

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

IFB No. 17-25 Rockford Public School District 205 School A, Zone 2

DATE: Monday, January 30, 2017

RE: **ADDENDUM NO. 2**

To All Bidders:

Attached 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 3rd 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 Purchasing Manager by email at tamara.pugh@rps205.com.



Date of Addendum: January 27, 2017 Original Date of Contract Documents: Issued for Bid: January 04, 2017

Owner:

Architects and Engineers

Rockford Public School District 205 School A, Zone 2 Cherry Valley, IL Cannon Project No. 005005.00 Cannon Design 225 N. Michigan Ave, Suite 1100 Chicago, Illinois 60601

This Addendum amends Drawings and/or Specifications and/or Addenda for the above titled project, as indicated below, and is hereby incorporated into the Contract Documents as part thereof.

Bidders are required to acknowledge receipt of this Addendum in the space provided on the Proposal/Bid Form.

NARRATIVES:

SPECIFICATIONS (PROJECT MANUAL)

- 1. <u>AIA A701</u>
 - A. Delete this document in its entirety and insert new AIA A701 attached to this Addendum.
- 2. SUPPLEMENTARY INSTRUCTION TO BIDDERS
 - A. Page SIB-1,1,A strike the following: "Proposals shall be submitted in duplicate on the form provided. The sample proposal form bound into these Specification is for reference only and shall not be detached."
 - B. Page SIB-5,16 strike the following "Before a bid can be considered by the school district, the above referenced tax identification number must be on the bid form in the signature section. We also specifically require that you identify the legal organizational status of your firm in the signature section as to whether it is a corporation, partnership, proprietorship, etc. Should you have any questions concerning this tax identification number please contact us."

3. ASBESTOS NOTIFICATION

- A. <u>Delete this form in its entirety.</u>
- 4. <u>BID FORM</u>
 - A. Delete this document in its entirety and insert new BID FORM attached to this Addendum.
- 5. 015000 TEMPORARY FACILITIES AND CONTROLS
 - A. Page 015000-3, Article 2.2, Paragraph C, Subparagraph 3, ADD "Provide a dedicated internet service line separate from the contractors."

Addendum No. 2, Page 1

6. <u>042000 – UNIT MASONRY</u>

A. Page 042000-19, Article 3.12, Paragraph B, Subparagraph 2, has been revised to read as follows:

2. At masonry veneer walls, lay flashing over and bond to stainless steel drip and extend flashing through the veneer and across air space behind veneer. Extend flashing up face of back up wall at least 8 inches and terminate with a term bar. See item 4 for description of stainless steel drip. Seal top of term bar with a sealant to the compatible with the Air Barrier.

7. 072131 – FLUID APPLIED INSULATION COATINGS

A. Page 072131-3, Article 2.1, Paragraph A, ADD "or owner approved equal:"

8. 074212.13 – FORMED METAL WALL PANELS

A. Page 072131-3, Article 2.2, Paragraph B,1 ADD "or owner approved equal:"

9. <u>078413 – PENETRATION FIRESTOPPING</u>

- A. Page 078413-2, Article 1.6, Delete Paragraph C. In its entirety.
- B. Page 078413-6, Article 3.5, Insert Paragraph "A" as follows:
 - "A. Testing Agency: Engage a qualified testing agency to preform tests and inspections."

10. <u>078466 – FIRE-RESISTIVE JOINT SYSTEMS</u>

- A. Page 078446-2, Article 1.6, Delete Paragraph C. In its entirety.
- B. Page 078446-4, Article 3.5, Insert Paragraph "A" as follows:

"A. Testing Agency: Engage a qualified testing agency to preform tests and inspections."

11. 079500 – EXPANSION CONTROL

A. Page 079500-2, Article 2.3, Paragraph A, ADD "or owner approved equal:"

12. <u>085113 – ALUMINUM WINDOWS</u>

A. Page 085113-1, Article 2.1, Paragraph A, ADD "or owner approved equal:"

13. <u>086200 – UNIT SKYLIGHTS</u>

A. Page 086200-1, Article 2.1, Paragraph A, ADD "or owner approved equal:"

14. 087100- DOOR HARDWARE SCHEDULE

A. Page 087100-4 PART 3, Add the following: "10. Or owner approved equal:"

15. 092116- GYPSUM BOARD SHAFT WALL ASSEMBLIES

A. Section 087100 is being issued as a new document and attachment to this Addendum.

16. <u>096446- WOOD ATHLETIC FLOORING</u>

- A. Page 096466, Article 2.2, Paragraph A,1 ADD "or owner approved equal:"
- B. Page 096466-3, Article 2.2, Paragraph A,1,B ADD the following paragraph"c. Aacer Scissorloc II with air flow system"

17. 096513 – RESILIENT BASE

- A. Page 096513, Article 2.2, Paragraph A, ADD "or owner approved equal:"
- B. Page 096513, Article 2.2, Paragraph A, Subparagraph 4, DELETE the following:
 "http://www.specagent.com/LookUp/?uid=123456853219&mf=04&src=wd"

18. <u>096519 – RESILIENT TILE FLOORING</u>

- A. Page 096519, Article 2.2, Paragraph A, ADD "or owner approved equal:"
- B. Page 096519, Article 2.3, Paragraph A, ADD "or owner approved equal:"

19. <u>096813 – TILE CARPETING</u>

- A. Page 096813-2, Article 2.2 Paragraph A, Subparagraph 1, ADD "or owner approved equal:".
- B. Page 096813-2, Article 2.3 Paragraph A, Subparagraph 1, ADD "or owner approved equal:".

20. 099620 - GRAFFITI-RESISTANT COATINGS

A. Page 099620-2, Article 2.1, ADD the following Paragraph "C. Or owner approved equal:"

21. 116643 - SCOREBOARD

A. Page 116643-1, Article 2.1, ADD the following Paragraph "B. Or owner approved equal:"

22. <u>126600 – TELESCOPING STANDS</u>

A. Page 126600-3, Article 2.1 ADD the following Paragraph "C. Or owner approved equal:"

DRAWINGS:

Volume 1:

- 1. <u>G0 COVER SHEET</u>
 - A. Added Vicinity Map

Volume 2:

- 1. <u>G00 COVER SHEET</u>
 - B. Added Vicinity Map
- 2. <u>A0101 SERIES SHEETS:</u>
 - A. <u>Add key notes:</u>
 - 1. <u>21 ACCESS PANEL</u>
 - 2. KNOX BOX RECESSED

3. <u>A0101C – LEVEL 01 PLAN – AREA C</u>

A. Add plan detail callout 6/A0423 at column K5 and 5.2

4. <u>A0101D – LEVEL 01 PLAN – AREA D</u>

- A. Add Access Panel in Staff Toilet room 113, locate under hand dryer, add keynote 21 pointing at location.
- B. Add Recessed Knox Box at main entry, add keynote 22 pointing at location.
- 5. <u>A0102A ROOF PLAN AREA A</u>
 - A. At storm shelter roof, at two roof drain location, modify note to read: RD, SEE PLUMBING AND STRUCTURAL
 - B. At storm shelter roof, at two vents through roof locations, modify note to read: VENT THROUGH ROOF, IN PIPE CURB, SEE PLUMBING AND STRUCTURAL
 - C. At storm shelter roof, at exhaust fan location, modify note to read: EXHAUST FAN, ON ROOF CURB, SEE MECHANICAL AND STRUCTURAL
 - D. At storm shelter roof, at two relief hood locations, modify note to read: RELIEF HOOD, ON ROOF CURB, SEE MECHANICAL AND STRUCTURAL

6. <u>A0102B – ROOF PLAN – AREA B</u>

- A. Roof area above Boiler Room, at Vent Through Roof, modify note to read: VENT THROUGH ROOF IN THIMBLE, SEE MECHANICAL
- 7. <u>A0102C ROOF PLAN AREA C</u>
 - A. add section detail callout 3/A0453 at column K5 and 5.2

8. <u>A0102D – ROOF PLAN – AREA D</u>

- A. Roof area above Washer/Dryer room 110, modify note to read: DRYER VENT DOWN THROUGH ROOF CURB, SEE MECHANICAL
- 9. <u>A0400 SERIES SHEETS:</u>

Α.

- Add general notes to read (This information amends notes tagged in details):
 - 1. FLUID APPLIED MEMBRANE AIR BARRIER IS TO BE USED FOR ALL CMU SUBSTRATES. USE TRANSITION STRIP OVERLAPPING THE FLEXIBLE FLASHING AND SEALING AGAINST FLUID APPLIED MEMBRANE AIR BARRIER.
 - 2. MODIFIED BITUMINOUS SHEET AIR BARRIER IS TO BE USED FOR ALL COLD FORM METAL FRAMED GYPSUM SHEETING SUBSTRATES. ALSO USE AS A TRANSITION FROM FLUID APPLIED AIR BARRIER TO SEAL AGAINST ADJACENT MATERIALS PER SPECIFICATION
- 10. <u>A0401 WALL SECTIONS</u>
 - A. Wall section 5/A0401, add tag elevations at openings:
 - 1. B/ OPENING AT 102'-0"
 - 2. T/ OPENING AT 112'-0"
 - 3. B/ OPENING AT 114'-8"
 - 4. T/ OPENING AT 118'-8"
- 11. <u>A0452 EXTERIOR SECTION DETAILS</u>
 - A. Detail 2/A0452 add note at anchor into partial height CMU partition to read: SEE STRUCTURAL FOR DESIGNED ANCHORS

Volume 3:

- 1. <u>G000 COVER SHEET</u>
 - B. Added Vicinity Map
- 2. <u>E0101A LEVEL 01 LIGHTING PLAN AREA A</u>
 - A. General Note A updated to read : PENETRATIONS THROUGH THE STORM SHELTER ENVELOPE LARGER THAN 3-1/2 SQUARE INCHES IN AREA FOR RECTANGULAR OPENINGS OR 2-1/16" IN DIAMETER SHALL BE CONSIDERED AN OPENING AND SHALL BE PROVIDED WITH AN OPENING PROTECTIVE DEVICE. REFERENCE STRUCTURAL DRAWINGS. AVOID BUNDLING CONDUIT FEEDERS IN CLOSE PROXIMITY SO THAT THE SHELTER ENVELOPE IS NOT DEGRADED OR THE PENETRATION FALLS INTO THE CONDITION AS DESCRIBED ABOVE.

3. <u>E0402 – ENLARGED PLANS</u>

A. General Note B updated to read : PENETRATIONS THROUGH THE STORM SHELTER ENVELOPE LARGER THAN 3-1/2 SQUARE INCHES IN AREA FOR RECTANGULAR OPENINGS OR 2-1/16" IN DIAMETER SHALL BE CONSIDERED AN OPENING AND SHALL BE PROVIDED WITH AN OPENING PROTECTIVE DEVICE. REFERENCE STRUCTURAL DRAWINGS. AVOID BUNDLING CONDUIT FEEDERS IN CLOSE PROXIMITY SO THAT THE SHELTER ENVELOPE IS NOT DEGRADED OR THE PENETRATION FALLS INTO THE CONDITION AS DESCRIBED ABOVE._

4. <u>E0403 – ENLARGED PLANS</u>

A. General Note A updated to read : PENETRATIONS THROUGH THE STORM SHELTER ENVELOPE LARGER THAN 3-1/2 SQUARE INCHES IN AREA FOR RECTANGULAR OPENINGS OR 2-1/16" IN DIAMETER SHALL BE CONSIDERED AN OPENING AND SHALL BE PROVIDED WITH AN OPENING PROTECTIVE DEVICE. REFERENCE STRUCTURAL DRAWINGS. AVOID BUNDLING CONDUIT FEEDERS IN CLOSE PROXIMITY SO THAT THE SHELTER ENVELOPE IS NOT DEGRADED OR THE PENETRATION FALLS INTO THE CONDITION AS DESCRIBED ABOVE.

ATTACHED:

- 1. Pre-Bid Meeting Minutes and attachments
- 2. Bidding RFI Report

SPECIFICATIONS:

- 1. <u>AIA A701</u>
- 2. <u>BID FORM</u>

DRAWINGS – VOLUME 1

- 3. <u>C21 DETAIL</u>
 - A. Drawing <u>C21-DETAILS</u> has been revised and is being reissued as an attachment to this Addendum
- 2. <u>S0101</u>
 - A. New sheet for aid in building layout.

3. <u>S0101.A</u>

- A. Revised footing configuration at 0.5-L and 0.5-K.2
- B. Added/revised dimensions
- C. Added note

4. <u>S0101.B</u>

- A. Removed erroneous grid line
- B. Revised dimension

5. <u>S0101.D</u>

- A. Added dimensions
- 6. <u>S0102.A</u>
 - A. Added dimension string
 - B. Added sheet note

7. <u>S0102.B</u>

- A. Added dimension strings
- B. Added sheet note

- 8. <u>S0102.C</u>
 - A. Added plan details
 - B. Added sheet note

9. <u>S0102.D</u>

- A. Added plan details
- B. Added sheet notes

10. <u>S0200.A</u>

- A. Added perimeter slab bars
- B. Added not regarding slab reinforcing
- C. Added notes at no-shelter walls intersecting shelter walls

11. <u>S0200.B</u>

- A. Added/relocated shroud framing at small diameter roof penetrations
- B. Added sheet note

12. <u>S0200.C</u>

- A. Added detail 4
- B. Revised detail 1
- C. Revised load notes to match STR calculations

13. <u>S0200.D</u>

- A. Revised slab condition at details 1-4, 19
- B. Added note for chairs/bolsters at details 5-6, 8-9, 11-15, 17, 21
- C. Added note for pour stops/formed edge at details 6, 8, 12-15, 21
- D. Added note for A706 bars at details 6, 14, 17
- E. Revised detail 18 to show bridging termination at beam

14. <u>S0501</u>

- A. Revised bearing plate dimensions at details 14-15
- B. Revised masonry rebar at detail 15
- C. Added dimension to detail 18

- 15. <u>S0505</u>
 - A. Added note s to detail 15
- 16. <u>S0506</u>
 - A. Added detail 9

DRAWINGS – VOLUME 2

- 4. <u>G00 COVER SHEET</u>
 - A. Drawing <u>G00 COVER SHEET</u> has been revised and is being reissued as an attachment to this Addendum
- 5. <u>A0101A LEVEL 01 PLAN AREA A</u>
 - A. Drawing <u>A0101A LEVEL 01 PLAN AREA A</u> has been revised and is being reissued as an attachment to this Addendum
- 6. <u>A0101B LEVEL 01 PLAN AREA B</u>
 - A. Drawing <u>A0101B_LEVEL 01 PLAN AREA B</u> has been revised and is being reissued as an attachment to this Addendum
- 7. <u>A0201 ENLARGED PLANS TOILET ROOMS</u>
 - A. Drawing <u>A0201 ENLARGED PLANS TOILET ROOMS</u> has been revised and is being reissued as an attachment to this Addendum
- 8. <u>A0311 EXTERIOR ELEVATIONS</u>
 - A. Drawing <u>A0311 EXTERIOR ELEVATIONS</u> has been revised and is being reissued as an attachment to this Addendum
- 9. <u>A0312 EXTERIOR ELEVATIONS</u>
 - A. Drawing <u>A0312 EXTERIOR ELEVATIONS</u> has been revised and is being reissued as an attachment to this Addendum
- 10. <u>A0423 EXTERIOR PLAN DETAILS</u>
 - A. Drawing <u>A0423 EXTERIOR PLAN DETAILS</u> has been revised and is being reissued as an attachment to this Addendum
- 11. <u>A0453 EXTERIOR SECTION DETAILS</u>
 - A. Drawing <u>A0453 EXTERIOR SECTION DETAILS</u> has been revised and is being reissued as an attachment to this Addendum

12. <u>A1006 – DOORS & BORROWED LIGHTS SCHEDULE</u>

- A. Drawing <u>A1006 DOORS & BORROWED LIGHTS SCHEDULE</u> has been revised and is being reissued as an attachment to this Addendum
- 13. <u>A1200 GENERAL FINISH NOTES & MATERIAL LEGEND</u>
 - A. Drawing <u>A1200 GENERAL FINISH NOTES & MATERIAL LEGEND</u> has been revised and is being reissued as an attachment to this Addendum
- 14. <u>A1231A LEVEL 01 FINISH PLAN AREA A</u>
 - A. Drawing <u>A1231A LEVEL 01 FINISH PLAN AREA A</u> has been revised and is being reissued as an attachment to this Addendum
- 15. <u>A1231B LEVEL 01 FINISH PLAN AREA B</u>
 - A. Drawing <u>A1231B LEVEL 01 FINISH PLAN AREA B</u> has been revised and is being reissued as an attachment to this Addendum
- 16. <u>A1231C LEVEL 01 FINISH PLAN AREA C</u>
 - A. Drawing <u>A1231C LEVEL 01 FINISH PLAN AREA C</u> has been revised and is being reissued as an attachment to this Addendum
- 17. <u>A1231D LEVEL 01 FINISH PLAN AREA D</u>
 - A. Drawing <u>A1231D LEVEL 01 FINISH PLAN AREA D</u> has been revised and is being reissued as an attachment to this Addendum

DRAWINGS – VOLUME 3

- 1. <u>P0101.D UNDERGROUND & LEVEL 01 SANITARY, VENT & STORM PLAN AREA D</u>
 - B. Drawing P0101.D is being issued as an attachment to this Addendum.
- 2. <u>P0303 ENLARGED PLUMBING PLAN</u>
 - A. Drawing P0303 is being issued as an attachment to this Addendum.
- 3. <u>M0101B HVAC DUCTWORK PLAN</u>
 - A. Exhaust airflow values were revised to exhaust fans EF-2, EF3, EF-4, and EF-5.
 - B. Exhaust duct mains were revised to 8x8 for EF-4 and EF-5.

4. <u>M0101D – HVAC DUCTWORK PLAN</u>

- A. Exhaust airflow values were revised to exhaust fans EF-6.
- B. Added return air transfer air duct connection to admin. offices.
- C. C.A.I. for cloth's dryer was added and dry vent size was up-dated.
- D. Added keyed note #3

5. <u>M0102B – HVAC DUCTWORK PLAN</u>

- A. Expansion loop for hot water piping was added to plans.
- B. Added keyed note #3

6. <u>M0102D – HVAC DUCTWORK PLAN</u>

- A. C.A.I. for cloth's dryer was added and dry vent size was up-dated.
- B. Added keyed note #3

7. <u>M0201A – HVAC PIPING PLAN</u>

- A. Expansion loop(s) for hot water piping were added.
- B. Added keyed note #2

8. <u>M0201B – HVAC PIPING PLAN</u>

- A. Expansion loop(s) for hot water piping were added.
- B. Added keyed note #1
- C. Branch HWS & HWR piping was added to server boiler room unit heater.

9. <u>M0301 – ENLARGED PLAN</u>

- A. Updated keyed note #1
- B. Added keyed note #5
- C. Removed HWS & HWR piping serving VAV-A209
- D. Branch HWS & HWR piping was added to server boiler room unit heater.
- 10. <u>M0401 Riser diagram</u>
 - A. Eliminated/removed by-pass control valve at/near pressure sensor for HW system.
- 11. M0402 Riser diagram
 - A. Updated air separator model number to a RL-5G.

Addendum No. 2, Page 11

12. <u>M0501 – Schedules</u>

- A. Fin-tube schedule: added remark #5.
- B. Unit heater schedule: Added remark #4 to fin-tube schedule, and added missing UH-7 to schedule.
- 13. <u>M0502 Schedules</u>
 - A. Pump schedule: Revised HWP-1 & HWP-2 model number and remark # 3.
 - B. Computer room AC schedule: removed remark #3 from schedule and indicated respective remarks to each unit.
 - C. Cabinet Heater schedule: added remark #3 to schedule.
- 14. <u>M0601 Flow and Control Diagrams</u>
 - A. #2: Added sequence for VAV-A209 to VAV sequence.
 - B. #3: Added heating position point.
 - C. #4: Added damper command point and updated fan number for fan sequence.

15. <u>M0701 – Details</u>

- A. #2: removed fire damper at kitchen hood.
- B. #4: removed fire damper for ducted transfer air connection.

16. <u>E0201A – LEVEL 01 POWER AND SYSTEMS PLAN – AREA A</u>

- A. Drawing E0201A is being issued as an attachment to this Addendum.
- 17. <u>E0201B LEVEL 01 POWER AND SYSTEMS PLAN AREA B</u>
 - A. Drawing E0201B is being issued as an attachment to this Addendum.

18. <u>E0521 – POWER RISER DIAGRAMS</u>

A. Drawing E0521 is being issued as an attachment to this Addendum.

19. <u>E0601 – LIGHTING SCHEDULES</u>

A. Drawing E0601 is being issued as an attachment to this Addendum.

20. <u>E0621 – POWER SCHEDULES</u>

A. Drawing E0621 is being issued as an attachment to this Addendum.

21. <u>E0641 – SYSTEM SCHEDULES</u>

A. Drawing E0641 is being issued as an attachment to this Addendum.

22. <u>E0721 – POWER DETAILS</u>

1. Drawing E0721 is being issued as an attachment to this Addendum.

END OF ADDENDUM NO. 2

MEETING NOTES

Project Name	Rockford Public Schools 205 - New Elementary School A – Cherry Valley, IL
Project Number	5005.00
Date	January 25, 2016
Time	9:30 a.m.
Place	RPS 205 Administration Building, 501 7th Street, Rockford, IL 61104
Attendees	Refer to sign-in sheet
Attachments	RPS 205 Opening Statement, SSR Prebid Agenda and Presentation, Sign-in Sheet

Mandatory Prebid Meeting Bid No. 17-25 Rockford Public School District #205 New Elementary School A – Cherry Valley, IL

The following is a summary of the above-mentioned meeting.

- A. Introduction Ragnar Benson Construction read aloud an opening statement for the project; refer to the attached.
 - 1. Meeting Sign-In Sheet all attendees were instructed to sign in and provide contact information.
 - 2. Date / Time / Place of Bid Opening
 - a. Bids will be received no later than 2:00 p.m. on Wednesday, February 15, 2017.
 - b. Bidders will need to check in on the 3rd floor of the Administration Building to gain access to the 6th floor to deliver bids. Once collected, bids will be publicly opened and read aloud in the lower level of the Administration Building.
 - c. RPS Bid Number: 17-25
 - d. Refer to specifications front end documents for documents to be submitted with bid.
 - e. All Requests for Information (RFIs) are to be submitted to the District's Purchasing Department; attention: Tamara Pugh, RPS 205 tamara.pugh@rps205.com
 - 3. Key Individuals
 - a. Owner Rockford Public School District #205
 - 1) Tamara Pugh, RPS 205 tamara.pugh@rps205.com
 - 2) Kevin Behling, RPS 205 Executive Director of Design & Construction
 - 3) Todd Schmidt, RPS 205 Chief Operating Officer
 - b. Architect/Engineer CannonDesign / Arc Design Resources (Civil)
 - 1) Keri VanSant, CannonDesign Project Manager

MEETING NOTES

2

- 2) Sanja Residbegovic, CannonDesign Project Architect
- 3) Jeff Linkenheld, Arc Design Resources Principal
- 4) Jason Stone, Arc Design Resources Project Engineer
- c. Program Manager Ragnar Benson Construction
 - 1) Paul Paolini, Project Executive
 - 2) Dennis Williams, Senior Project Manger
 - 3) Craig Elliott, Senior Project Manager
- d. Commissioning Agent Smith Seckman Reid
 - 1) Laura Ludwig, Principal
- B. Project Procedures -
 - 1. Bid Date/Time: Wednesday, February 15, 2017 @ 2:00 p.m.
 - 2. Tax Exempt ID: E9992-3386-07
 - 3. Bid RFI Procedure Email Only All correspondence MUST be sent to Tamara Pugh
 - 4. Bid Documents Architectural Plan Issue Date 1/4/17
 - 5. Bidding Requirements
 - a. Deliverables
 - 1) Check List
 - 2) Bid Form Complete
 - 3) AIA A305 Contractor Qualification Statement
 - b. 5% Bid Bond or a Cashier's Check MUST accompany the Bid

NOTE: Bid Bond or Cashier's Check must be made payable to the Owner <u>not</u> CannonDesign.

- c. Performance and Payment Bonds will be required for 100% of the bid value for the project.
- d. Alternates Provide pricing for <u>all</u> alternates. Alternates 1A, 1B, 2, 3 and 4 pricing will be valid for a period of 90 days after notice of award. Alternates 5 and 6 will be valid for a period of 30 days after notice of award.
- e. Alternates identified in Section 012300 of Specifications:
 - 1) Alternate #1A ADD Kindergarten Rooms Cubbies
 - 2) Alternate #1B ADD Kindergarten Rooms Wall Cabinets
 - 3) Alternate #2 ADD Display Cases & Tack Surfaces
 - 4) Alternate #3 ADD Library Casework

MEETING NOTES

- 5) Alternate #4 ADD Increase Generator Capacity
- 6) Alternate #5 – ADD - Additional Parking Spaces @ Bus Loop
- Alternate #6 ADD Water Main Extension 7)
- f It is the Contractor's responsibility to visit the project site and review contract documents prior to bidding the project.
- 6. Addenda Status
 - Addendum #1 was issued on January 24, 2017. а.
 - Addendum #2 will be issued on January 27, 2017. b.
 - Last day for RFIs is February 8, 2017. c.
 - d. Last addendum will be issued by February 10, 2017.
- 7. Faxed/emailed bids will NOT be accepted.
- Changes to the bid documents will be executed via addendum only. Minutes from the Prebid 8. Meeting will be included in Addendum #2.
- Permits & Fees 9
 - Building permit will be issued by the Regional Office of Education and will be obtained by a. RPS 205.
 - b. Notice of Intent by RPS 205 – Permit has been received.
 - C. RRWRD I/C Permit Application will be need to be completed and submitted by the Contractor. The cost of the application will be a reimbursable expense for the Contractor.
 - Ь RRWRD Connection/Flow charges will be paid by the Contractor as a reimbursable expense.
 - Winnebago County Health Department permit application will be completed by the e. Contractor. The fee will be a reimbursable expense.
 - ComEd permanent service cost will be paid directly by RPS 205. f.
 - Nicor permanent service cost will be paid directly by RPS 205. q.
 - Village of Cherry Valley water connection fees will be paid by contractor as a reimbursable h. expense; Village has approved has approved and project is at EPA for water main approval.
- C. Project Overview Arc Design Resources and CannonDesign provided a general overview of the site and building, respectively.
 - 1. Site
 - Located southwest of the intersection of Perryville Road and Harrison Avenue. а.
 - Absolutely no construction access will be allowed from Riddelle Lane. The new access b. road from Perryville Road will be utilized as the construction access for the site.

MEETING NOTES

- c. The area of Riddelle Lane will include watermain service connection work; advance notification of work in this area will be required for residents.
- d. As part of a separate project, the County will be conducting a road widening and installation of a left-turn lane at Perryville Road.
- e. Lime stabilization is identified on the Drawings for the school building pad. UPDATE: Area of lime stabilization will be updated via addendum to include a portion of the parking lot.
- f. Undercuts are identified for portions of the parking lot and bus loop as allowances. Prior to any undercutting, specifications indicate requirements for continual discing and drying for 3 consecutive days. UPDATE: A revised undercut value of 695 CY for the north bus loop will be issued via addendum.
- g. Landscaped berms are identified on the west side of the site, as well as a detention pond at the northeast corner; the intent is for the site to balance for cut and fill. There are opportunities on the site to help with a balanced condition (detention area and north athletic fields).
- h. A decorative plaza is indicated for the main entrance in the Drawings.
- i. Utility routing was discussed and coordination/communications have been started with:
 - 1) Com Ed Permanent Service Installation July 2017
 - 2) Nicor
 - Cherry Valley Water Department has approved and project is at EPA for water main approval.
 - 4) RRWRD the EPA permit has been received; the Contractor will be responsible for the I/C Permit Application; the Contractor's plumbing subcontractor must be licensed and bonded with the RRWRD prior to starting work on the project.
- 2. Building
 - a. New 86,300 SF elementary school; building is a 4-strand, K-5 school, with interior shared spaces.
 - b. Review documents for central roof design with clerestories and skylights indicated throughout the building.
 - c. Storm shelter and construction sequencing -
 - Storm shelter is designed to meet the ICC 500-2014 code requirements and has 12-inch thick, fully-grouted masonry walls. The District is utilizing a 3rd-party peer review firm for the design.
 - 2) Contractors are required to review the specifications for special inspections and testing, as well as the "Quality Assurance Plan". Special protection for penetrations are identified in the Drawings; the Contractor is required to review all disciplines and coordinate trades, penetrations and opening protectives.
 - 3) Once construction has begun on the storm shelter, it must be continuous until each trade is complete (no phasing).

MEETING NOTES

- 4) The shelter is designed with systems to provide passive ventilation, lighting and plumbing/water for occupants for a minimum 2-hour time period following a storm event.
- 5) Contractors are required to review all documents to coordinate penetrations through roof and walls of shelter for all disciplines; not all penetrations may be indicated in the architectural drawings. Special opening protective details have been provided in the documents.
- d. Glazed brick is identified in the documents for the kindergarten area; special shapes and multiple colors are identified.
- e. A mechanical systems description was provided.
- 3. QA/QC
 - a. Called Inspections are required by the ROE and must be scheduled during construction
 - b. Testing requirements are identified in the documents.
 - c. Special inspections are identified and required for the storm shelter.
 - d. Commissioning will be required for building systems as identified in the documents. Refer also to attached presentation and agenda for additional information.
 - 1) Refer to Specification Section 019113 for roles and responsibilities and Commissioning Plan information.
 - 2) Building Start is the digital application/program that will be utilized for all commissioning activities.
 - 3) A prefunctional checklist will be required by the Contractor.
 - 4) Commissioning agent will review and backcheck testing and balancing performed by the Contractor.
 - 5) Written authorization by the Contractor will be required prior to the start of final functional performance testing.
 - "Beta" testing is to be completed prior to functional testing. If system is not operating as designed, Contractor can anticipate back charges for additional trips to the project site.
 - 7) Peak load conditions will be tested for summer and winter; 2-day duration for seasonal testing of building systems.
 - 8) A 10-month warranty review will be required for all commissioned building systems.
 - 9) The District will have graphics completed for the controls contractor in advance of functional testing.
- 4. Project Management and Coordination
 - a. Project Schedule and updating will be required for each pay request submission

MEETING NOTES

- b. Project supervision and management requirements (full time) both site superintendent and project manager must be onsite and dedicated solely to this project.
- c. Mock-ups and Pre-installation meetings are identified in the documents; masonry mockups are to be standalone (in-wall mock-ups are not allowed).
- d. Brick Masonry special finishes and shapes are identified in the documents.
- e. Meetings Weekly meetings will be conducted at project site.
- f. Owner and Architect trailer identified and specified in the documents; separate internet connections shall be provided for this trailer from the Contractor's use.
- g. Change Order procedures / Labor rates Prevailing wages are required; all required documentation will need to be submitted before any change orders are processed.
- h. Web-based submittal system / Development of Submittal Schedule Submittal Schedule must be submitted for review and approval within 60 days of Notice of Award.
- i. Schedule of Values / Stored Materials Schedule of Values must be submitted for review and approval within 60 days of Notice of Award; breakouts will be required for each trade subcontractor for materials and labor.
- j. The Contractor will be responsible for managing and maintaining the project's Storm Water Pollution Prevention Plan (SWPPP).
- k. A 10% retainage will be held until the end of the project; no partial release of retainage will be granted.
- I. All subcontractors must be capable of performing and completing work within the schedule identified.
- 5. Contractor Parking Requirements No access to site will be allowed from Riddelle Lane.
- 6. Staging/material storage requirements to be established by the Contractor; suggestions for fencing and staging are provided in the Drawings.
- 7. Use of Utilities Temporary power and use costs, permanent electric service use costs, and gas service use fees shall be the responsibility of the Contractor.
- Site safety and working times Contractor is solely responsible for site safety and security. Contractor shall review and adhere to noise ordinances and construction working hours for the Village of Cherry Valley.
- 9. Project Milestone Dates
 - a. CORRECTION: Award Letter is anticipated for March 1, 2017, following Board of Education award on February 28, 2017.
 - b. CORRECTION: Start Date is anticipated for March 2, 2017.
 - c. Commissioning Pre-Construction Meeting April 17, 2017
 - d. Commissioning Functional Testing April 16, 2018
 - e. Substantial Completion May 15, 2018

MEETING NOTES

- f. Project Final Completion June 15, 2018 **FIRM DATE**; RPS 205 will be moving in at this time in preparation for school year.
- g. CORRECTION: Final Commissioning for Heating System Winter 2018/2019
- D. Miscellaneous Project Items -
 - 1. Closeout Process all submittals shall be digital; the Contractor will be responsible for coordinating with the District's printing company (BHFX) for filing of all project-related documents.
 - 2. Criminal History Documentation Fingerprinting is not required.
 - 3. A cleared employee list must be provided by the Contractor for its employees, as well as the employees of any subcontractors. A search of the Illinois Sexual Predator and Illinois Murder and Violent Offender Against Youth databases shall be completed for every worker on the project site.
 - 4. Owner Furnished Materials review responsibility matrix in the Electrical Drawings for additional information. Contractor is responsible for receiving the material, storing it and disposal of debris.
 - 5. Post Bid Deliverables
 - a. Project Manager résumé
 - b. Project Superintendent résumé
 - c. Project Schedule of Values to be submitted within 60 days of award letter
 - d. Project labor rate schedule years 2017 and 2018
 - e. Project Submittal Schedule to be submitted within 60 days of award letter
- E. General Questions -
 - 1. The Project Budget is within the range of \$17M to \$18M.
 - 2. The requirement for full-time project management and job superintendent is required only for the General Contractor, not subcontractors.
 - 3. There are no liquidated damages for the project.
 - 4. The Bid Form must be 100% complete; RPS 205 will review and verify requirements for submittal of a duplicate form.
 - 5. This is not a LEED-certified project.
 - 6. The RRWRD has permitted the project for flows. The sanitary line is considered a private line.
 - 7. Any cost associated for permitting required for the access road connection at Perryville Road will be a reimbursable expense to the Contractor.
 - 8. The Contractor shall utilize a web-based submittal system. The basis-of-design is "Submittal Exchange". The Contractor can submit a substitution request prior to bidding utilizing the substitution request form included in Addendum #1 for other web-based submittal systems. The cost of any web-based submittal system shall be the responsibility of the Contractor.
 - 9. Builders Risk Insurance will be carried by RPS 205; RPS 205 will review and confirm responsibility for payment of deductibles.

MEETING NOTES

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- 10. Project is not utilizing any state or federal funding.
- 11. Contractor shall begin work immediately following receipt of Notice of Award letter.
- 12. The SWPPP has been developed by Arc Design Resources. The Contractor is responsible for management and maintenance of the SWPPP; permit has been received.
- 13. Owner-furnished/Contractor-installed items do not include furnishings and equipment other than what is indicated in the documents.
- 14. Prevailing wages are required for this project.
- 15. There are no specific minority participation goals or requirements for this project.
- 16. Review specifications for payment procedures and requirements for certified payroll, waivers, draft copies and payment schedule. Pay applications will not be processed without submittal of waivers.
- 17. The Quality Assurance Plan indicates special requirements for certifications and documentation; submit all RFIs in writing for clarification.
- 18. Determination for release of CAD files for use in preparing bid is forthcoming.
- F. Site Visit Following the meeting, Contractors were encouraged to visit the site on self-guided tours.

To the best of my knowledge, the above items were discussed. Should there be any additions or corrections, please advise CannonDesign in writing within seven days. We will consider these meeting notes an accurate record for proceeding with the necessary "actions", unless informed otherwise as noted.

Prepared by,

VanSart

Keri VanSant CannonDesign

PRE-BID CONFERENCE OPENING STATEMENT

Welcome to the mandatory pre-bid conference for IFB 17-25 New Elementary School A for the Rockford Public Schools.

The purpose of this meeting is to receive input, comments, questions, clarifications and suggested changes relative to this solicitation. As a reminder, the only acceptable changes to the Bid/RFP are formal Addendums published by the RPS Purchasing department. Additionally, the Addendum may address other issues identified by the School District.

The goal of today's meeting is to increase your knowledge of the solicitation as it is written and provide an information mechanisim in which you may advise the School District of any changes it should make. Consequently, any changes you wish the Rockford Public Schools to consider must be submitted in writing to the Purchasing department before the deadline as expressed in the solicitation.

We will try to answer as many of the questions as possible. If we cannot answer a question today, we will defer that answer to the published Addendum. Additionally, minutes from this pre-bid conference will be published in the Addendum.

- Bid Opening is scheduled for Wednesday, February 15, 2017 at 2:00 PM Rockford Board of Education, 6th floor Conference Room. Late bids will not be accepted. Faxed or emailed bids will not be accepted.
- Board Approval February 28, 2017
- Bid RFI Procedures Email Only All correspondence during the bid process MUST be sent to Tamara Pugh, Purchasing Process Manager at <u>tamara.pugh@rps205.com</u> Last RFI will be accepted until February 8th at 12 pm. Last addendum will be issued by February 10th at 12 pm.
- Addendums will be emailed to all attendees at the pre-bid conference, posted on the RPS website, Demand Star and the 3 printing companies.
- PLEASE reference the REQUIRED FORMS CHECK LIST for all documents that must be submitted with your bid offer form. All forms must be properly completed, signed and submitted or your bid will be deemed non-responsive. 5% Bid bond for the Base bid to be included.

I will turn it over to the Project Manager for summary of the project.



CHERRY VALLEY – ROCKFORD, IL <u>COMMISSIONING PRE BID MEETING AGENDA</u> January 25, 2017 Meeting Location: Rockford Administration Building

I. OVERVIEW OF COMMISSIONING (Cx) PROCESS within Contract Documents

A. Commissioning Process Goals and Benefits

- 1. Documents completion of project per construction documents
- 2. Commissioning scope defined in Specification 019113.
- 3. Ensures Owner is prepared to operate and maintain the building upon occupancy
- 4. Owner receives building with systems functioning properly and efficiently
- 5. Reduces Contractor call-backs and warranty phase expense
- 6. Architect/Engineer receives independent verification that systems are installed and functional per design intent.

B. Commissioning (Cx) Plan

- 1. The Construction Document (CD) Cx Plan will be issued to the Project Team. The Commissioning Plan includes an overall outline of all commissioning activities as well as equipment Prefunctional Checklists (PFC) and Functional Performance Test (FPT) scripts.
- 2. The Commissioning Plan is a "living" document and will be revised as required based on any changes made during the submittal and construction process.
- 3. BUILDING START ELECTRONIC COMMISSIONING PLATFORM
 - Building Start is a paperless digital platform we use for managing all commissioning aspects of your project. Using iPads, Android devices or Windows based devices, SSR uses this system to share construction information and capture on-site observations and construction feedback using the cloud.
 - Building Start is a real-time system for sharing project information, with data and notes immediately available for the Project Team's use. Building Start can assist the trades in sequencing the order of Quality Control checks and equipment startups, and by tracking completion and issues, we are able to use this tool to identify problems that could impact the construction schedule and keep the project on track.
 - GC, OR, OWNER, mechanical and electrical subcontractors will be given access to Building Start. All prefunctional and functional performance test scripts, all issues and Master Issue List will be within Building Start.
 - Once the Cx Plan has been developed and uploaded to Building Start, SSR will provide a training session on its use and reporting features.
 - Building Start session: Individuals with direct knowledge and responsibility for the installation of the equipment and completion of the prefunctional checklists must be available for 1 hour training. Subcontractor must come prepared with iPad or Android device for their own use.

C. Equipment/Systems to be Commissioned

- PLUMBING:
 - Domestic Water Booster Pump (if any).
 - Domestic Hot Water Heaters, Recirculation Pumps and associated Thermostatic Mixing Valves.
 - Any Building Automation System (BAS/EMS) integration or monitoring of commissioned Plumbing equipment/systems.
 - BAS System trending data for the Commissioning Performance Monitoring, Optimization and Reporting (Cx-PMOR) System for 100% of the equipment monitored or controlled by the BAS.
- MECHANICAL:
 - Heating Hot Water System including the Boilers, Hot Water Pumps, Hot Water System Chemical Treatment, and associated components.
 - Rooftop Units.
 - Computer Room Cooling Units (indoor and outdoor components).
 - Exhaust Fans.
 - Kitchen Hood and Exhaust Fan.
 - Variable Air Volume Terminal Units 25% sampling rate for FPTs.
 - Unit Heaters and Cabinet Heaters 25% sampling rate for FPTs.
 - Radiant Panels 25% sampling rate for FPTs.
 - Building Automation Systems ('BAS/EMS') for all commissioned equipment including graphics, system integration components, and network tie-ins to the existing campus BAS.
 - BAS System trending data for the Commissioning Performance Monitoring, Optimization and Reporting (Cx-PMOR) System for 100% of the equipment monitored or controlled by the BAS.
- ELECTRICAL:
 - Lighting and Daylighting Control Systems (interior and exterior).
 - Emergency Power including the Emergency Generator and Automatic Transfer Switches. Commissioning scope only includes testing operation of Emergency Generator and Transfer Switches, Alarms and Annunciation. Commissioning does not include "Black-Site Test" verification of operation of equipment/systems on emergency power (loss of normal power – transfer to emergency power – restoration of normal power).
 - Any Building Automation System (BAS/EMS) integration or monitoring of commissioned Electrical equipment/systems.
 - BAS System trending data for the Commissioning Performance Monitoring, Optimization and Reporting (Cx-PMOR) System for 100% of the equipment monitored or controlled by the BAS.

D. Prefunctional checklists

1. GC and subcontractors with direct knowledge of the installation are to complete the prefunctional checklists that are within the Cx Plan which will be located in the cloud through Building Start. SSR will conduct site visits to backcheck contractor completion of installation checklists.

E. Equipment Start-Up, Control System debugging and Test and Balance Work

- 1. GC / subcontractors are responsible for equipment/systems start-up.
- 2. Control system subcontractor is requested to submit a 100% complete start-up plan including point-to-point verification to CxA prior to start of functional testing. Controls subcontractor will

be required to export data points to the cloud for third party trending. Please refer to the specification section for further details of this requirement.

- 3. GC to forward to CxA copy of final TAB report (at least in draft form) prior to functional testing execution.
- 4. The subcontractors should completely check out and operate the equipment/systems prior to SSR functional performance testing to insure correct operation. Subcontractors to fill out FPT checklists as required to verify that various control sequences are operating correctly prior to SSR FPT verification. SSR FPT verification is not intended to be "beta" testing for the control systems. Any testing or retesting as a result of incomplete or failed installation will be charged to the contractor.
 - 5. GC to notify CxA when all start-up activities, HVAC control work, and test and balance work is complete and systems are ready for functional testing.

F. Functional Performance Testing (FPT)

- 1. SSR will coordinate final testing dates and schedules for functional testing with GC PM / subcontractors.
- 2. During SSR FPT verification testing the various equipment/system procedures are to be demonstrated by contractors and witnessed/verified by SSR.

G. Commissioning Meetings

 In general, SSR will attempt to discuss any other commissioning related activities (scheduling of site visits to complete checklists, MDL items, etc.) in conjunction with the subcontractor progress meetings. SSR will call other commissioning only meetings to discuss/resolve any lingering commissioning related activities as required. We understand how busy everyone is and we will only schedule additional commissioning specific meetings as a last resort to resolve an issue.

COMMISSIONING REQUIREMENTS

- 1. Specification Section 019113
- 2. Building Start Commissioning Plan and contractor completion of prefunctional checklists
- 3. Contractor requirements to remedy/resolve issues
- 4. Readiness for functional testing TAB, BAS points emailed to cloud for third-party trending, completed FPTs (beta testing)
- 5. Functional Testing
- 6. Opposed season testing & Warranty phase

ROCKFORD PUBLIC SCHOOLS 17-25 Rockford Public School District 205 School A, Zone 2 Pre-Bid Meeting Sign-In Sheet Wednesday, January 25, 2017 at 9:30 a.m.



PRE-BID MEETING SIGN-IN SHEET

IFB # 17-25 Rockford Public School District 205 School A, Zone 2

Wednesday, January 25, 2017 9:30 am (CST)

	/				
	Printed Name	Company Name	Company Address	Telephone	E-mail
			60191		ESTIMATING & Soll it theom
_	MICHAEL PADZEVILLY	GEORGE SOLLITT CONST. CO	790 N. CENTRAL AVE WOOD DAVE IL.	630-860-7333.	mradzeviche sollificom.
			6 86123		esti mating @ IHC
	Ryan Steens	IHC Construction, LLC	1500 executive drive Elgin IL	847-742-1516	construction, com
					TRIZZOG EHPaschen Ke
	Tom Rizzio	FHPaschen	5515 DI River ne Chicayo	773-444-3474	
				773 - 444 - 3474	1 bzitc K@fhpaschen
-1	Robert Zitek			773-693-0064	4 fax
	an: the i	SWEDBERGY ASSOLIATES	1135 E STATE ST	815 895	morato
ذ	Michelbrorak	ASSOLIATES	SYCAMORE IL	9116	swedburgs.com
	1				
	RyAN HATTHAURY	W-TRAIL GROUP	5901 MARCHAM KE	35-2283000	Thathaway entry fast con
		/			7
	CRAIG MANDEL	MARTAM CONSTRUCTEON	1200 GASKET DRIVE, ELGIN, IL	847-608-6800	CRAIGE MARTAN. ON
					MIKE. benstent@
	MIKE BENSTENT	MADISON Construction	15657 South 70th Ct. ORLANDPK	708-613-6888	MADISON Construction . Net
			12.	•	

ROCKFORD PUBLIC SCHOOLS

17-25 Rockford Public School District 205 School A, Zone 2 Pre-Bid Meeting Sign-In Sheet Wednesday, January 25, 2017 at 9:30 a.m.

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Printed Name	Company Name	Company Address	Telephone	E-mail
Jeff Bockhop	Stenstown General	Company Address	815-398-	jeff b @
	Const.	RHA 61104	2420	rstenstrom.com
	STENSTROM	2420 20th ST.	815-398-2420	DAVEDE
DAVE DINGES	GENERAL CONTRACTOR	ROCKFORD, IL	0.5 0.0	RSTENSTLOM. Com
		330 E Delevan Drive	608-754-6601	brigh girgene
Brian Girgen	JP Collen & sons	Saresville, WI	608-154 6601	prian.girgene speullen.com
	1			
DAN LEI	MORSE ELECTRIC	500 W. SOUTH ST. FREEPORT	815-266-4217	diei ethemorsegroup.com
	/-	LEGENTE PA EREER PT	1	TO UREDTEM OF EVENAGE
Tony Gilbertson	FISCHER EXCAUATING	1567 HEINTE RD FREEPORT	815-233-3232	TGILBERTSON @ FISCHAERIUG.
Juson Store	Are Design Resources	5291 Zenith Porkway	815-484-4300	jst-nelvodesign.any
TODD Byxbe	Miller Engineering	1616 South Main ST	\$15-963-4878	TByxbe enecogroup.com
1000 - 3.		Rochford, 12 4/102	010 10	
		1300 Gratery blod Rebit, WI 53511	608-449-2456	Steed ettens is con up com
Steven Reed	The Morse Group	The second		
KERI VANSANT	CANNON DESIGN	225 N. MICHIGAN, CHICAGO, IL		KUANSANTO CANNONDEGLAN.COM
SANJA	CANNONDECKN	v	동안 같은 가슴	SRESIDBEGOVICE
KERID BEGOVICO		601 BLACKHAWK Dr.		CANNONDESIGN.COM
AL Kulsik	ScHENNEN	401 BANCK MAWA WA.	262-221-6239	A Kulsik @
	CONTENTION	BUALing Tom, WI. 53105		SchEANER CONSTRUCTION,
				Com

KUUKFUKU FUDLIU JUHUULJ 17-25 Rockford Public School District 205 School A, Zone 2 Pre-Bid Meeting Sign-In Sheet Wednesday, January 25, 2017 at 9:30 a.m.

Printed Name	Çompany Name	Company Address	Telephone	E-mail
AL KUPSik		401 BLACK HAW 11	242-539-3100	A HUPSIK Q SHEARER CONSTRUCTION
JAKE DYKSMA	WIRD ANSTANIM W.	1322 E. STATE ST. NUCLAUD	815/965-6630	DIKSTAC CONSCONSTINCTION - WM
NICK REDIESKE	Cors CONSTRUCTION	13>= E.STATEST ROCKFORD, FL 61104	815-965-6620	REDIESKE C Cordio NEMULTION COM
KENIN GUGLIUZZA		BSSN. MADISONST RKFDIL G1107	8159624037	KEVIN Ge SANDALL. CUM
JEFF LINKENHELD	ARC DESIGN RESURCES	5291 Zomoth L.P. 6411	815-484.4300	jlinkenheld e Arcdesign.com
JAYMET CROZIER	ABIOLUSE FIRE PROTECTION	5279 23TH AVE RULLEFUED	815.397-6520	ABSOLUTE-FIRE . CAM
 CALUIN Fox	Pit Stop JANitorial Service, INC	14810 S. CICERO OAKFOREST, UL	708-508-4766	Pitstop JANitoriaL SERVICE. (A) GRAAIL

Bidding RFI Report

PROJECT: ADDENDUM ADDENDUM	5005.00 Rockford 205 - School A, Zone 2, Cherry Valley, IL 1/24/2016 1/27/2016						
ID 1	From Karen Looker Stalker Sports Floors 1215 Waupaca St New London, WI 54961 800-831-8773 920-982-4811 Fax	Received Response Da 1/20/2017_ 1/27/2017 email		An Rei			
2	Todd Hoffman 4120 Enterprise Ave. #120 Naples, FL 34104 USA Tel.: 1-800-606-0756 Fax: 1-239-384-9061 Website: www.sunflexwall.com Email: t.hoffman@sunflexwall.com	1/20/2017_ email	In reviewing the project specifications for the Aluminum Framed Folding/Paired Panel System (08 41 14), NanaWall SL45 has been used as the basis of design and we ask for consideration as an allowed substitute. For your review I have attached pertinent information for our comparable SF50. Additionally, I am providing the following link for more specific product information: http://www.sunflexwall.com/products/fold-and-slide-systems/non-insulated-aluminum-system/sf-50/.				
3	Alesia Richey Arizona Courtlines, Inc. (ACI) 8742 North 78TH Avenue, Peoria, Arizona 85345 Tel. 623.939.8126 Fax. 623.939.2526 email. alesia@arizonacourtlines.com	1/23/2017_ email	As the Architect for the above – referenced project, please find the attached Request for Prior Approvals for the following Specification Sections Specification Section: 116623- Gymnasium Equipment				
4	Neal Swartz Cell Ph 502-396-6903 Project Engineer KE Fibertec NA Inc 2107 Emmorton Park Rd Ste 102 Edgewood MD 21040 email; ns@kefibertec.com	1/27/2017_ email	We are seeking to be listed as an approved equal on your project- Rockford Public School. This is in reference to fabric duct located on drawing M0102A and referenced in the specification section.				



Answer Refer to Addendum 02.

IDFrom5Brian Girgen5SENIOR ESTIMATORp: 608.754.6601f: 608.754.9171e: brian.girgen@jpcullen.com	Brian Girgen SENIOR ESTIMATOR p : 608.754.6601 f : 608.754.9171	Received 1/26/2017_ email	Response Dat 1/27/2017	e Question 1. Supplementary Instructions to Bidder's Item#1.A states that proposals "shall be submitted in duplicate". With the volume of information required to fill out bidder's will need to cut-off internal bid receiving earlier in order to fill out all of the information in duplicate thus potentially raising the cost to the Owner (may not be able to include a close to bid time sub quote). Would the Owner consider only requiring (1) copy of the proposal?	Answ 1. Ref
		v.jpcullen.com 2. Supplementary Instructions to Bidder's Item#1.A states, "The sample proposal form bound shall not be detached". We could find no such "sample proposal form". If the "sample proposal other forms to be included with the bid please note Supplemental Instruction to Bidder's item	2. Supplementary Instructions to Bidder's Item#1.A states, "The sample proposal form bound into these specifications is for reference only and shall not be detached". We could find no such "sample proposal form". If the "sample proposal form" refers to the Bid Form and the various other forms to be included with the bid please note Supplemental Instruction to Bidder's item 3.C states "Proposal shall be made on the form provided and shall not be altered in any way". Please clarify if we are to use the Bid Form, etc. from the specifications or clarify what "sample proposal form" refers to.	2. Ref	
				3. Included in the Specifications is an "Asbestos Notification" form. It states that we are to sign and acknowledge that a "fill in the blank" school contains asbestos materials and "we should not disturb" and " have been informed of the types and locations of this material". We found no reference to an Asbestos Report in the documents and am not quite sure how there could be one as it is a greenfield site. Please advise and clarify if there is a report and if this how this form should be filled out if it is required.	
				4. Supplementary Instructions to Bidder's Item#4 states "Statement as to whether the bidder has adequate equipment to do the work properly and expeditiously". Supplemental Instruction to Bidder's item 3.C states "Proposal shall be made on the form provided and shall not be altered in any way". Please clarify where we are to add this statement to the proposal if it is required, or if it is required to be separate statement on separate page that a bidder is to include with the proposal.	4. Ref
				5. Supplementary Instructions to Bidder's Item#16 states "BEFORE A BID CAN BE CONSIDERED BY THE SCHOOL DISTRICT, THE ABOVE REFERENCED TAX IDENTIFICATION NUMBER MUST BE ON THE BID FORM IN THE SIGNATURE SECTION". On the actual bid from signature section there is no blank for FEIN, and Supplemental Instruction to Bidder's item 3.C states "Proposal shall be made on the form provided and shall not be altered in any way". Also note the W-9 form requests the same information and is to be included with proposal. Please clarify if we are to handwrite in at any location on the signature portion of the Bid Form our FEIN, if a line can be added to the Bid Form, or if it is even required on the Bid Form.	5. Ref
				6. On the Bid From page 5 it states that "Bidder is required to submit a list of reference with bid form. See attached document". We are unclear what the "attached document" refers to. Are we required to include reference directly attached to the actual Bid Form (and if so what types of references) or is the inclusion of references as required in Section Four of the AIA A305 – 1986 satisfy this requirement.	⁻ 6. Ref
				7. The Required Bid Forms Checklist states that a W-9 Department of Treasury Internal Revenue Service form is to be submitted with the Bid Proposal. Included in the documents is a Rockford Board of Education "Substitute IRS Form W-9". Please clarify if it is acceptable to submit the Rockford Board of Education "Substitute IRS Form W-9" in lieu of an Internal Revenue Service W-9 form.	7. It Form
				8. In the pre-bid meeting it was mentioned that there was no state funds being used for this project. Per Supplementary Instructions to Bidders item 15 – Employment of Illinois Workers on Public Works Act, it states among other things that 90% of labor needs to be Illinois labor if the unemployment is greater than 5% for any public works project that has state funding. Please confirm via addendum that this clause (#15) is not applicable to the project and strike from the documents.	5 8. The from t the la
				9. Please review and see if it would be acceptable to submit the subcontractor listing after the bid is submitted. This would allow bidders to incorporate bids that arrive up to bid time and ultimately provide a lower cost for the overall project.	9. The time.
6	Dan Lei Project Estimator The Morse Group Morse Electric o:815.266.4217 c:815.509.7777 f:815.266.8917 dlei@themorsegroup.com	1/26/2017_ email	1/27/2017	Sheet E0521 shows the Electrical Power Riser Diagram, but no feeder schedule is shown. Will there be an electrical feeder schedule issued that shows the conduit and wire sizes required for each power feed for the electric panels, switchboard, generator, etc.?	Refer
7	Lisa Giannini Life Safety Hardware Consultants	1/26/2017_ email	1/27/2017	After reviewing the hardware specifications it appears that the specifications are proprietary. Only 1 manufacturer is listed in the hardware schedule.	Refer
	Lisa@lshc.org (847) 960-7360			I would like to have Stanley Hardware be included in this specification. If you agree and would like to have a quote from us, please respond to this email and I will have one of our distributors prepare a quote.	

swer Refer to Addendum 02.

It is acceptable to submit the Rockford Board of Education "Substitute IRS rm W-9" in lieu of an Internal Revenue Service W-9 form.

The project is locally funded. The language in question cannot be removed on the documents. It is up to the bidder to determine what impact, if any, e language will have on their bid.

The breakout costs and subcontractor listing will need to be submitted at bid ne. A maximum of 2 subcontractors per trade can be listed if needed.

er to Addendum 02.

er to Addendum 02 .

ID	From	Received	Response Date	eQuestion	Α
8	Judi Stanley Project Administrative Assistant Stenstrom General Contractor - Design / Build Group 2420 20th St., Rockford, IL 61104 Office: 815-398-2420 Fax: 815-398-0041 JudiS@rstenstrom.com http://www.rstenstrom.com	1/26/2017_ email	1/27/2017	Are we able to get a plan set with a refundable deposit per your AIA document Article 3.1.1?	R
9	Brian Girgen SENIOR ESTIMATOR p : 608.754.6601 f : 608.754.9171 e : brian.girgen@jpcullen.com www.jpcullen.com	1/26/2017_ email		 Sheet A0311 elevation 2 shows brick types 6-7-8 (red) along grid line 4 (room 337). Details 4 and 6/A0202 and 2/A0455 at this location call out brick types 12-13-14. Please confirm the correct brick types for this location. Finish Plans A1231A-D reference CWT-1 in multiple locations at sinks, etc. Also referred to on interior elevations such as 4,5/A0610 (and elsewhere. We are unable to locate this wall tile on the Finish Schedule. Please provide. On the Finish Schedule sheet A1200 ACT-1 and ACT-3 are both called out as specific and different ceiling tiles. On the A0700 RCP's at multiple locations (typical of classrooms) it calls out for ACT-1 but has call out note 8 (rooms such as 330, 333, 334, 301, 3012, 303, 304, etc.). Call out note 8 references ACT-3. Rooms 324, 325, and 327 call out for ACT-3 and have note 8 referencing ACT-3. Please confirm if the rooms on the RCP's with call out note 8 and referencing ACT-1 are to receive ACT-1 or ACT-3. Similar to Cullen question #12, the RCP series of drawings A0700's RCP Notes section has a call out of "ACT-3: 2' X 2' ACT ceiling provide mineral wool above ceiling" and a Note 8 which states "ACT-3: 2' X 2' Performa – Symphony F". Please clarify if only the locations that reference specifically "ACT-3" on the RCP davings are to receive mineral wool or if all ceilings with Note 8 reference are to receive mineral wool above ceiling also by circular reference to ACT-3. On RCP A0700's series there is an "ACT-3" reference on RCP Notes that states to "provide mineral wool above ceiling". We are unable to locate this product in the specifications. Please provide. On RCP A0700's series there is a Note 7 that references tectum panels at the ceiling. We were unable to locate this product in the specifications. Please provide. On sheet C02 at Perryville Road there is a reference to a Monument Sign. We are unable to locate any details or specifications for this. Please provide. <l< td=""><td></td></l<>	
10	Rudolph Masonry, Inc. David Rudolph Vice President / Estimator Direct: 815-378-9384 Fax: 815-623-8116 RudolphMasonry.com	1/27/2017_ email		 01.) We are using 5 different brick on this project, will the mortar be grey or colored mortar for the 5 different brick? If the mortar is colored mortar, will we just pick from the standard colors? 02.) Area "A1" at Door #302A & #303A, I assume there will be Dry Wall on Steel Studs above the door? See Detail 16/S0200D I-beam is at deck, and it looks to be opening under I-beam? Detail 9/A0602 looks like it could be block? 	
11	Carolyn Dammen Architectural Services Coordinator Mule-Hide Products Co., Inc. 1195 Prince Hall Drive Beloit, WI 53511 Direct: 608-361-6828 www.mulehide.com	1/27/2017_ email		Mule-Hide Products would like to submit a substitution request on behalf of Distinctive Roofing for the TPO roofing system on this project. The formal request, along with supporting documentation, is attached.	3

Answer Refer to Addendum 02.

ID	From	Received	Response Date Question	Aı
12	Nick Redieske	1/27/2017_	1. Will the AWI certification be waived for Millwork suppliers?	
	Estimator / Project Manager	email		
	LEED Green Associate		2. Allowance calls for 2,300 CY for bus lane and 500 CY for foundations. Undercut note on C07 states to include 2,200 CY included in base	
	Cord Construction Company		bid. The allowances and unit prices are for different imported materials. Please clarify what is to be included in the base bid.	
	1322 East State Street			
	Rockford, IL 61104		3. Will the borings be provided? The spec section is included but the borings are not.	
	Phone 815 / 965-6630 x			
	148		4. One of the metal panel contractors has mentioned that the spec calls for all colors including custom colors. He mentioned that with the	
	Fax 815 / 965-6641		square footage required on the project the cost for the material will be inflated due to the over stock of material that will be required to be	
	Mobile 815 / 262-6125		manufactured and not utilized if a custom color is required. Please confirm that custom colors are required as a possible selection for the metal	
			wall panels.	

Answer

AIA° Document A701[™] – 1997

Instructions to Bidders

for the following PROJECT: (Name and location or address)

THE OWNER:

(Name, legal status and address) Board of Education Rockford School District No. 205 Winnebago and Boone Counties, Illinois 501 Seventh Street Rockford, Illinois 61104

THE ARCHITECT: (Name, legal status and address)

TABLE OF ARTICLES

- 1 DEFINITIONS
- 2 BIDDER'S REPRESENTATIONS
- 3 BIDDING DOCUMENTS
- 4 BIDDING PROCEDURES
- 5 CONSIDERATION OF BIDS
- 6 POST-BID INFORMATION
- 7 PERFORMANCE BOND AND PAYMENT BOND
- 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201as revised by Owner, or in other Contract Documents are applicable to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 The Bidder by making a Bid represents that:

§ 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

§ 2.1.2 The Bid is made in compliance with the Bidding Documents and all required information required by Owner in the Bidding Documents has been furnished by Bidder..

§ 2.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

§ 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 COPIES

§ 3.1.1 Bidders may obtain complete digital sets of the Bidding Documents via download from the issuing office designated in the Advertisement or Invitation to Bid. Paper copies of the Bidding Documents will not be provided. Bids including all required documents must be submitted on paper within the time and at the location specified in the Advertisement or Invitation to Bid.

§ 3.1.2 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.

§ 3.1.3 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

§ 3.1.4 The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

§ 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

§ 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

§ 3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall submit inquiries to the Director of Purchasing for Owner, 501 Seventh Street, Rockford, Illinois 61104.

§ 3.2.3 Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

§ 3.3 SUBSTITUTIONS

§ 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

§ 3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect and Program Manager at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.3 If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

§ 3.3.4 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

§ 3.4 ADDENDA

§ 3.4.1 Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.

§ 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 PREPARATION OF BIDS

§ 4.1.1 Bids shall be submitted on the forms included with the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

§ 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

§ 4.2 BID SECURITY

§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Section 6.2.

§ 4.2.2 If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

§ 4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

§ 4.3 SUBMISSION OF BIDS

§ 4.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

§ 4.3.3 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.4 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

§ 4.4 MODIFICATION OR WITHDRAWAL OF BID

§ 4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.

4

§ 4.4.2 Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

§ 4.4.3 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

§ 4.4.4 Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

ARTICLE 5 CONSIDERATION OF BIDS § 5.1 OPENING OF BIDS

This bid is form a project for the Rockford Public Schools. All bids advertised, submitted, and selected for award by Owner and other matters relating to the bidding process shall adhere to the provisions of Illinois law, in particular the provisions of the School Code, including without limitation, the provisions of 105 ILCS 5/10-20.21.

At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

§ 5.2 REJECTION OF BIDS

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way nonresponsive, incomplete or irregular is subject to rejection.

§ 5.3 ACCEPTANCE OF BID (AWARD)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

§ 5.3.2 The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

§ 6.2

(Paragraphs deleted) SUBMITTALS (Paragraphs deleted)

§ 6.2.1 The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

§ 6.2.2 The Bidder will be required to establish to the satisfaction of the Architect, Program Manager and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner, Program Manager or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity. The Owner may accept the substitute person or entity or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND § 7.1 BOND REQUIREMENTS

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.

§ 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

§ 7.1.3 If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

§ 7.2 TIME OF DELIVERY AND FORM OF BONDS

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

The Agreement for the Work will be written on AIA Document A101-2007 as revised by Owner and be accompanied by General Conditions on AIA Document A201-2007, as revised by Owner and further revised by Supplementary Conditions issued by Owner all as included in the Bidding Documents.

6

BID FORM

To: Rockford Public School District 205 501 7th Street Rockford, Illinois 61104

In compliance with your Invitation for Bids, the undersigned,

(Name of firm, partnership or Corporation)

hereby proposes to furnish all labor and materials and perform all general work for the construction of the in strict accordance with the Project Manual dated January 4, 2017 and the Drawings mentioned therein, and including any subsequently issued addenda for consideration of the following amount:

Base Bid	_ Dollars (\$)
ALTERNATES	
Refer to Division 01 Section 012300 - Alternates for description	of Alternates.
Alternate Bid #1A: ADD Kindergarten Room Cubbies	
Bid Amount \$	
Alternate Bid #1B: ADD Kindergarten Room Wall Cabinets	
Bid Amount \$	
Alternate Bid #2: ADD Display Cases & Tack Surface	
Bid Amount \$	
Alternate Bid #3: ADD Library Casework	
Bid Amount \$	
Alternate Bid #4: ADD Increase Generator Capacity & Transfer	Switch
Bid Amount \$	

Rockford Public School District 205 School A, Zone 2 Cherry Valley, IL Cannon Project No. 005005.00

Alternate Bid #5: ADD Parking Spaces at Bus Loop

Bid Amount \$_____.

Alternate Bid #6: ADD Water Main Extension

Bid Amount \$_____.

PROJECT MILESTONE DATES

- 1. Award Letter -3/01/2017
- 2. Start Date -3/02/2017
- 3. Commissioning Pre-Construction Meeting- 4/16/2017
- 4. Commissioning Functional Testing- 4/15/2018
- 5. Substantial Completion -5/15/2018
- 6. Project Final Completion- 6/15/18
- 7. Final Commissioning Winter 2019

If written notice of the acceptance of this Bid is mailed, telegraphed, or delivered to the undersigned at any time prior to the date set for the expiration of the Bid Security, the undersigned will, within ten (10) days after the notice, execute and deliver a contract in accordance with the required Form of the Agreement and give Performance and Payment Bond, if so required, in accordance with the Bid as accepted.

The undersigned acknowledges that the bidder has adequate equipment to do the work properly and expeditiously:

The undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed or delivered:

This Bid may be withdrawn at any time prior to the scheduled time for the opening of Bids or any authorized postponement thereof.

Caution: This Bid may be rejected if not accompanied by a guarantee in the specified amount. Any certified check may be held uncollected at risk of Bidders submitting them.

Addendum Receipt: The receipt of the following addenda to the Specifications is acknowledged:

 Addendum No.
 Date
 Addendum No.
 Date

 Addendum No.
 Date
 Addendum No.
 Date

Rockford Public School District 205
School A, Zone 2
Cherry Valley, IL
Cannon Project No. 005005.00

Addendum No. _____ Date _____ Addendum No. ____ Date _____

Submittals, as required by the Instructions/Supplementary Instructions to Bidders, shall be completed and delivered to the Architect, by the two (2) or three (3) low bidders, within three working days after the Bid opening.

Dated _____, 2017

Legal name of person, partnership or corporation

(Sign Bid Here) By:

Name and Title

Legal Business Address:

Street Address

City and State

UNIT PRICES

Should the amount of work required for this project be increased or decreased due to changes in design or conditions at the site, the undersigned agrees that the following unit prices will be the basis for an increase or decrease to the contract amount.

Refer to Division 01 Section 012200 - Unit Prices for description of Unit Prices.

Unit Price No. 1: For over excavation, hauling spoils off-site and breaker run aggregate (2" -3") material at locations where unsuitable soils are encountered at the North Bus Loop. <u>(cubic yard.</u>)

Unit Price No. 2: For over excavation, hauling spoils off-site and compacted granular fill material at locations where unsuitable soils are encountered at the building foundations. \$_____/cubic yard.

ALLOWANCES:

The following material cost allowances have been included in the Base Bid and should the following allowance exceed or be less than the cost of selected items, the difference in cost shall be added to, or credited to the Owner's Contract.

Refer to Division 01 Section 012100 - Allowances for description of Allowances.

Allowance No. 1: Include 695 cubic yards of over-excavation, hauling spoils off-site and breaker run aggregate (2" -3") material at locations where unsuitable soils are encountered at the North Bus Loop.

Allowance No. 2: Include 500 cubic yards of over excavation, hauling spoils off-site and compacted granular fill material at locations where unsuitable soils are encountered at the building foundations

LIST MAJOR SUBCONTRACTORS/VALUES

Rockford Public School District 205 School A, Zone 2 Cherry Valley, IL Cannon Project No. 005005.00

1.	EARTHWORK SUBCONTRACTOR	_\$
2.	SITE UTILITIES SUBCONTRACTOR	_\$
3.	CONCRETE	_\$
4.	MASONRY	\$
5.	STEEL FABRICATION	_\$
6.	ROOFING	\$
7.	WINDOWS	_\$
8.	PLUMBING	\$
9.	HVAC SUBCONTRACTOR	\$
	a) HVAC CONTROLS SUBCONTRACTOR	
11.	ELECTRICAL SUBCONTRACTOR	\$
	a) TECHNOLOGY SYSTEMS SUBCONTRACTOR	
	b) FIRE ALARM SYSTEM SUBCONTRACTOR	

IF BIDDER IS A FIRM OR PARTNERSHIP, COMPLETE THE FOLLOWING:

Name of Members or Partners	Legal Residence	

IF BIDDER IS A CORPORATION, COMPLETE THE FOLLOWING:

State of Incorporation:		
Name and Title	Legal Residence	
President		
Vice President		

Secretary

Bidders References: Each contractor is to submit a list of reference as indicated on AIA A305-1986.

DIRECTION FOR MAILING

Envelopes containing Bids, Guarantees, etc., must be sealed, marked and addressed in lower left hand corner as follows:

Bid For: School A, Zone 2 Cherry Valley,II Address: Rockford Public School District 205 501 7th Street Rockford, Illinois 61104

Attention: Cannon Design

Rockford Public School District 205 School A, Zone 2 Cherry Valley, IL Cannon Project No. 005005.00

BID PROPOSAL CERTIFICATIONS

Firm Name	
Business Address	
Telephone Number	Date of Bid

I. General Bid Certification

The bidder certifies that he will furnish, at the prices herein quoted, the materials, equipment and/or services as proposed on this bid.

- II. **Non-Collusive Bidding Certifications**: By submission of this bid proposal, the bidder also certifies compliance with the following:
 - Statement of Non-Collusion in Bids and Proposals to Political Subdivision of the State: Every bid or proposal hereafter made to a political subdivision of the state or any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation, or local law, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under the penalties of perjury: Non-collusive bidding certification.
 - (a) By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:
 - The prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder to any competitor; and
 - (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
 - (b) A bid shall not be considered for award nor shall any award be made where (a)(1), (a)(2) and (a)(3) above have not been complied with; provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where (a)(1), (a)(2) and (a)(3) above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting completions.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other

customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning subparagraph one (a).

2. Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work of services performed or to be performed or goods sold or not to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of the section, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

Signature (Authorized) _____

Title _____

WAIVER OF IMMUNITY CLAUSE

The bidder hereby agrees to the provisions of the applicable General Municipal Law which requires that upon the refusal of person, when called before a grand Jury to testify concerning any transaction or contract had with the State, any political subdivision thereof, a public authority or with any public department, agency or official of the state or of any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract.

- (a) Such person, any firm, partnership, or corporation of which he is a member, partner, director or officer shall be disqualified from thereafter selling to or submitting bids to or receiving awards from or entering into any contracts with any municipal corporation or any public department, agency or official thereof, for goods, work or services, for a period of five years after such refusal, and
- (b) Any and all contracts made with any municipal corporation or any public department, agency or official thereof, since the effective date of this law, by such person, and by any firm, partnership, or corporation of which he is a member, partner, director of officer may be canceled or terminated by the municipal corporation without incurring any penalty or damages on account of such cancellation or termination, but any monies owing by the municipal corporation for goods delivered or work done prior to the cancellation or termination shall be paid.

Individual

Corporation

Date _____ By:

Rockford Public School District 205 School A, Zone 2 Cherry Valley, IL Cannon Project No. 005005.00

AFFIRMATIVE ACTION AGREEMENT

Firm Name:	 	
Business Address: _	 	
Telephone Number:	 	

Non-discrimination Clauses:

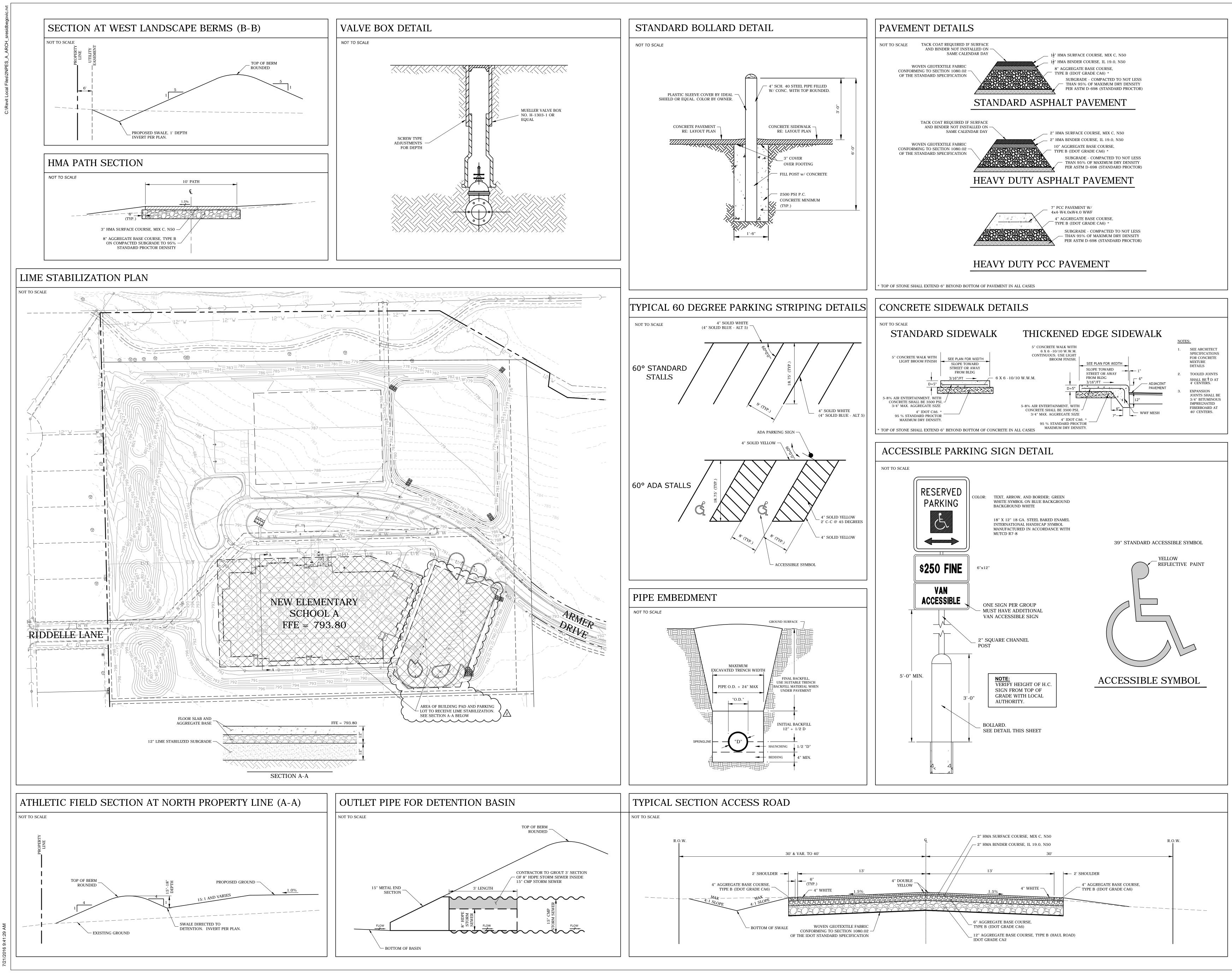
- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin and will take affirmative action to insure that they are afforded equal employment opportunities without discrimination because of race, creed, sex, color or national origin. Such action shall be taken with reference, but not limited to: recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.
- 2. The Contractor will send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commission for Human Rights, advising such labor union or representative of the Contractor's agreement under clauses (1) through (7) (hereinafter called "non-discrimination clauses"). If the Contractor was directed to do so by the contracting agency as part of the bid or negotiation of this Contract, the Contractor shall request such labor union or representative to furnish him with a written statement that such labor union or representative will not discriminate because of race, creed, sex, color or national origin and that such labor union or representative either will affirmatively cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment, employment and the terms and conditions of employment under this Contract shall be in accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the Contractor shall promptly notify the State Commission for Human Rights of such failure or refusal.
- 3. The Contractor will post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commission for Human Rights setting forth the substance of the provisions of clauses (1) and (2) and such provisions of the State's laws against discrimination as the State Commission for Human Rights shall determine.
- 4. The Contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, sex, color or national origin.
- 5. The Contractor will comply with the provisions of Sections 291-299 of the Executive Law and the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commission for Human Rights under these non-discrimination clauses and such sections of the Executive Law, and will permit access to his books, records and accounts by the State Commission for Human Rights, the Attorney General and the Industrial Commissioner for the purposes of investigation to ascertain compliance with these non-discrimination clauses and such sections of the Executive Law and Civil Rights Law.

- 6. This Contract may be forthwith canceled, terminated or suspended, in whole or in part, by the contracting agency upon the basis of a finding made by the State Commission for Human Rights that the Contractor has not complied with these non-discrimination clauses, and the Contractor may be declared ineligible for future contracts made by or on behalf of the State or a public authority or agency of the state, until he satisfies the State Commission for Human Rights that he has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such finding shall be made by the State Commission for Human Rights after conciliation efforts by the Commission have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the Commission, notice thereof has been given to the Contractor and an opportunity has been afforded him to be heard publicly before three members of the Commission. Such sanctions may be imposed and remedies invoked dependently of or in addition to sanctions and remedies otherwise provided by law.
- 7. The Contractor will include the provisions of clauses (1) through (6) in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to operations to be performed within the State of Illinois. The Contractor will take such action in enforcing such provisions of such subcontract or purchase order as the contracting agency may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor shall promptly so notify the Attorney General, requesting him to intervene and protect the interests of the State of Illinois.

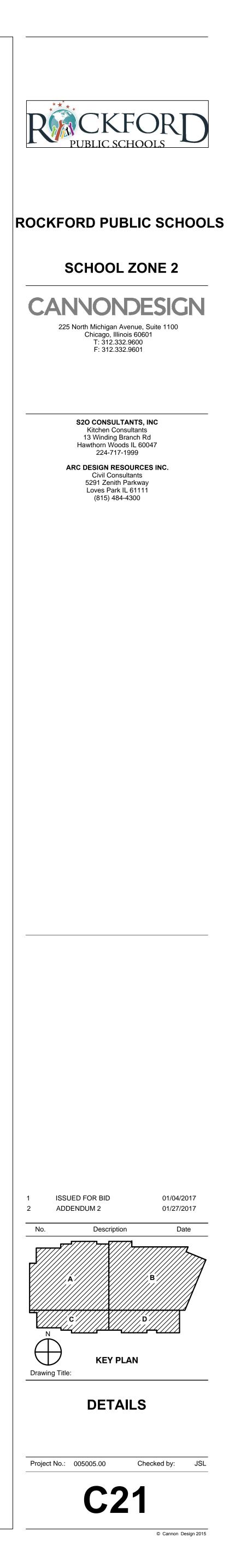
Signature (Authorized) _____

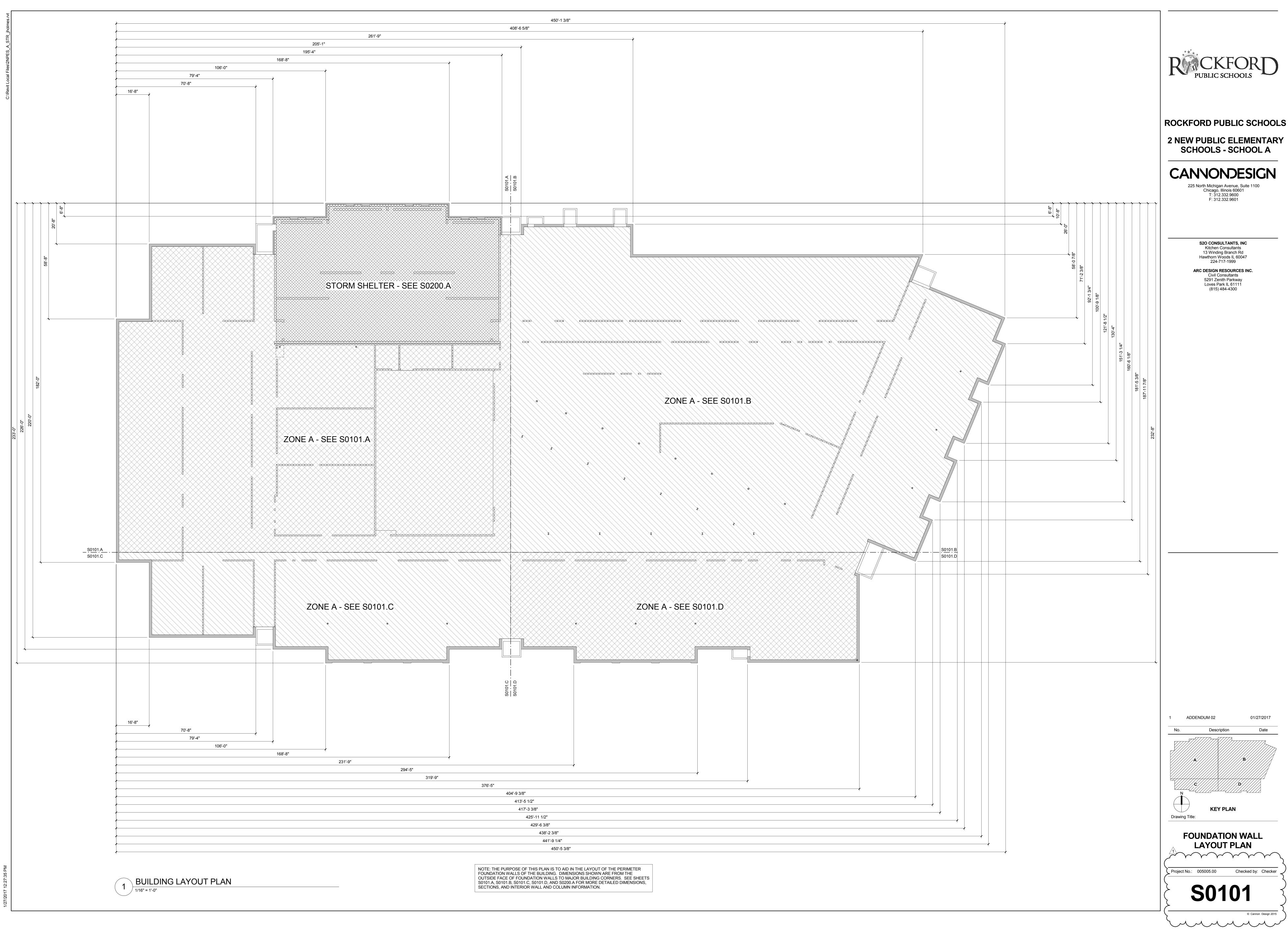
Title _____

END OF BID FORM



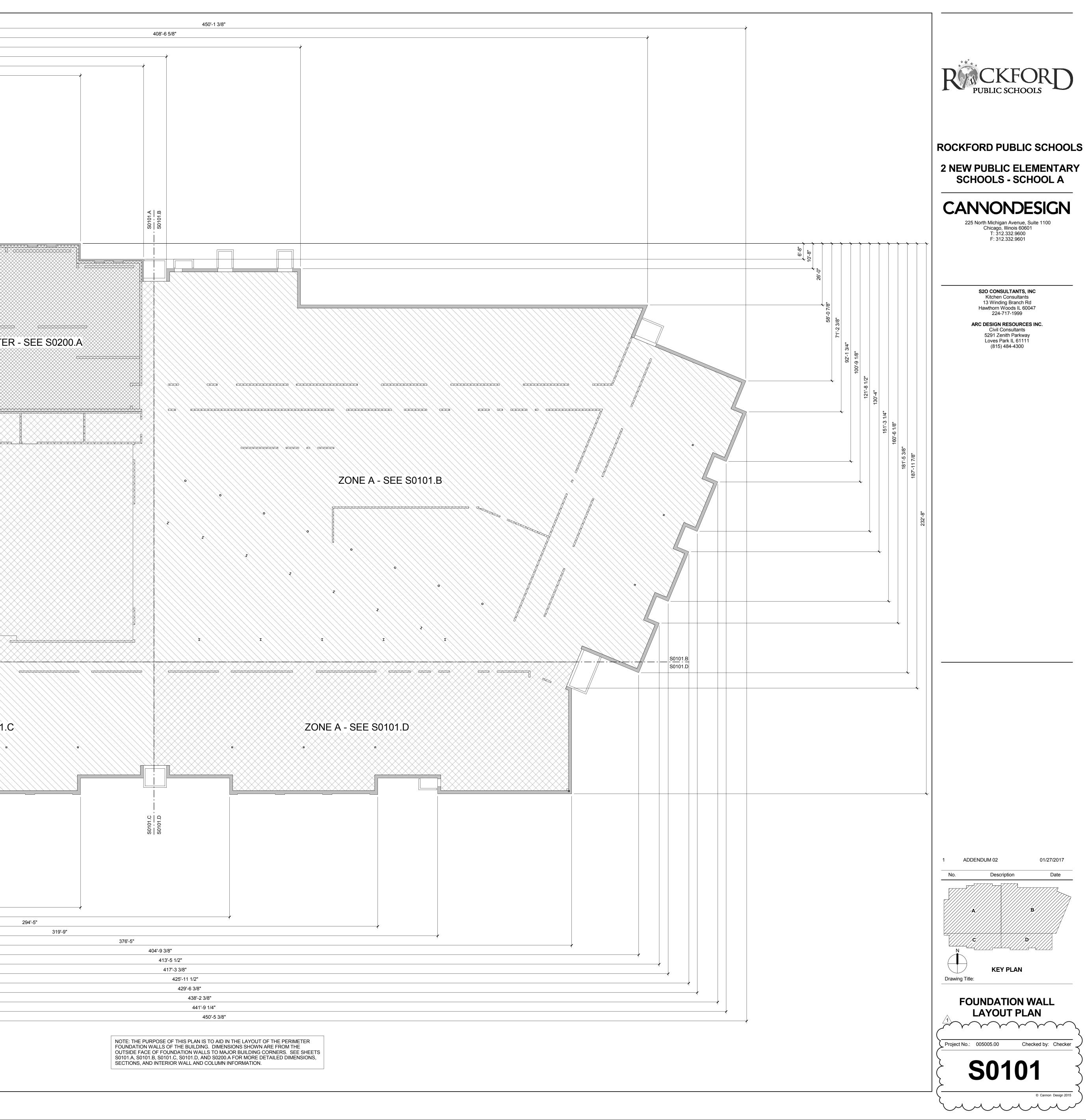
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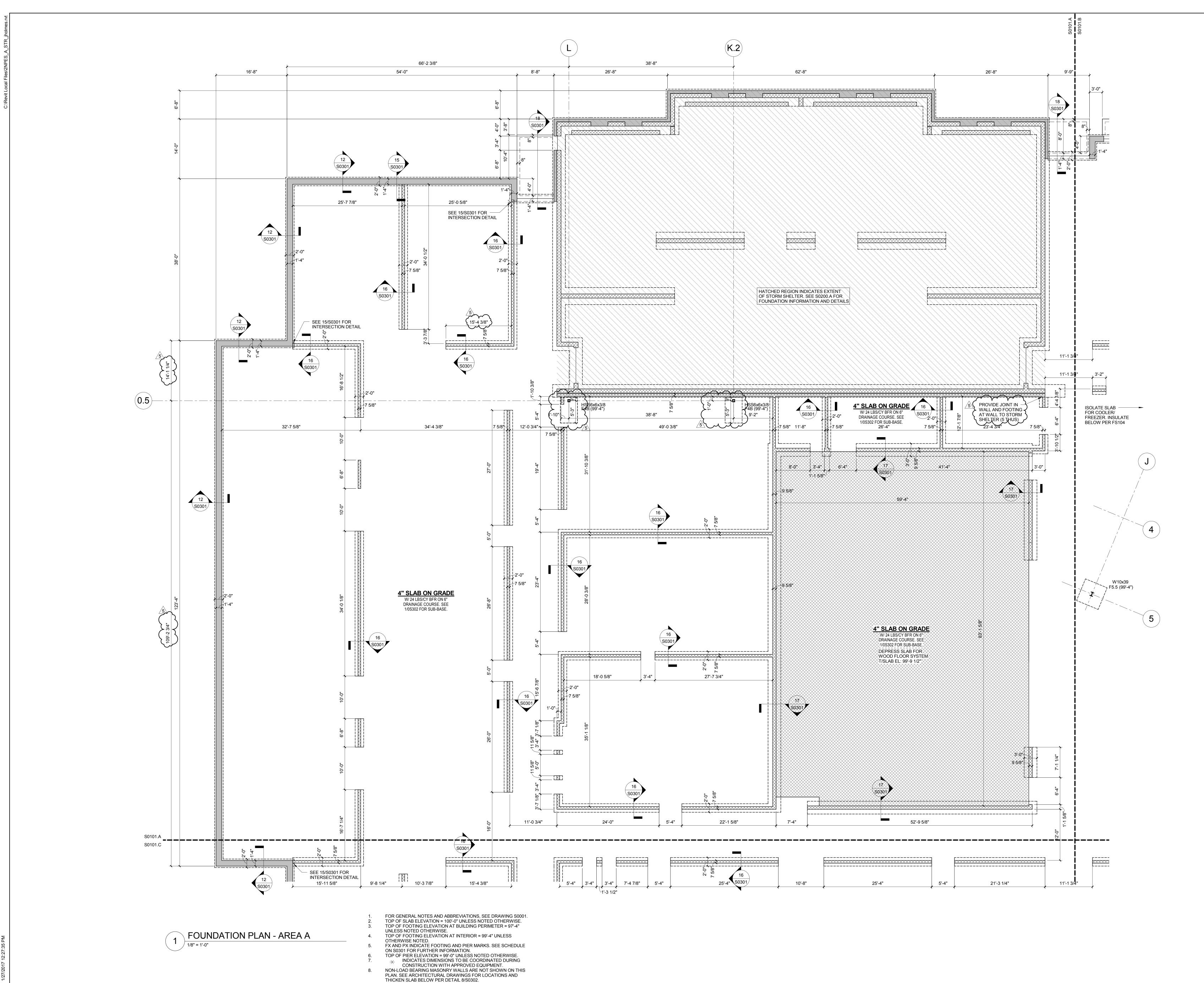
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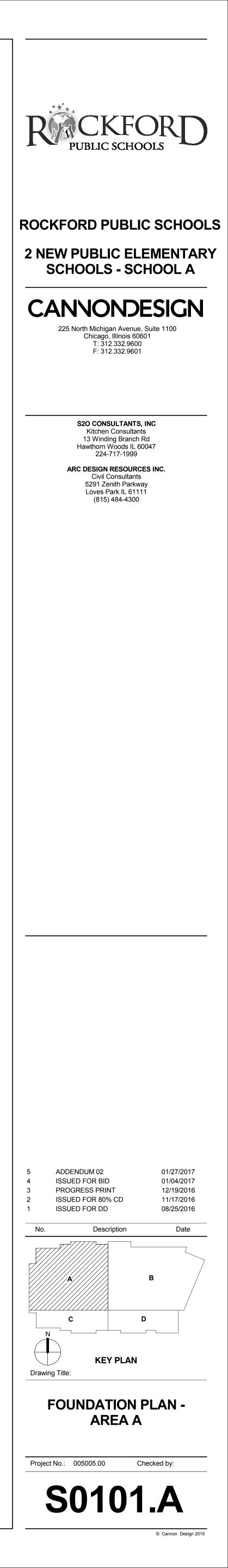
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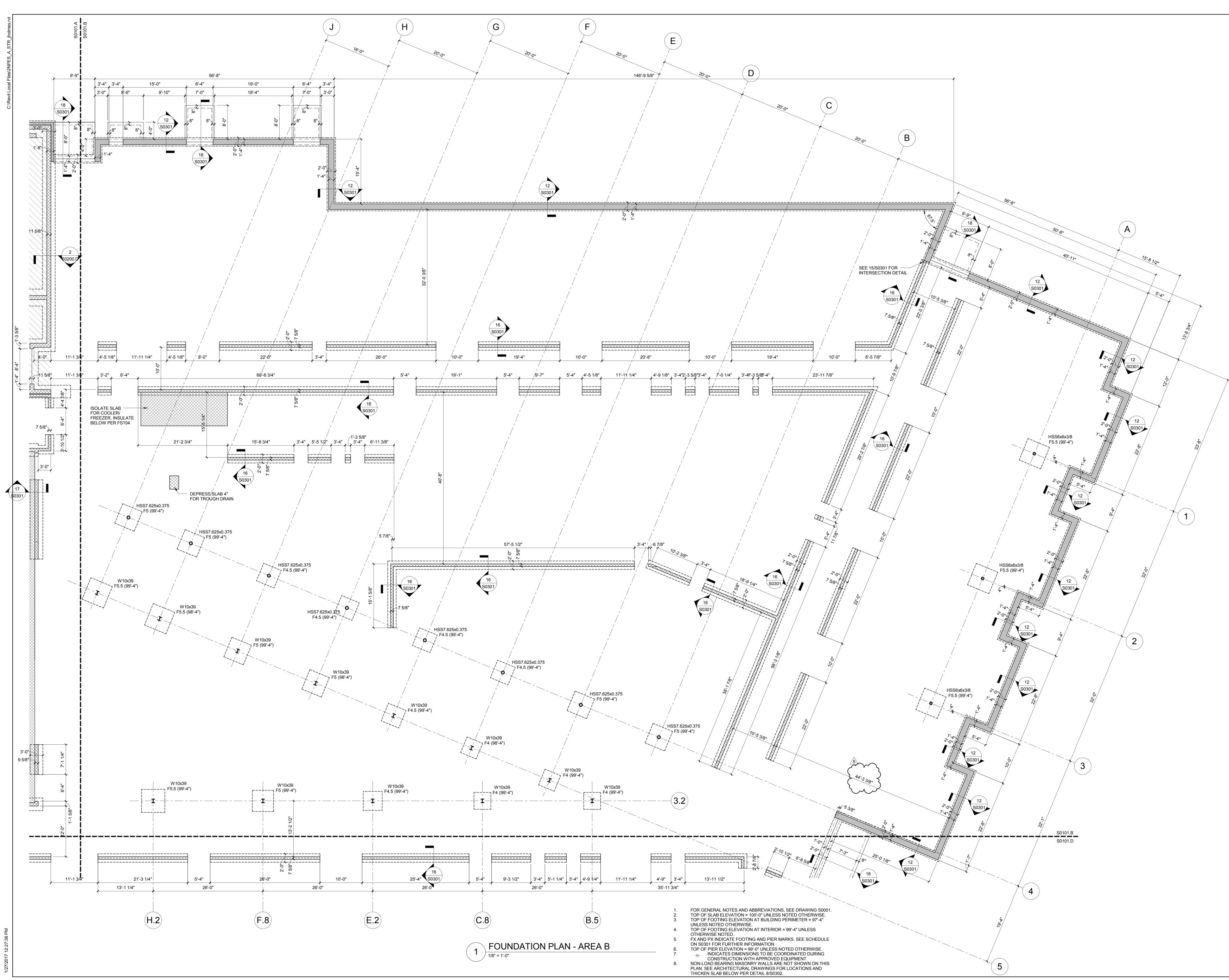


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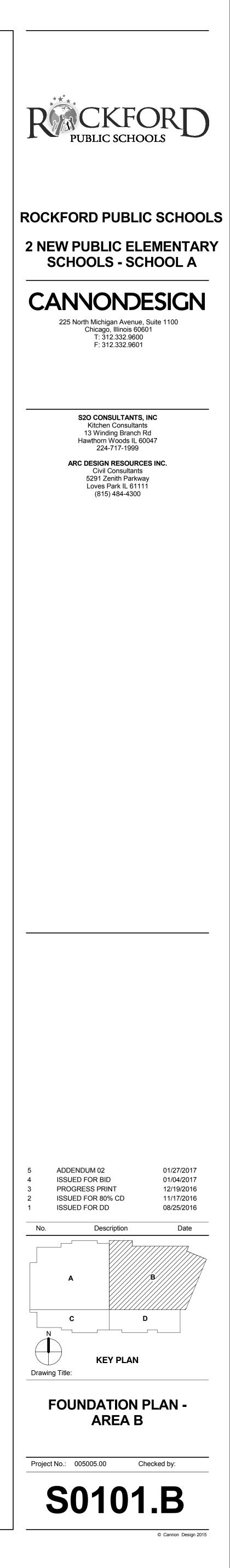
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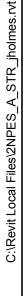


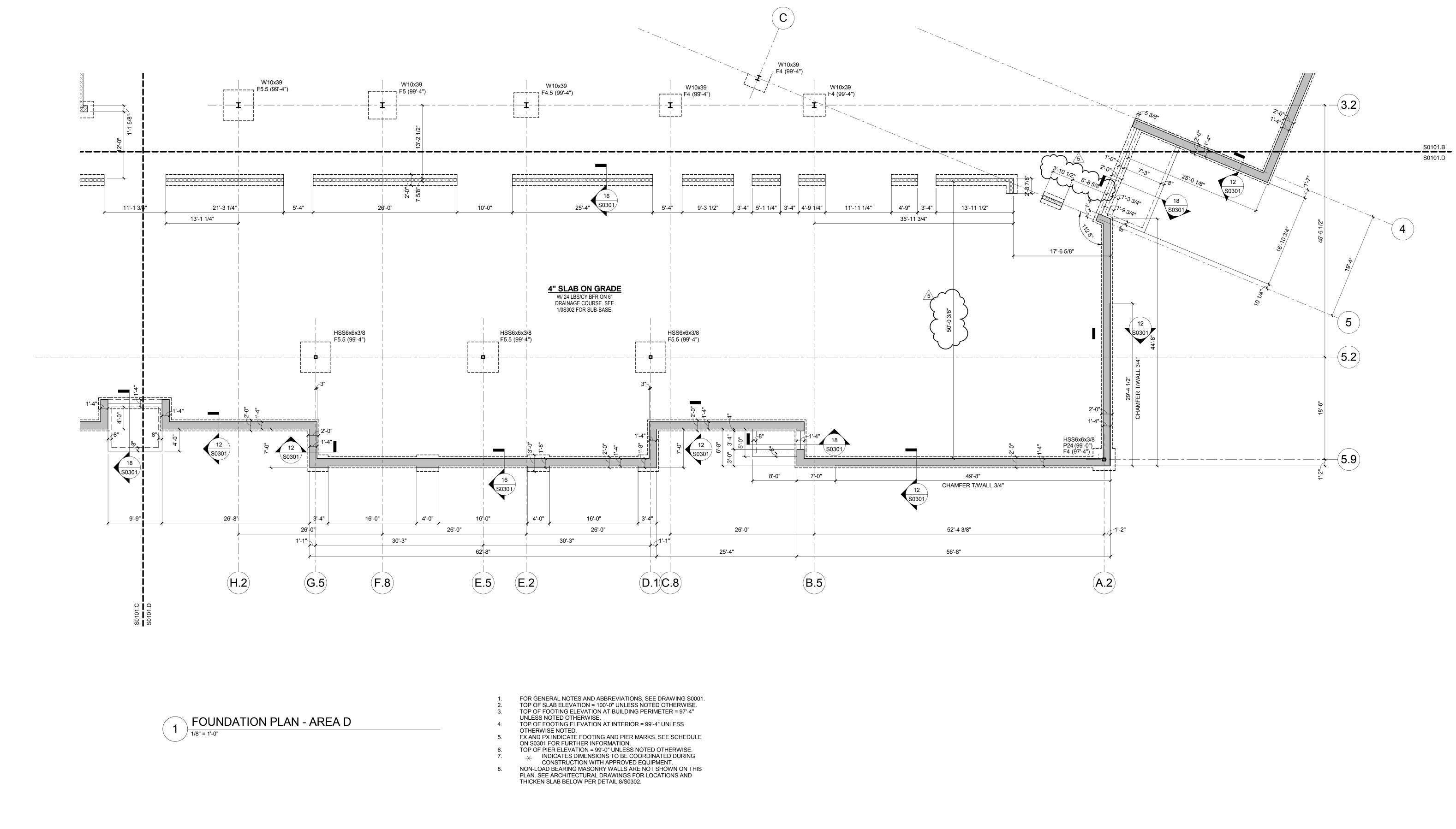




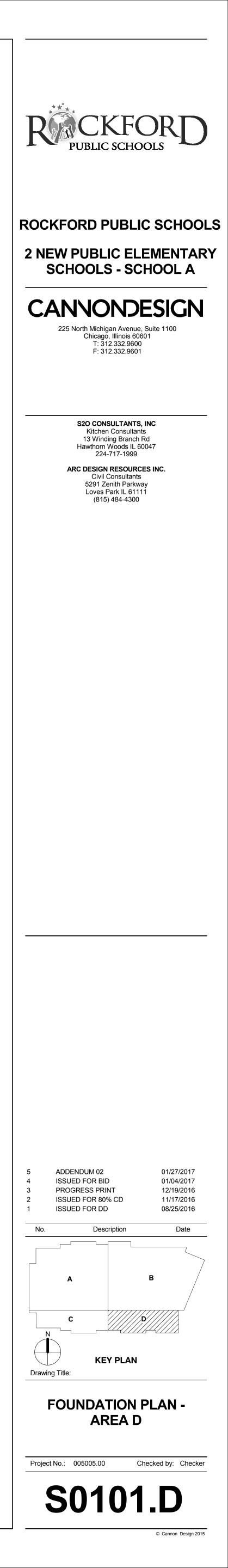
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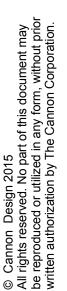




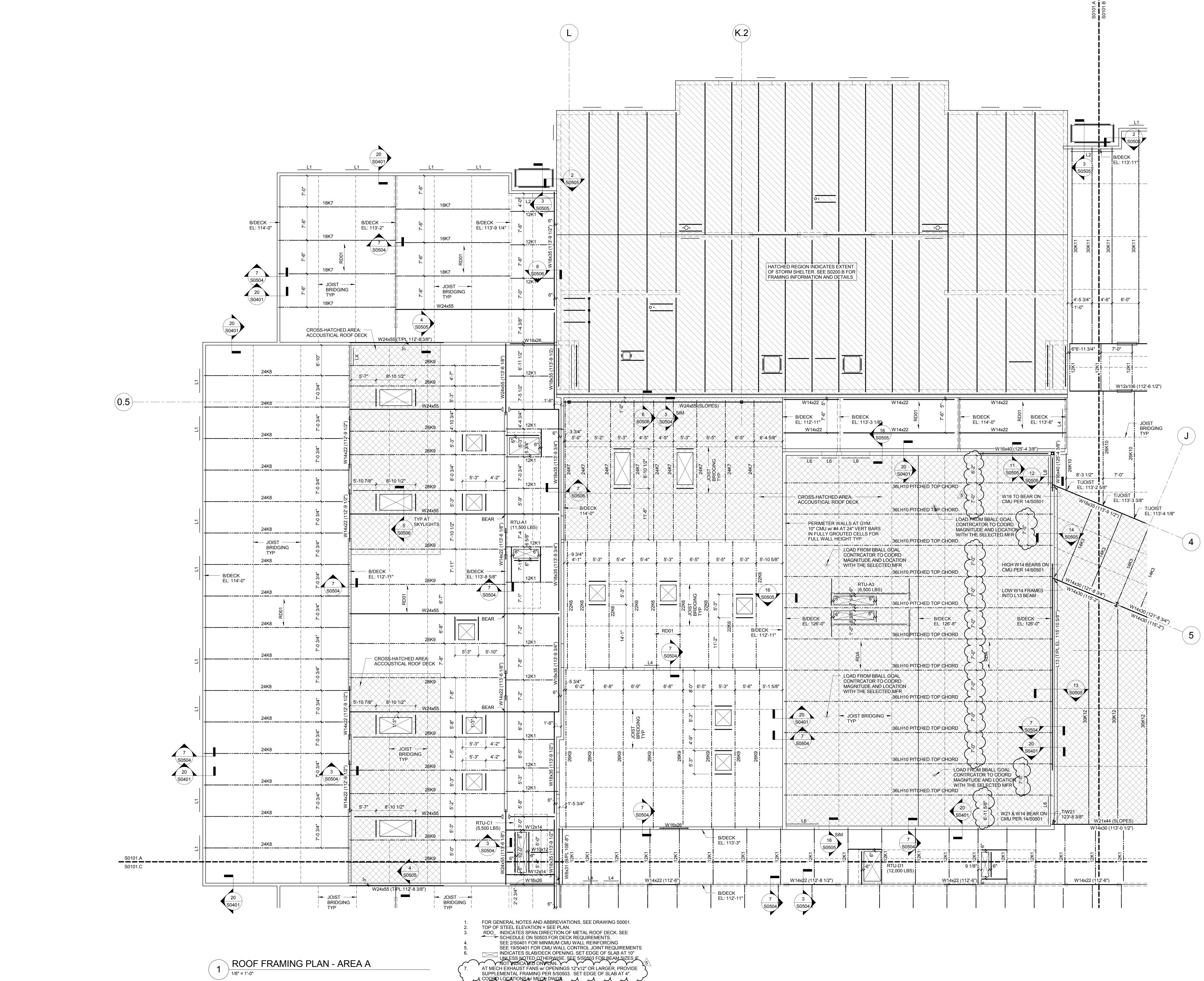


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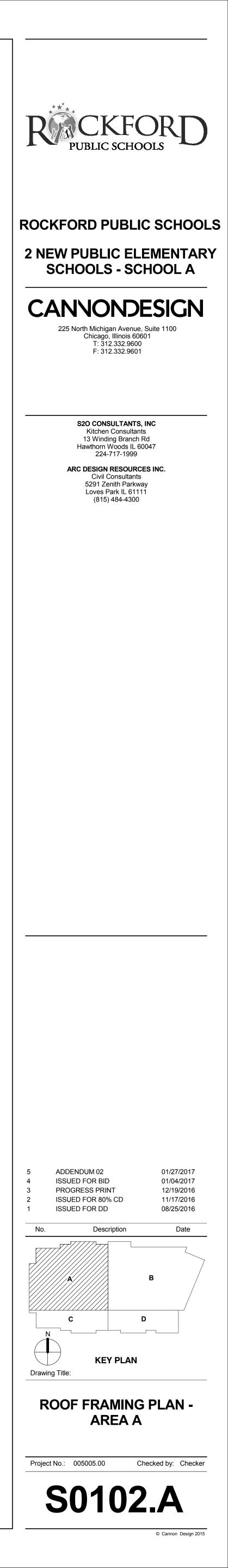


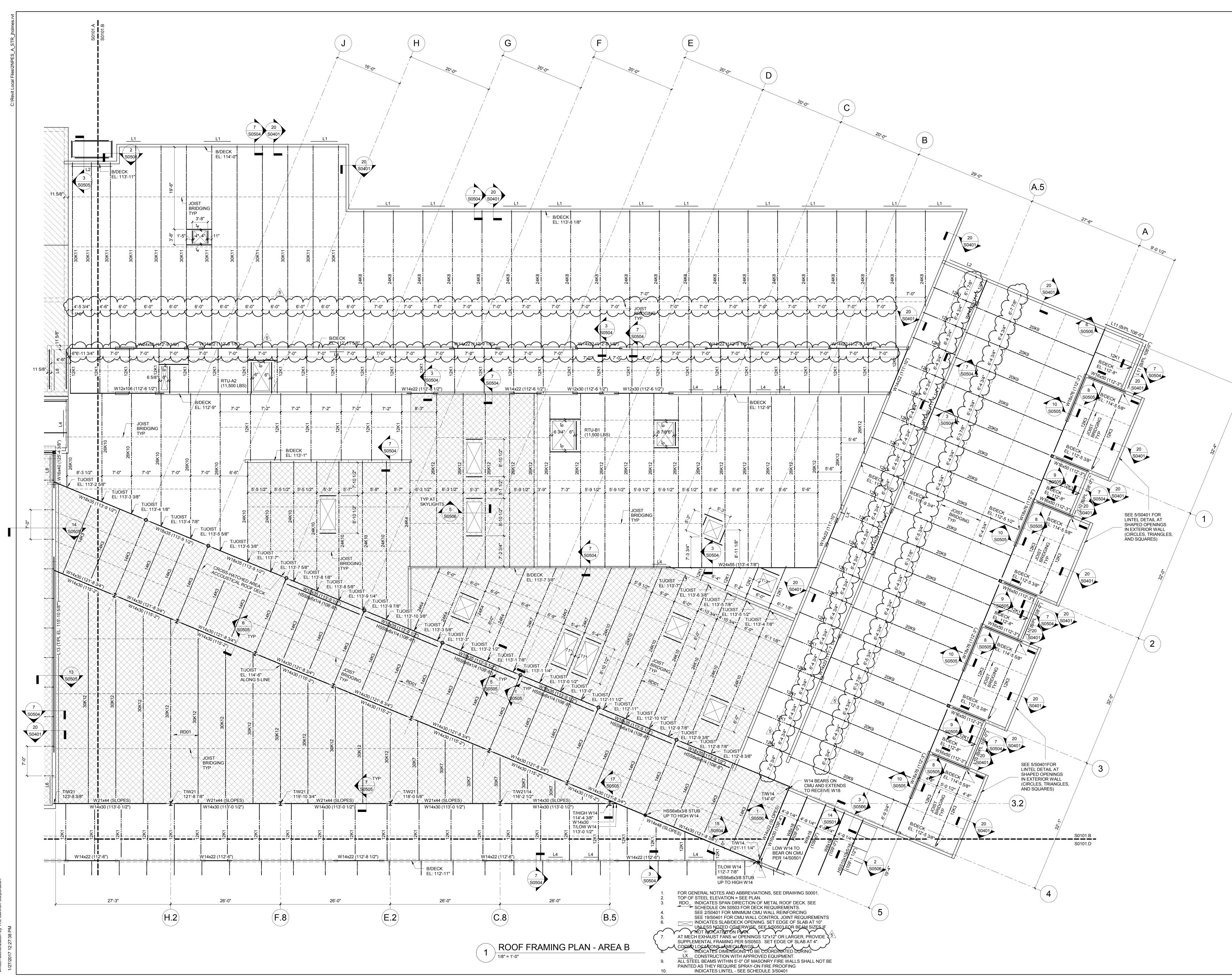


COODED LOCATIONS W/ MECH DWGS. LX CONSTRUCTION WITH APPROVED EQUIPMENT.

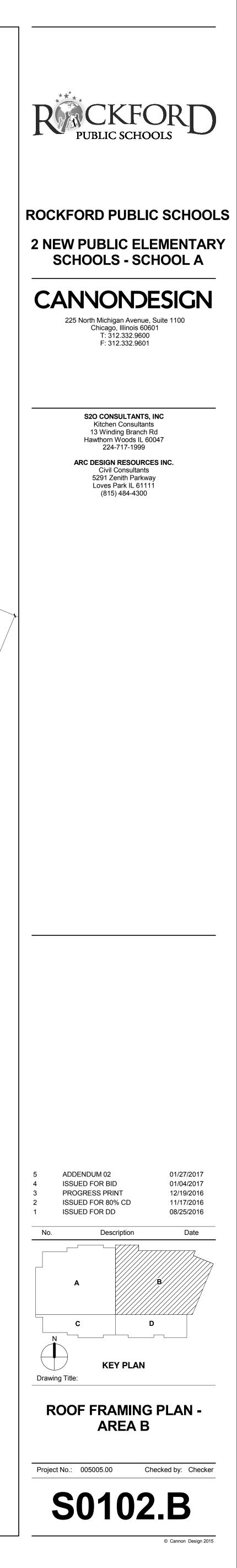
10.

ALL STEEL BEAMS WITHIN 5'-0" OF MASONRY FIRE WALLS SHALL NOT BE PAINTED AS THEY REQUIRE SPRAY-ON FIRE PROOFING INDICATES LINTEL - SEE SCHEDULE 3/S0401

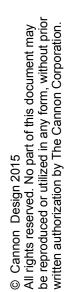


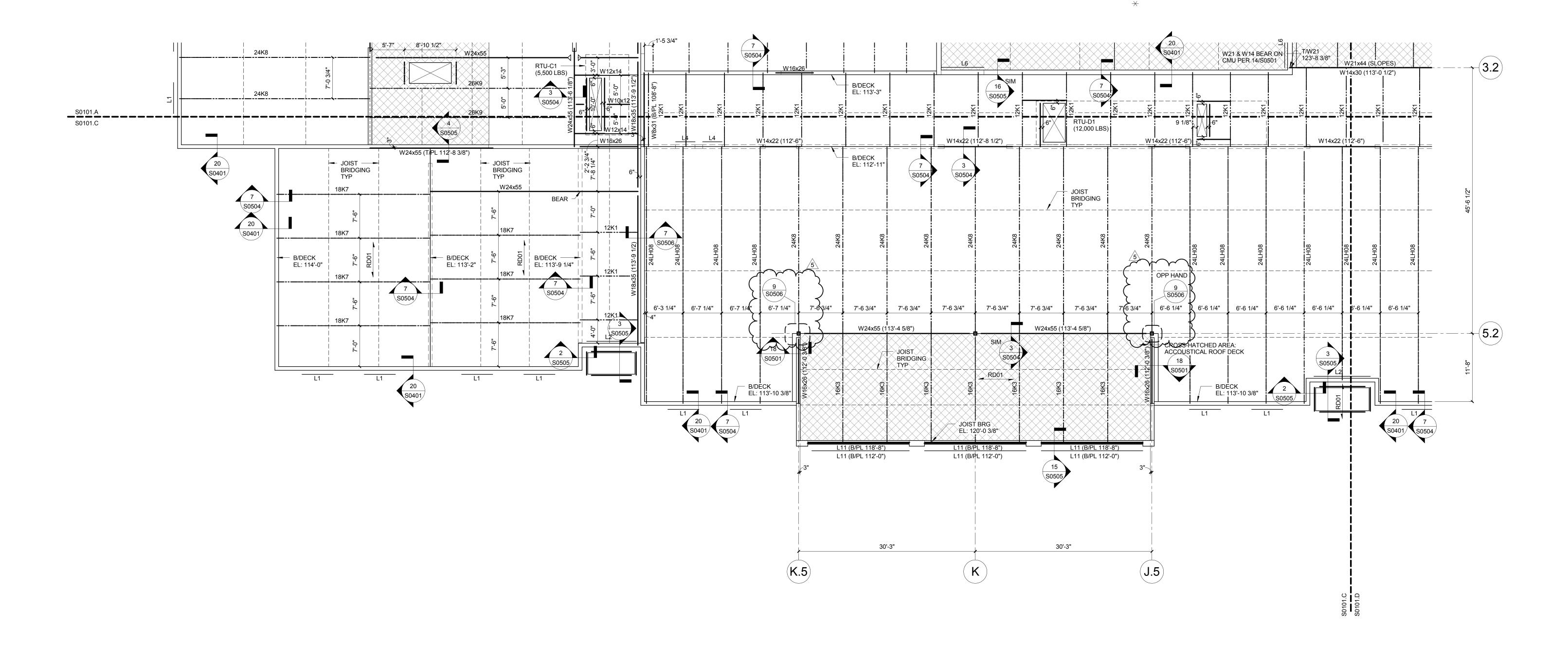


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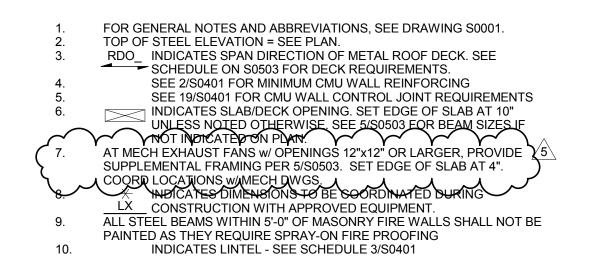
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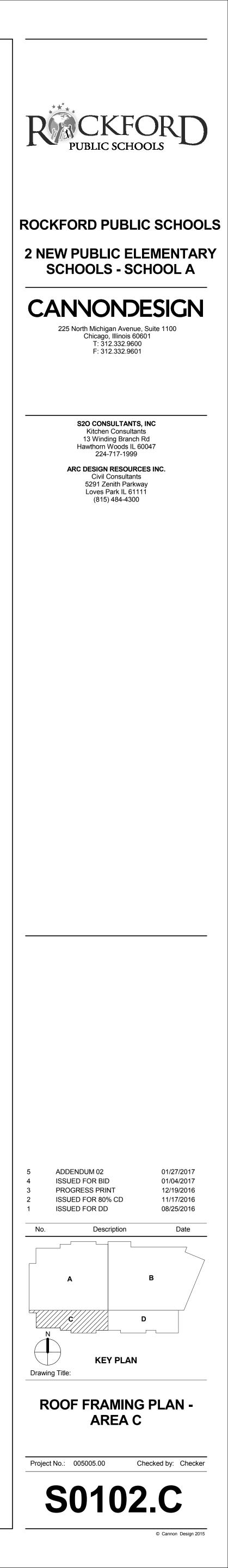




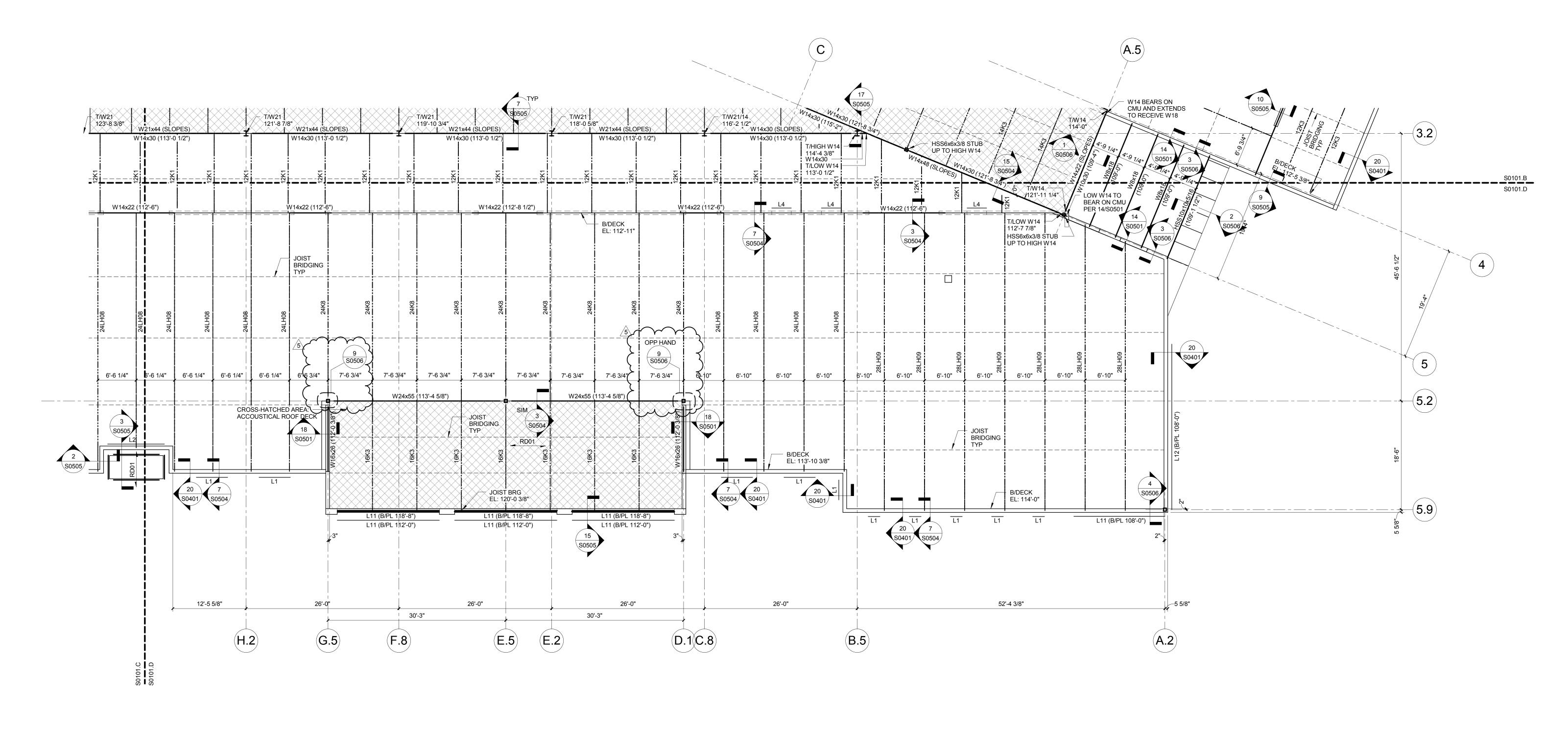
1/8 = 1-0

1 ROOF FRAMING PLAN - AREA C



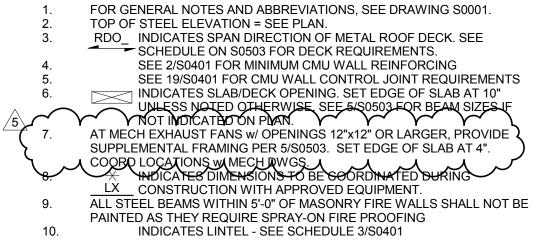


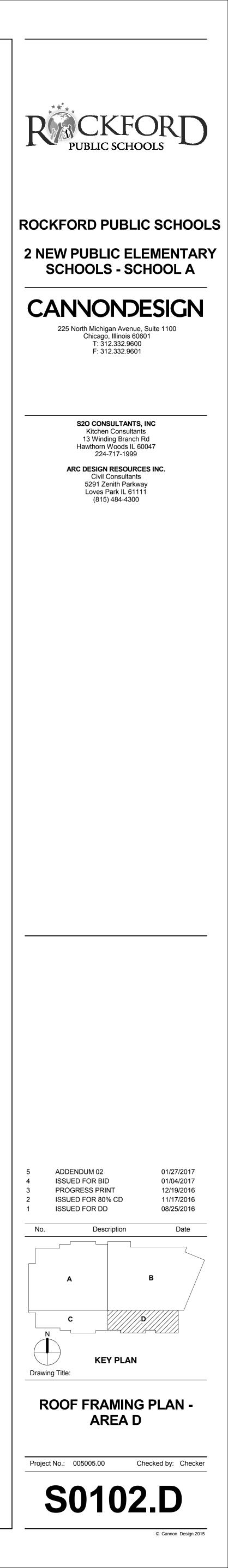
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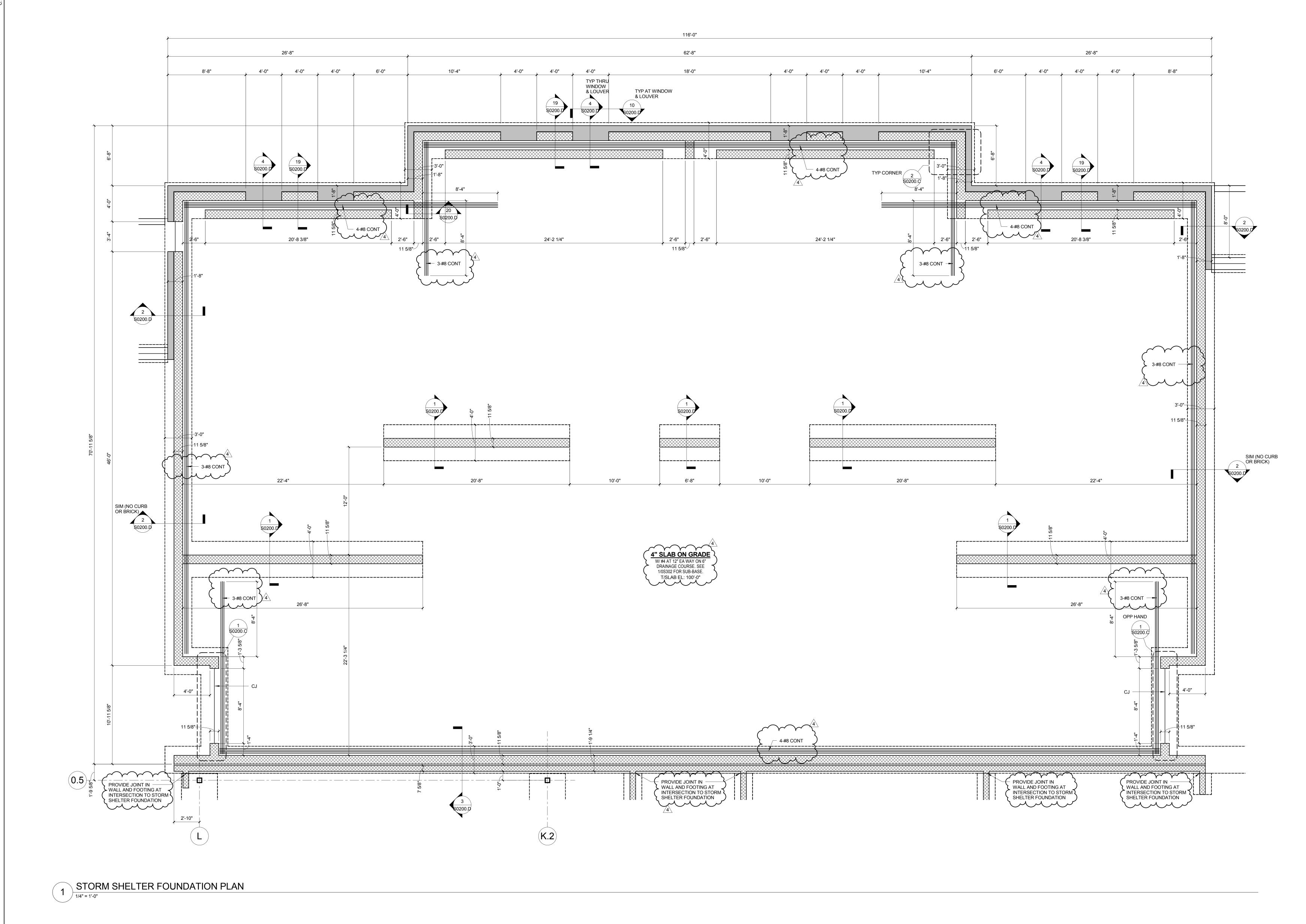
1 ROOF FRAMING PLAN - AREA D

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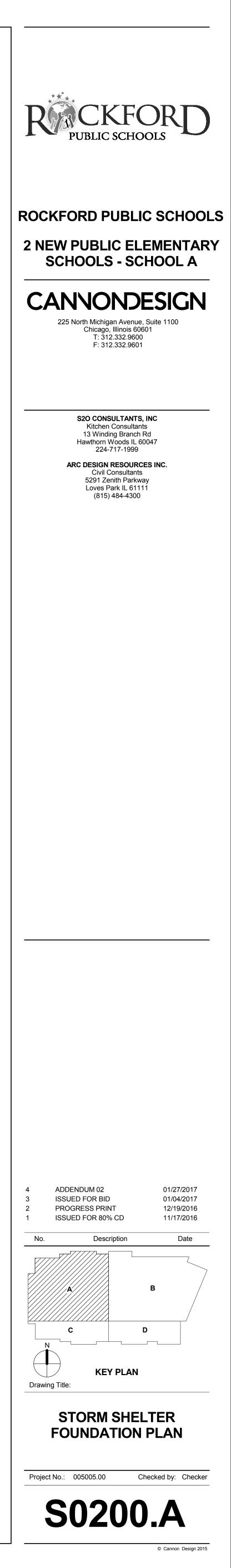


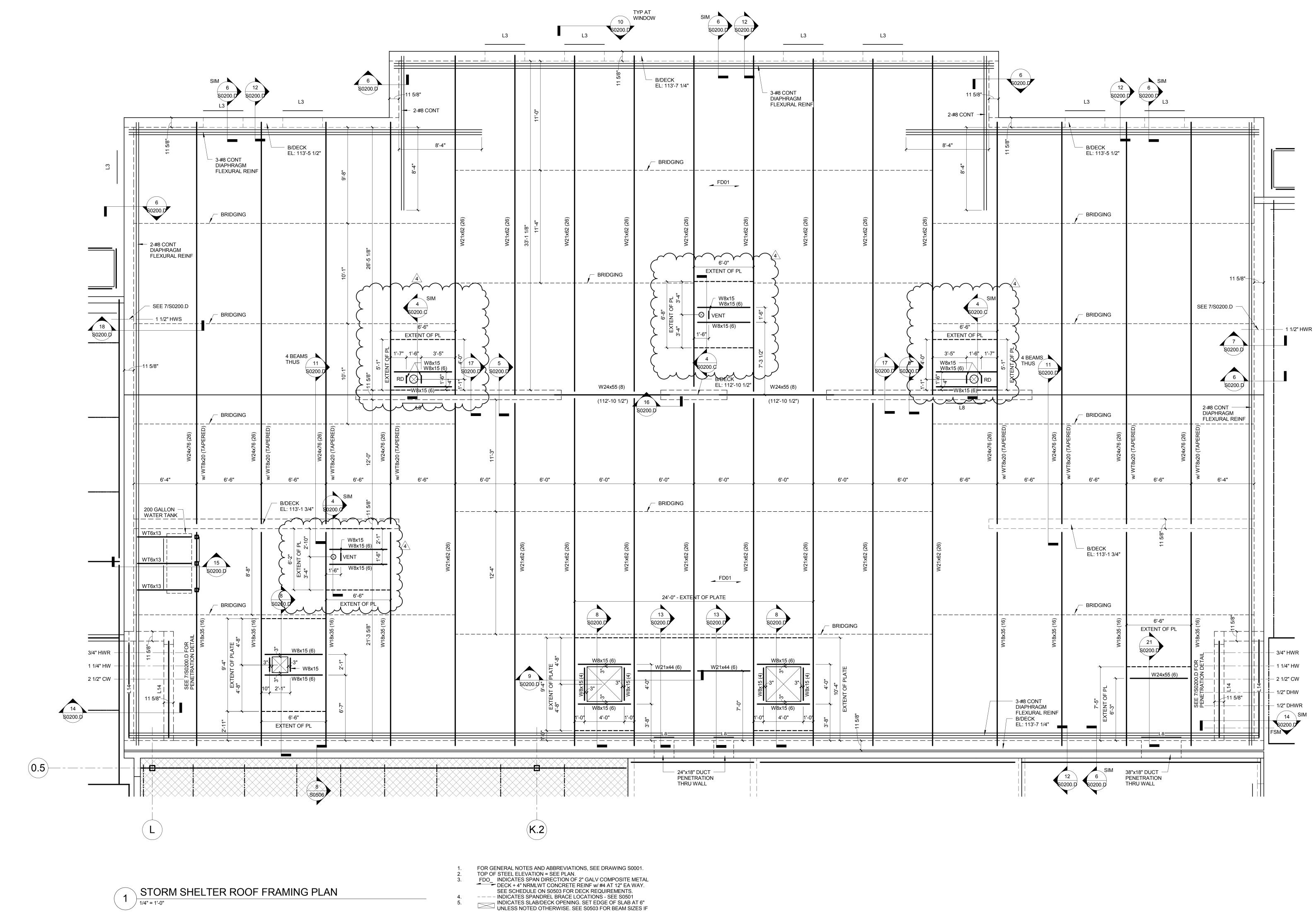


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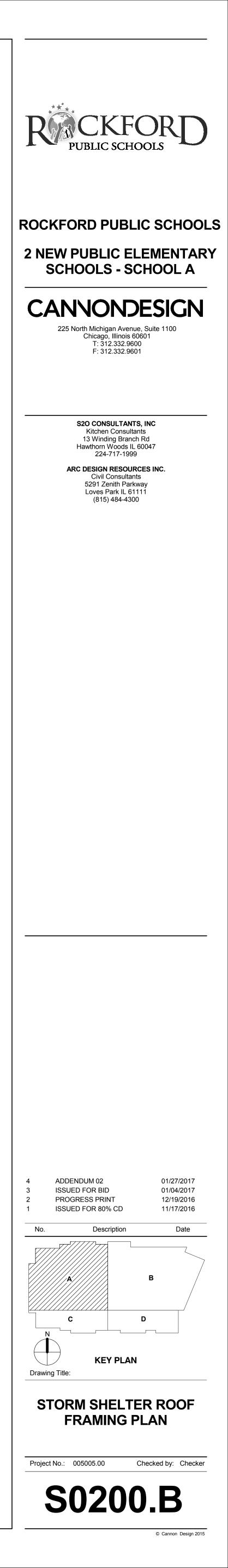




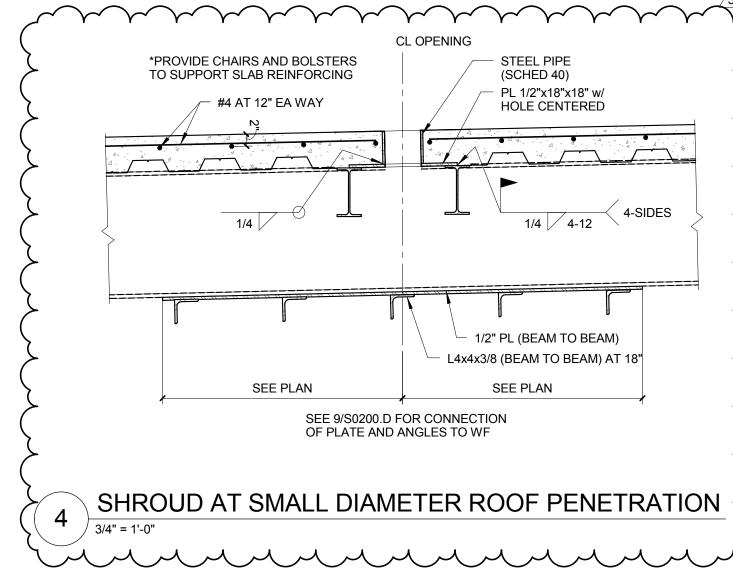
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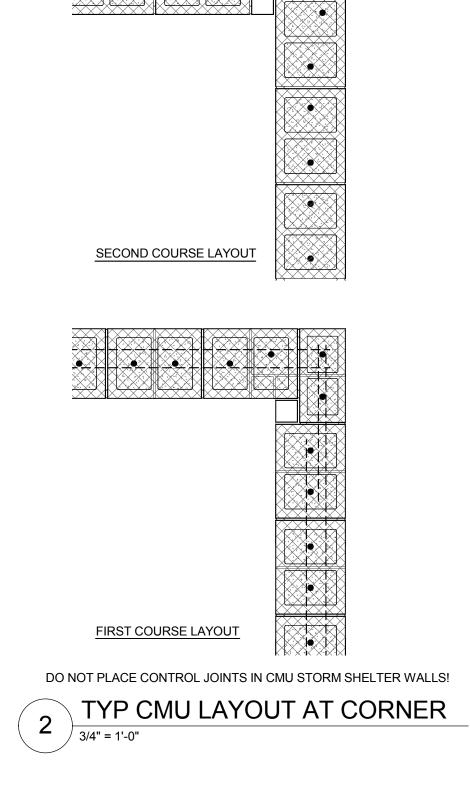
NOT INDICATED ON PLAN. ★ INDICATES DIMENSIONS TO BE COORDINATED DURING

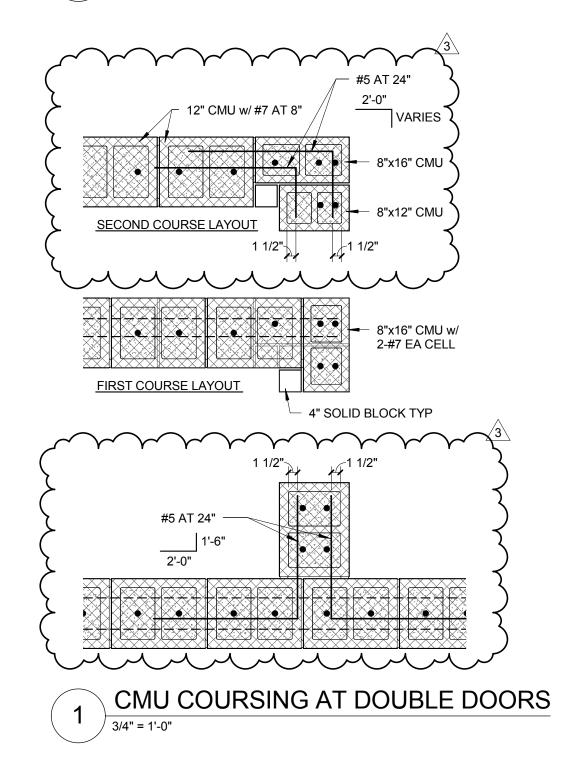
6. The indicates dimensions to be coordinated doring construction with approved equipment. 7. The indicates invite - see schedule 2/50401 8. CONTRACTOR TO COORD ALL WALL AND ROOF PENETRATION LOCATIONS w/ MEP DWGS.



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PLAN DETAIL 3 / 3/4" = 1'-0"

X X X X X X X

- 1/4" GALV PL TO UNDERSIDE OF HORIZ PL/HSS (SEE 4/S0200.D) w/ 3/4" DIA x 6" GALV EXP ANCH AT 8"

DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER AND TO THE AUTHORITY HAVING JURISDICTION. AT THE CONCLUSION OF THE WORK, THE REGISTERED DESIGN PROFESSIONAL WHO MADE THE STRUCTURAL OBSERVATIONS SHALL SUBMIT TO THE AUTHORITY HAVING JURISDICTION A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND SHALL IDENTIFY ANY REPORTED DEFICIENCIES THAT TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

STRUCTURAL OBSERVATIONS: DURING CONSTRUCTION, THE BUILDING OWNER SHALL EMPLOY A REGISTERED DESIGN PROFESSIONAL TO CONDUCT VISUAL OBSERVATIONS OF THE CONSTRUCTION OF THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT THE COMPLETION OF THE CONSTRUCTION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION SHALL NOT OBVIATE THE NEED FOR OTHER INSPECTIONS OR TESTING REQUIRED BY THE ICC-500 OR

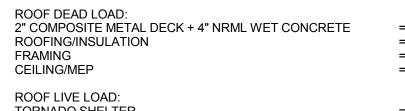
- 3. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION. THE METHOD AND FREQUENCY OF REPORTING, AND THE DISTRIBUTION OF REPORTS. 4. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.
- 1. ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE QUALITY ASSURANCE PLAB 2. ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS

CONTRACTOR RESPONSIBILITY: EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION, FABRICATION , OR INSTALLATION OF A MAIN WINDFORCE-RESISTING SYSTEM OR ANY COMPONENT LISTED IN THE QUALITY ASSURANCE PLAN SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE AUTHORITY HAVING JURISDICTION, THE RESPONSIBLE DESIGN PROFESSIONAL, AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT PF RESPONSIBILITY SHALL CONTAIN:

APPLICABLE BUILDING CODE.

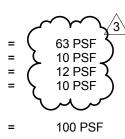
_					
	COMPONENTS AND CLADDING LOAD SUMMARY				
	WALL/ROOF SURFACE	ZONE	10 SF TRIBUTARY	100 SF TRIBUTARY	500 SF TRIBUTARY
	ROOF:	NEG ZONE 1	-210.8 psf	-197.2 psf	-197.2 psf
		NEG ZONE 2	-319.6 psf	-224.4 psf	-224.4 psf
		NEG ZONE 3	-455.6 psf	-224.4 psf	-224.4 psf
		POSITIVE	+115.6 psf	+102.0 psf	-224.4 psf
	WALLS:	NEG ZONE 4	-224.4 psf	-199.9 psf	-183.6 psf
		NEG ZONE 5	-265.2 psf	-216.2 psf	-183.6 psf
		POSITIVE	+210.8 psf	+186.3 psf	+170.0 psf

MAIN WIND FORCE RESISTING SYSTEM LOAD SUMMARY				
WALL/ROOF	qhGCp qhGCpi		PRESS	URES
SURFACE			w/ +GCpi	w/ -GCpi
WINDWARD WALL	+92.48	+/- 74.8	±167,3.psf	+tZ.Z.pst
LEEWARD WALL	-34.7	+/- 74.8	{ +17.0 psf	-132.6 psf
SIDE WALL	-80.9	+/- 74.8	-6.1 psf	-155.7 psf
WINDWARD ROOF:				
0 to H/2	-104.0	+/- 74.8	-29.2 psf	-178.8 psf
H/2 to H	-104.0	+/- 74.8	-29.2 psf	-178.8 psf
H to 2H	-57.8	+/- 74.8	+17.0 psf	-132.6 psf
> 2H	-34.7	+/- 74.8	+40.1 psf	-109.5 psf



3. THIS COMMUNITY TORNADO SHELTER HAS NOT BEEN CONSTRUCTED IN AN AREA SUSCEPTIBLE TO FLOODING

4. STORM SHELTER FOUNDATIONS SHALL BEAR UPON SOIL WITH AN ALLOWABLE CAPACITY OF 2000 PSF.



NOTES:

DESIGN LOADS

ROOFING/INSULATION

FRAMING CEILING/MEP

ROOF LIVE LOAD:

WIND LOADS:

V = 250 MPH EXPOSURE = C

H = 14'-8" H = 14'-8" H = 14'-0" B = 71'-0"

Kd = 1.0

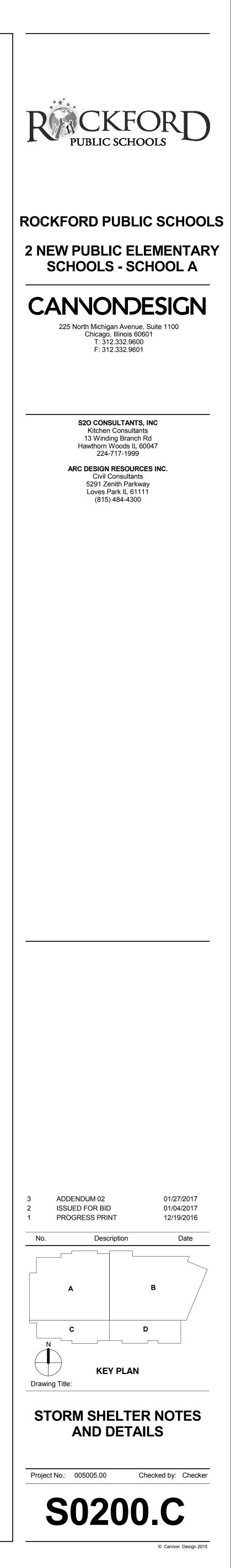
Kzt = 1.0 GCpi = +/- 0.55

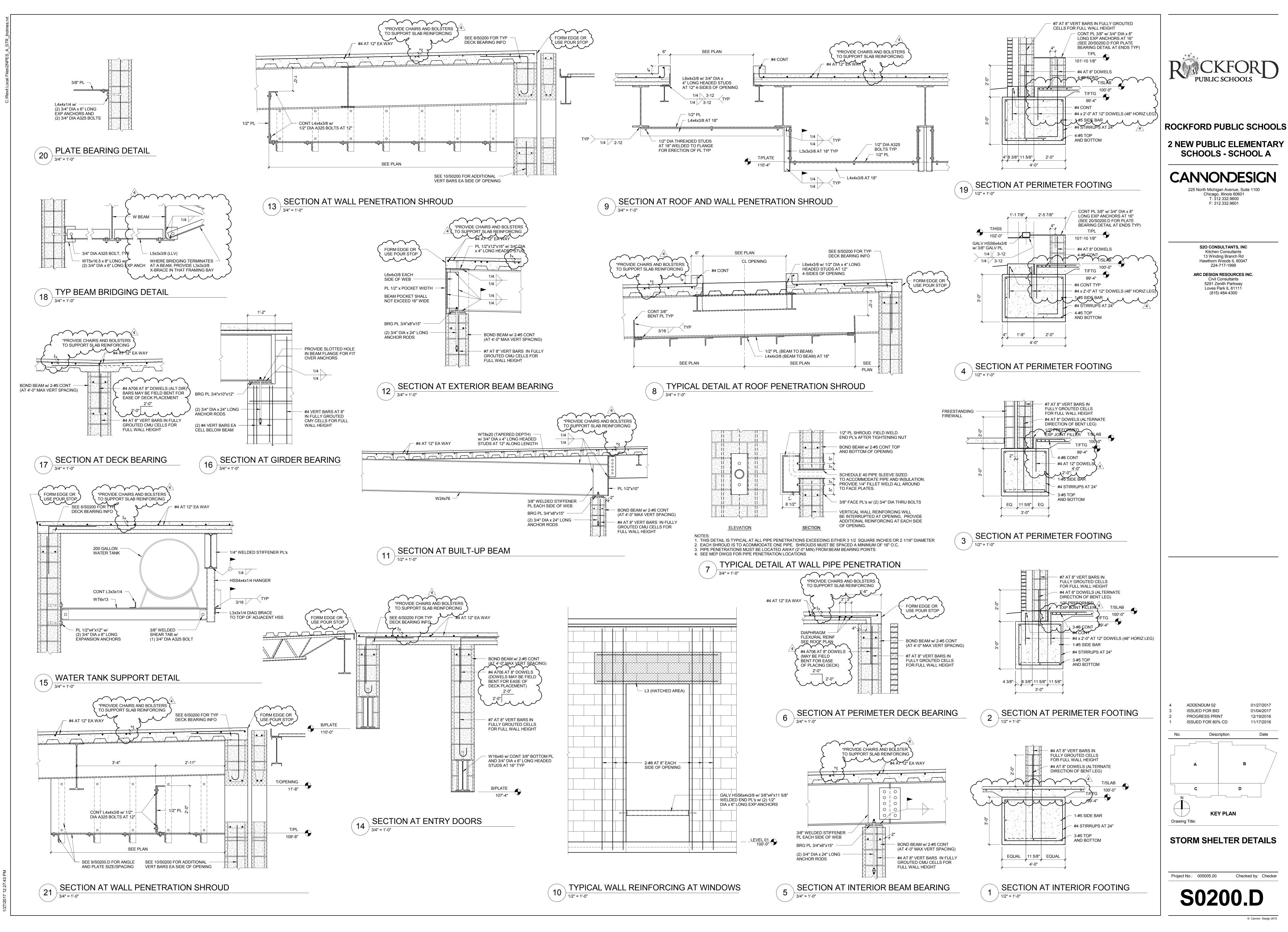
G = 0.85

TORNADO SHELTER

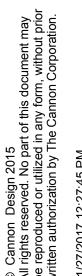
1. TYPE OF SHELTER: COMMUNITY TORNADO 2. THIS STRUCTURE WAS DESIGNED TO CONFORM TO THE PROVISIONS OF THE ICC/NSSA

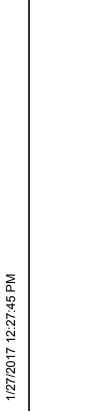
STANDARD FOR THE DESIGN AND CONSTRUCTION OF STORM SHELTERS, 2014

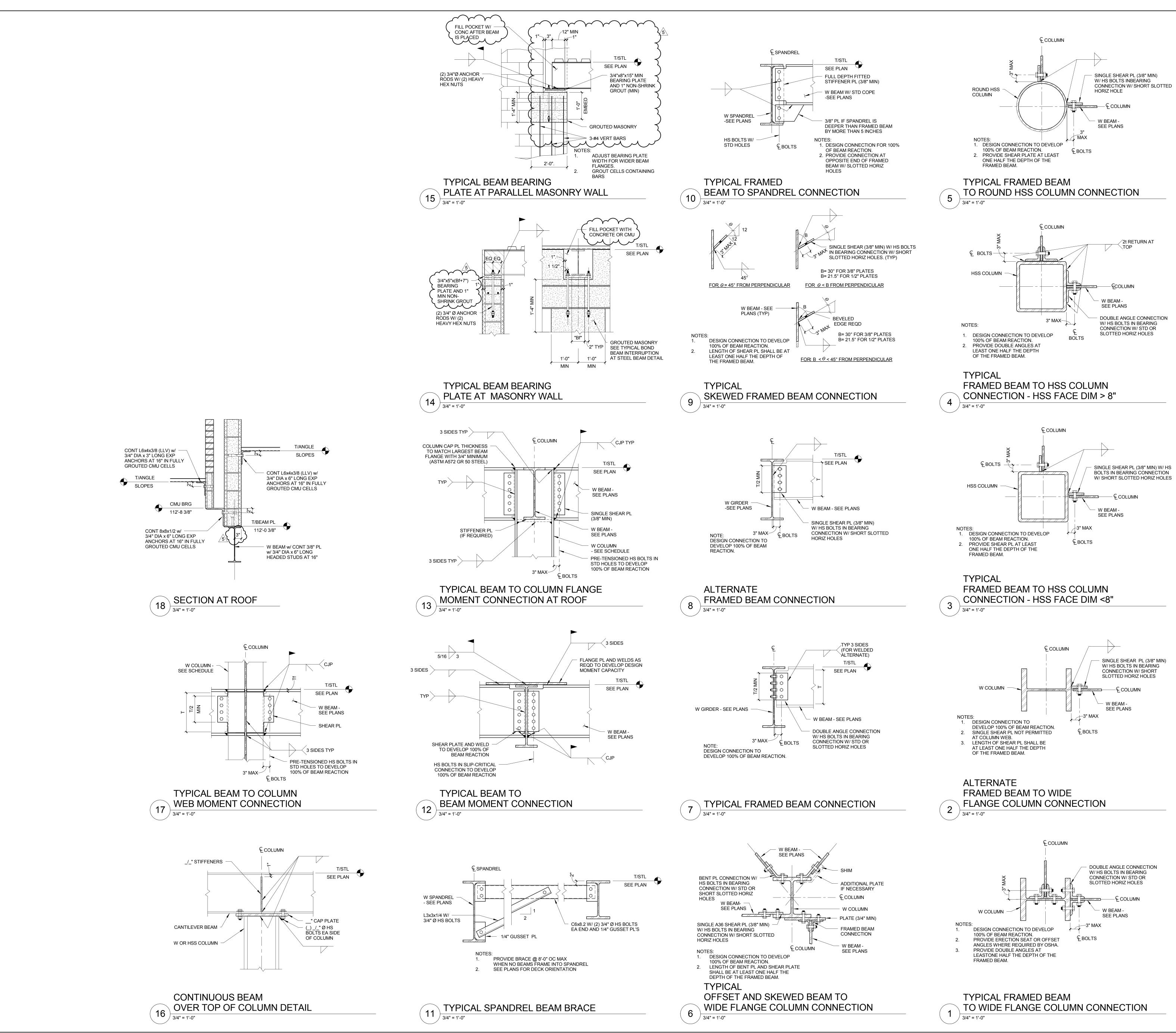




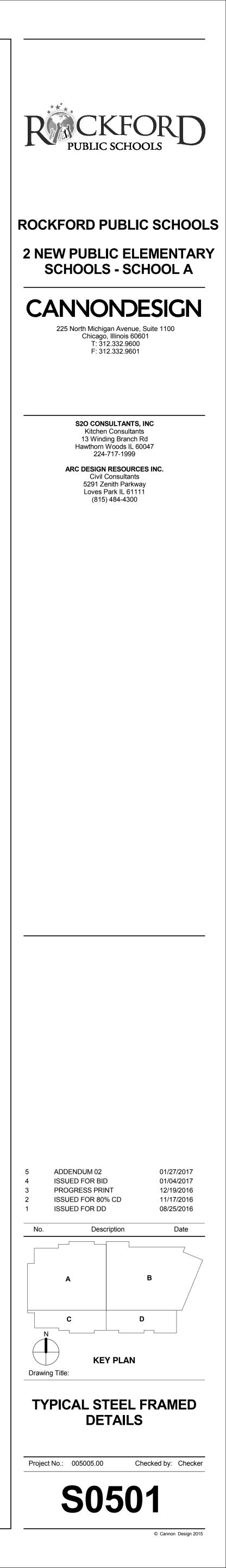
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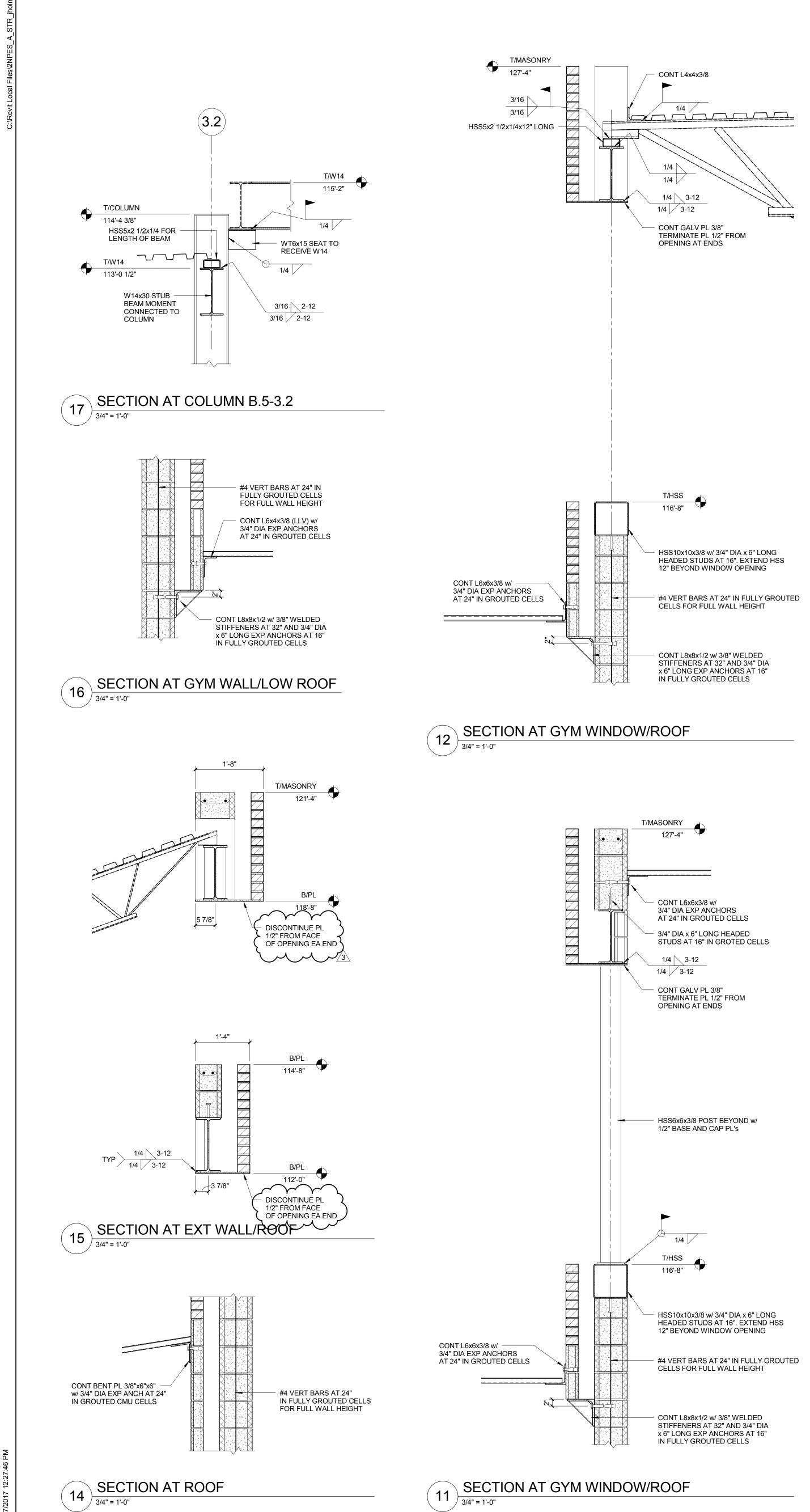






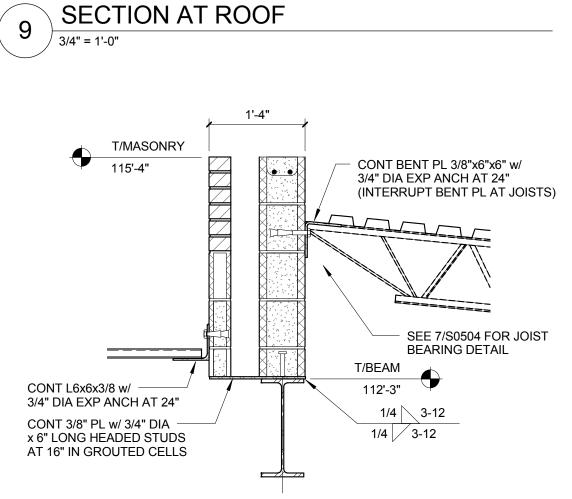






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T/MASONRY

113'-4"

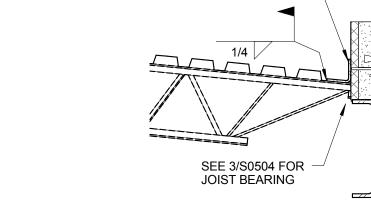
CONT L6x6x3/8 w/

- 3/4" DIA x 6" LONG

3/4" DIA EXP ANCH AT 24"

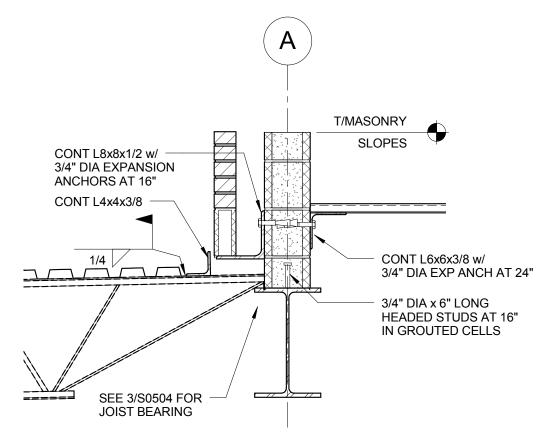
HEADED STUDS AT 16"

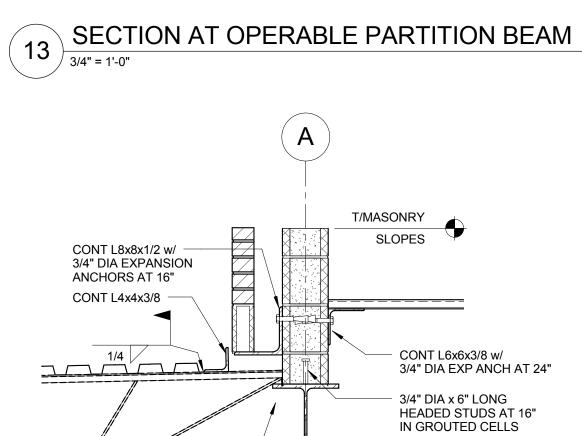
IN GROUTED CELLS

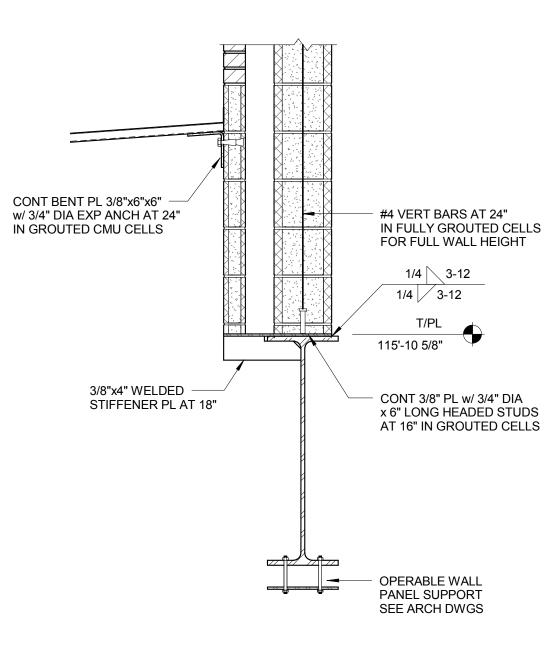


CONT BENT PL 3/8"x4"x4"



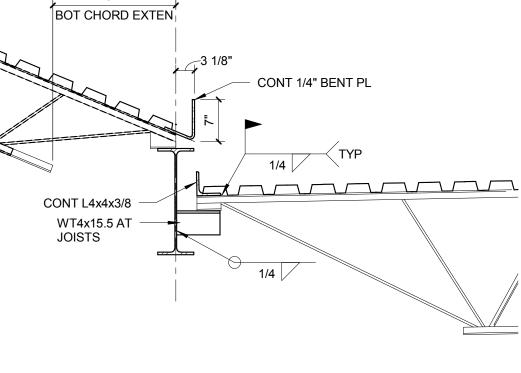


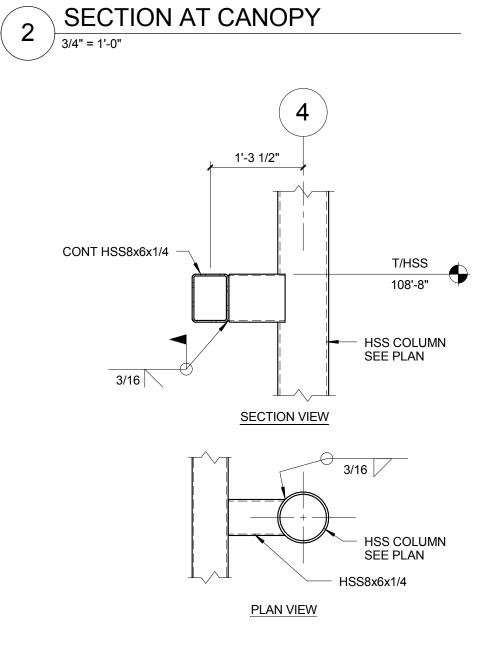






SECTION AT ROOF / 3/4" = 1'-0"





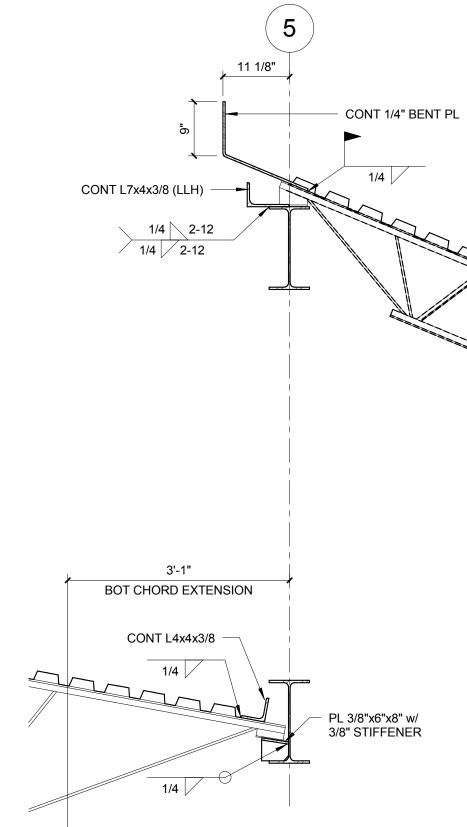
TYP CURTAIN WALL SUPPORT AT LIBRARY

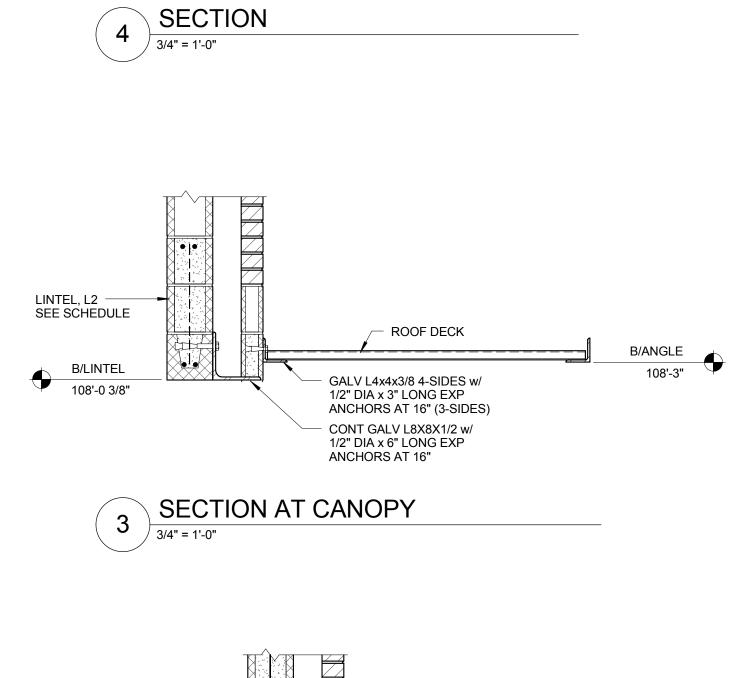
***INTERRUPT ANGLE AT WALL**

SCUPPER DRAIN LOCATIONS

6 SECTION AT ROOF

1'-8 1/2"





B/ANGLE 108'-3"

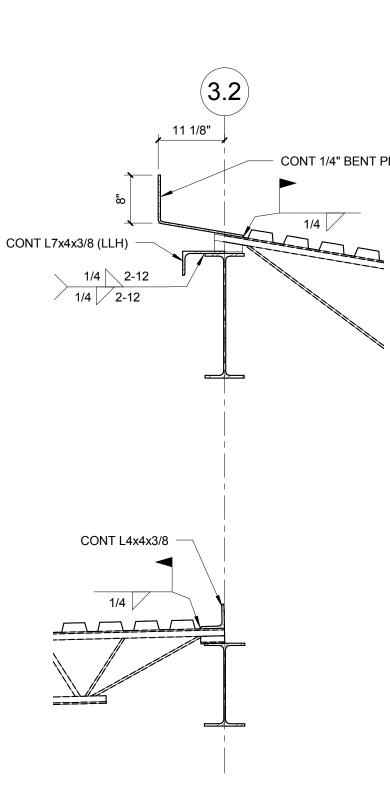
 $(1)^{-1}$

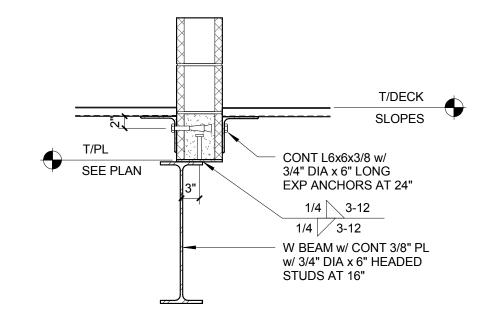
*CONT GALV L4x4x3/8 w/ 1/2" DIA x 3" LONG EXP

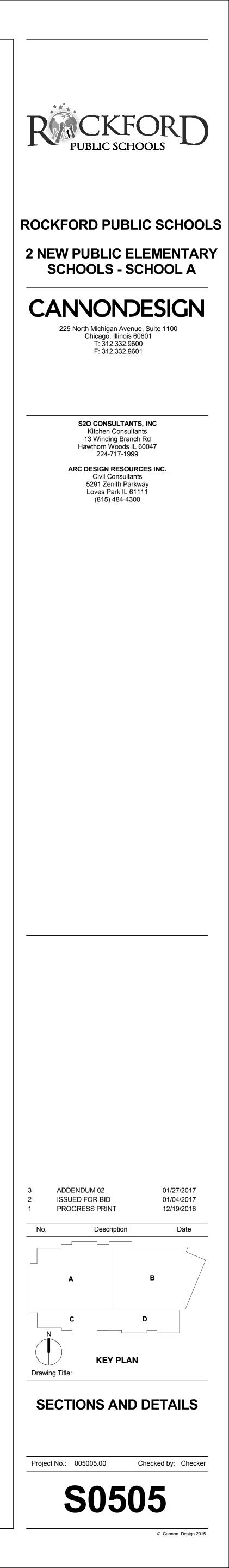
ANCHORS AT 16"



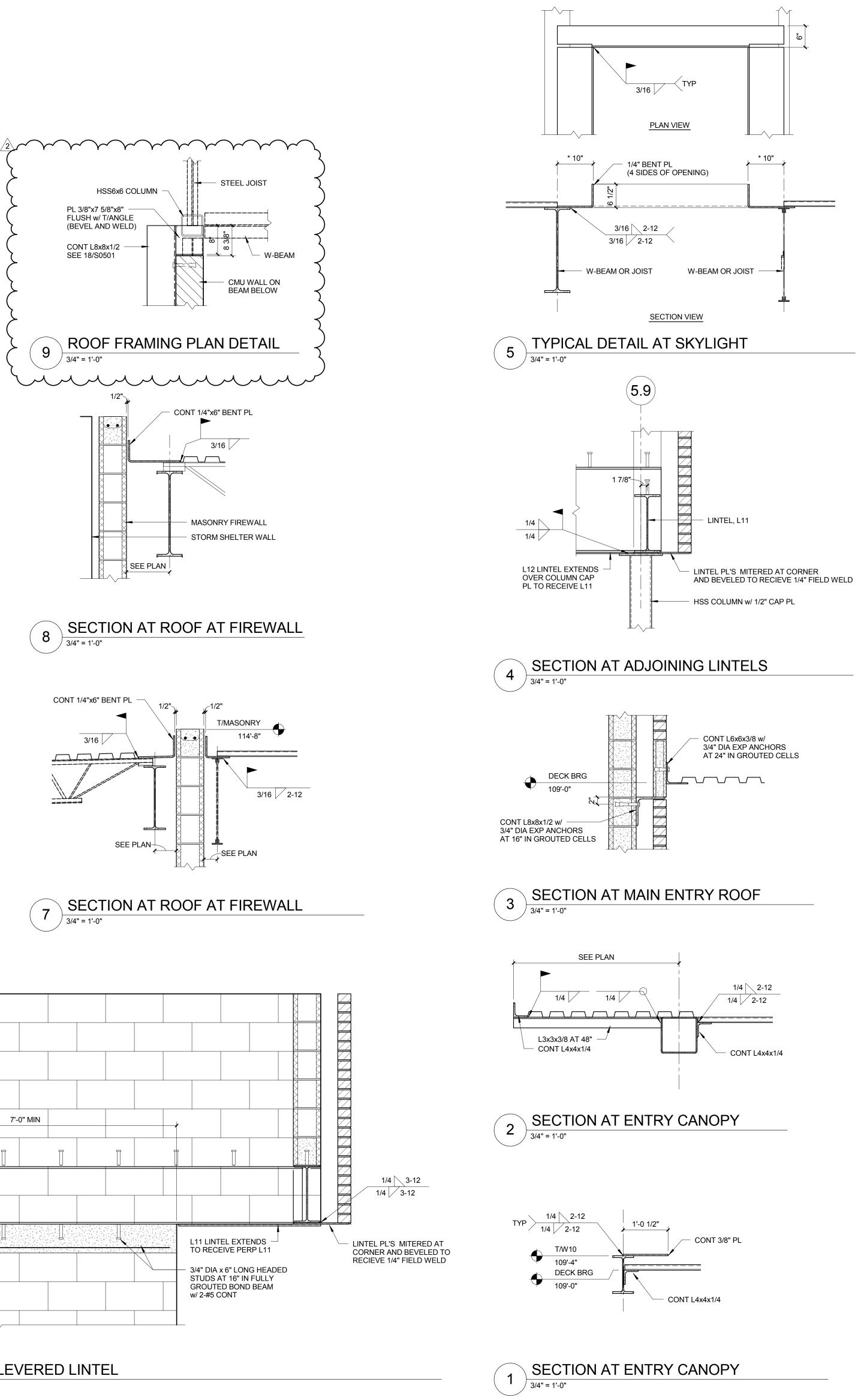
7

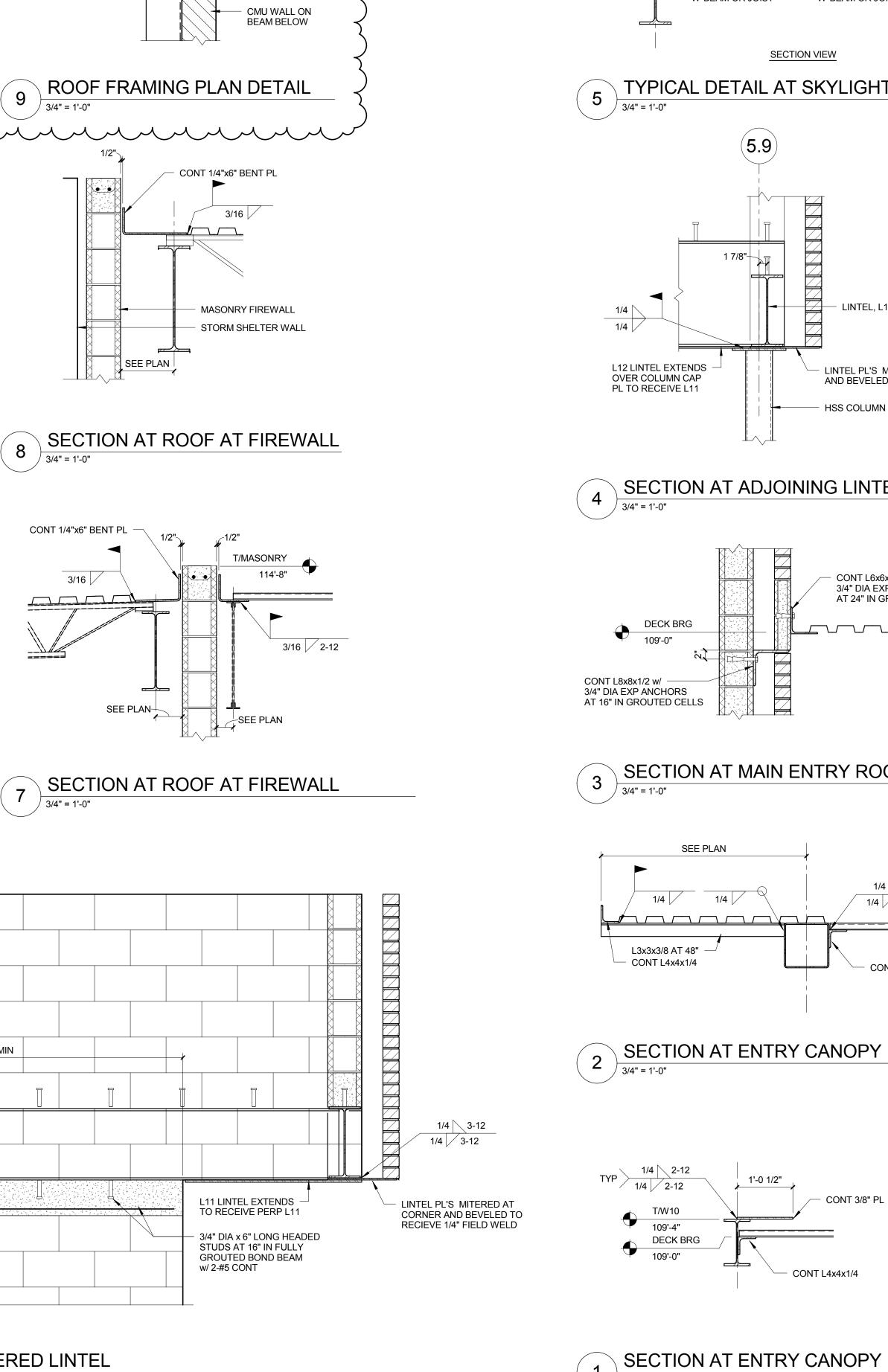


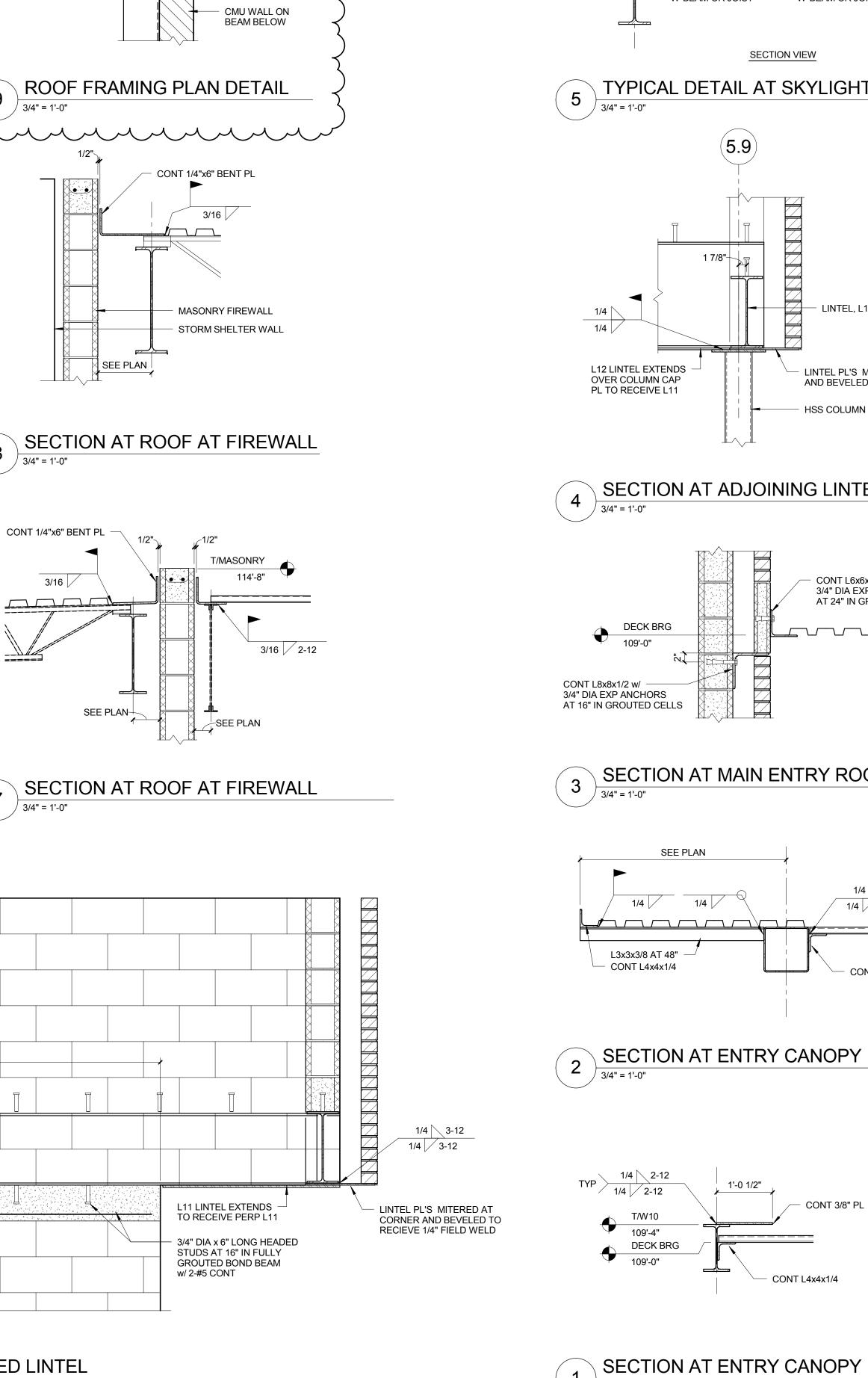


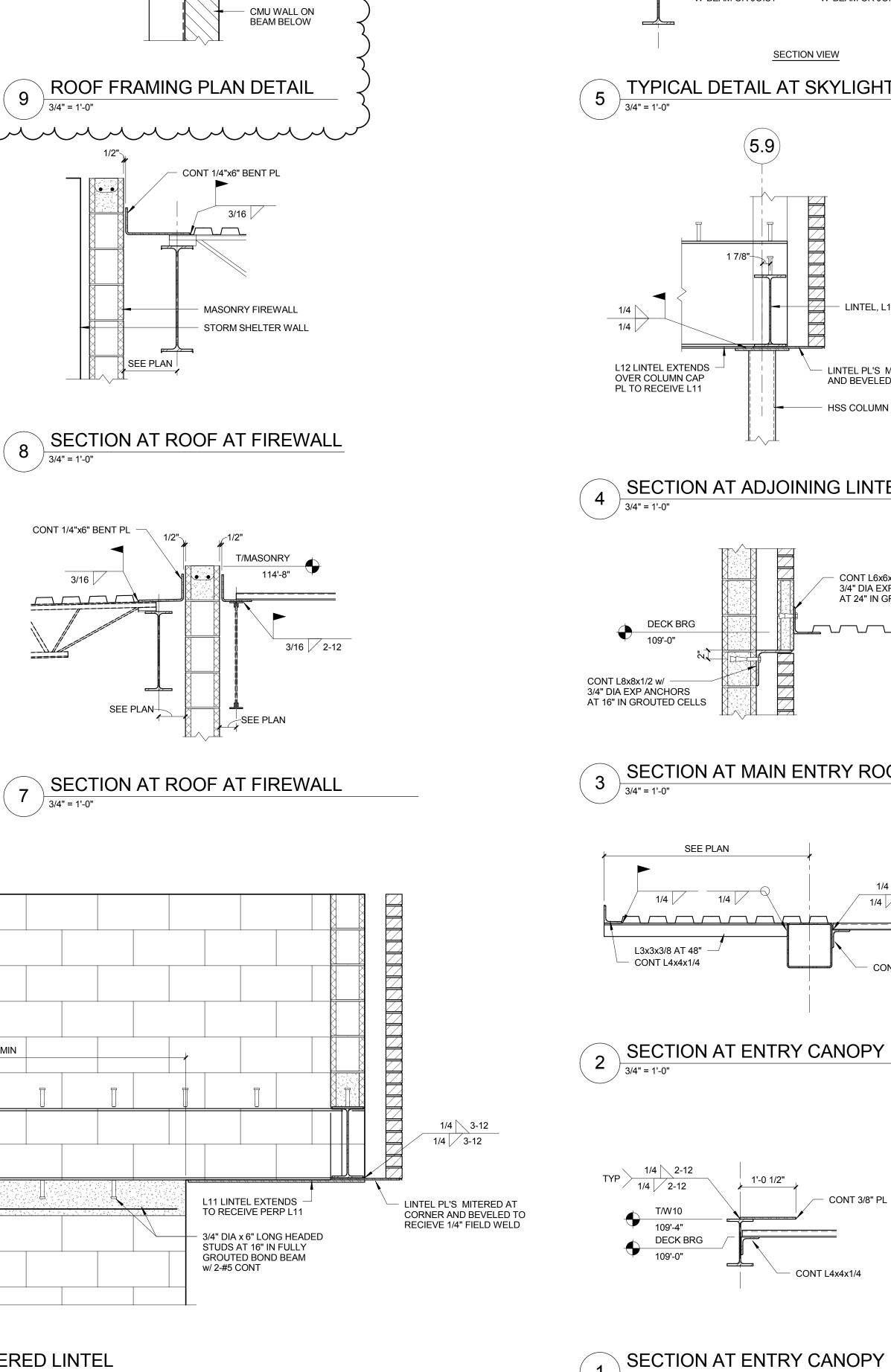


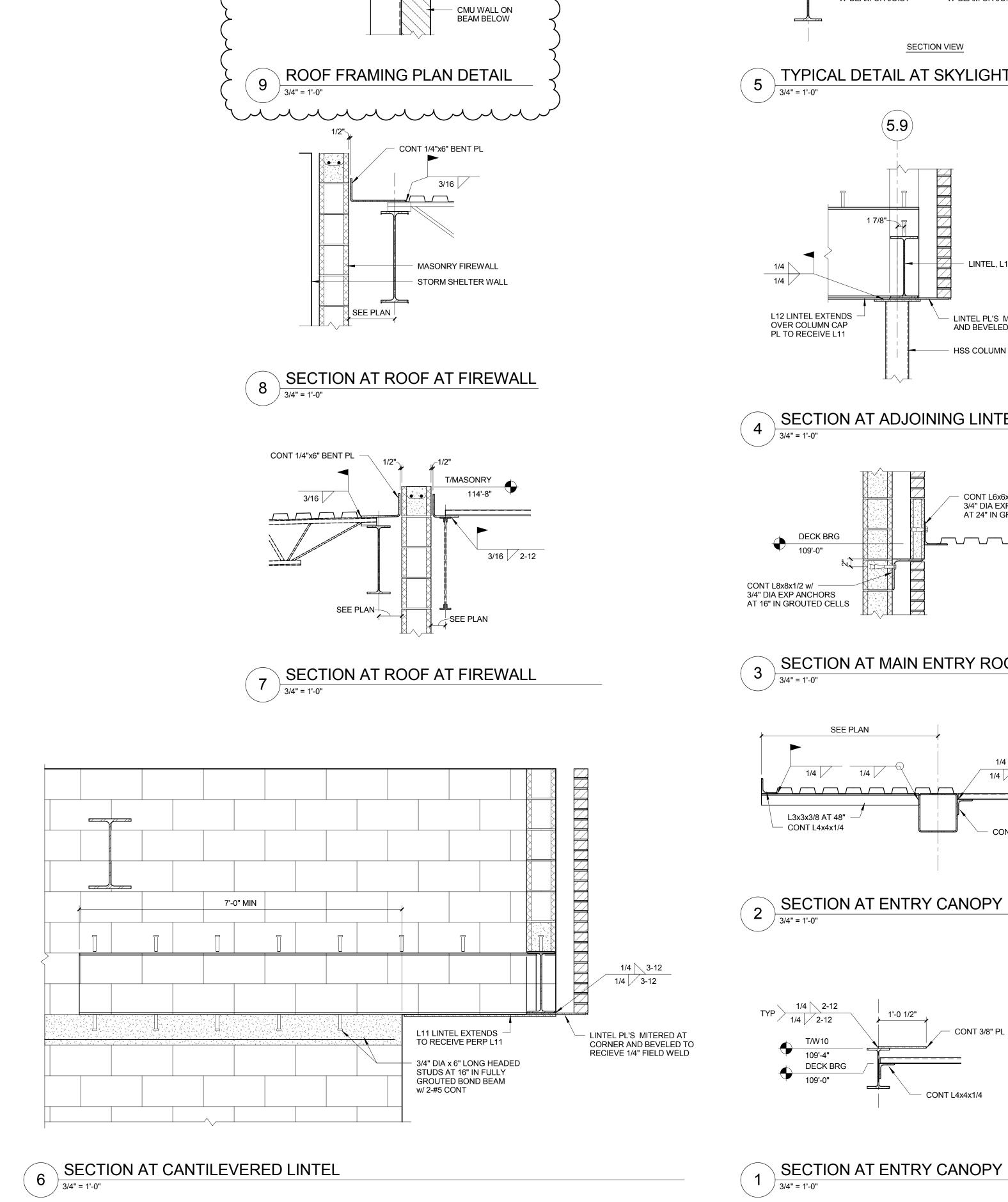
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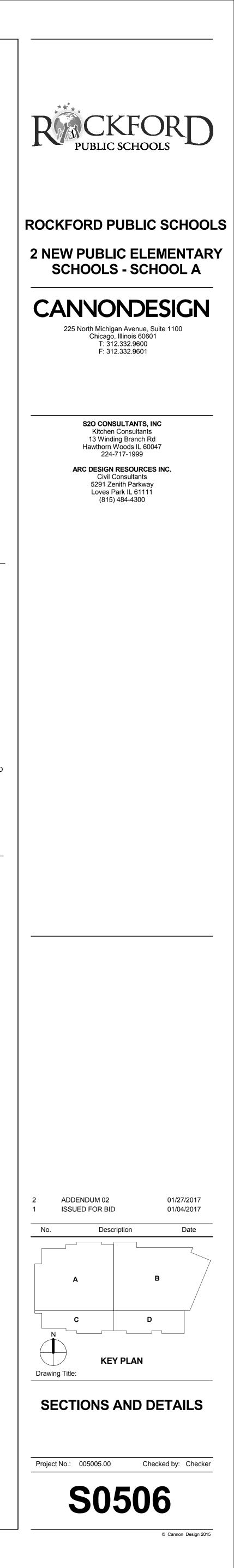










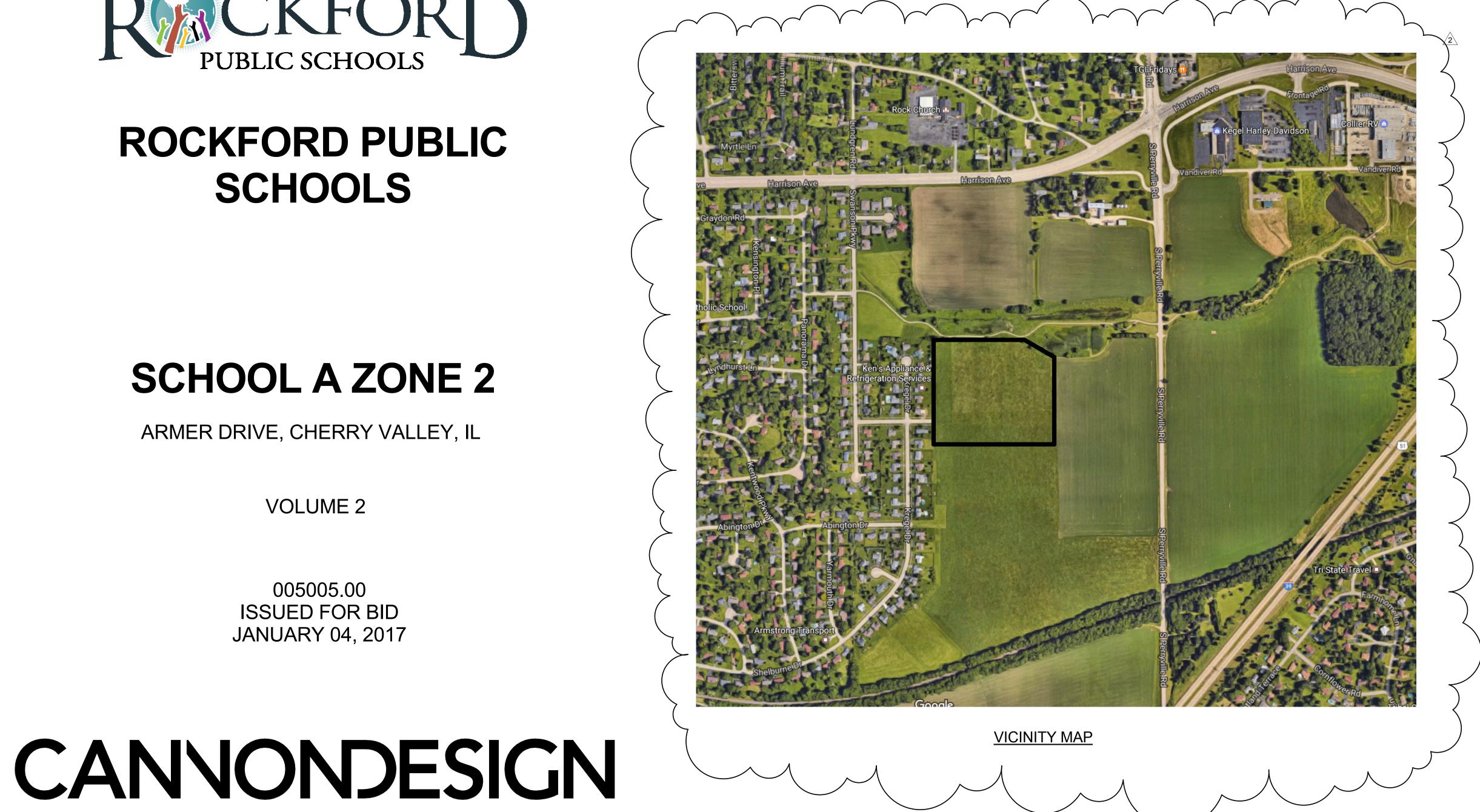


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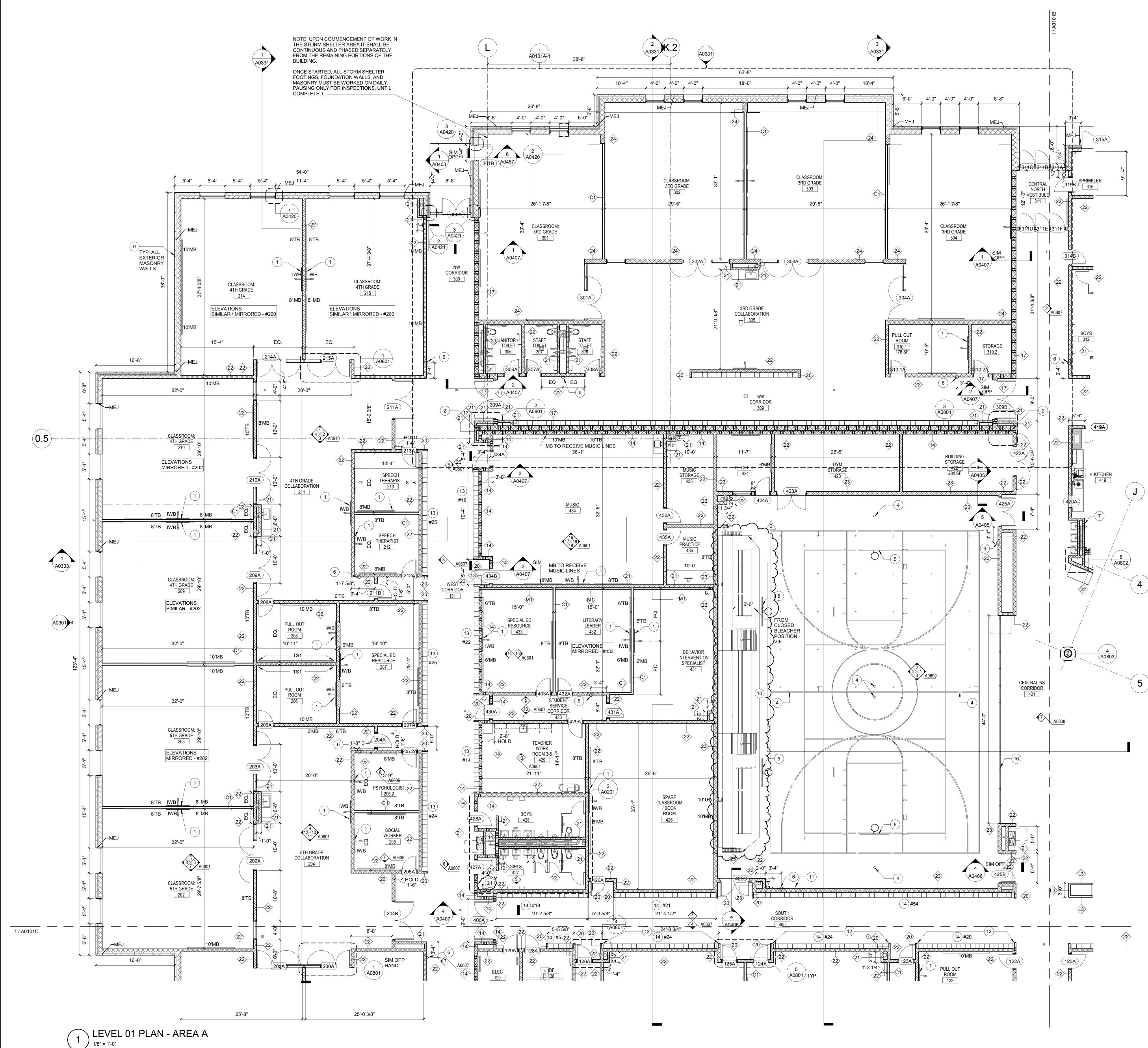
BOSTON NEW YORK BALTIMORE WASHINGTON DC BUFFALO TORONTO MONTREAL PITTSBURGH CHICAGO ST. LOUIS VANCOUVER SAN FRANCISCO LOS ANGELES PHOENIX MUMBAI ABU DHABI

Consultants:

S2O CONSULTANTS, INC Kitchen Consultants 13 Winding Branch Rd Hawthorn Woods IL 60047 224-717-1999

ARC DESIGN RESOURCES INC. Civil Consultants 5291 Zenith Parkway Loves Park IL 61111 (815) 484-4300

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GENERAL FLOOR PLAN NOTES

1. REFER TO SHEET A0001 FOR LIST OF TYPICAL ABBREVIATIONS AND TYPICAL ARCHITECTURAL GRAPHIC LEGENDS AND SYMBOLS.

2. REFER TO ENLARGED ELEVATIONS FOR EXTERIOR FINISHES AND FRAME TYPES. 3. ALL EXTERIOR WALL ASSEMBLIES ARE BC-0 UNO. 4. SEE A0400 FOR EXTERIOR WALL ASSEMBLIES TYPES, THICKNESSES, AND MATERIALS

5. REFER TO SHEET A0002 FOR TYPICAL MOUNTING HEIGHTS. 6. DIMENSIONS ARE FROM FACE OF WALL UNLESS

NOTED OTHERWISE. 7. OPENING DIMENSIONS ARE FROM FACE OF WALL TO

OUTSIDE OF FRAME. 8. IF OPENING IS NOT DIMENSIONED, OUTSIDE FACE OF

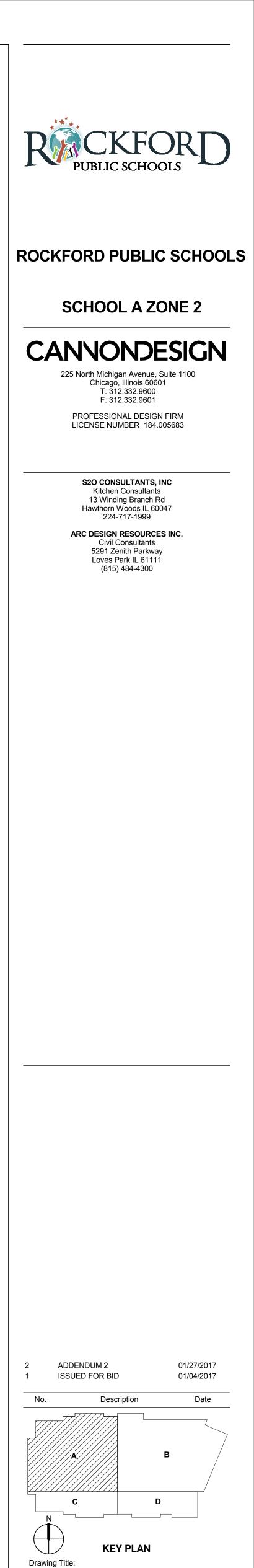
FRAME TO BE 4" FROM ADJACENT PARTITION. 9. PROVIDE BLOCKING AT WALL HUNG ACCESSORIES,

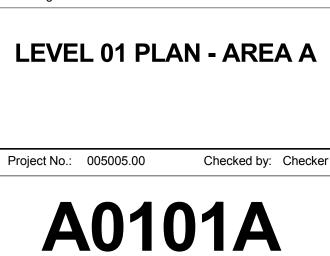
EQUIPMENT AND CASEWORK. 10. PREPARE SUBSURFACE AS REQUIRED FOR NEW

FLOOR PLAN NOTES

FLOORING FINISH.

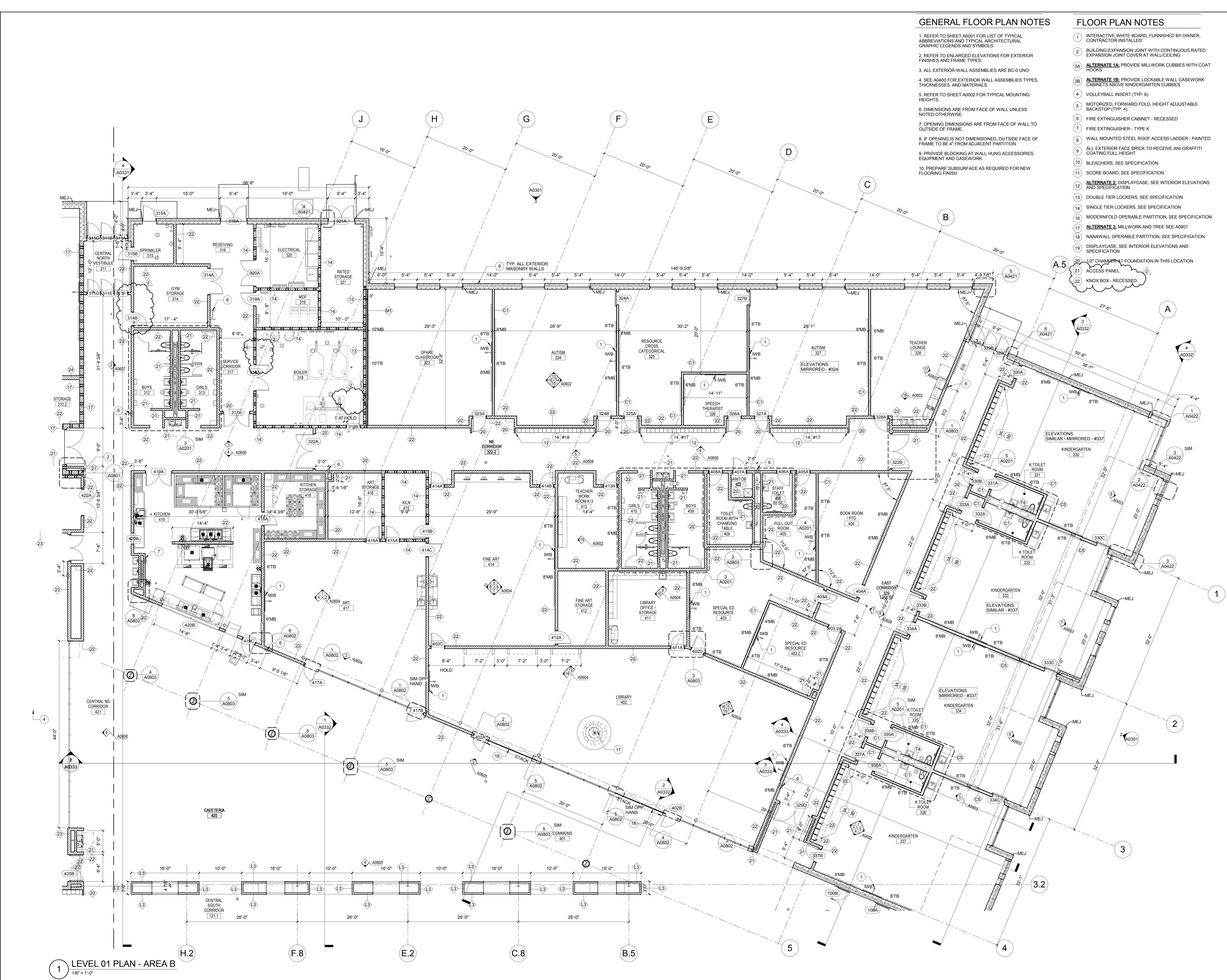
- INTERACTIVE WHITE BOARD, FURNISHED BY OWNER, CONTRACTOR-INSTALLED
- 2 BUILDING EXPANSION JOINT WITH CONTINUOUS RATED EXPANSION JOINT COVER AT WALL/CEILING
- (3A) ALTERNATE 1A: PROVIDE MILLWORK CUBBIES WITH COAT HOOKS
- (3B) <u>ALTERNATE 1B:</u> PROVIDE LOCKABLE WALL CASEWORK CABINETS ABOVE KINDERGARTEN CUBBIES
- (4) VOLLEYBALL INSERT (TYP. 6)
- MOTORIZED, FORWARD FOLD, HEIGHT ADJUSTABLE BACKSTOP (TYP. 4)
- (6) FIRE EXTINGUISHER CABINET RECESSED
- 7) FIRE EXTINGUISHER TYPE K
- WALL MOUNTED STEEL ROOF ACCESS LADDER PAINTED
- ALL EXTERIOR FACE BRICK TO RECEIVE ANI-GRAFFITI ⁹ COATING FULL HEIGHT
- (10) BLEACHERS, SEE SPECIFICATION
- (11) SCORE BOARD, SEE SPECIFICATION
- ALTERNATE 2: DISPLAYCASE, SEE INTERIOR ELEVATIONS AND SPECIFICATION
- (13) DOUBLE TIER LOCKERS, SEE SPECIFICATION
- SINGLE TIER LOCKERS, SEE SPECIFICATION
- MODERNFOLD OPERABLE PARTITION, SEE SPECIFICATION
- ALTERNATE 3: MILLWORK AND TREE SEE A0901
- NANAWALL OPERABLE PARTITION, SEE SPECIFICATION
- DISPLAYCASE, SEE INTERIOR ELEVATIONS AND SPECIFICATION
- 20 1/2" CHAMFER AT FOUNDATION IN THIS LOCATION (21) ACCESS PANEL (22) KNOX BOX - RECESSED



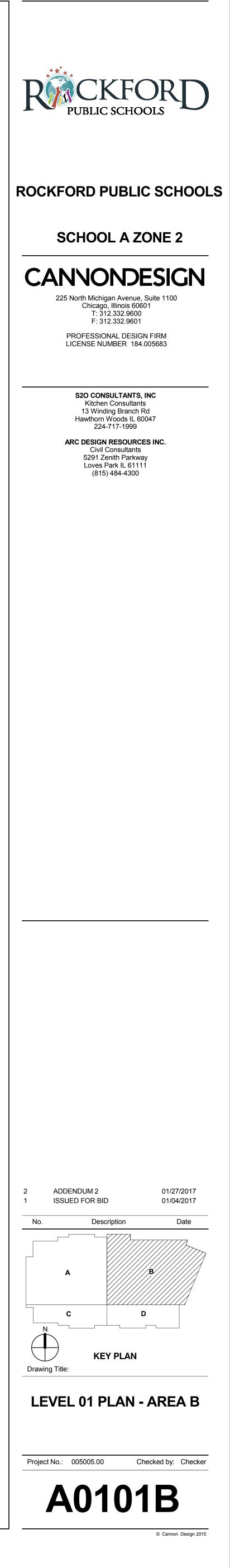


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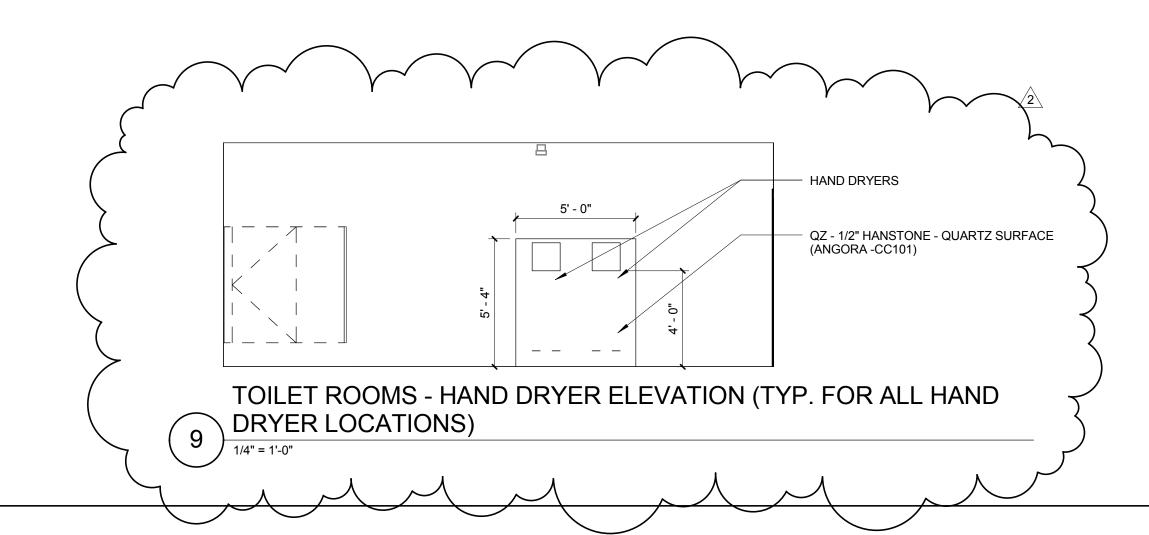
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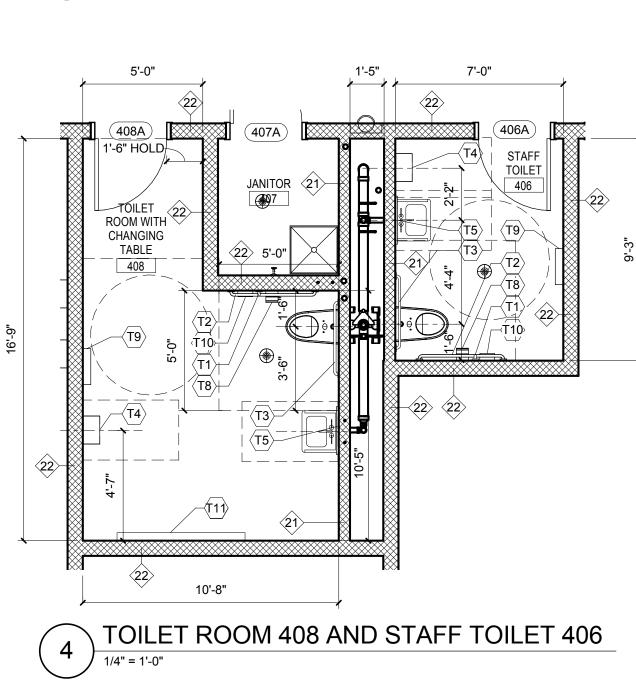


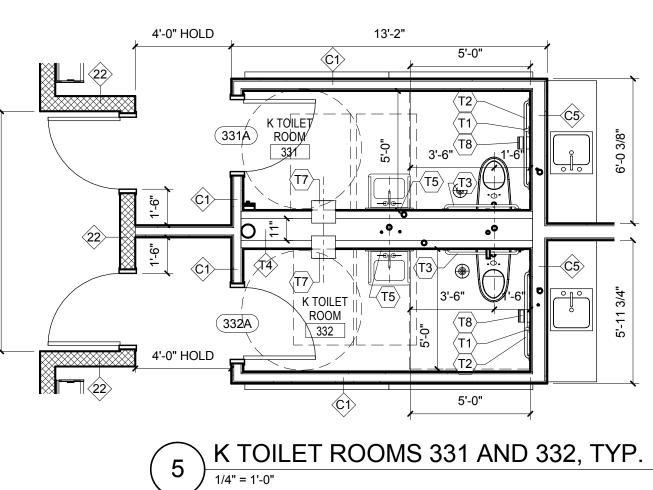
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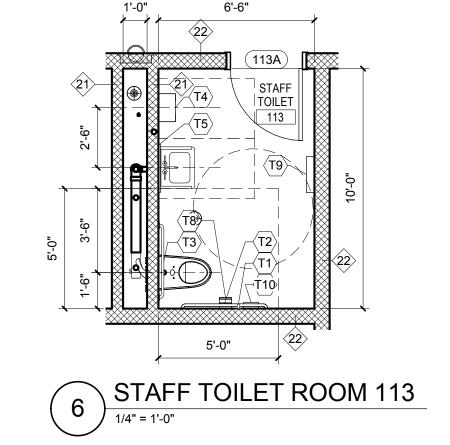


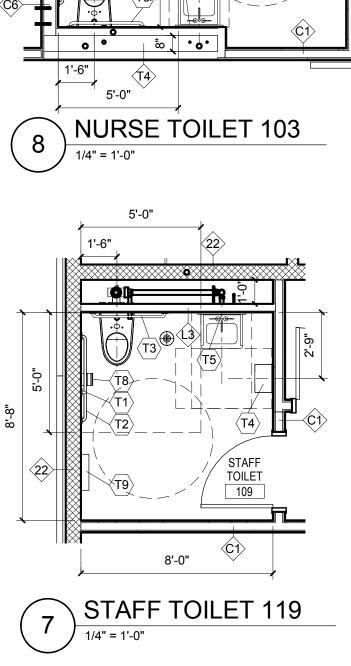
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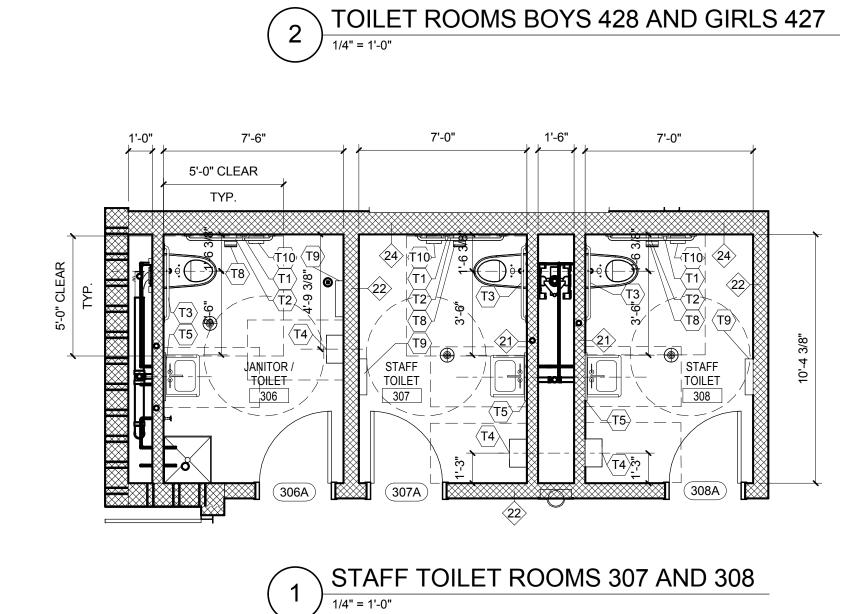


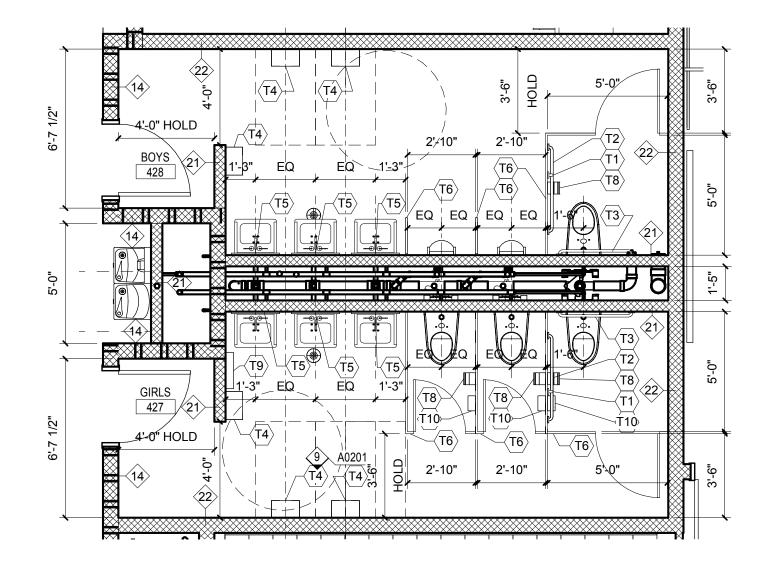




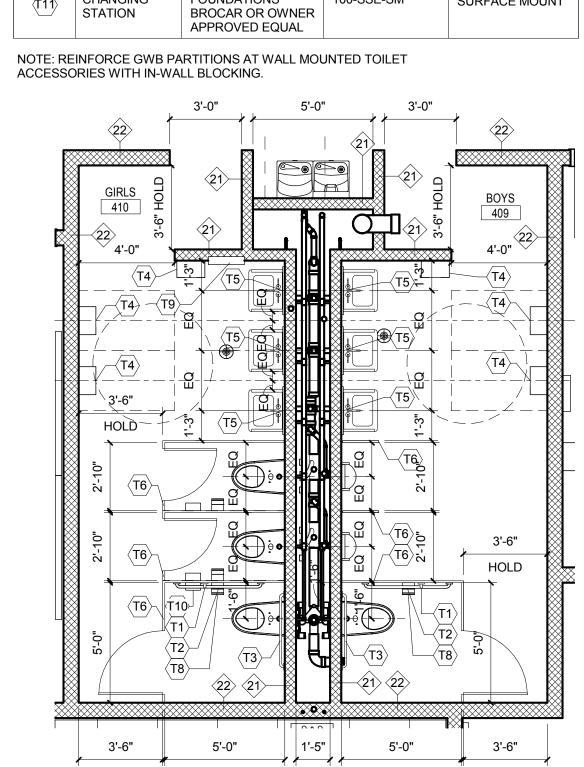


12'-0"



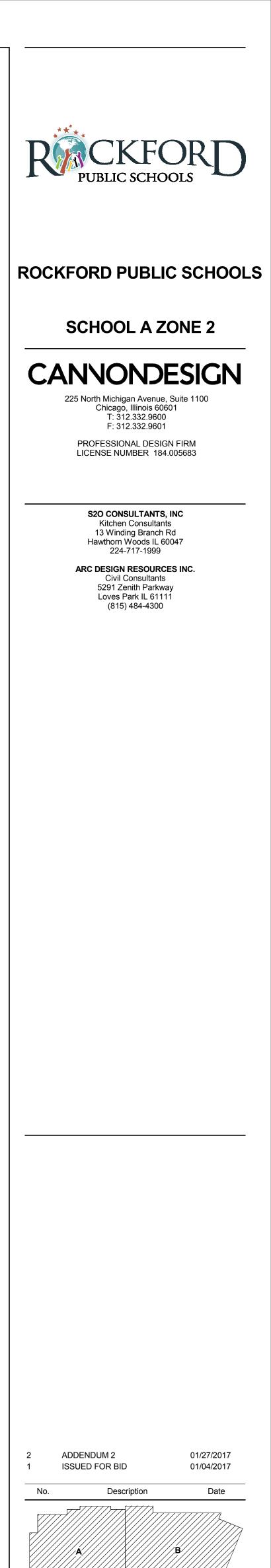




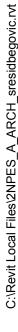


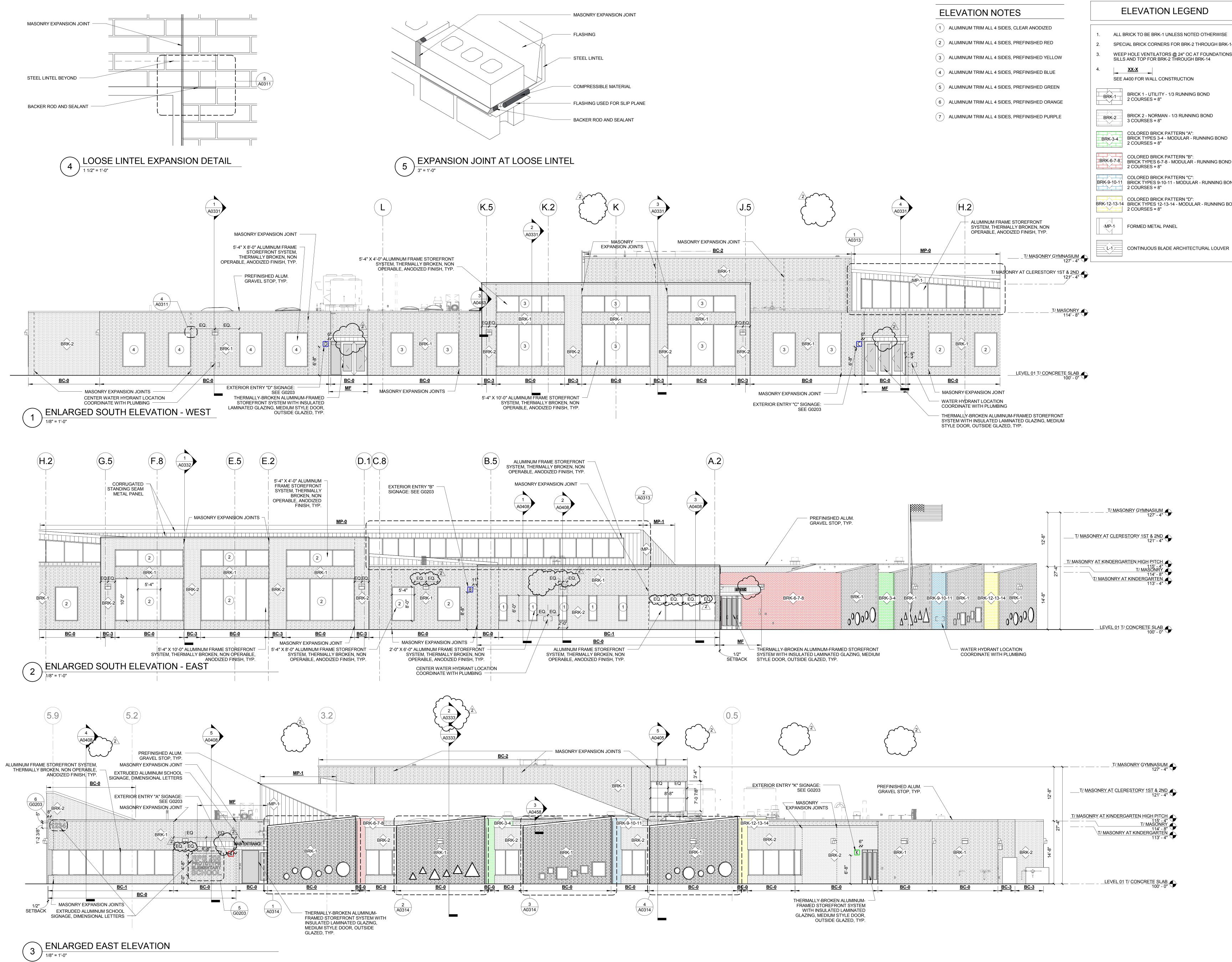
	TOILET ACCESSORIES				
SYMBOL	ITEM	MANUFACTURER	MODEL #	MOUNTING	
	18" GRAB BAR	BOBRICK OR OWNER APPROVED EQUAL	TBD	SURFACE MOUNT	
T2	42" GRAB BAR	BOBRICK OR OWNER APPROVED EQUAL	B-6881 SATIN FINISH	SURFACE MOUNT	
T3	36" GRAB BAR	BOBRICK OR OWNER APPROVED EQUAL	B-6806 SATIN FINISH	SURFACE MOUNT	
T4	HAND DRYER	AMERICAN SPECIALTIES INC	0165	SURFACE MOUNT	
(T5)	MIRROR	BOBRICK OR OWNER APPROVED EQUAL	B-290 2436	SURFACE MOUNT 3'-4" AFF	
(T6)	TOILET PARTITION	SEE SPEC	SEE SPEC	FLOOR MOUNT	
	PAPER TOWEL DISPENSER	OWNER FURNISHED AND INSTALLED	OWNER FURNISHED AND INSTALLED	SURFACE MOUNT	
(T8)	TOILET PAPER DISPENSER	OWNER FURNISHED AND INSTALLED	OWNER FURNISHED AND INSTALLED	SURFACE MOUNT	
(T9)	SANITARY NAPKIN VENDOR	BOBRICK OR OWNER APPROVED EQUAL	B-3706 25	SEMI-RECESSED	
(110)	SANITARY NAPKIN DISPOSAL	BOBRICK OR OWNER APPROVED EQUAL	TBD	PARTITION MOUNTED	
(T11)	CHANGING STATION	FOUNDATIONS BROCAR OR OWNER APPROVED EQUAL	100-SSE-SM	SURFACE MOUNT	





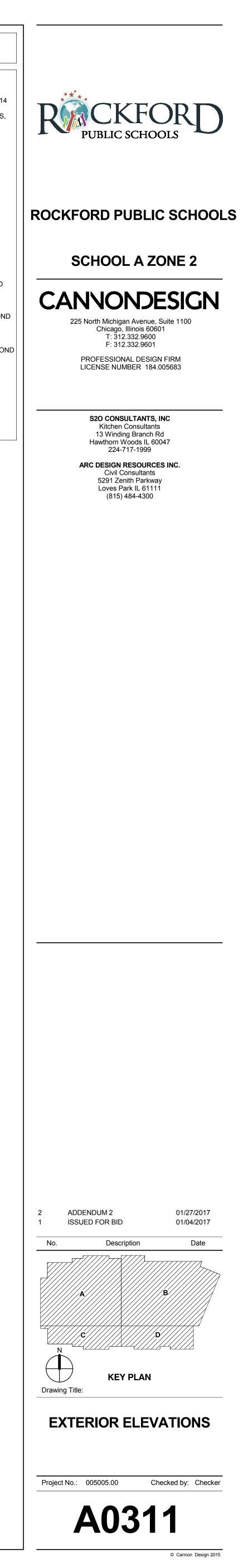


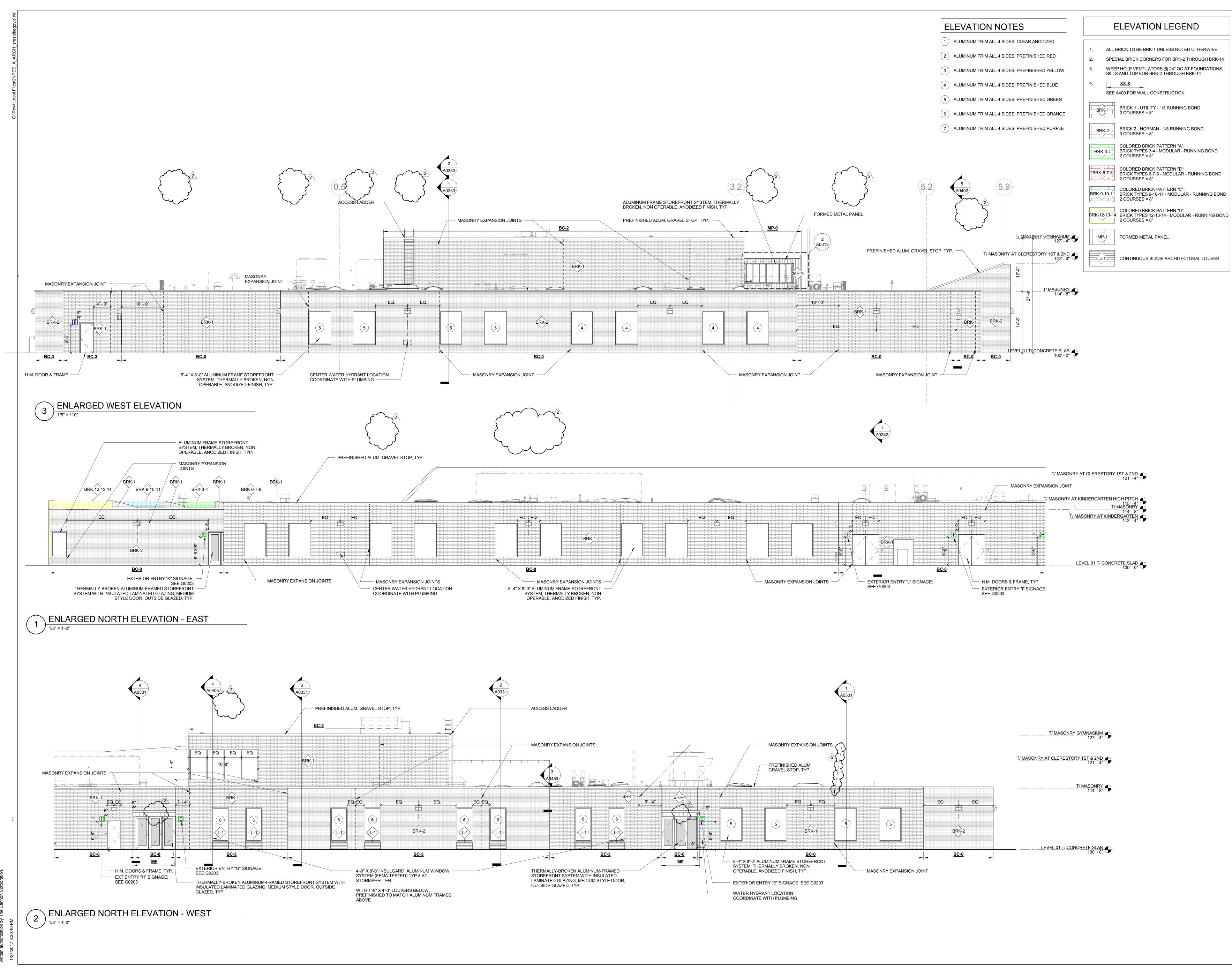




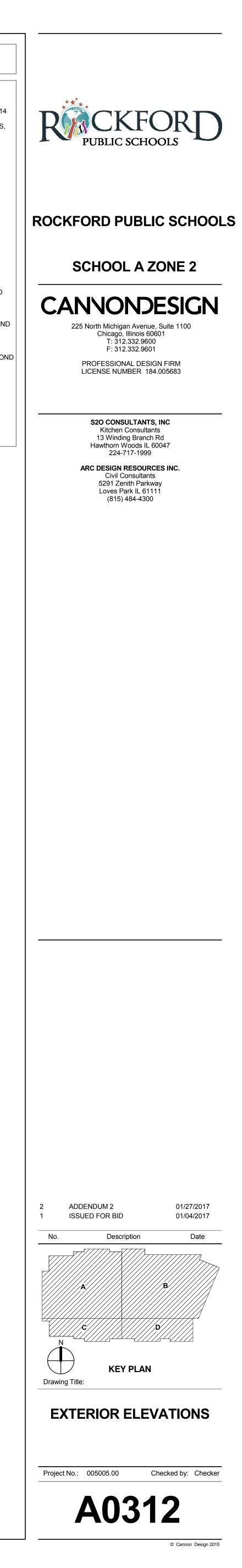
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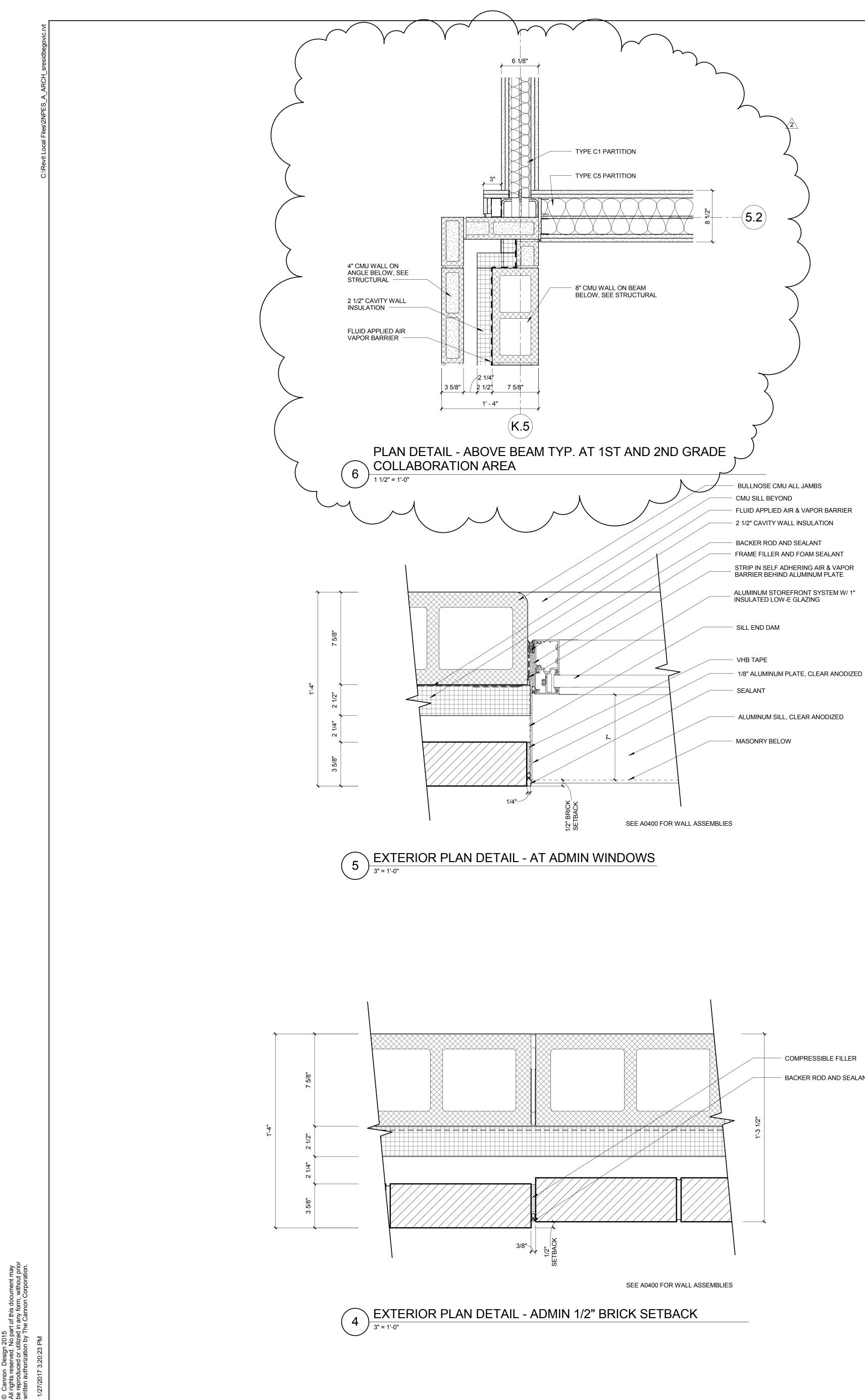
E	ELEVATION LEGEND
1. ALL	BRICK TO BE BRK-1 UNLESS NOTED OTHERWISE
2. SPEC	CIAL BRICK CORNERS FOR BRK-2 THROUGH BRK-1
	P HOLE VENTILATORS @ 24" OC AT FOUNDATIONS S AND TOP FOR BRK-2 THROUGH BRK-14
4. SEE	A400 FOR WALL CONSTRUCTION
BRK-1	BRICK 1 - UTILITY - 1/3 RUNNING BOND 2 COURSES = 8"
BRK-2	BRICK 2 - NORMAN - 1/3 RUNNING BOND 3 COURSES = 8"
BRK-3-4	COLORED BRICK PATTERN "A": BRICK TYPES 3-4 - MODULAR - RUNNING BOND 2 COURSES = 8"
BRK-6-7-8	COLORED BRICK PATTERN "B": BRICK TYPES 6-7-8 - MODULAR - RUNNING BOND 2 COURSES = 8"
BRK-9-10-11	COLORED BRICK PATTERN "C": BRICK TYPES 9-10-11 - MODULAR - RUNNING BOI 2 COURSES = 8"
BRK-12-13-14	COLORED BRICK PATTERN "D": BRICK TYPES 12-13-14 - MODULAR - RUNNING BC 2 COURSES = 8"
(MP-1)	FORMED METAL PANEL





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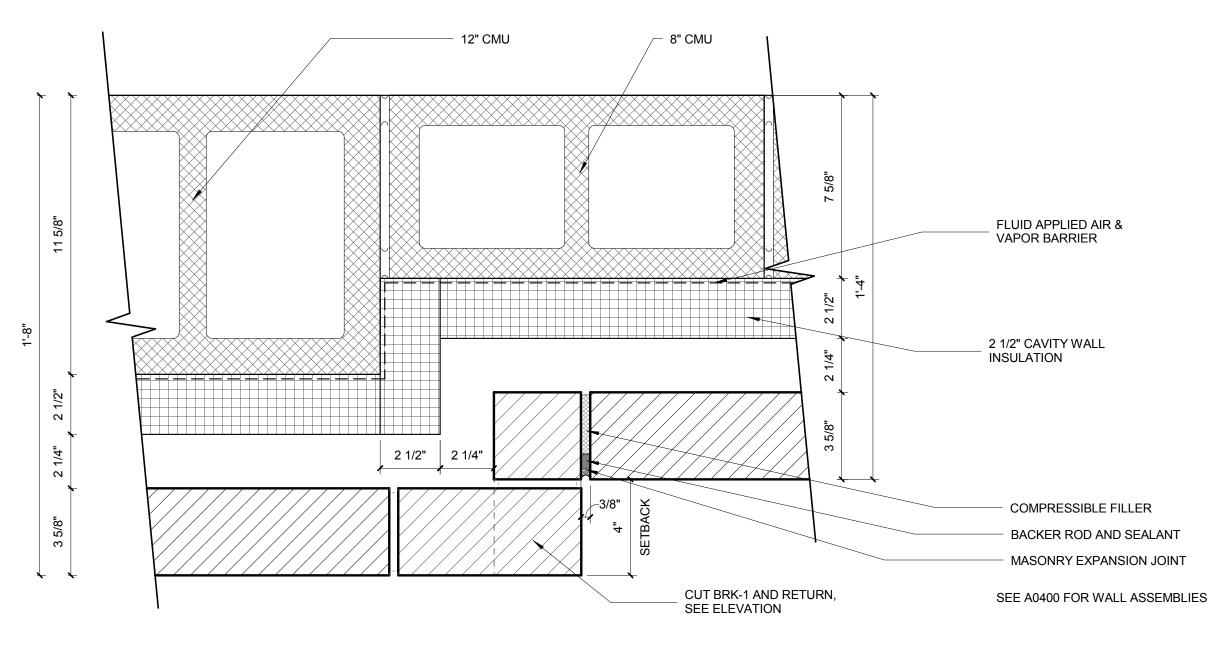


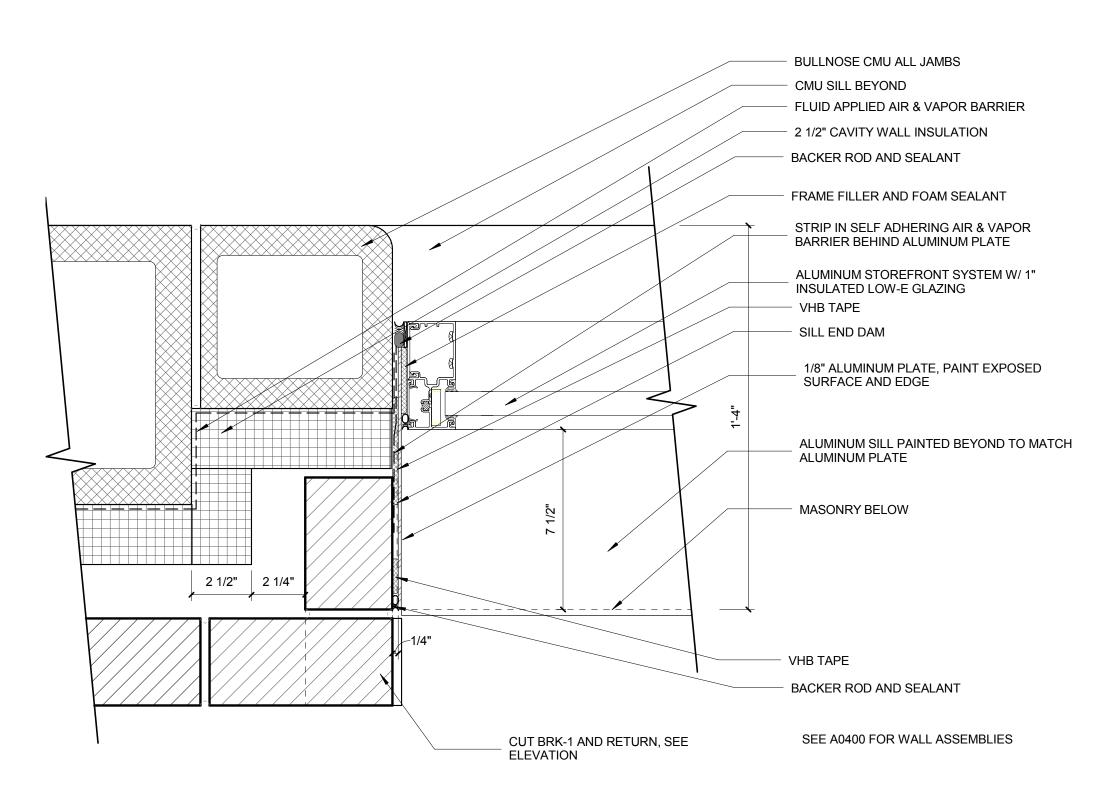
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BACKER ROD AND SEALANT

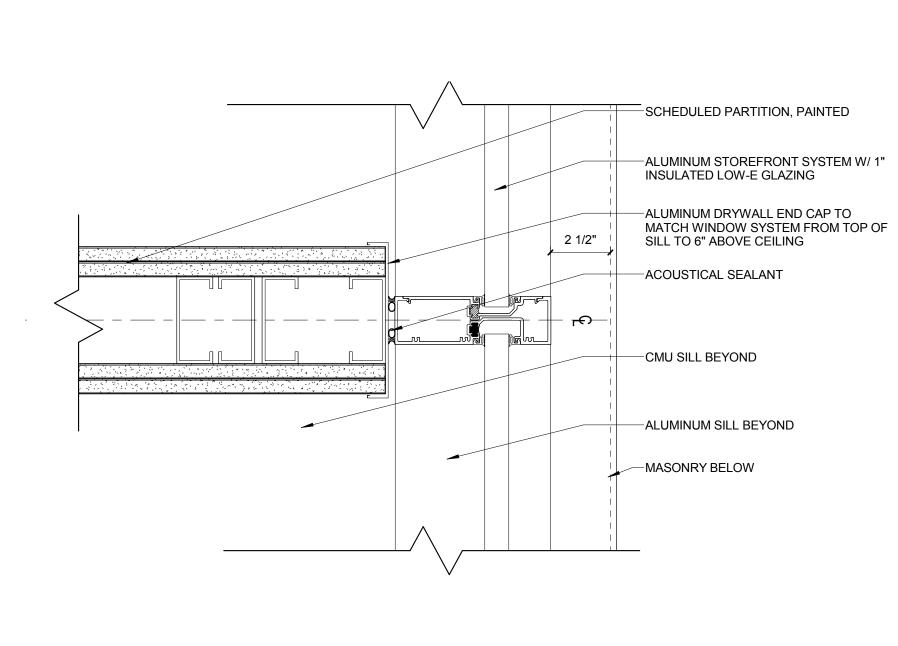
EXTERIOR PLAN DETAIL - 2ND GRADE COLLABORATION 127 SW γ CORNER AT 12" CMU TO 8" CMU TRANSITION, TYP. 1 3" = 1'-0"

2 <u>TYP.</u> 3" = 1'-0"



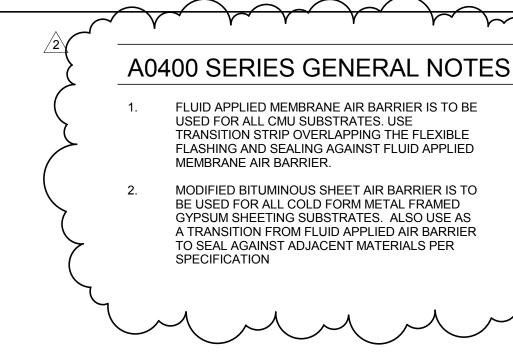


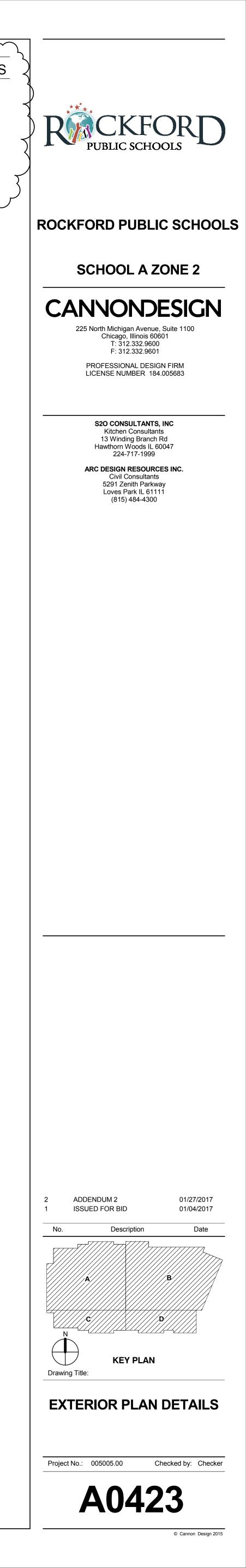


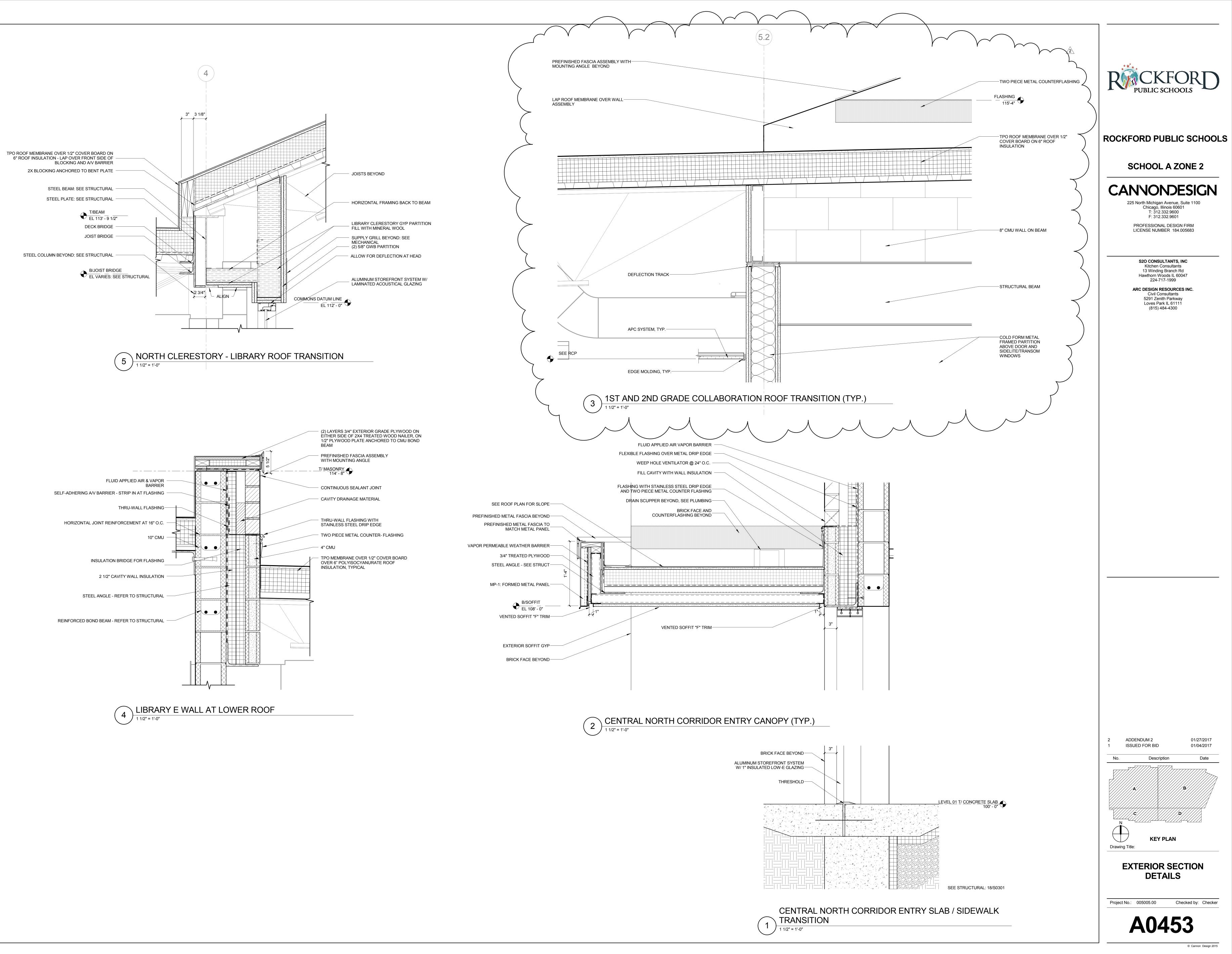


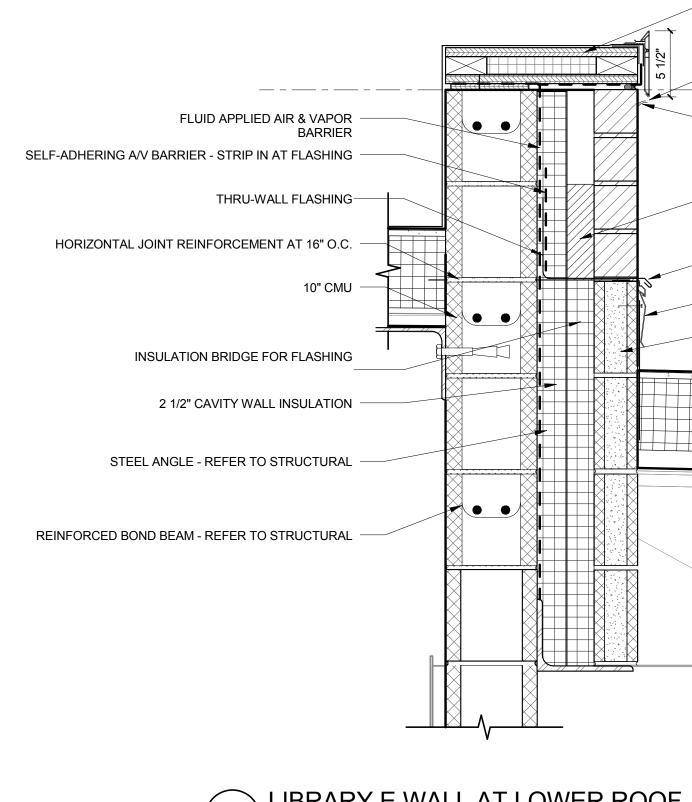




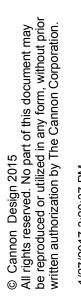


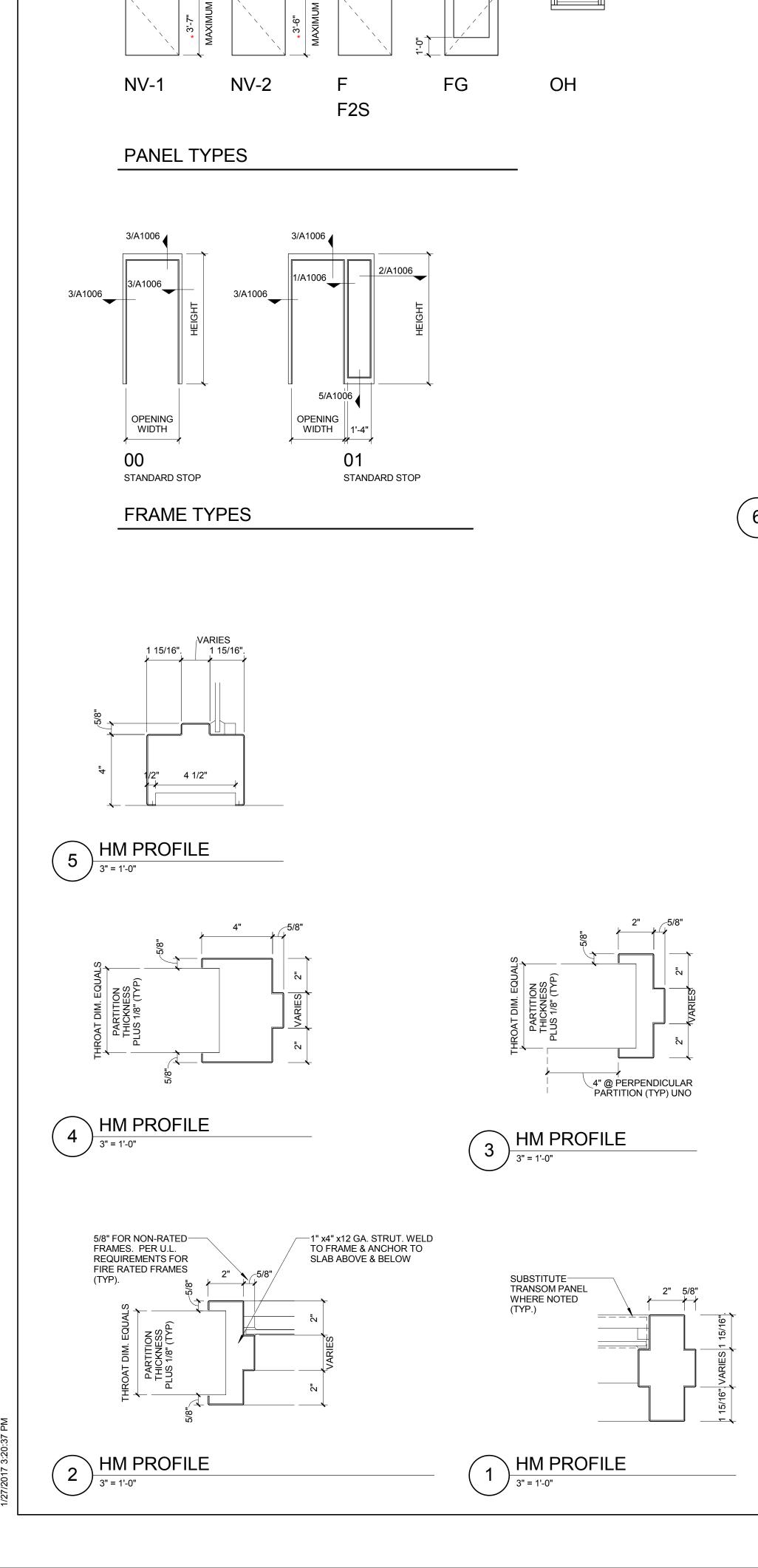






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OPENING NUMBER

420B

422A

423A

424A

425A 425B 425C

426A

427A

428A

429A

430A

431A

432A 433A

434A

434B 435A

436A

TYPE

NV-2, NV-2 6' -NV-2, NV-2 6' -NV-2, NV-2 6' -

14' - 8"

6' - 0"

3' - 0

3' - 0

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

,

OH

F. F

F. F

NV-2

NV-2

NV-2

NV-1

NV-2

NV-2

NV-2

NV-1

NV-1

NV-2

3" 8"

DOOR SCHEDULE

HM

HM

HM

HM

11

4"

11

THICKNESS MATERIAL GLASS TYPE TYPE MATERIAL HEAD JAMB SILL

FRAME DETAILS

04/A1006 03/A1006

DOOR

5' - 5 1/8"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

WD

WD

WD

WD WD WD

WD

WD

WD

WD

WD

WD

WD

WD

WD

WD

WD

WD

6" / /

6" 1

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

7' - 0"

SIZE

OPENING LEAF OPENING WIDTH WIDTH HEIGHT

' - 0"

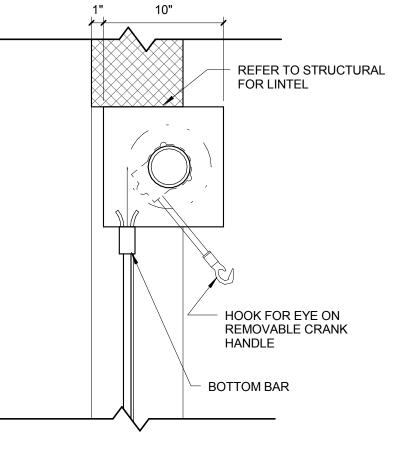
3' - 0"

3' - 0"

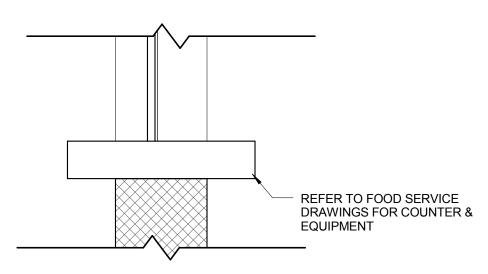
8" 8" / / /

Ň

RAME GLASS TYPE	FIRE RATING (MIN.)	HARDWARE SET	COMMENTS
		10.00	
		AC4.05	
		3.00	
		AC4.15	
		2.01	4
		2.01	4
		2.00	4
		AC4.14	
	90	8.05	
	90	8.05	
		AC4.10	
	90	4.01	3
		AC4.11	3
		AC4.11	3
		AC4.11	3
	90	AC3.06	3
	90	E2.03	3
		8.03	
		3.04	

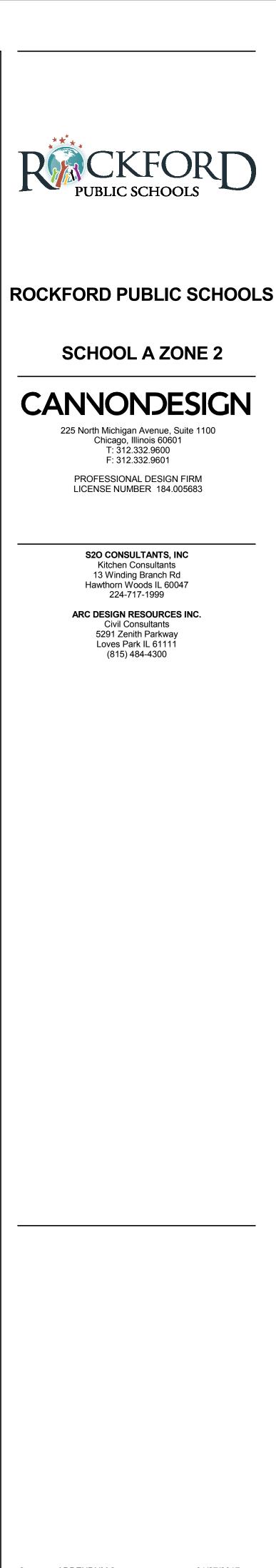


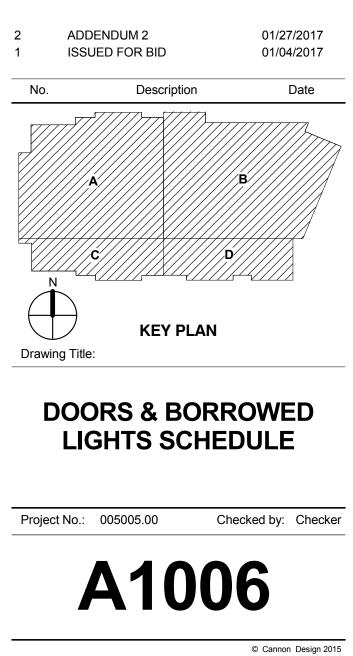
*



6 OH COUNTER DOOR SECTION (TYP.)

					DOOR]	DOOR	SCHE		RAME					GENERAL NOTES - OPENING
	OPENING NUMBER	TYPE	OPENING WIDTH	LEAF WIDTH	SIZE OPENING HEIGHT	THICKNESS	MATERIAL	GLASS TYPE	TYPE	MATERIAL	HEAD	JAMB	SILL	FRAME GLASS TYPE FIRE RATING (MIN.)	HARDWARE SET	COMMENTS	1. SAFETY GLAZING MUST COMPLY WITH LABELING AS PER IBC 2009.
		FG, FG FG, FG	6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 9 1/2" 7' - 9 1/2"	1 3/4" 1 3/4"			SEE ELEV SEE ELEV						AC1.00 AC1.03	1	2. STYLES & RAIL SIZES ON WOOD DOORS MIGHT VARY TO THE STANDARD OF EACH MANUFACTURER.
_	100C 100D	FG, FG FG, FG	6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 9 1/2" 7' - 9 1/2"	1 3/4" 1 3/4"	AL AL	G4 G1	SEE ELEV SEE ELEV	AL AL	0.4/4.4000	02/44000		G4	AC1.01 AC1.04		3. FRAME EXTENSIONS ADJUSTING TO WALL DEPTH ARE TYPICAL - REFER TO DOOR DETAILS.
		FG FG NV-2	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD	G1 G5	01 00	HM HM	04/A1006 04/A1006 04/A1006	03/A1006 03/A1006		G1	AC4.09 4.00 5.01	3	4. FOR HARDWARE GROUP SPECIFICATIONS REFER TO THE PROJECT MANUAL UNDER DOOR HARDWARE SPECS.
_	103A	NV-2 F F, F	3' - 0" 3' - 0" 6' - 0"	3' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD WD	-	00 00 00	НМ	04/A1006 04/A1006 04/A1006	03/A1006	- - -		AC4.16 7.02 3.01	3 2	5. DIMENSION ARE NOMINAL - MANUFACTURER PROVING THE DOORS TO DETERMINE THE ROUGH
	107A	NV-2 NV-2 NV-2	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD	G5	00 00 00	НМ	04/A1006 04/A1006 04/A1006		-		5.02 AC4.15 AC4.15	3	OPENINGS, EXCEPT THE OPENING IN CONCRETE WALLS THAT HAVE BEEN ALREADY SPECIFIED. 6. THICKNESS OF GLAZING WITHIN DOORS BY DOOR
	108B 109A	F F	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	HM WD	-	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	-		E1.01 7.01	2	6. THICKNESS OF GLAZING WITHIN DOORS BY DOOR MANUFACTURER STANDARDS.7. DOORS TO OPERATE AS SHOWN ON THE EXTERIOR
_	110A 113A 114A	F F F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD WD	-	00 00 00	НМ	04/A1006 04/A1006 04/A1006	03/A1006	- - -		8.02 6.00 AC4.13	2 2	BUILDING ELEVATIONS, ENLARGED UNIT PLANS & OVERALL PLANS.
	115B	NV-2 FG, FG NV-2	3' - 0" 6' - 0" 3' - 0"	3' - 0"	7' - 0" 7' - 1 1/2" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	AL	G5	00 SEE ELEV 00	AL	04/A1006 04/A1006		-	G5	AC4.06 8.00 AC4.06	3 4 3	8. TEMPERED GLAZING WHERE REQUIRED BY CODE (TYPICAL).
	116B 117A	FG, FG NV-2	6' - 0" 3' - 0"	3' - 0"	7' - 0" 7' - 0"	1 3/4" 1 3/4"	AL WD	G5 G1	SEE ELEV 00	AL HM	04/A1006		-	G5	8.01 AC4.06	4 3	9. GENERAL CONTRACTOR TO COORDINATE ALL TRADES INVOLVED. 10. ELECTRICAL DEVICES SUCH AS MAG LOCKS, CARD
	118A 118B	FG, FG NV-2 FG, FG	6' - 0" 3' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 0" 7' - 0" 7' - 1 1/2"	1 3/4" 1 3/4" 1 3/4"	WD		SEE ELEV 00 SEE ELEV	НМ	04/A1006	03/A1006	-	G5	8.01 AC4.06 8.00	4 3 4	READERS, AND ALARM SYSTEMS BEING PART OF THE DOOR FUNCTION ARE INCLUDED AS PART OF THE ELECTRICAL PLANS AND THE HARDWARE GROUPS.
	121A	NV-2 FG FG	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 10" 7' - 10"	1 3/4" 1 3/4" 1 3/4"	AL	G4	00 SEE ELEV SEE ELEV		04/A1006	03/A1006	-	^	5.03 AC1.05 AC1.06	3	11. REFER TO FINISH PLANS FOR DOOR/FRAME FINISHES
	121C 121D	FG	3' - 0" 3' - 0" 3' - 0"		7'-10" 7'-10" 7'-10"	1 3/4"	AL AL	64 G5	SEE ELEV SEE ELEV SEE ELEV	AL		\searrow	~~{		AG1.06	\sim	GLAZING
۔ ب	121E 121F 122 A	FG FG	3' - 0" A' - 0"	\mathcal{M}	7' - 10" 7' - 10" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	AL WD、人		SEE ELEV	AL	04/A1006	03/A1006 03/A10 06			1.00 1.00 5.03	31, 11, 1	G1 1/4" CLEAR LAMINATED GLASS (SAFETY RATED)
		NV-2 FG, FG NV-2	3' - 0" 6' - 0" 3' - 0"	3' - 0"	7' - 0'' 7' - 0'' 7' - 0''	1 3/4" 1 3/4" 1 3/4"	AL		00 SEE ELEV 00	AL	04/A1006_ 04/A1006			G5	AC4.06 8.00 AC4.06	3 — — — — — — — — — — — — — — — — — — —	G2 FIRE RESISTANT GLAZING (SAFETY RATED)G3 1" INSULATED GLASS UNIT (SAFETY RATED)
	124B 125A	FG, FG NV-2	6' - 0" 3' - 0"	3' - 0"	7' - 0" 7' - 0"	1 3/4" 1 3/4"	AL WD	G5 G1		AL HM	04/A1006		-	G5	8.01 AC4.06	4 3 4	G4 1" INSULATED LAMINATED GLASS UNIT (SECURITY GLAZING)
	126A 126B	FG, FG NV-2 FG, FG	6' - 0" 3' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD AL	G1 G5	SEE ELEV 00 SEE ELEV	HM AL	04/A1006		-	G5	8.01 AC4.06 8.00		G5 1/4" CLEAR GLASS (SAFETY RATED)
	128A 129A 130A	F F F, F	3' - 0" 3' - 0" 6' - 0"	3' - 0"	7' - 0" 7' - 0" 7' - 10"	1 3/4" 1 3/4" 1 3/4"	WD WD AL	-	00 00 SEE ELEV	НМ	04/A1006 04/A1006	03/A1006 03/A1006	-		AC4.13 AC4.12 AC1.02		G6 LAMINATED ACOUSTICAL GLAZING (SECURITY GLAZING)
	200A 201A	FG, FG FG, FG	6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 1 1/2" 7' - 1 1/2"	1 3/4" 1 3/4"	AL AL	G5 G5	SEE ELEV SEE ELEV	AL AL				G5	AC4.01 AC4.01	4 4 4	REMARKS
	203A 204A	FG, FG FG, FG F	6' - 0" 6' - 0" 3' - 0"	3' - 0" 3' - 0"	7' - 1 1/2" 7' - 1 1/2" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	AL WD	G5 -	SEE ELEV SEE ELEV 00	AL HM	04/A1006			G5	AC4.02 AC4.02 E2.02	4 3	1. ACCESSIBLE ENTRY WITH PUSH PLATE AND DOOR
		F, F NV-2 NV-2	8' - 0" 3' - 0" 3' - 0"	4' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"		G1	00 00 00	НМ	04/A1006 04/A1006 04/A1006	03/A1006	-		E2.00 AC4.15 AC4.15	4 3 3	OPERATOR 2. PROVIDE 3/4 DOOR UNDERCUT
	206A 207A	FG NV-2	3' - 0" 3' - 0"		7' - 4" 7' - 0"	1 3/4" 1 3/4"	AL WD	G5 G1	SEE ELEV 00	AL HM	04/A1006		-	G5	5.03 AC4.11	3 3 2	3. PROVIDE ACOUSTICAL GASKETING CONSISTING OF 151A THRESHOLD, 313AN DOOR BOTTOM, S88D PERIMETER
		FG FG, FG FG, FG	3' - 0" 6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 4" 7' - 1 1/2" 7' - 1 1/2"	1 3/4" 1 3/4" 1 3/4"	AL	G5	SEE ELEV SEE ELEV SEE ELEV	AL AL				G5	5.03 AC4.02 AC4.02	4	GASKETING. 4. PROVIDE ACOUSTICAL GASKETING CONSISTING OF 151A THRESHOLD, (2) 313AN DOOR BOTTOM, S88D PERIMETER
	211A 211B 212A	F, F F NV-2	8' - 0" 3' - 0" 3' - 0"	4' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD WD	-		НМ	04/A1006 04/A1006 04/A1006	03/A1006	- -		E2.00 E2.02 AC4.11	4 3 3	GASKETING AND (1) S772 MEETING STILE GASKETING.
	213A 214A	NV-2 FG, FG	3' - 0" 6' - 0"	3' - 0"	7' - 0" 7' - 0 3/4"	1 3/4" 1 3/4"	WD AL	G1 G5	00 SEE ELEV	HM AL	04/A1006			G5	AC4.11 AC4.01	3 4	5'-0" OPENING WIDTH
	300A	FG, FG F, F FG, FG	6' - 0" 6' - 0" 5' - 11 1/4"	3' - 0" 3' - 0" 3' - 0"	7' - 0 3/4" 7' - 10" 7' - 0 3/4"	1 3/4" 1 3/4" 1 3/4"	AL	G4	SEE ELEV SEE ELEV SEE ELEV	AL	\sim	\sim		G4	AC4.01 AC1.07 AC4.01	4	
		F FG, FG FG, FG	3' - 0" 6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 0" 7' - 0 3/4" 7' - 0 3/4"	1 3/4" 1 3/4" 1 3/4"			SEE ELEV SEE ELEV	AL C	6/A0457	3/A0420		G5	WS1.00 AC4.02 AC4.02	STORM SHELTER DOORS 4 4	
	304A 306A	FG, FG F	5' - 11 1/4" 3' - 0"	3' - 0"	7' - 0 3/4" 7' - 0"	1 3/4" 1 3/4"	AL WD	G5 -	SEE ELEV 00	AL HM	04/A1006			G5	AC4.01 6.00	4 2	
	307A 308A 309A	F F F, F	3' - 0" 3' - 0" 8' - 0"	4' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD HM		00 00	НМ	04/A1006 04/A1006 2/A0457	03/A1006 03/A1006 2/A0801	- - 2-^		6.00 6.00 WS2.0	2 2 STORM SHELTER DOORS,	
	309B	F, F	8' - 0"	4' - 0"	7' - 0"	1 3/4"	HM	-		1 U	2/A0457	3/A0801	<u>}∕2∖</u> }-	90	WS2.0	4 STORM SHELTER DOORS, 4	PANEL A TYPE PANEL B TYPE
	310.1A 310.2A 311A	NV-2 F FG	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 10"	1 3/4" 1 3/4" 1 3/4"	WD	-	00 00 SEE ELEV	НМ	04/A1006 04/A1006	03/A1006 03/A1006	- - {		5.03 3.05 AC1.06	3 3	PANEL A PANEL B WIDTH WIDTH
A c	311B -311G	FG	3' - 0"	~~~~	7' - 10" 7'-10'	1 3/4"		G4 64	SEE ELEV SEE MEEV	AL Øk⊑∽∽∽∽	\sim	\sim	~{		AC1.06	\sim	DOOR PANEL KEY
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	311D 311E 311F	FG FG FG	3' - 0" 3' - 0" 3' - 0"		7' - 10" 7' - 10" 7' - 10"	1 3/4" 1 3/4" 1 3/4"	AL	G5	SEE ELEV SEE ELEV SEE ELEV	AL					1.00 1.00 1.00		
Ę	314A 314B 315A	F, F F	6' - 0" 3' - 0" 3' - 0"	3' - 0"	7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 8/4"	HM WD	-	00 00	НМ	04/A1006 04/A1006		- - A		3.06 4.17 €C2,08 , , , , , , , , , , , , , , , , , ,	.4 .4 .4	{ABBREVIATIONS
	315B 316A 317A	F F, F	3' - 0" 6' - 0"	3' - 0"	7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD HM	-	00 00	нм НМ	04/A1006 04/A1006	03/A1006 03/A1006	-		3.03 AC2.00		AL ALUMINUM HM HOLLOW METAL
	318A 318B	F, F F, F F	6' - 0" 6' - 0" 3' - 0"	3' - 0" 3' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD HM WD	-	00 00 00	HM HM	04/A1006 04/A1006 04/A1006	03/A1006 03/A1006	- -	90 90	AC4.03 AC4.00 3.02		WD WOOD ST STEEL
	319A 320A 321A	F F, F F, F	3' - 0" 6' - 0" 6' - 0"	3' - 0" 3' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	HM HM HM	-	00 00 00	НМ	04/A1006 04/A1006 04/A1006	03/A1006	- - -	90	AC4.12 AC3.04 AC2.01		
		F, F F, F NV-2	8' - 0" 8' - 0" 3' - 0"	4' - 0" 4' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD WD	-	00 00 00	НМ	04/A1006 04/A1006 04/A1006		-		AC3.01 AC3.01 AC4.06		
	324A 324B	F NV-2	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD	- G1	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	- -		9.00 AC4.06	3	
	326A	NV-2 NV-2 NV-2	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD	G1	00 00 00	НМ	04/A1006 04/A1006 04/A1006	03/A1006	- - -		AC4.06 AC4.06 AC4.06	3 3 3	
	327B 328A	F NV-2 FG	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 10"	1 3/4" 1 3/4" 1 3/4"	WD WD	- G1		HM HM		03/A1006	-		9.00 AC4.08 AC1.05		
	329B 329C	FG FG	3' - 0" 3' - 0"	41	7' - 10" 7' - 10"	1 3/4" 1 3/4"	AL AL	G4 G4	SEE ELEV SEE ELEV	AL AL				G4	AC1.06 AC1.06		
	330A 330B	F, F NV-2 NV-2	8' - 0" 3' - 0" 3' - 0"	4' - 0"	7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD	G1 G1	00 00	HM HM	04/A1006 04/A1006 04/A1006	03/A1006 03/A1006	- -		AC3.01 AC3.05 E2.01	3 3	
	330C 331A 332A	F F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	MDF WD WD	-		HM HM	04/A1006 04/A1006		-		9.00 8.04	2	
	333A 333B	F NV-2 NV-2	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD	G1 G1	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	-		E2.01 AC3.05	3 3	
	334B	F NV-2 NV-2	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD	G1	00 00 00	HM HM	04/A1006 04/A1006 04/A1006	03/A1006 03/A1006	-		9.00 AC3.05 E2.01	3	
	334C 335A 336A	F F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	MDF WD WD	-	00 00 00	HM HM	04/A1006	03/A1006 03/A1006	-		9.00 8.04	2	
	337A 337B	F NV-2 NV-2	3' - 0" 3' - 0"	47 -	7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD	G1 G1	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	-		E2.01 AC3.05	2 3 3	
	402B		8' - 0" 3' - 0" 3' - 0"	4' - 0"	7' - 0" 7' - 9 3/4" 7' - 9 3/4"	1 3/4"		G6	00 SEE ELEV SEE ELEV	AL AL	04/A1006			G6	AC5.00	3 3	
	402C 402D	F F NV-2	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD	-	00	HM HM		03/A1006 03/A1006 03/A1006	-		AC4.10 AC4.10	3 3 3	
	403A 404A	NV-2 NV-2	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD	G1 G1	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	-		AC4.06 5.00	3	
	405A 406A 407A	NV-2 F F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD WD WD	-	00 00 00	НМ	04/A1006	03/A1006 03/A1006 03/A1006	- - -			3 2 2	
	408A	F NV-2 F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"	1 3/4" 1 3/4" 1 3/4"	WD	- G1	00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006 03/A1006	-		7.00 AC4.15 3.04	2	
		F NV-2 NV-2	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD	G5 G1	00 00	HM HM	04/A1006 04/A1006	03/A1006 03/A1006	-		AC4.08 E2.01	3	
	414A		3' - 0"		7' - 0"	1 3/4"	WD		00			03/A1006	-		AC3.05		
	414A 414B	NV-2 NV-2 F	3' - 0" 3' - 0"		7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD		00		04/A1006 04/A1006	03/A1006 03/A1006	-		E3.00 E3.01	3	
	414A 414B 414C 415A 415B 416A	NV-2 F F	3' - 0" 3' - 0" 3' - 0"		7' - 0" 7' - 0" 7' - 0"		WD WD WD		00 00 00	HM HM HM		03/A1006 03/A1006	- - -	45 45	E3.01 E3.01 3.04	3	
	414A 414B 414C 415A 415B 416A 417A 417B 418A	NV-2 F F FG Z	3' - 0" 3' - 0" 3' - 0" 3' - 0" 3' - 0" 3' - 0"	3' - 0"	7' - 0" 7' - 0"	1 3/4" 1 3/4"	WD WD WD AL AL HM	- - - G6 G6 -	00 00 SEE ELEV SEE ELEV 00	HM HM HM AL AL HM	04/A1006 04/A1006	03/A1006 03/A1006 03/A1006 03/A1006		45 45 G6 G6 45	E3.01 E3.01 3.04 AC5.00	3 3 3	

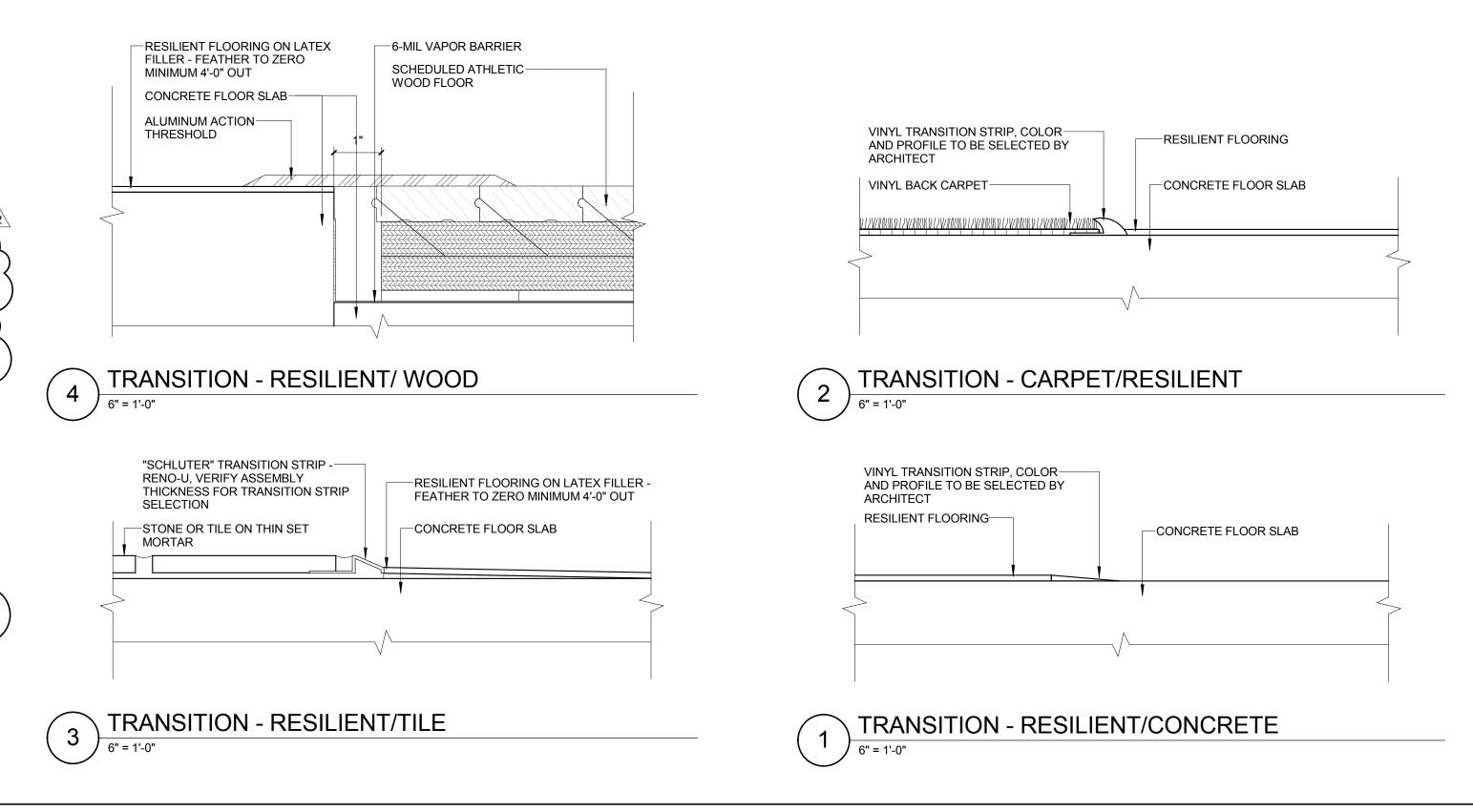


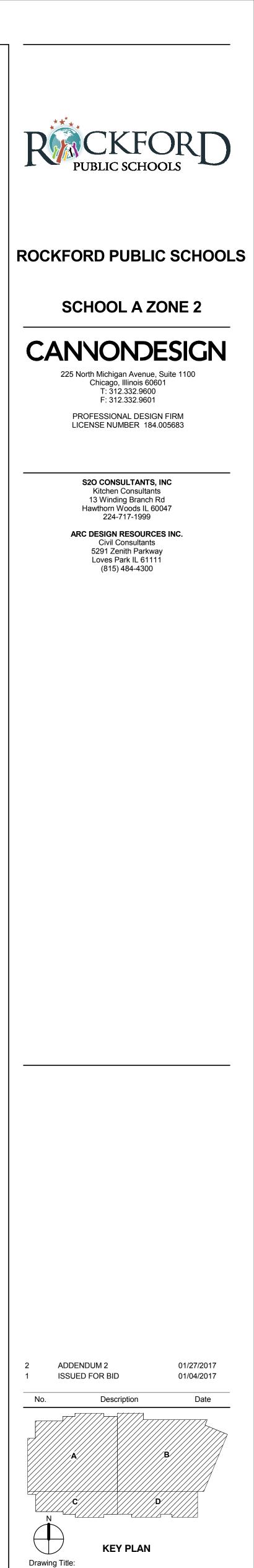


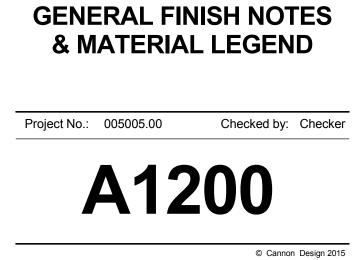
	BASE WALL									PT-1 PT-2	PAINT	SHERWIN WILLIAMS	COLOR: CREAMY NUMBER: SW 7012 COLOR: MODERN GREY NUMBER: SW 7632	GENERAL FIELD PAINT (NEUTRAL) CORRIDORS (NEUTRAL)
-	ΓΥΡΕ			MANUFACTURER USG	DESCRIPTION TILE: RADAR CLIMA PLUS	COMMENTS / LOCATION GENERAL				PT-3	PAINT	SHERWIN WILLIAMS	COLOR: DORIAN GRAY NUMBER: SW 7017	CORRIDORS (NEUTRAL)
			CEILING TILE GRID		SIZE: 2' X 2' EDGE: TEGULAR	REFER TO REFLECTED CEILING PLANS				PT-4	PAINT	SHERWIN WILLIAMS	COLOR: SIMPLE WHITE NUMBER: SW 7021	LIBRARY (NEUTRAL)
					FINISH: WHITE PRODUCT #: 22523 GRID: DXL 15/16", EXPOSED TEE SYSTEM					PT-5 PT-6	PAINT	SHERWIN WILLIAMS	COLOR: EXUBERANT PINK NUMBER: SW 6840 COLOR: HAUTE PINK	1ST GRADE CLASSROOM AND KINDERGARTEN 337 1ST GRADE
	LAY-IN CEILING SYSTEM	ACT-2	ACOUSTICAL CEILING TILE GRID	ARMSTRONG	TILE: HEALTH ZONE OPTIMA SIZE: 2' X 2' EDGE: SQUARE	KITCHEN #419				PT-0	PAINT	SHERWIN WILLIAMS	COLOR: HAUTE FINK NUMBER: SW 6570 COLOR: LEMON TWIST	2ND GRADE COLLABORATION
	AY-IN C SYS1				FINISH: WHITE, MATERIAL: FIBER GLASS CLASS A, USDA APPROVED NRC: .95				-	PT-8	PAINT	SHERWIN WILLIAMS	NUMBER: SW 6909 COLOR: VENETIAN YELLOW	2ND GRADE CLASSROOMS &
		ACT-3	ACOUSTICAL	CERTAINTEED	GRID: 15/16" TILE:PERFORMA - SYMPHONY F	CLASSROOMS: REFER TO				PT-9	PAINT	BENJAMIN MOORE	NUMBER: SW 1666 COLOR: TANGY ORANGE NUMBER: 2014-30	KINDERGARTEN 330 3RD GRADE COLLABORATION
			CEILING TILE GRID		SIZE: 2' X 2' EDGE: REVEAL EDGE FINISH: WHITE, MATERIAL: FIBER GLASS	REFLECTED CEILING PLANS A0700 SERIES				PT-10	PAINT	PITTSBURGH PAINT	COLOR: CANDIED YAM NUMBER: 123-6	3RD GRADE COLLABORATION & LIBRARY ACCENT
					NRC: .95 GRID: 15/16"					PT-11	PAINT	SHERWIN WILLIAMS	COLOR: STIRRING ORANGE NUMBER: SW 6889	3RD GRADE CLASSROOMS
	BASE	CTB-1	CERAMIC MOSAIC TILE BASE	DALTILE	STYLE: TO MATCH CMT-1 COLOR: TO MATCH CMT-1 OVERALL BASE CONSISTING OF 2"W X 1"H					PT-12		PITTSBURGH PAINT	COLOR: LEAP FROG NUMBER: PPG1225-7	4TH GRADE COLLABORATION
	TILE	VB-1	VINYL BASE	JOHNSONITE	COVE PROFILE (2) 2" X 2" CERAMIC MOSAIC TILE STACKED. TOP COURSE OF TILE TO BE SURFACE BULLNOSE PROFILE. COLOR: T.B.D. PRICE GROUP 2					PT-13 PT-14		PITTSBURGH PAINT PITTSBURGH PAINT	COLOR: GREEN PEAR NUMBER: PPG1224-7 COLOR: BE SPONTANEOUS NUMBER: PPG1221-6	4TH GRADE COLLABORATION 4TH GRADE CLASSROOMS, COLLABORATION &
	RESILIENT BASE				PROVILE: COVE SIZE: 4" HIGH				AINT	PT-15	PAINT	SHERWIN WILLIAMS	COLOR: BLUE NILE NUMBER: SW 6776	KINDERGARTEN 3345TH GRADE COLLABORATION
	CERAMIC RE TILE BASE	CTB-1	CERAMIC TILE BASE	DALTILE	STYLE: TO MATCH CMT-1 COLOR: TO MATCH CMT-1					PT-16	PAINT	SHERWIN WILLIAMS	COLOR: FRESHWATER NUMBER: SW 6774	5TH GRADE CLASSROOM, COLLABORATION, & KINDERGARTEN 333
-										PT-17		SHERWIN WILLIAMS	COLOR: RAPTURE BLUE NUMBER: SW 6773	5TH GRADE COLLABORATION
	QUARRY TILE	QT-1	QUARRY TILE BASE	DALTILE	STYLE: TO MATCH FLOORING QT-1 COLOR: TO MATCH FLOORING QT-1					PT-18 PT-19		SHERWIN WILLIAMS	COLOR: CAY NUMBER: SW 6772 COLOR: GRAPE JUICE	VARIES - REFER TO FINISH PLANS LIBRARY
		CPT-1	CARPET TILE	TANDUS   CENTIVA		NEUTRAL COLOR		ц		PT-20		SHERWIN WILLIAMS	COLOR: PLUM BLOSSOM	LIBRARY MUSIC
					COLOR: EDGE SHADOW 15613 TILE SIZE: 18" X 36" INSTALL METHOD: T.B.D.			L FINISH	-	PT-21	PAINT	SHERWIN WILLIAMS	NUMBER: SW 6974 COLOR: CALYPSO	LIBRARY
		CPT-2	CARPET TILE	TANDUS   CENTIVA	COLOR: TANNED TAUPE 15608	NEUTRAL COLOR		MAL		PT-22	PAINT	BENJAMIN MOORE	NUMBER: SW 6950 COLOR: FILTERED SUNLIGHT NUMBER: 2154-60	VARIES - REFER TO FINISH PLANS
					TILE SIZE: 18" X 36" INSTALL METHOD: T.B.D.					PT-23	PAINT	SHERWIN WILLIAMS	COLOR: REAL RED NUMBER: SW 6868	COMMONS
		CP1-3	CARPET TILE	TANDUS   CENTIVA	COLOR: ULTRA BERRY 15603 TILE SIZE: 18" X 36"	ACCENT COLOR - RED 1ST GRADE CLASSROOMS & COLLABORATION 119				PT-24	PAINT	PITTSBURGH PAINT	COLOR: BE DARING NUMBER: PPG1211-7	COMMONS
		CPT-4	CARPET TILE	TANDUS   CENTIVA	INSTALL METHOD: T.B.D. PATTERN: CARTOGRAPHY 04843 COLOR: RADIOACTIVE 15609	KINDERGARTEN 337 ACCENT COLOR - YELLOW 2ND GRADE CLASSROOMS &				PT-25	PAINT	BENJAMIN MOORE	COLOR: RUMBA ORANGE NUMBER: 2014-20	COMMONS
					TILE SIZE: 18" X 36"	COLLABORATION 127 KINDERGARTEN 330				PT-26		BENJAMIN MOORE	NUMBER: 413	COMMONS
		CPT-5	CARPET TILE	TANDUS   CENTIVA	COLOR: BOUNDARY 15604 TILE SIZE: 18" X 36"	ACCENT COLOR - ORANGE 3RD GRADE CLASSROOMS & COLLABORATION 305				PT-27 PT-28		BENJAMIN MOORE	COLOR: PADDINGTON BLUE NUMBER: 791 COLOR: TO BE DETERMINED	COMMONS
		CPT-6	CARPET TILE	TANDUS   CENTIVA		ACCENT COLOR - GREEN 4TH GRADE CLASSROOMS &					PAINT	TO BE DETERMINED	NUMBER: COLOR: TO BE DETERMINED	GYMNASIUM ACCENT
						COLLABORATION 211 KINDERGARTEN 334			-	PT-30	PAINT	TO BE DETERMINED	NUMBER: COLOR: TO BE DETERMINED	GYMNASIUM ACCENT
		CPT-7	CARPET TILE	TANDUS   CENTIVA	PATTERN: CARTOGRAPHY 04843	ACCENT COLOR - BLUE 5TH GRADE CLASSROOMS &				PT-31	PAINT	TO BE DETERMINED	NUMBER: COLOR: TO BE DETERMINED NUMBER:	GYMNASIUM ACCENT
	RPET				TILE SIZE: 18" X 36" INSTALL METHOD: T.B.D.	COLLABORATION 204 KINDERGARTEN 333				PT-32				GYMNASIUM ACCENT
	CA	CPT-8	CARPET TILE	TANDUS   CENTIVA	PATTERN: CARTOGRAPHY 04843 COLOR: URBAN VIOLET 15601 TILE SIZE: 18" X 36"	ACCENT COLOR - PURPLE AUTISM ROOMS 324\325\327 MUSIC ROOM 434				PT-33			COLOR: IRRESISTABLE	1ST GRADE ACCENT
		CPT-9	CARPET TILE	TANDUS   CENTIVA	TILE SIZE: 9" X 36"	LIBRARY 402 ACCENT COLOR - RED/FUCHSIA 1ST GRADE COLLABORATION			ТТ	PT- <del>34</del> SPT-1	SPECIALTY PAINT	TO BE DETERMINED	COLOR: TO BE DETERMINED NUMBER: DRY EREASE PAINT TYPE: PRO	MILLWORK: SLIDING DOORS, REFER TO FINISH PLANS
	·	CPT-10	CARPET TILE	TANDUS   CENTIVA		119 ACCENT COLOR - YELLOW 2ND GRADE COLLABORATION 127			SPECIA	AWM	ATHLETIC WALL MATS		COLOR: TO BE SELECTED BY OWNER DESCRIPTION: SEE SPEC	GYMNASIUM 425
	·	CPT-11	CARPET TILE	TANDUS   CENTIVA	INSTALL METHOD: T.B.D. PATTERN: DOT MATRIX 04852 COLOR: HIGH FREQUENCY 21311 TILE SIZE: 9" X 36"	ACCENT COLOR - ORANGE 3RD GRADE COLLABORATION 305					ACOUSTICAL WALL	CONWED	COLOR: TO BE SELECTED BY ARCHITECT DESCRIPTION: REBOUND, 2" THICKNESS,	GYMNASIUM
		CPT-12	CARPET TILE	TANDUS   CENTIVA	INSTALL METHOD: T.B.D.	ACCENT COLOR - GREEN					PANEL	DESIGNSCAPE	IMPACT RESISTANT 48" HEIGHT PANELS NRC 0.80 TO 0.85	EXTENT AND LOCATIONS PER FINISH PLANS A1200 SERIES & INTERIOR ELEVATIONS
					COLOR: CUSTOM GREEN COLOR	4TH GRADE COLLABORATION 211			-	A\M/D 2	ACOUSTICAL WALL	CONWED	FABRIC WRAPPED ACOUSTICAL PANEL DESIGNTEX FABRIC PATTERN: GAMUT COLOR: TO BE SELECTED BY ARCHITECT DESCRIPTION: REBOUND, 1" THICKNESS	MUSIC
		CPT-13	CARPET TILE	TANDUS   CENTIVA	PATTERN: DOT MATRIX 04852 COLOR: SUBMERGE 21307 TILE SIZE: 9" X 36" INSTALL METHOD: T.B.D.	ACCENT COLOR - BLUE 5TH GRADE COLLABORATION 204			ALL PANEL	AVVP-2	PANEL	DESIGNSCAPE	NRC 0.80" TO 0.85" FABRIC WRAPPED ACOUSTICAL PANEL DESIGNTEX FABRIC PATTERN: GAMUT	EXTENT AND LOCATIONS PER FINISH PLANS A1200 SERIES & INTERIOR ELEVATIONS
		CPT-14	CARPET TILE	TANDUS   CENTIVA	PATTERN: ANGULATE 04655 COLOR: UV 22106 TILE SIZE: 24" X 24" INSTALL METHOD: T.B.D.	LIBRARY 402			M	AWP-3	ACOUSTICAL WALL PANEL	CONWED DESIGNSCAPE	COLOR: TO BE SELECTED BY ARCHITECT DESCRIPTION: REBOUND, 1" THICKNESS NRC 0.60" TO 0.65" FABRIC WRAPPED ACOUSTICAL PANEL	EXTENT AND LOCATIONS PER FINISH PLANS A1200 SERIES &
		WCT	WALK-OFF CARPET TILE	TANDUS   CENTIVA	PATTERN: ASSERTIVE STRIA COLOR: CHROMIUM 26201 TILE SIZE: 24" X 24" INSTALL METHOD: T.B.D.				-	AWP-4	ACOUSTICAL WALL	CONWED	CARNEGIE FABRIC PATTERN: PULSE 5332 COLOR: TO BE SELECTED BY ARCHITECT DESCRIPTION: REBOUND, 1" THICKNESS	COLLABORATION, FINE ART,
	RETE	PC	POLISHED CONCRETE	PER SPEC	PER SPEC	GANGED TOILET ROOMS					PANEL	DESIGNSCAPE	NRC 0.80" TO 0.85" FABRIC WRAPPED ACOUSTICAL PANEL DESIGNTEX FABRIC PATTERN: GAMUT COLOR: STONE 3468-806	SMALL GROUP ROOMS, CONFERENCE ROOMS EXTENT AND LOCATIONS PER FINISH PLANS A1200 SERIES & INTERIOR ELEVATIONS
		CMT-1	CERAMIC MOSAIC FLOOR TILE	DALTILE	STYLE: KEYSTONES COLOR: PRICE GROUP 2 SIZE: 2" X 2"					СВ	CORK BOARD PANELS		BULLETIN BOARD HOMOGENEOUS, RESILIENT TACKABLE SURFACE SHEET MATERIAL COLORY TO BE SEVENTED BY ARCHIVEST	CORRIDORS, PER FINISH PLANS
	TILE	QT-1	QUARRY TILE	DALTILE	STYLE: QUARRY TILE COLOR: TO BE SELECTED BY ARCHITECT				JARTZ-	QZ	QUARTZ WALL	HANSTONE	1/2" THICKNESS COLOR: ANGORA CC101	BELOW ALL HAND DRYERS
		RFT-1	RESILIENT FLOOR TILE	RIKETT	SIZE: 6" X 6" QUARTZ TILE - MEDLEY	FLOOR PATTERN PER			لح			Lun,		
		RFT-2	RESILIENT FLOOR TILE	RIKETT	COLOR: 8821 SIZE: 24" X 24" QUARTZ TILE - MEDLEY	FINISH PLANS		$\frown$	$\sim$	$\frown$	$\widehat{}$	$\gamma \gamma \gamma \gamma$		
	-OOR				COLOR: 8802 ALTO SIZE: 24" X 24"	FINISH PLANS	کم			RFT-5	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY COLOR: 8861 LILAC DELIGHT	FIRST GRADE THRESHOLD - SEE
	IENT FL	RFT-3	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY COLOR: 8804 TRIBECA SIZE: 24" X 24"	FLOOR PATTERN PER FINISH PLANS				RFT-6	RESILIENT FLOOR TILE	RIKETT	SIZE: 24" X 24" QUARTZ TILE - CLASSIC	FINISH PLANS SECOND GRADE THRESHOLD - SEE
	RESIL	RFT-4	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY COLOR: 8805 MONTEREY SIZE: 24" X 24"	FLOOR PATTERN PER FINISH PLANS	2	FINISH	OOR	RFT-7	RESILIENT FLOOR TILE	RIKETT	COLOR: 0690 BRIGHT YELLOW SIZE: 24" X 24" QUARTZ TILE - CLASSIC COLOR: 0631 TUSCAN RED	THRESHOLD - SEE FINISH PLANS THIRD GRADE THRESHOLD - SEE
		LVT-1	LUXURY VINYL TILE	TANDUS   CENTIVA	HERITAGE PLANK EHP COLOR: SMOKED OAK 3350 PLANK SIZE: 6" X 36"	CLASSROOM SINKS	$\left  \right\rangle$	JOR FII	IENT FL	RFT-8	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY	FINISH PLANS
	ш	SC	SEALED CONCRETE	SEE SPEC	PLANK SIZE: 6" X 36" SEE SPEC		$\left  \right\rangle$	ELC	RESIL				COLOR: 8842 KIWI SIZE: 24" X 24"	THRESHOLD - SEE FINISH PLANS
	SEAL						2			RFT-9	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY COLOR: 8832 CERULEAN SIZE: 24" X 24"	FIFTH GRADE THRESHOLD - SEE FINISH PLANS
	WOOD FLOOR	WD-1	WOOD FLOOR	SEE SPEC	ATHLETIC WOOD FLOOR	GYMNASIUM 425				RFT-10	RESILIENT FLOOR TILE	RIKETT	QUARTZ TILE - MEDLEY COLOR: 8862 LAVENDAR BREEZE SIZE: 24" X 24"	AUTISM/BUBBLE THRESHOLD - SEE FINISH PLANS
							~			RFT-11	RESILIENT FLOOR TILE	JOHNSONITE	RUBBER TILE - SOLID - HAMMERED FINISH COLOR: 22 - PEARL	DRINKING FOUNTAINS

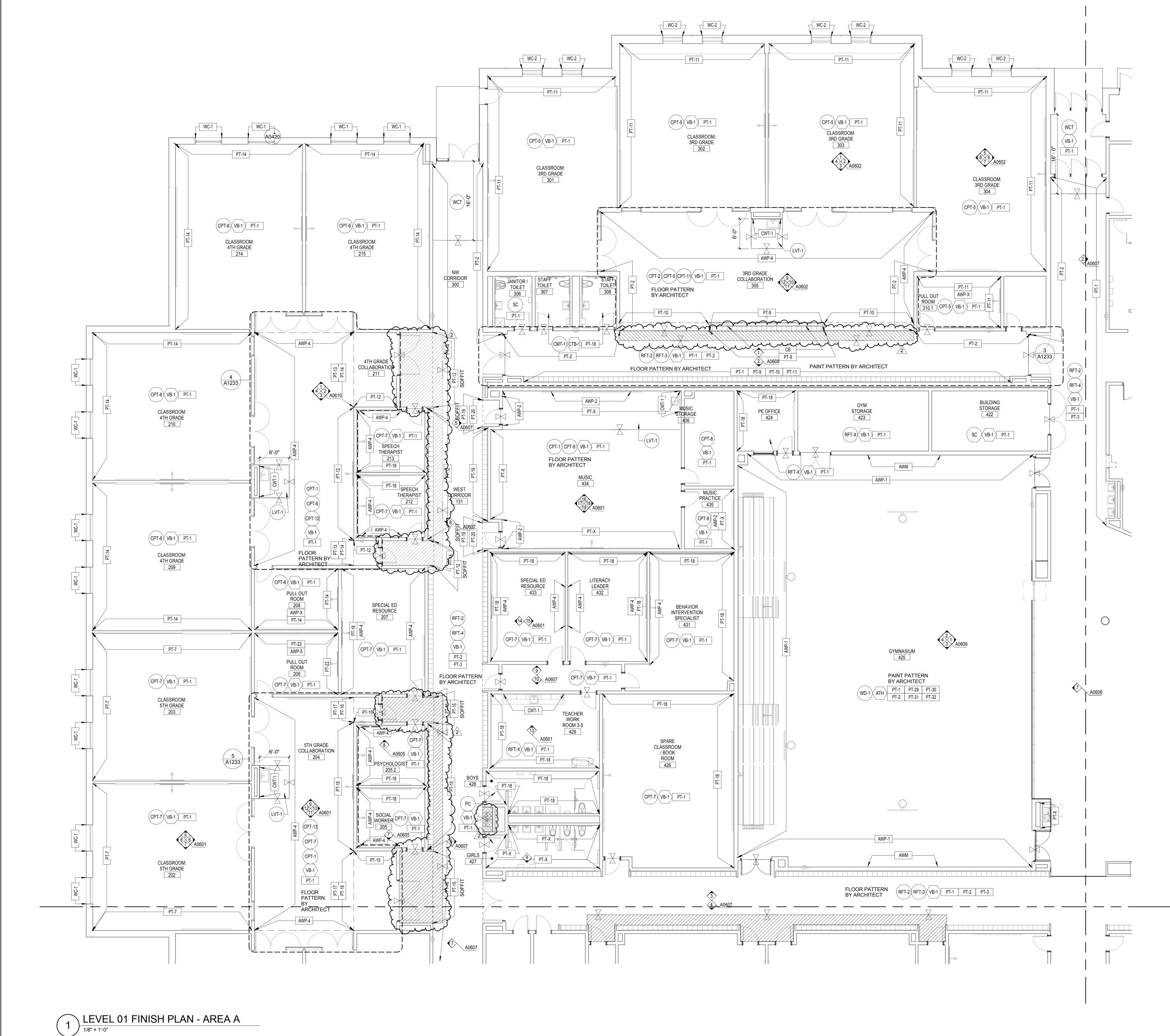
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		PL-1	PLASTIC LAMINATE	FORMICA	COLOR: TO BE DETERMINED	CLASSROOM CASEWORK
		PL-2	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	WALL CABINETS
		PL-3	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	STAFF ROOMS
ORK	FINISH	PL-4	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	CAFETERIA 420 MILLWORK - ACCENT GREEN
CASEW	-AMINATE F	PL-5	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	CAFETERIA 420 MILLWORK - ACCENT YELLO
MILLWORK / CASEWORK	LAMII	PL-6	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	CAFETERIA 420 MILLWORK - ACCENT ORANG
MILLWO		PL-7	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	CAFETERIA 420 MILLWORK - ACCENT RED
-		PL-8	PLASTIC LAMINATE	TO BE DETERMINED	COLOR: TO BE DETERMINED	CAFETERIA 420 MILLWORK - ACCENT BLUE
	C E	SSM-1	SOLID SURFACE	CORIAN	COLOR: PRICE GROUP 3	COUNTERTOPS
	SOLID SURFACE	SSM-2	SOLID SURFACE	CORIAN	COLOR: PRICE GROUP 3	BENCHES AT 3RD GRADE CLASSROOMS
S	()	WC-1	ROLLER SHADE	DRAPER	ROLLER SHADES: SINGLE-SHADE - MANUAL, MANUAL SHADE CLOTH: BASKETWEAVE WITH 1% OPENNESS FACTOR COLOR: TO BE SELECTED BY ARCHITECT REFER TO FINISH PLANS FOR LOCATION & QUANTITIES.	
WINDOW TREATMENTS	WINDOW-COVERING	WC-2	ROLLER SHADE	DRAPER	ROLLER SHADES: DUAL-SHADE - MANUAL SHADE CLOTH: BASKETWEAVE WITH 1% OPENNESS FACTOR & BLACKOUT SHADE CLOTH COLOR: TO BE SELECTED BY ARCHITECT REFER TO FINISH PLANS FOR LOCATION & QUANTITIES.	3RD GRADE CLASSROOMS
M		WC-3	ROLLER SHADE	DRAPER	ROLLER SHADES: SINGLE-SHADE - MOTORIZED SHADE CLOTH: BASKETWEAVE WITH 1% OPENNESS FACTOR COLOR: TO BE SELECTED BY ARCHITECT REFER TO FINISH PLANS FOR LOCATION & QUANTITIES.	CAFETERIA 420 CLEARSTORY WINDOWS, 1ST & 2ND GRADE COLLABORATION CLEARSTORY WINDOWS





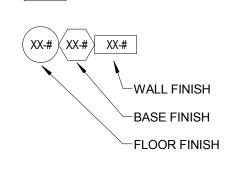


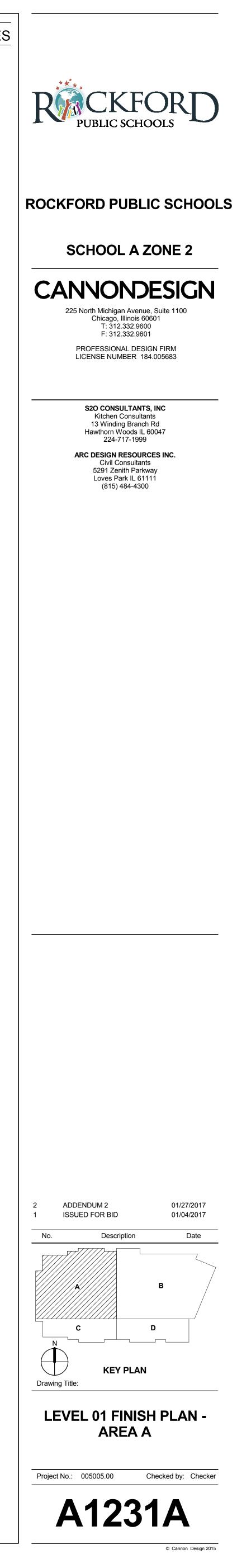


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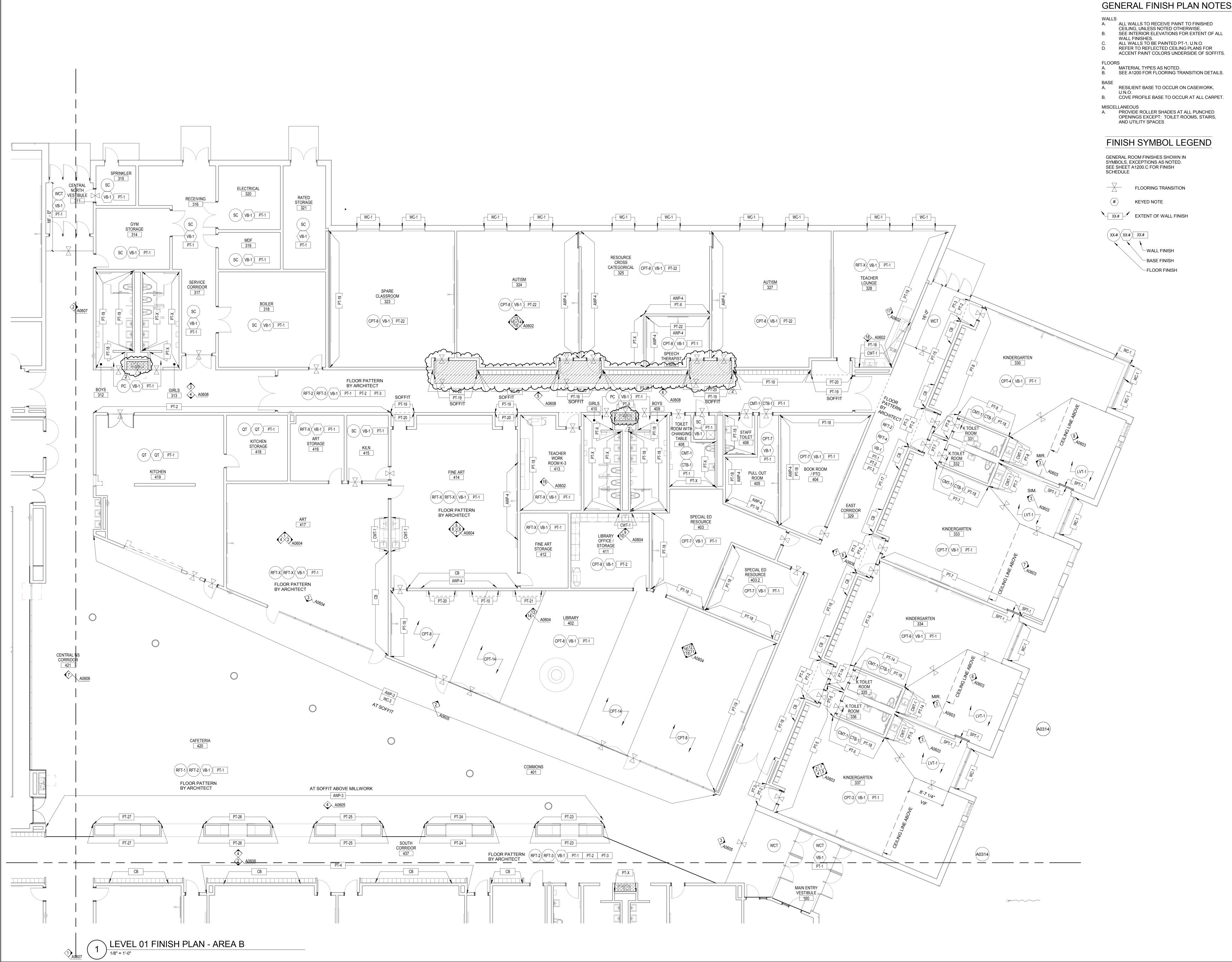
# GENERAL FINISH PLAN NOTES

A.	ALL WALLS TO RECEIVE PAINT TO FINISHED CEILING, UNLESS NOTED OTHERWISE.
B.	SEE INTERIOR ELEVATIONS FOR EXTENT OF ALL WALL FINISHES.
C. D.	ALL WALLS TO BE PAINTED PT-1, U.N.O. REFER TO REFLECTED CEILING PLANS FOR ACCENT PAINT COLORS UNDERSIDE OF SOFFITS.
FLOOR	
А. В.	MATERIAL TYPES AS NOTED. SEE A1200 FOR FLOORING TRANSITION DETAILS.
BASE A.	RESILIENT BASE TO OCCUR ON CASEWORK,
B.	U.N.O. COVE PROFILE BASE TO OCCUR AT ALL CARPET.
MISCEL A.	LANEOUS PROVIDE ROLLER SHADES AT ALL PUNCHED OPENINGS EXCEPT: TOILET ROOMS, STAIRS, AND UTILITY SPACES
FINI	SH SYMBOL LEGEND
SYMBOL	AL ROOM FINISHES SHOWN IN .S, EXCEPTIONS AS NOTED. EET A1200.C FOR FINISH JLE
	FLOORING TRANSITION
<b>(#</b> )	KEYED NOTE
XX-#	EXTENT OF WALL FINISH

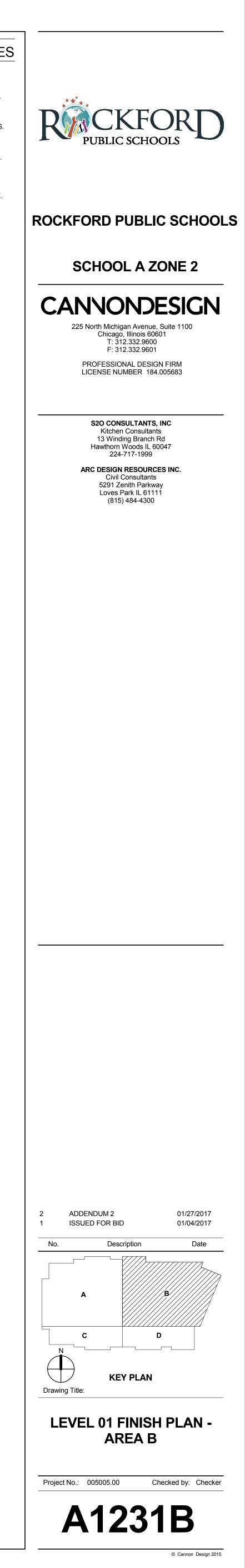


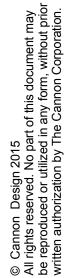


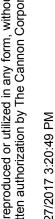
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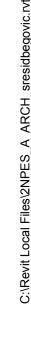


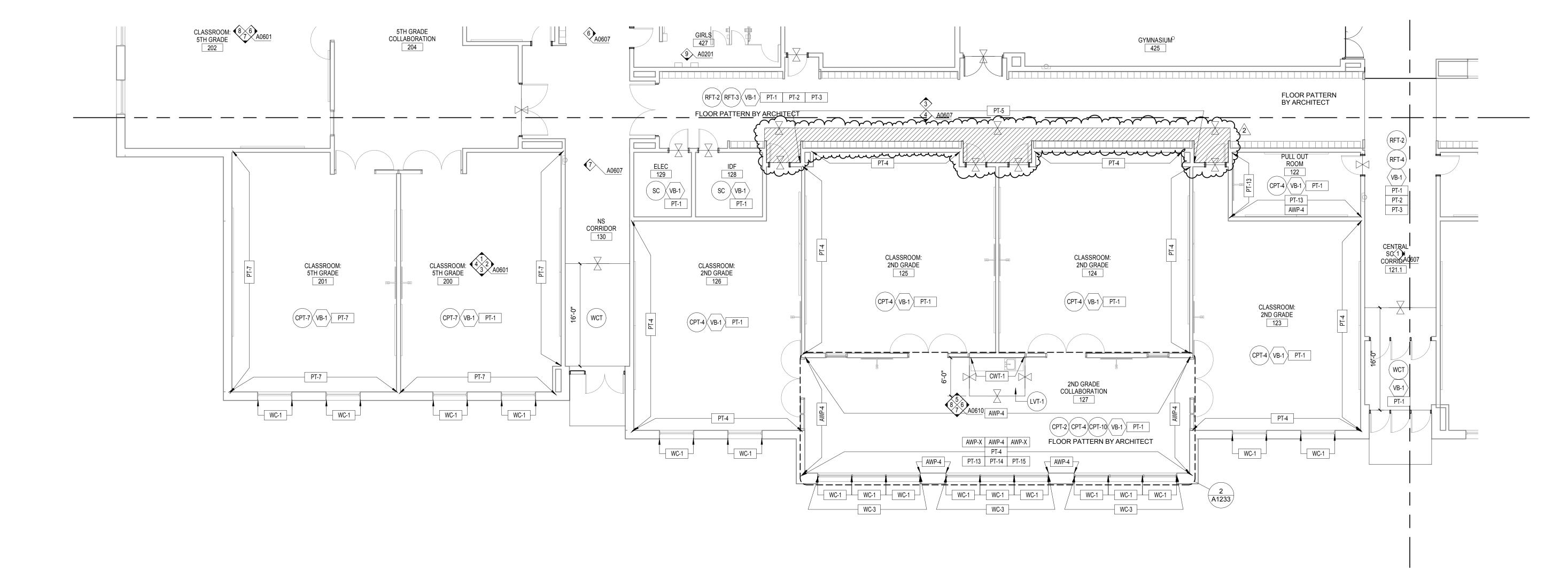
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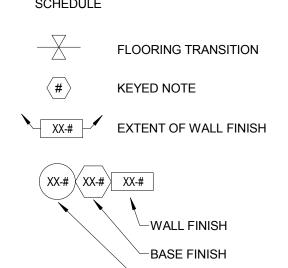
1 LEVEL 01 FINISH PLAN - AREA C

#### GENERAL FINISH PLAN NOTES

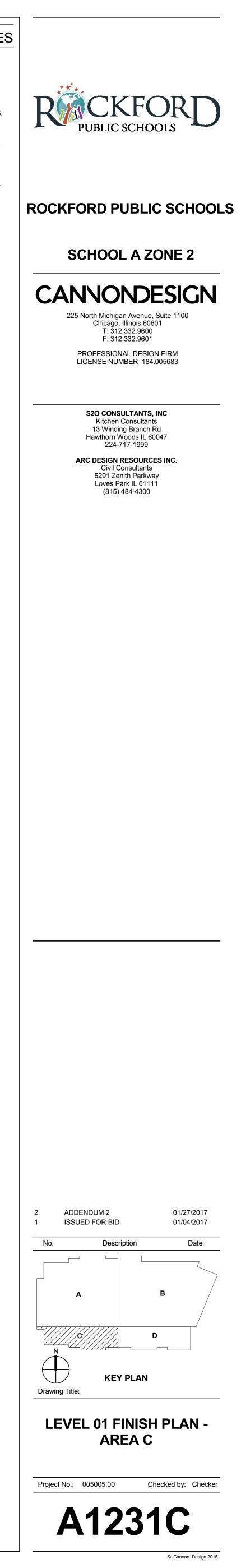
WALLS	
A.	ALL WALLS TO RECEIVE PAINT TO FINISHED CEILING, UNLESS NOTED OTHERWISE.
B.	SEE INTERIOR ELEVATIONS FOR EXTENT OF ALL
C.	WALL FINISHES. ALL WALLS TO BE PAINTED PT-1, U.N.O.
D.	REFER TO REFLECTED CEILING PLANS FOR ACCENT PAINT COLORS UNDERSIDE OF SOFFITS
FLOOR	S
А. В.	MATERIAL TYPES AS NOTED. SEE A1200 FOR FLOORING TRANSITION DETAILS.
BASE	
A.	RESILIENT BASE TO OCCUR ON CASEWORK, U.N.O.
B.	COVE PROFILE BASE TO OCCUR AT ALL CARPET.
MISCEL	LANEOUS
A.	PROVIDE ROLLER SHADES AT ALL PUNCHED OPENINGS EXCEPT: TOILET ROOMS, STAIRS, AND UTILITY SPACES

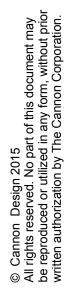
#### FINISH SYMBOL LEGEND

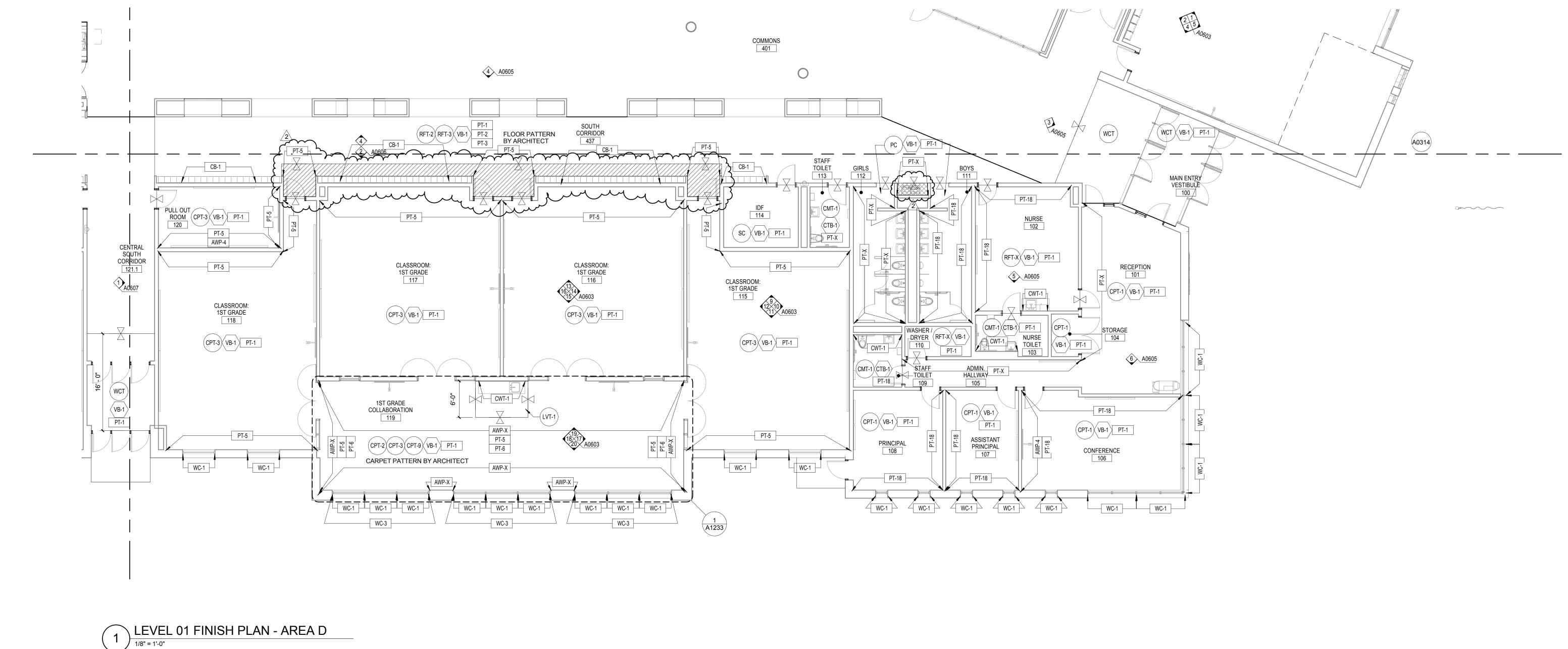
# GENERAL ROOM FINISHES SHOWN IN SYMBOLS, EXCEPTIONS AS NOTED. SEE SHEET A1200.C FOR FINISH SCHEDULE



-FLOOR FINISH



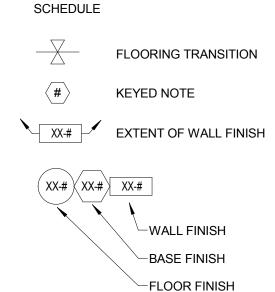


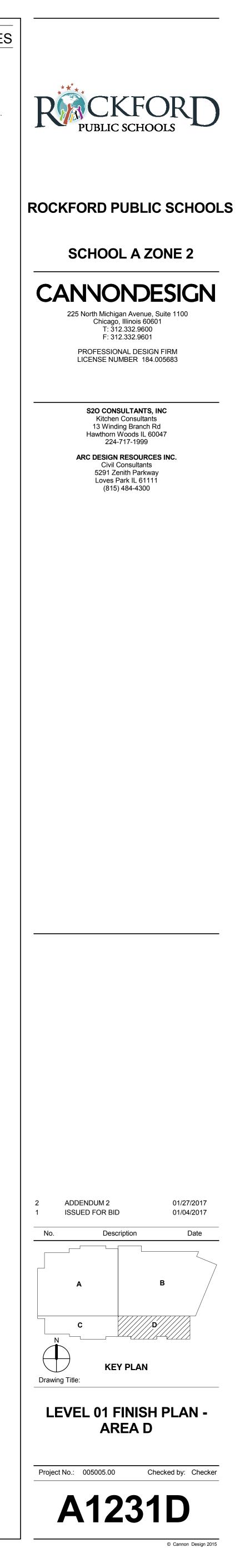


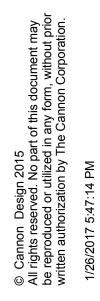
#### GENERAL FINISH PLAN NOTES

- WALLS A. ALL WALLS TO RECEIVE PAINT TO FINISHED CEILING, UNLESS NOTED OTHERWISE. SEE INTERIOR ELEVATIONS FOR EXTENT OF ALL В. WALL FINISHES.
- ALL WALLS TO BE PAINTED PT-1, U.N.O.
- REFER TO REFLECTED CEILING PLANS FOR ACCENT PAINT COLORS UNDERSIDE OF SOFFITS. FLOORS
- MATERIAL TYPES AS NOTED. Α. SEE A1200 FOR FLOORING TRANSITION DETAILS. В.
- BASE A. RESILIENT BASE TO OCCUR ON CASEWORK,
- U.N.O. COVE PROFILE BASE TO OCCUR AT ALL CARPET. В.
- MISCELLANEOUS PROVIDE ROLLER SHADES AT ALL PUNCHED Α. OPENINGS EXCEPT: TOILET ROOMS, STAIRS, AND UTILITY SPACES
- FINISH SYMBOL LEGEND

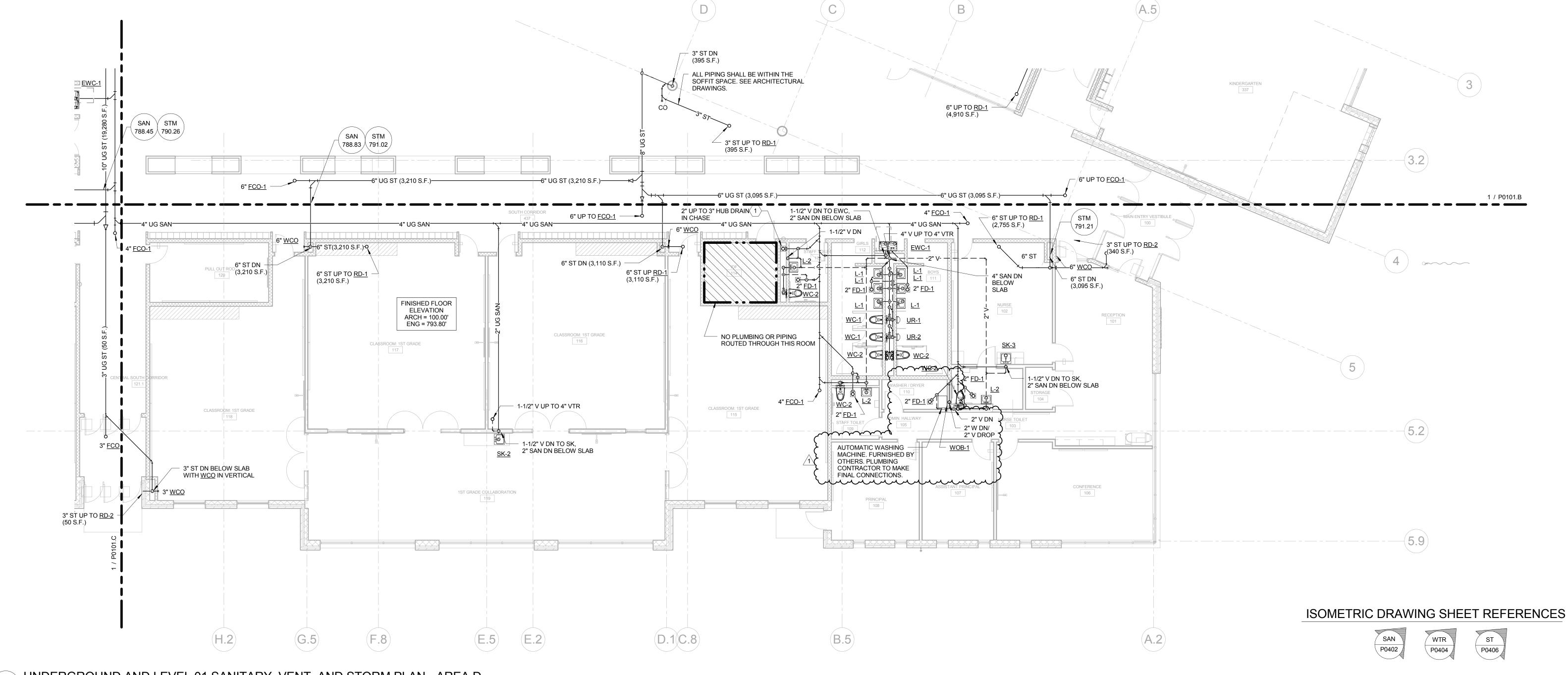
#### GENERAL ROOM FINISHES SHOWN IN SYMBOLS, EXCEPTIONS AS NOTED. SEE SHEET A1200.C FOR FINISH



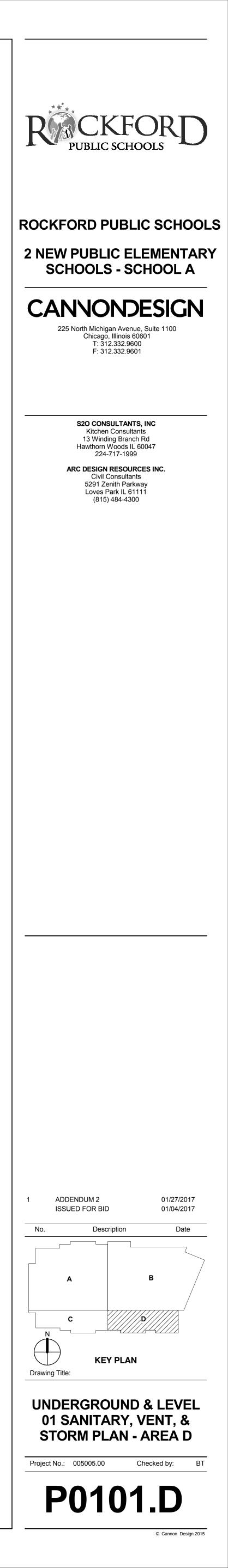


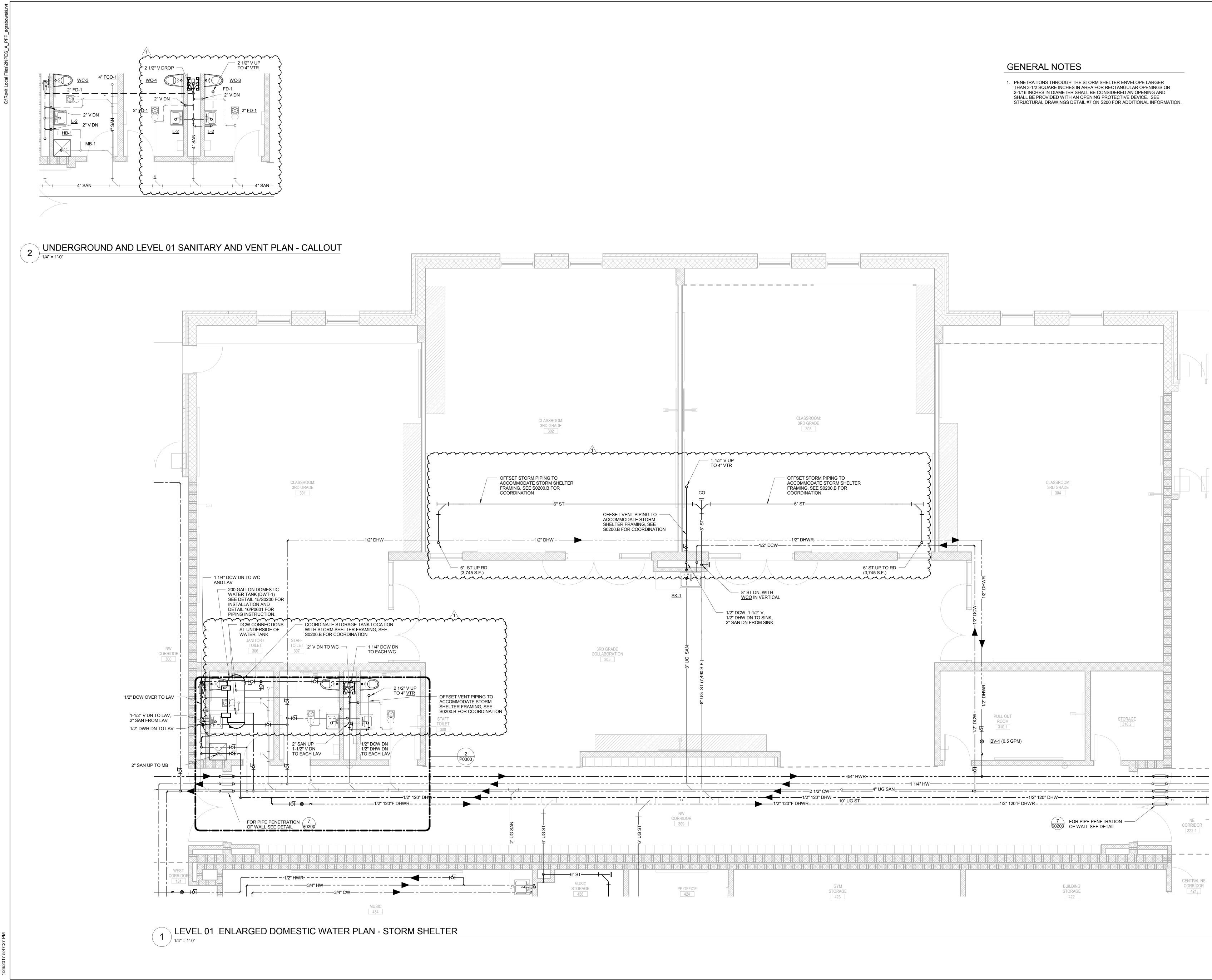




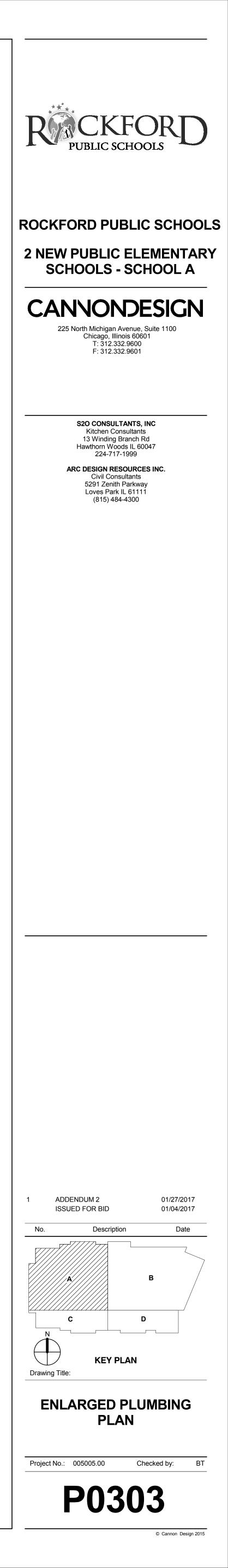




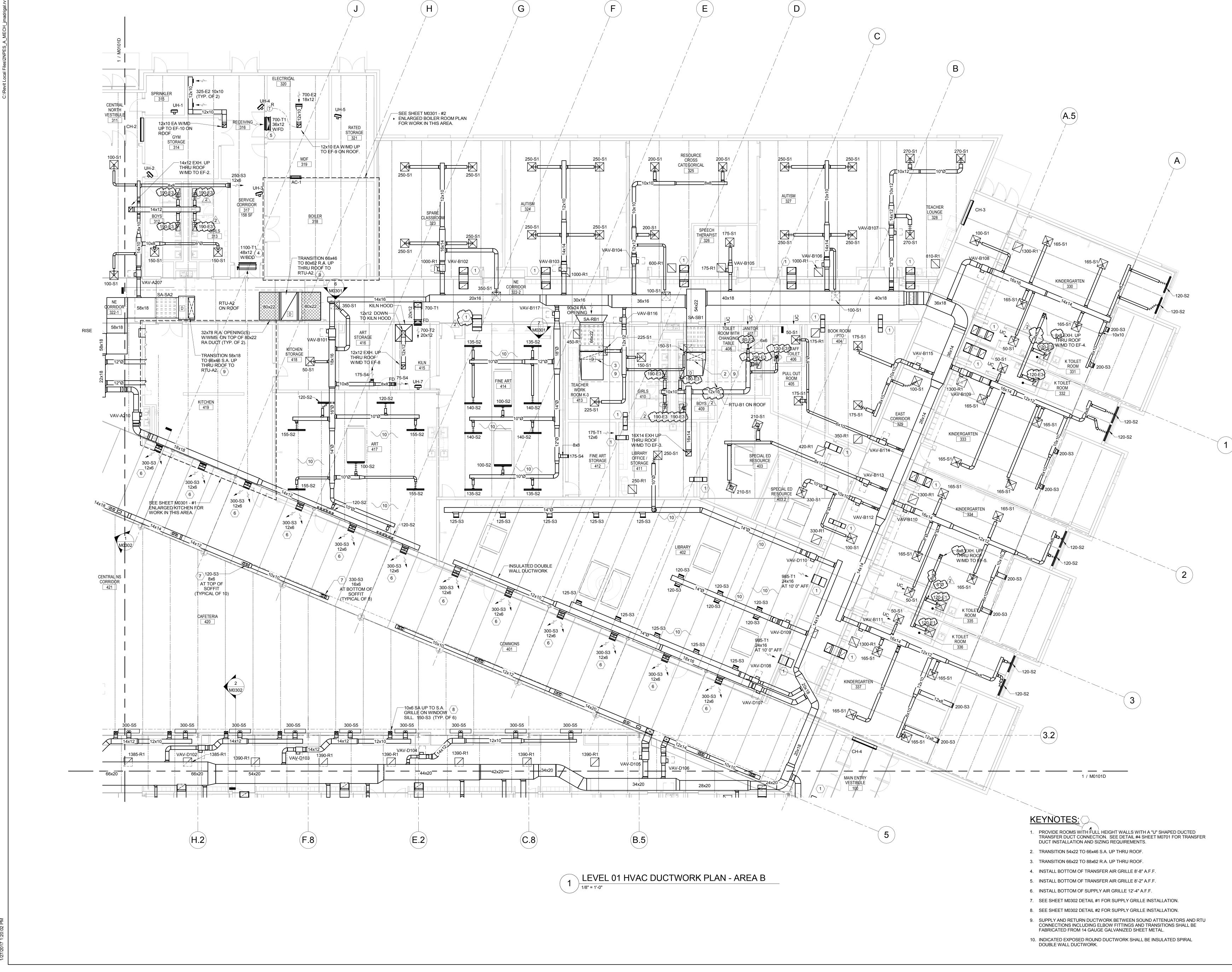


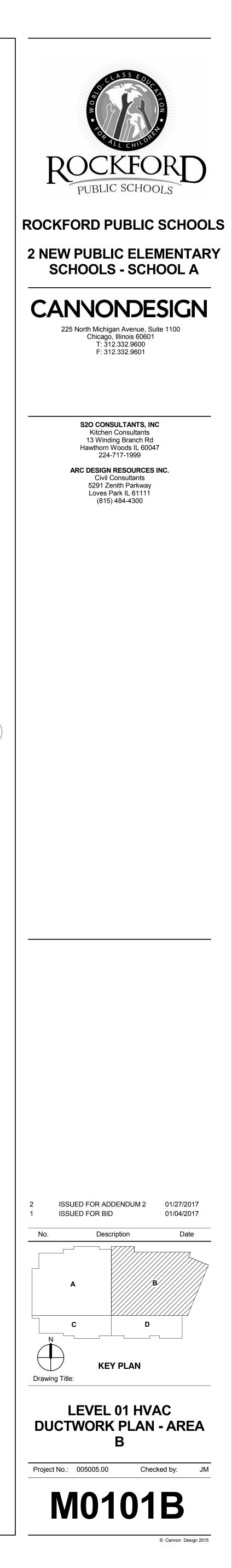


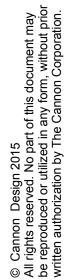
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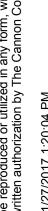


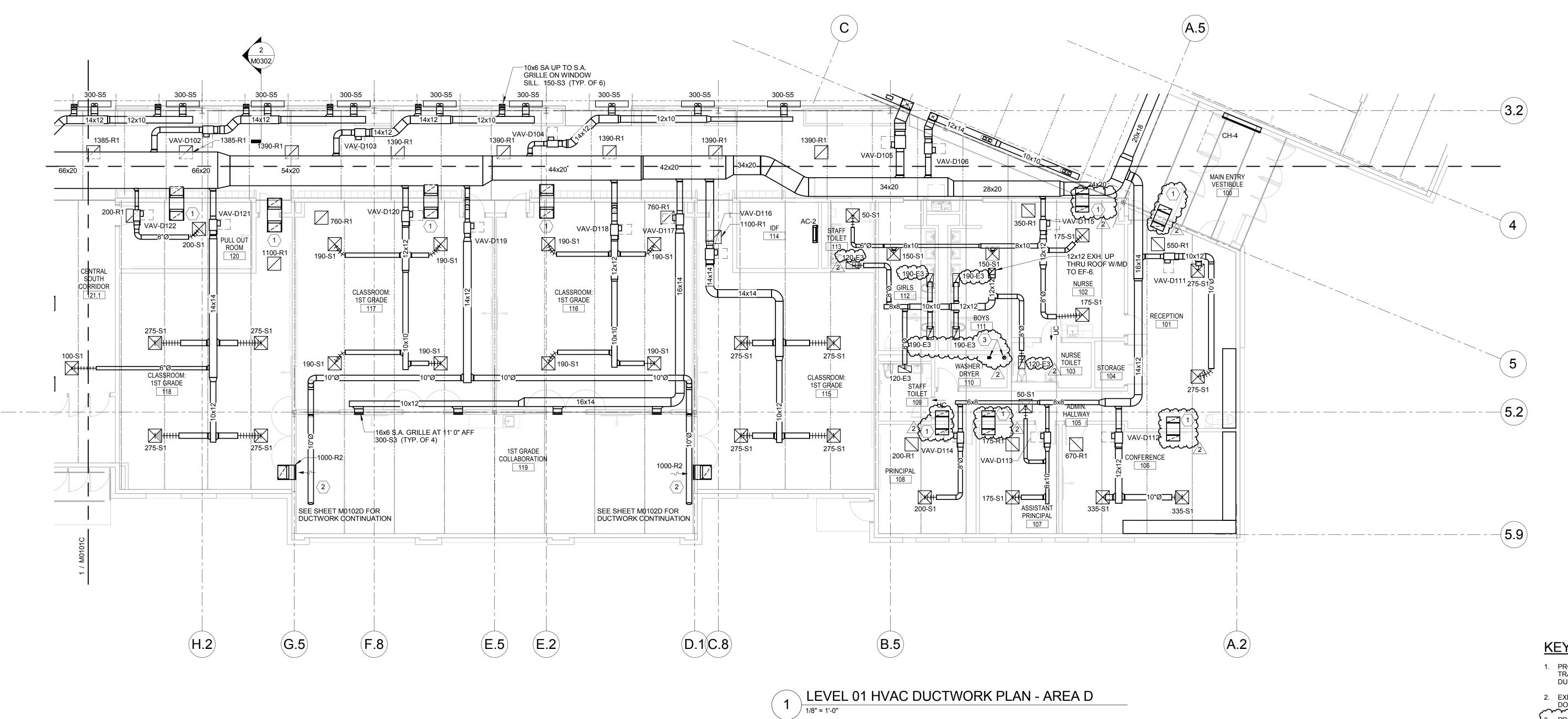
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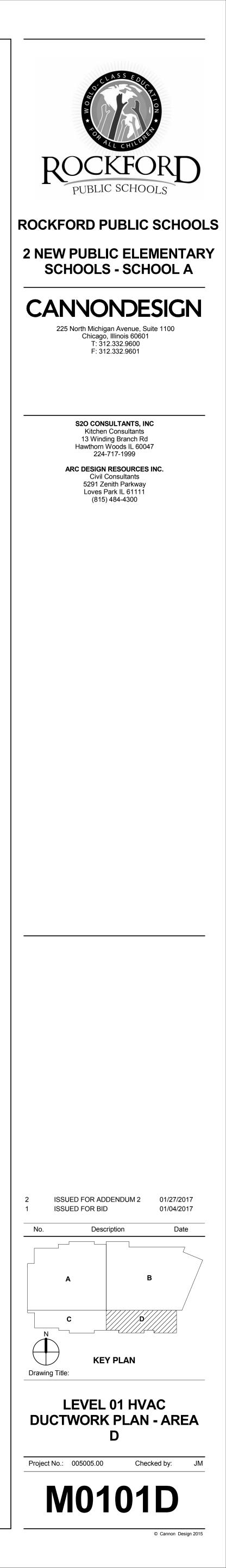


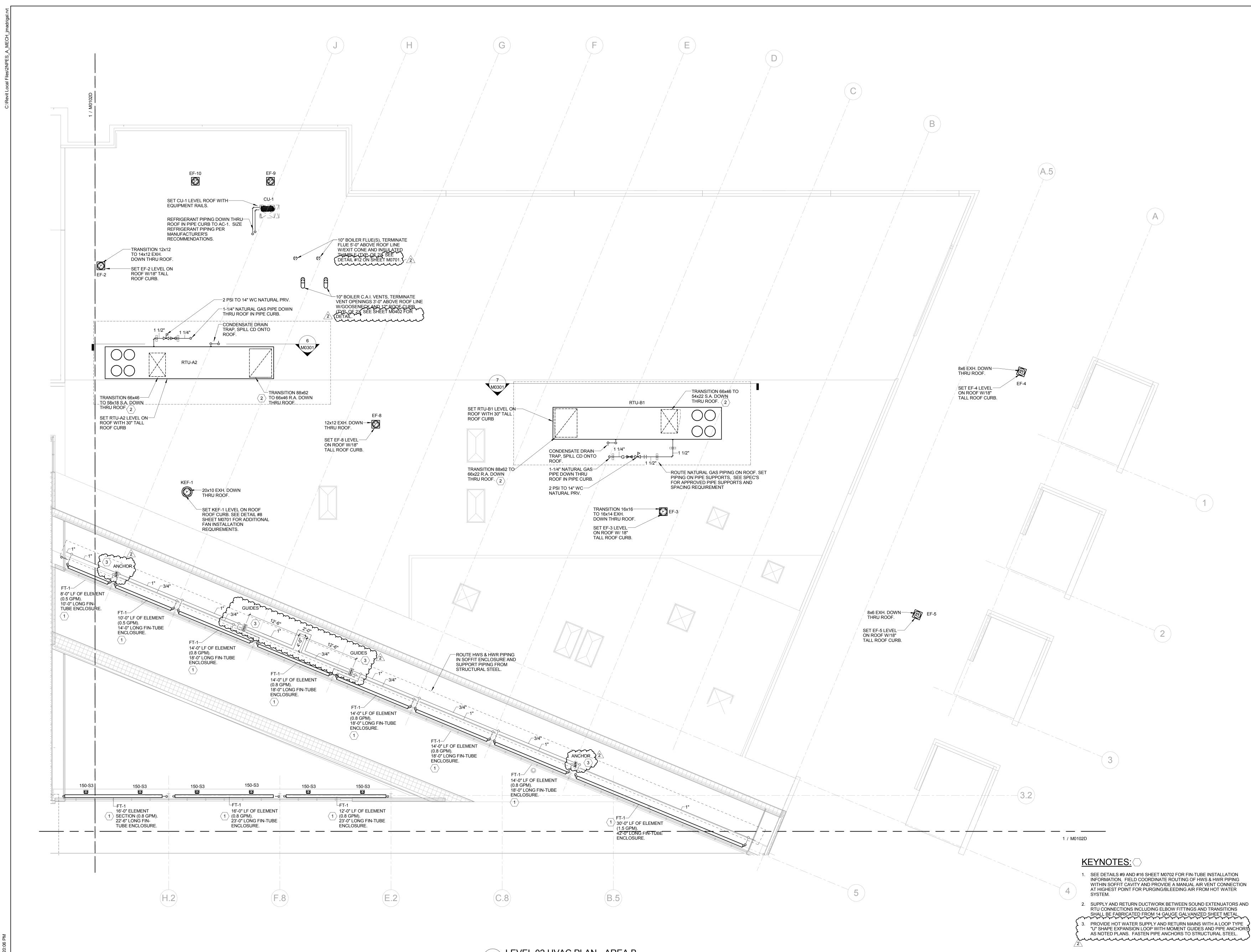




# <u>KEYNOTES:</u>

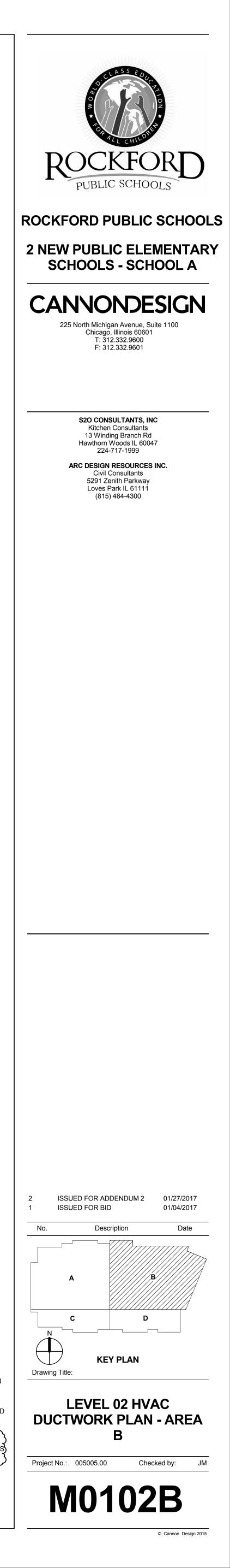
- 1. PROVIDE ROOMS WITH FULL HEIGHT WALLS WITH A "U" SHAPED DUCTED TRANSFER DUCT CONNECTION. SEE DETAIL #4 SHEET M0701 FOR TRANSFER DUCT INSTALLATION AND SIZING REQUIREMENTS.
- 2. EXPOSED DUCTWORK IN COLLABORATION AREAS SHALL BE INSULATED SPIRAL DOUBLE WALL DUCTWORK. PROVIDE AND EXTEND A RIGID 5" DRYER VENT AND 6" C.A.I. UP THRU ROOF IN ROOF CURB, TERMINATE BOTH VENTS 18" ABOVE ROOF LINE WITH GOOSENECK AND BIRD SCREEN. TERMINAL 6" C.A.I. VENT WITHIN WASHER/DRYER 110 12" ABOVE FINISH FLOOR. COORDINATE WITH OWNER PROVIDED CLOTHS DRYER FOR FINAL TERMINATION DRYER VENT ELEVATION. PROVIDE CLOTHS DRYER BE LOCATION 6" ABOVE TOP DRYER'S CONTROLS.



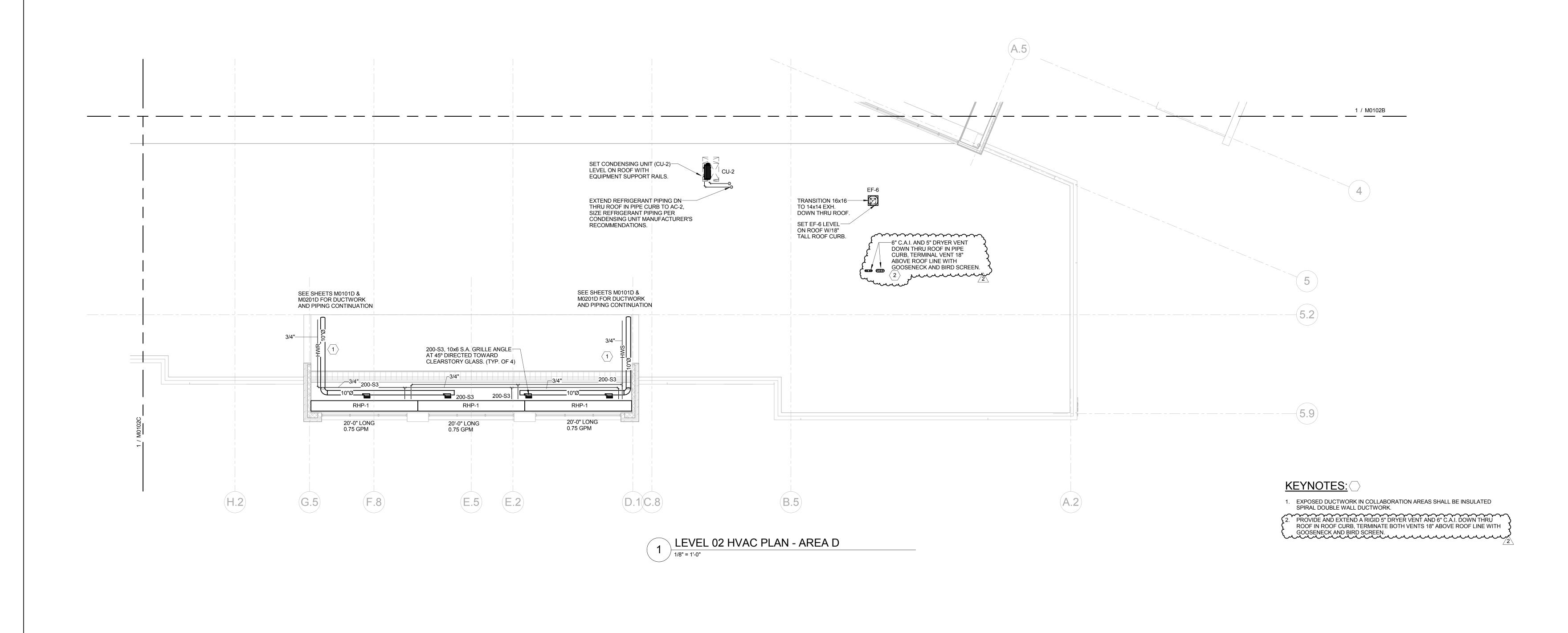


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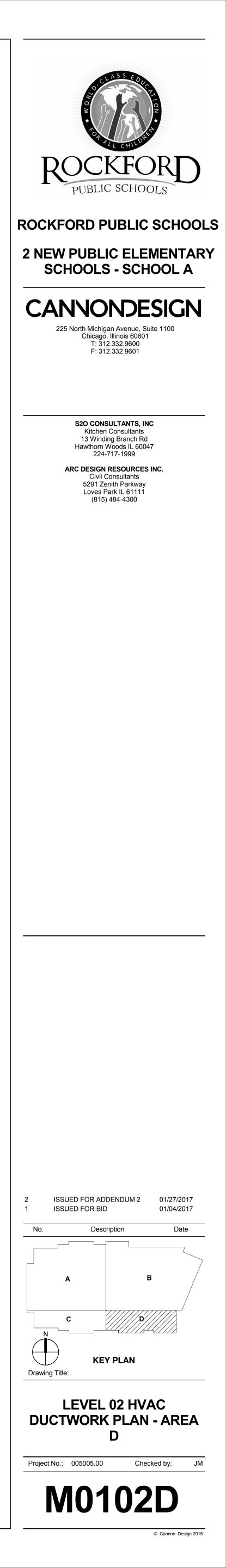
1 LEVEL 02 HVAC PLAN - AREA B



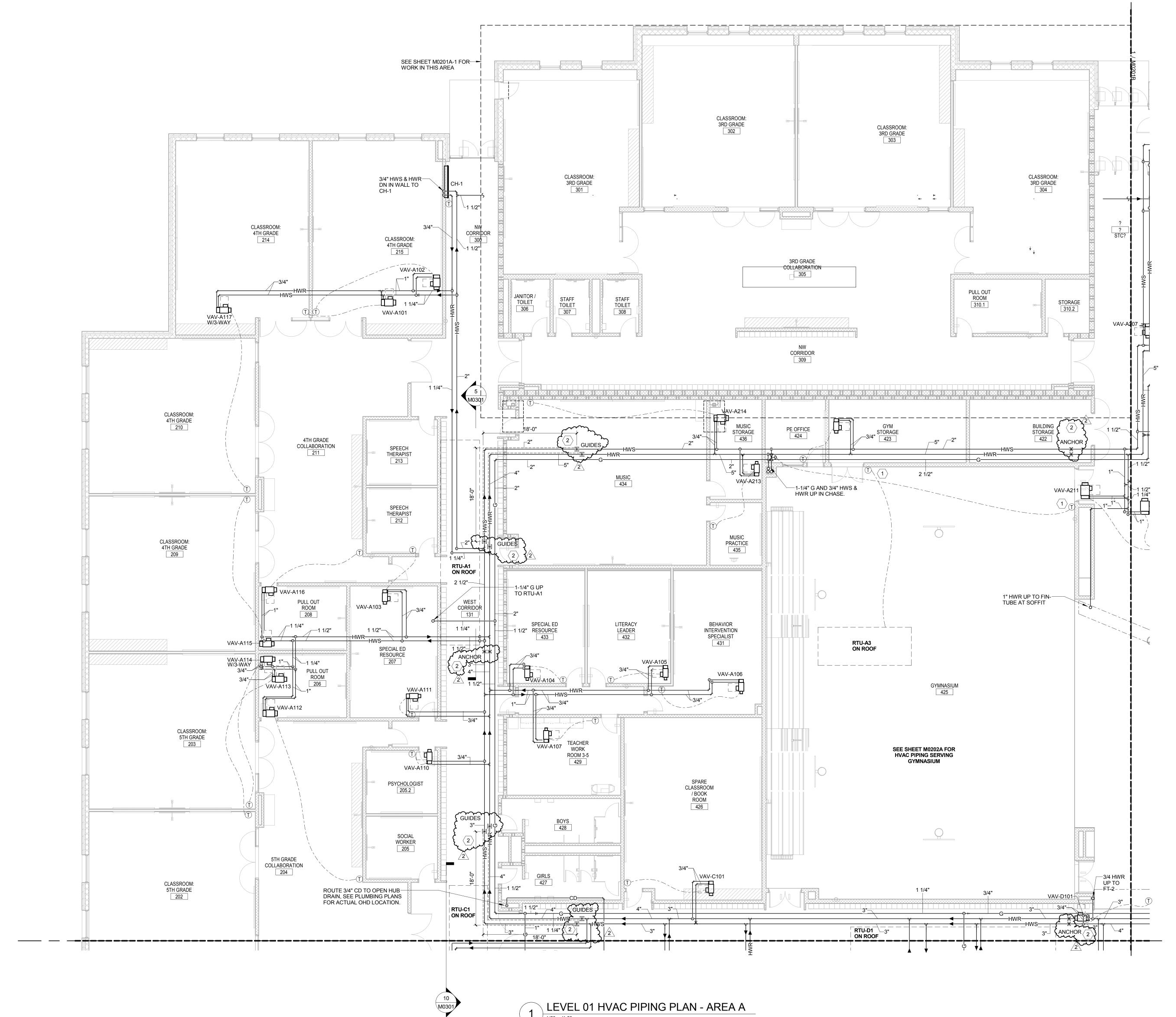
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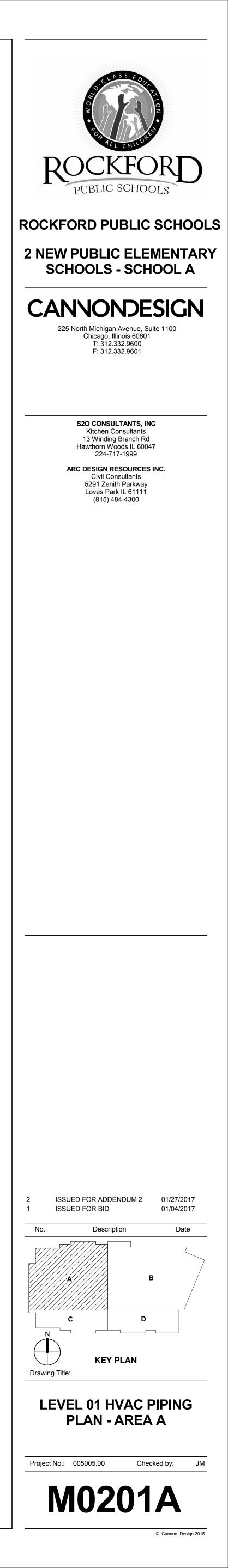
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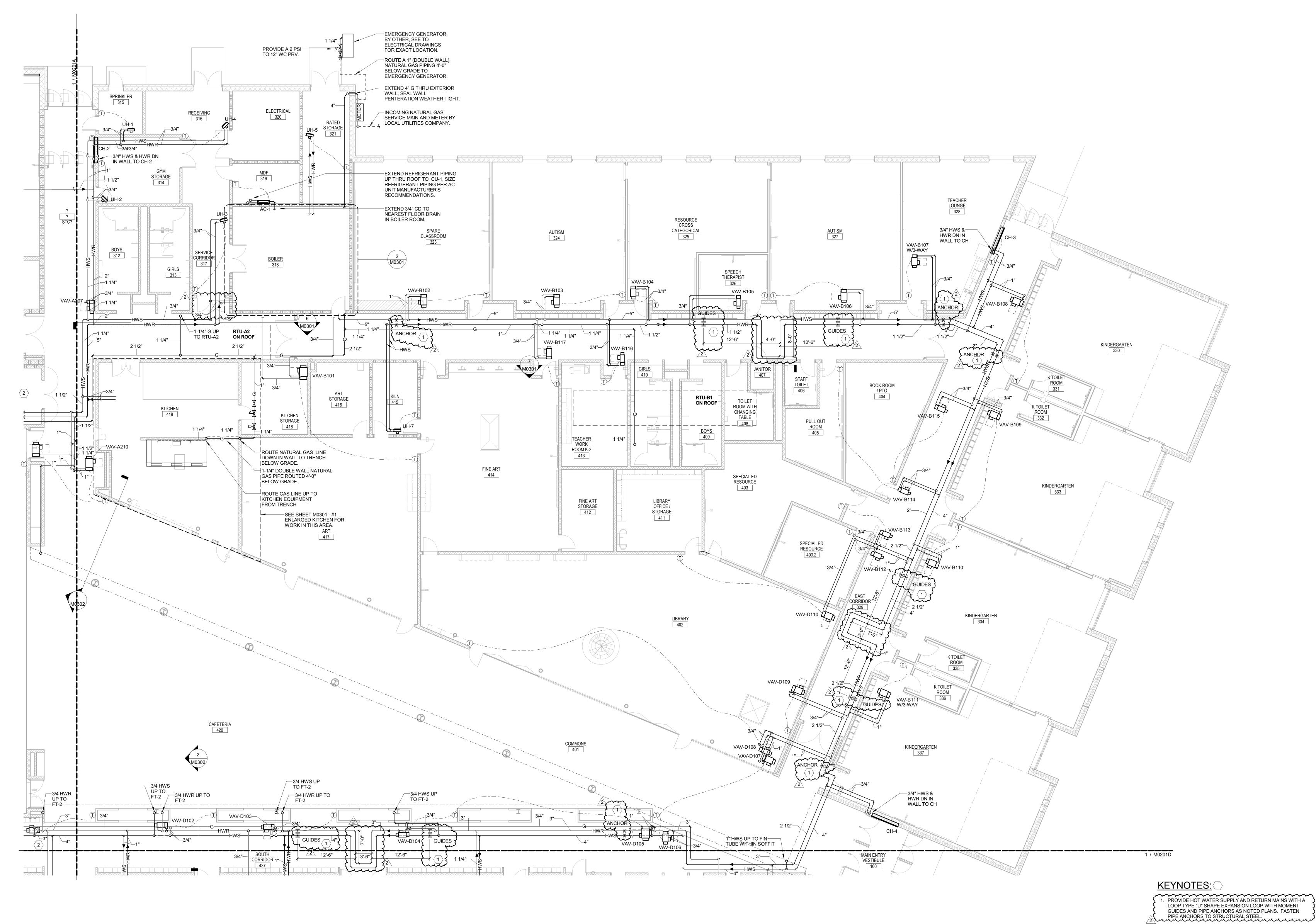


1 LEVEL 01 HVAC PIPING PLAN - AREA A

KEYNOTES:

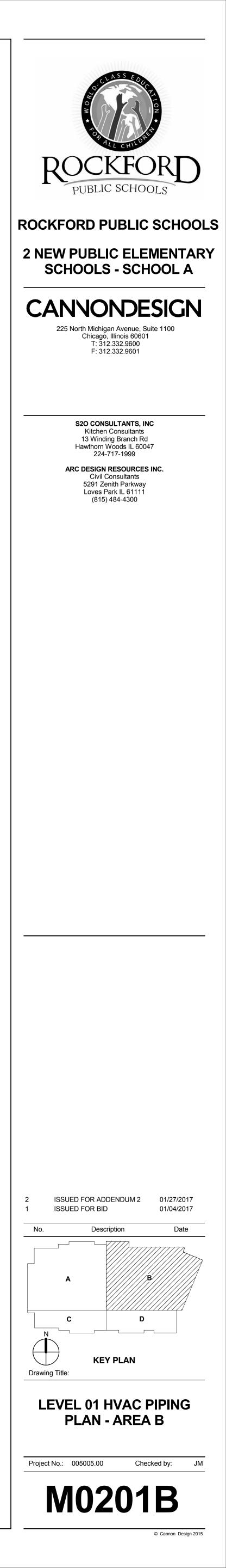
1. PROVIDE THERMOSTAT WITH PROTECTIVE WIRE COVER. 2. PROVIDE HOT WATER SUPPLY AND RETURN MAINS WITH A 90 DEGREE "L" SHAPE EXPANSION LOOP WITH MOMENT GUIDES AND PIPE ANCHORS AS NOTED PLANS. FASTEN PIPE ANCHORS TO STRUCTURAL STEEL.

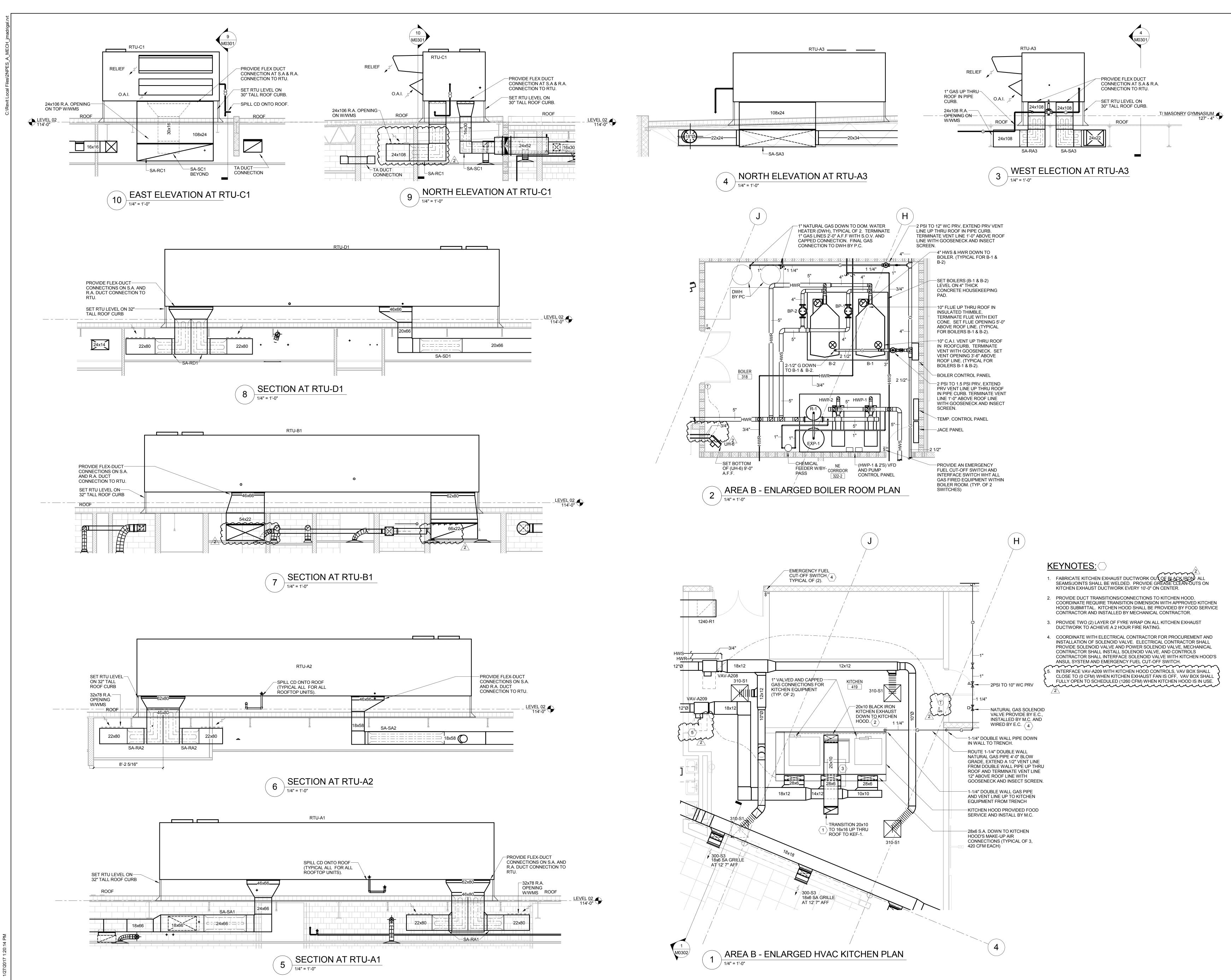




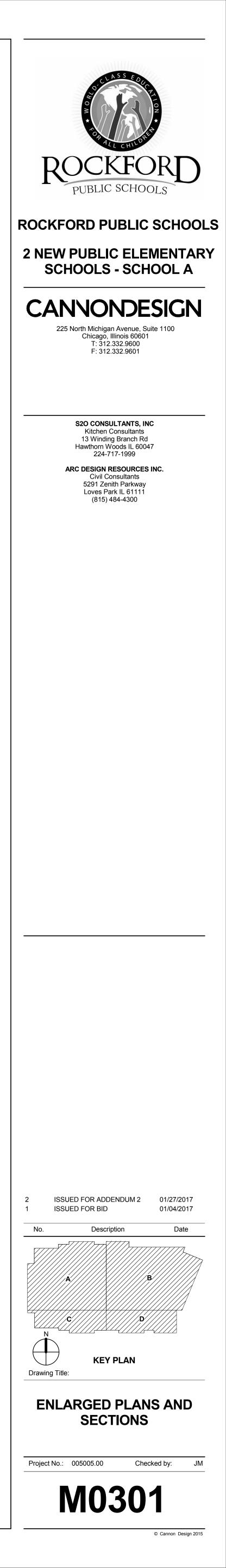
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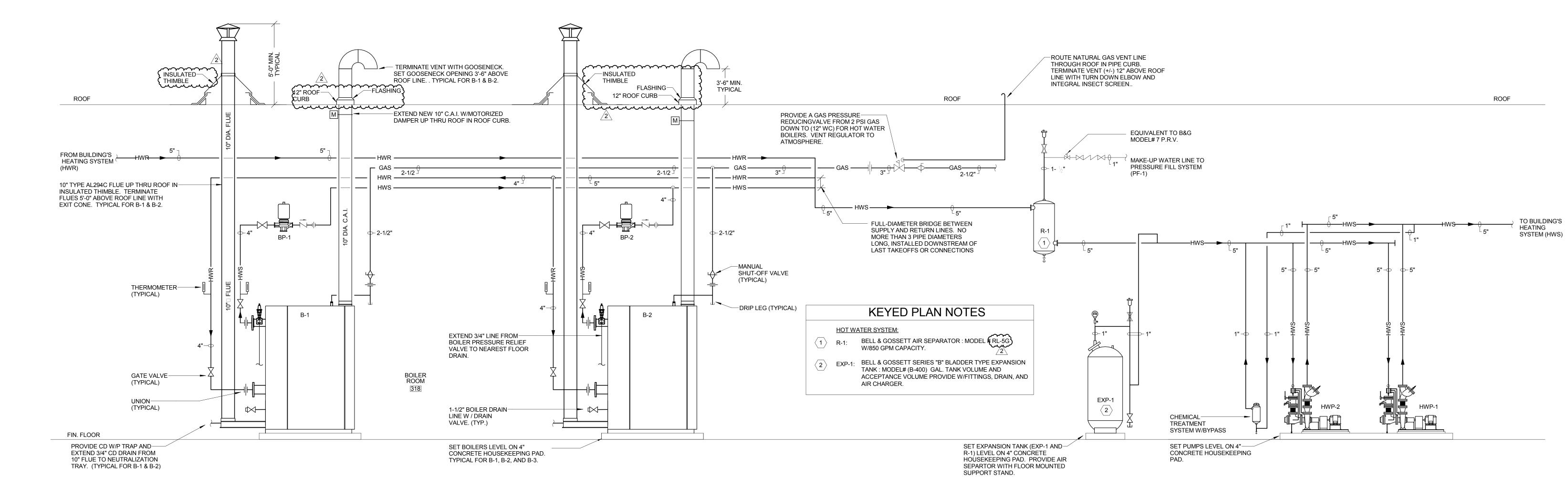






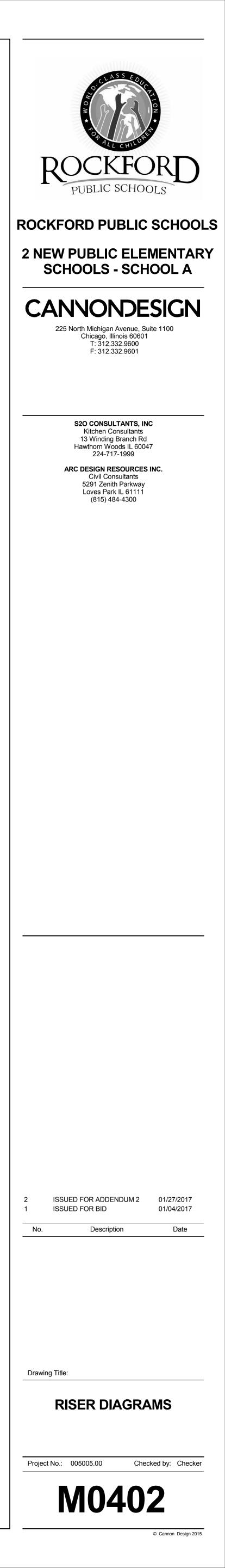
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HOT WATER BOILER PLANT PIPING DIAGRAM



		C00	LING	HEATING	TOTAL UNIT	DUCT	OUTLET	BOX					HOT W	ATER CO	NL				MANUFACTURER	
TAG	LOCATION	MAX.	MIN	MAX.	AIR P.D.	SIZES	DUCT SIZE	AIR P.D.	MAX NC		CAPACITY	EAT	LAT	EWT	LWT	GPM	W.P.D.	T.C.	AND MODEL	REMARK
	ROOM #	CFM	CFM	CFM	INCH W.C.	INLET	(IN)	INCH W.C.	DISCH.	RAD.	МВН	(F)	(F)	(F)	(F)		(FT)	VALVE	TITUS	
REA D (RTU-D	1)			•			•												•	
VAV-D101	420	900	270	900	.3"	10"	14" x 12-1/2"	0.5	22	25	34.2	55	90	170	140	2.3	5'	2-WAY	DESV-10	
VAV-D102	420	900	270	900	.3"	10"	14" x 12-1/2"	0.5	22	25	34.2	55	90	170	140	2.3	5'	2-WAY	DESV-10	
VAV-D103	420	900	270	900	.3"	10"	14" x 12-1/2"	0.5	22	25	34.2	55	90	170	140	2.3	5'	2-WAY	DESV-10	
VAV-D104	401	900	270	900	.3"	10"	14" x 12-1/2"	0.5	22	25	34.2	55	90	170	140	2.3	5'	2-WAY	DESV-10	
VAV-D105	401	1800	540	1800	.3"	14"	20" x 17-1/2"	0.5	-	24	68.4	55	90	170	140	4.6	5'	2-WAY	DESV-14	
VAV-D106	401	900	270	900	.3"	10"	14" x 12-1/2"	0.5	22	25	34.2	55	90	170	140	2.3	5'	2-WAY	DESV-10	
VAV-D107	401	1800	540	1800	.3"	14"	20" x 17-1/2"	0.5	-	24	68.4	55	90	170	140	4.6	5'	2-WAY	DESV-14	
VAV-D108	402	625	190	625	.3"	8"	12" x 10"	0.5	20	23	23.7	55	90	170	140	1.6	5'	2-WAY	DESV-08	
VAV-D109	402	720	220	720	.3"	8"	12" x 10"	0.5	20	23	27.3	55	90	170	140	1.8	5'	2-WAY	DESV-08	
VAV-D110	402	875	265	875	.3"	10"	14" x 12-1/2"	0.5	22	25	33.2	55	90	170	140	2.2	5'	2-WAY	DESV-10	
VAV-D111	101	550	165	550	.3"	8"	12" x 10"	0.5	20	23	20.9	55	90	170	140	1.4	5'	2-WAY	DESV-08	
VAV-D112	106	670	205	670	.3"	8"	12" x 10"	0.5	20	23	25.4	55	90	170	140	1.7	5'	2-WAY	DESV-08	
VAV-D113	107	225	70	225	.3"	6"	12" x 8"	0.5	-	22	8.5	55	90	170	140	0.6	5'	3-WAY	DESV-06	
VAV-D114	108	200	60	200	.3"	6"	12" x 8"	0.5	-	22	7.6	55	90	170	140	0.5	5'	2-WAY	DESV-06	
VAV-D115	102	700	210	700	.3"	8"	12" x 10"	0.5	20	23	26.6	55	90	170	140	1.8	5'	2-WAY	DESV-08	
VAV-D116	115	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	
VAV-D117	116	1200	360	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	2-WAY	DESV-10	
VAV-D118	116	760	380	760	.3"	10"	14" x 12-1/2"	0.5	22	25	28.9	55	90	170	140	1.9	5'	2-WAY	DESV-10	
VAV-D119	117	800	320	800	.3"	10"	14" x 12-1/2"	0.5	22	25	30.4	55	90	170	140	2.0	5'	2-WAY	DESV-10	
VAV-D120	117	760	380	760	.3"	10"	14" x 12-1/2"	0.5	22	25	28.9	55	90	170	140	1.9	5'	2-WAY	DESV-10	
VAV-D121	120	1200	360	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	3-WAY	DESV-10	
VAV-D122	120	200	60	200	.3"	6"	12" x 8"	0.5	-	22	7.6	55	90	170	140	0.5	5'	2-WAY	DESV-06	

						FIN TU	JBE F	RADIA		N SCH	HEDU	LE		
			FINS	;										
TAG	LOCATION	BTUH/	THICKNESS	PER	FIN SIZE	PIPE SIZE/	ROWS	EWT	LWT	EAT	GPM /	W.P.D.	MANUFACTURER	REMARKS
		LIN. FT.	(IN)	FT.	(IN)	MATERIAL		(%%DF)	(%%DF)	(%%DF)	LIN. FT.	(FT)	AND MODEL	
FT-1	SEE PLAN	508	0.016	40	4-1/4" x 3-5/8"	3/4" COPPER	1	170	140	65	0.25	-	VULCAN : VC3/4 435	1, 2, 3, 4, 5
														/2
REMAF	KS:				* · · ·							•		

1. HEATING ELEMENT : 3/4"C - 4-1/4" x 3-5/8" - 40 FINS/FT

2. PROVIDE FIN-TUBE WITH MOUNTING HARDWARE, FIN-TUBE HOUSING. 3. PROVIDE FIN-TUBE HOUSING WITH SLOPED TOP TO MATCH WINDOW SILL SLOPE, SEE FIN-TUBE DETAIL #9 SHEET M0702.

4. PROVIDE FIN-TUBE HOUSING WITH SILL GRILLE EQUIVALENT TO TITUS CT-PP-0 WITH (C1 OR C2) FRAME TO MATCH FIN-TUBE DIMENSIONS, 

	••					.05				000	2101	2000			-010	0.00			
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									ER	SCF		ULE						-
				WA	TER HE	ATING	COIL D	ATA			-	FAN/ MOT	FOR DA	ΓA				SEE
TAG	LOCATION	UNIT	MBH	GPM	WPD	EAT	LAT	EWT	LWT	CFM	QTY	HP	RPM	VOLT	PH	ΗZ	MANUFACTURER	REMAR
		SIZE										EACH					AND MODEL	BELOW
UH-1	315	18	10.6	0.8	0.0	60	99	170	140	350	1	9 W	1350	120	1	60	VULCAN : HV-18	1, 2, 3
UH-2	314	18	10.6	0.8	0.0	60	99	170	140	350	1	9 W	1350	120	1	60	VULCAN : HV-18	1, 2, 3
UH-3	314	24	14.0	1.1	0.0	60	98	170	140	380	1	9 W	1350	120	1	60	VULCAN : HV-24	1, 2, 3
UH-4	316	24	14.0	1.1	0.0	60	98	170	140	380	1	9 W	1350	120	1	60	VULCAN : HV-24	1, 2, 3
UH-5	321	24	14.0	1.1	0.0	60	98	170	140	380	1	9 W	1350	120	1	60	VULCAN : HV-24	1, 2, 3
UH-6	318	36	21.2	1.6	0.0	60	103	170	140	480	1	16 W	1350	120	1	60	VULCAN : HV-36	1, 2, 3
UH-7			10.6	0.8	0.0		, <u>99</u>	170	140	350		<u>y</u> w	1350	120		60	VULCAN : HV-18	1, 2, 3

REMARKS: 1. PROVIDE UNIT HEATER WITH UNIT MOUNTED DISCONNECT SWITCH.

2. PROVIDE UNIT HEATER WITH EQUIPMENT SUPPORT KIT AND VIBRATION ISOLATION SUPPORT HANGERS. 3. SEE MECHANICAL PIPING PLANS FOR THEMOSTAT INSTALLATION LOCATION (3. COODINATE CONTROLS CONTRACTOR FOR PROCURMENT AND INSTALL OF UNITS' WALL MOUNTED THERMOSTAT, 3-WAY T.C. VALVE.)

TAG	DESCRIPTION	CAPACITY	GAS VALVE	PRESSURE	REMARKS
		CFH	PRESSURE	AFTER PRV	
B-1	CONDENSING BOILER	3000	2 PSI	1.5 PSI	-
B-2	CONDENSING BOILER	3000	2 PSI	1.5 PSI	-
HWH-1	DOMESTIC WATER HEATER	199	2 PSI	12" W.C.	-
HWH-2	DOMESTIC WATER HEATER	199	2 PSI	12" W.C.	-
RTU-A1	ROOF TOP UNIT	650	2 PSI	12" W.C.	-
RTU-A2	ROOF TOP UNIT	650	2 PSI	12" W.C.	-
RTU-A3	ROOF TOP UNIT	800	2 PSI	12" W.C.	-
RTU-B1	ROOF TOP UNIT	650	2 PSI	12" W.C.	-
RTU-C1	ROOF TOP UNIT	350	2 PSI	12" W.C.	-
RTU-D1	ROOF TOP UNIT	650	2 PSI	12" W.C.	-
-	KITCHEN	500	2 PSI	10" W.C.	-
EM. GEN.	STAND-BY GENERATOR	260	2 PSI	12" W.C.	
-	LAUNDRY DRYERS	140	2 PSI	6" W.C.	
-	-	-			-
-	-	- 11048			- CU. FT. / HOUR

	B	ASEBOARD	) HE	ATI	ER	SCHE	DULE (ELECTRIC)	
		ELEMENT DATA				TOTAL	MANUFACTURER	
TAG	LOCATION	WATTS/LF	VOLT	PH	ΗZ	WATTS	AND MODEL	REMARKS
FT-2	SEE PLANS	250	277	1	60	750	MARLEY QMKC2573W	1 THRU 3
REMARK	(S:		-		-			
1.	PROVIDE AND CEN	ITER A 4'-0" LONG SEC	CTION O	F ELE	CTRIC	FIN-TUBE EI	LEMENT WITHIN BENCH SECTION.	
2.	PROVIDE FT WITH	DISCONNECT SWITCH	H, INTEG	GRAL T	HERM	IOSTAT, AND	THERMO-OVER LOAD PROTECTIO	N.
3.	PROVIDE FT WITH	FT WITH REQUIRED E	ND CAP	S AND	INST/	ALLATION HA	ARDWARE.	

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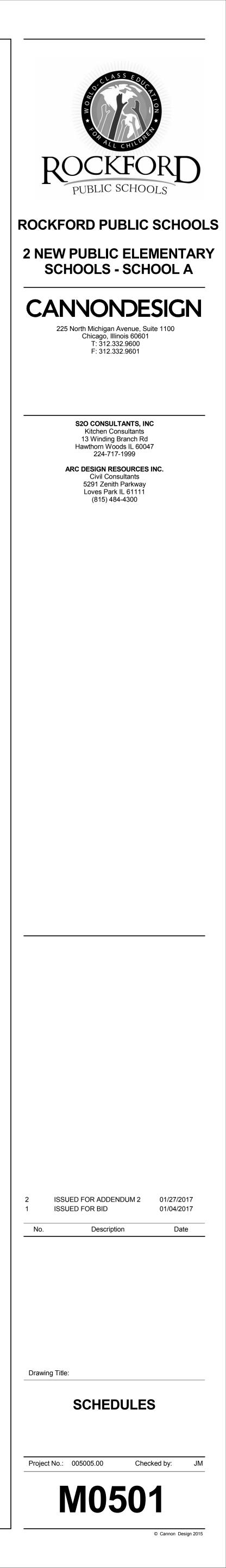
		coo	LING	HEATING	TOTAL UNIT	DUCT	OUTLET	BOX					HOT W	ATER CO	JIL				MANUFACTURER	,
TAG	LOCATION	MAX.	MIN	MAX.	AIR P.D.	SIZES	DUCT SIZE	AIR P.D.	MAX NC		CAPACITY	EAT	LAT	EWT	LWT	GPM	W.P.D.	T.C.	AND MODEL	REMARKS
	ROOM #	CFM	CFM	CFM	INCH W.C.	INLET	(IN)	INCH W.C.	DISCH.	RAD.	МВН	(F)	(F)	(F)	(F)		(FT)	VALVE	TITUS	
REA A (RTU-A1	)						•													
VAV-A101	215	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	
VAV-A102	215	1200	480	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	2-WAY	DESV-10	
VAV-A103	207	400	120	400	.3"	6"	12" x 8"	0.5	-	22	15.2	55	90	170	140	1.0	5'	2-WAY	DESV-06	
VAV-A104	433	400	120	400	.3"	6"	12" x 8"	0.5	-	22	15.2	55	90	170	140	1.0	5'	2-WAY	DESV-06	ļ
VAV-A105	432	300	90	300	.3"	6"	12" x 8"	0.5	-	22	11.4	55	90	170	140	0.8	5'	2-WAY	DESV-06	ļ
VAV-A106	431	400	120	400	.3"	6"	12" x 8"	0.5	-	22	15.2	55	90	170	140	1.0	5'	2-WAY	DESV-06	I
VAV-A107	429	950	285	950	.3"	10"	14" x 12-1/2"	0.5	22	25	36.1	55	90	170	140	2.4	5'	2-WAY	DESV-10	I
VAV-A108	200	1200	480	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	2-WAY	DESV-10	1
VAV-A109	200	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	3-WAY	DESV-10	1
VAV-A110	205.2	550	165	550	.3"	8"	12" x 10"	0.5	20	23	20.9	55	90	170	140	1.4	5'	2-WAY	DESV-08	1
VAV-A111	207	850	255	850	.3"	10"	14" x 12-1/2"	0.5	22	25	32.3	55	90	170	140	2.2	5'	2-WAY	DESV-10	1
VAV-A112	206	1440	435	1440	.3"	12"	16" x 15"	0.5	20	23	54.7	55	90	170	140	3.6	5'	2-WAY	DESV-12	1
VAV-A113	206	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	1
VAV-A114	206	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	3-WAY	DESV-10	1
VAV-A115	208	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	1
VAV-A116	208	1440	435	1440	.3"	12"	16" x 15"	0.5	20	23	54.7	55	90	170	140	3.6	5'	2-WAY	DESV-12	L
VAV-A117	214	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	3-WAY	DESV-10	1

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		coo	LING	HEATING	TOTAL UNIT	DUCT	OUTLET	BOX					нот w	ATER CO	NL				MANUFACTURER	
TAG	LOCATION	MAX.	MIN	MAX.	AIR P.D.	SIZES	DUCT SIZE	AIR P.D.	MAX	( NC	CAPACITY	EAT	LAT	EWT	LWT	GPM	W.P.D.	T.C.	AND MODEL	REMARKS
	ROOM #	CFM	CFM	CFM	INCH W.C.	INLET	(IN)	INCH W.C.	DISCH.	RAD.	мвн	(F)	(F)	(F)	(F)		(FT)	VALVE	TITUS	
REA A (RTU-A	2)						•									-				
VAV-A201	301	1360	410	1360	.3"	12"	16" x 15"	0.5	20	23	51.6	55	90	170	140	3.4	5'	2-WAY	DESV-12	
VAV-A202	302	1000	400	1000	.3"	10"	14" x 12-1/2"	0.5	22	25	38.0	55	90	170	140	2.5	5'	2-WAY	DESV-10	
VAV-A203	303	1000	400	1000	.3"	10"	14" x 12-1/2"	0.5	22	25	38.0	55	90	170	140	2.5	5'	2-WAY	DESV-10	
VAV-A204	305	1200	360	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	2-WAY	DESV-10	
VAV-A205	304	1000	400	1000	.3"	10"	14" x 12-1/2"	0.5	22	25	38.0	55	90	170	140	2.5	5'	3-WAY	DESV-10	
VAV-A206	310.1	410	125	410	.3"	8"	12" x 10"	0.5	20	23	15.6	55	90	170	140	1.0	5'	2-WAY	DESV-08	
VAV-A207	311	750	225	750	.3"	10"	14" x 12-1/2"	0.5	22	25	28.5	55	90	170	140	1.9	5'	2-WAY	DESV-10	
VAV-A208	419	1240	375	1240	.3"	12"	16" x 15"	0.5	20	23	47.1	55	90	170	140	3.1	5'	2-WAY	DESV-12	
VAV-A209	419	1260	380	1260	.3"	12"	16" x 15"	0.5	20	23	47.8	55	90	170	140	3.2	5'	2-WAY	DESV-12	
VAV-A210	421	1800	540	1800	.3"	14"	20" x 17-1/2"	0.5	-	24	68.4	55	90	170	140	4.6	5'	2-WAY	DESV-14	
VAV-A211	421	1800	540	1800	.3"	14"	20" x 17-1/2"	0.5	-	24	68.4	55	90	170	140	4.6	5'	2-WAY	DESV-14	
VAV-A212	424	410	125	410	.3"	8"	12" x 10"	0.5	20	23	15.6	55	90	170	140	1.0	5'	2-WAY	DESV-08	
VAV-A213	436	220	70	220	.3"	6"	12" x 8"	0.5	-	22	8.4	55	90	170	140	0.6	5'	2-WAY	DESV-06	
VAV-A214	434	1250	375	1250	.3"	12"	16" x 15"	0.5	20	23	47.5	55	90	170	140	3.2	5'	2-WAY	DESV-12	

						VAR	ABLE AIR '	VOLUME	TERM	IINAL	UNIT SC	HEDU	LE							
		coo	LING	HEATING	TOTAL UNIT	DUCT	OUTLET	BOX		:			HOT W	ATER CC	NL	:			MANUFACTURER	
TAG	LOCATION	MAX.	MIN	MAX.	AIR P.D.	SIZES	DUCT SIZE	AIR P.D.	MAX NC		CAPACITY	EAT	LAT	EWT	LWT	GPM	W.P.D.	T.C.	AND MODEL	REMARKS
	ROOM #	CFM	CFM	CFM	INCH W.C.	INLET	(IN)	INCH W.C.	DISCH.	RAD.	МВН	(F)	(F)	(F)	(F)		(FT)	VALVE	TITUS	
AREA B (RTU-B'	1)						•			2										
VAV-B101	418	1850	650	1850	.3"	14"	20" x 17-1/2"	0.5	-	24	70.3	55	90	170	140	4.7	5'	2-WAY	DESV-14	
VAV-B102	323	1350	405	1350	.3"	12"	16" x 15"	0.5	20	23	51.3	55	90	170	140	3.4	5'	2-WAY	DESV-12	
VAV-B103	324	1000	400	1000	.3"	10"	14" x 12-1/2"	0.5	22	25	38.0	55	90	170	140	2.5	5'	2-WAY	DESV-10	
VAV-B104	325	700	280	700	.3"	8"	12" x 10"	0.5	20	23	26.6	55	90	170	140	1.8	5'	2-WAY	DESV-08	
VAV-B105	326	175	90	175	.3"	6"	12" x 8"	0.5	-	22	6.6	55	90	170	140	0.4	5'	2-WAY	DESV-06	
VAV-B106	327	1100	550	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	
VAV-B107	328	810	245	810	.3"	10"	14" x 12-1/2"	0.5	22	25	30.8	55	90	170	140	2.1	5'	3-WAY	DESV-10	
VAV-B108	330	1450	435	1450	.3"	12"	16" x 15"	0.5	20	23	55.1	55	90	170	140	3.7	5'	2-WAY	DESV-12	
VAV-B109	333	1350	405	1350	.3"	12"	16" x 15"	0.5	20	23	51.3	55	90	170	140	3.4	5'	2-WAY	DESV-12	
VAV-B110	334	1350	405	1350	.3"	12"	16" x 15"	0.5	20	23	51.3	55	90	170	140	3.4	5'	2-WAY	DESV-12	
VAV-B111	337	1350	405	1350	.3"	12"	16" x 15"	0.5	20	23	51.3	55	90	170	140	3.4	5'	3-WAY	DESV-12	
VAV-B112	403.2	430	130	430	.3"	8"	12" x 10"	0.5	20	23	16.3	55	90	170	140	1.1	5'	2-WAY	DESV-08	
VAV-B113	403	420	130	420	.3"	8"	12" x 10"	0.5	20	23	15.9	55	90	170	140	1.1	5'	2-WAY	DESV-08	
VAV-B114	405	225	115	225	.3"	6"	12" x 8"	0.5	-	22	8.5	55	90	170	140	0.6	5'	2-WAY	DESV-06	
VAV-B115	404	450	135	450	.3"	8"	12" x 10"	0.5	20	23	17.1	55	90	170	140	1.1	5'	2-WAY	DESV-08	
VAV-B116	413	750	225	750	.3"	10"	14" x 12-1/2"	0.5	22	25	28.5	55	90	170	140	1.9	5'	2-WAY	DESV-10	
VAV-B117	414	1300	520	1300	.3"	12"	16" x 15"	0.5	20	23	49.4	55	90	170	140	3.3	5'	2-WAY	DESV-12	

		coo	LING	HEATING	TOTAL UNIT	DUCT	OUTLET	BOX					HOT W	ATER CC	NL				MANUFACTURER	
TAG	LOCATION	MAX.	MIN	MAX.	AIR P.D.	SIZES	DUCT SIZE	AIR P.D.	MAX	( NC	CAPACITY	EAT	LAT	EWT	LWT	GPM	W.P.D.	T.C.	AND MODEL	REMARK
	ROOM #	CFM	CFM	CFM	INCH W.C.	INLET	(IN)	INCH W.C.	DISCH.	RAD.	МВН	(F)	(F)	(F)	(F)		(FT)	VALVE	TITUS	
REA C (RTU-C [/]	1)				•		•													
VAV-C101	426	880	440	880	.3"	10"	14" x 12-1/2"	0.5	22	25	33.4	55	90	170	140	2.2	5'	2-WAY	DESV-10	
VAV-C102	122	200	60	200	.3"	6"	12" x 8"	0.5	-	22	7.6	55	90	170	140	0.5	5'	2-WAY	DESV-06	
VAV-C103	123	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	3-WAY	DESV-10	
VAV-C104	124	1200	360	1200	.3"	10"	14" x 12-1/2"	0.5	22	25	45.6	55	90	170	140	3.0	5'	2-WAY	DESV-10	
VAV-C105	124	880	440	880	.3"	10"	14" x 12-1/2"	0.5	22	25	33.4	55	90	170	140	2.2	5'	2-WAY	DESV-10	
VAV-C106	125	760	380	760	.3"	10"	14" x 12-1/2"	0.5	22	25	28.9	55	90	170	140	1.9	5'	2-WAY	DESV-10	
VAV-C107	125	800	240	800	.3"	10"	14" x 12-1/2"	0.5	22	25	30.4	55	90	170	140	2.0	5'	2-WAY	DESV-10	
VAV-C108	126	1100	440	1100	.3"	10"	14" x 12-1/2"	0.5	22	25	41.8	55	90	170	140	2.8	5'	2-WAY	DESV-10	



																ROOF	TOP	UNIT	SCHE	DULE																
							AIF	RCFM				EXHA	JST FAN					COOL	ING SECT	ION				HE	ATING SEC	TION		CONDEN	۱.		ELI	ECTRICAL I	DATA	UNIT		
TAG	LOCATION	NOMINAL	ТҮРЕ	DISCHARGE	SUPPL	Y MIN.	ESP		FAN			ESP	FA	N	CAPACI	TY (MBH)	EAT	Г (F)	LAT (F	⁻ ) NC	OF ABI	IT COOL	_'G INPU	T OUTPU	T EAT	LAT	#	FAN	FILTER	REFRIGERAN	T			WT.	MANUFACTURER	REMARKS
		TONS		DIRECTION		<b>O.A</b> .	IN. W.C.	HP	BHP	RPM		. W.C.	HP BH	P RPM	TOTAL	SENSIBLE	DB	WB	DB	WB CC	MP. F	EDE	3 MBH	H MBH	F	F	STAGES	QTY FL	Α	TYPE	MCA MC	CP VOLT	PH HZ	(LBS)	AND MODEL	
RTU-A1	AREA "A" ROOF	60	VAV SYSTEM	VERTICAL	15100	4800	2.2	20	18.07	682	15100	0.5	15 9	811	682.8	439.4	83.3	68.5	55	54.3	1 94	. 75	650	524.6	42.8	55	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	155 1	75 480	3 60	11600 C	ARRIER : 48P3F060610JJSLDXR	1 THRU 13
RTU-A2	AREA "A" ROOF	60	VAV SYSTEM	VERTICAL	15780	5300	2.7	25	21.96	733	15780	0.5	15 9.5	5 819	675.6	439.4	83.8	65.5	55	54.3	4 94	. 75	650	524.6	40.2	55	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	155 1	75 480	3 60	11600 C	ARRIER : 48P3F060610JJSLDXR	1 THRU 13
RTU-A3	AREA "A" ROOF	40	SINGLE ZONE - VAV	VERTICAL	9900	3800	1.5	15	9.5	931	9900	0.5 12.	BFLA -	-	462	285.3	80.8	68.3	54.2	53.3	1 94	. 75	800	648	37.7	90	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	115 1	25 480	3 60	6000	CARRIER : 48A2W040-PM62AEQ	1 THRU 12, 14,
RTU-B1	AREA "B" ROOF	70	VAV SYSTEM	VERTICAL	16510	5200	2.3	25	19.43	689	16510	0.5	15 10.	6 840	704.4	473.9	82.8	67.8	55	54.1	1 94	. 75	650	524.6	43	55	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	162 1	75 480	3 60	11600 C	ARRIER : 48P3F070610JJSJNNR	1 THRU 13
RTU-C1	AREA "C" ROOF	35	VAV SYSTEM	VERTICAL	8240	2200	2.1	15	9.72	1045	8240	0.5 12.	BFLA -	-	349.2	239	81.6	66.7	54	52.8	1 94	. 75	350	283.5	46.7	55	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	100 1	10 480	3 60	6000	CARRIER : 48A3V035-PM62ARB	1 THRU 13
RTU-D1	AREA "D" ROOF	70	VAV SYSTEM	VERTICAL	19100	5200	2.2	25	23.1	715	19100	0.5	20 14.	3 901	753.6	498.5	80.8	67	55	54.3	1 94	. 75	650	524.6	46.3	55	MOD.	4 3.3	3 MERV 8 PLEATE	D R-410A	178 2	00 480	3 60	12000 0	CARRIER : 48P3F070610JJSLHR3	1 THRU 13
REMARKS		1															· · · · · ·																			
1. PF				T), INTERFACE RTI WITH SCH	OOL DISTRI	CTS B.A.S.	FOR UNIT	MONITORI	NG AND AL	ARMS. UNI	'S CONTRO	S SHALL M	AKE ALL OPE	RATING COM	IMANDS TO A	CHIEVE				8. PROV	DE RTU WITH	NATURAL	GAS PRESS	SURE REDU	CING VALVE	S (2 PSI TC	0 11.5" WC)	GAS PRESS	URE AT RTU							
																				9. PROV	DE RTU WITH	COMBUSTI	ION AIR BLO	OWER MOTO	)R											
2. PF	OVIDE RTU WITH H	UMIDITY CONTROL	S FOR SUPPLY AIR IN THREE MODE	S: NORMAL COOLING MODE,	SUB-COOLII	NG MODE,	AND HOT	GAS REHE	AL. WALL M	OUNTED H	JMIDISTAT.									10 PROV	DE RTU WITH	(20% TO 10		II ATING NAT	URAL GAS I											

3. PROVIDE RTU'S SUPPLY AND RELIEF FAN MOTORS WITH VARIABLE FREQUENCY DRIVE (VFD), NEMA 3R DISCONNECT SWITCH, AND FACTORY INSTALLED CONVENIENCE OUTLET.

4. PROVIDE RTU WITH ECONOMIZE CONTROL OPTION: PROVIDE 0-100% MODULATING POWERED RELIEF ECONOMIZER.

5. PROVIDE RTU WITH 30" TALL SLOPED INSULATE VIBRATION ISOLATION ROOF CURB (EQUIVALENT TO THYBAR VIBRO-CURB III, 14 GA. GALVANIZED STEEL, 1-1/2" INSULATION), FIELD VERIFY REQUIRED ROOF SLOPE FOR EACH RTU'S ROOF CURB.

6. PROVIDE RTU WITH HAILGAURD ON ALL CONDENSER FAN.

7. PROVIDE RTU WITH SUPPLY AND RETURN AIR SMOKE DETECTORS.

TAG BP-1		SERVICE	TYPE	GPM	HEAD (FT)	IMP. SIZE	FLUID	VFD	START	ER BY			MOTOF	R DATA			PUMF	P SIZE	BASI	S OF DESIGN	NOTES
BP-1 :					(FT)	IN.															
BP-1									MC	EC	BHP	HP	RPM	VOLT	PH	ΗZ	SUCTION	DISCHARGE	MANUFACTURER	MODEL	
	318 BOILER ROOM	BOILER B-1	INLINE	200	30	5.5"	WATER	YES	Х	-	2.31	3	1750	480	3	60	4"	4"	BELL & GOSSETT	SERIES E-80 : 4x4x7B	1, 2
BP-2	318 BOILER ROOM	BOILER B-2/2	INLINE	200	30	5.5"	WATER	YES	Х	-	2.31	3	1750	480	3	60	4"	4"	BELL & GOSSETT	SERIES E-80 : 4x4X7B	1, 2
HWP-1	318 BOILER ROOM	PRIMARY HOT WATER BUILDING PUPMS	END-SUCTION	400	85	£10"}	WATER	YES	Х	-	(11.3)	£15}	1750	480	3	60	£4"}	<b>5</b> 3"	BELL & GOSSETT	SERIES e-1510 (3EB)	1, 3
HWP-2	318 BOILER ROOM	PRIMARY HOT WATER BUILDING PUPMS	END-SUCTION	400	85	ξ ₁₀ ",	WATER	YES	Х	-	<b>{</b> 11.3 <b>}</b>	{ <u>15</u> }	1750	480	3	60		<b>E E E E E E E E E E</b>	BELL & GOSSETT	SERIES e-1510 3EB	1, 3

1. PROVIDE PUMPS WITH DISCONNECT SWITCH AND VARIABLE FREQUENCY DRIVES.

2. INTERFACE (SECONDARY) BOILER PUMP WITH RESPECTIVE BOILER AND ASSOCIATED 2-WAY ISOLATION VALVE 3. PRIMARY PUMPS (HWP-1 & HWP-2) SHALL OPERATE IN A LED LAG CONFIGURATION WITH ONE OF TWO PUMPS AS 100 % STAND-BY.

					F	FAN SO	CHEDULE	-									
			AIRFLOW	E.S.P.		FAN DATA			МОТ	OR DAT	A		MOTOR S	TARTER BY	WEIGHT (LBS)	MAUNFACTURER / MODEL	REMARKS
TAG	LOCATION	SERVICE	(CFM)	IN WC	FAN TYPE	RPM	DRIVE	BHP	HP	VOLT	PH	HZ	M.C.	E.C.			
EF-1	AREA A ROOF	TOILET EXHAUST	460	.4	CENTRIFUGAL	1033	BELT	0.08	1/4	120	1	60	Х		75	GREENHECK - GB-101-4	1 THRU 7
EF-2	AREA B ROOF	TOILET EXHAUST	700	.4	CENTRIFUGAL	1166	BELT	0.11	1/4	120	1	60	Х		75	GREENHECK - GB-101-4	1 THRU 7
EF-3	AREA B ROOF	TOILET EXHAUST	1150	.5	CENTRIFUGAL	974	BELT	0.21	1/4	120	1	60	Х		90	GREENHECK - GB-141-4	1 THRU 7
EF-4	AREA B ROOF	TOILET EXHAUST	200	.3	CENTRIFUGAL	876	BELT	0.04	1/6	120	1	60	Х		65	GREENHECK - GB-081-6	1 THRU 7
EF-5	AREA B ROOF	TOILET EXHAUST	200	.3	CENTRIFUGAL	876	BELT	0.04	1/6	120	1	60	Х		65	GREENHECK - GB-081-6	1 THRU 7
EF-6	AREA D ROOF	TOILET EXHAUST	925	.4	CENTRIFUGAL	846	BELT	0.14	1/4	120	1	60	Х		90	GREENHECK - GB-141-4	1 THRU 7
EF-7	AREA A ROOF	TOILET EXHAUST	700	.4	CENTRIFUGAL	1166	BELT	0.11	1/4	120	1	60	Х		75	GREENHECK - GB-101-4	1 THRU 7
EF-8	AREA B ROOF	KILN HOOD	300	.3	CENTRIFUGAL	884	BELT	0.05	1/4	120	1	60	Х		75	GREENHECK - GB-101-4	1 THRU 6, & 8
EF-9	AREA B ROOF	ELECTRICAL ROOM	700	.4	CENTRIFUGAL	1273	BELT	0.13	1/4	120	1	60	Х		60	GREENHECK - GB-091-4	1 THRU 7
EF-10	AREA B ROOF	RECEIVING AREA	650	.4	CENTRIFUGAL	1181	BELT	0.11	1/4	120	1	60	Х		60	GREENHECK - GB-091-4	1 THRU 7
KEF-1	AREA B ROOF	KITCHEN EXHAUST HOOD	2100	1.0	CENTRIFUGAL	1589	BELT	0.75	1.00	208	3	60	Х		140	GREENHECK - CUBE-141-10	1 THRU 5, & 8

1. PROVIDE FAN WITH DISCONNECT SWITCH AND BIDSCREEN

2. PROVIDE FAN WITH 18" TALL ROOFCURB

**REMARKS** :

3. PROVIDE WITH MOTOR STARTER.

4. PROVIDE FAN WITH EXTENDED LUBE LINES. 5. PROVIDE FAN WITH HIGH EFFICIENCY MOTOR

			FAN DATA	4				COOLIN	G CAPAC	ITY								ELECT	RICAL	DATA					
				EXTERNAL		COOLING			#		EN	TERING A	IR	LEAV	ING AIR										
	AREA		MOTOR	STATIC	NOMINAL	TOTAL	REFRIC	GERANT	CIRC.	AMB											DISCONNECT	UNIT			
TAG	SERVED	AIRFLOW	SIZE	PRESS.	CAPACITY	COOLING	TYPE	CHARGE		TEMP	DB	WB	RH	DB	WB	VOLT	PH	ΗZ	MCA	MOCP	SWITCH	WEIGHT	MANUFACTURER	MODEL NO.	REMARK
		(CFM)	(HP)	(IN. W.G.)	(TONS)	(MBH)	-	lbs - oz.		(F)	(F)	(F)	(%)	(F)	(F)							(LBS)			
.C-1	IDF-CLOSET	425	0.05	-	1	12	R410A	-	-	-	95	71	50	55	54	208	1	60	1	15	Y	20	MITSUBISHI	PKA-A12HAL	1, 2, 4, 7, 9
U-1	AC-1	-	3	-	1	12	R410A	3	1	115	-	-	-	-	-	208	1	60	13	15	Y	97	MITSUBISHI	PUYA12NHA3	1, 5, 6, 8, 9
C-2	IDF-CLOSET	425	0.05	-	1	12	R410A	-	-	-	95	71	50	55	54	208	1	60	1	15	Y	20	MITSUBISHI	PKA-A12HAL	1, 2, 4, 7, 9
:U-2	AC-2	-	3	-	1	12	R410A	3	1	115	-	-	-	-	-	208	1	60	13	15	Y	97	MITSUBISHI	PUYA12NHA3	<b>{</b> 1, 5, 6, 8, 9
C-3	IDF-CLOSET	425	0.05	-	1	12	R410A	-	-	-	95	71	50	55	54	208	1	60	1	15	Y	20	MITSUBISHI	PKA-A12HAL	1, 2, 4, 7, 9
CU-3	AC-3	_	3	-	1	12	R410A	3	1	115	-	-	-	-	-	208	1	60	13	15	Y	97	MITSUBISHI	PUYA12NHA3	<b>a</b> 1, 5, 6, 8, 9

PROVICE WITH LOCAL DISCONNECT SWITCH AND MOTOR STARTER.

2. PROVIDE WITH LOCAL ZONE THERMOSTAT AND INTERFACE AC UNIT OPERATION WITH BAS.

4. PROVIDE UNIT WITH DUAL FLOAT CONDENSATE PUMP.

5. MOUNT CONDENSING UNIT LEVEL ON ROOF WITH EQUIPMENT SUPPORT RAILS.

6. PROVIDE UNIT WITH NEMA 3R DISCONNET SWITCH.

7. INTERFACE CONDENSING UNIT WITH BAS. BAS SHALL RECEIVE ALL UNIT'S ALARMS, UNIT OPERATING STATUS, AND SPACE TEMPERATURE. 8. PROVIDE CONDENSING UNIT WITH LOW AMBIENT CONTROLS

9. PROVIDE UNIT WITH ALL MANUFACTUER RECOMMENDED TRIM, VALVES, AND PIPING EQUIPMENT.

TAG	LOCATION	UNIT	CABINET		WATER	HEATING (	COIL DATA	A				-	FAN/ MOTO	OR DATA				MANUFACTURER	REMARKS
		SIZE	MOUNTING	MBH	GPM	WPD	EAT	LAT	EWT	LWT	CFM	QTY	HP EACH	RPM	VOLT	PH	HZ	AND MODEL	
CH-1	-	10	WALL SEMI-RECESSED	49.2	3.5	0.9	60	120	180	150	845	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-10	1, 2, 3
CH-2	-	10	WALL SEMI-RECESSED	49.2	3.5	0.9	60	120	180	150	845	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-10	1, 2, 3
CH-3	-	08	WALL SEMI-RECESSED	44.2	3.5	0.9	60	126	180	150	685	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-08	1, 2, 3
CH-4	-	10	WALL SEMI-RECESSED	49.2	3.5	0.9	60	120	180	150	845	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-10	1, 2, 3
CH-5	-	10	WALL SEMI-RECESSED	49.2	3.5	0.9	60	120	180	150	845	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-10	1, 2, 3
CH-6	-	08	WALL SEMI-RECESSED	44.2	3.5	0.9	60	126	180	150	685	2	1/10 - 1/15	875	120	1	60	Vulcan : RC-1200-08	1, 2, 3

1. PROVIDE CABINET HEAERS WITH DISCONNECT SWITCH AND FAN STARTER. 2. COORDINATE CABINET UNIT HEATER FINISH WITH ARCHITECT. (3. COORDINATE WITH CONTROLS CONTRACTOR FOR PROCURMENT AND INSTALLATION OF UNIT'S WALL MOUNTED THERMOSTAT AND 3-WAY T.C. VALVE. )2

R1

R2 R3

E1 E2 E3

REMARKS

1.

3. 4

12. PROVIDE (SUPPLY & OUTDOOR) AIRFLOW MEASURING STATIONS.

13. RTU SERVES MULTIPLE ZONE VAV TERMINAL UNITS WITH HW REHEAT FOR EACH ZONE. PROVIDE VFD ON SUPPLY FAN, WITH A CONSTANT DISCHARGE AIR TEMPERATURE AND VARYING FLOW TO VAV BOXES.

14. RTU IS A SINGLE-ZONE VAV UNIT WITH VFD ON SUPPLY FAN WITH A CONSTANT DISCHARGE AIR TEMPERATURE AND VARYING AIRFLOW.

15. PROVIDE RTU-A3'S THERMOSTAT WITH WIRE COVER GUARD.

6. PROVIDE FAN WITH (24VAC) MOTORIZED DAMPER AND DAMPER TRAY.

7. INTERLOCK FAN WITH BAS AND OPERATE ON SCHOOL OCCUPANCY SCHEDULE.

8. INTERLOCK FAN WITH RESPECTIVE HOOD'S ON/OFF CONTROLS.

MIN/MAX NATURAL GAS TAG INPUT PRESSURE (IN W.C.) B-1 3.5" WC / 14" WC B-2 3.5" WC / 14" WC 3. PROVIDE NEUTRALIZING PAN FOR BOILER'S CONDENSATE DRAIN AND FLUE VENT'S P-TRAP DRAIN. 4. PROVIDE BOILER BURNER WITH 25:1 TURNDOWN.

11. PROVIDE RTU WITH SCROLL COMPRESSORS CAPABLE OF MULTI-STAGE OPERATION OR (MINIMUM 2 STAGE COMPRESSOR CONTROLS).

			IFFUSER - REGISTER - GR		· · ·			
		D	IT OULK - NEGIOTEK - OK					
			LENGTH/	# OF SLOTS/		MATERIAL/	MANUFACTURER	
SERVICE	TYPE	SIZE	FACE AREA	SLOT WIDTH	DAMPER	FINISH	AND MODEL	REMARKS
SUPPLY	SQUARE PLAQUE	SEE NOTE	2' x 2'	-	Y	STEEL / WHITE	TITUS : OMNI	1-4
SUPPLY	LINEAR SLOT CEILING DIFFUSER	48"	4 ' LONG	2 / 1"	Y	STEEL / WHITE	TITUS: TBD-30	1-4, 6
SUPPLY	DOUBLE DEFLECTION GRILLE	SEE PLANS	VARIES - SEE PLANS	-	Y	STEEL / WHITE	TITUS : S300FL	1, 2
SUPPLY	DOUBLE DEFLECTION GRILLE	SEE PLANS	VARIES - SEE PLANS	-	Y	STEEL / WHITE	TITUS : 272RL	1-4
TRANSFER	SIDEWALL GRILLE	SEE PLANS	VARIES - SEE PLANS		-	STEEL / WHITE	TITUS : 350RL	1-3, 5
RETURN	SQUARE PLAQUE	SEE PLANS	2' x 2'	-	Y	STEEL / WHITE	TITUS : OMNI	1-3, 5
RETURN	SIDEWALL GRILLE	SEE PLANS	VARIES - SEE PLANS	-	Y	STEEL / WHITE	TITUS : 272RL	1-3, 5
RETURN	LINEAR SLOT CEILING DIFFUSER	SEE PLANS	VARIES - SEE PLANS	2 / 1"	Y	STEEL / WHITE	TITUS: TBD-30	1-3, 6
EXHAUST	SQUARE PLAQUE	SEE NOTE	2' x 2'	-	Y	STEEL / WHITE	TITUS : OMNI	1-3, 5
EXHAUST	SIDEWALL GRILLE	SEE PLANS	VARIES - SEE PLANS	-	Y	STEEL / WHITE	TITUS : 272RL	1-3
EXHAUST	SQUARE PLAQUE	SEE PLANS	2' x 1'	-	Y	STEEL / WHITE	TITUS : OMNI	1-3, 5

REFER TO THE MECHANICAL PLANS FOR CAPACITIES AND SIZES, UNLESS OTHERWISE NOTED IN THE SCHEDULES.

COORDINATE REGISTER, GRILLE, AND DIFFUSER FINAL FINISH WITH ARCHITECT.

REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF EACH CEILING MOUNTED AIR DEVICE AND FOR TYPE OF CEILING GRID.

SUPPLY DIFFUSER NECK SIZES AS SHOWN BELOW BASED ON CFM'S NOTED ON PLANS:

	SUPPL	LY DIFFUSER NECK SIZES	
	CFM RANGE	NECK SIZE	12x12 FACE SIZE
	0-160	6"	CFM RANGE NECK SIZE
	161-250	8"	0-100 6"
	251-400	10"	101-200 8"
	401-500	12"	
	501-700	14"	
5.	RETURN/EXHAUST	DIFFUSER NECK SIZES AS SHOWN BE	OW BASED ON CFM'S NOTED ON PLANS. PROVIDE 24x24 METAL PAN MODULE FOR LAY-IN CELING:
		22x22 FACE SIZE	12x12 FACE SIZE
	CFM RANGE	NECK SIZE	CFM RANGE NECK SIZE
	50-250	10x10 OR 8" dia.	0-100 6"
	251-500	15x15 OR 12" dia.	101-250 8"
	501-1500	22x22	

6. PROVIDE WITH HARD CEILING MOUNTING CLIPS AND INSULATED PLENUM.

		NATURAL		THROAT					
TAG	LOCATION	VENT.	MAX.S.P	AREA	THROAT	THROAT	DAMPER	MANUFACTURER	REMARKS
		CFM	(IN. WG)	(SQ. FT)	SIZE	VELOCITY	SIZE	AND MODEL NO.	
RH-1	AREA A ROOF - STORM SHELTER	6000	0.1	12.83	42"x44"	468	42x44	GREENHECK FGR	1, 2, 3
RH-2	AREA A ROOF - STORM SHELTER	6000	0.1	12.83	42"x44"	468	42x44	GREENHECK FGR	1, 2, 3
REMARKS:					•				-

					E	BOILER SO	CHEDUI	_E							
							MAX		FL	ECTRIC		Δ			
		ACITY		FLUD	FLOW	MAX	WORKING	RELIEF		ECTRIC			OPERATING	MANUFACTURER	
F	-	OUTPUT	EWT /LWT	I LOD	RATE	OPERATING	PRESSURE	VALVE	FLA	VOLT		FLA	WEIGHT	AND MODEL	REMARKS
L_	MBH	MBH	%%DF/%%DF		(GPM)	TEMP (%%DF)	(PSI)	SETTING	AMPS	VOLI			(LBS)		
)	3000	2760	140 / 170	WATER	184	170	160	50 PSI	-	120	1	60	4126	FBN3000	1 - 4
;	3000	2760	140 / 170	WATER	184	170	160	50 PSI	-	120	1	60	4126	FBN3000	1 - 4

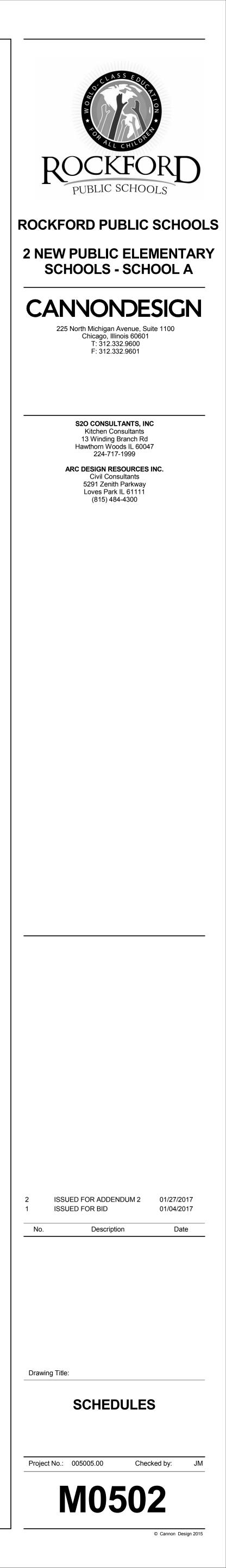
PROVIDE BOILER PLANT WITH BOILER SYSTEM CONTROLS FOR MASTER/MEMBER NETWORK CONTROLS (LEAD/LAG AND RUN TIME CONTROL).

PROVIDE WITH BAS/LOCAL SWITCH AND MANUAL CAPACITY CONTROL

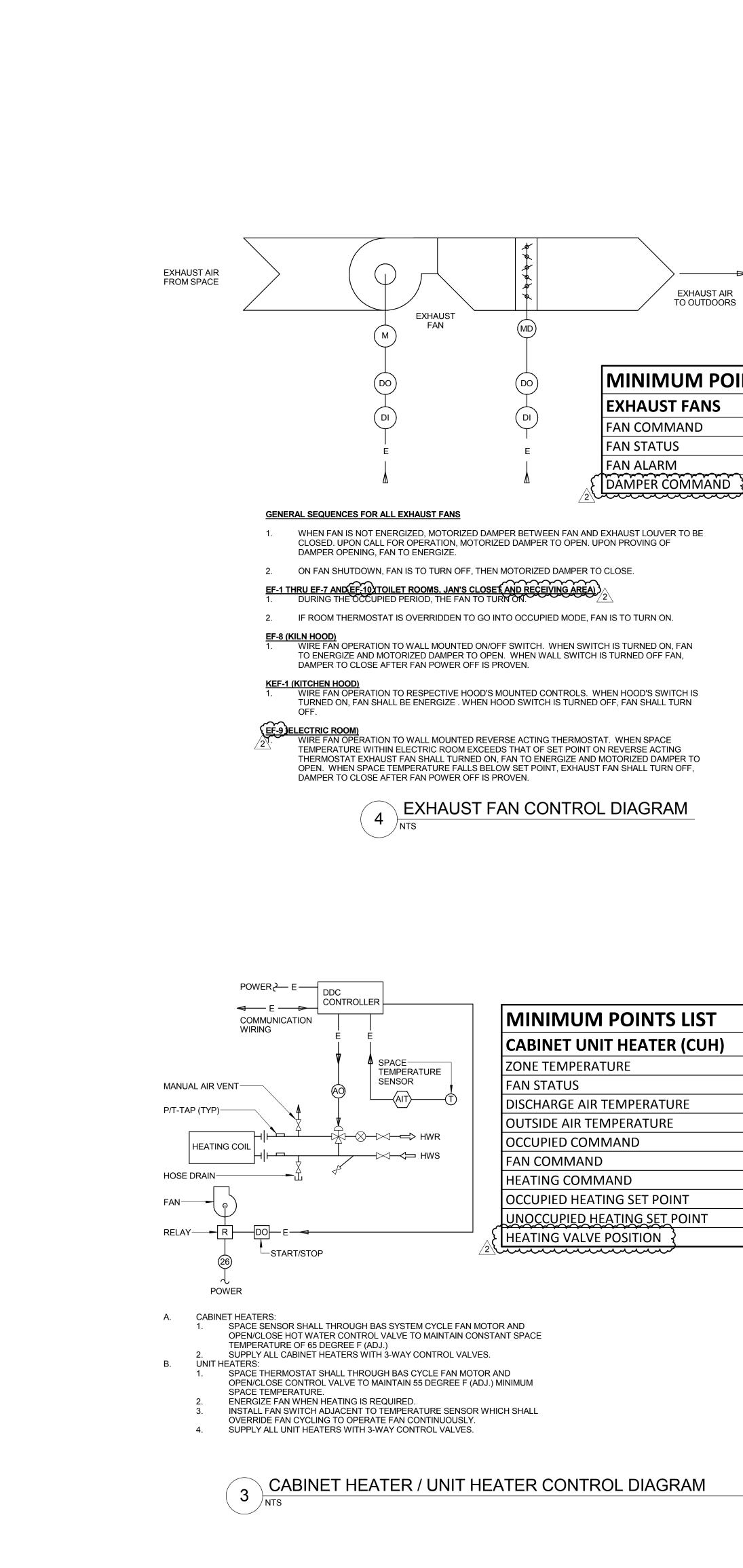
5. PROVIDE WITH CONTROL PANEL AND BAS COMMUNICATION INTERFACE (MODBUS, LONWORKS, BACNET, ETC)

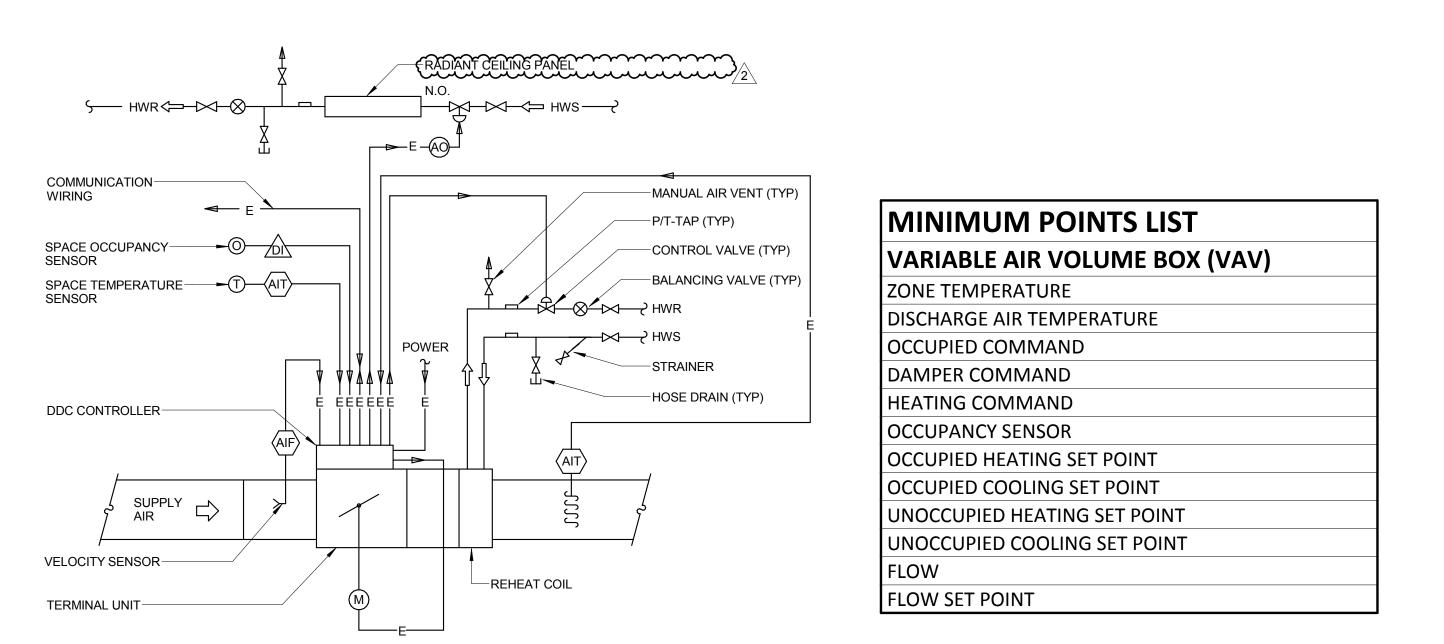
6. BOILER FLUE LAYOUT MUST BE REVIEWED AND APPROVED BY THE BOILER MANUFACTURER.

	RADIANT PANEL SCHEDULE (HYDRONIC)												
		PANEL		WATER	W.P.D.								
TAG	PANEL	DIMENSIONS	GPM	VELOCITY	PER 100 FT.	EWT	LWT	BTUH	MANUFACTURER	REMARKS			
	LENGTH	WIDTH		(FPS)	(FT W.C.)	(%%DF)	(%%DF)	PER L.F.	AND MODEL				
RHP-1	SEE PLANS	24"	SEE PLANS	1.0	0.91	155	185	389	AIRTEX : HEF-2	1, 2, 3, 4			
REMARKS:													
1.	PROVIDE WITH R-	13 BATT INSULAT	ION FOR TOP C	F PANELS.									
2. PROVIDE PANEL WITH CROSS CHANNEL BRACE, SLIP EDGE CLIPS, RETURN BENDS, END CLIPS, AND INTERCONNECT FITTINGS.													
3.	COORIDINATE PA	NEL SUPPORTS W	ITH REFLECTIV	VE CEILING.									
4. WHERE REQUIRED PROVIDE WALL ANGEL MOLDING AND WALL CHANNEL MOLDING.													





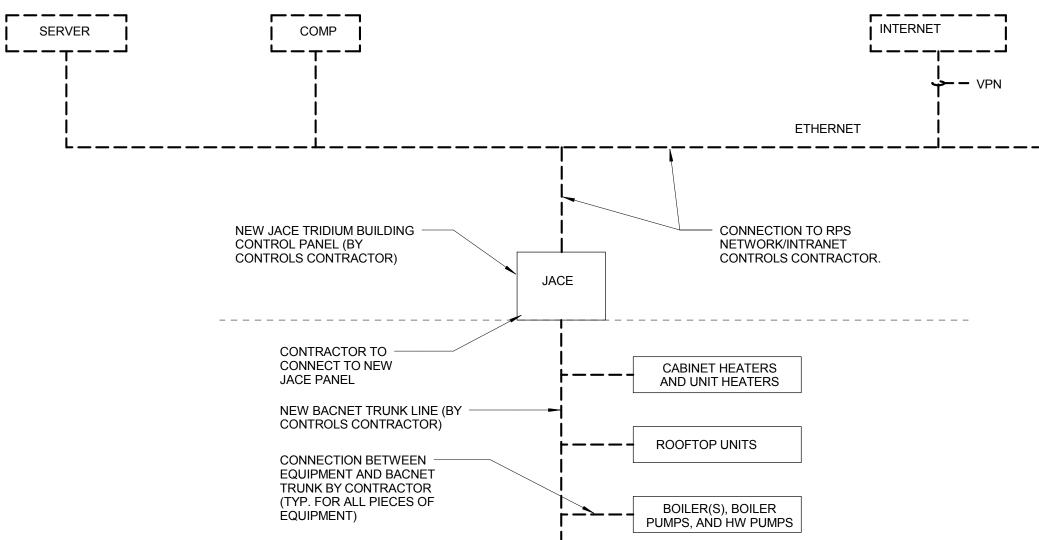




# SEQUENCE OF OPERATION 1. TEMPERATURE RESET OR WARM-UP PERIOD). TEMPERATURE SHALL BE READOUT ONLY. (ADJ.) THE VAV AIRFLOW DAMPER WILL OPEN TO MAXIMUM AIRFLOW RATE. (ADJ.)

10.	PREVENT OVERCOOLING OF THE SPA
11.	CARBON DIOXIDE SENSOR CONTROL SUPPLIED BY TERMINAL UNIT TO MAII
$\sim$	
12.	FOR VAV-A209 SERVING KITHCHEN HOCT IS CFM VALUE, WHEN KITCHEN HOOD IS
m	mmmmm
	(

# **CONTROLS NETWORK / BACNET TRUNK RISER SCHEMATIC**



10.

# **INITIAL SPACE TEMPERATURE SETPOINTS**

SEASON	MODE	SPACE TEMPERATURE [DEG F, ADJ]	TIME OF DAY
	OCCUPIED	74	7 AM -5 PM (WD)
COOLING	UNOCCUPIED	80	12 AM - 7 AM (WD) 5 PM - 12 AM (WD) 12 AM - 12 AM (WE, H)
	OCCUPIED	70	7 AM -5 PM (WD)
HEATING	UNOCCUPIED	65	12 AM - 7 AM (WD) 5 PM - 12 AM (WD) 12 AM - 12 AM (WE, H)

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# MINIMUM POINTS LIST



"OCCUPIED" AND "UNOCCUPIED" MODE IS TO PROGRAMMED THROUGH THE BUILDING MANAGMENT SYSTEM.

SUPPLY AIR IS TO BE AVAILABLE IN OCCUPIED MODE AND UNAVAILABLE IN UNOCCUPIED MODE (UNLESS UNOCCUPIED MODE HAS BEEN OVERRIDDEN TO RECIRCULATION MODE DUE TO SPACE

THROUGH THE BUILDING MANAGEMENT SYSTEM OPERATORS WORKSTATION IT SHALL BE POSSIBLE TO READ AND ADJUST SUPPLY AIRFLOW AND SPACE TEMPERATURE. DISCHARGE

OCCUPIED CYCLE: VAV AIRFLOW WILL PROVIDE VENTILATION AIR TO SPACE AT DESIGN AIRFLOWS WHEN NO HEATING OR COOLING IS REQUESTED BY THERMOSTAT.

FOR VAV BOXES SERVING SPACES WITH SUPPLEMENTAL RADIANT HEATING, FOLLOW THE BELOW SEQUENCE:

5.1. ON A CALL FOR HEATING, THE PERIMETER FINNED TUBE RADIATION CONTROL VALVE WILL OPEN, AND THE VAV AIRFLOW DAMPER WILL GO TO ITS DESIGN MINIMUM AIRFLOW SETTING. 5.2. IF THE SPACE REQUIRES ADDITIONAL HEATING, THE CONTROL VALVE ON THE HOT WATER COILS ON THE VAV BOX WILL OPEN TO MAINTAIN A MAXIMUM OF 90 DEGREES F (ADJ.) 5.3. ON ADDITIONAL HEATING DEMAND, THE AIRFLOW DAMPER WILL OPEN TO THE HEATING MAXIMUM AIRFLOW SETTING. MAXIMUM DISCHARGE AIR TEMPERATURE SHALL BE 90 DEGREES F

5.4. UPON MEETING HEATING DEMAND, AND THE VAV AIRFLOW DAMPER WILL RESTRICT TO AIRFLOW MINIMUM. IF HEATING DEMAND IS STILL REDUCED, THE CONTROL VALVE ON THE VAV HEATING COIL WILL MODULATE DOWN TO CLOSED. IF THE ROOM CONTINUES TO HEAT UP, THE CONTROL VALVE ON THE RADIANT PANELS WILL MODULATE DOWN TO CLOSED, AND THEN

FOR VAV BOXES SERVING SPACES WITH NO SUPPLEMENTAL RADIANT HEATING, FOLLOW THE BELOW SEQUENCE:

6.1. ON A CALL FOR HEATING, THE VAV AIRFLOW DAMPER WILL GO TO ITS DESIGN MINIMUM AIRFLOW SETTING.

6.2. IF THE SPACE REQUIRES ADDITIONAL HEATING, THE CONTROL VALVE ON THE HOT WATER COILS ON THE VAV BOX WILL OPEN TO MAINTAIN A MAXIMUM OF 90 DEGREES F (ADJ.) 6.3. ON ADDITIONAL HEATING DEMAND, THE AIRFLOW DAMPER WILL OPEN TO THE HEATING MAXIMUM AIRFLOW SETTING. MAXIMUM DISCHARGE AIR TEMPERATURE SHALL BE 90 DEGREES F

6.4. UPON MEETING HEATING DEMAND, AND THE VAV AIRFLOW DAMPER WILL RESTRICT TO AIRFLOW MINIMUM. IF HEATING DEMAND IS STILL REDUCED, THE CONTROL VALVE ON THE VAV HEATING COIL WILL MODULATE DOWN TO CLOSED. IF THE ROOM CONTINUES TO HEAT UP, THE VAV AIRFLOW DAMPER WILL OPEN TO MAXIMUM AIRFLOW RATE. DURING BUILDING WARM-UP, THE CONTROL VALVES FOR BOTH THE FINNED TUBE RADIATION AND VAV HYDRONIC COIL WILL OPEN SIMULTANEOUSLY. SUPPLY AIR VOLUME WILL INCREASE TO ITS SCHEDULED HEATING MAXIMUM. ONCE BUILDING ENTERS REGULAR OCCUPIED MODE, THE BOX WILL BEGIN OCCUPIED SEQUENCE IN STEP 4.

DURING A CALL FOR COOLING, BOTH THE CONTROL VALVE FOR THE HYDRONIC COIL IN THE VAV TERMINAL BOX AND THE CONTROL VALVE FOR THE PERIMETER RADIATION WILL BE CLOSED. SUPPLY AIR IS INCREASED TO THE SCHEDULED MAXIMUM. ONCE ROOM TEMPERATURE IS ACHEIVED, AIRFLOW RATE IS REDUCED TO BOX MINIMUM. UNOCCUIPED CYCLE: IF SUPPLY AIRFLOW IS UNAVAILABLE, THE AIR VOLUME DAMPER IS TO CLOSE AND THE HYDRONIC HEATING COIL IS LOCKED OUT DUE TO A LACK OF AIRFLOW.

IF THE HEATING WATER SYSTEM IS NOT AVAILABLE AND THE SPACES ARE BELOW TEMPERATURE SETPOINT CALLING FOR HEATING THE VAV-BOXES SHALL OPERATE AT MINIMUM AIRFLOW TO PACES.

> : FOR SPACES WITH A CARBON DIOXIDE SENSOR SHALL PROVIDE BAS SYSTEM WITH ROOM CARBON DIOXIDE LEVEL SIGNAL. INCREASE MINIMUM PRIMARY AIR INTAIN CARBON DIOXIDE LEVEL BELOW 1000 PPM (ADJ). HOOD'S MAKE-UP AIR, INTERFACE VAV WITH KITHCHEN HOOD'S CONTROLS: WHEN KITCHEN HOOD IS TURNED ON VAV BOX SHALL OPEN TO SCHEDULED MAX

S TURNED OFF VAV BOX SHALL FULLY CLOSE TO (0 CFM). NO REHEAT IS REQURIED FOR FOR VAV-A209. 

#### NARIABLE VOLUME TERMINAL UNIT WITH REHEAT ( 2 ) v*r*

#### _____ INTERNET └─ — — — _I__ — — → Ϋ́́Υ – VPN ETHERNET CONNECTION TO RPS NETWORK/INTRANET CONTROLS CONTRACTOR. JACE CABINET HEATERS AND UNIT HEATERS ROOFTOP UNITS BOILER(S), BOILER PUMPS, AND HW PUMPS VARIABLE AIR VOLUME - _ _ _ _ TERMINALS EXHAUST FANS -----URINAL FLUSH VALVE DOMESTIC WATER HEATER(S) ► — — — AND HOT WATER RETURN TEMPERATURE

#### **ROCKFORD SCHOOL DISTRICT TEMPERATURE CONTROLS WIRING STANDARD**

1. CABLE SHALL BE 18 AWG WIRE, PLENUM RATED, SHIELDED

2. COLOR CODING TABLE (VERIFY FINAL COLOR CODING WITH SCHOOL DISTRICT AND SCHOOL DISTRICT'S CONTROLS MAINTENANCE CONTRACTOR PRIOR TO PURCHASE):

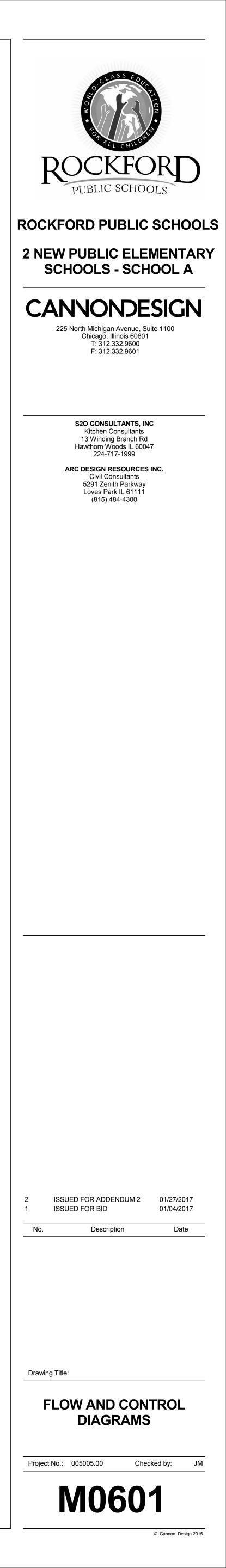
N2 BUS	BLUE
ANALOG INPUT CABLE	YELLOW
ANALOG OUTPUT CABLE	TAN
BINARY INPUT CABLE	ORANGE
BINARY OUTPUT CABLE	VIOLET
N1 BUS	PURPLE
24 VAC CABLE	GRAY
SPARE	WHITE
ETHERNET CAT-5	PURPLE
N2 E	PINK

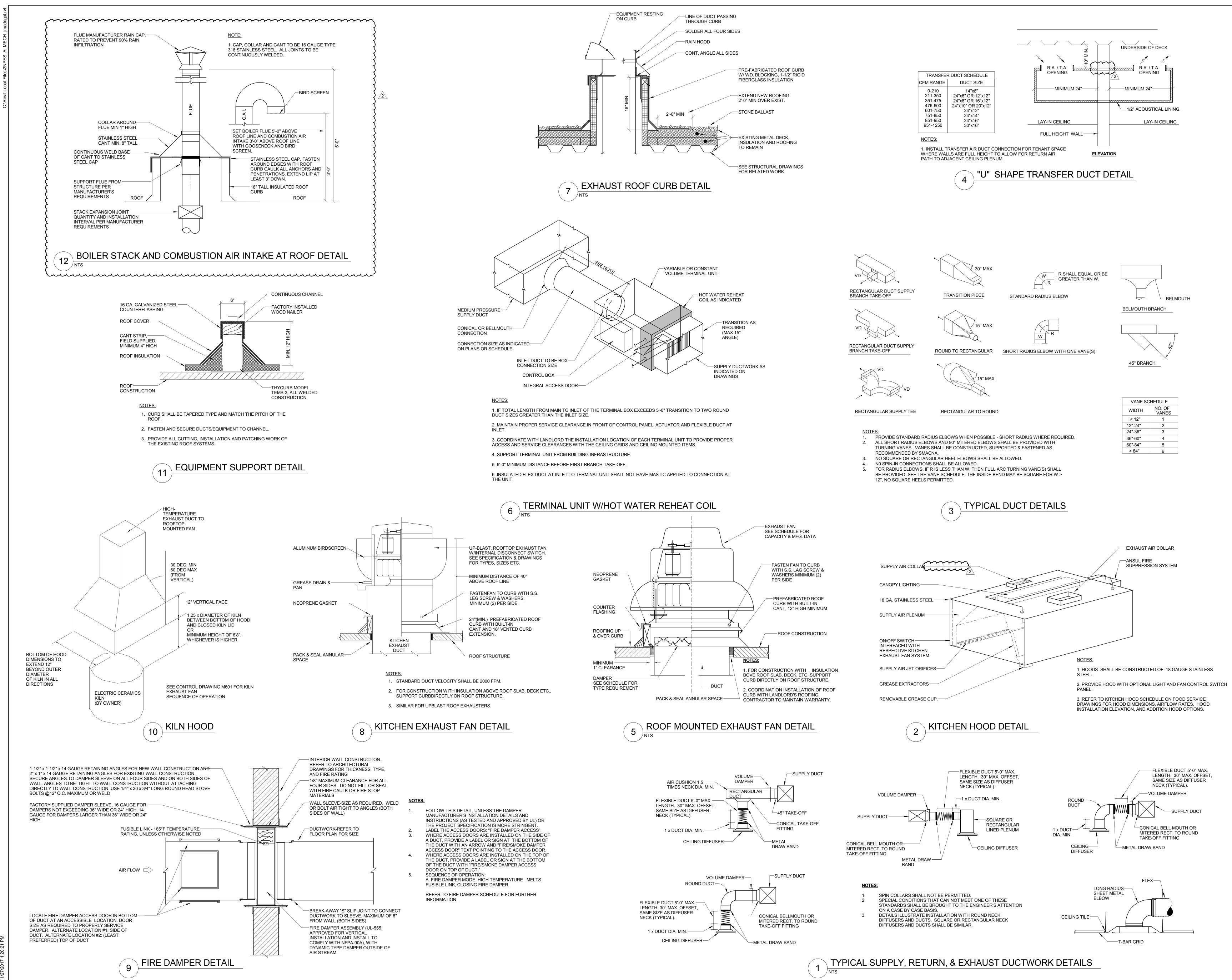
ON CONTROLS DRAWINGS, DI/DO SYMBOLS REFER TO DIGITAL SIGNALS, WHICH ARE BINARY INPUT / OUTPUT SYMBOLS

# **GENERAL CONTROLS SYSTEM REQUIREMENTS**

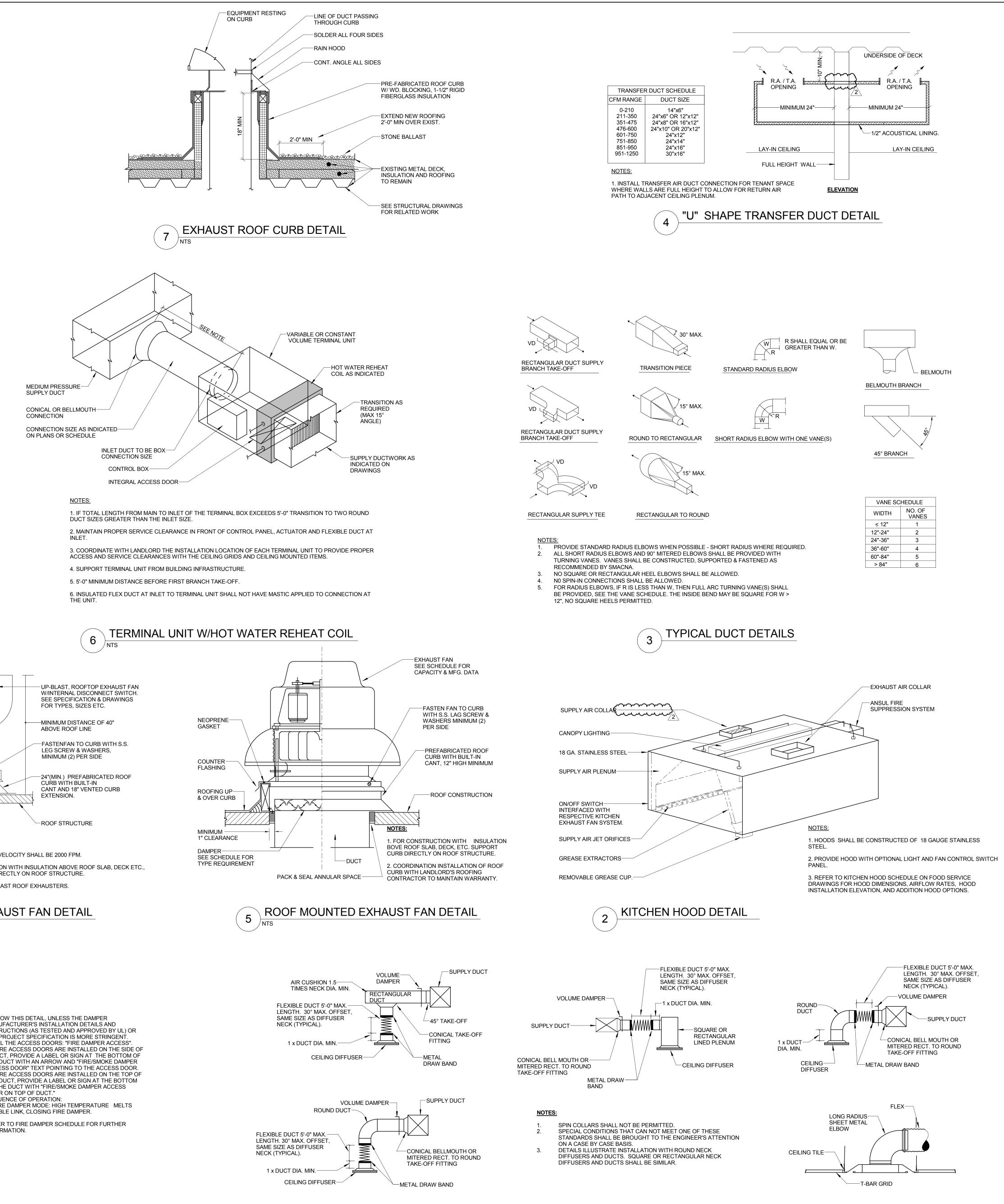
- 1. CONTROLS CONTRACTOR TO PROVIDE AND INSTALL NEW JACE-TRIDIUM BUILDING CONTROL PANEL IN BOILER ROOM (SEE PLANS). CONTRACTOR TO INSTALL NEW BACNET TRUNK LINE THROUGH SCHOOL, AND CONNECT TO NEW JACE PANEL AND EACH NEW FIELD LEVEL CONTROLLER.
- 2. EACH NEW PIECE OF EQUIPMENT ON PROJECT IS TO BE PROVIDED WITH A BACNET COMPATIBLE APPLICATION SPECIFIC (SOMETIMES TERMED FIELD-LEVEI THE MANUFACTURER, AND CONTROLS CONTRACTOR IS TO CONNECT NEW APPLICATION SPECIFIC CONTROLLER TO NEW BACNET TRUNK.
- 3. WHERE POSSIBLE, PROVIDE SPACES WITH STAINLESS STEEL FLAT-PLATE WALL THERMOSTATS INSTEAD OF THERMOSTATS WITH DISPLAYS. ALL TEMPERATURE CONTROLS ARE TO BE DONE THROUGH BAS. IF FLAT-PLATE THERMOSTAT CONTROLLERS ARE NOT AVAILABLE, PROVIDE LOCKABLE COVERS FOR ALL TEMPERATURE SENSORS.
- 4. CONTROLS CONTRACTOR TO PROVIDE OWNER WITH A COPY OF ALL CONTROLS LANGUAGE (S) USED ON PROJECT SO THAT DISTRICT MAY MANAGE ITS OWN PROGRAMMING ONCE WARRANTY PERIOD HAS ELAPSED.
- 5. WHEN POSSIBLE, ALL DATA CONTROL POINTS ARE TO BE NVI CLASSIFICATION ALLOWING FOR UNLIMITED READ/WRITE CAPABILITIES.

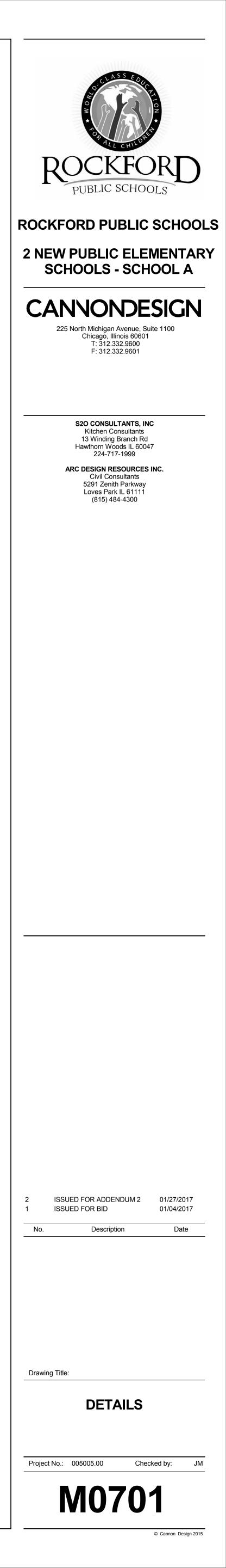


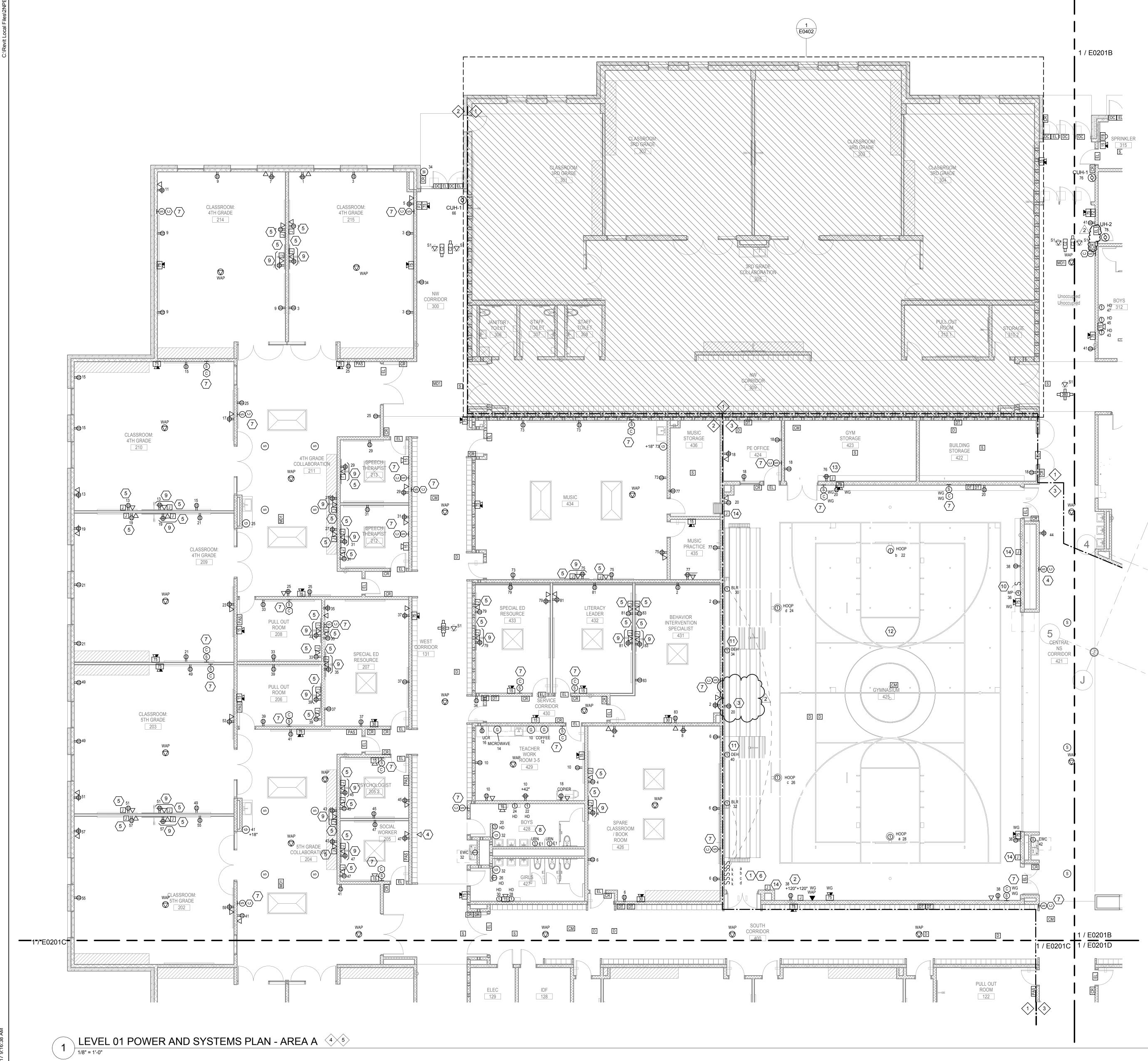




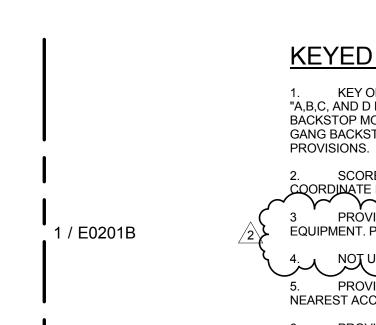
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#### KEYED NOTES 📿 :

KEY OPERATED SWITCHES FOR MOTORIZED BACKSTOPS. ENGRAVE COVERPLATES WITH "A,B,C, AND D BACKSTOP" LETTERING. PROVIDE ALL CONTROL WIRING AND INTERFACE WITH BACKSTOP MOTORS AS REQUIRED. KEYED SWITCHES SHALL BE BY IPI BY BISON OR DRAPER. GANG BACKSTOP SWITCHES IN A 4 GANG ARRANGEMENT. SEE KEYED NOTE #6 FOR ADDITIONAL

2. SCOREBOARD LOCATION. PROVIDE 1" C. TO DESIGNATED SCORERS TABLE LOCATION. COORDINATE EXACT LOCATION WITH BPS PRIOR TO BOUGH-IN. PROVIDE DUPLEX MOUNTED ABOVE TOP OF BLEACHERS FOR CHARGING SCORER'S EQUIPMENT. PROVIDE WEATHERPROOF COVER.

PROVIDE AND INSTALL A SINGLE GANG JUNCTION BACKBOX WITH 1-1/4" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE.

6. PROVIDE A RECESSED LOCKABLE STAINLESS STEEL CABINET THAT WILL ENCLOSE THE CONTROLS FOR LIGHTING, BACKSTOPS, AND BLEACHERS. PROVIDE ENGRAVING FOR BLEACHER CONTROL SWITCHES: "N-BLEACHER", "S-BLEACHER". KEYED SWITCHES SHALL BE BY IPI BY BISION OR DRAPER. GANG BLEACHER SWITCHES IN 2-GANG ARRANGEMENT. PAINT CABINET TO MATCH WALL COLOR.

INTERCOM SPEAKER AND CLOCK SHALL BE FURNISHED BY RPS AND INSTALLED BY CONTRACTOR. PROVIDE ONE CATEGORY 6 CABLE AND BACKBOX AT THIS LOCATION. CONTRACTOR SHALL TEST AND TERMINATE CABLE TO THE NEAREST IDF CLOSET. 8. ELECTRICAL CONNECTION SHALL BE HIDDEN BEHIND FLUSH VALVE. EXPOSED FLEXIBLE

CONDUIT IS NOT ACCEPTABLE. EXACT MOUNTING HEIGHT OF QUAD RECEPTACLE, DATA OUTLET, AND A/V BACKBOX FOR

SMARTBOARD / INTERACTIVE DISPLAY SHALL BE COORDINATED WITH RPS PRIOR TO ROUGH-IN. 10. PROVIDE A RECESSED, STAINLESS STEEL, LOCKABLE CABINET THAT WILL ENCLOSE THE LIGHTING CONTROL WALL STATION AND MOTORIZED PARTITION KEYED SWITCH. PAINT CABINET TO MATCH WALL PAINT COLOR. PROVIDE ENGRAVING FOR MOTORIZED PARTITION SWITCH TO READ "PARTITION". KEYED SWITCH SHALL BE BY IPI BY BISION OR DRAPER.

11. PROVIDE 120V CONNECTION TO DEHUMIDIFICATION UNDER FLOOR SYSTEM. CONTROL PANEL SHALL BE LOCATED RIGHT ABOVE THE FLOOR WITH METAL BLANK COVER. PROVIDE 2#18 AWG WIRE TO HUMIDISTAT BELOW FLOOR. PROVIDE 2#18 AWG WIRES TO THE TWO EXHAUST FANS. PROVIDE ALL WIRING AND TERMINATIONS PER MANUFACTURERS INSTRUCTIONS.

12. COORDINATE LOCATION OF ALL ELECTRICAL DEVICES AT GYMNASIUM WITH WALL MATS SO THAT NO CONFLICTS OCCUR. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. 13. PROVIDE A SINGLE GANG JUNCTION BOX WITH 1-1/4" CONDUIT TO THE NEAREST TRUSS FOR

OWNER PROVIDED AUDIO RACK. 14. PROVIDE A SINGLE GANG JUNCTION BOX WITH 1" CONDUIT MOUNTED TO NEAREST TRUSS. COORDINATE HEIGHT AND LOCATION OF THE JUNCTION BOX WITH RPS PRIOR TO INSTALLATION. PROVIDE AND INSTALL CABLE SUPPORT/HOOKS FOR 2/22 AWG CABLING THAT WILL BE ROUTED TO GYM STORAGE 423. PROVIDE AUDIO CABLING FROM EACH SPEAKER BACK TO GYM STORAGE 423. COORDINATE WITH ROCKFORD PUBLIC SCHOOL IT FOR EXACT CABLING REQUIREMENT. NEATLY

# BRANCH CIRCUIT NOTES

1. EXTEND BRANCH CIRCUITS IN THIS AREA TO THE FOLLOWING BRANCH PANELBOARDS, UNLESS OTHERWISE NOTED: 120 / 208V PANELBOARDS 1LNL1 - NORMAL POWER

COIL THE CABLE IN GYM STORAGE 423 AT THE DESIGNATED AUDIO RACK LOCATION.

1LEL1 - EMERGENCY POWER

2. EXTEND BRANCH CIRCUITS IN THIS AREA TO THE FOLLOWING BRANCH PANELBOARDS, UNLESS OTHERWISE NOTED:

<u>120 / 208V PANELBOARDS</u> 1LNL4 - NORMAL POWER 1LEL1 - EMERGENCY POWER 3. EXTEND BRANCH CIRCUITS IN THIS AREA TO THE FOLLOWING BRANCH

PANELBOARDS, UNLESS OTHERWISE NOTED: 120 / 208V PANELBOARDS 1LNL3 - NORMAL POWER

1LEL1 - EMERGENCY POWER

# **GENERAL NOTES:**

A. VERIFY ALL POWER AND DATA RECEPTACLE MOUNTING HEIGHTS WITH OWNER PRIOR TO INSTALLATION.

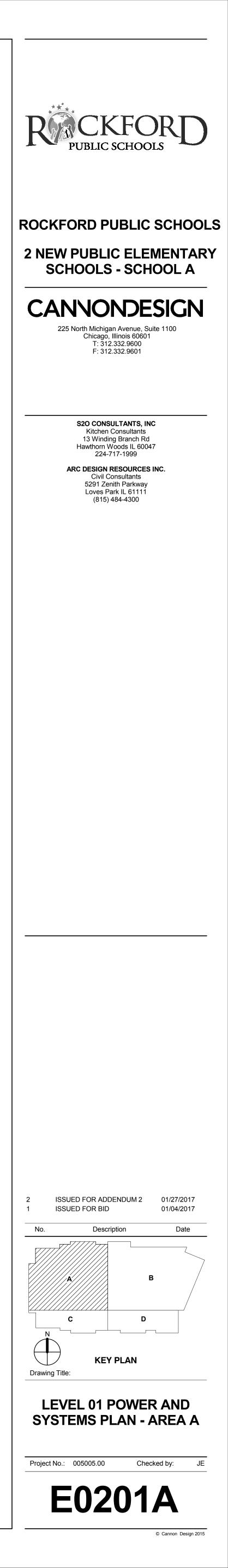
B. PENETRATIONS THROUGH THE STORM SHELTER ENVELOPE LARGER THAN 3-1/2 SQUARE INCHES IN AREA FOR RECTANGULAR OPENINGS OR 2-1/16" IN DIAMETER SHALL BE CONSIDERED AN OPENING AND SHALL BE PROVIDED WITH AN OPENING PROTECTIVE DEVICE. REFERENCE STRUCTURAL DRAWINGS. AVOID BUNDLING CONDUIT FEEDERS IN CLOSE PROXIMITY SO THAT THE SHELTER ENVELOPE IS NOT DEGRADED OR THE PENETRATION FALLS INTO THE CONDITION AS DESCRIBED ABOVE.

PROVIDE A MINIMUM OF 16" SEPARATION BETWEEN DEVICES ON OPPOSITE SIDES OF WALLS.

# HORIZONTAL TERMINATION NOTES 💚 :

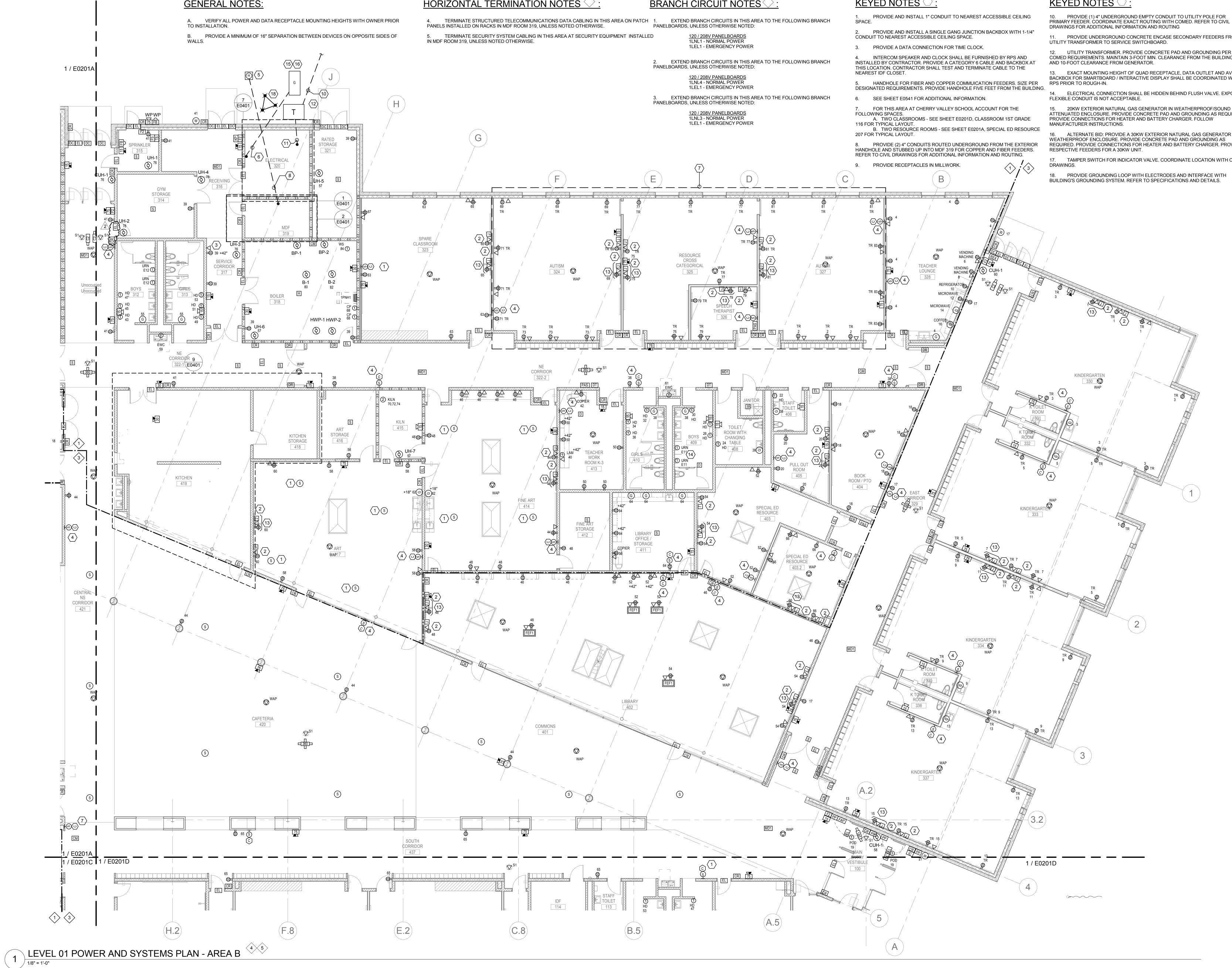
4. TERMINATE STRUCTURED TELECOMMUNICATIONS DATA CABLING IN THIS AREA ON PATCH PANELS INSTALLED ON RACKS IN TELECOMMUNICATIONS ROOM 128, REFER TO E0201C FOR ROOM LOCATION.

TERMINATE SECURITY SYSTEM CABLING IN THIS AREA AT SECURITY EQUIPMENT INSTALLED IN TELECOMMUNICATIONS ROOM 128, REFER TO E0201C FOR ROOM LOCATION.



#### **GENERAL NOTES:**

TO INSTALLATION.



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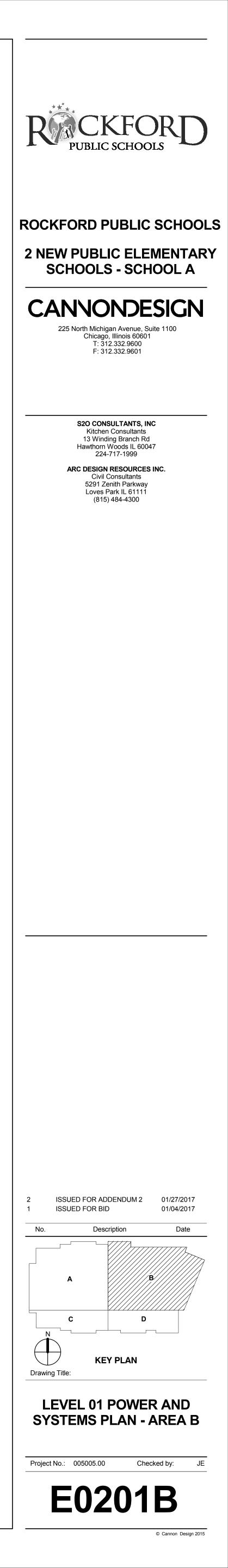
BRANCH CIRCUIT NOTES :

#### KEYED NOTES 📿 :

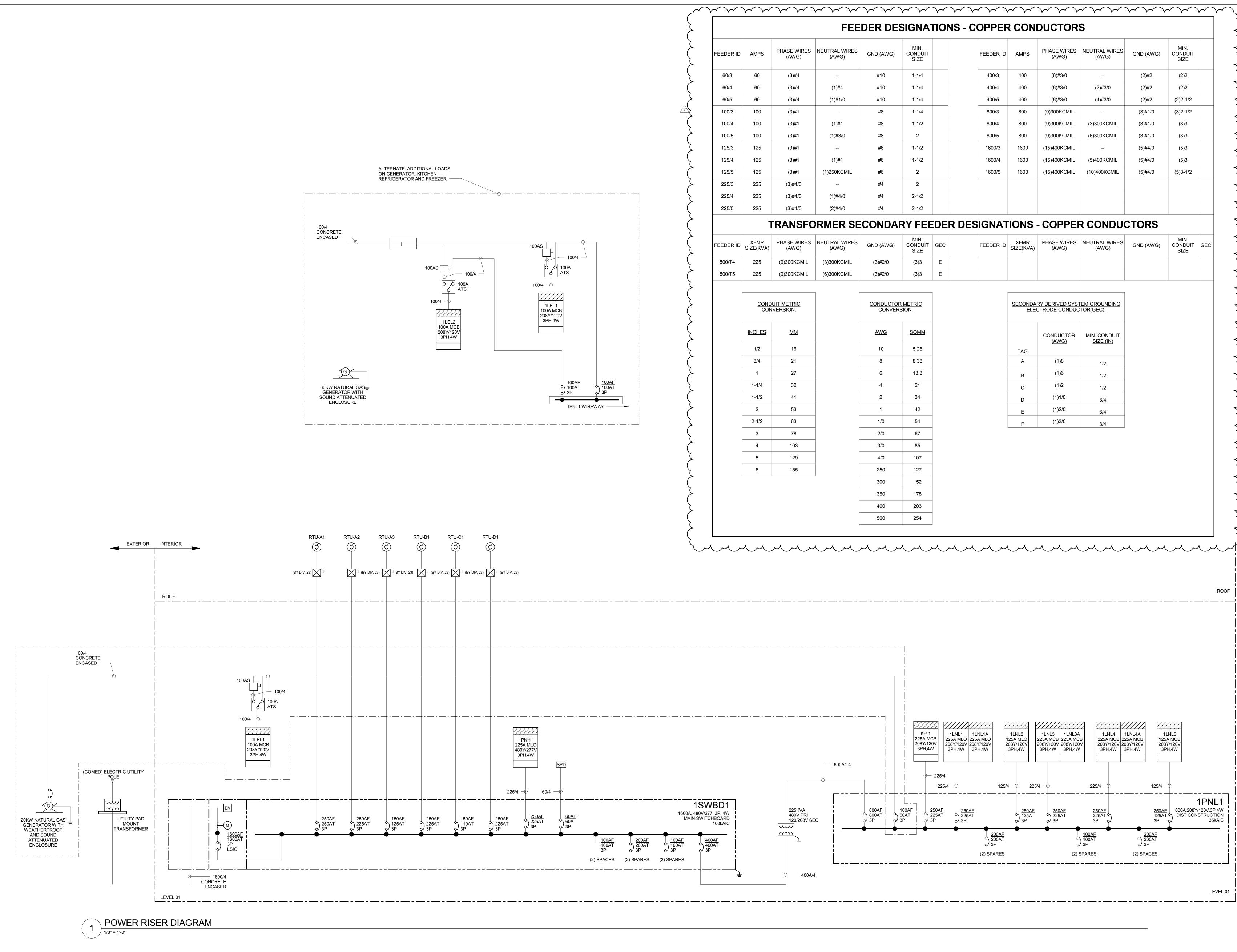
# KEYED NOTES 📿 :

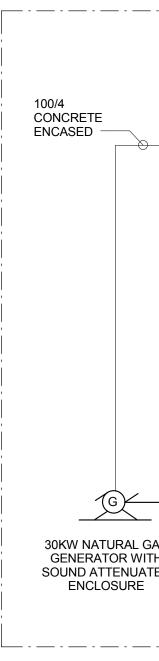
PROVIDE UNDERGROUND CONCRETE ENCASE SECONDARY FEEDERS FROM 12. UTILITY TRANSFORMER. PROVIDE CONCRETE PAD AND GROUNDING PER COMED REQUIREMENTS. MAINTAIN 3-FOOT MIN. CLEARANCE FROM THE BUILDING 13. EXACT MOUNTING HEIGHT OF QUAD RECEPTACLE, DATA OUTLET AND AV BACKBOX FOR SMARTBOARD / INTERACTIVE DISPLAY SHALL BE COORDINATED WITH 14. ELECTRICAL CONNECTION SHALL BE HIDDEN BEHIND FLUSH VALVE. EXPOSED 20KW EXTERIOR NATURAL GAS GENERATOR IN WEATHERPROOF/SOUND ATTENUATED ENCLOSURE. PROVIDE CONCRETE PAD AND GROUNDING AS REQUIRED. PROVIDE CONNECTIONS FOR HEATER AND BATTERY CHARGER. FOLLOW 16. ALTERNATE BID: PROVIDE A 30KW EXTERIOR NATURAL GAS GENERATOR IN WEATHERPROOF ENCLOSURE. PROVIDE CONCRETE PAD AND GROUNDING AS REQUIRED. PROVIDE CONNECTIONS FOR HEATER AND BATTERY CHARGER. PROVIDE 17. TAMPER SWITCH FOR INDICATOR VALVE. COORDINATE LOCATION WITH CIVIL

18. PROVIDE GROUNDING LOOP WITH ELECTRODES AND INTERFACE WITH BUILDING'S GROUNDING SYSTEM. REFER TO SPECIFICATIONS AND DETAILS.

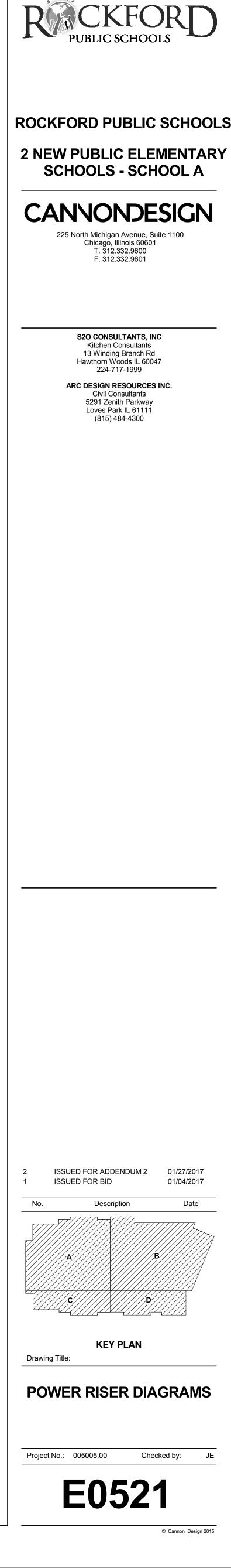


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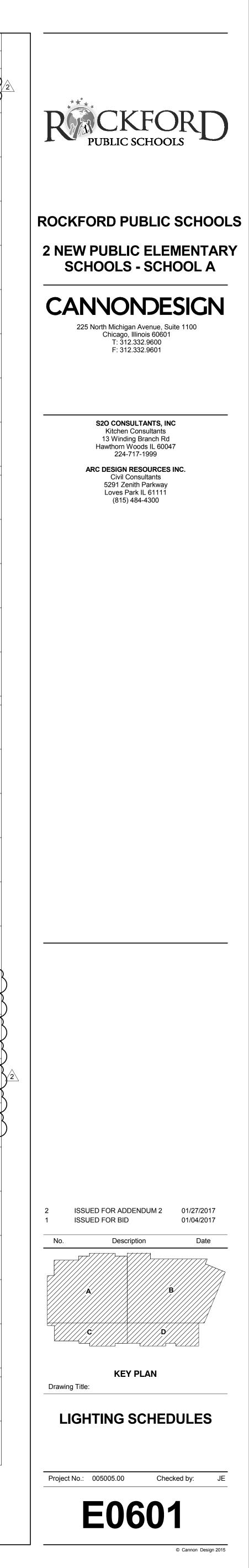


	FEE	DER DE	SIGNA	TIO	- COPPER	R CON	DUCTOR	S		
E WIRES WG)	NEUTRAL WIRES (AWG)	GND (AWG)	MIN. CONDUIT SIZE		FEEDER ID	AMPS	PHASE WIRES (AWG)	NEUTRAL WIRES (AWG)	GND (AWG)	MIN. CONDUIT SIZE
)#4		#10	1-1/4		400/3	400	(6)#3/0		(2)#2	(2)2
)#4	(1)#4	#10	1-1/4		400/4	400	(6)#3/0	(2)#3/0	(2)#2	(2)2
)#4	(1)#1/0	#10	1-1/4		400/5	400	(6)#3/0	(4)#3/0	(2)#2	(2)2-1/2
)#1		#8	1-1/4		800/3	800	(9)300KCMIL		(3)#1/0	(3)2-1/2
)#1	(1)#1	#8	1-1/2		800/4	800	(9)300KCMIL	(3)300KCMIL	(3)#1/0	(3)3
)#1	(1)#3/0	#8	2		800/5	800	(9)300KCMIL	(6)300KCMIL	(3)#1/0	(3)3
)#1		#6	1-1/2		1600/3	1600	(15)400KCMIL		(5)#4/0	(5)3
)#1	(1)#1	#6	1-1/2		1600/4	1600	(15)400KCMIL	(5)400KCMIL	(5)#4/0	(5)3
)#1	(1)250KCMIL	#6	2		1600/5	1600	(15)400KCMIL	(10)400KCMIL	(5)#4/0	(5)3-1/2
#4/0		#4	2							
#4/0	(1)#4/0	#4	2-1/2							
<b>#4/0</b>	(2)#4/0	#4	2-1/2							
ISFC	ORMER SE			EDE	DESIGNAT		- COPPEI		CTORS	
WIRES VG)	NEUTRAL WIRES (AWG)	GND (AWG)	MIN. CONDUIT SIZE	GEC	FEEDER ID	XFMR SIZE(KVA)	PHASE WIRES (AWG)	NEUTRAL WIRES (AWG)	GND (AWG)	MIN. CONDUIT GEO SIZE
KCMIL	(3)300KCMIL	(3)#2/0	(3)3	E						
KCMIL	(6)300KCMIL	(3)#2/0	(3)3	E						
<u>RIC</u> <u>1:</u>		CONDUCTOF	<u>R METRIC</u> SION:			SECONDA ELE	RY DERIVED SYS CTRODE CONDUC	TEM GROUNDING TOR(GEC):		
IM		<u>AWG</u>	<u>SQMM</u>				CONDUCTOR (AWG)	MIN. CONDUIT SIZE (IN)		
6		10	5.26			<u>TAG</u>				
1		8	8.38			A	(1)8	1/2		
.7		6	13.3			В	(1)6	1/2		
2		4	21			С	(1)2	1/2		
1		2	34			D	(1)1/0	3/4		
63		1	42			E	(1)2/0	3/4		
3		1/0	54			F	(1)3/0	3/4		
5		2/0	67							
				1						
78 03		3/0	85							
78		3/0	85 107	-						
78 03				_						



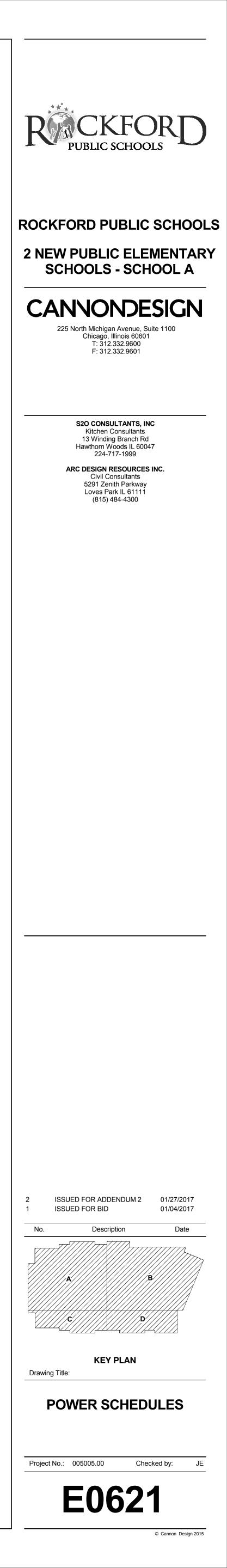
TAG LP6A	DESCRIPTION 7" x 4FT LED LINEAR PENDANT BI-DIRECTIONAL DISTRIBUTION, CONTINUOUSLY MOUNT (MUSIC	INSTALLATION METHOD P-AC	DEPTH 1-13/16"	LIGHT SOU SPEC LED 5000K	QTY - IN	BALLAST/DI SPEC NTERNAL LED	RIVER VOLT 120	INPUT WATTS 24.2 PER 4ET	B EFF.	SHIELDING/OPTICS 75% DIRECT/ 25% INDIRECT, 129 SATINE LENS, MATTE FINISH, C DUST GUARD		FEATURES/OPTIONS DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	REFERENCED PRODUCTS PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	N
	AND COLLABORATION AREA)			3400 LUM PER 4FT		0-10V		4FT						
LP6A-EM	7" x 4FT LED LINEAR PENDANT BI-DIRECTIONAL DISTRIBUTION, CONTINUOUSLY MOUNT, INTEGRAL BATTERY BACKUP, (COLLABORATION AREA)	P-AC	1-13/16"	LED 5000K 3400 LUM PER	D	NTERNAL LED DIMMABLE 0-10V	120	24.2 PER 4FT	84 LPW	75% DIRECT/ 25% INDIRECT, 129 SATINE LENS, MATTE FINISH, C DUST GUARD		DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE, 2 HOURS EMERGENCY BATTERY BACKUP	PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	
LP6B	7" x 8FT LED LINEAR PENDANT BI-DIRECTIONAL DISTRIBUTION, INDIVIDUALLY MOUNT (COLLAB)	P-AC	1-13/16"	4FT LED 5000K 3400 LUM PER	D	NTERNAL LED DIMMABLE 0-10V	120	24.2 PER 4FT	84 LPW	75% DIRECT/ 25% INDIRECT, 129 SATINE LENS, MATTE FINISH, C DUST GUARD		DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	
LP6B-EM	7" x 8FT LED LINEAR PENDANT BI-DIRECTIONAL DISTRIBUTION, INDIVIDUALLY MOUNT (COLLAB)	P-AC	1-13/16"	4FT LED 5000K 3400 LUM PER	D	NTERNAL LED DIMMABLE 0-10V	120	24.2 PER 4FT	84 LPW	75% DIRECT/ 25% INDIRECT, 129 SATINE LENS, MATTE FINISH, C DUST GUARD		DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE N-LITE EMERGENCY RELAY	PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	
LP7	4FT DIAMETER DECORATIVE CIRCULAR PENDANT LUMINAIRE (LIBRARY)	P-AC	≤4"H	4FT LED 5000K 3000 LUM	11 -	NTERNAL LED DIMMABLE 0-10V	120	72		FROSTED ACRYLIC LENS, FLUS BOTTOM OF THE HOUSING	H WITH	EXTRUDED ALUMINUM FRAME, FINISH TBD	NEIDHARDT INC - RP006R1-E OR APPROVED EQUIAL BY OCL, AXIS	
LP7A	4FT DIAMETER DECORATIVE CIRCULAR PENDANT LUMINAIRE	P-AC	≤4"H	LED 5000K 3000 LUM	D	NTERNAL LED DIMMABLE 0-10V	120	72		FROSTED ACRYLIC LENS, FLUS BOTTOM OF THE HOUSING	H WITH	EXTRUDED ALUMINUM FRAME, FINISH TBD	NEIDHARDT INC - RP006R1-E OR APPROVED EQUIAL BY OCL, AXIS	
LP7B	3FT DIAMETER DECORATIVE CIRCULAR PENDANT LUMINAIRE	P-AC	≤4"H	LED 5000K 2300 LUM	11 -	NTERNAL LED DIMMABLE 0-10V	120	56		FROSTED ACRYLIC LENS, FLUS BOTTOM OF THE HOUSING	H WITH	EXTRUDED ALUMINUM FRAME, FINISH TBD	NEIDHARDT INC - RP006R1-E OR APPROVED EQUIAL BY OCL, AXIS	
LP7C	2FT DIAMETER DECORATIVE CIRCULAR PENDANT LUMINAIRE	P-AC		LED 5000K 1500 LUM		LED	120	36		FROSTED ACRYLIC LENS, FLUS BOTTOM OF THE HOUSING	H WITH	EXTRUDED ALUMINUM FRAME, FINISH TBD	NEIDHARDT INC - RP006R1-E OR APPROVED EQUIAL BY OCL, AXIS	
LP8A LP8B LP8C LP9A LP9B	NOT USED NOT USED NOT USED NOT USED NOT USED					0-10V								
LP9C LX1	NOT USED 16.5"x 7"H LED EXTERIOR TRAPEZOID WALL MOUNT LUMINAIRE	SURFACE WALL	10-3/16" PROJ.	LED 5000K 2157 LUM		NTERNAL LED DRIVER	120	32	84 LPW	7 LED LIGHT BAR, SHARP CUTO DISTRIBUTION, TYPE 4 DISTRIE 0.187" CLEAR POLYCARBONATE	BUTION,	HIGH IMPACT RESISTANT INJECTION MOLDED POLYCARONATE, BALLAST HOUSING DIE-CAST ALUMINUM, GASKETED, WET LABEL, PHOTOCONTROL BUTTON TYPE, FINISH TBS	McGRAW-EDISON - IST-F01-BL4-7050 LITHONIA - WST	
LX1-EM	16.5"x 7"H LED EXTERIOR TRAPEZOID WALL MOUNT LUMINAIRE	SURFACE WALL	10-3/16" PROJ.	LED 5000K 2157 LUM		NTERNAL LED DRIVER	120	32	84 LPW	7 LED LIGHT BAR, SHARP CUTO DISTRIBUTION, TYPE 4 DISTRIE 0.187" CLEAR POLYCARBONATE	BUTION,	HIGH IMPACT RESISTANT INJECTION MOLDED POLYCARONATE, BALLAST HOUSING DIE-CAST ALUMINUM, GASKETED, WET LABEL, PHOTOCONTROL BUTTON TYPE, FINISH TBS N-LITE EMERGENCY RELAY	McGRAW-EDISON - IST-F01-BL4-7050 LITHONIA - WST	
XB1 XD1	NOT USED 4" APERTURE LED DOWNLIGHT, WET LABEL	RECESSED	6-1/8"	LED 5000K 1000 LUM		NTERNAL LED DRIVER	UNIV	20	50 LM/W	COMFORT CLEAR DIFFUSE REF	LECTOR	SELF-FLANGE, PAINTED WHITE, U.N.O., WET LABER, IP66 RATED	GOTHAM -EVO4-NLIGHT FOCAL POINT - FL4D PHILIPS-LIGHTOLIER - C4L10DL	
XG1	9""x7" FLOOD UPLIGHT LED LIGHT (FLAG POLES)	GROUND, CONCRETE BASE	8"	LED 5000K 5785 LUM	1 1	NTERNAL ED DRIVER	120	51		TEMPERED CLEAR DIFFUSER, DISTRIBUTION, BARN DOORS	6X6	DIE CAST ALUMINUM HOUSING, FINISH STANDARD TBS, IP66 RATED, 6" STEM, SLIPFITTER AND SURFACE MOUNT TENON, LOCKABLE, AIM TOWARDS TO FLAG, PROVIDE CONCRETE BASE 4" HEIGHT BY 12" DIAMETER	CREE-KR4 PORTFOLIO - LD4 LUMARK - NFFLD-SC70-66-7030- S-TYS BARN DOO	
XP1	20FT LIGHT POLE WITH SINGLE HEAD LUMINAIRE	POLE BASE	23-1/2" PROJ.	LED 5000K 12,000 LUM	D	NTERNAL LED DIMMABLE 0-10V	208	134	89LPW	PRECISION MOLDED ACRYLIC L TYPE FORWARD THROW DISTR HOUSE SIDE SHEILD	ENSES, IBUTION	SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 20FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE	LITHONIACXS1LED-60C-700-TFM HS -SPASSS205G-NLIGHT	
XP1A	15FT LIGHT POLE WITH SINGLE HEAD LUMINAIRE	POLE BASE	23-1/2" PROJ.	LED 5000K 12,000 LUM	- 11 D	NTERNAL LED DIMMABLE 0-10V	208	134	89LPW	PRECISION MOLDED ACRYLIC L TYPE FORWARD THROW DISTR HOUSE SIDE SHEILD	ENSES, IBUTION	SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 15FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE	LITHONIACXS1LED-60C-700-TFM HS -SPASSS205G-NLIGHT	1
XP2	20FT LIGHT POLE WITH SINGLE HEAD LUMINAIRE	POLE BASE	23-1/2" PROJ.	LED 5000K 12,000 LUM	- 11 D	NTERNAL LED DIMMABLE 0-10V	208	134	89LPW	PRECISION MOLDED ACRYLIC L TYPE 3 DISTRIBUTION, HOUSE S SHEILD		SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 20FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE	LITHONIACXS1LED-60C-700-T3 HS -SPASSS205G-NLIGHT	1
XP2A	20FT LIGHT POLE WITH SINGLE HEAD LUMINAIRE WITH INTEGRAL PHOTOCELL	POLE BASE	23-1/2" PROJ.	LED 5000K 12,000 LUM	D	NTERNAL LED DIMMABLE 0-10V	208	134	89LPW	PRECISION MOLDED ACRYLIC L TYPE 3 DISTRIBUTION, HOUSE S SHEILD		SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 20FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE	LITHONIACXS1LED-60C-700-T3 HS -SPASSS205G-NLIGHT-DLL127F 1.5 JU	1
XP3	20FT LIGHT POLE WITH SINGLE HEAD LUMINAIRE	POLE BASE	23-1/2" PROJ.	LED 5000K 12,000 LUM		NTERNAL LED DIMMABLE 0-10V	208	134	89LPW	PRECISION MOLDED ACRYLIC L TYPE 4 DISTRIBUTION, HOUSE S SHEILD		SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 20FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE	LITHONIACXS1LED-60C-700-T4 HS -SPASSS205G-NLIGHT	1
XP4 XP5	NOT USED 20FT LIGHT POLE WITH DOUBLE HEADS AT 180 DEGREE LUMINAIRE	POLE BASE	23-1/2" PROJ.	(2) LED 5000K 12,000 LUM	D	NTERNAL LED DIMMABLE 0-10V	208	268	89LPW	PRECISION MOLDED ACRYLIC L TYPE FORWARD THROW DISTR HOUSE SIDE SHEILD	ENSES, IBUTION	SINGLE PIECE DIE CAST HOUSING, HOUSESIDE SHIELD, FINISH TBS, MOUNT ON 20FT SQUARE STRAIGHT STEEL POLE AND 36" H x 24" DIA CONCRETE BASE, 180 DEGREE HEADS ORIENTATION	LITHONIA(2) HEADS CXS1LED-60C-700-T3 HS -SPASSS205G-NLIGHT	1
XS1-EM	13" LED EXTERIOR LUMINAIRE VANDAL PROOF (EXTERIOR CANOPY)	SURFACE	4" H	LED 5000K 1000 LUM	11 -	NTERNAL LED DRIVER	120	82	110 LM/W	UV STABILIZED HIGH IMPACT RESISTANT POLYCARBONATE L	ENS	ONE-PIECE DIE-CAST ALUMINUM HOUSING, HEAVY WALL CONSTRUCTION, FINISH TBD, WET LABEL, N-LITE EMERGENCY RELAY	KENALL- MR13L	$\left\{ \left\{ \right\} \right\}$
EBU-1	SELF CONTAINED, RECESSED, STANDBY/EMERG. LIGHTING BATTERY UNIT	RECESSED LG		12V, 9W PAR-36, SEALED BEAM	2		120	18W				STEEL SURFACE HOUSING-WHITE, PPC-ADJUSTABLE LAMP HEADS-12VDC NICKEL CADMIUM BATTERY-RATED ≥50W @ 120 MINSELF-TESTING DIAGNOSTICS	BIG BEAM - BR SURE LIGHTS - 12ST4	<u>}</u>
EBU-2	SELF CONTAINED, STANDBY/EMERG. LIGHTING BATTERY UNIT	SURFACE WALL		12V, 9W PAR-36, SEALED BEAM	2		120					STEEL SURFACE HOUSING-WHITE, PPC-ADJUSTABLE LAMP HEADS-12VDC NICKEL CADMIUM BATTERY-RATED ≥50W @ 120 MINSELF-TESTING DIAGNOSTICS	BIG BEAM -RC SURE LIGHTS -PC2-27	
X1	LED EXIT SIGN	CEILING, WALL, PENDANT AS SHOWN	,	LED		NTERNAL ED DRIVER	120	5		STENCIL CUT, CODE SIZE "EXIT LETTERS & DIRECTIONAL CHEVRON(S)-RED ACRYLIC SHE BACKING		DIE-CAST ALUMINUM HOUSING-SINGLE/DOUBLE FACE-WITH DIRECTIONAL CHEVRONS AS SHOWN-PAINTED PPC FINISH-COLOR WHITE	CHLORIDE - CX SERIES DUAL-LITE - "SIEMPRA" SE SERIES JUNO - NAVILITE - NXD SERIES LITHONIA - "SIGNATURE" LE SERIES	
PRODU B DETER C INCLUS TO MEE D LISTED MODIFI	ENCED PRODUCTS ARE INCLUDED HE ICTS BY OTHER MANUFACTURERS MA MINE SPECIFIC LUMINAIRE PART NUMI SION HEREIN OF MANUFACTURER'S SE ET THE REQUIREMENTS SPECIFIED HE	EREIN, OF MANU Y BE CONSIDER BERS BASED ON ERIES &/OR MOD EREIN & IN THE F IRES MAY NOT E ERIA, DESCRIPTI	ED, PRIOF I THE REF EL NUMBE PROJECT IN BE STAND	R TO BID. ERENCED PRO ERS DOES NOT MANUAL. ARD PRODUCT	CTS, THAT G DOUCT SER TIMPLY UN	GENERALLY RIES, WRITT ICONDITION	EN DESCF AL PRODU ANY GIVEN	RIPTIONS JCT APPI	S & PROJEC ROVAL - M/ ACTURER	BACKING RE DESIGN INTENTS ESTABLISHEI CT MANUAL SPECIFICATIONS. ANUFACTURER'S STANDARD PRO	D HEREI	SHOWN-PAINTED PPC FINISH-COLOR WHITE N, & IN THE PROJECT MANUAL. EQUIVALENT MAY REQUIRE CUSTOM MODIFICATIONS TANDARD PRODUCTS MAY REQUIRE CUSTOM	JUNO - NAVILITE - NXD SERIES	
ABBREVIATION			EXP	EXPOSED			LU/W	LUM	ENS PER V	VATT PPC	POLYES	FER POWDER COAT FINISH	S'S SEMI-SPECULAR	
DW D/I EFF ELBD	DRYWALL DIRECT/INDIRECT EFFICIENCY/EFFICACY EMERG. LTG. BYPASS DEVICE		LG LO-I LU	LAY-IN GRID LOW IRRIDES LUMENS LUMENS PER		ТОС	NT PAF PARA PL P-AC	NAR PAIN PAR PLAS	ROW TEE	GRID PRI GRID PRI GABRICATION REF SP SPEC	89 REFLECT SPLINE SPECUL/	IOR/REFLECTANCE CEILING SYSTEM	SS SEMI-SFECULAR SS STAINLESS STEEL TBS TO BE SELECTED BY ARCH UNIV UNIVERSAL 120-277VAC WH WHITE	
2 LIGHTIN 3 MOUNT		ROUGH CONTRO	OLS SYSTE FIXTURES	EM AS SELECT	ED. H BOTTOM (	OF STRUCT	COMPATIE	TRACTO			ITH SWI	VEL CANOPY, STEM LENGTHS AS REQUIRED. ITDOOR. SEE LOCATIONS INDICATED ON PLANS.		

FT12'X4' RE GASKEFT1-EM2'X4' RE GASKELI14'T LEI LUMINALI14FT LEI LUMINALD14'' APEF DOWNLLD1-EM4'' APEF DOWNLLD1A4'' APEF DOWNLLT1LC1LT12' X 4' LI (CORRI	ETED LUMINAIRE (KITCHEN) RECESSED WET LABEL, ETED LUMINAIRE (KITCHEN) ED INDUSTRIAL STRIP JAIRE ED INDUSTRIAL STRIP JAIRE ERTURE LED DIMMABLE NLIGHT ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) JSED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)		5" 4" 6-1/8" 6-1/8" 6-1/8" 6-1/8"	SPEC         F32/T8         5000K         CRI=>82         F32/T8         5000K         CRI=>82         F32/T8         5000K         CRI=>82         F32/T8         5000K         CRI=>82         LED         5000K         2680 LUM         LED         5000K         2680 LUM         LED         4000K         1000 LUM         LED         5000K         1000 LUM         PER 1FT	QTY 2 3 3 -	SPEC ELEC/T8 PROGRAM START ELEC/T8 PROGRAM START ELEC/T8 PROGRAM START INTERNAL LED DRIVER INTERNAL LED DRIVER INTERNAL LED DRIVER INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	VOLT 120 120 120 120 120 120 120 120 120	88 32 32 20 20	<ul> <li>98 LPW</li> <li>84 LPW</li> <li>84 LPW</li> <li>50 LPW</li> <li>50 LPW</li> </ul>	DOOR O.135" LENS P12 INVERTED, SEALED TO DOOR MEDIUM DIFFUSE LENSED OMFORT CLEAR DIFFUSE REFLECTOF		REFERENCED PRODUCTS         KENALL - MLHA5 -F-MW-PP-32-PM         KURTZON - G/EZ-2X4         KENALL - CSEGI         KURTZON - G/EZ-2X4         KENALL - CSEGI         LITHONIA - ZL2-L48         COLUMBIA - LCS-LW         METALUX - SNLED         LITHONIA - ZL2-L48         COLUMBIA - LCS-LW         METALUX - SNLED         GOTHAM -EVO4-NLIGHT         PRESCOLITE - LF4LEDG4         LIGHTOLIER - C4L10DL         PORTFOLIO - LD4A09	NOTES         6         2         2         2, 6         2, 6         1, 2         1, 2
FT1-EM       2'X4' RE         FT1-EM       2'X4' RE         LI1       4FT LEE         LI1       4FT LEE         LI1-EM       4FT LEE         LD1       4" APEF         DOWNL         LD1-EM       4" APEF         DOWNL         LD1-EM       4" APEF         DOWNL         LD1A       4" APEF         DOWNL         LD1A-EM       4" APEF         DOWNL         LD1A-EM       4" APEF         DOWNL       LD1A         LD1A-EM       4" APEF         DOWNL       LT1         LT1       2' X 4' LI         LT1-EM       2' X 4' LI	ETED LUMINAIRE (KITCHEN) RECESSED WET LABEL, ETED LUMINAIRE (KITCHEN) ED INDUSTRIAL STRIP JAIRE ED INDUSTRIAL STRIP JAIRE ERTURE LED DIMMABLE NLIGHT ERTURE LED DIMMABLE NLIGHT ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) ISED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	RECESSED LG PENDANT, HANGER CHAIN PENDANT, HANGER CHAIN RECESSED V RECESSED V RECESSED V RECESSED V RECESSED LG RECESSED LG	5" 4" 6-1/8" 6-1/8" 6-1/8" 6-1/8"	5000K CRI=>82 F32/T8 5000K CRI=>82 LED 5000K 2680 LUM LED 4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM		PROGRAM START ELEC/T8 PROGRAM START INTERNAL LED DRIVER INTERNAL LED DRIVER INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	120 120 120 120 120	88 32 32 20 20	<ul> <li>98 LPW</li> <li>84 LPW</li> <li>84 LPW</li> <li>50 LPW</li> <li>50 LPW</li> </ul>	DOOR O.135" LENS P12 INVERTED, SEALED TO DOOR MEDIUM DIFFUSE LENSED OMFORT CLEAR DIFFUSE REFLECTOF	LABEL, GASKETED, NSF RATED, GRID SIZE TBS         20 GA STEEL HOUSING, SEAM WELDED, OVERWET         LABEL, GASKETED, NSF RATED, GRID SIZE TBS         N-LITE EMERGENCY RELAY         FINISH WHITE, HANGER CHAIN         FINISH WHITE, HANGER CHAIN         N-LITE EMERGENCY RELAY         SELF-FLANGE, PAINTED WHITE, U.N.O.         R         SELF-FLANGE, PAINTED WHITE, U.N.O.	KENALL - CSEGI         KURTZON - G/EZ-2X4         KENALL - CSEGI         LITHONIA - ZL2-L48         COLUMBIA - LCS-LW         METALUX - SNLED         LITHONIA - ZL2-L48         COLUMBIA - LCS-LW         METALUX - SNLED         GOTHAM -EVO4-NLIGHT         PRESCOLITE - LF4LEDG4         LIGHTOLIER - C4L10DL         PORTFOLIO - LD4A09         GOTHAM -EVO4-NLIGHT         PRESCOLITE - LF4LEDG4         LIGHTOLIER - C4L10DL	2 2, 6 2, 6 1, 2
LD1 4" APEF DOWNL LD1 4" APEF DOWNL LD1-EM 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A CONNL LD1A CONNL	ETED LUMINAIRE (KITCHEN) ED INDUSTRIAL STRIP AIRE ED INDUSTRIAL STRIP AIRE ED INDUSTRIAL STRIP AIRE ERTURE LED DIMMABLE UIGHT ERTURE LED DIMMABLE UIGHT ERTURE LED DIMMABLE UIGHT (CLASSROOMS) ISED TRIP LUMINAIRE IN CORNER NLIGHT (CLASSROOMS) ISED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	PENDANT, HANGER CHAIN PENDANT, HANGER CHAIN RECESSED V RECESSED V RECESSED V RECESSED V RECESSED LG	4" 4" 6-1/8" 6-1/8" 6-1/8" 6-1/8"	5000K CRI=>82 LED 5000K 2680 LUM LED 5000K 2680 LUM LED 4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM	3	PROGRAM START INTERNAL LED DRIVER INTERNAL LED DRIVER INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	120 120 120 120	32 32 20 20	<ul> <li>84 LPW</li> <li>84 LPW</li> <li>50 LPW</li> <li>50 LPW</li> </ul>	DOOR MEDIUM DIFFUSE LENSED MEDIUM DIFFUSE LENSED COMFORT CLEAR DIFFUSE REFLECTOF	LABEL, GASKETED, NSF RATED, GRID SIZE TBS         N-LITE EMERGENCY RELAY         FINISH WHITE, HANGER CHAIN         FINISH WHITE, HANGER CHAIN         N-LITE EMERGENCY RELAY         R         SELF-FLANGE, PAINTED WHITE, U.N.O.         R         SELF-FLANGE, PAINTED WHITE, U.N.O.	KENALL - CSEGI LITHONIA - ZL2-L48 COLUMBIA - LCS-LW METALUX - SNLED LITHONIA - ZL2-L48 COLUMBIA - LCS-LW METALUX - SNLED GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09 GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL	2, 6
LUMINA LUMINA LI1-EM 4FT LEI LUMINA LD1 4" APEF DOWNL LD1-EM 4" APEF DOWNL LD1A 4" APEF DOWNL	AIRE ED INDUSTRIAL STRIP AIRE ERTURE LED DIMMABLE VLIGHT ERTURE LED DIMMABLE VLIGHT ERTURE LED DIMMABLE VLIGHT (CLASSROOMS) ERTURE LED DIMMABLE VLIGHT (CLASSROOMS) ISED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	HANGER CHÀIN PENDANT, HANGER CHÀIN RECESSED V RECESSED V RECESSED SURFACE, RECESSED LG	4" 6-1/8" 6-1/8" 6-1/8" 6-1/8"	5000K 2680 LUM LED 5000K 2680 LUM LED 4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM		LED DRIVER INTERNAL LED DRIVER INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	120 120 120 120	32 20 20	84 LPW 50 LPW 50 LPW	MEDIUM DIFFUSE LENSED	FINISH WHITE, HANGER CHAIN N-LITE EMERGENCY RELAY R SELF-FLANGE, PAINTED WHITE, U.N.O.	COLUMBIA - LCS-LW METALUX - SNLED LITHONIA - ZL2-L48 COLUMBIA - LCS-LW METALUX - SNLED GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09 GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL	2, 6
LD1 4" APEF DOWNL LD1-EM 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A-EM 4" APEF DOWNL LD1A-EM 4" APEF DOWNL LD1A-EM 2" X 4" L LT1 2" X 4" L	AIRE ERTURE LED DIMMABLE ILED DIMMABLE ERTURE LED DIMMABLE ERTURE LED DIMMABLE ILIGHT ERTURE LED DIMMABLE ILIGHT (CLASSROOMS) ISED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED ILED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR	HANGER CHÁIN RECESSED V RECESSED V RECESSED SURFACE, RECESSED LG	6-1/8" 6-1/8" 6-1/8" 6-1/8"	5000K 2680 LUM LED 4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM	-	LED DRIVER INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	120 120 120	20	50 LPW	COMFORT CLEAR DIFFUSE REFLECTOF	N-LITE EMERGENCY RELAY R SELF-FLANGE, PAINTED WHITE, U.N.O. R SELF-FLANGE, PAINTED WHITE, U.N.O.	COLUMBIA - LCS-LW METALUX - SNLED GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09 GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL	1, 2
LD1-EM 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A 4" APEF DOWNL LD1A-EM 4" APEF DOWNL LD1A-EM 4" APEF DOWNL LD1A-EM 2' X 4' LI (CORRI LT1-EM 2' X 4' LI	ERTURE LED DIMMABLE VLIGHT ERTURE LED DIMMABLE VLIGHT (CLASSROOMS) ERTURE LED DIMMABLE VLIGHT (CLASSROOMS) JSED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	V RECESSED V RECESSED V SURFACE, RECESSED LG	6-1/8" 6-1/8" 6-1/8" 0.72"H	4000K 1000 LUM LED 4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM		LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V	120	20	50 LPW	COMFORT CLEAR DIFFUSE REFLECTOF	R SELF-FLANGE, PAINTED WHITE, U.N.O.	PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09 GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL	
LD1A 4" APEF DOWNL LD1A-EM 4" APEF DOWNL LC1 NOT US LS1 LED ST CHANN MOUNT LT1 2' X 4' LI (CORRI LT1-EM 2' X 4' LI	ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) JSED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	V RECESSED V RECESSED SURFACE, RECESSED LG	6-1/8" 6-1/8" 0.72"H	4000K 1000 LUM LED 5000K 1000 LUM LED 5000K 1000 LUM LED 4100K 134 LUM	-	LED DIMMABLE 0-10V INTERNAL LED DIMMABLE 0-10V INTERNAL LED DIMMABLE	120			/2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, _,, _	PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL	1, 2
LD1A-EM LD1A-EM LC1 LC1 LS1 LED ST CHANN MOUNT LT1 (CORRI LT1-EM 2' X 4' LI	ERTURE LED DIMMABLE NLIGHT (CLASSROOMS) ISED ISED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	V RECESSED V SURFACE,	6-1/8" 0.72"H	5000K 1000 LUM LED 5000K 1000 LUM LED 4100K 134 LUM	-	LED DIMMABLE 0-10V INTERNAL LED DIMMABLE		20	50 LPW				
LC1 NOT US LS1 LED ST CHANN MOUNT LT1 2' X 4' LI (CORRI LT1-EM 2' X 4' LI	ISED JSED TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC DIMMABLE	V SURFACE, RECESSED LG	0.72"H	5000K 1000 LUM LED 4100K 134 LUM	-	LED DIMMABLE	120			COMFORT CLEAR DIFFUSE REFLECTOR	SELF-FLANGE, PAINTED WHITE, U.N.O.	GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09	1, 2
LS1 LED ST CHANN MOUNT LT1 2' X 4' LI (CORRI LT1-EM 2' X 4' LI	TRIP LUMINAIRE IN CORNER NEL, HORIZONTALLY ITED LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC TROFFER RIDOR)	RECESSED LG		4100K 134 LUM	-	'		20	50 LPW	COMFORT CLEAR DIFFUSE REFLECTOR	SELF-FLANGE, PAINTED WHITE, U.N.O.	GOTHAM -EVO4-NLIGHT PRESCOLITE - LF4LEDG4 LIGHTOLIER - C4L10DL PORTFOLIO - LD4A09	1, 2
LT1-EM 2' X 4' L	RIDOR) LED VOLUMETRIC TROFFER RIDOR) LED VOLUMETRIC DIMMABLE		4-3/8"			REMOTE LED DRIVER 10% 0-10V	24 DC	1.5 W/ FT		SLIM CORNER MOUNT CHANNEL WITH FROSTED LENS	ANODIZED ALUMINUM HOUSING, SPRING CLIPS, FINISH TBS, PROVIDE REMOTE DRIVER, LENGTH AS INDICATED ON DRAWINGS	OPTIC ART - FLEX-DC-15 -CHS-C-1919-MC-CF DESIGN PLAN - STOL	
	RIDOR) LED VOLUMETRIC DIMMABLE	RECESSED LG		LED 4000K ~3000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	31	103 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-30L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
			4-3/8"	LED 4000K ~3000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	31	103 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS. N-LITE EMERGENCY RELAY	LITHONIA - VTLED-30L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LT2 2' X 4' LI TROFFE		RECESSED LG	4-3/8"	LED 5000K ~4000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	39	102 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-40L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LT2-EM 2' X 4' LI TROFFE	LED VOLUMETRIC DIMMABLE FER	RECESSED LG	4-3/8"	LED 5000K ~4000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	39	102 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS. N-LITE EMERGENCY RELAY	LITHONIA - VTLED-40L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LT3 NOT US LT4 2' X 4' L TROFFE	LED VOLUMETRIC DIMMABLE	RECESSED LG	4-3/8"	LED 5000K ~4800 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	47	99 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-48L-NIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
	LED VOLUMETRIC DIMMABLE FER (AUTISM)	RECESSED LG		LED 3500K 3000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	42	72 LM/W	EDGE LIT LED SYSTEM WITH VAULTED VOLUMETRIC LENS. MATT WHITE DIFFUSE. CONCEALED INDIRECT LEDS.	GAVALIZED STEEL REFLECTOR AND HOUSING.	FOCAL POINT - VAULT	1, 2
LT6 2' X 4' LI TROFFE	LED VOLUMETRIC DIMMABLE FER	RECESSED LG	4-3/8"	LED 5000K 6000 LUM	-	INTERNAL LED DIMMABLE	120	52	115 LM/W	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-60L-NIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LT6-EM 2' X 4' L TROFFE	LED VOLUMETRIC DIMMABLE FER	RECESSED LG	4-3/8"	LED 5000K 6000 LUM	-	0-10V INTERNAL LED DIMMABLE 0-10V	120	52	115 LM/W	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-60L-NIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
	LED VOLUMETRIC DIMMABLE FER (KINDERGARTEN)	RECESSED LG	4-3/8"	LED 5000K ~3000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	31	103 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS.	LITHONIA - VTLED-30L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LT7-EM 2' X 4' L TROFFE	LED VOLUMETRIC DIMMABLE FER (KINDERGARTEN)	RECESSED LG	4-3/8"	LED 5000K ~3000 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	31	103 LPW	HIGH PERFORMANCE CLEAR ACRYLIC DIFFUSER, WIDE DISTRIBUTION	RUGGED, ONE-PIECE COLD-ROLLED STEEL COATED POLYESTER HOUSING, PAF WITH EMBOSSED FACETS. N-LITE EMERGENCY RELAY	LITHONIA - VTLED-30L-NLIGHT-N100 PHILIPS - CLEAR APPEAL METALUX - ENCOUNTER	1, 2
LP1 4" DIAM DIMMAE COMMC	METER LED PENDANT ABLE CYLINDER (CAFETERIA, IONS)	P-AC	10"	LED 4000K 3000 LUM DELIVERED	-	INTERNAL LED DRIVER 1% DIMMABLE 0-10V	120	43		50 DEGREE BEAM ANGLE, SOLITE FROSTED LENS	FRONT CAP AND BODY FINISH AS SELECTED BY ARCHITECTS, PENDANT MOUNT ACCESSORY	GOTHAM - ICO CYL-4K-RFD-NLIGHT JUNO - LC4-P	1, 2, 8
	METER LED PENDANT ABLE CYLINDER (CAFETERIA, IONS)	P-AC	10"	LED 4000K 3000 LUM DELIVERED	-	INTERNAL LED DRIVER 1% DIMMABLE 0-10V	120	43		50 DEGREE BEAM ANGLE, SOLITE FROSTED LENS	FRONT CAP AND BODY FINISH AS SELECTED BY ARCHITECTS, PENDANT MOUNT ACCESSORY N-LITE EMERGENCY RELAY	GOTHAM - ICO CYL-EM-4K-RFD JUNO - LC4-C	1, 2, 8
	METER LED PENDANT ABLE CYLINDER (LIBRARY)	P-AC	10"	LED 5000K 2000 LUM DELIVERED	-	INTERNAL LED DRIVER 1% DIMMABLE 0-10V	120	24		50 DEGREE BEAM ANGLE, SOLITE FROSTED LENS	FRONT CAP AND BODY FINISH AS SELECTED BY ARCHITECTS, PENDANT MOUNT ACCESSORY	GOTHAM - ICO CYL-NLIGHT JUNO - LC4-C USAI - LNRP6	1, 2, 8
	METER LED PENDANT ABLE CYLINDER (LIBRARY)	P-AC	10"	LED 5000K 2000 LUM DELIVERED	-	INTERNAL LED DRIVER 1% DIMMABLE 0-10V	120	24		50 DEGREE BEAM ANGLE, SOLITE FROSTED LENS	FRONT CAP AND BODY FINISH AS SELECTED BY ARCHITECTS, PENDANT MOUNT ACCESSORY N-LITE EMERGENCY RELAY	GOTHAM - ICO CYL-NLIGHT JUNO - LC4-C USAI - LNRP6	1, 2, 8
	6" PENDANT DIMMABLE LED BAY (GYM)	P-RS	3"	LED 5000K 21300 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	245	87 LPW	WIDE DISTRIBUTION OPTIC, SEMI-DIFFUSE ACRYLIC LENS FOR GLARE CONTROL	ALUMINUM HEAT SINK, CHANNEL AND END CAPS AR STEEL, BOTTOM WIRE GUARD, FINISH STANDARD TBS	E LITHONIA - IBL-24L-WD-SD125-WGX-NLIGHT	1,2,3
	6" PENDANT DIMMABLE LED BAY (GYM)	P-RS	3"	LED 5000K 21300 LUM	-	INTERNAL LED DIMMABLE 0-10V	120	245	87 LPW	WIDE DISTRIBUTION OPTIC, SEMI-DIFFUSE ACRYLIC LENS FOR GLARE CONTROL	ALUMINUM HEAT SINK, CHANNEL AND END CAPS AR STEEL, BOTTOM WIRE GUARD, FINISH STANDARD TBS N-LIGHT EMERGENCY RELAY	E LITHONIA - IBL-24L-WD-SD125-WGX-NLIGHT	1,2,3
	FT LED LINEAR PENDANT RECTIONAL DISTRIBUTION	P-AC	1-13/16"	LED 5000K 4800 LUM PER	-	INTERNAL LED DIMMABLE 0-10V	120			75% DIRECT/ 25% INDIRECT, 125" WHITE SATINE LENS, MATTE FINISH, CLEAR DUST GUARD	E DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	PEERLESS - BRM9L-HI-ENNB-N-LIGHT-LMES20	1, 2
	FT LED LINEAR PENDANT RECTIONAL DISTRIBUTION	P-AC	1-13/16"	4FT LED 5000K 4800 LUM PER	-	INTERNAL LED DIMMABLE 0-10V	120			75% DIRECT/ 25% INDIRECT, 125" WHITE SATINE LENS, MATTE FINISH, CLEAR DUST GUARD	E DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE N-LITE EMERGENCY RELAY	PEERLESS - BRM9L-HI-ENNB-N-LIGHT-LMES20	1, 2
	FT LED LINEAR PENDANT RECTIONAL DISTRIBUTION	P-AC	1-13/16"	4FT LED 5000K 4800 LUM PER	-	INTERNAL LED DIMMABLE 0-10V	120				DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	PEERLESS - BRM9L-HI-ENNB-N-LIGHT-LMES20	1, 2
BI-DIRE CONTIN	JSED FT LED LINEAR PENDANT ECTIONAL DISTRIBUTION, INUOUSLY MOUNT (MUSIC COLLABORATION AREA)	P-AC	1-13/16"	5000K 3400 LUM	-	INTERNAL LED DIMMABLE	120	24.2 PER 4FT	84 LPW	75% DIRECT/ 25% INDIRECT, 125" WHITE SATINE LENS, MATTE FINISH, CLEAR DUST GUARD	E DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	1, 2
LP6-EM 7" x 8F BI-DIRE	FT LED LINEAR PENDANT RECTIONAL DISTRIBUTION, INUOUSLY MOUNT (MUSIC)	P-AC	1-13/16"	PER 4FT LED 5000K 3400 LUM PER 4FT	-	0-10V INTERNAL LED DIMMABLE 0-10V	120	24.2 PER 4FT	84 LPW		E DIE FORM 18 GAUGE STEEL HOUSING, DIE CAST ALUMINUM ENDCAPS, FINISH WHITE, DUAL AIR CRAFT ADJUSTABLE CABLE	PEERLESS - BRM9L-LO-ENNB-N-LIGHT-LMES20	1, 2



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C:\Revit Loca	EQUIPMENT DESIGNATION	DESCRIPTION	I HP	ĸw	FLA	NORMAL	EMERGE	VOLTAGE	PHASE	PACKAG	SEPERAI	MCC	ТҮРЕ	NEMA SIZ	MCP	FUSE	RATING	SINGLEP	NEMA EN	WEIGHT (	LOCATIO		FUSE	RATING		NEMA EN	WEIGHT	LOCATIO	MCP	FUSE	BREAKEI	POLE AM	PANELBO	QUANTIT	SIZE	QUANTIT	SIZE	QUANTIT	SIZE	SIZE	CONNEC	REMARK												
	AC-1 AC-2	AIR CONDITIONING UNIT AIR	1/20			x		208	DI 1 PR	OVIDED E IVISION 23 OVIDED E	23 BY -	-	-	-	-	-	-	-	-	-	-		 -				-	-								-			#10		DC													
	AC-3	CONDITIONING UNIT AIR CONDITIONING UNIT	1/20			x	:	208	1 PR	IVISION 2: OVIDED E IVISION 2:	BY -	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	x	35	SEE PLAN	IS 2	#8	-	-	1	#10	1 3/4"	DC													
	B-1 B-2	BOILER				X X		208	DI 3 PR	OVIDED E IVISION 23 OVIDED E IVISION 23	23 BY -	-	-	-	-	-	-	-	-	-	-	-	 	-	- -	-	-	-		-						-			#12		DC DC													
	BP-1 BP-2	BOILER PUMP BOILER PUMP	, 3			X X		480 480	3 PR DI	OVIDED E IVISION 23 OVIDED E IVISION 23	23 BY - 23	-	-	-	-		-	-	-	-	-		· -		-	-	-	-	-	-	X	15	1PNH1	3	#12	-		1	#12	1 3/4"	DC DC													
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			LOCA	TION / TYPE				ACCESS		Μ	ULTI-		IVCE ers/ dev			HEDU	JLE	M	ATERIALS				FEATU	JRES																		RMINA		N SCH PHASE			GROUND	CO	DUIT	Б				
				("8")																						ЗОХ DEPTH													AGE	ш	TYPE	AMPS	S TITY		Ш			ШТТ			SDEC	CIAL		
		/ (1-6 GANG TY (6-10 GA		CITY (6" OR			E																		OX DEPTH	IY FLOOR B							D.R.			DESCRIPTION			<b>120</b>	FUSE 1	BREA	<b>3</b> <b>2</b> 0A		1 12		<b>BZIS</b>			BZICS		SPEC MOUNT HEIGI	iting Ght	REMARKS	3
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	AL ALUM BR BRASS BZ BRONZE PT PAINT (PC	OLYESTER POWDE	ER COAT)					G B	GRA BLAC	Y CK									SYSTEM	Л. VIDE (1) 3	6/4" EMT CO		·									MC	OUTLE GFI OU ISOLAT ABOVE	⁻ MOUNTEI ILET ED GROUN COUNTER	ID OUTLET OUTLET. (	VORK. FEED F - COORDINATE G HEIGHT. RE	HEIGHT	WITH ARCH	TECTURAL		N		CP D DR JB	CONTRO LOCAL D STANDAF JUNCTIO	DL PANEL - I DISCONNEC RD NEMA 5 DN BOX	T SWITCH -20R DUPL	MOUNTED EX RECEP	NEAR UN TACLE	IT. WIRE FRO					
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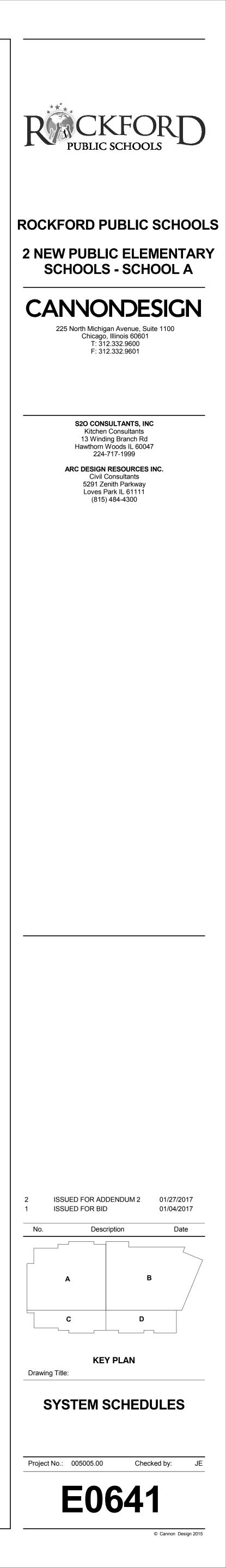
SYSTEM		Specified By	Drawn By	Furnished By	Installed By	Notes
Network & Communications						
	Network Electronics	0	N/A	0	0	
	Telephone Switch/Electronics	0	N/A	0	0	
	Data Backbone - campus, data center, mdf, idf (Fiber)	CD	CD	С	С	
	Voice Backbone - campus, data center, mdf, idf (copper)	CD	CD	С	С	
	Cable tray / ladder rack (In MDF/IDF's)	CD	CD	C	C	
	Equipment racks / cable management	CD	CD	C	C	
	Horizontal cable from MDF/IDF to workstation	CD	CD	C	C	
	Copper cross connects	0	N/A	0	Ο	
	Fiber cross connects	0	N/A	0	Ο	
	Patch cords - Access Switches	0	0	0	0	
	Teledata jacks / faceplates	CD	CD	С	C	
	Wireless access points cabling	0	CD	С	C	
	Wireless access point hardware	0	N/A	0	0	
	Local UPS (if utilized)	0	N/A	0	0	
Security System						
	CCTV cameras - Video Surveillance System - VSS	CD	CD	0	C	
	Storage hardware / software	0	N/A	0	0	
	Door hardware	CD/O	CD	C	C	
	Rough in / cable for VSS	CD	CD	С	C	
	Access Control Panel	0	CD	0	С	
	Access control - ACAMS - (readers / door contacts)	CD	CD	C	С	
	AIPhones phones / stations	0	CD	0	0	
	Rough in / cable for ACAMS	CD	CD	С	C	
	PC, servers, switches	0	N/A	0	0	
Audio/Visual Systems						
	Rough in	CD		c Y	c V V V	
	AV Cabling	0	<u>2</u> 0	0	• }	
	Display, projector, control, audio, speakers source devices and all other equipment	0	<pre>control</pre>	o		
Intercom and Clock						
	Clocks and related bardware		CD		C	
	Clocks and related hardware				C	
	Cable	CD	CD	C	C	

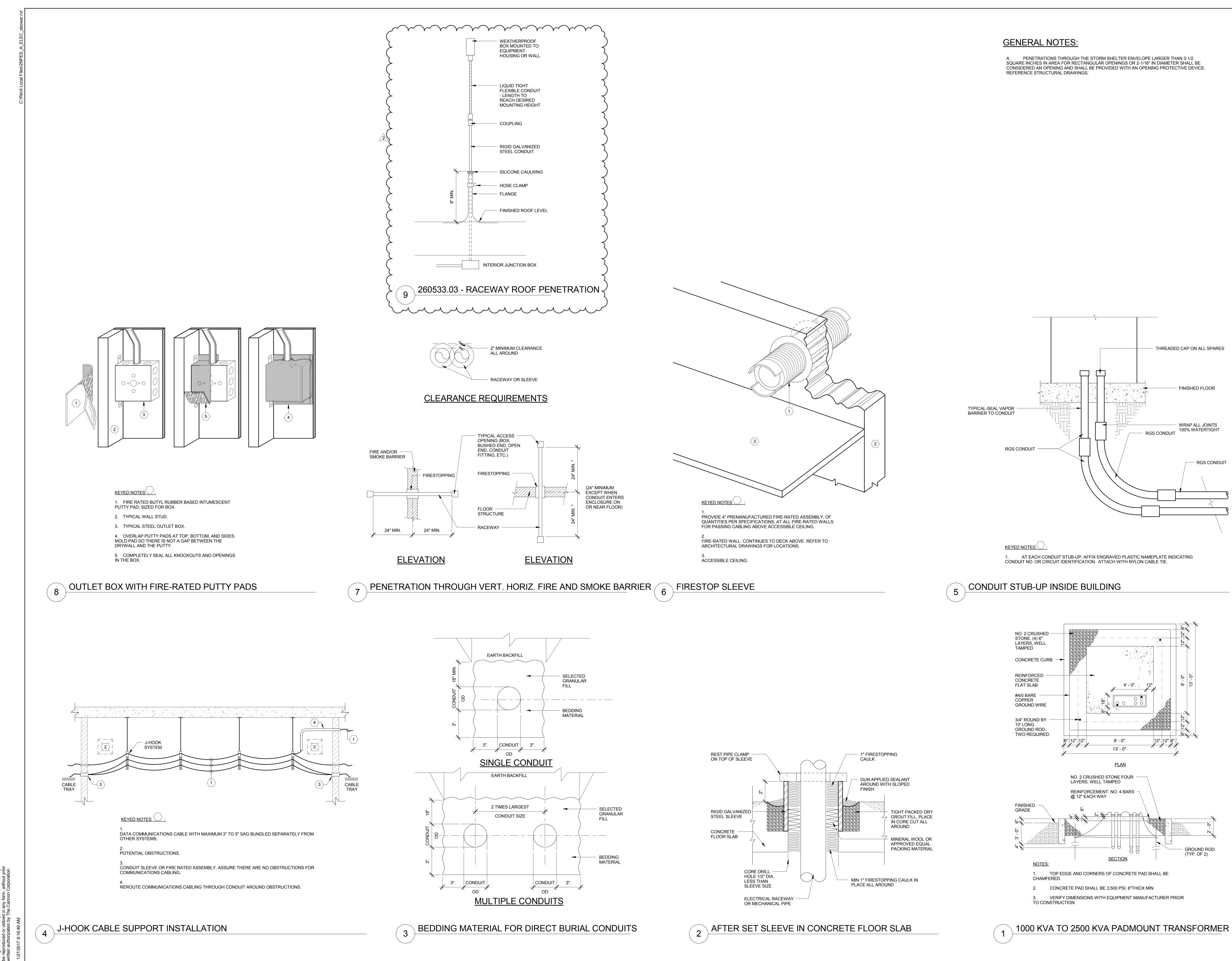
#### Abbreviations:

0	By others / owner
v	By others / vendor - not a direct contractor to the General Contractor
С	Contractor - a contractor working directly for the General Contractor
CD	Cannon Design
NA	Not applicable or system is not being provided

Rough In

Conduit and Junction Boxes





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