

### ROCKFORD BOARD OF EDUCATION INVITATION FOR BID ON SUPPLIES, MATERIALS, EQUIPMENT OR SERVICES FOR SCHOOL DISTRICT NO. 205 ROCKFORD, ILLINOIS

IFB No. IFB No. 22-24 HVAC Upgrades at Lathrop, Spring Creek and Bloom Schools

DATE: March 2, 2022

RE: ADDENDUM NO. 1

To All Bidders:

Included are modifications, clarifications and/or corrections for the Project Manual and are hereby made a part of the contract documents. Please attach this addendum to the Project Manual(s) in your possession. Please note the receipt of this addendum on the bid form. Bidders shall review changes to all portions of this work as changes to one portion may affect the work of another.

# If you plan to hand deliver your IFB submission on the due date, please note you must check in on the 1st floor prior to coming to the bid opening. Please allow time for this as late submission will not be accepted.

Refer all questions relative to the business aspect, Instructions to Bidders, Special Conditions, and questions concerning the technical aspect of the documents to the Director of Purchasing by email at <u>purchasingdeptstaff@rps205.com</u>.

ROCKFORD BOARD OF EDUCATION

By: Dane Youngblood Director of Purchasing



ADDENDUM # : 001

DATE ISSUED : March 1, 2022

### ADDENDUM

Subject : Addendum No. 001 To The Bid Documents For: RPS IFB number 22-24 Spring Creek, Lathrop, & Bloom Elementary HVAC Upgrades Rockford, Illinois

#### General Notes

- 1. Pre-bid meeting sign-in attendance sheet is attached to this addendum.
- 2. Notes from Pre-Bid Meeting 2/24/22:
  - a. Final date for contractor RFI's is revised to 3/14/22.
  - b. Final addendum to be issued is revised to 3/16/22.
  - c. Each school is individually bid with the opportunity to make a combination bid for all three.
  - d. Rockford Public Schools will provide the means of access to the contractor when they request access to the building to conduct work.
  - e. Background checks are required. Contractor cleared employees list that is included in the bid form.
  - f. A walkthrough of each school was facilitated by RPS, IFS, and KED.
- 3. Abatement documents are attached to this addendum for reference. Asbestos removal is being bid separately from 22-24 bid documents but are to be coordinated with the HVAC construction. <u>Note</u>: Guilford High School abatement documents are included in the abatement project manual, but are not part of the 22-24 bid package.

#### **Specifications**

1. Add Section 238223.49 - Self-Contained, Packaged Classroom Units

#### Drawings

1. Civil Drawings have been provided for inclusion in project scope. See attached sheets C101 through C107.



EXCELLENCE WITHIN.



#### Attachments

- Specifications: 238223.49 Self-Contained Packaged Classroom Units. •
- Drawings: C101, C102, C103, C104, C105, C106, C107 •
- Sign-In Sheet for 2-24-22 Pre-Bid Meeting ٠

Adm Cay

Signature

Adam Camp Mechanical Engineer

Printed Name & Title

707 NE Jefferson Ave : Peoria, IL 61603 : (309) 938-4005 : www.kedmep.com

ROCKFORD PUBLIC SCHOOLS IFB No. 22-24 HVAC Upgrades at Lathrop, Spring Creek & Bloom Schools Pre-Bid Meeting Sign-In Sheet February 24, 2022 at 10:00 a.m.



### PRE-BID MEETING SIGN-IN SHEET

IFB No. 22-24 HVAC Upgrades at Lathrop, Spring Creek and Bloom Schools

### PLEASE WRITE EMAIL ADDRESS SO THAT IT IS LEGIBLE IN ORDER TO RECEIVE ADDENDUM INFORMATION

	Printed Name	Company Name	Company Address	Telephone	E-mali	
1	Gres Hill	Nelson Cselson Much	1417 22nd St RockFord IL	415-398-1910	ghill@welsonpipin	GCO.CON
2	SLOTTNENSE	RF3205	1417 22 st RockFord IL SUSZ ROTH ANE Rockford, 11 (0109	815-940- 2032	SCOTT, JENSENCO	
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ROCKFORD PUBLIC SCHOOLS IFB No. 22-24 HVAC Upgrades at Lathrop, Spring Creek & Bloom Schools Pre-Bid Meeting Sign-In Sheet February 24, 2022 at 10:00 a.m.

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	Printed Name	Company Name	Company Address	Telephone	E-mall	
9	Derek murich	Walth Construction	929WAdans, Chicago, 72 60609	312-841-4437	Imarich@ wulshgroupin	om
10	Peter Schneling	Schmeling Construction	315 Harrison Ave. Rockford, IL 61104	815 - 399- 7800	Reterse Schmebing construction	an.com
	Luke Murphy	CMI	50 N. First St. Dunkap, IL	<del>309 - 143 - 7X68</del>	lukemurphy @cmi.bz	2
12	Fabrian Varquez	REED CONSTRUCTION	600 . Tackson, Chicago, De (	312)448-0426	Frazquer & Reckorp.	com
	Jody Havebla	Lauson/Lauson	1413 Industrial Do.	8155633-1773	estingflogal	L'builders inet
	Randy Warkentier	Helm	22797 Yellow Greek Rd Freevert IL	\$15-297-6013	ruber Kentien Chelm	group: com
	Matt Kalinski	RINGLAND John	15 13 I now friel Do. 22797 Hellow Greek Rd Freezert IL 1725 ituntwood PR Eon Cherry Dalley Ibile So. Main ST. TRufd	815-509 46	MILDENSKI RE	PINGLAND. COM
16	Todd Byxbe	Miller Eug	1616 So. Main ST. TEKED	815-963-4878	TByxbe@Mecogroup	com Com
		Schmeling Const. Co.	315 Harnison Ave. Rhifd		Searlw@schmeling Constr	
	Todd Dabacry		926 LAILE BLUFF N. CHORE SHEATHER, #1	347-477-5416	tjabaandifsp	n.com
19	20					

#### SECTION 23 8223.49

#### SELF-CONTAINED, PACKAGED CLASSROOM UNITS

#### PART 1 GENERAL

#### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. Section includes units and accessories with the following heating and cooling features:
  - 1. Direct-expansion refrigerant cooling coil with hydronic reheat coil.

#### 1.03 ACTION SUBMITTALS

- A. Product Data: For each type of product
  - 1. Include rated capacities, operating characteristics, and furnished specialties and accessories for each unit type and configuration.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, and details.
  - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Detail anchorages and attachments to structure and to supported equipment.
  - 4. Include diagrams for power, signal, and control wiring.

#### 1.04 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For units to include in emergency, operation, and maintenance manuals.
  - 1. In addition to items specified in Section 01 7000 "Closeout Submittals," include the following:
    - a. Maintenance schedules and repair part lists for motors, coils, integral controls, and filters.

#### **1.05 MAINTENANCE MATERIAL SUBMITTALS**

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

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1. Unit Filters: Furnish one (1) spare filter(s) for each filter installed.

#### **1.06 QUALITY ASSURANCE**

- A. Comply with NFPA 70.
- B. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1, Section 5 "Systems and Equipment" and Section 7 "Construction and Startup."
- C. ASHRAE/IES 90.1 Compliance: Applicable requirements in ASHRAE/IES 90.1, Section 6 "Heating, Ventilating, and Air-Conditioning."

#### **1.07 COORDINATION**

- A. Coordinate layout and installation of units and suspension system components with other construction that penetrates or is supported by ceilings, including light fixtures, HVAC equipment, fire-suppression-system components, and partition assemblies.
- B. Coordinate size and location of wall sleeves for outdoor-air intake.

#### 1.08 WARRANTY

A. Unit shall include 5-year parts warranty covering compressor, and 5-year warranty covering parts, heat exchange coils, ventilation packages, subject to terms and conditions of Limited Warranty agreement.

#### PART 2 PRODUCTS

#### 2.01 GENERAL

A. Furnish and install a self-contained vertical floor standing air conditioning unit, DX Cooling. Constructed in accordance with UL 1995 standards with a label affixed to the unit listing the product code under which it is registered. Unit performance shall be rated in accordance with AHRI 390. Unit shall be constructed follow-ing ISO: 9001 quality control program procedures and be fully assembled, charged, wired, and tested prior to shipment.

#### 2.02 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Bard Climate Control Solutions
  - 2. Modine Airedale

#### 2.03 CABINET

- A. Fire-Hazard Classification: Insulation shall have a fire rating of UL94HF-1.
- B. Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1-2010.

- C. Cabinet Interior: Interior right and left hand sides shall employ 20 gauge galvanized steel full double wall construction. No screws are exposed on the exterior panels.
- D. Cabinet Finish: Provide standard color finish.
- E. Paint finish shall be easily cleanable and hard wearing to give maximum protection.
- F. Service and Maintenance Access: All service and maintenance access shall be possible through the front of the unit only.
- G. Return air openings shall be integrated into the cabinet sides.
- H. Access Door shall be fully insulated to provide for superior noise deadening at front of unit. Door is secured with key locks. Door swing designed to turn into itself allowing side of the unit to be installed directly against a wall in the corner of a room.
- I. Factory installed condensate connection stub provided for connection to the field in-stalled building condensate drain.

#### 2.04 REFRIGERATION SYSTEM

- A. Compressor
  - 1. All models shall use a high efficiency 2-stage scroll compressor for maximum efficiency and reliability. Equipment shall be designed to provide 2 stages of cooling. The compressor shall be covered by a 5-year parts warranty. The refrigeration circuit shall be equipped with factory installed high and low pressure controls, liquid line filter dryer, and discharge muffler.
  - 2. Modulating low ambient control to 20 degrees shall be factory installed
  - 3. The compressor shall be mounted on double floating isolation mounting system and be fitted with factory installed sound attenuation jacket.
  - 4. The refrigeration control shall be a factory installed TXV. Refrigerant shall be R-410A.
- B. Coil Construction
  - Standard evaporator coil shall be constructed of hydrophilic fin stock (green) providing acrylic coating with no bead-up condensate, lower wet coil pressure drop and improved draining and reduced re-entrainment of moisture back into the air stream. Acrylic coating shall also provide antimicrobial properties providing resistance to microbial and fungicidal growth. Coil coating shall meet ASTM D2372- no growth.
  - 2. Evaporator coil shall be either standard hydrophilic fin stock or hydrophilic fin stock with Phenolic coating.
  - 3. Standard condenser coil shall be constructed of aluminum fin stock and copper tube.

#### 2.05 CONDENSER FAN MOTOR

A. The condenser fan motor shall be variable speed ECM, allowing for modulating low ambient control and low sound performance.

#### 2.06 INDOOR BLOWER MOTOR

- A. The indoor blower motor shall be a variable speed (ECM) type to produce the same rated air flow from 0 to .5 inch WC of external static pressure at low sound levels. The motor is to be self adjusting to provide proper rated air flow at high static pressures without user adjustment or wiring changes by the user. The motor shall be programmed for 20-second ramp up and 60-second down rate for quiet, smooth starting and stopping. PSC motor shall not be acceptable. Motor shall automatically adjust to proper blower speed:
- B. Ventilation stage 1 cooling or stage 2 cooling operation. Submittals shall include rated cfm for high speed, low speed, and ventilation speed.

#### 2.07 FILTER

A. Filter: 2" MERV 13 per ASHRAE standard

#### 2.08 CONTROL PANEL

- A. Control Panel: Located at top of the unit behind the front door for direct, centrally located access to controller, controller transformer (24V), and all necessary contactors, re-lays, and circuit breakers.
- B. Wiring: Individually numbered terminal blocks and wires are to match job-specific wiring diagrams. All electrical wires in the control panel will run in an enclosed trough. Wiring outside the control panel to be contained in a protective sleeve. All controls and wiring is factory installed in a clean, organized arrangement.
- C. Plug and Socket Wiring: Supply and Exhaust Fan decks, compressor, damper assembly, and energy wheel assembly (if applicable) wiring includes plugs local to the assembly allowing for quick wiring disconnect when the component requires removal for service.

#### 2.09 ECONOMIZER

- A. Single-blade damper that pivots using a central single shaft attached to a single actuator allowing for complete balance of the return, outside, and exhaust air streams. Capable of full modulation allowing any mixture of outside air and return air to be possible. Will allow for 100% of the units airflow to be taken from the outside during conditions allowing for full economizer savings. Damper blade edges lined with rubber gasket to prevent air infiltration in full recirculation or full economizer operation. Complete damper assembly slides out of unit on rails allowing for the damper assembly to be removed through the front of the unit if it requires service. Electrical and control wiring to damper assembly includes quick disconnect plug local to assembly.
- B. Outside Air Damper: Outside air damper and actuator provided for protection from out-door elements when unit is not in use.
- C. Damper Actuator: Low voltage modulating damper actuator with spring-return, fail safe. When power is cut to actuator, damper actuator will force damper blade closed to outside air.

#### 2.10 ENERGY RECOVERY VENTILATOR

A. The Energy Recovery Ventilator (ERV) shall consist of 2 rotary wheels in an insulated cassette frame with seals, drive motor and belt. The ERV assembly shall also include intake and exhaust blowers. The total energy wheel shall be coated with silica gel desiccant, permanently bonded without the use of

binders or adhesives. The coated segments shall be washable with detergent or alkaline coil cleaner and water. Desiccant shall not dissolve or deliquesce in the presence of water or high humidity. All diameter and perimeter seals shall be provided as part of the cassette assembly and shall be factory set. Drive belts shall not require external tensioners or adjustment. Cassette wheels shall include rims to prevent belts from slipping off wheels. Intake and exhaust airflow can be modulating mode (requires CO2 controller with 2-10vdc output) or can be demand control fixed mode On/Off using relay output from CO2 controller. In fixed mode the intake and exhaust rates are individually adjustable, and can be set to maintain positive pressure if desired. The ERV cassette including parts and media shall include 5-year warranty.

B. The ERV thermal performance shall be certified by the manufacturer in accordance with ASHRAE Standard 84, Method of Testing Air-to-Air Heat Exchangers and ARI Standard 1060, Rating for Air-to-Air Energy Recovery Ventilation Equipment Cassettes, and shall be listed in the ARI Certified Products. Unit complies with ANSI/ASHRAE Standard 62.1 Ventilation for Acceptable Air Quality.

### 2.11 HOT GAS REHEAT

- A. The dehumidification circuit shall incorporate an independent DX coil in the supply air stream in addition to the standard evaporator coil. This coil shall be mounted in the reheat position, and sized to nominally match the sensible cooling capacity of the evaporator coil. Extended run times in dehumidification mode can be achieved using waste heat from the refrigeration cycle to achieve the reheat process, Models that also have electric heaters installed shall have the electric heat inhibited during dehumidification mode, unless a call for emergency heat is initiated.
- B. The dehumidification cycle shall be energized by a rise in relative humidity above set point. The unit shall energize in the cooling mode and also a two position valve will energize, allowing hot refrigerant gas to pass thru the reheat coil, reheating the cold air leaving the evaporator coil. The dehumidification cycle shall have on/off capability. If the thermostat calls for cooling or heating during the dehumidification cycle, the unit shall terminate dehumidification to satisfy the call from the thermostat. A solid state circuit board shall control the dehumidification function.

### 2.12 CONTROLS

- A. THOC (Temp. Humidity, Occupancy) CO2 and Ethernet
- B. The unit is fitted with a programmable microprocessor controller provided by the unit manufacturer mounted outside the air stream in the control panel. The controller is designed specifically for operating the unit in its most energy efficient manner using pre-engineered control strategies. The microprocessor determines mode of operation based on the factory installed return air and supply air temperature sensors.
- C. Factory installed controls shall enable the unit to operate in the following modes:
  - 1. Free Cooling/Economizer using outside air in favorable conditions
  - 2. Staged Mechanical Cooling.
  - 3. Dehumidification: Controller adjusts compressor capacity based on dehumidification requirements through manufacturers sequence, hot gas reheat valve is opened
  - 4. Heating: Hot water heat
  - 5. C02 Demand Control Ventilation.

- D. The microprocessor controller shall also modify the minimum damper position to compensate for mode of operation and fan speed.
- E. BACnet Card: The factory Microprocessor Control includes a plug-in card allowing for complete compatibility with an MS/TP BACnet control system.
- F. Time Clock Card: The Control System microprocessor includes a time clock card for units where time functions, night and weekend setback, etc. are not transmitted from a building management system or remote central time clock. The time clock shall have a full 7- day schedule and calendar function incorporated. The 7-day schedule shall have two adjustable occupied/unoccupied periods per day. The calendar function shall allow 20 calendar periods (start date / stop date = 1 period).

#### 2.13 HOT WATER HEATING

A. Hot Water Coil: Unit is equipped with a hot water heating coil mounted in the reheat position relative to the evaporator coil.

Note: Water control valves not included. Field provided.

#### 2.14 ADDITIONAL FACTORY INSTALLED OPTIONS

- A. Disconnect Switch: Located on the control panel, amp power disconnect switch sized for the full load amperage of the unit. Allows the unit to be disconnected from the power supply prior to any maintenance. In the off position the switch can be locked out.
- B. FIELD INSTALLED ACCESSORIES
- C. Plenum:
  - 1. Discharge plenum mounted on top of the unit allowing for supply air to discharge through the front and two sides. Plenums with front and side discharge supplied with aluminum grills with a clear anodized finish. Lined with acoustic foam to minimize noise levels. Finished and painted to match the unit.
- D. WALL SLEEVE (Wall Sleeve And Louver Required):
  - Wall sleeve shall be factory supplied and must be constructed of galvanized steel, coated with an epoxy primer and baked-on polyester enamel paint. It shall be designed to withstand a minimum of 1000 hours of salt spray protection when tested per ASTM B117-03 standard. Floor base shall be provided to raise height over 34" above finished floor. Wall sleeve shall be continuous from outside wall to rear of unit for weather tight installation. See 10.6 for optional Riser Platforms.
- E. Outdoor Louver Grille:

1. Furnish factory louver designed for condenser air and outside air intake and exhaust. Louver shall be aluminum construction with removable core for service. Access to removable core is by tamper-proof screws. Louver shall have a powder coat finish. See our color chart for color selections.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Examine areas, with Installer present, to receive units for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine roughing-in for piping and electrical connections to verify actual locations before unit installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 INSTALLATION

- A. Install unit to comply with NFPA 90A.
- B. Verify location of thermostats, humidistats, and other exposed control sensors with Drawings and room details before installation. Install devices 48 inches above finished floor.

#### 3.03 CONNECTIONS

- A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping, fittings, and specialties. Specific connection requirements are as follows:
  - 1. Install piping adjacent to machine to allow service and maintenance.
  - 2. Connect piping to unit factory hydronic piping package. Install piping package if shipped loose.
  - 3. Connect condensate drain to indirect waste.
- B. Install refrigerant piping as required by Section 23 2300 "Refrigerant Piping," and add refrigerant as required to compensate for length of piping.
- C. Connect supply-air and return-air ducts to unit with flexible duct connectors specified in Section 23 3300 "Air Duct Accessories." Comply with safety requirements in UL 1995 for duct connections.
- D. Ground equipment according to Section 26 0526 "Grounding and Bonding for Electrical Systems."
- E. Connect wiring according to Section 26 0519 "Low-Voltage Electrical Power Conductors and Cables."

### 3.04 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
  - 1. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
  - 2. Operate electric heating elements through each stage to verify proper operation and electrical connections.
  - 3. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.
  - 4. Record temperatures entering and leaving energy recovery wheel when outdoor-air temperature is a minimum of 15 deg F higher, or 20 deg F lower, than room temperature.
- C. Remove and replace malfunctioning units and retest as specified above.
- D. Prepare test and inspection reports.

#### 3.05 ADJUSTING

- A. Adjust initial temperature and humidity set points.
- B. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.

#### 3.06 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain unit.

#### END OF SECTION

### GENERAL NOTES

- 1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MUNICIPAL CODE, CITY OF ROCKFORD, ILLINOIS, CURRENT EDITION. THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, AS WELL AS ADJOINING RESIDENTIAL AREAS. CURRENT EDITION, "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS," CURRENT EDITION, SPECIAL PROVISIONS AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. 26. THE CONTRACTOR IS REQUIRED TO STAY WITHIN THE NOTED PROPERTY BOUNDARIES RIGHT-OF-WAY AND EASEMENTS AS SHOWN IN THE PLANS. ANY ADDITIONAL EASEMENTS SHALL BE SECURED BY THE CONTRACTOR AT NO EXTRA COST. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.
- AUTHORIZED AGENT. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "OWNER", WHICH SHALL MEAN ROCKFORD PUBLIC SCHOOL, OR THEIR DULY AWARDED AGENT.
- 27. ANY AREAS DAMAGED OR DISTURBED DURING THE PROJECT AS A DIRECT OR INDIRECT RESULT OF CONTRACTOR OPERATIONS. SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION. THE COST OF 2. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "ENGINEER", WHICH SHALL MEAN FEHR GRAHAM OR THEIR DULY SAID RESTORATION OR REPAIR SHALL BE BORNE TOTALLY BY THE CONTRACTOR, WITH NO EXTRA COMPENSATION BEING AWARDED UNDER THIS CONTRACT. THE RESPONSIBILITY FOR THE REPAIR OR REPLACEMENT OF ANY UTILITY, STRUCTURE, LANDSCAPING, ETC., DAMAGED OR DESTROYED BY THE CONTRACTOR DURING MOBILIZATION OR CONSTRUCTION SHALL BE BORNE SOLELY BY THE CONTRACTOR, WITH NO EXPENSE BEING CHARGED TO THE ENGINEER OR OWNER. PRIOR TO 3. AS PART OF THE BIDDING PROCEDURE, THE CONTRACTOR SHALL VERIFY THAT THE QUANTITIES FOR PAY ITEMS, AS PRESENTED ACCEPTANCE OF THIS REPAIR OR REPLACEMENT, THE CONTRACTOR SHALL PRESENT THE OWNER WITH A "SIGNOFF LETTER" IN THESE PLAN DOCUMENTS, ARE SUBSTANTIALLY CORRECT. IF DISCREPANCIES ARE DETECTED, THE CONTRACTOR SHALL NOTIFY SIGNED BY A RESPONSIBLE OFFICIAL OF THE OWNER OF THE DAMAGED UTILITY STATING THAT THE REPAIR OR REPLACEMENT THE ENGINEER OF THE DISCREPANCY PRIOR TO THE BID DATE. IS ACCEPTABLE.
- 4. QUANTITIES SHOWN ARE ESTIMATES FOR INFORMATION ONLY. PAYMENT WILL BE MADE BASED ON CONTRACT REQUIREMENTS.
- 5. THE CONTRACTOR SHALL BE PAID FOR MATERIALS AND EQUIPMENT SUCCESSFULLY INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AS MEASURED OR VERIFIED IN PLACE BY THE ENGINEER OR HIS AGENT.
- 6. IN CASE OF CONFLICT BETWEEN THE ABOVE MENTIONED SPECIFICATIONS, THE ENGINEER SHALL DETERMINE WHICH OF THE SPECIFICATIONS SHALL GOVERN. THE ENGINEER'S DECISION SHALL BE FINAL AND NO ADDITIONAL COMPENSATION SHALL BE AWARDED UNLESS APPROVED BY THE ENGINEER.
- 7. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE OWNER. IMPROVEMENT REPRESENTATIONS AS SHOWN ON THESE PLANS, ARE AS ACCURATE AS POSSIBLE FROM THE 1. UNLESS OTHERWISE SPECIFIED, ALL EROSION AND SEDIMENT CONTROL MEASURES AND THEIR MAINTENANCE, CLEARING AND INFORMATION AVAILABLE. HOWEVER SOME FIELD REVISIONS MAY BE REQUIRED TO ACCOMMODATE UNFORESEEN CIRCUMSTANCES REMOVAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. - THE ENGINEER SHALL BE ADVISED OF ANY NECESSARY REVISIONS WITH SUFFICIENT LEAD TIME ALLOWED TO PROPERLY CONSIDER AND ACT UPON SAID REQUESTS. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED IN CONSTRUCTING THOSE THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE ILLINOIS URBAN MANUAL, THE ILLINOIS DEPARTMENT IMPROVEMENTS AS DETAILED IN THIS ENGINEERING PLAN.
- 8. THE OWNER OR ENGINEER SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE OR REJECT THE WORKMANSHIP AND/OR MATERIALS WHICH GO TO MAKE UP IMPROVEMENTS AS DETAILED IN THESE PLANS AND SPECIFICATIONS.
- 9. GENERAL SAFETY PROVISION: TO PROVIDE DRIVERS WITH SAFE TRAVEL CONDITIONS DURING THE CONSTRUCTION PROJECT, AND TO PROVIDE SAFE WORKING CONDITIONS FOR ALL EMPLOYEES, THE RULES, REGULATIONS, AND CONDITIONS STATED BELOW 4. THE SWPPP SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS AND WILL BE AVAILABLE FOR REVIEW DURING THE WILL PREVAIL FOR THE DURATION OF THIS CONTRACT. ANY EMPLOYEE OF THE CONTRACTOR OR HIS SUBCONTRACTORS WHO BIDDING PROCESS. REFUSES TO COMPLY WITH THESE GENERAL SAFETY PROVISIONS SHALL BE REMOVED FROM THE JOB SITE IN ACCORDANCE. WITH STATE AND LOCAL REQUIREMENTS. THE CONTRACTOR AND ANY SUBCONTRACTORS RETAINED BY HIM SHALL COMPLY WITH 5. A COPY OF THE SWPPP WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL MAINTAIN ONE COPY THE STATE AND FEDERAL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA), JULY 1, 1987 AS OF THE SWPPP AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS FROM THE DATE OF PROJECT INITIATION IT RELATES TO CONTRACTOR'S OPERATIONS. TO THE DATE OF FINAL STABILIZATION.
- 10. THE CONTRACTOR SHALL COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.
- 11. THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS NOT THE REDUCED SIZE PLANS.
- 7. THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL MEASURES OR 12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF CONSTRUCTION ACTIVITIES THAT DISTURB SITE SOIL WILL BE REQUIRED TO CERTIFY THE SWPPP BEFORE A NOTICE TO THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. COST OF PROCEED IS ISSUED. MAINTAINING DRAINAGE FLOWS SHALL BE INCIDENTAL TO THE CONTRACT.
- 13. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED OR DISTURBED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS AND RIGHT-OF-WAY PINS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS. REPLACEMENT OF MONUMENTS WILL BE DETERMINED BY THE ENGINEER.
- 14. THE CONTRACTOR SHALL REMOVE, STORE, AND RELOCATE TO THE SATISFACTION OF THE ENGINEER ALL EXISTING SIGNAGE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS, AND CONSIDER THIS AS INCIDENTAL TO THE CONTRACT.
- 15. WITHIN OR OUTSIDE THE EXISTING RIGHT-OF-WAY, THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING SIGNS. ANY SIGNS REMOVED FOR CONSTRUCTION PURPOSES SHALL BE CAREFULLY REMOVED AND RE-ERECTED BY THE CONTRACTOR AT A LOCATION NEAREST TO THE ORIGINAL LOCATION, OR AT A LOCATION DETERMINED BY THE ENGINEER IN THE FIELD. REMOVAL AND RE-ERECTED SIGNS AND ANY DAMAGE DONE TO EXISTING SIGNS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 16. ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE. MATERIALS AND LABOR NOT SPECIFICALLY IDENTIFIED SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 17. AT THE END OF EACH DAY, THE CONTRACTOR SHALL SECURE THE CONSTRUCTION WORK ZONE FROM POTENTIAL INTRUDERS.
- 14. EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORM WATER EXPECTED DURING THE 18. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONSTRUCTION PROCESS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE IDENTIFIED IN THE SWPPP. THESE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY PAVEMENT DISCHARGES SHALL BE DIRECTED AWAY FROM UNPROTECTED, BARE, OR OTHERWISE UNSTABILIZED SOIL, AND APPROPRIATE ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED SO THAT THESE DISCHARGES DO NOT CAUSE EROSION OR REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR DEGRADE THE QUALITY OF RUNOFF FROM THE CONSTRUCTION SITE. HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
- 19. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES, AND SHALL NOT PROCEED WITH THE WORK UNTIL ALL LINES AND GRADES WHICH ARE BELIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE ENGINEER OR HIS REPRESENTATIVE.
- 20. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- 21. ALL ITEMS TO BE REMOVED AND NOT DEFINED AS A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 22. ALL EXCESS EARTH EXCAVATION, EXCESS MATERIALS, OR OTHER REMOVED ITEMS SHALL BE HAULED OFF-SITE AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE APPROVED BY THE OWNER.
- 23. THIS WORK SHALL BE IN ACCORDANCE WITH SECTION 201 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL OBSTRUCTIONS, TREES, DEBRIS AND BRUSH AS DESIGNATED BY THE OWNER AND AS INDICATED ON THE PLANS. ALL MATERIALS SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DURING CONSTRUCTION, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE EXISTING TREES AND LANDSCAPING. ONLY THOSE ITEMS DESIGNATED BY THE OWNER SHALL BE REMOVED.
- 24. ALL ROADWAY REMOVAL ITEMS SHALL CONFORM TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION. ALL JOINTS BETWEEN THE PORTION REMOVED AND THAT LEFT IN PLACE SHALL BE SAWED TO SUCH A DEPTH THAT A CLEAN. NEAT EDGE WILL RESULT WITH NO SPALLING TO THE REMAINING PORTION. THE COST OF SAWING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ADDITIONAL SAWING OR RE-SAWING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER WITH NO ADDITIONAL COMPENSATION BEING ALLOWED. THE COST OF SAWCUTTING THE EXISTING PAVEMENT SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

# GENERAL NOTES

25. WHEN ARTIFICIAL LIGHTING IS UTILIZED DURING NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE UTMOST PRECAUTIONS

# CONSTRUCTION STAKING

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING THE PROPOSED IMPROVEMENTS AND SHALL INCLUDE THE COST OF STAKING IN THEIR QUOTE. CONTROL POINTS ARE INDICATED ON THE PLANS.

## EROSION CONTROL NOTES

- OF TRANSPORTATION STANDARD SPECIFICATION, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE APPROPRIATE DETAILS.
- 3. A NOTICE OF INTENT (NOI) AND A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE COMPLETED AND SUBMITTED TO THE ILLINOIS EPA BY THE OWNER PRIOR TO CONSTRUCTION.
- 6. THE CONTRACTOR SHALL LEGIBLY MARK ANY CHANGES OR REVISIONS IMPLEMENTED TO THE SWPPP. AT COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER THE SWPPP (INCLUDING ALL REVISIONS, RECORDS, AND INSPECTION REPORTS) TO THE OWNER.
- 8. A COPY OF THE LETTER OF NOTIFICATION OF COVERAGE, AND THE GENERAL NPDES PERMIT NO. ILR10 MUST BE POSTED IN A PROMINENT PLACE FOR PUBLIC VIEWING AT THE CONSTRUCTION SITE BY THE GENERAL CONTRACTOR. 9. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THESE EROSION
- CONTROL PLANS AND IN THE SWPPP BEFORE CONSTRUCTION BEGINS. 10. THE CONTROLS SHALL BE INSTALLED AS DETAILED AND WHERE INDICATED ON THE EROSION CONTROL PLAN SHEETS AND AS DIRECTED BY THE INSPECTOR.
- 11. SITE ACTIVITIES SHOULD ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE PRACTICABLE.
- 12. EXCEPT AS PROVIDED IN THE SWPPP, DISTURBED PORTIONS OF THE SITE SHALL BE STABILIZED (TEMPORARILY OR PERMANENTLY SEEDED, MULCHED, SODDED OR PAVED) AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 13. UNTIL SUCH TIME AS THE PROJECT SITE REACHES FINAL STABILIZATION AND A NOTICE OF TERMINATION IS FILED BY THE OWNER, THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST, REPAIR, OR REPLACE, ALL VEGETATION, EROSION CONTROLS, SEDIMENT CONTROLS, AND ANY OTHER PROTECTIVE MEASURES AS REQUIRED IN ORDER TO MAINTAIN THEIR INTENDED FUNCTION IN A GOOD AND EFFECTIVE OPERATING CONDITION.
- 15. THE INSPECTOR SHALL HAVE AUTHORIZATION TO DETERMINE THE ADEQUACY OF THE CONTRACTOR'S EROSION CONTROL EFFORTS. THE OWNER OR THE INSPECTOR SHALL HAVE FULL AUTHORITY OVER THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL OR TO SUSPEND OR LIMIT THE CONTRACTORS OPERATIONS PENDING ADEQUATE PERFORMANCE.
- 16. PERIMETER EROSION BARRIER TO BE CONSTRUCTED OF SILT FENCE UNLESS NOTED OTHERWISE.
- 17. INLET PROTECTION SHALL BE A DANDY BAG, DANDY SACK, ROCSOC, OR APPROVED EQUAL 18. EROSION CONTROL BLANKET SHALL BE OF NORTH AMERICAN GREEN DS75 OR APPROVED EQUAL.
- 19. A TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE CONSTRUCTED AT A LOCATION APPROVED BY THE ENGINEER. WASHOUT FACILITY SHALL BE UTILIZED FOR ALL APPLICABLE OPERATIONS.

- EROSION CONTROL ITEMS.
- VEGETATION.

- APPROPRIATE DETAILS.

6. RESTORATION - THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED DURING CONSTRUCTION OF THE IMPROVEMENTS AND RELATED APPURTENANCES OR AS PART OF ANY OF THEIR ACTIVITIES TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION.

# EROSION CONTROL NOTES

21. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED, TO THE DIMENSIONS AS SHOWN, AT APPROVED LOCATIONS FOR THIS PROJECT. ALL CONSTRUCTION TRAFFIC MUST UTILIZE THE STABILIZED CONSTRUCTION ENTRANCES WHEN EXITING THE SITE. ALL COST FOR EROSION CONTROL AND RESTORATION WORK ASSOCIATED WITH THE APPROVED STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

22. TEMPORARY EROSION CONTROL MEASURES INCLUDE TEMPORARY DITCH CHECKS, PERIMETER EROSION BARRIER, INLET AND PIPE PROTECTION, TEMPORARY SEEDING, AND ANY OTHER TEMPORARY EROSION CONTROL MEASURE NEEDED TO LIMIT THE AMOUNT OF SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION. 23. AT THE COMPLETION OF THE PROJECT, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED FROM THE SITE, AND

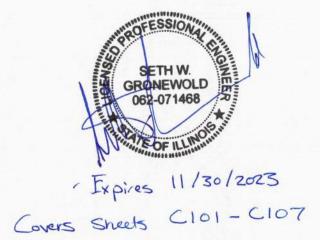
BECOME THE PROPERTY OF THE CONTRACTOR. CONTRACTOR MUST STABILIZE ANY AREA DISTURBED BY THE REMOVAL OF 24. CONTRACTOR SHALL CLEAN ANY DEBRIS TRACKED OFFSITE DAILY.

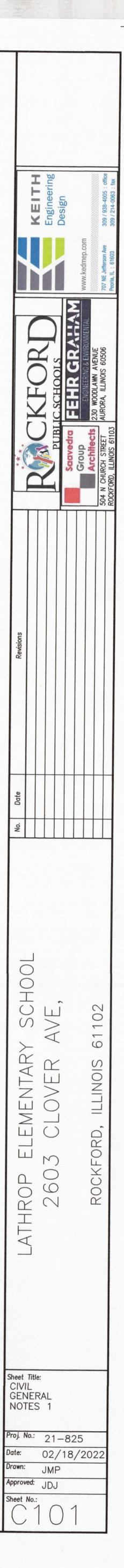
## SEEDING OF DISTURBED AREAS

1. THE FINAL TOP 6" INCHES OF SOIL IN ANY DISTURBANCE AREA MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING

2. FERTILIZER HAVING AN ANALYSIS OF 10-10-10 SHALL BE APPLIED AT A RATE OF 90 LBS/ACRE TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SOWING THE SEED. 3. THE CONTRACTOR SHALL SEED AND STABILIZE ALL DISTURBED AREAS ADJACENT TO IMPROVEMENTS WITH SEEDING, IDOT CLASS 1A AND NAG DS75 EROSION CONTROL BLANKET OR APPROVED EQUAL IN ACCORDANCE WITH IDOT STANDARD SPECIFICATION OR AS APPROVED BY THE ENGINEER.

4. GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AND MOWED FOR AT LEAST 30 DAYS AFTER GERMINATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA INCLUDING 30-DAY MAINTENANCE, MOWING AND WATERING AS NECESSARY 5. THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE ILLINOIS URBAN MANUAL, THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTIONS, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE





# STORM SEWER

- 1. STORM SEWERS THAT CROSS OVER ANY PROPOSED WATER MAIN SHALL BE CONSTRUCTED WITH RUBBER GASKETED JOINTS (ASTM C443).
- 2. ALL EXISTING MANHOLE CONNECTIONS MUST BE CORE-DRILLED, UNLESS A PRE-CORED HOLE, SUITABLY LOCATED, EXISTS IN THE MANHOLE.
- 3. THE LENGTH OF FLARED END SECTIONS IS NOT INCLUDED IN THE INDICATED PIPE LENGTH. HOWEVER, THE ENTIRE LENGTH OF THE FLARED END SECTION IS TAKEN INTO ACCOUNT FOR THE INDICATED SLOPE AND INVERT GRADES.
- 4. CONTRACTOR SHALL FURNISH ALL PIPE BEDDING. PIPE BEDDING MATERIAL SHALL BE AS SHOWN IN THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.
- 5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STORM SEWER ELEVATIONS THAT PROJECT CONNECTS TO.

## MATERIAL AND COMPACTION TESTING

1. A GEOTECHNICAL REPRESENTATIVE WILL BE PROVIDED AND PAID FOR BY THE CONTRACTOR FOR ANY REQUIRED TESTING. THE CONTRACTOR IS RESPONSIBLE TO FOLLOW AND MEET GUIDELINES SET BY THE GEOTECHNICAL REPRESENTATIVE.

# <u>UTILITIES</u>

- 1. UTILITIES SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS MADE OR INFERRED. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL-INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION INTO THE LOCATION, SIZE, DEPTH AND NATURE OF ANY AND ALL EXISTING UTILITIES THAT MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY AND ALL UTILITY COMPANIES REGARDING ADJUSTMENTS NECESSARY. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE AND CONSIDERED INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND, OVERHEAD, OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER OR REPLACED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 2. THE CONTRACTOR MUST VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT J.U.L.I.E. AT 1-800-892-0123 (OR 811) FOR EXACT FIELD LOCATION OF UTILITIES. DAMAGE, AND THE COST THEREOF, TO ANY AND ALL UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY AND ALL EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THE ENGINEER AND SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF THE EXISTING UTILITIES SHOWN HEREON.
- 3. IF THERE ARE ANY UTILITIES WHICH ARE NOT MEMBERS OF THE J.U.L.I.E. SYSTEM. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THIS AND REQUESTING SAID UTILITIES TO FIELD VERIFY AND MARK PERTINENT UTILITY LOCATIONS.
- 4. THE UTILITY LOCATIONS, DEPTHS, ETC. SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, AND SHALL BE VERIFIED BY THE CONTRACTOR WITH ALL AFFECTED UTILITY COMPANIES PRIOR TO INITIATING CONSTRUCTION OPERATIONS: THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY FOR THE ADEQUACY, SUFFICIENCY OR EXACTNESS OF THESE UTILITY REPRESENTATIONS.
- 5. THE CONTRACTOR SHALL CONTACT THE NECESSARY UTILITY COMPANIES FOR ANY UTILITY RELOCATIONS. THE CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH RELOCATION OF UTILITIES ON OR ADJACENT TO THE SUBJECT PROPERTY OR WITHIN THE ROAD RIGHT-OF-WAY.
- 6. TRENCH BACKFILL SHALL BE FILL MATERIAL TYPE A (GRAVEL OR CA6 CRUSHED STONE.) OR TYPE C (SAND FA-1 OR SAND FA-2) IN ACCORDANCE WITH AASHTO T27 GUIDELINES AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR WATER & SEWER CONSTRUCTION IN ILLINOIS", CURRENT EDITION. COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.
- 7. TRENCH BACKFILL SHALL BE USED IN LOCATIONS WHERE THERE IS AN EXISTING OR PROPOSED PERMANENT SURFACE. IN LOCATIONS WHERE THE PROPOSED PIPE IS NOT BENEATH PAVEMENT, NATIVE MATERIALS MAY BE USED FOR BACKFILL OUTSIDE OF INITIAL PIPE BEDDING, PER DETAIL. TOP 6" SHALL BE TOPSOIL CONDUCIVE FOR PLANTING.
- ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION OR HAVE THE POTENTIAL FOR CREATING FUTURE PROBLEMS SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT AN APPROVED LOCATION OBTAINED BY THE CONTRACTOR, ACCORDING TO THE "STANDARD SPECIFICATIONS FOR WATER & SEWER CONSTRUCTION IN ILLINOIS", CURRENT EDITION, AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 9. ANY AND ALL FIELD TILES AND OR STORM SEWERS DAMAGED OR ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED, REPLACED AND/OR CONNECTED IMMEDIATELY BY THE CONTRACTOR. COST FOR SAID REPAIRS, REPLACEMENT, AND/OR CONNECTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

## SUBGRADES, SUBBASES, AND BASE COURSES

- 1. THE CONTRACTOR WILL BE REQUIRED TO SUBSTANTIATE BASE COURSE THICKNESSES AND FINISH PAVEMENT THICKNESSES. THE ENGINEER SHALL INSPECT BASE COURSE COREOUT PRIOR TO PLACING BASE COURSE TO ENSURE REQUIRED BASE COURSE DEPTH IS PRESENT. IN ADDITION, THE ENGINEER AND/OR THE CITY ENGINEER SHALL WITNESS THE PLACEMENT OF BITUMINOUS BINDER AND SURFACE COURSE. CORE DRILLING MAY BE REQUIRED TO DEMONSTRATE THAT BASE COURSE AND PAVEMENT THICKNESSES CONFORM TO THE SPECIFICATIONS. PRIOR TO PLACING BASE COURSE MATERIAL. THE CONTRACTOR SHALL TEST ROLL THE SUBGRADE. IN THE PRESENCE OF THE ENGINEER OR HIS AGENT TO DEMONSTRATE THAT SAID SUBGRADE IS READY FOR BASE. PRIOR TO PLACEMENT OF THE BITUMINOUS SURFACE. THE SAME VERIFICATION PROCEDURE SHALL BE PERFORMED ON THE BASE COURSE MATERIAL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO PERFORMING ANY OF THE REQUIRED TESTS SO THAT A REPRESENTATIVE MAY BE PRESENT.
- 2. PRIOR TO ANY EMBANKMENT OR ROAD BASE BEING PLACED. SHOULD IT BE DETERMINED BY THE ENGINEER THAT THE SUBGRADE MATERIAL IS UNSUITABLE ON WHICH TO CONSTRUCT THE ROADWAY STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER AND REPLACING SAME WITH STABILIZING SUBBASE CONSISTING OF SUBBASE GRANULAR MATERIAL, TYPE B IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION. TO HELP MINIMIZE THE AMOUNT OF SUBBASE MATERIAL INSTALLED FOR GROUND STABILIZATION, GEOTECHNICAL FABRIC MAY BE INSTALLED AS APPROVED BY THE ENGINEER. FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 210 OF THE IDOT STANDARD SPECIFICATIONS. THE COARSE AGGREGATE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR SUBBASE GRANULAR MATERIAL, TYPE B. THE EXCAVATION AND DISPOSAL OF THE UNSUITABLE MATERIAL SHALL BE CONSIDERED INCIDENTAL TO SUBBASE GRANULAR MATERIAL, TYPE B. STABILIZING FABRIC SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR GEOTECHNICAL FABRIC FOR GROUND STABILIZATION.

# TRAFFIC CONTROL

- 1. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL TRAFFIC CONTROL ITEMS NECESSARY FOR THE CONSTRUCTION OF ITEMS WITH IN THE ROAD RIGHT-OF-WAY. ALL WORK PERFORMED SHALL HAVE TRAFFIC CONTROL IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION.
- 2. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT. ALL SIGNS SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CONTRACTOR. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 3. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN CONDITIONS MAY REQUIRE THE ENGINEER TO MODIFY THE LOCATION OF THE TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES FROM THE TIME OF NOTIFICATION BY THE ENGINEER TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION, IMPROVEMENT OR MODIFICATION OF THE MAINTENANCE OF TRAFFIC CONTROL DEVICES. DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ADJACENT TRAFFIC LANES OPEN TO TRAFFIC FROM DEBRIS BEING BLOWN OR OTHERWISE REMOVED FROM THE CONSTRUCTION AREAS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING DEBRIS OFF THE ADJACENT TRAVELED LANE SURFACE. COST INCIDENTAL TO THE PROJECT.
- 4. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC AND STAGING OF CONSTRUCTION PLANS FOR APPROVAL BY THE ENGINEER PRIOR TO COMMENCING WORK.
- 5. THE CONTRACTOR SHALL PERFORM THE WORK UNDER STAGE CONSTRUCTION IN THE EVENT THAT THE CONTRACTOR WILL NEED TO CLOSE PUBLIC ROADS, CONTRACTOR SHALL SUBMIT PROPOSED DETOUR ROUTE AND ASSOCIATED SIGNAGE TO THE ENGINEER PRIOR TO COMMENCING WORK.
- 6. TRAFFIC CONTROL DEVICES, STREET NAME SIGNS, AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF ROCKFORD ORDINANCES AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". LOCATIONS OF SIGNS AND MARKINGS SHALL BE SPECIFIED BY THE PLANS, AND/OR AS DIRECTED BY THE ENGINEER.
- 7. PROVIDE TO THE ENGINEER AND THE OWNER THE NAME AND PHONE NUMBER OF INDIVIDUALS RESPONSIBLE FOR MAINTAINING TRAFFIC CONTROL MEASURES DURING CONSTRUCTION. THIS INDIVIDUAL SHALL BE AVAILABLE TO CORRECT TRAFFIC CONTROL PROBLEMS 24 HOURS PER DAY.
- 8. THE CONTRACTOR SHALL NOTIFY THE POST OFFICE, POLICE DEPARTMENT, FIRE DEPARTMENT, 911 DISPATCH CENTER, ILLINOIS DEPARTMENT OF TRANSPORTATION, STATE POLICE, APPROPRIATE SCHOOL DISTRICT AND THE LOCAL AGENCY A MINIMUM OF 5 DAYS PRIOR TO CLOSING ANY PORTION OF THE STREET OR ALLEY.

### EXCAVATION/EARTHWORK

- 1. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 2. PRIOR TO STARTING EARTHWORK OR UTILITY TRENCHING, THE CONTRACTOR SHALL STRIP THE SITE OF TOPSOIL TO A DEPTH OF 6" AND TO THE LIMITS APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE STOCKPILED IN A REMOTE LOCATION OF THE SITE (APPROVED BY THE ENGINEER) UNTIL THE PLAN IMPROVEMENTS ARE COMPLETED AND THE EXCESS MATERIAL SPREAD AS DIRECTED. IT SHALL THEN BE THE RESPONSIBILITY OF THE CONTRACTOR TO SPREAD THIS TOPSOIL MATERIAL IN AREAS OF THE SITE, OVER AREAS WHERE EXCESS EXCAVATED MATERIAL, SAND, GRAVEL HAS BEEN SPREAD OR IN OTHER AREAS AS DESIGNATED BY THE ENGINEER. THE MATERIAL SHALL THEN BE COMPACTED TO A MINIMAL DEPTH OF 6" AND FINE GRADED IN A MANNER ACCEPTABLE TO THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS". CURRENT EDITION.
- 5. CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) REQUIREMENTS—"THE CONTRACTOR IS RESPONSIBLE FOR THE ASSESSMENT AND PROPER DISPOSAL OF ALL EXCESS SOIL AND SUBSURFACE MATERIALS THAT ARE NOT ABLE TO BE RE-USED ON THE PROJECT SITE AS SUITABLE CLEAN FILL. CONTRACTOR RESPONSIBILITY'S SHALL INCLUDE ALL REQUIRED SOIL SAMPLING, LABORATORY ANALYSIS, DISPOSAL PROFILING FEES, TRANSPORTATION, AND DISPOSAL TIPPING FEES AND SURCHARGES."
- 4. ROCK IS NOT ANTICIPATED TO BE ENCOUNTERED.
- 5. ALL EXCAVATIONS FOR STRUCTURES AND PIPE SHALL BE KEPT DEWATERED DURING CONSTRUCTION UNTIL BACKFILL IS IN PLACE. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. (COST INCIDENTAL)
- 6. EARTH EXCAVATION SHALL CONFORM TO SECTION 202 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION. THIS WORK SHALL INCLUDE THE EXCAVATION OF ALL MATERIALS TO DESIGN SUBGRADE ELEVATIONS INDICATED IN THE PLANS.
- 7. SHEETING AND SHORING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT IF REQUIRED.
- 8. WHENEVER THE CONTRACTOR WORKS NEAR EXISTING FACILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS DURING TRENCHING OPERATIONS. HE WILL BE REQUIRED TO HAND TRENCH IN THAT AREA IN ORDER NOT TO DAMAGE THESE FACILITIES. PUSH HOLES AND SEARCH HOLES THAT ARE DUG BY THE CONTRACTOR SHALL BE BACKFILLED BY TAMPING THE EXCAVATED MATERIAL BACK IN PLACE TO KEEP SETTLEMENT TO A MINIMUM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 9. EMBANKMENT WORK SHALL CONSIST OF THE CONSTRUCTION OF EMBANKMENTS BY DEPOSITING, PLACING AND COMPACTING EARTH, STONE, GRAVEL OR OTHER MATERIALS OF ACCEPTABLE QUALITY ABOVE THE NATURAL GROUND OR OTHER SURFACE IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION.
- 10. IF SUFFICIENT TOPSOIL IS NOT PRESENT, THE CONTRACTOR SHALL SPREAD FURNISHED TOPSOIL SO AS TO MEET THE REQUIREMENTS OF THE CONTRACT. FURNISHED TOPSOIL SHALL ONLY BE USED WITH APPROVAL BY THE ENGINEER. THIS FURNISHED TOPSOIL SHALL BE PAID FOR AS FURNISHED TOPSOIL IN PLACE, DEPTH SPECIFIED.
- 11. IN PROPOSED FILL AREAS FOR PAVEMENT AND EMBANKMENT, TOPSOIL AND TURF SHALL BE SCARIFIED AND REMOVED PRIOR TO CONSTRUCTING THE EMBANKMENT.

## <u>WATER</u>

- AND THE OWNER.

- 9. WATER VALVE BOX ADJUSTMENTS SHALL BE DETERMINED ON SITE.
- REDUCERS.
- 12. EXISTING WATER MAIN AND SERVICE LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

- DIAMETER VAULT WITH CAST IRON LID.
- GLUED TO PVC WATER MAIN.

- OF 6 INCHES IN DIAMETER.
- SERVICES OFFICE.
- CONSTRUCTION.

23. ALL HYDRANTS REMOVED SHALL BE SALVAGED TO THE APPROPRIATE UTILITY.

24. ALL WATER SERVICE INSTALLATIONS SHALL BE COMPLETED IN COMPLIANCE WITH THE STANDARDS AND REQUIREMENTS SET FORTH IN THE ILLINOIS PLUMBING CODE.

1. SITE CONTRACTOR TO COORDINATE WATER SERVICE CONNECTION AND WATER MAIN ADJUSTMENTS WITH THE OWNER. 2. WATER PIPE SHALL BE D.I. CLASS 52 UNLESS NOTED OTHERWISE ON THE PLANS.

3. LEAKAGE TESTING OF THE WATER MAIN SHALL BE REQUIRED AS PER THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. ANY DEFECTS FOUND IN THE NEW WATER MAIN WILL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.

4. DISINFECTION OF THE WATER SERVICE SHALL BE REQUIRED AS PER THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA, THE ILLINOIS EPA,

CONTRACTOR SHALL MAINTAIN A MINIMUM EIGHTEEN INCH VERTICAL SEPARATION WITH WATER MAIN/WATER MAIN SERVICES AND SANITARY OR STORM SEWER AND MAINTAIN A MINIMUM TEN FEET HORIZONTAL SEPARATION BETWEEN ANY WATER MAIN/WATER MAIN SERVICES ENCOUNTERED AND THE SANITARY SEWER/SANITARY SEWER SERVICES AND STORM SEWER. ANY CHANGES TO THIS REQUIREMENT SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION.

. EXISTING WATER MAIN SHUT DOWN TIME SHALL BE KEPT TO A MINIMUM AND BE COORDINATED WITH CITY OF ROCKFORD. NO USER SHALL BE WITHOUT WATER FOR MORE THAN 24 HOURS, UNLESS SPECIAL APPROVAL IS OBTAINED. DIMENSIONS SHOWING WATER MAIN AND SERVICE LOCATIONS ARE APPROXIMATE. THE HORIZONTAL ALIGNMENT MAY BE

ADJUSTED WITH THE ENGINEER'S APPROVAL WHERE EXISTING BURIED UTILITIES MAY CONFLICT.

8. ALL FITTINGS (BENDS, TEES, CROSSES, AND PLUGS) REQUIRED TO COMPLETE THE INSTALLATION OF DUCTILE IRON WATER SERVICE, AS SHOWN ON THE PLANS, SHALL BE INCIDENTAL TO THE CONTRACT.

10. THRUST RESTRAINT SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER

MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS AND

11. THE CONTRACTOR SHALL PROVIDE 'WHIPS' AS NECESSARY FOR FLUSHING AND AIR RELEASE ON THE NEWLY CONSTRUCTED WATER MAINS AND SERVICES. WHIPS SHALL BE CONSTRUCTED USING 1-INCH CORPORATION STOPS AND 1-INCH DIAMETER COPPER TUBING. WHEN ALL TESTING AND FLUSHING OPERATIONS HAVE BEEN COMPLETED, THE CORPORATION STOPS SHALL BE CLOSED AND THE COPPER TUBING SHALL BE CUT AND CAPPED. THE COST TO FURNISH, INSTALL AND REMOVE THE WHIPS SHALL BE INCLUDED IN THE UNIT PRICES FOR THE WATER MAINS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THIS WILL BE INCIDENTAL TO THE CONTRACT. 13. ALL WATER MAINS AND SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR

WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION, AS WELL AS THE OWNER'S ADOPTED STANDARD WATER MAIN SPECIFICATIONS, CURRENT EDITION, ON FILE WITH THE ILLINOIS EPA DIVISION OF PUBLIC WATER SUPPLIES. 14. THE MINIMUM COVER FOR ALL WATER MAIN AND SERVICE PIPE IS 6 FEET (6') FROM FINISHED GRADE TO TOP OF PIPE.

15. ALL WATER MAINS UNDER AND WITHIN TWO FEET OF ANY EXISTING OR PROPOSED STREET PAVEMENT OR CURB SHALL BE BACKFILLED WITH GRANULAR BACKFILL MATERIAL. BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.

16. ALL VALVES SHALL BE GATE VALVES MUELLER MODEL A-2360 OR APPROVED EQUAL, WITH MECHANICAL JOINTS, RESILIENT SEAT WEDGE TYPE, WITH CAST IRON OR DUCTILE IRON BODY, BRONZE MOUNTED, BRONZE NON-RISING STEM, DOUBLE DISC PATTERN, DESIGNED FOR 300 POUNDS WORKING PRESSURE MEETING AWWA STANDARD C509 OR C515. ALL VALVES SHALL OPEN LEFT. VALVES 14 INCHES AND LARGER SHALL BE BUTTERFLY AND SHALL BE INSTALLED IN A FIVE FOOT (5')

17. AFTER THE PRESSURE TEST HAS BEEN ACCEPTED, THE CONTRACTOR SHALL CHLORINATE THE WATER MAINS AND SERVICES IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA, THE ILLINOIS EPA, AND THE OWNER. HTH TABLETS SHALL NOT BE

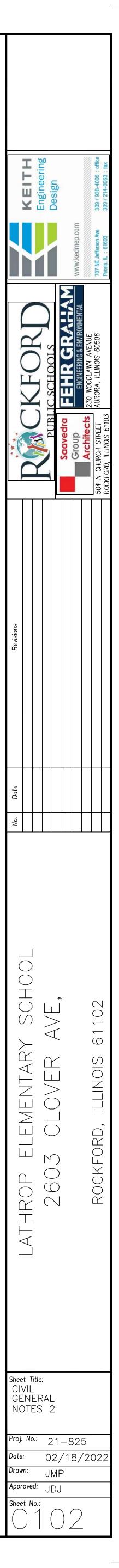
18. NO OBJECT MAY BE CONSTRUCTED, MAINTAINED, OR INSTALLED WITHIN 48 INCHES OF A FIRE HYDRANT, TREES, BUSHES, WALLS, OR OTHER OBSTACLES WHICH MAY HIDE OR IMPEDE THE USE OF A FIRE HYDRANT WILL NOT BE PERMITTED.

19. FIRE HYDRANTS SHALL COMPLY WITH STANDARDS SPECIFIED IN AWWA C502 FOR DRY BARREL FIRE HYDRANTS. EACH HYDRANT SHALL BE THE MECHANICAL JOINT TYPE EQUAL TO THOSE MANUFACTURED BY THE MUELLER COMPANY (SUPER CENTURION) OR APPROVED EQUAL. NO FIRE HYDRANTS SHALL BE LOCATED IN CUL-DE-SAC ISLANDS. HYDRANTS SHALL BE PAINTED IN CONFORMITY TO AWWA STD. C502. COLOR TO BE DETERMINED BY OWNER.

20. FIRE HYDRANTS SHALL HAVE TWO 2-1/2 INCH NOZZLES AND ONE 4 INCH PUMPER CONNECTION WITH NATIONAL STANDARD HOSE THREADS. HYDRANTS SHALL BE OF DRY BARREL TYPE FOR NON-FREEZING WITH AUTOMATIC DRAIN ON EXTREME END OF HYDRANT AND NON-FLOODING WITH THE GATE SECURELY LOCKED IN PLACE. THE CHAIN SHALL BE OF PLATED STEEL CONSTRUCTION. HYDRANTS SHALL CLOSE WITH THE PRESSURE AND SHALL HAVE A SUFFICIENT NUMBER OF TURNS TO CLOSE HYDRANT SLOWLY ENOUGH TO ELIMINATE WATER HAMMER. THE GATE OF THE HYDRANT SHALL INSURE A RIGHT AND COMPLETE SHUTOFF. HYDRANTS SHALL BE OF SUCH DESIGN TO ALLOW FOR THE REMOVAL AND REPAIR OF THE INTERNAL MECHANISM WITHOUT DIGGING. EACH HYDRANT SHALL HAVE AN AUXILIARY GATE VALVE OF NOT LESS THAN 6 INCHES IN SIZE COMPLETE WITH CAST IRON VALVE BOX AND COVER AS SPECIFIED ABOVE. ALL HYDRANT LEADS SHALL BE A MINIMUM

21. HYDRANT INSTALLATION: HYDRANTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH AWWA C600 AND RECOMMENDATIONS OF THE MANUFACTURER. ALL HYDRANTS SHALL STAND PLUMB AND SHALL HAVE THEIR NOZZLES PARALLEL WITH OR AT RIGHT ANGLES TO THE CURB, WITH PUMPER NOZZLE FACING THE CURB. HYDRANTS SHALL BE SET TO THE ESTABLISHED GRADE, AND HAVE A MINIMUM BURY DEPTH OF 6 FEET 6 INCHES, WITH THE CENTER OF THE PUMPER NOZZLE BEING 18 TO 24 INCHES ABOVE GRADE. PRECAUTIONS MUST BE TAKEN TO PROVIDE ADEQUATE DRAINAGE OF HYDRANTS WHERE NATURAL SOILS WILL NOT PROVIDE DRAINAGE. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10 FEET OF SANITARY SEWERS OR STORM DRAINS. HYDRANTS WILL BE SPACED AS DIRECTED BY THE OWNER. IN GENERAL, HYDRANT SPACING WILL BE BASED UPON THE AREA BEING SERVED AND AS RECOMMENDED BY THE STATE INSURANCE

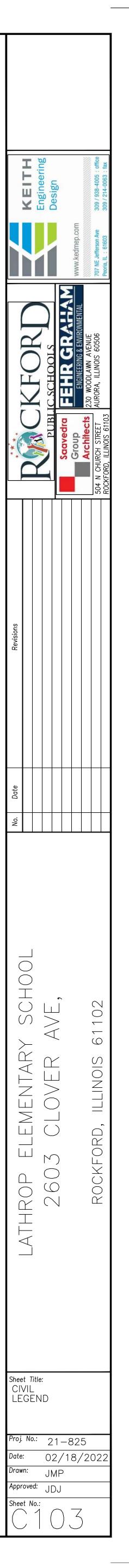
22. THE CONTRACTOR SHALL CONTACT THE OWNER AT LEAST 48 HOURS PRIOR TO BEGINNING WORK ON THE WATER MAIN AND/OR SERVICE INSTALLATIONS AND SHOULD MAKE THE SITE AVAILABLE FOR INSPECTION AT REGULAR INTERVALS DURING



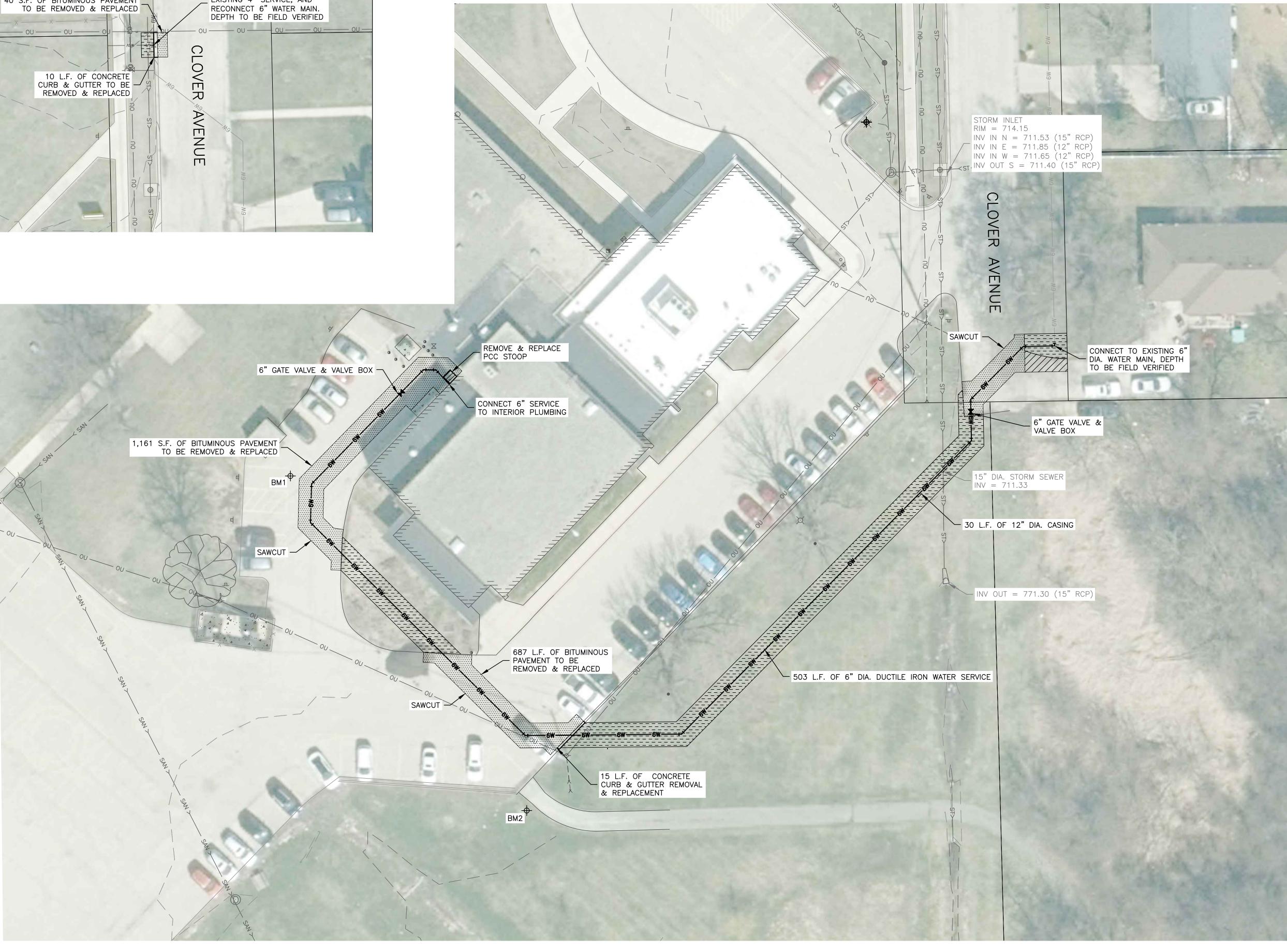
ABBREV	SYMBOLS									
< ANGLE ABC AGGREGATE BASE COURSE	PE POLYETHYLENE PIPE PI POINT OF INTERSECTION	EXISTING	CIVIL	PROPOSED	EXISTING	WATER	PROPOSED	EXISTING	UTILITY	PROPOSED
AC ACRE(S) ACI AMERICAN CONCRETE INSTITUTE	PL PLATE PLG PLUG VALVE	EXISTING R.O.W.		PROPOSED R.O.W.	wsv wsv	WATER SERVICE	wsv wsv	FO FO	FIBER OPTIC LINE	F0 F0
AGR AGGREGATE AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION	PLP POLYPROPYLENE PIPE PLYWD PLYWOOD		RIGHT-OF-WAY LINE		WW		ww	TV TV	UNDERGROUND TV CABLE	TVTV
ALT ALTERNATE ARCH ARCHITECT	PM PRINCIPAL MERIDIAN PR PRESSURE REGULATORS		PROPERTY LINE		-0-	FIRE HYDRANT		C	CABLE TV RISER PEDESTAL	C
ASPH ASPHALT ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS	PRC POINT OF REVERSE CURVATURE PRESS PRESSURE		CENTERLINE		~~		<b>▼</b>	OU	OVERHEAD UTILITY	OU
B BALL VALVE BFP BACKFLOW PREVENTER	PR, PROP PROPOSED PRV PRESSURE REDUCING VALVE		SETBACK LINE		Ö	YARD HYDRANT	•	UE UE	UNDERGROUND ELECTRIC	
BIT BITUMINOUS BLDG BUILDING	PSF POUNDS PER SQUARE FOOT PSI POUNDS PER SQUARE INCH PSL PIPE SLEEVE		EASEMENT LINE		$\boxtimes$	WATER VALVE WITH BOX	X	E	ELECTRIC RISER PEDESTAL	E
BLK BLOCKING BM BENCHMARK	PT POINT OF TANGENCY		SECTION LINE		$\otimes$	CURB STOP W/CURB BOX	•	(E)	ELECTRIC MANHOLE	E
BOT BOTTOM BSMT BASEMENT BV BUTTERFLY VALVE	PLG PLUG VALVE PVC POLYVINYL CHLORIDE (PLASTIC) PIPE R RADIUS	54			$\bigtriangledown$	REDUCER		TT	UNDERGROUND TELEPHONE	TT
B-B BACK-TO-BACK OF CURB DIMENSION CL or & CENTERLINE	RDCR REDUCER		SECTION CORNER		$(\mathbb{W})$	WATER VALVE VAULT	$\bigotimes$			
C TO C CENTER TO CENTER C & G CURB AND GUTTER	RCCP REINFORCED CONCRETE CYLINDER PIPE RCP REINFORCED CONCRETE PIPE RD ROOF DRAIN	N 1000.00 E 1000.00	COORDINATE POINT ON GRID SYSTEM			11.25° BEND	Ч		TELEPHONE RISER PEDESTAL	
CF CUBIC FEET CHD CHORD LENGTH	RFINE RFINEORCING	• FND	FOUND OR SET PROPERTY PIN	O SET		22.50° BEND	М	$(\mathbb{T})$	TELEPHONE MANHOLE	$\bigcirc$
CI CAST IRON PIPE CHK CHECK VALVE	REQD REQUIRED ROW RIGHT OF WAY RFTR RAFTER	X	RIGHT-OF-WAY MARKER	X			, , 	¢	UTILITY POLE	<b>•</b>
CLR CLEAR	RND ROUND RR RAILROAD		BENCHMARK			45° BEND	<ul><li></li></ul>	-8-	UTILITY POLE W/ METER	
CMU CONCRETE MASONRY UNIT CTY COUNTY	RRSP RAILROAD SPIKE RT RIGHT	Ψ				90° BEND	너	-Ô-	UTILITY POLE W/ TRANSFORMER	
CONC CONCRETE CONT CONTINUOUS	R&R REMOVE AND REPLACE S SOUTH	— — 600		600		TEE	Щ		UTILITY POLE W/ LIGHT	
C–B CENTERLINE TO BACK OF CURB DIMENSION COORD COORDINATE	SB STREAM BED SCHED SCHEDULE	000.00 FG	SPOT ELEVATION (AT ●)	000.00 FG		CAP	2	>	UTILITY POLE WITH GUY WIRE AND ANCHO	or ≻——-▲
CU COPPER PIPING CTRS CENTERS	SEC SECTION SF SQUARE FEET	X X	FENCE LINE	x x	M	WATER METER	M			
CY CUBIC YARDS CS CORPORATION STOP	SHR SHOWER SHT SHEET	00	SILT FENCE LINE	0	×	SPRINKLER HEAD			LIGHT (MAST MOUNTED)	×
D DEGREE OF CURVE DEP DEPRESSED	SHTG SHEATHING SP SANITARY PIPE		CURB AND GUTTER		۰	TRACER WIRE BOX	•	X	LIGHT POLE (SINGLE FIXTURE)	×
DET DETAIL DIAG DIAGONAL	SPA SPACING OR SPACES SPEC SPECIFICATION		TIP OUT CURB AND GUTTER				_	Ĭ	YARD LIGHT	×
DIM DIMENSION DI DUCTILE IRON PIPE	SQ SQUARE SS SANITARY SERVICE		SAWCUT, LIMITS OF PAVEMENT REMOVA & REPLACEMENT		<u>EXISTING</u>	STORM SEWER	PROPOSED	GG	GAS MAIN	GG
DN DOWN DNSTR DOWNSTREAM	STA STATION STD STANDARD	ATA			LAISTING	<u>STOKW SEWEN</u>	FROFUSED	M	GAS METER	M
DP DRAINAGE PIPE/STORM PIPE DWG DRAWING	STL STEEL STRUCT STRUCTURAL	X"	DECIDUOUS TREE W/ SIZE		ST> ST>	STORM SEWER	ST> ST>		GAS VALVE	M
E EAST EJ EXPANSION JOINT	SW SIDEWALK SY SQUARE YARDS		CONIFEROUS TREE W/ SIZE	<b>₩</b> ×	DT> DT>	DRAIN TILE	DT> DT>	G	GAS STRUCTURE	G
EL, ELEV ELEVATION EP EDGE OF PAVEMENT	SYM SYMMETRICAL TAN TANGENT LENGTH	✓ X"	TREE STUMP		· · · ·	DITCH LINE (PAVED)	· · · ·			
EQUIP EQUIPMENT EQUIV EQUIVALENT	TBC TOP BACK OF CURB TBM TEMPORARY BENCH MARK; BASED ON BENCHMARK DATUM	mmm	HEDGEROW		· · _	DITCH LINE (UNPAVED)	· ·		TRANSFORMER	
EW EACH WAY EXP EXPANSION	TD TILE DRAIN THK THICK	{~~}	BUSH OR SHRUB	$\sim$	$(\overline{\cdot})$	STORM MANHOLE		GEN	GENERATOR	
EX, EXIST EXISTING EXT EXTERIOR	TR TREAD TY TYPE		TREE LINE					EXISTING	TRAFFIC RELATED	PROPOSED
E = EXTERNAL DISTANCE FD FLOOR DRAIN	TYP TYPICAL U.O.N. UNLESS OTHERWISE NOTED	CL		CL		CATCH BASIN	Ŵ		CONTROLLER	
FDN FOUNDATION FE FIELD ENTRANCE	UP UTILITY POLE UPSTR UPSTREAM		CONSTRUCTION LIMIT LINE			STORM SEWER INLET			MAST ARM ASSEMBLY AND POLE	
FF FINISH FLOOR FIL FILLET FIN FINISH	UR URINAL USGS US GEOLOGICAL SURVEY	SIGN	(MULTIPLE POST, SINGLE POST, STREET	「SIGN) <b>― ―</b>	$\bigcirc$	STORM SEWER INLET - BEHIND CURB	$\bigcirc$	$\bigcirc \neg $	SIGNAL HEAD AND POST	••
FL FLOW LINE	VC VERTICAL CURVE VCP VITRIFIED CLAY PIPE VERT VERTICAL		SIGN (PYLON)		() ()	DOWNSPOUT				
FLR FLOOR FM FORCE MAIN FND FOUND	VERT VERTICAL VOL VOLUME VPC VERTICAL POINT OF CURVATURE	<u> </u>	GUARD RAIL		<u>X" TYPE</u>	CULVERT AND SIZE			SIGNAL HEAD	-+•
FND FOUND FRMG FRAMING FTG FOOTING	VPC VERTICAL POINT OF CORVATORE VPI VERTICAL POINT OF INTERSECTION VPRC VERTICAL POINT OF REVERSE CURVATURE		RAILROAD TRACKS	<del>-+ + + + +</del>		GOLVERT AND SIZE	LJ	-	PEDESTRIAN HEAD	-+
FIG FOUTING F-F FACE TO FACE GA GAUGE	VPRC VERTICAL POINT OF REVERSE CORVATORE VPT VERTICAL POINT OF TANGENCY W WEST		BUILDING			RCCP OR RCP EQRS (RCAP) END SECTION		٢	PEDESTRIAN PUSH-BUTTON	$\odot$
GA GAUGE GI GALVANIZED IRON PIPE GRD GRADE	WC WATER CLOSET WF WIDE FLANGE		MAILBOX	بر <u>بر بر بر بر بر</u>	$\Box$	METAL OR HDPE END SECTION	D		HAND HOLE	
GRS GRATING SUPPORT GRT GROUT	WM WATER MAIN WMQ WATER MAIN QUALITY			L	$\longrightarrow$	FLOW DIRECTION	$\longrightarrow$		DOUBLE HAND HOLE	
GV GAS VALVE	WMQ WATER MAIN QOALTT WV WATER VALVE WGT WEIGHT	~~~	FLAGPOLE							J
HSE HOUSE	WP WEATHER PROOF WS WATER SERVICE		BOLLARD	•	EXISTING	EROSION CONTROL	PROPOSED		HAND HOLE OR JUNCTION BOX	
HC HORIZONTAL CURVE HMA HOT MIX ASPHALT HNGR HANGER	WWF WELDED WIRE FABRIC W/ WITH	AC	AIR CONDITIONER	AC					HEAVY-DUTY HAND HOLE	
HORIZ HORIZONTAL H.P. HIGH POINT	W/O WITHOUT XP EXPLOSION PROOF		MISC		1	EROSION CONTROL BLANKET		(5' - 2")	EXISTING CONDUIT (LENGTH AND SIZE) PROP GALVANIZED STEEL OR PVC CONDU	TIL
HW HOT WATER HWH HOT WATER HEATER		<u>EXISTING</u>		PROPOSED		TEMPORARY AND PERMANENT SEEDING AREA		<u>(5' – 2")</u>	UPPER NUMERAL INDICATES LENGTH "T" INDICATES CONDUIT IN TRENCH	<u>5' – T</u> 2" GS–PVC
		● S.B. #XX	SOIL BORING LOCATION AND NUMBER	S.B. #XX			· · · · ·		"P" INDICATED CONDUIT PUSHED LOWER NUMERAL INDICATES SIZE AND TY	
ID INSIDE DIAMETER INT INTERIOR	HATCH PATTERNS	MW #XX	MONITORING WELL	▲ MW #XX		UNDISTURBED AREA	$\begin{array}{ccc} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ \end{array}$	X	LUMINAIRE	¥
INV INVERT ELEVATION; BASED ON BENCH MARK DATUM IP IRON PIPE	EARTH – FILL BRICK		REVISION NUMBER	$\Delta$		STABILIZED CONSTRUCTION ENTRANCE		Λ		▲
JST JOIST L LENGTH OF CURVE	EARTH - FILL BRICK		OUTLINE OF DETAILED AREA			SILT FENCE			ARROW – THROUGH, TURN LEFT	4
LAT LATERAL LAV LAVATORY	EARTH – UNDISTURBED STEEL			<u>^</u>		JILI FENGE		л Л		۲ <b>۱</b>
LF LINEAL FEET L.P. LOW POINT				A S-		INLET PROTECTION		Â	ARROW – THROUGH	<b>▲</b>
LT LEFT OF SURVEY BASE LINE MAX MAXIMUM	LOOSE/ BATT)		SHEET WHERE SHOWN			TEMPORARY SEDIMENT TRAP				l
ME MATCH EXISTING MH MANHOLE	STONE OR RIP RAP INSULATION (RIGID)			]	4			$\langle $	ARROW – TURN LEFT	
MIN MINIMUM MJ MECHANICAL JOINT	GRAVEL WOOD (ROUGH)	EXISTING	SANITARY SEWER	PROPOSED		CULVERT INLET PROTECTION	$\bigcap$			<u> </u>
MTL METAL N NORTH		SAN >	SANITARY SEWER	SAN ≻		ROCK OUTLET PROTECTION			ARROW – TURN RIGHT	ſ
No. OR # NUMBER NOM NOMINAL	CONCRETE WOOD (BLOCKING)							nw v	ONE DIRECTION TURN ONLY	<b>nn</b> i v
NTS NOT TO SCALE OC ON CENTER	CONCRETE BLOCK WOOD (FINISH)	SSV> SSV>	SANITARY SEWER SERVICE	\$\$V> \$\$V>		ROCK CHECK DAM - COURSE AGGREGATE		UNILI	ONE DIRECTION TORM ONET	UNLI
OD OUTSIDE DIAMETER OO OUTSIDE TO OUTSIDE		<fm< td=""><td>SANITARY SEWER FORCE MAIN</td><td><fm< td=""><td></td><td>ROCK CHECK DAM – RIP RAP</td><td></td><td>E.</td><td>HANDICAPPED PARKING STALL</td><td>F</td></fm<></td></fm<>	SANITARY SEWER FORCE MAIN	<fm< td=""><td></td><td>ROCK CHECK DAM – RIP RAP</td><td></td><td>E.</td><td>HANDICAPPED PARKING STALL</td><td>F</td></fm<>		ROCK CHECK DAM – RIP RAP		E.	HANDICAPPED PARKING STALL	F
OPP OPPOSITE	CMU DETECTABLE WARNING	0	SANITARY CLEANOUT	CO •						
PC POINT OF CURVATURE PCC PORTLAND CEMENT CONCRETE	ASPHALT PAVEMENT	S	SANITARY MANHOLE			DITCH CHECK	<del></del>		TRAFFIC DETECTOR LOOP	
PCF POUNDS PER CUBIC FOOT PDP PERFORATED DRAIN PIPE			WYE FITTING	ب کا					TRAFFIC CONTROL BOX	$\bowtie$
								<u> </u>		

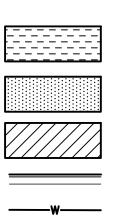
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SYMBOLS
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<u>LEGEND</u> EROSION CONTROL BLANKET, RESTORATION, & SEEDING CLASS 1A

BITUMINOUS PAVEMENT TO BE REMOVED & REPLACED, PER DETAIL ON SHEET C107 PCC PAVEMENT TO BE REMOVED & REPLACED, PER DETAIL ON SHEET C107 PCC\_CURB & GUTTER, PER DETAIL ON SHEET

C107 PROPOSED WATER MAIN

\_\_\_\_\_W\_\_\_\_\_ EXISTING WATER MAIN

<u>GENERAL NOTES:</u>

CONTRACTOR TO RESTORE ANY DISTURBED AREA TO PRE CONSTRUCTION CONDITIONS

SIDEWALK SHALL BE CONSTRUCTED PER IDOT AND PROWAG STANDARDS IN ALL LOCATIONS, INCLUDING RAMPS.

EXISTING HMA LAID OVER CURB & GUTTER SHALL BE REPLACED AS SUCH.

TREE REMOVAL TO BE REVIEWED IN FIELD AND COMPLETED PER DISCRETION OF OWNER AND ENGINEER. TREES THAT ARE DEEMED NOT TO BE REMOVED SHALL BE WORKED AROUND.

TREE REPLACEMENT LOCATIONS ARE TO BE FIELD DETERMINED, BASED ON CITY DIRECTION.

ALL WATER SERVICES SHALL BE FIELD VERIFIED FOR DEPTH AND LOCATION.

ABANDON ALL EXISTING WATER SERVICES. EXISTING CURB BOXES SHALL BE REMOVED. TEST CORPORATIONS MAY BE NECESSARY IN VARIOUS LOCATION

FOR WATER MAIN TESTING PURPOSES.

ADDITIONAL BENDS MAY BE REQUIRED BASED ON FIELD CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

BM1 = MAG NAILN-2,034,348.46, E-2,581,185.71, ELEV-716.67 BM2 = WORK POINT, 8" REBAR WITH FGA CAP N-2,034,213.75, E-2,581,280.84, ELEV-715.55

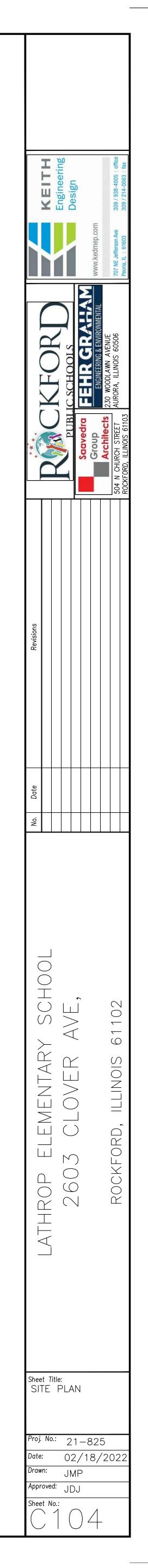
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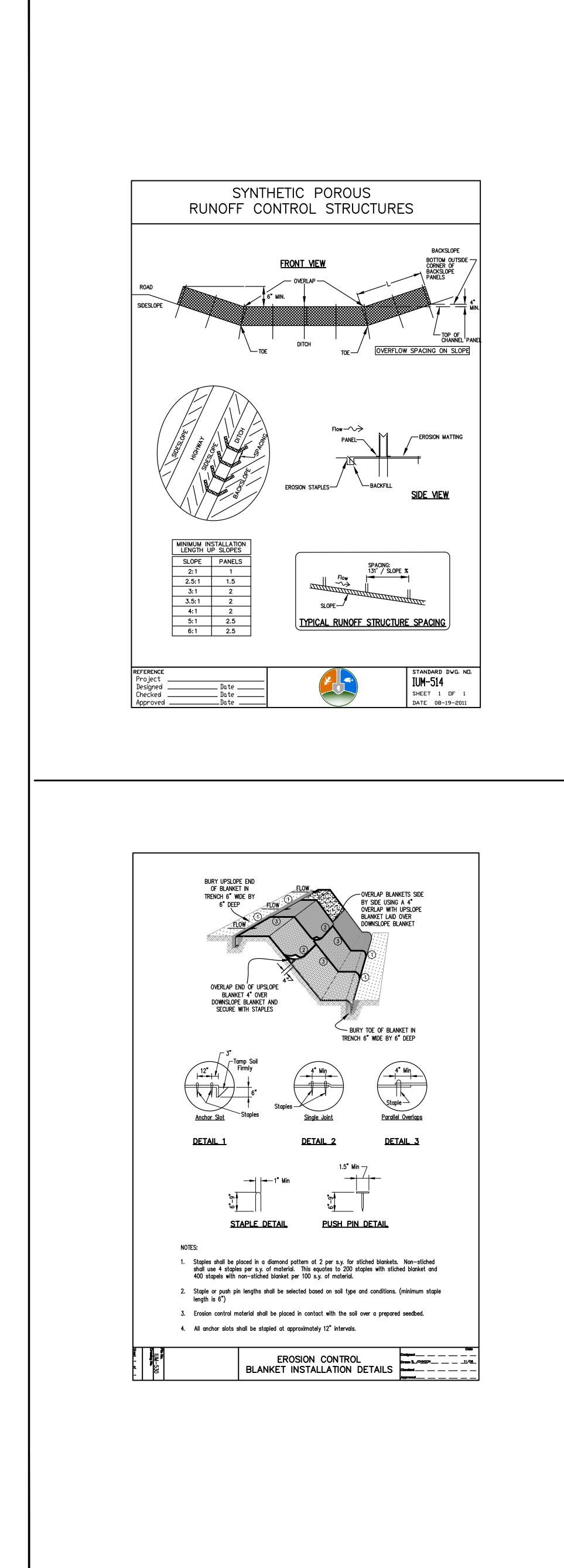
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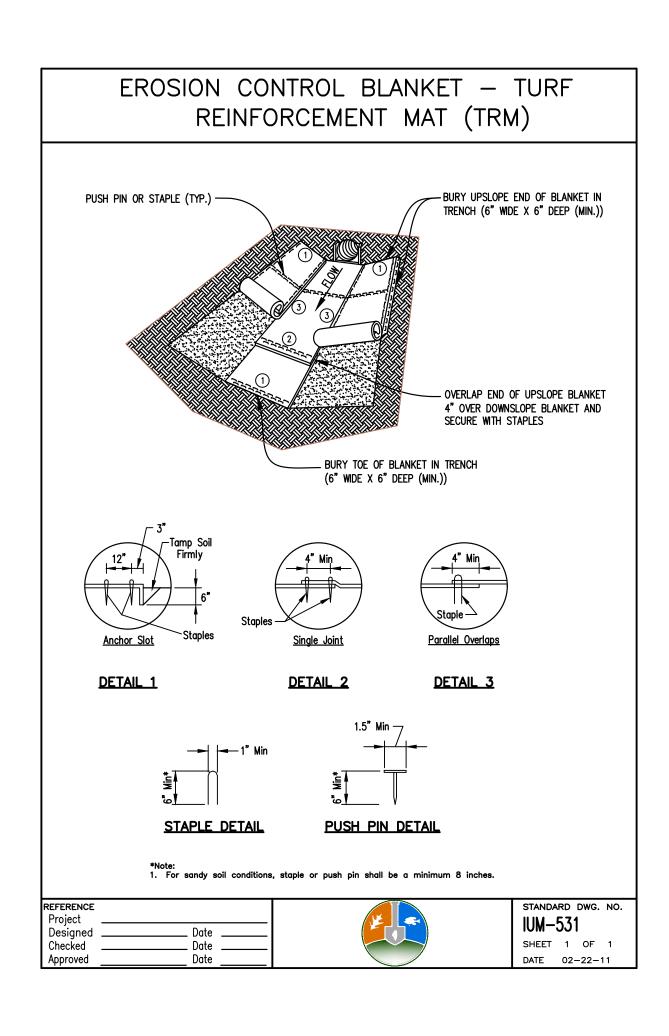
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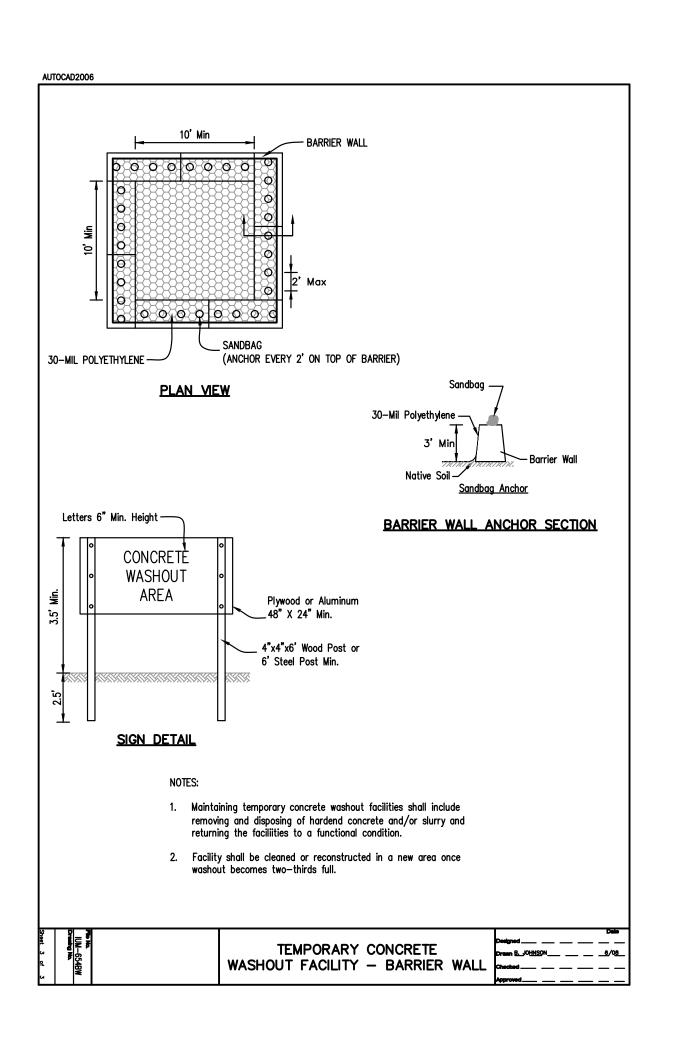
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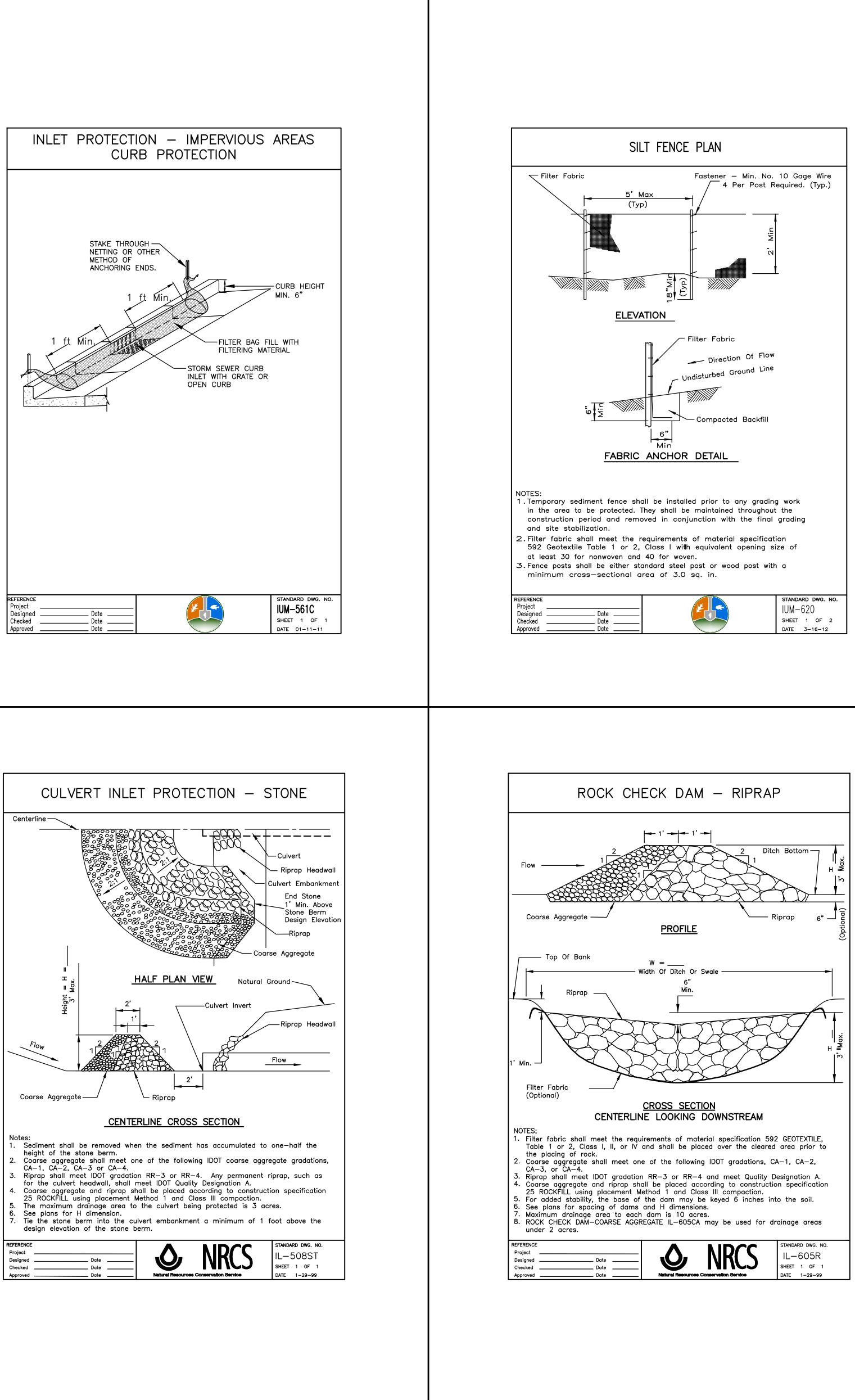
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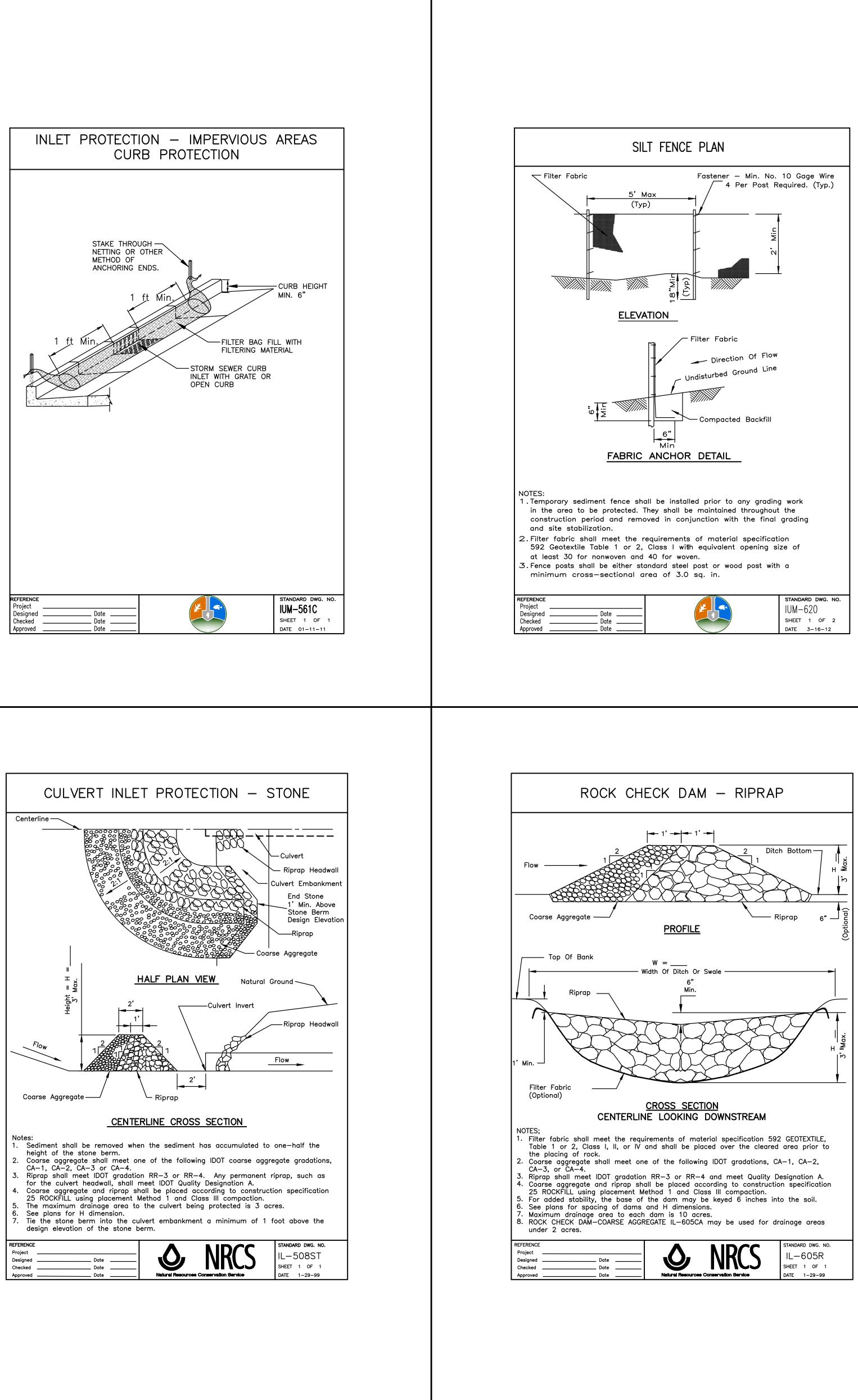




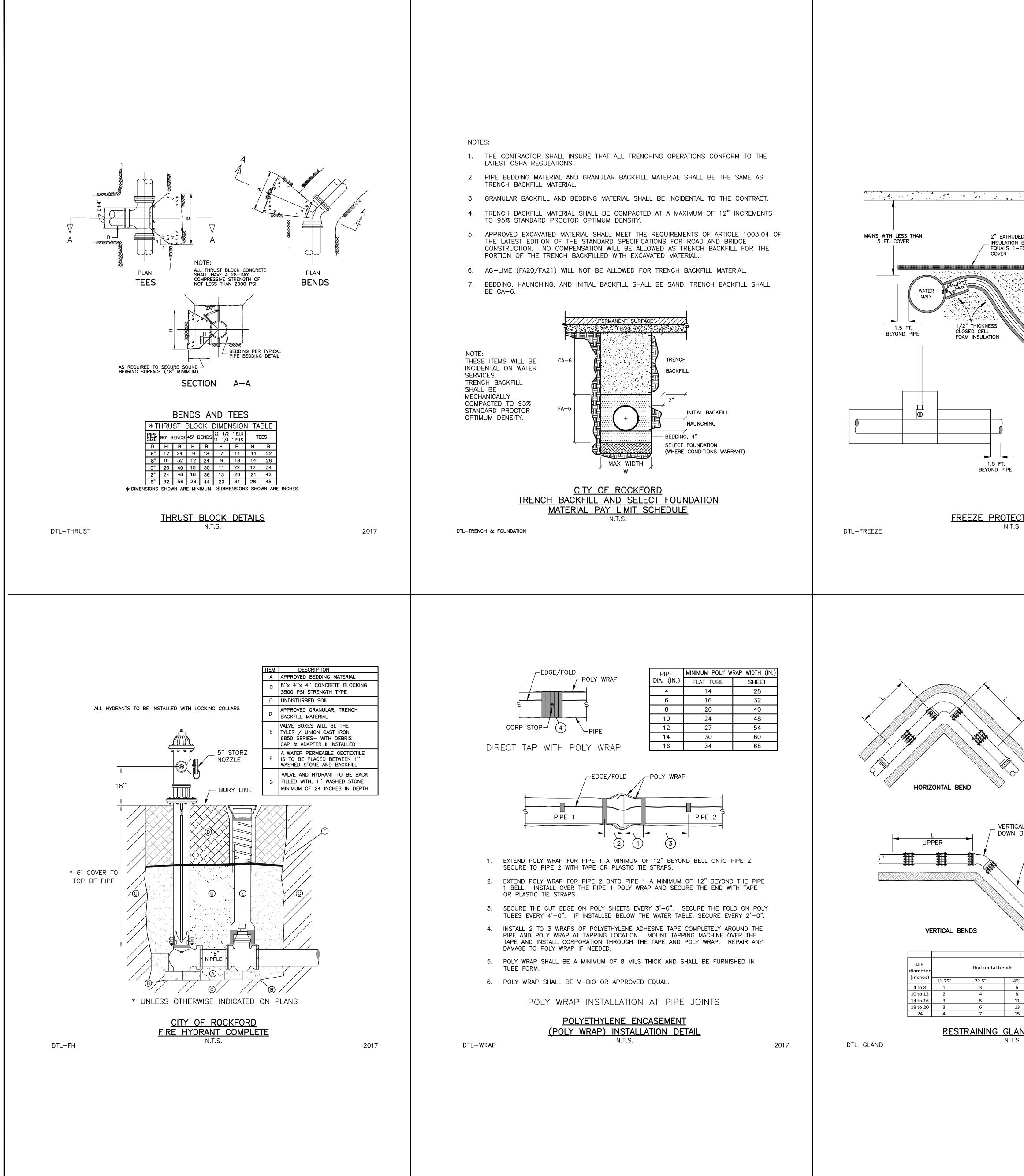




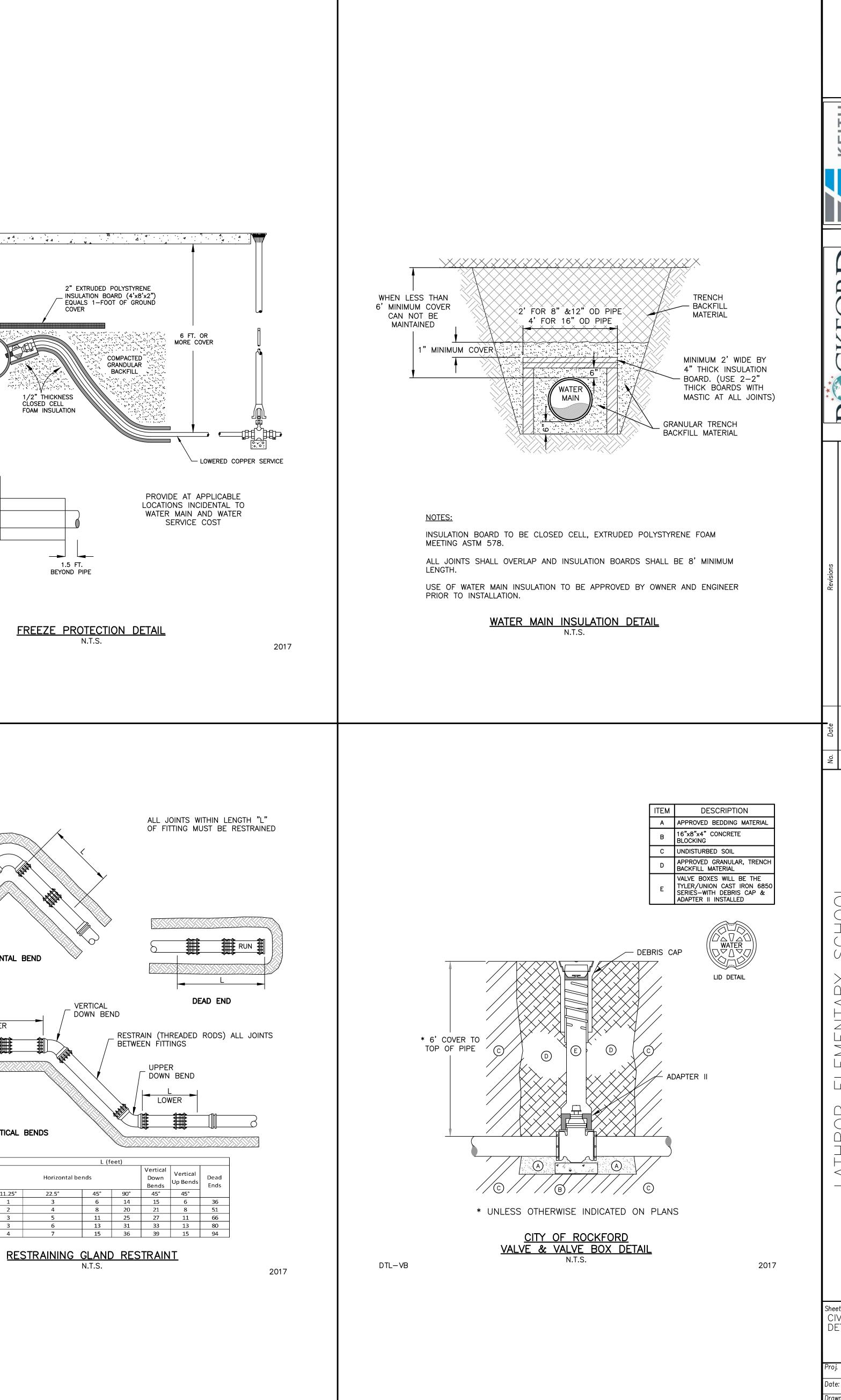




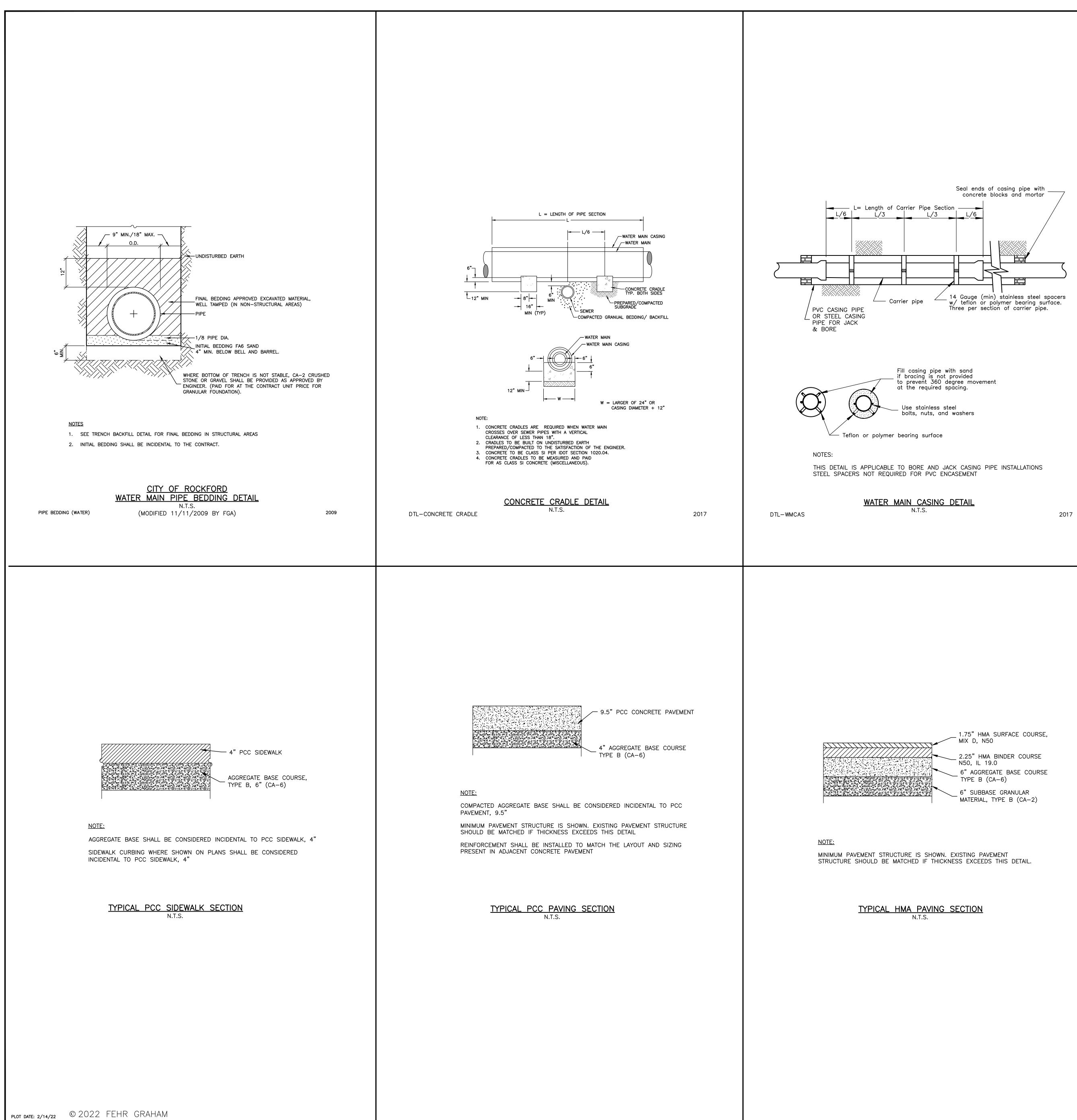
KEITH	Engineering	nesign	www.kedmep.com	707 NE Jefferson Ave 309 / 938-4005 : office	Peoria, IL : 61603 309 / 214-0063 : fax
		FEHR GRAHAM	RING & ENVIR	AURORA, ILLINOIS 60506	
		Saavedra	Group	504 N CHURCH STREET	ROCKFORD, ILLINOIS 61103
Revisions					
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	KEITH	Fngineering		Design	1	www.kedmep.com		707 NE Jefferson Ave 309 / 938-4005 : office	Peoria, IL : 61603 309 / 214-0063 : fax
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*			L PI IBI		saavedra	Group	Architects	504 N CHURCH STREET	ROCKFORD, ILLINOIS 61103
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No. Date									
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Sheet Title: CIVIL DETAILS 2 Proj. No.: 21–825 Date: 02/18/2022 Drawn: JMP Approved: JDJ Sheet No.:								02	22

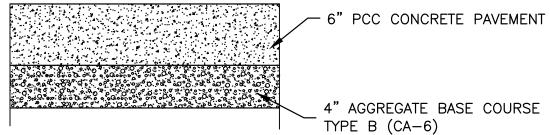


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\_ 14 Gauge (min) stainless steel spacers w/ teflon or polymer bearing surface. Three per section of carrier pipe.

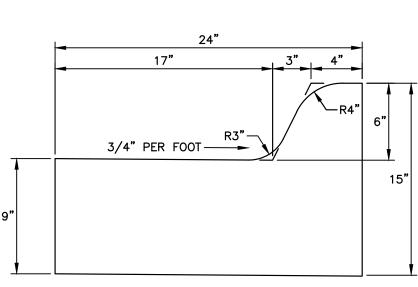
TYPICAL PCC APPROACH PAVING SECTION N.T.S.

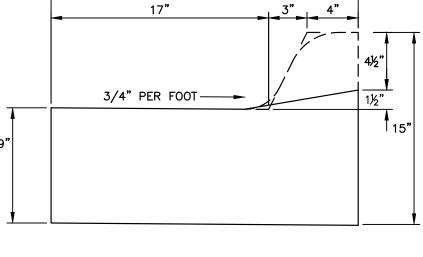
NOTE: AGGREGATE BASE SHALL BE CONSIDERED INCIDENTAL TO PCC DRIVEWAY, 6" MINIMUM PAVEMENT STRUCTURE IS SHOWN. EXISTING PAVEMENT STRUCTURE SHOULD BE MATCHED IF THICKNESS EXCEEDS THIS DETAIL.



COMBINATION CONCRETE CURB & GUTTER TYPE M6.18 MODIFIED N.T.S. MODIFIED BY FG JULY 2016

CITY OF ROCKFORD



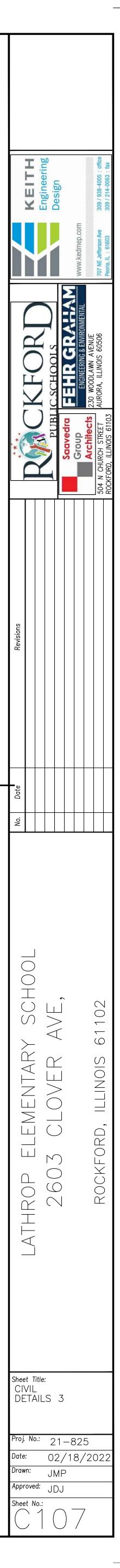


ADA DEPRESSED CURB

24"

24"

17"



2009

### **PROJECT MANUAL**

- FOR: Rockford Public Schools 501 7<sup>th</sup> Street Rockford, Illinois 61104
- AT: Bloom Elementary School 2912 Brendenwood Rd. Rockford, Illinois 61107

Lathrop Elementary School 2603 Clover Avenue Rockford, Illinois 61104 Guilford High School 5620 Spring Creek Rd. Rockford, Illinois 61114

Spring Creek Elem. School 5222 Spring Creek Rd. Rockford, Illinois 61114

**PROJECT:** Asbestos Abatement for ESSER HVAC Improvements

### **ENVIRONMENTAL CONSULTANT:**

### CARNOW, CONIBEAR & ASSOC., LTD.

600 W. Van Buren Street, Suite 500 Chicago, IL 60607 (312) 762.2900 (312) 782-5145 (fax)

Prepared by:

Rod Harvey, PE, CIH, CSP Project Designer IDPH #100-01548



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Rockford Public Schools Bloom, Guilford, Lathrop, Spring Creek

February 24, 2022



## **SPECIFICATION SECTION 02131**

## **ASBESTOS ABATEMENT FOR INTERIOR AREAS**

Rockford Public Schools Bloom, Guilford, Lathrop, Spring Creek

February 24, 2022



#### SECTION 02131 - ASBESTOS ABATEMENT FOR INTERIORS

#### PART 1 - GENERAL

1.1 Introduction: Asbestos abatement in interior building spaces, covered walkways or porticos connecting buildings, and on outdoor mechanical systems which condition indoor air (such as air handling units, air conditioners, cooling towers, etc.) is governed by rules established by the Illinois Department of Public Health (IDPH). This specification section addresses or references the requirements for complying with IDPH, OSHA, and EPA NESHAP asbestos rules. Each and every rule requirement may not be restated in detail since trained, accredited, and licensed contractors and individuals are required for this work and are presumed to be familiar with the relevant laws and rules. Full regulatory compliance is required, and is a part of the contract, whether specifically stated herein or not.

Exterior building spaces are not subject to IDPH rules unless the abatement procedures involve interior spaces of the building. Roofing, window replacement, exterior transite sheeting, asbestos siding, asbestos-containing paint, caulking, glazing, flashings, cements, or other products installed on the building exterior are subject to OSHA and NESHAP rules which, in many cases are less rigorous than IDPH requirements. Abatement of these items is specified in separate, related specification sections.

- 1.2 Definitions: In addition to the terms listed below, all definitions in the laws and regulations listed in Section 1.5 are incorporated by reference, whether or not restated herein.
  - A. Abatement Contractor (AC) means the entity responsible for performing the work in this section and has the training and accreditation to competently perform the work. This entity will obtain and maintain licenses required for the indoor work in this section.
  - B. Asbestos Abatement Supervisor, hereinafter referred to as "supervisor" means a person retained by the AC, who supervises asbestos abatement workers. This person must be trained, accredited, and licensed as required, and must also meet OSHA "competent person" criteria for asbestos abatement.
  - C. Asbestos Project Manager (APM) is the individual that performs asbestos abatement project oversight, acts on behalf of the Rockford Public Schools or its agents on the project and performs "Project Manager" duties as defined by IDPH asbestos regulations.
  - D. Rockford Public Schools means the owner of the property and the authority ordering the work specified herein.
  - E. HEPA Filter means a High Efficiency Particulate Air filter capable of trapping 99.97% percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
  - F. IDPH means the Illinois Department of Public Health.
  - G. Carnow Conibear & Assoc., Ltd. (CCA) means the entity with overall responsibility for the environmental aspects of the project, including design, organization, direction, and control as well as investigations, assessments, and supervision of project managers.
  - H. SDS means Safety Data Sheet, required by OSHA for any chemicals in the workplace that that could be expected to cause an exposure to workers during normal use or in emergency situations.



- I. Plasticize means to apply plastic sheeting over surfaces or objects to protect them from contamination or water damage.
- J. PPE (Personal Protection Equipment) means the protective suits, head and foot covers, gloves, respirators and other items used to protect persons from asbestos or other hazards.
- K. RCRA means the Resource Conservation and Recovery Act and associated regulations.
- L. TCLP means the Toxicity Characteristic Leaching Procedure as specified in EPA 530/SW-846, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods 3rd edition, November 1986.
- M. Work Area means the area or areas where asbestos abatement is being conducted.
- 1.3 Scope of Work: Refer to Environmental Scope forms included in Appendix B.

#### 1.4 Work Included

- A. The work includes all labor, equipment, materials, and supplies necessary to perform the Scope of work in the Documents by the procedures described herein. The contractor, by submitting a bid for the work, represents itself as knowledgeable and expert in the performance of the work, and includes all things usually and customarily necessary to provide a complete and finished job, whether specifically mentioned or not.
- B. Removal of friable and non-friable asbestos-containing materials listed in the Documents, including pre-cleaning, moving of furnishings, establishing regulated areas, isolating the work areas, protection of adjacent areas, containment when required, cleanup and decontamination to the specified clearance levels, proper packaging and disposal of wastes, and all other steps necessary to complete the scope of work.
- C. Repair or replacement of damaged surfaces, fixtures, or furnishings to restore them to their pre-existing condition to the satisfaction of the Project Manager.
- D. When the Documents include lead and asbestos abatement items in the same spaces, they should be performed in the sequence and combinations that produce the most efficient results, minimize concentrated lead waste volume, and produce the least amount of total waste. That sequence will generally be:
  - 1. Cleanup of lead dust, flakes, chips, and residues most likely to fail a TCLP test. If both lead and asbestos debris are present and mixed together, they may be cleaned up and disposed together.
  - 2. Cleanup and removal of failed or delaminated friable asbestos-containing debris, if any.
  - 3. Removal of friable asbestos materials and cleanup of visible residues.
  - 4. Removal of lead-bearing architectural components.
  - 5. Removal of non-friable asbestos items. If both asbestos and lead are on the same components, for example lead paint and asbestos-containing glazing compound, the components may be removed and disposed with both the lead and asbestos-bearing items intact.
  - 6. Removal of lead-based paint, coatings, or surfacing material.
  - 7. Final cleanup and decontamination of the workspace. Final air clearance (asbestos) and wipe samples (lead) may be performed concurrently.
  - 8. When lead and asbestos final decontamination processes are combined, the more stringent cleanup procedures will apply for both.



- 9. Waste disposal.
  - a. <u>Hazardous waste</u>: loose paint flakes, chips, and dust; lead-specific cleaning supplies; contaminated soil; combined final decontamination supplies; disposable suits, gloves, head covers, and foot covers; other items that fail a TCLP or other RCRA test.
  - b. <u>Special waste</u>: friable asbestos-containing waste materials and leadcontaminated waste that has passed TCLP or other RCRA tests.
  - c. <u>Construction and demolition (C&D) debris</u>: lead-bearing architectural components; concrete and lumber with or without tile or mastic attached; demolition debris, and other general wastes.
  - d. All asbestos-containing or lead-bearing wastes, regardless of classification, shall be disposed in a landfill approved by the IEPA to accept asbestos-containing or lead-bearing waste materials.
- E. Compliance with all applicable laws, regulations, standards, and these specifications. In the case of a conflict, the contractor will comply with the most stringent.
- F. Contractor is required to fully comply with IDPH rules and these specifications unless a variance is granted by IDPH. Any variances obtained by the CCA will be listed in the Documents.
- G. All licenses, accreditations, permits, fees, notifications, reports, or other documents required by law, regulation, this specification, or the Documents.
- Provide project closeout documentation to the APM within thirty (30) days after final clearance. This documentation shall include, but is not limited to, items listed in paragraph 1-7, Submittals.
- 1.5 Laws, Regulations and Standards
  - A. The following laws, regulations, and standards are incorporated by reference:
    - 1. 105 ILCS 105: Illinois Asbestos Abatement Act
    - 2. 77 Ill. Adm. Code 855: Asbestos Abatement for Public and Private Schools and Commercial and Private Buildings in Illinois
    - 3. 29 CFR 1910: US OSHA General Industry Standards
    - 4. 29 CFR 1926: US OSHA Construction Standards
    - 5. 29 CFR 1926.1101: US OSHA Asbestos Construction Standards
    - 6. ASHARA: US EPA Asbestos School Hazard Abatement Reauthorization Act
    - 40 CFR Part 61: US EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP), 11/90 revision
    - 8. 40 CFR 763 Subpart E: US EPA Asbestos Hazard Emergency Response Act (AHERA) Rules
    - 9. 40 CFR 763 Subpart E: US EPA Asbestos Model Accreditation Plan (MAP): Appendix C -Interim Final Rule
- 1.6 Assessment, Monitoring, Testing and Analysis
  - A. CCA will perform inspection, testing and design services prior to the start of work, and during the project, and will perform testing, inspection, and monitoring services during the work and upon its completion:



- 1. Prior to the start of the work
  - a. CCA shall identify suspect materials and confirm their asbestos content through review of the school's historical documentation, management plan or by testing.
  - b. CCA will design the project and address any design changes if requested by the Owner.
  - c. CCA shall collect background air samples (as necessary) before conditions are disturbed. Background samples will be analyzed by PCM.
  - d. Review and approve the pre-abatement submittals submitted by the AC.
- 2. During the work, CCA shall:
  - a. Enter the work area at least every two hours to inspect the work procedures and work area integrity.
  - b. Maintain a daily log to record the day's events, problems, corrective actions.
  - c. Collect air samples inside and outside the work area, and in the breathing zone of representative persons.
  - d. CCA will stop the work if airborne asbestos concentrations outside the work area exceed 0.01 f/cc. The work may restart when the source of fiber release has been identified and corrected. Contractor will be responsible for cleaning and decontaminating the outside area if caused by the asbestos abatement activities.
  - e. Observe/document smoke testing of the containment by the contractor.
  - f. Review original worker licenses and maintain weekly submittals from the AC.
  - g. Notify CCA's project designer if design changes are needed before execution.
- 3. Upon completion of the work, CCA shall:
  - a. Inspect for visible debris. Contractor shall be required to re-clean the area or portions of areas until no visible debris remains and the work area is dry.
  - Perform aggressive clearance testing by Transmission Electron Microscopy b. (TEM) when the ACM in a work area is 260 linear feet, 160 square feet, or 35 cubic feet of volume or more, as required by AHERA and IDPH Section 855.170. The sample set shall include at least 5 inside samples, 5 outside samples, 2 field blanks and 1 sealed blank. Note: Large complicated, or multi-floor contiguous work areas connected by corridors, stairways, or other connections shall be tested using additional inside the work area samples. For clearance of multiple mini containments containing a total removal quantity greater then160 square feet or 260 linear feet, a combined PCM/TEM final clearance procedure may be used. The first part of the procedure shall involve the collection and analysis of one PCM sample from within each mini containment. The second part shall involve the collection and analysis of five (5) TEM samples within the mini containments having the highest PCM analysis results. If there are five or fewer mini containments to be sampled, then only TEM sampling shall be conducted. A minimum of five (5) TEM samples shall be collected. All requirements of 40 CFR 763 Subpart E, Appendix A shall apply.
  - c. Perform aggressive clearance testing by Phase Contrast Microscopy (PCM) when the ACM in a work area is less than 260 linear feet, 160 square feet, or 35 cubic feet of volume.
  - d. Collect and analyze samples in accordance with AHERA Appendix A procedures and IDPH rule section 855.470.
  - e. Prepare and submit the IDPH "Project Manager's Summary Report Form" within 10 days of final clearance.
  - f. Prepare and submit the Project Manager Report to the IDPH within 60 working days of clearance testing. The final Project Manager is responsible for



completion of the project report.

- B. The Contractor shall provide OSHA compliance air monitoring to determine exposures to its employees in accordance with OSHA 29 CFR 1926.1101. Frequency of testing will comply with OSHA requirements for the anticipated and actual exposure levels.
  - 1. A written Exposure Assessment may be provided prior to the start of the work to determine the requirements for respiratory protection and frequency of OSHA monitoring for each type of activity. The contractor should note that a Negative Exposure Assessment (NEA) may be possible for many tasks. For interior work, this would allow reduced OSHA monitoring frequency.
  - 2. Analysis may be performed on site.
- C. Credentials required for testing and analysis of PCM final clearance air samples:
  - 1. Accreditation by AIHA or AAR; or
  - 2. Participation in the Proficiency Analytical Testing (PAT) program.
  - 3. Certification of individual qualification to read samples on site when on site analysis is performed.
- 1.7 Submittals by the Contractor
  - A. To IDPH, IEPA (If Applicable), Cook County and CCA at least 10 working days before commencement of work:
    - 1. Asbestos Notification on current form, including inspector license number and landfill permit number.
    - 2. Written permission from building owner authorizing contractor to commence abatement.
    - 3. Building owner asbestos abatement notification to building occupants and users.
  - B. To CCA at least five days prior to commencement of Work:
    - 1. Documentation of arrangements of transport and disposal, landfill name and location, handling procedures and PPE at the landfill, prepared and signed by the landfill.
    - 2. Drawings or sketches for layout and construction of isolation barriers and decontamination units.
    - 3. Respirators: NIOSH approvals and manufacturer certification of HEPA filtration for cartridges
    - 4. Manufacturers' certifications that all HEPA vacuums, negative air pressure equipment, and other local exhaust ventilation equipment conform to ANSI Z9.2-79
    - 5. Written notifications to rental companies for any rental equipment used.
    - 6. Results of any performance tests for encapsulants, if applicable.
    - 7. OSHA Exposure Assessment, if available.
    - 8. Laboratory and analyst credentials for contractor OSHA samples.
    - 9. Material Safety Data Sheets (MSDS) for chemicals used on site.
    - 10. Work Plan and Schedule.
  - C. To CCA on the first day of abatement work:
    - 1. Original contractor, supervisor, and worker licenses along with a copy each.
    - 2. Initial Course Accreditation and current refresher accreditation for each supervisor and worker.
    - 2. Physician's Written Opinions for workers and supervisors.



- 3. Fit test documentation for all employees, agents.
- D. To CCA weekly (or as necessary) during the abatement work:
  - 1. Job progress reports detailing abatement activities, progress compared to schedule, problems and actions taken, injury reports, and equipment breakdowns.
  - 2. Waste Shipment Records.
  - 3. Work site Entry logs.
  - 4. Manometer readable tape for negative pressure differentials for each negative pressure worker enclosure or a log of digital readout.
  - 5. Filter Change logs for respirators, HEPA vacuums, negative air machines, and other engineering controls.
  - 6. OSHA compliance air monitoring data.
  - 7. Worker license and certification log.
- E. Prior to beginning work, the AC shall submit required notifications to applicable regulatory agencies and receive an Owners Authorization and Notice to Occupants from Rockford Public Schools for buildings where asbestos abatement will take place. The AC will provide copies of all regulatory notices to CCA for review prior to sending such notices to each regulatory authority. The AC shall not begin a project until such notices are provided to Rockford Public Schools and/or CCA.

#### PART 2 - PRODUCTS

- 2.1 Tools and Equipment: All tools and equipment shall at least conform to minimum industry standards and IDPH regulations.
  - A. Equipment:
    - 1. Negative Air Machines shall provide HEPA filtration and conform to ANSI Z9.2 fabrication criteria.
    - 2. Respirators shall be NIOSH approved for use with lead, asbestos, or other contaminants anticipated in the work.
    - 3. Contractor is fully responsible for complying with OSHA rules for other Safety equipment, such as hard hats, safety harnesses, eye protection, gloves, footwear, and any other safety devices used on the site.
    - 4. Pressure differential manometer with readable tape shall be provided by the contractor, including calibration documentation.
  - B. Tools:
    - 1. Shovels and scoops shall be rubber or plastic, suitable for use in a plasticized containment. Metal shovels are not permitted.
    - 2. Scrapers, brushes, utility knives and other hand tools shall be of good quality and suitable for the intended uses. The contractor shall keep an ample supply on hand for the completion of the work.
    - 3. Power tools such as, but not limited to saws, pneumatic chisels, brushes, sanders, and needle guns shall be equipped with shrouds and HEPA-filtered local exhaust systems to capture released particles.
    - 4. Buffers are not permitted.
- 2.2 Materials: All materials shall at least conform to minimum industry standards and IDPH regulations.



- A. Installed materials which become a part of the work such as, but not limited to, encapsulants shall be of good quality, non-lead-bearing, free of asbestos, and conform to the respective reinstallation specification sections prepared by others.
  - 1. Contractor shall ensure that encapsulants and sealants used as primers, basecoats, or covering existing materials are compatible with the respective existing or reinstallation materials and their manufacturers' warranties.
  - 2. Encapsulants for surfaces to which fireproofing will be applied (beams, columns, floor or roof decks, other structural members) shall be tested and rated as a component of the fireproofing system and listed in the UL Fire Resistance Directory with the specific fireproofing material to be installed.
- B. Abatement materials
  - 1. Fire-retardant Poly sheeting for all applications shall be 6 mil nominal thickness for critical seals, floors, ceilings and drop cloths, and 4 mil for walls.
  - 2. Tape shall be 2" or 3" duct tape or other waterproof tape suitable for joining poly seams and attaching poly sheeting to surfaces.
  - 3. Spray adhesives shall be non-flammable and free of methylene chloride solvents.
  - 4. Disposal bags shall be 6 mil.
  - 5. Disposable suits, hoods, and foot coverings shall be TYVEK or similar.
  - 6. Solvents shall be compatible with any primers, mastics, adhesives, paints, coatings, or other surfacing materials to be installed following their use.

#### PART 3 - EXECUTION

- 3.1 Employee Training, Qualification and Medical Screening
  - A. Supervisors and Workers shall be trained, accredited, and licensed in accordance with IDPH rules.
    - 1. Contractor shall keep copies of licenses and most recent annual refresher training certificate at the jobsite at all times for all contractor personnel.
    - 2. An IDPH- licensed supervisor (competent person) shall be present at the worksite at all times when work under this section is being conducted.
    - 3. Current fit testing documentation.
  - B. Medical Screening. All contractor personnel shall have a current medical examination in accordance with OSHA requirements. Copies of the Physician's Written Opinions shall be kept on site.
- 3.2 Permissible Exposure Limits
  - A. The OSHA permissible exposure limit (PEL) for worker exposure to airborne asbestos is 0.1 f/cc as an 8-hour time-weighted average (TWA).
  - B. The OSHA short term excursion limit for worker exposure to airborne asbestos is 1.0 f/cc for a 30 minute sample.
  - C. The permissible level of airborne fibers in areas adjacent to the work area is 0.01 f/cc or



background level, whichever is higher, as determined by phase contrast microscopy (PCM).

- 1. Work shall immediately cease in any work area where the airborne fiber concentrations exceed this level.
- 2. The source of outside contamination shall be determined, and corrective measures (e.g. wet cleaning, changes in work practices, negative pressure containment) will be implemented to prevent recurrence.
- 3. The contractor shall be responsible for cleanup of contamination in adjacent areas caused by the asbestos abatement activities at no additional cost to the building owner.
- 3.3 Exposure Assessment and Monitoring
  - A. The Contractor shall make an assessment of the airborne exposures. Assessment shall conform to OSHA requirements and may be based upon:
    - 1. Initial monitoring of representative workers who the contractor believes are exposed to the greatest airborne concentrations of asbestos, <u>or</u>
    - 2. Past monitoring (within the past 12 months) or objective data for conditions closely resembling the processes, type of material, control methods, work practices and environmental conditions to be used for this project, <u>or</u>
    - 3. In the absence of an exposure assessment, the contractor shall perform the work in full negative pressure containment with Type C pressure-demand respirator with auxiliary SCBA escape bottle.
  - B. The contractor shall perform personal monitoring in accordance with the following requirements:
    - 1. Initially, to establish an exposure assessment when past monitoring or objective data are not available for an initial determination.
    - 2. Periodically if the exposures are, or are expected to be, below the PEL.
      - a. Whenever there has been a change of equipment, process, control, personnel, or a new task has been initiated that may affect employee exposures, the exposure assessment shall be updated, and monitoring shall be reinstituted if exposures are unknown or are expected to exceed the PEL.
    - 3. Daily, if exposures are above the PEL.
- 3.4 Respiratory Protection
  - A. Respiratory protection shall be worn by all persons potentially exposed to airborne asbestos fibers from the start of the abatement project until all areas have passed clearance air monitoring, in accordance with all applicable regulations incorporated by reference in 1.5 A.
  - B. Contractors must have a respiratory protection program in compliance with all applicable regulations incorporated by reference in 1.5 A.
- 3.5 Hygiene Practices
  - A. Eating, drinking, smoking, chewing gum or tobacco, and applying of cosmetics are not allowed in the work area.



- B. All persons entering the work area are required to wear appropriate PPE and follow the entry and exit procedures posted in the Personnel Decontamination Enclosure System.
- C. Personal Protection Equipment (PPE) shall include:
  - 1. Full body disposable suits, headgear, and footwear.
  - 2. Gloves.
  - 3. Safety glasses
  - 4. Hardhats.
  - 5. Non-disposable footwear and clothing shall remain in the work area and shall be disposed of as contaminated waste when the job is completed.
  - 6. Authorized visitors shall be provided with suitable PPE.

#### 3.6 Prohibited Activities

- A. Dry removal or dry sweeping.
- B. Use of compressed air for cleaning.
- C. Use of high-speed power tools not equipped with a HEPA-filtered local exhaust system.
- D. The abatement contractor shall not execute abatement activities without asbestos abatement design drawings that have been signed by an IDPH licensed Asbestos Designer are on the job site. Any and all changes to containment layout and placement shall not be executed until revised design drawings that have been approved and signed by an IDPH licensed Asbestos Designer are on the job site.
- E. Buffers cannot be used to remove mastic.
- 3.7 Work Area Isolation and Preparation
  - A. General Preparation. Contractor shall:
    - 1. Post:
      - a. Caution signs meeting the specifications of OSHA 29 CFR 1926.1101 (k)(6) at any location and approaches to a location where airborne concentrations of asbestos may exceed ambient background levels.
      - b. Decontamination and work procedures in equipment rooms and clean rooms.
      - c. EPA NESHAP asbestos rules (40 CFR Part 61, subparts A & M) in the clean room.
      - d. OSHA Asbestos Construction Standards (29 CFR 1926.1101) in the clean room.
      - e. Entry and Exit Log
      - f. List of telephone numbers in the clean room for:
        - 1) local hospital and/or local emergency squad.
        - 2) school security office (if applicable).
        - 3) owner representative reachable 24 hours per day.
        - 4) contractor's headquarters.
        - 5) architects or consultants directly involved in the project.
    - 2. Secure the work area from entry by unauthorized persons.
    - 3. Separate Work Areas from Occupied Areas



- a. Seal off all doorways and corridors which will not be used for passage during work.
- b. Install IDPH required separation barriers per section 855.430 (a) in all openings larger than 4 ft by 8 ft, consisting of wood or metal framing, a sheathing material such as plywood or drywall at least 5/8" thick on the work side, and double-layer 6-mil poly, both sides. Edges shall be caulked at the floor, ceiling, walls, and fixtures to form an air-tight seal.
- c. If the school is not totally occupied (see Section 855.430), the sheathing material may be omitted.
- 4. Separate occupied areas from secured areas
  - a. Install IDPH barriers per section 855.430 (b)
- B. Interior Preparation.
  - 1. Shut down and lock out electric power to all work areas. Provide temporary power from an outside source with ground-fault circuit interrupter (GFCI) at the source.
  - 2. Shut down and isolate heating, cooling, and ventilating air systems. Remove HVAC filters, package and dispose as asbestos waste. (Need to discuss filter removal and disposal in light of replacement costs and clarify that this applies when work happens in a mechanical system and not in classrooms)
  - 3. Pre-clean movable objects with HEPA vacuums or wet cleaning and remove from the work area to a location designated by the EC or Owner where friable ACBM is involved.
  - 4. Pre-clean fixed items which must remain in the work area with HEPA vacuums or wet cleaning where friable ACBM is involved.
  - 5. Wrap all fixed objects and equipment which will remain in the work area with a minimum of one layer of six mil poly.
  - 6. Remove/protect carpeting per environmental scope sheets.
  - 7. Pre-clean the work area with HEPA vacuums or wet cleaning.
  - 8. Seal off all windows, corridors, doorways, skylights, ducts, grilles, diffusers, and other penetrations or openings in walls, ceilings and floors with 6-mil poly and tape.
  - 9. Cover floors with two layers of fire-retardant 6-mil poly with seams staggered and taped and extending 12" up walls. Cover walls with two layers of 4-mil poly, with each wall poly overlapping each floor poly layers by 12".
  - 10. Asbestos materials shall not be disturbed during the preparation phase.
  - 11. Suspended ceilings shall remain in place until preparation phase is complete. Remove/protect ceiling tile per environmental scope sheets.
  - 12. Maintain emergency and fire exits.
  - 13. Install a five chamber Worker Decontamination Enclosure System, consisting of clean room, shower room, and dirty room separated by airlocks at least 3' wide, all with curtained doorways, of sufficient size to serve the size of the crew, and with all features required by IDPH rules.
    - a. Where a remote decon unit is used (i.e. non-friable ACBM and TSI glovebag operations), the AC shall:
      - 1) set up the decon unit within the work area barriers
      - establish a negative pressure of at least 0.02" water column (wc) between the dirty room and adjacent spaces, including the clean room
        provide at least 4 air changes per hour within the decon unit
      - 4) use a double suiting procedure where the workers proceed to the work area exit, HEPA-vacuum gross debris from their persons using a "buddy system" put on a clean suit (either over their dirty suit or after removing the dirty suit), assure that their footwear are free of ACM contamination, and follow a designated path to the remote decon unit.



- 5) Once in the decon unit, follow normal decontamination procedures.
- 14. Install an Equipment Decontamination Enclosure System, consisting of a washing station and a holding area, with curtained doorways and a lockable door.
- 15. Maintain a negative pressure of at least 0.02" water column (wc) between each contained area and adjacent spaces 24 hours a day using negative air machines vented to the outside, from the start of abatement work to final clearance. Backup negative air machines shall be available onsite in case of machine failure.
- 16. Once operational, the system shall be inspected daily with smoke tubes by the contractor. Damages and defects will be repaired immediately upon discovery.
- C. Exterior Preparation (for areas that interface with interior work)
  - 1. 6 mil plastic sheeting shall be placed over the ground, foundation, or other surfaces below the abatement area.
  - 2. Unauthorized entry shall be prevented by using appropriate barriers, such as warning tape, fencing, or other suitable barriers.
  - 3. Nearby air intakes, grilles, and other openings into the building interior shall be sealed off with poly and tape.
  - 4. The contractor shall be responsible for cleanup of any adjacent areas that become contaminated as a result of the abatement activities at no additional cost to the building owner.
- 3.8 Abatement Procedures
  - A. Removal:
    - 1. Asbestos materials shall be adequately wetted and kept adequately wet during removal.
    - 2. ACM waste shall be bagged or containerized as it is removed.
    - 3. Work areas shall be kept wet until visible material is cleaned up.
  - B. Encapsulation:
    - 1. Damaged or missing areas of existing materials shall be repaired with non-asbestos substitutes, where appropriate.
    - 2. Loose or hanging ACM shall be removed using appropriate removal procedures.
    - 3. Bridging encapsulants shall be applied in accordance with manufacturer's instructions.
    - 4. Penetrating encapsulants shall be applied to penetrate existing materials to the substrate.
    - 5. Encapsulants shall be applied with airless spray equipment.
    - 6. Encapsulated ACM shall be labeled as asbestos to prevent future unprotected disturbance.
  - C. Enclosure:
    - 1. Locations where openings for hangers, supports, framing, or other attachments must be made in the ACM must be misted with water and kept damp to reduce airborne fiber release. Tools used to drill, cut, or otherwise disturb the ACM during attachment installation shall be equipped with a HEPA-filtered local exhaust system.
    - 2. Loose or hanging ACM shall be removed using removal procedures.
    - 3. Damaged areas shall be repaired with non-asbestos materials.
    - 4. Utilities or other items requiring access shall be relocated outside of the enclosure area. Once enclosures are installed, they shall not be opened or disturbed.
    - 5. Enclosure materials shall be impact resistant and provide an airtight barrier.



- 6. Enclosures shall be labeled that they contain asbestos materials to prevent future unprotected disturbance.
- 3.9 Cleaning and Decontamination: Cleaning and decontamination of abatement areas, excluding glovebag areas, are as follows:
  - A. All visible accumulations of ACM, debris, tools, and unnecessary equipment shall be removed from the work area.
  - B. First clean:
    - 1. Wet clean all surfaces and remove excess water.
    - 2. Wait 12 hours before proceeding further to allow dust and fibers to settle.
    - 3. Remove outer layer of poly and dispose as ACM waste.
    - 4. Completion of First Clean shall be determined and documented by the EC.
  - C. Second clean:
    - 1. Wet clean all surfaces and remove excess water.
    - 2. Wait 12 hours before proceeding further to allow dust and fibers to settle.
    - 3. Remove inner layer of poly and dispose as ACM waste.
    - 4. Critical barriers on windows, doors, penetrations, and other openings shall remain in place and negative air system shall remain in continuous operation until final clearance tests have passed.
    - 5. Completion of Second Clean shall be determined and documented by the EC.
  - D. Third clean:
    - 1. Wet clean all surfaces and remove excess water.
    - 2. Wait 12 hours before proceeding further to allow dust and fibers to settle.
    - 3. Remove all tools, cleaning materials, remaining wastes from the work area. Tools and equipment shall be cleaned before removal.
    - 4. Third Clean shall be determined and documented by the EC.
  - E. Visual inspection: EC and contractor shall jointly inspect the work area for visible residue and excess water and, if observed, repeat the clean/12 hour wait cycle until residues are not detected and work area is dry.
  - F. Apply lock-down encapsulants where specified in the Documents.
  - G. EC will inform AC if the work area is ready for final clearance testing.
- 3.10 Final Clearance
  - A. Final clearance testing (aggressive methods) shall be performed after 12 hours have lapsed since the final cleaning, and when visual inspection has been completed and no visible water or condensation remains.
  - B. Work areas with 260 linear feet or 160 square feet or more of ACM shall be tested using aggressive sample collection methods and Transmission Electron Microscopy (TEM) analysis, as required by AHERA and IDPH Section 855.170. The sample set must include at least 5 inside samples, 5 outside samples, 2 field blanks, and 1 sealed blank. NOTE: Large, complicated, or multi-floor contiguous work areas connected by corridors, stairways, or other



connections may be tested with a larger "inside" sample set rather than full, multiple TEM tests, so long as the inside sample distribution is reasonably representative of the work area conditions.

- C. Work areas with less than 260 linear feet or 160 square feet may be tested using aggressive sample collection methods and analyzed by Phase Contrast Microscopy (PCM).
- D. If final clearance test(s) fail, the AC is responsible for repeating the cleaning sequence as necessary until final clearance tests are successful. All expenses associated with the collection and analysis of additional final clearance tests are the responsibility of the AC.
- 3.11 Special Procedures: Less stringent requirements may apply in a number of cases.
  - A. Variances from IDPH Regulations. Variances may be requested and approved by the IDPH. These less stringent procedures may only be used when they have been requested by the Project Designer and approved by the IDPH on a case-by-case basis.
    - 1. Variances that have been applied for the project will be listed in the Documents. These variances may or may not be approved by the IDPH.
    - 2. The contractor is encouraged to request additional variances it believes will be beneficial to the project. Such requests shall be submitted to the Project Designer (CCA) as a value engineering proposal which references the IDPH regulation section, describes the procedure variations, includes information which supports the efficacy and benefits of the alternative procedures, and offers appropriate cost savings.
    - 3. Otherwise the contractor is required to fully adhere to the requirements of this specification. Failure to obtain a variance shall not constitute a change in the requirements of these documents.
  - B. Operations and Maintenance Procedures where minor areas of ACM must be disturbed for building repairs, such as drilling holes in walls or floors, cleaning small areas to allow installation of fixtures, smoke detectors, etc. The Documents will state if these procedures are allowed for a particular project or task.
    - 1. Submit an asbestos notification to the IDPH for quantities over 3 linear or square feet.
    - 2. Licensed abatement workers are required, but a licensed abatement contractor is not mandatory for work less than 3 linear or square feet.
    - 3. Shut down heating, cooling, or ventilating air systems to prevent fiber dispersal to other areas.
    - 4. Seal off openings in the work area, including windows, doorways, vents, and other openings with 6 mil poly sheeting and tape.
    - 5. Lay an impermeable drop cloth under the work.
    - 6. Wear appropriate PPE and at least a 1/2 mask APR respirator. Note that OSHA still requires an exposure assessment and respirators that are appropriate for the expected airborne fiber concentrations.
    - 7. Use wet removal methods.
    - 8. Wet clean work area, leaving no visible residue.
    - 9. Package and dispose of asbestos-containing waste as specified in the waste disposal section.
    - 10. Work shall be considered complete following inspection by Asbestos Project Manager and Post O&M Air Sampling <0.01 f/cc.
  - C. Glovebag Procedure. Glovebags may be used to remove pipe and duct insulation.
    - 1. Normal IDPH Notification requirements apply to quantities of more than 3 linear or



square feet.

- 2. Glovebag removal will require a single layer, 6 mil poly tent containment (mini containment) with negative pressure air filtration.
- 3. Monitoring will be performed for each contained area by the CCA:
  - a. 1 personal sample
  - b. 1 area sample
  - c. 1 area sample at each negative pressure machine exhaust
- 4. Glovebag construction shall be 6 mil poly with seamless bottom, suitable for the intended use (straight runs, fittings, elbows, vertical pipes, etc.) without modification.
- 5. At least two licensed workers shall perform glovebag operations.
- 6. Workers shall wear full body PPE and at least a 1/2 mask APR respirator. Note here, too, that OSHA still requires an exposure assessment and respirators that are appropriate for the expected airborne fiber concentrations.
- 7. Prior to use, all loose or damaged material adjacent to the operation shall be wrapped in two layers of 6 mil poly or otherwise be rendered intact.
- 8. Work Practices shall include:
  - a. installation to completely cover the circumference of pipe or other structure. Pipe insulation diameter shall not exceed 1/2 the bag working length above the glove sleeves.
  - b. smoke test for leaks and seal any leaks prior to use.
  - c. glove bag shall be single use and not moved once it is placed.
  - d. wet removal methods on the materials to be removed and wet cleaning to remove all visible ACM from the pipe or structure surfaces.
  - e. not to be used on surfaces having temperatures greater than 150°F.
  - f. spray down the interior surfaces of the bag, substrate, and removed ACM.
  - g. first and second cleaning, waiting at least 12 hours following each cleaning.
  - h. wet down remaining ACM surfaces or seal with encapsulant.
  - i. seal off the lower portion of the bag containing the ACM waste by twisting several times and sealing with tape.
  - j. collapse glovebag with a HEPA vacuum.
  - k. slip a 6 mil poly waste disposal bag over the glovebag, detach the bag from the pipe, and gooseneck-seal it in the waste disposal bag.
  - I. dispose in accordance with this specification.
- D. Resilient Floor Covering. Removal of resilient floor covering may only be performed when Gross Removal is not specifically required by the Project Designer or Project Documents. Intact removal of resilient vinyl floor coverings shall be by IDPH Licensed Asbestos Workers supervised by an IDPH licensed Supervisor using heat guns, infrared heat machines or other methods that remove the floor covering in whole pieces. Buffing machines may not be used for removal of mastic. The contractor shall insure that no damage is caused to the area or equipment below the floor. Abatement procedures are as follows:
  - 1. Submit the Floor Tile Project Notice at least 10 working days prior to the beginning of all asbestos resilient floor covering abatement projects.
  - 2. Post signs so that the work area cannot be entered from any direction without observing a sign.
  - 3. Isolate the work area from areas to remain occupied.
  - 4. Install barriers of six mil plastic sheeting sealed with duct tape at all openings in the work area. Openings larger than 4' x 8' may include wood constriction barriers.
  - 5. Install a curtained doorway at the entry to the work area, lock out electrical power to the room and supply required power with ground fault interruption protected circuits.
  - 6. Wear, as a minimum, half-faced dual cartridge NIOSH-approved respirators and double disposable suits.

Asbestos Abatement - Interiors



- 7. Remove floor covering without causing breakage. Work will stop if breakage occurs and removal will be completed by gross removal at the contractor's cost.
- 8. Dispose of floor covering and debris as asbestos waste.
- 9. HEPA vacuum the work area thoroughly following completion of the removal.
- 10. HEPA vacuum surface of protective clothing and dispose of clothing as asbestos waste.
- 11. Personal air monitoring will be performed by the contractor in accordance with OSHA during ALL intact floor tile/mastic removal operations.
- 3.12 Waste Disposal and Equipment Load-out
  - A. Preparing equipment for load-out.
    - 1. Seal openings to prevent escape of internal contamination; or open up equipment, remove filters, and make equipment interiors accessible for cleaning and decontamination.
    - 2. HEPA vacuum and wet wipe all equipment before removal
  - B. Packaging asbestos wastes:
    - 1. All asbestos-containing wastes, including removed ACM and debris, containment poly, critical barrier materials, suits, respirator filters, vacuum and negative air machine HEPA filters, water filters, and other asbestos-containing items shall be properly packaged for disposal.
    - 2. Use double 6 mil plastic bags with "gooseneck" seal, or other impermeable containers.
    - 3. Wrap large or irregular items in 2 layers of 6 mil poly sheeting, seal with tape, and affix required labeling.
    - 4. Sharp, jagged, or other items (floor tiles, screws, nails, metal debris, wood etc.) that may puncture poly shall be packaged in rigid impermeable containers such as drums or boxes, or wrapped in burlap or other protective covering before sealing in double bags or double layers of 6 mil poly.
    - 5. Label containers:
      - a. OSHA warning label.
      - b. DOT performance-oriented hazardous material label.
      - c. Name and address of generator and abatement location.
  - C. Removing items from the work area:
    - 1. Packaged asbestos wastes, non-porous debris (such as ceiling grid, doors, hardware, and other items that can be decontaminated), and equipment shall be wet cleaned, moved into the equipment decontamination enclosure system, cleaned a second time, and moved into the holding area.
    - 2. Containers and equipment shall be removed from the holding area by workers in clean PPE and respirators who enter from the uncontaminated side (outside). The equipment decontamination enclosure system shall not be used to enter or exit the work area.
    - 3. Waste shall be placed in a cart and covered. A plastic runner shall be placed on the floor to the waste storage area. The loaded cart shall be carefully taken to and unloaded into the enclosed waste storage container.
  - D. Storage of packaged asbestos wastes shall be in a completely enclosed dumpster or another suitable container that can be secured. The secured area shall be kept locked at all times to prevent unauthorized access.
  - E. Shipment of items from the project.

Asbestos Abatement - Interiors



- 1. Decontaminated tools and equipment may be shipped by normal carrier to warehouse, another jobsite, or other destination.
- 2. For asbestos wastes:
  - a. Line shipping container with 6 mil poly prior to loading packaged asbestos wastes.
  - b. Post NESHAP placards during loading.
  - c. Persons performing loading operations shall wear PPE and respirators.
  - d. Containers and packages shall be tightly packed together to prevent shifting during transport. Large components or heavy items shall be secured to prevent shifting and shall not be stacked on top of bags.
  - e. Execute the NESHAP-required Waste Shipment Record (WSR) to be signed by the generator, transporter, and landfill. All WSRs shall be returned to CCA within 30 days of shipment.
  - f. ACBM waste shall be transported from the work site directly to the landfill.
- F. Disposal of packaged asbestos wastes.
  - 1. Only landfills approved and permitted by Illinois for accepting asbestos wastes may be used for disposal.
- 3.13 Demobilization
  - A. CCA shall inspect the work area for evidence of visible debris prior to releasing the area for tear-down. Detection of contamination will require additional cleaning and re-testing of the work area.
  - B. Remove critical barriers and seals.
  - C. Restore previously removed items, if specified in the Documents:
    - 1. Re-mount fixtures and other previously dismounted objects.
    - 2. Return moveable objects to their original locations.
    - 3. Install new filters in HVAC systems where filters were previously removed.
    - 4. Re-establish electric systems and other utilities that were shut down or locked out.
  - D. A punch list walk-through shall be conducted for each cleared work area within two working days of clearance testing by CCA, contractor, and school official. All punch list items shall be completed within five working days of walk through.

END OF SECTION



# SPECIFICATION SECTION 02136

# **GENERAL DUST, FUME, AND ODOR CONTROL**

Rockford Public Schools Bloom, Guilford, Lathrop, Spring Creek

February 24, 2022



### SECTION 02136 - GENERAL DUST, FUME, AND ODOR CONTROL

PART 1 - GENERAL

### 1.1 Introduction

- A. Dust and fume emission control is required to maintain a healthful learning environment for students, maintain good public relations with neighbors and employees, prevent damage, minimize cleaning and maintenance costs, and to comply with regulations and laws. All contractors (including subcontractors, lower-tier subcontractors, and suppliers) who perform work or provide services at Rockford Public Schools facilities are required to control dust and fume emissions from their operations and/or activities.
- 1.2 Definitions: In addition to the terms listed below, all definitions in the laws and regulations listed in Section 1.4 are incorporated by reference, whether or not restated herein.
  - A. Rockford Public Schools means the owner of the property and the authority ordering the work specified herein.
  - B. HEPA Filter means a High Efficiency Particulate Air filter capable of trapping 99.97% percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
  - C. IDPH means the Illinois Department of Public Health.
  - D. Carnow Conibear & Assoc., Ltd. (CCA) designs the environmental work, maintains the documents, conducts oversight, and reviews the environmental work, submittals, and reports.
  - E. SDS means Safety Data Sheets, required by OSHA for any chemical in the workplace that that could be expected to cause an exposure to workers during normal use or in emergency situations.
  - F. Plasticize means to apply plastic sheeting over surfaces or objects to protect them from contamination or water damage.
  - G. Personal Protective Equipment (PPE) means the protective suits, head and foot covers, gloves, respirators and other items used to protect persons from potential hazards.
  - H. Work Area means the area or areas where work is being conducted.
- 1.3 Work Included
  - A. The work includes the control of all nuisance or noxious dust, vapors, fumes, odors or emissions caused by construction, demolition, renovation, restoration, or related activities including, but not limited to sawing, cutting, grinding, sanding, abrading, sweeping, crushing, scraping, gluing, prying, plowing, heating, finishing, painting welding, torch cutting or burning, or any other related processes at Rockford Public Schools facilities that can create noxious dust, fumes or odors.

Rockford Public Schools 205

General Dust, Fume, and Odor Control



- B. No visible emissions or unreasonable odors will be permitted outside the work area.
- C. All products to be used that will possibly cause emissions shall be accompanied with SDS sheets to be submitted to CCA prior to the use of the product.
- 1.4 Laws, Regulations, and Standards.
  - A. The Contractor is responsible for compliance with all applicable federal, state, county and municipal laws, regulations and ordinances including, but not limited to, those listed below, which are incorporated by reference.
  - B. The following laws, regulations and standards are incorporated by reference:
    - 1. 29 CFR 1910: US OSHA General Industry Standards
    - 2. 29 CFR 1926: US OSHA Construction Standards
    - 2. 40 CFR Part 61: USEPA National Emissions Standards for Hazardous Air Pollutants (NESHAP)

### PART 2 - EXECUTION

- 3.1 Barriers or Work Area Isolation
  - A. Contractors shall prevent the spread of dust, fumes and odors from their immediate work areas by:
    - 1. Erecting dust-tight barriers between indoor work areas and adjacent occupied areas. Construction barriers may be used for this purpose if suitably constructed to prevent dust and fume migration.
    - 2. Closing and or covering windows, intake vents, louvers, or other building openings in the immediate vicinity of outdoor work, sufficient to prevent dust, fume or odor migration into the building interior. If such openings cannot be adequately sealed by closing, then poly sheeting, tape, or other impermeable covers shall be used.
    - 3. The contractor shall provide a filtered, local exhaust system for the isolated work area.
  - B. Contractor is prohibited from creating other hazardous or uncomfortable conditions for building occupants, such as very hot, humid, cold, or other conditions created by ventilation system alterations or blockages, closed or open windows in hot or cold weather conditions.
  - C. Contractor is responsible for making itself familiar with building conditions and shall take care to isolate its work area in such a manner that building occupant activities and comfort are not unreasonably disrupted.
- 3.2 Dust, Fume and Odor Control
  - A. Dust, fume or odor release shall be prevented by a suitable means, including but not limited to:
    - 1. Tools equipped with shrouds, HEPA filter equipped vacuum pickups
    - 2. Alteration, shut down, or isolation of building ventilation systems in the immediate

Rockford Public Schools 205

General Dust, Fume, and Odor Control



work vicinity

- 3. Shrouding around work activities
- 4. Shrouding stages, scaffolds, or other work platforms
- 5. Local exhaust ventilation systems exhausted to the outside of the building
- 6. Wet work methods
- B. It is the Contractor's responsibility to select the means and methods it considers most suitable to achieve dust, fume and odor control.
- C. In the event that dust or fumes escape from the work area or create dirty conditions or contamination to nearby building spaces or grounds, the Contractor is responsible for all costs associated with the cleaning, testing and/ or repair deemed necessary by the Owner

END of SECTION



# **APPENDIX A**

# **SCHOOL INFORMATION**

Rockford Public Schools Bloom, Guilford, Lathrop, Spring Creek

February 24, 2022



### **ASBESTOS ABATEMENT**

### ROCKFORD PUBLIC SCHOOLS ESSER HVAC IMPROVEMENTS

### **APPENDIX A: SCHOOL INFORMATION**

### Project and Building Information for IDPH Notifications

### **Bloom Elementary School:**

IDPH Building ID#	04-101-2050-2017
Building Address	2912 Brendenwood Road
Building Size	Rockford, Illinois 61107 68.631 SF
Age of Building	1952, 1954, 1959
Number of Floors	1+Basement
Owner	Rockford Public Schools - District 205
	501 7 <sup>th</sup> Street, Rockford, Illinois 61104
	Contact: Mr. Guy Carynski
	Environmental Coordinator
	Phone: 1-815-490-4106
Project Designer	Rod Harvey, CIH, CSP 100-1548
Project Manager	To be determined. Contact CCA at time of notification.
Air Sampling Professional	To be determined. Contact CCA at time of notification.
Building Inspector ID#	Mr. Evan Christian IDPH# 100-19466
Name of Analytical Lab	STAT Analysis Corp.

#### **Guilford High School:**

IDPH Building ID# Building Address	04-101-2050-0003 5620 Spring Creek
Duliding Address	Rockford, Illinois 61111
Building Size	198,618 SF
Age of Building	Approx 1970
Number of Floors	1+ Basement
Owner	Rockford Public Schools - District 205
	501 7 <sup>th</sup> Street, Rockford, Illinois 61104
	Contact: Mr. Guy Carynski
	Environmental Coordinator
	Phone: 1-815-490-4106
Project Designer	Rod Harvey, CIH, CSP 100-1548
Project Manager	To be determined. Contact CCA at time of notification.
Air Sampling Professional	To be determined. Contact CCA at time of notification.
Building Inspector ID#	Mr. Evan Christian IDPH# 100-19466
Name of Analytical Lab	STAT Analysis Corp.



### **ASBESTOS ABATEMENT**

### ROCKFORD PUBLIC SCHOOLS ESSER HVAC IMPROVEMENTS

### **APPENDIX A: SCHOOL INFORMATION**

### Lathrop Elementary School:

IDPH Building ID# Building Address	04-101-2050-2041 2603 Clover Avenue
Building Size Age of Building	Rockford, Illinois 61102 49,380 SF 1958, 2013
Number of Floors	1
Owner	Rockford Public Schools - District 205 501 7 <sup>th</sup> Street, Rockford, Illinois 61104 Contact: Mr. Guy Carynski Environmental Coordinator Phone: 1-815-490-4106
Project Designer	Rod Harvey, CIH, CSP 100-1548
Project Manager Air Sampling Professional Building Inspector ID# Name of Analytical Lab	To be determined. Contact CCA at time of notification. To be determined. Contact CCA at time of notification. Mr. Evan Christian IDPH# 100-19466 STAT Analysis Corp.

### Spring Creek Elementary School:

IDPH Building ID#	04-101-2050-2056
Building Address	5222 Spring Creek Road
	Rockford, Illinois 61114
Building Size	Approx. 60,000 SF
Age of Building	Approx. 1970
Number of Floors	2
Owner	Rockford Public Schools - District 205
	501 7 <sup>th</sup> Street, Rockford, Illinois 61104
	Contact: Mr. Guy Carynski
	Environmental Coordinator
	Phone: 1-815-490-4106
Project Designer	Rod Harvey, CIH, CSP 100-1548
Project Manager	To be determined. Contact CCA at time of notification.
Air Sampling Professional	To be determined. Contact CCA at time of notification.
Building Inspector ID#	Mr. Evan Christian IDPH# 100-19466
Name of Analytical Lab	STAT Analysis Corp.
2	



# **APPENDIX B**

# **ENVIRONMENTAL SCOPE OF WORK DRAWINGS**

Rockford Public Schools Bloom, Guilford, Lathrop, Spring Creek

February 24, 2022



# ASBESTOS ABATEMENT AT BLOOM ELEMENTARY

2912 BRENDENWOOD RD, ROCKFORD, IL 61107

ROCKFORD PUBLIC SCHOOL DISTRICT #205 501 7TH STREET ROCKFORD, ILLINOIS 61104

# ENVIRONMENTAL CONSULTANT

CARNOW CONIBEAR & ASSOCIATES, Ltd.

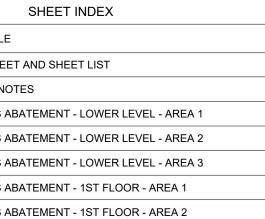
600 WEST VAN BUREN STREET CHICAGO, IL 60607 PHONE: (312) 782-2925 FAX: (312) 782-5145 CONTACT: EVAN CHRISTIAN

SHEET NUMBER	SHEET TITLI
ASB-0	COVER SHE
ASB-G	GENERAL N
ASB-1	ASBESTOS
ASB-2	ASBESTOS
ASB-3	ASBESTOS
ASB-4	ASBESTOS
ASB-5	ASBESTOS

ASBESTOS PROJECT DESIGNER:

ROD HARVEY, P.E., CIH, CSP IDPH LICENSE NUMBER: 100-01548

DRAWING HISTORY			RAWING HISTORY		CLIENT:	PROJECT NAME: Asbestos Abatement		SHEET TITLE:	ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Bloom Element 2912 Brender	-		COVER PAGE
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602	Rockford, Illin	ois 61107		
						PROJECT DESIGNER Prod Har		DESIGNER SIGNATURE	1011
					-	PROJECT DESIGNER Rod Har IDPH #: 100	5	BEDIONER DIONATORE	-). 000-1Fg



Carnow, Conibear & Assoc., Ltd. Environmental Consulting Services 600 W. Van Buren St., Suite 500 Chicago, IL 60607 t: 312.782.4486 f: 312.782.5145 www.ccaltd.com



A139670205

CCA PROJECT NO

PLOT DATE:





### SCOPE OF WORK

# ASBESTOS ABATEMENT:

- 1. Removal and disposal of asbestos-containing acoustical plaster, thermal systems pipe insulation, transite-type ceiling tiles, transite-type unit ventilator panels.
- 2. Alternate 1: General demolition of ceiling tile system from corridors.
- 3. Contractor shall include 500 square feet of non-friable floor tile and mastic removal. Locations to be determined in the field by General Contractor for equipment replacements. Contractor shall include a floor tile and mastic removal square feet unit price.
- 4. Contractor shall include an allowance to remove up to 500 linear feet of pipe insulation within up to 10 mini 8. When a room or location identified on an environmental scope of work sheet, all closets, bathrooms, offices, enclosures that may be discovered in inaccessible/concealed spaces. Contractor shall include a mini-enclosure unit price.
- 5. Work to be conducted per specification section 02131 and applicable IDPH, IEPA, and OSHA rules and regulations.

# SCHEDULE:

- 1. The work is scheduled to begin at upon start of Summer Break 2022.
- 2. Anticipated start date is June 9, 2022. Exact start date to be determined by District and Carnow Conibear. 11. Any existing electrical panels in the work area shall be adequately protected (i.e. "Boxed out.") during
- 3. Phase 1: Base Bid Items (except tunnels) 6/9/22-6/23/22 (15 calendar days)

Phase 2: Tunnel Abatement - TBD

Phase 3: Alternate 1 - Concurrent with Phase 1

\*Abatement Contractor may work all shifts necessary to complete the work by the scheduled completion date. Schedule anticipates contractor working Saturdays and double shifts. Exact dates subject to change, however, phase durations must be met by Contractor.

# **BUILDING INFORMATION**

a.	IDPH Building ID#:	04-101-2050-2017
b.	Building Address:	2912 Brendenwood Road
		Rockford, Illinois 61107
C.	Building Size:	68,631 SF
d.	Age of Building:	1952, 1954, 1959
e.	Number of Floors:	2

e. Number of Floors:

# **GENERAL NOTES**

- 1. Locations shown are approximate only.
- 2. Phasing of the work to be determined by the General Contractor and the Building Owner.
- 3. Worker decontamination enclosure system shall be constructed in strict accordance with IDPH section 855.410. Clean room shall be sized to accommodate the needs of the work crew. Donning and doffing of PPE outside of clean room is strictly prohibited.
- 4. Where non-friable removal methods are utilized (Specification Section 3.11(D)), Contractor shall be responsible for the isolation of the work area(s) with critical seals, signage, and the security of the work areas to eliminate access by unauthorized personnel.

		D	RAWING HISTORY		CLIENT:	PROJECT NAME: Asbestos Abatement Bloom Elementary School 2912 Brendenwood Rd Rockford, Illinois 61107		SHEET TITLE:	ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools				GENERAL NOTES
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602				AREA 1
						PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	T. Co2/14

- completion of all work.
- starting any mitigation/ abatement or O&M clean up in or on any equipment, etc.
- activities.
- storage rooms, etc. are included in the scope of work for that room or location.
- 9. The abatement contractor is responsible for all security to the work area(s) during the environmental additional cost to the property owner.
- 10. Electric/HVAC service shall be disconnected by the District as necessary.
- 12. Contractor shall maintain clear access to building egress points outside of regulated areas.
- Carnow Conibear.
- 15. Contractor Supervisor is required to perform a punch list walk-through with a Carnow Conibear removed, project specifications are met, and any incidental damage is identified.
- damages of \$500/day for dumpsters not removed.

5. HEPA filtered negative air machines shall be set up within the work areas and run continuously through the

6. The abatement contractor is responsible for the lockout and tagout of all mechanical equipment prior to

7. The contractor is responsible for verifying quantities in the field before bidding. Any questions about the scope or clarifications shall be obtained from the Project Designer prior to bidding. Any interpretations of the design documents shall only be made by the Project Designer. The abatement contractor shall be responsible for removing any ACM which will be disturbed during renovation activities, prior to renovation

mitigation/abatement and replacement activities. The abatement contractor shall be responsible for any damages or thefts to property in the work area(s), until the area(s) are returned to the property owner. The abatement contractor shall repair and/or replace damaged or stolen property to the satisfaction of, and at no

Asbestos Abatement activities in accordance with specification 02131 and all applicable regulations.

13. The School District will provide an electrician for the installation of temporary power panels and/or whips and isolation of work areas. The Abatement Contractor is responsible for providing District electrician any power panels and/or whips a minimum of five (5) business days prior to start of work. Coordinate with

14. If abatement of flooring materials is specified, the Abatement Contractor is responsible for the removal of all layers of flooring, associated mastics, and leveling compounds down to the lowest substrate. Unless specified, NO CHEMICAL REMOVAL OF MASTICS shall be utilized. Mechanical removal methods ONLY. representative prior to containment tear-down AND demobilization to ensure all scope items have been

16. Contractor shall remove dumpster from site within two (2) weeks of project completion. District may seek



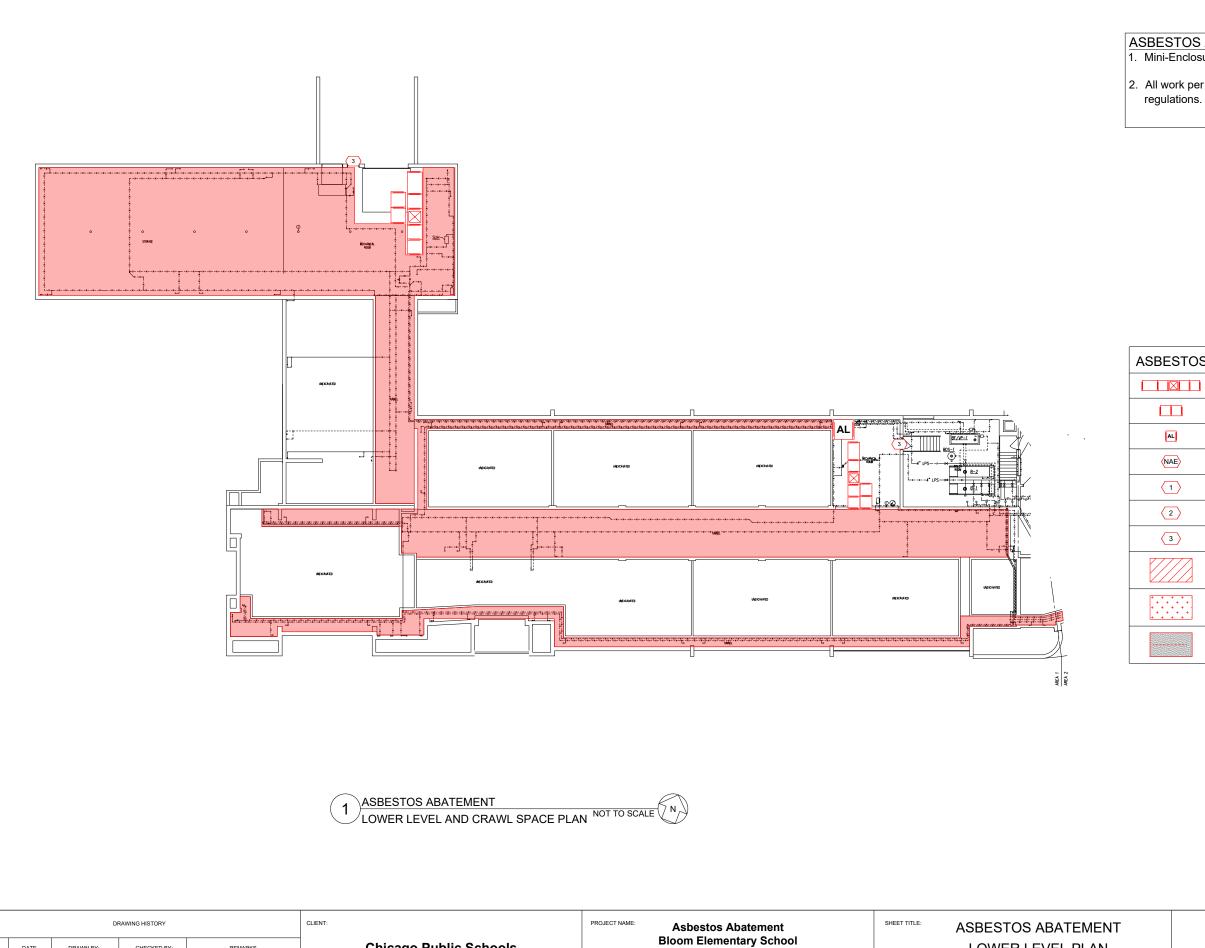


CARNOW

CONÍBEAR

CCA PROJECT NO





		Dł	RAWING HISTORY	
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID

Chicago Public Schools 42 West Madison Street Chicago, Illinois 60602 Bloom Elementary Schoo 2912 Brendenwood Rd Rockford, Illinois 61107

ESIGNER Rod Harvey IDPH #: 100-01548 LOWER LEVEL PLAN AREA 1 DESIGNER SIGNATURE

# ASBESTOS ABATEMENT SCOPE OF WORK:

1. Mini-Enclosure Abatement of Pipe Insulation.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

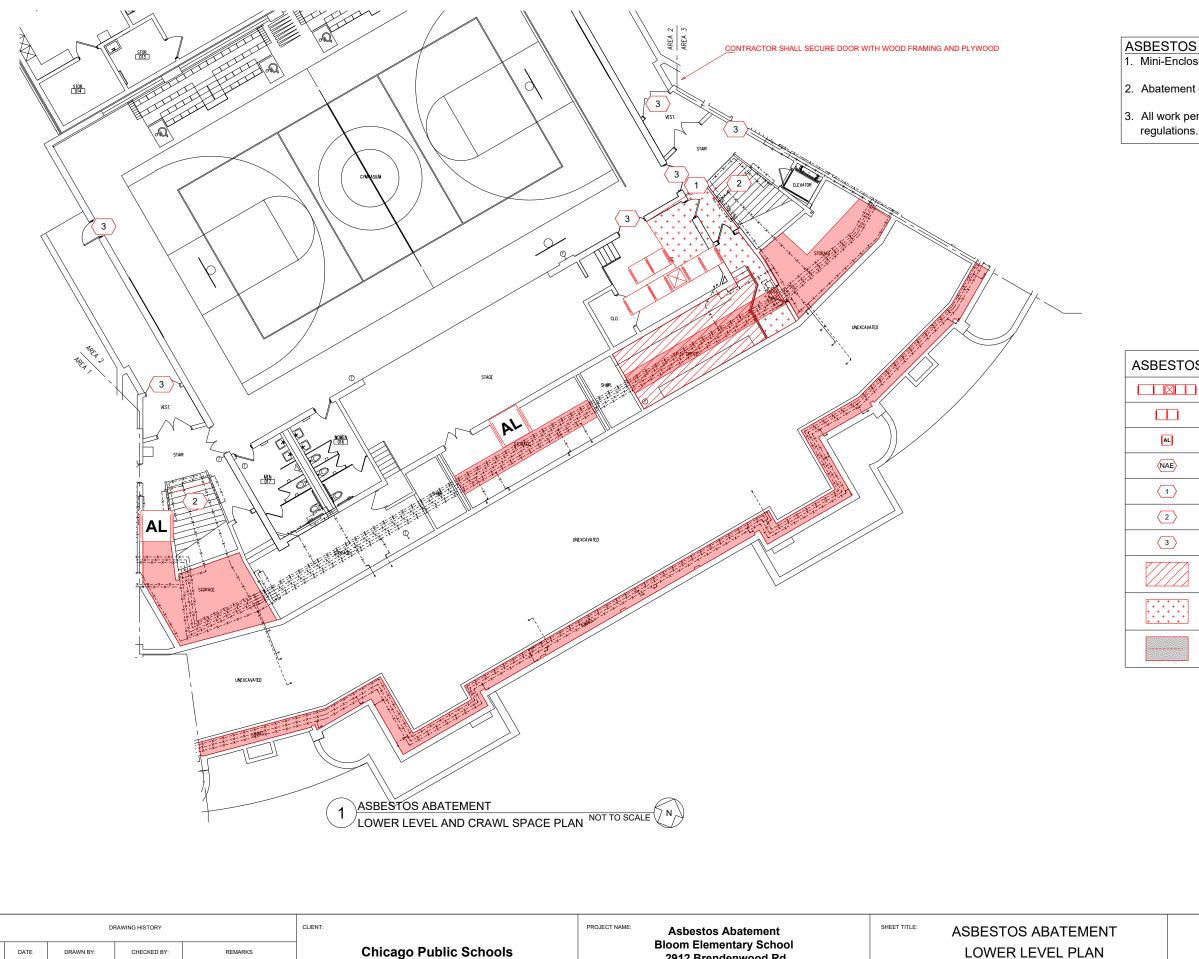
ESTOS	STOS ABATEMENT KEYNOTES					
	Worker decontamination unit.					
	Waste decontamination unit.					
AL	Airlock					
NAE	Negative Air Exhaust					
1	Separation barrier per IDPH 855.430(a)					
2	Separation barrier per IDPH 855.430(b) (with lockable door)					
3	Contractor to secure door and control access					
	Asbestos Abatement Gross Removal Area					
+ + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area					
	Asbestos Abatement Location of Mini-Enclosures and Piping					

Carnow, Conibear & Assoc., Ltd. Environmental Consulting Services 600 W. Van Buren St., Suite 500 Chicago, IL 60607 t: 312.782.4486 f: 312.782.5145 www.ccaltd.com



CCA PROJECT NO.





		5.		
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID

Chicago Public Schools 42 West Madison Street Chicago, Illinois 60602

2912 Brendenwood Rd Rockford, Illinois 61107 PROJECT DESIGNER

Rod Harvey IDPH #: 100-01548

AREA 2 DESIGNER SIGNATURE Col

#### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Mini-Enclosure Abatement of Pipe Insulation.

2. Abatement of Transite Ceiling Tiles.

3. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

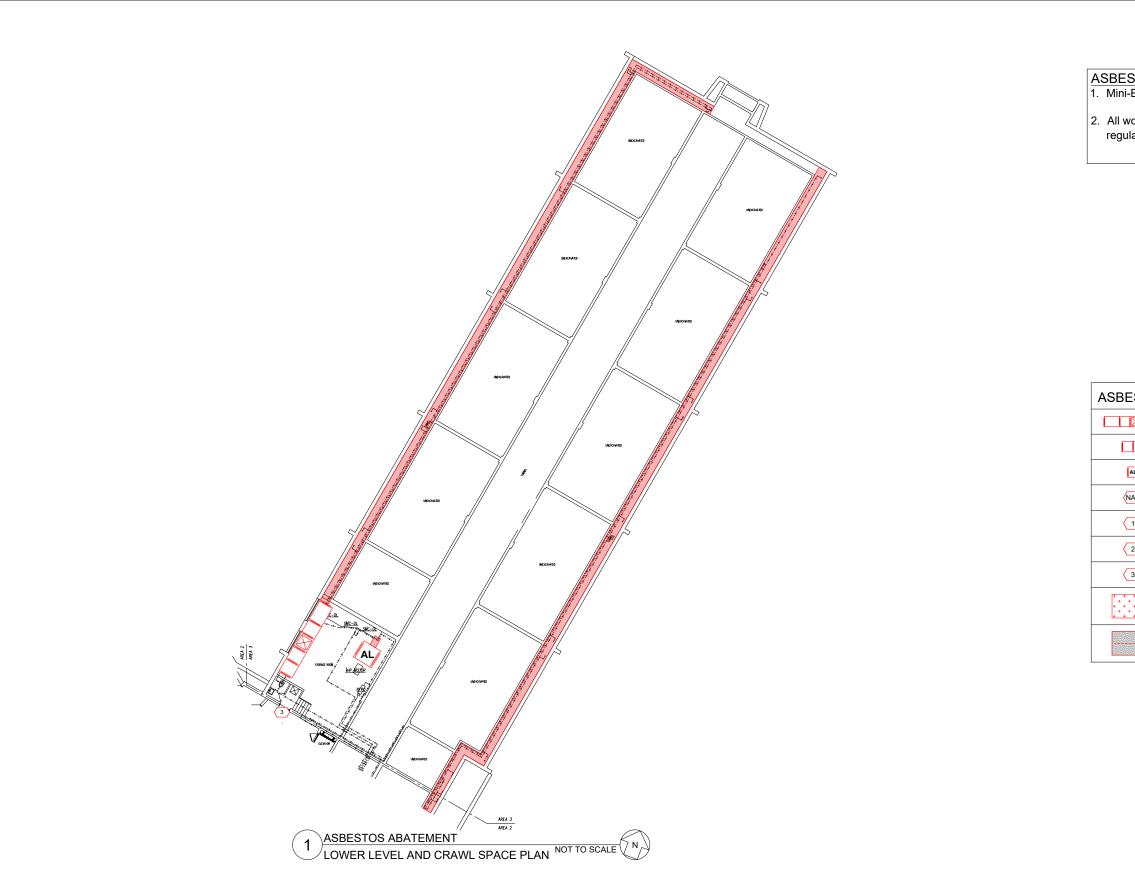
ESTOS	ESTOS ABATEMENT KEYNOTES				
	Worker decontamination unit.				
	Waste decontamination unit.				
AL	Airlock				
NAE	Negative Air Exhaust				
1	Separation barrier per IDPH 855.430(a)				
2	Separation barrier per IDPH 855.430(b) (with lockable door)				
3	Contractor to secure door and control access				
	Asbestos Abatement of Transite Ceiling Tiles				
+ + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Location of Mini-Enclosures and Piping				

Carnow, Conibear & Assoc., Ltd. Environmental Consulting Services 600 W. Van Buren St., Suite 500 Chicago, IL 60607 t: 312.782.4486 f: 312.782.5145 www.ccaltd.com



CCA PROJECT NO.





	DRAWING HISTORY				CLIENT:	PROJECT NAME: Asbestos Abatement	SHEET TITLE:	ASBESTOS ABATEMENT
NC	). DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Bloom Elementary School 2912 Brendenwood Rd		LOWER LEVEL PLAN
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602	Rockford, Illinois 61107		AREA 3
						PROJECT DESIGNER Rod Harvey	DESIGNER SIGNATURE	1000/14
						IDPH #: 100-01548		1. 000-11-0

1. Mini-Enclosure Abatement of Pipe Insulation.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

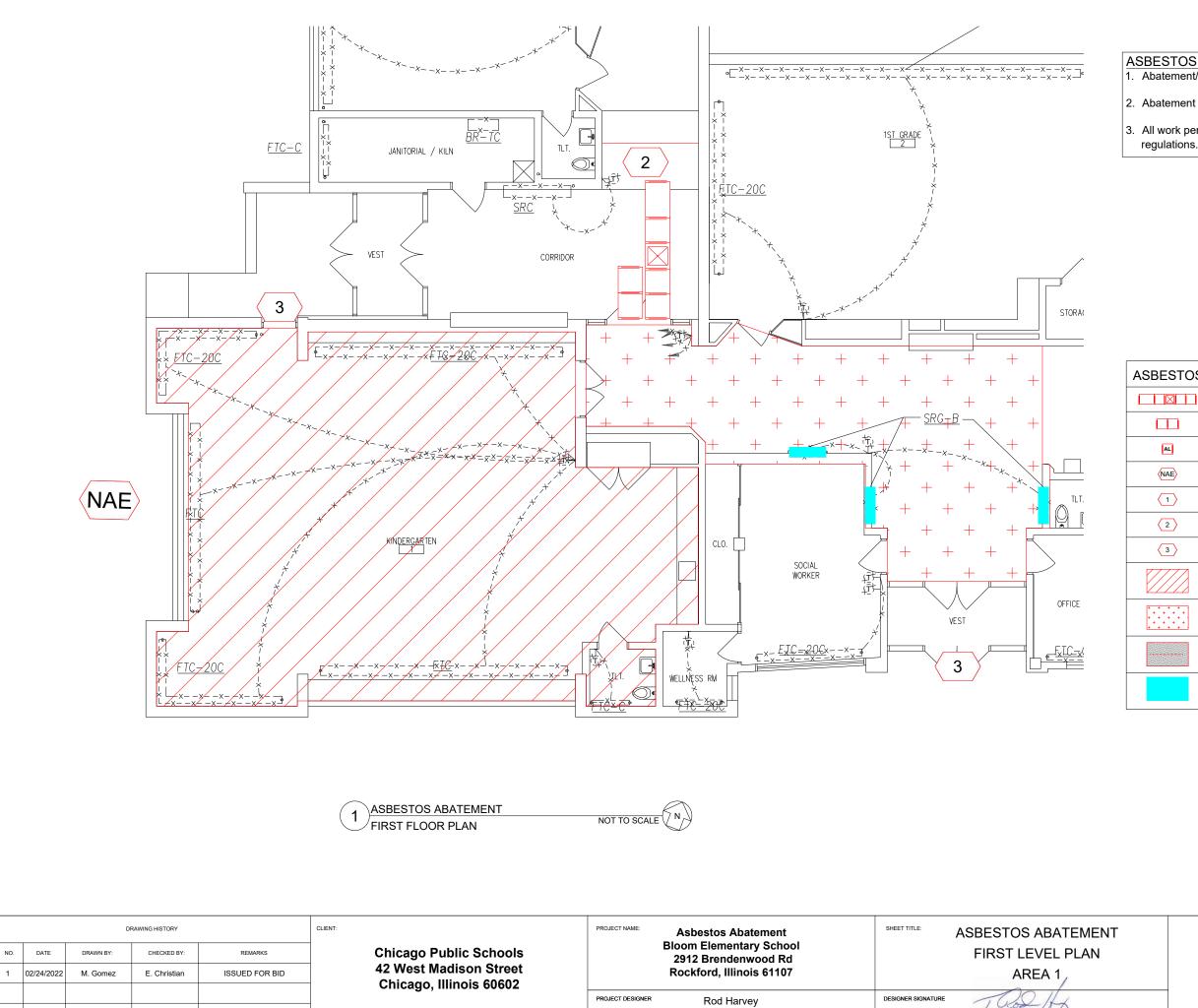
ESTOS ABATEMENT KEYNOTES					
	Worker decontamination unit.				
	Waste decontamination unit.				
AL	Airlock				
NAE	Negative Air Exhaust				
1	Separation barrier per IDPH 855.430(a)				
2	Separation barrier per IDPH 855.430(b) (with lockable door)				
3	Contractor to secure door and control access				
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Location of Mini-Enclosures and Piping				





SHEET NO.





IDPH #: 100-01548

#### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Abatement/Demolition of Plaster Ceiling System.

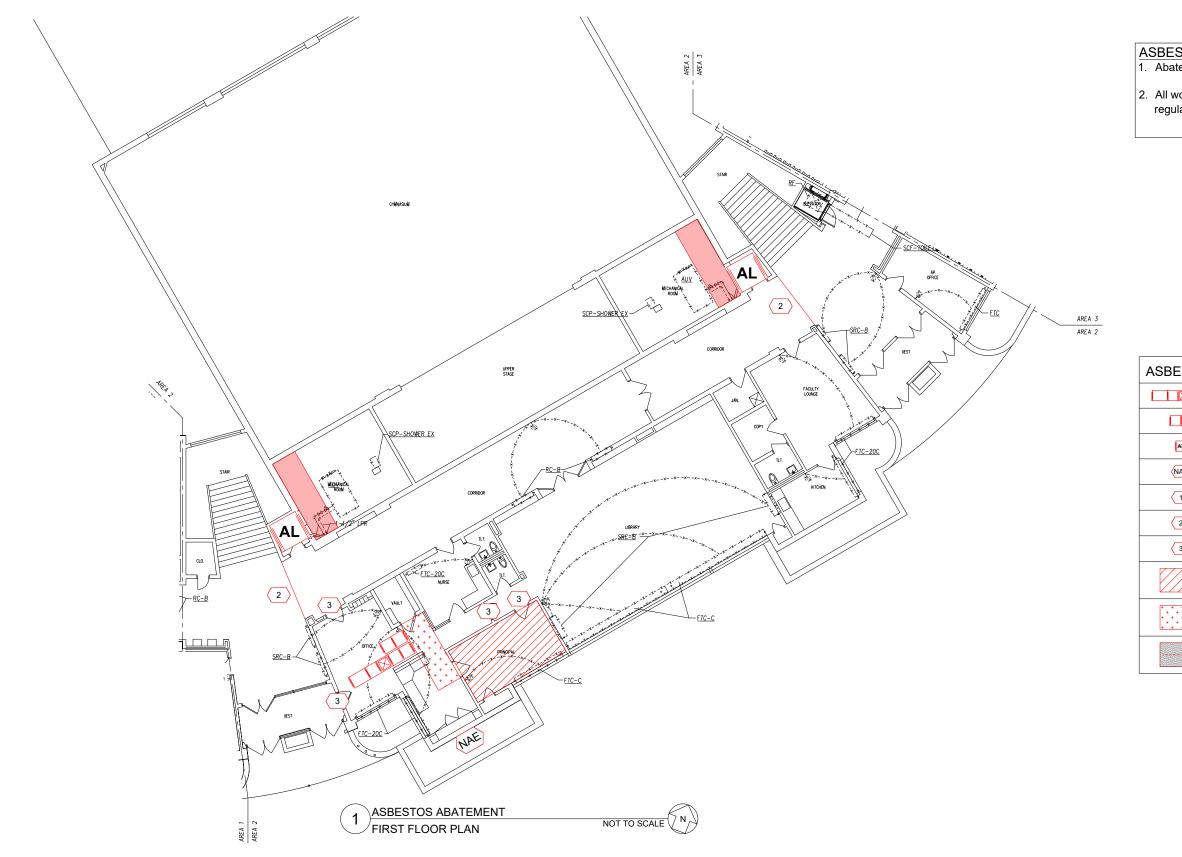
2. Abatement of Transite Panels in Unit Ventilators as necessary to access panels.

3. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

ESTOS ABATEMENT KEYNOTES					
	Worker decontamination unit.				
	Waste decontamination unit.				
AL	Airlock				
NAE	Negative Air Exhaust				
1	Separation barrier per IDPH 855.430(a)				
2	Separation barrier per IDPH 855.430(b) (with lockable door)				
3	Contractor to secure door and control access				
	Abatement/Demolition of Plaster Ceiling System				
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Location of Mini-Enclosures and Piping				
	Abatement of Transite Panels in Unit Ventilators				



CCA PROJECT NO.



	DRAWING HISTORY				PROJECT NAME: Asbestos Abatement		SHEET TITLE: ASBESTOS ABATEMENT
1	NO. DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Bloom Elementary School 2912 Brendenwood Rd	FIRST LEVEL PLAN
	1 02/24/202	2 M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602	Rockford, Illinois 61107	AREA 2
						PROJECT DESIGNER Rod Harvey	DESIGNER SIGNATURE
					1	IDPH #: 100-01548	1. 000-11-7

#### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Abatement/Demolition of Plaster Ceiling System.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

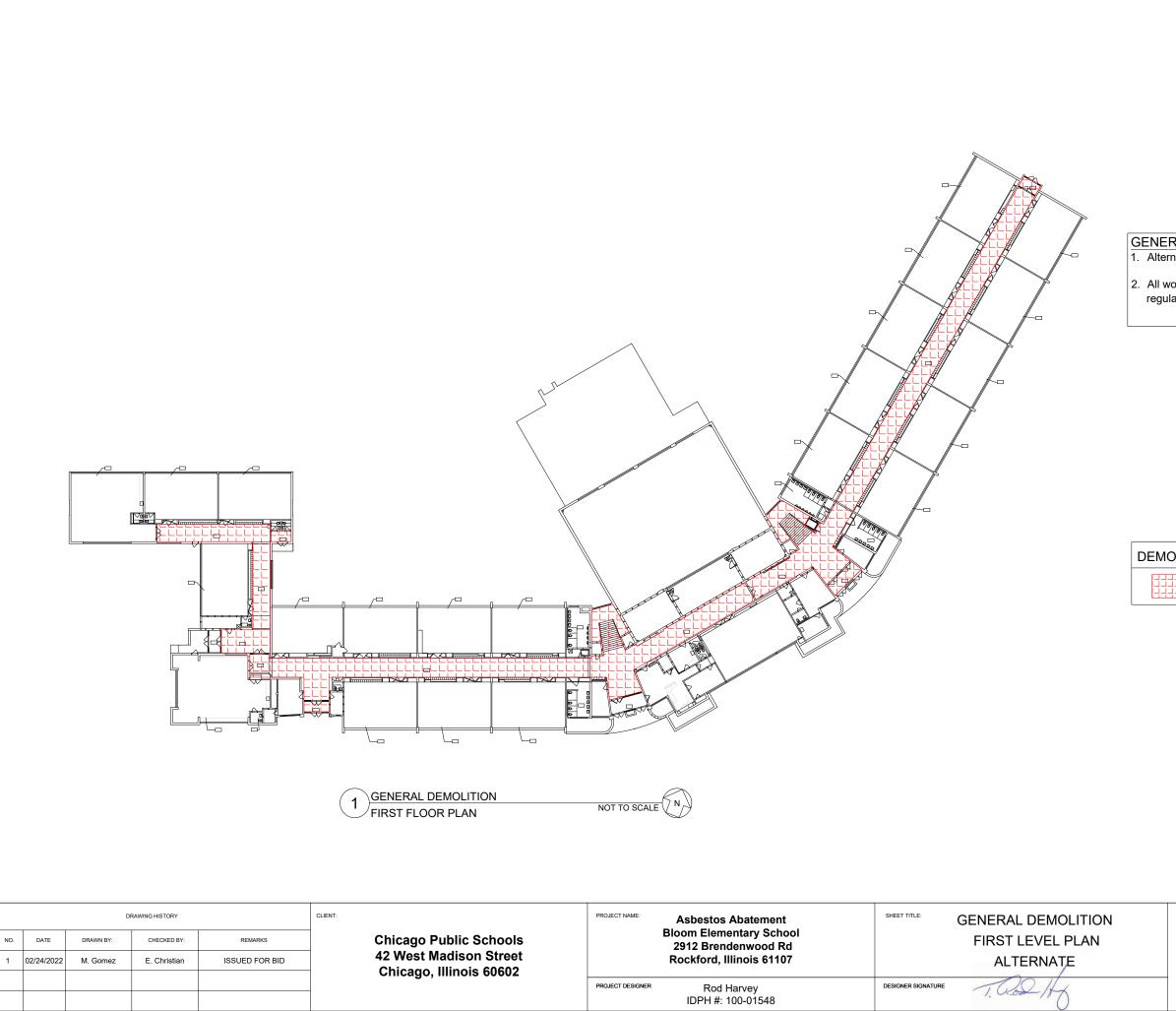
ESTOS	ESTOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
AL	Airlock						
NAE	Negative Air Exhaust						
1	Separation barrier per IDPH 855.430(a)						
2	Separation barrier per IDPH 855.430(b) (with lockable door)						
3	Contractor to secure door and control access						
	Asbestos/Demolition of Plaster Ceiling System						
+ + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area						
	Asbestos Abatement Location of Mini-Enclosures and Piping						

Carnow, Conibear & Assoc., Ltd. Environmental Consulting Services 600 W. Van Buren St., Suite 500 Chicago, IL 60607 t: 312.782.4486 f: 312.782.5145 www.ccaltd.com **CARNOW CONIBEAR** 









### GENERAL DEMOLITION SCOPE OF WORK: 1. Alternate 1: General Demolition of Ceiling Tile System in Corridors.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

### DEMOLITION KEYNOTES

Location of Ceiling Tile System







# ASBESTOS ABATEMENT AT LATHROP ELEMENTARY SCHOOL

2603 CLOVER AVE, ROCKFORD, IL 61102

ROCKFORD PUBLIC SCHOOL DISTRICT #205 501 7TH STREET ROCKFORD, ILLINOIS 61104

### ENVIRONMENTAL CONSULTANT

CARNOW CONIBEAR & ASSOCIATES, Ltd.

600 WEST VAN BUREN STREET CHICAGO, IL 60607 PHONE: (312) 782-2925 FAX: (312) 782-5145 CONTACT: EVAN CHRISTIAN

	S
SHEET NUMBER	SHEET TITLE
ASB-0	COVER SHEET AN
ASB-G	GENERAL NOTES
ASB-1	ASBESTOS ABATI
ASB-2	ASBESTOS ABATI
ASB-3	ASBESTOS ABATI
<u>.</u>	•

ASBESTOS PROJECT DESIGNER:

ROD HARVEY, P.E., CIH, CSP IDPH LICENSE NUMBER: 100-01548

DRAWING HISTORY					CLIENT:	PROJECT NAME: Asbestos Abatement		SHEET TITLE:	ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools		Lathrop Elementary School 2603 Clover Ave		COVER SHEET
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602		Rockford, Illinois 61102		
					_	PROJECT DESIGNER	Rod Harvey	DESIGNER SIGNATURE	TOPH
							IDPH #: 100-01548		1. 00000000

### SHEET INDEX

ND SHEET LIST

3

EMENT - FIRST LEVEL - AREA 1

EMENT - FIRST LEVEL - AREA 2

TEMENT - FIRST LEVEL - AREA 3





PLOT DATE: February 24, 2022



CARNOW



# SCOPE OF WORK

# **ASBESTOS ABATEMENT:**

- 1. Removal and disposal of asbestos-containing thermal systems pipe insulation.
- 2. Contractor shall include an allowance to remove up to 500 linear feet of pipe insulation within up to 10 mini enclosures that may be discovered in inaccessible/concealed spaces. Contractor shall include a mini-enclosure unit price.
- 3. Work to be conducted per specification section 02131 and applicable IDPH, IEPA, and OSHA rules and regulations.

# SCHEDULE:

- 1. The work is scheduled to begin at upon start of Summer Break 2022.
- 2. Anticipated start date is June 9, 2022. Exact start date to be determined by District and Carnow Conibear.
- 3. Work shall be completed in no more than 3 weeks.

\*Abatement Contractor may work all shifts necessary to complete the work by the scheduled completion date. Schedule anticipates contractor working Saturdays and double shifts. Exact dates subject to change, however, phase durations must be met by Contractor.

# **BUILDING INFORMATION**

a. IDPH Building ID#: 04-101-2050-2041

b. Building Address:

- c. Building Size:
- d. Age of Building:
- e. Number of Floors:

2603 Clover Avenue Rockford, Illinois 61102 49,380 SF 1958, 2013 1

# **GENERAL NOTES**

- 1. Locations shown are approximate only.
- 2. Phasing of the work to be determined by the General Contractor and the Building Owner.
- 3. Worker decontamination enclosure system shall be constructed in strict accordance with IDPH section 855.410. Clean room shall be sized to accommodate the needs of the work crew. Donning and doffing of PPE outside of clean room is strictly prohibited.
- 4. Where non-friable removal methods are utilized (Specification Section 3.11(D)), Contractor shall be responsible for the isolation of the work area(s) with critical seals, signage, and the security of the work areas to eliminate access by unauthorized personnel.

- 5. HEPA filtered negative air machines shall be set up within the work areas and run continuously through the completion of all work.
- 6. The abatement contractor is responsible for the lockout and tagout of all mechanical equipment prior to starting any mitigation/ abatement or O&M clean up in or on any equipment, etc.
- 7. The contractor is responsible for verifying quantities in the field before bidding. Any be disturbed during renovation activities, prior to renovation activities.
- 8. When a room or location identified on an environmental scope of work sheet, all closets, bathrooms, offices, storage rooms, etc. are included in the scope of work for that room or location.
- 9. The abatement contractor is responsible for all security to the work area(s) during the shall be responsible for any damages or thefts to property in the work area(s), until the area(s) are returned to the property owner. The abatement contractor shall repair and/or replace damaged or stolen property to the satisfaction of, and at no additional cost to the property owner.
- 10. Electric/HVAC service shall be disconnected by the District as necessary.
- 11. Any existing electrical panels in the work area shall be adequately protected (i.e. "Boxed applicable regulations.
- 12. Contractor shall maintain clear access to building egress points outside of regulated areas.
- and/or whips and isolation of work areas. The Abatement Contractor is responsible for days prior to start of work. Coordinate with Carnow Conibear.
- 14. If abatement of flooring materials is specified, the Abatement Contractor is responsible for utilized. Mechanical removal methods ONLY.
- 15. Contractor Supervisor is required to perform a punch list walk-through with a Carnow Conibear representative prior to containment tear-down AND demobilization to ensure all is identified.
- 16. Contractor shall remove dumpster from site within two (2) weeks of project completion. District may seek damages of \$500/day for dumpsters not removed.

DRAWING HISTORY					CLIENT:	PROJECT NAME: Asbestos Abatement	SHEET TITLE: ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Lathrop Elementary School 2603 Clover Ave	GENERAL NOTES
1	02/24/2022	M. Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602	Rockford, Illinois 61102	
						PROJECT DESIGNER Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE

questions about the scope or clarifications shall be obtained from the Project Designer prior to bidding. Any interpretations of the design documents shall only be made by the Project Designer. The abatement contractor shall be responsible for removing any ACM which will

environmental mitigation/abatement and replacement activities. The abatement contractor

out.") during Asbestos Abatement activities in accordance with specification 02131 and all

13. The School District will provide an electrician for the installation of temporary power panels providing District electrician any power panels and/or whips a minimum of five (5) business

the removal of all layers of flooring, associated mastics, and leveling compounds down to the lowest substrate. Unless specified, NO CHEMICAL REMOVAL OF MASTICS shall be

scope items have been removed, project specifications are met, and any incidental damage



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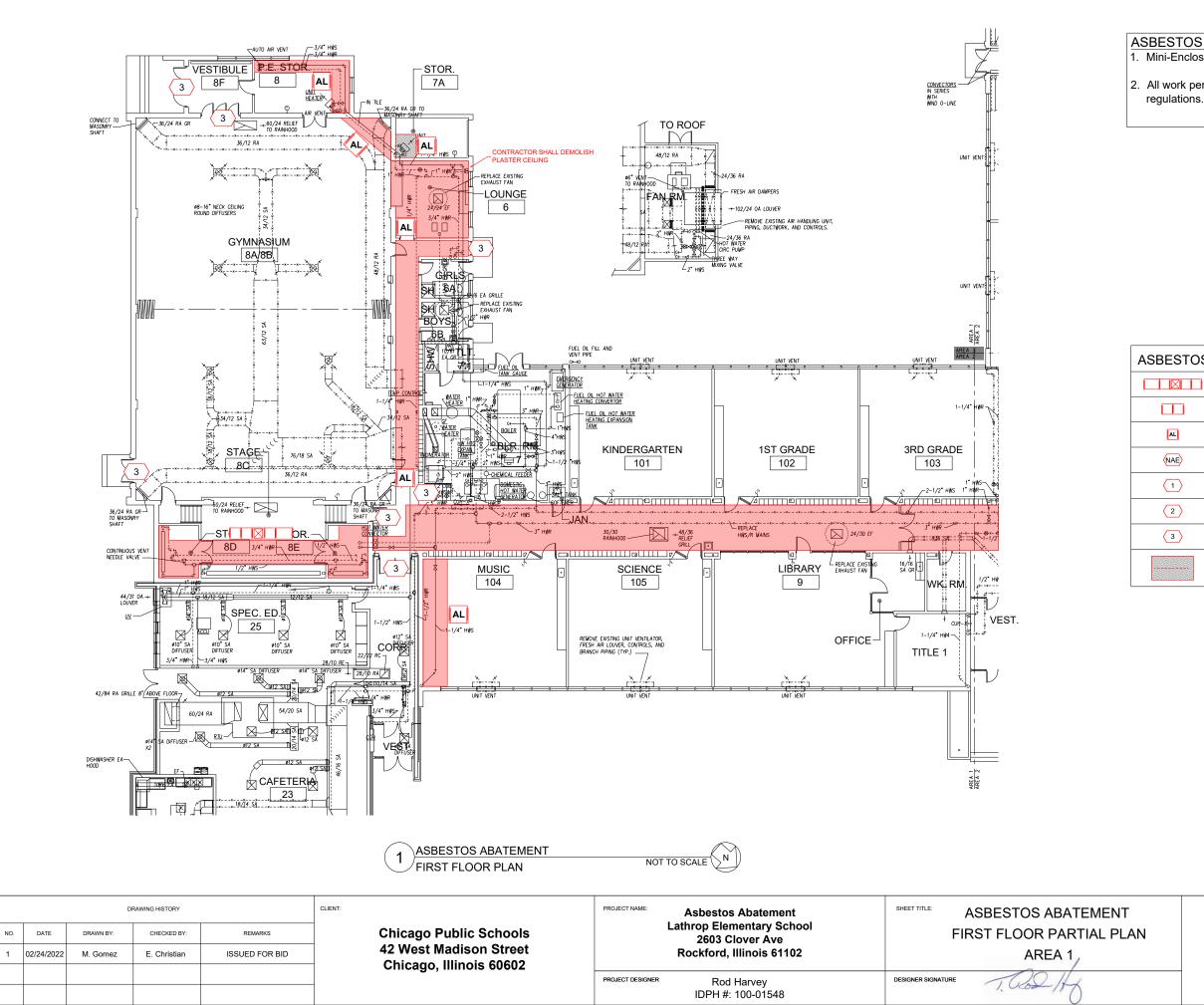
February 24, 2022

CCA PROJECT NO

PLOT DATE

CARNOW

CONÍBEAR



NO.

### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Mini-Enclosure Abatement of Pipe Insulation.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

STOS	STOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
	Airlock						
Æ	Negative Air Exhaust						
$\supset$	Separation barrier per IDPH 855.430(a)						
$\mathbf{D}$	Separation barrier per IDPH 855.430(b) (with lockable door)						
$\supset$	Contractor to secure door and control access						
	Asbestos Abatement Location of Mini-Enclosures and Piping						





CCA PROJECT NO.

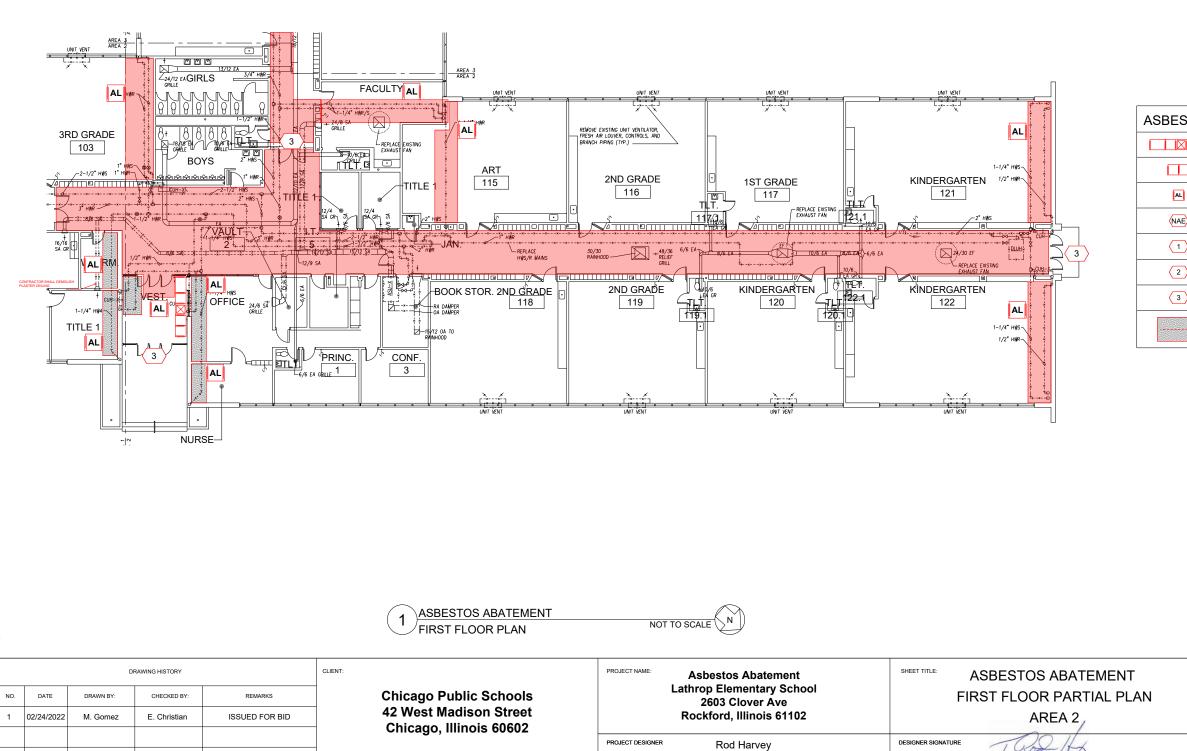
CARNOW

CONIBEAR





2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.



IDPH #: 100-01548

### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Mini-Enclosure Abatement of Pipe Insulation.

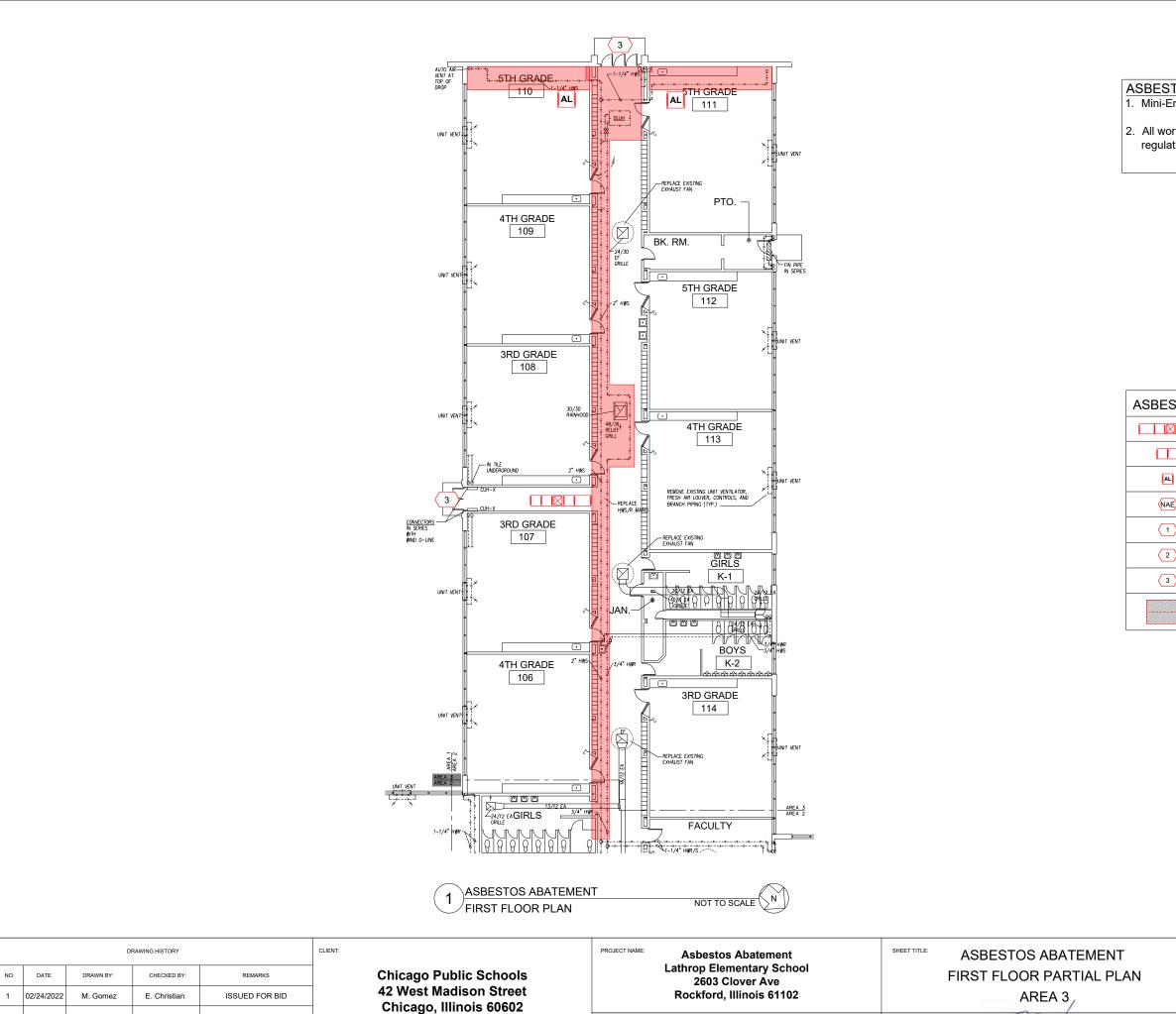
STOS	STOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
	Airlock						
Æ	Negative Air Exhaust						
$\supset$	Separation barrier per IDPH 855.430(a)						
$\mathbf{D}$	Separation barrier per IDPH 855.430(b) (with lockable door)						
$\supset$	Contractor to secure door and control access						
	Asbestos Abatement Location of Mini-Enclosures and Piping						





CCA PROJECT NO.





Street 0602		Rockford, Illinois 611
	PROJECT DESIGNER	Rod Harvey
		IDPH #: 100-01548

NO.

DESIGNER SIGNATURE Cod It

### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Mini-Enclosure Abatement of Pipe Insulation.

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

STOS	STOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
	Airlock						
Æ	Negative Air Exhaust						
$\supset$	Separation barrier per IDPH 855.430(a)						
$\mathbf{D}$	Separation barrier per IDPH 855.430(b) (with lockable door)						
$\supset$	Contractor to secure door and control access						
	Asbestos Abatement Location of Mini-Enclosures and Piping						





CCA PROJECT NO.



# ASBESTOS ABATEMENT AT SPRING CREEK ELEMENTARY SCHOOL

5222 SPRING CREEK RD., ROCKFORD, IL 61114 ROCKFORD PUBLIC SCHOOL DISTRICT #205 501 7TH STREET ROCKFORD, ILLINOIS 61104

# ENVIRONMENTAL CONSULTANT

# CARNOW CONIBEAR & ASSOCIATES, Ltd.

600 WEST VAN BUREN STREET CHICAGO, IL 60607 PHONE: (312) 782-2925 FAX: (312) 782-5145 CONTACT: EVAN CHRISTIAN

SHEET IN
SHEET TITLE
COVER SHEET AND SHEET
GENERAL NOTES
ASBESTOS ABATEMENT - F
ASBESTOS ABATEMENT - S
ASBESTOS ABATEMENT - F
ASBESTOS ABATEMENT - F

ASBESTOS PROJECT DESIGNER:

ROD HARVEY, P.E., CIH, CSP IDPH LICENSE NUMBER: 100-01548

DRAWING HISTORY					CLIENT:	PROJECT NAME:	Asbestos Abatement	SHEET TITLE:	ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Rockford Public Schools		Spring Creek Elementary 5222 Spring Creek Rd.		GENERAL NOTES
1 0:	2/03/2022	A. Rodriguez	E. Christian	OUT TO BID	501 7th Street		Rockford, Illinois 61114		GENERAL NOTES
					Rockford, Illinois 61104	PROJECT DESIGNER	Rod Harvey	DESIGNER SIGNATURE	0011
							IDPH #: 100-01548		1.0002/17



T LIST

FIRST FLOOR PARTIAL PLAN

SECOND FLOOR PARTIAL PLAN

FIRST FLOOR PARTIAL PLAN

FIRST FLOOR PARTIAL PLAN





A139670200

CCA PROJECT NO

PLOT DATE:



## SCOPE OF WORK

## **ASBESTOS ABATEMENT:**

- 1. Removal and disposal of asbestos-containing pipe insulation, breeching, and general demolition of ceilings as needed to access piping.
- 2. Removal and disposal of exterior door caulks/sealants.
- Alternate 1: General demolition of ceiling systems as indicated in scope of work drawings.
- 4. Contractor shall include 500 square feet of non-friable floor tile and mastic removal. Locations to be determined in the field by General Contractor for equipment replacements. Contractor shall include a floor tile and mastic removal square feet unit price.
- 5. Contractor shall include an allowance to remove up to 500 linear feet of pipe insulation within up to 10 mini enclosures that may be discovered in inaccessible/concealed spaces. Contractor shall 9. include a mini-enclosure unit price.
- 6. Work to be conducted per specification section 02131 and applicable IDPH, IEPA, and OSHA rules and regulations.

## SCHEDULE:

- 1. The work is scheduled to begin at upon start of Summer Break 2022.
- 2. Anticipated start date is June 9, 2022. Exact start date to be determined by District and Carnow Conibear.
- 3. Work shall be completed in no more than 3 weeks.

\*Abatement Contractor may work all shifts necessary to complete the work by the scheduled completion date. Schedule anticipates contractor working Saturdays and double shifts. Exact dates subject to change, however, phase durations must be met by Contractor.

# **BUILDING INFORMATION**

a. IDPH Building ID#: 04-101-2050-2056

b. Building Address: 5222 Spring Creek Road

- Rockford, Illinois 61114
- c. Building Size: d. Age of Building:
- Approx. 60,000 SF 1970
- e. Number of Floors: 2

# **GENERAL NOTES**

- 1. Locations shown are approximate only.
- 2. Phasing of the work to be determined by the General Contractor and the Building Owner.
- Worker decontamination enclosure system shall be constructed in strict accordance with IDPH section 855.410. Clean room shall be sized to accommodate the needs of the work crew. Donning and doffing of PPE outside of clean room is strictly prohibited.
- 4. Where non-friable removal methods are utilized (Specification Section 3.11(D)), Contractor shall be responsible for the isolation of the work area(s) with critical seals, signage, and the security of the work areas to eliminate access by unauthorized personnel.

- 5. HEPA filtered negative air machines shall be set up within the work areas and run continuously through the completion of all work.
  - 6. The abatement contractor is responsible for the lockout and tagout of all mechanical equipment prior to starting any mitigation/ abatement or O&M clean up in or on any equipment, etc.
  - 7. The contractor is responsible for verifying quantities in the field before bidding. Any questions about the scope or clarifications shall be obtained from the Project Designer prior to bidding. Any interpretations of the design documents shall only be made by the Project Designer. The abatement contractor shall be responsible for removing any ACM which will be disturbed during renovation activities, prior to renovation activities.
  - 8. When a room or location identified on an environmental scope of work sheet, all closets, bathrooms, offices, storage rooms, etc. are included in the scope of work for that room or location.
  - The abatement contractor is responsible for all security to the work area(s) during the environmental mitigation/abatement and replacement activities. The abatement contractor shall be responsible for any damages or thefts to property in the work area(s), until the area(s) are returned to the property owner. The abatement contractor shall repair and/or replace damaged or stolen property to the satisfaction of, and at no additional cost to the property owner.
  - 10. Electric/HVAC service shall be disconnected by the District as necessary.
  - 11. Any existing electrical panels in the work area shall be adequately protected (i.e. "Boxed out.") during Asbestos Abatement activities in accordance with specification 02131 and all applicable regulations.
  - 12. Contractor shall maintain clear access to building egress points outside of regulated areas.
  - 13. The School District will provide an electrician for the installation of temporary power panels and/or whips and isolation of work areas. The Abatement Contractor is responsible for providing District electrician any power panels and/or whips a minimum of five (5) business days prior to start of work. Coordinate with Carnow Conibear.
  - 14. If abatement of flooring materials is specified, the Abatement Contractor is responsible for the removal of all layers of flooring, associated mastics, and leveling compounds down to the lowest substrate. Unless specified, NO CHEMICAL REMOVAL OF MASTICS shall be utilized. Mechanical removal methods ONLY.
  - 15. Contractor Supervisor is required to perform a punch list walk-through with a Carnow Conibear representative prior to containment tear-down AND demobilization to ensure all scope items have been removed, project specifications are met, and any incidental damage is identified.
  - 16. Contractor shall remove dumpster from site within two (2) weeks of project completion. District may seek damages of \$500/day for dumpsters not removed.

DRAWING HISTORY					CLIENT:	PROJECT NAME:	Asbestos Abatement	SHEET TITLE:	ASBESTOS ABATEMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Rockford Public Schools		Spring Creek Elementary 5222 Spring Creek Rd.	,	GENERAL NOTES
1	01/25/2022	M. Gomez	E. Christian	OUT TO BID	501 7th Street Rockford, Illinois 61104		Rockford, Illinois 61114		GENERAL NOTES
						PROJECT DESIGNER	Dedllamen	DESIGNER SIGNATURE	101
					-		Rod Harvey IDPH #: 100-01548		-1. 000×17



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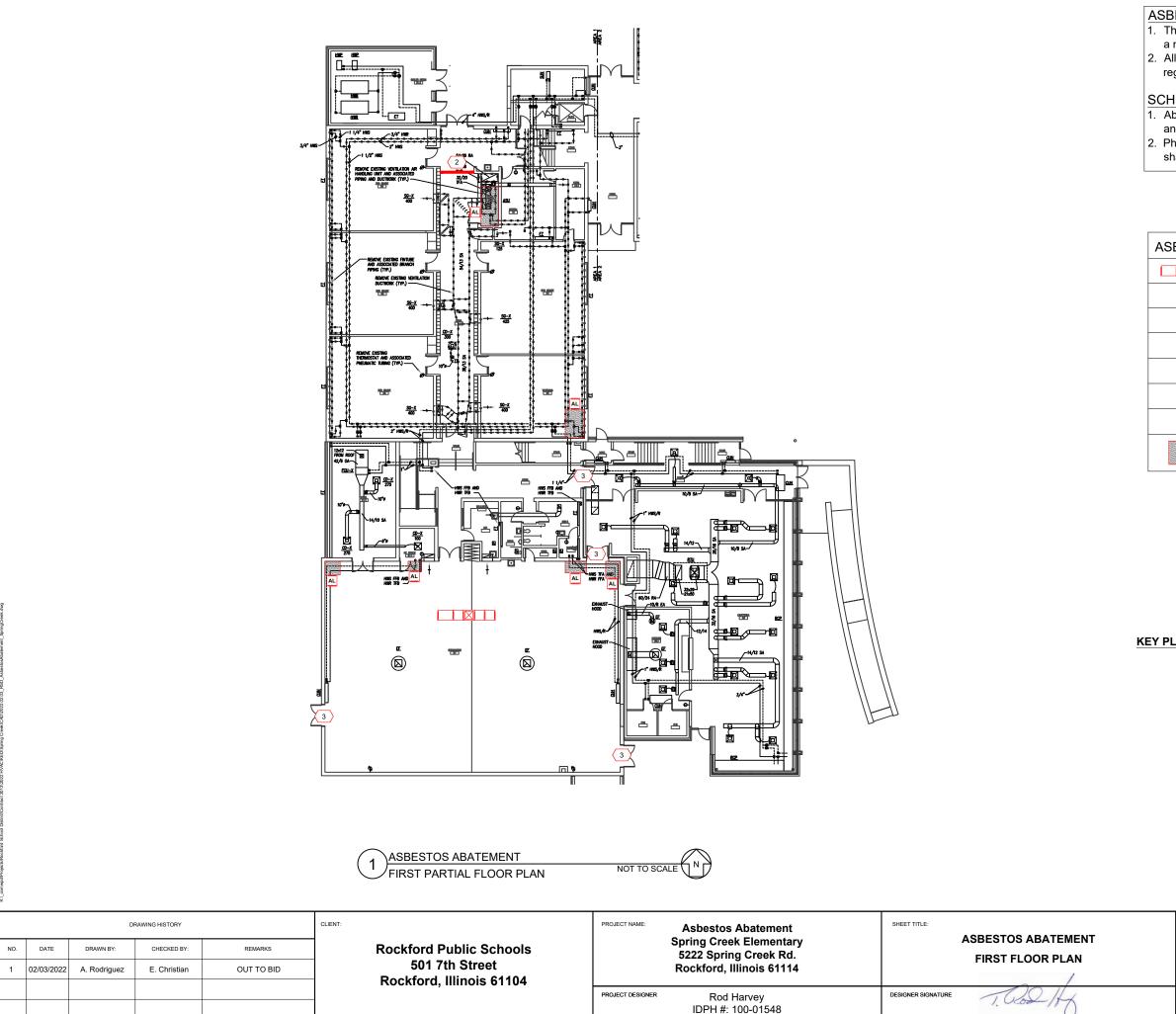
February 24, 2022

CCA PROJECT NO

PLOT DATE

CARNOW

CONÍBEAR



1. The scope of work includes the glovebag removal of thermal pipe insulation within a mini-enclosure work area.

2. All work per specification section 02131 and all applicable IDPH, IEPA, and OSHA regulations

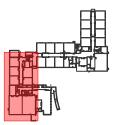
### SCHEDULE:

1. Abatement Work shall be closely coordinated with the Owner, Carnow Conibear, and General Contractor

2. Phase I shall begin Summer 2022 Q3 soon as areas are cleared by Owner. Work shall be completed in more than 10 calendar days

BESTOS	BESTOS ABATEMENT KEYNOTES					
	Worker decontamination unit.					
	Waste decontamination unit.					
AL	One Chamber Air Lock					
NAE	Negative Air Exhaust					
(1)	Separation barrier per IDPH 855.430(a)					
2	Separation barrier per IDPH 855.430(b) (with lockable door)					
3	Contractor to secure door and control access					
	Asbestos Abatement of pipe insulation in mini-enclosure					

### KEY PLAN - FIRST FLOOR:



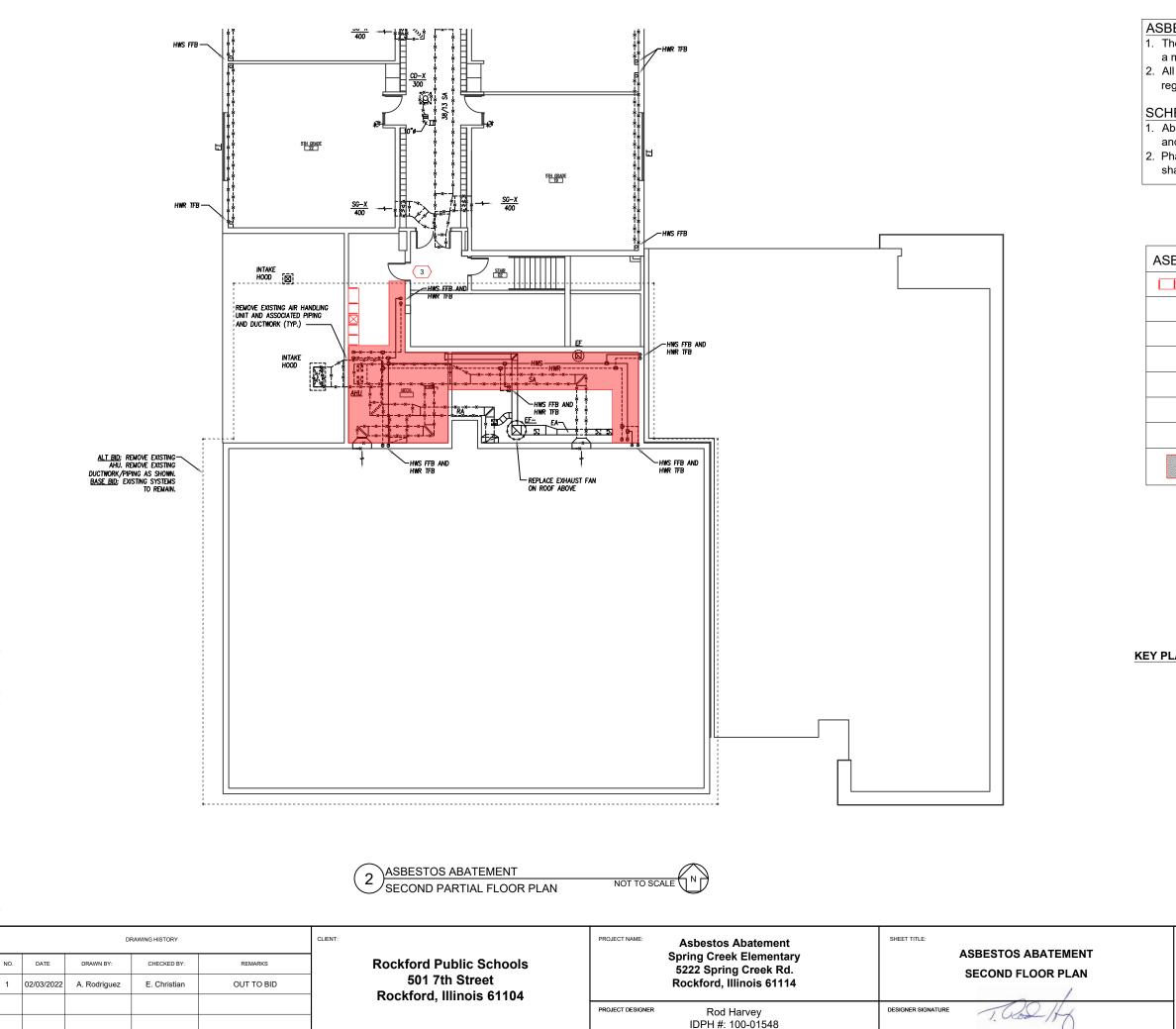




PLOT DATE: February 24, 2022

SHEET NO.





1. The scope of work includes the glovebag removal of thermal pipe insulation within a mini-enclosure work area.

2. All work per specification section 02131 and all applicable IDPH, IEPA, and OSHA regulations

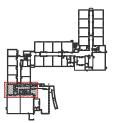
### SCHEDULE:

1. Abatement Work shall be closely coordinated with the Owner, Carnow Conibear, and General Contractor

2. Phase I shall begin Summer 2022 Q3 soon as areas are cleared by Owner. Work shall be completed in more than 10 calendar days

BESTOS	BESTOS ABATEMENT KEYNOTES					
	Worker decontamination unit.					
	Waste decontamination unit.					
AL	One Chamber Air Lock					
NAE	Negative Air Exhaust					
1	Separation barrier per IDPH 855.430(a)					
2	Separation barrier per IDPH 855.430(b) (with lockable door)					
3	Contractor to secure door and control access					
	Asbestos Abatement of pipe insulation in a mini-enclosure					

### KEY PLAN - SECOND FLOOR:

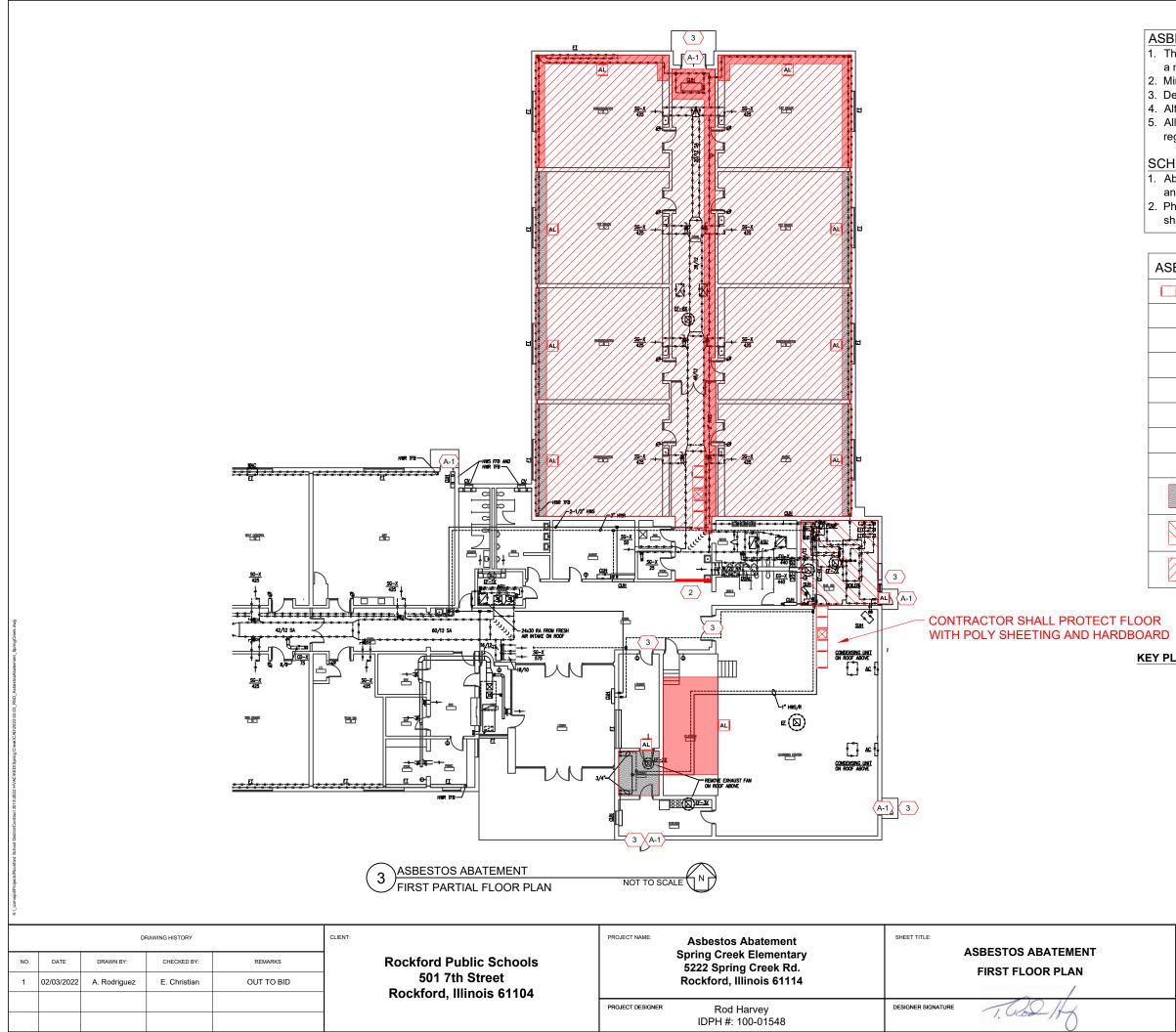






February 24, 2022 SHEET NO.





1. The scope of work includes the glovebag removal of thermal pipe insulation within a mini-enclosure work area.

Mini-enclosure abatement of pipe insulation and boiler breeching in boiler room.
 Demolition of spline and suspended ceiling system as needed to access piping.
 Alternate #1: Gross removal of entire spline and suspended ceiling system.
 All work per specification section 02131 and all applicable IDPH, IEPA, and OSHA regulations

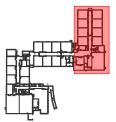
### SCHEDULE:

1. Abatement Work shall be closely coordinated with the Owner, Carnow Conibear, and General Contractor

2. Phase I shall begin Summer 2022 Q3 soon as areas are cleared by Owner. Work shall be completed in more than 10 calendar days

BESTOS	BESTOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
AL	One Chamber Air Lock						
NAE	Negative Air Exhaust						
(1)	Separation barrier per IDPH 855.430(a)						
2	Separation barrier per IDPH 855.430(b) (with lockable door)						
3	Contractor to secure door and control access						
(A-1)	Removal of Exterior Door Caulks						
	Asbestos Abatement of pipe insulation in a mini-enclosure and demolition of spline ceiling as neccessary						
	Asbestos Abatement of pipe insulation and boiler breeching						
	Alternate Bid #1: Demolition of spline ceiling in classrooms and plaster ceiling in corridor						

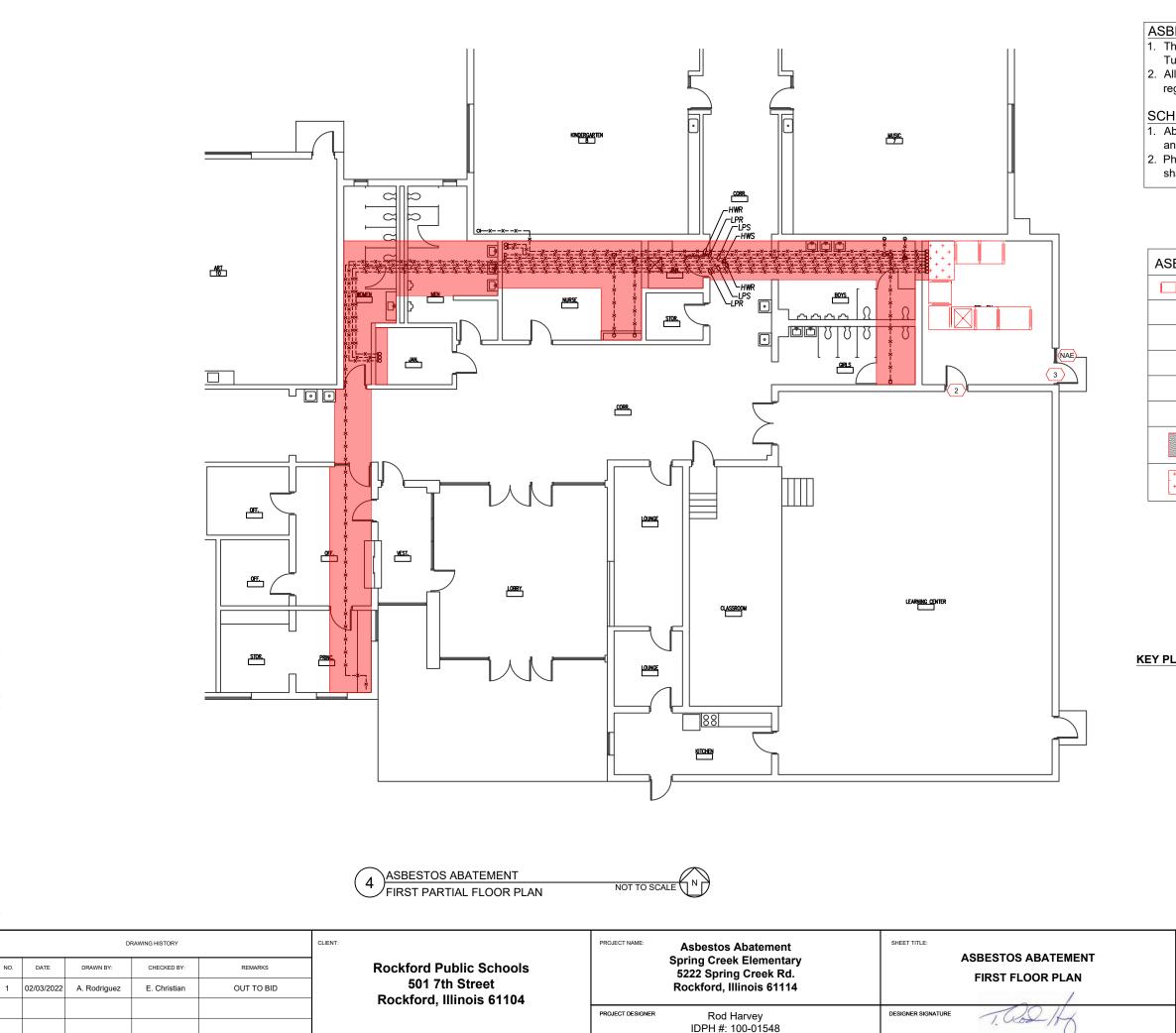
### KEY PLAN - FIRST FLOOR:





CCA PROJECT NO





1. The scope of work includes the glovebag removal of thermal pipe insulation from Tunnel.

2. All work per specification section 02131 and all applicable IDPH, IEPA, and OSHA regulations

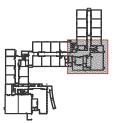
### SCHEDULE:

1. Abatement Work shall be closely coordinated with the Owner, Carnow Conibear, and General Contractor

2. Phase I shall begin Summer 2022 Q3 soon as areas are cleared by Owner. Work shall be completed in more than 10 calendar days

BESTOS	BESTOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
NAE	Negative Air Exhaust						
1	Separation barrier per IDPH 855.430(a)						
2	Separation barrier per IDPH 855.430(b) (with lockable door)						
3	Contractor to secure door and control access						
	Asbestos Abatement of pipe insulation from Tunnel						
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area						

### KEY PLAN - FIRST FLOOR:







February 24, 2022



# ASBESTOS ABATEMENT AT **GUILFORD HIGH SCHOOL** 5620 Spring Creek Road, ROCKFORD, IL 61114

**ROCKFORD PUBLIC SCHOOL DISTRICT #205** 501 7TH STREET ROCKFORD, ILLINOIS 61104

## ENVIRONMENTAL CONSULTANT

## CARNOW CONIBEAR & ASSOCIATES, Ltd.

600 WEST VAN BUREN STREET CHICAGO, IL 60607 PHONE: (312) 782-2925 FAX: (312) 782-5145 CONTACT: EVAN CHRISTIAN

### ASBESTOS PROJECT DESIGNER:

ROD HARVEY, P.E., CIH, CSP **IDPH LICENSE NUMBER: 100-01548** 

SH	
SHEET TITLE	SHEET NUMBER
COVER SHEET AND	ASB-0
GENERAL NOTES	ASB-G
ASBESTOS ABATE	ASB-1
ASBESTOS ABATE	ASB-1.1
ASBESTOS ABATE	ASB-1.2
ASBESTOS ABATE	ASB-1.3
ASBESTOS ABATE	ASB-2
ASBESTOS ABATE	ASB-3
ASBESTOS ABATE	ASB-4
ASBESTOS ABATE	ASB-5
ASBESTOS ABATE	ASB-6
ASBESTOS ABATE	ASB-7
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ASBESTOS ABATE	ASB-10
ASBESTOS ABATE	ASB-11
ASBESTOS ABATE	ASB-11

					Aspestos Abatement					
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools		Guilford High School 5620 Spring Creek Rd		COVER PAGE	
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602		Rockford, Illinois 61114		/	
						PROJECT DESIGNER	Rod Harvey	DESIGNER SIGNATURE	1002/14	
							IDPH #: 100-01548			

HEET INDEX

D SHEET LIST

EMENT - BASEMENT LEVEL - AREA C

EMENT - BASEMENT LEVEL - AREA C

EMENT - FIRST LEVEL - AREA C

EMENT - FIRST LEVEL - AREA C

MENT - FIRST LEVEL - AREA D

EMENT - FIRST LEVEL - AREA E

EMENT - FIRST LEVEL - AREA F

MENT - FIRST LEVEL - AREA G

EMENT - FIRST LEVEL - AREA H

MENT - FIRST LEVEL - AREA I

EMENT - FIRST LEVEL - AREA J

EMENT - SECOND LEVEL - AREA J

EMENT - FIRST LEVEL - AREA K

EMENT - FIRST LEVEL - AREA E

Carnow, Conibear & Assoc., Ltd. Environmental Consulting Services 600 W. Van Buren St., Suite 500 Chicago, IL 60607 t: 312.782.4486 f: 312.782.5145 www.ccaltd.com CCA PROJECT NO A132560164 PLOT DATE

February 24, 2022

SHEET NO

CARNOW CONIBEAR



### SCOPE OF WORK

## **ASBESTOS ABATEMENT:**

- 1. Removal and disposal of asbestos-containing thermal systems pipe insulation.
- 2. Removal and disposal of fiberglass duct insulation and associated asbestos-containing adhesive.
- 3. General demolition of ceiling tiles and grid.
- 4. Contractor shall include 500 square feet of non-friable floor tile and mastic removal. Locations to be determined in the field by General Contractor for equipment replacements. Contractor shall include a floor tile and mastic removal square feet unit price.
- 5. Contractor shall include an allowance to remove up to 500 linear feet of pipe insulation within up to 8. When a room or location identified on an environmental scope of work sheet, all closets, bathrooms, 10 mini enclosures that may be discovered in inaccessible/concealed spaces. Contractor shall include a mini-enclosure unit price.
- 6. Work to be conducted per specification section 02131 and applicable IDPH, IEPA, and OSHA rules and regulations.

# SCHEDULE:

- 1. The work is scheduled to begin at upon start of Summer Break 2022.
- 2. Anticipated start date is June 9, 2022. Exact start date to be determined by District and Carnow Conibear.
- 3. Schedule TBD

\*Abatement Contractor may work all shifts necessary to complete the work by the scheduled completion date. Schedule anticipates contractor working Saturdays and double shifts. Exact dates 13. The School District will provide an electrician for the installation of temporary power panels and/or subject to change, however, phase durations must be met by Contractor.

# **BUILDING INFORMATION**

- a. IDPH Building ID#: 04-101-2050-0003
- 5620 Spring Creek Road b. Building Address: Rockford, Illinois 61111
- c. Building Size:
- 198,618 SF 1968
- d. Age of Building: e. Number of Floors: 1

# **GENERAL NOTES**

- 1. Locations shown are approximate only.
- 2. Phasing of the work to be determined by the General Contractor and the Building Owner.
- 3. Worker decontamination enclosure system shall be constructed in strict accordance with IDPH section 855.410. Clean room shall be sized to accommodate the needs of the work crew. Donning and doffing of PPE outside of clean room is strictly prohibited.
- 4. Where non-friable removal methods are utilized (Specification Section 3.11(D)), Contractor shall be responsible for the isolation of the work area(s) with critical seals, signage, and the security of the work areas to eliminate access by unauthorized personnel.

		D	RAWING HISTORY		CLIENT:	PROJECT NAME: Asbestos Abatement		SHEET TITLE:	ASBESTOS ABATMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools		Guilford High School 5620 Spring Creek Rd		GENERAL NOTES
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602		Rockford, Illinois 61114		
						PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	1.000/H

- 5. HEPA filtered negative air machines shall be set up within the work areas and run continuously through the completion of all work.
- 6. The abatement contractor is responsible for the lockout and tagout of all mechanical equipment prior to starting any mitigation/ abatement or O&M clean up in or on any equipment, etc.
- 7. The contractor is responsible for verifying quantities in the field before bidding. Any questions about the scope or clarifications shall be obtained from the Project Designer prior to bidding. Any interpretations of the design documents shall only be made by the Project Designer. The abatement contractor shall be responsible for removing any ACM which will be disturbed during renovation activities, prior to renovation activities.
- offices, storage rooms, etc. are included in the scope of work for that room or location.
- 9. The abatement contractor is responsible for all security to the work area(s) during the environmental mitigation/abatement and replacement activities. The abatement contractor shall be responsible for any damages or thefts to property in the work area(s), until the area(s) are returned to the property owner. The abatement contractor shall repair and/or replace damaged or stolen property to the satisfaction of, and at no additional cost to the property owner.
- 10. Electric/HVAC service shall be disconnected by the District as necessary.
- 11. Any existing electrical panels in the work area shall be adequately protected (i.e. "Boxed out.") during Asbestos Abatement activities in accordance with specification 02131 and all applicable regulations.
- 12. Contractor shall maintain clear access to building egress points outside of regulated areas.
- whips and isolation of work areas. The Abatement Contractor is responsible for providing District electrician any power panels and/or whips a minimum of five (5) business days prior to start of work. Coordinate with Carnow Conibear.
- 14. If abatement of flooring materials is specified, the Abatement Contractor is responsible for the removal of all layers of flooring, associated mastics, and leveling compounds down to the lowest substrate. Unless specified, NO CHEMICAL REMOVAL OF MASTICS shall be utilized. Mechanical removal methods ONLY.
- 15. Contractor Supervisor is required to perform a punch list walk-through with a Carnow Conibear representative prior to containment tear-down AND demobilization to ensure all scope items have been removed, project specifications are met, and any incidental damage is identified.
- 16. Contractor shall remove dumpster from site within two (2) weeks of project completion. District may seek damages of \$500/day for dumpsters not removed.

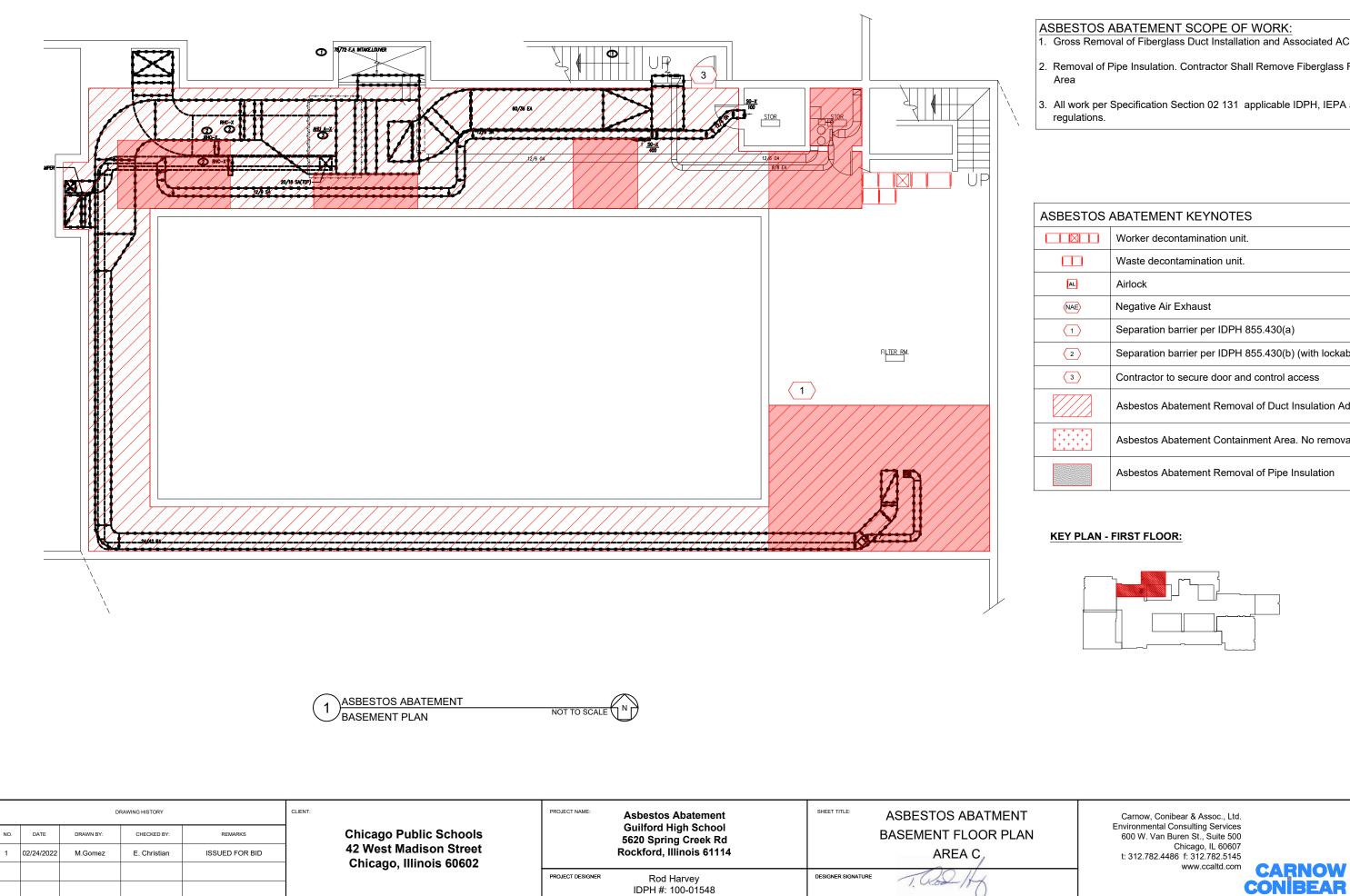


A132560164

CA PROJECT NO

CARNOW

CONIBEAR



1. Gross Removal of Fiberglass Duct Installation and Associated ACM Adhesive.

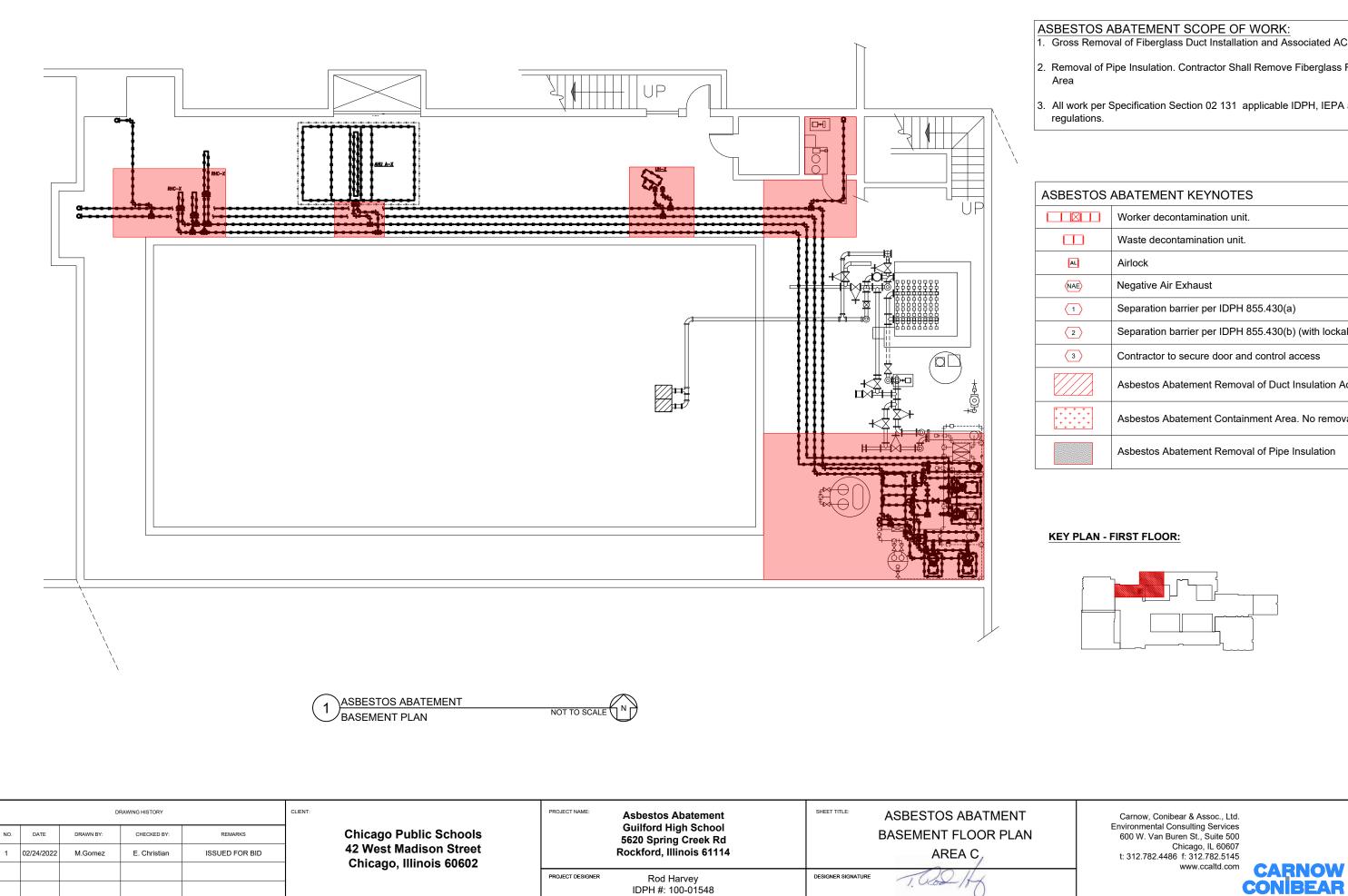
2. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

3. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

STOS	STOS ABATEMENT KEYNOTES					
$\boxtimes$	Worker decontamination unit.					
	Waste decontamination unit.					
F	Airlock					
AE	Negative Air Exhaust					
	Separation barrier per IDPH 855.430(a)					
2	Separation barrier per IDPH 855.430(b) (with lockable door)					
3	Contractor to secure door and control access					
	Asbestos Abatement Removal of Duct Insulation Adhesive					
+ + + + + + + +	Asbestos Abatement Containment Area. No removal in this area					
	Asbestos Abatement Removal of Pipe Insulation					







IDPH #: 100-01548

1. Gross Removal of Fiberglass Duct Installation and Associated ACM Adhesive.

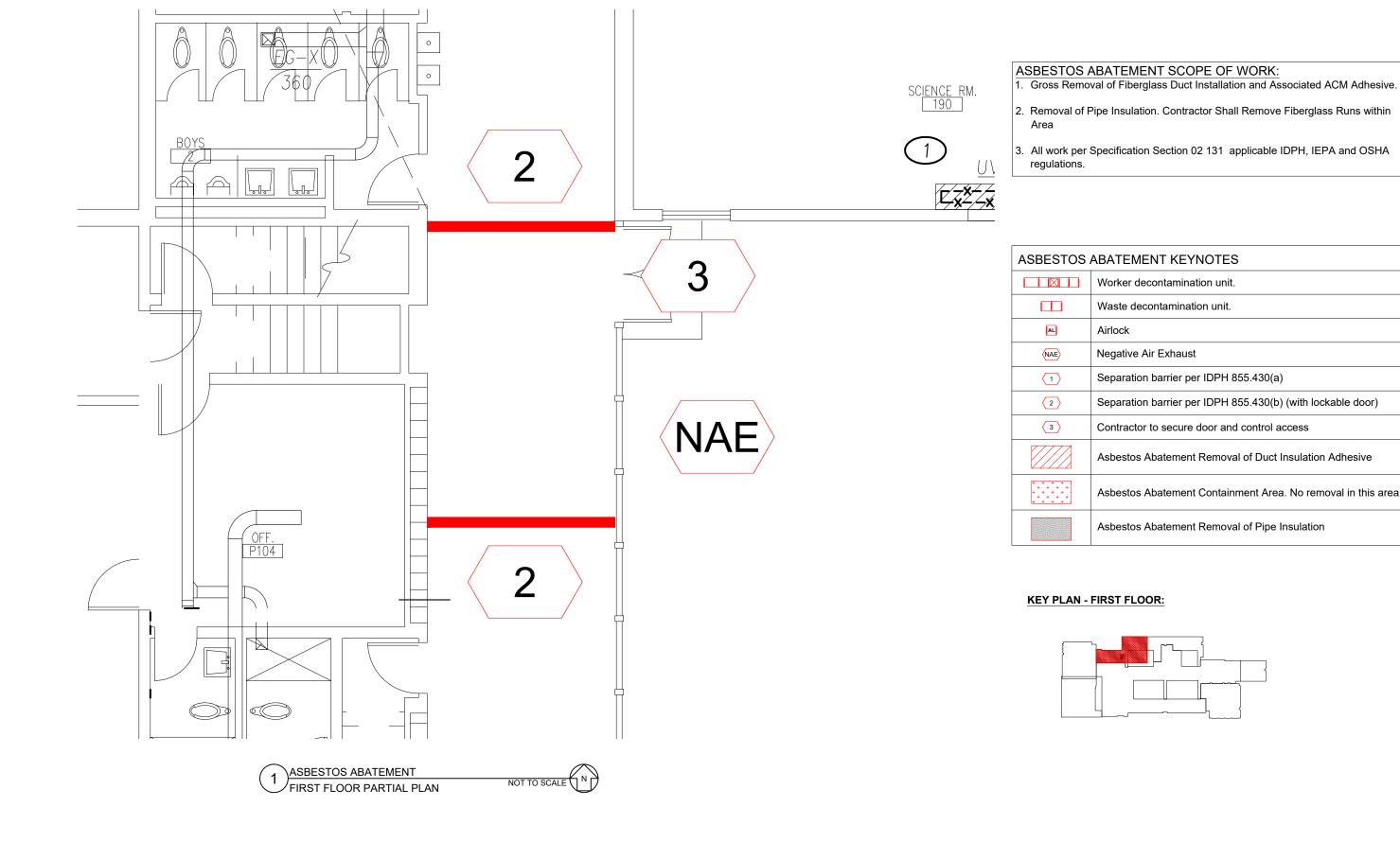
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ESTOS	STOS ABATEMENT KEYNOTES						
	Worker decontamination unit.						
	Waste decontamination unit.						
AL	Airlock						
NAE	Negative Air Exhaust						
1	Separation barrier per IDPH 855.430(a)						
2	Separation barrier per IDPH 855.430(b) (with lockable door)						
3	Contractor to secure door and control access						
	Asbestos Abatement Removal of Duct Insulation Adhesive						
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area						
	Asbestos Abatement Removal of Pipe Insulation						







DRAWING HISTORY					ENT:	PROJECT NAME: Asbestos Abatement	SHEET TITLE: ASBESTOS ABATMENT		
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Guilford High School 5620 Spring Creek Rd	FIRST FLOOR PLAN		
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602		Rockford, Illinois 61114		AREA C
						PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	1. Col /4

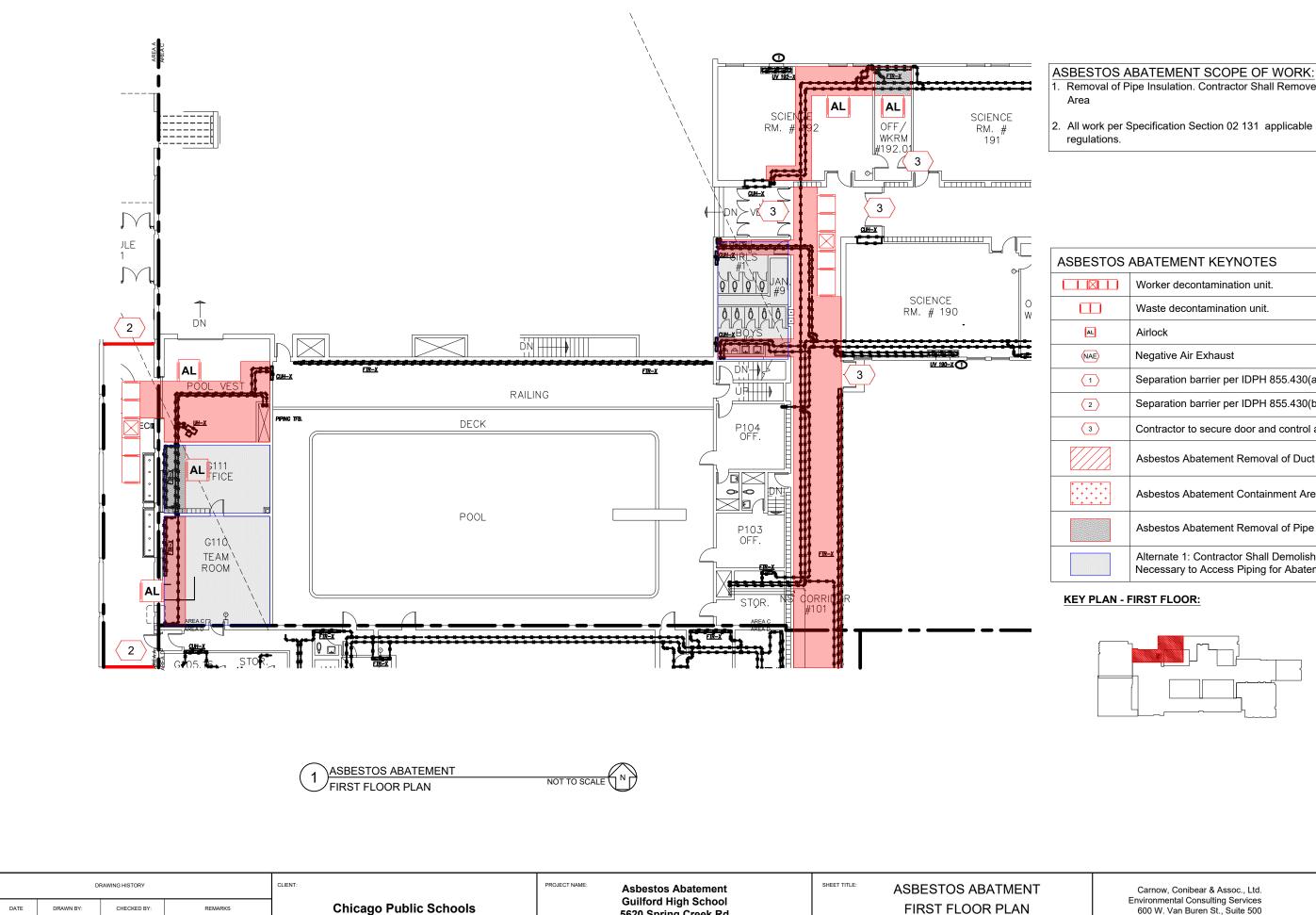
3. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

STOS ABATEMENT KEYNOTES						
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	Waste decontamination unit.					
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AE	Negative Air Exhaust					
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2	Separation barrier per IDPH 855.430(b) (with lockable door)					
3	Contractor to secure door and control access					
	Asbestos Abatement Removal of Duct Insulation Adhesive					
+ + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area					
	Asbestos Abatement Removal of Pipe Insulation					





SHEET NO. **ASB-1.2** 



42 West Madison Street Chicago, Illinois 60602

NO.

1 02/24/2022

M.Gomez

E. Christian

ISSUED FOR BID

5620 Spring Creek Rd Rockford, Illinois 61114 PROJECT DESIGNER DESIGNER SIGNATURE Rod Harvey IDPH #: 100-01548

AREA C Cod Ht

# . Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

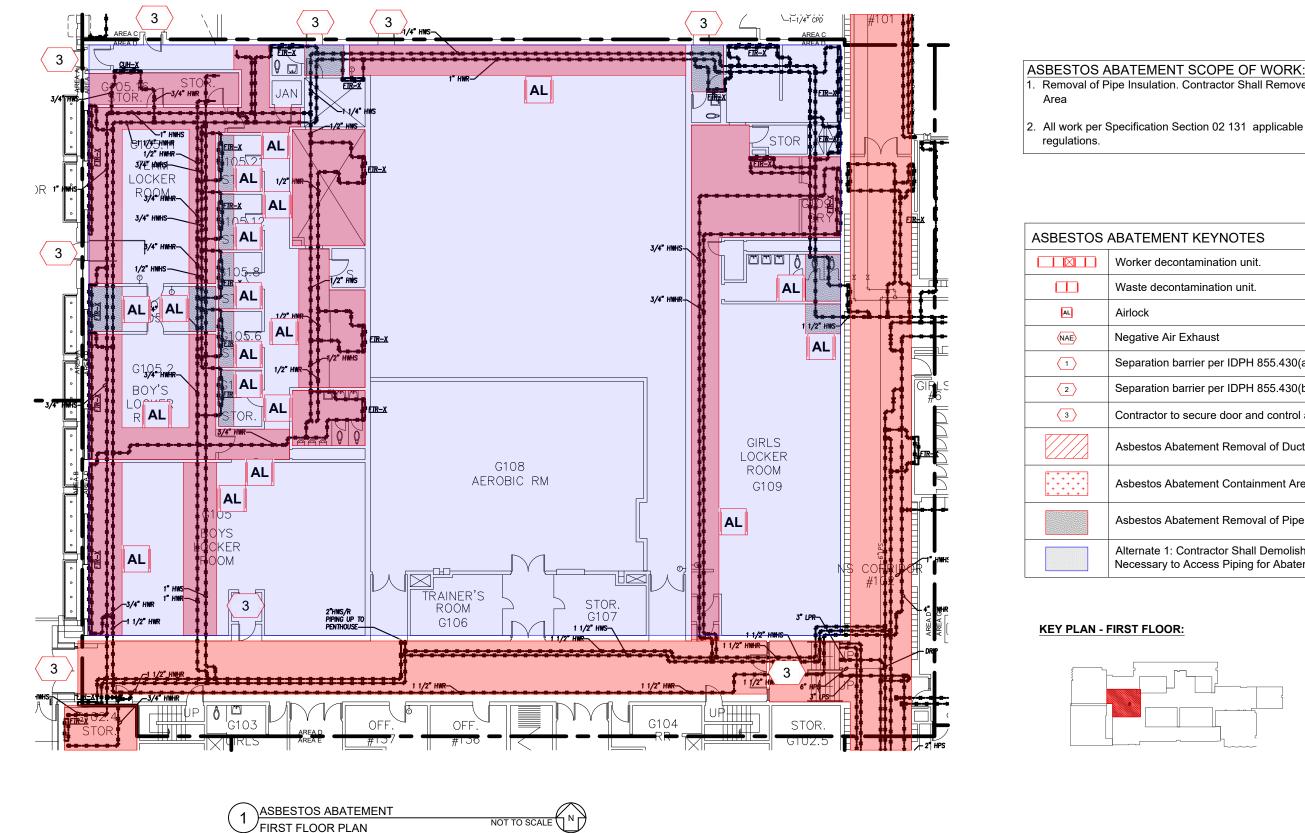
ESTOS ABATEMENT KEYNOTES					
	Worker decontamination unit.				
	Waste decontamination unit.				
AL	Airlock				
NAE	Negative Air Exhaust				
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3	Contractor to secure door and control access				
	Asbestos Abatement Removal of Duct Insulation Adhesive				
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Removal of Pipe Insulation				
	Alternate 1: Contractor Shall Demolish Plaster/Gypsum as Necessary to Access Piping for Abatement				





**ASB-1.3** 

SHEET NO



	DRAWING HISTORY				CLIENT:	PROJECT NAME: Asbestos Abatement	SHEET TITLE:	ASBESTOS ABATMENT
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Guilford High School 5620 Spring Creek Rd		FIRST FLOOR PLAN
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602	Rockford, Illinois 61114		AREA D
						PROJECT DESIGNER Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	1.000/Hg

## 1. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

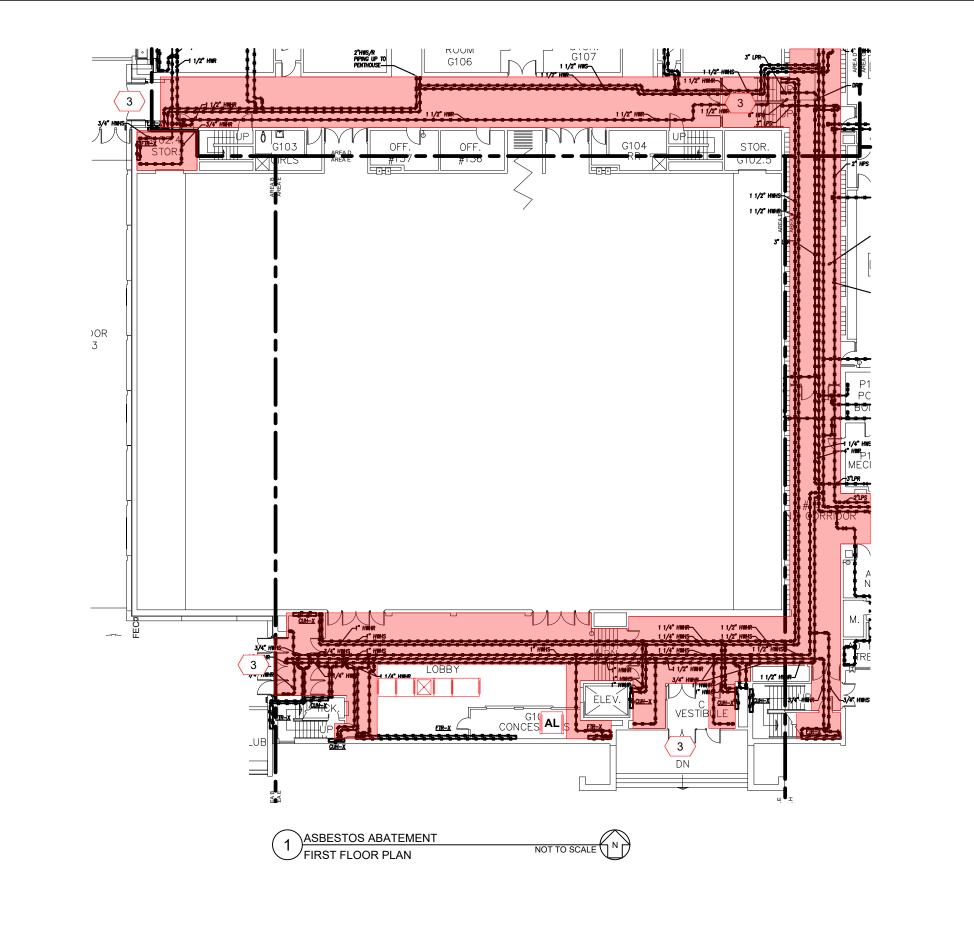
ESTOS	STOS ABATEMENT KEYNOTES			
	Worker decontamination unit.			
	Waste decontamination unit.			
AL	Airlock			
IAE	Negative Air Exhaust			
1	Separation barrier per IDPH 855.430(a)			
2	Separation barrier per IDPH 855.430(b) (with lockable door)			
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	Asbestos Abatement Removal of Duct Insulation Adhesive			
+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area			
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	Alternate 1: Contractor Shall Demolish Plaster/Gypsum as Necessary to Access Piping for Abatement			



A132560164 LOT DATE February 24, 2022 SHEET NO.

CCA PROJECT NO.







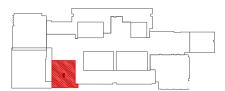
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NO	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools		Guilford High School 5620 Spring Creek Rd		FIRST FLOOR PLAN
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602		Rockford, Illinois 61114		AREA E
						PROJECT DESIGNER	Ded Haman	DESIGNER SIGNATURE	1011
						Prostor Bedioner	Rod Harvey IDPH #: 100-01548	BEGGALICOGIATORE	-1. 0202/14g

### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within Area

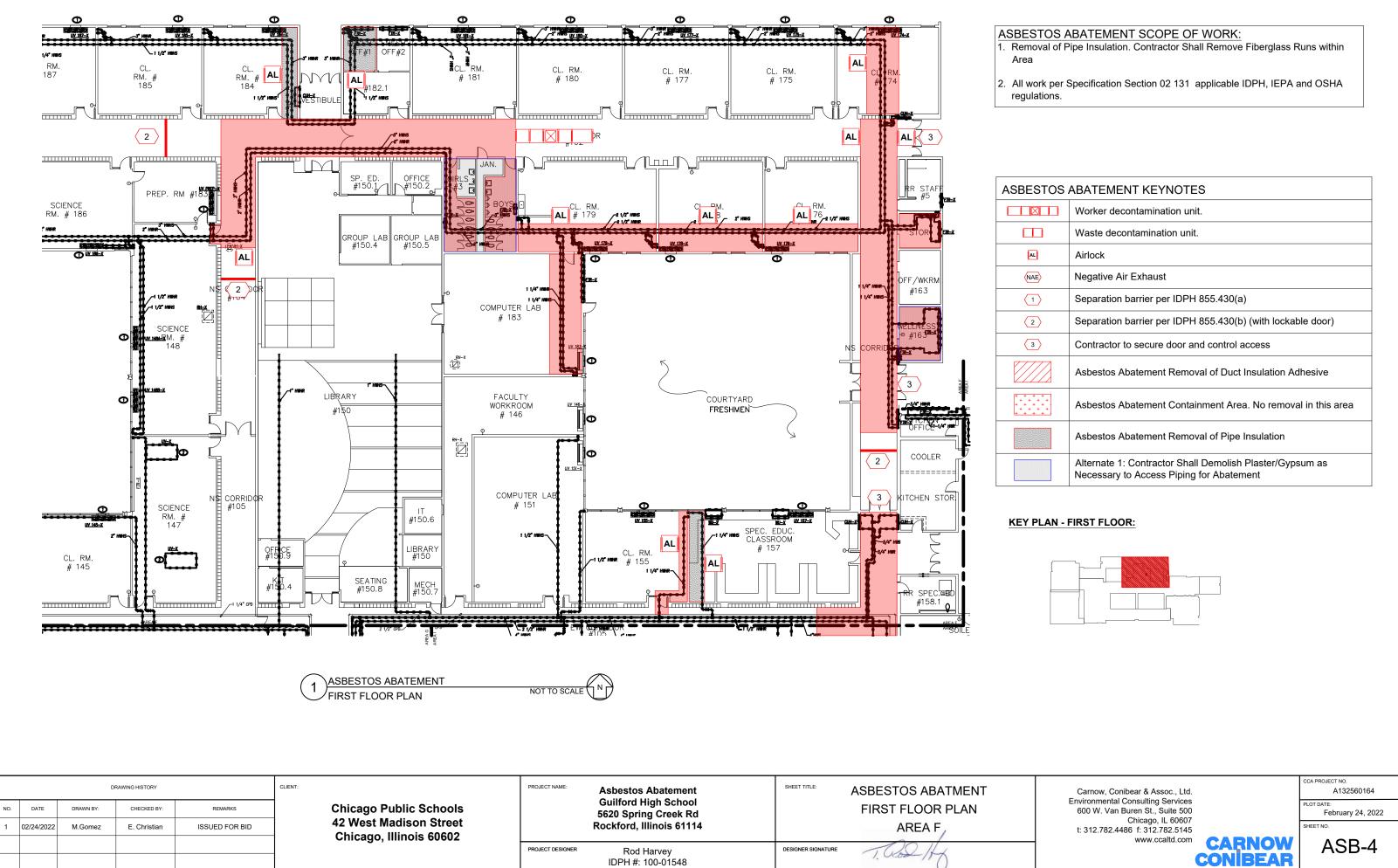
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STOS ABATEMENT KEYNOTES			
	Worker decontamination unit.		
	Waste decontamination unit.		
AL	Airlock		
IAE	Negative Air Exhaust		
1	Separation barrier per IDPH 855.430(a)		
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3	Contractor to secure door and control access		
* * * * * * * * * * * *	Asbestos Abatement Containment Area. No removal in this area		
	Asbestos Abatement Removal of Pipe Insulation		

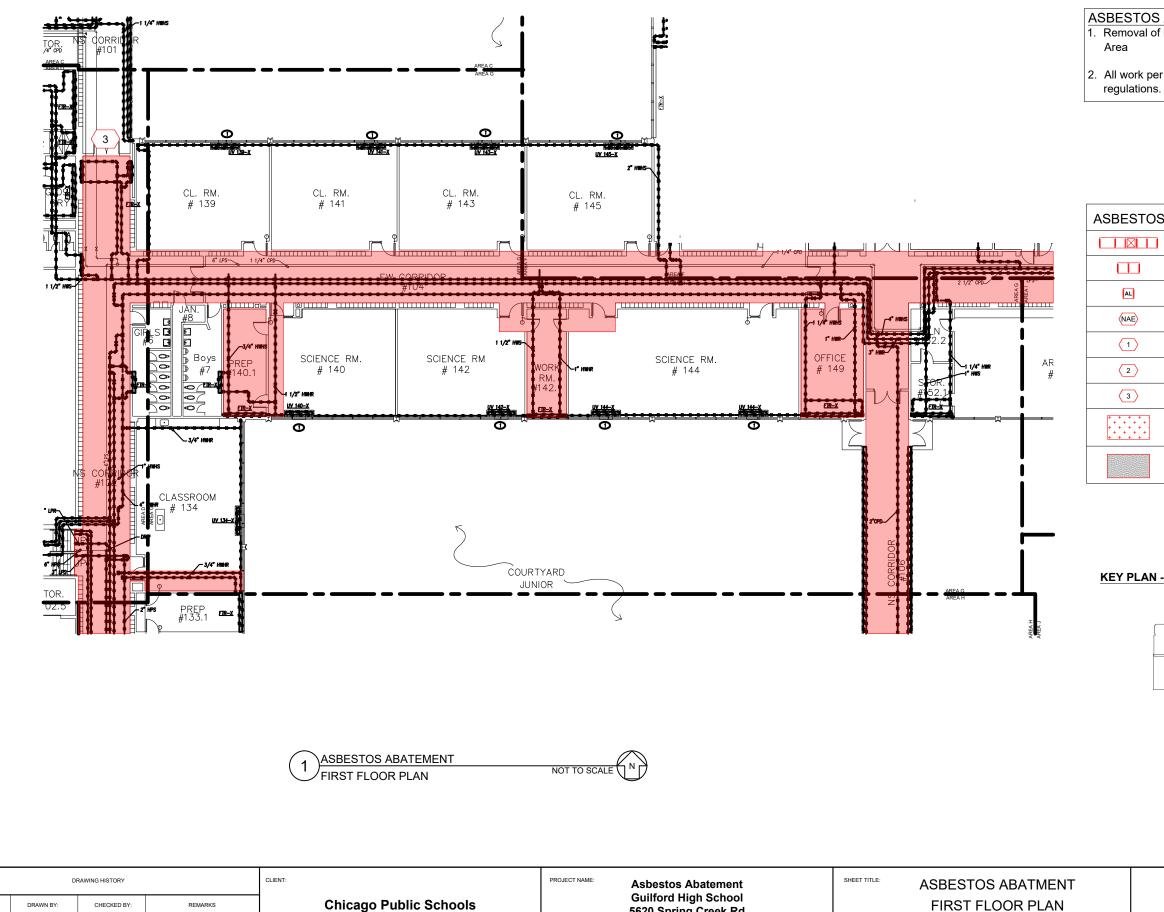
### **KEY PLAN - FIRST FLOOR:**







ESTOS ABATEMENT KEYNOTES				
Worker decontamination unit.				
Waste decontamination unit.				
Airlock				
Negative Air Exhaust				
Separation barrier per IDPH 855.430(a)				
Separation barrier per IDPH 855.430(b) (with lockable door)				
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Asbestos Abatement Removal of Pipe Insulation				
Alternate 1: Contractor Shall Demolish Plaster/Gypsum as Necessary to Access Piping for Abatement				



		5.		
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID

Chicago Public Schools 42 West Madison Street Chicago, Illinois 60602

PROJECT NAME:	Asbestos Abatement Guilford High School 5620 Spring Creek Rd Rockford, Illinois 61114	SHEET TITLE:	SHEET TITLE: ASBESTOS ABAT FIRST FLOOR F AREA G		
PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	T. 000/14		

### ASBESTOS ABATEMENT SCOPE OF WORK: 1. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

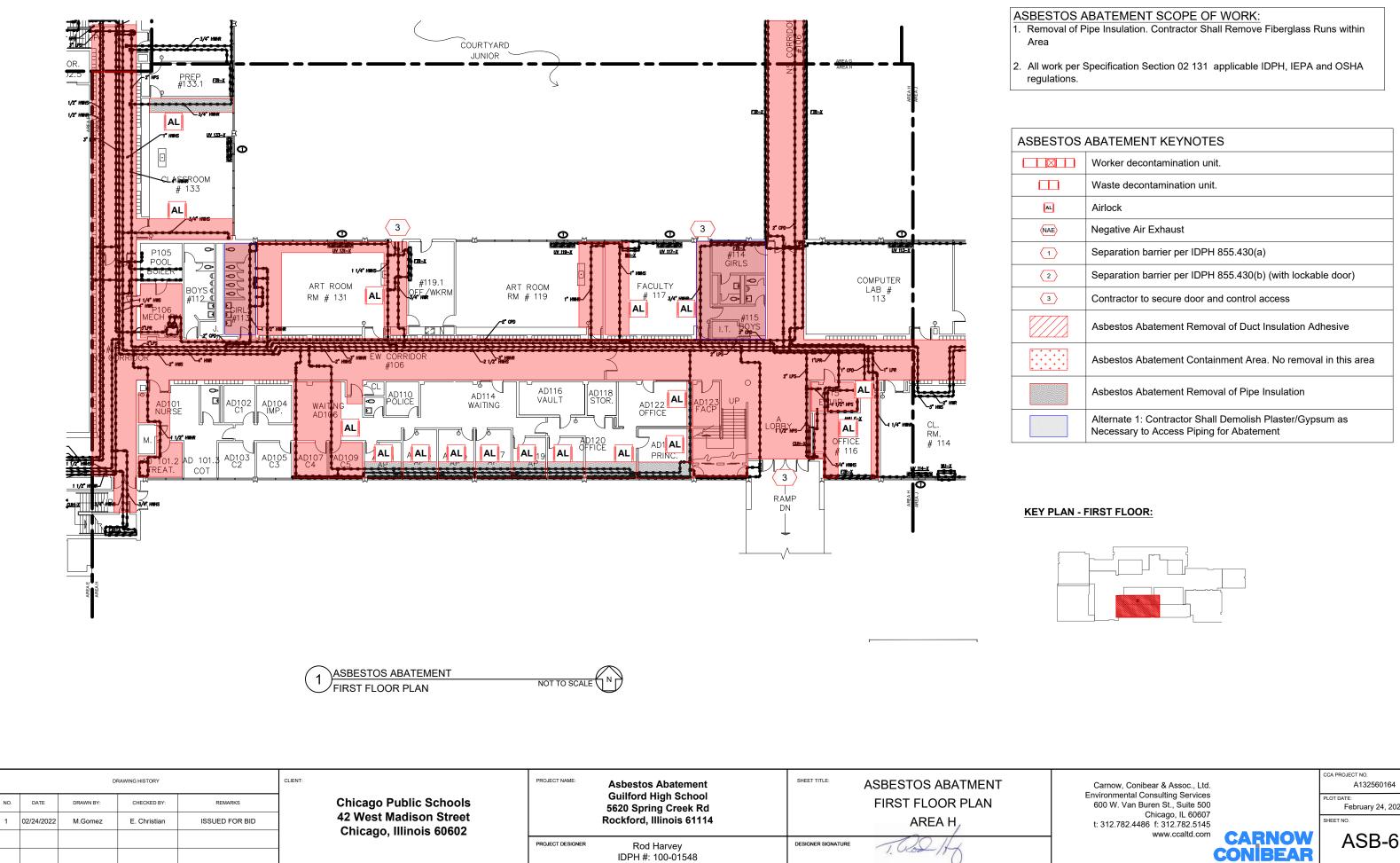
2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

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### KEY PLAN - FIRST FLOOR:

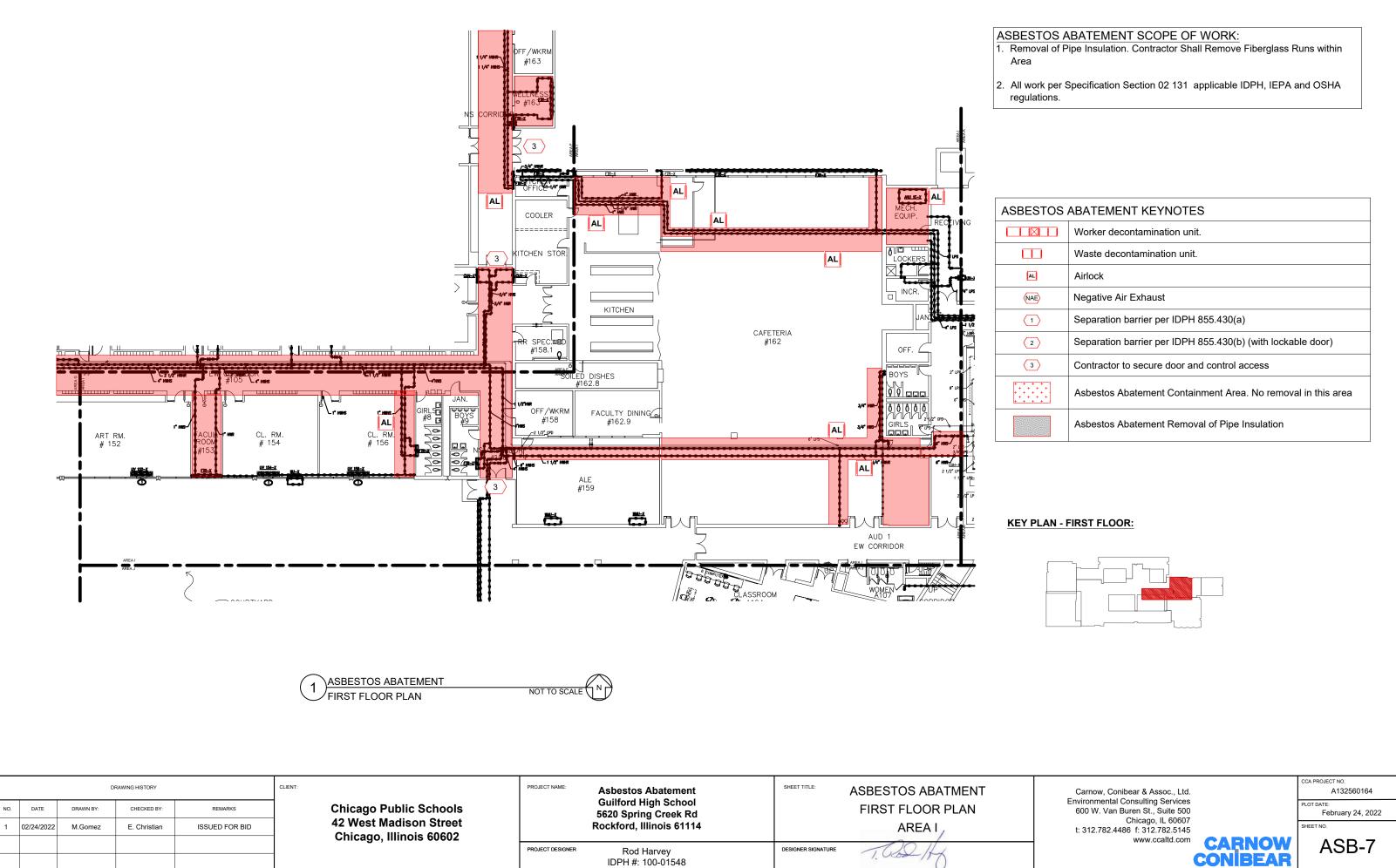




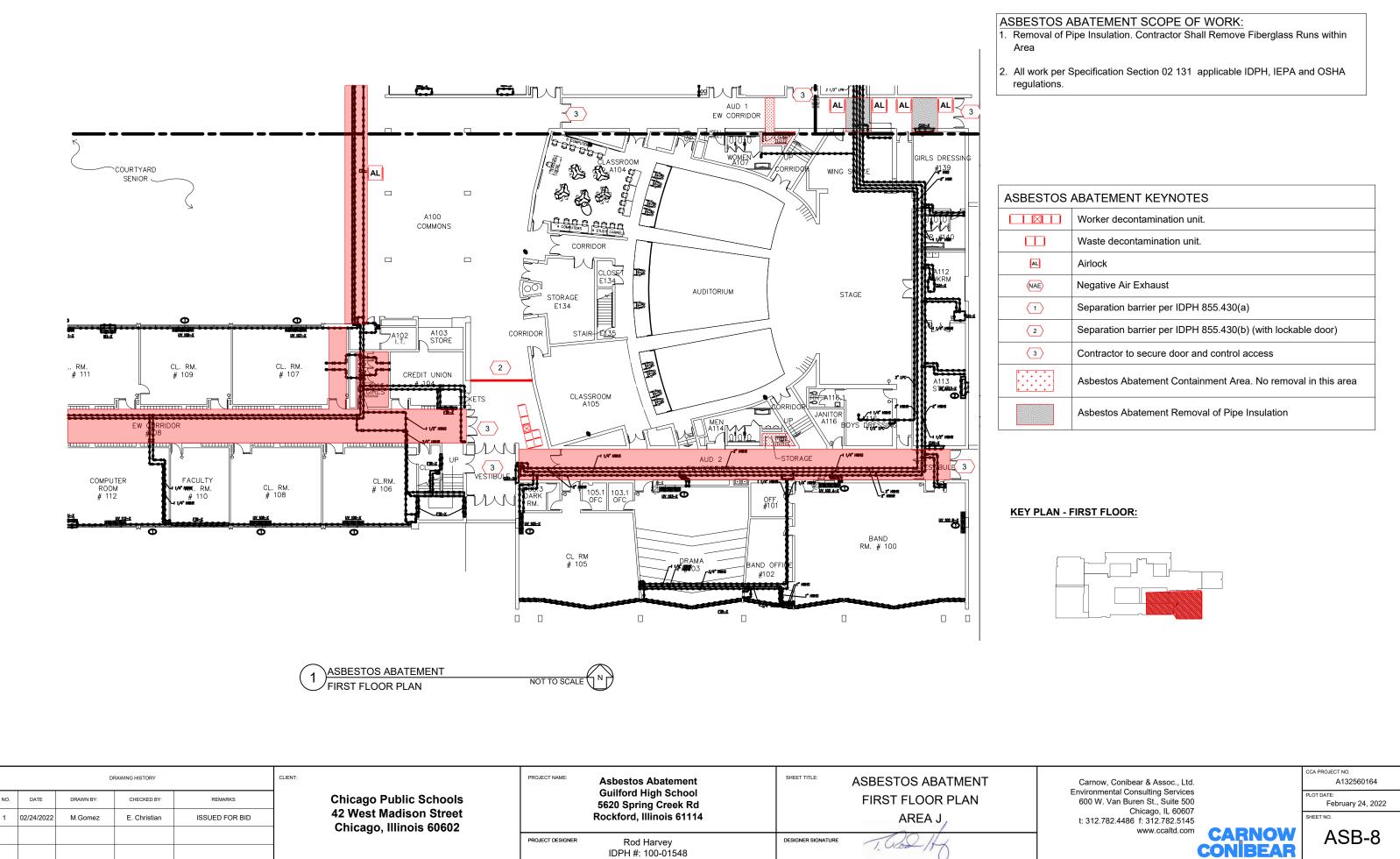


ESTOS ABATEMENT KEYNOTES				
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+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area			
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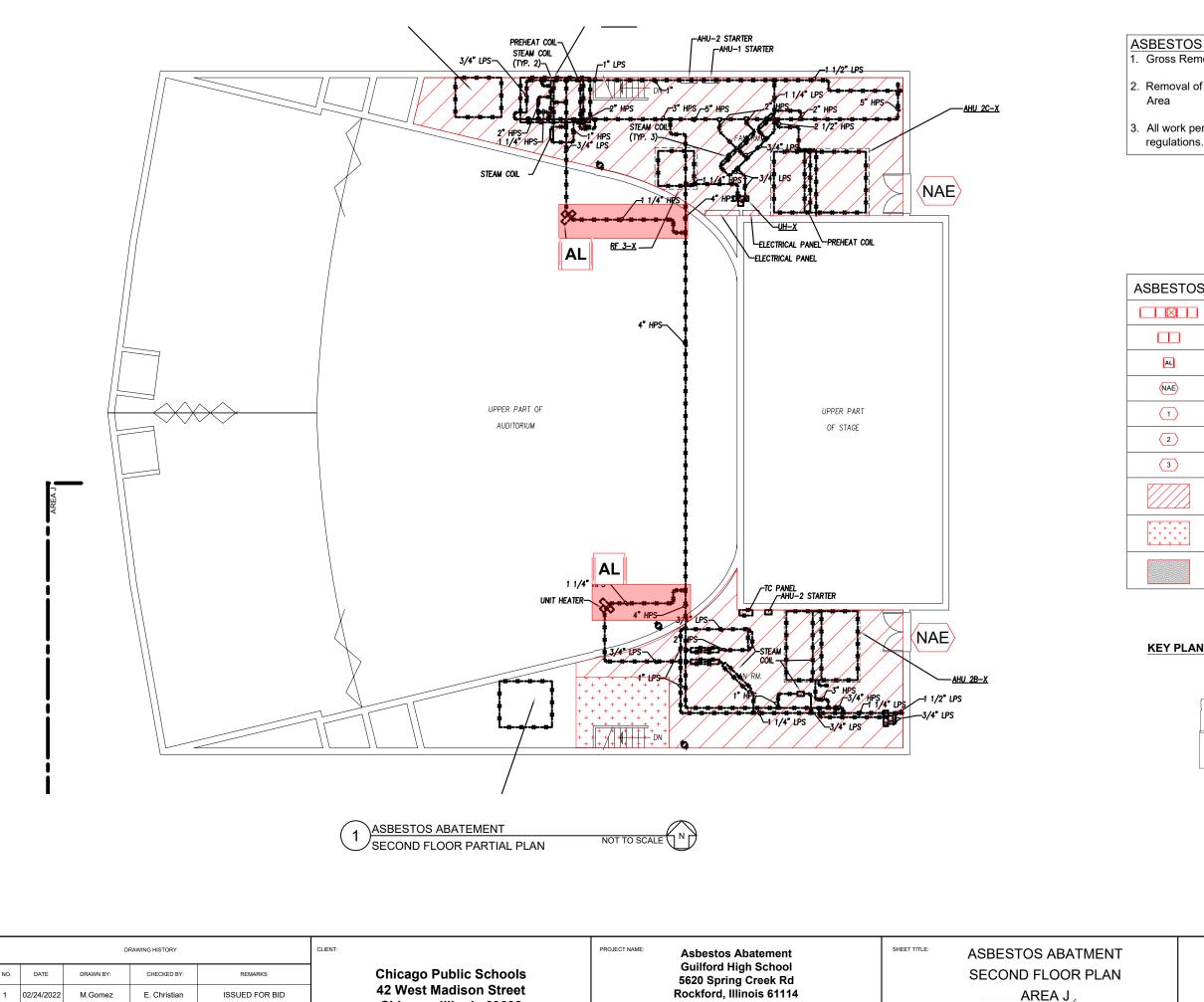
February 24, 2022



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PROJECT DESIGNER

Rod Harvey

IDPH #: 100-01548

DESIGNER SIGNATURE

Cod It

Chicago, Illinois 60602

### ASBESTOS ABATEMENT SCOPE OF WORK:

1. Gross Removal of Fiberglass Duct Installation and Associated ACM Adhesive.

2. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

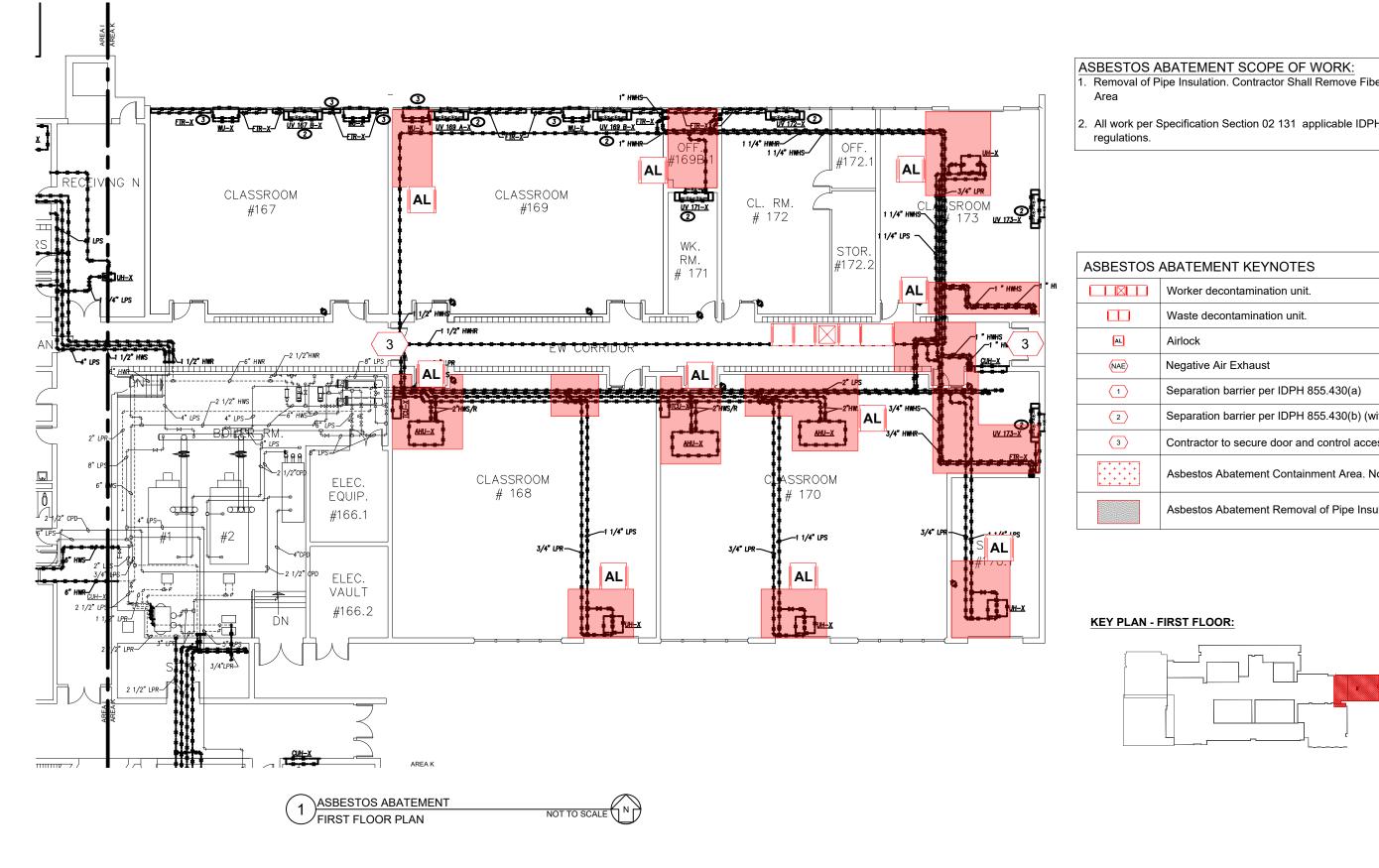
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+ + + + + +	Asbestos Abatement Containment Area. No removal in this area			
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### KEY PLAN - FIRST FLOOR:







DRAWING HISTORY					CLIENT:	PROJECT NAME: Asbestos Abatement	SHEET TITLE: ASBESTOS ABATMENT		
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS	Chicago Public Schools	Guilford High School 5620 Spring Creek Rd Rockford, Illinois 61114		FIRST FLOOR PLAN	
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID	42 West Madison Street Chicago, Illinois 60602			AREA K	
						PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	1.000/Hg

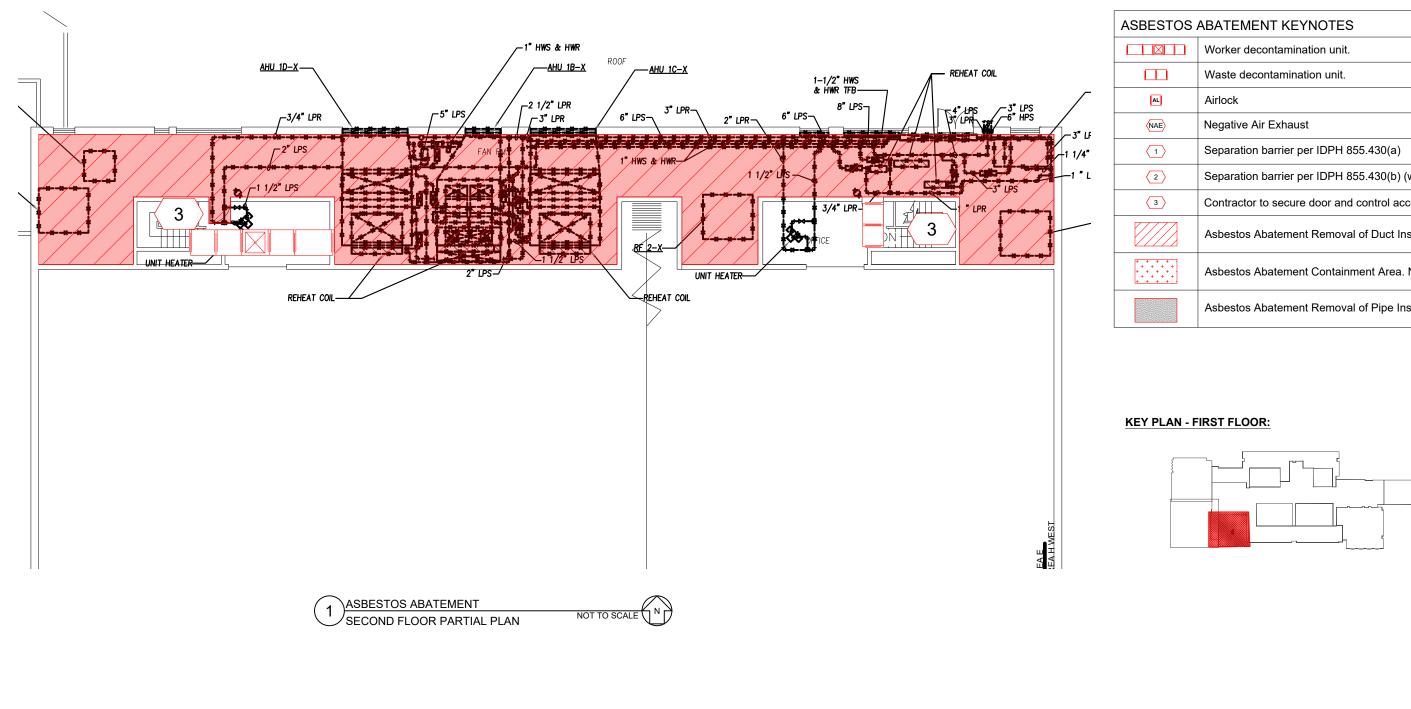
# 1. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

ESTOS ABATEMENT KEYNOTES					
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3	Contractor to secure door and control access				
* * * * * * * * * * * *	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Removal of Pipe Insulation				







	DRAWING HISTORY					
NO.	DATE	DRAWN BY:	CHECKED BY:	REMARKS		
1	02/24/2022	M.Gomez	E. Christian	ISSUED FOR BID		

Chicago Public Schools 42 West Madison Street Chicago, Illinois 60602

PROJECT NAME: Asbestos Abatement Guilford High School 5620 Spring Creek Rd Rockford, Illinois 61114	SHEET TITLE: ASBESTOS ABATMENT FIRST FLOOR PLAN AREA E
PROJECT DESIGNER Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE

## ASBESTOS ABATEMENT SCOPE OF WORK:

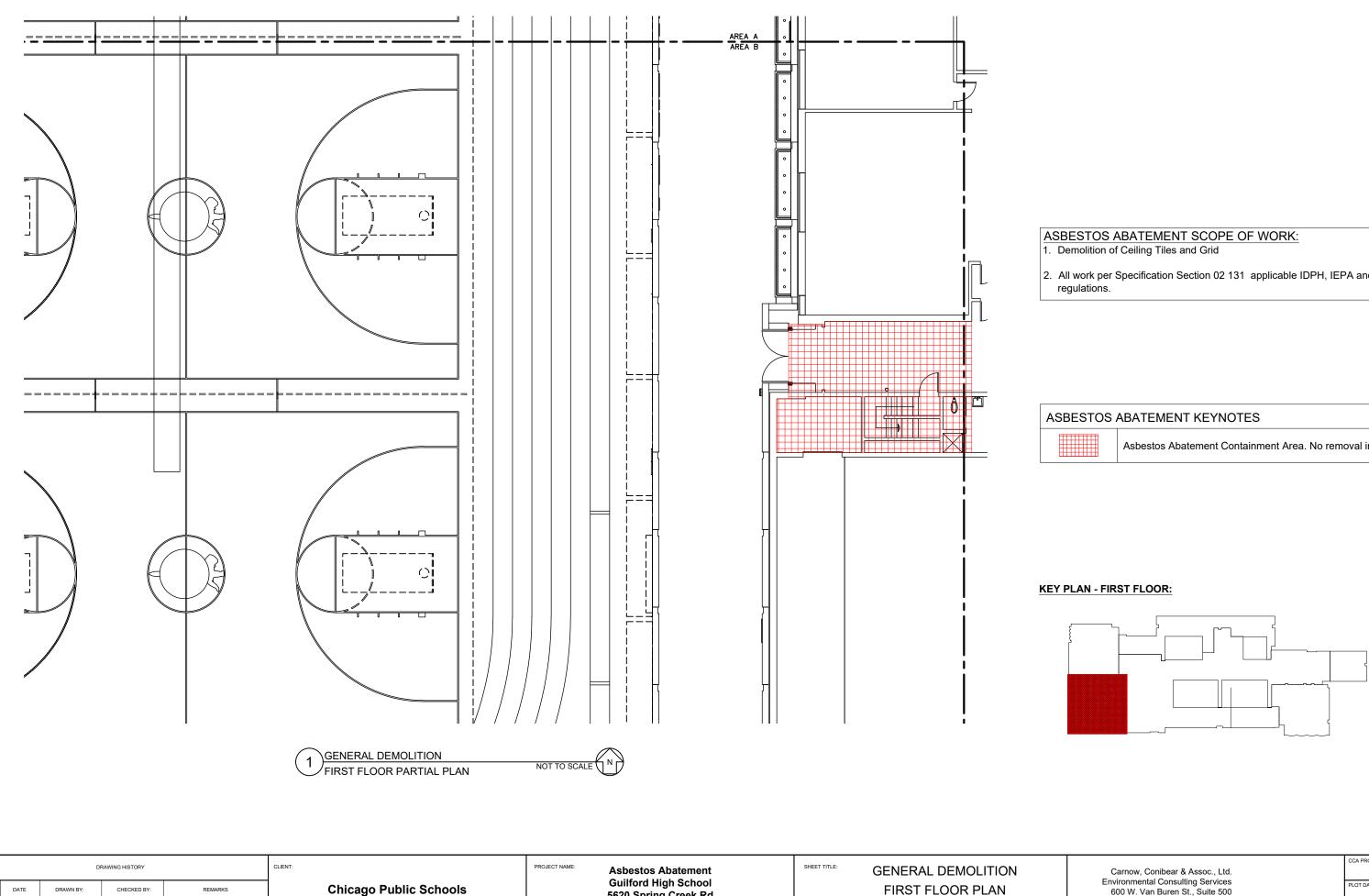
1. Gross Removal of Fiberglass Duct Installation and Associated ACM Adhesive.

2. Removal of Pipe Insulation. Contractor Shall Remove Fiberglass Runs within Area

3. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA regulations.

ESTOS ABATEMENT KEYNOTES					
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+ + + + + + + + + + + +	Asbestos Abatement Containment Area. No removal in this area				
	Asbestos Abatement Removal of Pipe Insulation				





Chicago Public Schools
42 West Madison Street
Chicago, Illinois 60602

1 02/24/2022

M.Gomez

E. Christian

ISSUED FOR BID

PROJECT NAME:	Asbestos Abatement	SHEET TITLE:	GENERAL DEMC		
	Guilford High School 5620 Spring Creek Rd		FIRST FLOOR		
Rockford, Illinois 61114		AREA B			
PROJECT DESIGNER	Rod Harvey IDPH #: 100-01548	DESIGNER SIGNATURE	T. 020/14		

2. All work per Specification Section 02 131 applicable IDPH, IEPA and OSHA

Asbestos Abatement Containment Area. No removal in this area



