THE SCHOOL DISTRICT OF PHILADELPHIA
SCHOOL REFORM COMMISSION
Office of Capital Programs
440 North Broad Street, 3rd Floor – Suite 371
Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 001

Subject: **Rhawnhurst Elementary School- Additions and Renovations**
SDP Contracts No. B-070 (R), B-071 (R), B-072 (R) and B-073 (R) of 2019/20

Location: **Rhanwhurst Elementary School**
7809 Castor Avenue
Philadelphia, Pennsylvania 19152

This Addendum dated December 14, 2021, shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents, unless modified by prior addenda.

IMPORTANT NOTICE:

TO MEET THE REQUIRED PROJECT FINAL COMPLETION DATE OF MARCH 31, 2024, THE SCHOOL DISTRICT HAS IMPLEMENTED SPECIAL REQUIREMENTS FOR THIS PROJECT:

1. AWARDED CONTRACTORS ARE REQUIRED TO BEGIN SUBMITTALS IMMEDIATELY AFTER RECEIPT OF NOTICE OF AWARD.

To avoid or minimize supply chain delays, the process of preparing and submitting shop drawings, samples, catalog cuts, etc. must begin before formal execution of the contracts has been completed

2. RESPONSE TIME FOR SUBMITTAL REVIEWS HAS BEEN SHORTENED TO TEN (10) CALENDAR DAYS FROM FOURTEEN (14) CALENDAR DAYS.

Priority shall be given to equipment and materials required early in the project, such as steel products, roofing and window units required for building enclosure, and critical long lead time items, such as heating and ventilating equipment.

3. TO ENCOURAGE THE EARLIEST POSIBLE PROCUREMENT OF REQUIRED EQUIPMMENT AND MATERIAL, THE SCHOOL DISTICT WILL PAY FOR OFFSITE STORED EQUIPMENT AND MATERIAL

Contractors will be reimbursed for the documented actual cost of approved equipment and materials delivered to offsite, bonded and insured warehouses, as well as extended storage costs, where necessary and unavoidable, provided

that title and ownership of the stored equipment and material has been transferred to the School District.

TO IMPLEMENT THESE REQUIREMENTS, THE FOLLOWING CHANGES HAVE BEEN MADE TO THE BIDDING AND CONTRACT DOXUMENTS:

1. GENERAL CONDITIONS:

(a) GC-3.2 SERVICES OF THE ARCHITECT/ENGINEER.

GC-3.2.10-Change the time interval to ten (10) calendar days.

(b) GC-9. APPLICATIONS FOR PAYMENT

(i) GC-9.2.3: ADD the phrase "or an approved, bonded, insured warehouse" after the words "stored at the Project Site" in the first sentence.

(ii) Add the following paragraph:

9.2.3.1 Contractors will be reimbursed for the documented actual cost of approved equipment and materials delivered to offsite, bonded and insured warehouses, as well as extended storage costs, where necessary and unavoidable, provided that title and ownership of the stored equipment and material has been transferred to the School District.

2. SUPPLEMENTARY CONDITIONS

(a) SC-19 SHOP DRAWINGS/SAMPLES

(i) 19.3, 19.4, 19.5 CHANGE time interval to ten (10) calendar days

(b) SC-5. PROGRESS PAYMENTS

(i) SC-5.4 DELETE

(ii) SC-5.6. ADD the phrase "or an approved, bonded and insured warehouse" after the words "at the Project Site" throughout the paragraph

(iii) ADD the following:

5.6.1 Contractors will be reimbursed for the documented actual cost of approved equipment and materials delivered to offsite, bonded and insured warehouses,

as well as extended storage costs, where necessary and unavoidable, provided that title and ownership of the stored equipment and material has been transferred to the School District.

3.CHANGES TO DIVISION 01-GENERAL REQUIREMENTS

(a) SECTION 01 1135-ASBESTOS ABATEMENT

DELETE the SPECIFICATION FOR ASBESTOS ABATEMENT AND LEAD BASED PAINT STABILIZATION, dated September 24, 2021, 75 pages.

REPLACE with the attached SPECIFICATION FOR ASBESTOS ABATEMENT AND EQUIPMENT DEMOLITION, Revised 12/10/21, 73 pages.

Major Changes are:

(i) Inclusion of floor tile mastic removal by the Asbestos Abatement Contractor (AAC) at floor locations marked by the MEP Contractors for conduit, piping or ductwork penetrations. This will permit the MEP contractors to make those penetrations themselves after the mastic removal. See Section 1.13 (Table) and Section 18 (Floor Tile) of the revised Specification for specific procedures and requirements.

(ii) Exclusion of Lead Based Paint (LBP) Stabilization from the AAC's scope of work. Each prime contractor will be responsible for whatever LBP Stabilization is required to perform their work in accordance with the requirements of Section 01 1100 ENVIRONMENTAL COORDINATION, PART 4-RENOVATION, REPAIR AND PAINTING-US EPA LEAD BASED PAINT RULE.

(b) SECTION 015214 MODULAR CLASSROOM BUILDING

1. **DELETE** Section 015214 – MODULAR CLASSROOM BUILDING in its entirety. The School District of Philadelphia (SDP) will be providing the modular classroom building to the construction site including foundations. Electrical contractor and plumbing contractor shall provide power and plumbing lines to modular classroom buildings' location for The School District of Philadelphia's supplier to set foundations, classrooms and perform hook-ups to utilities. Contractors shall maintain proposed phasing schedule, if modular classrooms and Phase 1 existing building classroom renovations are completed ahead of schedule, contractors shall work with SDP representatives for opportunity to start construction of Phase 2 new construction ahead of proposed Phasing Schedule.

4. ARCHITECTURAL DRAWINGS

DRAWING D1.3 FIRST FLOOR DEMOLITION PLAN UNITS "A" & "B"

1. **ADD** demolition note “7A - existing built-in casework and associated blocking and fasteners shall be removed in their entirety. Patch and prepare all adjacent finishes for new work and finish as scheduled” to room B101.

DRAWING PH-1 SITE PHASING PLAN

1. **REPLACE** Drawing PH-1 in its entirety, The School District of Philadelphia (SDP) will be providing the modular classroom buildings to the construction site including foundations. Electrical contractor and plumbing contractors shall provide power and plumbing lines to modular classroom locations for The School District of Philadelphia’s supplier to set foundations, classrooms and perform hook-ups to utilities. Contractors shall maintain proposed phasing schedule, if modulars classrooms and Phase 1 existing building classroom renovations are completed ahead of schedule, contractors shall work with SDP representatives for opportunity to start construction of Phase 2 new construction ahead of proposed Phasing Schedule.

DRAWING PH-2 BUILDING PHASING PLAN

1. **REPLACE** Drawing PH-1 in its entirety, The School District of Philadelphia (SDP) will be providing the modular classroom buildings to the construction site including foundations. Electrical contractor and plumbing contractors shall provide power and plumbing lines to modular classroom locations for The School District of Philadelphia’s supplier to set foundations, classrooms and perform hook-ups to utilities. Contractors shall maintain proposed phasing schedule, if modulars classrooms and Phase 1 existing building classroom renovations are completed ahead of schedule, contractors shall work with SDP representatives for opportunity to start construction of Phase 2 new construction ahead of proposed Phasing Schedule.

DRAWING PH-3 MODULAR CLASSROOMS

1. **DELETE** Drawing PH-3 MODULAR CLASSROOMS in its entirety. The School District of Philadelphia (SDP) will be providing the modulars to the construction site including foundations, not THE GENERAL CONTRACTOR. Electrical contractor and plumbing contractors shall provide power and plumbing lines to modular classroom locations for The School District of Philadelphia’s supplier to set foundations, classrooms and perform hook-ups to utilities. Contractors shall maintain proposed phasing schedule, if modulars classrooms and Phase 1 existing building classroom renovations are completed ahead of schedule, contractors shall work with SDP representatives for opportunity to start construction of Phase 2 new construction ahead of proposed Phasing Schedule.

DRAWING I4.11 LARGE SCALE LAYOUTS ADMINISTRATION

1. **ADD** detail E/I4.11 Reception Counter elevation & item no. 226 to the casework & equipment schedule.

5. GENERAL INFORMATION

See Prebid Presentation.

6, BIDDER QUESTIONS SUBMITTED TO DATE & RESPONSES ARE AS FOLLOWS:

1. C-700 (New Inlet) SHOWS: Standard 2'x4' "M" w/ Hanging Bell Trap NOTES: w/PWD Trap (15" Trap) which usually goes with a standard PWD Inlet (See attachment for dimension/structural differences. Are these "New Inlets" supposed to be 2'x4 Inlets w/ Hanging Bell Traps that normally have a 15" Sump from the INVERT? Are they supposed to be Standard 4' PWD Inlets with 15" PWD Traps which have 15" Sumps from Bottom of the TRAP? OR Are they supposed to be the third option (mixed-attached)?

Answer: Contractor shall provide a standard 2'x4' PennDOT inlet box with type M concrete top unit and structural steel bicycle safe grate. All inlets to be provided with a hanging bell trap and 15" sump from bottom of trap.

2. C-701 (4'x4' Inlet Box w/Frame and Cover) Bottom/Sect View Shows Casting Flush with Deck (Poured together) giving no room for adjustment 3D View Shows Casting and Deck Separate. Is casting separate or flush?

Answer: Contractor shall provide a PennDOT type 4 inlet box with 4'x4' interior dimensions, casting to be separate with grade adjustment rings.

3. C-701 (SMP-1&2 Outlet Structures) SHOWS: 4'x4' Box w/ Hanging Bell Trap, Separate Deck and 24" Frame & Grate to be place on TOP of Deck to Grade NOTES: Traps are labeled as PWD Trap "may be placed in any wall as required". Are these structures supposed to be a custom 4'x4' as noted in #2 above with a PWD Trap placed in the wall and 15" Sump below the bottom of the trap? Are the Castings and Decks Separate as well? OR Would a City Top Inlet (see attached) be better?

Answer: Contractor shall provide a PennDOT type 4 inlet box with 4'x4' interior dimensions, casting to be separate with grade adjustment rings. All outlet control structures to be provided with a hanging bell trap and 15" sump from bottom of trap.

4. C-701 (SMP-3 Outlet Structure) SHOWS: 4'x4' Box w/ Hanging Bell Trap, Concrete "M" Top with a Steel Bike Safe Grate NOTES: Traps are labeled as PWD Trap "may be placed in any wall as required" a 5'x5' Conversion Deck will be needed to make the opening from 4'x4' to 2'x4' for the standard "M" Top. Is this structure supposed to be a custom 4'x4' with a PWD Trap placed in the wall and 15" Sump below the bottom of the trap? And a 5'x5' Conversion Deck an "M" Top? OR Would a Highway Inlet (see attached) be better?

Answer: Contractor shall provide a standard 2'x4' PennDOT inlet box with type M concrete top unit and structural steel bicycle safe grate. All inlets to be provided with a hanging bell trap and 15" sump from bottom of trap.

5. C-701 (Trash Rack Detail). Is the trash rack not applicable for this job? (a "carryover" from another job. There is no OS0201A Structure in these plans

Answer: Ignore reference to 0S0201A structure; Trash Rack to be provided on the 2" low flow pipe in the jellyfish filter outlet control structure (OCS).

6. C-500 (30"Dia Summit Manhole). We only provide 4'dia Manholes, is that acceptable? Will this manhole receive a standard 1835 City Casting which match the detail on C-701? (See attached) Are there really (3ea) Inverts in this ONE Manhole? (2) Sanitary? (1) Storm? Please provide a detail showing the intersections a little more clearly where each pipe intersects.

Answer: Ignore reference to 30" diameter manhole, contractor shall provide 4' (48") diameter summit manhole in accordance with PWD standard details and specifications. Inverts are as shown on the plan.

7. C-500 (Highway Grate Inlets) SHOWS: Highway Grate Inlets in a different font than the rest of the utility plans. Are these existing or proposed (new) Highway Grate Inlets Are they supposed to be standard PWD Highway Inlets, 2x4 "M"s w/Bell Traps or a Hybrid Mix? (See attached and Question #1 Above)

Answer: Contractor shall provide new inlets with standard 2'x4' PennDOT inlet box with type M concrete top unit and structural steel bicycle safe grate. All inlets to be provided with a hanging bell trap and 15" sump from bottom of trap.

8. Details & Plans Conflict Plans show small pipe runs (6"-12") leaving the proposed structures. Details and Plans call for PWD Traps (15" Traps). Are there supposed to be a lot of reducers used? Are the structures PWD Inlets using PWD traps or a structure with Hanging Bell Traps? (see #1 above) Are the pipe sizes wrong and need to be changed to 15"RCP? (Usual size pipe used for PWD Traps).

Answer: Contractor shall provide inlet boxes with hanging bell traps and 15" sump from bottom of trap to bottom of box. Contractor to provide pipe size and material per plan and reducers as required.

ATTACHMENTS

This Addendum includes the following attachments:

Specification for Asbestos Abatement and Equipment Demolition, rev. 12/10/21, 73 pages

Prebid Presentation

Architectural Drawings:

DRAWING D1.3 FIRST FLOOR DEMOLITION
PH-1 – SITE PHASING PLAN
PH-2 – BUILDING PHASING PLAN
DRAWING I4.11 LARGE SCALE LAYOUTS ADMINISTRATION

END OF ADDENDUM #001

SPECIFICATION
for
ASBESTOS ABATEMENT
and
EQUIPMENT DEMOLITION
at the
RHAWNHURST ELEMENTARY SCHOOL
7809 Castor Avenue
Philadelphia, Pennsylvania 19152

prepared for:

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF ENVIRONMENTAL MANAGEMENT
440 North Broad Street
3rd Floor, Room 3053
Philadelphia, Pennsylvania 19130

prepared by:

SYNERTECH INCORPORATED
228 Moore Street
Philadelphia, Pennsylvania 19148
Project # 010-4479-2

REVISED December 10, 2021

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Certified Pennsylvania Asbestos Project Designer
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1.00 INTRODUCTION

.01 This specification outlines the required tasks and procedures involved in the removal of asbestos containing material (ACM), and equipment demolition throughout the Rhawnhurst Elementary School in conjunction with the Major Renovation and Building Addition Project. ACM removal, associated equipment demolition and associated decontamination cleaning procedures shall be accomplished under asbestos-abatement conditions. The Asbestos Abatement Contractor (AAC) shall be employed as a sub-contractor to the Prime General Contractor (GC) awarded this project.

a. The AAC shall be a current pre-qualified contractor by the School District of Philadelphia and must demonstrate they have the necessary personnel, equipment, materials, and experience to complete a project of this nature in the required time period.

.02 The asbestos abatement scope of work includes, but is not limited to:

a. Removal and disposal of all assumed asbestos containing wire insulation inside electrical panels throughout the Main and Modular Buildings (assumed present);

b. Removal and disposal of all assumed asbestos containing exterior fire doors; removal and disposal of certain interior fire doors identified in the architectural demolition drawings (fire doors scheduled to be replaced will require interior core investigations by the onsite Asbestos Project Inspector prior to the performance of unhinging and disposal of the doors);

c. Removal and disposal of all confirmed friable pipe/pipe fitting insulation throughout classrooms, offices, storage rooms, restrooms and pipechases on the first and second floors (metal jacketing is present on the most vertical pipe risers);

d. Removal and disposal of all fiberglass pipe insulation throughout the building;

e. Removal and disposal of all confirmed glue dot adhesive associated with the verified non-asbestos 1'x1' ceiling tiles throughout the first and second floors. Removal and disposal of all associated sheetrock ceilings;

f. Removal and disposal of all 9" x 9", 12" x 12" and linoleum vinyl flooring throughout the building (remove all layers of flooring; remove in areas specified including below casework, cabinetry and unit-ventilators; mastic residue on floor substrate to remain intact, except where required for holes to be cored through floor slabs for MEP piping or ductwork - *Refer to subsection 1.03*;

g. Demolition and disposal of the two (2) sectional boilers and all associated breeching;

h. Removal and disposal of all soot & debris at base of the Smoke Stack;

i. Removal and disposal of all blackboard/tack boards and associated asbestos-containing glue dots throughout the building;

j. Removal and disposal of assumed asbestos containing vibration damper cloth in two (2) first floor air handling rooms;

k. Removal and disposal of asbestos-containing caulk on the exterior frame openings of the unit-ventilators and crawlspace louvers throughout the main building;

l. Removal and disposal of all sheetrock/joint compound walls in the precast modular annex building;

m. Removal and disposal of windows with asbestos-containing glazing on the exterior side of the window frames throughout the modular annex building.

.03 Floor tile mastic shall be removed using a chemical solvent in locations of coring through floor slabs for the installation of MEP piping or ductwork. Disposable rags shall be used to absorb the chemical solvent and mastic from the floor surfaces. Mechanical methods for the removal of floor tile mastic are prohibited.

a. Each prime contractor shall layout the locations of core drilling necessary for the installation of MEP piping or ductwork and coordinate these layouts with the AAC. The AAC shall perform the removal of floor tile and mastic in these locations and the onsite Asbestos Project Inspector (API) shall conduct a visual inspection and approve the concrete floor surfaces prior to any core drilling by prime contractors. Refer to *Section 18.12.a.1-2.*

b. Provide product data and Safety Data Sheets (SDS) for the chemical solvent intended to be used as per *Section 5.01.f.3.*

.04 Lead Based Paint (LBP) Stabilization is not included in the scope of this specification. Each prime contractor is responsible for LBP impact and any stabilization that is required to perform their work.

a. Refer to DIVISION O1 GENERAL REQUIREMENTS, Section 01 1100 ENVIRONMENTAL COORDINATION, PART 4-RENOVATION, REPAIR AND PAINTING RULE-US EPA LEAD BASED PAINT RULE for requirements.

.05 With the exception of the crawlspace that travels below the first floor, all pipe insulation of any kind, including, but not limited to, fiberglass pipe insulation (FGPI), zeston, neoprene, cellular glass, cork, etc. located throughout the building shall be removed as part of this project.

a. Once containments and air filtration devices (AFDs) are in place but prior to start of asbestos abatement, all non-asbestos containing items can be removed and disposed of as construction debris, under ‘dust control’ conditions. Once asbestos abatement commences, all non-asbestos containing materials present in the work area shall be removed and disposed of as asbestos contaminated waste.

.06 The AAC shall submit a work plan to the School District of Philadelphia Office of Environmental Services (OEMS) ten (10) days prior to beginning the project. The work plan shall include a schedule for all work areas listed in *Section 1.13*. The schedule shall be approved by OEMS and the Asbestos Project Designer prior to the commencement of work. The schedule shall include dates and timelines for the completion of all work areas listed in addition to proposed crew sizes.

.07 A representative from the AAC shall attend regularly scheduled construction progress meetings while asbestos abatement is occurring during all phases of the project. The representative of the AAC must have authorization to speak for and make commitments for the AAC. The GC and AAC shall continuously coordinate to fulfill project milestones and phasing requirements. The Owner will not pay remobilization fees, charges and/or change orders issued by the GC and/or AAC.

.08 The AAC must utilize a licensed electrician to install separate temporary electric panels, receptacles, and lights, all with ground fault interruption and current-overload protection.

a. For all Major Projects, the AAC shall provide temporary electrical panel boards with ground fault interruption. All electrical power shall be brought into the work area via ground fault interrupters (GFIs). Temporary electrical panel boards shall be placed no more than twenty-five (25) feet from each Major Project work area.

.09 No work shall be performed if the AAC believes the work to be performed is a change and/or addition to the work scope outlined in the asbestos abatement specification documents without first obtaining a Notice To Proceed (NTP) and Field Work Directive (FWD) from the Owner.

a. The Owner shall not be responsible for compensating the AAC for work performed that is considered a change and/or addition to the asbestos abatement specification documents without the issuance of a FWD.

b. The onsite API must field measure and approve additional allowance work quantities prior to the AAC performing such work.

.10 All Prime Contractors and Subcontractors shall inform themselves fully of the scope and scale of the asbestos abatement as it relates to this project. At no time shall any Contractor/Subcontractor disturb asbestos-containing pipe/pipe fitting insulation, vinyl asbestos floor tile, asbestos-containing floor tile mastic, or any other Asbestos Containing Material listed on the Asbestos Inspection Report. Contractors and Subcontractors shall prove a copy of the Asbestos Inspection Report to all personnel from their Company upon admission to each construction work zone. A mandatory pre-commencement meeting shall be attended by all Prime Contractor(s) to discuss the Asbestos Inspection Report and the School District of Philadelphia's environmental compliance policies for all outside Contractors.

.11 Regarding any roof removal and replacement by the Roofing Contractor:

a. Existing roofing materials are presumed asbestos-containing materials (PACMs). The removal of roofing materials are non-regulated projects according to the City of Philadelphia Asbestos Control Regulation (ACR), provided:

1. the methods utilized to remove the roofing do not render the roofing material friable. The use of rotating blade roof cutters or other powered equipment that sand, grind, cut, or abrade the roof material is prohibited. Only methods that slice, shear, or punch using equipment such as axes, hatchets, knives, spud bars, pry bars and shovels shall be permitted.

2. the resulting waste is disposed of at a landfill that accepts non-friable asbestos waste. No recycling of the roofing materials is acceptable without sampling and analysis that would confirm that the roofing materials are non-asbestos.

3. the supervisor of the crew performing the removal of the roofing material has successfully completed asbestos awareness training at a minimum, in accordance with the Pennsylvania Department of Environmental Protection (PADEP).

4. appropriate notification of a non-friable asbestos abatement project is submitted to the EPA, DEP, and Philadelphia Air Management Services.

.12 Regarding the removal of existing interior or exterior caulking:

a. Caulks and glazing's are presumed asbestos-containing materials (PACMs). The removal of these materials are non-regulated projects according to the City of Philadelphia Asbestos Control Regulation (ACR), provided:

1. the methods utilized to remove caulk and/or glazing do not render the materials friable. Powered equipment that sand, grind, cut, or abrade the materials is prohibited.

2. the resulting waste is disposed of at a landfill that accepts non-friable asbestos waste. No recycling of the materials is acceptable without sampling and analysis that would confirm that the caulk and/or glazing's are non-asbestos;

3. the supervisor of the crew performing the removal has successfully completed asbestos awareness training at a minimum, in accordance with the Pennsylvania Department of Environmental Protection (PADEP);

4. appropriate notification of a non-friable asbestos abatement project is submitted to the EPA, DEP, and Philadelphia Air Management Services.

.13 The Work Scope Summarization (*Section 1.13*) beginning on the following page consists of:

a. Floor Designation;
b. Space Numbers (Room Identification Numbers Used in the Asbestos Survey);
c. On Site Room Names;
d. Material Descriptions;
e. Determination of Confirmed or Assumed Asbestos Containing Material;
f. Friability Classification;
f. Approximate Amount of Material to Be Removed and Disposed of;
g. Action Item for the ACM/Equipment listed (Removal and/or Demolition and Removal);
h. Pertinent Comments/Description/Notes associated with the ACM to be removed, equipment to be demolished, and/or in reference to the Construction Document drawing set.

Section 1.13 - Table of Materials Scheduled for Removal and Demolition *(19 page table):*

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							
			Year Built: 1949	__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1			**Element 1 - Main Building**							**Main**	
-	-		Throughout	Mastic associated with Vinyl Floor Tile	Confirmed	NF1	458 locations	EA	ND	**REM**	Remove mastic residue from floor substrate where required for holes to be cored through floor slabs for MEP piping or ductwork: **458 locations at an area of 4 square feet per location.** Refer to Specification Section 1.03
1	-	-	Exterior	Exterior Louver Frame Caulk associated with Unit Ventilators	Confirmed	NF2	360	LF	ND	**REM**	45 locations - 8 linear feet at each location
1	-	-	Exterior	Exterior Frame Caulk associated with Crawlspace Louvers	Confirmed	NF2	140	LF	ND	**REM**	14 locations - 10 linear feet at each location
1	-	-	Exterior	Exterior Door Caulk	Confirmed	NF2	Q/U	LF	ND	**REM as indicated on the Arch. Drawings**	Exterior Door Caulk confirmed asbestos containing at Best Door (rear schoolyard beside driveway); Door Caulk Removal to be Performed by the Door Contractor
1	-	-	Exterior	Exterior Window Caulk	Confirmed	NF2	Q/U	LF	ND	**REM as indicated on the Arch. Drawings**	Exterior Window Caulk confirmed asbestos containing outside Cafeteria 112; Window Caulk Removal to be Performed by the Window Contractor
1	-	-	Concealed within Wall Cavities and above Rigid Ceilings (assumed present)	Thermal System Insulation (pipe, duct, radiator, etc.)	Assumed	FRI	Q/U	SF	unknown	**REM as Required**	Remove if uncovered during wall/ceiling demolition
1	-	-	Throughout	Ceiling Tile Glue Dots	Confirmed	NF1	Q/U	SF	ND	**REM**	All Glue Dots associated with 1' x 1' Ceiling Tile throughout the building are Confirmed Asbestos Containing
1	-	-	Throughout	1' x 1' Ceiling Tile	NAD	x	Q/U	SF	x	**REM**	All 1' x 1' Ceiling Tile verified NAD throughout the building (fiberglass type, large fissured type, small fissured type, pegboard type, metal pan type)

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary. Q/U = Quantity Undetermined Synertech Project No. 010-4479-2
			Rhawnhurst Elementary School (8360) Year Built: 1949	_____ Three- Year Reinspection IX							
				__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	***Floor***	***Space #***	***On Site Room Name***	***Material Description***	***Confirmed, Assumed, NAD, Non Suspect ACM***	***Type (Code 1)***	***Amount of Material***	***SF LF EA***	***Condition (Code 2)***	***Action (Code 3)***	***Comments***
1	-	-	Throughout	Metal Fire Doors	Assumed	NF2	Q/U	LF	ND	**REM as indicated on the Arch. Drawings**	Interior Door Insulation is Assumed Asbestos Containing
1	-	-	Throughout	Blackboard/Tackboard Glue Dots	Confirmed	NF1	Q/U	SF	ND	**REM**	Present behind all Blackboards and Tackboards throughout the building
1	-	-	Throughout	Wire Insulation	Assumed	NF2	90	LF	ND	**REM as indicated on the Elec. Drawings**	Approximately 10 linear feet of asbestos wire wrap applied to feeder wires assumed present in all electrical panels throughout the building - Remove from 9 Panels Identified in Drawing E8.1
1	-	-	Throughout	Vinyl Floor Tile	refer to individual listings	-	-	-	-	**REM**	Remove all layers of flooring down to the concrete or wood substrate
1	B	1	Boiler Room B002	Sectional Boilers	Assumed	FRI/NF2	2	EA	ND	**REM**	Installed Approximately Mid-1990s - Internal Rope, Packing, Gaskets, etc. remain assumed asbestos-containing - Each boiler approx. 8'x10'x8' high; Demolish under Full Asbestos-Abatement Containment
1	B	1	Boiler Room B002	Soot & Debris at base of Smoke Stack	Assumed	FRI	100	SF	ND	**REM**	
1	B	5	Electrical Room next to Building Engineer's Office B002A	Fire Doors	Assumed	NF2	1	EA	ND	**REM**	Metal Entrance Door
1	B	5	Electrical Room next to Building Engineer's Office B002A	Wire Insulation	Assumed	NF2	80	LF	ND	**REM**	
1	1	S18	Stair's next to Classroom 110	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	136	SF	x	**REM**	
1	1	S18	Stair's next to Classroom 110	Ceiling Tile Glue Dots	Confirmed		136	SF	ND	**REM**	
1	1	H10	Hallway adjacent to Classroom 100 and Custodial Closet	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	198	SF	x	**REM**	
1	1	H10	Hallway adjacent to Classroom 100 and Custodial Closet	Ceiling Tile Glue Dots	Confirmed	NF1	198	SF	ND	**REM**	
1	1	H10	Hallway adjacent to Classroom 100 and Custodial Closet	Sheetrock Ceiling	NAD	x	198	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H10	Hallway adjacent to Classroom 100 and Custodial Closet	9" x 9" Floor Tile	Confirmed	NF1	198	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	100B	Custodial Closet near Classroom 100	9" x 9" Floor Tile	Confirmed	NF1	15	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	100A	Kindergarten Coat Room/Storage in Room 100	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	285	SF	x	**REM**	
1	1	100A	Kindergarten Coat Room/Storage in Room 100	Ceiling Tile Glue Dots	Confirmed	NF1	285	SF	ND	**REM**	

			School District of Philadelphia	Survey Type								The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary. Q/U = Quantity Undetermined Synertech Project No. 010-4479-2
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance								
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX								
			Year Built: 1949	**__X__ AIR/EIE**								
			7809 Castor Avenue, Philadelphia, PA 19152	**__X__ Asbestos Abatement Activity**								
			Certification # 0437 Date: 12/10/2021	**__X__ Bulk Sampling Event**								
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020								
Element	***Floor***	***Space #***	***On Site Room Name***	***Material Description***	***Confirmed, Assumed, NAD, Non Suspect ACM***	***Type (Code 1)***	***Amount of Material***	***SF LF EA***	***Condition (Code 2)***	***Action (Code 3)***	***Comments***	
1	1	100A	Kindergarten Coat Room/Storage in Room 100	9" x 9" Floor Tile	Confirmed	NF1	285	SF	ND	**REM**	Mastic residue on concrete floor to remain intact	
1	1	100C1	Front Closet within Kindergarten Coat Room/Storage in Room 100	9" x 9" Floor Tile	Confirmed	NF1	40	SF	ND	**REM**	Mastic residue on concrete floor to remain intact	
1	1	100C2	Rear Closet within Kindergarten Coat Room/Storage in Room 100	9" x 9" Floor Tile	Confirmed	NF1	40	SF	ND	**REM**	Mastic residue on concrete floor to remain intact	
1	1	100D	Classroom 100 Girl's Restroom	1' x 1' Ceiling Tile	NAD	x	64	SF	x	**REM**		
1	1	100D	Classroom 100 Girl's Restroom	Ceiling Tile Glue Dots	Confirmed	NF1	64	SF	ND	**REM**		
1	1	100E	Classroom 100 Boy's Restroom	1' x 1' Ceiling Tile	NAD	x	64	SF	x	**REM**		
1	1	100E	Classroom 100 Boy's Restroom	Ceiling Tile Glue Dots	Confirmed	NF1	64	SF	ND	**REM**		
1	1	100-PC	Pipe Chase between Girl's and Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	16	EA	ND	**REM**		
1	1	100-PC	Pipe Chase between Girl's and Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	**REM**		
1	1	100	Classroom 100	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1920	SF	x	**REM**		
1	1	100	Classroom 100	Ceiling Tile Glue Dots	Confirmed	NF1	1920	SF	ND	**REM**		
1	1	100	Classroom 100	12" x 12" Tan Floor Tile & Mastic	NAD	x	960	SF	x	**REM**	Includes Flooring below Unit-Ventilators	
1	1	100	Classroom 100	Green Linoleum below 12x12s	NAD	x	960	SF	x	**REM**		
1	1	100	Classroom 100	Carpet	Non Suspect ACM	x	960	SF	x	**REM**	Includes Flooring below Unit-Ventilators	
1	1	100	Classroom 100	Beige Linoleum below Carpeting	NAD	x	960	SF	x	**REM**		
1	1	100	Classroom 100	Sink Undercoat Mastic	Assumed	NF1	6	SF	ND	**REM**		
1	1	100	Classroom 100	Blackboard/Tackboard Glue Dots	Confirmed	NF1	100	SF	ND	**REM**		
1	1	100F	Classroom 100 Rear Closet on the Left	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	20	SF	x	**REM**		
1	1	100F	Classroom 100 Rear Closet on the Left	Ceiling Tile Glue Dots	Confirmed	NF1	20	SF	ND	**REM**		
1	1	100F	Classroom 100 Rear Closet on the Left	Sheetrock Ceiling	NAD	x	20	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling - un-insulated roof drain piping above	
1	1	100F	Classroom 100 Rear Closet on the Left	Green Linoleum	NAD	x	20	SF	x	**REM**		
1	1	100G	Classroom 100 Rear Closet on the Right	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	20	SF	x	**REM**		
1	1	100G	Classroom 100 Rear Closet on the Right	Ceiling Tile Glue Dots	Confirmed	NF1	20	SF	ND	**REM**		
1	1	100G	Classroom 100 Rear Closet on the Right	Sheetrock Ceiling	NAD	x	20	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling - un-insulated roof drain piping above	
1	1	100G	Classroom 100 Rear Closet on the Right	Green Linoleum	NAD	x	20	SF	x	**REM**		
1	1	S17	Stair's next to Classroom 100	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	104	SF	x	**REM**		
1	1	S17	Stair's next to Classroom 100	Ceiling Tile Glue Dots	Confirmed	NF1	104	SF	ND	**REM**		
1	1	102	Classroom 101	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet	
1	1	102	Classroom 101	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**		
1	1	102	Classroom 101	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling	

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							
			Year Built: 1949	**__X__ AIR/EIE**							
			7809 Castor Avenue, Philadelphia, PA 19152	**__X__ Asbestos Abatement Activity**							
			Certification # 0437 Date: 12/10/2021	**__X__ Bulk Sampling Event**							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	102	Classroom 101	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	102	Classroom 101	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	102RC	Classroom 101 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	102RC	Classroom 101 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	102RC	Classroom 101 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	102RC	Classroom 101 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102LC	Classroom 101 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	102LC	Classroom 101 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	102LC	Classroom 101 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	102LC	Classroom 101 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	110	Classroom 110	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	110	Classroom 110	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	110	Classroom 110	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	110	Classroom 110	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	110	Classroom 110	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	110RC	Classroom 110 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	110RC	Classroom 110 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	110RC	Classroom 110 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	110RC	Classroom 110 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	110LC	Classroom 110 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	110LC	Classroom 110 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	110LC	Classroom 110 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	110LC	Classroom 110 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	109	Classroom 109	Pipe Fitting Insulation	Confirmed	FRI	16	EA	ND	**REM**	
1	1	109	Classroom 109	Pipe Insulation 2-6 inch	Confirmed	FRI	65	LF	ND	**REM**	4 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	109	Classroom 109	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	109	Classroom 109	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	109	Classroom 109	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

__X__ Asbestos Abatement Activity

__X__ Bulk Sampling Event

Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	Floor	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments
1	1	109	Classroom 109	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	109	Classroom 109	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	109RC	Classroom 109 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	109RC	Classroom 109 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	109RC	Classroom 109 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	109RC	Classroom 109 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	109LC	Classroom 109 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	109LC	Classroom 109 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	109LC	Classroom 109 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	109LC	Classroom 109 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	109LC	Classroom 109 Front Left Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	16	LF	ND	**REM**	
1	1	101	Classroom 102	Pipe Fitting Insulation	Confirmed	FRI	16	EA	ND	**REM**	
1	1	101	Classroom 102	Pipe Insulation 2-6 inch	Confirmed	FRI	65	LF	ND	**REM**	4 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	101	Classroom 102	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	101	Classroom 102	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	101	Classroom 102	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	101	Classroom 102	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	101	Classroom 102	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	101RC	Classroom 102 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	101RC	Classroom 102 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	101RC	Classroom 102 Front Right Closet	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	101RC	Classroom 102 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	101LC	Classroom 102 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	101LC	Classroom 102 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	101LC	Classroom 102 Front Left Closet	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	101LC	Classroom 102 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	S113	Stairwell No. 2 across from Classroom 102	Pipe Fitting Insulation	Confirmed	FRI	6	EA	ND	**REM**	
1	1	S113	Stairwell No. 2 across from Classroom 102	Pipe Insulation 2-6 inch	Confirmed	FRI	6	LF	ND	**REM**	
1	1	109A	"She Shed" Office beside Stairwell No. 2	Pipe Fitting Insulation	Confirmed	FRI	6	EA	ND	**REM**	

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary. Q/U = Quantity Undetermined Synertech Project No. 010-4479-2
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							
			Year Built: 1949	__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	***Floor***	***Space #***	***On Site Room Name***	***Material Description***	***Confirmed, Assumed, NAD, Non Suspect ACM***	***Type (Code 1)***	***Amount of Material***	***SF LF EA***	***Condition (Code 2)***	***Action (Code 3)***	***Comments***
1	1	109A	"She Shed" Office beside Stairwell No. 2	Pipe Insulation 2-6 inch	Confirmed	FRI	30	LF	ND	**REM**	2 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	109D	Air Handling Room inside "She Shed" Office	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	
1	1	109D	Air Handling Room inside "She Shed" Office	Pipe Insulation 2-6 inch	Confirmed	FRI	14	LF	ND	**REM**	
1	1	109D	Air Handling Room inside "She Shed" Office	Vibration Damper Cloth	Assumed	NF2	18	LF	ND	**REM**	At Ceiling Level - Inside Ceiling Penetration (Tan/White Material)
1	1	109E	Air Handling Room across from Main Office Suite (IT MDF Present)	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	
1	1	109E	Air Handling Room across from Main Office Suite (IT MDF Present)	Pipe Insulation 2-6 inch	Confirmed	FRI	14	LF	ND	**REM**	
1	1	109E	Air Handling Room across from Main Office Suite (IT MDF Present)	Vibration Damper Cloth	Assumed	NF2	18	LF	ND	**REM**	At Ceiling Level - Inside Ceiling Penetration (Tan/White Material)
1	1	102B	Speech Room	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	
1	1	102B	Speech Room	Pipe Insulation 2-6 inch	Confirmed	FRI	18	LF	ND	**REM**	2 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	102B	Speech Room	9" x 9" Floor Tile	Confirmed	NF1	220	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102H	Small Hallway to Speech Room	9" x 9" Floor Tile	Confirmed	NF1	21	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102-PC	Staff Restroom Pipe Chase	Pipe/Pipe Fitting Insulation	Confirmed	FRI	10	LF	ND	**REM**	No Access Doors Present - 10 linear feet assumed within pipe chase
1	1	102CL	Storage Room beside Staff Restroom near Speech Room	9" x 9" Floor Tile	Confirmed	NF1	90	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102A	Nurse's Office	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	
1	1	102A	Nurse's Office	Pipe Insulation 2-6 inch	Confirmed	FRI	30	LF	ND	**REM**	
1	1	102A	Nurse's Office	9" x 9" Floor Tile	Confirmed	NF1	242	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102A	Nurse's Office	Blackboard/Tackboard Glue Dots	Confirmed	NF1	24	SF	ND	**REM**	
1	1	102L	Lobby area to Nurse's Office	9" x 9" Floor Tile	Confirmed	NF1	55	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102LCL	Closet in Lobby Area of Nurse's Office	9" x 9" Floor Tile	Confirmed	NF1	3	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102D	Counselor's Office	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	276	SF	x	**REM**	
1	1	102D	Counselor's Office	Ceiling Tile Glue Dots	Confirmed	NF1	276	SF	ND	**REM**	
1	1	102D	Counselor's Office	9" x 9" Floor Tile	Confirmed	NF1	241	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	102D	Counselor's Office	12" x 12" Floor Tile & Mastic	Assumed	NF1	35	SF	ND	**REM**	
1	1	102DD	Counselor's Office Closet	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	24	SF	x	**REM**	
1	1	102DD	Counselor's Office Closet	Ceiling Tile Glue Dots	Confirmed	NF1	24	SF	ND	**REM**	
1	1	102DD	Counselor's Office Closet	9" x 9" Floor Tile	Confirmed	NF1	24	SF	ND	**REM**	Mastic residue on concrete floor to remain intact

			School District of Philadelphia	Survey Type							
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			Rhawnhurst Elementary School (8360) Year Built: 1949	_____ Three- Year Reinspection IX							
				__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	***Floor***	***Space #***	***On Site Room Name***	***Material Description***	***Confirmed, Assumed, NAD, Non Suspect ACM***	***Type (Code 1)***	***Amount of Material***	***SF LF EA***	***Condition (Code 2)***	***Action (Code 3)***	***Comments***
1	1	102C-PC	Women's Staff Restroom beside Counselor's Office Pipe Chase	Pipe/Pipe Fitting Insulation	Confirmed	FRI	10	LF	ND	**REM**	No Access Doors Present - 10 linear feet assumed within pipe chase
1	1	103D	Principal's Office	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	100	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	103D	Principal's Office	Ceiling Tile Glue Dots	Confirmed	NF1	100	SF	ND	**REM**	
1	1	103D	Principal's Office	12" x 12" Floor Tile & Mastic	NAD	x	100	SF	x	**REM**	
1	1	103D	Principal's Office	9" x 9" Floor Tile	Confirmed	NF1	100	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	103D	Principal's Office	Blackboard/Tackboard Glue Dots	Confirmed	NF1	12	SF	ND	**REM**	
1	1	103DCL	Principal's Office - Closet	9" x 9" Floor Tile	Confirmed	NF1	6	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103C	Principal's Conference Room	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	120	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	103C	Principal's Conference Room	Ceiling Tile Glue Dots	Confirmed	NF1	120	SF	ND	**REM**	
1	1	103C	Principal's Conference Room	12" x 12" Floor Tile & Mastic	Assumed	NF1	120	SF	ND	**REM**	
1	1	103C	Principal's Conference Room	9" x 9" Floor Tile	Confirmed	NF1	120	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	103C	Principal's Conference Room	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	**REM**	1 Riser
1	1	103C	Principal's Conference Room	Blackboard/Tackboard Glue Dots	Confirmed	NF1	12	SF	ND	**REM**	
1	1	103CCL	Principal's Conference Room - Closet	1' x 1' Ceiling Tile	NAD	x	12	SF	x	**REM**	
1	1	103CCL	Principal's Conference Room - Closet	Ceiling Tile Glue Dots	Confirmed	NF1	12	SF	ND	**REM**	
1	1	103CCL	Principal's Conference Room - Closet	Sheetrock Ceiling	NAD	x	12	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103CCL	Principal's Conference Room - Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	16	LF	ND	**REM**	2 Risers
1	1	103CCL	Principal's Conference Room - Closet	9" x 9" Floor Tile	Confirmed	NF1	12	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103PH	Hallway between Main Office and Principal's Office	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	35	SF	x	**REM**	
1	1	103PH	Hallway between Main Office and Principal's Office	Ceiling Tile Glue Dots	Confirmed	NF1	35	SF	ND	**REM**	
1	1	103PH	Hallway between Main Office and Principal's Office	12" x 12" Floor Tile & Mastic	Assumed	NF1	35	SF	ND	**REM**	
1	1	103PH	Hallway between Main Office and Principal's Office	9" x 9" Floor Tile	Confirmed	NF1	35	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	103-PC	Principal's Restroom Pipe Chase	Pipe/Pipe Fitting Insulation	Confirmed	FRI	10	LF	ND	**REM**	No Access Doors Present - 10 linear feet assumed within pipe chase
1	1	103B	Main Office	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	100	SF	x	**REM**	
1	1	103B	Main Office	Ceiling Tile Glue Dots	Confirmed	NF1	100	SF	ND	**REM**	
1	1	103B	Main Office	12" x 12" Floor Tile & Mastic	NAD	x	100	SF	x	**REM**	
1	1	103B	Main Office	9" x 9" Floor Tile	Confirmed	NF1	100	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							Q/U = Quantity Undetermined
			Year Built: 1949	__X__ AIR/EIE							Synertech Project No. 010-4479-2
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	103BB	Custodial Closet next to Girl's Restroom	9" x 9" Floor Tile	Confirmed	NF1	36	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103SO	Secretary's Office in Main Office	12" x 12" Floor Tile & Mastic	Assumed	NF1	36	SF	ND	**REM**	
1	1	103SO	Secretary's Office in Main Office	9" x 9" Floor Tile	Confirmed	NF1	36	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	103RH	Rear Hallway to Principal's Conference Room (copier location)	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	48	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	103RH	Rear Hallway to Principal's Conference Room (copier location)	Ceiling Tile Glue Dots	Confirmed	NF1	48	SF	ND	**REM**	
1	1	103RH	Rear Hallway to Principal's Conference Room (copier location)	12" x 12" Floor Tile & Mastic	Assumed	NF1	48	SF	ND	**REM**	
1	1	103RH	Rear Hallway to Principal's Conference Room (copier location)	9" x 9" Floor Tile	Confirmed	NF1	48	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	103CLL	Closet on Left in Rear Hallway to Principal's Conference Room (copier location)	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	1	103CLL	Closet on Left in Rear Hallway to Principal's Conference Room (copier location)	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	1	103CLL	Closet on Left in Rear Hallway to Principal's Conference Room (copier location)	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103CLL	Closet on Left in Rear Hallway to Principal's Conference Room (copier location)	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103CLR	Closet on Right in Rear Hallway to Principal's Conference Room (copier location)	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	1	103CLR	Closet on Right in Rear Hallway to Principal's Conference Room (copier location)	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	1	103CLR	Closet on Right in Rear Hallway to Principal's Conference Room (copier location)	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103CLR	Closet on Right in Rear Hallway to Principal's Conference Room (copier location)	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103A	Girl's Restroom beside Classroom 103	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	Applied to Roof Drain Piping
1	1	103A	Girl's Restroom beside Classroom 103	Pipe Insulation 2-6 inch	Confirmed	FRI	6	LF	ND	**REM**	Applied to Roof Drain Piping
1	1	103A	Girl's Restroom beside Classroom 103	Fiberglass Pipe Insulation	Non Suspect ACM	x	16	LF	x	**REM**	
1	1	103A-PC	Girl's Restroom Pipe Chase beside Classroom 103	Pipe Fitting Insulation	Confirmed	FRI	10	EA	ND	**REM**	
1	1	103A-PC	Girl's Restroom Pipe Chase beside Classroom 103	Pipe Insulation 2-6 inch	Confirmed	FRI	50	LF	ND	**REM**	
1	1	S15	Stairwell adjacent to Classroom 108	Pipe Insulation 2-6 inch	Confirmed	FRI	4	LF	ND	**REM**	
1	1	108	Classroom 108	Pipe Fitting Insulation	Confirmed	FRI	16	EA	ND	**REM**	
1	1	108	Classroom 108	Pipe Insulation 2-6 inch	Confirmed	FRI	65	LF	ND	**REM**	4 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	108	Classroom 108	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	108	Classroom 108	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	108	Classroom 108	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

__X__ Asbestos Abatement Activity

__X__ Bulk Sampling Event

Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	Floor	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments
1	1	108	Classroom 108	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	108	Classroom 108	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	108RC	Classroom 108 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	108RC	Classroom 108 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	108RC	Classroom 108 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	108RC	Classroom 108 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	108LC	Classroom 108 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	108LC	Classroom 108 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	108LC	Classroom 108 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	108LC	Classroom 108 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103	Classroom 103	Pipe Fitting Insulation	Confirmed	FRI	16	EA	ND	**REM**	
1	1	103	Classroom 103	Pipe Insulation 2-6 inch	Confirmed	FRI	65	LF	ND	**REM**	4 Pipe Risers - Metal Jacketing present along the bottom 6' of each Riser
1	1	103	Classroom 103	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	103	Classroom 103	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	103	Classroom 103	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103	Classroom 103	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	103	Classroom 103	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	103RC	Classroom 103 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	103RC	Classroom 103 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	103RC	Classroom 103 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103RC	Classroom 103 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	103LC	Classroom 103 Front Left Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	7	LF	ND	**REM**	
1	1	103LC	Classroom 103 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	103LC	Classroom 103 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	103LC	Classroom 103 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	103LC	Classroom 103 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	107	Classroom 107	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	107	Classroom 107	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	107	Classroom 107	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							Q/U = Quantity Undetermined
			Year Built: 1949	__X__ AIR/EIE							Synertech Project No. 010-4479-2
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	107	Classroom 107	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	107	Classroom 107	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	107RC	Classroom 107 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	107RC	Classroom 107 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	107RC	Classroom 107 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	107RC	Classroom 107 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	107LC	Classroom 107 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	107LC	Classroom 107 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	107LC	Classroom 107 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	107LC	Classroom 107 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	104	Classroom 104	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	Coat Closet
1	1	104	Classroom 104	Ceiling Tile Glue Dots	Confirmed	NF1	40	SF	ND	**REM**	
1	1	104	Classroom 104	Sheetrock Ceiling	NAD	x	40	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	104	Classroom 104	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	104	Classroom 104	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	104RC	Classroom 104 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	104RC	Classroom 104 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	104RC	Classroom 104 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	104RC	Classroom 104 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	104LC	Classroom 104 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	104LC	Classroom 104 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	104LC	Classroom 104 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	104LC	Classroom 104 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	105B	Closet beside Classroom 105	9" x 9" Floor Tile	Confirmed	NF1	54	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	105B-PC	Boys Restroom Pipe Chase beside Classroom 105	Pipe Fitting Insulation	Confirmed	FRI	10	EA	ND	**REM**	
1	1	105B-PC	Boys Restroom Pipe Chase beside Classroom 105	Pipe Insulation 2-6 inch	Confirmed	FRI	50	LF	ND	**REM**	
1	1	106	Classroom 106	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	872	SF	x	**REM**	
1	1	106	Classroom 106	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	large fissured type
1	1	106	Classroom 106	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	small fissured type

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			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							Q/U = Quantity Undetermined
			Year Built: 1949	__X__ AIR/EIE							Synertech Project No. 010-4479-2
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			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	106	Classroom 106	1' x 1' Ceiling Tile	NAD	x	40	SF	x	**REM**	pegboard type
1	1	106	Classroom 106	Ceiling Tile Glue Dots	Confirmed	NF1	1024	SF	ND	**REM**	
1	1	106	Classroom 106	9" x 9" Floor Tile	Confirmed	NF1	1032	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	106	Classroom 106	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	106RC	Classroom 106 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	106RC	Classroom 106 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	106RC	Classroom 106 Front Right Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	106RC	Classroom 106 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	106LC	Classroom 106 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	8	SF	x	**REM**	
1	1	106LC	Classroom 106 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	8	SF	ND	**REM**	
1	1	106LC	Classroom 106 Front Left Closet	Sheetrock Ceiling	NAD	x	8	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	106LC	Classroom 106 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	8	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	105	Classroom 105	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	48	SF	x	**REM**	Coat Closet
1	1	105	Classroom 105	Ceiling Tile Glue Dots	Confirmed	NF1	48	SF	ND	**REM**	
1	1	105	Classroom 105	Sheetrock Ceiling	NAD	x	48	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	105	Classroom 105	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	1	105	Classroom 105	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	1	105CL	Classroom 105 - Closet by Door	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	15	SF	x	**REM**	
1	1	105CL	Classroom 105 - Closet by Door	Ceiling Tile Glue Dots	Confirmed	NF1	15	SF	ND	**REM**	
1	1	105CL	Classroom 105 - Closet by Door	Sheetrock Ceiling	NAD	x	15	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	105CL	Classroom 105 - Closet by Door	9" x 9" Floor Tile	Confirmed	NF1	15	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	105CL2	Classroom 105 - Closet furthest from Entrance Door	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	15	SF	x	**REM**	
1	1	105CL2	Classroom 105 - Closet furthest from Entrance Door	Ceiling Tile Glue Dots	Confirmed	NF1	15	SF	ND	**REM**	
1	1	105CL2	Classroom 105 - Closet furthest from Entrance Door	Sheetrock Ceiling	NAD	x	15	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	105CL2	Classroom 105 - Closet furthest from Entrance Door	9" x 9" Floor Tile	Confirmed	NF1	15	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	S13	Exit Foyer near Classrooms 105 and 106	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	68	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	S13	Exit Foyer near Classrooms 105 and 106	Ceiling Tile Glue Dots	Confirmed	NF1	68	SF	ND	**REM**	
1	1	H13	Hallway from Lobby by Main Office to Classroom 105	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1323	SF	x	**REM**	

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			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							Q/U = Quantity Undetermined
			Year Built: 1949	__X__ AIR/EIE							Synertech Project No. 010-4479-2
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			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	H13	Hallway from Lobby by Main Office to Classroom 105	Ceiling Tile Glue Dots	Confirmed	NF1	1323	SF	ND	**REM**	
1	1	H13	Hallway from Lobby by Main Office to Classroom 105	Sheetrock Ceiling	NAD	x	1323	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H13	Hallway from Lobby by Main Office to Classroom 105	9" x 9" Floor Tile	Confirmed	NF1	1323	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	H12	Hallway between Main Entrance and Auditorium	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1230	SF	x	**REM**	
1	1	H12	Hallway between Main Entrance and Auditorium	Ceiling Tile Glue Dots	Confirmed	NF1	1230	SF	ND	**REM**	
1	1	H12	Hallway between Main Entrance and Auditorium	Sheetrock Ceiling	NAD	x	1230	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H12	Hallway between Main Entrance and Auditorium	9" x 9" Floor Tile	Confirmed	NF1	1230	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	H12	Hallway between Main Entrance and Auditorium	Blackboard/Tackboard Glue Dots	Confirmed	NF1	48	SF	ND	**REM**	
1	1	H11	Hallway from Nurse's Office to Classroom 110	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1116	SF	x	**REM**	
1	1	H11	Hallway from Nurse's Office to Classroom 110	Ceiling Tile Glue Dots	Confirmed	NF1	1116	SF	ND	**REM**	
1	1	H11	Hallway from Nurse's Office to Classroom 110	Sheetrock Ceiling	NAD	x	1116	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H11	Hallway from Nurse's Office to Classroom 110	9" x 9" Floor Tile	Confirmed	NF1	1116	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	H15	Hallway adjacent to the Left side of the Auditorium	2' x 4' Acoustical Ceiling Tile	Non Suspect ACM	x	576	SF	x	**REM**	
1	1	H15	Hallway adjacent to the Left side of the Auditorium	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	576	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	H15	Hallway adjacent to the Left side of the Auditorium	Ceiling Tile Glue Dots	Confirmed	NF1	576	SF	ND	**REM**	
1	1	H15	Hallway adjacent to the Left side of the Auditorium	Sheetrock Ceiling	NAD	x	576	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H15	Hallway adjacent to the Left side of the Auditorium	9" x 9" Floor Tile	Confirmed	NF1	576	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	H16	Hallway between the Gym, Cafeteria, and Women's Restroom	2' x 4' Acoustical Ceiling Tile	Non Suspect ACM	x	468	SF	x	**REM**	
1	1	H16	Hallway between the Gym, Cafeteria, and Women's Restroom	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	468	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	H16	Hallway between the Gym, Cafeteria, and Women's Restroom	Ceiling Tile Glue Dots	Confirmed	NF1	468	SF	ND	**REM**	
1	1	H16	Hallway between the Gym, Cafeteria, and Women's Restroom	Sheetrock Ceiling	NAD	x	468	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	H16	Hallway between the Gym, Cafeteria, and Women's Restroom	9" x 9" Floor Tile	Confirmed	NF1	468	SF	ND	**REM**	Mastic residue on concrete floor to remain intact

			School District of Philadelphia	Survey Type							
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance							The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary. Q/U = Quantity Undetermined Synertech Project No. 010-4479-2
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							
			Year Built: 1949	__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	1	112F	Janitorial Closet at Entrance to Cafeteria	9" x 9" Floor Tile	Confirmed	NF1	40	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	114-PC	Pipe Chase in Men's Restroom near Cafeteria	Pipe Fitting Insulation	Confirmed	FRI	10	EA	ND	**REM**	
1	1	114-PC	Pipe Chase in Men's Restroom near Cafeteria	Pipe Insulation 2-6 inch	Confirmed	FRI	25	LF	ND	**REM**	
1	1	113-PC	Pipe Chase in Women's Restroom near Cafeteria	Pipe Fitting Insulation	Confirmed	FRI	6	EA	ND	**REM**	
1	1	113-PC	Pipe Chase in Women's Restroom near Cafeteria	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	**REM**	
1	1	S11	Entrance Vestibule beside Kitchen	2' x 4' Acoustical Ceiling Tile	Non Suspect ACM	x	70	SF	x	**REM**	
1	1	S11	Entrance Vestibule beside Kitchen	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	70	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	S11	Entrance Vestibule beside Kitchen	Ceiling Tile Glue Dots	Confirmed	NF1	70	SF	ND	**REM**	
1	1	S11	Entrance Vestibule beside Kitchen	Sheetrock Ceiling	NAD	x	70	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	1	112B	Kitchen	Fire Blanket	Assumed	NF2	1	EA	ND	**REM**	
1	1	112D	Kitchen Office	9" x 9" Floor Tile	Confirmed	NF1	165	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	112E	Cafeteria Serving Area	2' x 4' Acoustical Ceiling Tile	Non Suspect ACM	x	162	SF	x	**REM**	
1	1	112E	Cafeteria Serving Area	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	162	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	112E	Cafeteria Serving Area	Ceiling Tile Glue Dots	Confirmed	NF1	162	SF	ND	**REM**	
1	1	112	Cafeteria	2' x 4' Acoustical Ceiling Tile	Non Suspect ACM	x	2560	SF	x	**REM**	
1	1	112	Cafeteria	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	2560	SF	x	**REM**	Above 2'x4' Suspended Ceiling Tiles
1	1	112	Cafeteria	Ceiling Tile Glue Dots	Confirmed	NF1	2560	SF	ND	**REM**	
1	1	112	Cafeteria	12" x 12" Blue Floor Tile & Mastic	NAD	x	2560	SF	ND	**REM**	
1	1	112	Cafeteria	9" x 9" Floor Tile	Confirmed	NF1	2560	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	1	112	Cafeteria	Blackboard/Tackboard Glue Dots	Confirmed	NF1	48	SF	ND	**REM**	
1	1	111	Gymnasium	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	Applied to Roof Drain Piping just below Ceiling
1	1	111	Gymnasium	Pipe Insulation > 6 inch	Confirmed	FRI	6	LF	ND	**REM**	Applied to Roof Drain Piping just below Ceiling
1	1	111	Gymnasium	Pipe Insulation 2-6 inch	Confirmed	FRI	28	LF	ND	**REM**	Applied to Heating System Piping on Both Sides of Each AHU within Wall Cavity; Assumed to Travel Inside Each AHU

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

__X__ Asbestos Abatement Activity

__X__ Bulk Sampling Event

Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	Floor	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments
1	1	111	Gymnasium	Pipe Fitting Insulation	Confirmed	FRI	12	EA	ND	**REM**	Applied to Heating System Piping on Both Sides of Each AHU within Wall Cavity; Assumed to Travel Inside Each AHU
1	1	111D	Custodial Closet between Gym and Boys Restroom	9" x 9" Floor Tile	Confirmed	NF1	12	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	1	111B-PC	Urinal Wall Chase in Boys Restroom in Gym	Pipe/Pipe Fitting Insulation	Confirmed	FRI	30	LF	ND	**REM**	No Access Doors Present - 30 linear feet assumed within pipe chase
1	1	S16	Gym Office	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	**REM**	
1	1	S16	Gym Office	Pipe Insulation > 6 inch	Confirmed	FRI	12	LF	ND	**REM**	
1	1	109B	Stage	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	**REM**	
1	1	109B	Stage	Pipe Insulation 2-6 inch	Confirmed	FRI	29	LF	ND	**REM**	
1	1	109B	Stage Lighting	Wire Insulation	Assumed	NF2	2	EA	ND	**REM**	2 Long Fixtures - Width of Stage
1	1	109B	Stage Electrical Panels	Wire Insulation	Assumed	NF2	Q/U	LF	ND	**REM**	
1	1	109A	Auditorium	12" x 12" Floor Tile & Mastic	Assumed	NF1	1644	SF	ND	**REM**	No 9x9s below - Installed directly to the Concrete Floor
1	2	202	Classroom 202	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	52	SF	x	**REM**	Coat Closet
1	2	202	Classroom 202	Ceiling Tile Glue Dots	Confirmed	NF1	52	SF	ND	**REM**	
1	2	202	Classroom 202	Sheetrock Ceiling	NAD	x	52	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	202	Classroom 202	9" x 9" Floor Tile	Confirmed	NF1	1080	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	2	202	Classroom 202	12" x 12" Floor Tile & Mastic	Assumed	NF1	64	SF	ND	**REM**	
1	2	202	Classroom 202	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	2	202RC	Classroom 202 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	202RC	Classroom 202 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	202RC	Classroom 202 Front Right Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	202RC	Classroom 202 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	202LC	Classroom 202 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	202LC	Classroom 202 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	202LC	Classroom 202 Front Left Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	202LC	Classroom 202 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	202A-PC	Boys Restroom Pipe Chase	Pipe Fitting Insulation	Confirmed	FRI	20	EA	ND	**REM**	
1	2	202A-PC	Boys Restroom Pipe Chase	Pipe Insulation 2-6 inch	Confirmed	FRI	64	LF	ND	**REM**	
1	2	202B	Custodial Closet beside Boys Restroom	9" x 9" Floor Tile	Confirmed	NF1	48	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	203	Classroom 203	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	52	SF	x	**REM**	Coat Closet
1	2	203	Classroom 203	Ceiling Tile Glue Dots	Confirmed	NF1	52	SF	ND	**REM**	

			School District of Philadelphia	Survey Type							
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			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX							
			Year Built: 1949	__X__ AIR/EIE							
			7809 Castor Avenue, Philadelphia, PA 19152	__X__ Asbestos Abatement Activity							
			Certification # 0437 Date: 12/10/2021	__X__ Bulk Sampling Event							
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020							
Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	2	203	Classroom 203	Sheetrock Ceiling	NAD	x	52	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	203	Classroom 203	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	2	203	Classroom 203	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	2	203RC	Classroom 203 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	203RC	Classroom 203 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	203RC	Classroom 203 Front Right Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	203RC	Classroom 203 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	203LC	Classroom 203 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	203LC	Classroom 203 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	203LC	Classroom 203 Front Left Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	203LC	Classroom 203 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	203A	Reading Room	Blackboard/Tackboard Glue Dots	Confirmed	NF1	80	SF	ND	**REM**	
1	2	201B	ESOL	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	144	SF	x	**REM**	
1	2	201B	ESOL	Ceiling Tile Glue Dots	Confirmed	NF1	144	SF	ND	**REM**	
1	2	201B	ESOL	9" x 9" Floor Tile	Confirmed	NF1	144	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	201B	ESOL	Blackboard/Tackboard Glue Dots	Confirmed	NF1	80	SF	ND	**REM**	
1	2	201D	ESOL Closet	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	10	SF	x	**REM**	
1	2	201D	ESOL Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	201D	ESOL Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	201D	ESOL Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	H27A	Hallway to ESOL Room from Main Hallway	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	45	SF	x	**REM**	
1	2	H27A	Hallway to ESOL Room from Main Hallway	Ceiling Tile Glue Dots	Confirmed	NF1	45	SF	ND	**REM**	
1	2	H27A	Hallway to ESOL Room from Main Hallway	Sheetrock Ceiling	NAD	x	45	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	H27A	Hallway to ESOL Room from Main Hallway	9" x 9" Floor Tile	Confirmed	NF1	45	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	205	Fan Room across from Library	Fiberglass Pipe Insulation	Non Suspect ACM	x	100	LF	x	**REM**	
1	2	205	Fan Room across from Library	Fiberglass Pipe Fitting Insulation	Non Suspect ACM	x	25	EA	x	**REM**	
1	2	201	IMC/Library	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1260	SF	x	**REM**	
1	2	201	IMC/Library	Ceiling Tile Glue Dots	Confirmed	NF1	1260	SF	ND	**REM**	
1	2	201	IMC/Library	12" x 12" Floor Tile & Mastic	NAD	x	1260	SF	x	**REM**	

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

__X__ Asbestos Abatement Activity

__X__ Bulk Sampling Event

Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

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Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	Floor	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments
1	2	201	IMC/Library	9" x 9" Floor Tile	Confirmed	NF1	1260	SF	ND	**REM**	Below 12x12s - including Coat Closet and below Unit-Ventilators
1	2	210A	Teacher Lounge/Dining	12" x 12" Floor Tile & Mastic	NAD	x	198	SF	x	**REM**	
1	2	210A	Teacher Lounge/Dining	9" x 9" Floor Tile	Confirmed	NF1	198	SF	ND	**REM**	Below 12x12s; Mastic residue on concrete floor to remain intact
1	2	210A	Teacher Lounge/Dining	Blackboard/Tackboard Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	210AB	Computer Server Room in 210A	9" x 9" Floor Tile	Confirmed	NF1	54	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	203B	Reading Room	9" x 9" Floor Tile	Confirmed	NF1	234	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	200A-PC	Girl's Restroom Pipe Chase	Pipe Fitting Insulation	Confirmed	FRI	5	EA	ND	**REM**	
1	2	200A-PC	Girl's Restroom Pipe Chase	Pipe Insulation 2-6 inch	Confirmed	FRI	32	LF	ND	**REM**	
1	2	200	Classroom 200	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	52	SF	x	**REM**	Coat Closet
1	2	200	Classroom 200	Ceiling Tile Glue Dots	Confirmed	NF1	52	SF	ND	**REM**	
1	2	200	Classroom 200	Sheetrock Ceiling	NAD	x	52	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	200	Classroom 200	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	2	200	Classroom 200	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	2	200RC	Classroom 200 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	200RC	Classroom 200 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	200RC	Classroom 200 Front Right Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	200RC	Classroom 200 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	200LC	Classroom 200 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	200LC	Classroom 200 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	200LC	Classroom 200 Front Left Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	200LC	Classroom 200 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	204	Classroom 204	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	52	SF	x	**REM**	Coat Closet
1	2	204	Classroom 204	Ceiling Tile Glue Dots	Confirmed	NF1	52	SF	ND	**REM**	
1	2	204	Classroom 204	Sheetrock Ceiling	NAD	x	52	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	204	Classroom 204	9" x 9" Floor Tile	Confirmed	NF1	1144	SF	ND	**REM**	including Coat Closet and below Unit-Ventilators
1	2	204	Classroom 204	Blackboard/Tackboard Glue Dots	Confirmed	NF1	150	SF	ND	**REM**	
1	2	204RC	Classroom 204 Front Right Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	204RC	Classroom 204 Front Right Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

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Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

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Synertech Project No. 010-4479-2

Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
1	2	204RC	Classroom 204 Front Right Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	204RC	Classroom 204 Front Right Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	204LC	Classroom 204 Front Left Closet	1' x 1' Ceiling Tile	NAD	x	10	SF	x	**REM**	
1	2	204LC	Classroom 204 Front Left Closet	Ceiling Tile Glue Dots	Confirmed	NF1	10	SF	ND	**REM**	
1	2	204LC	Classroom 204 Front Left Closet	Sheetrock Ceiling	NAD	x	10	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	204LC	Classroom 204 Front Left Closet	9" x 9" Floor Tile	Confirmed	NF1	10	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	H27	Hallway from Classrooms 200 to 204	1' x 1' Fiberglass Ceiling Tile	Non Suspect ACM	x	1575	SF	x	**REM**	
1	2	H27	Hallway from Classrooms 200 to 204	Ceiling Tile Glue Dots	Confirmed	NF1	1575	SF	ND	**REM**	
1	2	H27	Hallway from Classrooms 200 to 204	Sheetrock Ceiling	NAD	x	1575	SF	x	**REM**	1'x1' ceiling tiles applied to sheetrock ceiling
1	2	H27	Hallway from Classrooms 200 to 204	9" x 9" Floor Tile	Confirmed	NF1	1521	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
1	2	H27	Hallway from Classrooms 200 to 204	12" x 12" Floor Tile & Mastic	Assumed	NF1	54	SF	ND	**REM**	
1	2	H27	Hallway from Classrooms 200 to 204	Blackboard/Tackboard Glue Dots	Confirmed	NF1	32	SF	ND	**REM**	
2			**Element 2 - Modular Annex Building**							**Modular**	
2	1	-	Throughout Element 2 - Modular Annex Building	Exterior Window Glazing	Confirmed	NF2	1600	LF	ND	**REM**	32 linear feet of glazing per window - approximately 50 windows
2	1	S19	Stairwell from Gym to Element 2 (A1-A6)	Fiberglass Pipe Insulation	Non Suspect ACM	x	18	LF	x	**REM**	
2	1	S19	Stairwell from Gym to Element 2 (A1-A6)	Sheetrock/Joint Compound Walls	Confirmed	FRI	63	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	S19	Stairwell from Gym to Element 2 (A1-A6)	12" x 12" Blue Floor Tile & Mastic	Confirmed	NF1	24	SF	ND	**REM**	Mastic is Confirmed Asbestos-Containing; No 9x9s below - Installed directly to the Concrete Floor
2	1	H17	Hallway between Gym and Element 2 (A1-A6)	Pipe Fitting Insulation	Confirmed	FRI	8	EA	ND	**REM**	
2	1	H17	Hallway between Gym and Element 2 (A1-A6)	Fiberglass Pipe Insulation	Non Suspect ACM	x	70	LF	x	**REM**	
2	1	H17	Hallway between Gym and Element 2 (A1-A6)	12" x 12" Blue Floor Tile & Mastic	Confirmed	NF1	210	SF	ND	**REM**	Mastic is Confirmed Asbestos-Containing; No 9x9s below - Installed directly to the Concrete Floor
2	1	H17	Hallway between Gym and Element 2 (A1-A6)	Sheetrock/Joint Compound Walls	Confirmed	FRI	416	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	A6	Classroom A6 (306) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	13	EA	ND	**REM**	
2	1	A6	Classroom A6 (306) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	85	LF	x	**REM**	
2	1	A6	Classroom A6 (306) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing

School District of Philadelphia

Section 1.13 - Table of Materials Scheduled for Removal and Demolition

Rhawnhurst Elementary School (8360)

Year Built: 1949

7809 Castor Avenue, Philadelphia, PA 19152

Certification # 0437 Date: 12/10/2021

Major Renovation and Addition

Survey Type

_____ 6 Month Surveillance

_____ Three- Year Reinspection IX

__X__ AIR/EIE

__X__ Asbestos Abatement Activity

__X__ Bulk Sampling Event

Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020

The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary.
Q/U = Quantity Undetermined
Synertech Project No. 010-4479-2

Element	*Floor*	*Space #*	*On Site Room Name*	*Material Description*	*Confirmed, Assumed, NAD, Non Suspect ACM*	*Type (Code 1)*	*Amount of Material*	*SF LF EA*	*Condition (Code 2)*	*Action (Code 3)*	*Comments*
2	1	A6	Classroom A6 (306) and Rear Closet Area	9" x 9" Floor Tile	Confirmed	NF1	804	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
2	1	A6	Classroom A6 (306) and Rear Closet Area	9" x 9" Floor Tile	Confirmed	NF1	55	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
2	1	A6	Classroom A6 (306) and Rear Closet Area	12" x 12" Floor Tile & Mastic	Assumed	NF1	15	SF	ND	**REM**	
2	1	A6	Classroom A6 (306) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**	
2	1	A1	Classroom A1 (301) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	17	EA	ND	**REM**	
2	1	A1	Classroom A1 (301) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	90	LF	x	**REM**	
2	1	A1	Classroom A1 (301) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	A1	Classroom A1 (301) and Rear Closet Area	12" x 12" Blue Floor Tile & Mastic	Confirmed	NF1	874	SF	ND	**REM**	Mastic is Confirmed Asbestos-Containing; No 9x9s below - Installed directly to the Concrete Floor
2	1	A1	Classroom A1 (301) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**	
2	1	A5	Classroom A5 (305) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	**REM**	
2	1	A5	Classroom A5 (305) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	51	LF	x	**REM**	
2	1	A5	Classroom A5 (305) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	A5	Classroom A5 (305) and Rear Closet Area	9" x 9" Floor Tile	Confirmed	NF1	874	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
2	1	A5	Classroom A5 (305) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**	
2	1	A2	Classroom A2 (302) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	**REM**	
2	1	A2	Classroom A2 (302) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	51	LF	x	**REM**	
2	1	A2	Classroom A2 (302) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	A2	Classroom A2 (302) and Rear Closet Area	9" x 9" Floor Tile	Confirmed	NF1	814	SF	ND	**REM**	Mastic residue on concrete floor to remain intact
2	1	A2	Classroom A2 (302) and Rear Closet Area	12" x 12" Floor Tile & Mastic	Assumed	NF1	60	SF	ND	**REM**	
2	1	A2	Classroom A2 (302) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**	
2	1	A4	Classroom A4 (304) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	**REM**	
2	1	A4	Classroom A4 (304) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	48	LF	x	**REM**	
2	1	A4	Classroom A4 (304) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing
2	1	A4	Classroom A4 (304) and Rear Closet Area	12" x 12" Floor Tile & Mastic	Assumed	NF1	874	SF	ND	**REM**	
2	1	A4	Classroom A4 (304) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**	
2	1	A3	Classroom A3 (303) and Rear Closet Area	Pipe Fitting Insulation	Confirmed	FRI	11	EA	ND	**REM**	
2	1	A3	Classroom A3 (303) and Rear Closet Area	Fiberglass Pipe Insulation	Non Suspect ACM	x	70	LF	x	**REM**	
2	1	A3	Classroom A3 (303) and Rear Closet Area	Sheetrock/Joint Compound Walls	Confirmed	FRI	1220	SF	ND	**REM**	Joint Compound confirmed asbestos-containing

			School District of Philadelphia	Survey Type								The quantities listed for No Asbestos Detected (NAD) and/or Non-Suspect Materials are only estimated and were not measured for the purpose of this report. Field verification of quantities for renovation purposes would be necessary. Q/U = Quantity Undetermined Synertech Project No. 010-4479-2
			Section 1.13 - Table of Materials Scheduled for Removal and Demolition	_____ 6 Month Surveillance								
			Rhawnhurst Elementary School (8360)	_____ Three- Year Reinspection IX								
			Year Built: 1949	**__X__ AIR/EIE**								
			7809 Castor Avenue, Philadelphia, PA 19152	**__X__ Asbestos Abatement Activity**								
			Certification # 0437 Date: 12/10/2021	**__X__ Bulk Sampling Event**								
			Major Renovation and Addition	Major Renovation and Addition as described in the 90% drawings dated September 11, 2020 as prepared by the School District of Philadelphia B-070, B-071, B-072, B-073c of 2019/2020								
Element	***Floor***	***Space #***	***On Site Room Name***	***Material Description***	***Confirmed, Assumed, NAD, Non Suspect ACM***	***Type (Code 1)***	***Amount of Material***	***SF LF EA***	***Condition (Code 2)***	***Action (Code 3)***	***Comments***	
2	1	A3	Classroom A3 (303) and Rear Closet Area	9" x 9" Floor Tile	Confirmed	NF1	874	SF	ND	**REM**	Mastic residue on concrete floor to remain intact	
2	1	A3	Classroom A3 (303) and Rear Closet Area	Blackboard/Tackboard Glue Dots	Confirmed	NF1	260	SF	ND	**REM**		
2	1	H14	Hallway from Classrooms A1 to A4	Pipe Fitting Insulation	Confirmed	FRI	9	EA	ND	**REM**		
2	1	H14	Hallway from Classrooms A1 to A4	Fiberglass Pipe Insulation	Non Suspect ACM	x	54	LF	x	**REM**		
2	1	H14	Hallway from Classrooms A1 to A4	9" x 9" Floor Tile	Confirmed	NF1	1035	SF	ND	**REM**	Mastic residue on concrete floor to remain intact	

.14 The AAC shall submit to the API the number of AFDs projected to obtain a negative pressure differential sufficient to provide a minimum of four (4) air changes of the work area per hour along with the calculations used to determine this. The AAC shall install a manometer to confirm the differential, which should read minimum of -0.02 inches of water column.

a. Number of AFDs projected to obtain a negative pressure differential sufficient to provide a minimum of four (4) air changes of the work area per hour:

$$\frac{L \times W \times H \times 4 \text{ air changer per hour}}{\text{CFM Rating of AFD} \times 60}$$

.15 Stated quantities are approximate. By submitting a bid, the AAC signifies they have visited the site, examined conditions that may affect the work, verified quantities of materials, and is informed as to the extent and character of the project. Any discrepancies from stated footages shall not be cause for a contract cost adjustment.

.16 The AAC shall furnish all labor, materials, employee training, services, permits, fees, insurance and equipment necessary to carry out the asbestos removal, decontamination operations and disposal in accordance with EPA, OSHA, and all other applicable Federal, State, and local government regulations, and this Specification.

2.00 GENERAL ABATEMENT PROJECT CONDITIONS

.01 The asbestos abatement work areas listed in *Section 1.13* are Major, Minor and Non-Friable Projects as defined by the Philadelphia Asbestos Control Regulation (ACR) and shall comply with all requirements therein.

a. The AAC shall have a PA licensed Supervisor on site at all times during asbestos abatement activities. The AAC shall not perform any abatement activities, including prep, bag-out, and teardown unless a City of Philadelphia certified API is on site.

b. **The AAC shall provide a schedule for all work areas listed. The schedule shall be approved by the Owner and API prior to the commencement of work. The schedule shall include dates and timelines for the completion of all work areas listed in addition to proposed crew sizes.**

.02 If the AAC seeks a change in the procedures and/or methods for accomplishing a certain asbestos abatement task, the AAC may submit a written request to the Asbestos Project Designer for an alternative method, identifying the procedure for which an alternative is being sought, and the reason for seeking a change. The Asbestos Project Designer shall review the request and render a decision within twenty-four (24) hours of receipt of the written request.

.03 The Owner, API, and AAC shall conduct an inspection for existing damages prior to the commencement of work. All parties shall agree in writing on building conditions and list all damaged materials, furnishings, etc.

.04 AAC access shall be confined to the work areas indicated in this Contract. The Contract may be proceeding concurrently with others in the building. The AAC shall cooperate fully with the other Contractors in expediting the work of all trades, and avoid damage to the work of the other Contractors.

.05 The AAC shall be served with a Stop Work Order by the Project Designer and/or API when they are in non-compliance with this Contract Specification and/or other pertinent regulations (Refer to *Section 3.01.a-p*).

a. The project shall remain halted until all matters identified in the Stop Work Order are corrected.

.06 If it is determined that airborne asbestos contamination has occurred "outside the work area" adjacent to an active asbestos abatement work area, the AAC shall contain and clean the affected premises under the direction of the API at no additional cost to the Owner. Causes for "outside the work area" airborne asbestos contamination include, but are not limited to:

a. The loss of a negative pressure differential inside any active asbestos abatement work area;
b. A breech of containment into any active asbestos abatement work area;
c. Improper maintenance of AFDs/HEPA vacuums (Refer to *Section 15.07.a-c.1-2*)
d. Improper worker decontamination procedures;
e. Negligence of the AAC;
f. Any other poor work practices of the AAC.

3.00 QUALITY ASSURANCE

.01 All work and disposal shall be performed in compliance with all applicable Federal, State, and local regulations including, but not limited to:

- **a.** 29 CFR 1926.1101 (OSHA) for asbestos exposure in construction;
- **b.** 29 CFR 1926.501 (OSHA) for fall protection in construction;
- **c.** 40 CFR Part 61 (NESHAP);
- **d.** 40 CFR Part 763 (AHERA);
- **e.** 40 CFR 761 **(**PCB Regulations);
- **f.** Resource Conservation and Recovery Act (RCRA);
- **g.** 40 CFR 300-399, EPA Comprehensive Environmental Response Compensation & Liability Act;
- **h.** 40 CFR 745, EPA Toxic Substances Control Act; LBP Poisoning Prevention;
- **i.** EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act;
- **j.** 49 CFR 171-180, DOT Hazardous Material Regulations;
- **k.** 42 CFR Part 84 & 30 CFR Part 11 (NIOSH/DHHS respirator standards);
- **l.** the Asbestos Control Regulation (Philadelphia Department of Public Health);
- **m.** Act 194 & Act 161 (Pennsylvania Department of Labor and Industry);
- **n.** Section F-315.8 (R) of the Philadelphia Fire Prevention Code;
- **o.** NADCA ACR 2006 (HVAC System cleaning standards);
- **p.** 29 CFR 1926.62 for lead exposure in construction;
- **q.** this Specification.

.02 The AAC has the responsibility of informing themselves fully of the requirements of these agencies and shall satisfy completely this Specification and all referenced regulations. All other applicable federal state and local regulations are incorporated by reference.

.03 The AAC must be a City of Philadelphia Licensed Asbestos Abatement Contractor as well as a Pennsylvania Licensed Asbestos Contractor and employ asbestos workers certified to work in the state of Pennsylvania.

.04 The Philadelphia Federation of Teacher's (PFT) Environmental Consultant shall have the option to conduct side by side final clearance air samples within 24 hours of notice of work area completion with the API. Samples will be collected, analyzed, and addressed, in accordance with all applicable, Federal, State, and local regulations.

- **a.** Samples may be collected and analyzed via PCM and/or TEM.
- **b.** Results shall be evaluated in accordance with the ACR and AHERA.
- **c.** Acceptable airborne fiber concentrations for individual "outside the work area" air samples shall be < 0.010 f/cc for PCM and < 70 s/mm² for TEM.

4.00 NOTIFICATIONS

.01 The AAC shall notify all applicable agencies including the EPA, DEP, and Philadelphia Air Management Services, using the appropriate form(s), ten (10) days prior to the commencement of asbestos abatement projects.

.02 The AAC shall submit written notification of the asbestos abatement project schedule to the local police and fire departments ten (10) days prior to beginning the project.

.03 The Owner shall provide a minimum of ten (10) calendar days advance notification of intended asbestos abatement to all occupants. This notice shall conform to the Philadelphia ACR, *Section VI.B.2* and shall remain posted until the re-occupancy standard is met.

5.00 MANDATORY MEETINGS/SUBMITTALS

.01 **Pre-construction meeting** - The AAC shall attend a pre-construction meeting scheduled by the Owner. The AAC shall submit to the Owner the following, if not already submitted:

- **a.** Copies of required notifications, insurance, and bonds.
- **b.** Progress schedule
  - **1.** The AAC shall provide a schedule for all work areas listed. The schedule shall be approved by the Owner and API prior to the commencement of work. The schedule shall include the number of active abatement work areas at any given time, proposed crew sizes, and waiting periods following the delivery of the work area to the API for final visual inspections and clearance testing.
- **c.** Work plan delineating phasing and preparation of the work site, including intended locations of water and electrical sources, and the intended storage locations for furniture and ceiling mounted light fixtures and other ceiling mounted items. Description of decontamination sequence, removal methods to be used and waste handling.
- **d.** Supervisor credentials and delineation of responsibility for work site supervision, including name, telephone number and pager number for both the project manager and the on-site supervisor.
- **e.** Worker qualifications, current licenses, fit tests, and medicals. These may be submitted as the crew is selected or changed, however, no workers will be permitted to remain on site without submission and approval of qualifications.
- **f.** Safety Data Sheets (SDS) for the materials to be used on the job:
  - **1.** Asbestos abatement encapsulant (only encapsulants approved by the Department of Public Health may be used);
  - **2.** Heavy-duty polyethylene tape used for sealing fixed objects, the construction of critical barriers, decontamination chambers and floor/wall containments;
  - **3.** Chemical solvent floor tile mastic remover.
- **g.** Name of Waste Hauler(s) and disposal site with EPA/DEP identification numbers;
- **h.** Name of the firm or competent person performing the AACs OSHA required personnel monitoring and the laboratories PAT Certification and Philadelphia Laboratory Certification;
- **i.** A detailed *written* description of emergency procedures to be followed in the event of injury or fire. This submittal must include execution procedures, source of emergency assistance (including telephone numbers), and access procedures to be used by emergency personnel.

.02 **Progress meetings** - Meetings shall be held at the job site at the discretion of the Owner/Construction Manager/API to discuss the progress of the work, phasing and other Contractor coordination, work schedule, and any conflicts or problems. The representative of the AAC must have authorization to speak for and make commitments for the AAC. The GC and AAC shall continuously coordinate to fulfill project milestones and phasing requirements. The Owner will not pay remobilization fees, charges and/or change orders issued by the GC and/or AAC.

6.00 OWNER'S RESPONSIBILITIES

.01 The Owner shall employ the services of an Asbestos Project Inspector (API) who is licensed by the City of Philadelphia to perform asbestos project inspection as defined by the Asbestos Control Regulation (ACR).

.02 The Owner shall ensure the work areas will be unoccupied prior to abatement activity commencing.

.03 The Owner shall make water and electricity available at the site at no cost to the AAC. The Owner and/or Construction Manager shall notify the AAC of scheduled system shut downs to ensure no interruptions to the project's engineering controls.

.04 The Owner shall be responsible to remove all computers, monitors, printers, all other computer related components, personal effects, books, or other items deemed too valuable or sensitive to leave in the scheduled work areas to be handled by the AAC. A list of such items includes:

a. Personal items throughout any previously mentioned work areas;
b. All computers and computer accessories in any previously mentioned work areas;
c. Stored maintenance and building supply items, paper products, paints, cleaners, replacement ceiling tiles and florescent light bulbs, excess furniture, etc. located in any of the work areas scheduled for abatement, demolition and/or cleaning.
d. Any other items deemed appropriate by the Owner.
e. The Owner shall store items in areas not scheduled for asbestos abatement work.
f. The Owner shall send written notices to the appropriate and responsible School District personnel at the Rhawnhurst Elementary School informing them of this responsibility and the limit of the AACs responsibilities.
g. Any movable items remaining in the scheduled work areas at the time of the mobilization of the AAC shall be removed by the AAC.

7.00 ASBESTOS ABATEMENT CONTRACTOR'S (AAC) RESPONSIBILITIES

.01 The AAC is responsible for visiting the site and verifying quantities of asbestos containing materials, locations of utilities, and waste out routes *prior to* submitting a bid.

a. No work shall be performed if the AAC believes the work to be performed is a change and/or addition to the work scope outlined in the construction documents without first obtaining a Notice To Proceed (NTP) from the Owner.

1. The Owner shall not be responsible for compensating the AAC for work performed that is considered a change and/or addition to the construction documents without the issuance of a NTP and/or a written work directive.

.02 Project phasing, start and completion dates are subject to change at the discretion of the Owner.

.03 The AAC shall provide all labor, tools, materials and scaffold necessary to complete the project safely, in a timely fashion, and in accordance with the specification and all applicable regulations.

a. All tools, ladders, equipment, etc. shall arrive at the project site in good condition and free of any visual residual asbestos contamination.

.04 Any movable items remaining in the scheduled work areas at the time of the mobilization of the AAC shall be removed and disposed of by the AAC. The AAC shall coordinate with the Owner to determine which items shall be discarded and which items are intended to be salvaged.

.05 The AAC shall protect all non-movable furniture, cabinetry and equipment from damage throughout the duration of this project.

.06 The AAC shall supply, at their own expense, all construction materials, supplies, and all electrical, water, and waste connections, tie-ins, or extensions. Temporary service lines shall be installed to prevent tripping, slipping or falling. The AAC must utilize a licensed electrician to install separate temporary electric panels, receptacles, and lights, all with ground fault interruption and current-overload protection. All temporary electrical set-ups shall be in accordance with OSHA regulation and NEMA standards.

a. The AACs electrician shall de-energize all equipment scheduled to be demolished, including, but not limited to, electrical panels, boilers, etc.

.07 The AAC shall utilize a PA State licensed Mechanical Services Contractor and Certified Mechanic to assure that:

a. all utility services such as oil, natural gas, water and electric are disconnected from the boilers and tagged-out, including the gas lines to the pilot lights, if present. The AAC shall coordinate with the Building Engineer to determine which oil, natural gas, water and electric services associated with the work area are essential and are required to remain functional, if any.

1. The gas/oil lines supplying the boilers shall be disconnected back to a point where the remaining lines are away from potential impact or damage due to the specified demolition tasks. The upstream valves shall be closed, and a secure blind flange shall be installed at the point of disconnection to facilitate future connections.

a. Any oil, gas, water and electric lines that are required to remain 'live' in any work area as determined by the Building Engineer shall be tagged every six feet.

b. Disconnection of the gas lines to the boiler(s) may require coordination with representatives from Philadelphia Gas Works (PGW). The Certified Mechanic shall be assigned the responsibility to determine if or when involvement of PGW is required.

2. The valves connecting the header and hot water return lines to the boilers shall be closed.

a. The valves of the header and hot water return lines supplying the boiler shall be disconnected at the flange at the stop valve. A secure blind flange shall be installed at the point of disconnection.

3. The piping supplying each boiler with make-up water shall be cut and capped. The water supply to the make-up water piping to each boiler shall be temporarily shut down to allow for the cutting and capping of this piping.

b. All utility lines providing water, oil or natural gas are drained or evacuated prior to the AAC continuing work.

c. The boiler systems are drained prior to the AAC commencing boiler demolition work.

.08 Seal the smoke stack opening resulting from the disconnection of the boiler breeching. The stack opening shall be sealed with a temporary blank consisting of ⅜" plywood minimum, mechanically fastened in place.

.09 The AAC shall maintain current copies of certifications for workers on-site, and shall keep copies of all pertinent specifications and regulations on-site. The API retains the right to prohibit work by employees without current certifications.

.10 The AAC shall maintain a detailed sign-in/sign-out log, which must be filled out by every person entering the work area. All entries shall be complete and legible.

.11 The AAC shall be responsible for security of the work site, fire/smoke detection, and maintenance of existing utility systems as it relates to the performance of this project.

.12 The AAC shall provide fire protection in accordance with all State and Local codes. This includes, but is not limited to:

a. Providing a written fire prevention and emergency action plan.

b. Providing multi-purpose ABC rated fire extinguishers, insuring that on-site personnel are aware of the location and proper use of all fire extinguishers and other safety equipment.

c. Performing a fire watch of the overall work area.

d. Designating a safety coordinator to implement the above actions. The AACs safety coordinator shall be responsible for:

1. Fire/life safety entries shall be entered into the AACs log daily and shall be submitted with the AAC's final report.

2. Daily entries shall include names, dates, duration, problems & corrective actions taken by the fire watch - must be signed by the safety coordinator.

.13 Assure protection of AFD exhaust ducts from damage during asbestos abatement activities.

.14 The AAC Supervisor and API shall perform a visual inspection of the entire floor immediately below all active abatement work areas at the end of each 8-hour shift to verify that no water leaks, fallen material, or any other type of damage has occurred.

a. If water leaks, fallen material, or any other type of damage has occurred:

1. all asbestos abatement work shall be halted;

2. the API shall immediately notify the Asbestos Project Manager, Construction Manager and Owner for direction and input;

3. the source of the leak or damage shall be determined;

4. the containment breech issue shall be rectified before any asbestos abatement work will be permitted to continue.

.15 As required by the Asbestos Control Regulation, the AAC shall provide a minimum 18" square transparent viewing window consisting of shatterproof material greater than or equal to 1/8" in thickness located at a height appropriate for accessible viewing and in such a manner as to maximize visibility of the abatement work area.

.16 Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area during the performance of final cleaning. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.

a. Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.

b. This process shall be performed several times to the satisfaction of the API.

.17 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

8.00 ASBESTOS PROJECT INSPECTOR'S (API) RESPONSIBILITIES

.01 The API shall act as the Owner's representative on the work site to assure and document compliance with this Specification and applicable regulations and to perform all project sampling and analysis required by the Philadelphia ACR and AHERA.

.02 The API shall be responsible to see that required information and notifications are posted and are accessible for review by all concerned parties.

.03 The API shall keep a daily log documenting the progress and performance of the AAC over the course of the project.

.04 The API shall perform continuous inspections to monitor the performance of the AAC and to assure and document compliance with this Specification and applicable regulations. Inspections shall be performed during all phases of the project including verifying compliance with standard operating procedures, checking engineering controls, personal protection and decontamination systems, and handling and disposition of the resulting asbestos waste materials.

.05 The API shall be responsible for performing all project sampling and analysis required by the Philadelphia ACR and AHERA.

a. The API shall also perform representative personal air sampling on themselves during the project as defined within OSHA 1926.1101 and 1910.1001. Personal air samples shall be collected to establish a time weighted average (TWA) and a short-term excursion limit (STEL). Such air samples shall be collected within the breathing zone and used to:

1. initially determine the level of respiratory protection;
2. subsequently to assure that such protections remain adequate throughout the project.

.06 The API shall routinely perform smoke testing at all critical barriers throughout the performance of asbestos abatement activities until the receipt of acceptable clearance air sample results to verify the integrity of critical barriers and presence of an adequate negative pressure differential.

.07 The API shall notify the Owner and Air Management Services of the City of Philadelphia if the AAC is found to be in non-compliance with the technical specifications or those Municipal, State or Federal regulations applicable to this project.

a. The API shall serve written notice to the AAC for all AAC non-compliance actions.

.08 The AAC Supervisor and API shall perform a visual inspection of the entire floor immediately below all active abatement work areas at the end of each 8-hour shift to verify that no water leaks, fallen material, or any other type of damage has occurred.

a. If water leaks, fallen material, or any other type of damage has occurred:

1. all asbestos abatement work shall be halted;

2. the API shall immediately notify the Asbestos Project Manager, Construction Manager and Owner for direction and input;

3. the source of the leak or damage shall be determined;

4. the containment breech issue shall be rectified before any asbestos abatement work will be permitted to continue.

.09 The API shall conduct a detailed final inspection to ensure that no visible dust or debris remains on any surfaces. This includes all surfaces inside the abatement work area and all horizontal surfaces in the immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

9.00 AIR MONITORING BY THE OWNER

.01 The Owner shall employ the services of an API who is in licensed by the City of Philadelphia to perform air monitoring and quality assurance of the AACs work practices.

.02 The API shall collect pre-test and project air samples in accordance with the Philadelphia Asbestos Control Regulations and AHERA. Project air monitoring during abatement activities shall include samples inside and outside the work area to ensure airborne fiber concentrations remain at acceptable levels. Acceptable airborne fiber concentrations outside the work area shall be < 0.010 f/cc for PCM and < 70 s/mm² for TEM. The API may also perform discretionary random personnel monitoring. Pre-test and project samples shall be analyzed via Phase Contrast Microscopy (PCM), NIOSH Method 7400.

a. Transmission Electron Microscopy (TEM) sampling may be performed in locations outside the containment work areas at the owner/consultant's discretion throughout the abatement project. Results shall be evaluated in accordance with AHERA and/or the ACR.

.03 The API shall provide clearance air sampling:

a. For Major Projects, five (5) clearance samples shall be collected and analyzed via TEM. Results shall be evaluated in accordance with the ACR.

b. For Small and Minor Projects, five (5) clearance samples shall be collected and analyzed via Phase Contrast Microscopy (PCM) or TEM. Results shall be evaluated in accordance with the ACR.

c. For Non-Friable Projects, clearance samples shall be collected and analyzed via Phase Contrast Microscopy (PCM) or TEM. Results shall be evaluated in accordance with the ACR.

d. Clearance air sampling shall be performed using aggressive techniques. Sampling procedures and clearance criteria shall follow all requirements of the Philadelphia ACR and AHERA.

.04 The Owner shall be responsible for costs incurred for the initial required laboratory work. Any subsequent testing required due to limits exceeded during abatement or any clearance sampling shall be paid by the AAC. These costs include both labor and analysis.

a. The API shall invoice the Owner, on a separate invoice, for all costs relating to labor and analyses resulting from additional testing required due to limits exceeded during abatement or failure of first round clearance sampling.

b. The AACs contract amount shall be reduced by an amount equal to the costs for labor and analyses resulting from additional testing required due to limits exceeded during abatement or failure of first round clearance sampling.

c. The Owner shall retain possession and ownership of all air sampling data and documentation.

.05 The Z-test method found in 40 CFR 763, Subpart E., Appendix A, is a test method in which inside and outside area averages can be used to pass an area based upon the outcome of the arithmetic comparison of both areas. However, the analysis and comparison of the inside and outside air samples via the Z-test method is not permitted as part of this project.

a. Inside the work area samples shall be analyzed using the geometric mean. Outside the work area samples shall be analyzed and compared independently.

1. An Exceedance of the geometric mean inside the work area and/or an exceedance of 70 s/mm² outside the work area shall require corrective action recleaning by the AAC.

b. Inside and outside final clearance air samples shall be collected and analyzed via PCM or TEM. Results shall be evaluated in accordance with the ACR and AHERA.

c. Acceptable airborne fiber concentrations for individual "outside the work area" air samples shall be < 0.010 f/cc for PCM and < 70 s/mm² for TEM.

d. During all phases of the project, the API/Consulting Firm shall be required to notify the Department of Public Health in the event an “outside the work area” air sample is in exceedance of 0.010 f/cc for PCM and 70 s/mm² for TEM.

10.00 AIR MONITORING BY THE ASBESTOS ABATEMENT CONTRACTOR (AAC)

.01 The AAC shall perform representative personal air sampling as defined within OSHA 1926.1101 and 1910.1001. Personal air samples shall be collected to establish a time weighted average (TWA) and a short-term excursion limit (STEL). Such air samples shall be collected within the breathing zone and used to:

a. initially determine the level of respiratory protection;
b. subsequently to assure that such protections remain adequate throughout the project.

.02 Sampling strategy and protocols shall be determined by a competent sampling professional according to NIOSH 7400 method. The AAC shall have a competent person collect personal air samples.

.03 Personal air sample results must be posted within 24 hours of sample collection.

.04 AAC personnel shall comply with the personal air sampling of the competent person and shall not interfere with or alter sampling protocol.

11.00 SCAFFOLDING/WALKWAYS/HOISTS/LADDERS

.01 The AAC shall use appropriate ladders, scaffolds, lifts, and/or hoists to provide safe access for equipment demolition and removal of ACM. Personnel safety lines and harnesses are required where appropriate.

a. Fall protection equipment and guidelines shall comply with OSHA Regulation Standards *29 CFR 1926.501*.

.02 All scaffolding shall be of sound condition and assembled per OSHA requirements on a level, secure base. Scaffolding shall not be overloaded. The scaffolding shall be secured or tied into the building whenever possible. Guardrails consisting of top and mid-rails and toe boards shall always be installed. A post set-up inspection and daily inspections shall be conducted. Scaffold work platforms shall comply with OSHA Regulation Standards *29 CFR 1926.451*.

.03 All stairs, platforms, catwalks and walking surfaces shall be kept, as is practical, free from obstructions, accumulation of water, and tripping hazards, and where elevated, be protected by OSHA specified top-rails, mid-rails, and toe boards.

.04 Ladders of sufficient quantity and of suitable length or height shall be provided. Only electrically non-conductive materials, such as wood or fiberglass, shall be used. Ladders shall be kept in good repair and inspected regularly. Personnel shall be instructed in the proper use of ladders. No structural alterations shall be made to any ladder.

.05 All ladders, scaffolds, lifts, and/or hoists shall arrive at the project site in good condition and free of any visual residual asbestos contamination.

12.00 - CONFINED SPACES

.01 A confined space is defined as any space that has limited or restricted means of entry or exit, is large enough for a person to enter to perform tasks, and is not designed or configured for continuous occupancy.

.02 The Occupational Safety and Health Administration (OSHA) defines a **permit-required confined space** as having the three characteristics listed above (which define a confined space) and one or more of the following:

a. Contains or has the potential to contain a hazardous atmosphere.
b. Contains a material that has the potential for engulfing the entrant.
c. Has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section.
d. Contains any other recognized serious safety or health hazards.

.03 All work performed in a confined space shall conform to OSHA Construction Industry Standards (29 CFR 1926). The AAC shall notify all employees of the locations and hazards of all confined spaces. Employees shall be instructed how to limit their risk when working in such spaces and in rescue procedures. As needed, an assistant shall remain stationed at the point of entry and maintain a line of visual and/or audible communication with the worker.

.04 Workers in a confined space shall be provided respiratory equipment that provides adequate protection against the potential hazards and is suitable for the activity in that space. As needed, harness belts and lifelines shall also be provided.

13.00 RESPIRATORY AND PERSONAL PROTECTIVE EQUIPMENT

.01 The AAC shall provide approved respirators and protective clothing to all workers. Authorized representatives of the Owner, State or other Government entity who arrive to inspect the work site shall be permitted access to the work area provided the visitor arrives with their own approved respirator. Protective clothing shall be provided to these visitors by the AAC.

a. The AAC shall provide approved respirators to all visitors that can provide proof that a Pulmonary Function Test, Medical exam and chest x-ray has been performed on the visitor, and that a doctor has performed a pulmonary evaluation of the visitor indicating that the visitor has been deemed able to safely wear a respirator.

.02 The AAC shall require that each person entering the work area shall wear an approved respirator and protective clothing. There shall be no exceptions to this rule.

.03 Respiratory protection shall be in compliance with:

a. OSHA regulations 29 CFR 1910.1001, 1926.1101, and 1910.134;
b. ANSI Z88.2-1980;
c. NIOSH 30 CFR Part 11 for type B and C respiratory protection;
d. NIOSH and DHHS 42 CFR Part 84 for non-powered, air-purifying particulate-filter respirators.

.04 At a minimum, the respiratory protection at the start of the project shall be Type B (PAPR). After the initial exposure assessment establishes the expected airborne asbestos concentrations during removal, the respiratory protection shall be:

a. .01-1.0 f/cc - Dual Cartridge, Air Purifying respirator, Type A.
b. 1.0-2.5 f/cc - Powered Air Purifying Respirators - Type B (PAPR).
c. >2.5 f/cc- - Supplied Air with Constant Flow - Type C.

.05 All persons performing asbestos abatement work requiring respiratory protection (including Type B) shall be clean shaven and have an unobstructed face mask seal. Only mustaches that do not exceed the corners of the upper lip and sideburns that do not extend below the earlobes are permitted.

.06 For containments with an attached three (3) stage decontamination unit, asbestos workers shall wear a single disposable suit including hood and footwear. Before exiting the work area, the workers shall remove their respirator filters and disposable suit in the shower after appropriate wetting. These shall be disposed of as asbestos waste.

.07 For containments utilizing a remote decontamination unit, asbestos workers shall wear two (2) disposable Tyvek-type suits. Before exiting the work area, the worker shall remove both suits and change into a clean disposable suit in the one-stage chamber. The worker shall immediately proceed to the remote centralized, decontamination chamber, equipped with a shower and clean room. Dispose of clean suit and respirator cartridges in the centralized decontamination chamber.

a. The use of a remote decontamination FOR MAJOR PROJECTS requires the submission of an Alternative Method Request to the City of Philadelphia's Air Management Services, Asbestos Division, and receipt of approval by that office.

14.00 DECONTAMINATION FACILITIES

.01 For Major Projects, the AAC shall construct and place a three-stage decontamination unit at the entrance to the work area. For Minor Projects, a one-stage decontamination unit shall be constructed and placed at the entrance to the work area, with a two-stage centralized decontamination unit/shower constructed prior to work in any abatement work areas. Decontamination units shall have a sturdy frame comprised of studs or equivalent.

.02 Decontamination units are not required for Non-Friable Projects.

.03 Decontamination units shall be constructed as described below:

a. Three-stage unit (clean room, shower room, equipment room):

1. Interior of the chamber shall be covered with two layers of six (6) mil polyethylene with triple flap airlocks installed between each chamber;
2. Shall have a sturdy frame comprised of studs and ⅜ "plywood.
3. Entrance shall be equipped with a secure, lockable plywood door with louver system;
4. Shall have danger signs posted at the entrance;
5. Shall be provided with hot and cold water for use in the shower room;
6. Shower water shall be added to waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.

b. One-stage unit:

1. Interior of the chamber shall be covered with two layers of six (6) mil polyethylene and triple flap airlocks shall be placed at entrance and exit;
2. Shall have a sturdy frame comprised of studs or an approved equivalent.
3. Shall have danger signs posted at the entrance;
4. Asbestos workers shall wear two (2) disposable Tyvek-type suits. Before exiting the work area, the worker shall remove the outer suit in the single-stage decontamination chamber. The worker shall immediately proceed to the remote centralized, decontamination chamber, equipped with a shower and clean room. The inner disposable suit and respirator shall be removed after appropriate wetting. Dispose of the inner suit and respirator cartridges in the centralized decontamination chamber. Workers shall shower with liquid bath soap and shampoo. Clean, dry towels shall be available for drying;
5. Hot and cold water shall be available for use in the shower room;
6. Shower water shall be added to waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.

c. The AAC shall provide one decontamination chamber for every eight (8) workers.

.04 The use of a remote decontamination unit for MAJOR PROJECTS requires the submission of an Alternative Method Request to the City of Philadelphia's Air Management Services, Asbestos Division, and receipt of approval by that office.

.05 Asbestos abatement shall not commence until the AAC can demonstrate to the API that the shower unit is fully operational.

15.00 GENERAL PREPARATION FOR ALL ASBESTOS ABATEMENT ACTIVITIES

.01 The AAC shall confine their apparatus, the storage of materials, tools, supplies and the activities of their workman to the limits established by the Owner and local ordinances.

.02 The AAC shall assure that building exits are not obstructed and that appropriate safety barriers are established to prevent access by unauthorized persons. The works areas are to be kept neat, clean and safe.

.03 The AAC shall post OSHA specified, asbestos specific danger signs at the entrance to each work area. Such signs shall also be posted when applicable to decontamination chambers, bagout chambers, critical and separation barriers, and waste storage containers.

.04 Provide isolation barriers to separate the abatement work areas from the remaining occupied areas of each floor.

.05 All necessary building occupants remaining in the building during the asbestos abatement project shall be denied access to the asbestos abatement work area(s) by isolation barriers and/or locked doors.

.06 All moveable objects shall be removed from the work area. Movable objects shall be wet wiped & HEPA vacuumed prior to their relocation to a clean area.

.07 AFDs and HEPA vacuums require different maintenance schedules and attention depending on the model. Check the user's manual to determine and comply with the maintenance, filer replacement, and cleaning requirements of each AFD and HEPA vacuum being used.

- **a.** At no time shall an AFD be dismantled and the inner HEPA filter replaced while onsite at the Rhawnhurst Elementary School. Removal and replacement of HEPA filters shall be performed offsite.
- **b.** At no time shall a HEPA vacuum be opened for cleaning/emptying outside an active asbestos abatement work area of the Rhawnhurst Elementary School.
- **c.** Cleaning/emptying a HEPA vacuum shall be performed INSIDE an active asbestos abatement work area with a minimum negative pressure differential of -0.02 inches of water column.
  - **1.** Cleaning/emptying of HEPA vacuums shall be performed directly beside an operating AFD exhausting to the exterior.
  - **2.** HEPA vacuums shall be cleaned/emptied only during gross removal of asbestos and/or equipment demolition. No HEPA vacuums shall be cleaned/emptied, or opened for any other reason, during final cleaning and/or encapsulation.

.08 AFDs and all other supplies and equipment shall arrive at the project site in good condition and free of any visual residual asbestos contamination.

.09 Assure HVAC systems associated with, or that pass through any abatement work areas are shut down. Provide appropriate lock and tag out devices at the shut off point of the fan.

.10 De-energize the work areas and all conduit running through the work areas, if feasible.

a. Appropriate lock and tag out devices shall be installed at the breakers.
b. The AAC shall provide a temporary electric panel with ground fault interruption.
c. The AAC shall supply sufficient temporary lighting to illuminate the work areas during asbestos abatement and paint stabilization. All active work areas shall be lighted to not less than the minimum illumination intensities listed in OSHA Regulation 29 CFR 1926.56(a), Table D-3 for Indoors: warehouses, corridors, hallways, and exit ways (e.g. - 5-foot candles).

.11 Only approved noncombustible or flame-resistant materials shall be used for work area preparation. Polyethylene sheeting shall be certified to conform to NFPA 701.

.12 The dropping, lowering, transporting or otherwise moving any open or packaged waste through any shaft during this project is strictly prohibited. When the asbestos abatement work area IS a shaft, asbestos waste must be packaged and lowered in a controlled fashion to the base of the shaft. No dropping of waste in any shaft shall be permitted at any time.

16.00 PREPARATION & ABATEMENT – MAJOR/MINOR PROJECT WORK AREAS

.01 This section is intended to specify the acceptable methods for the removal of all friable and non-friable asbestos containing material listed in *Section 1.13* utilizing full containment protocols.

.02 The AAC shall assure that exits from the building are not obstructed. The work areas are to be kept neat, clean, and safe.

.03 Only approved noncombustible or flame-resistant materials shall be used in the construction of temporary enclosures. Polyethylene sheeting shall be certified to conform to NFPA 701.

.04 Post OSHA specified, asbestos specific danger signs at the entrance to the work area. Such signs shall also be posted when applicable to decontamination chambers, bag-out chambers, critical and separation barriers, and waste storage containers.

.05 All building occupants shall be removed from the work area floors during the performance of the removal project, unless access to the work area is restricted by an isolation barrier or lockable doors.

a. If required, wooden isolation barriers shall be erected to completely isolate the work area from any occupied areas of the building.

1. Isolation barriers shall be eight (8) feet high and shall be constructed of minimum ⅜" fire-rated plywood supported by 2'x3' stud framing, or equivalent, placed on sixteen-inch (16") centerlines. Appropriate footings and bracings shall be installed to provide proper support.

.06 The AAC shall confine their equipment, storage of materials, tools, supplies, and activities of their workers to the limits established by the Owner and local ordinances.

.07 Assure any HVAC systems associated with or which course through the work area are sealed, shut down, and locked out.

.08 Approved high quality HEPA equipped air filtration devices (AFDs) shall be placed so as to develop and hold a negative differential air pressure. Each AFD shall be equipped with a magnehelic gauge or manometer to measure pressure drop across the filters, indicating overload and a need to change filters. An automatic shutdown system shall be provided in the event of improper filter fit, a rupture in the HEPA filter, or a blocked air discharge.

a. The negative differential air pressure shall be sufficient to provide a minimum of four (4) air changes of the work area per hour. The AAC shall install a manometer to confirm this differential, which should read minimum of -0.02 inches of water column.

b. Negative differential air pressure shall be continuously maintained 24 hours a day, from the time the isolation barrier is first established until final clearance air sampling is completed, and the Contractor is released by the API.

c. The AFD exhaust shall be vented outside of the building, where feasible.

.09 For Major Project work areas, construct a three-stage decontamination unit at the work area entrance. For Minor Project work areas, construct and attach a one-stage decontamination unit at the work area entrance. A remote two-stage decontamination unit shall also be constructed at an appropriate location. Exact decontamination unit placements shall be at the discretion of the AAC with approval from the on-site API.

.10 Remove of all loose, flaking, non-adhering paint applied to walls, ceilings, columns, floors, Air Handling Units (AHUs), pipework, ductwork, etc. throughout the mechanical rooms prior to the installation of polyethylene sheeting.

.11 Pre-clean the floor and horizontal surfaces via wet wipe and HEPA vacuum techniques.

a. All fixed objects, including but not limited to, sinks, radiators, motors, pumps, AHUs, ductwork, etc. shall be wet wiped and sealed with one (1) layer of six (6) mil polyethylene.

.12 Install critical barriers consisting of two (2) separate identifiable layers of six-mil polyethylene over all windows, doors, openings between walls and ceilings, and any other critical openings inside the work area such that the work area is isolated from the rest of the building.

a. Ensure all electrical panels, control panels, and control boxes are protected with watertight critical barriers consisting of two (2) separate identifiable layers of six-mil polyethylene.
b. Areas where critical barriers are to be installed shall first be pre-cleaned via wet wipe and HEPA vacuum techniques.

.13 Critical 'containment' barriers shall be erected to cover openings greater than six feet in width, consisting of two (2) separate identifiable layers of six-mil polyethylene. Studs or equivalent shall support these barrier(s). Note: these are considered critical barriers, and application of two additional layers of wall coverings shall be required.

.14 All floor and wall surfaces (including polyethylene critical 'containment' barriers) shall then be covered with two (2) layers of six-mil polyethylene sheeting. Sheeting shall be installed in such a manner as to cause minimal damage to underlying surfaces. The AAC shall ensure proper adhesion of the sheeting to problem areas, such as walls with peeling paint.

a. Wall coverings shall extend from ceiling level to floor level and overlap the floor sheeting. Floor coverings shall extend twelve inches (12") up behind the wall coverings. All seams shall be staggered as to overlap a minimum of twelve inches and be sealed with duct tape.
b. Note that floor coverings shall be omitted in areas where vinyl asbestos floor tile is scheduled for removal.

.15 The AAC shall de-energize the work area and all conduit running through the work area, if possible.

a. Appropriate lock and tag out devices shall be installed at the circuit breakers.

b. All conduit that cannot be de-energized shall be wrapped with a minimum of one (1) layer of six (6) mil polyethylene sheeting.

1. Suspend OSHA approved, electrical - voltage and shock hazard warning tags from the energized conduit traveling through the work area every six feet. The warning tags shall remain in place for the duration of the abatement project.

c. The AAC shall provide a temporary electrical panel board with ground fault interruption. All electrical power shall be brought into the work area via ground fault interrupters (GFIs).

d. The AAC shall supply sufficient temporary lighting to illuminate the work areas during abatement. Refer to *Section 15.10.c.*

.16 Erect ladders, scaffolding, and/or raised work platforms to access elevated areas of pipe/pipe fitting insulation.

a. Ladders, scaffolding and/or raised work platforms shall be of sound condition and assembled per OSHA requirements on a level, secure base.

b. Ladders, scaffolding and/or raised work platforms shall not be overloaded.

c. Scaffold work platforms shall comply with OSHA Regulation 29 CFR 1926.451.

.17 In locations where vinyl floor tile is scheduled for removal and floor coverings have been omitted, install temporary floor coverings consisting of one (1) layer of six (6) mil polyethylene beneath the pipe/pipe fitting to be removed extending at least five (5) feet in all directions.

.18 Upon completion of the work area preparation, and approval by the on-site API, install containment bags (glove bags) around all pipe/pipe fitting insulation in accordance with the ACR Section VI.C.3.e.2-5. The containment bag, once attached, shall be smoke tested using a smoke tube and aspirator bulb. The containment bags shall be utilized in order to further contain any airborne asbestos fibers released during the removal tasks and simplify the subsequent final cleaning tasks.

.19 Removal of pipe/pipe fitting insulation shall be initiated only after the material has been treated with a solution of water and wetting agent. At the start of each work day, the pipe/pipe fitting insulation to be removed shall be wetted. This wetting shall be repeated at such intervals as to prevent the material from drying out.

.20 Perform removal of pipe/pipe fitting insulation using the containment-bag technique. Containment bag removal practices shall conform to the ACR Section VI.C.3.e.7-20.

.21 The API shall conduct a visual inspection prior to encapsulation. The on-site API shall approve the area when no visible dust is evident.

.22 Prior to removing the glove-bag, any residue shall be removed using a stiff nylon brush or a scraper. The pipe surfaces shall then be wet wiped to remove any visible debris. The API shall conduct a visual inspection and shall approve encapsulation to be performed when no visible ACM dust or debris is evident on any surfaces.

.23 Upon approval by the API, encapsulate the pipe surface prior to removing the containment bag. The API shall inspect the sealant/encapsulant to confirm adequate and proper application and approve subsequent removal of the glove bags. When acceptable, the API shall approve the removal of the glove-bag.

a. A HEPA vacuum shall be used when evacuating and breaking the seal of the glove-bag.

.24 Remove and dispose of all other friable ACM:

a. Removal of asbestos shall be initiated only after the material has been treated with a solution of water and wetting agent. This wetting shall be repeated at such intervals as to prevent the asbestos from drying out. Removal shall be performed in a manner that minimizes the release of asbestos fibers.

1. Continually mist the air with water using an airless sprayer to keep airborne fiber levels to a minimum.

2. No standing water shall be tolerated inside of the work area. Standing water would have the potential of leaking to spaces below the work area. The AAC shall designate a worker to constantly monitor the work area and vacuum or mop up any standing water resulting from the pre-wetting or air misting procedures.

3. All wastewater generated in the decontamination chamber shower shall be retrieved and added to packaged asbestos waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.

4. All wastewater generated in the abatement work area shall be retrieved and added to packaged asbestos waste materials and/or placed in plastic lined leak-tight drums for disposal in accordance with VI.C.7 of the Asbestos Control Regulation.

b. All removed ACM must be placed in asbestos waste containers simultaneously with their removal. Removed ACMs shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, ready for disposal, before the end of each shift.

c. ACM removed at a height shall be bagged at that time or lowered to the ground in a controlled manner and then bagged. No dropping of ACM shall be permitted.

.25 Perform removal of vinyl floor tile. Mechanical methods may be employed.

a. Remove all carpeting, binding strips, cove base, and other restrictive moldings holding flooring at locations such as doorways, walls, thresholds, etc.

b. Adequately wet flooring prior to removal.

c. Crews shall be structured such that flooring is packaged as it is removed. Removed flooring shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, without further breakage, ready for disposal, before the end of each shift.

.26 The removal of floor tile mastic is not addressed in this specification, and is not included in this contract's scope of work.

.27 Upon completion of removal, perform final cleaning of all surfaces in the work area. Assure that all surfaces to which asbestos insulation was applied are visibly free of insulation material. Any residue shall be removed using a stiff nylon brush or a scraper. Work area surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.

.28 Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area during the performance of final cleaning. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.

a. Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.
b. This process shall be performed several times to the satisfaction of the API.

.29 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces “outside the work area” shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

a. Remove all bulk trash and/or large construction debris items from the area.
b. Wet bulk piles of debris with a fine water mister or "Hudson" sprayer.
1. Pick up large pieces by hand and/or shovel and place into asbestos waste bags. Broom sweeping is not permitted at any time on any asbestos abatement project.
c. Any residues shall be removed using a stiff nylon brush or scraper.

.30 Remove the top layer of polyethylene sheeting and dispose as asbestos waste.

.31 The AAC shall again, clean all surfaces in the work area, including polyethylene sheeting, via wet-wipe and HEPA-vacuum techniques. Perform a fine cleaning of the interior fan unit chambers.

.32 Upon completion of cleaning activities, the API shall conduct a detailed visual inspection prior to encapsulation and shall approve the area for encapsulation when no visible dust or debris is evident on any surfaces. **During final inspection; floors, walls and ceilings shall be swept with the exhaust of electric leaf blowers. If visible emissions produced from the leaf blowing activity are generated, the AAC shall be directed to continue the cleaning process. This sequence shall be continued until the APIs are satisfied with the outcome of the final visual inspection and can definitively document that the work area is sufficiently clean.**

a. The AAC must deliver the encapsulant in the manufacturer’s original sealed and labeled containers and store encapsulant in compliance with manufacturer’s printed instructions. A copy of manufacturer’s printed instructions shall be available on site at all times.

b. The AAC shall encapsulate the work area with an encapsulant whose manufacturer's instructions indicate that the encapsulant is approved for use on the intended surfaces following asbestos abatement tasks.

c. Encapsulation shall not be performed with any packaged ACM or objectionable equipment remaining in the work area.

.33 Upon approval by the on-site API, encapsulate all surfaces in the work area and the polyethylene sheeting used in work area preparation. The sealant/encapsulant shall be tinted to provide a visual confirmation of uniformity and completeness of application.

.34 The API shall inspect the sealant/encapsulant to confirm adequate and proper application. After the encapsulant has dried, the AAC shall remove the last layer of polyethylene floor and wall sheeting, leaving only the Critical and Containment Barriers.

.35 The API shall conduct a detailed final inspection to ensure that no visible dust or debris remains on any surfaces. If any suspect or objectionable material is evident, the AAC shall clean the material and sufficient surrounding area to the satisfaction of the API, via wet-wipe and HEPA-vacuum techniques.

.36 Upon completion of removal, cleaning, encapsulation, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.37 If any of the results of clearance samples are unacceptable according to the Philadelphia ACR and AHERA, the AAC shall re-clean the work area via wet-wipe and HEPA-vacuum techniques. Following an acceptable inspection, the API shall re-test the area. This sequence shall be repeated until receipt of acceptable air sample results according to the Philadelphia ACR and AHERA.

.38 Upon receipt of acceptable final visual inspections and acceptable air sample clearance results according to the Philadelphia ACR, the AAC shall carefully dismantle critical barriers, plastic sheeting, tape and other materials used in the work area construction.

.39 All materials used in the work area containment and all removed materials shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to *Section 24.00 - ACM Waste Disposal*.

17.00 PREPARATION & ABATEMENT - PIPE/PIPE FITTING INSULATION - GLOVE-BAG METHOD

.01 This section is intended to specify the acceptable friable methods for the removal of pipe/pipe fitting insulation listed in *Section 1.13* using glove-bags.

a. All glove-bag procedures require a 2 man operation (one man removing material while the other man sprays the material with a garden sprayer), stapling across the top of the bag at one-inch intervals over the duct tape, smoke-testing the inside of the glove-bag by placing the smoke tube into the water sleeve and visually checking for leakage, evacuating the glove-bag with a HEPA vacuum, twisting of the pouch holding the tools used inside the glove-bag and cleaning the tools while submerged in a bucket of water, etc. (refer to ACR Section VI.C.3.a-e).

b. pipe/pipe fitting insulation present inside floor/ceiling pipe penetrations within any given work area shall be removed as part of this project.

c. Negative pressure shall be required in all tent containments and larger sized containments for all glove-bag projects.

.02 Approved high quality HEPA equipped air filtration devices (AFDs) shall be placed so as to develop and hold a negative differential air pressure. Each AFD shall be equipped with a magnehelic gauge or manometer to measure pressure drop across the filters, indicating overload and a need to change filters. An automatic shutdown system shall be provided in the event of improper filter fit, a rupture in the HEPA filter, or a blocked air discharge.

.03 For Major Project work areas, construct a three-stage decontamination unit at the work area entrance. For Minor Project work areas, construct and attach a one-stage decontamination unit at the work area entrance. A remote two-stage decontamination unit shall also be constructed at an appropriate location. Exact decontamination unit placements shall be at the discretion of the AAC with approval from the on-site API.

.04 Pre-clean the floor and horizontal surfaces via wet wipe and HEPA vacuum techniques.

a. All fixed objects shall be wet wiped and sealed with one (1) layer of six (6) mil polyethylene.

.05 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all windows, doors, openings between walls and ceilings, and any other critical openings inside the work area such that the work area is isolated from the rest of the building.

a. Ensure all electrical panels, control panels, and control boxes are protected with watertight critical barriers consisting of one (1) layer of six-mil polyethylene.

b. Areas where critical barriers are to be installed shall first be pre-cleaned via wet wipe and HEPA vacuum techniques.

.06 Should the AAC chose to limit the size of each work area to the immediate spaces adjacent to the pipe/pipe fitting insulation to be removed, the AAC may construct a tent containment as specified below. If the AAC chooses not to utilize tent containments to limit the size of the work areas, the entire room/area containing the pipe/pipe fitting insulation to be removed must be considered part of the work area, and is subject to pre-cleaning, polyethylene protective sheeting for all non-movable items, decontamination, and final clearance testing as specified in other paragraphs in this Section.

a. Erect wall coverings, completely enclosing and isolating the pipe/pipe fitting insulation removal locations using one (1) layer of six (6) mil polyethylene sheeting.

b. Tape one (1) layer of six (6) mil polyethylene sheeting to the floors, extending at least five (5) feet from the pipe/pipe fitting insulation to be removed.

c. All fixed, unmovable objects to be enclosed in the tent containment shall be pre-cleaned and sealed with one (1) layer of six (6) mil polyethylene sheeting.

d. Polyethylene sheeting shall be installed in such a manner as to cause minimal damage to underlying surfaces. The AAC shall ensure proper adhesion of the sheeting to problem areas, such as walls with peeling paint.

e. Approved high quality HEPA equipped air filtration devices (AFDs) shall be placed so as to develop and hold a negative differential air pressure.

1. The AFD exhaust shall be vented outside of the building.

.07 The AAC shall construct a one-stage or three stage decontamination chamber, as appropriate at the intended location at each work area and a remote two-stage decontamination chamber complete with a shower at a designated location when utilizing a one stage decontamination chamber. Refer to *Section 14.00 - Decontamination Facilities*. Exact placement shall be at the discretion of the AAC, with approval from the on-site API.

.08 Upon completion of the work area preparation, and approval by the on-site API, install containment bags (glove bags) around the pipe/pipe fitting insulation to be removed, in accordance with the ACR Section VI.C.3.e.2-5. The containment bag, once attached, shall be smoke tested using a smoke tube and aspirator bulb. The containment bags shall be utilized in order to further contain any airborne asbestos fibers released during the removal tasks and simplify the subsequent final cleaning tasks.

a. Pipe insulation covered with metal jacketing shall first require the removal of the metal jacket using appropriate tin snips.

b. The pipe insulation diameter worked shall not exceed one-half of the bag working length above the attached gloves.

c. These bags are for single use and shall not be repositioned.

d. Polyethylene sheeting shall be applied to the work area floors beneath the pipe/pipe fitting insulation to be removed, extending a minimum of five (5) feet in all directions or to the full extent of the floor space included in the tent containment, whichever is larger.

.09 Removal of pipe/pipe fitting insulation shall be initiated only after the material has been treated with a solution of water and wetting agent.

a. At the start of each work day, the material to be removed shall be wetted. This wetting shall be repeated at such intervals as to prevent the insulation from drying out.

1. Continually mist the air with water using an airless sprayer to keep airborne fiber levels to a minimum.

2. No standing water shall be tolerated inside of the work area. Standing water would have the potential of leaking to spaces below the work area. The AAC shall designate a worker to constantly monitor the work area and vacuum or mop up any standing water resulting from the pre-wetting or air misting procedures.

3. All wastewater generated in the decontamination chamber shower shall be retrieved and added to packaged asbestos waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.

4. All wastewater generated in the abatement work area shall be retrieved and added to packaged asbestos waste materials and/or placed in plastic lined leak-tight drums for disposal in accordance with VI.C.7 of the Asbestos Control Regulation.

b. All removed ACM must be placed in asbestos waste containers simultaneously with their removal. Removed ACMs shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, ready for disposal, before the end of each shift.

c. ACM removed at a height shall be bagged at that time or lowered to the ground in a controlled manner and then bagged. No dropping of ACM shall be permitted.

.10 Perform removal of the pipe/pipe fitting insulation using the containment-bag technique. Containment bag removal practices shall conform to the ACR Section VI.C.3.e.7-20.

.11 Prior to removing the glove bag, any residue shall be removed using a stiff nylon brush or a scraper. The pipe surfaces shall then be wet wiped to remove any visible debris. The API shall conduct a visual inspection and approve encapsulation when no visible dust or debris is evident on pipe surfaces.

.12 Upon approval by the API, encapsulate the pipe surfaces prior to removing the containment bag. The API shall inspect the sealant/encapsulant to confirm adequate and proper application and approve subsequent removal of the glove bag(s). When acceptable, the API shall approve the removal of the glove-bag.

a. A HEPA vacuum shall be used to collapse the glove-bag prior to removal.

.13 The AAC shall clean all surfaces in the work area using wet-wipe and HEPA-vacuum techniques.

.14 Upon completion of cleaning activities, the API shall inspect the sealant/encapsulant to confirm adequate and proper application.

.15 The API shall conduct a detailed final inspection to ensure that no visible dust or debris remains on any surfaces. If any suspect or objectionable material is evident, the AAC shall clean the material and sufficient surrounding areas to the satisfaction of the API, via wet-wipe and HEPA-vacuum techniques. **During final inspection; floors, walls and ceilings shall be swept with the exhaust of electric leaf blowers. If visible emissions produced from the leaf blowing activity are generated, the AAC shall be directed to continue the cleaning process. This sequence shall be continued until the APIs are satisfied with the outcome of the final visual inspection and can definitively document that the work area is sufficiently clean.**

.16 Upon completion of removal, cleaning, encapsulation, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.17 If any of the results of clearance samples are unacceptable according to the Philadelphia ACR and AHERA, the AAC shall re-clean the work area via wet-wipe and HEPA-vacuum techniques. Following an acceptable inspection, the API shall re-test the area. This sequence shall be repeated until receipt of acceptable air sample results according to the Philadelphia ACR and AHERA.

.18 Upon receipt of acceptable final visual inspections and acceptable air sample clearance results according to the Philadelphia ACR and AHERA, the AAC shall carefully dismantle critical barriers, plastic sheeting, tape and other materials used in the work area construction. These materials shall be disposed of in sealable plastic bags as asbestos contaminated waste.

.19 The AAC shall remove all glue and tape adhesive reside from all walls, floors and all other surfaces in which glue and tape were utilized in containment preparations. The API shall conduct a post teardown inspection to ensure this task has been completed.

.20 All materials used in the work area containment and all removed materials shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to *Section 24.00 - ACM Waste Disposal*.

18.00 PREPARATION & ABATEMENT – FLOOR TILE – NON-FRIABLE PROJECTS

.01 **This section shall apply to the non-friable removal of vinyl floor tile as listed in *Section 1.13*. Removal of vinyl floor tile shall be performed using infra-red heat machines or dry-ice. If it is apparent the AAC cannot remove the floor tile in a non-friable manner, the API will stop work and all requirements of a friable project will be implemented at no additional cost to the Owner.**

.02 The AAC shall assure that exits from the building are not obstructed and that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.

.03 Only approved noncombustible or flame-resistant materials shall be used in the construction of temporary enclosures. Polyethylene sheeting to be used shall be certified to conform to NFPA 701.

.04 Post OSHA specified, asbestos specific danger signs at the entrance to the work area. Such signs shall also be posted when applicable to decontamination chambers, bag out chambers, critical and separation barriers, and waste storage containers.

.05 The AAC shall confine their equipment, the storage of materials, tools, supplies, and the activities of their workmen to the limits established by the Owner and local ordinances.

.06 Assure any HVAC systems associated with or which course through any work area are sealed, shut down and locked out.

.07 The AAC shall de-energize the work area and all conduit running through the work area, if possible.

- **a.** Appropriate lock and tag out devices shall be installed at the circuit breakers.
- **b.** All conduit that cannot be de-energized shall be wrapped with a minimum of one (1) layer of six (6) mil polyethylene sheeting.
  - **1.** Suspend OSHA approved, electrical - voltage and shock hazard warning tags from the energized conduit traveling through the work area every six feet. The warning tags shall remain in place for the duration of the abatement project.
- **c.** The AAC shall provide a temporary electrical panel board with ground fault interruption. All electrical power shall be brought into the work area via ground fault interrupters (GFIs).
- **d.** The AAC shall supply sufficient temporary lighting to illuminate the work area during abatement.

.08 Install an approved high quality HEPA equipped air filtration devices (AFDs) so as to develop and hold a negative differential air pressure. The AFD exhaust shall be vented outside of the building.

.09 Construct and attach a decontamination unit at the work area entrance. Refer to *Section 14.00 – Decontamination Facilities.* Exact placement shall be at the discretion of the AAC, with approval from the on-site API.

.10 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all windows, doors, HVAC ducts and any other critical openings inside the work area such that the work area is isolated from the rest of the building. Areas where critical barriers are to be installed shall first be pre-cleaned via wet wipe and HEPA vacuum techniques.

.11 Upon completion of preparation of the work area and approval by the API, perform removal of the floor tile, using the appropriate non-friable method to facilitate non-friable removal. Tiles shall be removed and placed into waste containers in as complete sections as possible to minimize the release of asbestos fibers and dust.

a. Remove all binding strips or other restrictive moldings holding floor tile at locations such as doorways, walls, thresholds, etc...

b. Using the appropriate non-friable method to loosen the tile's adhesion to the substrate, wedge a scraper beneath the edge of the floor tile and lift the tile intact to minimize the release of asbestos fibers and dust.

c. Crews shall be structured such that tiles are packaged as they are removed. Removed floor tile shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, without further breakage, ready for disposal, before the end of each shift.

.12 If it is apparent the AAC cannot remove the tiles in a non-friable manner without breakage, work will be stopped by the API and all requirements of a friable project will be implemented, as per ACR Section V1.

a. The removal of floor tile mastic is not addressed in this specification, and is not included in this contract's scope of work, except where required for holes to be cored through floor slabs for MEP piping or ductwork.

1. Floor tile mastic shall be removed using a chemical solvent in locations of coring through floor slabs for the installation of MEP piping or ductwork. Disposable rags shall be used to absorb the chemical solvent and mastic from the floor surfaces. Mechanical methods for the removal of floor tile mastic are prohibited.

2. The onsite API shall conduct a visual inspection and approve the concrete floor surfaces prior to any core drilling by prime contractors.

.13 Upon completion of all floor tile, perform final cleaning of the work area. AFDs shall remain in operation during this procedure.

.14 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

a. Remove all bulk trash and/or large construction debris items from the area.

b. Wet bulk piles of debris with a fine water mister or "Hudson" sprayer.

1. Pick up large pieces by hand and/or shovel and place into asbestos waste bags. Broom sweeping is not permitted at any time on any asbestos abatement project.

c. Any residues shall be removed using a stiff nylon brush or scraper.

d. Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.

e. Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.

.15 The API shall conduct a detailed final inspection to ensure that no visible dust or ACM debris (tile chips, dust) remains on any surfaces. **During final inspection; floors, walls and ceilings shall be swept with the exhaust of electric leaf blowers. If visible emissions produced from the leaf blowing activity are generated, the AAC shall be directed to continue the cleaning process. This sequence shall be continued until the APIs are satisfied with the outcome of the final visual inspection and can definitively document that the work area is sufficiently clean.**

.16 The floor surface need not be encapsulated, as some replacement tile/mastic system manufacturers instructions preclude the use of an encapsulant in order to ensure proper adhesive performance.

.17 Upon completion of removal, cleaning, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.18 Upon acceptable final visual inspections and clearance air sample results, all materials used in the work area containment shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to *Section 24.00 - ACM Waste Disposal*.

19.00 PREPARATION & ABATEMENT – GLUE DOT ADHESIVE

.01 This section is intended to specify the acceptable methods for non-friable removal of asbestos containing glue adhesive adhered to 1' x 1' ceiling tiles, sheetrock ceilings, blackboards and tack boards as listed in *Section 1.13.*

a. Remove and dispose of all glue adhesive, 1' x 1' ceiling tiles, sheetrock ceilings, blackboards and tack boards.

b. Glue-dot adhesive is classified as a non-friable Category I material. The removal shall be performed as a non-friable project. Only methods that remove the glue-dots intact are permitted. The use of any equipment that may sand, grind, saw, or abrade the material is prohibited.

c. If the on-site API deems the work as friable, work shall be halted and the project shall proceed in accordance with full containment protocols, as per *Section 16.00.*

.02 Delineate and restrict the work area(s) using asbestos specific barrier tape and asbestos specific danger signs. The AAC shall assure that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.

.03 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all doors to isolate the work area from the rest of the building.

a. Post OSHA specified, asbestos specific danger signs at the entrance to the work area.

.04 Install floor coverings consisting of one (1) layer of six (6) mil polyethylene beneath the material to be removed, extending at least five (5) feet in all directions.

.05 Begin the non-friable removal of glue dots.

a. Carefully remove the building components and glue dots:

1. If glue dot adhesive is adhered to the ceiling tiles/sheetrock ceilings/blackboards/tackboards, properly package the components using two (2) layers of six (6) mil polyethylene sheeting or (2) six (6) mil asbestos waste bags.

2. If glue dot adhesive is not adhering to the ceiling tiles/sheetrock ceilings/blackboards/tackboards - or if it has been determined by the onsite API that all glue dots have all been removed from the ceiling tiles/sheetrock ceilings/blackboards/tackboards, dispose of the components as ordinary construction waste.

3. Removal of the glue-dots from the wall and from behind the black/tack boards may be performed by the following methods:

a. Mechanical removal using hammer and flat-bladed scraper/screwdriver.

b. Heat removal using heat-gun or open-flame propane torch. Open flame shall be used only to soften glue-dots sufficiently for removal – no ignition or singeing of dots shall be permitted. Adequate ventilation shall be ensured at all times. Ensure that fire protection procedures are complied with.

c. Other methods must be submitted and demonstrated for approval.

4. After removal of the glue-dots from the wall and from behind the black/tack boards, clean all residue from surfaces and fastener holes, as well as any debris fallen onto the polyethylene sheeting, utilizing wet-wiping and HEPA vacuum techniques.

.06 The API shall perform a work area inspection to ensure no debris exists in the work area and that all asbestos waste has been properly packaged and removed.

.07 Upon approval by the API, encapsulate the wall and ceiling surfaces in which glue-dot removal was performed. The API shall inspect the sealant/encapsulant to confirm adequate and proper application.

a. Concrete ceilings in which glue dot adhesive was removed shall be encapsulated using an airless sprayer.

.08 Upon completion of removal, cleaning, encapsulation, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.09 Upon acceptable final visual inspections and clearance air sample results, all materials used in the work area containment shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to *Section 24.00 - ACM Waste Disposal*.

20.00 PREPARATION & ABATEMENT – MISCELLANEOUS CAULKING & GLAZING

.01 Exterior louver frame caulk in the main building and window glazing in the annex building contains asbestos and shall require removal as part of this abatement project.

a. Caulk and glazing are classified as non-friable Category II materials. The removal shall be performed as non-friable projects. Only methods that allow the materials to be removed without rendering them friable are permitted. The use of any equipment that may sand, grind, saw, or abrade the materials is prohibited.

b. If undue disturbance of materials occurs during removal and the on-site API deems the work as friable, work will be stopped by the API and all requirements of a friable project will be implemented, as per *Section 16.00.*

.02 Delineate and restrict the work area(s) using asbestos specific barrier tape and asbestos specific danger signs. The AAC shall assure that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.

.03 Install floor/ground coverings consisting of one (1) layer of six (6) mil polyethylene sheeting beneath the caulk to be removed. The floor/ground covering is intended to receive any/all caulk material that falls to the ground as a result of the caulk removal operation. Only approved noncombustible or flame-resistant materials shall be used in the performance of this project. Polyethylene sheeting to be used shall be certified to conform to NFPA 701.

a. Place polyethylene sheeting <u>on the ground at the base of the building</u> below where caulk is scheduled to be removed to extend a minimum of twenty (20) feet away from the base of the building and a minimum of twenty (20) feet laterally along the base of the building in each direction East and West (or North and South). Place weights on the polyethylene sheeting or utilize other means of anchoring the polyethylene sheeting to avoid the polyethylene sheeting from being dislodged by the wind.

b. Place polyethylene sheeting on the floor <u>inside of each room</u> beneath the location where caulk is scheduled to be removed, to extend a minimum of ten (10) feet away from the window/door frame and a minimum of ten (10) feet laterally along the base of the wall in each direction East and West (or North and South).

.04 Main Building Louver Frame Caulk: Manually scrape/dislodge all caulk from the rough openings of the unit-ventilators and crawlspace louver frames.

.05 Annex Building Window Glazing: Carefully remove all window units. Each window unit shall be wrapped securely with two (2) layers of six (6) mil polyethylene sheeting and disposed of as asbestos waste.

.06 Clean any caulk residue from the surfaces using HEPA-VAC techniques.

.07 Carefully roll up the polyethylene sheeting and caulk debris. Place the rolled polyethylene sheeting into appropriate asbestos waste containers. The wrapped window units and all caulking shall be disposed of as asbestos waste in accordance with *Section 24.00 - ACM Waste Disposal*.

.08 A visual inspection shall be made by the API to ensure completeness of the removal.

.09 No clearance sampling shall be required following the completion of this work.

21.00 PREPARATION AND ABATEMENT – FAN UNIT VIBRATION DAMPER CLOTH

.01 Vibration Damper Cloth is classified as a non-friable Category II material. If Vibration Damper Cloth removal is performed as a non-friable project, only methods that remove the material intact are permitted. The use of any equipment that may sand, grind, saw, or abrade the material is prohibited.

a. If the on-site API deems the work as friable, work will be stopped and all requirements of a friable project will be implemented, as per *Section 16.00.*

.02 Delineate and restrict the work area(s) using asbestos specific barrier tape and asbestos specific danger signs. The AAC shall assure that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.

.03 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all doors to isolate the work area from the rest of the building.

a. Post OSHA specified, asbestos specific danger signs at the entrance to the work area.

.04 Install floor coverings consisting of one (1) layer of six (6) mil polyethylene beneath the Vibration Damper Cloth to be removed, extending at least five (5) feet in all directions.

.05 The Vibration Damper Cloth shall be sprayed with amended water before and during removal activities, to wet the material and enhance dust control.

.06 Remove all fasteners from the metal flanges holding the Vibration Damper Cloth in place. Slightly pry apart flanges and detach the cloth intact without tearing or cutting. Package and dispose as asbestos containing waste.

a. Upon completion of removal, clean any residue from flanges using HEPA vacuuming and wet-wipe techniques.
b. Clean all debris fallen onto the polyethylene sheeting below using a HEPA vacuum and wet-wipe techniques.

.07 Upon completion of removal, cleaning, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.08 Upon acceptable final visual inspections and clearance air sample results, all materials used in the work area containment shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to *Section 24.00 - ACM Waste Disposal*.

22.00 – REMOVAL OF ASSUMED ASBESTOS CONTAINING FIRE DOORS

.01 This section is intended to specify the acceptable methods for the removal of the assumed asbestos packed fire doors.

a. Fire doors scheduled to be replaced will require interior core investigations by the onsite Asbestos Project Inspector prior to the performance of unhinging and disposal of the doors.

b. Internal asbestos containing door packing is a friable material but is at the same time is enclosed in the wood or metal door casing. This allows for the removal of the doors to be treated in a non-friable method.

.02 Carefully unhinge the asbestos containing fire door.

a. If any of the assumed asbestos containing door casings become damaged and/or packing becomes exposed, pre-wet the packing with amended water and cover the exposed area with polyethylene sheeting, sealed with tape.

.03 Wrap each fire door with two (2) independent layers of six (6) mil polyethylene sheeting, sealed with tape.

.04 Dispose of each wrapped fire door in an asbestos waste dumpster. Refer to *Section 24.00 - ACM Waste Disposal*.

.05 Dropping of these doors out of windows, down stairwells or during carryout shall be **strictly prohibited.**

.06 No clearance samples shall be required, provided there was no damage to the door(s) during unhinging and disposal. If any internal asbestos containing door packing was at any time exposed, five (5) clearance samples shall be collected and analyzed via PCM.

23.00 - PREPARATION & ABATEMENT – WIRE INSULATION

.01 This section is intended to specify the acceptable methods for non-friable removal of woven wire insulation.

a. Woven wire insulation is classified as a non-friable Category II material. Asbestos wire insulations always contain, in addition to the fabric, coatings or are impregnated by moisture and weather resistant substances - waxes, bituminous compounds, rubber or varnish. Therefore, woven wire insulation would not readily release asbestos fibers unless detrimentally impacted by sanding, grinding, sawing, or otherwise abrading the material.

b. **The removal of woven wire insulation shall be performed as non-regulated non-friable projects.** Only methods that remove the material intact are permitted. The use of any equipment that may sand, grind, saw, or abrade the material is prohibited.

c. The AAC shall wear respiratory and personal protective equipment throughout all phases of asbestos abatement. Refer to *Section 13.00 - Respiratory and Personal Protective Equipment*.

.02 The Electrical Contractor (EC) shall provide written notice to the AAC informing the AAC that electricity to the panel, junction box, transformer, etc. in which wrap removal is scheduled to be performed has been de-energized.

.03 All building occupants shall be removed from the work area floors during the performance of the removal project.

a. Install critical barriers consisting of one (1) layer of six-mil polyethylene to completely isolate the work area from occupied areas of the building.

b. Affix asbestos specific danger signs at the entrance to the work area.

c. The work areas are to be kept neat, clean, and safe.

.04 Install floor coverings consisting of one (1) layer of six-mil polyethylene beneath the wire wrap to be removed, extending at least five (5) feet in all directions.

.05 Remove the wire wrap insulation wrap using non-friable methods.

a. Unfasten the wires from the electrical panel and dispose of the wires along with the intact insulation as asbestos contaminated waste.

1. If necessary, wiring may be cut into manageable sections using wire-cutters, which shear through the outer cloth wrap and interior cable. The cloth wrap shall be sprayed with amended water at cut points before and during removal activities, to wet the material and enhance dust control.

.06 After removal of the woven wire insulation, carefully roll up the polyethylene floor sheeting and place into an appropriate asbestos waste container.

.07 Clean all residue from surfaces using HEPA-vacuum and wet-wipe techniques.

.08 Upon conclusion of removal and cleaning, a visual inspection shall be made by the API to ensure completeness of the removal.

.09 Following an acceptable final inspection, the API shall perform clearance air sampling. Refer to *Section 9.00 - Air Monitoring by the Owner*.

.10 If the results of clearance samples are unacceptable according to ACR and AHERA requirements, the AAC shall re-clean the work area. Following an acceptable inspection, the API shall again perform clearance sampling. This sequence shall be repeated until receipt of acceptable air sample results.

.11 Upon receipt of acceptable final visual inspections and acceptable air sample clearance results according to the Philadelphia ACR and AHERA, carefully dismantle all materials used in the work area containment. These materials shall be disposed of in sealable plastic bags as asbestos contaminated waste as per *Section 24.00 – ACM Waste Disposal.*

.12 In the event that the AAC exposes suspect asbestos-containing packing between woven wire insulation and outer electrical sheathing:

- **a.** Work by the electrician shall be immediately halted so as to not disturb the material;
- **b.** The School District of Philadelphia's Office of Environmental Management Services (SDP OEMS) shall be immediately contacted and advised of the situation;
- **c.** A notification revision shall be submitted to the EPA, DEP, and Philadelphia Air Management Services;
- **d.** The removal and disposal of friable packing between the woven wire insulation and outer sheathing shall be performed by an Asbestos Abatement Contractor (AAC) according to the Philadelphia Asbestos Control Regulation (ACR), 40 CFR Part 61 (NESHAP) and 40 CFR Part 763 (AHERA).
- **e.** The API shall perform asbestos project inspection as defined by the Asbestos Control Regulation (ACR) including all project oversight, air sampling and regulatory compliance assurance required by the Philadelphia ACR and AHERA.

24.00 ACM WASTE DISPOSAL

.01 **The dropping, lowering, transporting or otherwise moving any open or packaged waste through any shaft during this project is strictly prohibited!** When the asbestos abatement work area IS a shaft, asbestos waste must be packaged and lowered in a controlled fashion to the base of the shaft. No dropping of waste in any shaft shall be permitted at any time.

.02 Approval must be obtained from the API prior for temporary storage of any asbestos waste containers or construction debris on site, prior to being loaded into appropriate dumpsters. The waste shall be appropriately packaged according to the type of waste. A polyethylene drop cloth and covering shall be provided and the storage areas restricted by barrier tape and appropriate signage. Asbestos waste containers must be distinctly stored separately from other waste. No long-term storage may occur in these areas.

.03 The loading, transportation, and disposal of asbestos waste at the landfill shall occur in accordance with regulatory requirements of NESHAPS and applicable state and local guidelines and regulations.

.04 Waste disposal containers shall conform to one of the following. Waste with sharp edges shall not be disposed of solely in polyethylene bags. **All six-mil polyethylene bags shall be transparent so that when filled, the contents of the bag are readily visible.**

a. Two (2) six-mil polyethylene bags, one placed inside the other, separately sealed. The bags shall be carefully closed to minimize dead air space and taped shut.

1. Six-mil polyethylene disposal bags containing asbestos and asbestos contaminated materials shall be placed into a second six-mil polyethylene bag inside an approved bag-out chamber or decontamination chamber while being removed from the work area. **The second bag shall not be applied inside the work area.**

b. Material first shall be placed into burlap bags or equivalent to prevent edges/corners from tearing or penetrating polyethylene waste bags. The encased material may then be placed in two (2) six mil polyethylene bags, as per *Subsection a* above.

c. One (1) six mil polyethylene sealed bag inside an air and water tight drum.

.05 The AAC shall label asbestos waste with the name of the generator and the location from which the waste was generated.

.06 The container used for transporting and disposing of ACM waste shall be clearly and properly labeled as specified in EPA and DOT regulations. In addition to generator labels, containers must carry the following labels:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

-and-

DOT labels requirement: (Easily readable in sharp relief)

CAUTION
Contains Asbestos Fibers
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous
to your Health
RQ ASBESTOS
9,NA2212,PG III
(ASBESTOS)

.07 During waste load out, post asbestos specific danger signs along the waste disposal route, and on and around the vehicle or dumpster being used to transport the waste off site.

a. Polyethylene drop cloths shall be utilized along routes in which bagged ACM waste is passed through the building. Proposed waste removal route shall be presented to the API and Asbestos Project Manager/Designer for approval prior to performing delivery of asbestos waste material to the intended waste container. The API must document the proposed route and the APIs subsequent approval in an activity log.

.08 Waste routes must be approved by the Owner and on-site API prior to the commencement of work. All waste being transported through the building must be placed in covered/enclosed containers bearing proper warning signs. The waste route must be kept clean.

a. The rolling of waste drums or the dropping of waste bags down stairs is strictly prohibited!

b. After transport of waste through the building is completed, the AAC shall wet mop the waste removal route to assure continued cleanliness and removal of any debris associated with the waste transport tasks.

.09 All documentation of transportation and disposal transactions such as dump receipts, trip tickets and waste manifests shall be completed and delivered to the Owner for their records.

.10 Should the Owner not receive a receipt of the waste shipment record within 35 days, the Owner shall contact the AAC to determine the status/disposition of the waste.

.11 Should the Owner not receive a receipt of the waste shipment record within 45 days, the Owner shall notify the EPA.

25.00 PROJECT CLOSEOUT

.01 After achieving acceptable air sample clearance and dismantling the work area, the AAC shall be released after the following items are completed:

a. Removal of all temporary signs, labels, tape and glue/tape adhesive residue.
b. Removal of all temporary devices, facilities, and equipment.
c. Cleaning the project site and storage areas of trash, etc.
d. Replacement/repair of any damage.
e. SDP deems the repair work (if any) is acceptable for re-occupancy.
f. Removal of all waste containers (asbestos, scrap, and construction debris) from site and proper disposal of waste.

.02 Upon completion of the project, the AAC shall submit final documentation to the Owner, including but not limited to, all waste handling/shipping documentation/manifests.

END OF SPECIFICATION

RHAWNHURST ELEMENTARY SCHOOL

PRE-BID – DECEMBER 3, 2021

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

EXISTING OVERALL SITE PHOTO (FRONT)

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

EXISTING OVERALL SITE PHOTO (REAR)

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

A MAIN ENTRANCE
FACING CASTOR AVENUE

B SIDE ENTRANCE CLASSROOM WING
FACING GRIFFITH STREEET

C CLASSROOM WING
FACING HARD SURAFACE PLAY AREA AND LARGE STREET

D TWO STORY CLASSROOM WING
FACING HARD SURFACE PLAY AREA AND LARGE STREET

E CLASSROOM WING
FACING HARTEL AVENUE

F SIDE ENTRANCE TO CLASSROOM WING
FACING CASTOR AVENUE

EXISTING BUILDING

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

A COMMERCIAL PROPERTIES
ACROSS CASTOR AVENUE FROM MAIN ENTRY

B HOUSING
CASTOR AVENUE ACROSS FROM SCHOOL

C SIDEYARD OF SCHOOL FACING HOUSING
SOUTH EDGE OF SITE

D SINGLE FAMILY HOUSING UNITS
REAR OF SCHOOL- LARGE STREET & BORBECK STREET

E SINGLE FAMILY HOUSING
REAR OF SCHOOL- LARGE STREET & CHANDLER

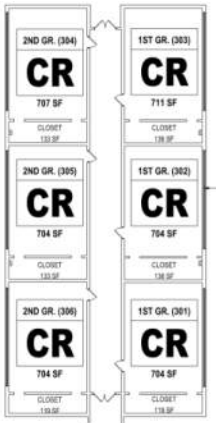
F HOUSING
REAR OF SITE- LARGE STREET

EXISTING SURROUNDING NEIGHBORHOOD

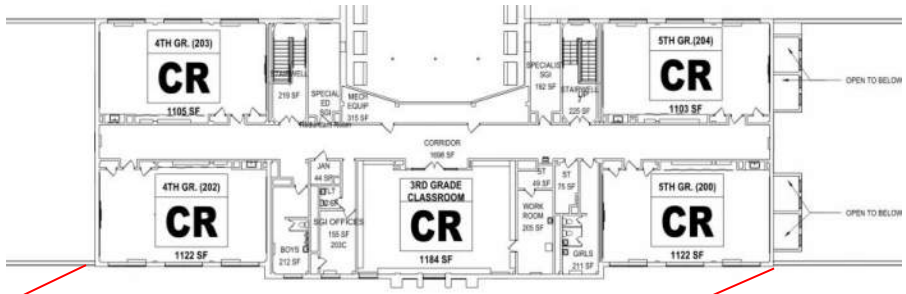
CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

EXISTING BUILDING

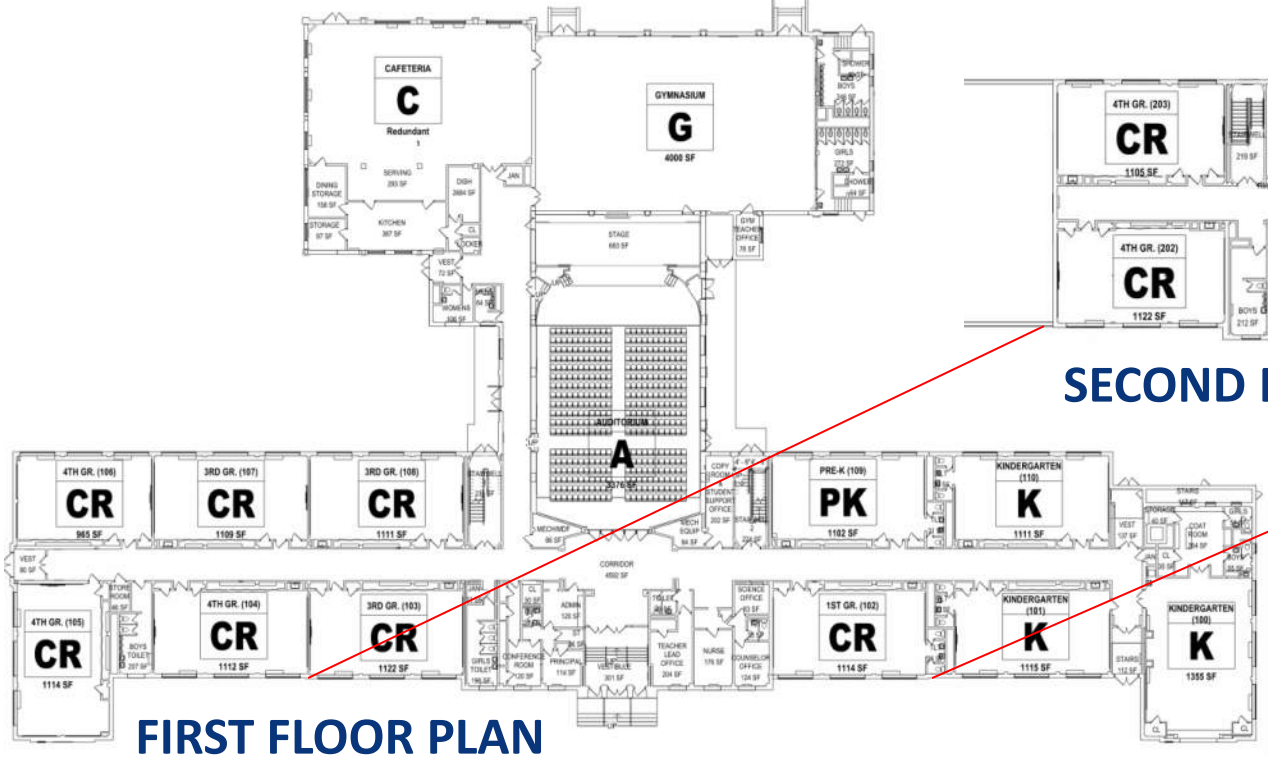
16 CLASSROOMS
1 MODULAR CLASSROOM
6 ANNEX CLASSROOMS
23 CLASSROOMS



ANNEX BUILDING



SECOND FLOOR PLAN



FIRST FLOOR PLAN

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

RHAWNHURST ELEMENTARY SCHOOL
THE SCHOOL DISTRICT OF PHILADELPHIA

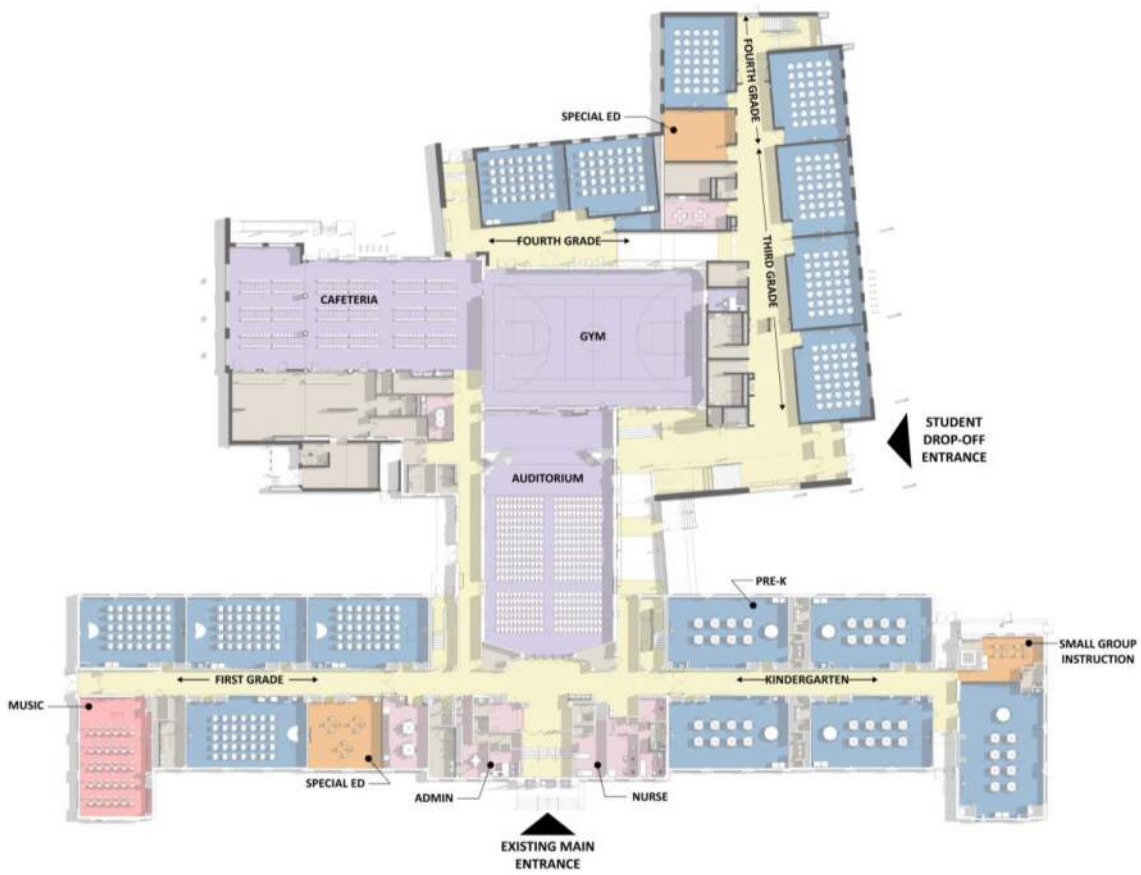
CURRENT DESIGN

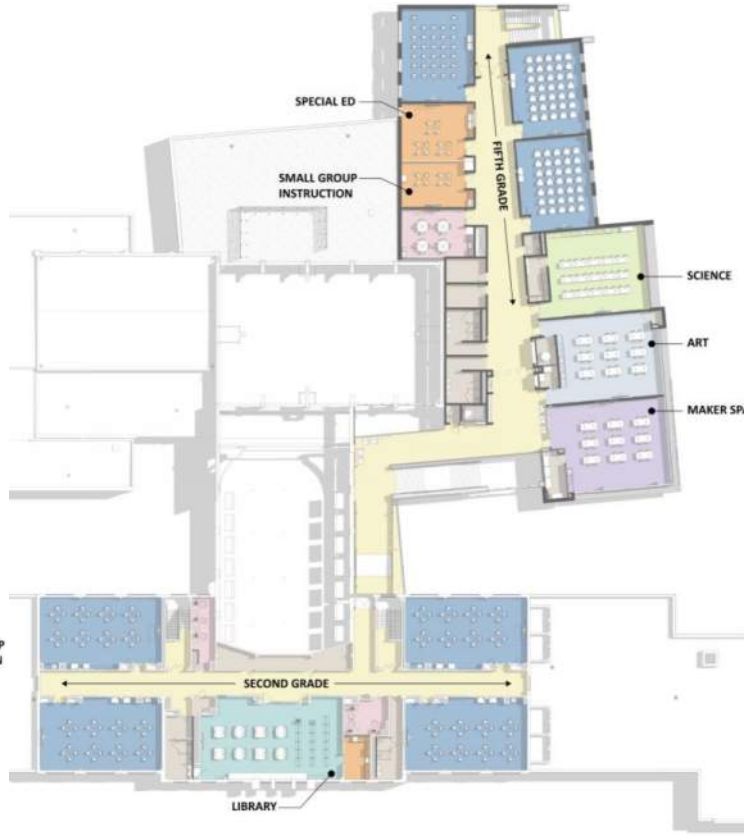
25 CORE CLASSROOMS

1 PRE-K CLASSROOM
KINDER-5TH GRADE (4) CLRMS/GRADE

INCREASES KITCHEN/CAFTERIA TO ACCOMMODATE 720 STUDENTS CAPACITY

BUILDING CAN HOLD 756 STUDENTS AND MAINTAIN CONFIGURATION WITH 30/STUDENTS IN K-2 AND 33/STUDENTS IN 3-5.

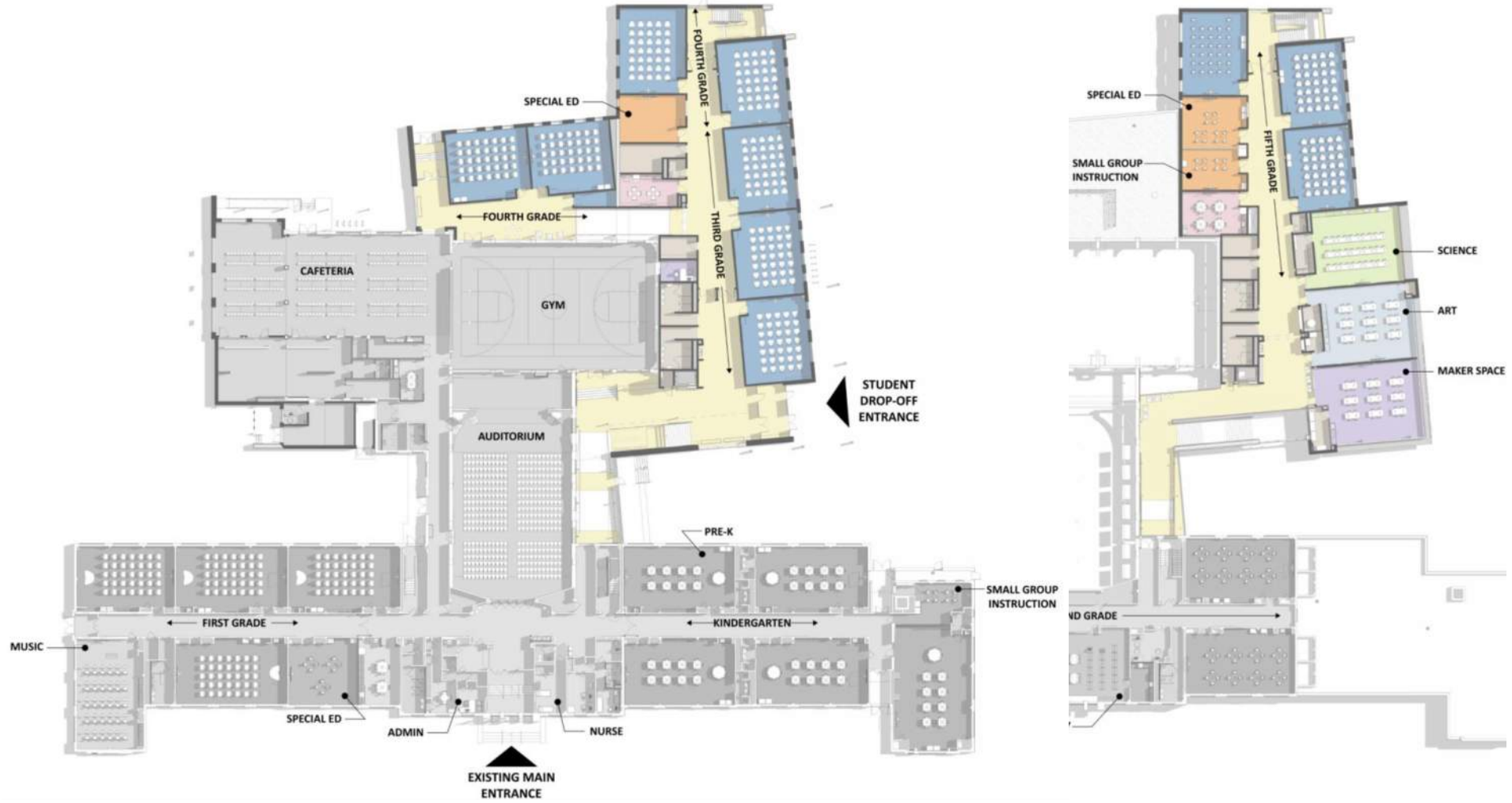




CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

EXISTING BUILDING
16 CLASSROOMS
1 MODULAR CLASSROOM
6 ANNEX CLASSROOMS

CURRENT DESIGN
23 CORE CLASSROOMS
RESTORES SUPPORT
EDUCATIONAL PROGRAM



ADDITIONS- 2 STORY CLASSROOM ADDITION & KITCHEN/CAFETERIA

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

CURRENT BUILDING

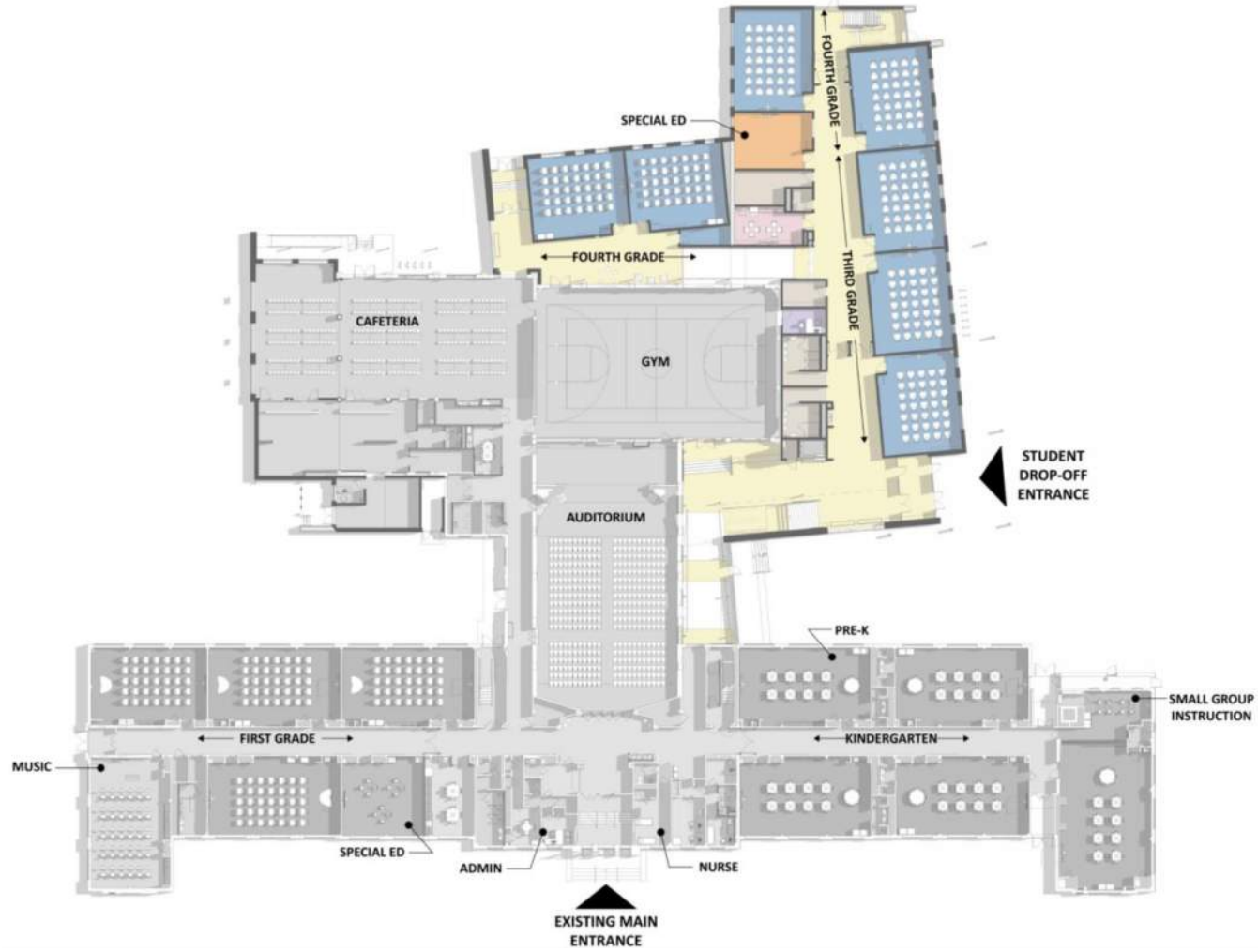
52,500 SF EXISTING

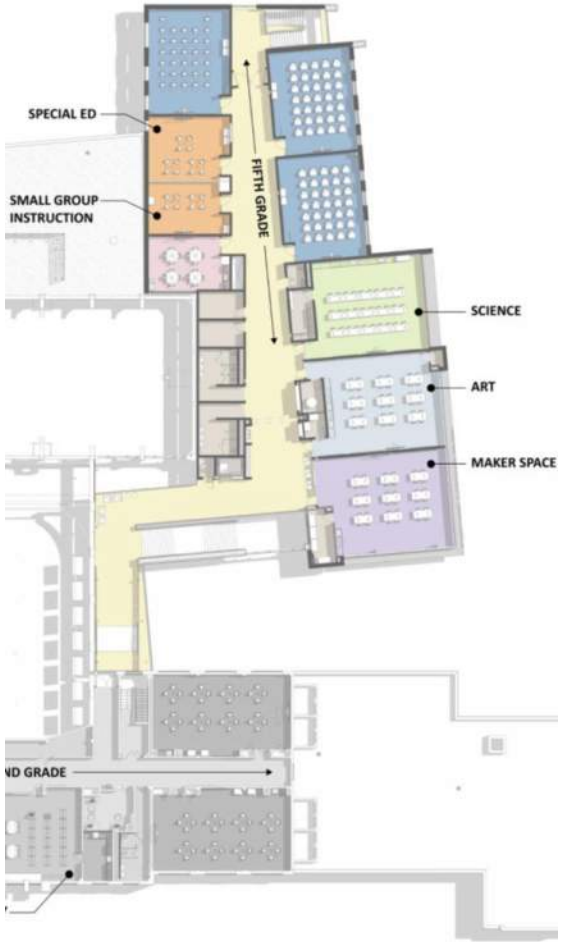
31,000 SF NEW ADDITIONS

83,500 SF TOTAL APPROXIMATE

EXISTING 52,500 SF W/ 7,000 SF ANNEX

59,000 SQUARE FEET





ADDITIONS- 2 STORY CLASSROOM ADDITION & KITCHEN/CAFETERIA

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

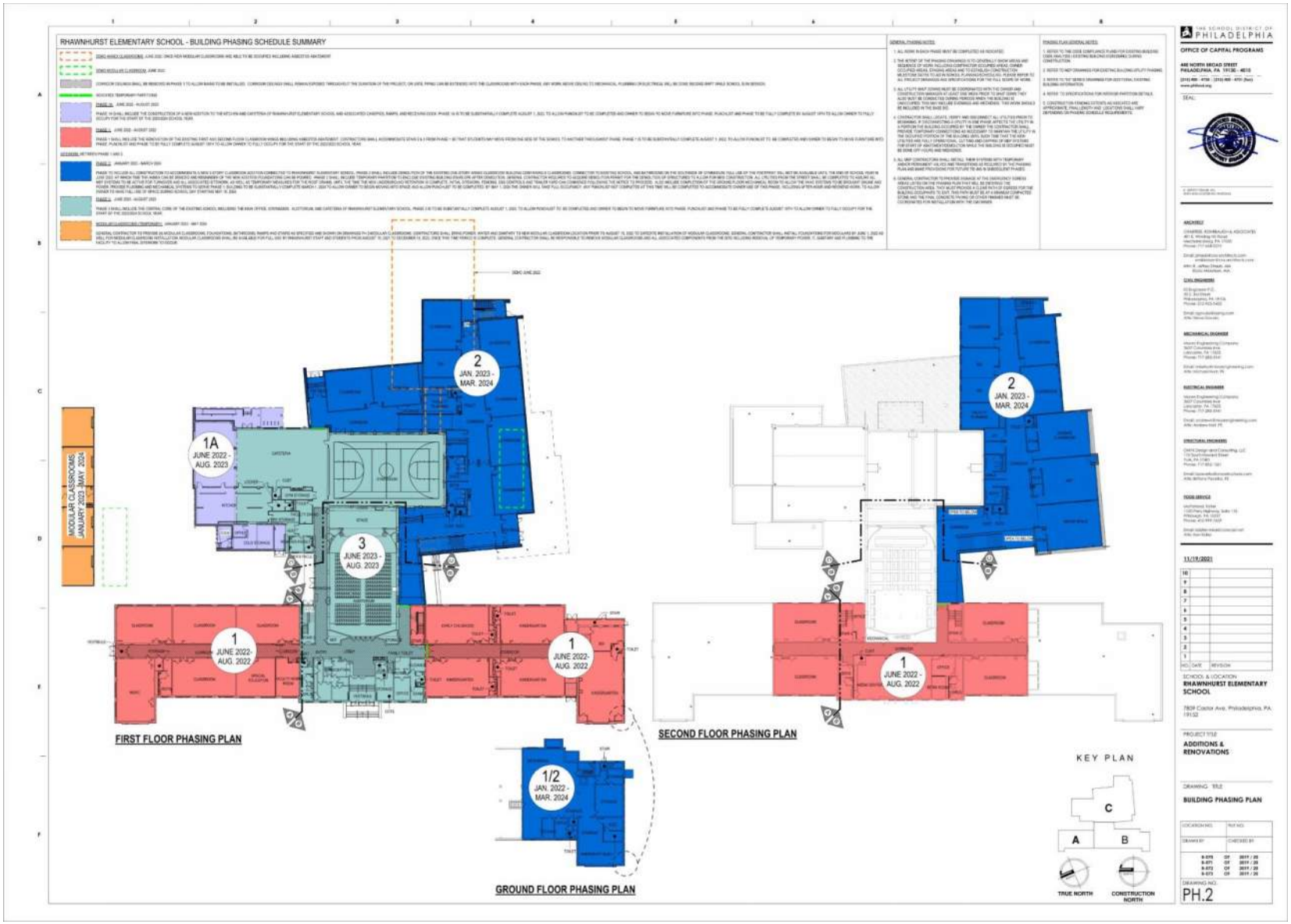
RHAWNHURST ELEMENTARY SCHOOL

THE SCHOOL DISTRICT OF PHILADELPHIA

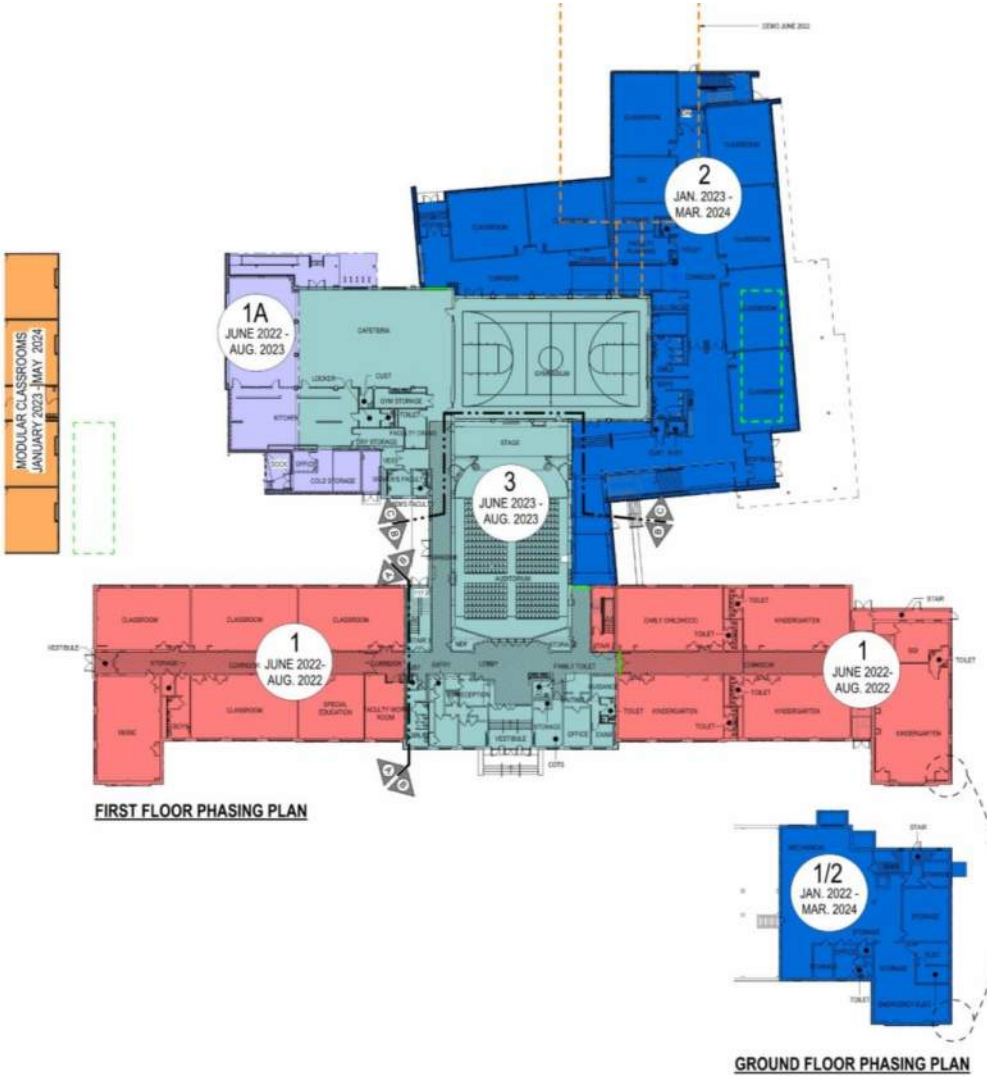
SCHEDULE

- **BUILDING, ZONING & CITY PERMITS**
  - ZONING COMPLETED
  - CODE COMPLETED
  - STREETS IN PROCESS
- **BID OPENING**
  - DECEMBER 21, 2021
- **SRC/BOARD APPROVAL**
  - FEBRUARY 2022
- **CONSTRUCTION**
  - START – MARCH 2022
  - 24 MONTHS OF CONSTRUCTION APPROXIMATELY
  - BUILDING FINISHED MARCH 2024

PHASING


RHAWNHURST ELEMENTARY SCHOOL - BUILDING PHASING SCHEDULE SUMMARY
MODULAR CLASSROOMS JANUARY 2023 - MAY 2024
1A JUNE 2022 - AUG. 2023
2 JAN. 2023 - MAR. 2024
3 JUNE 2023 - AUG. 2023
1 JUNE 2022 - AUG. 2022
1 JUNE 2022 - AUG. 2022
FIRST FLOOR PHASING PLAN
2 JAN. 2023 - MAR. 2024
1 JUNE 2022 - AUG. 2022
SECOND FLOOR PHASING PLAN
1/2 JAN. 2024 - MAR. 2024
GROUND FLOOR PHASING PLAN
KEY PLAN
C
A
B
TRUE NORTH
CONSTRUCTION NORTH
THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
11/19/2021
SCHOOL & LOCATION:
RHAWNHURST ELEMENTARY SCHOOL
7809 Castor Ave, Philadelphia, PA 19152
PROJECT TITLE:
ADDITIONS & RENOVATIONS
DRAWING TITLE:
BUILDING PHASING PLAN
DRAWING NO.:
PH.2

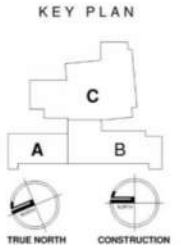
PHASING



FIRST FLOOR PHASING PLAN

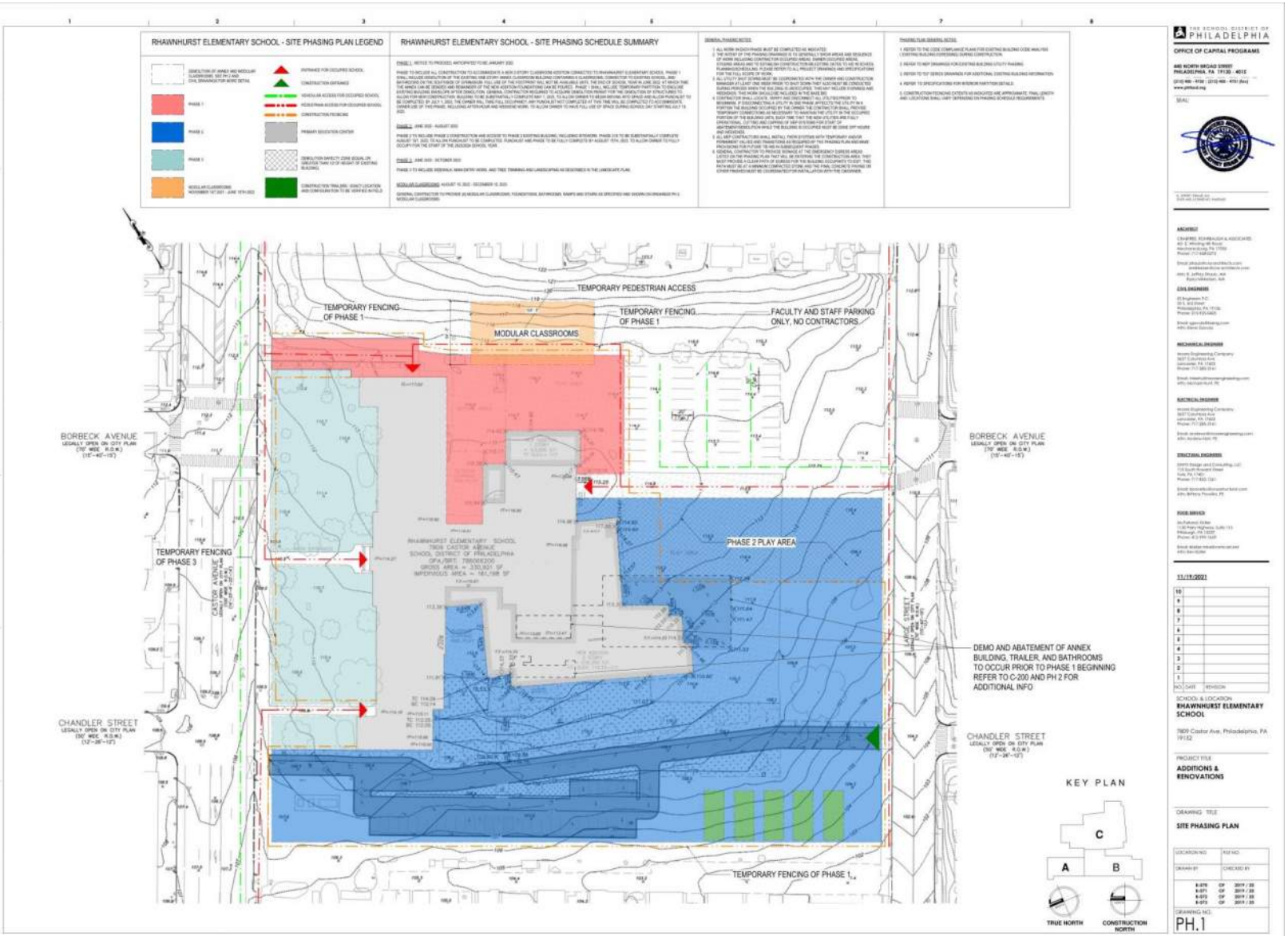
GROUND FLOOR PHASING PLAN

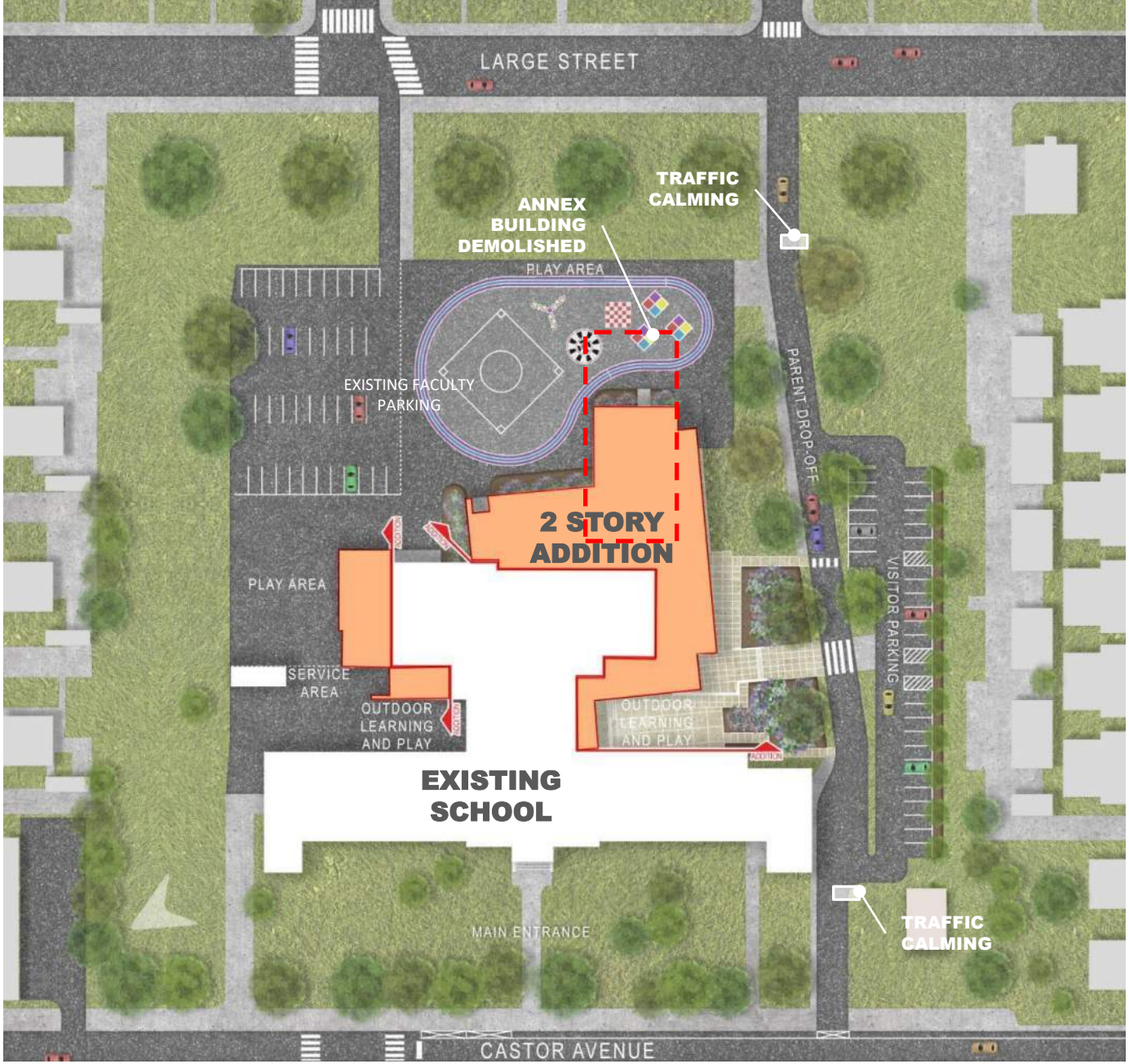
SECOND FLOOR PHASING PLAN



CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

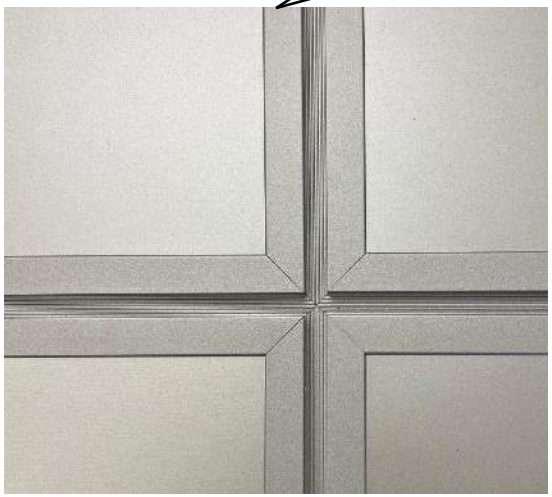
SITE PHASING





PROPOSED SITE PLAN

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055



NEW STUDENT DROP-OFF AND VISITOR PARKING

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

BRICK TYPES USED ON ADDITION

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

VISITOR ENTRANCE LOBBY

VISITOR ENTRANCE LOBBY- 2ND FLOOR

QUESTIONS?

Thank You

RHAWNHURST ELEMENTARY SCHOOL - SITE PHASING PLAN LEGEND

- DEMOLITION OF ANNEX AND MODULAR CLASSROOMS. SEE PH 2 AND CIVIL DRAWINGS FOR MORE DETAIL
- PHASE 1
- PHASE 2
- PHASE 3
- MODULAR CLASSROOMS (BY SCHOOL DISTRICT OF PHILADELPHIA) NOVEMBER 1ST 2021 - JUNE 15TH 2022
- ENTRANCE FOR OCCUPIED SCHOOL
- CONSTRUCTION ENTRANCE
- VEHICULAR ACCESS FOR OCCUPIED SCHOOL
- PEDESTRIAN ACCESS FOR OCCUPIED SCHOOL
- CONSTRUCTION FECNCING
- PRIMARY EDUCATION CENTER
- DEMOLITION SAFECTY ZONE (EQUAL OR GREATER THAN 1/2 OF HEIGHT OF EXISTING BUILDING)
- CONSTRUCTION TRAILERS - EXACT LOCATION AND CONFIGURATION TO BE VERIFIED IN FIELD

RHAWNHURST ELEMENTARY SCHOOL - SITE PHASING SCHEDULE SUMMARY

PHASE 1: NOTICE TO PROCEED, ANTICIPATED TO BE MARCH 2022

PHASE TO INCLUDE ALL CONSTRUCTION TO ACCOMMODATE A NEW 2-STORY CLASSROOM ADDITION CONNECTED TO RHAWNHURST ELEMENTARY SCHOOL. PHASE 1 SHALL INCLUDE DEMOLITION OF THE EXISTING ONE-STORY ANNEX CLASSROOM BUILDING CONTAINING 6 CLASSROOMS, CONNECTOR TO EXISTING SCHOOL, AND BATHROOMS ON THE SOUTHSIDE OF GYMNASIUM. FULL USE OF THE FOOTPRINT WILL NOT BE AVAILABLE UNTIL JANUARY 2023. AT WHICH TIME THE ANNEX CAN BE DEMOED AND REMAINDER OF THE NEW ADDITION FOUNDATIONS CAN BE POURED. PHASE 1 SHALL INCLUDE TEMPORARY PARTITION TO ENCLOSE EXISTING BUILDING ENVELOPE AFTER DEMOLITION. GENERAL CONTRACTOR REQUIRED TO ACQUIRE DEMOLITION PERMIT FOR THE DEMOLITION OF STRUCTURES TO ALLOW FOR NEW CONSTRUCTION. BUILDING TO BE SUBSTANTIALLY COMPLETE MARCH 1, 2024 TO ALLOW OWNER TO BEGIN MOVING INTO SPACE AND ALLOW PUNCHLIST TO BE COMPLETED. BY MAT 1, 2024 THE OWNER WILL TAKE FULL OCCUPANCY, ANY PUNCHLIST NOT COMPLETED AT THIS TIME WILL BE COMPLETED TO ACCOMMODATE OWNER USE OF THIS PHASE, INCLUDING AFTER-HOUR AND WEEKEND WORK.

PHASE 2: JUNE 2022 - MAY 2024

PHASE 2 TO INCLUDE PHASE 2 CONSTRUCTION AND ACCESS TO PHASE 2 EXISTING BUILDING, INCLUDING SITEWORK. PHASE 2 IS TO BE SUBSTANTIALLY COMPLETE AUGUST 1ST, 2023. TO ALLOW PUNCHLIST TO BE COMPLETED. PUNCHLIST AND PHASE TO BE FULLY COMPLETE BY AUGUST 15TH, 2023, TO ALLOW OWNER TO FULLY OCCUPY FOR THE START OF THE 2023/2024 SCHOOL YEAR.

PHASE 3: JUNE 2023 - OCTOBER 2023

PHASE 3 TO INCLUDE SIDEWALK, MAIN ENTRY WORK, AND TREE TRIMMING AND LANDSCAPING AS DESCRIBED IN THE LANDSCAPE PLAN.

MODULAR CLASSROOMS: JANUARY 1, 2023 - JUNE 10, 2024

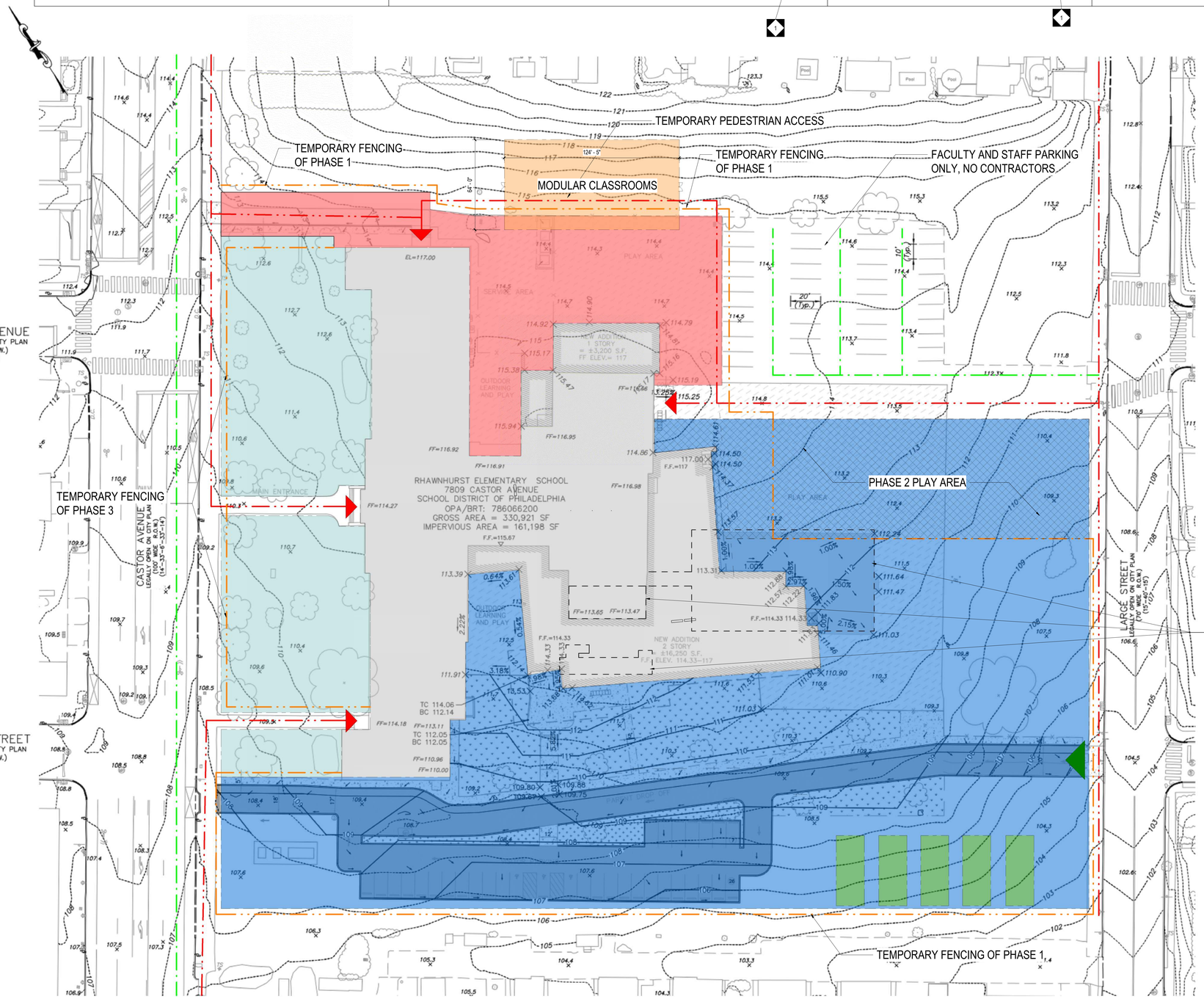
SCHOOL DISTRICT OF PHILADELPHIA WILL PROVIDE (8) MODULAR CLASSROOMS, FOUNDATIONS, BATHROOMS, RAMPS AND STAIRS AS SPECIFIED AND SHOWN ON DRAWINGS PH.3 MODULAR CLASSROOMS. REFER TO GENERAL PHASING NOTE 7 FOR MORE INFORMATION.

GENERAL PHASING NOTES:

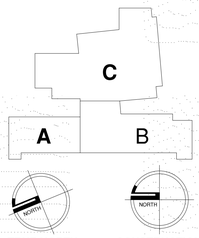
1. ALL WORK IN EACH PHASE MUST BE COMPLETED AS INDICATED.
2. THE INTENT OF THE PHASING DRAWINGS IS TO GENERALLY SHOW AREAS AND SEQUENCE OF WORK INCLUDING CONTRACTOR OCCUPIED AREAS, OWNER OCCUPIED AREAS, STAGING AREAS AND TO ESTABLISH CONSTRUCTION MILESTONE DATES TO AID IN SCHOOL PLANNING/SCHEDULING. PLEASE REFER TO ALL PROJECT DRAWINGS AND SPECIFICATIONS FOR THE FULL SCOPE OF WORK.
3. ALL UTILITY SHUT DOWNS MUST BE COORDINATED WITH THE OWNER AND CONSTRUCTION MANAGER AT LEAST ONE WEEK PRIOR TO SHUT DOWN THEY ALSO MUST BE CONDUCTED DURING PERIODS WHEN THE BUILDING IS UNOCCUPIED. THIS MAY INCLUDE EVENINGS AND WEEKENDS. THIS WORK SHOULD BE INCLUDED IN THE BASE BID.
4. CONTRACTOR SHALL LOCATE, VERIFY AND DISCONNECT ALL UTILITIES PRIOR TO BEGINNING. IF DISCONNECTING A UTILITY IN ONE PHASE AFFECTS THE UTILITY IN A PORTION THE BUILDING OCCUPIED BY THE OWNER THE CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS NECESSARY TO MAINTAIN THE UTILITY IN THE OCCUPIED PORTION OF THE BUILDING UNTIL SUCH TIME THAT THE NEW UTILITIES ARE FULLY OPERATIONAL. CUTTING AND CAPPING OF MEP SYSTEMS FOR START OF ABATEMENT/DEMOLITION WHILE THE BUILDING IS OCCUPIED MUST BE DONE OFF HOURS AND WEEKENDS.
5. ALL MEP CONTRACTORS SHALL INSTALL THEIR SYSTEMS WITH TEMPORARY AND/OR PERMANENT VALVES AND TRANSITIONS AS REQUIRED BY THE PHASING PLAN AND MAKE PROVISIONS FOR FUTURE TIE-INS IN SUBSEQUENT PHASES.
6. GENERAL CONTRACTOR TO PROVIDE SIGNAGE AT THE EMERGENCY EGRESS AREAS LISTED ON THE PHASING PLAN THAT WILL BE ENTERING THE CONSTRUCTION AREA. THEY MUST PROVIDE A CLEAR PATH OF EGRESS FOR THE BUILDING OCCUPANTS TO EXIT. THIS PATH MUST BE AT A MINIMUM COMPACTED STONE AND THE FINAL CONCRETE PAVING OR OTHER FINISHES MUST BE COORDINATED FOR INSTALLATION WITH THE CM/OWNER
7. IF SCHOOL DISTRICT OF PHILADELPHIA HAS MODULAR CLASSROOMS COMPLETE AND OPERATIONAL FOR STUDENTS EARLIER THAN PHASING PLAN INDICATES AND PHASE 1 EXISTING CLASSROOMS ARE RENOVATED, CONTRACTOR CAN START NEW CONSTRUCTION EARLY.

PHASING PLAN GENERAL NOTES:

1. REFER TO THE CODE COMPLIANCE PLANS FOR EXISTING BUILDING CODE ANALYSIS (EXISTING BUILDING EGRESSING) DURING CONSTRUCTION.
2. REFER TO MEP DRAWINGS FOR EXISTING BUILDING UTILITY PHASING.
3. REFER TO "EX" SERIES DRAWINGS FOR ADDITIONAL EXISTING BUILDING INFORMATION.
4. REFER TO SPECIFICATIONS FOR INTERIOR PARTITION DETAILS.
5. CONSTRUCTION FECNCING EXTENTS AS INDICATED ARE APPROXIMATE. FINAL LENGTH AND LOCATIONS SHALL VARY DEPENDING ON PHASING SCHEDULE REQUIREMENTS.



KEY PLAN



TRUE NORTH | CONSTRUCTION NORTH

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

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STATE AND LICENSE NO: RA403652

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emikkelsen@cra-architects.com
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Elysia Mikkelsen, AIA

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York, PA 17401
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Email: bpavelko@onyxstructural.com
Attn: Brittany Pavelko, PE

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McFarland, Kistler
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Pittsburgh, PA 15237
Phone: 412-999-7659

Email: kkistler-mka@comcast.net
Attn: Ken Kistler

11/19/2021

NO.	DATE	REVISION
10		
9		
8		
7		
6		
5		
4		
3		
2		
1	12/10/2021	ADDENDUM #1

SCHOOL & LOCATION
RHAWNHURST ELEMENTARY SCHOOL

7809 Castor Ave, Philadelphia, PA 19152

PROJECT TITLE
ADDITIONS & RENOVATIONS

DRAWING TITLE
SITE PHASING PLAN

LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-070 (R) OF 2019 / 20
B-071 (R) OF 2019 / 20
B-072 (R) OF 2019 / 20
B-073 (R) OF 2019 / 20

DRAWING NO.
PH.1

RHAWNHURST ELEMENTARY SCHOOL - BUILDING PHASING SCHEDULE SUMMARY

DEMO ANNEX CLASSROOMS: JANUARY 2023: ONCE NEW MODULAR CLASSROOMS ARE ABLE TO BE OCCUPIED INCLUDING ASBESTOS ABATEMENT

DEMO MODULAR CLASSROOM: JUNE 2022

CORRIDOR CEILINGS SHALL BE REMOVED IN PHASE 1 TO ALLOW MAINS TO BE INSTALLED. CORRIDOR CEILINGS SHALL REMAIN EXPOSED THROUGHOUT THE DURATION OF THE PROJECT, OR UNTIL PIPING CAN BE EXTENDED INTO THE CLASSROOMS WITH EACH PHASE. ANY WORK ABOVE CEILING TO MECHANICAL, PLUMBING OR ELECTRICAL WILL BE DONE SECOND SHIFT WHILE SCHOOL IS IN SESSION.

INDICATES TEMPORARY PARTITIONS

PHASE 1A: JUNE 2022 - AUGUST 2023

PHASE 1A SHALL INCLUDE THE CONSTRUCTION OF A NEW ADDITION TO THE KITCHEN AND CAFETERIA OF RHAWNHURST ELEMENTARY SCHOOL AND ASSOCIATED CANOPIES, RAMPS, AND RECEIVING DOCK. PHASE 1A IS TO BE SUBSTANTIALLY COMPLETE AUGUST 1, 2023, TO ALLOW PUNCHLIST TO BE COMPLETED AND OWNER TO BEGIN TO MOVE FURNITURE INTO PHASE. PUNCHLIST AND PHASE TO BE FULLY COMPLETE BY AUGUST 19TH TO ALLOW OWNER TO FULLY OCCUPY FOR THE START OF THE 2023/2024 SCHOOL YEAR.

PHASE 1: JUNE 2022 - AUGUST 2022

PHASE 1 SHALL INCLUDE THE RENOVATION OF THE EXISTING FIRST AND SECOND FLOOR CLASSROOM WINGS INCLUDING ASBESTOS ABATEMENT. PHASE 1 IS TO BE SUBSTANTIALLY COMPLETE AUGUST 1, 2022, TO ALLOW PUNCHLIST TO BE COMPLETED AND OWNER TO BEGIN TO MOVE FURNITURE INTO PHASE. PUNCHLIST AND PHASE TO BE FULLY COMPLETE AUGUST 19TH TO ALLOW OWNER TO FULLY OCCUPY FOR THE START OF THE 2022/2023 SCHOOL YEAR.

SITEWORK: BETWEEN PHASE 1 AND 2

PHASE 2: JANUARY 2023 - MARCH 2024

PHASE TO INCLUDE ALL CONSTRUCTION TO ACCOMMODATE A NEW 2-STORY CLASSROOM ADDITION CONNECTED TO RHAWNHURST ELEMENTARY SCHOOL. PHASE 2 SHALL INCLUDE DEMOLITION OF THE EXISTING ONE-STORY ANNEX CLASSROOM BUILDING CONTAINING 6 CLASSROOMS, CONNECTOR TO EXISTING SCHOOL, AND BATHROOMS ON THE SOUTHSIDE OF GYMNASIUM. FULL USE OF THE FOOTPRINT WILL NOT BE AVAILABLE UNTIL THE END OF SCHOOL YEAR IN JANUARY 2023, AT WHICH TIME THE ANNEX CAN BE DEMOED AND REMAINDER OF THE NEW ADDITION FOUNDATIONS CAN BE POURED. PHASE 2 SHALL INCLUDE TEMPORARY PARTITION TO ENCLOSE EXISTING BUILDING ENVELOPE AFTER DEMOLITION. GENERAL CONTRACTOR REQUIRED TO ACQUIRE DEMOLITION PERMIT FOR THE DEMOLITION OF STRUCTURES TO ALLOW FOR NEW CONSTRUCTION. ALL UTILITIES FROM THE STREET SHALL BE COMPLETED TO ASSURE ALL MEP SYSTEMS TO BE ACTIVE FOR TURNOVER AND ALL ASSOCIATED SITEWORK, AS WELL AS TEMPORARY MEASURES FOR THE ROOF DRAINS, UNTIL THE TIME THE NEW UNDERGROUND RETENTION IS COMPLETE. INITIAL SITEWORK, FENCING, E&S CONTROLS AND TRAILER YARD CAN COMMENCE FOLLOWING THE NOTICE TO PROCEED. ALSO INCLUDE COMPLETION OF THE GROUND FLOOR MECHANICAL ROOM TO ALLOW THE HVAC SYSTEMS TO BE BROUGHT ONLINE AND POWER. PROVIDE PLUMBING AND MECHANICAL SYSTEMS TO SERVE PHASE 1. BUILDING TO BE SUBSTANTIALLY COMPLETE MARCH 1, 2024 TO ALLOW OWNER TO BEGIN MOVING INTO SPACE AND ALLOW PUNCHLIST TO BE COMPLETED. BY MAY 1, 2024 THE OWNER WILL TAKE FULL OCCUPANCY; ANY PUNCHLIST NOT COMPLETED AT THIS TIME WILL BE COMPLETED TO ACCOMMODATE OWNER USE OF THIS PHASE, INCLUDING AFTER-HOUR AND WEEKEND WORK, TO ALLOW OWNER TO HAVE FULL USE OF SPACE DURING SCHOOL DAY STARTING MAY 15, 2024.

PHASE 3: JUNE 2023 - AUGUST 2023

PHASE 3 SHALL INCLUDE THE CENTRAL CORE OF THE EXISTING SCHOOL INCLUDING THE MAIN OFFICE, GYMNASIUM, AUDITORIUM, AND CAFETERIA OF RHAWNHURST ELEMENTARY SCHOOL. PHASE 3 IS TO BE SUBSTANTIALLY COMPLETE AUGUST 1, 2023, TO ALLOW PUNCHLIST TO BE COMPLETED AND OWNER TO BEGIN TO MOVE FURNITURE INTO PHASE. PUNCHLIST AND PHASE TO BE FULLY COMPLETE AUGUST 19TH TO ALLOW OWNER TO FULLY OCCUPY FOR THE START OF THE 2023/2024 SCHOOL YEAR.

MODULAR CLASSROOMS (TEMPORARY): JANUARY 2023 - MAY 2024

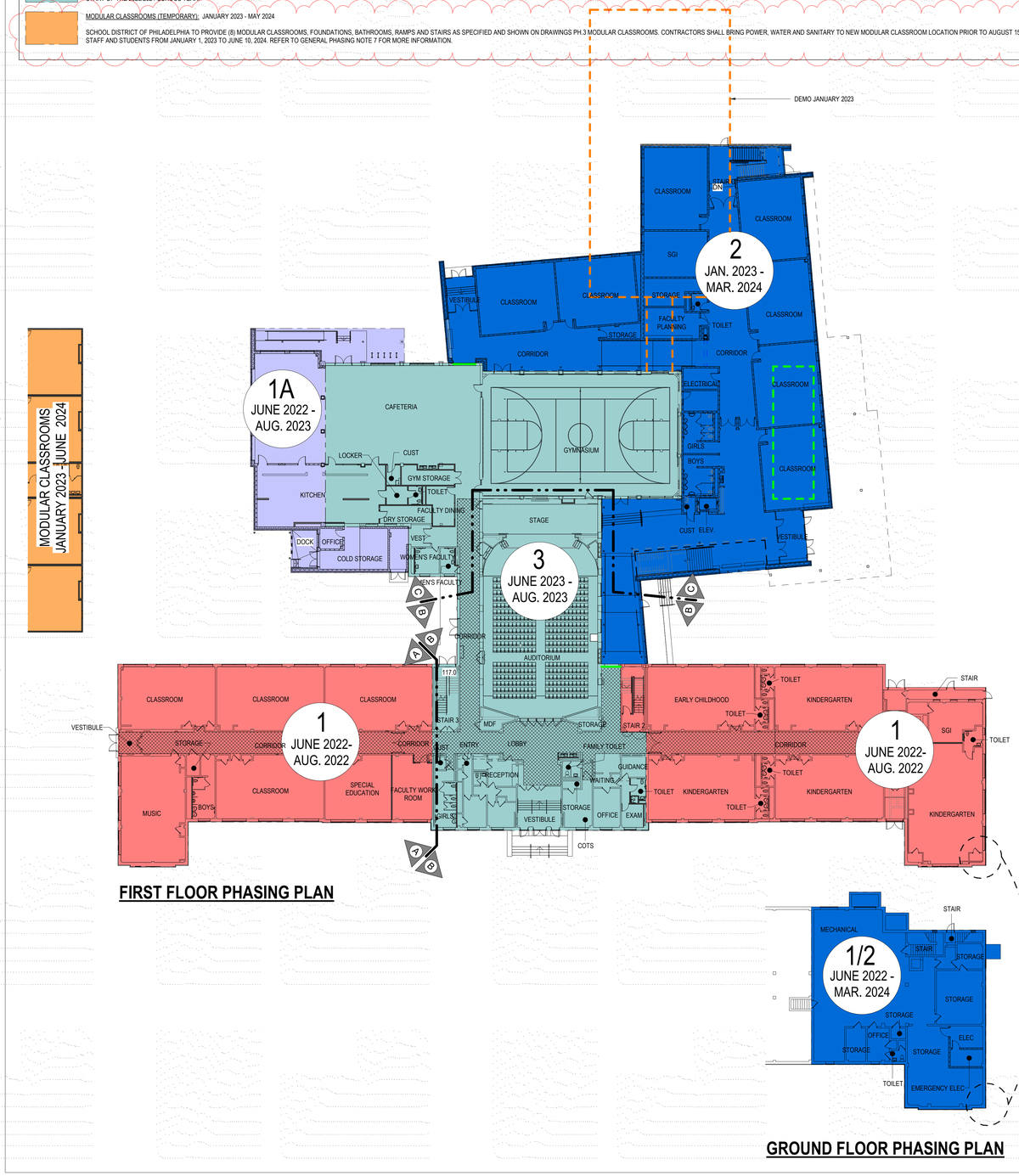
SCHOOL DISTRICT OF PHILADELPHIA TO PROVIDE (8) MODULAR CLASSROOMS, FOUNDATIONS, BATHROOMS, RAMPS AND STAIRS AS SPECIFIED AND SHOWN ON DRAWINGS PH.3 MODULAR CLASSROOMS. CONTRACTORS SHALL BRING POWER, WATER AND SANITARY TO NEW MODULAR CLASSROOM LOCATION PRIOR TO AUGUST 15, 2022 TO EXPEDITE INSTALLATION OF MODULAR CLASSROOMS. MODULAR CLASSROOMS SHALL BE AVAILABLE FOR FULL USE BY RHAWNHURST STAFF AND STUDENTS FROM JANUARY 1, 2023 TO JUNE 10, 2024. REFER TO GENERAL PHASING NOTE 7 FOR MORE INFORMATION.

GENERAL PHASING NOTES:

1. ALL WORK IN EACH PHASE MUST BE COMPLETED AS INDICATED.
2. THE INTENT OF THE PHASING DRAWINGS IS TO GENERALLY SHOW AREAS AND SEQUENCE OF WORK INCLUDING CONTRACTOR OCCUPIED AREAS, OWNER OCCUPIED AREAS, STAGING AREAS AND TO ESTABLISH CONSTRUCTION MILESTONE DATES TO AID IN SCHOOL PLANNING/SCHEDULING. PLEASE REFER TO ALL PROJECT DRAWINGS AND SPECIFICATIONS FOR THE FULL SCOPE OF WORK.
3. ALL UTILITY SHUT DOWNS MUST BE COORDINATED WITH THE OWNER AND CONSTRUCTION MANAGER AT LEAST ONE WEEK PRIOR TO SHUT DOWN THEY ALSO MUST BE CONDUCTED DURING PERIODS WHEN THE BUILDING IS UNOCCUPIED. THIS MAY INCLUDE EVENINGS AND WEEKENDS. THIS WORK SHOULD BE INCLUDED IN THE BASE BID.
4. CONTRACTOR SHALL LOCATE, VERIFY AND DISCONNECT ALL UTILITIES PRIOR TO BEGINNING. IF DISCONNECTING A UTILITY IN ONE PHASE AFFECTS THE UTILITY IN A PORTION THE BUILDING OCCUPIED BY THE OWNER THE CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS NECESSARY TO MAINTAIN THE UTILITY IN THE OCCUPIED PORTION OF THE BUILDING UNTIL SUCH TIME THAT THE NEW UTILITIES ARE FULLY OPERATIONAL. CUTTING AND CAPPING OF MEP SYSTEMS FOR START OF ABATEMENT/DEMOLITION WHILE THE BUILDING IS OCCUPIED MUST BE DONE OFF HOURS AND WEEKENDS.
5. ALL MEP CONTRACTORS SHALL INSTALL THEIR SYSTEMS WITH TEMPORARY AND/OR PERMANENT VALVES AND TRANSITIONS AS REQUIRED BY THE PHASING PLAN AND MAKE PROVISIONS FOR FUTURE TIE-INS IN SUBSEQUENT PHASES.
6. GENERAL CONTRACTOR TO PROVIDE SIGNAGE AT THE EMERGENCY EGRESS AREAS LISTED ON THE PHASING PLAN THAT WILL BE ENTERING THE CONSTRUCTION AREA. THEY MUST PROVIDE A CLEAR PATH OF EGRESS FOR THE BUILDING OCCUPANTS TO EXIT, THIS PATH MUST BE AT A MINIMUM COMPACTED STONE AND THE FINAL CONCRETE PAVING OR OTHER FINISHES MUST BE COORDINATED FOR INSTALLATION WITH THE CM/OWNER.
7. IF SCHOOL DISTRCIT OF PHILADELPHIA HAS MODULAR CLASSROOMS COMPLETE AND OPERATIONAL FOR STUDENTS EARLIER THAN PHASING PLAN INDICATES AND PHASE 1 EXISTING CLASSROOMS ARE RENOVATED, CONTRACTOR CAN START NEW CONSTRUCTION EARLY.

PHASING PLAN GENERAL NOTES:

1. REFER TO THE CODE COMPLIANCE PLANS FOR EXISTING BUILDING CODE ANALYSIS (EXISTING BUILDING EGRESSING) DURING CONSTRUCTION.
2. REFER TO MEP DRAWINGS FOR EXISTING BUILDING UTILITY PHASING.
3. REFER TO "EX" SERIES DRAWINGS FOR ADDITIONAL EXISTING BUILDING INFORMATION.
4. REFER TO SPECIFICATIONS FOR INTERIOR PARTITION DETAILS.
5. CONSTRUCTION FENCING EXTENTS AS INDICATED ARE APPROXIMATE. FINAL LENGTH AND LOCATIONS SHALL VARY DEPENDING ON PHASING SCHEDULE REQUIREMENTS.

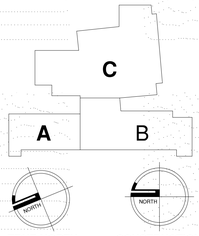


FIRST FLOOR PHASING PLAN

SECOND FLOOR PHASING PLAN

GROUND FLOOR PHASING PLAN

KEY PLAN



TRUE NORTH

CONSTRUCTION NORTH

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11/19/2021

NO.	DATE	REVISION
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1	12/10/2021	ADDENDUM #1

SCHOOL & LOCATION
RHAWNHURST ELEMENTARY SCHOOL

7809 Castor Ave, Philadelphia, PA 19152

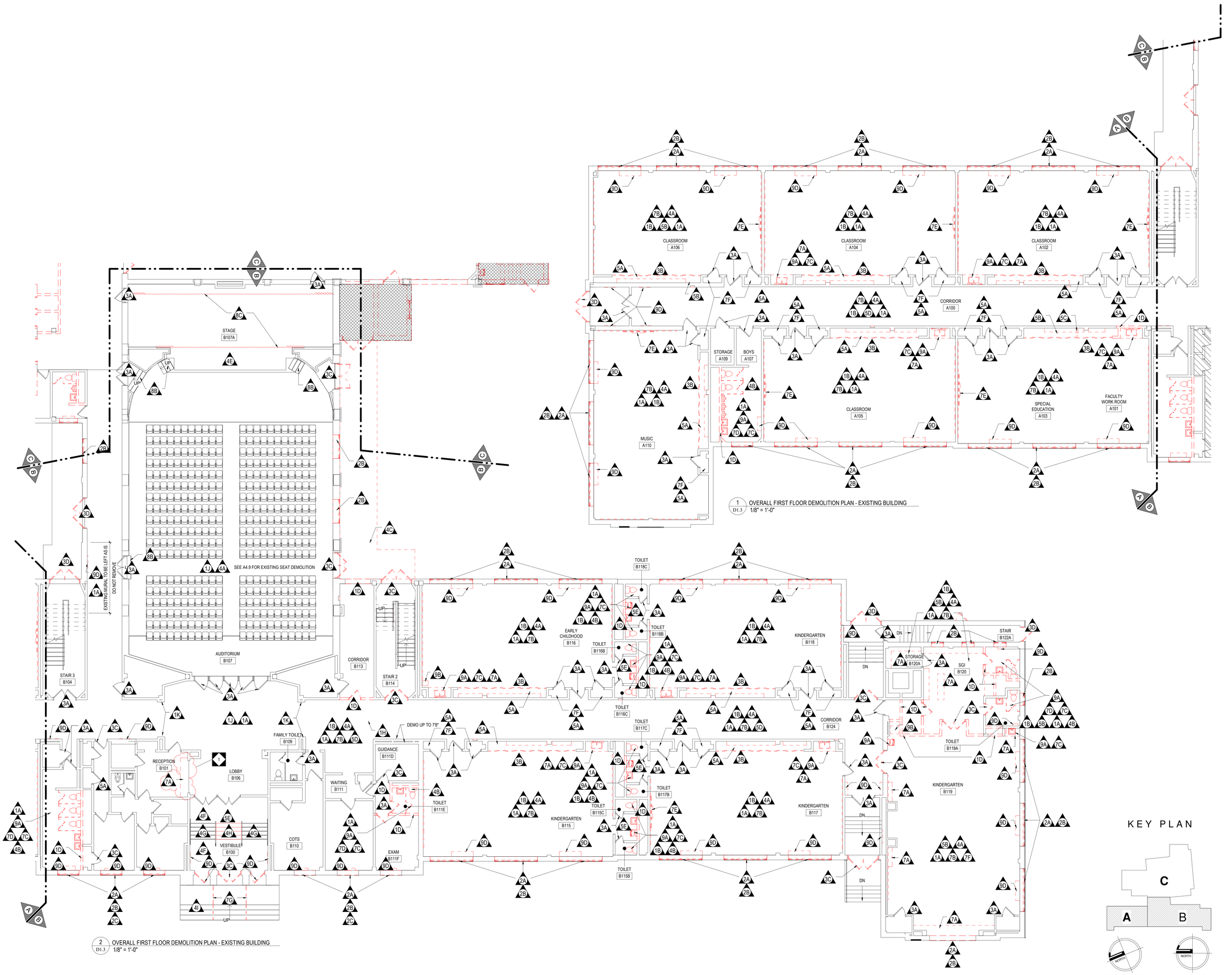
PROJECT TITLE
ADDITIONS & RENOVATIONS

DRAWING TITLE
BUILDING PHASING PLAN

LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-070 (R) OF 2019 / 20
B-071 (R) OF 2019 / 20
B-072 (R) OF 2019 / 20
B-073 (R) OF 2019 / 20

DRAWING NO.
PH.2



1 D1.3 OVERALL FIRST FLOOR DEMOLITION PLAN - EXISTING BUILDING
1/8" = 1'-0"

2 D1.3 OVERALL FIRST FLOOR DEMOLITION PLAN - EXISTING BUILDING
1/8" = 1'-0"

KEY PLAN

TRUE NORTH

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1	12/10/2021	ADDENDUM #1

SCHOOL & LOCATION
RHAWNHURST ELEMENTARY SCHOOL

7809 Castor Ave, Philadelphia, PA 19152

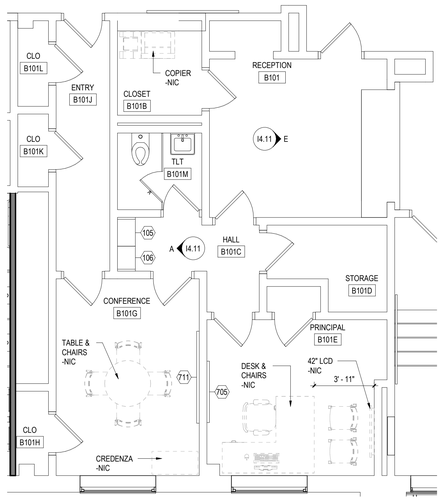
PROJECT TITLE
ADDITIONS & RENOVATIONS

DRAWING TITLE
FIRST FLOOR DEMOLITION PLAN UNITS "A" & "B"

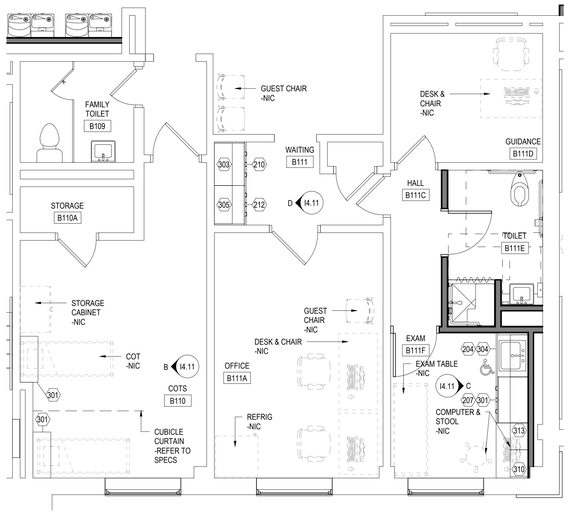
LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-070 (R) OF 2019 / 20
B-071 (R) OF 2019 / 20
B-072 (R) OF 2019 / 20
B-073 (R) OF 2019 / 20

DRAWING NO.
D1.3

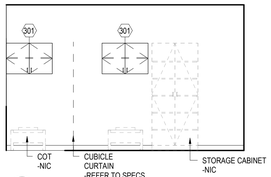


1 I4.11 ADMINISTRATION
1/4" = 1'-0"

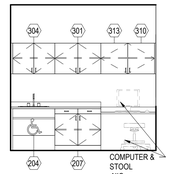


2 I4.11 NURSE & GUIDANCE
1/4" = 1'-0"

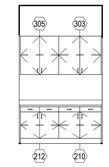
A I4.11 INTERIOR ELEVATION A
1/4" = 1'-0"



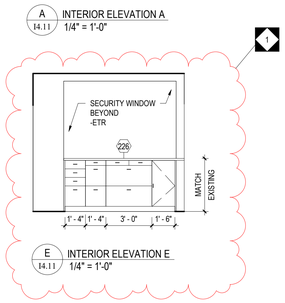
B I4.11 INTERIOR ELEVATION B
1/4" = 1'-0"



C I4.11 INTERIOR ELEVATION C
1/4" = 1'-0"



D I4.11 INTERIOR ELEVATION D
1/4" = 1'-0"



E I4.11 INTERIOR ELEVATION E
1/4" = 1'-0"

GENERAL NOTE IN REFERENCE TO I4.12

1. ALL CASEWORK IN ADMINISTRATION, GUIDANCE AND NURSE'S AREA SHALL RECEIVE LOCKS.
2. WHERE COUNTERTOP DEPTHS VARY, PROVIDE 45° ANGLE IN COUNTERTOP AS SHOWN.

ADMINISTRATION MOUNTING HEIGHT SCHEDULE

MARKER BOARD	3'-0" AFF TO BOTTOM EDGE
TACK BOARD	3'-0" AFF TO BOTTOM EDGE
BASE CABINETS	3'-0" AFF TO TOP OF CABINET
WALL CABINETS	7'-0" AFF TO TOP OF CABINET

ADMINISTRATION MOUNTING HEIGHT SCHEDULE SHALL BE APPLIED TO ALL ROOMS IN THE ADMINISTRATION, GUIDANCE, HEALTH AREAS AND ALL IP/WORK ROOMS.

I4.11 - GENERAL CASEWORK AND EQUIPMENT SCHEDULE

4

NO	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS
226	BUILT-IN PLAM RECPTION COUNTER W/(1)B/B/BF, (1)B/F/F,(1)2-DRAWER LATERAL FILE W/(2)DRAWERS ABOVE & (1) 1-DOOR CABINET, ALL W/LOCKS	SEE SPECIFICATIONS	CUSTOM	REFER TO DRAWINGS x HEIGHT TO MATCH EXISTING (VERIFY IN FIELD PRIOR TO FABRICATION)
105	OPEN TALL STORAGE	CASE SYSTEMS	T0000	21"W x 14"D x 84"H
106	OPEN TALL STORAGE	CASE SYSTEMS	T0000	18"W x 14"D x 84"H
204	ADA VANITY SINK BASE CABINET	CASE SYSTEMS	D1120	33"W x 24"D x 30"H
207	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	36"W x 24"D x 34"H
210	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	33"W x 24"D x 30"H
212	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	30"W x 24"D x 30"H
301	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	36"W x 14"D x 24"H
303	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	33"W x 14"D x 30"H
304	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	33"W x 14"D x 24"H
305	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	30"W x 14"D x 30"H
310	1-DOOR WALL CABINET - RIGHT HINGED	CASE SYSTEMS	W0120	21"W x 14"D x 24"H
313	1-DOOR WALL CABINET - LEFT HINGED	CASE SYSTEMS	W0110	21"W x 14"D x 24"H
705	MARKERBOARD	SEE SPECIFICATIONS	SEE SPECIFICATIONS	4'-0"W x 4'-0"H
711	TACK BOARD	SEE SPECIFICATIONS	SEE SPECIFICATIONS	6'-0"W x 4'-0"H

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SCHOOL & LOCATION
RHAWNHURST ELEMENTARY SCHOOL

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PROJECT TITLE
ADDITIONS & RENOVATIONS

DRAWING TITLE
LARGE SCALE LAYOUTS ADMINISTRATION

LOCATION NO.	FILE NO.
DRAWN BY: Author	CHECKED BY: Checker

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8-073 (R) OF 2019 / 20

DRAWING NO.
I4.11