## NORTH SCOTT COMMUNITY SCHOOL DISTRICT

# ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748



#### SCHEDULE OF DRAWINGS

G-101 CODE INFORMATION & SAFETY REFERENCE PLANS SLP-2 SITE LOGISTIC PLAN C-100 EXISTING CONDITIONS AND DEMOLITION PLAN C-101 SITE LAYOUT AND UTILITY PLAN M-000 MECHANICAL LEGEND MASONRY DETAILS AD-101 FIRST FLOOR DEMOLITION PLAN A-101A FIRST FLOOR PLAN - MODULE A A-101B FIRST FLOOR PLAN - MODULE B AF101A FIRST FLOOR FINISH PLAN - MODULE A

AF101B FIRST FLOOR FINISH PLAN - MODULE B AC101A FIRST FLOOR REFLECTED CEILING PLAN - MODULE A AC101B FIRST FLOOR REFLECTED CEILING PLAN - MODULE B AR101A ROOF PLAN - MODULE A AR101B ROOF PLAN - MODULE B A-201 EXTERIOR BUILDING ELEVATIONS A-211 INTERIOR ELEVATIONS A-212 INTERIOR ELEVATIONS A-301 BUILDING SECTIONS A-311 WALL SECTIONS A-401 ENLARGED TOILET ROOM PLANS, ELEVATIONS & DETAILS A-501 EXTERIOR DETAILS A-502 EXTERIOR DETAILS

A-511 INTERIOR DETAILS A-521 TYPICAL ROOF DETAILS SINGLE-PLY MEMBRANE A-522 TYPICAL ROOF DETAILS PREFINISHED METAL A-601 DOOR AND FRAME DETAILS

A-611 PARTITION TYPES & DETAILS A-901 PERSPECTIVE VIEWS

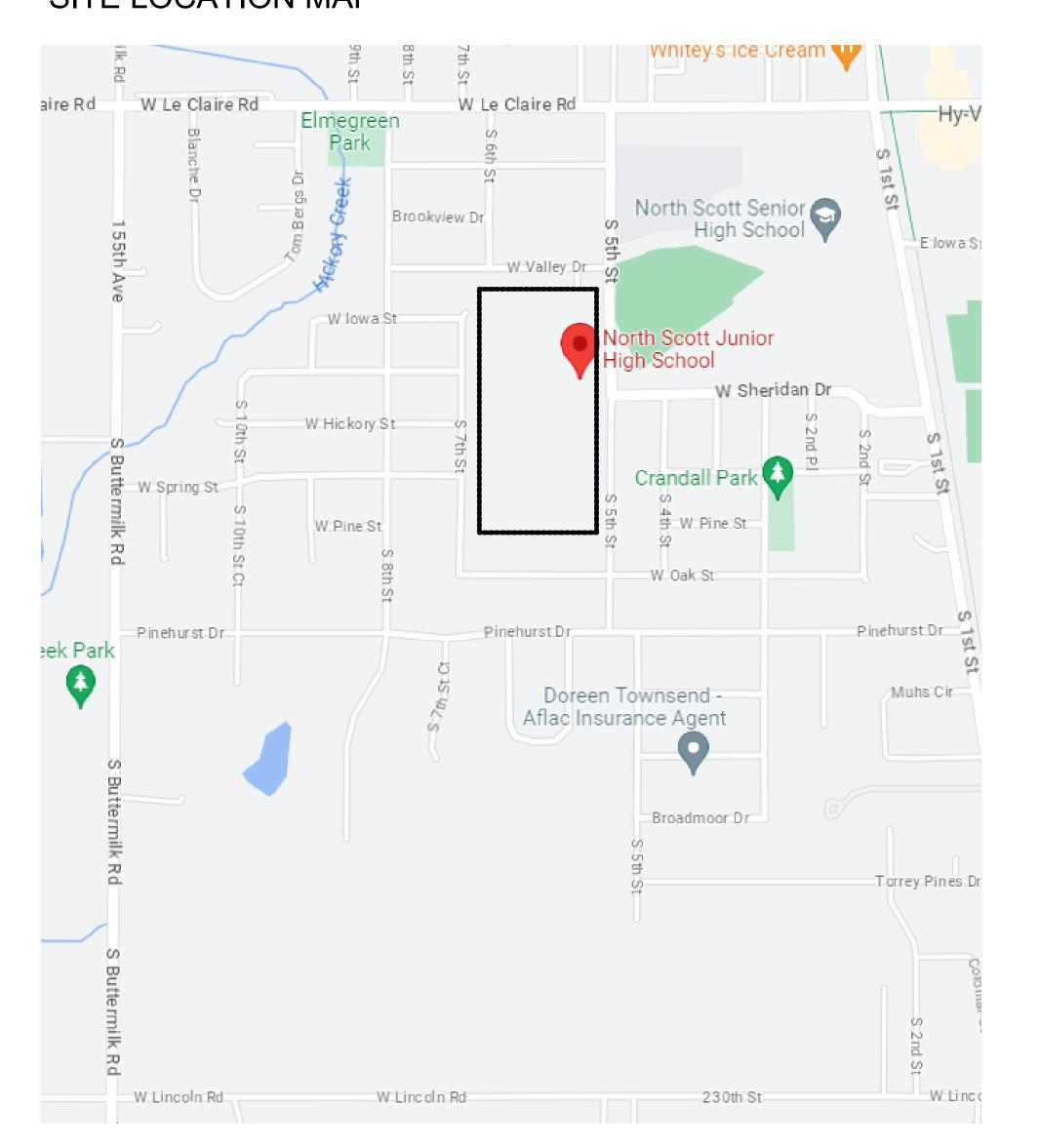
PLUMBING DRAWINGS PD101A PLUMBING FIRST FLOOR DEMOLITION PLAN - MODULE A PD101B PLUMBING DEMOLITION PLANS - MODULE B PLUMBING FIRST FLOOR DOMESTIC WATER PLAN - MODULE A MD101A MECHANICAL FIRST FLOOR HVAC DEMOLITION PLAN - MODULE A M-302 MECHANICAL RTU CONTROL DIAGRAM M-303 MECHANICAL VAV AND ELECTRIC HEATER CONTROL DIAGRAM M-304 MECHANICAL EXHAUST FAN CONTROL DIAGRAM M-305 ALTERNATE BID RTU CONTROL DIAGRAM M-400 MECHANICAL SCHEDULES AND DETAILS

M-500 MECHANICAL DETAILS ELECTRICAL DRAWINGS E-000 ELECTRICAL SYMBOLS AND GENERAL NOTES ED101A ELECTRICAL FIRST FLOOR POWER DEMOLITION PLAN - MODULE A ED101B ELECTRICAL DEMOLITION PLANS - MODULE B ED201A ELECTRICAL FIRST FLOOR LIGHTING DEMOLITION PLAN - MODULE A E-101A ELECTRICAL FIRST FLOOR POWER PLAN - MODULE A E-101B ELECTRICAL FIRST FLOOR PLANS - MODULE B E-102A FIRST FLOOR MECHANICAL COORDINATION PLAN - MODULE A E-103A ELECTRICAL ROOF POWER PLAN - MODULE A E-201A ELECTRICAL FIRST FLOOR LIGHTING PLAN - MODULE A E-300 ELECTRICAL ONE-LINE, SCHEDULES, AND DETAILS

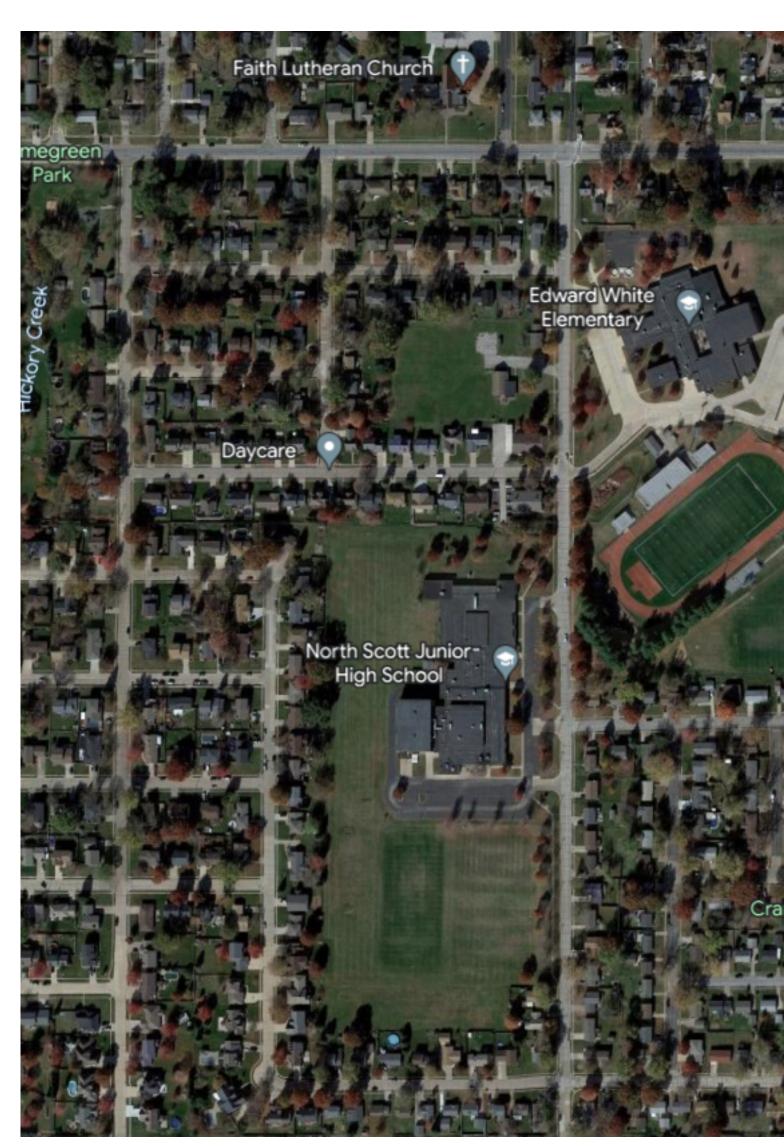
E-400 ELECTRICAL A/V DIAGRAM AND SCHEDULE

E-500 ELECTRICAL PANEL SCHEDULES

## SITE LOCATION MAP



#### CAMPUS PLAN



**BOARD OF EDUCATION** 

Mark Pratt, President Tracy Lindaman, Vice President John Maxwell, Member Joni Dittmer, Member Frank Wood, Member Molly Bergfeld, Member Carrie Keppy, Member

Joe Stutting, Superintendent

RELEASE **BIDDING** 

DATE OF ISSUE 11.10.2023

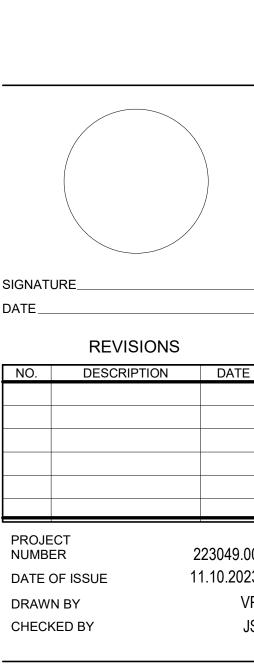
ARCHITECT'S PROJECT NUMBER 223049.00

LEGATARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY









LEGATARCHITECT

ESIGN | PERFORMANCE | SUSTAINABIL

NORTH

SCOTT

COMMUNITY

SCHOOL

DISTRICT

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

502 South 5th Street Eldridge, IA 52748

<u>ARCHITECT</u>

1515 5th Avenue, Suite 1

Moline, IL 61265 P: 309.517.5545

F: 309.517.5540

CONSTRUCTION MANAGER

**Russel Construction** 

4700 E 53rd Street

Davenport, IA 52807

CIVIL ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807 P: 563.726.6310

STRUCTURAL ENGINEER

623 26th Avenue

Rock Island, IL 61201

P: 309.788.0673

F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

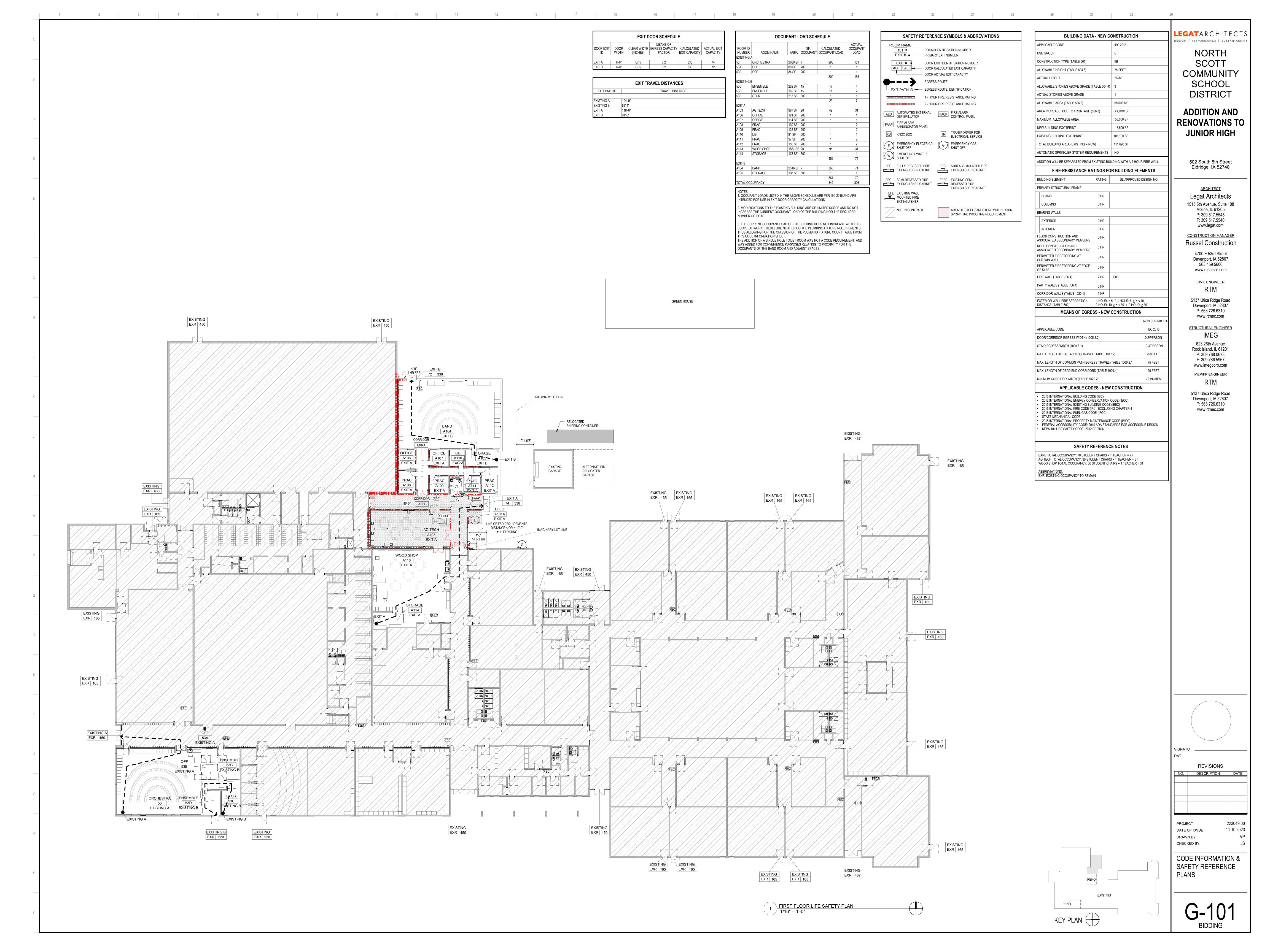
www.rtmec.com

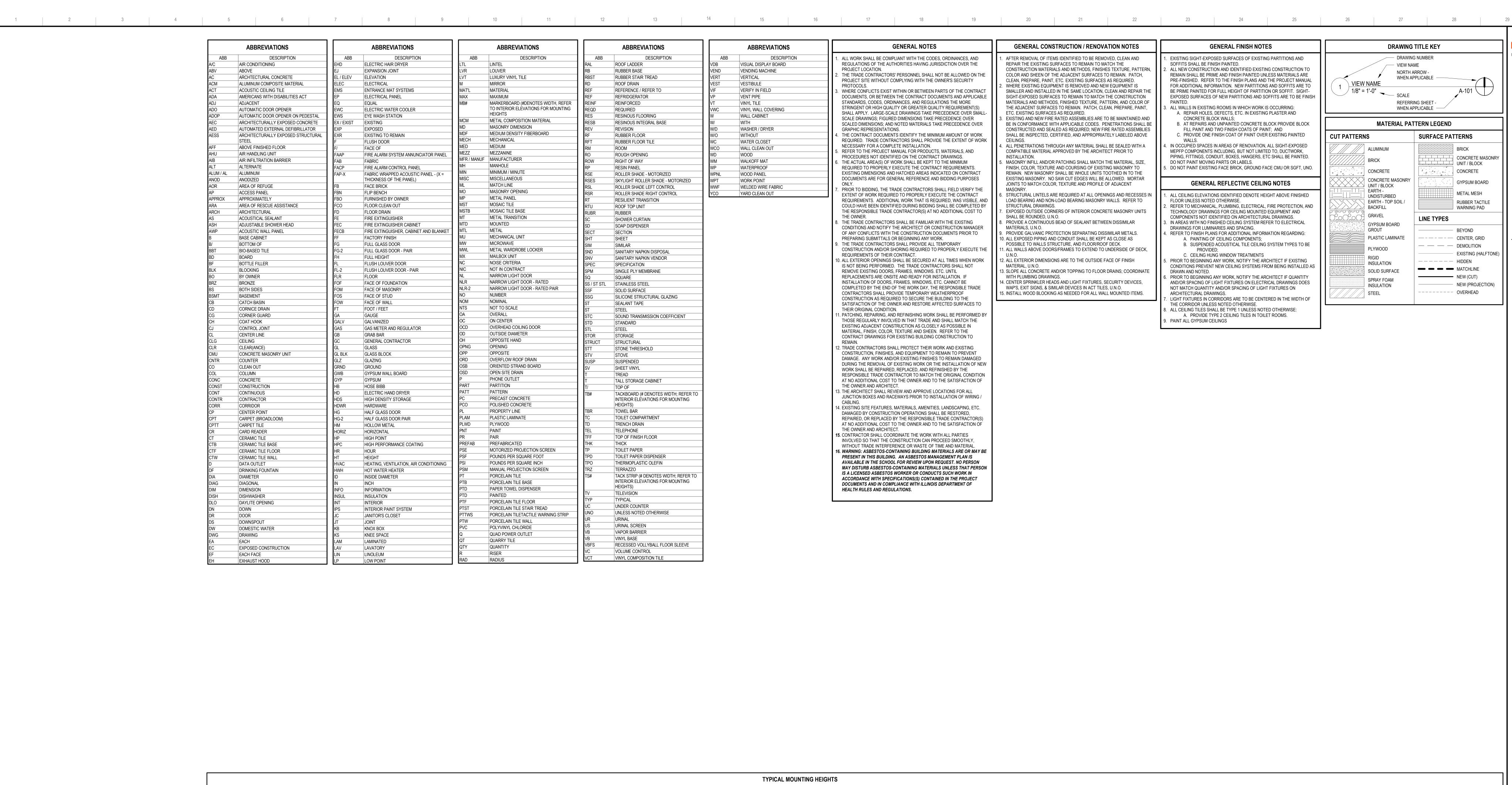
P: 563.459.5600 www.russelco.com

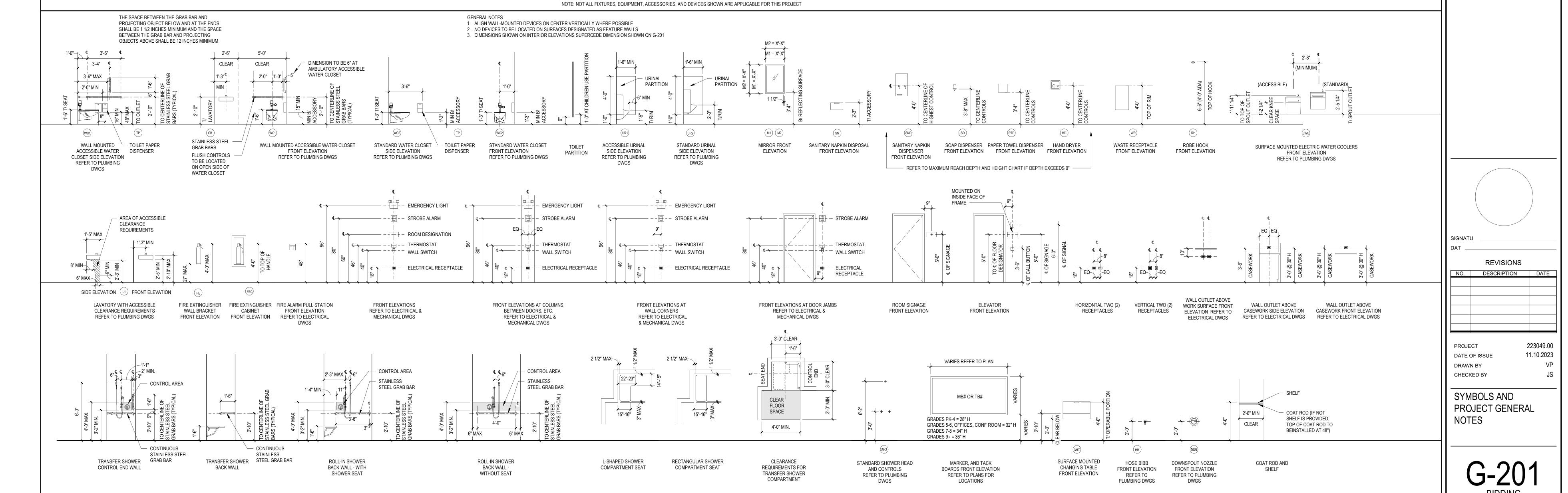
www.legat.com

G-001

TITLE SHEET







**LEGAT**ARCHITECT ESIGN | PERFORMANCE | SUSTAINABILI NORTH

BRICK

CONCRETE MASO

**GYPSUM BOARD** 

METAL MESH

RUBBER TACTILE

EXISTING (HALFTONE)

NEW (PROJECTION)

OVERHEAD

WARNING PAD

BEYOND

— - — - — CENTER, GRID

— — — DEMOLITION

---- HIDDEN

UNIT / BLOCK

CONCRETE

502 South 5th Street Eldridge, IA 52748

<u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com

**CONSTRUCTION MANAGER** 

Russel Construction 4700 E 53rd Street Davenport, IA 52807 563.459.5600

CIVIL ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

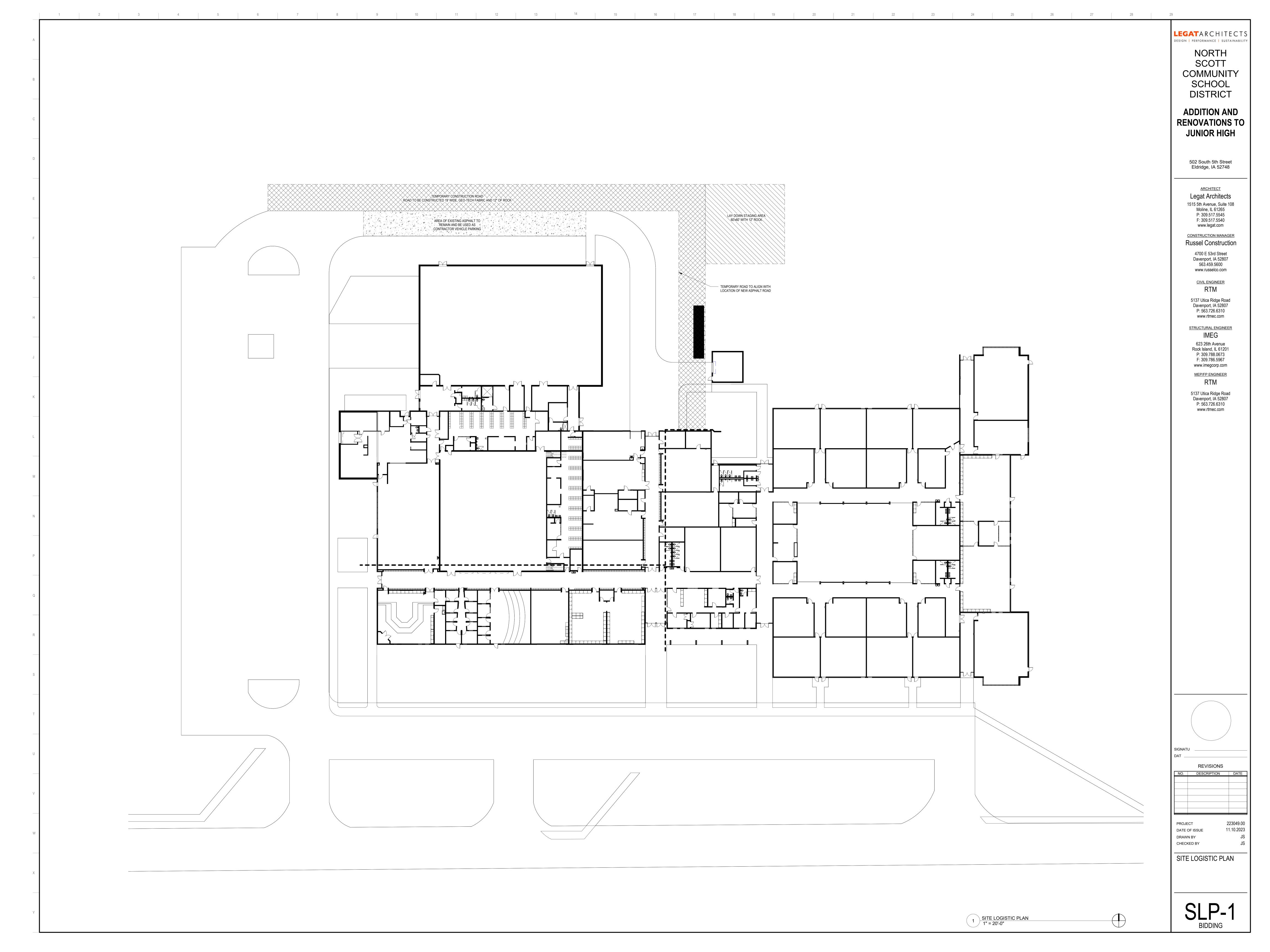
www.russelco.com

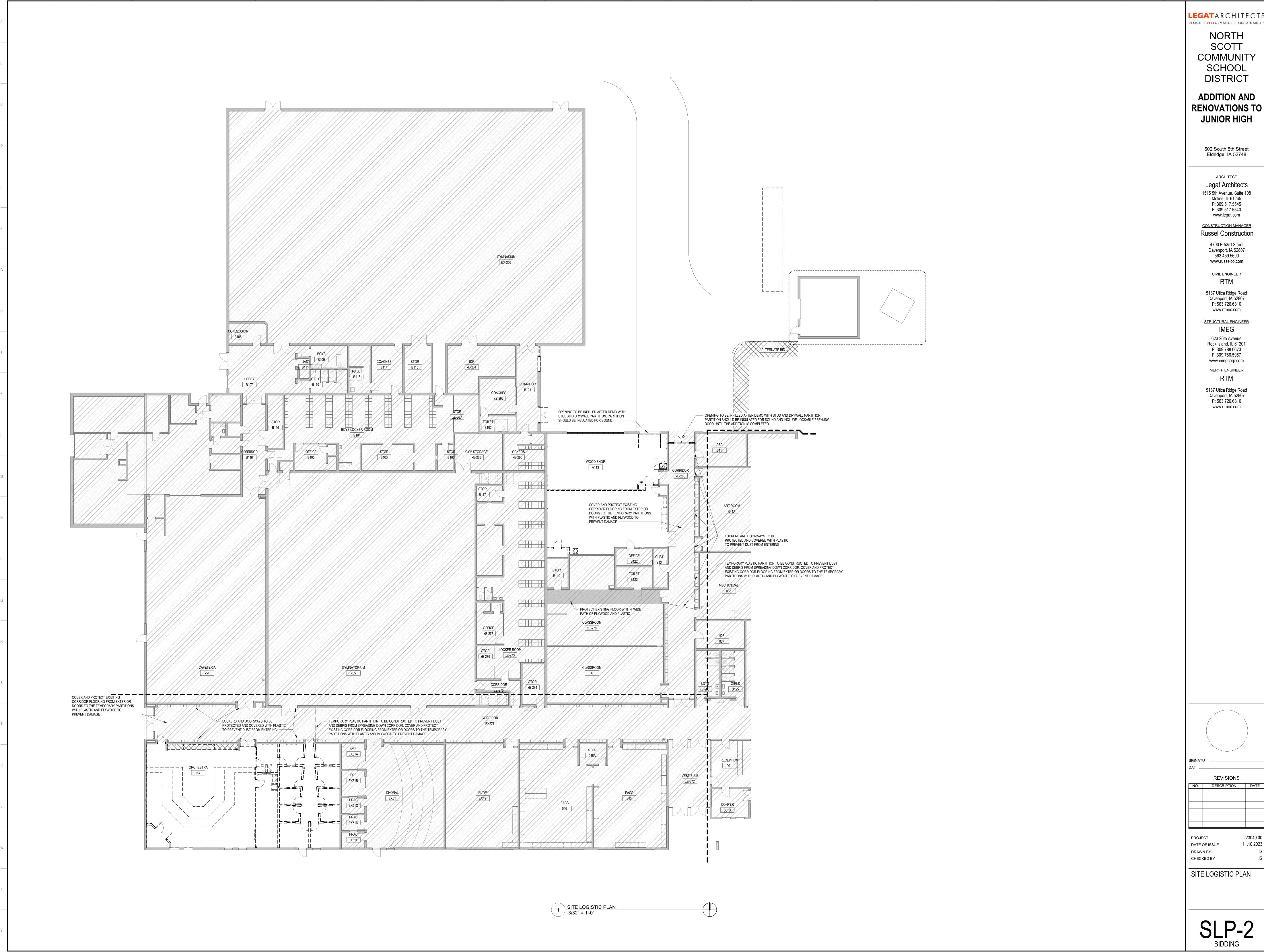
www.rtmec.com STRUCTURAL ENGINEER

> 623 26th Avenue Rock Island, IL 61201 P: 309.788.0673

F: 309.786.5967 www.imegcorp.com MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



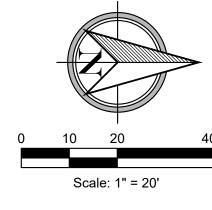


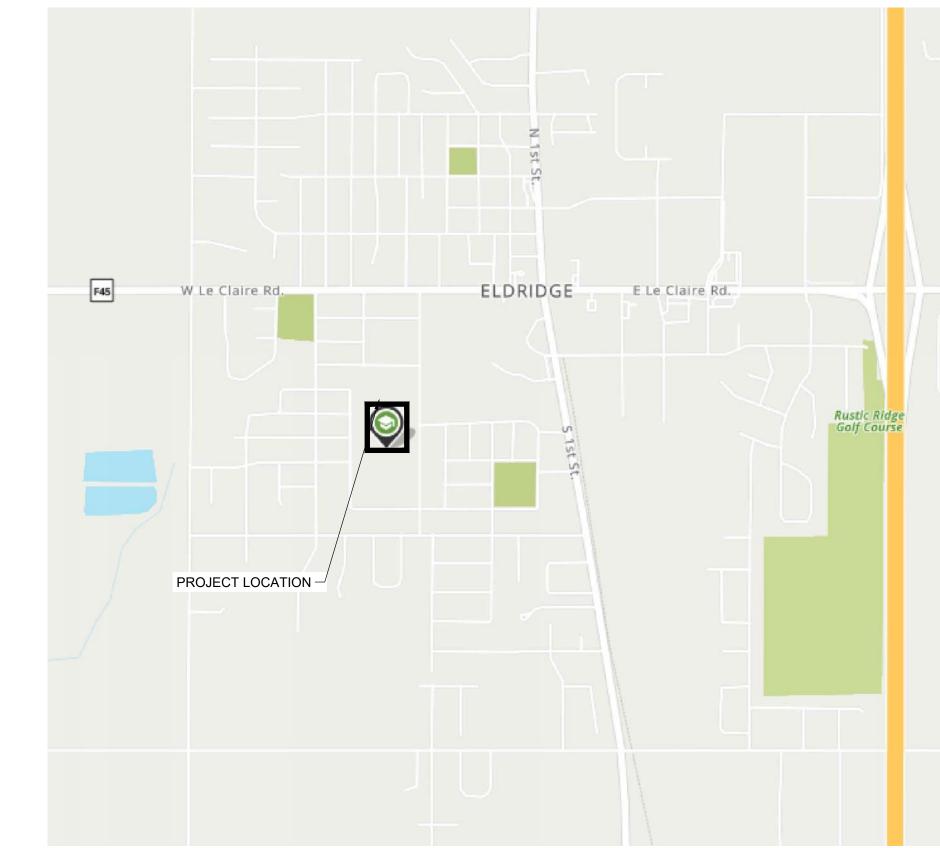
**ADDITION AND RENOVATIONS TO** 

NO. DESCRIPTION DATE



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29 |





#### **LOCATION MAP**

DDODOSED	EVICTING	
PROPOSED	EXISTING	
•		STORM MANHOLE
•		STORM OVERFLOW STRUCTURE
•	$\triangleleft$	FLARED END SECTION
		DOWNSPOUT
	G	GAS METER
<del></del>	—ST ——ST ——	STORM SEWER
	—	GAS LINE
		TREE REMOVAL
		ASPHALT PAVMENT REMOVAL
		PCC SIDEWALK REMOVAL
+++++++++++++++++++++++++++++++++++++++		PIPE REMOVAL

HORIZONTAL CONTROL - NAD 83						
POINT#	NORTHING	EASTING	DESCRIPTION			
100	614432.2650	2435534.9860	CP SPIKE			
201	614712.6500	2435573.2920	CP MAG			
2000	614432.3310	2435535.0170	CHK			

1. PRIOR TO ANY EXCAVATION AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND/OR ENGINEER, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANIES' REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.

- 2. PROTECT ALL ITEMS WITHIN THE CONTRACT LIMITS NOT INDICATED TO BE REMOVED. 3. ANY EXISTING FACILITIES THAT ARE DAMAGED DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 4. SAWCUT EDGES OF PAVEMENT FULL DEPTH PRIOR TO REMOVAL TO PREVENT DAMAGE TO ADJACENT SLABS AND

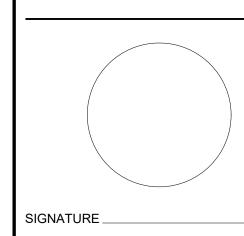
5. CONTRACTOR SHALL KEEP REQUIRED AREAS SECURE WHEN FENCING OR OTHER BARRIERS ARE NECESSARILY

- 6. IMMEDIATELY NOTIFY ENGINEER OF UNEXPECTED SUB-SURFACE CONDITIONS. DISCONTINUE WORK IN AREA
- UNTIL NOTIFIED BY ENGINEER TO RESUME WORK. 7. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- 8. NOTIFY UTILITY COMPANIES TO REMOVE AND RELOCATE UTILITY SERVICES AND FACILITIES AS NEEDED. 9. COORDINATE WITH OWNER OR ADJACENT PROPERTY OWNERS AS NECESSARY WHEN SCHEDULING
- DISCONNECTION OF UTILITIES OR SERVICE DISRUPTIONS.
- 10. USE GRANULAR BACKFILL MATERIALS FOR ALL UTILITY EXCAVATIONS WITHIN 2' OF PAVED SURFACES. 11. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF PROPERLY OFF-SITE.

#### FEATURES LEGEND

PROPOSED	EXISTING	
•		STORM MANHOLE
•		STORM OVERFLOW STRUCTURE
•	$\triangleleft$	FLARED END SECTION
		DOWNSPOUT
	G	GAS METER
<del></del>	—ST ——ST ——	STORM SEWER
	——-G———-G———	GAS LINE
		TREE REMOVAL
		ASPHALT PAVMENT REMOVAL
		PCC SIDEWALK REMOVAL
+++++++++++++++++++++++++++++++++++++++		PIPE REMOVAL
		BUILDING (GARAGE) REMOVAL

Know what's below.  Call before you dig.



LEGATARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

SCOTT

COMMUNITY

SCHOOL

DISTRICT

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

251 East Iowa Street

Eldridge, IA 52748

**ARCHITECT** 

Legat Architects

1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545

F: 309.517.5540 www.legat.com

CONSTRUCTION MANAGER

**Russel Construction** 

4700 East 53rd Street Davenport, IA 52807 563.459.5600

www.russelco.com

CIVIL ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P:

563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue Rock

Island, IL 61201 P:

309.788.0673 F:

309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

DATE\_

**REVISIONS** NO. DESCRIPTION DATE

223049.00

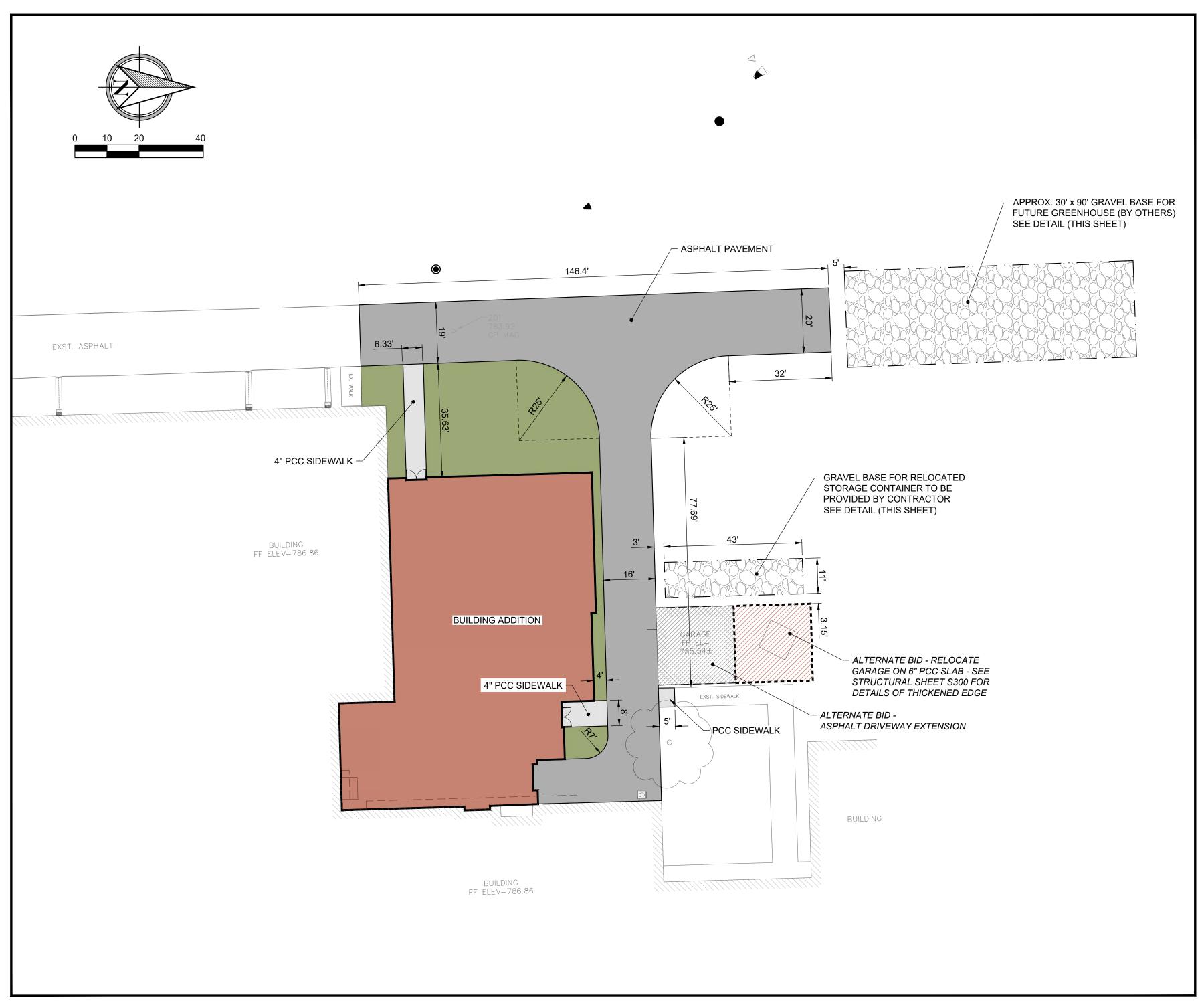
LE | CM

DATE OF ISSUE DRAWN BY CHECKED BY

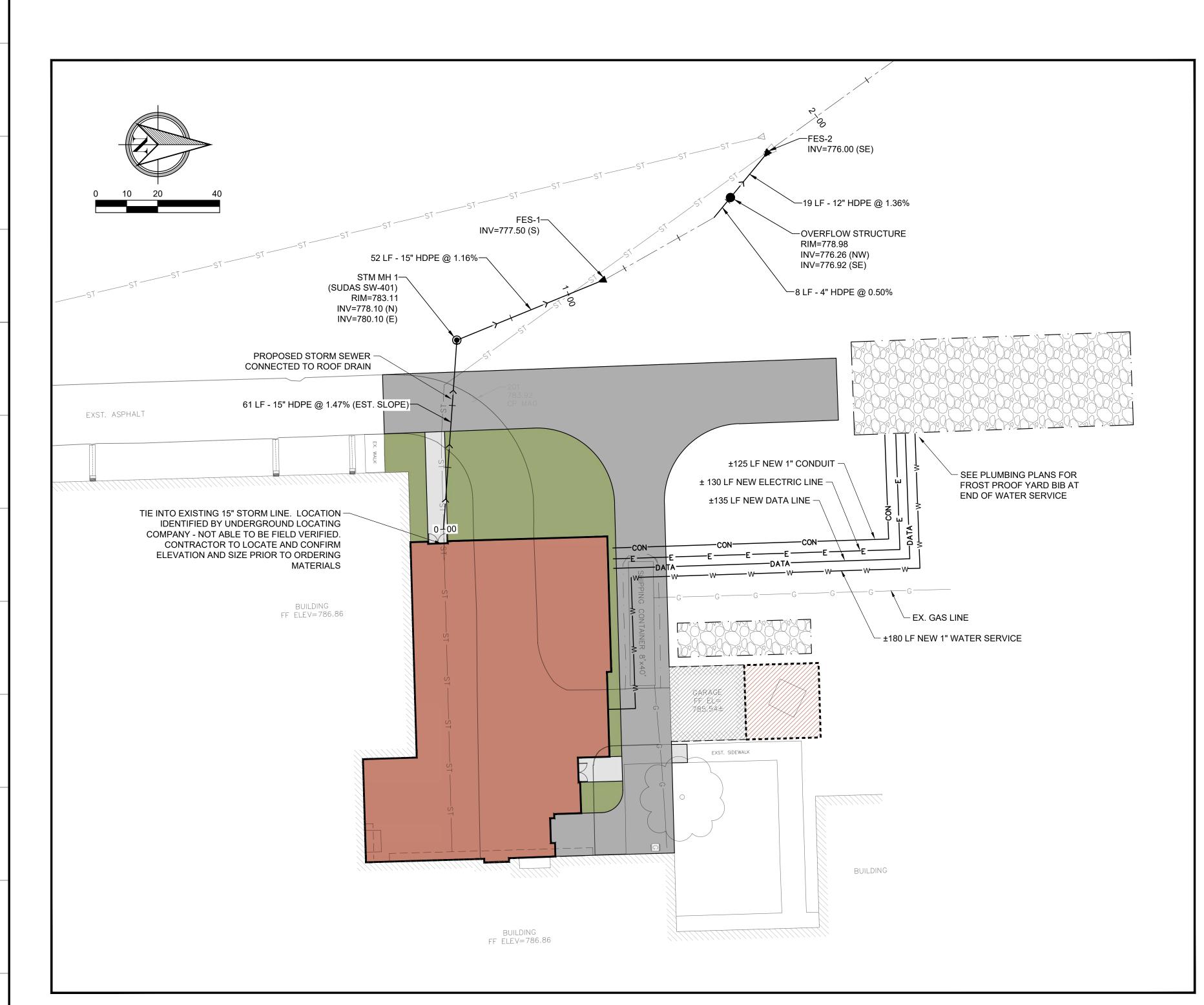
PROJECT NUMBER

EXISTING CONDITIONS & DEMOLITION PLAN

ISSUED FOR BIDDING



SITE LAYOUT PLAN



UTILITY LAYOUT PLAN

#### GENERAL NOTES:

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29

- 1. ALL IMPROVEMENTS SHOWN SHALL COMPLY WITH THE CURRENT EDITIONS OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS), CITY OF ELDRIDGE SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS, IOWA STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION (WHERE SPECIFIED), AND CITY OF ELDRIDGE CODE OF ORDINANCES AND STANDARDS.
- TOPOGRAPHIC SURVEY AND BOUNDARY LOCATION FOR THE SITE WAS PROVIDED BY ABBITT LAND SURVEY & DEVELOPMENT.
- 3. LOCATIONS OF UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES WERE DETERMINED FROM AVAILABLE SURVEYS, RECORDS, AND FIELD INVESTIGATION. THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. OTHER UTILITIES MAY ALSO EXIST THAT ARE NOT SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES.
- 4. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES BETWEEN THE DRAWINGS AND THE EXISTING CONDITIONS, FEATURES, OR ANY OTHER CONFLICTING INFORMATION CONTAINED IN THE PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH THE WORK.
- 5. CONTRACTOR SHALL PROTECT ALL ABOVE AND BELOW GRADE EXISTING UTILITIES, PAVED STREETS AND OTHER ITEMS TO REMAIN, INCLUDING ANY NOT SHOWN IN THE PLANS. DAMAGE TO EXISTING UTILITIES,
- PAVING OR OTHER ITEMS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

  6. IMMEDIATELY NOTIFY ENGINEER OF UNEXPECTED SUB-SURFACE CONDITIONS. DISCONTINUE WORK IN AREA UNTIL NOTIFIED BY ENGINEER TO RESUME WORK.
- UNTIL NOTIFIED BY ENGINEER TO RESUME WORK.7. DEVELOPER OR CONTRACTOR RESPONSIBLE FOR ALL FIELD TESTING AND MATERIALS TESTING AS MAY BE REQUIRED BY THE CITY.
- 8. WORK SHALL BE PERFORMED IN A MANNER WHICH PROVIDES THE LEAST INTERFERENCE AND MOST PROTECTION TO THE PUBLIC. CONTRACTOR'S OPERATIONS SUBJECT TO APPROVAL BY THE CITY PRIOR TO
- BEGINNING WORK.

  CONTRACTOR SHALL KEEP REQUIRED AREAS SECURE WHEN FENCING OR OTHER RARRIERS ARE
- CONTRACTOR SHALL KEEP REQUIRED AREAS SECURE WHEN FENCING OR OTHER BARRIERS ARE NECESSARILY REMOVED.
   ALL DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS SHALL BE PROPERLY DISPOSED OF OFF-SITE.

#### 11. KEEP ADJACENT PUBLIC STREETS FREE FROM SOIL AND DEBRIS GENERATED BY THE PROJECT. CLEAN SOIL AND DEBRIS FROM THE ADJACENT STREETS ON A DAILY BASIS AS SOON AS FEASIBLE.

#### CONSTRUCTION STAKING AND LAYOUT NOTES:

STATE OF IOWA AT THE CONTRACTOR'S EXPENSE.

- 1. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING CONSTRUCTION LAYOUT FOR ALL CONSTRUCTION.
- NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH WORK.
- PAVING DIMENSIONS SHOWN ARE TO BACK OF CURB AND EDGE OF PAVEMENT UNLESS NOTED OTHERWISE
   RADII ARE TO EDGE OF PAVEMENT OR TO BACK OF CURB LINE LOCATION UNLESS NOTED OTHERWISE.
- SIDEWALK CURB RAMPS SHALL BE BUILT IN ACCORDANCE WITH FEDERAL AND STATE ACCESSIBILITY STANDARDS
- SUBMIT SIDEWALK JOINTING PLAN TO ARCHITECT PRIOR TO CONSTRUCTION.
- VERIFY LOCATION OF CURB CUTS PRIOR TO CONSTRUCTION.
   CONTRACTOR SHALL PROTECT ALL LAND CORNERS, PROPERTY PINS, AND PERMANENT REFERENCE MARKERS UNLESS NOTED OTHERWISE. LAND CORNERS, PROPERTY PINS, AND PERMANENT REFERENCE MARKERS DISTURBED BY THE CONTRACTOR SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR IN THE
- 9. STAKING ELEVATIONS SHALL BE OBTAINED FROM THE PRINTED PLANS. IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PRINTED PLANS AND THE ELECTRONIC FILES BEFORE PROCEEDING WITH
- 10. ELECTRONIC AUTODESK CIVIL3D FILES WILL BE PROVIDED TO AID CONSTRUCTION LAYOUT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LAYOUT THE LOCATIONS AND GRADES BASED ON THE PRINTED PLANS, USING THE PROVIDED ELECTRONIC FILES FOR ASSISTANCE. IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PRINTED PLANS AND THE ELECTRONIC FILES BEFORE PROCEEDING WITH
- 11. VERIFY ALL COORDINATES PRIOR TO CONSTRUCTION. CHECK HORIZONTAL AND VERTICAL INFORMATION INCLUDING BUT NOT LIMITED TO ALIGNMENTS, LOCATIONS, ELEVATIONS, AND DIMENSIONS, THAT EITHER THE PLANS SHOW OR THE ENGINEER PROVIDES, FOR COMPATIBILITY WITH EXISTING FIELD CONDITIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOR REVIEW PRIOR TO STAKING.

#### PAVING NOTES:

- APPLY CALCIUM CHLORIDE TO PROVIDE

— 4" AGGREGATE SURFACE GRADATION

- 6" AGGREGATE BASE

(95% STD. DENSITY)

GRADATION 13 MACADAM STONE BASE

- GEOTECH FABRIC MIRAFI

500X OR EQUAL

(95% STD. DENSITY) (SEE NOTE)

DUST FREE SURFACE (SEE NOTE)

11 CLASS A ROAD STONE

TO PROVIDE A DUST FREE SURFACE, IT IS ACCEPTABLE TO SUBSTITUTE 4" OF GRADATION 11 CRUSHED ASPHALT FOR THE 4" OF GRADATION 11

GRANULAR SURFACING SECTION FOR

RELOCATED SHIPPING CONTAINER

TO PROVIDE A DUST FREE SURFACE, IT IS ACCEPTABLE TO SUBSTITUTE

4" OF GRADATION 11 CRUSHED ASPHALT FOR THE 4" OF GRADATION 11

GRANULAR SURFACING SECTION

FOR FUTURE GREENHOUSE

N.T.S.

CLASS A ROAD STONE AND ELIMINATE THE CALCIUM CHLORIDE

- APPLY CALCIUM CHLORIDE TO PROVIDE DUST FREE SURFACE (SEE NOTE)

11 CLASS A ROAD STONE

← 6" AGGREGATE SURFACE GRADATION

(95% STD. DENSITY) (SEE NOTE)

CLASS A ROAD STONE AND ELIMINATE THE CALCIUM CHLORIDE

COMPACTED SUBGRADE

COMPACTED SUBGRADE

APPLICATION ON THE AGGREGATE.

(95% STD. DENSITY)

APPLICATION ON THE AGGREGATE.

(95% STD. DENSITY)

1. SITE PAVING AND JOINTING: COMPLY WITH DETAILS ON PLANS AND SUDAS STANDARD DETAILS.

#### **UTILITY NOTES:**

- 1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ELDRIDGE CODE OF ORDINANCES, CURRENT EDITION OF STATEWIDE URBAN STANDARDS AND SPECIFICATIONS (SUDAS), CITY OF ELDRIDGE STANDARD SPECIFICATIONS AND DETAILED DRAWINGS, AND CURRENT EDITION OF STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (IOWA DOT) WHERE REFERENCED.
- 2. LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED AS APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT EACH UTILITY COMPANY AND IOWA ONE-CALL FOR LOCATION OF EXISTING LINES IN OR NEAR THE CONSTRUCTION AREA. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS BETWEEN THE DRAWINGS AND THE EXISTING FEATURES.
- 3. CONTRACTOR SHALL PROTECT ALL ABOVE AND BELOW GRADE EXISTING UTILITIES, PAVED STREETS AND OTHER ITEMS TO REMAIN, INCLUDING ANY NOT SHOWN IN THE PLANS. CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY MAJOR CONFLICTS BETWEEN THE DRAWING AND THE EXISTING FEATURES. DAMAGE TO EXISTING UTILITIES, PAVING OR OTHER ITEMS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS
- 4. NOTIFY UTILITY COMPANIES TO REMOVE AND RELOCATE UTILITIES IF NEEDED.
- COORDINATE WITH OWNER AND ADJOINING PROPERTIES WHEN SCHEDULING DISCONNECTION OF UTILITIES OR SERVICE DISRUPTIONS.
- USE GRANULAR BACKFILL MATERIALS FOR ALL UTILITY EXCAVATIONS WITHIN 2' OF PAVED SURFACES.
   ADJUSTMENTS OF UTILITY FIXTURES, VALVES, AND CASTINGS SHALL BE INCIDENTAL TO THE PAVEMENT AND GRADING ITEMS, UNLESS NOTED OTHERWISE. ANY DAMAGE MADE TO UTILITIES DURING ADJUSTMENT SHALL
- EXISTING UTILITY MARKERS SHALL BE CAREFULLY REMOVED, STORED, AND REINSTALLED AS REQUIRED FOR CONSTRUCTION. UTILITY MARKERS LOST OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

#### STORM SEWER NOTES:

1. SEE CITY OF ELDRIDGE SPECIFICATIONS FOR ALLOWABLE PIPE MATERIALS.

BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.

LENGTHS OF PIPE RUNS SHOWN ARE MEASURED FROM CENTER TO CENTER OF STRUCTURES. SLOPES AND LENGTHS ARE BASED UPON THOSE MEASUREMENTS.
 ADHERE TO ALL IOWA DNR WATER AND SEWER SEPARATION REQUIREMENTS.

#### TRENCH EXCAVATION AND BACKFILL:

- 1. EXCAVATE TRENCH TO UNIFORM WIDTHS AS SHOWN IN STANDARD DETAILS. TRENCH BOTTOM SHALL PROVIDE A SMOOTH, FIRM, STABLE, AND ROCK FREE FOUNDATION FOR THE ENTIRE LENGTH OF THE PIPE.
- FOR UTILITIES IN FILL, CONSTRUCT COMPACTED EMBANKMENT TO A MINIMUM OF 2' ABOVE TOP OF PIPE ELEVATION PRIOR TO TRENCHING.
- NOTIFY OWNER IF UNSUITABLE MATERIALS EXIST IN THE TRENCH. OVEREXCAVATE AS DEEMED NECESSARY BY THE OWNER, AND INSTALL TRENCH STABILIZATION MATERIAL BELOW THE BEDDING ELEVATION TO PROVIDE FOR PROPER PIPE OR STRUCTURE SUPPORT.
- PROVIDE FOR PROPER PIPE OR STRUCTURE SUPPORT.

  4. BACKFILL WITH GRANULAR MATERIALS AS SPECIFIED ABOVE TO 1' ABOVE PIPE FOR FLEXIBLE PIPE MATERIALS
- AND TO SPRINGLINE FOR RIGID PIPE MATERIALS.

  5. REMAINDER OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EXCAVATED MATERIALS IN LOCATIONS
- BEYOND 2' OF PAVED SURFACES. USE GRANULAR BACKFILL MATERIALS WITHIN 2' OF PAVED SURFACES AS SPECIFIED ABOVE.

  6. PLACE AND COMPACT SPECIFIED BACKFILL MATERIALS TO THE PROPOSED SUBGRADE OR SURFACE

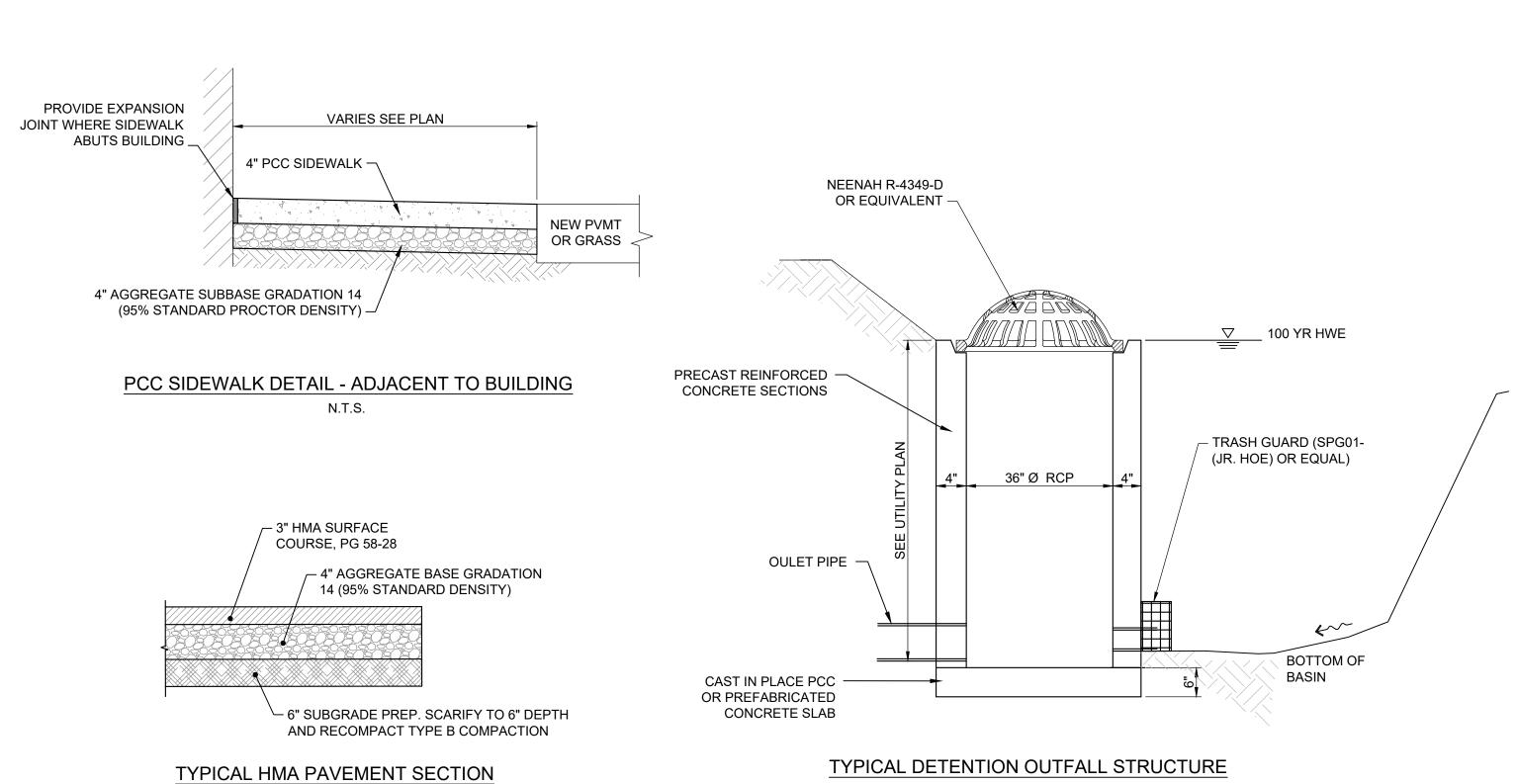
ELEVATIONS. COMPACT TO 95% OF STANDARD PROCTOR DENSITY BENEATH PAVEMENT AND WITHIN PUBLIC

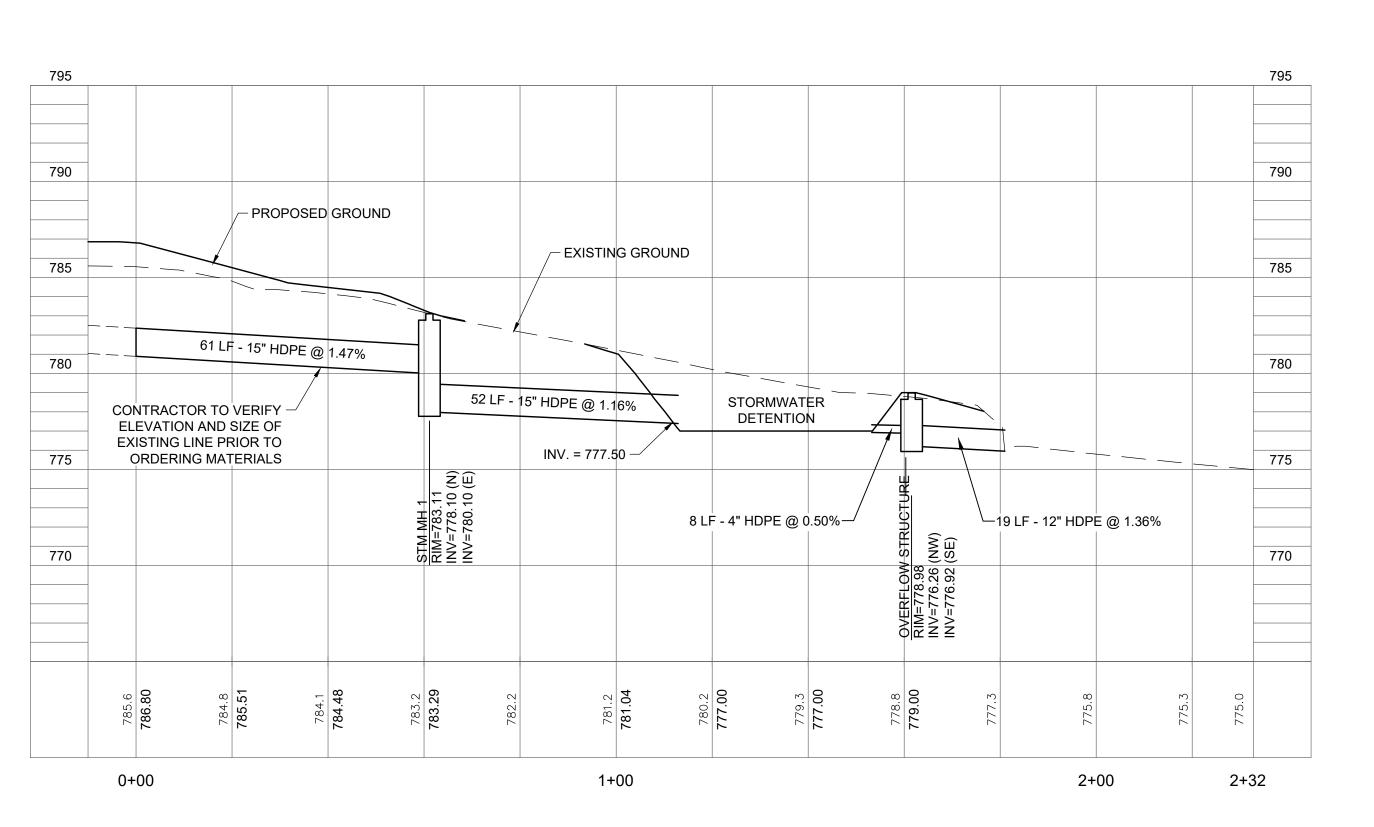
RIGHT-OF-WAY AND 90% OF STANDARD PROCTOR DENSITY IN OTHER LOCATIONS.

UTILITY NOTE

ALL UTILITIES, MAINS, SERVICE CONNECTIONS, AND STRUCTURES ARE
APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE
TO THE ENGINEER. THERE MAY BE OTHER EXISTING UTILITIES, MAINS,
SERVICE CONNECTIONS, AND STRUCTURES NOT KNOWN AND NOT SHOWN
ON THIS THESE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO
DETERMINE THE EXACT LOCATION, DEPTH, AND SIZE OF ALL EXISTING
UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CALL IOWA ONECALL
(1-800-292-8989) FOR UTILITY LOCATES A MINIMUM OF 48-HOURS PRIOR TO
DIGGING. REVIEW EXISTING UTILITY RECORDS SUPPLIED BY THE ARCHITECT
AND PERFORM EXPLORATORY DIGGING AS NECESSARY TO VERIFY UTILITIES

PRIOR TO ORDERING MATERIALS AND CONSTRUCTION OF IMPROVEMENTS.





STORM SEWER PROFILE

LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

SCOTT
COMMUNITY
SCHOOL
DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

251 East Iowa Street Eldridge, IA 52748

ARCHITECT
Legat Architects
1515 5th Avenue, Suite 108

Moline, IL 61265 P: 309.517.5545 F: 309.517.5540 www.legat.com

CONSTRUCTION MANAGER

Russel Construction
4700 East 53rd Street

Davenport, IA 52807

563.459.5600 www.russelco.com

CIVIL ENGINEER RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

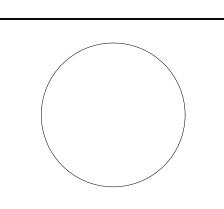
www.rtmec.com

STRUCTURAL ENGINEER

IMEG
623 26th Avenue Rock
Island, IL 61201 P:
309.788.0673 F:
309.786.5967
www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



NO. DESCRIPTION DATE

223049.00

11.10.23

LE | CM

PROJECT NUMBER

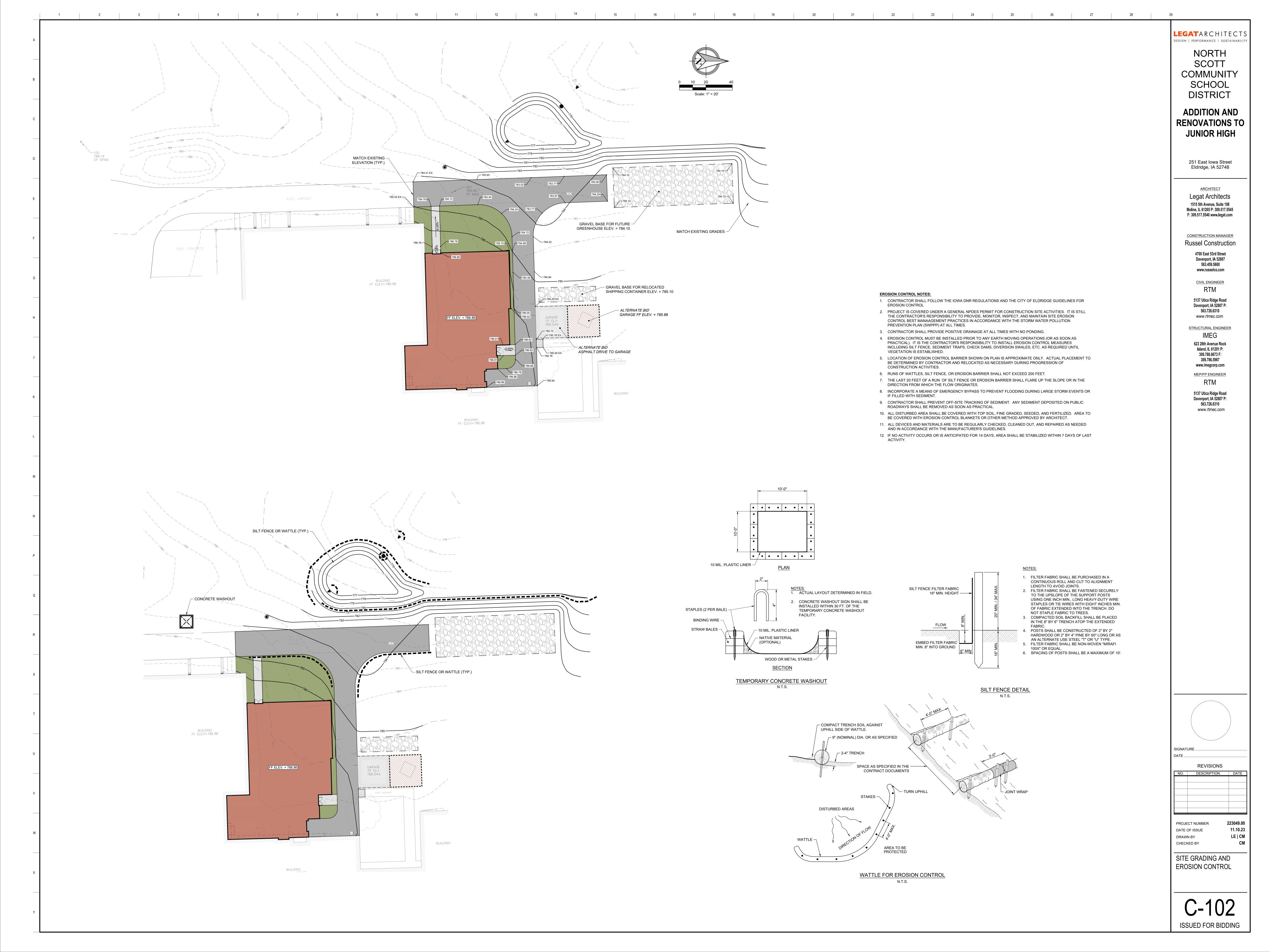
DATE OF ISSUE

DRAWN BY

CHECKED BY

SITE LAYOUT AND UTILITY PLAN

C-101
ISSUED FOR BIDDING



#### DESIGN CRITERIA

1. STRUCTURE HAS BEEN DESIGNED TO COMPLY WITH: ASCE 7-10 ACI 318-14 AISC 360-10 **AISI S100** AWS D1.1, AND D1.3 2. RISK CATEGORY III LIVE LOADS: TYPICAL ROOF 20 PSF (REDUCIBLE) 4. SNOW: **GROUND SNOW** SNOW EXPOSURE FACTOR THERMAL FACTOR IMPORTANCE FACTOR FLAT-ROOF SNOW SEE S-001 FOR SNOW DRIFT PLAN SEISMIC: SEISMIC DESIGN CATEGORY IMPORTANCE FACTOR SOIL CLASS 0.091 g0.063 g SEISMIC FORCE RESISTING SYSTEM ORDINARY REINFORCED MASONRY SHEAR WALLS 1 3/4

R 2
Cd 1 3/4
Ω0 2 ½
ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR, STRENGTH V = Cs x W = 0.0607 x 952 = 57.8 KIPS
LEVEL

6. WIND:
BASIC WIND SPEED V ULT = 120 MPH
IMPORTANCE FACTOR 1.15

EXPOSURE CLASS STORY DRIFT INTERNAL PRESSURE COEFFICIENT, **ROOF COMPONENTS** ZONE 2 ZONE 3 SUPPORT BEAMS (A > 200 SF) 28.1 PSF 30.3 PSF 30.2 PSF ROOF SHEATHING (A = 50 SF) 28.1 PSF 30.9 PSF 34.2 PSF DECK FASTENERS (A ≤ 10 SF) 28.1 PSF 32.5 PSF 43.4 PSF WALL COMPONENTS: ZONE 4 ZONE 5 A = 100 SF22.2 PSF 24.6 PSF A = 50 SF23.2 PSF 26.7 PSF A ≤ 20 SF 24.6 PSF 29.5 PSF BASE SHEAR, STRENGTH LEVEL V = 12.6 KIPS, GRID D V = 6.6 KIPS, GRID 4

a. THE PRESSURES LISTED ARE IN ACCORDANCE IBC AND ASCE 7, AND THE DESIGN FORCES USED BY THE SUBCONTRACTOR FOR A SPECIFIC APPLICATION ARE THE RESPONSIBILITY OF THE SUBCONTRACTOR.
b. WIND PRESSURES ARE ULTIMATE DESIGN LEVEL.

c. SEE ASCE 7 FOR ZONE DEFINITIONS AND EXTENT OF ZONES.
d. SUBMIT DESIGN CALCULATIONS PREPARED BY A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED, FOR ANY DESIRED MODIFICATION TO THE STATED PRESSURES.

ALL LATERAL LOAD RESISTANCE AND STABILITY OF THE BUILDING IN THE COMPLETED STRUCTURE IS PROVIDED BY SHEAR WALLS IN EACH ORTHOGONAL DIRECTION. SEE PLANS FOR LOCATIONS. THE STEEL DECKS SERVE AS HORIZONTAL DIAPHRAGMS DISTRIBUTING THE LATERAL FORCES TO THE VERTICAL LATERAL ELEMENTS WHICH IN TURN CARRY THE LOAD TO THE BUILDING FOUNDATIONS.

#### **GENERA**

DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONNEL AND PROPERTY ON AND AROUND THE JOBSITE. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING, GUYS, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.
 ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION SO A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.

STRUCTURAL SUBSTITUTIONS MAY BE ALLOWED WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. SUPPLIER SHALL PROVIDE SEALED DESIGN CALCULATIONS OR SUITABLE PRODUCT LITERATURE FOR THE COMPONENTS.
 ALL DIMENSIONS AND SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOBSITE PRIOR TO CONSTRUCTION, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, OR CONDITIONS DEVELOP THAT ARE NOT COVERED BY THE CONTRACT

DOCUMENTS, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION.
5. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. STRUCTURAL DRAWINGS INCLUDE DESIGN REQUIREMENTS AND DIMENSIONS FOR

WORK SO IT WILL CONFORM TO THE CLEARANCES REQUIRED BY ARCHITECTURAL, MECHANICAL AND ELECTRICAL DESIGN.
7. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
8. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED

STRUCTURAL INTEGRITY BUT DO NOT SHOW ALL DETAIL DIMENSIONS TO FIT INTRICATE

ARCHITECTURAL AND MECHANICAL DETAILS. CONTRACTOR SHALL SO CONSTRUCT THE

NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
8. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE-SCALE OVER SMALL-SCALE DRAWINGS. CONTRACTOR TO DETERMINE FINAL DIMENSION WITH ARCHITECT.
9. TYPICAL DETAILS SHALL APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED. WHERE NO DETAILS ARE

GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

10. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL

NOT INCLUDE INSPECTION OR APPROVAL OF THE ABOVE ITEMS AND DO NOT IN ANY WAY RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES FOR THE ABOVE.

1. SEE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR DETAILS, CONDITIONS, PITS, TRENCHES, PADS, DEPRESSIONS, ROOF/FLOOR OPENINGS, STAIRS, SLEEVES, ITEMS TO BE EMBEDDED OR ATTACHED TO STRUCTURAL ELEMENTS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS.

2. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL AND PLUMBING WITH APPROPRIATE TRADE CONTRACTORS. OPENING SIZES AND LOCATIONS

PLUMBING WITH APPROPRIATE TRADE CONTRACTORS. OPENING SIZES AND LOCATIONS SHOWN FOR DUCTS, PIPE, INSERTS AND OTHER PENETRATIONS WHEN SHOWN ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED PRIOR TO FORMING.

13. NO BLOCK-OUTS, ETC. ARE ALLOWED IN STRUCTURAL ELEMENTS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

14. BEFORE SUBMITTING A PROPOSAL FOR THIS WORK, EACH PARTY SHALL VISIT THE PREMISES AND BECOME FULLY ACQUAINTED WITH CONDITIONS IN FIELD, TEMPORARY CONSTRUCTION REQUIRED, QUANTITIES AND TYPE OF EQUIPMENT, ETC. THE PROPOSAL SHALL INCLUDE ALL SUMS REQUIRED TO DO THE WORK.

#### SUBMITTALS

a. CONCRETE MIX DESIGNS
b. MATERIAL PRODUCT DATA FOR STRUCTURAL MATERIALS
c. CONCRETE AND MASONRY REINFORCING
d. STEEL FABRICATION AND MISCELLANEOUS METALS

SUBMITTALS ARE:

SECTIONS.

e. JOISTS
f. STEEL DECK
2. SUBMITTALS SHALL BE REVIEWED AND COORDINATED PRIOR TO SUBMITTING TO THE ARCHITECT. EACH SHOP DRAWING SUBMITTED SHALL BE STAMPED INDICATING REVIEW

ARCHITECT SHALL NOT BEGIN UNTIL THIS IS COMPLETE. WORK SHALL NOT BEGIN WITHOUT REVIEW BY THE ARCHITECT/STRUCTURAL ENGINEER.

3. SUBMITTALS SHALL BE REVIEWED BY THE ARCHITECT/STRUCTURAL ENGINEER FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY. NOTATIONS MADE BY THE ARCHITECT/STRUCTURAL ENGINEER ON THE SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS.

4. FOR ADDITIONAL INFORMATION ON REQUIRED SUBMITTALS, SEE INDIVIDUAL MATERIAL

BY THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR AND REVIEW BY THE

#### **EXISTING CONDITIONS / DEMOLITION**

EXISTING CONDITIONS:
 EXISTING STRUCTURAL INFORMATION SHOWN WAS OBTAINED FROM EXISTING

i. DATED 02/14/1974 BY BRAKE HAYES MILLER, ARCHITECTS.ii. DATED 07/09/1998 BY BRAKE HAYES MILLER, ARCHITECTS.

b. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE. CONTRACTOR TO VERIFY EXISTING INFORMATION, DIMENSIONS AND SIZES AS REQUIRED TO COMPLETE THEIR WORK. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE ARCHITECT OR STRUCTURAL ENGINEER SO PROPER CLARIFICATION MAY BE MADE. MODIFICATION OF CONSTRUCTION DETAILS SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT OR STRUCTURAL

ALL DEMOLITION SHALL BE CARRIED OUT IN SUCH A WAY SO AS TO NOT DAMAGE EXISTING ELEMENTS WHICH ARE TO REMAIN.
 ALL ELEMENTS WHICH ARE TO REMAIN AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDED COST. EXISTING ELEMENTS ARE TO BE PROTECTED TO THE FULLEST EXTENT POSSIBLE TO REDUCE SUCH DAMAGE TO A MINIMUM.

#### **EARTHWORK**

FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT DATED 06/27/2023 BY TEAM SERVICES, INC. REPORT IS ON FILE WITH THE ARCHITECT.
 SOIL PROPERTIES PER THE GEOTECHNICAL REPORT:

ALLOWABLE NET SOIL BEARING PRESSURE:

FOOTINGS

ANTICIPATE DEPTH TO ALLOWABLE SOIL BEARING

FROST DEPTH

3.5 FT BELOW EXISTING GRADE
18 IN (HEATED) 42 IN (UNHEATED)

3. ALL EXCAVATIONS SHALL BE PROPERLY AND SAFELY BACKFILLED. CONTRACTOR SHALL
PROVIDE FOR DESIGN, PERMITS, AND INSTALLATION OR SHORING.

PROVIDE FOR DESIGN, PERMITS, AND INSTALLATION OR SHORING.

CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER OR SEEPAGE. FREE GROUND WATER WAS NOT ENCOUNTERED IN THE BORINGS. DETAILS OF GROUND WATER INFORMATION CAN BE OBTAINED FROM THE ABOVE-MENTIONED GEOTECHNICAL REPORT. IF GROUND WATER SHOULD OCCUR DURING EXCAVATION, SPECIAL PROCEDURES SHALL BE IMPLEMENTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

5. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILL MATERIAL OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS AND FOUNDATIONS. IF ANY SUCH MATERIAL OR STRUCTURES ARE FOUND, ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY. ALL ABANDONED FOUNDATIONS, UTILITIES AND OTHER STRUCTURES THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.

BE REMOVED.
6. ALL FOOTINGS AND SLABS ON GRADE SHALL BE PLACED ONTO FIRM UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL, REMOVING ANY EXISTING FILL, ORGANIC MATERIAL, OR UNSUITABLE SOILS, AS RECOMMENDED BY THE GEOTECHNICAL REPORT. EXPOSED NATURAL SOIL SHALL BE PROOF ROLLED BELOW SLABS ON GRADE.
7. THE PREPARATION OF THE SUBGRADE FOR THE SLAB ON GRADE SHALL BE IN STRICT

CONTRACTOR SHALL DIRECT QUESTIONS REGARDING THE SUBGRADE PREPARATION REQUIREMENTS TO THE GEOTECHNICAL ENGINEER.

8. FOUNDATION ELEVATIONS SHOWN DESIGNATE A MINIMUM DEPTH WHERE AN ADEQUATE SOIL BEARING PRESSURE IS EXPECTED. FOOTINGS, PIERS AND/OR WALLS SHALL BE LOWERED OR EXTENDED AS REQUIRED TO REACH SOIL MEETING THE DESIGN BEARING PRESSURE AS DIRECTED BY GEOTECHNICAL ENGINEER ON SITE

ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT REFERENCED ABOVE. THE

LOWERED OR EXTENDED AS REQUIRED TO REACH SOIL MEETING THE DESIGN BEARING PRESSURE AS DIRECTED BY GEOTECHNICAL ENGINEER ON SITE.

9. ALL REQUIRED BACKFILL AND UTILITY TRENCH BACKFILL WITHIN THE BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN 12" LAYERS TO 95% MAXIMUM DRY DENSITY PER

ASTM D698 AND TO THE APPROVAL OF THE INSPECTION AGENCY.
10. THE MOISTURE CONTENT OF ONSITE CLAYEY SOILS AT THE TIME OF COMPACTION SHALL BE BETWEEN 2-3% ABOVE OPTIMUM MOISTURE CONTENT.
11. ANY REQUIRED IMPORT FILL SOIL SHALL HAVE A LOW POTENTIAL FOR EXPANSION AND SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO IMPORTING.

#### REINFORCING STEEL

ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE AMERICAN CONCRETE INSTITUTE "ACI DETAILING MANUAL" (SP-066) EXCEPT AS OTHERWISE SHOWN, NOTED OR SPECIFIED.
 CONCRETE REINFORCING STEEL SHALL BE HIGH STRENGTH NEW BILLET STEEL CONFORMING TO THE FOLLOWING STANDARDS:
 DEFORMED BARS
 ASTM A615. GR 60
 Fv = 60 KSI

WELDED WIRE REINFORCING ASTM A1064 Fy = 65 KSI
DEFORMED EPOXY-COATED BARS ASTM A775 Fy = 60 KSI

MINIMUM CONCRETE COVER SHALL BE PROVIDED AS FOLLOWS TO THE OUTERMOST REINFORCING BARS:

CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND 3"

REINFORCING BARS:

CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND 3"

EXPOSED TO WEATHER OR IN CONTACT WITH GROUND

#6 BARS OR LARGER 2"

#5 BARS OR SMALLER 1 1/2"

NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND

SLABS, JOIST AND WALLS WITH #14 AND #18 BARS 1 1/2"

4. BAR SPLICES: SPLICE REINFORCING WHERE INDICATED ON THE DRAWINGS. ALL SPLICES SHALL BE CLASS 'B' AS DEFINED IN ACI 318. IF SPLICE LENGTH IS NOT GIVEN ON THE DRAWINGS. PROVIDE LAP LENGTHS (IN INCHES) AS FOLLOWS:

DAD CIZE	3000 PSI CC	ONCRETE	4000 PSI CONCRETE		
BAR SIZE	OTHER	TOP	OTHER	TOF	
#3	22	28	19	25	
#4	29	38	25	33	
#5	36	47	31	41	
#6	43	56	37	49	
#7	63	81	54	71	
#8	72	93	62	81	
#9	81	105	70	91	

LAP LENGTHS ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM COVER OF 1 BAR DIAMETER. FOR DEVELOPMENT LENGTHS, DIVIDE BY 1.3. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 1'-0" OF FRESH CONCRETE BELOW

WELDING OF REINFORCING BARS TO BE IN ACCORDANCE WITH AWS D1.4.
 SUPPORTS FOR REINFORCEMENT SHALL HAVE CLASS 2 PROTECTION AS DEFINED IN THE CRSI MANUAL OF STANDARD PRACTICE, UNLESS OTHERWISE NOTED.
 SUPPORTS FOR COATED REINFORCEMENT SHALL HAVE CLASS 1 PROTECTION AS DEFINED IN THE CRSI MANUAL OF STANDARD PRACTICE, UNLESS OTHERWISE NOTED.
 ALL WELDED WIRE REINFORCING (WWR) SHALL BE LAPPED 2 PANELS AT EDGES AND

ENDS.

9. CONTINUOUS HORIZONTAL REINFORCING SHALL BE LAPPED AT MIDSPAN FOR TOP BARS AND DIRECTLY OVER SUPPORTS FOR BOTTOM BARS. AT DISCONTINUOUS ENDS, THE TOP STEEL SHALL BE BENT DOWN 12 BAR DIAMETERS OR 12" MINIMUM, WHICHEVER IS

DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY, UNLESS OTHERWISE NOTED. PROVIDE FOUNDATION DOWELS TO MATCH SIZE AND SPACING OF WALL OR COLUMN REINFORCEMENT. EXTEND DOWELS A LAP SPLICE LENGTH INTO WALL OR COLUMN AND TERMINATE WITH STANDARD HOOK AT BOTTOM OF FOOTING, UNLESS OTHERWISE NOTED.
 REINFORCING IN WALL FOOTINGS BETWEEN COLUMNS SHALL BE DEVELOPED (Ld) INTO

COLUMN FOOTINGS.

12. CUTTING OF REINFORCING WHICH CONFLICTS WITH EMBEDDED OBJECTS OR SLEEVES IS NOT ACCEPTABLE.

13. REINFORCING BARS SHALL BE BENT COLD, AND NO METHOD OF FABRICATION SHALL BE

USED WHICH WOULD BE INJURIOUS TO THE MATERIAL. HEATING OF BARS FOR BENDING IS NOT PERMITTED.
14. FIELD WELDING OR BENDING OF REINFORCING IS NOT PERMITTED EXCEPT AS INDICATED ON THE DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER.
15. USE TEMPLATES TO SET ALL EMBEDDED ANCHOR BOLTS, LEVELING PLATES, AND DOWEL

16. SUBMIT SHOP DRAWINGS FOR FABRICATION AND PLACEMENT OF REINFORCING STEEL. INCLUDE SCHEDULES AND DIAGRAMS OF BENT BARS AND SHOW ARRANGEMENT OF REINFORCEMENT, INCLUDING CONCRETE COVER. STRUCTURAL ENGINEER'S REVIEW WILL BE FOR COMPLIANCE WITH DESIGN REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS AND QUANTITIES.

17. ALL CONCRETE NOT OTHERWISE SPECIFIED SHALL BE REINFORCED TO THE MINIMUM

### CAST-IN-PLACE CONCRETE

 ALL CONCRETE WORK SHALL CONFORM TO THE CORRESPONDING EDITION OF THE AMERICAN CONCRETE INSTITUTE PUBLICATIONS: ACI 117, ACI 301, ACI 305.1, ACI 306.1, ACI 308.1, ACI 318 AND SP-066, UNLESS OTHERWISE NOTED.
 CONCRETE MATERIALS SHALL CONFORM TO:

ASTM C150, TYPE I OR II

FLY ASH
FINE AND COARSE AGGREGATE
WATER
AIR-ENTRAINING ADMIXTURE
WATER REDUCING ADMIXTURE
CONCRETE STRENGTHS SHALL CONFORM TO:

ASTM C618, TYPE C OR F
ASTM C33
POTABLE
ASTM C260
ASTM C494
CONCRETE STRENGTHS SHALL CONFORM TO:

BARS AS REQUIRED.

CEMENT

REINFORCING.

GROUT

JOINT REINFORCING

INTENDEDUSE	STRENGTH(PSI)	EXPOSU CLASS
INTERIOR FOUNDATIONS/FOOTINGS	3000	F0,S0,C0
EXTERIOR FOUNDATIONS/FOOTINGS	4000	F1,S0,C1
SLAB ON GRADE	3000	F0,S0,C0
UNLESS OTHERWISE NOTED	4000	F1,S0,C1
NORMAL-WEIGHT 28-DAY STRENGTH UNLESS OT	HERWISE NOTED.	
3.DRYPACK OR GROUT SHALL HAVE A MINIMUM 2	28-DAY STRENGTH OF 700	0 PSI.

3.DRYPACK OR GROUT SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 7000 PSI.
 4. SLAB-ON-GRADE CONSTRUCTION: LOCATE SAW-CUT CONTROL JOINTS ALONG COLUMN LINES WITH INTERMEDIATE JOINTS SPACED PER THE TABLE BELOW, UNLESS OTHERWISE NOTED. SLAB PANELS SHALL HAVE A MAXIMUM LENGTH TO WIDTH RATIO OF 1.5:1. PROVIDE ADDITIONAL CONTROL JOINTS AT ALL RE-ENTRANT CORNERS. SEE PLAN FOR SPECIAL CASES.
 THICKNESS (IN) MAXIMUM JOINT SPACING EACH WAY (FT)

5 10
5. CROSS REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS TO ENSURE PROPER

DIMENSIONS AND PLACEMENT OF ALL ANCHOR BOLTS, INSERTS, NOTCHES, AND EDGES OF WALLS/FOUNDATIONS PRIOR TO PLACING CONCRETE.

6. UNLESS OTHERWISE NOTED, ALL FOOTINGS SHALL BE CENTERED UNDER WALLS, PIERS OR COLUMNS.

CONSTRUCTION JOINTS SHALL BE CLEAN BEFORE POUR. LOCATION TO BE APPROVED BY THE STRUCTURAL ENGINEER. SUBMIT LOCATION PLAN OF ALL PROPOSED JOINTS NOT INDICATED ON DRAWINGS FOR APPROVAL PRIOR TO BEGINNING WORK.
 PRIOR TO PLACING CONCRETE, THE CONTRACTOR SHALL ENSURE ALL REINFORCING AND EMBEDMENTS, INCLUDING COLUMN ANCHOR BOLTS, ARE PROPERLY LOCATED AND SECURELY TIED IN PLACE.

PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL PENETRATIONS THROUGH
CONCRETE BEFORE PLACING. SECURE SLEEVES TO PREVENT MOVEMENT DURING
PLACING OPERATIONS. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS.
 CONFIRM WITH ARCHITECT THAT MATERIALS TO BE EMBEDDED ARE SUITABLE FOR

CONFIRM WITH ARCHITECT THAT MATERIALS TO BE EMBEDDED ARE SUITABLE FOR EMBEDMENT IN CONCRETE.
 NO ALUMINUM SHALL BE ALLOWED IN THE CONCRETE WORK UNLESS COATED TO PREVENT ALUMINUM-CONCRETE REACTION.

PROJECTING CORNERS OF WALLS, PIERS, ETC., SHALL BE FORMED WITH A 3/4 INCH CHAMFER, UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS.
 SLOPE SLABS TO DRAINS OR FOR POSITIVE DRAINAGE IF NO DRAINS ARE PRESENT AND PROVIDE DEPRESSIONS WHERE SHOWN ON THE STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS WITHOUT REDUCING THE THICKNESS OF SLAB INDICATED. FOR SLAB-ON-GRADE DEPRESSIONS GREATER THAN 1 INCH, SEE DETAILS FOR ADDITIONAL

14. CONCRETE SHALL NOT BE PERMITTED TO DROP MORE THAN 5 FEET.
15. IF CONCRETE IS PLACED BY PUMPING, SUPPORT SHALL BE PROVIDED FOR THE HOSE. THE HOSE SHALL NOT BE ALLOWED TO RIDE ON THE REINFORCING AND OTHER EMBEDDED ITEMS.

CONCRETE SLABS SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 7 DAYS. FORMS FOR CONCRETE WALLS SHALL BE LEFT IN PLACE FOR 7 DAYS OR MAY BE STRIPPED AFTER 3 DAYS AND COATED WITH AN APPROVED CURING COMPOUND.
 CONTRACTOR SHALL SURVEY ALL CONCRETE WORK WITHIN 48 HOURS OF PLACING CONCRETE TO ENSURE PLACEMENT IS IN ACCORDANCE WITH PROJECT REQUIREMENTS.
 THE DESIGN AND ENGINEERING OF FORMWORK, SHORING AND RESHORING, AS WELL AS THEIR CONSTRUCTION, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMS SHALL BE DESIGNED TO HAVE SUFFICIENT STRENGTH TO SAFELY WITHSTAND THE LOADS

RESULTING FROM PLACEMENT AND VIBRATION OF THE CONCRETE AND SHALL ALSO BE

DESIGNED FOR SUFFICIENT RIGIDITY TO MAINTAIN SPECIFIED TOLERANCES. CONTRACTOR

SHALL SUBMIT DETAILED FORMWORK SHOP DRAWINGS TO THE ARCHITECT TO BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN CONCEPT ONLY.

19. NO CONCRETE SHALL BE PLACED ONTO OR AGAINST SUBGRADES CONTAINING FREE

NO CONCRETE SHALL BE PLACED ONTO OR AGAINST SUBGRADES CONTAINING FREE WATER, FROST, ICE OR SNOW.
 GENERAL CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR SIZE, LOCATION AND HEIGHT OF MECHANICAL EQUIPMENT PADS ON CONCRETE SLAB ON STEEL DECK AND SLAB-ON-

21. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED BY THE TESTING AGENCY. RESPONSIBILITY FOR OBTAINING THE REQUIRED DESIGN STRENGTH IS THE CONTRACTOR'S. SUBMIT TEST DATA ON EACH PROPOSED MIX FOR REVIEW IN ACCORDANCE WITH THE APPLICABLE CODE. MIX DESIGNS SUBMITTED WITHOUT THE REQUIRED TEST DATA WILL BE RETURNED WITHOUT REVIEW.

#### MASONRY

 CMU CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH TMS 402/602 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES".
 MINIMUM 28-DAY COMPRESSIVE STRENGTHS FOR CMU CONSTRUCTION SHALL BE:

DESIGN ASSEMBLY STRENGTH, fm 2500 PSI INDIVIDUAL CONCRETE MASONRY UNITS 3250 PSI GROUT 2500 PSI

3. CMU MATERIALS SHALL CONFORM TO THE FOLLOWING STANDARDS: CONCRETE MASONRY UNITS ASTM C90, NORMAL WEIGH MORTAR ASTM C270, TYPE S

ASTM C90, NORMAL WEIGHT
ASTM C270, TYPE S
ASTM C476
ASTM A82

4. BAR SPLICES SHALL BE PROVIDED WHERE INDICATED ON THE DRAWINGS. IF SPLICE LENGTH IS NOT GIVEN ON THE DRAWINGS, PROVIDE LAP LENGTHS (IN INCHES) AS FOLLOWS EXCEPT BARS LARGER THAN #9 SHALL BE MECHANICALLY SPLICED:

	MINIMUM LAP SPLICE LENGTH	1
BAR SIZE	f'm = 2	500 PSI
DAR SIZE	8" CMU	10" CMU
#3	12	12
#4	13	12
#5	20	16
#6	38	29

5. WIRE REINFORCING PER ASTM A82 FOR SINGLE-WYTHE CMU WALLS, CMU CAVITY WALLS, AND MULTI-WYTHE COMPOSITE CMU WALLS SHALL BE HOT-DIP GALVANIZED PER ASTM A153, CORROSION RESISTANT HORIZONTAL JOINT REINFORCING WITH THE FOLLOWING GAUGE AND VERTICAL SPACING:
9 GA @ 16" OC (ALL WIDTHS)

BELOW GRADE WALLS

9 GA @ 8" OC

6. ALL LOAD BEARING CMU WALLS TO HAVE FULL MORTAR BED, HEAD, AND COLLAR JOINTS.

7. GROUT SOLID ALL JAMBS FULL HEIGHT IN LOAD BEARING CMU WALLS TO UNDERSIDE OF LINTEL PLUS ONE CELL BEYOND BEARING LENGTH.

8. PROVIDE MINIMUM 1 INCH GROUT BETWEEN MAIN REINFORCING AND/OR BOLTS AND CMU UNIT FACE. VERTICAL REINFORCEMENT SHALL BE CENTERED IN WALL, UNLESS OTHERWISE NOTED. VERTICAL REINFORCING BARS SHALL SECURELY BE HELD IN

POSITION BY WIRE TIES OR OTHER APPROVED MEANS TO ENSURE DESIGN LOCATION AND LAP. PLACE BARS AND LAP PRIOR TO GROUTING.

9. HORIZONTAL BOND BEAM AND VERTICAL REINFORCING SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED.

10. CELLS SHALL BE IN VERTICAL ALIGNMENT. DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH VERTICAL REINFORCING STEEL.

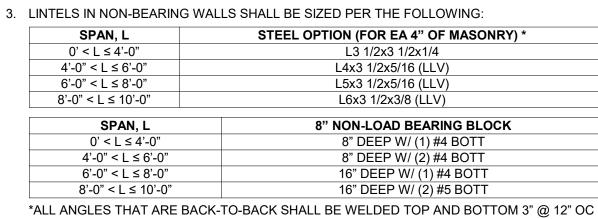
11. ALL CELLS CONTAINING REINFORCING SHALL BE FILLED SOLID WITH GROUT.

LIFTS OF GROUT SHALL BE KEYED 1 1/2 INCHES INTO THE PREVIOUS COURSE BELOW.
 HORIZONTAL BAR REINFORCEMENT IN BOND BEAMS SHALL BE FULLY EMBEDDED IN GROUT IN AN UNINTERRUPTED POUR.
 COORDINATE ANY UNIDENTIFIED PIPE OR DUCT PASSING THROUGH STRUCTURAL CMU WALLS WITH TYPICAL DETAILS, UNLESS OTHERWISE NOTED.
 SEE ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN,

AND JOINT TYPE. ALL BLOCK SHALL BE LAID IN RUNNING BOND, UNLESS OTHERWISE

16. PROVIDE HORIZONTAL TIES WHERE CMU ABUTS CONCRETE.

PROVIDE LINTELS OVER ALL OPENINGS AND RECESSES IN MASONRY CONSTRUCTION.
LINTELS ARE NOT REQUIRED OVER OPENINGS 12" WIDE OR LESS THAT IS AT LEAST 1
COURSE BELOW THE BOND BEAM AT THE TOP OF WALL.
 PENETRATIONS NOT IDENTIFIED ON THE DOCUMENTS ARE TO BE TREATED IN A MANNER
SIMILAR TO THE IDENTIFIED LOCATIONS.



MINIMUM.
4. ALL LINTELS SHALL HAVE A MINIMUM OF 8" END BEARING AND DO NOT REQUIRE BEARING PLATES, UNLESS OTHERWISE NOTED.
5. TEMPORARY SHORING OF MASONRY LINTELS MUST BE PROVIDED UNTIL MASONRY HAS REACHED 75% OF DESIGN STRENGTH.
6. ALL STEEL LINTELS IN EXTERIOR WALL CONSTRUCTION SHALL BE HOT-DIP GALVANIZED, UNLESS OTHERWISE NOTED.

#### CTEEL

1. STRUCTURAL STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "DETAILING FOR STEEL CONSTRUCTION" AND FABRICATED AND ERECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"

STRUCTURAL STEEL SHALL CONFORM TO ASTM STANDARDS AS NOTED BELOW: WIDE FLANGE SHAPES ASTM A992 Fy = 50 KSIOTHER ROLLED SHAPES ASTM A36 Fy = 36 KSIASTM A500, GR C Fv = 50 KSIHSS SECTION, SQ/RECT BASE AND CONNECTION PLATES  $F_V = 36 \text{ KSI}$ ASTM A36 ANCHOR RODS ASTM F1554, GR 36  $F_V = 36 \text{ KSI}$ HIGH STRENGTH BOLTS ASTM F3125, GR A325 Fv = 120 KSI HEAVY HEX NUTS ASTM A563 ASTM F436 WASHERS HEADED STUD ANCHORS ASTM A108, TYPE B

ELECTRODES FOR ARC WELDING AWS 5.1, E70XX
3. HIGH STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH AISC
"SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS". SEE DETAILS
FOR BOLT SIZE AND MATERIAL ASTM DESIGNATION.
4. ALL BOLTED CONNECTIONS SHALL BE GRADE A325N BEARING TYPE BOLTS, UNLESS
OTHERWISE NOTED. ALL BOLTS SHALL BE INSTALLED TO A MINIMUM "SNUG TIGHT"

CONDITION, UNLESS OTHERWISE NOTED.
5. FULLY TENSIONED HIGH STRENGTH BOLTS AND SLIP CRITICAL HIGH STRENGTH BOLTS SHALL USE TENSION-CONTROL "TWIST-OFF" BOLTS OR BE INSTALLED USING THE TURN OF THE NUT METHOD.
6. WELD LENGTHS INDICATED ON THE DRAWINGS ARE THE NET EFFECTIVE LENGTH

WELD LENGTHS INDICATED ON THE DRAWINGS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE WELD LENGTH IS NOT SPECIFIED, PROVIDE WELD ALONG ENTIRE INTERSECTION OF THE JOINED PARTS. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM WELD SIZE AS SPECIFIED IN AISC 360, TABLE J2.4.
 ALL WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED BY CERTIFIED WELDERS WITH EXPERIENCE AND CERTIFICATION IN THE TYPES OF WELDING CALLED FOR. WELDERS SHALL HAVE BEEN RECENTLY QUALIFIED AS PRESCRIBED IN "QUALIFICATION PROCEDURES" OF THE AMERICAN WELDING SOCIETY (AWS).
 HEADED STUD ANCHORS (HSA): SHALL BE INSTALLED IN ACCORDANCE WITH AWS D1.1 AND SHALL BE AUTOMATICALLY END WELDED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IN SUCH A MANNER AS TO PROVIDE COMPLETE FUSION BETWEEN THE END OF THE HSA AND THE STEEL SHAPE. THERE SHOULD BE NO POROSITY OR EVIDENCE OF LACK OF FUSION BETWEEN THE WELDED END OF THE HSA AND THE STEEL SHAPE. THE HSA SHALL DECREASE IN LENGTH DURING WELDING APPROXIMATELY 1/8" FOR 5/8" Ø AND SMALLER AND 3/16" FOR LARGER THAN 5/8" Ø.

SPLICING OF STEEL MEMBERS WHERE NOT DETAILED ON THE DRAWINGS IS PROHIBITED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE.
 ALL STEEL EXPOSED TO WEATHER OR AS NOTED ON PLAN SHALL BE HOT-DIP GALVANIZED

10. ALL STEEL EXPOSED TO WEATHER OR AS NOTED ON PLAN SHALL BE HOT-DIP GALVANIZ AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 G60. ABRADED AREAS TO BE TOUCHED UP WITH COLD GALVANIZING COMPOUND IN ACCORDANCE WITH ASTM A780.
 14. ALL GALVANIZED HOLLOW SECTIONS SHALL HAVE WELDED CAP PLATES TO SEAL EXPOSED ENDS.

WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS. BURNING OF HOLES AND CUTS IN THE FIELD SHALL NOT BE ALLOWED, EXCEPT BY WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER.

16. FURNISH AND INSTALL MISCELLANEOUS STEEL (CURBS, HANGERS, EXPANSION JOINT ANGLES, STRUTS, ETC.) AS CALLED FOR OR AS NECESSARY PER ARCHITECTURAL AND

15. CUTS, HOLES, OPENINGS, ETC., REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE

GROUT FOR BASE AND BEARING PLATES SHALL BE A NON-SHRINK, NON-METALLIC PRODUCT. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 8,000 PSI. INSTALL GROUT PRIOR TO APPLYING SIGNIFICANT LOADING TO MEMBER.
 THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL STRUCTURAL STEEL FOR ARCHITECT/STRUCTURAL ENGINEER'S REVIEW BEFORE

MECHANICAL/ELECTRICAL DRAWINGS.

JOIST BEING USED.

### STEEL JOISTS

1. DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI) SPECIFICATION BY A MEMBER OF THE SJI, APPROVED FOR THE TYPE OF

,	ATTACH ST	EEL JOIS	T TO SUPF	PORT AS FOI	LOWS:			
	JOIST	TYPE		WITH WELD		WITH BOLT MATION		NUM END RING (IN)
	SERIES	JOIST SEAT DEPTH	FILLET WELD SIZE	WELD LENGTH (IN)	BOLT DIAMETER (IN)	BOLT MATERIAL	STEEL	MASON
Ī	K	4"	1/8	2	1/2	A307	2 1/2	4
	LH 08-12	5"	1/4	2	3/4	A307	4	6

OF JOIST SEAT UNLESS OTHERWISE NOTED.
3. DESIGN JOIST SEAT FOR 2500 LBS (1.0 WL) ROLLOVER LOAD FOR K-SERIES JOIST ONLY.
4. PROVIDE BRIDGING PER SJI SPECIFICATIONS. DESIGN AND PROVIDE UPLIFT BRIDGING TO WITHSTAND A NET UPLIFT PRESSURE AS INDICATED WITHIN THE DESIGN CRITERIA AND LOADS SECTION. WHERE BRIDGING INTERFERES WITH MECHANICAL OR OTHER TRADE INSTALLATIONS, THE JOIST MANUFACTURER SHALL PROVIDE DIRECTION FOR REMOVAL AND REPLACEMENT OF ANY BRIDGING.

WHERE WELDS OR BOLTS ARE INDICATED, WELD/BOLT TO BE INSTALLED ON BOTH SIDES

PROVIDE ANCHORS AT EACH END OF EACH ROW OF BRIDGING TOP AND BOTTOM CHORDS, EXCEPT AT EXPANSION JOINTS.
 ALL JOIST HEADERS AND ACCESSORIES SHALL BE DESIGNED AND FURNISHED BY THE JOIST FABRICATOR.
 STEEL JOISTS SHALL BE TOP CHORD BEARING UNLESS OTHERWISE NOTED ON PLANS.

8. PROVIDE BOTTOM CHORD CEILING SUPPORT EXTENSIONS WHERE SHOWN ON THE ARCHITECTURAL DRAWINGS.
9. THE JOIST FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL BAR JOIST MATERIAL AND ACCESSORIES FOR ARCHITECT/STRUCTURAL ENGINEER'S REVIEW BEFORE FABRICATION. JOIST DESIGNATIONS ON THE SHOP DRAWINGS SHALL BE THE SAME

## NUMBERS AS SHOWN IN THE SJI MANUAL. STEEL DECK

 MATERIAL, DETAILING, DESIGN, MANUFACTURE, AND ERECTION OF STEEL DECKS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE (SDI) SPECIFICATION.
 DECK SIZE AND GAUGE INDICATED ON THE DRAWINGS ARE BASED ON THE FOLLOWING: A. CURRENT VERSION OF VULCRAFT CATALOG FOR GRAVITY DESIGN LOADS AND

UNSHORED CONSTRUCTION SPANS

B. STEEL DECK INSTITUTE (SDI) DIAPHRAGM DESIGN MANUAL 4TH EDITION FOR DIAPHRAGM LOADS

3. STEEL DECK GALVANIZING SHALL CONFORM TO ASTM A653 WITH A MINIMUM COATING OF

STEEL DECK GALVANIZING SHALL CONFORM TO ASTM A653 WITH A MINIMUM COATING OF G60.
 PROVIDE MINIMUM DECK BEARING AND LAP LENGTHS PER MANUFACTURER'S RECOMMENDATIONS.
 USE SUMP PANS AT ALL ROOF DRAINS. MINIMUM THICKNESS FOR SUMP PANS SHALL BE 14

6. DECK MANUFACTURER SHALL FURNISH ALL RIDGE AND VALLEY PLATES, SUMP PANS,

8. COORDINATE ALL PENETRATIONS, EMBEDS, AND RECESSES IN COMPOSITE FLOOR

SYSTEMS WITH THE STRUCTURAL ENGINEER, UNLESS OTHERWISE NOTED.

DRAIN PLATES, AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.

DECK MANUFACTURER SHALL PROVIDE ALL CLOSURE PLATES AND POUR STOPS NOT PROVIDED BY THE STEEL FABRICATOR.

7. CUTTING AND FRAMING OF OPENINGS FOR OTHER TRADES SHALL BE THE RESPONSIBILITY OF THE TRADES INVOLVED. HOLES THAT ARE LOCATED AND DIMENSIONED ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE DECK ERECTOR.

9. DO NOT EXCEED 25 LBS PER HANGER AND A MINIMUM SPACING OF 2'-0" ON CENTER WHEN ATTACHING TO STEEL ROOF DECK. THIS 25 LBS LOAD AND 2'-0" SPACING INCLUDES ADJACENT MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS HANGING FROM THE DECK. IF THE HANGER RESTRICTIONS CANNOT BE ACHIEVED, SUPPLEMENTAL FRAMING SUPPORTED OFF STEEL FRAMING WILL NEED TO BE ADDED. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATION AND WEIGHT OF ALL THE ELEMENTS BEING HUNG WITH STRUCTURAL ENGINEER, UNLESS OTHERWISE NOTED.

10. SUBMIT SHOP DRAWINGS SHOWING ERECTION PROCEDURES, WELDING PROCEDURES, VERTICAL LOAD AND DIAPHRAGM SHEAR CAPACITY FURNISHED, DECK SHORING REQUIREMENTS, UNDERWRITER'S LABORATORIES (UL) FIRE RATING NUMBER AND COMPOSITE BEAM AND GIRDER STUD PROFILES TO THE ARCHITECT/STRUCTURAL ENGINEER FOR REVIEW. FABRICATION SHALL NOT BEGIN WITHOUT APPROVED SHOP

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29

#### **POST-INSTALLED ANCHORS**

ANCHORS SERVING AS THE BASIS OF DESIGN ARE SHOWN ON THE DRAWINGS.
 ACCEPTABLE ALTERNATIVE ANCHORS MAY BE SUPPLIED PROVIDED THE QUANTITY AND
 CONFIGURATION MATCH THE CAPACITY OF THE DESIGN ANCHOR QUANTITY AND
 CONFIGURATION. ANY ALTERNATES ARE TO BE SUBMITTED TO THE STRUCTURAL
 ENGINEER FOR REVIEW. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN
 INSTRUCTIONS. BELOW SUMMARIZES EACH ANCHOR TYPE USED ON THE PROJECT.
 MECHANICAL ANCHORS:

a. EXPANSION ANCHORS **ACCEPTABLE ALTERNATES** ANCHORED BASIS OF DESIGN INTO GROUTED DEWALT POWER STUD+ SD1 (ESR-2966) MASONRY SIMPSON WEDGE-ALL (ESR-1396) UNCRACKED HILTI KB3 (ESR-2302) DEWALT POWER STUD+ SD2 (ESR-2502) RED CONCRETE HEAD TRUBOLT+ (ESR-2427) SIMPSON STRONG BOLT 2 (ESR-3037) HILTI KBTZ (ESR-1917) DEWALT POWER STUD+ SD2 (ESR-2502) RED HEAD TRUBOLT+ (ESR-2427) SIMPSON STRONG CONCRETE BOLT 2 (ESR-3037)

b. THREADED SCREW ANCHORS ANCHORED **BASIS OF DESIGN ACCEPTABLE ALTERNATES** INTO HILTI KWIK HUS-EZ DEWALT WEDGE-BOLT+ (ESR-1678) SIMPSON GROUTED MASONRY (ESR-3056) TITEN HD (ESR-1056) UNCRACKED HILTI KWIK HUS-EZ DEWALT POWER SCREW-BOLT+ (ESR-3889) CONCRETE SIMPSON TITEN HD (ESR-2713) CRACKED HILTI KWIK HUS-EZ DEWALT POWER SCREW-BOLT+ (ESR-3889) CONCRETE (ESR-3027) SIMPSON TITEN HD (ESR-2713) ADHESIVE ANCHORS: SHALL CONSIST OF DEFORMED REINFORCING BARS OR ASTM A193 GRADE B7 RODS. HEAVY DUTY NUTS AND WASHERS AND A TWO COMPONENT

SHALL BE PROVIDED. ANCHORED **BASIS OF DESIGN ACCEPTABLE ALTERNATES** INTO HILTI HIT-HY 270 DEWALT AC 100+ GOLD (ESR-3200) SIMPSON HOLLOW MASONRY (ESR-4143) SET-XP (ESR-0265) GROUTED HILTI HIT-HY 270 DEWALT AC 100+ GOLD (ESR-3200) RED HEAD A7 MASONRY (ESR-4143) ACRYLIC (ESR-3951) SIMPSON SET-XP (ESR-0265) CONCRETE HILTI HIT-HY 200 DEWALT AC 200+ (ESR-4027) SIMPSON SET-3G (ESR-3187)

STRUCTURAL ADHESIVE. WHERE ANCHORING INTO HOLLOW MASONRY, A SCREEN TUBE

CRACKED CONCRETE REPRESENTS ALL CONCRETE FOR PROJECTS LOCATED IN SEISMIC

DESIGN CATEGORY C OR HIGHER, TENSILE ZONES SUCH AS BOTTOMS OF BEAMS AND

SLABS, OR WHERE NOTED ON THE DRAWINGS.

LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH SCOTT COMMUNITY SCHOOL DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

251 East Iowa Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

CONSTRUCTION MANAGER

Russel Construction

4700 E 53rd Street
Davenport, IA 52807
P: 563.459.5600
www.russelco.com

CIVIL ENGINEER

RTM

5137 Utica Ridge Road
Davenport, IA 52807
P: 563.726.6310
www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue

Rock Island, IL 61201

P: 309.788.0673

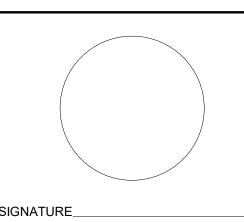
F: 309.786.5967
www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road
Davenport, IA 52807
P: 563.726.6310

www.rtmec.com



REVISIONS

NO. DESCRIPTION DATE

223049.00

11.10.23

ARUMON

PROJECT
DATE OF ISSUE
DRAWN BY
CHECKED BY

GENERAL NOTES

DATE\_

ROCK ISLAND, IL 61201
P: 309.788.0673 F: 309.786.5967

www.imegcorp.com

IMEG CORP. RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHT
TO THIS DRAWING AND THE DATA SHOWN THEREON. SAID DRAWING
AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP. AND
SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT
WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF
IMEG CORP. ©2023 IMEG CORP.

0 1 2 3

S-000

#### **TESTING, INSPECTIONS, AND OBSERVATIONS**

- 1. THE STRUCTURAL ENGINEER DOES NOT PROVIDE INSPECTIONS OF CONSTRUCTION. STRUCTURAL ENGINEER MAY MAKE PERIODIC OBSERVATIONS OF THE CONSTRUCTION. SUCH OBSERVATIONS SHALL NOT REPLACE REQUIRED INSPECTIONS BY THE GOVERNING AUTHORITIES OR SERVE AS "SPECIAL INSPECTIONS" AS MAY BE REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
- 2. SEE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS OR SPECIFICATIONS FOR TESTING AND INSPECTION REQUIREMENTS OF NON-STRUCTURAL COMPONENTS.
- 3. DUTIES OF THE INSPECTION AGENCY PER IBC CHAPTER 17: a. SUBMIT A PROPOSED TESTING AND INSPECTION PROGRAM TO THE OWNER, THE ARCHITECT AND THE STRUCTURAL ENGINEER FOR REVIEW AND
- APPROVAL AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. b. PERFORM ALL TESTING AND INSPECTION REQUIRED PER APPROVED TESTING AND INSPECTION PROGRAM.
- c. FURNISH INSPECTION REPORT TO THE BUILDING OFFICIAL, THE OWNER, THE ARCHITECT, STRUCTURAL ENGINEER AND THE GENERAL CONTRACTOR. THE REPORTS SHALL BE COMPLETED AND FURNISHED WITHIN 48 HOURS OF INSPECTED WORK.

THE IBC. THESE ITEMS INCLUDE: a. POST-INSTALLED ANCHORS - INSPECTION						FERENCED BY
THE FOLLOWING WORK SHALL BE INSPECTED BY THE SPECIAL INSPECTOR UNLESS SPE						
VERIFICATION AND INSPECTION TASK	CONTIN	IUOUS	PERIODIC	MATERIAL REFEREN		IBC REFERENCE
CONCRETE CONSTRUCTION  1. INSPECT REINFORCEMENT AND VERIFY PLACEMENT			X	25.2, 25.3,		1908.4
2. MATERIAL IDENTIFICATION OF REINFORCING (TYPE/GRADE)			X	26.2.1-26.6.3 AISC 341: TABLE J9.1		
REINFORCING STEEL HAS NOT BEEN REBENT IN THE FIELD			X	AISC 341: T/	ABLE	
. REINFORCING STEEL HAS BEEN TIED AND SUPPORTED AS REQUIRED			Х	AISC 341: T/ J9.1	ABLE	
. REINFORCING STEEL CLEARANCES HAVE BEEN PROVIDED			Х	AISC 341: T/ J9.1		
. COMPOSITE STEEL MEMBERS HAVE REQUIRED SIZE . REINFORCING BAR WELDING:			X	AISC 341: T/ J9.1	ABLE	
. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 . INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND			X	AWS D1 ACI 318: 26		
INSPECTS ALL OTHER WELDS     INSPECT ANCHORS CAST IN CONCRETE	X		X	ACI 318: 17		
. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS: . ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED	X			ACI 318: 17.	8.2.4	
RIENTATIONS TO RESIST SUSTAINED TENSION LOADS  MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 9.a  VERIFY USE OF REQUIRED DESIGN MIX			X	ACI 318: 17		1904.1, 1904.2
VERIFY USE OF REQUIRED DESIGN MIX     PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS,	X		<b>X</b>	ACI 318: CF 26.4.2, 26. ASTM C172,	4.4	1908.2, 1908.3
ERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF HE CONCRETE	^			C31, ACI 318 26.12		
2. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION ECHNIQUES	X			ACI 318: 2	6.5	1908.6, 1908.7 1908.8
3. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES			Х	ACI 318 26.5.3-26.		1908.9
ERIFICATION AND INSPECTION TASK ASONRY CONSTRUCTION - LEVEL 2	CONTIN	IUOUS	PERIODIC	TMS 402	2	TMS 602
PRIOR TO CONSTRUCTION:  VERIFICATION OF COMPLIANCE OF SUBMITTALS			X			ART. 1.5
VERIFICATION OF COMPLIANCE OF SUBMITTALS  VERIFICATION OF f'm  AS CONSTRUCTION BEGINS, VERIFY THE FOLLOWING ARE IN COMPLIANCE:			X			ART. 1.4 B
PROPORTIONS OF SITE-PREPARED MORTAR			Х			ART. 2.1, 2.6 A & 2.6 C
GRADE AND SIZE OF ANCHORAGES	X				ART. 2.4 B & 2.	
GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND NCHORAGES		X				ART. 3.4 & 3.6
SAMPLE PANEL CONSTRUCTION PRIOR TO GROUTING, VERIFY THE FOLLOWING ARE IN COMPLIANCE:	X				ART. 1.6 D	
GROUT SPACE			X	050 1000	40.0	ART. 3.2 D & 3.2 F
PLACEMENT OF ANCHORAGES PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS		X		SEC. 10.8 & SEC. 6.1, 6 6.3.6 & 6.3	.3.1,	ART. 2.4 & 3.6 ART. 3.2 E & 3.
PROPORTIONS OF SITE-PREPARED GROUT	X		X	0.3.0 & 0.s		ART. 2.6 B & 2. G.1.b
DURING CONSTRUCTION: VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-			X			ART. 1.5 & 1.6.
ONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE  MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS			X			ART. 1.5
PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION SIZE AND LOCATION OF STRUCTURAL MEMBERS			X			ART. 3.3 B ART. 3.3 F
TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF NCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER			X	SEC. 1.2.1(e) & 6.3.1		
ONSTRUCTION  WELDING OF REINFORCEMENT  PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD	X		X	SEC. 6.1.6	.1.2	ART. 1.8 C &
EATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°			^			1.8 D
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR RISMS			Х			ART. 1.4 B.2.a.3, 1.4
						B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4
ERIFICATION AND INSPECTION TASK			QC	QA		ATERIAL STD REFERENCE
TRUCTURAL STEEL - FABRICATION FABRICATION FACILITY						X
CONNECTION ERECTION AND ASSEMBLY PRETENSIONED AND SLIP-CRITICAL BOLTS/JOINTS USING TURN-OF-NUT METHOD WIT	HOUT		X	X		
ATCHMAKING OF CALIBRATED WRENCH METHODS OF INSTALLATION SINGLE PASS FILLET WELDS 5/16" OR LESS			X	X		X
ALL OTHER WELDS INCLUDING COMPLETE AND PARTIAL PENETRATION WELDS SHEAR STUD PLACEMENT			X	X		X
ERIFICATION AND INSPECTION TASK			QC	QA		ATERIAL STD REFERENCE
TRUCTURAL STEEL - ERECTION STRUCTURAL STEEL ERECTION			X	X		
CONNECTION ERECTION AND ASSEMBLY PRETENSIONED AND SLIP-CRITICAL BOLTS/JOINTS USING TURN-OF-NUT METHOD WITH A TION OF CALIBRATED WITHOUTH METHODS OF INSTALL ATION.	HOUT		X	X X		
ATCHMAKING OF CALIBRATED WRENCH METHODS OF INSTALLATION SINGLE PASS FILLET WELDS 5/16" OR LESS ALL OTHER WELDS INCLUDING COMPLETE AND PARTIAL PENETRATION WELDS			X	X		X
SHEAR STUD PLACEMENT BEAM CAMBER (IN-PLACE)			X	X		
ERIFICATION AND INSPECTION TASK	Q	3	QA	MATERIAL		AWS D1.1
TRUCTURAL STEEL PRIOR TO BOLTING - MINIMUM INSPECTION  MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	0		P	TABLE C-N		2.1, 9.1
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT	0	1	0	TABLE C-N	5.6-1	6.5.1
ENGTH IF THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANE)  CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	0		0	TABLE C-N		4, 8
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE DIDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	0		0	TABLE C-N		TABLE 6.1(2)
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL BSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P		O <sup>1</sup>	TABLE C.N.		3, 9.1, 9.3
PROTECTION STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER ASTENER COMPONENTS	0		0	TABLE C-N		2.2, 8, 9.1
DOCUMENT - THE INSPECTOR SHALL PREPARE REPORTS INDICATING THE WORK HAS EDUCATION. THE REPORTS NEED NOT PROVIDE DETAILED MEASUREMENTS FOR JOINT DIVIDIAL ITEMS LISTED IN THE TABLES. FOR SHOP FARRICATION, THE REPORT SHALL I	FIT-UPS,	WPS SE	ETTINGS, CO	MPLETED WE	LDS, C	OR OTHER
DIVIDUAL ITEMS LISTED IN THE TABLES. FOR SHOP FABRICATION, THE REPORT SHALL I ELD WORK, THE REPORT SHALL INDICATE THE REFERENCE GRID LINES AND FLOOR OF ONTRACT DOCUMENTS AND WHETHER THE NONCOMPLIANCE HAS BEEN SATISFACTOF	R ELEVATI	ON INS	PECTED. WC	RK NOT IN CO	OMPLI	ANCE WITH TH
			QA	MATERIAL		AWS D1.1
ERIFICATION AND INSPECTION TASK	Q	<u>ز</u>	Q,	<b></b>	_	A
TRUCTURAL STEEL AFTER BOLTING - MINIMUM INSPECTION				REFEREN		CLAUSES
TRUCTURAL STEEL AFTER BOLTING - MINIMUM INSPECTION  DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS  TERIFICATION AND INSPECTION TASK	P		P QA	TABLE C-N	5.6-3	N/A  AWS D1.1

VERIFICATION AND INSPECTION TASK	QC	QA	MATERIAL STD	AWS D1.1
CTRUCTURAL CTEEL AFTER ROLTING. MINIMUM INCRECTION			REFERENCE	CLAUSES
STRUCTURAL STEEL AFTER BOLTING - MINIMUM INSPECTION  1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P	TABLE C-N5.6-3	N/A
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P	TABLE C-NO.0-3	IN/A
VERIFICATION AND INSPECTION TASK	QC	QA	MATERIAL STD REFERENCE	AWS D1.1 CLAUSES
STRUCTURAL STEEL PRIOR TO WELDING - MINIMUM INSPECTION	_	_		
WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	P	P	TABLE C-N5.4-1	6.3
2. MANUFACTURER CERTIFICATES FOR WELDING CONSUMABLES AVAILABLE	Р	Р	TABLE C-N5.4-1	6.2
3. MATERIAL IDENTIFICATION	0	0	TABLE C-N5.4-1	6.2
4. WELDER IDENTIFICATION	0	0	TABLE C-N5.4-1	6.4 (WELDER QUALIFICATION)
5. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)	0	0	TABLE C-N5.4-1	
a. JOINT PREPARATION	0	0	TABLE C-N5.4-1	6.5.2
b. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)	0	0	TABLE C-N5.4-1	5.22
c. CLEANLINESS (CONDITION OF STEEL SURFACE)	0	0	TABLE C-N5.4-1	5.14
d. TACKING (TACK WELD QUALITY AND LOCATION)	0	0	TABLE C-N5.4-1	5.17
e. BACKING TYPE AND FIT (IF APPLICABLE)	0	0	TABLE C-N5.4-1	5.9, 5.21.1.1
6. FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y- & KJOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	9.11.2
a. JOINT PREPARATION	P/O <sup>1</sup>	0	TABLE C-N5.4-1	9.11.2
b. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	9.11.2
c. CLEANLINESS (CONDITION OF STEEL SURFACE)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	9.11.2
d. TACKING (TACK WELD QUALITY AND LOCATION)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	9.11.2
7. CONFIGURATION AND FINISH OF ACCESS HOLES	0		TABLE C-N5.4-1	6.5.2, 5.16 (& SEE AISC 360 SECT. J1.6)
8. FIT-UP OF FILLET WELDS	P/O <sup>1</sup>	0	TABLE C-N5.4-1	
a. DIMENSIONS (ALIGNMENT, GAPS AT ROOT)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	5.21.1
b. CLEANLINESS (CONDITION OF STEEL SURFACES)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	5.14
c. TACKING (TACK WELD QUALITY AND LOCATION)	P/O <sup>1</sup>	0	TABLE C-N5.4-1	5.17
9. CHECK WELDING EQUIPMENT	0	0	TABLE C-N5.4-1	6.2, 5.10
VERIFICATION AND INSPECTION TASK	QC	QA	MATERIAL STD	AWS D1.1
			REFERENCE	CLAUSES
STRUCTURAL STEEL DURING WELDING - MINIMUM INSPECTION				
1. USE OF QUALIFIED WELDERS	0	0	TABLE C-N5.4-2	6.4
2. CONTROL AND HANDLING OF WELDING CONSUMABLES	0	0	TABLE C-N5.4-2	6.2
a. PACKAGING	0	0	TABLE C-N5.4-2	5.3.1
b. EXPOSURE CONTROL	0	0	TABLE C-N5.4-2	5.3.2 (FOR SMAW), 5.3.3 (FOR SAW)
3. ENVIRONMENT CONDITIONS	0	0	TABLE C-N5.4-2	,
a. WIND SPEED WITHIN LIMITS	0	0	TABLE C-N5.4-2	5.11.1
b. PRECIPITATION AND TEMPERATURE	0	0	TABLE C-N5.4-2	5.11.2
4. WPS FOLLOWED	0	0	TABLE C-N5.4-2	6.3.3, 6.5.2, 5.5 5.20
a. SETTINGS ON WELDING EQUIPMENT	0	0	TABLE C-N5.4-2	
b. TRAVEL SPEED	0	0	TABLE C-N5.4-2	
c. SELECTED WELDING MATERIALS	0	0	TABLE C-N5.4-2	
	_	_	TABLE C NE 4 2	1
d. SHIELDING GAS TYPE/FLOW RATE	0	0	TABLE C-N5.4-2	
e. PREHEAT APPLIED	0	0	TABLE C-N5.4-2	5.6, 5.7
				5.6, 5.7

TABLE C-N5.4-2

TABLE C-N5.4-2

TABLE C-N5.4-2

TABLE C-N5.4-2 6.5.2, 6.5.3, 5.23

TABLE C-N5.4-2 5.29.1

PROPER POSITION (F, V, H, OH)

a. INTERPASS AND FINAL CLEANING

b. EACH PASS WITHIN PROFILE LIMITATIONS c. EACH PASS MEETS QUALITY REQUIREMENTS

5. WELDING TECHNIQUES

INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED

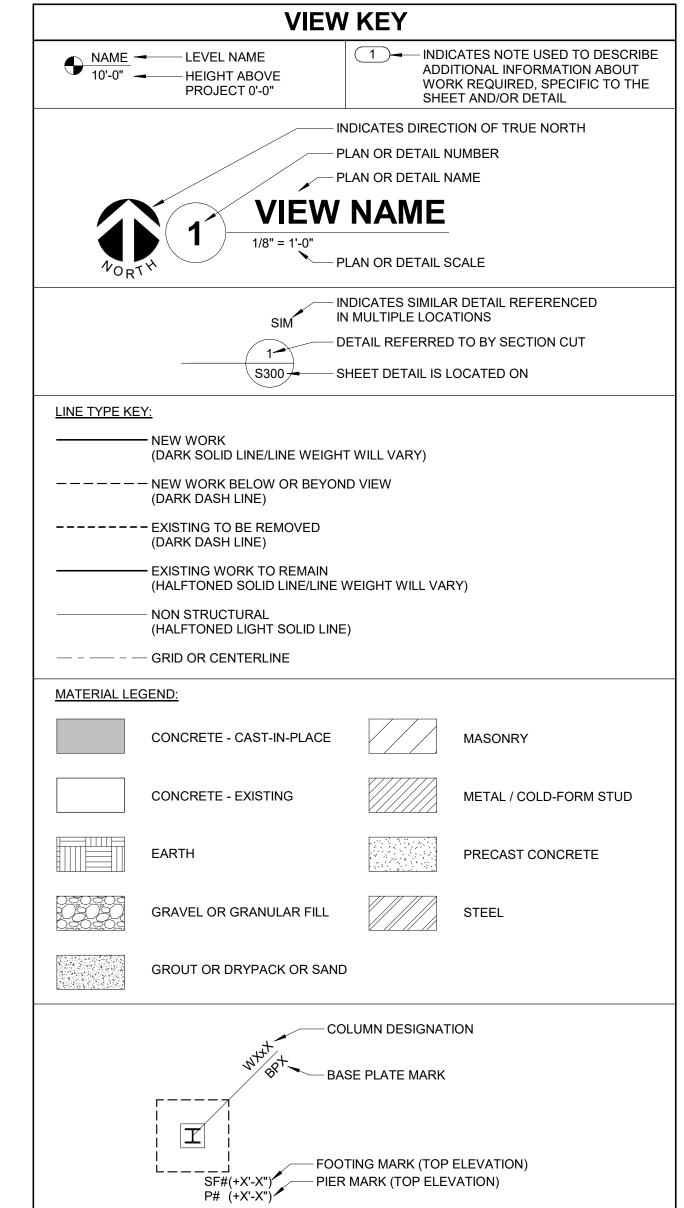
RIFICATION AND INSPECTION TASK	QC	QA	MATERIAL STD REFERENCE	AWS D1.1 CLAUSES
RUCTURAL STEEL AFTER WELDING - MINIMUM INSPECTION				
WELDS CLEANED	0	0	TABLE C-N5.4-3	5.29.1
SIZE, LENGTH AND LOCATION OF WELDS	Р	Р	TABLE C-N5.4-3	6.5.1
WELDS MEET VISUAL ACCEPTANCE CRITERIA	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	6.5.3
CRACK PROHIBITION	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(1)
WELD/BASE-METAL FUSION	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(2)
CRATER CROSS-SECTION	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(3)
WELD PROFILES	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(4), 5.24
WELD SIZE	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(6)
UNDERCUT	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	TABLE 6.1(7)
POROSITY	P <sup>2</sup>	P <sup>2</sup>		TABLE 6.1(8)
ARC STRIKES	Р	Р	TABLE C-N5.4-3	5.28
K-AREA <sup>3</sup>	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	N/A
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES	Р	Р	TABLE C-N5.4-3	5.16, 6.5.2 (& SEE AISC 360 SECT. J1.6)
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	5.9, 5.30
REPAIR ACTIVITIES	Р	P <sup>2</sup>	TABLE C-N5.4-3	6.5.3, 5.25
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	Р	Р	TABLE C-N5.4-3	6.5.4, 6.5.5
PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS (IF REQUIRED)	P <sup>2</sup>	P <sup>2</sup>	TABLE C-N5.4-3	6.5.4, 6.5.5

UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF THE SKILLS TO VERIFY THESE ITEMS. THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED. 2 DOCUMENT - THE INSPECTOR SHALL PREPARE REPORTS INDICATING THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT

DOCUMENTS. THE REPORT NEED NOT PROVIDE DETAILED MEASUREMENTS FOR JOINT FIT-UPS, WPS SETTINGS, COMPLETED WELDS, OR OTHER INDIVIDUAL ITEMS LISTED IN THE TABLES. FOR SHOP FABRICATION, THE REPORT SHALL INDICATE THE PIECE MARK OF THE PIECE INSPECTED. FOR FIELD WORK, THE REPORT SHALL INDICATE THE REFERENCE GRID LINES AND FLOOR OR ELEVATION INSPECTED. WORK NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND WHETHER THE NONCOMPLIANCE HAS BEEN SATISFACTORILY REPAIRED SHALL BE NOTED IN THE INSPECTION. 3 WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3" OF THE WELD. THE VISUAL INSPECTION SHALL BE PERFORMED NO SOONER THAN 48 HOURS FOLLOWING COMPLETION

OF THE WELDING.

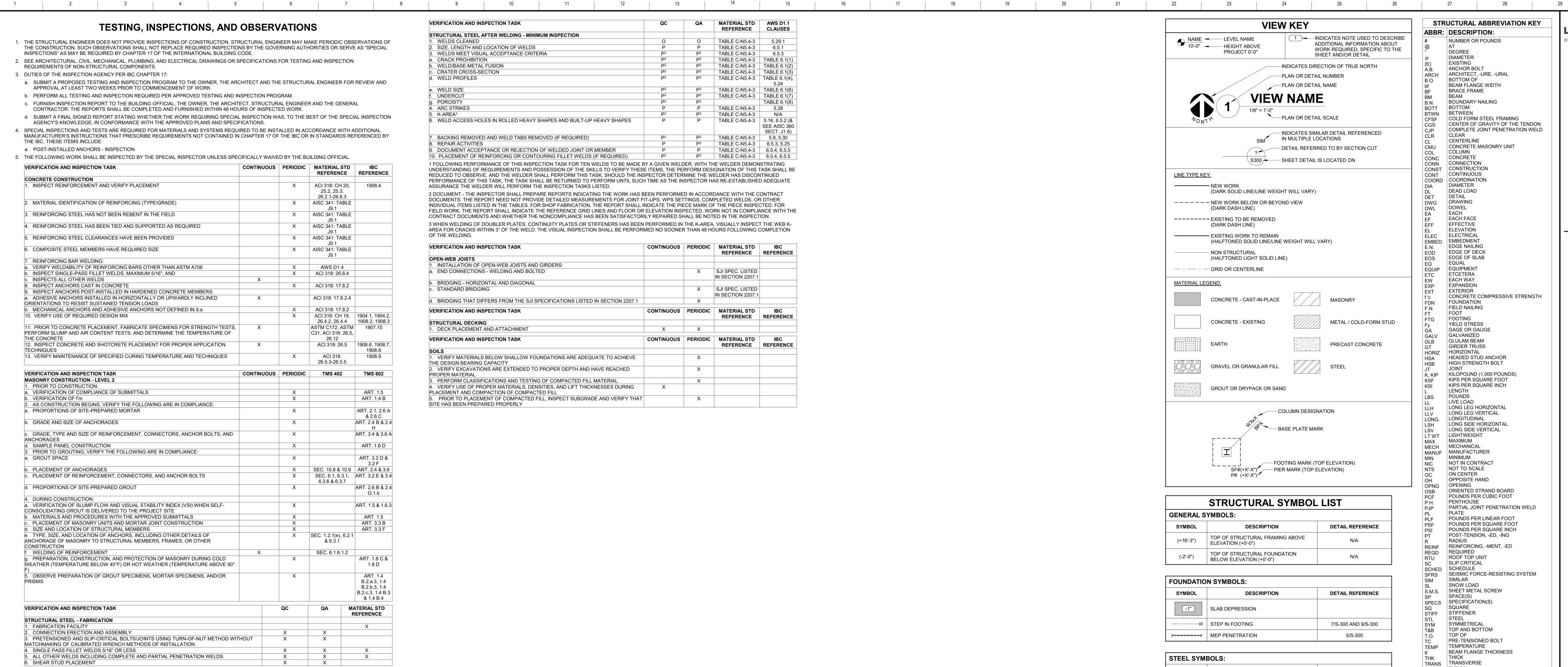
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	MATERIAL STD REFERENCE	IBC REFERENCE
OPEN-WEB JOISTS				
1. INSTALLATION OF OPEN-WEB JOISTS AND GIRDERS:				
a. END CONNECTIONS - WELDING AND BOLTED		Х	SJI SPEC. LISTED IN SECTION 2207.1	
b. BRIDGING - HORIZONTAL AND DIAGONAL				
c. STANDARD BRIDGING		Х	SJI SPEC. LISTED IN SECTION 2207.1	
d. BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION 2207.1		Х		
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	MATERIAL STD REFERENCE	IBC REFERENCE
STRUCTURAL DECKING				
1. DECK PLACEMENT AND ATTACHMENT	X	Х		
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	MATERIAL STD REFERENCE	IBC REFERENCE
SOILS				
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		Х		
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		Х		
3. PERFORM CLASSIFICATIONS AND TESTING OF COMPACTED FILL MATERIAL		X		
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	Х			
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		Х		



STRUCTURAL SYMBOL LIST  GENERAL SYMBOLS:				
(+16'-3")	TOP OF STRUCTURAL FRAMING ABOVE ELEVATION (+0'-0")	N/A		
(-2'-0")	TOP OF STRUCTURAL FOUNDATION BELOW ELEVATION (+0'-0")	N/A		

FOUNDATION SYMBOLS:			
SYMBOL	DESCRIPTION	DETAIL REFERENCE	
-1"	SLAB DEPRESSION		
o	STEP IN FOOTING	7/S-300 AND 9/S-300	
<del>-======</del>	MEP PENETRATION	5/S-300	

STEEL SYMBOLS:			
SYMBOL	DESCRIPTION	DETAIL REFERENCE	
	STEEL DECK (DIRECTION)	N/A	



TYP UON VERT VIF

TYPICAL

WITH WORK POINT

VERTICAL VERIFY IN FIELD

UNLESS OTHERWISE NOTED

WEIGHT WELDED WIRE REINFORCING

**LEGAT**ARCHITECT

DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

251 East Iowa Street

Eldridge, IA 52748

**ARCHITECT** 

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

CONSTRUCTION MANAGER

Russel Construction

4700 E 53rd Street

Davenport, IA 52807

P: 563.459.5600

www.russelco.com

**CIVIL ENGINEER** 

5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue

Rock Island, IL 61201

P: 309.788.0673

F: 309.786.5967

www.imegcorp.com

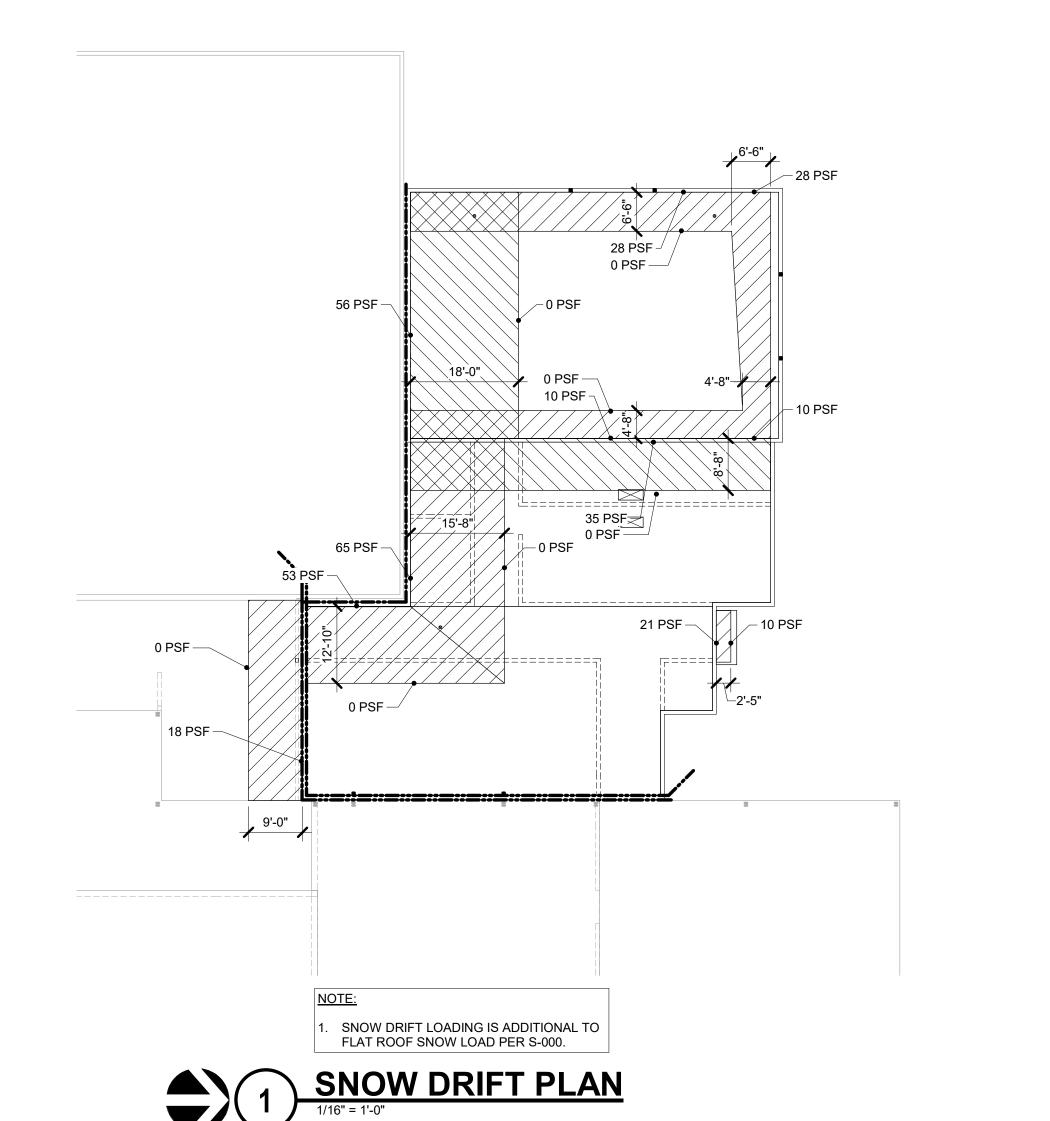
MEP/FP ENGINEER

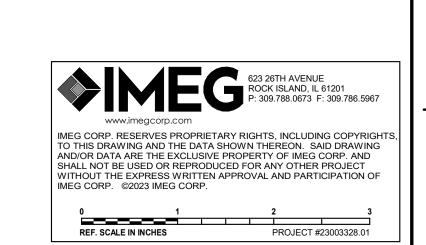
5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

www.rtmec.com





223049.00

ARUMON

SIGNATURE\_

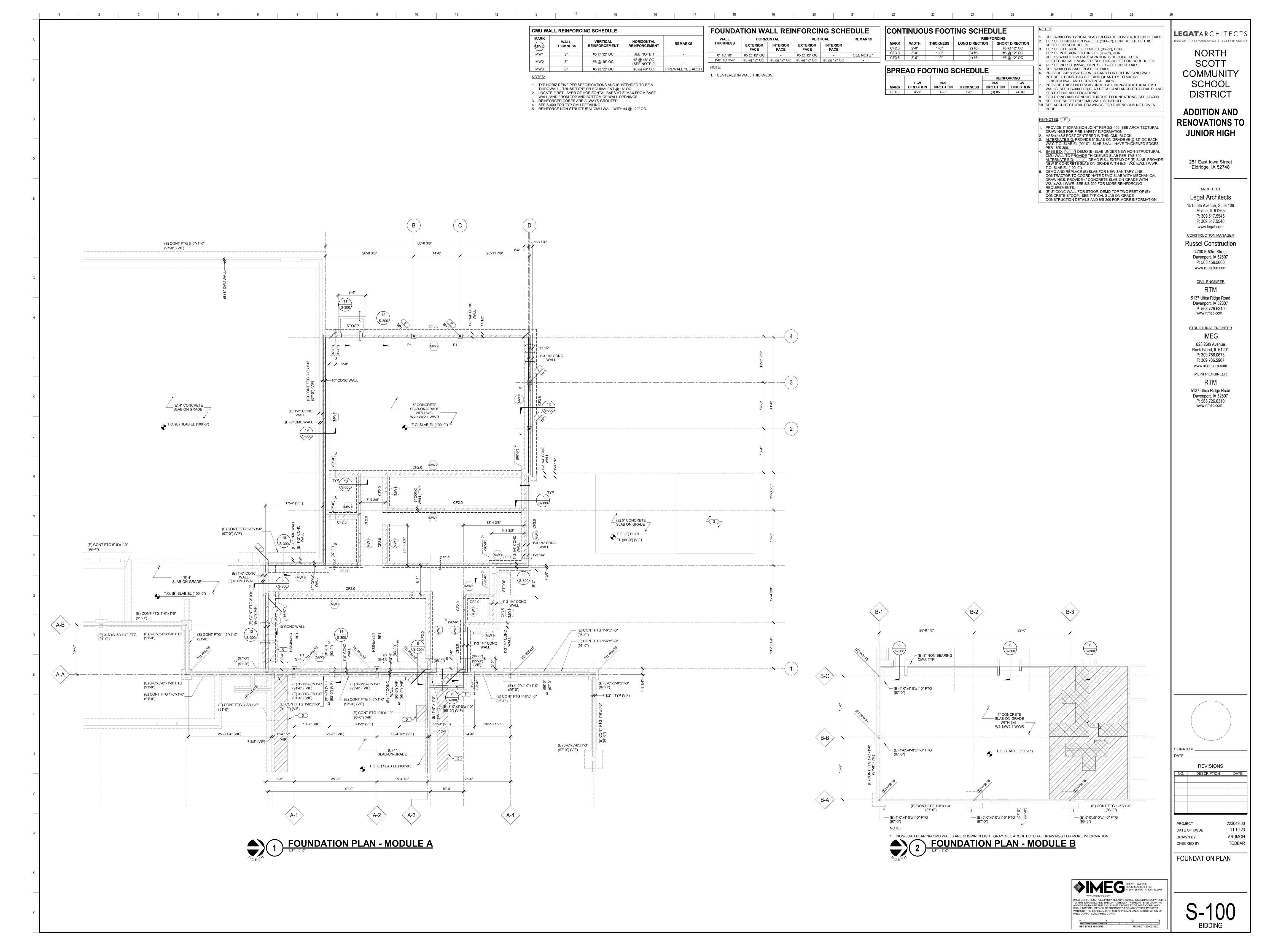
PROJECT

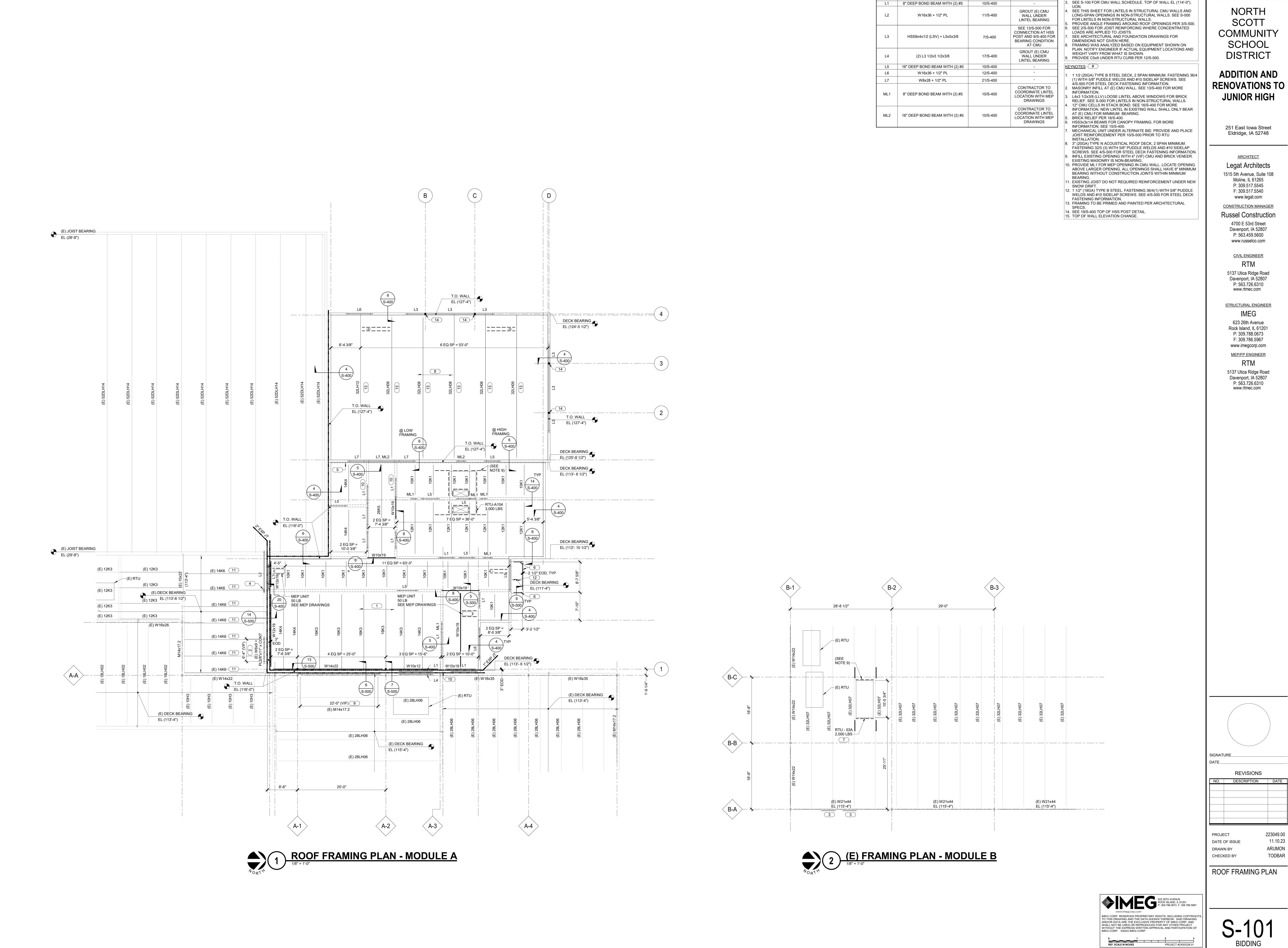
DRAWN BY CHECKED BY

DATE OF ISSUE

**GENERAL NOTES** 

**REVISIONS** NO. DESCRIPTION DATE





1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29

**LEGAT**ARCHITECT: DESIGN | PERFORMANCE | SUSTAINABILITY

NOTES:

REMARKS

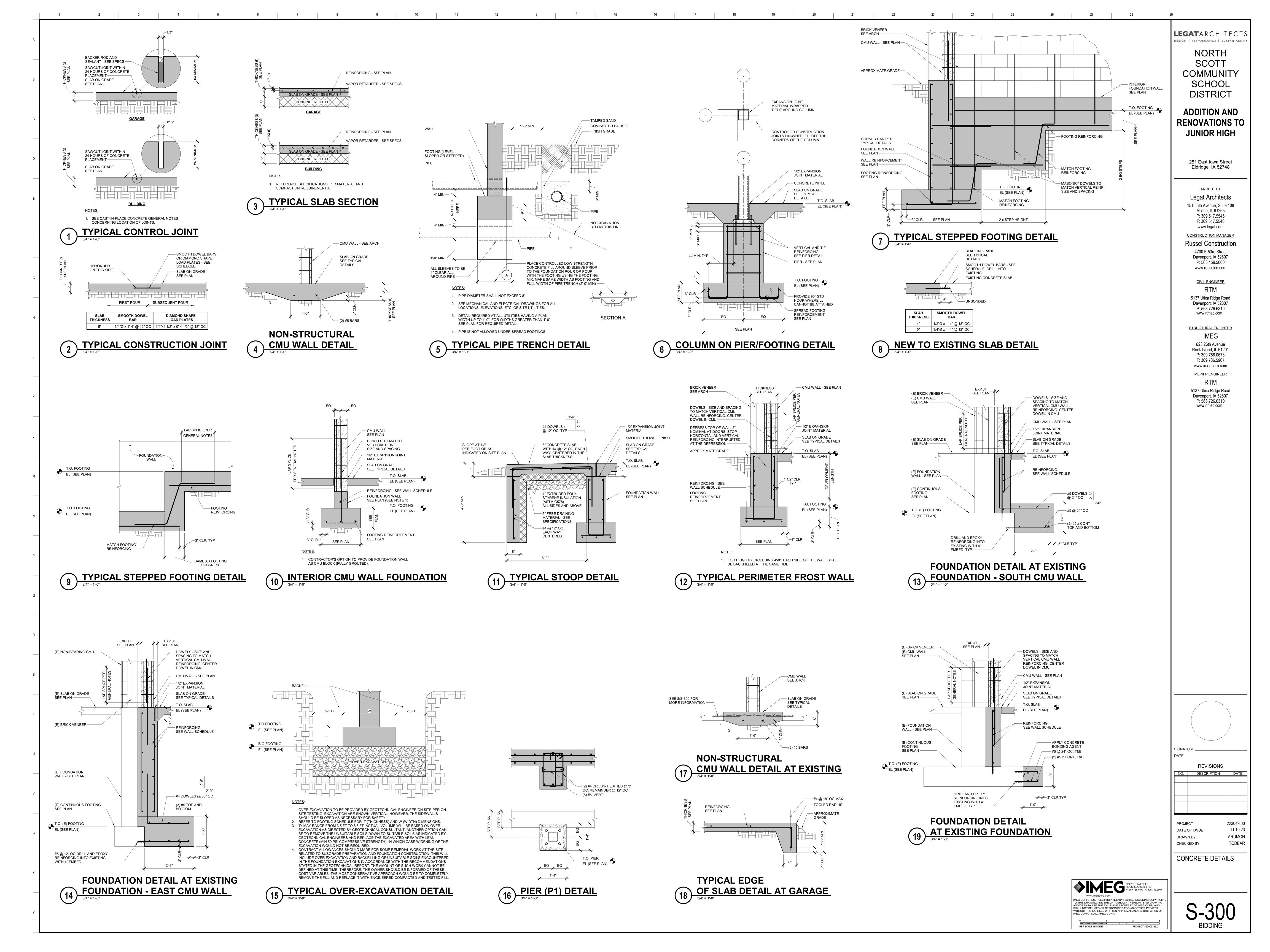
I. SEE PLAN FOR DECK BEARING ELEVATIONS.

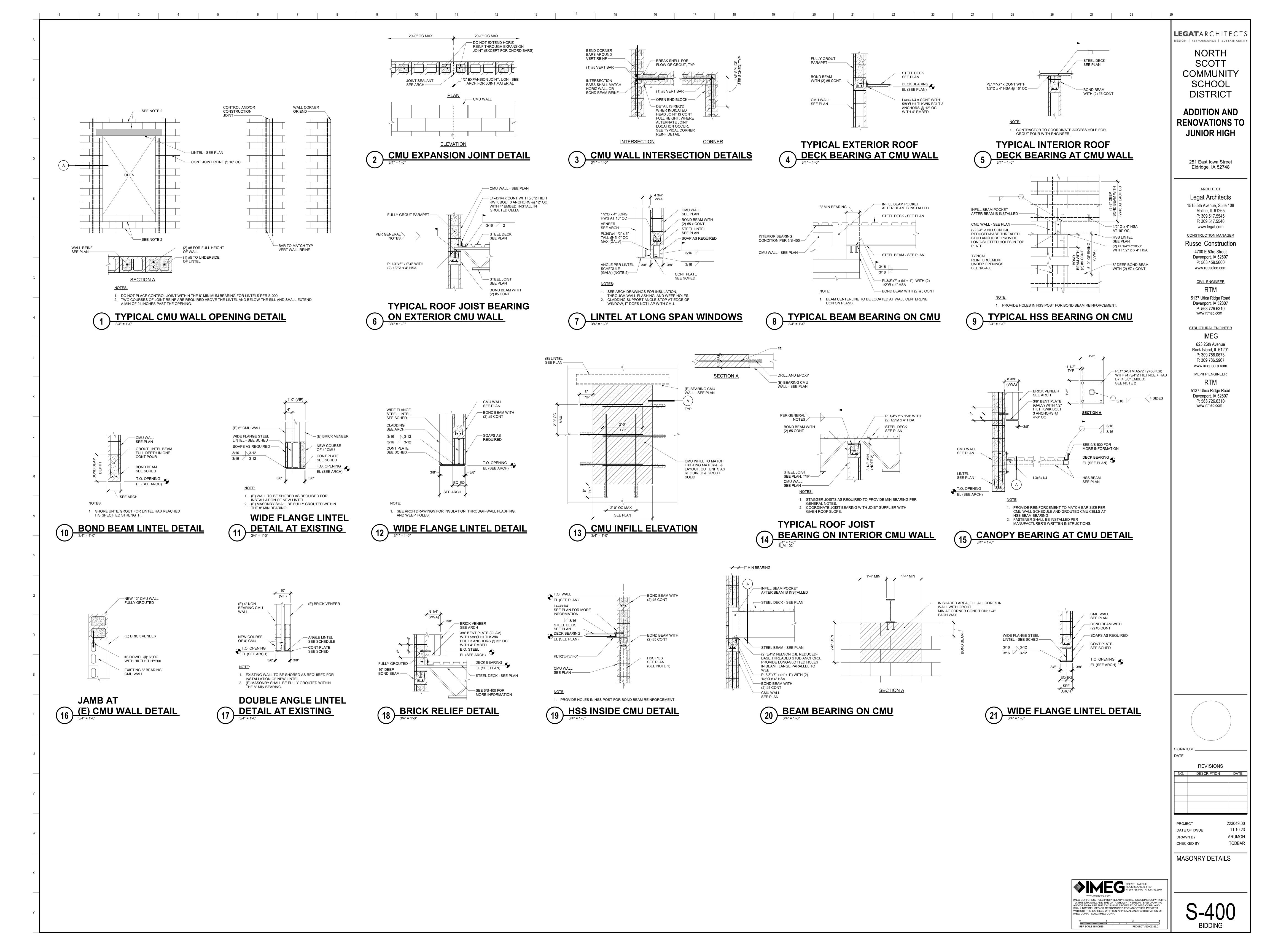
SEE S-500 FOR TYPICAL SHEAR CONNECTION DETAILS.

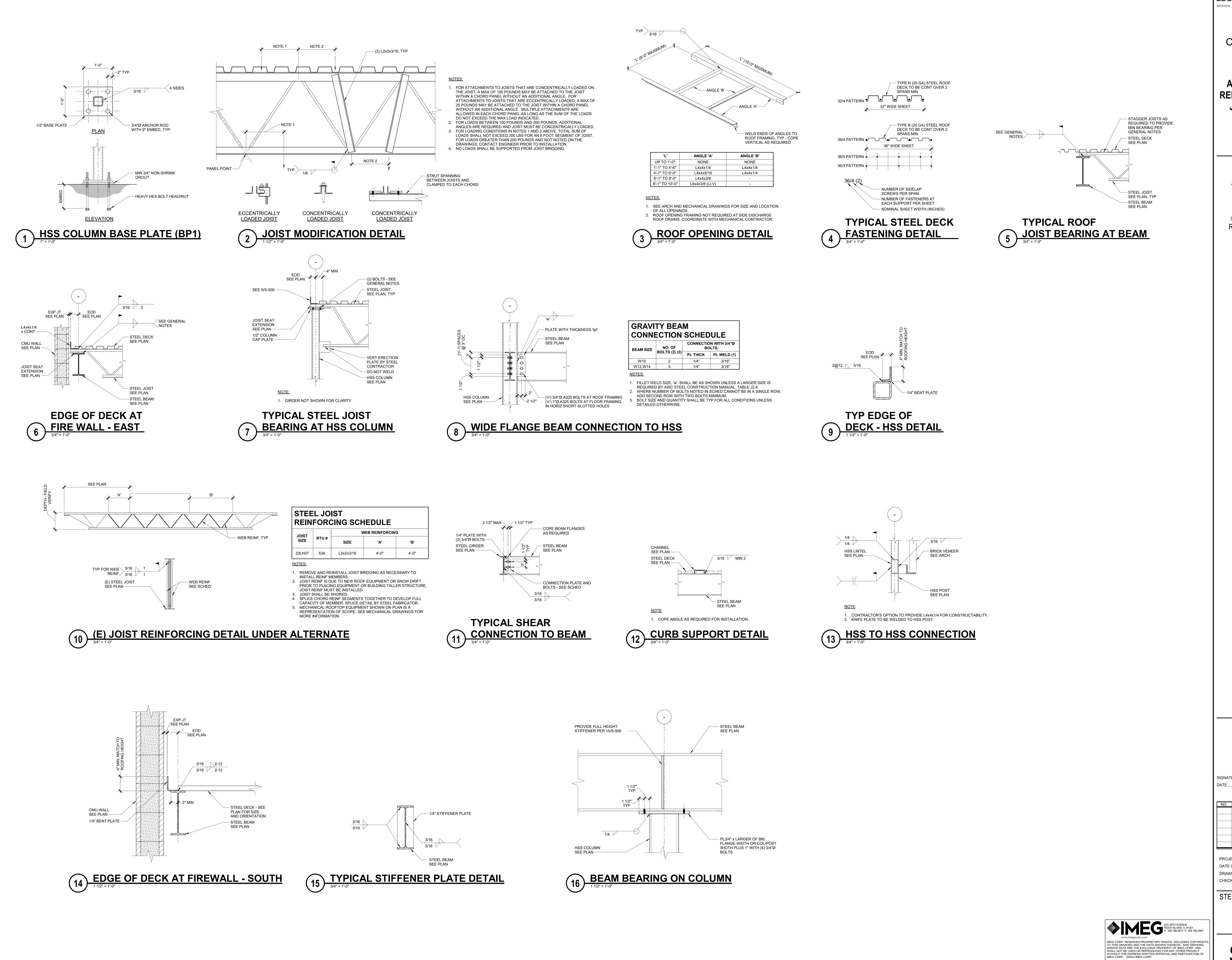
LINTEL SCHEDULE

**MEMBER SIZE** 

REFERENCE DETAIL







**LEGAT**ARCHITECT DESIGN | PERFORMANCE | SUSTAINABILIT NORTH SCOTT COMMUNITY SCHOOL DISTRICT

**ADDITION AND RENOVATIONS TO JUNIOR HIGH** 

> 251 East Iowa Street Eldridge, IA 52748

**ARCHITECT** Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545

F: 309.517.5540 www.legat.com CONSTRUCTION MANAGER **Russel Construction** 

4700 E 53rd Street Davenport, IA 52807 P: 563.459.5600 www.russelco.com

**CIVIL ENGINEER** 5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com STRUCTURAL ENGINEER 623 26th Avenue Rock Island, IL 61201

P: 309.788.0673 F: 309.786.5967 www.imegcorp.com MEP/FP ENGINEER 5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

SIGNATURE **REVISIONS** NO. DESCRIPTION DATE

223049.00

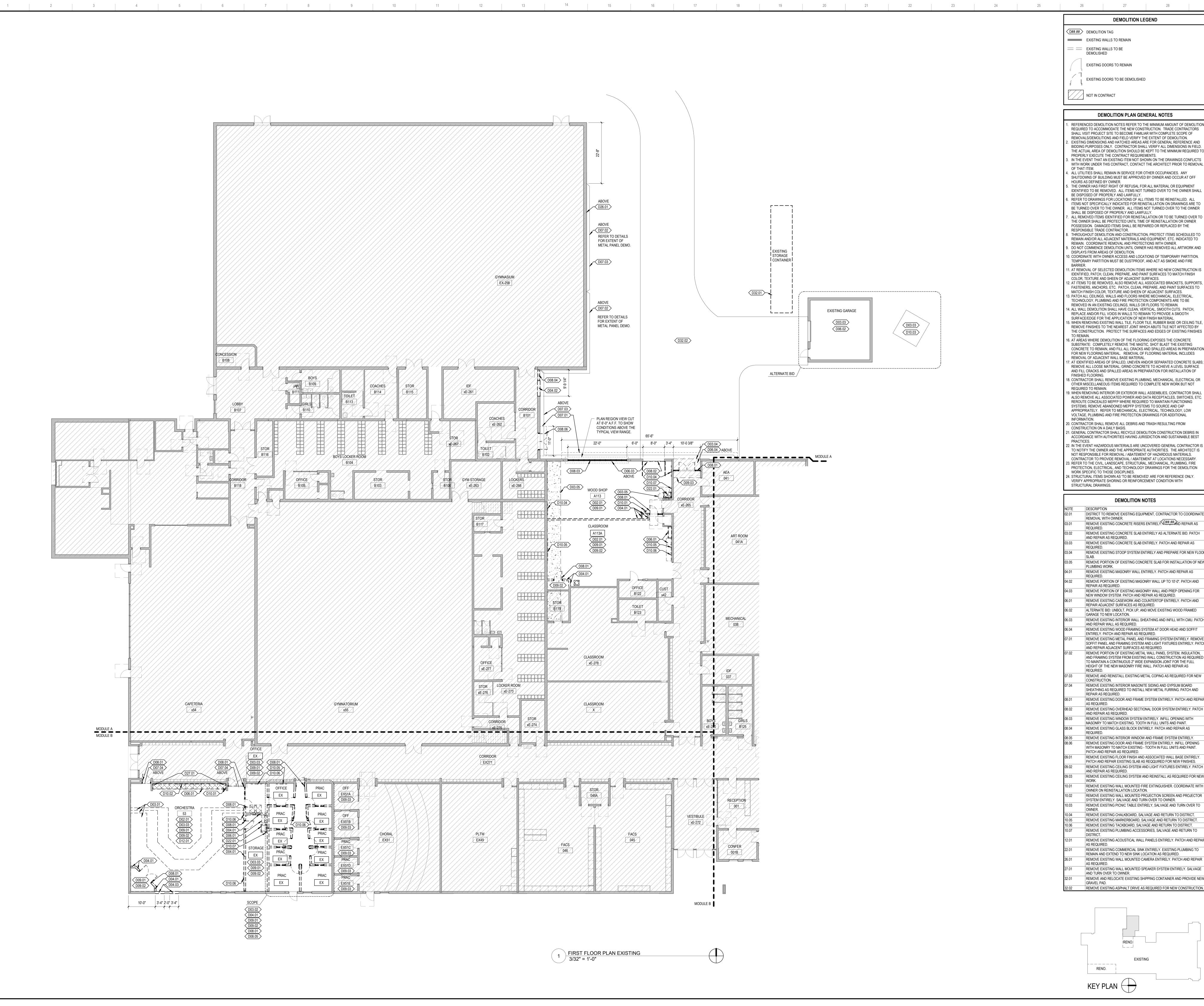
11.10.23

ARUMON

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

STEEL DETAILS

REF. SCALE IN INCHES PROJECT #23003328.01



REFERENCED DEMOLITION NOTES REFER TO THE MINIMUM AMOUNT OF DEMOLITION REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION. TRADE CONTRACTORS SHALL VISIT PROJECT SITE TO BECOME FAMILIAR WITH COMPLETE SCOPE OF REMOVALS/DEMOLITIONS AND FIELD VERIFY THE EXTENT OF DEMOLITION. . EXISTING DIMENSIONS AND HATCHED AREAS ARE FOR GENERAL REFERENCE AND BIDDING PURPOSES ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD. THE ACTUAL AREA OF DEMOLITION SHOULD BE KEPT TO THE MINIMUM REQUIRED TO . IN THE EVENT THAT AN EXISTING ITEM NOT SHOWN ON THE DRAWINGS CONFLICTS WITH WORK UNDER THIS CONTRACT, CONTACT THE ARCHITECT PRIOR TO REMOVAL

4. ALL UTILITIES SHALL REMAIN IN SERVICE FOR OTHER OCCUPANCIES. ANY SHUTDOWNS OF BUILDING MUST BE APPROVED BY OWNER AND OCCUR AT OFF . THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL MATERIAL OR EQUIPMENT IDENTIFIED TO BE REMOVED. ALL ITEMS NOT TURNED OVER TO THE OWNER SHALL

. ALL REMOVED ITEMS IDENTIFIED FOR REINSTALLATION OR TO BE TURNED OVER TO THE OWNER SHALL BE PROTECTED UNTIL TIME OF REINSTALLATION OR OWNER POSSESSION. DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE THROUGHOUT DEMOLITION AND CONSTRUCTION, PROTECT ITEMS SCHEDULED TO REMAIN AND/OR ALL ADJACENT MATERIALS AND EQUIPMENT, ETC. INDICATED TO REMAIN. COORDINATE REMOVAL AND PROTECTIONS WITH OWNER. . DO NOT COMMENCE DEMOLITION UNTIL OWNER HAS REMOVED ALL ARTWORK AND

10. COORDINATE WITH OWNER ACCESS AND LOCATIONS OF TEMPORARY PARTITION. TEMPORARY PARTITION MUST BE DUSTPROOF, AND ACT AS SMOKE AND FIRE 1. AT REMOVAL OF SELECTED DEMOLITION ITEMS WHERE NO NEW CONSTRUCTION IS

IDENTIFIED, PATCH, CLEAN, PREPARE, AND PAINT SURFACES TO MATCH FINISH 12. AT ITEMS TO BE REMOVED, ALSO REMOVE ALL ASSOCIATED BRACKETS, SUPPORTS, FASTENERS, ANCHORS, ETC. PATCH, CLEAN, PREPARE, AND PAINT SURFACES TO MATCH FINISH COLOR, TEXTURE AND SHEEN OF ADJACENT SURFACES. PATCH ALL CEILINGS, WALLS AND FLOORS WHERE MECHANICAL, ELECTRICAL, TECHNOLOGY, PLUMBING AND FIRE PROTECTION COMPONENTS ARE TO BE REMOVED IN AN EXISTING CEILINGS, WALLS OR FLOORS TO REMAIN. 14. ALL WALL DEMOLITION SHALL HAVE CLEAN, VERTICAL, SMOOTH CUTS. PATCH, REPLACE AND/OR FILL VOIDS IN WALLS TO REMAIN TO PROVIDE A SMOOTH

5. WHEN REMOVING EXISTING WALL TILE, FLOOR TILE, RUBBER BASE OR CEILING TILE, REMOVE FINISHES TO THE NEAREST JOINT WHICH ABUTS TILE NOT AFFECTED BY THE CONSTRUCTION. PROTECT THE SURFACES AND EDGES OF EXISTING FINISHES 16. AT AREAS WHERE DEMOLITION OF THE FLOORING EXPOSES THE CONCRETE SUBSTRATE: COMPLETELY REMOVE THE MASTIC, SHOT BLAST THE EXISTING CONCRETE TO REMAIN, AND FILL ALL CRACKS AND SPALLED AREAS IN PREPARATION FOR NEW FLOORING MATERIAL. REMOVAL OF FLOORING MATERIAL INCLUDES 7. AT IDENTIFIED AREAS OF SPALLED, UNEVEN AND/OR SEPARATED CONCRETE SLABS; REMOVE ALL LOOSE MATERIAL; GRIND CONCRETE TO ACHIEVE A LEVEL SURFACE

18. CONTRACTOR SHALL REMOVE EXISTING PLUMBING, MECHANICAL, ELECTRICAL OR OTHER MISCELLANEOUS ITEMS REQUIRED TO COMPLETE NEW WORK BUT NOT 19. WHEN REMOVING INTERIOR OR EXTERIOR WALL ASSEMBLIES, CONTRACTOR SHALL ALSO REMOVE ALL ASSOCIATED POWER AND DATA RECEPTACLES, SWITCHES, ETC REROUTE CONCEALED MEPFP WHERE REQUIRED TO MAINTAIN FUNCTIONING SYSTEMS; REMOVE ABANDONED MEPFP SYSTEMS TO SOURCE AND CAP APPROPRIATELY. REFER TO MECHANICAL, ELECTRICAL, TECHNOLOGY, LOW

20. CONTRACTOR SHALL REMOVE ALL DEBRIS AND TRASH RESULTING FROM 21. GENERAL CONTRACTOR SHALL RECYCLE DEMOLITION CONSTRUCTION DEBRIS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND SUSTAINABLE BEST 22. IN THE EVENT HAZARDOUS MATERIALS ARE UNCOVERED GENERAL CONTRACTOR IS TO NOTIFY THE OWNER AND THE APPROPRIATE AUTHORITIES. THE ARCHITECT IS NOT RESPONSIBLE FOR REMOVAL / ABATEMENT OF HAZARDOUS MATERIALS. CONTRACTOR TO PROVIDE REMOVAL / ABATEMENT AT LOCATIONS NECESSARY.

DISTRICT TO REMOVE EXISTING EQUIPMENT, CONTRACTOR TO COORDINATE REMOVE EXISTING CONCRETE RISERS ENTIRELY: PHENTING REPAIR AS REMOVE EXISTING CONCRETE SLAB ENTIRELY AS ALTERNATE BID. PATCH

REMOVE EXISTING CONCRETE SLAB ENTIRELY. PATCH AND REPAIR AS REMOVE EXISTING STOOP SYSTEM ENTIRELY AND PREPARE FOR NEW FLOOP REMOVE PORTION OF EXISTING CONCRETE SLAB FOR INSTALLATION OF NEW

REMOVE EXISTING MASONRY WALL ENTIRELY. PATCH AND REPAIR AS REMOVE PORTION OF EXISTING MASONRY WALL UP TO 10'-0". PATCH AND

REMOVE PORTION OF EXISTING MASONRY WALL AND PREP OPENING FOR NEW WINDOW SYSTEM. PATCH AND REPAIR AS REQUIRED. REMOVE EXISTING CASEWORK AND COUNTERTOP ENTIRELY. PATCH AND ALTERNATE BID: UNBOLT, PICK UP, AND MOVE EXISTING WOOD FRAMED

REMOVE EXISTING INTERIOR WALL SHEATHING AND INFILL WITH CMU. PATCH REMOVE EXISTING WOOD FRAMING SYSTEM AT DOOR HEAD AND SOFFIT REMOVE EXISTING METAL PANEL AND FRAMING SYSTEM ENTIRELY. REMOVE SOFFIT PANEL AND FRAMING SYSTEM AND LIGHT FIXTURES ENTIRELY. PATCH

REMOVE AND REINSTALL EXISTING METAL COPING AS REQUIRED FOR NEW REMOVE EXISTING INTERIOR MASONITE SIDING AND GYPSUM BOARD SHEATHING AS REQUIRED TO INSTALL NEW METAL FURRING. PATCH AND

REMOVE EXISTING DOOR AND FRAME SYSTEM ENTIRELY. PATCH AND REPAIR REMOVE EXISTING OVERHEAD SECTIONAL DOOR SYSTEM ENTIRELY. PATCH

REMOVE EXISTING GLASS BLOCK ENTIRELY. PATCH AND REPAIR AS REMOVE EXISTING INTERIOR WINDOW AND FRAME SYSTEM ENTIRELY. REMOVE EXISTING DOOR AND FRAME SYSTEM ENTIRELY. INFILL OPENING

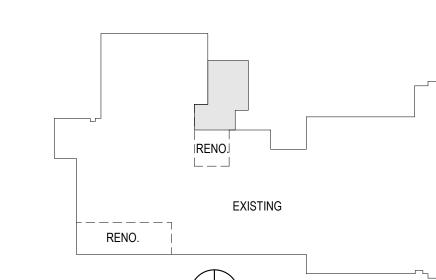
REMOVE EXISTING FLOOR FINISH AND ASSOCIATED WALL BASE ENTIRELY PATCH AND REPAIR EXISTING SLAB AS REQQUIRED FOR NEW FINISHES. REMOVE EXISTING CEILING SYSTEM AND LIGHT FIXTURES ENTIRELY. PATCH REMOVE EXISTING CEILING SYSTEM AND REINSTALL AS REQUIRED FOR NEW

REMOVE EXISTING WALL MOUNTED FIRE EXTINGUISHER. COORDINATE WIT REMOVE EXISTING WALL MOUNTED PROJECTION SCREEN AND PROJECTOR SYSTEM ENTIRELY. SALVAGE AND TURN OVER TO OWNER. REMOVE EXISTING PICNIC TABLE ENTIRELY, SALVAGE AND TURN OVER TO

REMOVE EXISTING CHALKBOARD, SALVAGE AND RETURN TO DISTRICT. REMOVE EXISTING MARKERBOARD, SALVAGE AND RETURN TO DISTRICT. REMOVE EXISTING TACKBOARD, SALVAGE AND RETURN TO DISTRICT. REMOVE EXISTING PLUMBING ACCESSORIES, SALVAGE AND RETURN TO

REMOVE EXISTING ACOUSTICAL WALL PANELS ENTIRELY. PATCH AND REPAIR REMOVE EXISTING COMMERCIAL SINK ENTIRELY. EXISTING PLUMBING TO REMAIN AND EXTEND TO NEW SINK LOCATION AS REQUIRED. REMOVE EXISTING WALL MOUNTED CAMERA ENTIRELY. PATCH AND REPAIR

REMOVE AND RELOCATE EXISTING SHIPPING CONTAINER AND PROVIDE NEW REMOVE EXISTING ASPHALT DRIVE AS REQUIRED FOR NEW CONSTRUCTION.



**LEGAT**ARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILIT NORTH

**ADDITION AND** 

502 South 5th Street Eldridge, IA 52748

<u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com **CONSTRUCTION MANAGER Russel Construction** 

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

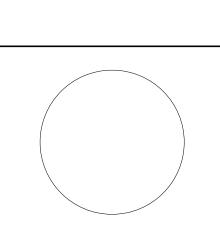
**CIVIL ENGINEER** 

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER 623 26th Avenue

Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

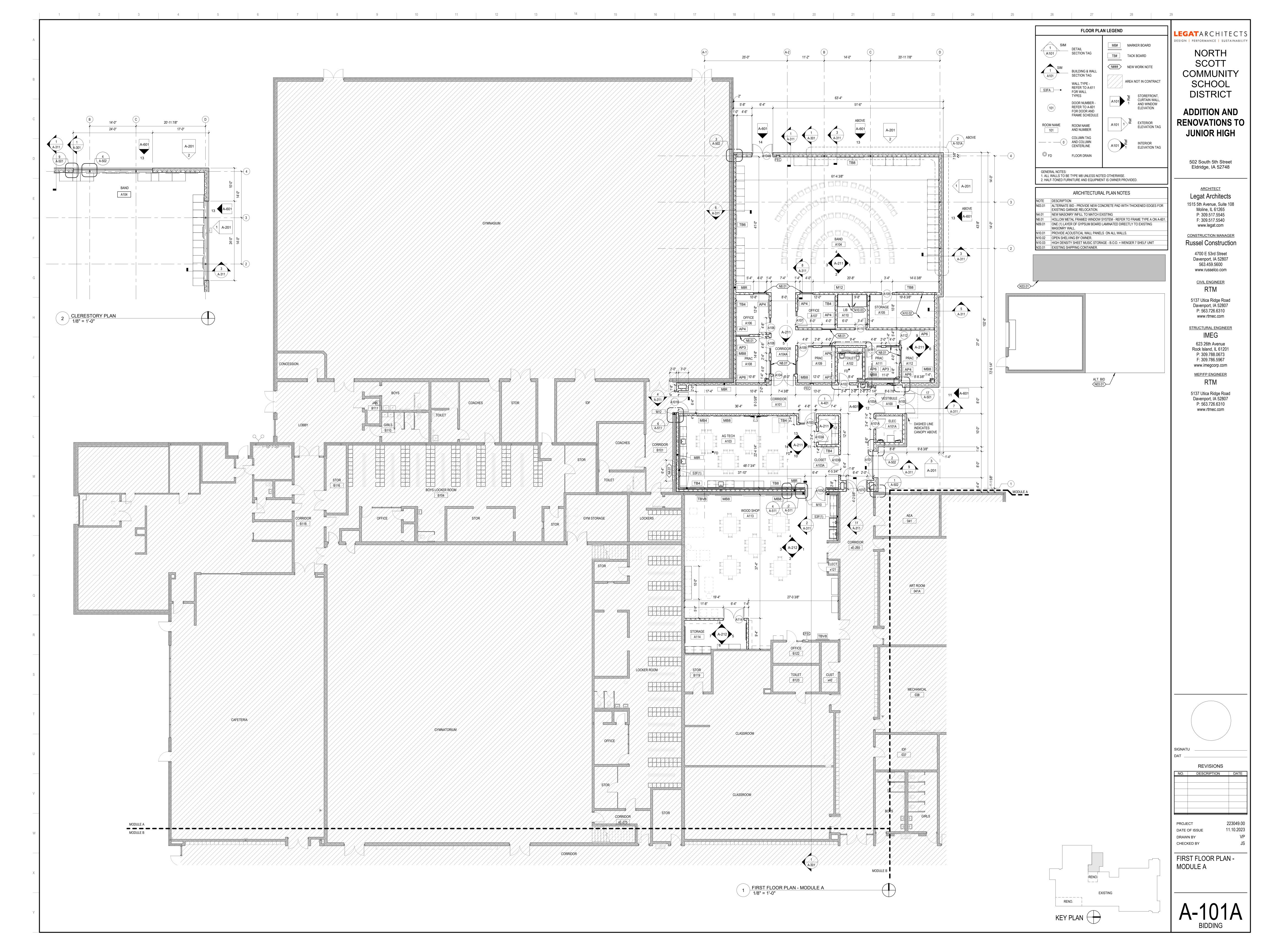


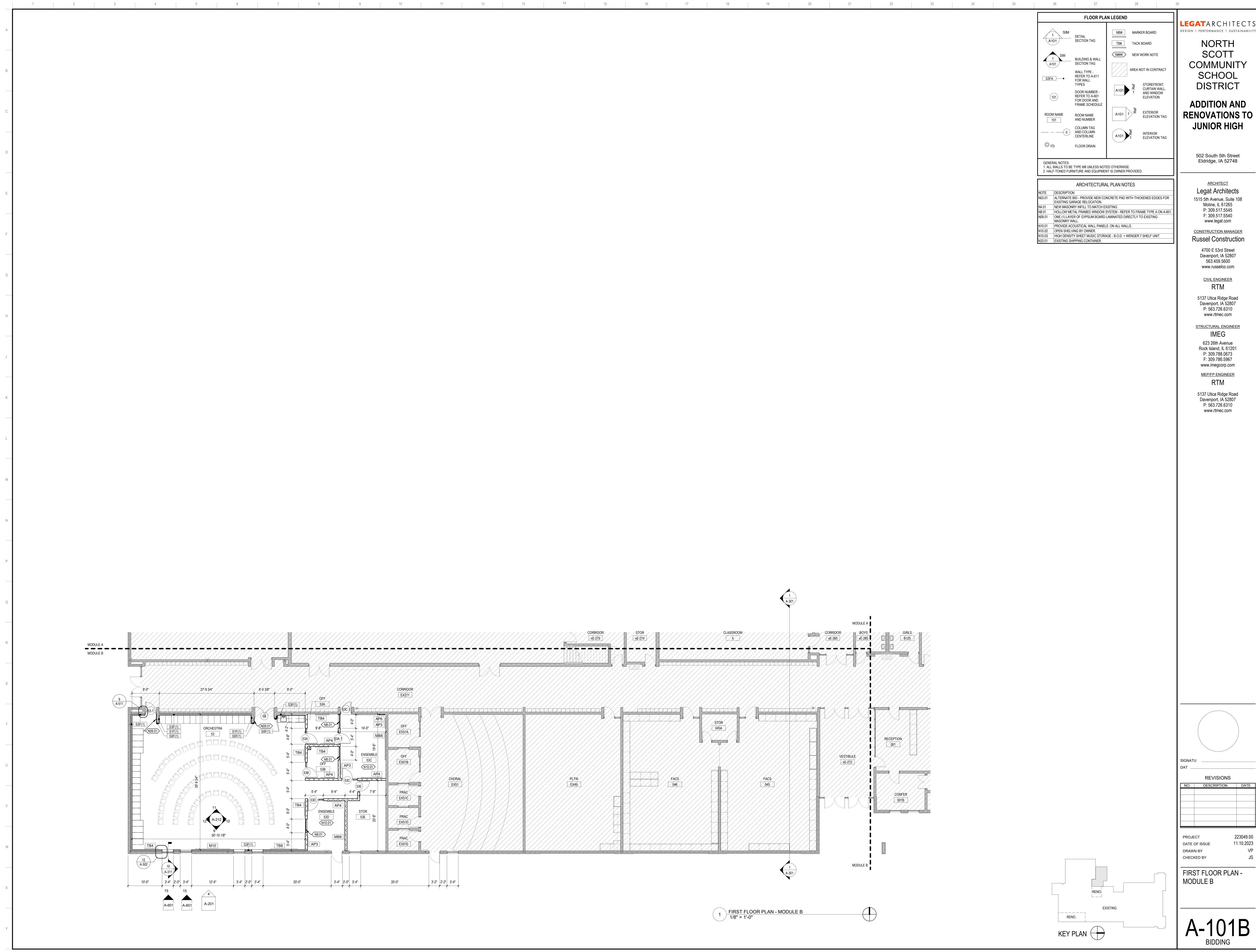
REVISIONS NO. DESCRIPTION DATE

223049.00 PROJECT 11.10.2023

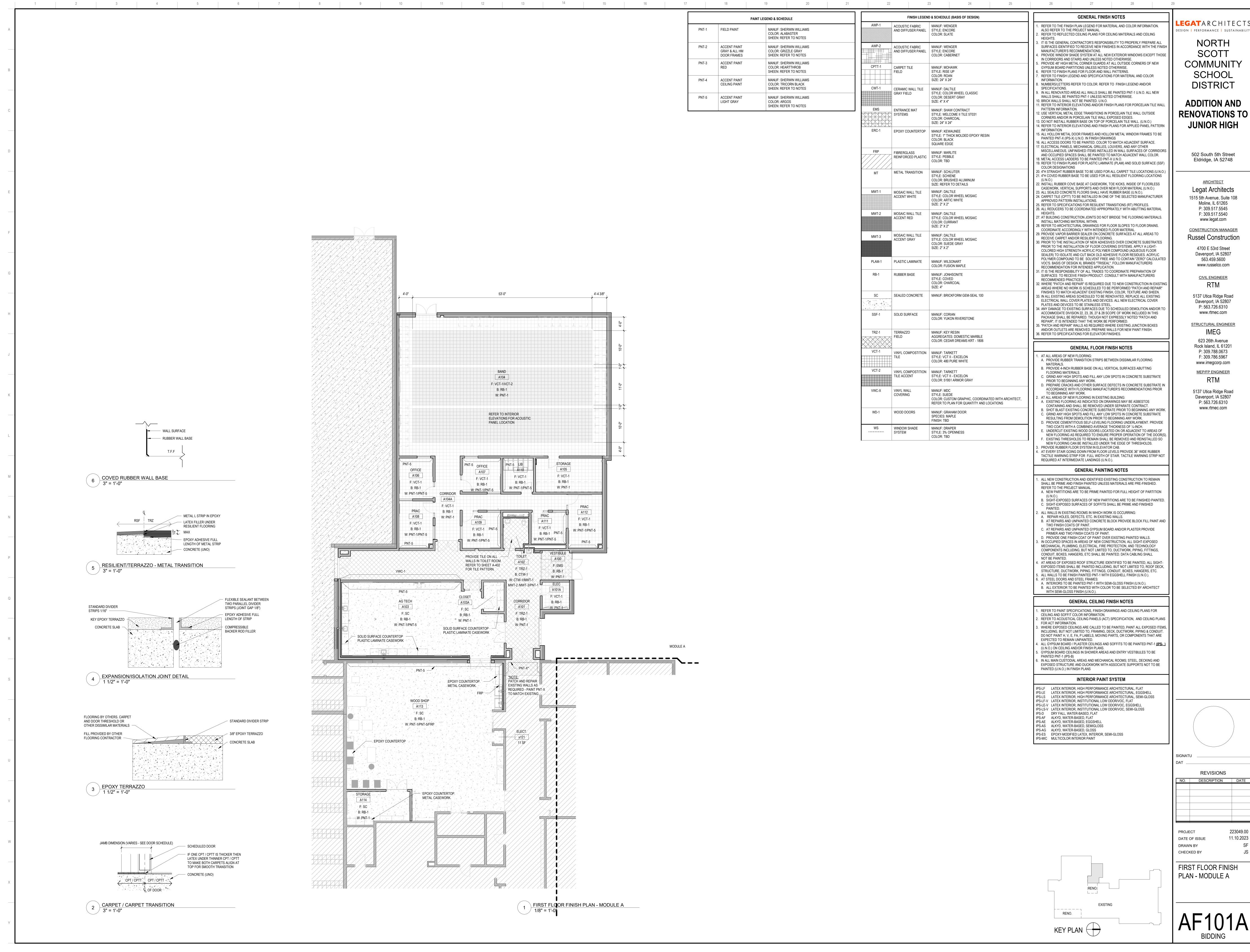
DATE OF ISSUE DRAWN BY CHECKED BY

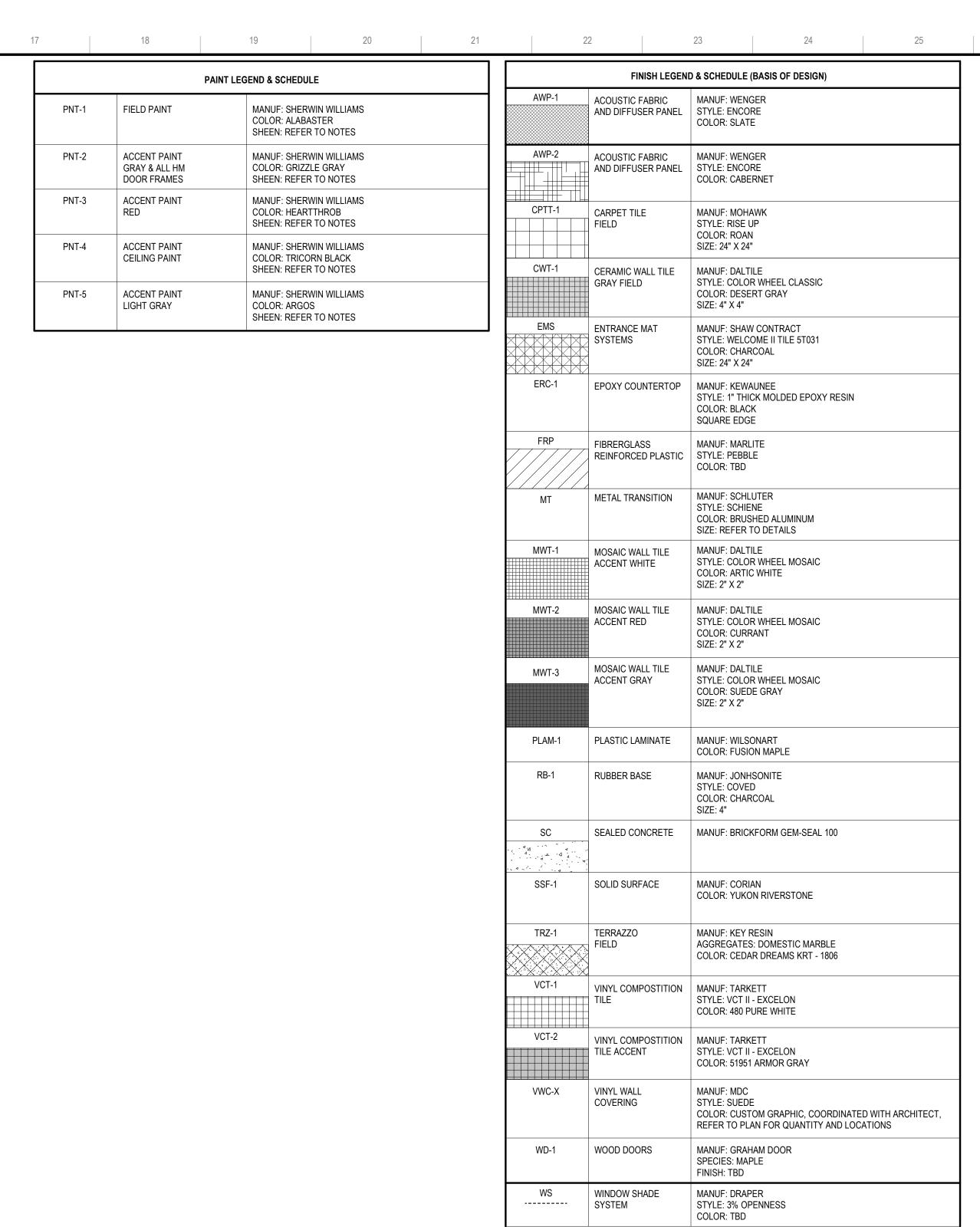
FIRST FLOOR **DEMOLITION PLAN** 



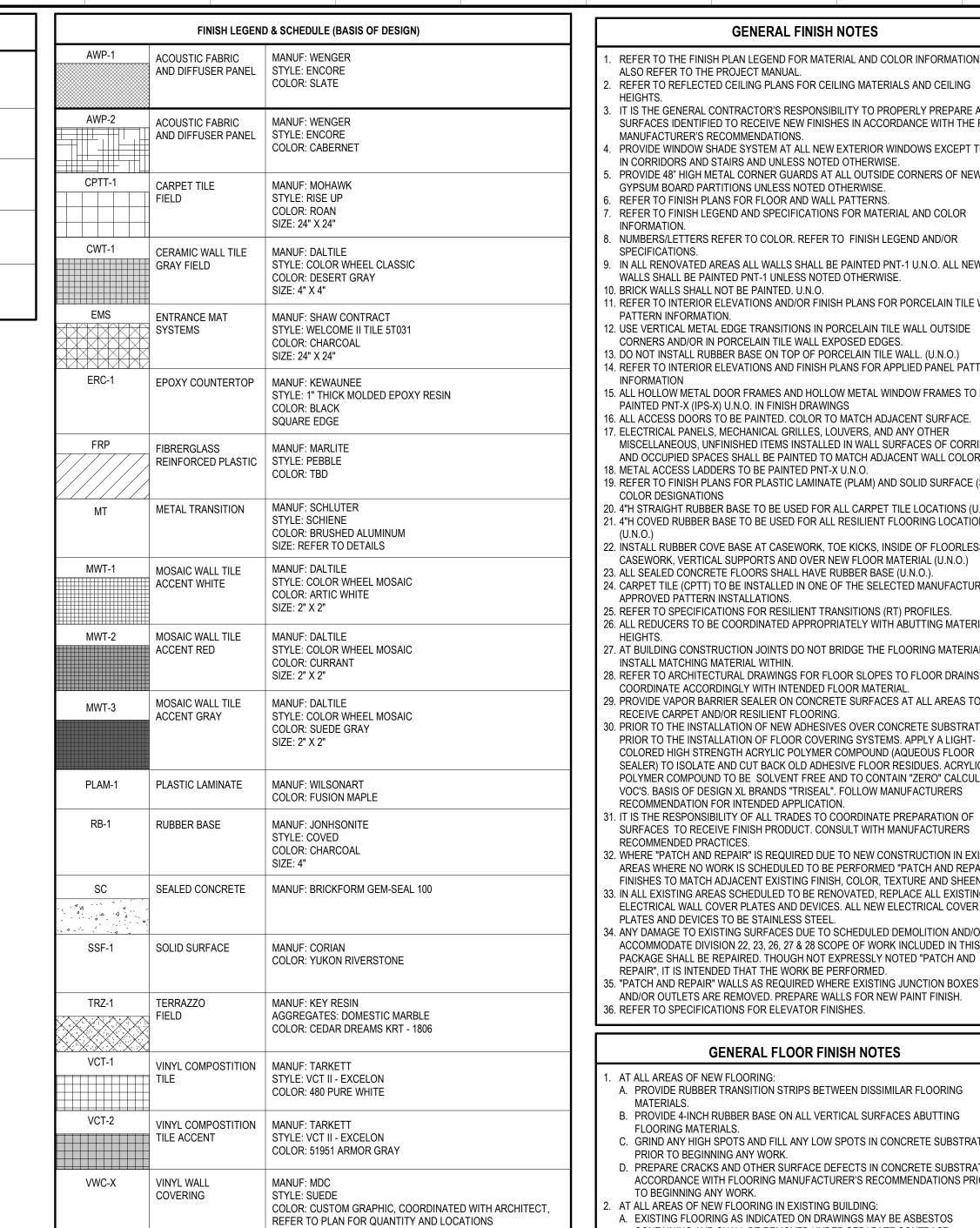


LEGATARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY





1 FIRST FLOOR FINISH PLAN - MODULE B
1/8" = 1'-0"



#### **GENERAL FINISH NOTES**

. REFER TO THE FINISH PLAN LEGEND FOR MATERIAL AND COLOR INFORMATION. ALSO REFER TO THE PROJECT MANUAL. . REFER TO REFLECTED CEILING PLANS FOR CEILING MATERIALS AND CEILING 3. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROPERLY PREPARE ALL SURFACES IDENTIFIED TO RECEIVE NEW FINISHES IN ACCORDANCE WITH THE FINISH MANUFACTURER'S RECOMMENDATIONS. 4. PROVIDE WINDOW SHADE SYSTEM AT ALL NEW EXTERIOR WINDOWS EXCEPT THOSE IN CORRIDORS AND STAIRS AND UNLESS NOTED OTHERWISE. . PROVIDE 48" HIGH METAL CORNER GUARDS AT ALL OUTSIDE CORNERS OF NEW GYPSUM BOARD PARTITIONS UNLESS NOTED OTHERWISE. 6. REFER TO FINISH PLANS FOR FLOOR AND WALL PATTERNS. . REFER TO FINISH LEGEND AND SPECIFICATIONS FOR MATERIAL AND COLOR

**LEGAT**ARCHITECT

DESIGN | PERFORMANCE | SUSTAINABILIT

NORTH

COMMUNITY

SCHOOL

DISTRICT

**ADDITION AND** 

502 South 5th Street

Eldridge, IA 52748

<u>ARCHITECT</u>

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

**CONSTRUCTION MANAGER** 

Russel Construction

4700 E 53rd Street

Davenport, IA 52807

563.459.5600

www.russelco.com

**CIVIL ENGINEER** 

5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

**IMEG** 

623 26th Avenue Rock Island, IL 61201

P: 309.788.0673

F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

www.rtmec.com

INFORMATION. 8. NUMBERS/LETTERS REFER TO COLOR. REFER TO FINISH LEGEND AND/OR SPECIFICATIONS. 9. IN ALL RENOVATED AREAS ALL WALLS SHALL BE PAINTED PNT-1 U.N.O. ALL NEW WALLS SHALL BE PAINTED PNT-1 UNLESS NOTED OTHERWISE.

10. BRICK WALLS SHALL NOT BE PAINTED. U.N.O. 11. REFER TO INTERIOR ELEVATIONS AND/OR FINISH PLANS FOR PORCELAIN TILE WALL PATTERN INFORMATION. 12. USE VERTICAL METAL EDGE TRANSITIONS IN PORCELAIN TILE WALL OUTSIDE CORNERS AND/OR IN PORCELAIN TILE WALL EXPOSED EDGES. 13. DO NOT INSTALL RUBBER BASE ON TOP OF PORCELAIN TILE WALL. (U.N.O.) 14. REFER TO INTERIOR ELEVATIONS AND FINISH PLANS FOR APPLIED PANEL PATTERN INFORMATION 15. ALL HOLLOW METAL DOOR FRAMES AND HOLLOW METAL WINDOW FRAMES TO BE PAINTED PNT-X (IPS-X) U.N.O. IN FINISH DRAWINGS

17. ELECTRICAL PANELS, MECHANICAL GRILLES, LOUVERS, AND ANY OTHER MISCELLANEOUS, UNFINISHED ITEMS INSTALLED IN WALL SURFACES OF CORRIDORS AND OCCUPIED SPACES SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR. 18. METAL ACCESS LADDERS TO BE PAINTED PNT-X U.N.O. 19. REFER TO FINISH PLANS FOR PLASTIC LAMINATE (PLAM) AND SOLID SURFACE (SSF) COLOR DESIGNATIONS 20. 4"H STRAIGHT RUBBER BASE TO BE USED FOR ALL CARPET TILE LOCATIONS (U.N.O.) 21. 4"H COVED RUBBER BASE TO BE USED FOR ALL RESILIENT FLOORING LOCATIONS 22. INSTALL RUBBER COVE BASE AT CASEWORK, TOE KICKS, INSIDE OF FLOORLESS CASEWORK, VERTICAL SUPPORTS AND OVER NEW FLOOR MATERIAL (U.N.O.)

23. ALL SEALED CONCRETE FLOORS SHALL HAVE RUBBER BASE (U.N.O.). 24. CARPET TILE (CPTT) TO BE INSTALLED IN ONE OF THE SELECTED MANUFACTURER APPROVED PATTERN INSTALLATIONS. 25. REFER TO SPECIFICATIONS FOR RESILIENT TRANSITIONS (RT) PROFILES. 26. ALL REDUCERS TO BE COORDINATED APPROPRIATELY WITH ABUTTING MATERIAL 27. AT BUILDING CONSTRUCTION JOINTS DO NOT BRIDGE THE FLOORING MATERIALS.

INSTALL MATCHING MATERIAL WITHIN. 28. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR SLOPES TO FLOOR DRAINS. COORDINATE ACCORDINGLY WITH INTENDED FLOOR MATERIAL. 29. PROVIDE VAPOR BARRIER SEALER ON CONCRETE SURFACES AT ALL AREAS TO RECEIVE CARPET AND/OR RESILIENT FLOORING. 30. PRIOR TO THE INSTALLATION OF NEW ADHESIVES OVER CONCRETE SUBSTRATES PRIOR TO THE INSTALLATION OF FLOOR COVERING SYSTEMS. APPLY A LIGHT-COLORED HIGH STRENGTH ACRYLIC POLYMER COMPOUND (AQUEOUS FLOOR SEALER) TO ISOLATE AND CUT BACK OLD ADHESIVE FLOOR RESIDUES. ACRYLIC POLYMER COMPOUND TO BE SOLVENT FREE AND TO CONTAIN "ZERO" CALCULATED VOC'S. BASIS OF DESIGN XL BRANDS "TRISEAL". FOLLOW MANUFACTURERS RECOMMENDATION FOR INTENDED APPLICATION. 31. IT IS THE RESPONSIBILITY OF ALL TRADES TO COORDINATE PREPARATION OF SURFACES TO RECEIVE FINISH PRODUCT. CONSULT WITH MANUFACTURERS RECOMMENDED PRACTICES. 32. WHERE "PATCH AND REPAIR" IS REQUIRED DUE TO NEW CONSTRUCTION IN EXISTING

AREAS WHERE NO WORK IS SCHEDULED TO BE PERFORMED "PATCH AND REPAIR" FINISHES TO MATCH ADJACENT EXISTING FINISH, COLOR, TEXTURE AND SHEEN. 33. IN ALL EXISTING AREAS SCHEDULED TO BE RENOVATED, REPLACE ALL EXISTING ELECTRICAL WALL COVER PLATES AND DEVICES. ALL NEW ELECTRICAL COVER PLATES AND DEVICES TO BE STAINLESS STEEL. 34. ANY DAMAGE TO EXISTING SURFACES DUE TO SCHEDULED DEMOLITION AND/OR TO ACCOMMODATE DIVISION 22, 23, 26, 27 & 28 SCOPE OF WORK INCLUDED IN THIS PACKAGE SHALL BE REPAIRED. THOUGH NOT EXPRESSLY NOTED "PATCH AND REPAIR", IT IS INTENDED THAT THE WORK BE PERFORMED. 35. "PATCH AND REPAIR" WALLS AS REQUIRED WHERE EXISTING JUNCTION BOXES

AND/OR OUTLETS ARE REMOVED. PREPARE WALLS FOR NEW PAINT FINISH.

**GENERAL FLOOR FINISH NOTES** 

AT ALL AREAS OF NEW FLOORING IN EXISTING BUILDING:

REQUIRED AT INTERMEDIATE LANDINGS (U.N.O.).

TO BEGINNING ANY WORK.

#### 1. AT ALL AREAS OF NEW FLOORING: A. PROVIDE RUBBER TRANSITION STRIPS BETWEEN DISSIMILAR FLOORING

B. PROVIDE 4-INCH RUBBER BASE ON ALL VERTICAL SURFACES ABUTTING FLOORING MATERIALS. . GRIND ANY HIGH SPOTS AND FILL ANY LOW SPOTS IN CONCRETE SUBSTRATE PRIOR TO BEGINNING ANY WORK. D. PREPARE CRACKS AND OTHER SURFACE DEFECTS IN CONCRETE SUBSTRATE IN ACCORDANCE WITH FLOORING MANUFACTURER'S RECOMMENDATIONS PRIOR

A. EXISTING FLOORING AS INDICATED ON DRAWINGS MAY BE ASBESTOS CONTAINING AND SHALL BE REMOVED UNDER SEPARATE CONTRACT. 3. SHOT BLAST EXISTING CONCRETE SUBSTRATE PRIOR TO BEGINNING ANY WORK. . GRIND ANY HIGH SPOTS AND FILL ANY LOW SPOTS IN CONCRETE SUBSTRATE RESULTING FROM DEMOLITION PRIOR TO BEGINNING ANY WORK. D. PROVIDE CEMENTITIOUS SELF-LEVELING FLOORING UNDERLAYMENT. PROVIDE TWO COATS WITH A COMBINED AVERAGE THICKNESS OF 1/4-INCH.

. UNDERCUT EXISTING WOOD DOORS LOCATED ON OR ADJACENT TO AREAS OF NEW FLOORING AS REQUIRED TO ENSURE PROPER OPERATION OF THE DOOR(S). F. EXISTING THRESHOLDS TO REMAIN SHALL BE REMOVED AND REINSTALLED SO NEW FLOORING CAN BE INSTALLED UNDER THE EDGE OF THRESHOLDS. PROVIDE RUBBER FLOOR SYSTEM IN ELEVATOR CAB. . AT EVERY STAIR GOING DOWN FROM FLOOR LEVELS PROVIDE 36" WIDE RUBBER

TACTILE WARNING STRIP FOR FULL WIDTH OF STAIR. TACTILE WARNING STRIP NOT

#### **GENERAL PAINTING NOTES**

. ALL NEW CONSTRUCTION AND IDENTIFIED EXISTING CONSTRUCTION TO REMAIN SHALL BE PRIME AND FINISH PAINTED UNLESS MATERIALS ARE PRE-FINISHED. REFER TO THE PROJECT MANUAL. A. NEW PARTITIONS ARE TO BE PRIME PAINTED FOR FULL HEIGHT OF PARTITION B. SIGHT-EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE FINISHED PAINTED. C. SIGHT-EXPOSED SURFACES OF SOFFITS SHALL BE PRIME AND FINISHED

. ALL WALLS IN EXISTING ROOMS IN WHICH WORK IS OCCURRING: A. REPAIR HOLES, DEFECTS, ETC. IN EXISTING WALLS. B. AT REPAIRS AND UNPAINTED CONCRETE BLOCK PROVIDE BLOCK FILL PAINT AND TWO FINISH COATS OF PAINT. C. AT REPAIRS AND UNPAINTED GYPSUM BOARD AND/OR PLASTER PROVIDE

PRIMER AND TWO FINISH COATS OF PAINT. D. PROVIDE ONE FINISH COAT OF PAINT OVER EXISTING PAINTED WALLS. . IN OCCUPIED SPACES IN AREAS OF NEW CONSTRUCTION, ALL SIGHT-EXPOSED MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, AND TECHNOLOGY COMPONENTS INCLUDING, BUT NOT LIMITED TO, DUCTWORK, PIPING, FITTINGS, CONDUIT, BOXES, HANGERS, ETC SHALL BE PAINTED. DATA CABLING SHALL NOT BE PAINTED.

. AT AREAS OF EXPOSED ROOF STRUCTURE IDENTIFIED TO BE PAINTED, ALL SIGHT-EXPOSED ITEMS SHALL BE PAINTED INCLUDING, BUT NOT LIMITED TO, ROOF DECK, STRUCTURE, DUCTWORK, PIPING, FITTINGS, CONDUIT, BOXES, HANGERS, ETC. 5. ALL WALLS TO BE FINISH PAINTED PNT-1 WITH EGGSHELL FINISH (U.N.O.). 6. AT STEEL DOORS AND STEEL FRAMES:

A. INTERIORS TO BE PAINTED PNT-1 WITH SEMI-GLOSS FINISH (U.N.O.). B. ALL EXTERIOR TO BE PAINTED WITH COLOR TO BE SELECTED BY ARCHITECT WITH SEMI-GLOSS FINISH (U.N.O.).

#### GENERAL CEILING FINISH NOTES

REFER TO PAINT SPECIFICATIONS, FINISH DRAWINGS AND CEILING PLANS FOR CEILING AND SOFFIT COLOR INFORMATION. . REFER TO ACOUSTICAL CEILING PANELS (ACT) SPECIFICATION, AND CEILING PLANS FOR ACT INFORMATION. . WHERE EXPOSED CEILINGS ARE CALLED TO BE PAINTED. PAINT ALL EXPOSED ITEMS. INCLUDING, BUT NOT LIMITED TO, FRAMING, DECK, DUCTWORK, PIPING & CONDUIT. DO NOT PAINT H, V, E, FA, P LABELS, MOVING PARTS, OR COMPONENTS THAT ARE EXPECTED TO REMAIN UNPAINTED. 4. ALL GYPSUM BOARD / PLASTER CEILINGS AND SOFFITS TO BE PAINTED PNT-1 (IPS- ) (U.N.O.) ON CEILING AND/OR FINISH PLANS. . GYPSUM BOARD CEILINGS IN SHOWER AREAS AND ENTRY VESTIBULES TO BE PAINTED PNT-1 (IPS-B) 6. IN ALL MAIN CUSTODIAL AREAS AND MECHANICAL ROOMS; STEEL, DECKING AND

#### INTERIOR PAINT SYSTEM

EXPOSED STRUCTURE AND DUCKWORK WITH ASSOCIATE SUPPORTS NOT TO BE

IPS-LF LATEX INTERIOR, HIGH PERFORMANCE ARCHITECTURAL, FLAT IPS-LE LATEX INTERIOR, HIGH PERFORMANCE ARCHITECTURAL, EGGSHELL IPS-LS LATEX INTERIOR, HIGH PERFORMANCE ARCHITECTURAL, SEMI-GLOSS IPS-LF-V LATEX INTERIOR, INSTITUTIONAL LOW ODOR/VOC, FLAT IPS-LE-V LATEX INTERIOR, INSTITUTIONAL LOW ODOR/VOC, EGGSHELL IPS-LS-V LATEX INTERIOR, INSTITUTIONAL LOW ODOR/VOC, SEMI-GLOSS IPS-D DRY FALL, WATER-BASED, FLAT

**EXISTING** 

RENO.

KEY PLAN

IPS-AF ALKYD, WATER-BASED, FLAT IPS-AE ALKYD, WATER-BASED, EGGSHELL IPS-AS ALKYD, WATER-BASED, SEMIGLOSS IPS-AG ALKYD, WATER-BASED, GLOSS IPS-ES EPOXY-MODIFIED LATEX, INTERIOR, SEMI-GLOSS

IPS-MIC MULTICOLOR INTERIOR PAINT

PAINTED (U.N.O.) IN FINISH PLANS

**REVISIONS** NO. DESCRIPTION DATE

SIGNATU

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

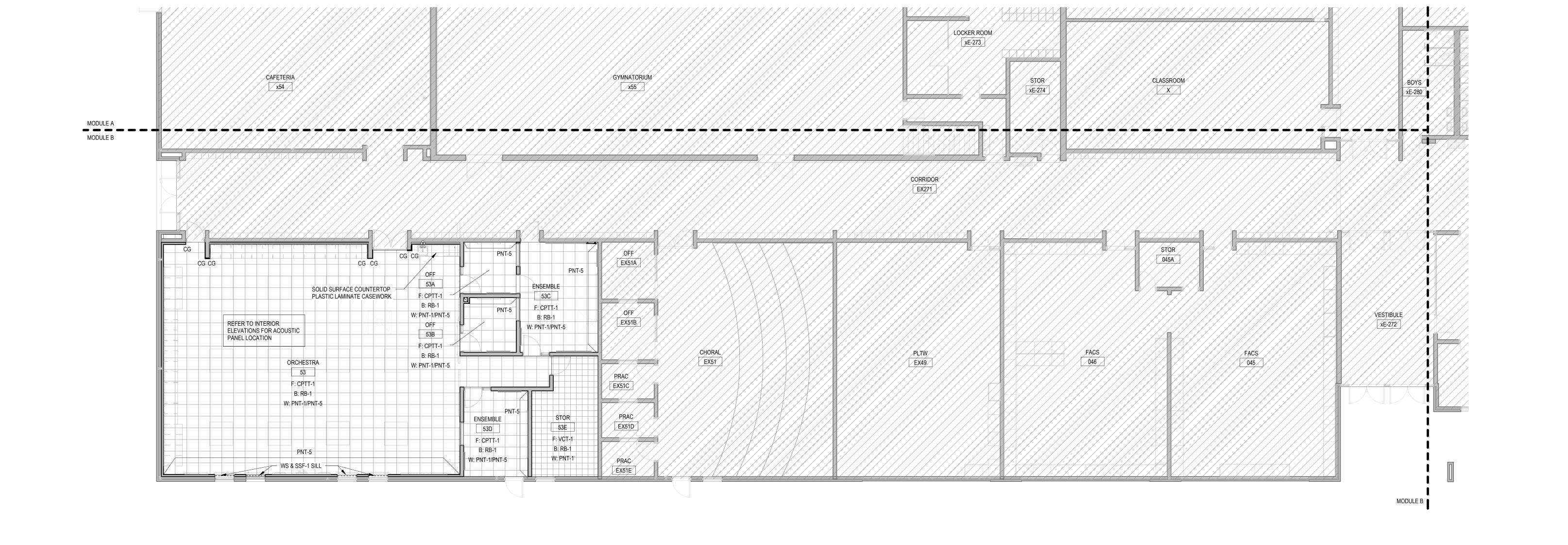
FIRST FLOOR FINISH

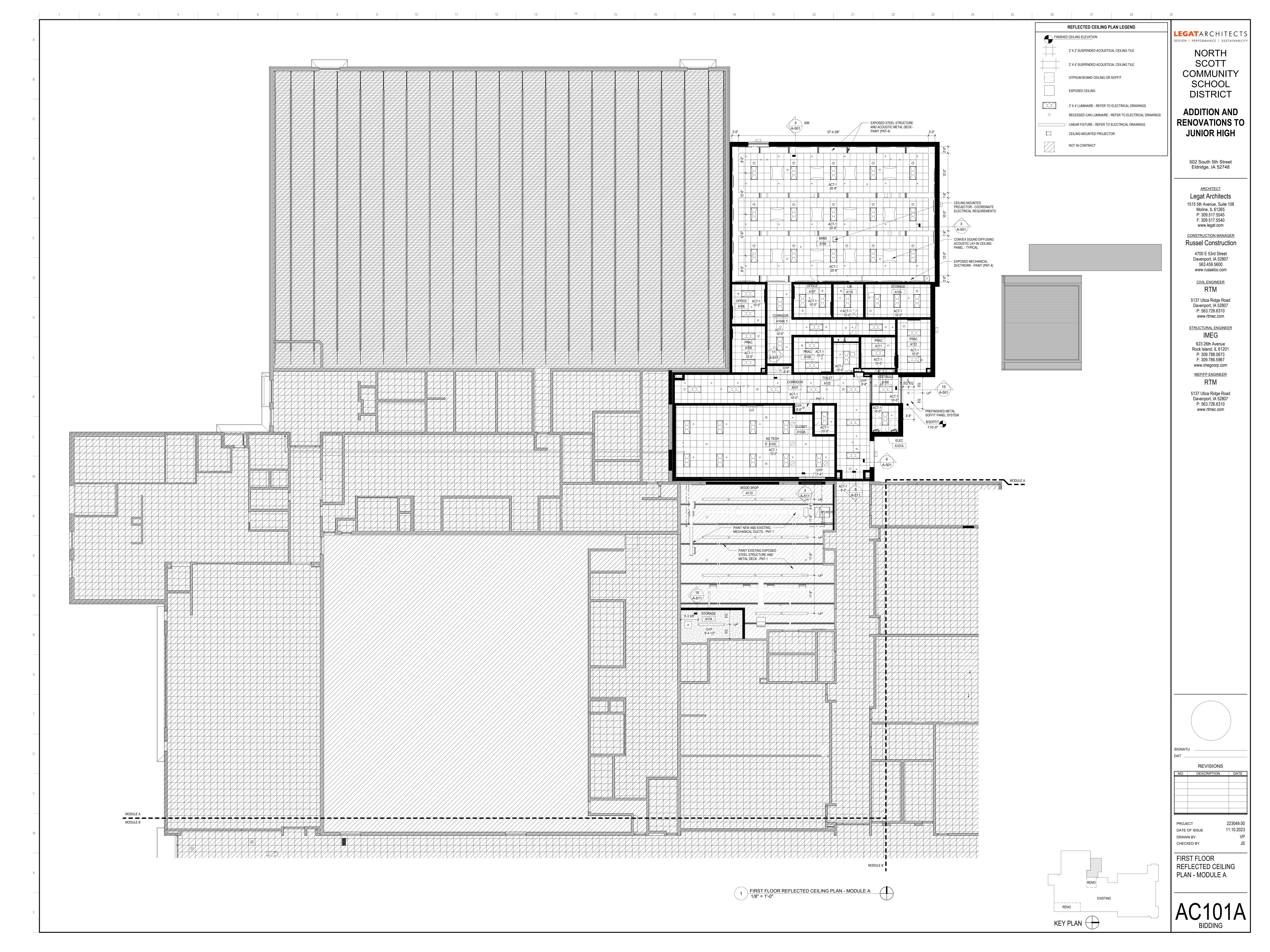
223049.00

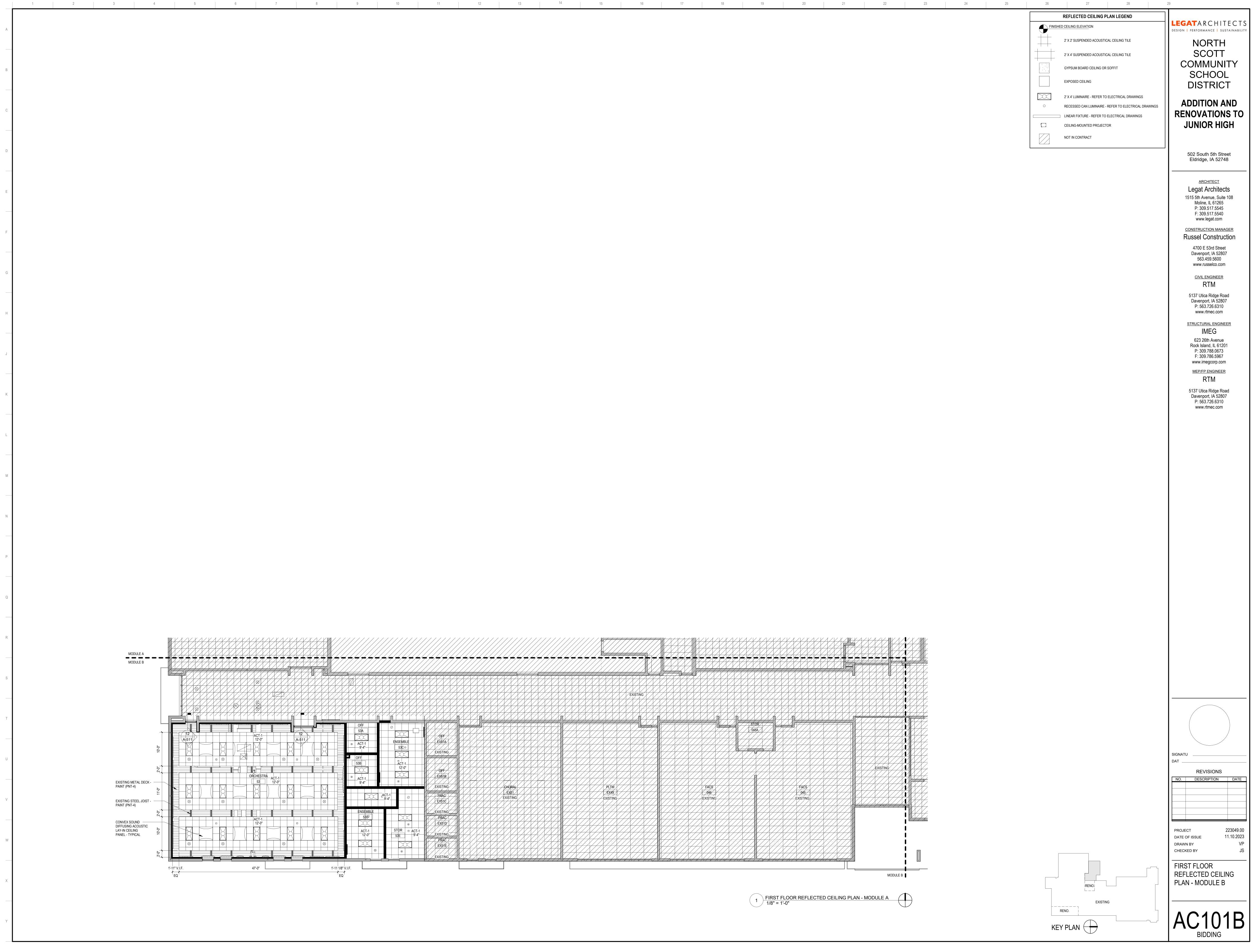
11.10.2023

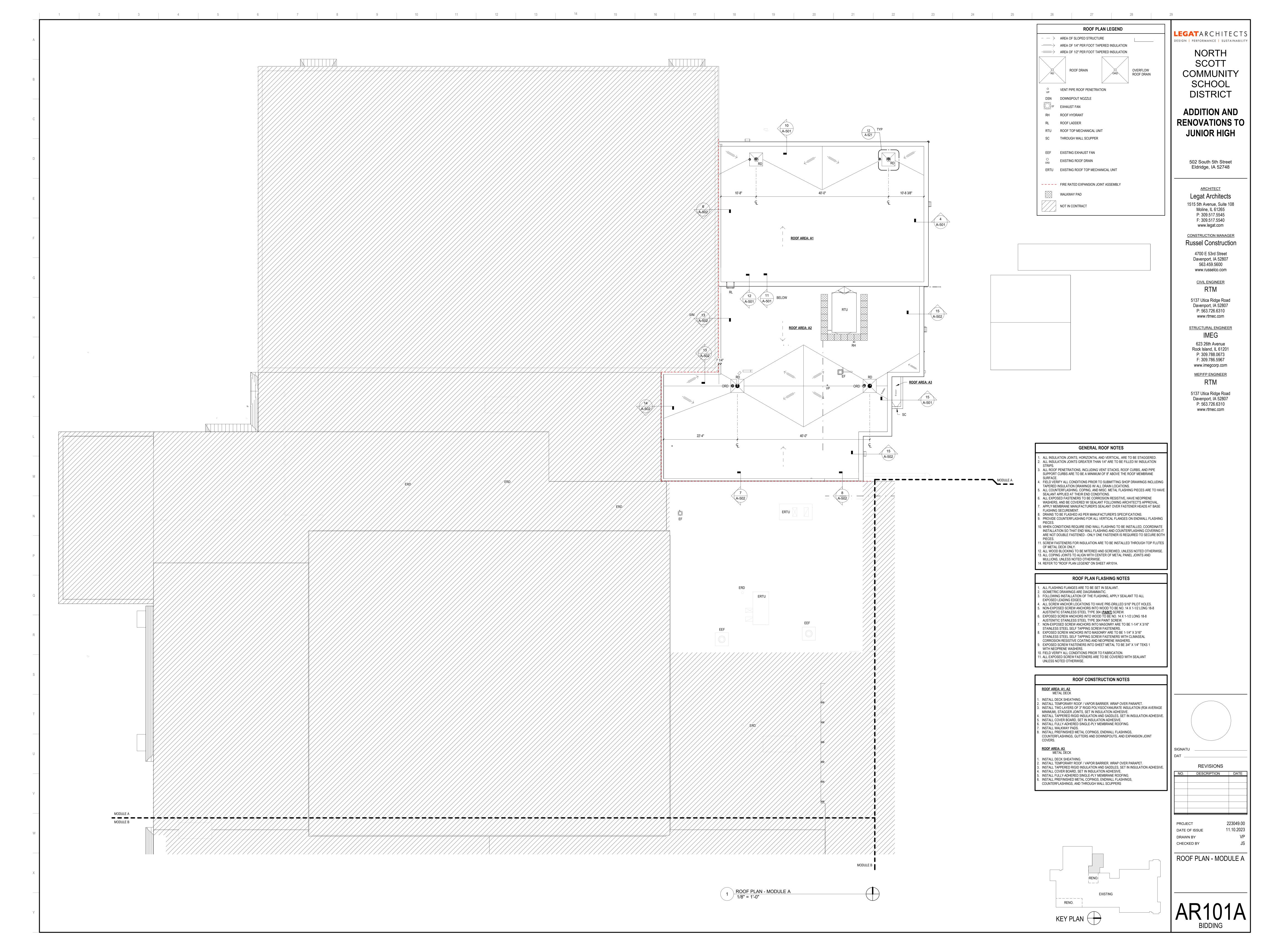
PLAN - MODULE B

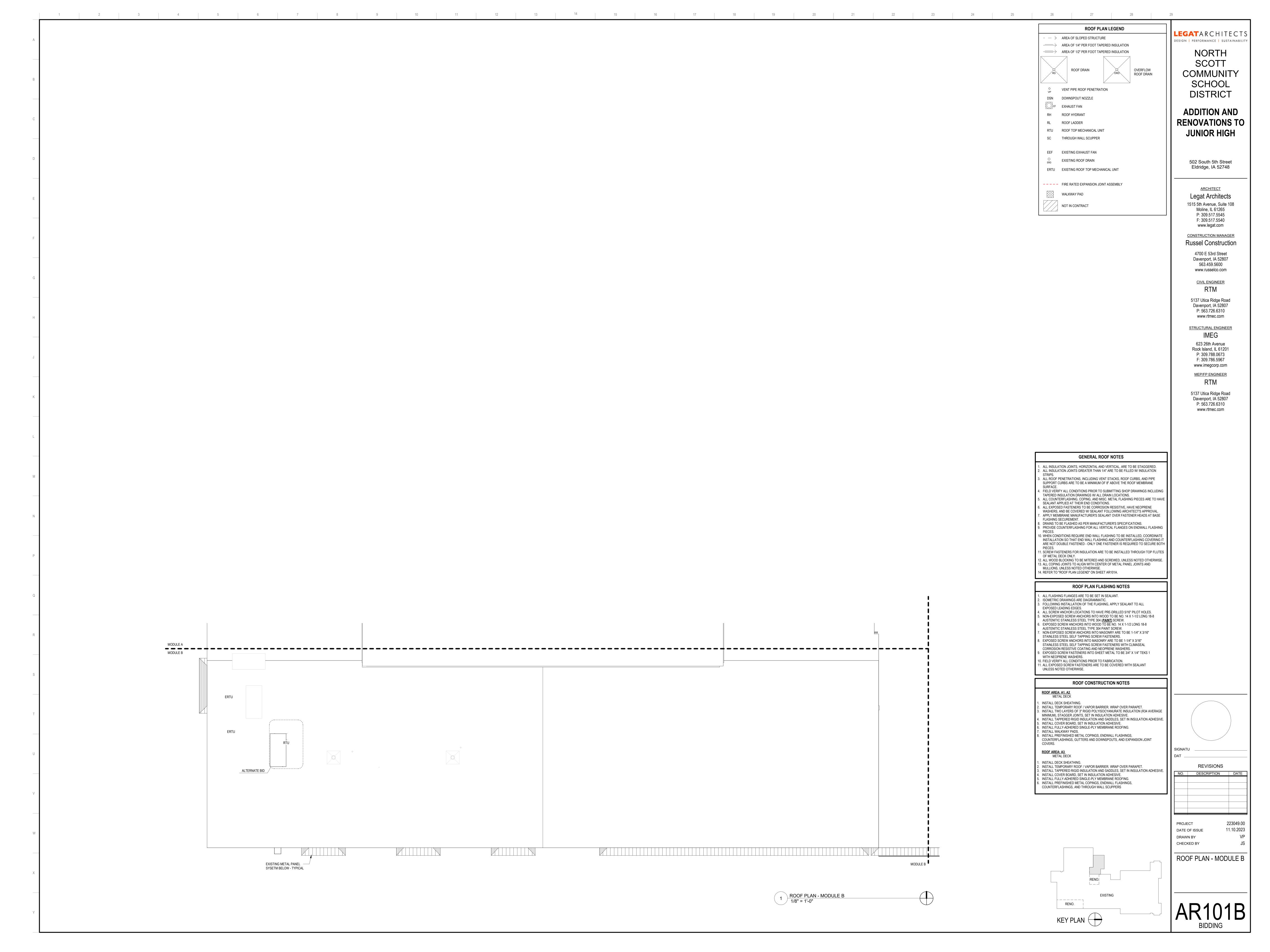
BIDDING

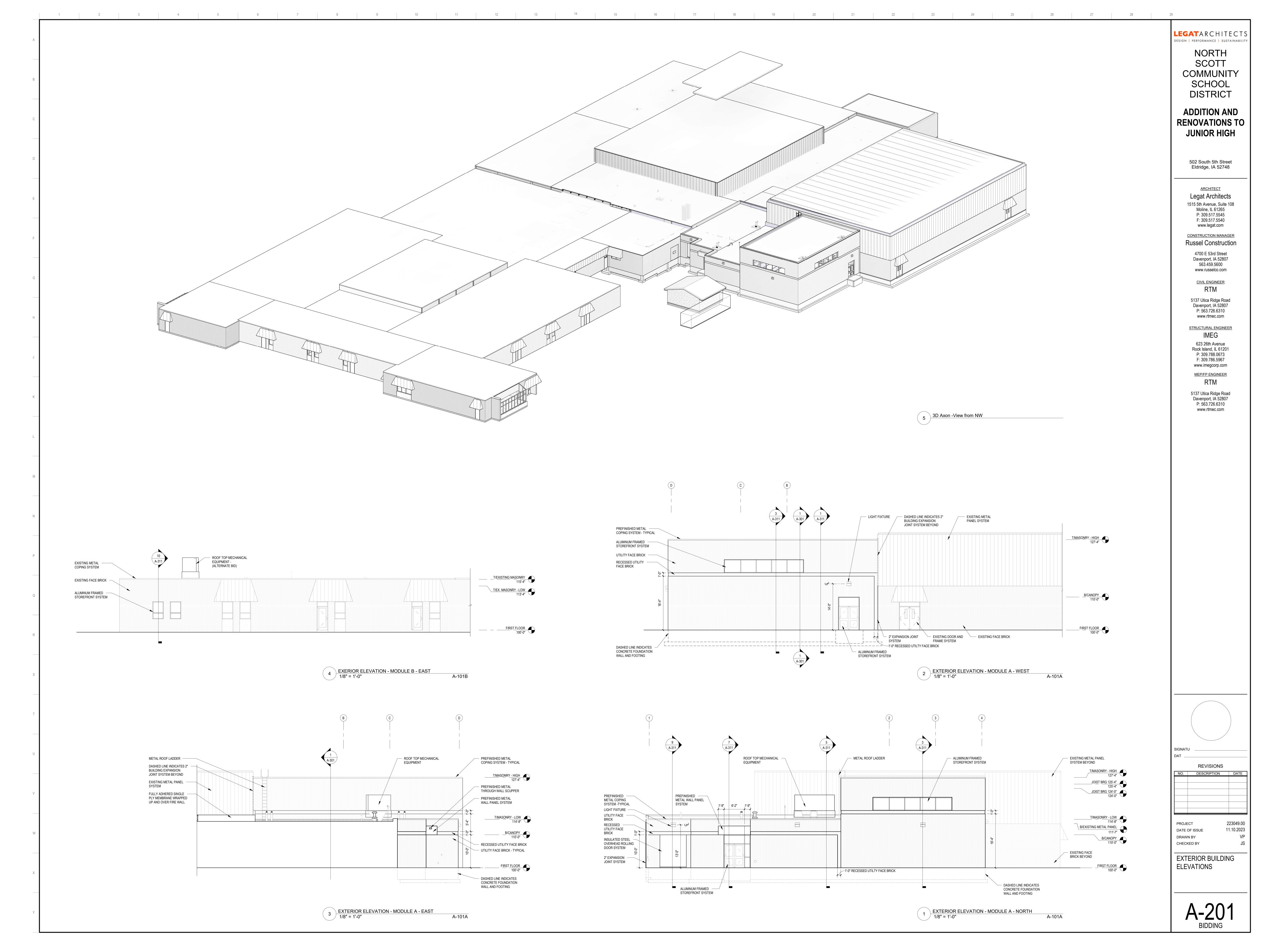


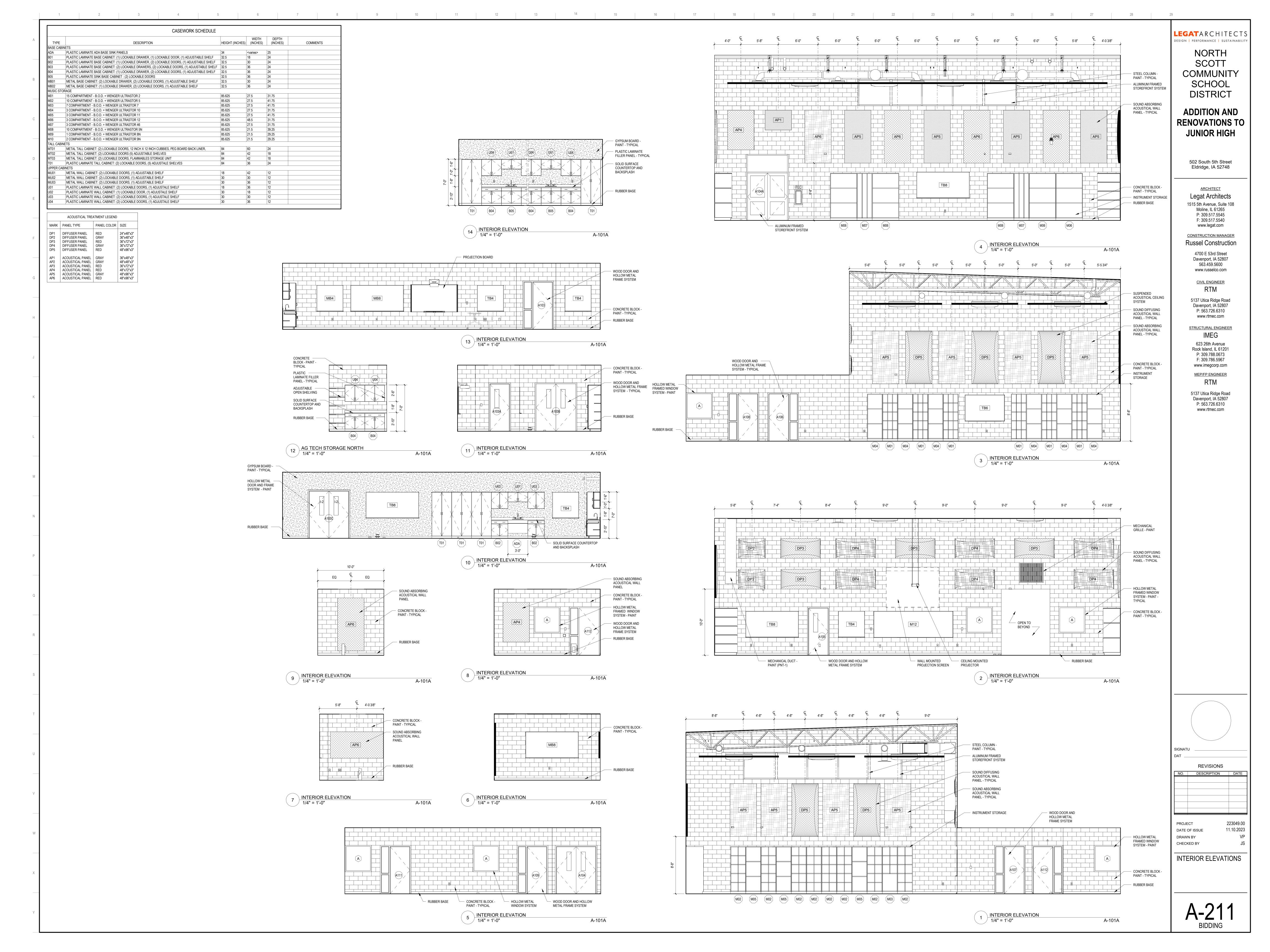


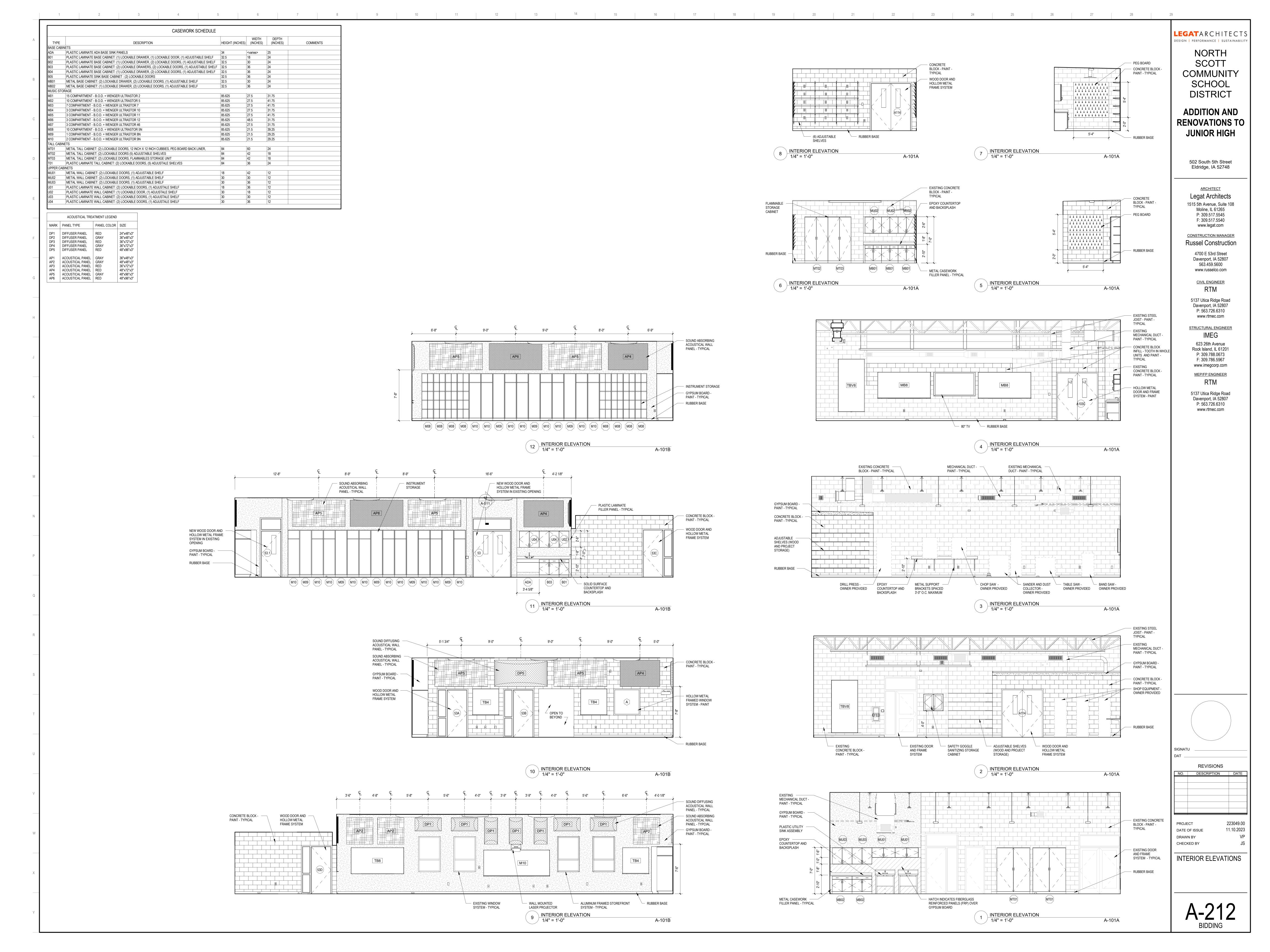


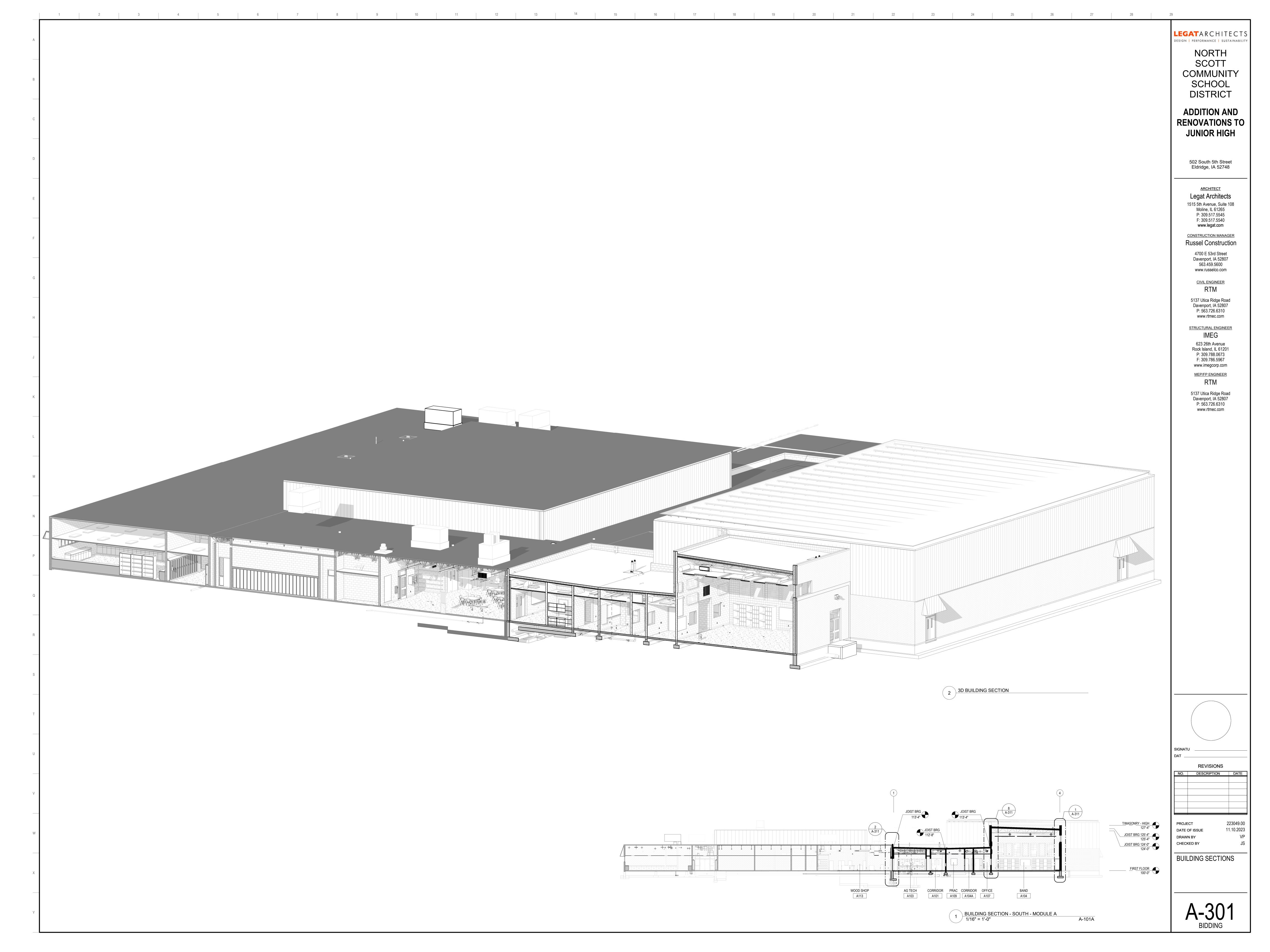


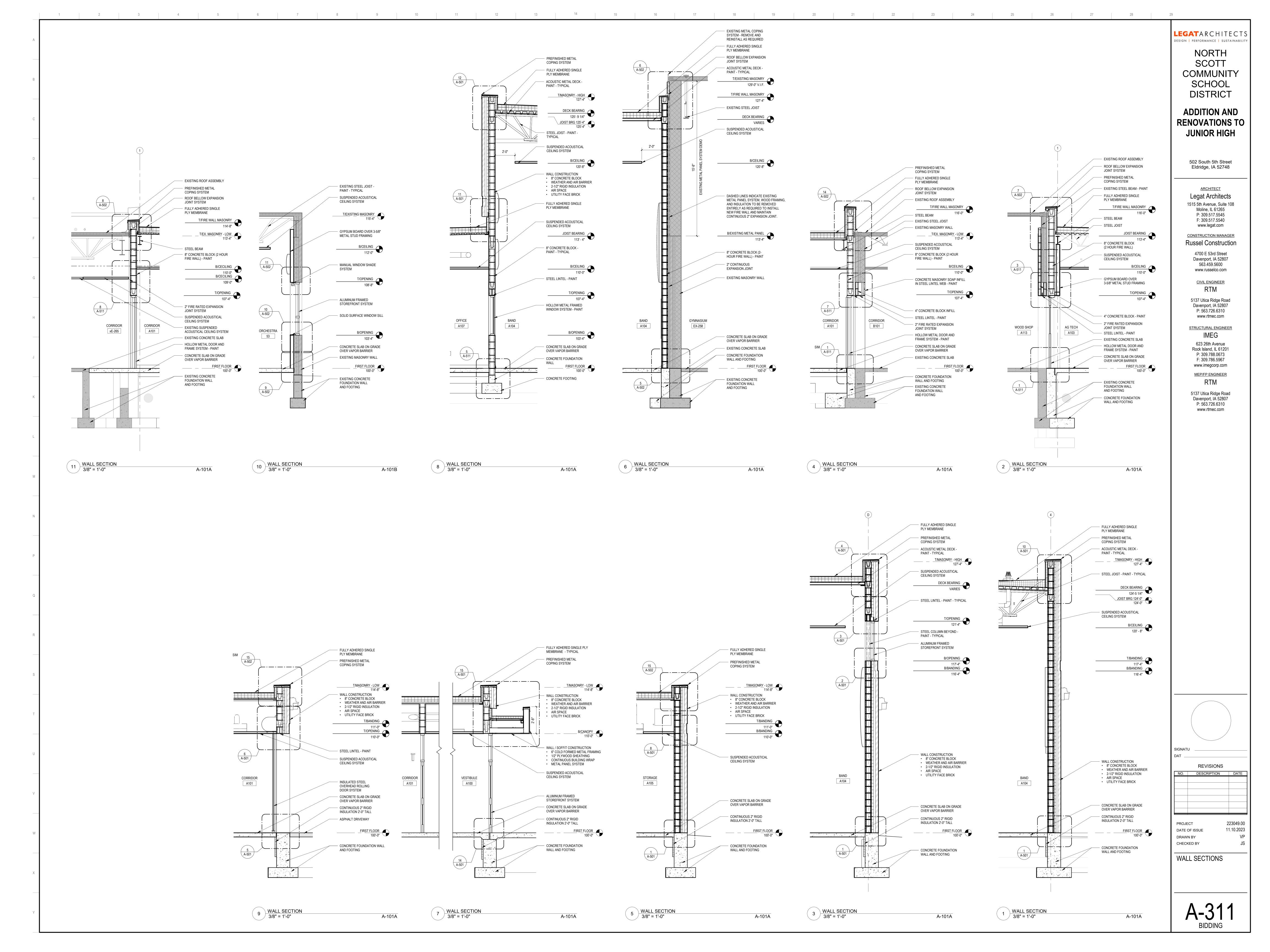


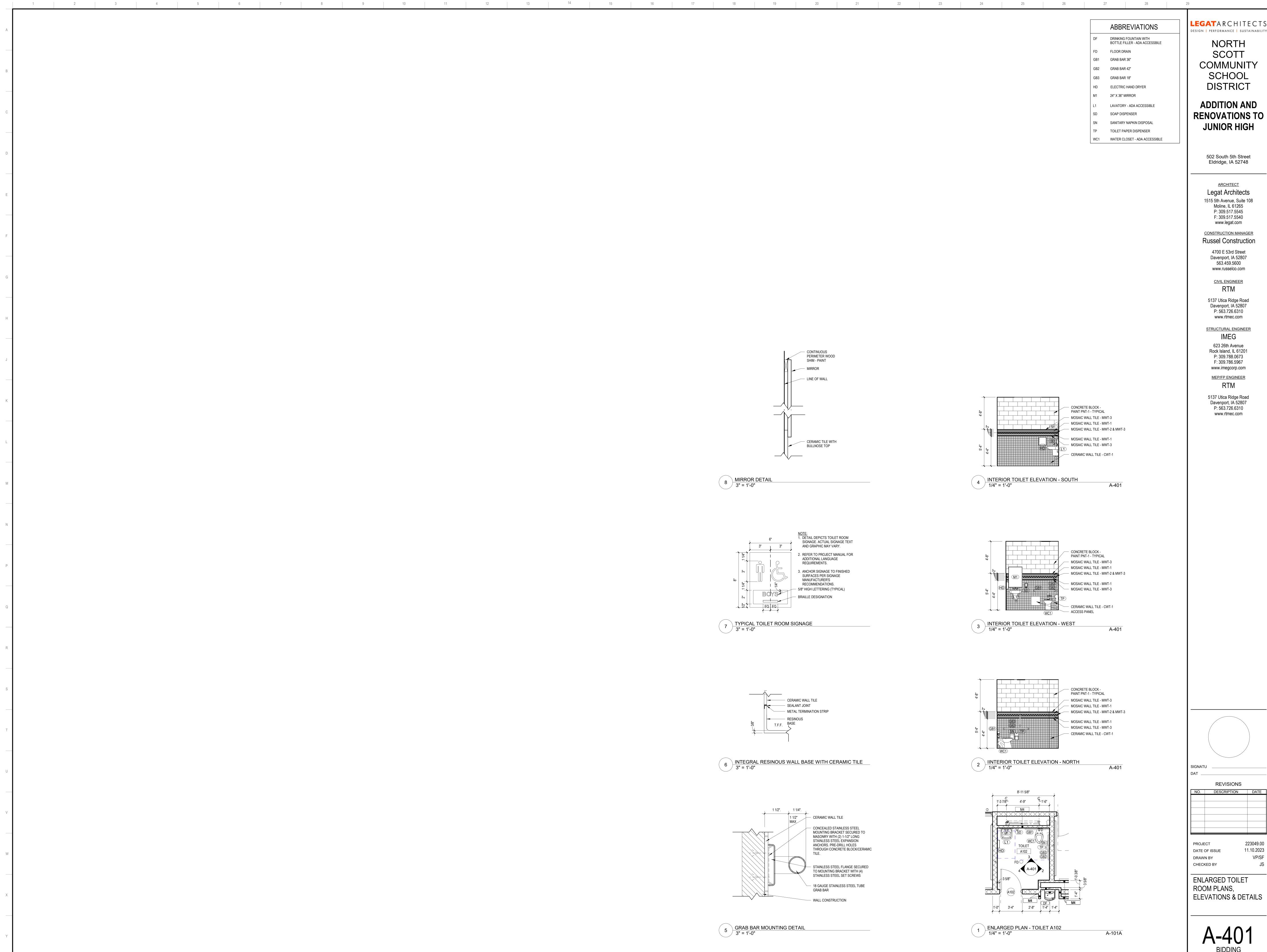










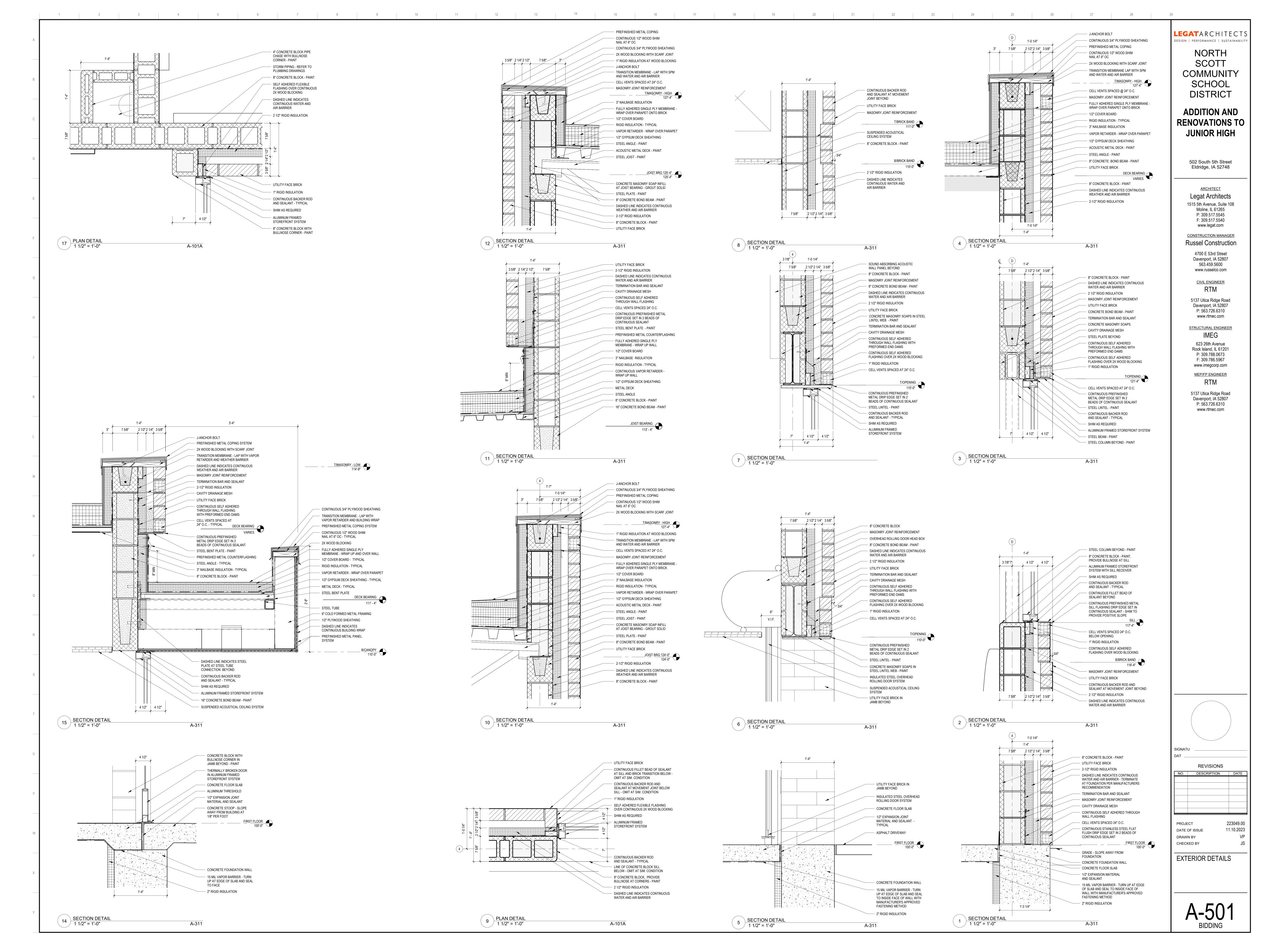


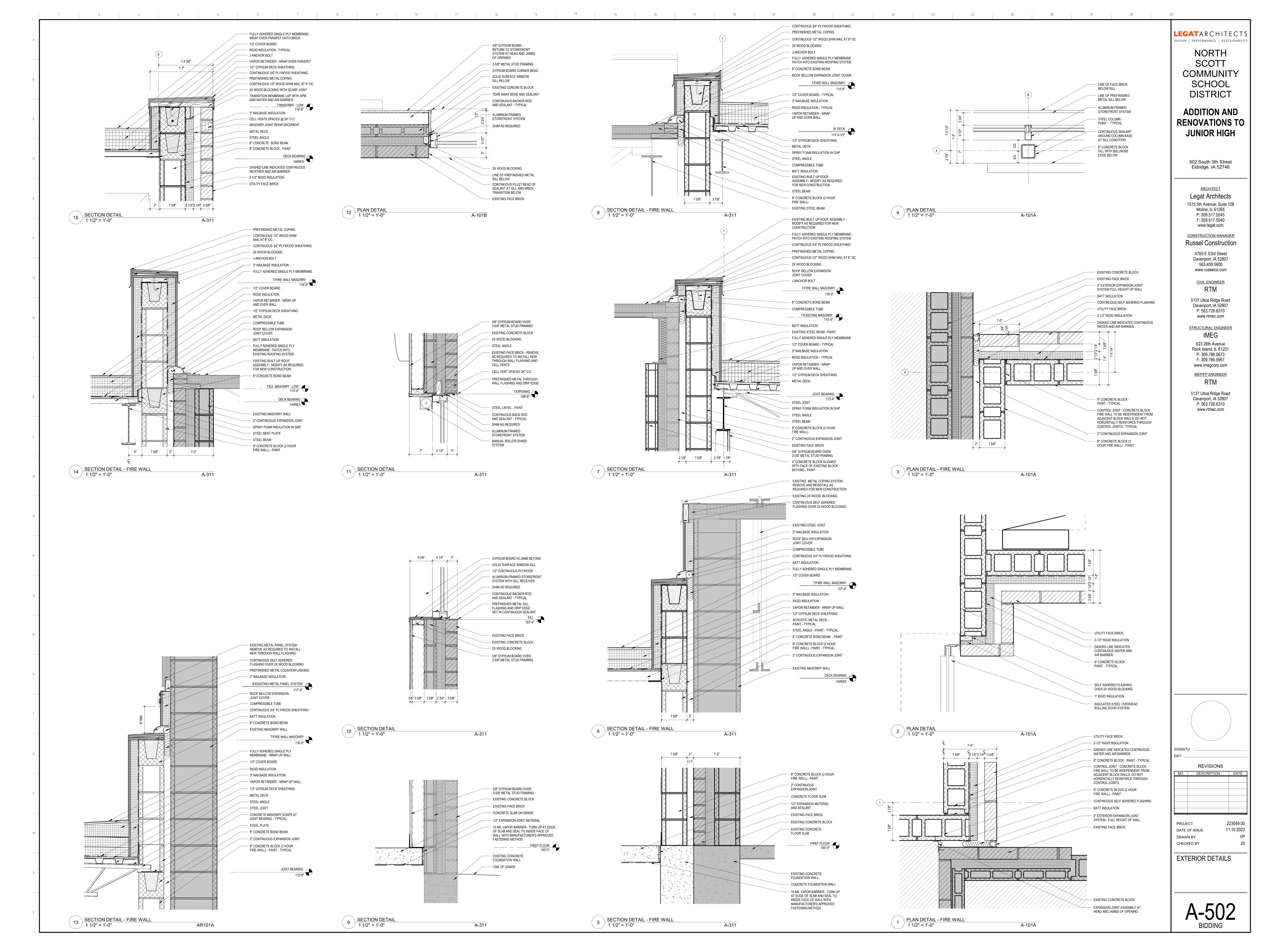
LEGATAR CHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY

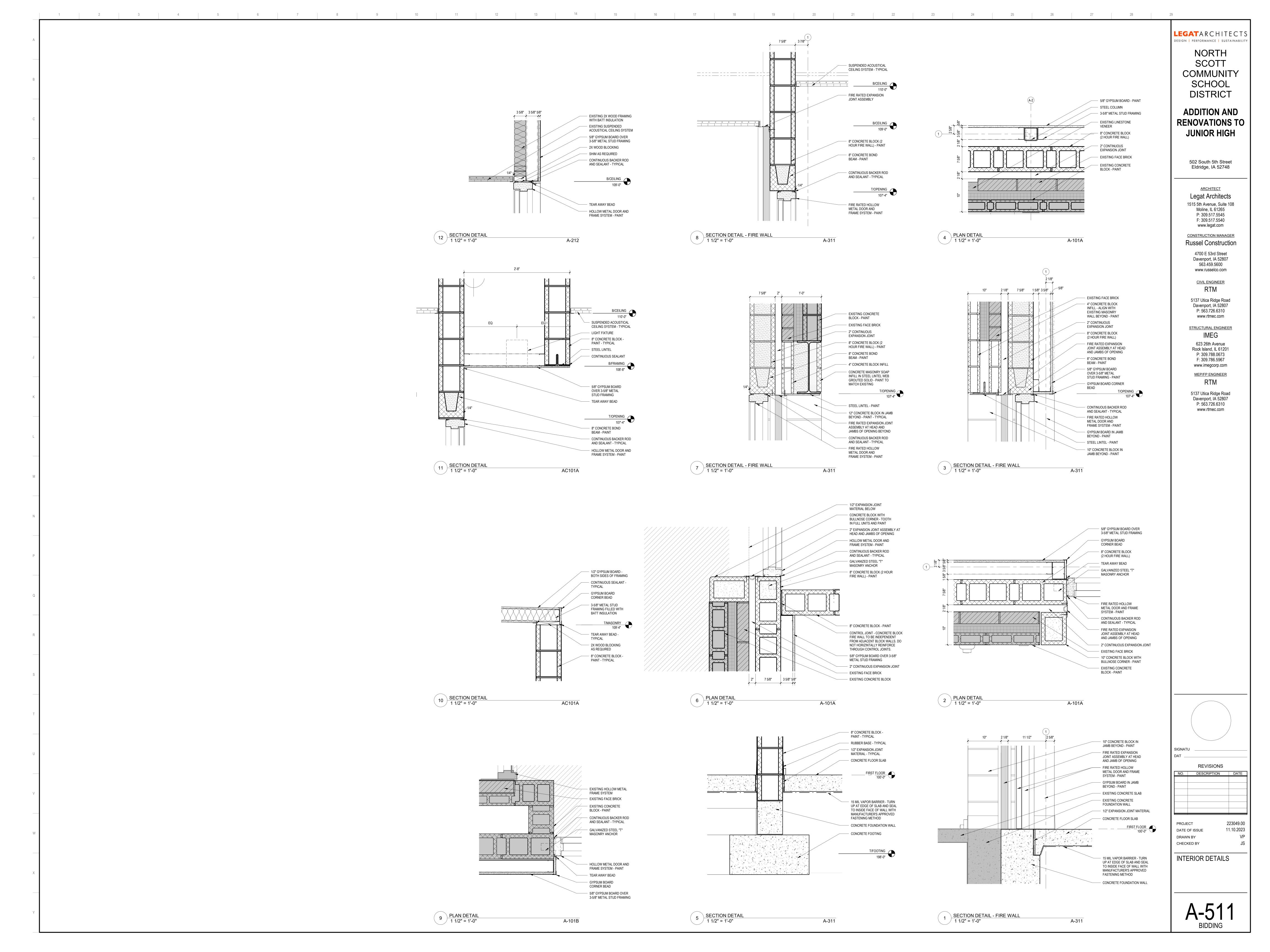
> NO. DESCRIPTION DATE 223049.00

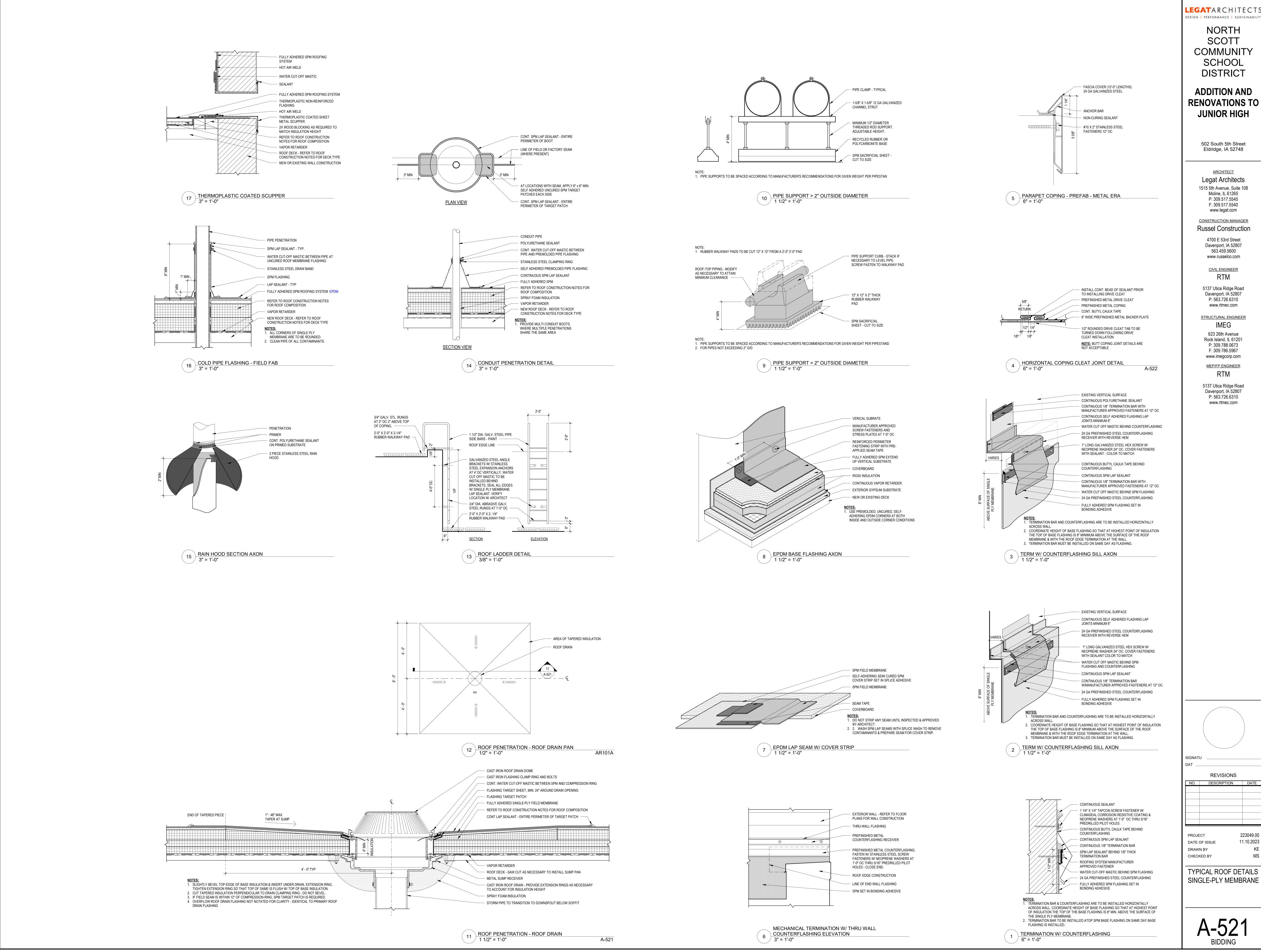
**ELEVATIONS & DETAILS** 

**BIDDING** 

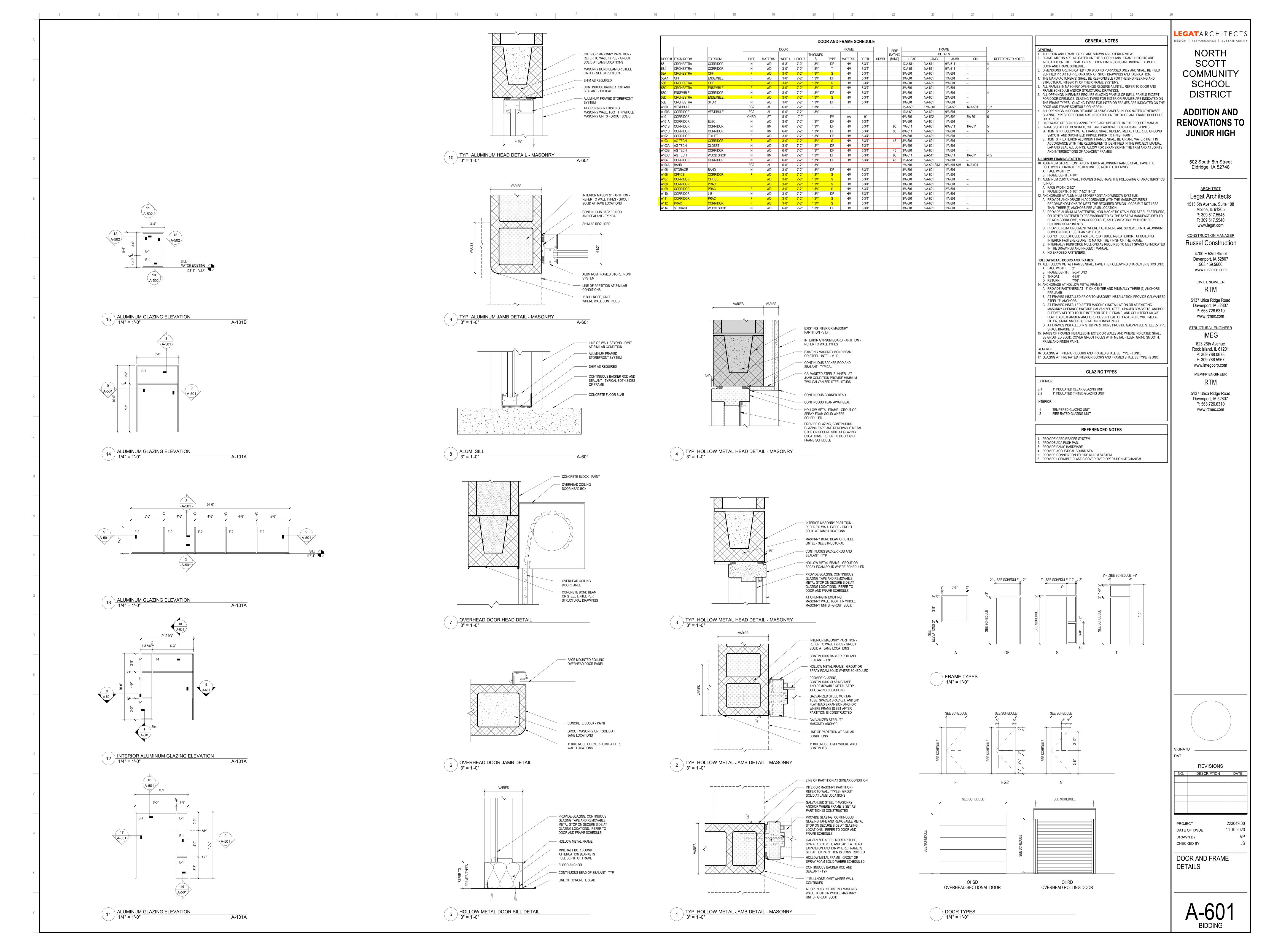


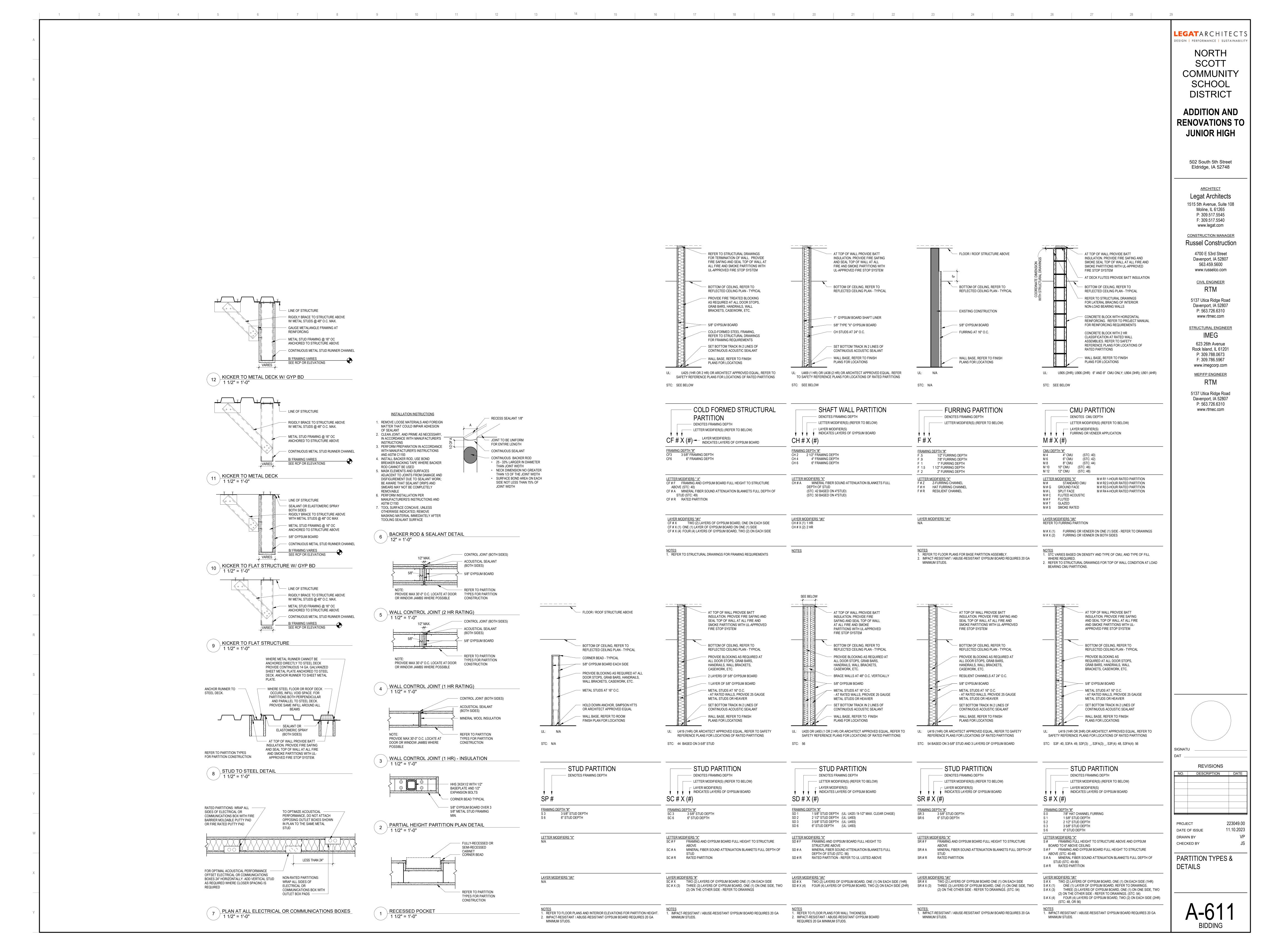


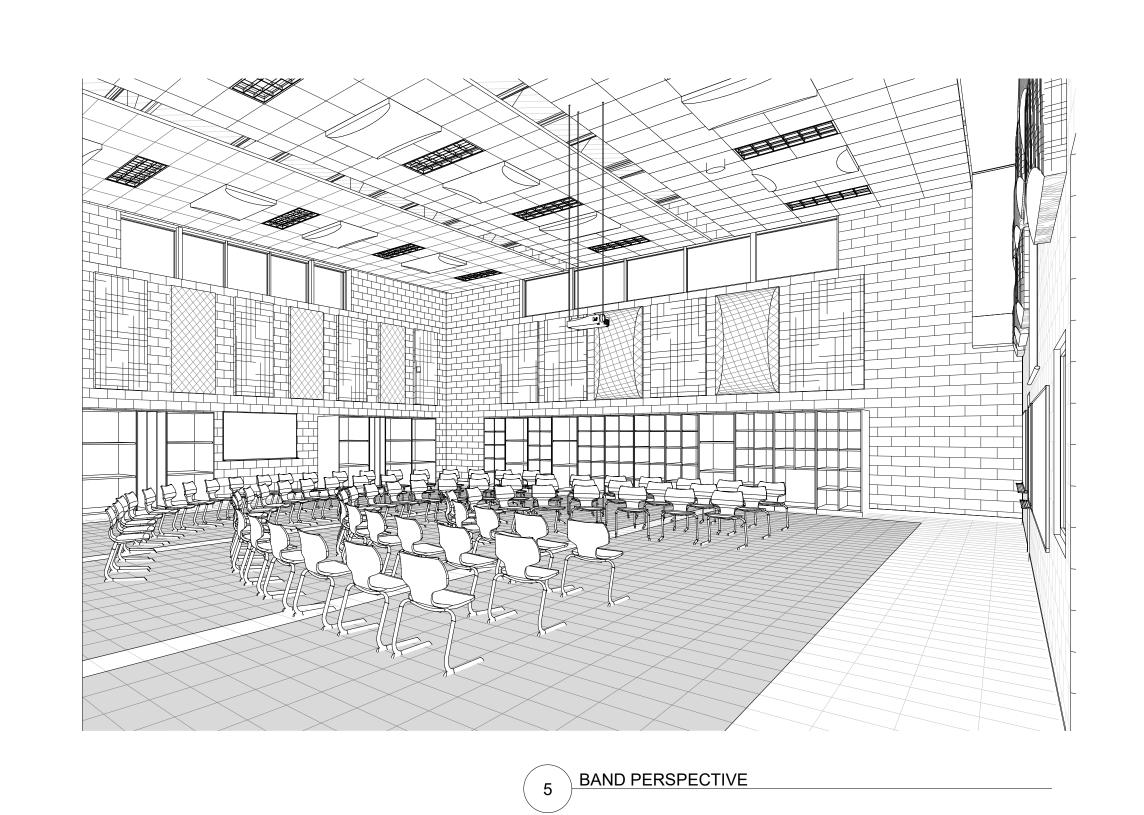


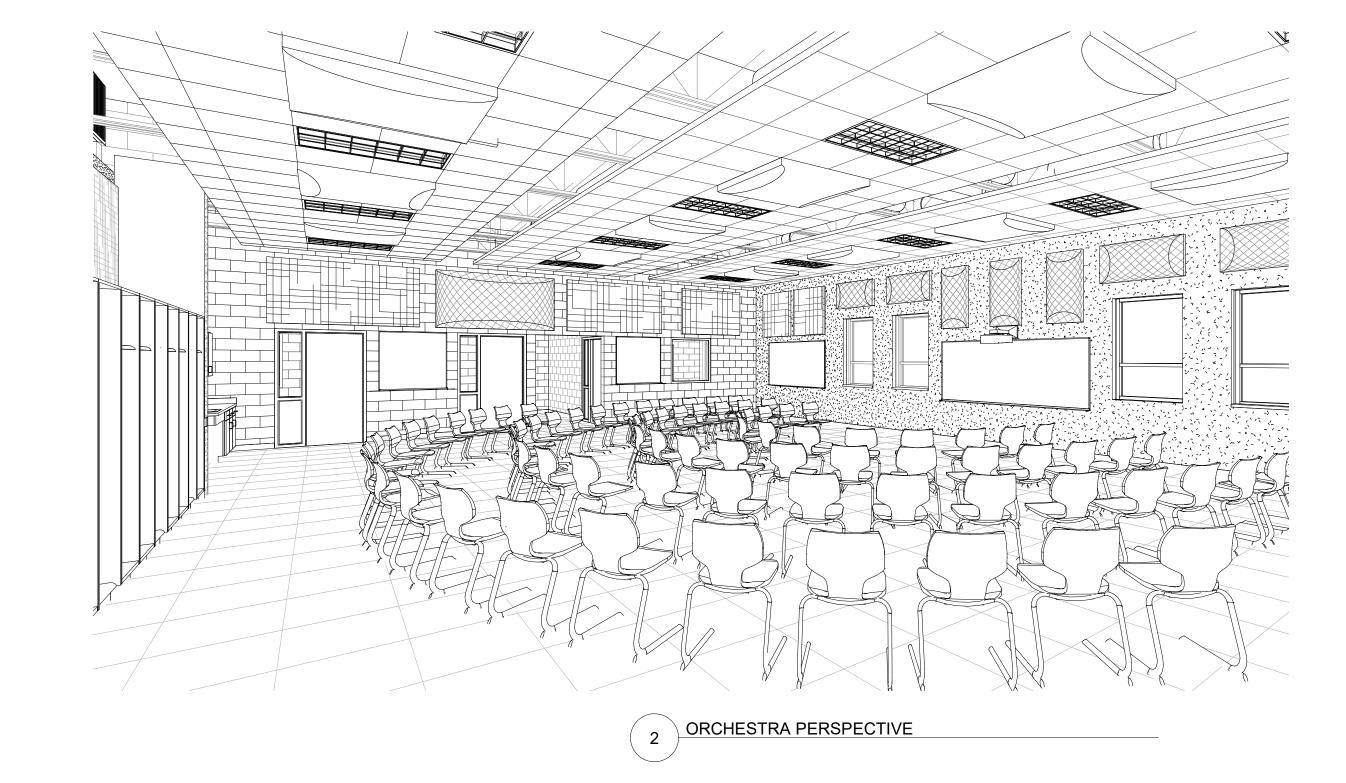


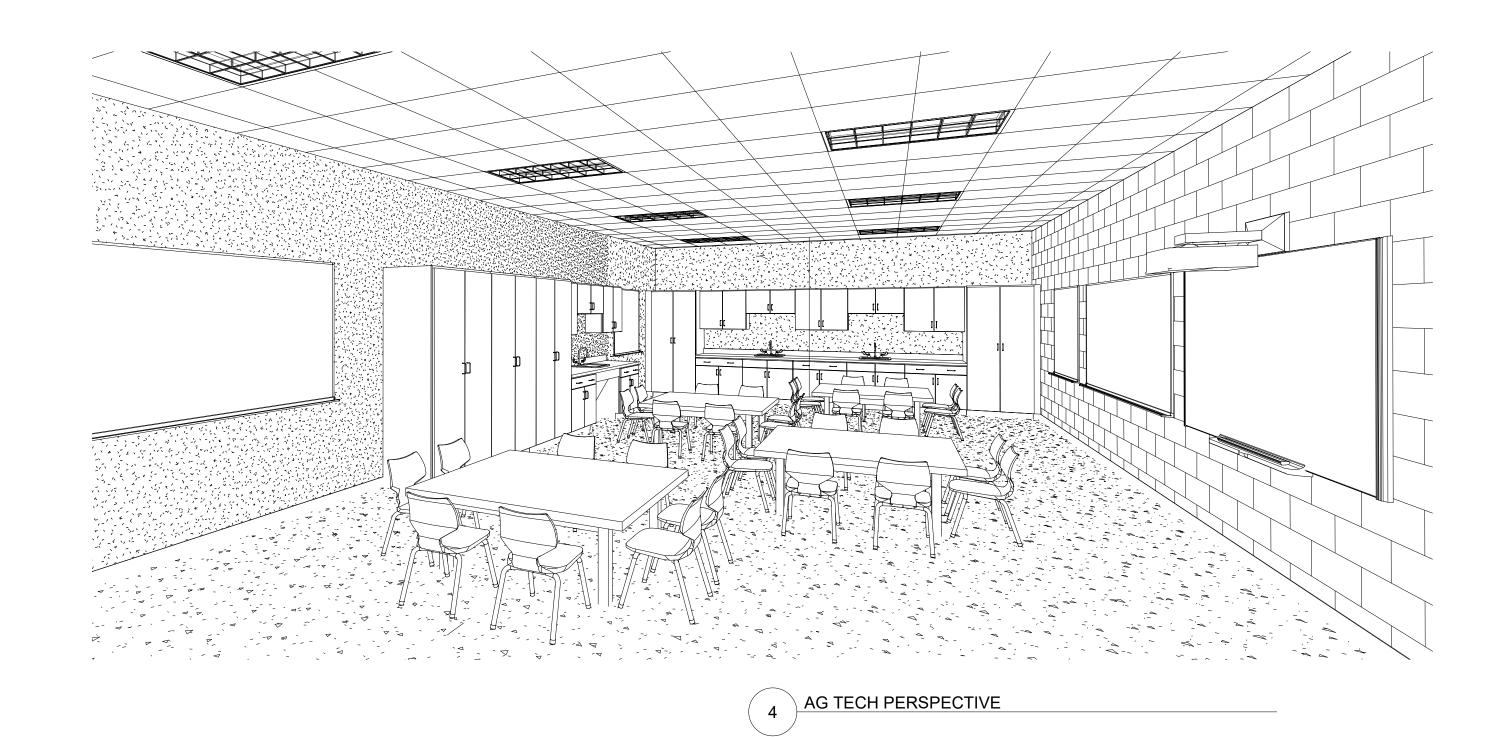
COMMUNITY

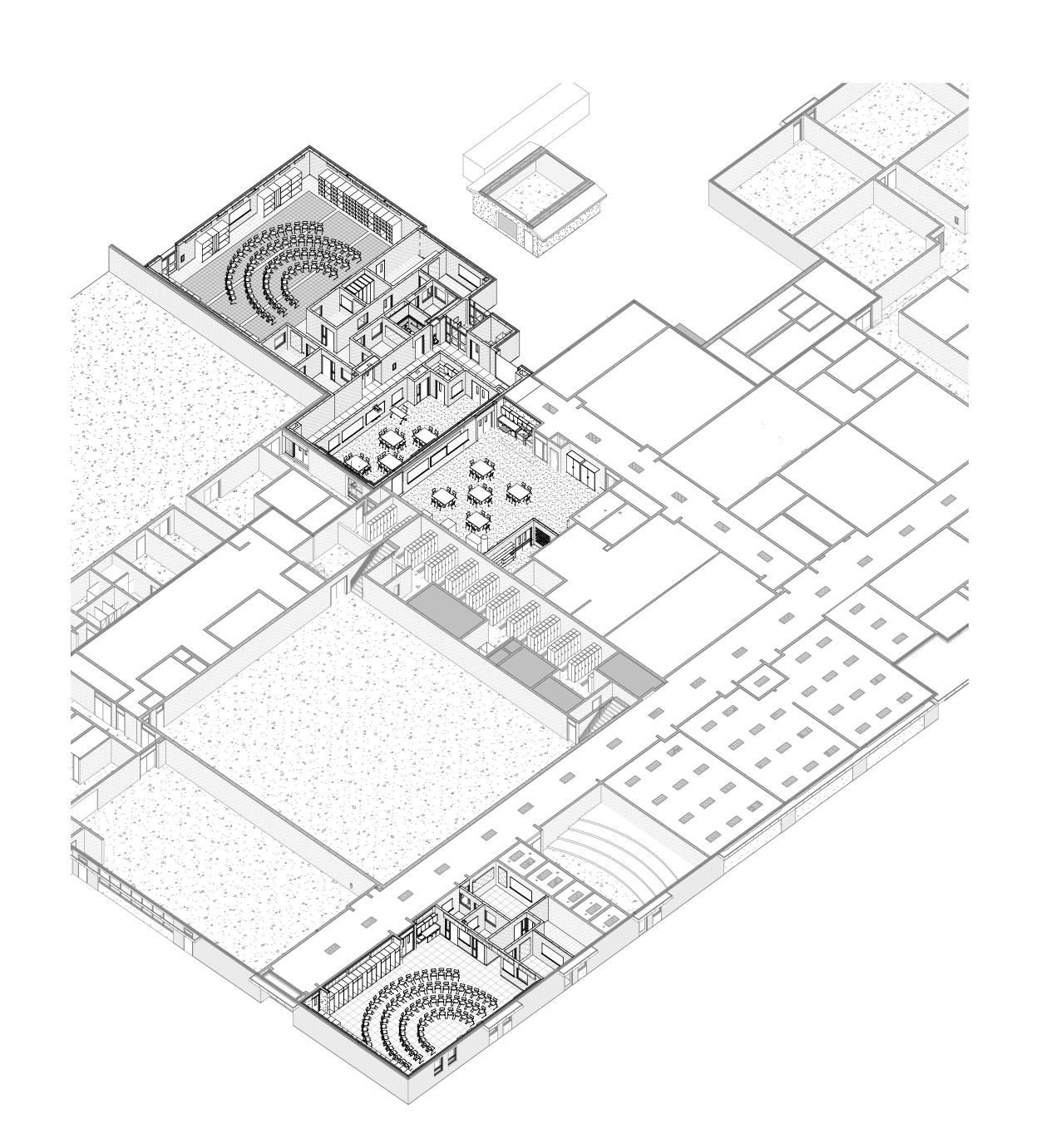


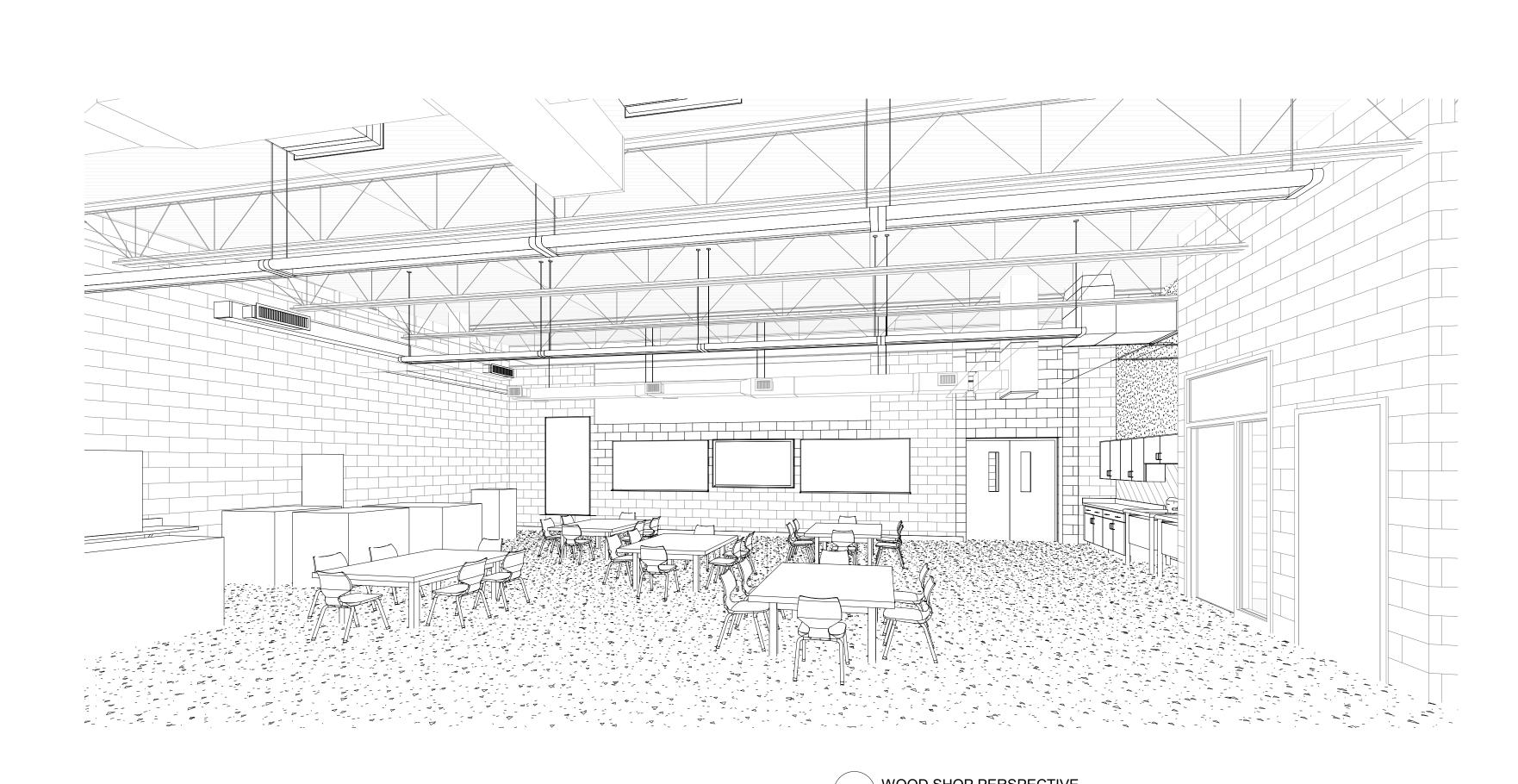












**ADDITION AND RENOVATIONS TO JUNIOR HIGH** 502 South 5th Street Eldridge, IA 52748 <u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540 www.legat.com CONSTRUCTION MANAGER **Russel Construction** 4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com <u>CIVIL ENGINEER</u> RTM 5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

LEGATARCHITECTS

DESIGN | PERFORMANCE | SUSTAINABILITY

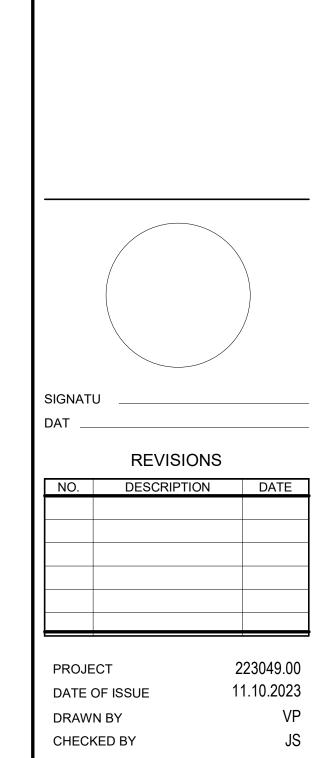
NORTH

SCOTT

COMMUNITY

SCHOOL

DISTRICT



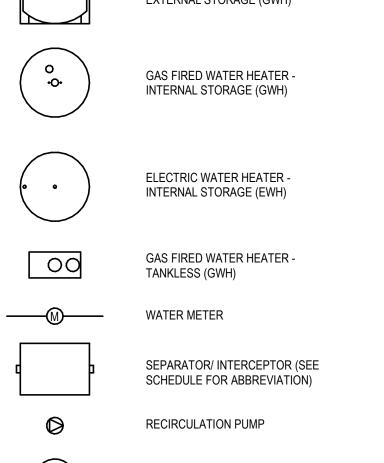
A-90'

PERSPECTIVE VIEWS

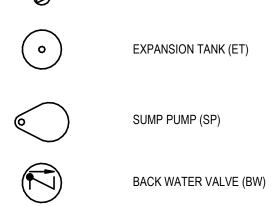
		PIPF MΔ	TERIAL SCHEDULE	
			I LIMAL OUTLINGEL	
PPLICATION	LOCATION	SIZE	MATERIAL	JOINING METHOD
	BELOW GRADE	ALL	SCHEDULE 40 ABS	SOLVENT
ANITARY WASTE/ VENT	ABOVE GRADE	ALL	SCHEDULE 40 ABS	SOLVENT
	PLENUM RETURN	ALL	CAST IRON	HUBLESS
&P RELIEF	ALL	ALL	COPPER (TYPE M)	95/5 SOLDER
OMESTIC WATER IN OR	BELOW GRADE	ALL	COPPER (TYPE K) W/CORROSION-RESISTANT TAPE	LEAD FREE BRAZED
/ITHIN 5' OF BUILDING	ABOVE GRADE	ALL	COPPER (TYPE L OR K)	95/5 SOLDER
ONDENSATE	PLENUM RETURN	ALL	COPPER (TYPE M)	95/5 SOLDER
ONDENSATE	DUCTED RETURN	ALL	SCHEDULE 40 ABS	SOLVENT
OTES:	ALL ABS AND PVC PIPIN ALL BLACK STEEL PIPIN ALL PVC PIPING MUST PROJECT, AND THUS A	NG EXPOSE NG EXPOSE MEET FLAM LL PIPING M	G METHODS CONTINGENT ON AUTHORITY HAVING JURISDICTION AD TO SUNLIGHT SHALL BE PROTECTED BY WATER-BASED LATEX PD TO MOISTURE SHALL BE PROTECTED BY RUST-PREVENTATIVE PE SPREAD ASTM E85 CERTIFICATION. NO EXCEPTIONS. PLENUM RIJUST MEET THE WITHIN PLENUM SPACE. FF PIPING IS NOT REFELLED.	AINT. AINT. ETURN UTILIZED IN THEN CONTRACTOR TO

# CARRY COST TO INSULATE ALL PIPING WITH FIRE WRAP INSULATION TO MEET THE ASTM E85 REQUIREMENT BY CODE.

# PLUMBING EQUIPMENT: 45° ELBOW SEWAGE EJECTOR (SE) BOOSTER PUMP (BP) GAS FIRED WATER HEATER -EXTERNAL STORAGE (GWH) GAS FIRED WATER HEATER -INTERNAL STORAGE (GWH)



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29



### **GENERAL NOTES:** 1. THE FOLLOWING NOTES APPLY TO THE FULL SET OF PLUMBING DRAWINGS AND SPECIFICATIONS INCLUDING ADDENDA, CHANGE ORDERS, BULLETINS AND ARCHITECTURAL SUPPLEMENTARY

- INSTRUCTIONS. 2. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT AND LOCATION OF THE WORK. FURTHER DETAIL OF THE WORK THAT IS REQUIRED FOR A COMPLETE INSTALLATION, WHICH IS NOT SHOWN BECAUSE OF DRAWING SCALE, SHALL BE INCLUDED IN BASE BID.
- 3. FOR ADDITIONAL DETAILS, CONSULT THE ARCHITECTURAL DRAWINGS, OTHER ENGINEERING DRAWINGS, OWNER FURNISHED DRAWINGS AND OTHER OWNER FURNISHED DOCUMENTATION. 4. ALL PERMITS, LICENSES, APPROVALS AND OTHER
- ARRANGEMENTS FOR THE WORK SHALL BE INCLUDED WITH THE BASE BID. THIS INCLUDES PLAN REVIEW FEE FOR ALL BACKFLOW PREVENTERS. 5. CONTRACTOR SHALL BE RESPONSIBLE FOR
- COORDINATING PLUMBING WORK WITH THE WORK OF OTHER TRADES. PROVIDE OFFSETS TO ALL PIPING AS REQUIRED WHETHER SHOWN OR NOT. 6. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL
- CODES. THESE CODES SHALL BE FOLLOWED AS A MINIMUM. HIGHER GRADES OF MATERIAL AND WORKMANSHIP SHALL BE PROVIDED WHERE
- 7. PROVIDE HOLES, SLEEVES, FIRE STOPPING AND PATCHING FOR THE INSTALLATION OF THE PLUMBING
- 8. ALL PLENUM MATERIALS SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX NOT GREATER THAN 50 WHEN TESTED WITH ASTEM E84 OR UL 723. PVC VENT PIPING PLENUM SHALL BE FIRE WRAPPED OR MEET PREVIOUS STATEMENT.
- 9. ON ALL PUBLIC LAVATORIES AND SINKS PROVIDE A.S.S.E 1070 APPROVED MIXING VALVE TO SUPPLY A MAX OF 110 DEGREE HOT WATER IN ORDER TO ENSURE SCOLDING WILL NOT OCCUR.
- 10. MANUFACTURER AND PRODUCT SELECTION: THE DRAWINGS AND SPECIFICATIONS INDICATE SIZES, PROFILES, AND DIMENSIONAL REQUIREMENTS OF MATERIAL AND SPECIFIC PRODUCTS. MANUFACTURERS OF PRODUCTS HAVING EQUIVALENT PERFORMANCE CHARACTERISTICS HAVE BEEN LISTED IN THE SPECIFICATION. THE USE OF ANY OF THESE EQUIVALENT PRODUCTS SHALL REQUIRE THAT THE CONTRACTOR IDENTIFY MODIFICATIONS TO ACCOMMODATE VARIATIONS IN CHARACTERISTICS, SUCH AS WEIGHTS, CONNECTIONS, SIZES, AND DIMENSIONS. THE RESPONSIBILITY FOR MODIFICATIONS TO MECHANICAL, STRUCTURAL, ELECTRICAL, OR OTHER PLUMBING SYSTEMS, OR TO ACCOMMODATE CODES SHALL BE WITH THE CONTRACTOR. COSTS RESULTING FROM THE USE OF THESE EQUIVALENT PRODUCTS SHALL BE INCLUDED

WITH THE BASE BID.

## **PLUMBING INSULATION NOTES:** DOMESTIC COLD WATER ABOVE GRADE: LIGHT DENSITY, FIBERGLASS PIPE INSULATION. ½" THICK, WITH VAPOR BARRIER JACKET.

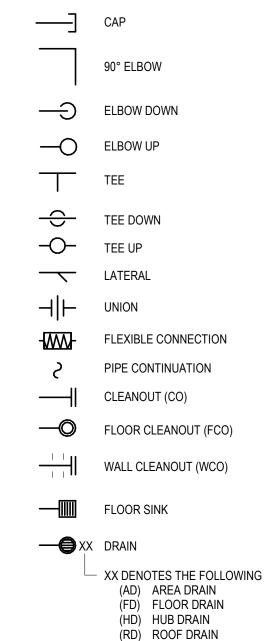
DOMESTIC HOT WATER-ABOVE GRADE: LIGHT DENSITY, FIBERGLASS PIPE INSULATION, 1" THICK, WITH GLASS CLOTH JACKET.

AT CONTRACTOR'S OPTION FIBERGLASS SNAP ON INSULATION WITH FOAM VAPOR BARRIER MAY BE SUBSTITUTED FOR ABOVE. PIPING TO BE INSULATED ACCORDING TO 2012 ENERGY

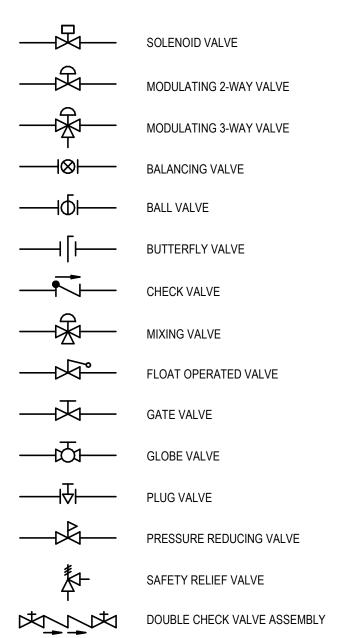
INSULATED TO A MINIMUM OF R-3.

CONSERVATION CODE. ANY NEW WATER PIPING SHALL BE

# **PLUMBING FITTINGS:**



# **PLUMBING VALVES:**



REDUCED PRESSURE ZONE VALVE (RPZ)

DUAL CHECK VALVE WITH INTERMEDIATE ATMOSPHERIC VENT

**PLUMBING SPECIALTIES:** AUTOMATIC AIR VENT MANUAL AIR VENT PRESSURE GAUGE PRESSURE SWITCH THERMOMETER STRAINER, BLOW DOWN STRAINER

> EXPANSION JOINT WATER HAMMER ARRESTER AQUASTAT → HOSE BIBB/ WALL HYDRANT

\_\_\_\_ EXPANSION LOOP

TRAP PRIMER □VB VACUUM BREAKER

SPV SPILL PROOF VACUUM BREAKER

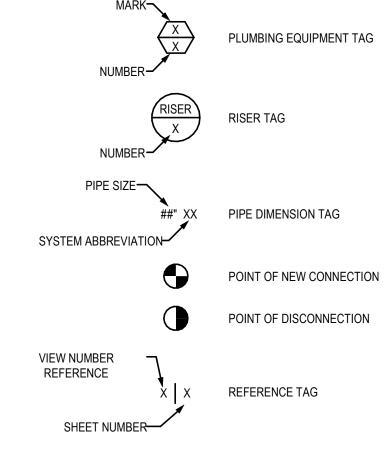
# PIPE SYSTEM LINETYPES:

---- PIPING OR EQUIPMENT TO BE REMOVED PIPING OR EQUIPMENT TO REMAIN GRS GREY WASTE (GRS) GREASE WASTE (GR) - — -CV- — - CLEAR WATER VENT (CV) — —AV— — — ACID VENT (AV) ——AW——— ACID WASTE (AW) ——DT —— SUB-SOIL DRAINAGE (DT) GREY WATER (GRW) ——CA—— COMPRESSED AIR (CA) ——CW(CITY)—— CITY COLD WATER (CW(CITY)) — – — COLD WATER DOMESTIC (CW) COLD WATER RETURN (CWR) SCW—SCW—SOFT COLD WATER (SCW) GARAGE WASTE (GW) —— – – HOT WATER DOMESTIC (HW) —— – – — HOT WATER DOMESTIC RETURN (HWR) ——NG—— NATURAL GAS (NG) NPCW NON-POTABLE COLD WATER (NPCW) — — OV— — — OIL VENT (OV) PD—PD—PUMP DISCHARGE (PD) PW—PW—PURE WATER (PW) ——SAN—— SANITARY (SAN) ——ST—— STORM (ST) STO—STO—STORM OVERFLOW (STO)

— — — UNDERGROUND PIPING

---- V ---- VENT (V)

# PLUMBING TAGS:



## **GENERAL**: (##) |##> DRAWING KEYNOTE SYMBOL DETAIL NUMBER **BUILDING SECTION** - SHEET NUMBER DETAIL NUMBER **BUILDING ELEVATION** - SHEET NUMBER DETAIL NUMBER CALLOUT BOUNDARY `\_---' SHEET NUMBER DETAIL NUMBER VIEW REFERENCE CALLOUT

SHEET NUMBER

+X' - X" MOUNTING HEIGHT DESIGNATION

**PLUMBING ABBREVIATIONS:** AREA DRAIN BACKFLOW PREVENTER **BOOSTER PUMP** BRITISH THERMAL UNIT BTU(S) PER HOUR BTUH BALANCING VALVE CARBON DIOXIDE CO2 CPVC CHLORINATED PVC COLD WATER **COLD WATER RETURN** CWR CWFU COLD WATER FIXTURE UNITS DRINKING FOUNTAIN DRAINAGE FIXTURE UNITS DIAMETER DOWNSPOUT DISH WASHER EMERGENCY SHOWER **EXPANSION TANK** WASTE ANESTHETIC GAS DISPOSAL EMERGENCY EYE WASH ELECTRIC WATER COOLER ELECTRIC WATER HEATER FCO FLOOR CLEANOUT FLOOR DRAIN FLUSHING RIM SINK FLOOR SINK **GALLONS PER MINUTE** GAS WATER HEATER HOSE BIBB **HUB DRAIN** HAND SINK **HOT WATER** HWR HOT WATER RETURN HWFU HOT WATER FIXTURE UNITS

INDIRECT WASTE PIPE KITCHEN SINK KILOWATT LAB AIR LAVATORY LABATORY VACUUM MOP BASIN BTU PER HOUR (THOUSAND MIXING VALVE NITROGEN NITROGEN CONTROL PANEL NOZZLE DRAIN NATURAL GAS NITROUS OXIDE NATIONAL PIPE THREAD TAPERED

POC

TEMP

VTR

YCO

AFG

AFG

APPROX

ARCH

BLDG

DEG-F, °F

AVG

BFG

FIXT

FLA

FLR

GYP

HVAC

J-BOX

MAX

RQD

SPEC

SURF

UNO

URINAL

VACUUM

WASTE PIPE

WATER CLOSET

WALL CLEANOUT

WATER HEATER

YARD CLEANOUT

ARCHITECT/ENGINEER

ABOVE FINISH FLOOR

ABOVE FINISHED GRADE

ABOVE FINISHED GRADE

**GENERAL ABBREVIATIONS:** 

ABOVE

ALTERNATE

ARCHITECT

**AVERAGE** 

BUILDING

DISCONNECT

EMERGENCY

FIXTURE

FLOOR

GROUND

CEILING

DOWN

APPROXIMATELY

**BELOW FINAL GRADE** 

DEGREES FAHRENHEIT

ELECTRICAL CONTRACTOR

ELEVATION REFERENCE

FURNISHED BY OTHERS

GENERAL CONTRACTOR

HEATING VENTILATING

HEATING & VENTILATING - AIR

EXPLOSION PROOF

FULL LOAD AMPS

FIRE PROTECTION

FLOW SWITCH

GYPSUM BOARD

CONDITIONING

CONTRACTOR

INVERT ELEVATION

HEAVYWALL

INTERLOCK

JUNCTION BOX

LAY-IN GRID

LOW VOLTAGE

MISCELLANEOUS

NOT IN CONTRACT NOT TO SCALE

PLUMBING CONTRACTOR

LINE VOLTAGE THERMOSTAT

LIGHTING

MAXIMUM

MOUNTED NOT APPLICABLE

PLUMBING

REQUIRED

SURFACE

TYPICAL UNDERGROUND

SQUARE FEET

SPECIFICATION(S)

TAMPER SWITCH

UNLESS NOTED OTHERWISE

ROOM

MINIMUM

IN UNIT

INDIRECT

CONSTRUCTION MANAGER Russel Construction 4700 E 53rd Street Davenport, IA 52807 OXYGEN CROSS LINKED POLYETHYLENE 563.459.5600 POINT OF CONNECTION www.russelco.com POUNDS PER SQUARE INCH PSI GAUGE POLYVINYL CHLORIDE **CIVIL ENGINEER** PURE WATER ROOF DRAIN ROOF DRAIN OVERFLOW REVOLUTIONS PER MINUTE

5137 Utica Ridge Road SHOWER DRAIN Davenport, IA 52807 SEWAGE EJECTOR P: 563.726.6310 SUPPLY FIXTURE UNIT www.rtmec.com SHOWER SUMP PUMP STANDPIPE RECEPTOR STRUCTURAL ENGINEER SERVICE SINK TRENCH DRAIN **IMEG** TEMPERATURE

THERMOSTATIC MIXING VALVE 623 26th Avenue Rock Island, IL 61201 VENT THROUGH ROOF P: 309.788.0673 F: 309.786.5967 www.imegcorp.com WATER SOFTENER MEP/FP ENGINEER

> 5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

LEGATARCHITECT DESIGN | PERFORMANCE | SUSTAINABILIT

NORTH

SCOTT

COMMUNITY

SCHOOL

**DISTRICT** 

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

502 South 5th Street

Eldridge, IA 52748

<u>ARCHITECT</u>

Legat Architects

1515 5th Avenue, Suite 108

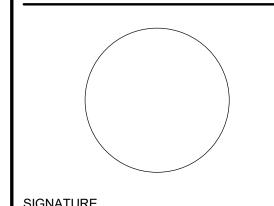
Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

**RENOVATION LEGEND:** EXISTING TO REMAIN EXISTING TO BE RELOCATED EXISTING TO BE REMOVED EXISTING IN NEW LOCATION <XO> <XNL>

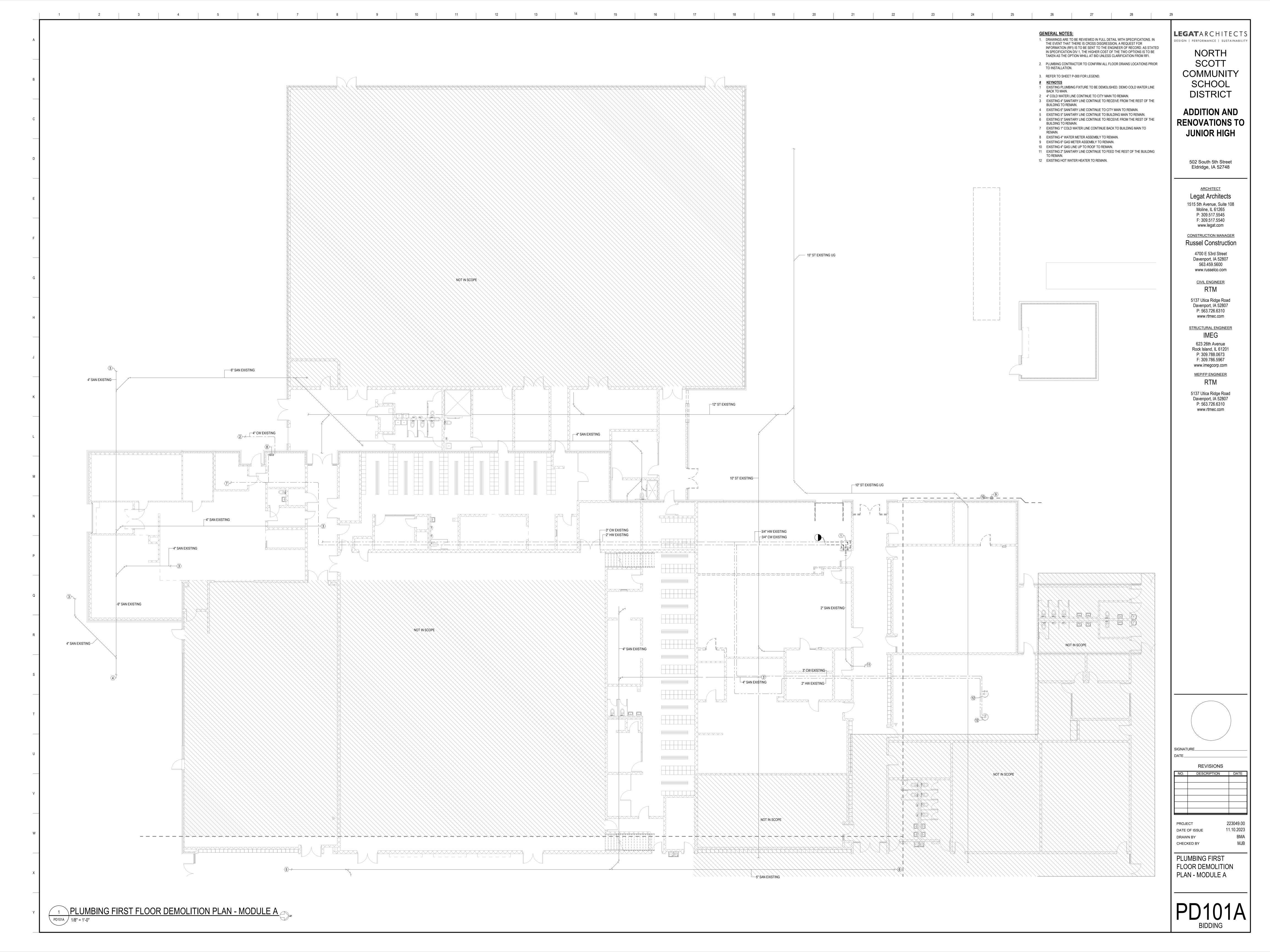


SIGNATURE\_ **REVISIONS** NO. DESCRIPTION DATE

> 223049.00 11.10.2023

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

PLUMBING LEGEND



PLUMBING ROOF DEMOLITION PLAN - MODULE B 5" SAN EXISTING UG 1/2" CW EXISTING 1" CW EXISTING 6 3/4" CW EXISTING EX51A 5" ST EXISTING UG-4" ST EXISTING UG 4" STORM EXISTING NOT IN SCOPE NOT IN SCOPE EX51B 1/2" HW EXISTING-PRAC TOPESTA IN POPULATION 3/4" CW EXISTING 1 PLUMBING FIRST FLOOR DEMOLITION PLAN - MODULE B

PD101B 1/8" = 1'-0"

**GENERAL NOTES:** 

1. DRAWINGS ARE TO BE REVIEWED IN FULL DETAIL WITH SPECIFICATIONS. IN THE EVENT THAT THERE IS CROSS DISGRESSION, A REQUEST FOR INFORMATION (RFI) IS TO BE SENT TO THE ENGINEER OF RECORD. AS STATED IN SPECIFICATION DIV 1, THE HIGHER COST OF THE TWO OPTIONS IS TO BE TAKEN AS THE OPTION WHILL AT BID UNLESS CLARIFICATION FROM RFI.

2. PLUMBING CONTRACTOR TO CONFIRM ALL FLOOR DRAINS LOCATIONS PRIOR TO INSTALLATION.

3. REFER TO SHEET P-000 FOR LEGEND.

# KEYNOTES

1 MECHANICAL EQUIPMENT SHOWN AS REFERENCE ONLY. SEE SHEET M-400 FOR MORE INFORMATION. 2 EXISTING 1-1/2" VENT PIPE THROUGH ROOF TO REMAIN.

3 EXISTING 5" STORM LINE CONTINUE TO FEED THE REST OF THE BUILDING TO

4 EXISTING 3/4" CW, 1/2" HW, AND 2" SANITARY LINE CONTINUE TO FEED THE REST OF THE BUILDING TO REMAIN. 5 EXISTING 1/2" COLD WATER LINE CONTINUE TO FEED THE REST OF THE BUILDING TO REMAIN.

6 EXISTING 1" COLD WATER LINE CONTINUE BACK TO BUILDING MAIN TO 7 EXISTING 5" SANITARY LINE CONTINUE TO RECEIVE FROM THE REST OF THE

BUILDING TO REMAIN. 8 EXISTING 5" SANITARY LINE CONTINUE TO BUILDING MAIN TO REMAIN. 9 EXISTING PLUMBING FIXTURE TO BE DEMOLISHED. DEMO CW, HW, SANITARY,

AND VENT LINES BACK TO MAIN. 10 EXISTING PLUMBING FIXTURE TO BE DEMOLISHED. DEMO COLD WATER LINE BACK TO MAIN.

11 EXISTING 4" STORM DRAIN TO REMAIN.

12 EXISTING GAS LINE TO CONTINUE TO FEED REST OF BUILDING TO REMAIN.

502 South 5th Street Eldridge, IA 52748

**LEGAT**ARCHITECTS

DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

SCHOOL

**ADDITION AND** 

**RENOVATIONS TO** 

**ARCHITECT** Legat Architects

1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540 www.legat.com

CONSTRUCTION MANAGER Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

**CIVIL ENGINEER** 

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

5137 Utica Ridge Road

Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

MEP/FP ENGINEER

SIGNATURE\_

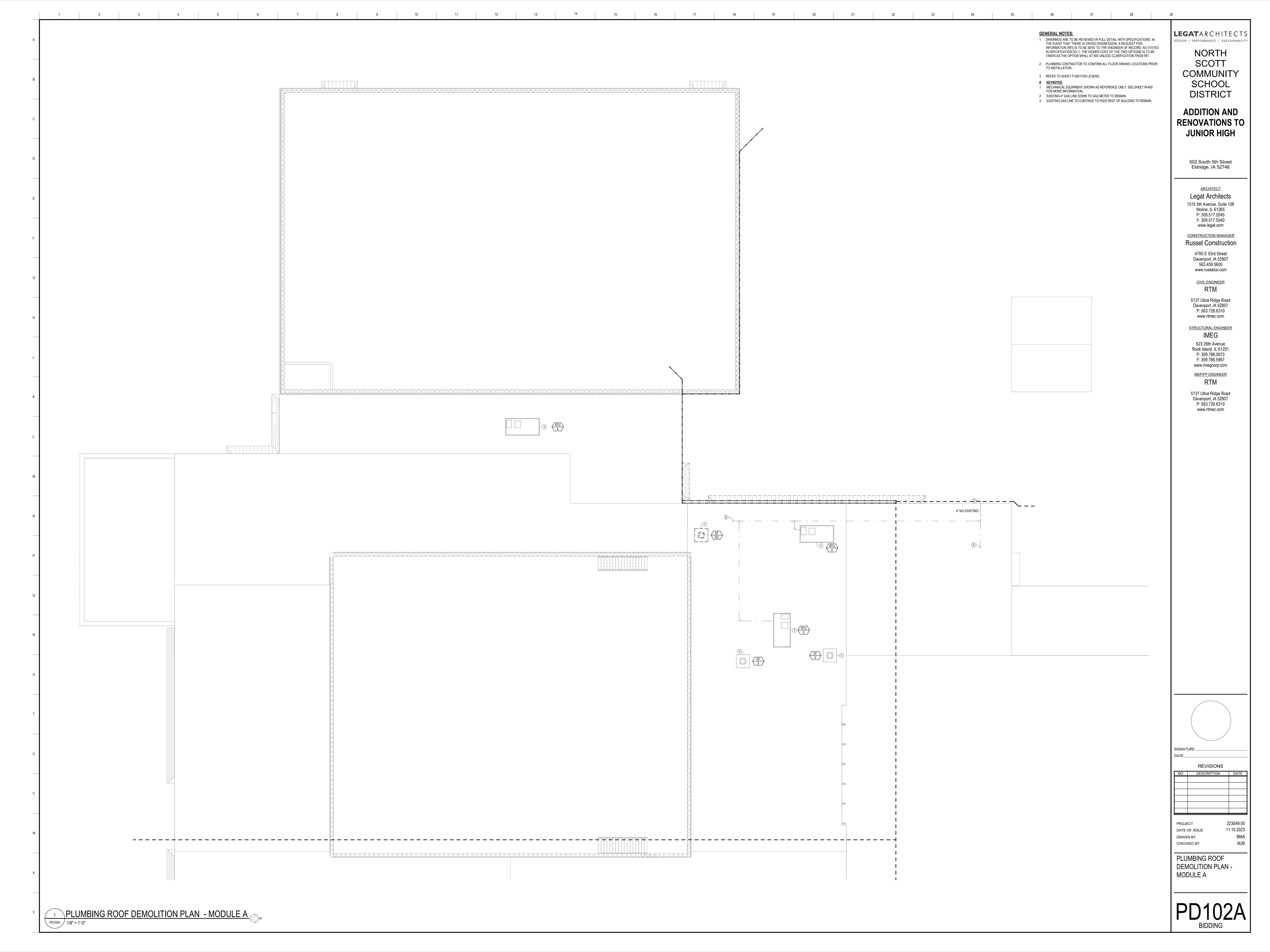
**REVISIONS** NO. DESCRIPTION DATE

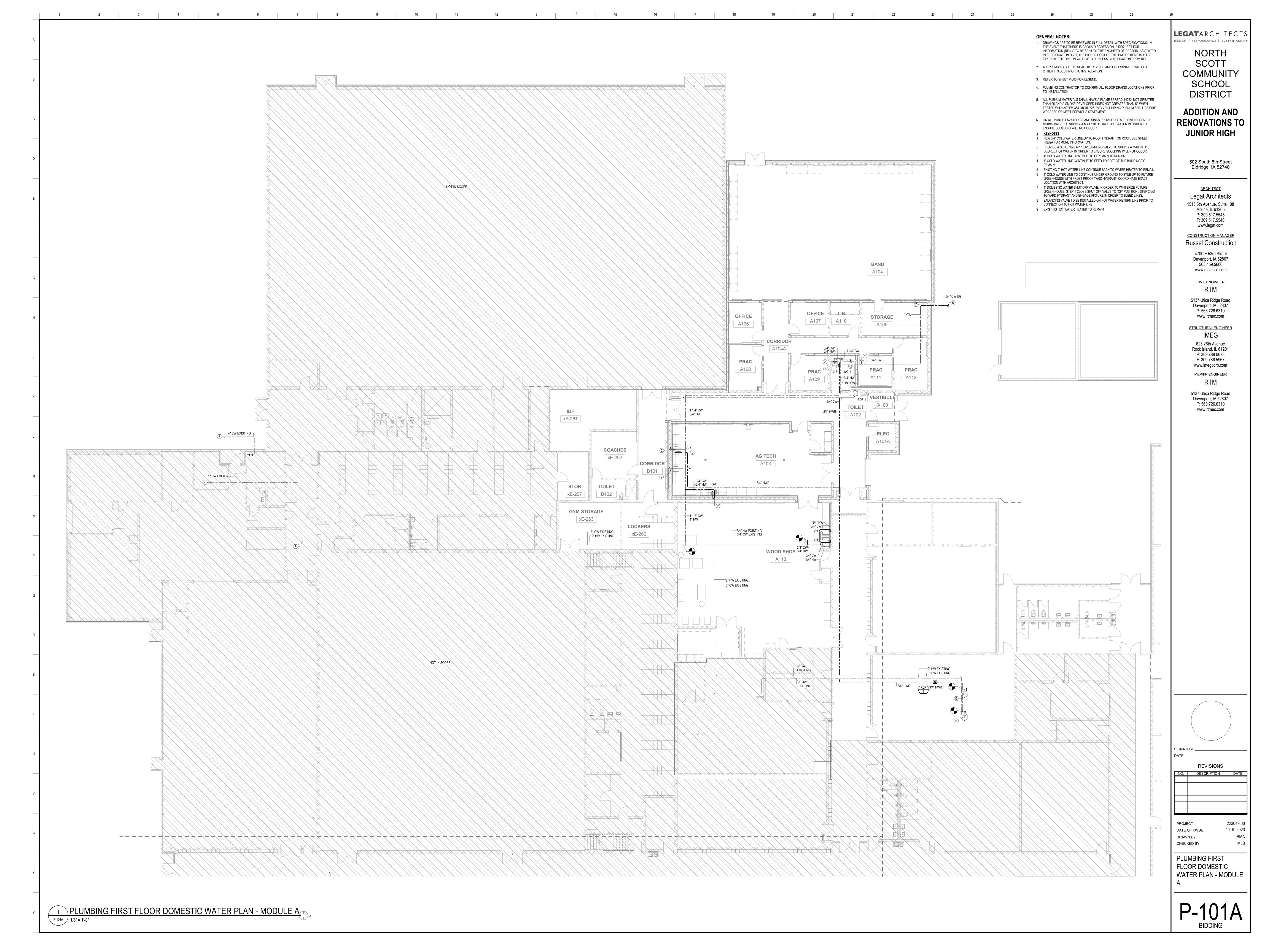
PROJECT DATE OF ISSUE DRAWN BY

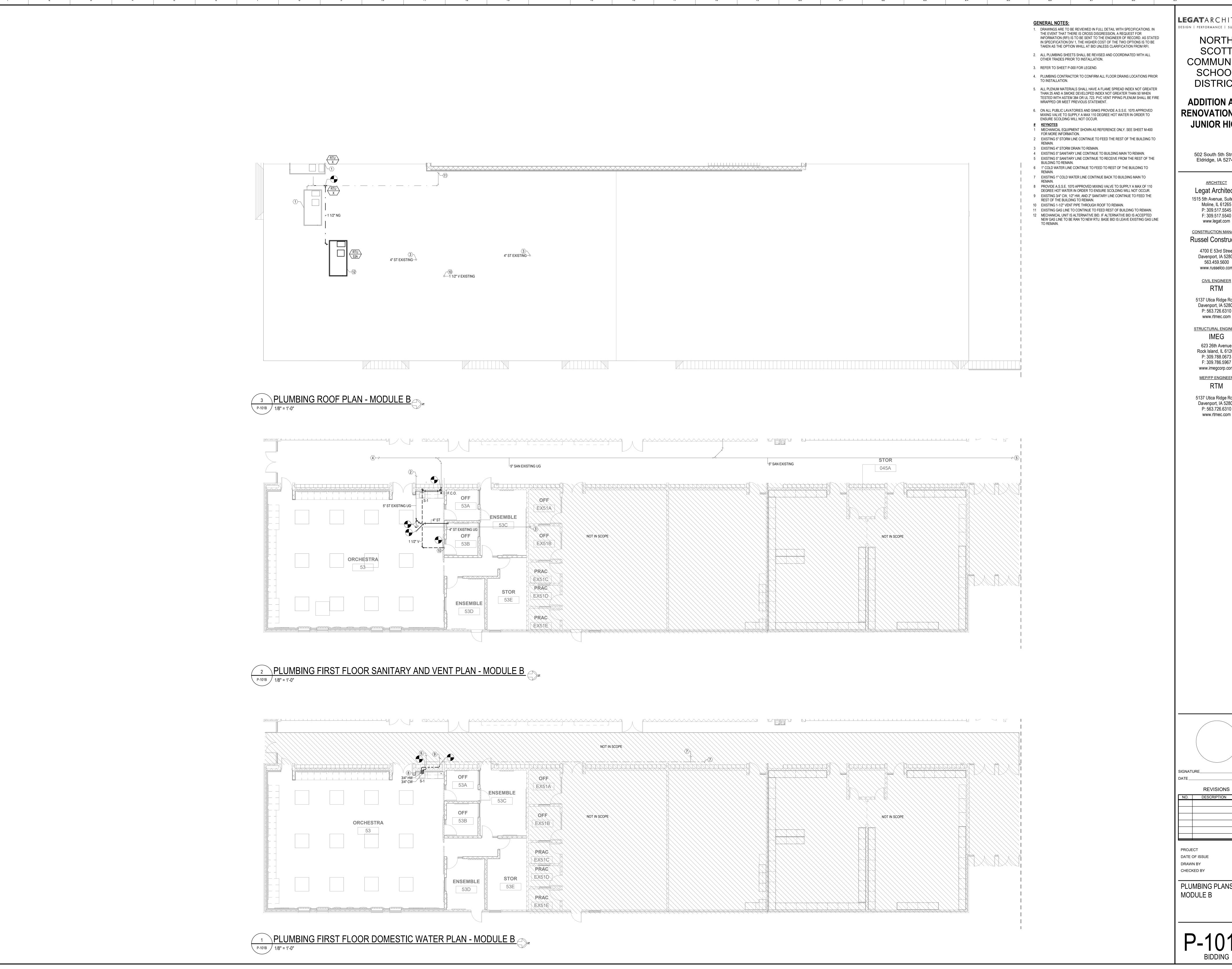
CHECKED BY

11.10.2023

PLUMBING DEMOLITION PLANS - MODULE B







**LEGAT**ARCHITECT DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

502 South 5th Street Eldridge, IA 52748

**ARCHITECT** Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545

> F: 309.517.5540 www.legat.com

**CONSTRUCTION MANAGER** Russel Construction

> 4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

5137 Utica Ridge Road Davenport, IA 52807

P: 563.726.6310 www.rtmec.com STRUCTURAL ENGINEER

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967

www.imegcorp.com MEP/FP ENGINEER

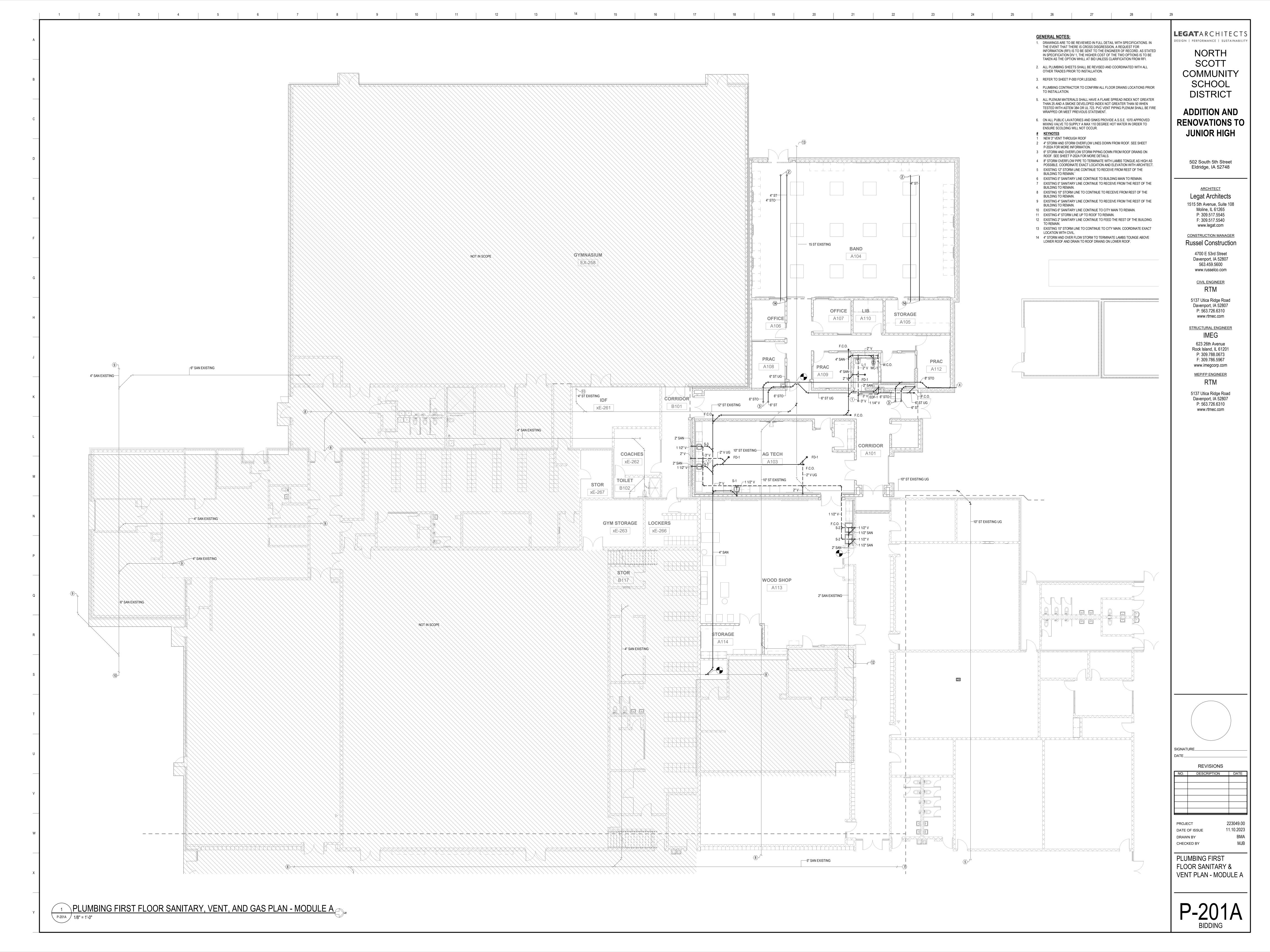
5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

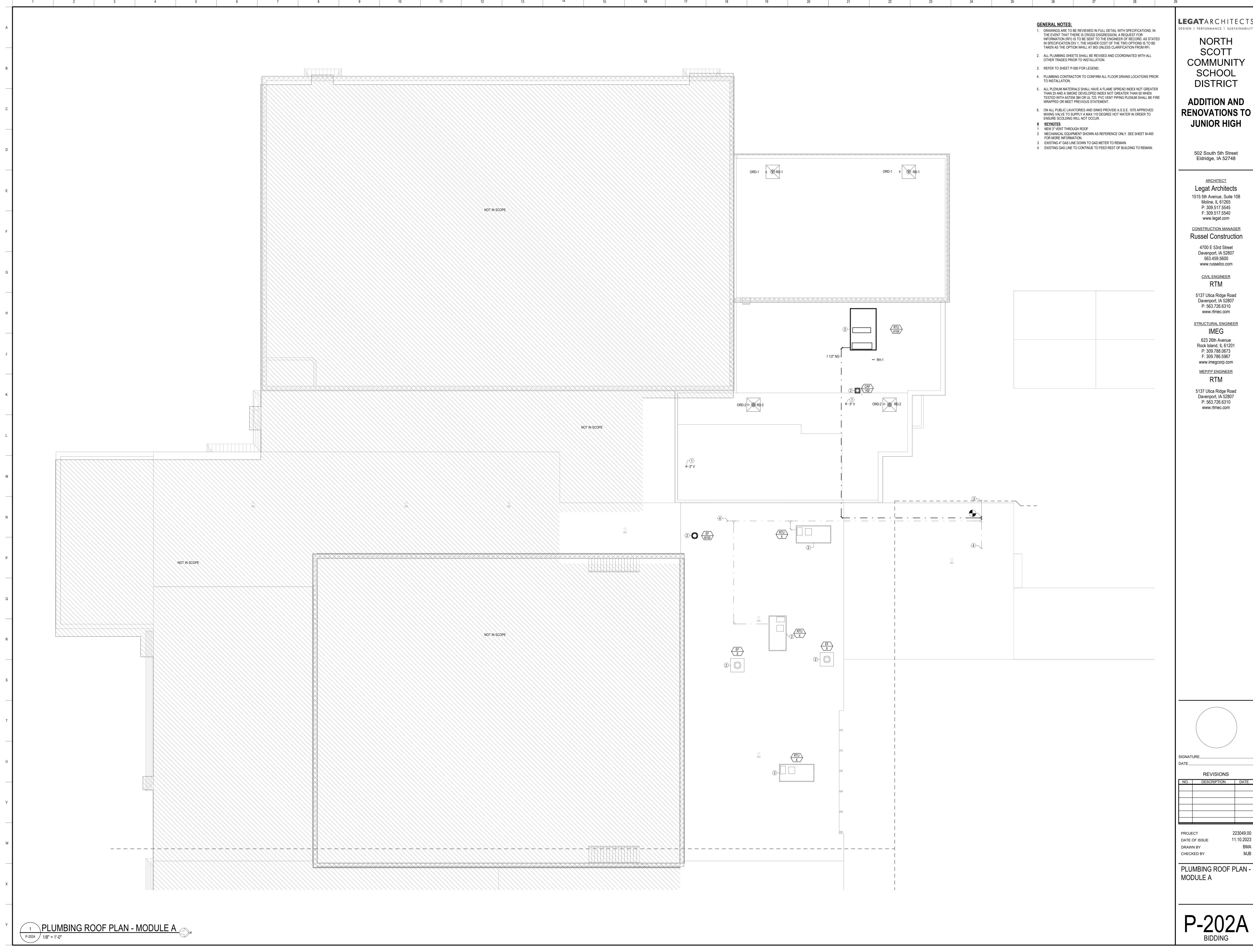
**REVISIONS** NO. DESCRIPTION DATE

11.10.2023

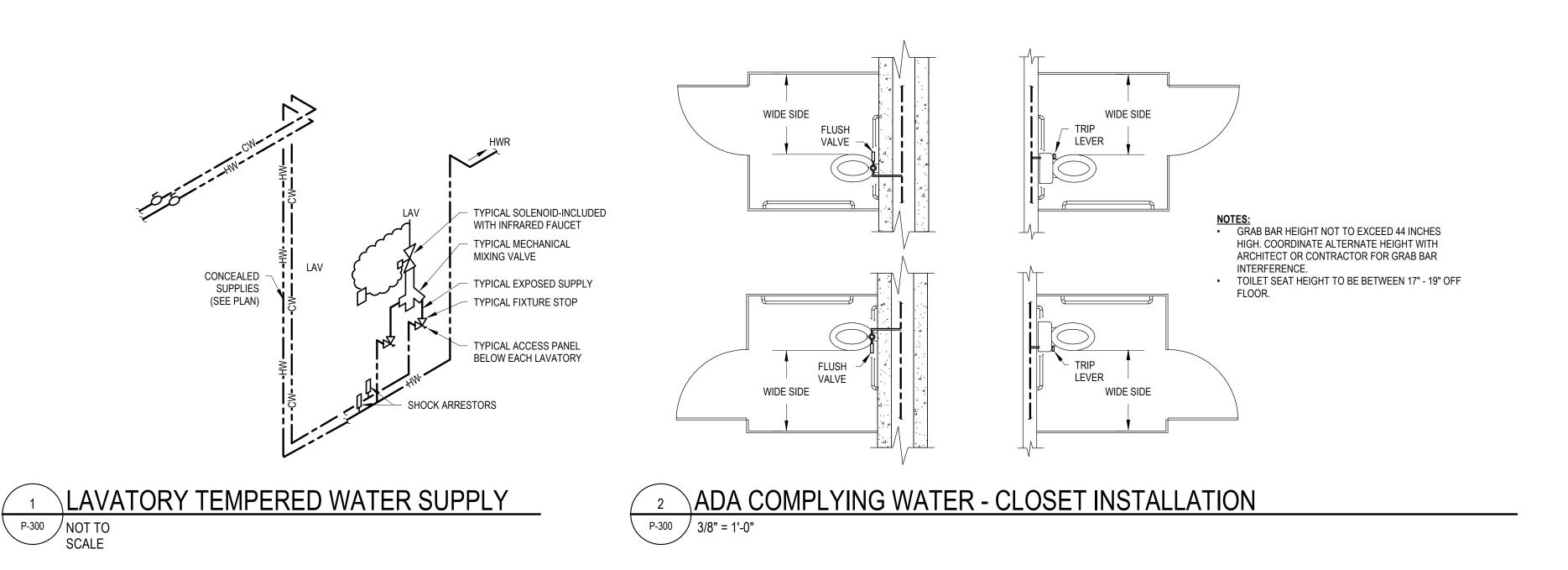
DATE OF ISSUE DRAWN BY CHECKED BY

PLUMBING PLANS -MODULE B





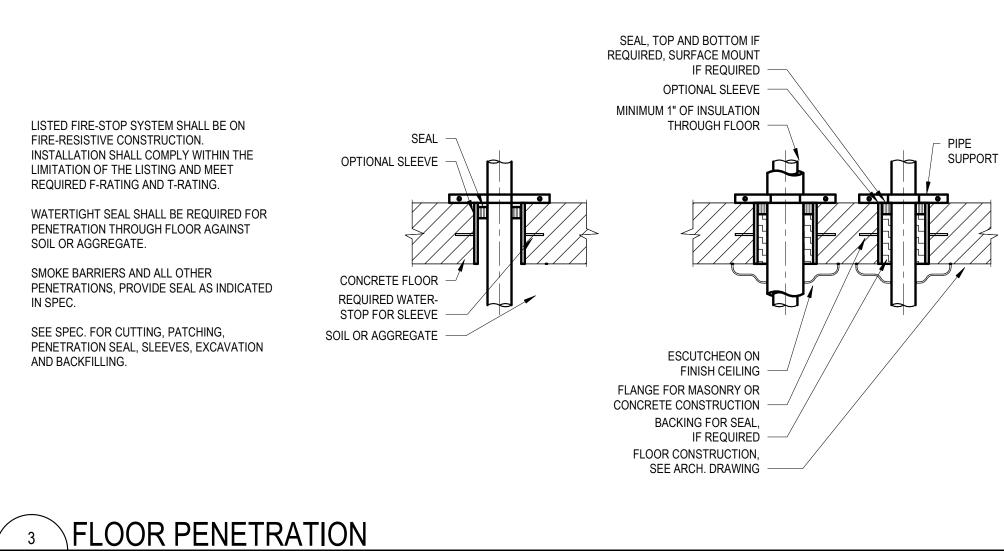
DESIGN | PERFORMANCE | SUSTAINABILITY

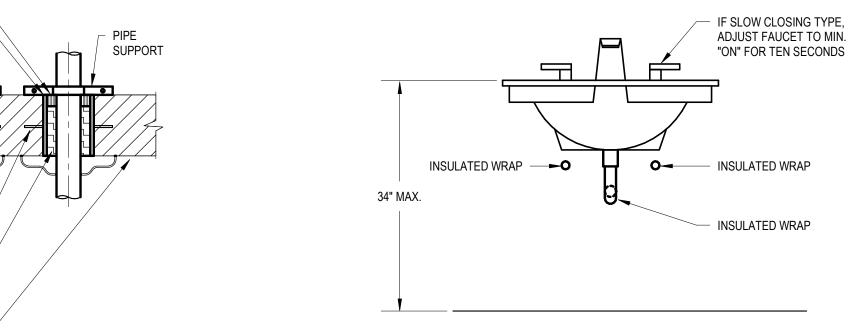


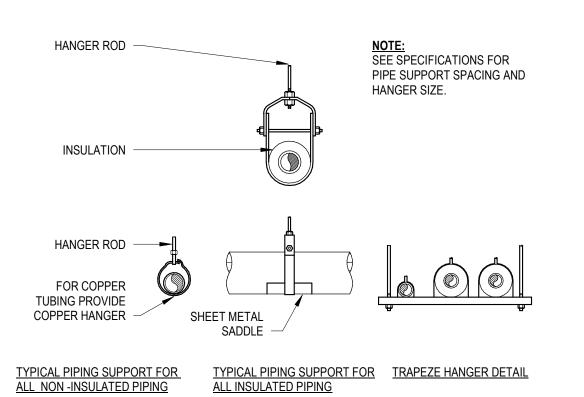
						FIXTUF	RE UNIT S	CHEDULE						
		FIX	TURE UNI	T SCHEDU	LE	DF	U	CWFU	HWFU	TOTA	L WSFU			
TAG	DESCRIPTION		CONNECTION	ON SIZE (IN)		FIVELIDE	TOTAL	FIVELIDE	FIVELIDE	FIVELIBE	TOTAL	MANUFACTURER	MODEL NO.	REMARKS
		WASTE	VENT	CW	HW	FIXTURE	TOTAL	FIXTURE	FIXTURE	FIXTURE	TOTAL			
EDF-1	ELECTRIC DRINKING FOUNTAIN - SURFACE MOUNTED, SINGLE BASIN, BOTTLE FILLER	1 1/4"	1 1/4"	1/2"	0"	1	1	0.25	0	0.25	0.25	ELKAY	LZS8WSLK	SINGLE DRINKING FOUTAIN WITH BOTTLE FILLER.
FD-1	FLOOR DRAIN	4"	2"	0"	0"	6	18	0	0	0	0	SIOUX CHIEF	832	CAST IRON
L-1	LAVATORY - WALL MOUNT, VITREOUS CHINA, WIDESPREAD FAUCET, ADA	1 1/4"	1 1/4"	1/2"	1/2"	1	1	1	1	1.5	1.5	ZURN	Z5344	ADA COMPLIANT, WALL MOUNT, MAX DEPTH OF 6-1/2", FAUCET TO BE ZURN Z6915-XL, AUTOMATIC, HARDWIRED, 0.5 GPM. PROVIDE A.S.S.E. APPROVED TMV. TMV TO BE SET TO 110F.
ORD-1	ROOF DRAIN OVERFLOW - 4" DIAMTER	4"	0"	0"	0"	0	0	0	0	0	0	JR SMITH	1010	CAST IRON BODY AND DOME.
ORD-2	ROOF DRAIN OVERFLOW - 6" DIAMTER	6"	0"	0"	0"	0	0	0	0	0	0	JR SMITH	1010	CAST IRON BODY AND DOME.
RD-1	ROOF DRAIN - 4" DIAMETER	4"	0"	0"	0"	0	0	0	0	0	0	JR SMITH	1010	CAST IRON BODY AND DOME.
RD-2	ROOF DRAIN - 6" DIAMETER	6"	0"	0"	0"	0	0	0	0	0	0	JR SMITH	1010	CAST IRON BODY AND DOME.
RH-1	ROOF HYDRANT	0"	0"	1"	0"	0	0	0	0	0	0	WOODFORD	SRH-MS	FREEZELESS, DRAINLESS ROOF MOUNTED HOSE BIB.
S-1	SINK - DROP IN	1 1/2"	1 1/2"	1/2"	1/2"	2	4	1	1	1.5	3	ELKAY	LRAD191845	ADA, SINGLE BOWL, DROP-IN SINK. FAUCET TO BE MOEN 87932. PROVIDE WITH A.S.S.E. APPROVED TMV. TMV TO BE SET AT 110F.
S-2	SINK - FREE STANDING, TUB	1 1/2"	1 1/2"	1/2"	1/2"	2	4	1	1	1.5	3	MUSTEE	UTILATUB	FREE STAINDING, PLASTIC, UTILITY SINK, MAX DEPTH OF 24". FAUCET TO BE MOEN 4736. PROVIDE WITH A.S.S.E. APPROVED TMV TMV TO BE SET AT 110F.
S-3	SINK - DROP IN	1 1/2"	1 1/2"	1/2"	1/2"	2	4	1	1	1.5	3	ELKAY	DLR191910	ADA, SINGLE BOWL, DEPTH TO BE A MINIMUM OF 10" .DROP-IN SINK FAUCET TO BE MOEN 87932. PROVIDE WITH A.S.S.E. APPROVED TMV. TMV TO BE SET AT 110F.
WC-1	WATER CLOSET - FLOOR MOUNT, TANK TYPE, ADA	3"	1 1/2"	1/2"	0"	6	6	3	0	3	3	ZURN	Z5655-BWL	MOUNTED AT ADA HEIGHT, FLOOR MOUNTED. FLUSH VALVE TO BE ZEMS6000AS-IS, HARD WIRED, 1.28 GPF. PROVIDE WITH OPEN FRONT SEAT.
			1			1	38	-			13.75			-

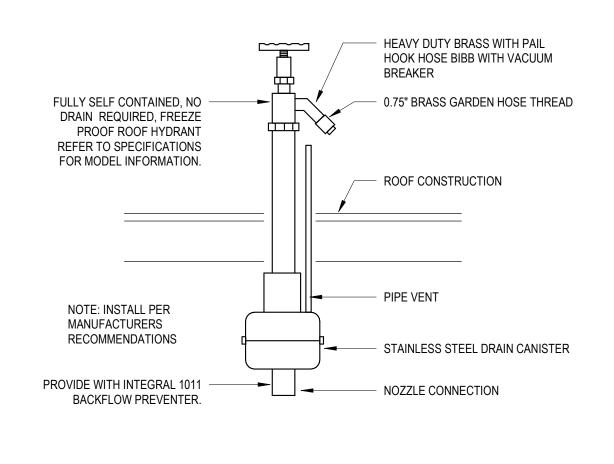
				1	RECIRCULATIO	N PUMP	SCHE	ULE						
TAG	LOCATION	SERVICE	TYPE	CAPACITY (GPM)	PUMP HEAD (FT)	RPM	ELECT HP	RICAL DA V	TA PH	HZ	WEIGHT (LBS)	MANUFACTURER	MODEL NO.	REMARKS
RCP-1	MECH	NEW HOT WATER FIXTURES	RECIRCULATION	10	25	1450	0.17	120	1	60	17	BELL AND GOSSET	PL-45	ALL

2. INLINE PUMPS ARE TO BE SUPPORTED BY PIPING, AND/OR HUNG FROM UNISTRUCT WITH VIBRATION HANGING RODS. 3. CONTRACTOR SHALL VERIFY FINAL HEAD PRESSURE AND PUMP SELECTION WITH ACTUAL FIELD CONDITIONS.





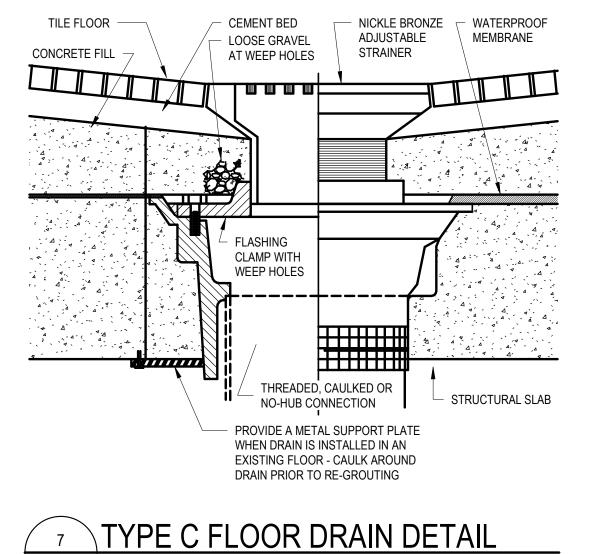




4 ADA COMPLYING LAVATORY INSTALLATION P-300 NOT TO SCALE

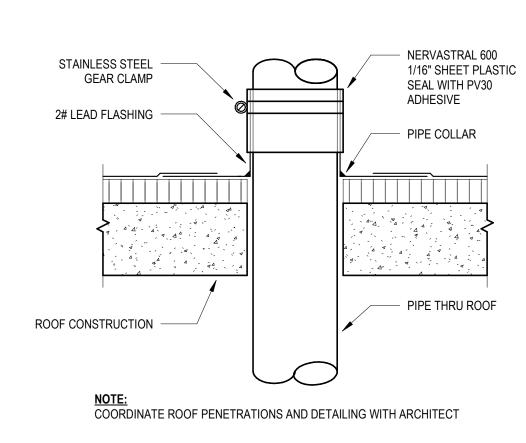
5 PIPE SUPPORT P-300 NOT TO SCALE

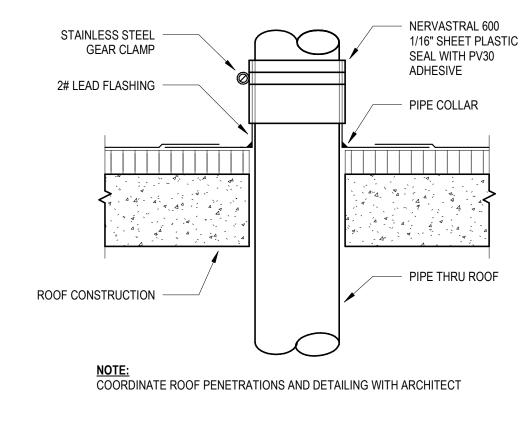
6 ROOF HYDRANT DETAIL



 $P-300 \int 3/4" = 1'-0"$ 

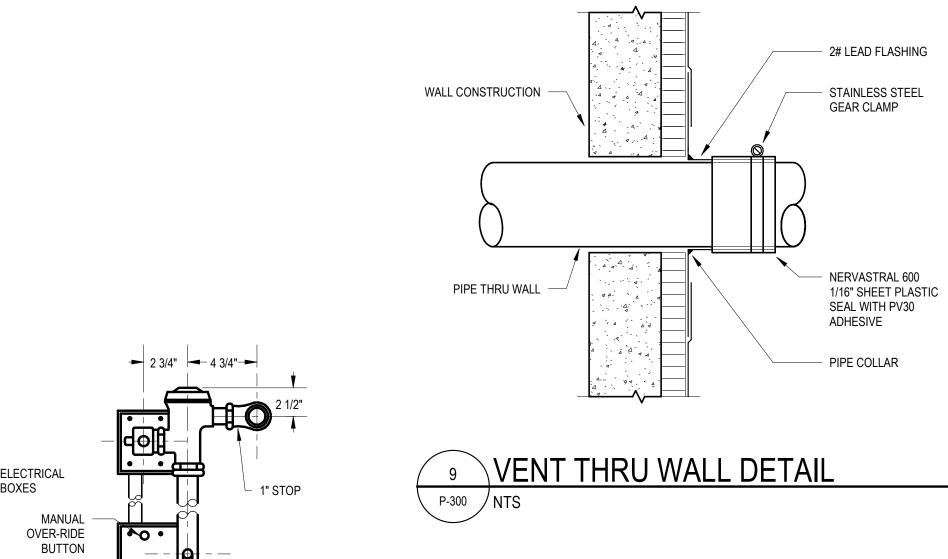
P-300 NOT TO SCALE



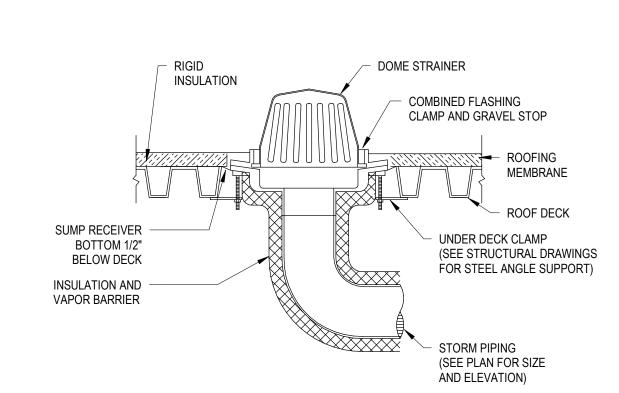


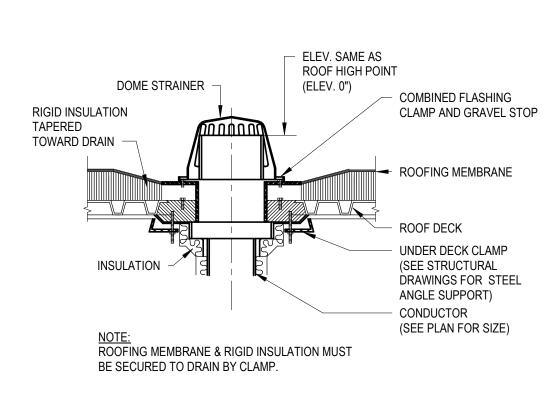
**SOURCE STAIL NOOF DETAIL** 

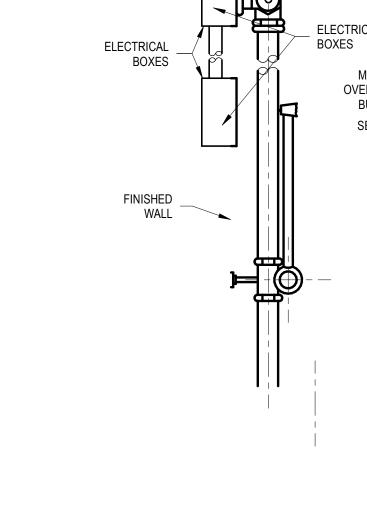
P-300 NTS



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29





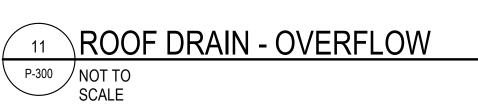


NOTE: FURNISH 24V TRANSFORMER

C/L OF FIXTURE

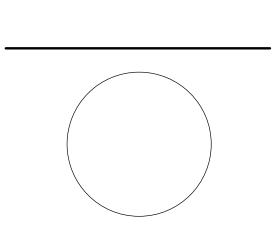
10 ROOF DRAIN - GENERAL PURPOSE

ROOFING MEMBRANE & RIGID INSULATION MUST BE SECURED TO DRAIN BY CLAMP.





SENSOR



LEGATARCHITECT DESIGN | PERFORMANCE | SUSTAINABILIT

NORTH

COMMUNITY

SCHOOL

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

502 South 5th Street

Eldridge, IA 52748

**ARCHITECT** 

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540 www.legat.com

CONSTRUCTION MANAGER Russel Construction

> 4700 E 53rd Street Davenport, IA 52807

563.459.5600 www.russelco.com

**CIVIL ENGINEER** 

5137 Utica Ridge Road

Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

**IMEG** 

623 26th Avenue

P: 309.788.0673

F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

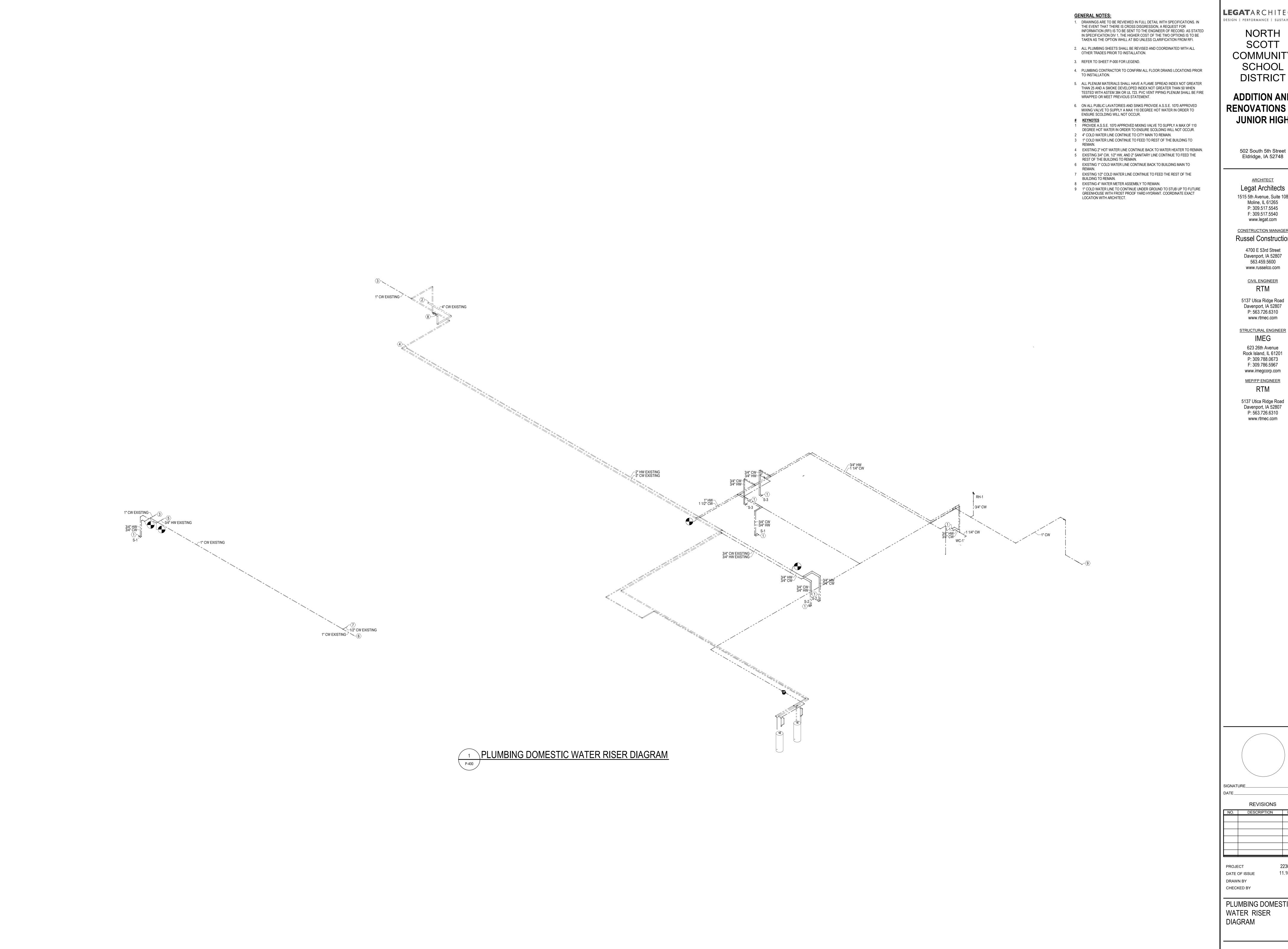
Rock Island, IL 61201

SIGNATURE\_ **REVISIONS** NO. DESCRIPTION DATE

223049.00 11.10.2023

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

PLUMBING SCHEDULES AND DETAILS



**LEGAT**ARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

502 South 5th Street

<u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

**CONSTRUCTION MANAGER** Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

5137 Utica Ridge Road

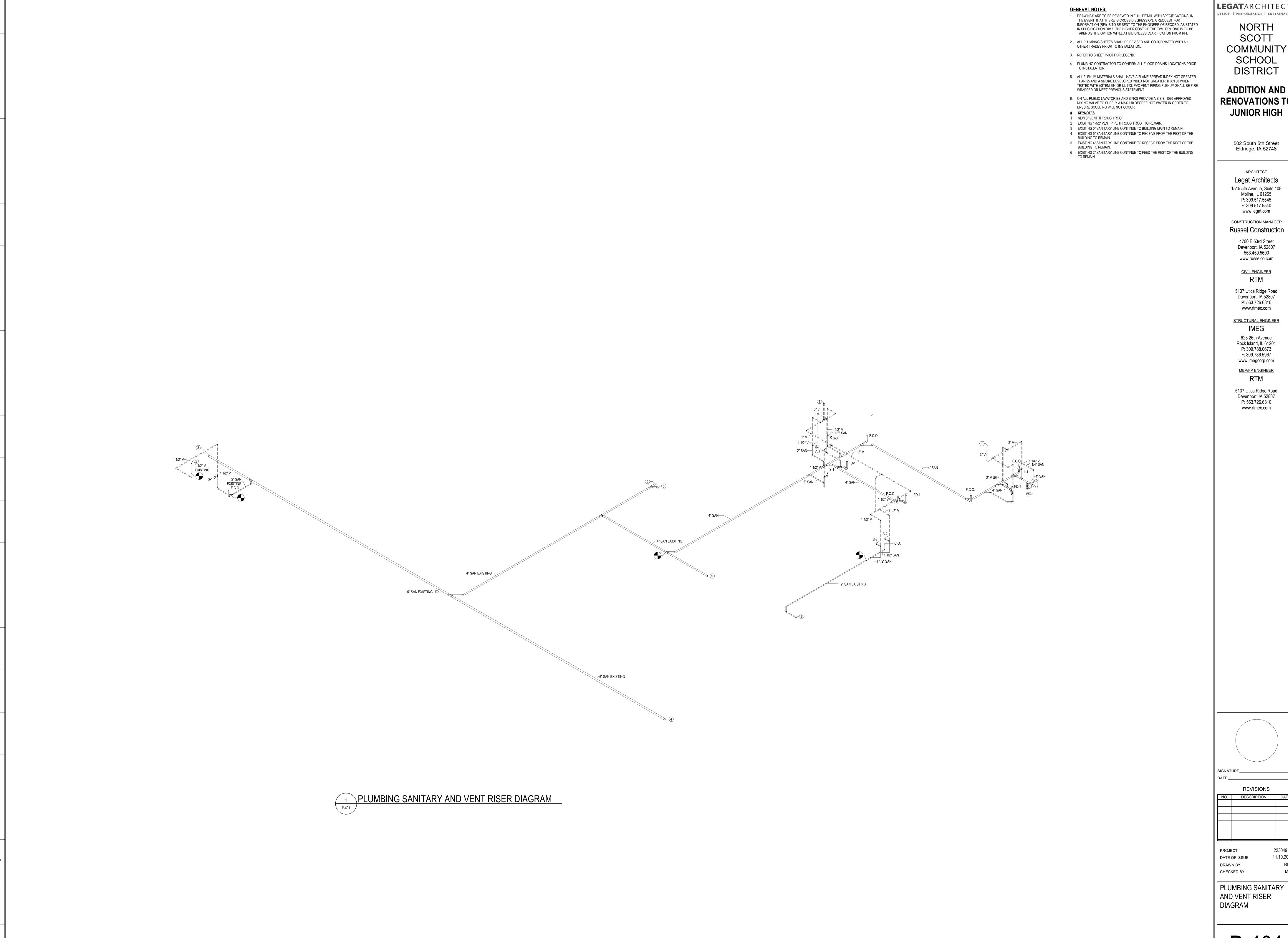
P: 563.726.6310 www.rtmec.com STRUCTURAL ENGINEER

www.imegcorp.com MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

NO. DESCRIPTION DATE

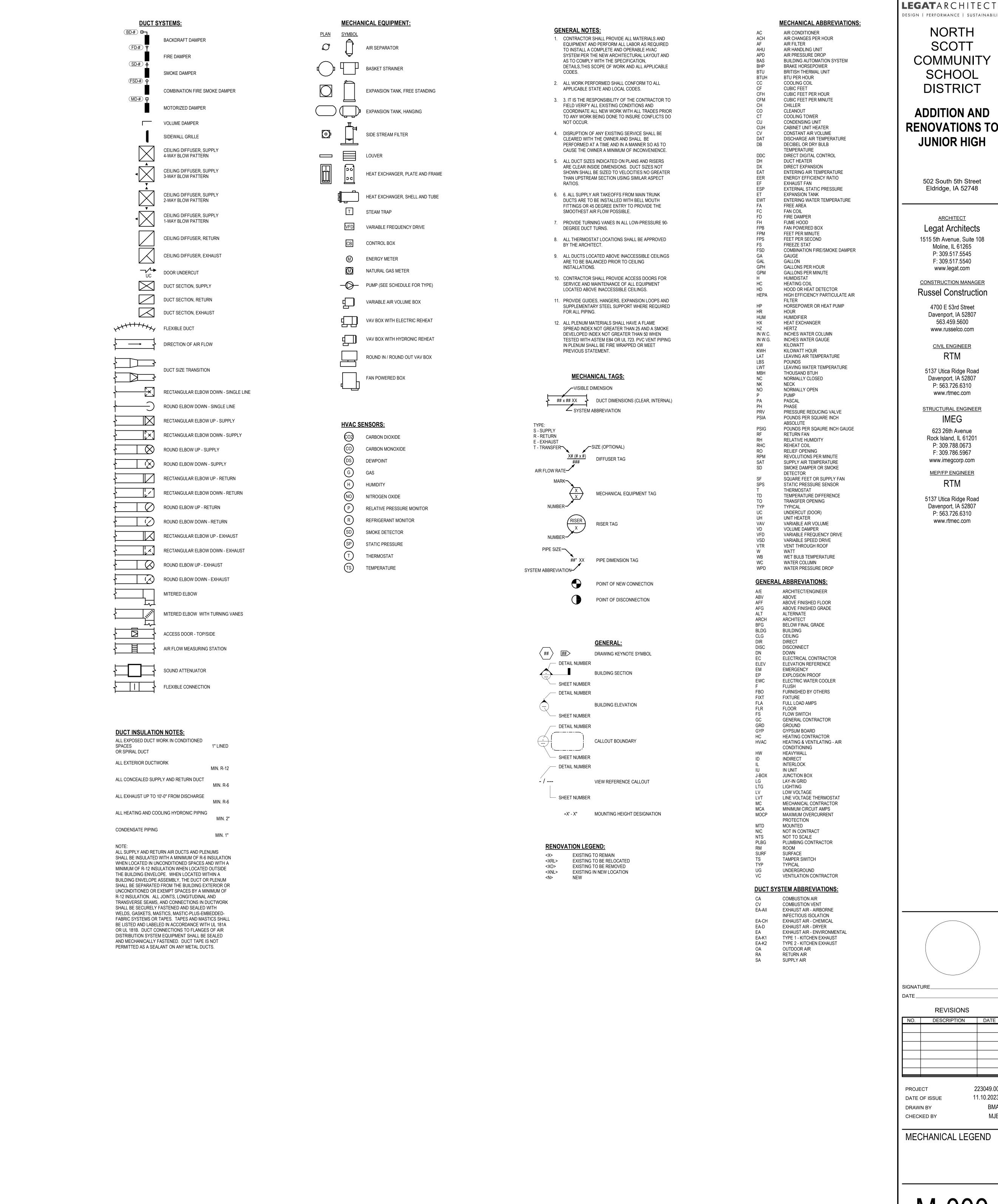
PLUMBING DOMESTIC WATER RISER



**LEGAT**ARCHITECTS DESIGN | PERFORMANCE | SUSTAINABILITY

**ADDITION AND** 

NO. DESCRIPTION DATE



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29

DESIGN | PERFORMANCE | SUSTAINABILIT NORTH SCOTT

COMMUNITY SCHOOL

**ADDITION AND RENOVATIONS TO JUNIOR HIGH** 

> 502 South 5th Street Eldridge, IA 52748

<u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com CONSTRUCTION MANAGER

**Russel Construction** 4700 E 53rd Street Davenport, IA 52807

**CIVIL ENGINEER** 

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER **IMEG** 623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

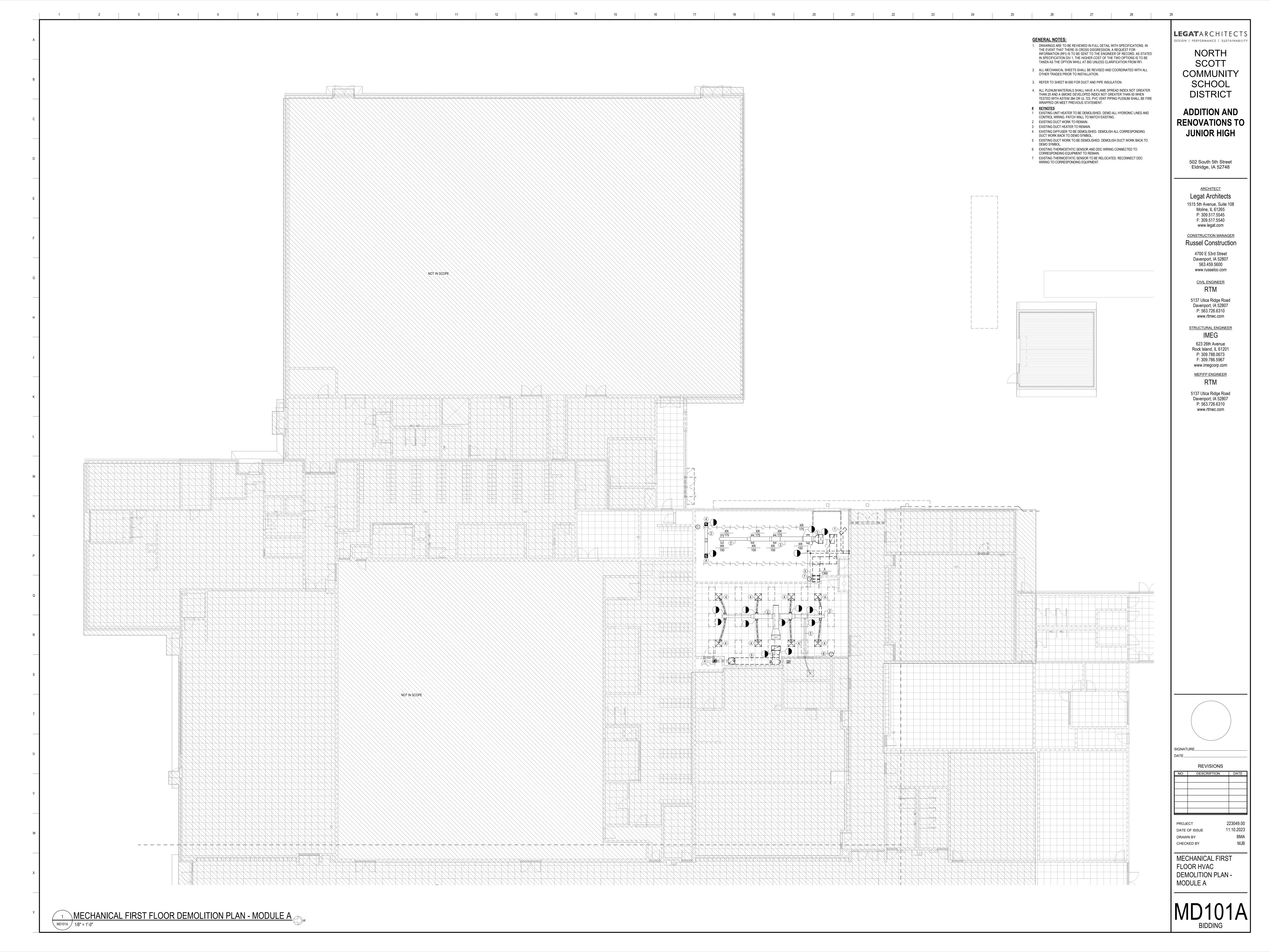
5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

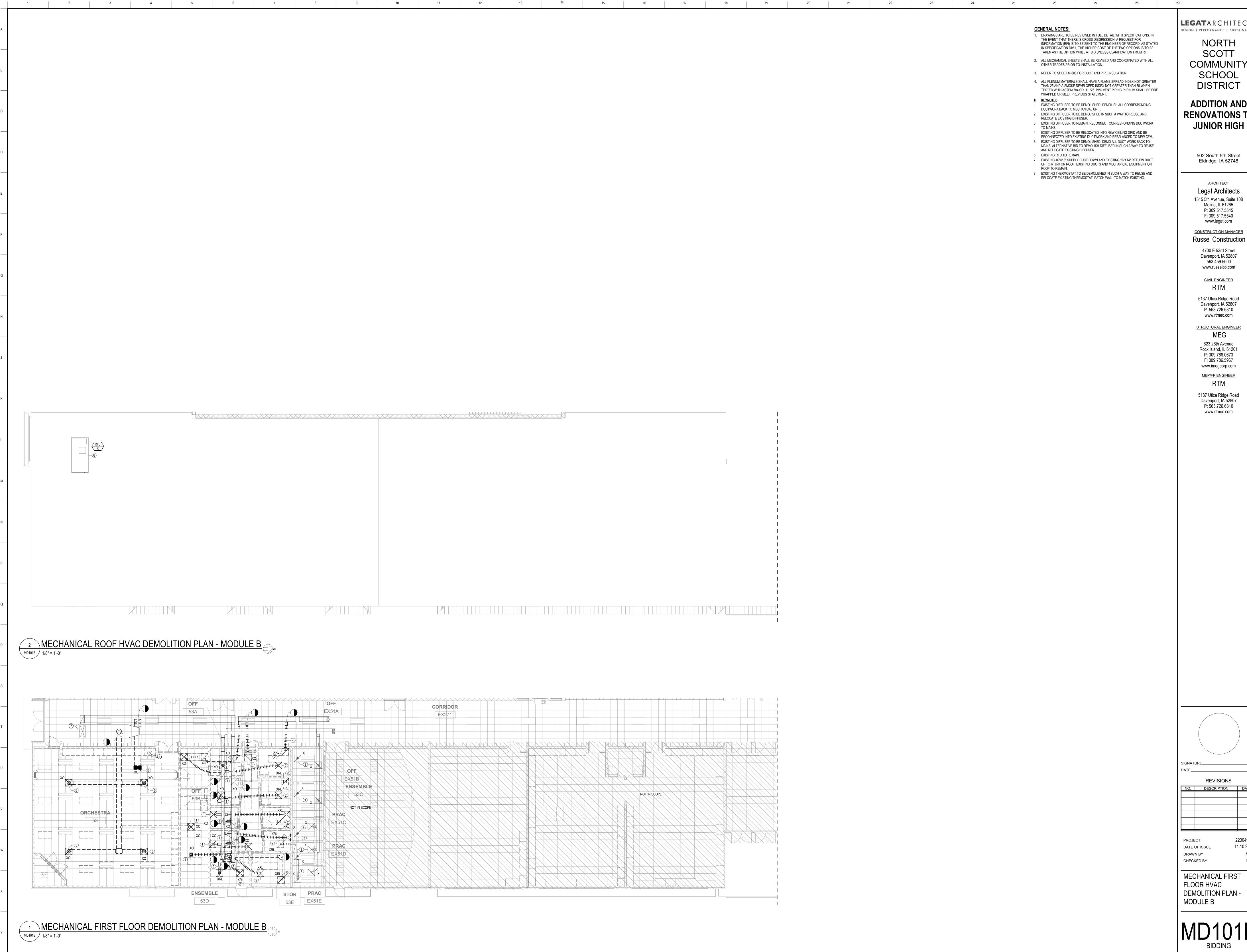
REVISIONS NO. DESCRIPTION DATE

223049.00

11.10.2023

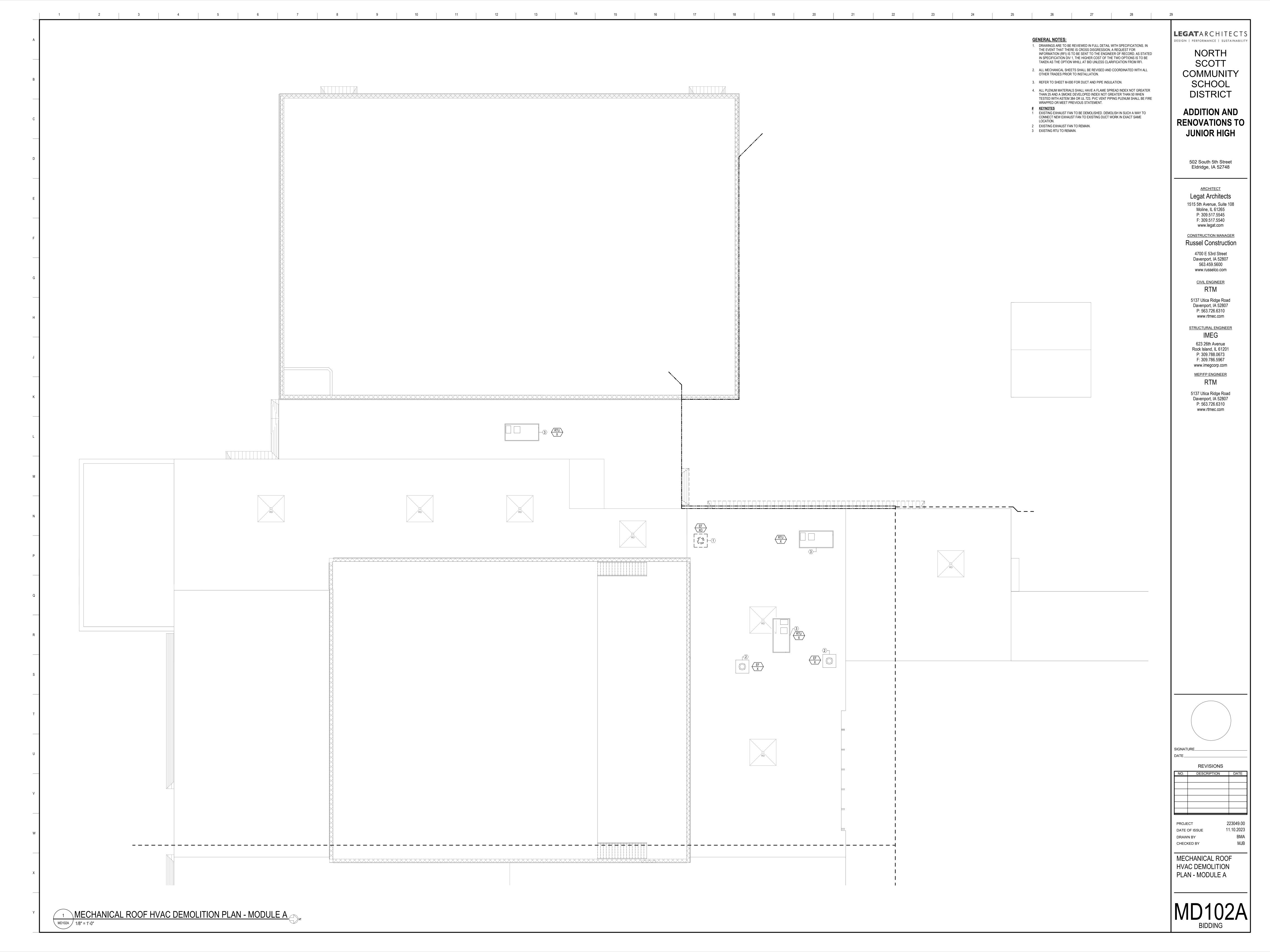
MECHANICAL LEGEND

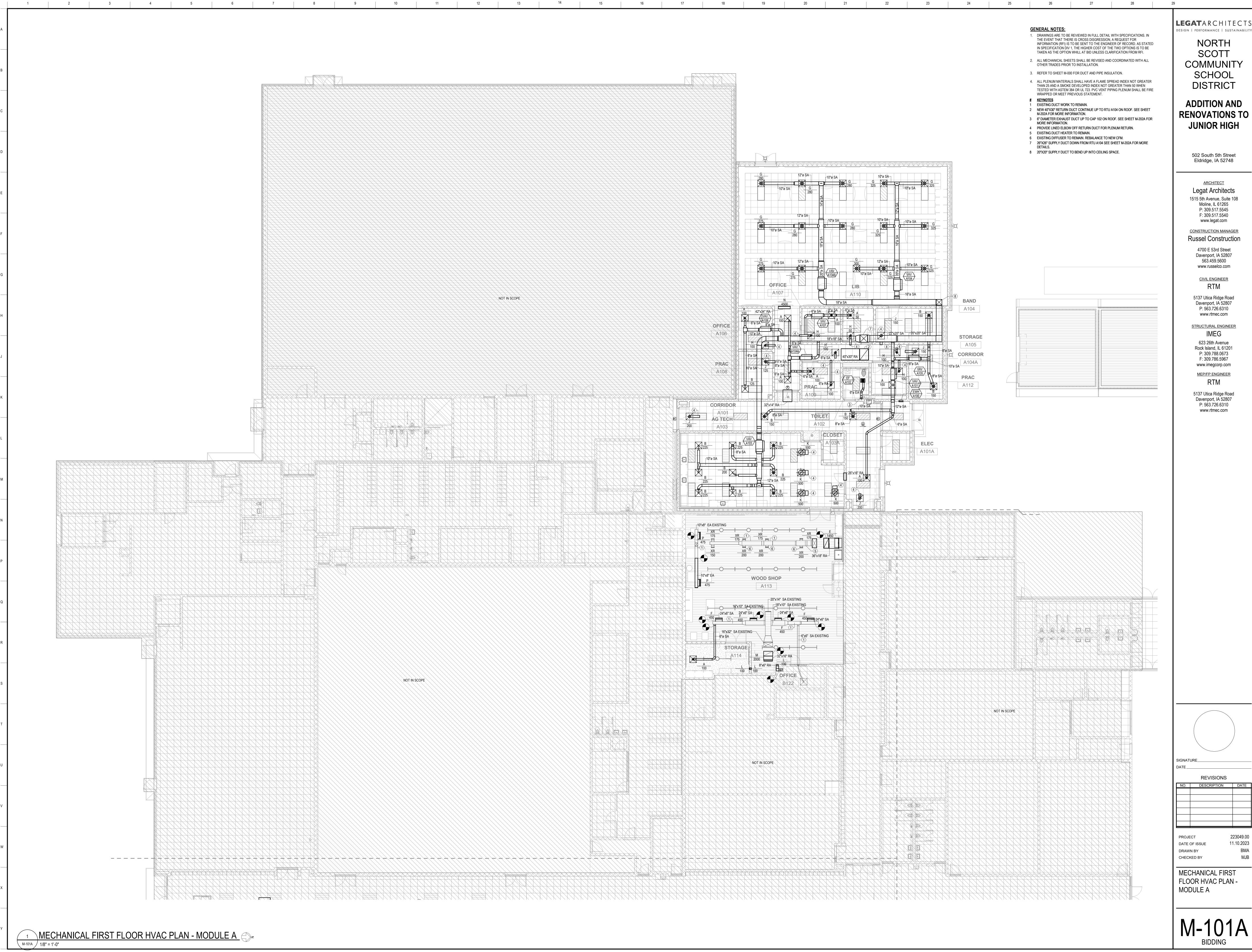


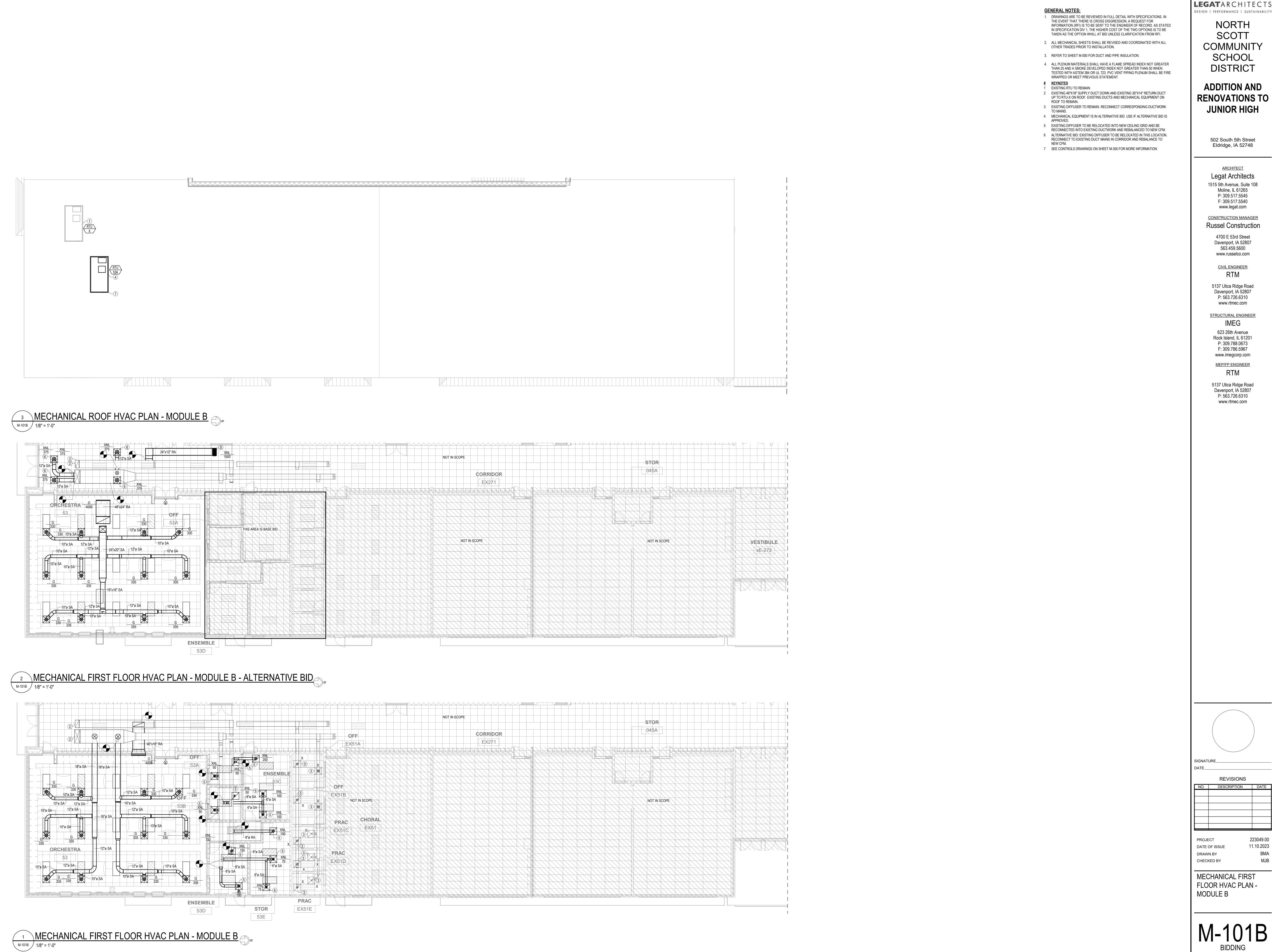


LEGATARCHITECT DESIGN | PERFORMANCE | SUSTAINABILITY

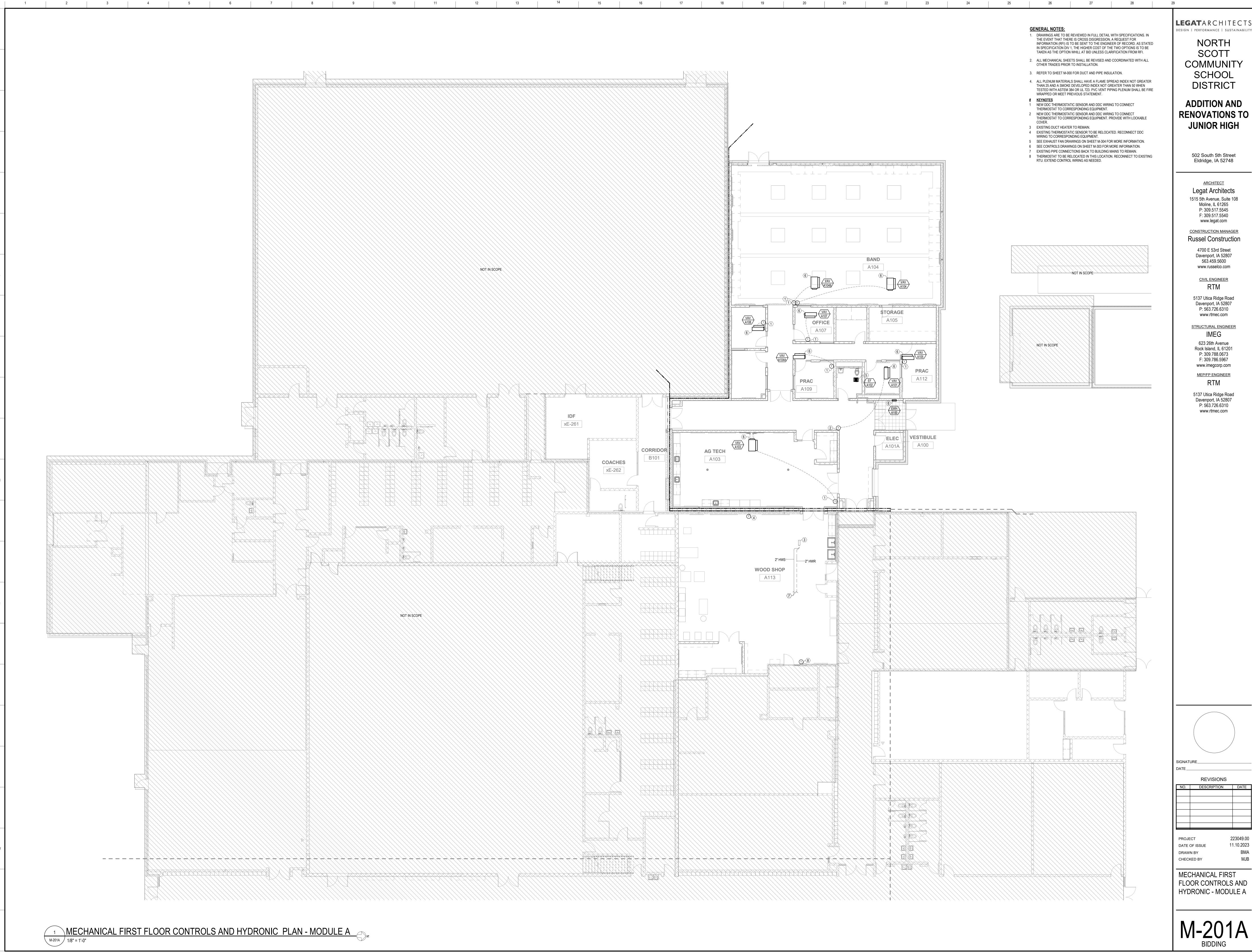
NO. DESCRIPTION DATE



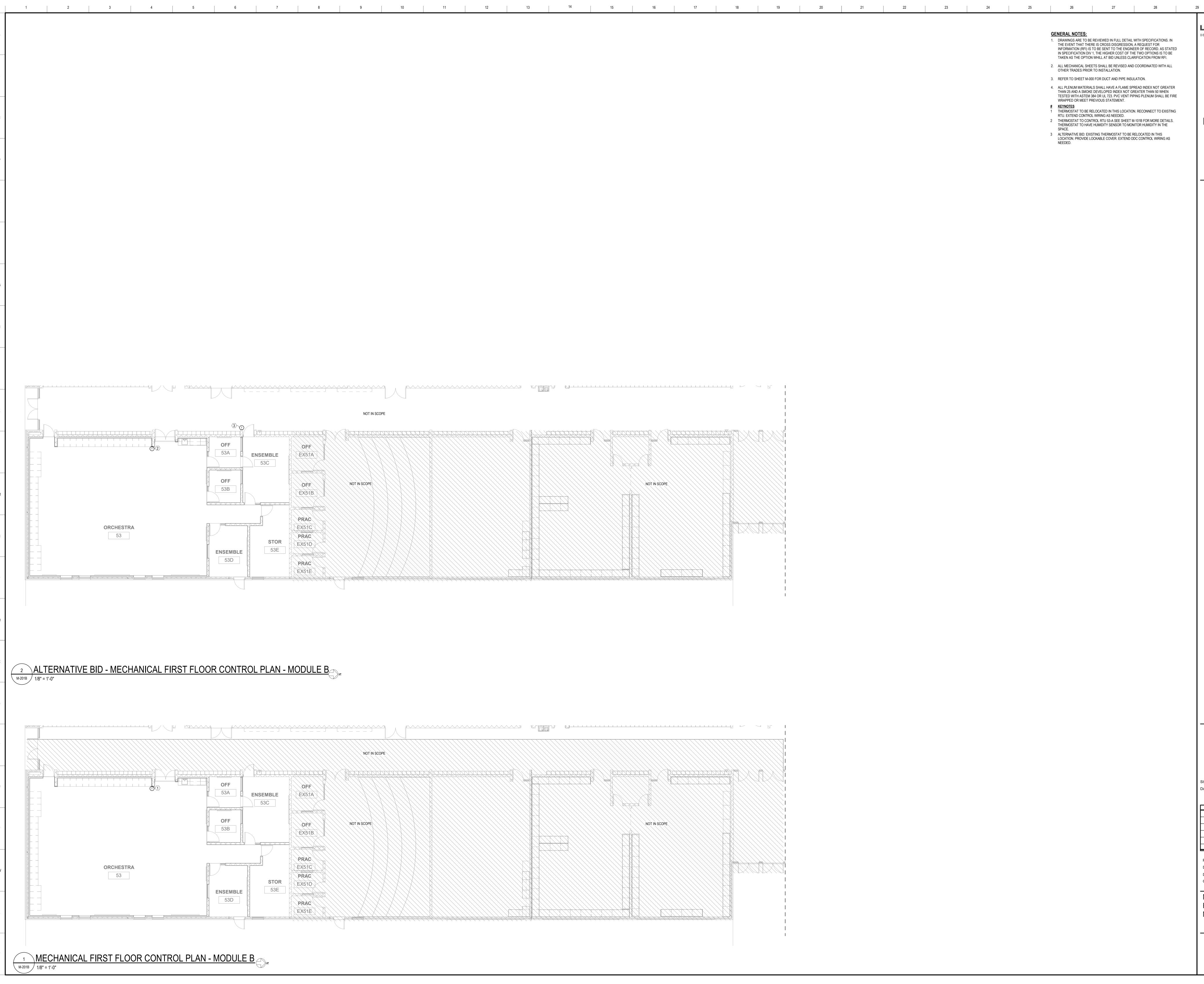




LEGATARCHITECT DESIGN | PERFORMANCE | SUSTAINABILITY



DESIGN | PERFORMANCE | SUSTAINABILITY



**GENERAL NOTES:** 

1. DRAWINGS ARE TO BE REVIEWED IN FULL DETAIL WITH SPECIFICATIONS. IN THE EVENT THAT THERE IS CROSS DISGRESSION, A REQUEST FOR INFORMATION (RFI) IS TO BE SENT TO THE ENGINEER OF RECORD. AS STATED IN SPECIFICATION DIV 1, THE HIGHER COST OF THE TWO OPTIONS IS TO BE

TAKEN AS THE OPTION WHILL AT BID UNLESS CLARIFICATION FROM RFI. 2. ALL MECHANICAL SHEETS SHALL BE REVISED AND COORDINATED WITH ALL

OTHER TRADES PRIOR TO INSTALLATION.

3. REFER TO SHEET M-000 FOR DUCT AND PIPE INSULATION.

4. ALL PLENUM MATERIALS SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX NOT GREATER THAN 50 WHEN TESTED WITH ASTEM 384 OR UL 723. PVC VENT PIPING PLENUM SHALL BE FIRE WRAPPED OR MEET PREVIOUS STATEMENT. # KEYNOTES

1 THERMOSTAT TO BE RELOCATED IN THIS LOCATION. RECONNECT TO EXISTING RTU. EXTEND CONTROL WIRING AS NEEDED.

2 THERMOSTAT TO CONTROL RTU 53-A SEE SHEET M-101B FOR MORE DETAILS. THERMOSTAT TO HAVE HUMIDITY SENSOR TO MONITOR HUMIDITY IN THE

3 ALTERNATIVE BID: EXISTING THERMOSTAT TO BE RELOCATED IN THIS LOCATION. PROVIDE LOCKABLE COVER. EXTEND DDC CONTROL WIRING AS NEEDED.

DESIGN | PERFORMANCE | SUSTAINABILITY NORTH

LEGATARCHITECT

**JUNIOR HIGH** 

502 South 5th Street Eldridge, IA 52748

**ARCHITECT** Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com **CONSTRUCTION MANAGER** Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

**CIVIL ENGINEER** 

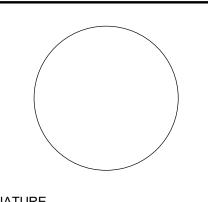
5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



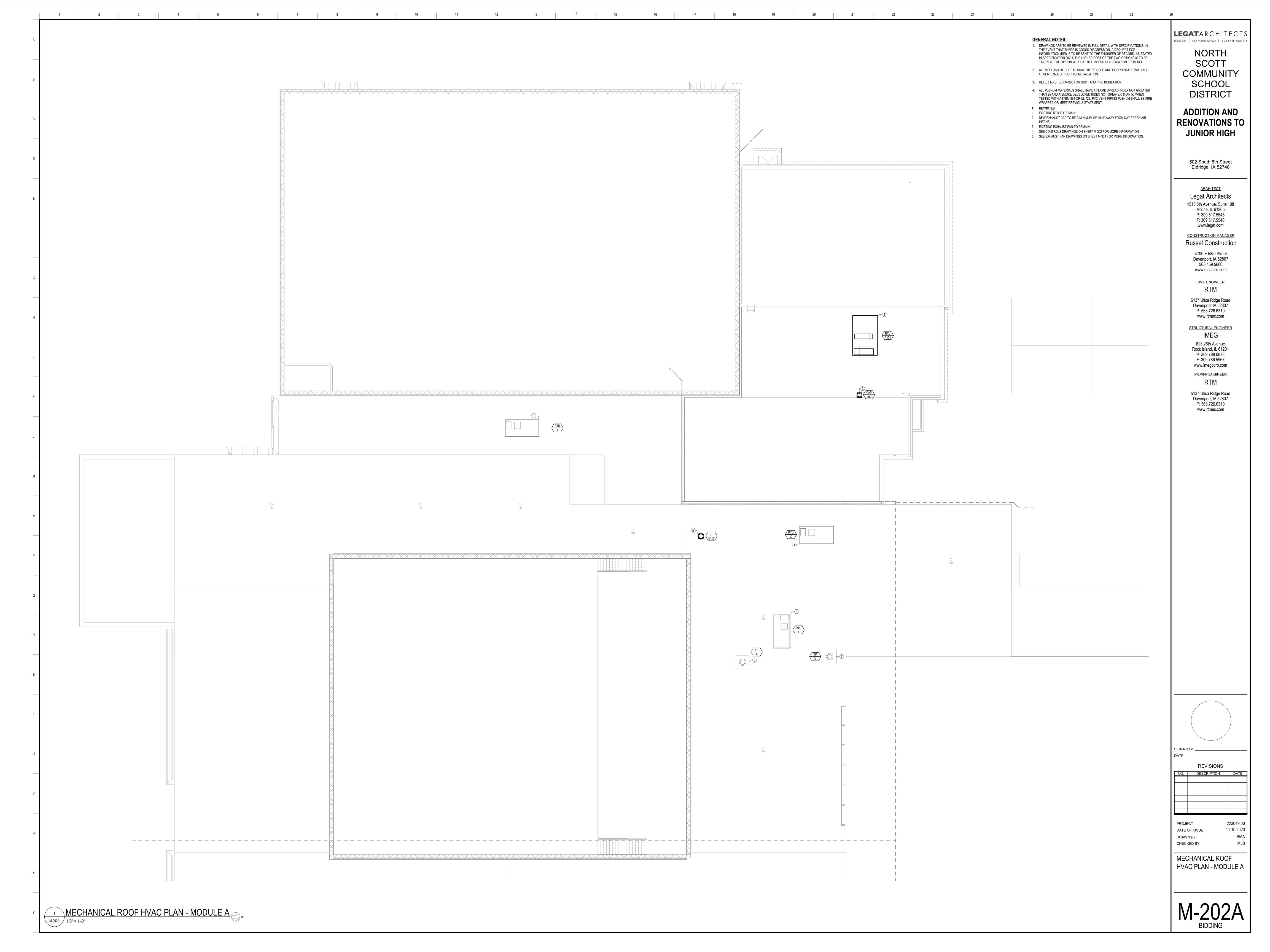
**REVISIONS** 

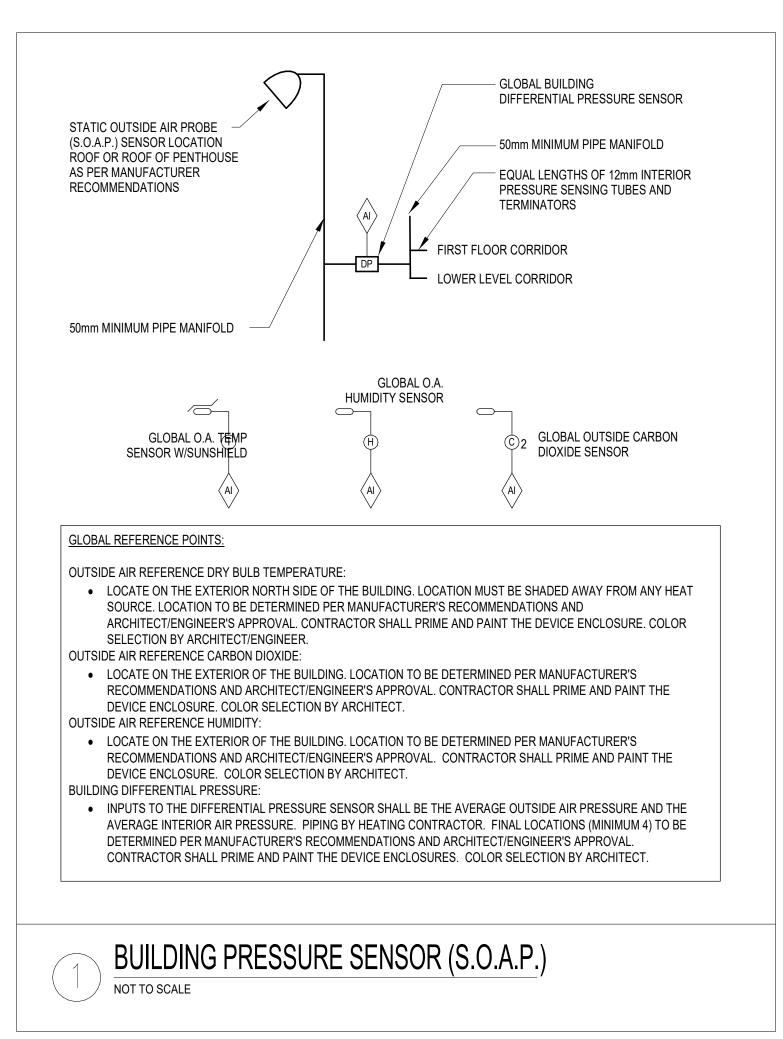
NO. DESCRIPTION DATE

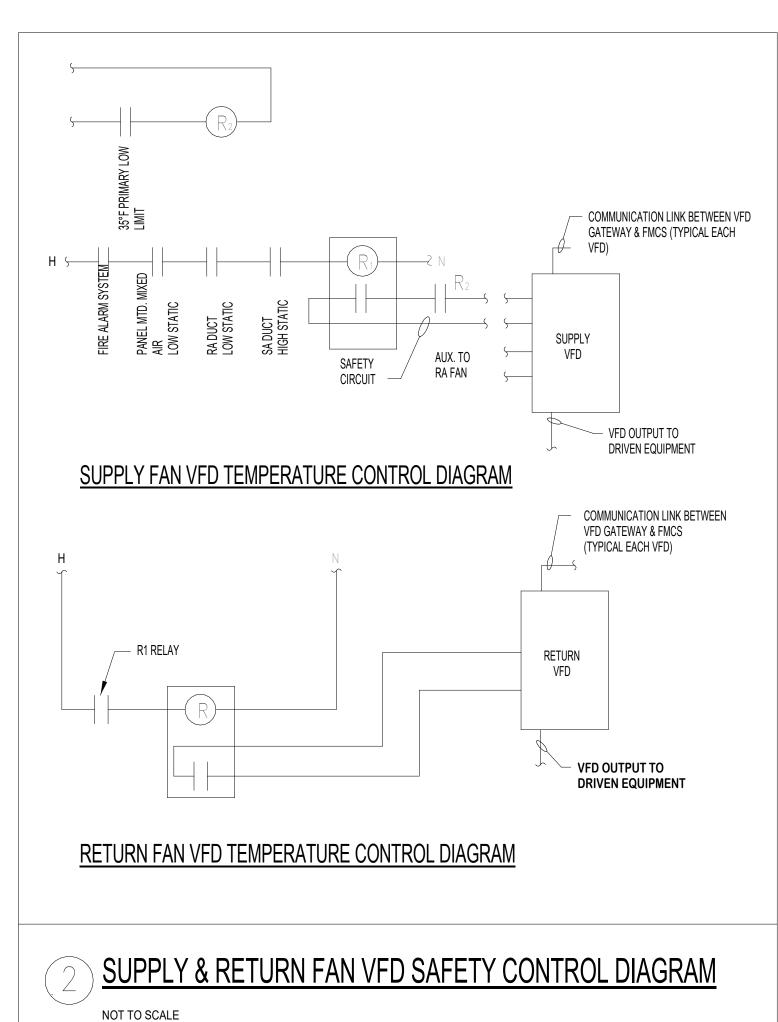
PROJECT DATE OF ISSUE DRAWN BY

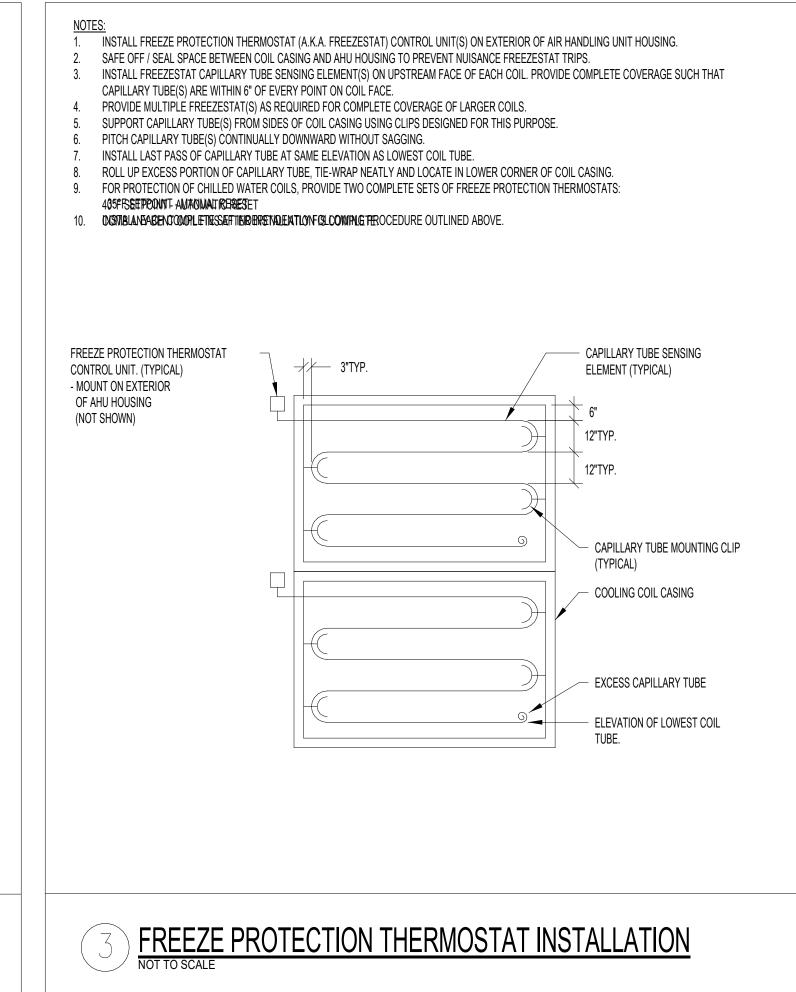
11.10.2023 CHECKED BY

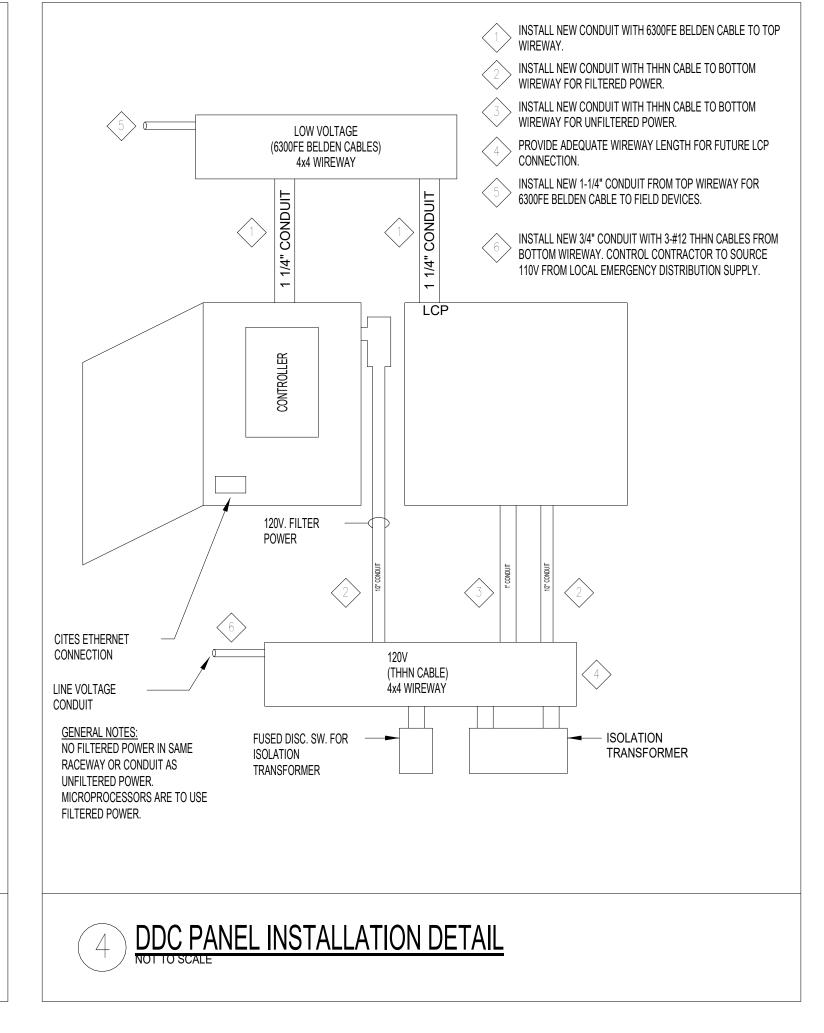
MECHANICAL FIRST FLOOR CONTROLS -MODULE B

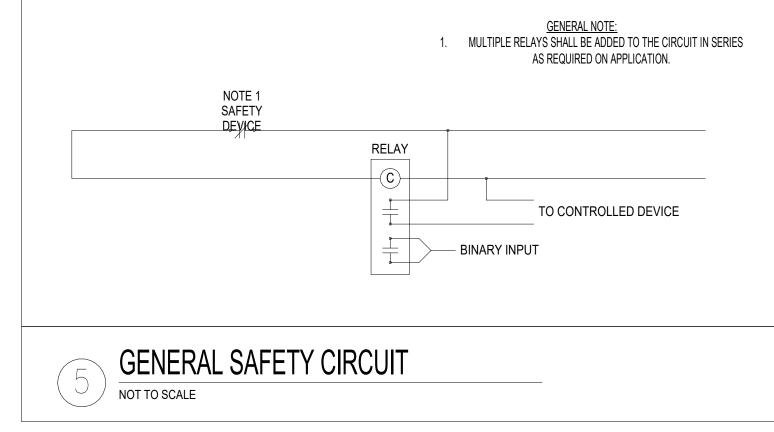


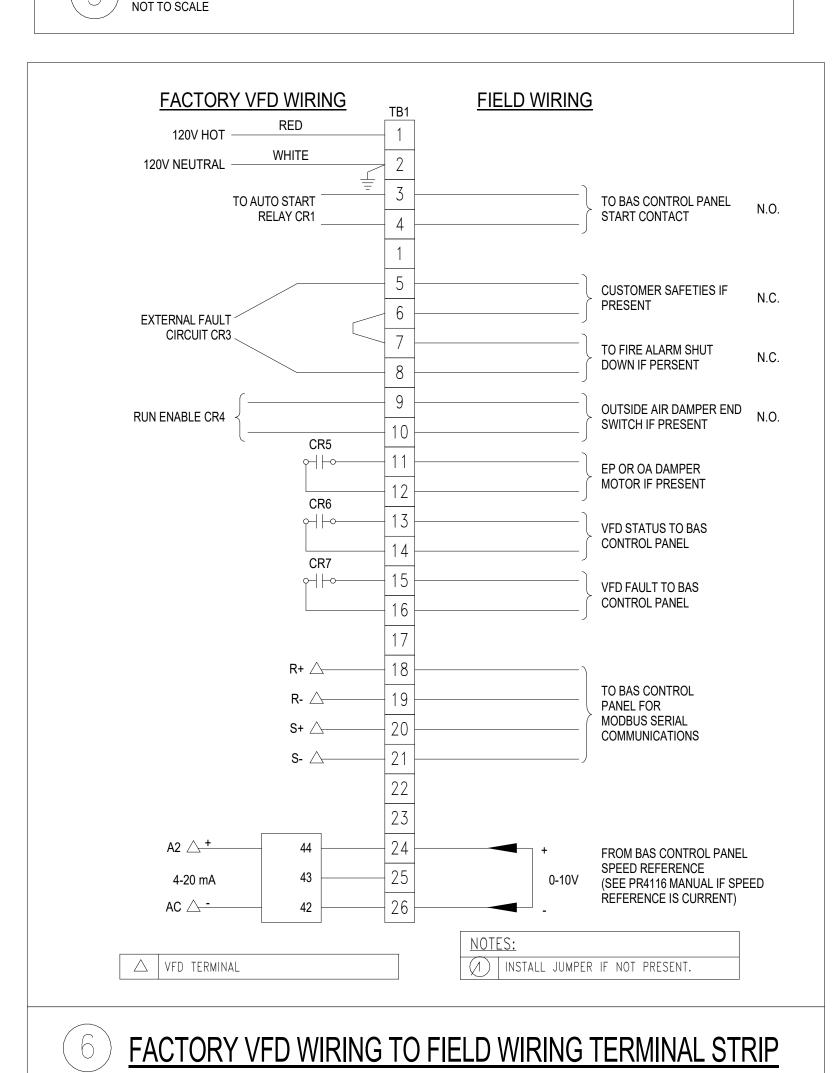


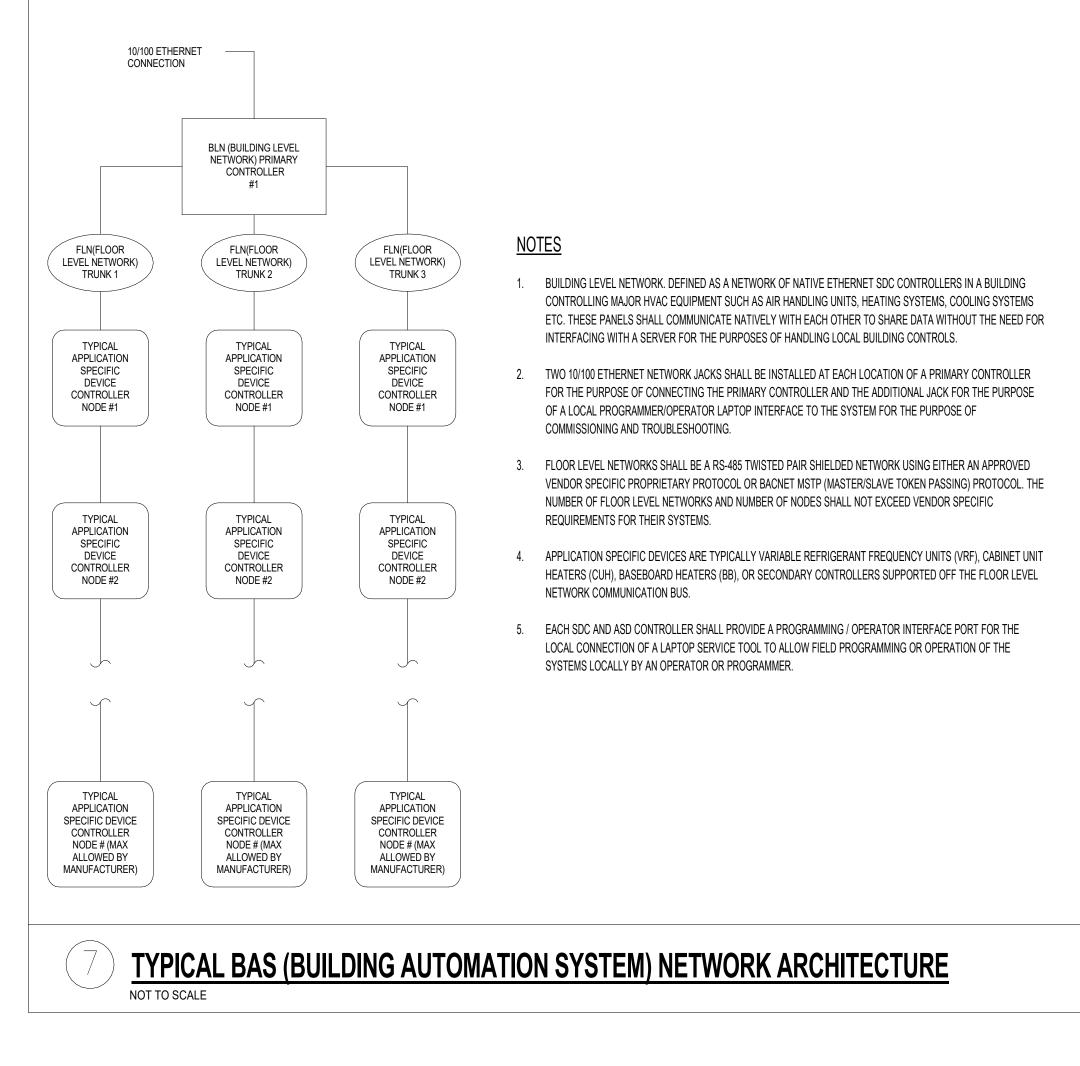












			CONTROLS SYMBOLS		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
POINT NAME AO	DDC POINT DESCRIPTOR WITH NAME AI - ANALOG INPUT DI - DIGITAL INPUT AO - ANALOG OUTPUT DO - DIGITAL OUTPUT	AHU OR EQ. NO.  4 10 ZONE NUMBER	ZONE DESCRIPTOR		THREE WAY CONTROL VALVE
[2] \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TEMPERATURE SENSOR WITH AVERAGING ELEMENT	480V 120V	CONTROL TRANSFORMER	ACT	DAMPER ACTUATOR
25	TEMPERATURE SENSOR WITH SINGLE POINT ELEMENT	(MS) (EP1) (S)	RELAY COILS	φ •••••••	DUCT AIR QUALITY SENSOR
TS1	TEMPERATURE SENSOR WITH PIPE WELL		FUSE	<b>→ →</b> ••••••••••••••••••••••••••••••••	HIGH LIMIT HUMIDISTAT
<u>X</u>	HUMIDITY SENSOR	<b>0</b> L ∘∕∕∕∘	THERMAL OVERLOAD	TDR	TIME DELAY RELAY DELAY ON MAKE OR BREAK
	LOW TEMPERATURE SWITCH (FREEZESTAT)	에는 에는	NORMALLY OPEN AND NORMALLY CLOSED CONTACTS	**************************************	DUCT MOUNTED HUMIDISTAT
<u>*************************************</u>	HIGH TEMPERATURE SWITCH (FIRESTAT)	HAND OFF AUTO	HAND-OFF-AUTO SELECTOR SWITCH	FOI	FIBER OPTIC INTERFACE
SD1	SMOKE DETECTOR		WIRING DESIGNATION. (NO. OF HATCHES INDICATES NO. OF CONDUCTORS)	DCS	NEW DIGITAL CONTROL STATION  OCCUPANCY SENSOR
DPS1	DIFFERENTIAL PRESSURE SWITCH		WIRING CONNECTION		
(M)	MAIN AIR SUPPLY	ON-OFF	ON-OFF SELECTOR SWITCH		
M IP1	CURRENT TO PNEUMATIC TRANSDUCER	T	ROOM TEMPERATURE SENSOR AS SHOWN ON FLOOR PLANS		AIR FLOW MONITORING STATION
	TWO WAY CONTROL VALVE	(H <sub>S</sub> )	ROOM HUMIDITY SENSOR AS SHOWN ON FLOOR PLANS	FAR oが	FIRE ALARM RELAY
ST	STARTER	(PS)	PRESSURE SENSOR AS SHOWN ON FLOOR PLANS		

LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH SCOTT OMMUNITY SCHOOL DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265
P: 309.517.5545
F: 309.517.5540

construction MANAGER
Russel Construction

www.legat.com

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

CIVIL ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

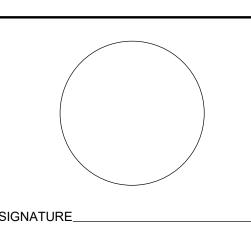
www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

RTM
5137 Utica Ridge Road

Davenport, IA 52807
P: 563.726.6310
www.rtmec.com



REVISIONS

NO. DESCRIPTION DATE

11.10.2023

PROJECT
DATE OF ISSUE
DRAWN BY
CHECKED BY

MECHANICAL CONTROLS LEGEND

**BUILDING AUTOMATION SYSTEM INTERFACE:** THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED BYPASS, MORNING WARM-UP/PRE-COOL, OCCUPIED/UNOCCUPIED AND HEAT/COOL MODES. IF A BAS IS NOT PRESENT, OR COMMUNICATION IS LOST WITH THE BAS THE CONTROLLER SHALL OPERATE USING DEFAULT MODES AND SETPOINTS. BAS CONTRACTOR (DELTA) SHALL PROVIDE BACNET CONTROLLER FOR RTU. OCCUPIED MODE: DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS. THE UNIT CONTROLLER SHALL CONTROL THE SUPPLY FAN SPEED TO MAINTAIN THE CURRENT DUCT STATIC PRESSURE SETPOINT (ADJ). THE DX COOLING SHALL STAGE AND GAS HEAT SHALL MODULATE TO MAINTAIN THE CURRENT DISCHARGE AIR TEMPERATURE SETPOINT. IF ECONOMIZING IS ENABLED THE OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN THE CURRENT DISCHARGE AIR TEMPERATURE UNOCCUPIED MODE: WHEN THE SPACE TEMPERATURE IS BELOW THE UNOCCUPIED HEATING SETPOINT OF 60°F (ADJ) THE SUPPLY FAN SHALL START, THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND THE GAS HEAT SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED HEATING SETPOINT OF 60°F (ADJ) PLUS THE UNOCCUPIED DIFFERENTIAL OF 4°F (ADJ) THE SUPPLY FAN SHALL STOP AND THE GAS HEAT SHALL BE DISABLED. WHEN THE SPACE TEMPERATURE IS ABOVE THE UNOCCUPIED COOLING SETPOINT OF 85°F (ADJ) THE SUPPLY FAN SHALL START, THE OUTSIDE AIR DAMPER SHALL OPEN IF ECONOMIZING IS ENABLED AND REMAIN CLOSED IF ECONOMIZING IS DISABLED AND THE DX COOLING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED COOLING SETPOINT OF 85°F (ADJ) MINUS THE UNOCCUPIED DIFFERENTIAL OF 4°F (ADJ) THE SUPPLY FAN SHALL STOP, THE DX COOLING SHALL BE DISABLED AND THE OUTSIDE AIR DAMPER SHALL CLOSE. OPTIMAL START: THE BAS SHALL MONITOR THE SCHEDULED OCCUPIED TIME, OCCUPIED SPACE SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL START OCCURS. MORNING WARM-UP MODE: DURING OPTIMAL START, IF THE AVERAGE SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT A MORNING WARM-UP MODE SHALL BE ACTIVATED. WHEN MORNING WARM-UP IS INITIATED THE UNIT SHALL ENABLE THE HEATING AND SUPPLY FAN. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. WHEN THE AVERAGE SPACE TEMPERATURE REACHES THE OCCUPIED HEATING SETPOINT (ADJ), THE UNIT SHALL TRANSITION TO THE PRE-COOL MODE: DURING OPTIMAL START, IF THE AVERAGE SPACE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT, PRE-COOL MODE SHALL BE ACTIVATED. WHEN PRE-COOL IS INITIATED THE UNIT SHALL ENABLE THE FAN AND COOLING OR ECONOMIZER. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED, UNLESS ECONOMIZING. WHEN THE AVERAGE SPACE TEMPERATURE REACHES OCCUPIED COOLING SETPOINT (ADJ), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE. OPTIMAL STOP: THE BAS SHALL MONITOR THE SCHEDULED UNOCCUPIED TIME, OCCUPIED

STOP OCCURS. WHEN THE OPTIMAL STOP MODE IS ACTIVE THE UNIT CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE TO THE SPACE TEMPERATURE OFFSET SETPOINT.

OCCUPIED BYPASS:
THE BAS SHALL MONITOR THE STATUS OF THE "ON" AND "CANCEL" BUTTONS OF THE SPACE TEMPERATURE SENSORS. WHEN AN OCCUPIED BYPASS REQUEST IS RECEIVED FROM A SPACE SENSOR, THE UNIT SHALL TRANSITION FROM ITS CURRENT OCCUPANCY MODE TO OCCUPIED BYPASS MODE AND THE

SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL

ECONOMIZER:
THE SUPPLY AIR SENSOR SHALL MEASURE THE DRY BULB TEMPERATURE OF
THE AIR LEAVING THE EVAPORATOR COIL WHILE ECONOMIZING. WHEN
ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN THE COOLING
MODE, THE ECONOMIZER DAMPER SHALL BE MODULATED BETWEEN ITS
MINIMUM POSITION AND 100% TO MAINTAIN THE DISCHARGE AIR

UNIT SHALL MAINTAIN THE SPACE TEMPERATURE TO THE OCCUPIED

SETPOINTS (ADJ).

TOWARD MINIMUM POSITION IN THE EVENT THE MIXED AIR TEMPERATURE FALLS BELOW THE LOW LIMIT TEMPERATURE SETTING. COMPRESSORS SHALL BE DELAYED FROM OPERATING UNTIL THE ECONOMIZER HAS OPENED TO

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29

REFERENCE DRY BULB:
OUTSIDE AIR (OA) TEMPERATURE SHALL COMPARED WITH A REFERENCE DRY
BULB SETPOINT. THE ECONOMIZER SHALL ENABLE WHEN THE OA
TEMPERATURE IS LESS THAN REFERENCE DRY BULB SETPOINT (ADJ). THE
ECONOMIZER SHALL BE DISABLED WHEN OA TEMPERATURE IS GREATER THAN
REFERENCE DRY BULB SETPOINT + 5°F (ADJ).

THE SUPPLY FAN SHALL BE ENABLED WHILE IN THE OCCUPIED MODE AND CYCLED ON DURING THE UNOCCUPIED MODE. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FAN. IF THE SWITCH DOES NOT OPEN WITHIN 40 SECONDS AFTER A REQUEST FOR FAN OPERATION A FAN FAILURE ALARM SHALL BE ANNUNCIATED AT THE BAS, THE UNIT SHALL STOP, REQUIRING A MANUAL RESET.

SUPPLY DUCT STATIC PRESSURE CONTROL:
THE UNIT CONTROLLER SHALL MODULATE THE SUPPLY FAN OUTPUT AS
REQUIRED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT. IF THE DUCT
STATIC PRESSURE FALLS BELOW THE SUPPLY AIR STATIC SETPOINT +
DEADBAND, THE UNIT CONTROLLER SHALL INCREASE THE OUTPUT TO THE
SUPPLY FAN TO MAINTAIN SETPOINT. IF THE DUCT STATIC PRESSURE RISES
ABOVE THE SUPPLY AIR STATIC SETPOINT + DEADBAND, THE UNIT
CONTROLLER SHALL DECREASE THE OUTPUT TO THE SUPPLY FAN TO
MAINTAIN SETPOINT.

DUCT STATIC OPTIMIZATION, IN COMPLIANCE WITH ASHRAE 90.1, SHALL BE EMPLOYED. THE UNIT DUCT STATIC PRESSURE SETPOINT SHALL RESET IN RESPONSE TO ZONE DAMPER POSITION KEEPING THE CRITICAL ZONE DAMPER AT LEAST 75% OPEN (ADJ) IN EFFORT TO PREVENT DUCT OVERPRESSURIZATION.

IF FOR ANY REASON THE SUPPLY AIR PRESSURE EXCEEDS THE FIXED SUPPLY AIR PRESSURE LIMIT OF 3.5 INCHES OF W.C. THE SUPPLY FAN SHALL SHUT DOWN. THE UNIT SHALL BE ALLOWED TO RESTART THREE TIMES. IF THE OVERPRESSURIZATION CONDITION OCCURS ON THE FOURTH RESTART, THE UNIT SHALL SHUT DOWN AND A MANUAL RESET DIAGNOSTIC IS DISPLAYED AT THE REMOTE PANEL AND/OR THE BAS SYSTEM.

DISCHARGE AIR TEMPERATURE RESET: THE DISCHARGE AIR TEMPERATURE SHALL RESET LINEARLY UPWARDS FROM 55°F (ADJ) TO 60°F (ADJ) FROM AMBIENT TEMPERATURES OF 65°F (ADJ) TO 55°F (ADJ).

DISCHARGE AIR TEMPERATURE TEMPERING (UNIT HEAT) SHALL BE ENABLED AND SET TO 65°F (ADJ) AT AMBIENT TEMPERATURES OF 35°F AND BELOW DURING OCCUPIED PERIODS. DAT TEMPERING SHALL BE OVERRIDDEN BY ANY ZONE DAMPER POSITION OPENING TO 95% FOR MORE THAN 10 MINUTES (ADJ).

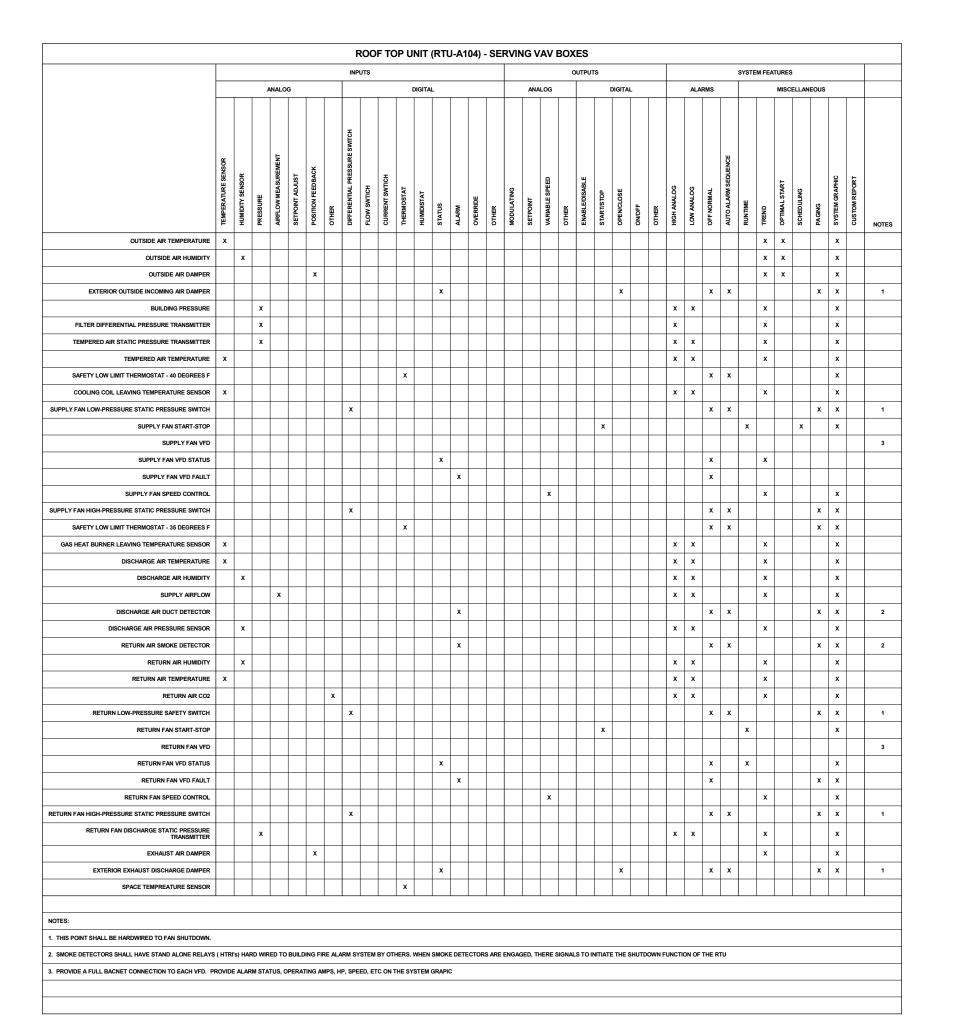
BUILDING PRESSURE CONTROL:
THE POWER EXHAUST SHALL ENABLE WHEN THE ECONOMIZER DAMPER
POSITION IS EQUAL TO OR GREATER THAN THE EXHAUST FAN SETPOINT.

FILTER STATUS:
A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL
PRESSURE ACROSS THE FILTER WHEN THE FAN IS RUNNING. IF THE SWITCH
CLOSES FOR 2 MINUTES AFTER A REQUEST FOR FAN OPERATION A DIRTY
FILTER ALARM SHALL BE ANNUNCIATED AT THE BAS.

DEHUMIDIFICATION: ZONE HUMIDITY SHALL BE MONITORED BY BAS. IF ANY ZONE RH LEVELS INCREASE TO 55% OR GREATER, DAT SHALL BE COMMANDED TO 53°F (ADJ) AND ANY DAT RESET SEQUENCE SHALL BE DISABLED.

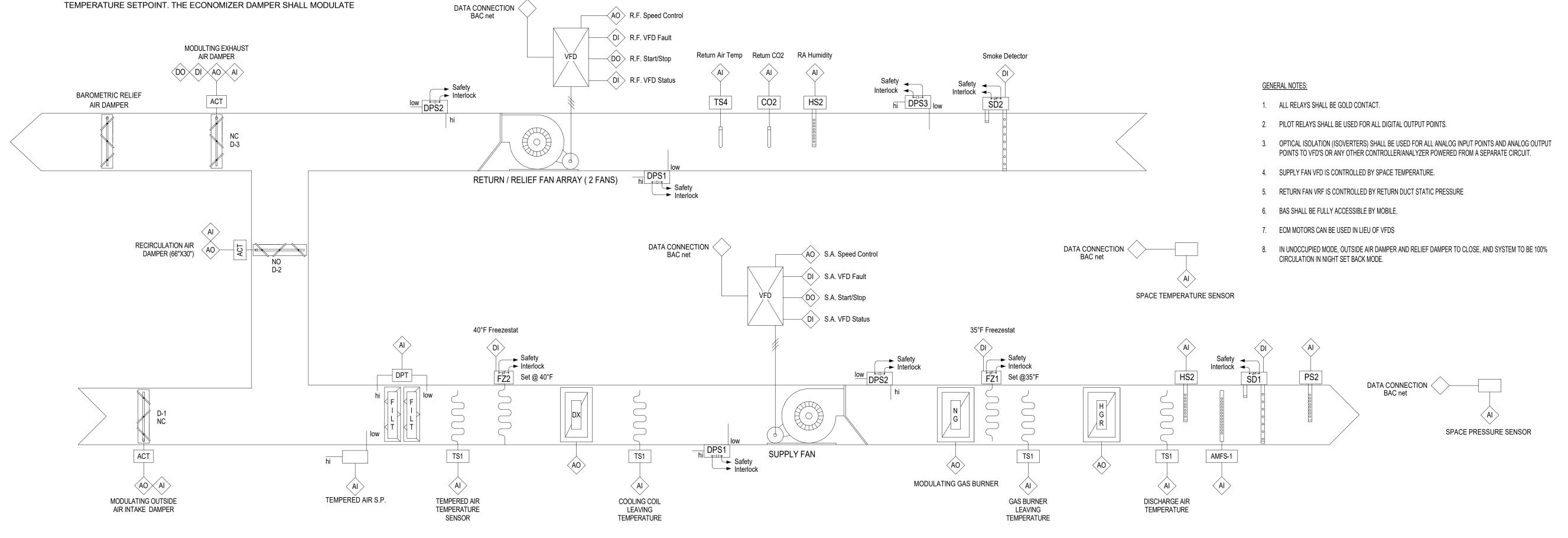
DEMAND CONTROLLED VENTILATION:
IN OCCUPIED MODE, THE OUTSIDE AIR DAMPER SHALL OPEN TO THE MINIMUM
OUTSIDE AIR POSITION. WHEN THE CO2 LEVEL RISES ABOVE THE CO2
SETPOINT OF 800 PPM (ADJ) (BASED ON SPACE CO2 SENSOR), THE OUTSIDE
AIRFLOW SHALL INCREASE UP TO THE MAXIMUM OUTSIDE AIR DAMPER
POSITION UNTIL THE CALL FOR VENTILATION IS SATISFIED, AS PER ASHRAE
62.1.

RETURN/RELIEF FAN VFD CONNECTIONS TYPICAL OF ONE VFD (TO CONTROL TWO RETURN FANS)



ATTENTION:
THESE CONTROL SHEETS SHOW SEQUENCE OF OPERATION THAT FIELD START UP SHALL PROGRAM INTO EQUIPMENT WITH FACTORY CONTROLS.

ALTERNATIVE BID IS FOR CONTROLS CONTRACTOR TO BE HIRED TO TIE INTO DISTRICT JOHNSON CONTROLS METESYS SYSTEM.



LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

NORTH SCOTT COMMUNITY SCHOOL DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265
P: 309.517.5545
F: 309.517.5540

construction MANAGER
Russel Construction

www.legat.com

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

CIVIL ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

P: 563.726.6310
www.rtmec.com

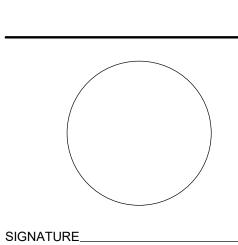
IMEG
623 26th Avenue
Rock Island, IL 61201
P: 309.788.0673
F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



REVISIONS

NO. DESCRIPTION DATE

11.10.2023

PROJECT
DATE OF ISSUE
DRAWN BY
CHECKED BY

MECHANICAL RTU CONTROL DIAGRAM

BUILDING AUTOMATION SYSTEM INTERFACE: THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED AND UNOCCUPIED COMMANDS. THE BAS MAY ALSO SEND A HEAT/COOL MODE, PRIORITY SHUTDOWN COMMANDS, SPACE TEMPERATURE AND/OR SPACE TEMPERATURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE VAV CONTROLLER SHALL OPERATE USING ITS LOCAL SETPOINTS. THE CONTROL POINT SUMMARY FOR VAV UNIT (TYPICAL) BAS SHALL UTILIZE THE INPUT FROM THE LIGHTING OCCUPANCY SENSORS IN ALL ROOMS ASSOCIATED WITH AN INDIVIDUAL VAV TO DETERMINE IF THE VAV IS IN OCCUPIED OR UNOCCUPIED MODE. IF VAV SERVES A ROOM WHICH HAS NO LIGHTING OCCUPANCY SENSOR, OCCUPIED AND UNOCCUPIED MODE FOR THAT ROOM SHALL BE ESTABLISHED VIA A BUILDING SCHEDULE. BAS CONTRACTOR (DELTA) SHALL PROVIDE BACNET CONTROLLER FOR VAV. BAS APPLICATION | SCENARIOS | PRIORITIES THE OCCUPANCY MODE SHALL BE COMMUNICATED OR HARDWIRED TO THE VAV VIA A BINARY INPUT. VALID OCCUPANCY MODES FOR THE VAV SHALL BE: **CONTROL POINTS** NORMAL OPERATING MODE FOR OCCUPIED SPACES OR DAYTIME OPERATION. WHEN THE UNIT IS IN THE OCCUPIED MODE THE VAV SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE OCCUPIED HEATING OR COOLING SETPOINT. APPLICABLE VENTILATION AND AIRFLOW SETPOINTS SHALL BE ENFORCED. THE OCCUPIED MODE SHALL BE THE DEFAULT MODE OF THE VAV. NORMAL OPERATING MODE FOR UNOCCUPIED SPACES OR NIGHTTIME OPERATION. WHEN THE UNIT IS IN UNOCCUPIED MODE THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE UNOCCUPIED HEATING OR COOLING SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS THE ACTIVE UNOCCUPIED SETPOINT THE VAV SHALL MODULATE FULLY CLOSED. MODE USED TO TEMPORARILY PLACE THE UNIT INTO THE OCCUPIED OPERATION. TENANTS SHALL BE ABLE TO OVERRIDE THE UNOCCUPIED MODE FROM THE SPACE SENSOR. THE OVERRIDE SHALL ZONE SPACE TEMPERATURE LAST FOR A MAXIMUM OF 4 HOURS (ADJ). THE TENANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME. DURING THE OVERRIDE THE UNIT SHALL OPERATE IN ZONE SPACE TEMPERATURE SET POINT SUPPLY AIR DISCHARGE TEMPERATURE HEAT/COOL MODE: PRIMARY AIR DAMPER CONTROL X X THE HEAT/COOL MODE SHALL BE SET BY A COMMUNICATED VALUE OR AUTOMATICALLY BY THE VAV. IN STANDALONE OR AUTO MODE THE VAV SHALL COMPARE THE PRIMARY AIR TEMPERATURE VENTILATION AIR FLOW (CFM) WITH THE CONFIGURED AUTO CHANGEOVER SETPOINT TO DETERMINE IF THE AIR IS "HOT" OR "COLD". HEATING MODE IT IMPLIES THE PRIMARY AIR TEMPERATURE IS HOT. COOLING MODE IT IMPLIES | X | X | THE PRIMARY AIR TEMPERATURE IS COLD. THE SPACE TEMPERATURE SETPOINT SHALL BE DETERMINED EITHER BY A LOCAL SETPOINT, THE VAV DEFAULT SETPOINT OR A COMMUNICATED VALUE. THE VAV SHALL USE THE LOCALLY STORED DEFAULT SETPOINTS WHEN NEITHER A LOCAL SETPOINT NOR COMMUNICATED SETPOINT IS PRESENT. IF BOTH A LOCAL SETPOINT AND COMMUNICATED SETPOINT EXIST, THE VAV SHALL USE THE COMMUNICATED VALUE. WHEN THE UNIT IS IN COOLING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE COOLING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE COOLING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM COOLING AIRFLOW SETPOINT. BASED ON THE VAV CONTROLLER OCCUPANCY MODE, THE ACTIVE COOLING SETPOINT SHALL BE ONE OF THE FOLLOWING: SETPOINT DEFAULT VALUE OCCUPIED COOLING SETPOINT UNOCCUPIED COOLING SETPOINT 85.0 DEG. F OCCUPIED STANDBY COOLING SETPOINT 78.0 DEG. F OCCUPIED MIN COOLING AIRFLOW SETPOINT SEE TU SCHEDULE OCCUPIED MAX COOLING AIRFLOW SETPOINT SEE TU SCHEDULE THE VAV SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE COOLING SETPOINT TO DETERMINE THE REQUESTED COOLING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED COOLING CAPACITY. **HEATING MODE:** WHEN THE UNIT IS IN HEATING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE HEATING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM HEATING AIRFLOW SETPOINT. BASED ON THE VAV CONTROLLER OCCUPANCY MODE, THE ACTIVE HEATING SETPOINT SHALL BE ONE OF THE SETPOINT DEFAULT VALUE OCCUPIED HEATING SETPOINT 68.0 DEG. F UNOCCUPIED HEATING SETPOINT 60.0 DEG. F OCCUPIED STANDBY HEATING SETPOINT OCCUPIED MIN HEATING AIRFLOW SETPOINT SEE TU SCHEDULE OCCUPIED MAX HEATING AIRFLOW SETPOINT SEE TU SCHEDULE THE VAV CONTROLLER SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE HEATING SETPOINT TO DETERMINE THE REQUESTED HEATING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED HEATING CAPACITY. REHEAT CONTROL: THE REHEAT SHALL BE ENABLED WHEN THE SPACE TEMPERATURE DROPS BELOW THE ACTIVE HEATING SETPOINT AND THE MINIMUM AIRFLOW REQUIREMENTS ARE MET. DURING REHEAT THE VAV Prim Air Damper SHALL OPERATE AT ITS MINIMUM HEATING AIRFLOW SETPOINT AND ENERGIZE THE HEAT AS FOLLOWS: AI) THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR TEMPERATURE SENSOR SHALL MODULATE THE HOT WATER VALVE SO THAT THE DISCHARGE ON THE SUPPLY AIR THE SUPPLY EQUIPMENT WITH FACTORY CONTROLS. \_SCHEDULE. VENTILATION CONTROL (FIXED): ALTERNATIVE BID IS FOR CONTROLS CONTRACTOR TO BE HIRED TO TIE INTO DISTRICT JOHNSON CONTROLS WHEN THE UNIT IS IN UNOCCUPIED MQDE THE VANTILATION AIRFLOW SETPOINT SHALL BE ZERO. WHEN 附班的的时候 IN OCCUPIED MODE, THE VENTILATION AIRFLOW SETPOINT SHALL EQUAL THE PRIMARY AIR DESIGN OUT BURNELOW (SEE TU SCHEDULE) IF THERE IS A FAULT WITH THE OPERATION OF THE ZONE SENSOR AN ALARM SHALL BE ANNUNCIATED AT THE BAS. SPACE SENSOR FAILURE SHALL CAUSE THE VAV TO DRIVE THE DAMPER TO MINIMUM AIR FLOW IF THE VAV IS IN THE OCCUPIED MODE, OR DRIVE IT CLOSED IF THE VAV IS IN THE UNOCCUPIED MODE. Primary Air VP VAV BOX CONTROL DIAGRAM CONTROL POINT SUMMARY FOR HEATERS (TYPICAL) INFRARED HEATER Sequence of Operations BAS APPLICATION ALARMING SCENARIOS ALARM PRIORITIES A. Provide a space temperature sensor to monitor the temperature of the room through the BAS. ELECTRICAL/TELECOM ROOM MONITORING Sequence of Operations CONTROL POINTS A. Provide a space temperature sensor to monitor the temperature of the room through the BAS. CABINET UNIT HEATER ELECTRIC Sequence of Operations A. General: A unit mounted thermostat will cycle the staged electric heating to maintain an adjustable setpoint. ZONE SPACE TEMPERATURE ZONE SPACE TEMPERATURE SET POINT THESE CONTROL SHEETS SHOW SEQUENCE OF OPERATION THAT FIELD START UP SHALL PROGRAM INTO EQUIPMENT WITH FACTORY CONTROLS. Setpt Adjust < ALTERNATIVE BID IS FOR CONTROLS CONTRACTOR TO BE HIRED TO TIE INTO DISTRICT JOHNSON CONTROLS Space Temp (A) TYPICAL FOR CABINET HEATER

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29

LEGATARCHITECTS

DESIGN | PERFORMANCE | SUSTAINABILIT

NORTH
SCOTT
COMMUNITY
SCHOOL

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265
P: 309.517.5545
F: 309.517.5540

www.legat.com

<u>CONSTRUCTION MANAGER</u>

Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

CIVIL ENGINEER
RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

IMEG

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

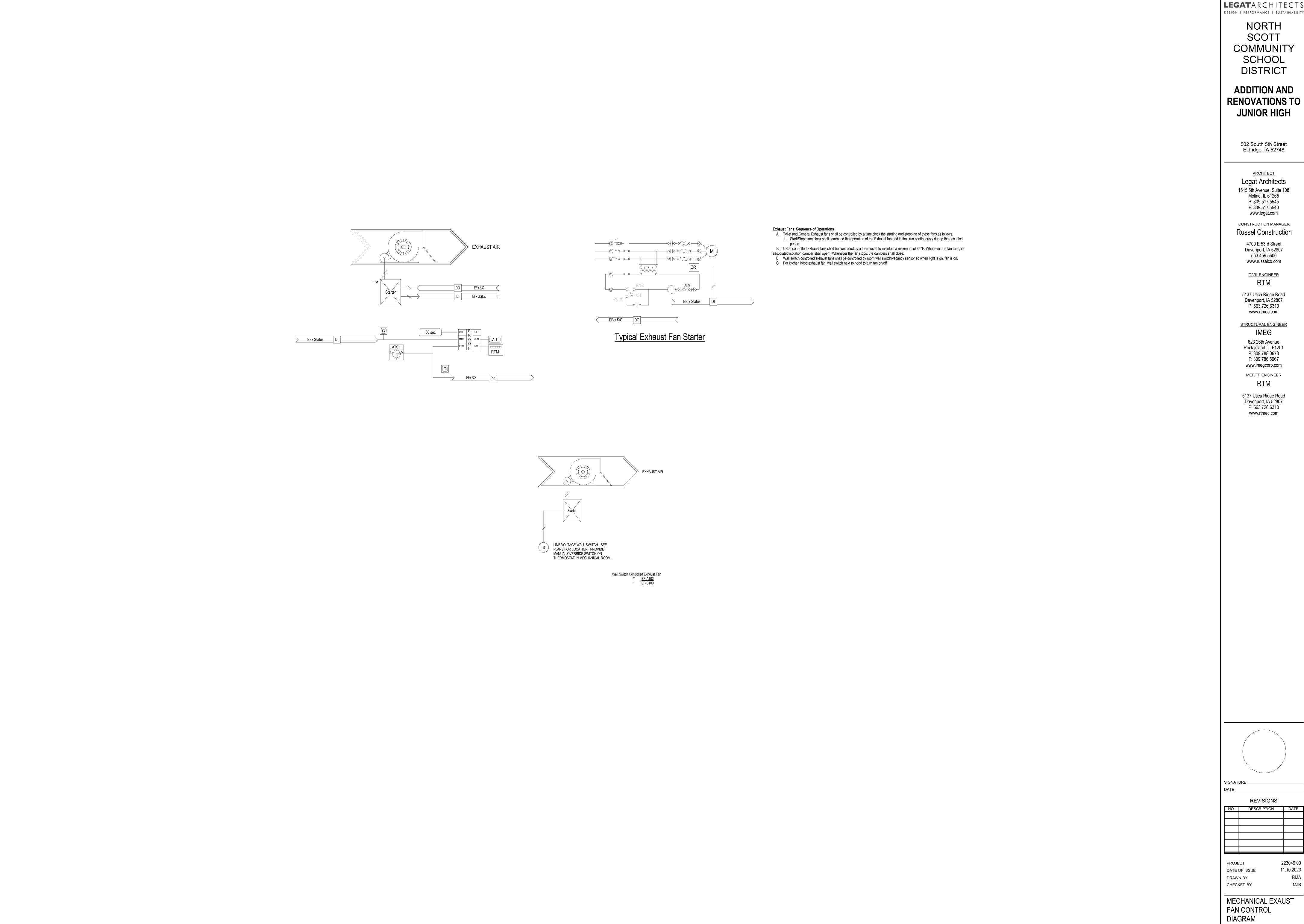
SIGNATURE\_\_\_\_\_\_
DATE\_\_\_\_\_\_
REVISIONS

NO. DESCRIPTION DATE

11.10.2023

PROJECT
DATE OF ISSUE
DRAWN BY
CHECKED BY

MECHANICAL VAV AND ELECTRIC HEATER CONTROL DIAGRAM



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29 |

NORTH SCOTT COMMUNITY SCHOOL

DISTRICT **ADDITION AND** 

> 502 South 5th Street Eldridge, IA 52748

<u>ARCHITECT</u> Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

CONSTRUCTION MANAGER **Russel Construction** 

4700 E 53rd Street Davenport, IA 52807 563.459.5600

CIVIL ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com STRUCTURAL ENGINEER

623 26th Avenue Rock Island, IL 61201

P: 309.788.0673 F: 309.786.5967 www.imegcorp.com MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

REVISIONS

NO. DESCRIPTION DATE

MECHANICAL EXAUST

FAN CONTROL

RTU Single Zone - Gas Heat and DX Cooling Sequence of Operations

A. General: The air handler shall be fully controlled by the BAS. For details on the referenced logic strategies refer to item 3.2 Air Handling Units General: Logic Strategies. Air handler control logic strategies shall include Air handler control logic strategies shall include:

night purge
 sequenced heating and cooling

1. scheduled occupancy with optimum preoccupancy

B. Space Temperature Setpoints: Three setpoints shall apply. Normal (72°F adj.)), setback heating (65°F (adj.)), and setback cooling (85°F). These three values shall be the only values changed by the operator to adjust space temperatures. All other deadbands, differentials, etc. shall be calculated in the program logic (unless another means is provided to prohibit overlap of the heating and cooling loops and ensure a dead band such as function block templates that restrict the setpoint input). During the normal periods, separate heating and cooling setpoints shall be calculated.

1. Normal space cooling setpoint: shall be the normal space temperature plus 2°F (adj.)

Normal space heating setpoint: shall be the normal space temperature minus 2°F (adj.)
 The space temperature setpoints above shall be the only values changed by the operator to adjust space temperatures. All other deadbands, differentials, etc. shall be calculated in the program logic (unless another means is provided to prohibit overlap of the heating and cooling loops and ensure a dead band such as function block templates that restrict the setpoint input).

C. Discharge Air Setpoint: The discharge air setpoint will be reset by space temperature on a ratchet loop that increases and decreases the setpoint based upon variance from

1. Heating: The discharge air temperature will be reset from 68°F (adj.) to a fixed maximum of 95°F (adj.) based upon the variance of space temperature from setpoint.

2. Cooling: The discharge air temperature will be reset from 68°F (adj.) to a fixed minimum of 55°F (adj.) based upon the variance of space temperature from setpoint.

3. The BAS shall shut down the RTU through software and require a manual reset if the discharge air temperature falls below 40°F (adj.) for more than 1 minute.

D. Supply/ Return Fan Enable: BAS shall control the fans as follows:

1. Start/Stop: BAS shall command the operation of the fan and it shall run continuously in occupied and night purge modes.] Unit shall cycle on as needed during the night setback mode.

2. Proof: BAS shall prove fan operation and use the status indication to accumulate runtime. Upon failure of either fan, the BAS shall enunciate an alarm as specified above.

E. Economizer Dampers: BAS shall control the dampers as follows:

1. Closed: When AH is deenergized, dampers shall remain in their "off" positions. When the unit is energized during the unoccupied period, the minimum damper position/ flow rate shall be 0% / 0cfm.

Minimum Damper Position (constant): During the occupied period, applicable RA and OA dampers shall never be positioned less than the position set for the required minimum OA ventilation rate. This minimum position shall be determined by the Test & Balance Contractor. The BAS contractor shall coordinate with the T&B contractor and input the minimum position into the applicable controller logic.
 Airside Economizer: BAS shall modulate the mixing dampers to provide "free cooling" when conditions merit. The free cooling shall generally be staged before any mechanical cooling. While conditions merit, dampers shall be modulated in a PID loop to maintain the mixed air temperature at its setpoint. The mixed air temperature setpoint shall be equal to the discharge air temperature setpoint - 2°F. Economizer logic shall remain enabled during night purge where applicable. Economizer mode shall be inactive while the unit is energized AND outside air temperature falls below the switching setpoint of 70°F (adj.) (with 5F cycle differential). Economizer mode shall be inactive when outside air temperature

1. The staging of the gas heater will be controlled locally by an integral control loop supplied with the RTU. The BAS will have the ability to reset the discharge air setpoint.

Or, the gas heater will be controlled via a PID loop to maintain the discharge temperature at the heating discharge temperature setpoint. The heating discharge temperature setpoint equal the discharge air temperature setpoint -2°F.

G. DX Cooling:

1. The staging of the DX cooling system will be controlled locally by a integral control loop supplied with the RTU.

2. Or the DX costom will be controlled via a RID loop to maintain the discharge air temperature at the discharge temperature settering.

rises above switching setpoint, dampers shall return to their scheduled minimum positions as specified above.

Or, the DX system will be controlled via a PID loop to maintain the discharge air temperature at the discharge temperature setpoint.
 H. Diagnostics: BAS execute the following diagnostic strategies as detailed in item 3.2 Air Handling Units General: Diagnostics. Diagnostic Logic strategies shall include:

 Run Time Limit

 DP Transmitter Filter Monitoring

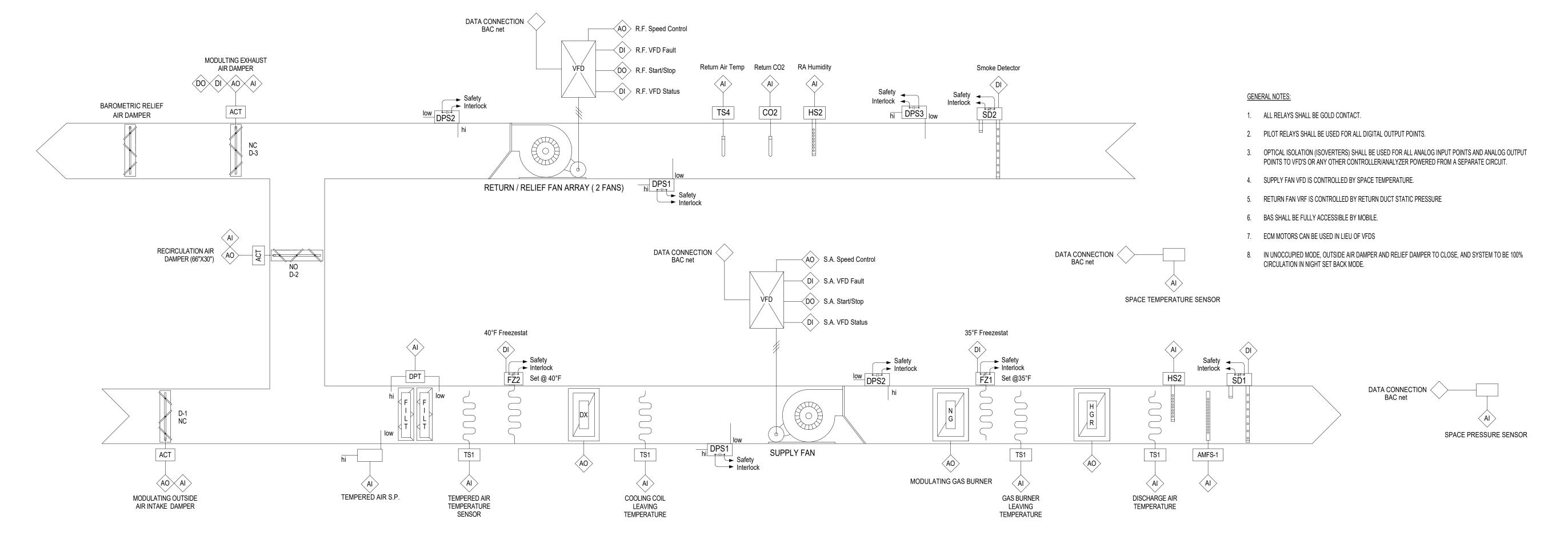
DI Transmitter Filter Worldoning

ATTENTION:
THESE CONTROL SHEETS SHOW SEQUENCE OF OPERATION THAT FIELD START UP SHALL PROGRAM INTO EQUIPMENT WITH FACTORY CONTROLS.

ALTERNATIVE BID IS FOR CONTROLS CONTRACTOR TO BE HIRED TO TIE INTO DISTRICT JOHNSON CONTROLS

l		ANI	LOG			NPUT	5		DIGITAL				Α.	NALOG		PUTS	DIGIT	·A1			ALARM		SYSTE	M FEAT		LANEOU	•	
l		ANA	LOG						DIGITAL				A	NALOG			DIGIT	AL			ALARIVI	<b>5</b>		IVII	SCEL	LANEOU	s 	
	TEMPERATURE SENSOR HUMIDITY SENSOR	PRESSURE A DEL OM MEASI DEMENT	SETPOINT ADJUST	POSITION FEEDBACK	OTHER DIFFERENTIAL PRESSURE SWITCH	FLOW SWTICH	CURRENT SWTICH	THERMOSTAT	HUMIDISTAT	STATUS AI ARM	OVERRIDE	ОТНЕК	MODULATING	VARIABLE SPEED	OTHER ENABLE FINISABLE	START/STOP	OPEN/CLOSE	ON/OFF	отнек	HIGH ANALOG	LOW ANALOG OFF NORMAL	AUTO ALARM SEQUENCE		TREND	OPIIMAL STAKI	SCHEDULING	SYSTEM GRAPHIC CUSTOM REPORT	NOT
OUTSIDE AIR TEMPERATURE	х																							х	х		х	
OUTSIDE AIR HUMIDITY	Х																							х	х		Х	
OUTSIDE AIR DAMPER				Х																				х	х		х	
EXTERIOR OUTSIDE INCOMING AIR DAMPER										X							х				>	×	(			Х	х	1
BUILDING PRESSURE		X																			х			х			х	
FILTER DIFFERENTIAL PRESSURE TRANSMITTER		X								_										X		-		X	_		X	
TEMPERED AIR STATIC PRESSURE TRANSMITTER		X								_											X			X			X	
TEMPERED AIR TEMPERATURE	X							1		$\perp$										Х	X		_	X	_		X	
SAFETY LOW LIMIT THERMOSTAT - 40 DEGREES F		++						X		_											, ,	<b>X</b>	•				X	
COOLING COIL LEAVING TEMPERATURE SENSOR	X	+			╽ .	v				+										X	X	, ,	,	X	$\perp$	v	X	
SUPPLY FAN LOW-PRESSURE STATIC PRESSURE SWITCH SUPPLY FAN START-STOP		+			+ + '	X				+						<u> </u>	X				>	<b>X</b>	X		_	X X	x	1
SUPPLY FAN START-STOP		++					-			+		++				+	^			+		+	<b></b>		+	^	^	3
SUPPLY FAN VFD SUPPLY FAN VFD STATUS										X											)			х	-			3
SUPPLY FAN VFD FAULT											X										)	_						
SUPPLY FAN SPEED CONTROL				+										х										х			X	
SUPPLY FAN HIGH-PRESSURE STATIC PRESSURE SWITCH					,	x															<b>)</b>	: x	(			х	х	
SAFETY LOW LIMIT THERMOSTAT - 35 DEGREES F								х													>	_				Х	х	
GAS HEAT BURNER LEAVING TEMPERATURE SENSOR	х																			х	х			х			х	
DISCHARGE AIR TEMPERATURE	х																			Х	х			х			х	
DISCHARGE AIR HUMIDITY	х																			Х	х			х			х	
SUPPLY AIRFLOW			(																	Х	х			х			х	
DISCHARGE AIR DUCT DETECTOR											х										>	X	(			х	Х	2
RETURN AIR SMOKE DETECTOR											х										>	X	(			Х	Х	2
RETURN AIR HUMIDITY	X																				Х			Х			X	
RETURN AIR TEMPERATURE										$\perp$											X	_		X			X	
RETURN AIR CO2		+			X					_										X	X			Х			X	
DETUDNI ON DESCRIPT OF THE COMME										$\perp$									+	_	-		,		_		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
RETURN LOW-PRESSURE SAFETY SWITCH RETURN FAN START-STOP					<del>                                     </del>	X				+		++				+,	X		+	-	<b></b>	<b>X</b>	X		+	X	X	1
RETURN FAN START-STOP		+ +								+							^						^		+		X	3
RETURN FAN VFD RETURN FAN VFD STATUS										X		+						-			)	+	X		+		X	3
RETURN FAN VFD STATUS											x										)		+^		_	Х	X	
RETURN FAN SPEED CONTROL		++								+				Х							+			х	-		X	
RETURN FAN HIGH-PRESSURE STATIC PRESSURE SWITCH					;	x				+				+							<b>)</b>	: ×	(		+	х	X	1
RETURN FAN DISCHARGE STATIC PRESSURE TRANSMITTER		х								+										х	х			х			х	
EXHAUST AIR DAMPER				х						$\top$														х			х	
EXTERIOR EXHAUST DISCHARGE DAMPER										х							Х				>	: ×	(			Х	х	1
SPACE TEMPREATURE SENSOR								х																				
																							1 THIC	POINT	SHALL	I RE HAG	SUMIBED	O FAN SHU

RETURN/RELIEF FAN VFD CONNECTIONS TYPICAL OF ONE VFD (TO CONTROL TWO RETURN FANS)



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29 |

LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH
SCOTT

SCOTT COMMUNITY SCHOOL DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265
P: 309.517.5545
F: 309.517.5540

construction MANAGER
Russel Construction

www.legat.com

4700 E 53rd Street
Davenport, IA 52807
563.459.5600

CIVIL ENGINEER

RTM

www.russelco.com

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

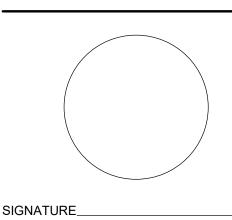
IMEG

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



REVISIONS

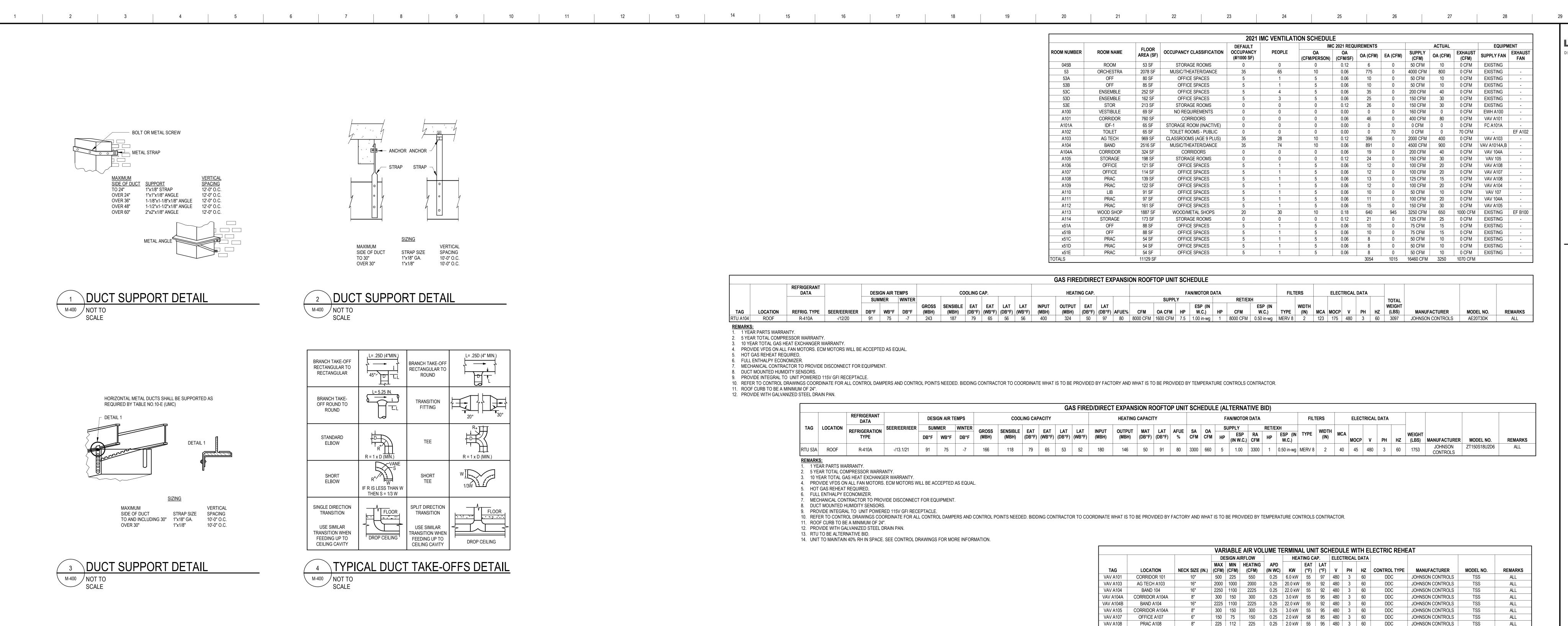
NO. DESCRIPTION DATE

PROJECT DATE OF ISSUE

DATE OF ISSUE DRAWN BY CHECKED BY

ALTERNATIVE BID RTU CONTROL DIAGRAM

11.10.2023



EYE SCREW

**→** #12 WIRE

TYPICAL DIFFUSER AND GRILLE CONNECTIONS

NOTE:
NORMALLY USED WHEN FULL RADIUS ELBOW

IN FLEX DUCT CAN BE ACHIEVED.

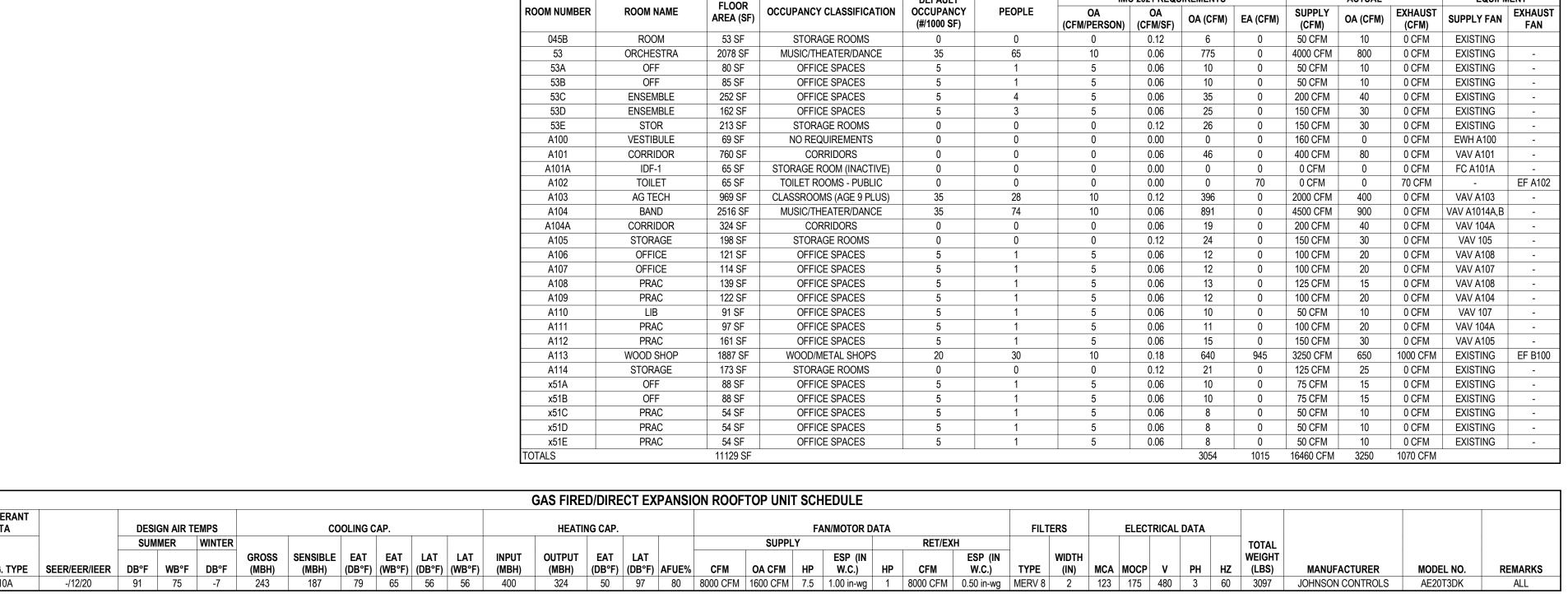
DIFFUSER DETAIL - OPTION #1

FLEXIBLE DUCT, SEE

PLANS FOR SIZE

PLENUM SIZE TO

MATCH NECK SIZE



OCCUPANCY CLASSIFICATION OCCUPANCY

														GAS FIRE	D/DIRE	CT EXPANS	SION RO	OFTOP UN	IIT SCI	HEDULE													
		REFRIGERANT DATA		DES	IGN AIR	TEMPS		(	COOLING	G CAP.	,				NG CAP.					AN/MOTOR D	DATA			FIL	TERS	ELE	ECTRIC	AL DATA	,				
				SUN	MMER	WINTER												SUP	PLY			RET/EX	KH							TOTAL			
							GROSS		_			LAT	INPUT	OUTPUT	EAT					ESP (IN			ESP (IN		WIDTH					WEIGHT			
TAG	LOCATION	REFRIG. TYPE	SEER/EER/IEER	DB°F	WB°F	DB°F	(MBH)	(MBH)	(DB°l	F) (WB°F	(DB°F	) (WB°F)	(MBH)	(MBH)	(DB°F)	(DB°F) AFUE	% CFM	OA CFN	l HP	W.C.)	HP	CFM	W.C.)	TYPE	(IN)	MCA MOC	CP V	PH	HZ	(LBS)	MANUFACTURER	MODEL NO.	REMARKS
RTU A104	ROOF	R-410A	-/12/20	91	75	-7	243	187	79	65	56	56	400	324	50	97 80	8000 CF	M 1600 CFI	Л 7.5	1.00 in-wg	1	8000 CFM	0.50 in-wg	MERV 8	3 2	123 175	5 48	0 3	60	3097	JOHNSON CONTROLS	AE20T3DK	ALL
<ol> <li>5 YEA</li> <li>10 YE</li> <li>PROV</li> <li>HOT 0</li> <li>FULL</li> <li>MECH</li> </ol>	R TOTAL GAS H DE VFDS ON ALL AS REHEAT REQ NTHALPY ECON	ESSOR WARRANTY. EAT EXCHANGER W _ FAN MOTORS. ECN QUIRED, IOMIZER. CTOR TO PROVIDE	/ARRANTY. // MOTORS WILL BE			QUAL.																											

											GAS	S FIRED	/DIRECT	EXPAN	SION RO	OOFTC	P UNI	T SCH	EDULE	(ALTERN	ATIVE E	BID)											
		REFRIGERANT DATA		DES	SIGN AIR T	EMPS		COOL	ING CAP	ACITY				HEATING	S CAPACIT	TY				FAN/MOT	OR DATA			FILT	ERS	ELEC	CTRICAL	DATA					
TAG	LOCATION	REFRIGERATION	SEER/EER/IEER		MMER	WINTER	GROSS	SENSIBLE	EAT	EAT			INPUT	OUTPUT		LAT	AFUE	SA	OA -	SUPPLY ESP	P RA	RET/EX	KH ESP (IN	TYPE	WIDTH	MCA				WEIGHT			
		TYPE		DB°F	WB°F	DB°F	(MBH)	(MBH)	(DR <sub>2</sub> E)	(MR.L)	(DB°F)	(WB F)	(MBH)	(MBH)	(DB°F)	(DB <sub>2</sub> F)	<b>%</b>	CFM	CFM	HP (IN W.C		HP	W.C.)		(IN)	MOCF	V (	PH	HZ		MANUFACTURER	MODEL NO.	REMARKS
RTU 53A	ROOF	R-410A	-/13.1/21	91	75	-7	166	118	79	65	53	52	180	146	50	91	80	3300	660	5 1.00	3300	1	0.50 in-wg	MERV 8	2	40 45	480	3	60	1753	JOHNSON CONTROLS	ZT150S18U2D6	ALL

## REMARKS: 1. 1 YEAR PARTS WARRANTY. 5 YEAR TOTAL COMPRESSOR WARRANTY.

9. PROVIDE INTEGRAL TO UNIT POWERED 115V GFI RECEPTACLE.

11. ROOF CURB TO BE A MINIMUM OF 24". 12. PROVIDE WITH GALVANIZED STEEL DRAIN PAN.

- 10 YEAR TOTAL GAS HEAT EXCHANGER WARRANTY. 4. PROVIDE VFDS ON ALL FAN MOTORS. ECM MOTORS WILL BE ACCEPTED AS EQUAL.
- 5. HOT GAS REHEAT REQUIRED, 6. FULL ENTHALPY ECONOMIZER.
- MECHANICAL CONTRACTOR TO PROVIDE DISCONNECT FOR EQUIPMENT. 8. DUCT MOUNTED HUMIDITY SENSORS.
- 9. PROVIDE INTEGRAL TO UNIT POWERED 115V GFI RECEPTACLE.
- 10. REFER TO CONTROL DRAWINGS COORDINATE FOR ALL CONTROL DAMPERS AND CONTROL POINTS NEEDED. BIDDING CONTRACTOR TO COORDINATE WHAT IS TO BE PROVIDED BY FACTORY AND WHAT IS TO BE PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR. 11. ROOF CURB TO BE A MINIMUM OF 24".

10. REFER TO CONTROL DRAWINGS COORDINATE FOR ALL CONTROL DAMPERS AND CONTROL POINTS NEEDED. BIDDING CONTRACTOR TO COORDINATE WHAT IS TO BE PROVIDED BY FACTORY AND WHAT IS TO BE PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR.

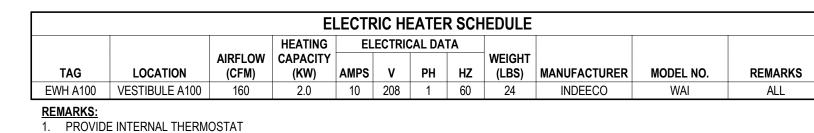
- 12. PROVIDE WITH GALVANIZED STEEL DRAIN PAN.
- 13. RTU TO BE ALTERNATIVE BID. 14. UNIT TO MAINTAIN 40% RH IN SPACE. SEE CONTROL DRAWINGS FOR MORE INFORMATION.

			DE	SIGN A	IRFLOW		HEA	TING CA	NP.	ELEC	TRICAL	DATA				
		N=0/4 0/3= (N)	MAX	MIN	HEATING	APD		EAT	LAT	.,						DE114 D1/4
TAG	LOCATION	NECK SIZE (IN.)	(CFM)	(CFM)	(CFM)	(IN WC)	KW	(°F)	(°F)	٧	PH	HZ	CONTROL TYPE	MANUFACTURER	MODEL NO.	REMARKS
VAV A101	CORRIDOR 101	10"	500	225	550	0.25	6.0 kW	55	97	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A103	AG TECH A103	16"	2000	1000	2000	0.25	20.0 kW	55	92	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A104	BAND 104	16"	2250	1100	2225	0.25	22.0 kW	55	92	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A104A	CORRIDOR A104A	8"	300	150	300	0.25	3.0 kW	55	95	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A104B	BAND A104	16"	2225	1100	2225	0.25	22.0 kW	55	92	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A105	CORRIDOR A104A	8"	300	150	300	0.25	3.0 kW	55	95	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A107	OFFICE A107	6"	150	75	150	0.25	2.0 kW	58	85	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL
VAV A108	PRAC A108	8"	225	112	225	0.25	2.0 kW	55	95	480	3	60	DDC	JOHNSON CONTROLS	TSS	ALL

2021 IMC VENTILATION SCHEDULE

1. ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECTS FOR EQUIPMENT. 2. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.

3. VAV BOXES TO BE TIED INTO BUILDING BAS. 4. PROVIDE 1 YEAR WARRANTY OF PARTS AND LABOR POST SUBSTANTIAL COMPLETION. 5. COORDINATE WHICH SIDE CONTROL BOXES IS ON.



2. COLOR TO BE DETERMINED AND APPROVED BY AOR. 3. CABINET HEATER TO BE WALL RECESSED MOUNTED

			IN	ILET SIZE (I	N)			
TAG	AIR STREAM	MOUNTING TYPE	DIA.	HEIGHT	WIDTH	MANUFACTURER	MODEL NO.	REMARKS
Α	SUPPLY	CEILING	6"			TITUS	OMNI	1-5
В	SUPPLY	CEILING	8"			TITUS	OMNI	1-5
Ε	RETURN	DUCT		18"	36"	TITUS	350RL	2,4-6
F	SUPPLY	DUCT		6"	24"	TITUS	301FL	1-5
G	SUPPLY	CEILING	10"			TITUS	OMNI	1-5
Н	RETURN	CEILING	6"			TITUS	PAR	2.4-6
J	RETURN	CEILING	8"			TITUS	PAR	2,4-6
K	RETURN	CEILING	16"			TITUS	PAR	2,4-6
L	RETURN	WALL		6"	6"	TITUS	350RL	2,4,5
М	RETURN	WALL		18"	30"	TITUS	350RL	2,4-6
N	RETURN	WALL		34"	42"	TITUS	350RL	2,4,5
0	RETURN	WALL		24"	48"	TITUS	350RL	2,4,5
Р	EXHAUST	DUCT		6"	24"	TITUS	350RL	2,4-6

REMARKS:

1. 4 WAY THROW UNLESS OTHERWISE NOTED. 2. PROVIDE ADAPTOR BOOTS AS REQUIRED. 3. PROVIDE WITH MANUAL VOLUME BALANCE DAMPER. 4. COORDINATE FRAME STYLE WITH ARCHITECTURAL PLANS.

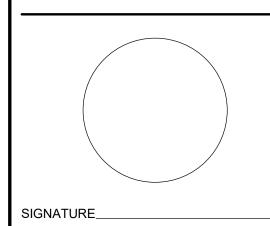
5. REFER TO PLAN FOR FACE AND DUCT SIZING. 6. RETURN GRILLE TO HAVE LINED ELBOW BOOT FOR PLENUM RETURN AND SOUND ATTENTUATION.

WEIGI	***		ı
7 /1 00			
L (LDS	S)   MANUFACTURER	MODEL NO.	REMARKS
) 12	GREENHECK	SP-A50-90VG	1-3
) 29	GREENHECK	G-095-VG	2-4
_			

2. ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECTS TO EQUIPMENT. MECHANICAL CONTRACTOR TO PROVIDE WITH MOTOR STARTER AND BACKDRAFT DAMPER AT CONNECTION TO RISER. 4. EXHAUST FAN TO BE TIED INTO BAS AND TO RUN DURING OCCUPIED HOURS.

		W	EATHE	R CAP SCHEDU	JLE	
TAG	TYPE	CFM	WEIGHT (LBS)	MANUFACTURER	MODEL NO.	REMARKS
CAP-102	EXHAUST CAP	70	9	GREENHECK	GRSR-8	ALL

REMARKS:
1. FLASH CAP WITH 18" CURB ON ROOF.



**LEGAT**ARCHITECT

DESIGN | PERFORMANCE | SUSTAINABILIT

NORTH

SCOTT

COMMUNITY

SCHOOL

DISTRICT

**ADDITION AND** 

**RENOVATIONS TO** 

**JUNIOR HIGH** 

502 South 5th Street

Eldridge, IA 52748

<u>ARCHITECT</u> Legat Architects

1515 5th Avenue, Suite 108 Moline, IL 61265

> P: 309.517.5545 F: 309.517.5540

> > www.legat.com

CONSTRUCTION MANAGER **Russel Construction** 

> 4700 E 53rd Street Davenport, IA 52807

> > 563.459.5600

www.russelco.com

**CIVIL ENGINEER** 

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue

Rock Island, IL 61201

P: 309.788.0673

F: 309.786.5967

www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

EQUIPMENT

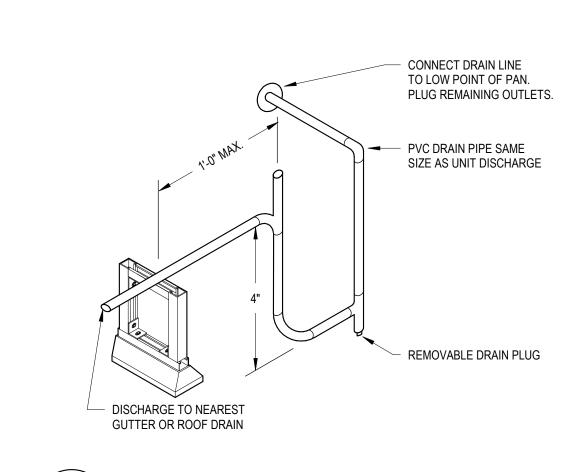
SIGNAT	URE	
DATE_		
	REVISIONS	
NO.	DESCRIPTION	DATE

223049.00

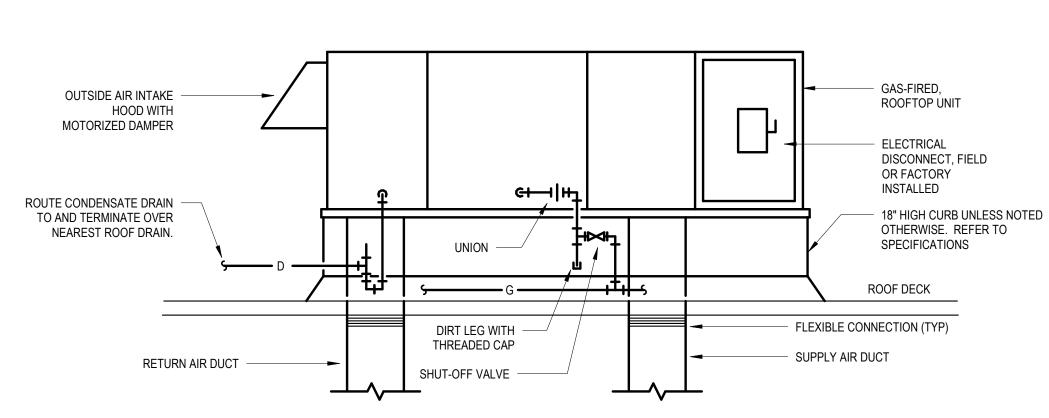
11.10.2023

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

MECHANICAL SCHEDULES AND **DETAILS** 



CONDENSATE DRAIN FROM RTU



ROOFTOP UNIT DETAIL

M-400 NTS

SPIN-IN COLLAR WITH INTEGRAL

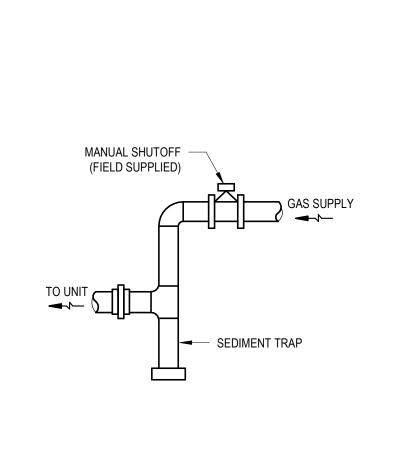
VOLUME DAMPER, EXTEND DAMPER

OPERATOR THRU

FASTEN FLEX LINER TO COLLAR WITH DRAW BAND.

SEAL OUTER JACKET & INSULATION TIGHT TO

DUCT OR DIFFUSER.



1" x 22 GAUGE BAND

MINIMUM RADIUS EQUAL

TO ONE DUCT DIAMETER

CONNECT FLEXIBLE DUCT TO COLLAR WITH 22 GAUGE CLAMP AND FOUR

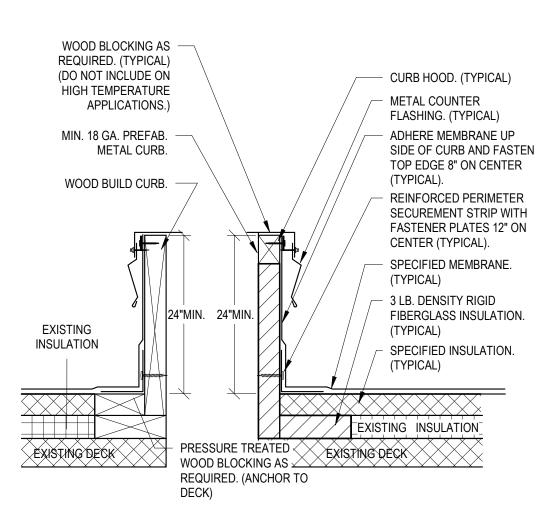
SHEET METAL SCREWS OR PROVIDE

A POSITIVE LOCKING STRAP. SEAL

A. 4.

WITH DUCT TAPE.

FLEXIBLE DUCT





CONNECT FLEXIBLE DUCT TO

COLLAR WITH 22 GAUGE CLAMP

STRAP. SEAL WITH DUCT TAPE

WITH EXTERIOR INSULATION

SHEET METAL PLENUM

─ CEILING DIFFUSER

NOTE:
USED WHEN NORMAL RADIUS ELBOW CAN'T BE

ATTACHED AS SHOWN IN OPTION #1.

DIFFUSER DETAIL - OPTION #2

AND FOUR SHEET METAL SCREWS

OR PROVIDE A POSITIVE LOCKING

SUPPORT FLEX OVER

5'-0" IN LENGTH AT

SHEET METAL BAND.

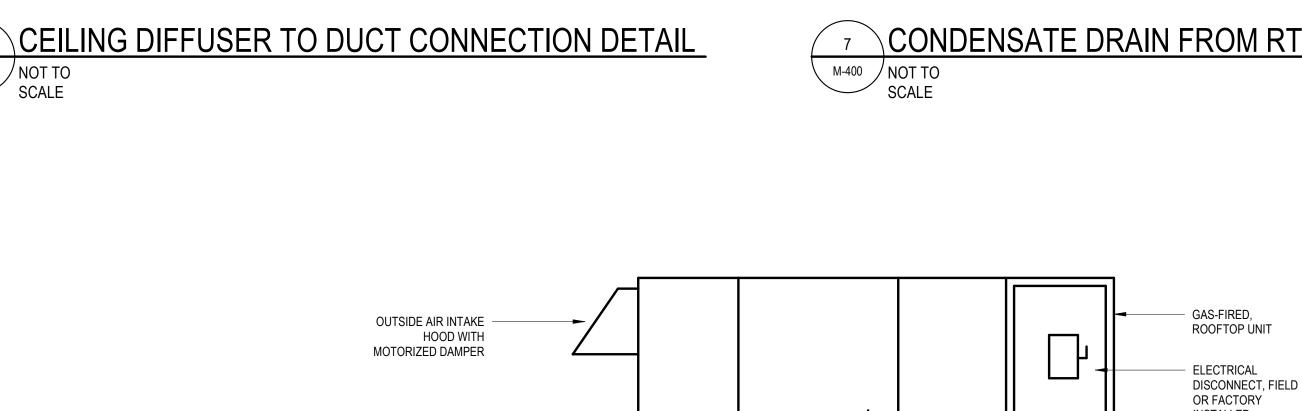
WITH 12 SWG WIRE.

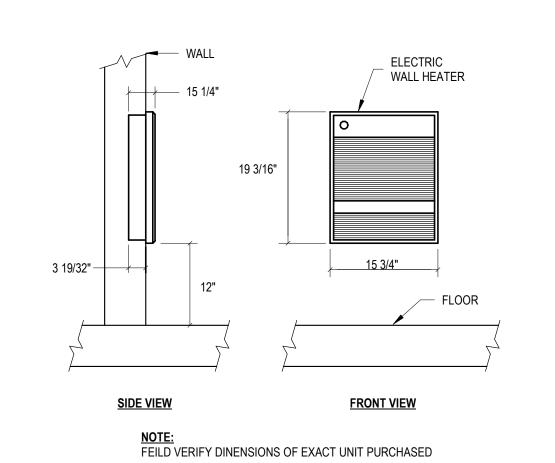
MIDPOINT WITH 3" WIDE

HANG FROM STRUCTURE

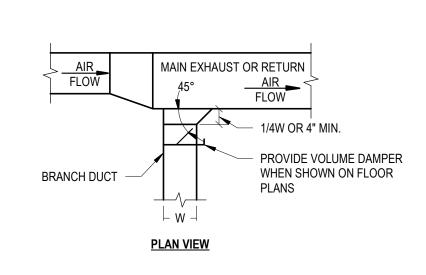
ACOUSTIC TILE -



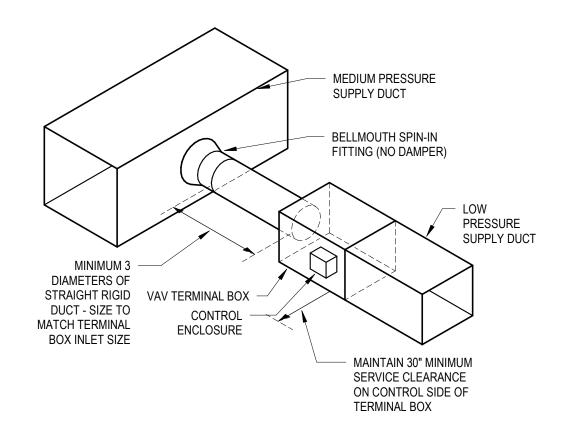






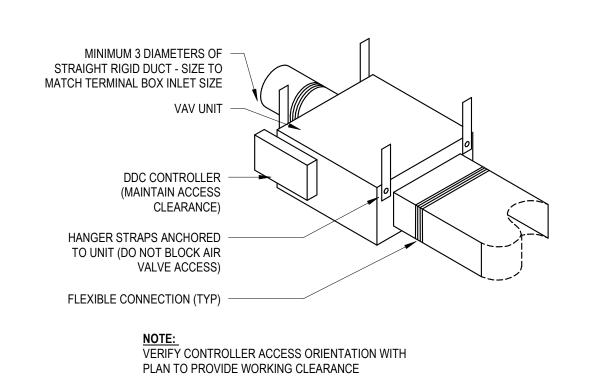


2 EXHAUST OR RETURN BRANCH DUCTOWRK DETAIL M-500 SCALE: N.T.S.

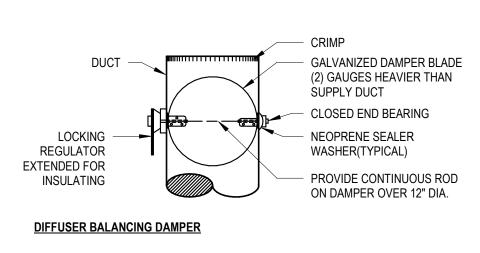


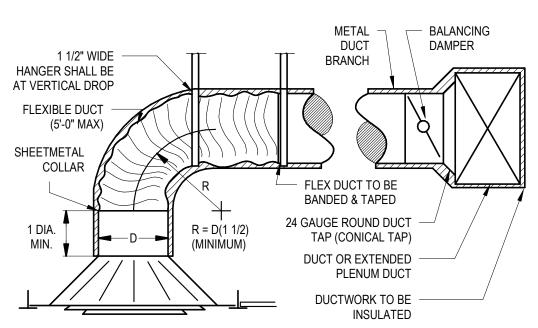
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29

3 VAV TERMINAL BOX INSTALLATION M-500 SCALE: N.T.S.



✓ ⁴ VAV UNIT DETAIL M-500 SCALE: N.T.S.

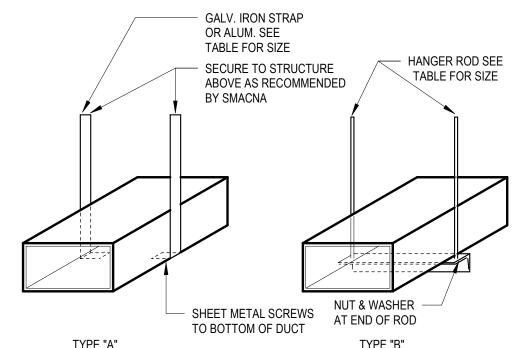




NO	TES:
1.	CEILING DIFFUSER SHALL BE SQUARE FACE, ROUND NECK & SIMILAR TO;
	TITUS TMS, CARNES SFTA, OR KRUEGAR 1400.
2.	DIFFUSER FRAME WITH EXTENDED PANELS NOT ACCEPTED.
3.	PROVIDE LAY-IN TYPE DIFFUSER FRAMES FOR INVERTED T-BAR CEILING.
4.	PROVIDE SURFACE MOUNTING FLANGE FOR GYP BOARD CEILING AND
	OTHER SPECIAL CEILING.
5.	FLEX DUCT SHALL BE BANDED AND TAPED. PROVIDE BEAD ON METAL
	COLLAR IF DUCT SIZES EXCEEDS 12" DIAMETER.
6.	LOW PRESSURE DUCTWORK ONLY.
7.	OMIT VOLUME DAMPER ABOVE GYPSUM BOARD CEILING AND USE DAMPER
	BEHIND CEILING DIFFUSER FOR BALANCE.
8.	THE HANGERS SUPPORTING FLEX DUCT SHALL BE NOT LESS THAN 1-1/2"
	WIDE IN DIRECT CONTACT WITH DUCT.

MINIMUM CONICAL TAP METAL GAUGE				
8 AND BELOW	GAUGE - GALV. STOCK	DAMPER GAUGE		
TAP DIA. (IN.)	24	22		
9 - 14	24	22		
15 - 16	22	20		
27 - 36	20	18		
37 - 50	18	16		

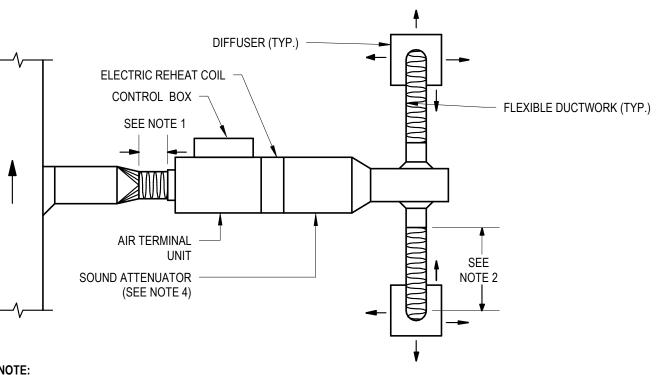




	IIFL A				IIFE B
		DUCT	HANGER SCHI	EDULE	
DUCT SIZE (INCH)	TYPE OF HANGER	HANGER SPACING (FT)	STRAP SIZE	ROD SIZE (INCH)	ANGLE FOR BRACING
UP TO 12 13 TO 18 19 TO 30 31 TO 42 43 TO 54 55 TO 60 61 TO 84 85 TO 96 OVER 96	A A/B B B B B B	8'-0" 8'-0" 8'-0" 8'-0" 8'-0" 8'-0" 8'-0"	1"x16GA 1"x16GA 1"x16GA N.A. N.A. N.A. N.A. N.A.	N.A. N.A. 1/4" 1/4" 1/4" 1/4" 1/4" 3/8"	N.A. N.A. 1-1/2"x1-1/2"x1/8" 1-1/2"x1-1/2"x1/8" 1-1/2"x1-1/2"x1/8" 1-1/2"x1-1/2"x1/8" 1-1/2"x1-1/2"x3/16" 1-1/2"x1-1/2"x3/16" 2"x2"x1/4"

1. FOR SEVERAL DUCTS ON ONE HANGER, TYPE "B" MAY BE USED. SIZE OF HANGER WILL BE SELECTED ON THE SUM OF DUCT WIDTHS EQUAL TO MAX WIDTH OF DUCT SCHEDULE. 2. ON TYPE "A" HANGER, PROVIDE 3 HANGERS AT EACH TAKE-OFF OR BRANCH.





. FLEXIBLE DUCT CONNECTION OF 3'-0" [914mm] MAXIMUM LENGTH SHALL BE PROVIDED FOR AIR TERMINAL UNIT INLET DUCT CONNECTION. 2. FLEXIBLE DUCT CONNECTION (WHEN USED) FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER SHALL NOT EXCEED 5'-0" [1524 mm]. 3. BENDS SHALL BE MADE WITH NOT LESS THAN ONE DUCT DIAMETER CENTER LINE RADIUS. 4. USE SOUND ATTENUATOR ONLY IF REQUIRED TO MEET DESIGN ROOM NC LEVEL. 5. COORDINATE WHICH SIDE CONTROL BOX IS ON.

- SEE PLAN VIEW FOR DUCT SIZE

VERTICAL CEILING
 EXHAUSTER

SEE PLAN VIEW FOR DUCT SIZE

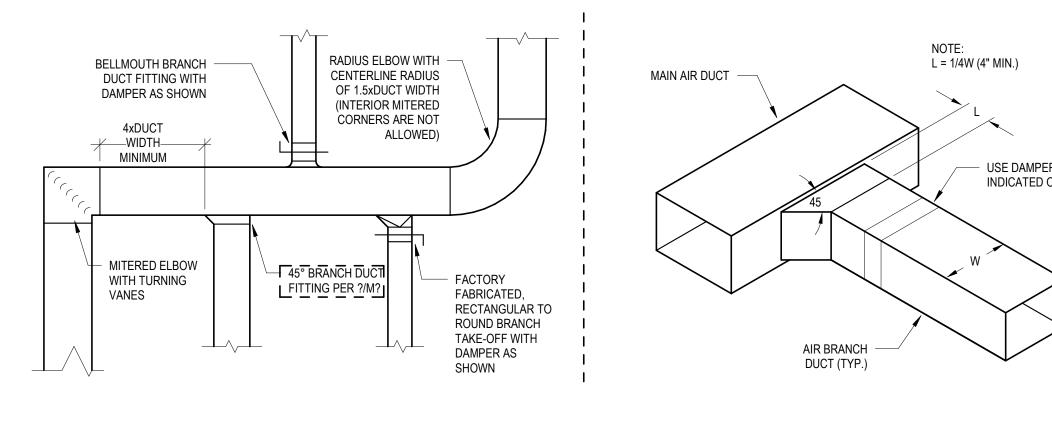
SEE DETAIL FOR WALL AND ROOF CAPS.

HORIZONTAL CEILING

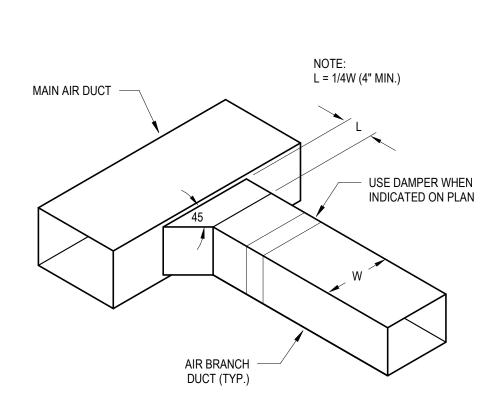
EXHAUSTER

SEE DETAIL FOR WALL

FLEXIBLE DUCT CONNECTION FOR AIR TERMINAL UNITS DETAIL









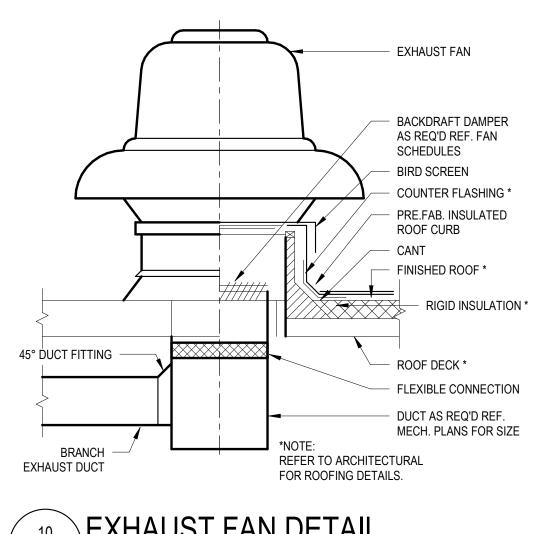
VERTICAL CEILING EXHAUSTER

FROM/ EXHAUST GRILLES — \

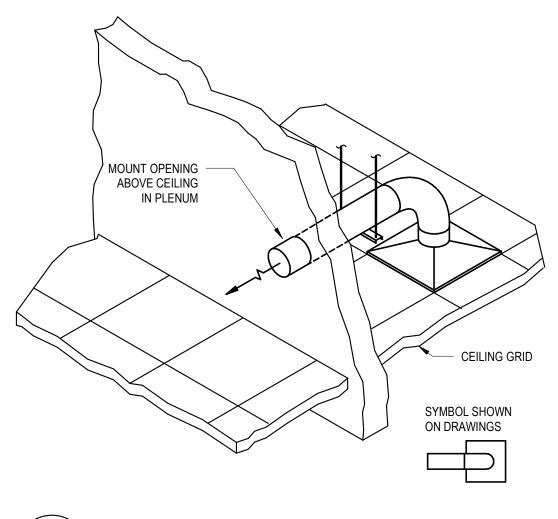
IN-LINE ADAPTOR PLATE

HORIZONTAL INLINE EXHAUSTER

SEE PLAN VIEW FOR DUCT SIZE



10	EXHAUST FAN DETAIL
M-500	NTS



TRANSFER DUCT DETAIL M-500 NOT TO SCALE

**LEGAT**ARCHITECT DESIGN | PERFORMANCE | SUSTAINABILIT NORTH

SCOTT COMMUNITY SCHOOL DISTRICT

**ADDITION AND RENOVATIONS TO JUNIOR HIGH** 

> 502 South 5th Street Eldridge, IA 52748

**ARCHITECT** Legat Architects 1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com **CONSTRUCTION MANAGER** Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

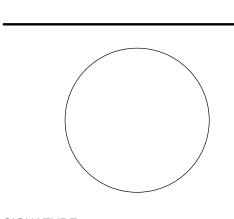
**CIVIL ENGINEER** 

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER 623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967

www.imegcorp.com MEP/FP ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

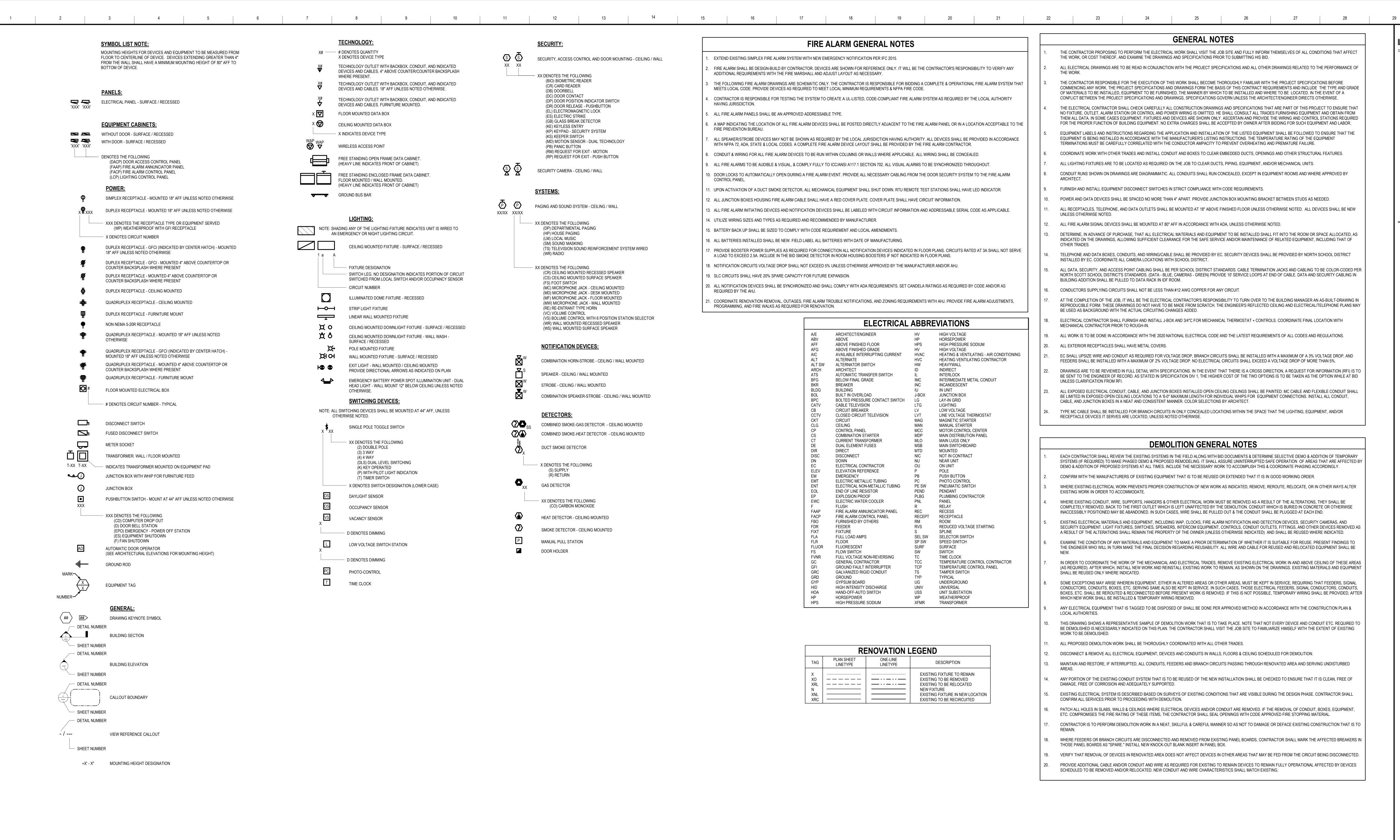


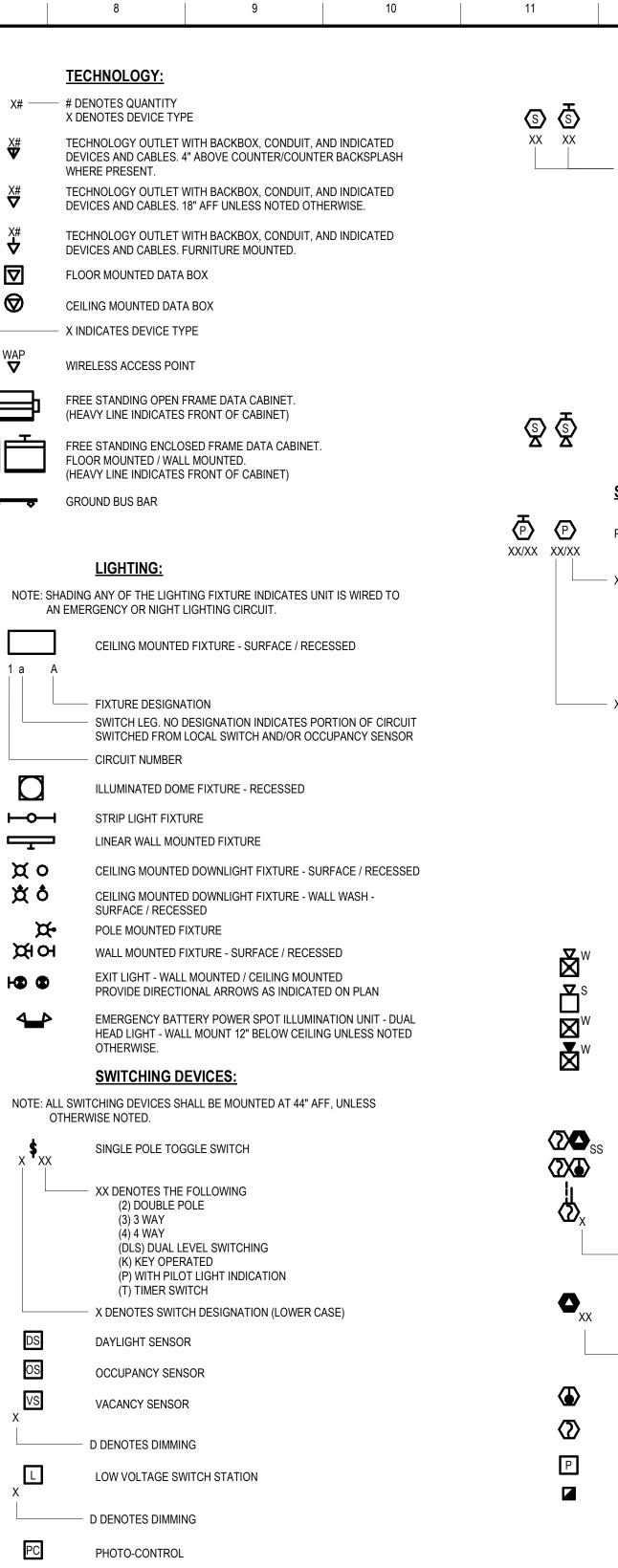
SIGNATURE\_ **REVISIONS** NO. DESCRIPTION DATE

PROJECT DATE OF ISSUE DRAWN BY CHECKED BY

MECHANICAL DETAILS

11.10.2023





**TECHNOLOGY:** 

WHERE PRESENT

X DENOTES DEVICE TYPE

FLOOR MOUNTED DATA BOX

CEILING MOUNTED DATA BOX

X INDICATES DEVICE TYPE

WIRELESS ACCESS POINT

GROUND BUS BAR

FLOOR MOUNTED / WALL MOUNTED.

FIXTURE DESIGNATION

- CIRCUIT NUMBER

STRIP LIGHT FIXTURE

SURFACE / RECESSED

POLE MOUNTED FIXTURE

**SWITCHING DEVICES:** 

SINGLE POLE TOGGLE SWITCH

XX DENOTES THE FOLLOWING

(K) KEY OPERATED

(T) TIMER SWITCH

(2) DOUBLE POLE

(4) 4 WAY

DAYLIGHT SENSOR

OCCUPANCY SENSOR

VACANCY SENSOR

D DENOTES DIMMING

D DENOTES DIMMING

PHOTO-CONTROL

TIME CLOCK

LOW VOLTAGE SWITCH STATION

OTHERWISE NOTED.

LINEAR WALL MOUNTED FIXTURE

X# — # DENOTES QUANTITY

## SECURITY: SECURITY, ACCESS CONTROL AND DOOR MOUNTING - CEILING / WALL XX DENOTES THE FOLLOWING (BIO) BIOMETRIC READER (CR) CARD READER (DB) DOORBELL (DC) DOOR CONTACT (DP) DOOR POSITION INDICATOR SWITCH (DR) DOOR RELEASE - PUSHBUTTON (EL) ELECTROMAGNETIC LOCK (ES) ELECTRIC STRIKE (GB) GLASS BREAK DETECTOR (KE) KEYLESS ENTRY (KP) KEYPAD - SECURITY SYSTEM (KS) KEEPER SWITCH (MD) MOTION SENSOR - DUAL TECHNOLOGY (PB) PANIC BUTTON (RM) REQUEST FOR EXIT - MOTION (RP) REQUEST FOR EXIT - PUSH BUTTON SECURITY CAMERA - CEILING / WALL **SYSTEMS:** PAGING AND SOUND SYSTEM - CEILING / WALL XX DENOTES THE FOLLOWING (DP) DEPARTMENTAL PAGING (HP) HOUSE PAGING (LM) LOCAL MUSIC (SM) SOUND MASKING (TS) TELEVISION SOUND REINFORCEMENT SYSTEM WIRED XX DENOTES THE FOLLOWING (CR) CEILING MOUNTED RECESSED SPEAKER (CS) CEILING MOUNTED SURFACE SPEAKER (FS) FOOT SWITCH (MC) MICROPHONE JACK - CEILING MOUNTED (MD) MICROPHONE JACK - DESK MOUNTED (MF) MICROPHONE JACK - FLOOR MOUNTED (MW) MICROPHONE JACK - WALL MOUNTED (RE) RE-ENTRANT TYPE HORN (VC) VOLUME CONTROL (VS) BOLUME CONTROL WITH 6 POSITION STATION SELECTOR (WR) WALL MOUNTED RECESSED SPEAKER (WS) WALL MOUNTED SURFACE SPEAKER **NOTIFICATION DEVICES:** COMBINATION HORN-STROBE - CEILING / WALL MOUNTED SPEAKER - CEILING / WALL MOUNTED STROBE - CEILING / WALL MOUNTED OMBINATION SPEAKER-STROBE - CEILING / WALL MOUNTED DETECTORS: COMBINED SMOKE-GAS DETECTOR - CEILING MOUNTED COMBINED SMOKE-HEAT DETECTOR - CEILING MOUNTED DUCT SMOKE DETECTOR X DENOTES THE FOLLOWING (S) SUPPLY (R) RETURN GAS DETECTOR XX DENOTES THE FOLLOWING (CO) CARBON MONOXIDE HEAT DETECTOR - CEILING MOUNTED SMOKE DETECTOR - CEILING MOUNTED MANUAL PULL STATION

DOOR HOLDER

# FIRE ALARM GENERAL NOTES EXTEND EXISTING SIMPLEX FIRE ALARM SYSTEM WITH NEW EMERGENCY NOTIFICATION PER IFC 2015.

FIRE ALARM SHALL BE DESIGN-BUILD BY CONTRACTOR. DEVICES ARE SHOWN FOR REFERENCE ONLY. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ANY ADDITIONAL REQUIREMENTS WITH THE FIRE MARSHALL AND ADJUST LAYOUT AS NECESSARY.

THE FOLLOWING FIRE ALARM DRAWINGS ARE SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE FOR BIDDING A COMPLETE & OPERATIONAL FIRE ALARM SYSTEM THAT MEETS LOCAL CODE. PROVIDE DEVICES AS REQUIRED TO MEET LOCAL MINIMUM REQUIREMENTS & NFPA FIRE CODE.

CONTRACTOR IS RESPONSIBLE FOR TESTING THE SYSTEM TO CREATE A UL-LISTED, CODE-COMPLIANT FIRE ALARM SYSTEM AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. ALL FIRE ALARM PANELS SHALL BE AN APPROVED ADDRESSABLE TYPE.

A MAP INDICATING THE LOCATION OF ALL FIRE ALARM DEVICES SHALL BE POSTED DIRECTLY ADJACENT TO THE FIRE ALARM PANEL OR IN A LOCATION ACCEPTABLE TO THE ALL SPEAKER/STROBE DEVICES MAY NOT BE SHOWN AS REQUIRED BY THE LOCAL JURISDICTION HAVING AUTHORITY. ALL DEVICES SHALL BE PROVIDED IN ACCORDANCE

WITH NFPA 72, ADA, STATE & LOCAL CODES. A COMPLETE FIRE ALARM DEVICE LAYOUT SHALL BE PROVIDED BY THE FIRE ALARM CONTRACTOR. CONDUIT & WIRING FOR ALL FIRE ALARM DEVICES TO BE RUN WITHIN COLUMNS OR WALLS WHERE APPLICABLE. ALL WIRING SHALL BE CONCEALED.

ALL FIRE ALARMS TO BE AUDIBLE & VISUAL, & COMPLY FULLY TO ICC/ANSI A117.1 SECTION 702. ALL VISUAL ALARMS TO BE SYNCHRONIZED THROUGHOUT. ). DOOR LOCKS TO AUTOMATICALLY OPEN DURING A FIRE ALARM EVENT. PROVIDE ALL NECESSARY CABLING FROM THE DOOR SECURITY SYSTEM TO THE FIRE ALARM

CONTROL PANEL. . UPON ACTIVATION OF A DUCT SMOKE DETECTOR, ALL MECHANICAL EQUIPMENT SHALL SHUT DOWN. RTU REMOTE TEST STATIONS SHALL HAVE LED INDICATOR.

2. ALL JUNCTION BOXES HOUSING FIRE ALARM CABLE SHALL HAVE A RED COVER PLATE. COVER PLATE SHALL HAVE CIRCUIT INFORMATION.

3. ALL FIRE ALARM INITIATING DEVICES AND NOTIFICATION DEVICES SHALL BE LABELED WITH CIRCUIT INFORMATION AND ADDRESSABLE SERIAL CODE AS APPLICABLE. 14. UTILIZE WIRING SIZES AND TYPES AS REQUIRED AND RECOMMENDED BY MANUFACTURER.

15. BATTERY BACK UP SHALL BE SIZED TO COMPLY WITH CODE REQUIREMENT AND LOCAL AMENDMENTS

ALL BATTERIES INSTALLED SHALL BE NEW. FIELD LABEL ALL BATTERIES WITH DATE OF MANUFACTURING.

PROVIDE BOOSTER POWER SUPPLIES AS REQUIRED FOR CONNECTION ALL NOTIFICATION DEVICES INDICATED IN FLOOR PLANS. CIRCUITS RATED AT 3A SHALL NOT SERVE

A LOAD TO EXCEED 2.5A. INCLUDE IN THE BID SMOKE DETECTOR IN ROOM HOUSING BOOSTERS IF NOT INDICATED IN FLOOR PLANS. 18. NOTIFICATION CIRCUITS VOLTAGE DROP SHALL NOT EXCEED 5% UNLESS OTHERWISE APPROVED BY THE MANUFACTURER AND/OR AHJ.

SLC CIRCUITS SHALL HAVE 20% SPARE CAPACITY FOR FUTURE EXPANSION. 20. ALL NOTIFICATION DEVICES SHALL BE SYNCHRONIZED AND SHALL COMPLY WITH ADA REQUIREMENTS. SET CANDELA RATINGS AS REQUIRED BY CODE AND/OR AS

1. COORDINATE RENOVATION REMOVAL, OUTAGES, FIRE ALARM TROUBLE NOTIFICATIONS, AND ZONING REQUIREMENTS WITH AHJ. PROVIDE FIRE ALARM ADJUSTMENTS, PROGRAMMING, AND FIRE WALKS AS REQUIRED FOR RENOVATION.

		LLLOTRIOAL	ADDILL	VIATIONO
	4/E	ARCHITECT/ENGINEER	HV	HIGH VOLTAGE
	ABV	ABOVE	HP	HORSEPOWER
	AFF	ABOVE FINISHED FLOOR	HPS	HIGH PRESSURE SODIUM
	AFG	ABOVE FINISHED FEOOR ABOVE FINISHED GRADE	HV	HIGH VOLTAGE
	AIC	AVAILABLE INTERRUPTING CURRENT	HVAC	HEATING & VENTILATING - AIR CONDITIONING
	ALT	ALTERNATE	HVC	
	ALT SW		HW	HEATING VENTILATING CONTRACTOR HEAVYWALL
		ALTERNATOR SWITCH		
	ARCH	ARCHITECT	ID ''	INDIRECT
	ATS	AUTOMATIC TRANSFER SWITCH	IL INC	INTERLOCK
	BFG	BELOW FINAL GRADE	IMC	INTERMEDIATE METAL CONDUIT
	BKR	BREAKER	INC	INCANDESCENT
	BLDG	BUILDING	IU	IN UNIT
	BOL	BUILT IN OVERLOAD	J-BOX	JUNCTION BOX
	BPC	BOLTED PRESSURE CONTACT SWITCH	LG	LAY-IN GRID
	CATV	CABLE TELEVISION	LTG	LIGHTING
	CB	CIRCUIT BREAKER	LV	LOW VOLTAGE
	CCTV	CLOSED CIRCUIT TELEVISION	LVT	LINE VOLTAGE THERMOSTAT
	CKT	CIRCUIT	MAG	MAGNETIC STARTER
	CLG	CEILING CONTROL PANEL	MAN	MANUAL STARTER
	CP	CONTROL PANEL	MCC	MOTOR CONTROL CENTER
	CS	COMBINATION STARTER	MDP	MAIN DISTRIBUTION PANEL
	CT	CURRENT TRANSFORMER	MLO	MAIN LUGS ONLY
	DE	DUAL ELEMENT FUSES	MSB	MAIN SWITCHBOARD
	DIR	DIRECT	MTD	MOUNTED
	DISC	DISCONNECT	NIC	NOT IN CONTRACT
	DN	DOWN	NU	NEAR UNIT
	EC	ELECTRICAL CONTRACTOR	OU	ON UNIT
	ELEV	ELEVATION REFERENCE	Р	POLE
	ΞM	EMERGENCY	PB	PUSH BUTTON
	EMT	ELECTRIC METALLIC TUBING	PC	PHOTO CONTROL
	ENT	ELECTRICAL NON-METALLIC TUBING	PE SW	PNEUMATIC SWITCH
	EOL	END OF LINE RESISTOR	PEND	PENDANT
	EΡ	EXPLOSION PROOF	PLBG	PLUMBING CONTRACTOR
	EWC	ELECTRIC WATER COOLER	PNL	PANEL
	F	FLUSH	R	RELAY
	FAAP	FIRE ALARM ANNUNCIATOR PANEL	REC	RECESS
	FACP	FIRE ALARM CONTROL PANEL	RECEPT	RECEPTACLE
	FBO	FURNISHED BY OTHERS	RM	ROOM
	FDR	FEEDER	RVS	REDUCED VOLTAGE STARTING
	FIXT	FIXTURE	S	SPLINE
	FLA	FULL LOAD AMPS	SEL SW	SELECTOR SWITCH
	FLR	FLOOR	SP SW	SPEED SWITCH
	FLUOR	FLUORESCENT	SURF	SURFACE
	FS	FLOW SWITCH	SW	SWITCH
	FVNR	FULL VOLTAGE NON-REVERSING	TC	TIME CLOCK
	GC	GENERAL CONTRACTOR	TCC	TEMPERATURE CONTROL CONTRACTOR
	GFI	GROUND FAULT INTERRUPTER	TCP	TEMPERATURE CONTROL PANEL
	GRC	GALVANIZED RIGID CONDUIT	TS	TAMPER SWITCH
	GRD	GROUND	TYP	TYPICAL
	GYP	GYPSUM BOARD	UG	UNDERGROUND
	HID	HIGH INTENSITY DISCHARGE	UNIV	UNIVERSAL

UNIT SUBSTATION

WEATHERPROOF

TRANSFORMER

XFMR

**ELECTRICAL ABBREVIATIONS** 

	RENOVATION LEGEND		
TAG	PLAN SHEET LINETYPE	ONE-LINE LINETYPE	DESCRIPTION
X XO XRL N XNL XRC			EXISTING FIXTURE TO REMAIN EXISTING TO BE REMOVED EXISTING TO BE RELOCATED NEW FIXTURE EXISTING FIXTURE IN NEW LOCATION EXISTING TO BE RECIRCUITED

HAND-OFF-AUTO SWITCH

HIGH PRESSURE SODIUM

HORSEPOWER

HPS

## **GENERAL NOTES**

- THE CONTRACTOR PROPOSING TO PERFORM THE ELECTRICAL WORK SHALL VISIT THE JOB SITE AND FULLY INFORM THEMSELVES OF ALL CONDITIONS THAT AFFECT THE WORK, OR COST THEREOF, AND EXAMINE THE DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMITTING HIS BID. ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF
- THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS BEFORE COMMENCING ANY WORK. THE PROJECT SPECIFICATIONS AND DRAWINGS FORM THE BASIS OF THIS CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND GRADE
- OF MATERIALS TO BE INSTALLED. EQUIPMENT TO BE FURNISHED. THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS. SPECIFICATIONS GOVERN UNLESS THE ARCHITECT/ENGINEER DIRECTS OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CHECK CAREFULLY ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS THAT ARE PART OF THIS PROJECT TO ENSURE THAT NO FIXTURE, OUTLIFT, ALARM STATION OR CONTROL AND POWER WIRING IS OMITTED, HE SHALL CONSULT ALL TRADES FURNISHING FOUIPMENT AND OBTAIN FROM
- FOR THE PROPER FUNCTION OF BUILDING EQUIPMENT. NO EXTRA CHARGES SHALL BE ACCEPTED BY OWNER AFTER BIDDING FOR SUCH EQUIPMENT AND LABOR. EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO ENSURE THAT THE

THEM ALL DATA. IN SOME CASES EQUIPMENT, FIXTURES AND DEVICES ARE SHOWN ONLY, ASCERTAIN AND PROVIDE THE WIRING AND CONTROL STATIONS REQUIRED

- EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
- COORDINATE WORK WITH OTHER TRADES AND INSTALL CONDUIT AND BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES. ALL LIGHTING FIXTURES ARE TO BE LOCATED AS REQUIRED ON THE JOB TO CLEAR DUCTS, PIPING, EQUIPMENT, AND/OR MECHANICAL UNITS.
- CONDUIT RUNS SHOWN ON DRAWINGS ARE DIAGRAMMATIC. ALL CONDUITS SHALL RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY
- FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.

12. ALL FIRE ALARM SIGNAL DEVICES SHALL BE MOUNTED AT 80" AFF IN ACCORDANCE WITH ADA, UNLESS OTHERWISE NOTED.

16. CONDUCTORS SUPPLYING CIRCUITS SHALL NOT BE LESS THAN #12 AWG COPPER FOR ANY CIRCUIT.

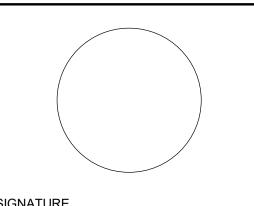
- POWER AND DATA DEVICES SHALL BE SPACED NO MORE THAN 4" APART. PROVIDE JUNCTION BOX MOUNTING BRACKET BETWEEN STUDS AS NEEDED.
- ALL RECEPTACLES, TELEPHONE, AND DATA OUTLETS SHALL BE MOUNTED AT 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. ALL DEVICES SHALL BE NEW UNLESS OTHERWISE NOTED.
- DETERMINE, IN ADVANCE OF PURCHASE, THAT ALL ELECTRICAL MATERIALS AND EQUIPMENT TO BE INSTALLED SHALL FIT INTO THE ROOM OR SPACE ALLOCATED, AS INDICATED ON THE DRAWINGS, ALLOWING SUFFICIENT CLEARANCE FOR THE SAFE SERVICE AND/OR MAINTENANCE OF RELATED EQUIPMENT, INCLUDING THAT OF
- OTHER TRADES.
- TELEPHONE AND DATA BOXES, CONDUITS, AND WIRING/CABLE SHALL BE PROVIDED BY EC. SECURITY DEVICES SHALL BE PROVIDED BY NORTH SCHOOL DISTRICT INSTALLED BY EC. COORDINATE ALL CAMERA LOCATIONS WITH SCHOOL DISTRICT.
- ALL DATA, SECURITY, AND ACCESS POINT CABLING SHALL BE PER SCHOOL DISTRICT STANDARDS. CABLE TERMINATION JACKS AND CABLING TO BE COLOR-CODED PER
- NORTH SCOTT SCHOOL DISTRICT'S STANDARDS. (DATA BLUE, CAMERAS GREEN) PROVIDE 10' SERVICE LOOPS AT END OF CABLE. DATA AND SECURITY CABLING IN BUILDING ADDITION SHALL BE PULLED TO DATA RACK IN IDF ROOM.
- AT THE COMPLETION OF THE JOB, IT WILL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO TURN OVER TO THE BUILDING MANAGER AN AS-BUILT-DRAWING IN
- REPRODUCIBLE FORM. THESE DRAWINGS DO NOT HAVE TO BE MADE FROM SCRATCH. THE ENGINEER'S REFLECTED CEILING AND ELECTRICAL/TELEPHONE PLANS MAY BE USED AS BACKGROUND WITH THE ACTUAL CIRCUITING CHANGES ADDED.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL J-BOX AND 3/4"C FOR MECHANICAL THERMOSTAT + CONTROLS. COORDINATE FINAL LOCATION WITH
- MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- 19. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE AND THE LATEST REQUIREMENTS OF ALL CODES AND REGULATIONS. ALL EXTERIOR RECEPTACLES SHALL HAVE METAL COVERS.
- EC SHALL UPSIZE WIRE AND CONDUIT AS REQUIRED FOR VOLTAGE DROP, BRANCH CIRCUITS SHALL BE INSTALLED WITH A MAXIMUM OF A 3% VOLTAGE DROP, AND FEEDERS SHALL BE INSTALLED WITH A MAXIMUM OF 2% VOLTAGE DROP, NO ELECTRICAL CIRCUITS SHALL EXCEED A VOLTAGE DROP OF MORE THAN 5%.
- DRAWINGS ARE TO BE REVIEWED IN FULL DETAIL WITH SPECIFICATIONS. IN THE EVENT THAT THERE IS A CROSS DIRECTION, A REQUEST FOR INFORMATION (RFI) IS TO BE SENT TO THE ENGINEER OF RECORD. AS STATED IN SPECIFICATION DIV 1, THE HIGHER COST OF THE TWO OPTIONS IS TO BE TAKEN AS THE OPTION WHILE AT BID UNLESS CLARIFICATION FROM RFI.
- ALL EXPOSED ELECTRICAL CONDUIT, CABLE, AND JUNCTION BOXES INSTALLED OPEN CEILING CEILINGS SHALL BE PAINTED, MC CABLE AND ELEXIBLE CONDUIT SHALL BE LIMITED IN EXPOSED OPEN CEILING LOCATIONS TO A '6-0" MAXIMUM LENGTH FOR INDIVIDUAL WHIPS FOR EQUIPMENT CONNECTIONS. INSTALL ALL CONDUIT, CABLE, AND JUNCTION BOXES IN A NEAT AND CONSISTENT MANNER. COLOR SELECTIONS BY ARCHITECT.
- TYPE MC CABLE SHALL BE INSTALLED FOR BRANCH CIRCUITS IN ONLY CONCEALED LOCATIONS WITHIN THE SPACE THAT THE LIGHTING, EQUIPMENT, AND/OR RECEPTACLE DEVICES IT SERVES ARE LOCATED, UNLESS NOTED OTHERWISE.

# **DEMOLITION GENERAL NOTES**

- EACH CONTRACTOR SHALL REVIEW THE EXISTING SYSTEMS IN THE FIELD ALONG WITH BID DOCUMENTS & DETERMINE SELECTIVE DEMO & ADDITION OF TEMPORARY SYSTEMS (IF REQUIRED) TO MAKE PHASED DEMO & PROPOSED REMODELING. IT SHALL ASSURE UNINTERRUPTED SAFE OPERATION OF AREAS THAT ARE AFFECTED BY DEMO & ADDITION OF PROPOSED SYSTEMS AT ALL TIMES. INCLUDE THE NECESSARY WORK TO ACCOMPLISH THIS & COORDINATE PHASING ACCORDINGLY.
- CONFIRM WITH THE MANUFACTURERS OF EXISTING EQUIPMENT THAT IS TO BE REUSED OR EXTENDED THAT IT IS IN GOOD WORKING ORDER.
- WHERE EXISTING ELECTRICAL WORK PREVENTS PROPER CONSTRUCTION OF NEW WORK AS INDICATED, REMOVE, REROUTE, RELOCATE, OR IN OTHER WAYS ALTER EXISTING WORK IN ORDER TO ACCOMMODATE.
- WHERE EXISTING CONDUIT, WIRE, SUPPORTS, HANGERS & OTHER ELECTRICAL WORK MUST BE REMOVED AS A RESULT OF THE ALTERATIONS, THEY SHALL BE
- COMPLETELY REMOVED, BACK TO THE FIRST OUTLET WHICH IS LEFT UNAFFECTED BY THE DEMOLITION. CONDUIT WHICH IS BURIED IN CONCRETE OR OTHERWISE INACCESSIBLY POSITIONED MAY BE ABANDONED. IN SUCH CASES, WIRE SHALL BE PULLED OUT & THE CONDUIT SHALL BE PLUGGED AT EACH END.
- EXISTING ELECTRICAL MATERIALS AND EQUIPMENT, INCLUDING WAP, CLOCKS, FIRE ALARM NOTIFICATION AND DETECTION DEVICES, SECURITY CAMERAS, AND SECURITY EQUIPMENT. LIGHT FIXTURES. SWITCHES. SPEAKERS, INTERCOM EQUIPMENT, CONTROLS, CONDUIT OUTLETS, FITTINGS, AND OTHER DEVICES REMOVED AS
- A RESULT OF THE ALTERATIONS SHALL REMAIN THE PROPERTY OF THE OWNER (UNLESS OTHERWISE INDICATED) AND SHALL BE REUSED WHERE INDICATED. EXAMINE THE CONDITION OF ANY MATERIALS AND EQUIPMENT TO MAKE A PRIOR DETERMINATION OF WHETHER IT IS SUITABLE FOR REUSE. PRESENT FINDINGS TO
- THE ENGINEER WHO WILL IN TURN MAKE THE FINAL DECISION REGARDING REUSABILITY. ALL WIRE AND CABLE FOR REUSED AND RELOCATED EQUIPMENT SHALL BE
- IN ORDER TO COORDINATE THE WORK OF THE MECHANICAL AND ELECTRICAL TRADES, REMOVE EXISTING ELECTRICAL WORK IN AND ABOVE CEILING OF THESE AREAS (AS REQUIRED). AFTER WHICH, INSTALL NEW WORK AND REINSTALL EXISTING WORK TO REMAIN, AS SHOWN ON THE DRAWINGS. EXISTING MATERIALS AND EQUIPMENT SHALL BE REUSED ONLY WHERE INDICATED.
- SOME EXCEPTIONS MAY ARISE WHEREIN EQUIPMENT, EITHER IN ALTERED AREAS OR OTHER AREAS, MUST BE KEPT IN SERVICE, REQUIRING THAT FEEDERS, SIGNAL CONDUCTORS, CONDUITS, BOXES, ETC. SERVING SAME ALSO BE KEPT IN SERVICE. IN SUCH CASES, THOSE ELECTRICAL FEEDERS, SIGNAL CONDUCTORS, CONDUITS, BOXES, ETC. SHALL BE REROUTED & RECONNECTED BEFORE PRESENT WORK IS REMOVED. IF THIS IS NOT POSSIBLE, TEMPORARY WIRING SHALL BE PROVIDED, AFTER
- WHICH NEW WORK SHALL BE INSTALLED & TEMPORARY WIRING REMOVED. ANY ELECTRICAL EQUIPMENT THAT IS TAGGED TO BE DISPOSED OF SHALL BE DONE PER APPROVED METHOD IN ACCORDANCE WITH THE CONSTRUCTION PLAN &
- THIS DRAWING SHOWS A REPRESENTATIVE SAMPLE OF DEMOLITION WORK THAT IS TO TAKE PLACE. NOTE THAT NOT EVERY DEVICE AND CONDUIT ETC. REQUIRED TO
- BE DEMOLISHED IS NECESSARILY INDICATED ON THIS PLAN. THE CONTRACTOR SHALL VISIT THE JOB SITE TO FAMILIARIZE HIMSELF WITH THE EXTENT OF EXISTING WORK TO BE DEMOLISHED.
- ALL PROPOSED DEMOLITION WORK SHALL BE THOROUGHLY COORDINATED WITH ALL OTHER TRADES.
- DISCONNECT & REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES AND CONDUITS IN WALLS, FLOORS & CEILING SCHEDULED FOR DEMOLITION. MAINTAIN AND RESTORE, IF INTERRUPTED, ALL CONDUITS, FEEDERS AND BRANCH CIRCUITS PASSING THROUGH RENOVATED AREA AND SERVING UNDISTURBED
- ANY PORTION OF THE EXISTING CONDUIT SYSTEM THAT IS TO BE REUSED OF THE NEW INSTALLATION SHALL BE CHECKED TO ENSURE THAT IT IS CLEAN, FREE OF
- DAMAGE, FREE OF CORROSION AND ADEQUATELY SUPPORTED. EXISTING ELECTRICAL SYSTEM IS DESCRIBED BASED ON SURVEYS OF EXISTING CONDITIONS THAT ARE VISIBLE DURING THE DESIGN PHASE. CONTRACTOR SHALL
- CONFIRM ALL SERVICES PRIOR TO PROCEEDING WITH DEMOLITION. PATCH ALL HOLES IN SLABS, WALLS & CEILINGS WHERE ELECTRICAL DEVICES AND/OR CONDUIT ARE REMOVED. IF THE REMOVAL OF CONDUIT, BOXES, EQUIPMENT.
- CONTRACTOR IS TO PERFORM DEMOLITION WORK IN A NEAT, SKILLFUL & CAREFUL MANNER SO AS NOT TO DAMAGE OR DEFACE EXISTING CONSTRUCTION THAT IS TO

ETC. COMPROMISES THE FIRE RATING OF THESE ITEMS, THE CONTRACTOR SHALL SEAL OPENINGS WITH CODE APPROVED FIRE STOPPING MATERIAL.

- WHERE FEEDERS OR BRANCH CIRCUITS ARE DISCONNECTED AND REMOVED FROM EXISTING PANEL BOARDS, CONTRACTOR SHALL MARK THE AFFECTED BREAKERS IN THOSE PANEL BOARDS AS "SPARE." INSTALL NEW KNOCK-OUT BLANK INSERT IN PANEL BOX.
- VERIFY THAT REMOVAL OF DEVICES IN RENOVATED AREA DOES NOT AFFECT DEVICES IN OTHER AREAS THAT MAY BE FED FROM THE CIRCUIT BEING DISCONNECTED.
- PROVIDE ADDITIONAL CABLE AND/OR CONDUIT AND WIRE AS REQUIRED FOR EXISTING TO REMAIN DEVICES TO REMAIN FULLY OPERATIONAL AFFECTED BY DEVICES SCHEDULED TO BE REMOVED AND/OR RELOCATED. NEW CONDUIT AND WIRE CHARACTERISTICS SHALL MATCH EXISTING.



**LEGAT**ARCHITECT

ESIGN | PERFORMANCE | SUSTAINABILIT

502 South 5th Street

Eldridge, IA 52748

<u>ARCHITECT</u>

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

**CONSTRUCTION MANAGER** 

Russel Construction

4700 E 53rd Street

Davenport, IA 52807

563.459.5600

www.russelco.com

CIVIL ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807

www.rtmec.com

STRUCTURAL ENGINEER

623 26th Avenue

Rock Island, IL 61201 P: 309.788.0673

F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

5137 Utica Ridge Road

Davenport, IA 52807

P: 563.726.6310

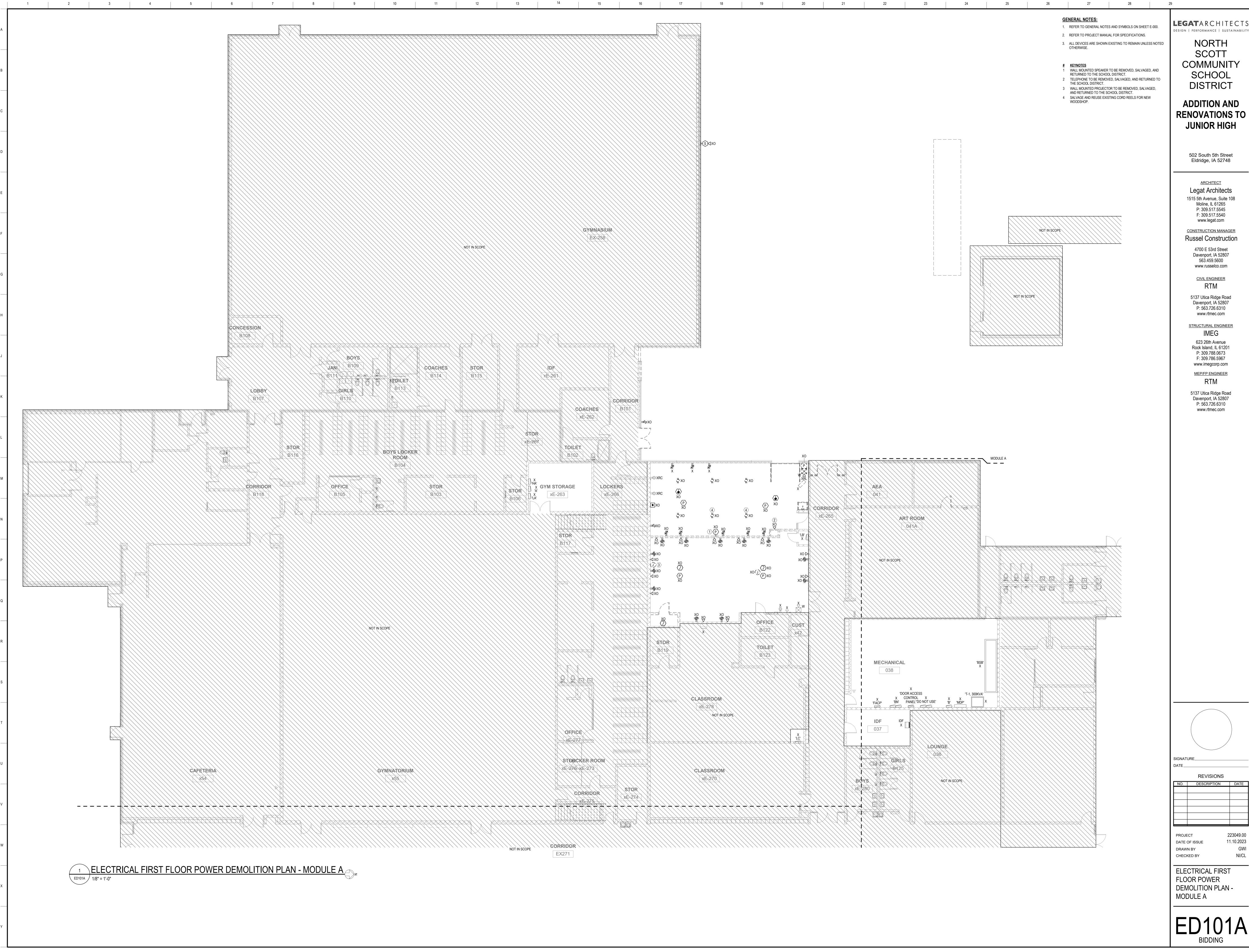
www.rtmec.com

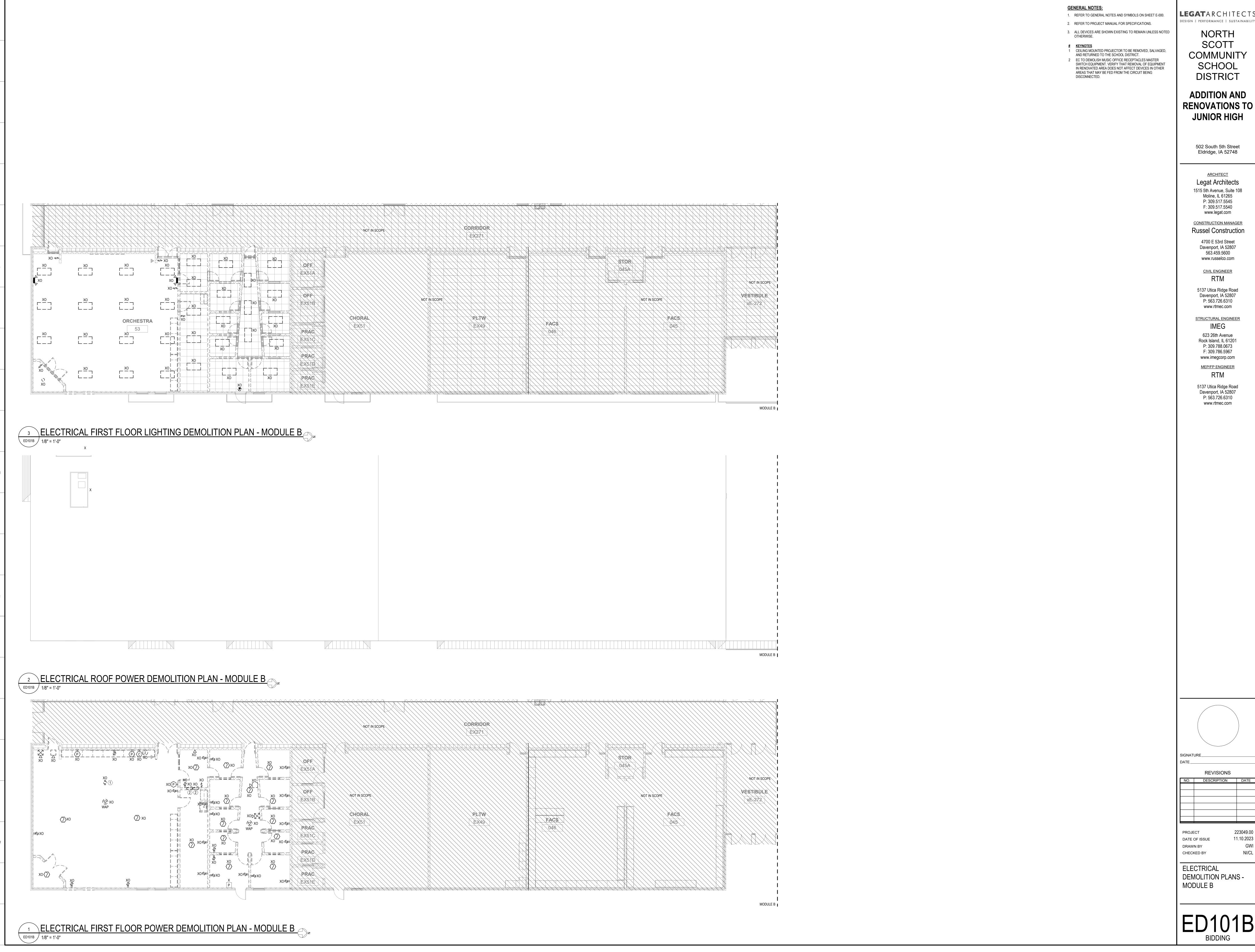
P: 563.726.6310

NO. DESCRIPTION DATE

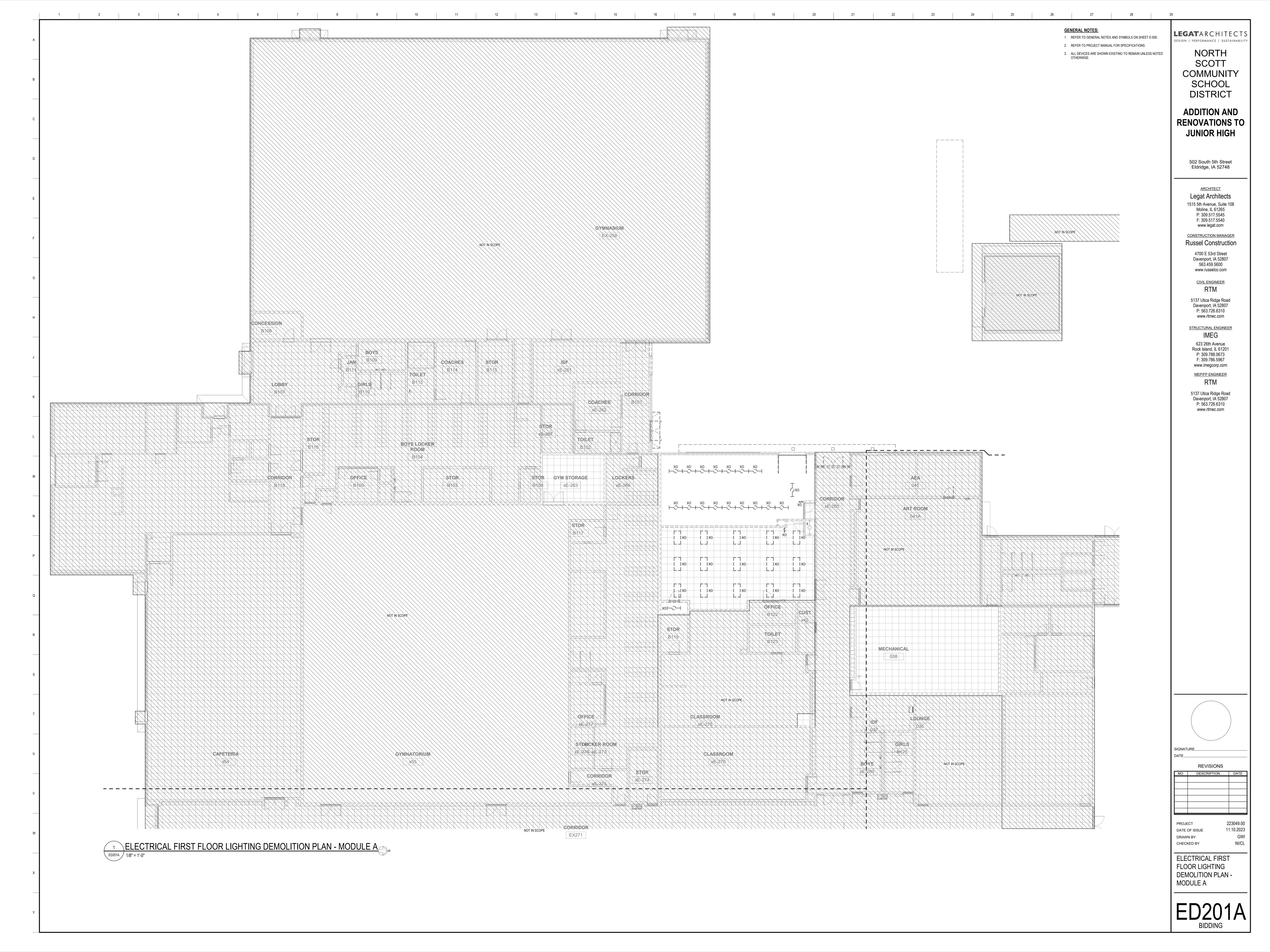
DATE OF ISSUE **CHECKED BY** 

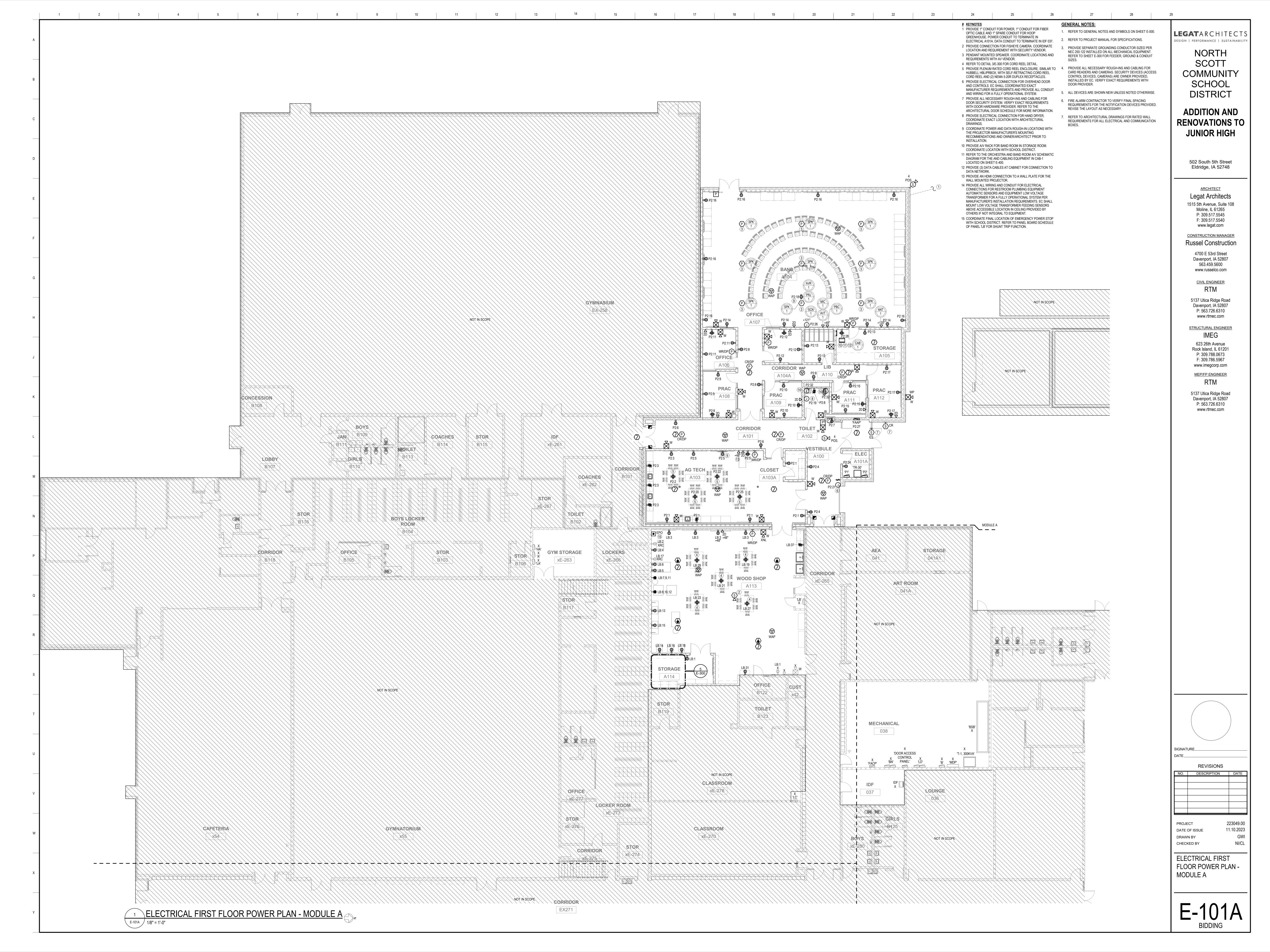
**ELECTRICAL SYMBOLS** AND GENERAL NOTES

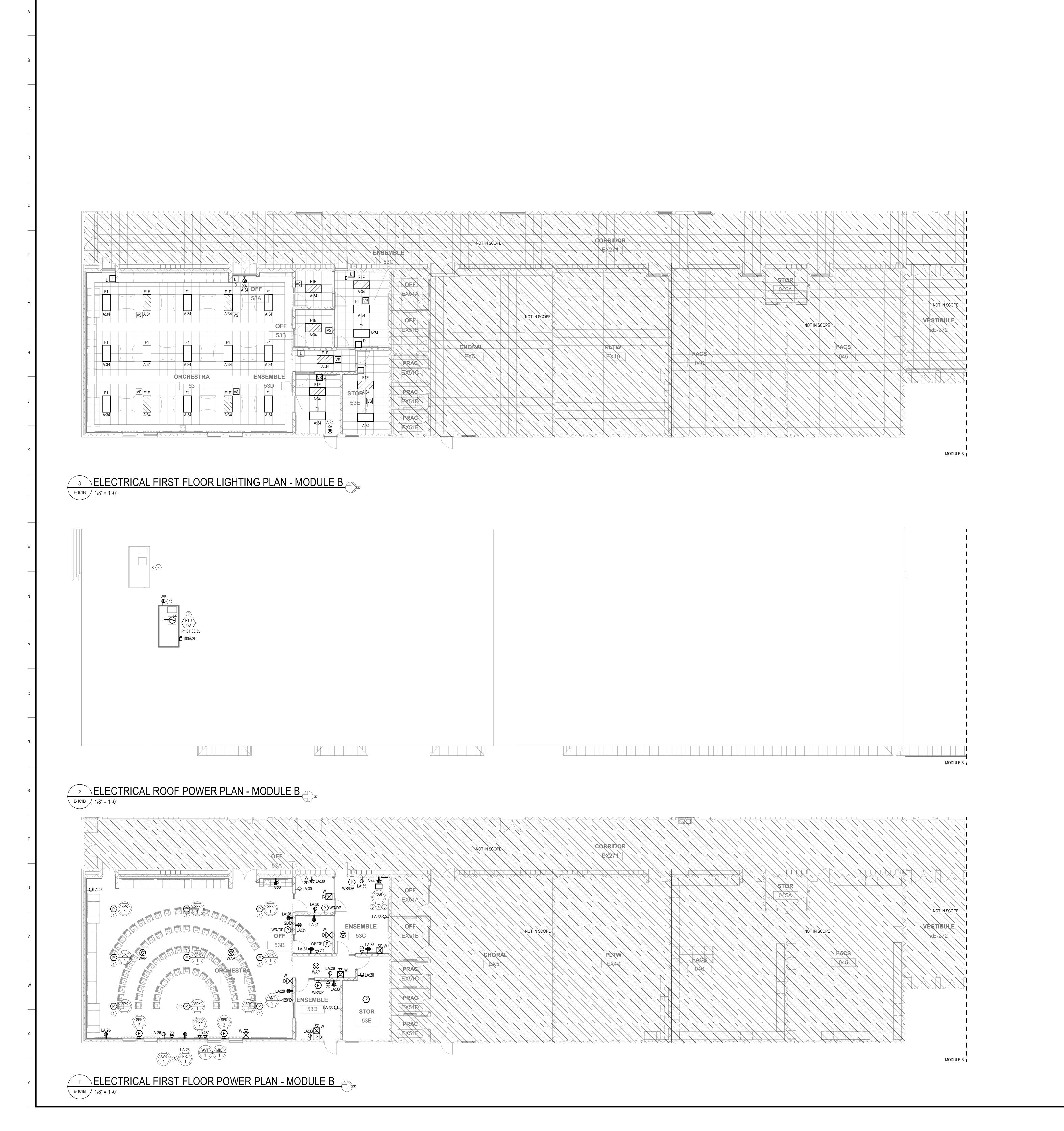




**RENOVATIONS TO** 







# **GENERAL NOTES:**

DOOR PROVIDER.

- REFER TO GENERAL NOTES AND SYMBOLS ON SHEET E-000.
   REFER TO PROJECT MANUAL FOR SPECIFICATIONS.
- 3. PROVIDE SEPARATE GROUNDING CONDUCTOR SIZED PER NEC 250.122 INSTALLED ON ALL MECHANICAL EQUIPMENT. REFER TO SHEET E-300 FOR FEEDER, GROUND & CONDUIT
- REFER TO SHEET E-300 FOR FEEDER, GROUND & CONDUIT SIZES.

  4. PROVIDE ALL NECESSARY ROUGH-INS AND CABLING FOR CARD READERS AND CAMERAS. SECURITY DEVICES (ACCESS

CONTROL DEVICES, CAMERAS) ARE OWNER PROVIDED, INSTALLED BY EC. VERIFY EXACT REQUIREMENTS WITH

- 5. ALL DEVICES ARE SHOWN NEW UNLESS NOTED OTHERWISE.

  6. FIRE ALARM CONTRACTOR TO VERIEV FINAL SPACING.
- 6. FIRE ALARM CONTRACTOR TO VERIFY FINAL SPACING REQUIREMENTS FOR THE NOTIFICATION DEVICES PROVIDED. REVISE THE LAYOUT AS NECESSARY.
- REVISE THE LAYOUT AS NECESSARY.

  7. REFER TO ARCHITECTURAL DRAWINGS FOR RATED WALL REQUIREMENTS FOR ALL ELECTRICAL AND COMMUNICATION
- 8. FOR ALL OCCUPANCY SENSORS, PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATIONAL SYSTEM, INCLUDING ALL OCCUPANCY SENSORS, POWER PACKS, WALL OVERRIDE SWITCHES, RELAYS, ETC.
- EMERGENCY FIXTURES TO DIM AND BE CONTROLLED WITH LOCAL FIXTURES. PROVIDE NCESSARY RELAYS TO TURN FIXTURES TO 100% WITH THE LOSS OF POWER.

## # KEYNOTES

- PENDANT MOUNTED SPEAKER. COORDINATE LOCATIONS AND REQUIREMENTS WITH AV VENDOR.
   ALTERNATE BID FOR THIS EQUIPMENT SHALL INCLUDE THE REQUIRED EQUIPMENT DISCONNECT, CONDUIT, WIRING, BREAKER SIZE TO FEED ALTERNATE EQUIPMENT, AND DUCT SMOKE DETECTOR. REFER TO MECHANICAL SCHEDULES AND
- MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET E-300 FOR ALTERNATE BID EQUIPMENT INFORMATION.

  3 PROVIDE AV RACK FOR ORCHESTRA ROOM IN ENSEMBLE
- ROOM.
  PROVIDE (3) DATA CABLES AT CABINET FOR CONNECTION TO DATA NETWORK.
  REFER TO THE ORCHESTRA AND BAND ROOM A/V SCHEMATIC DIAGRAM FOR THE AND CABLING EQUIPMENT IN CAB-1
- LOCATED ON SHEET E-400.

  6 COORDINATE POWER AND DATA ROUGH-IN LOCATIONS WITH THE PROJECTOR MANUFACTURER'S MOUNTING RECOMMENDATIONS AND OWNER/ARCHITECT PRIOR TO INSTALLATION.
- 7 RECEPTACLE IS POWERED BY MECHANICAL EQUIPMENT.
   8 MECHANICAL EQUIPMENT IS EXISTING TO REMAIN.

**LEGAT**ARCHITECT

NORTH SCOTT COMMUNITY SCHOOL

DESIGN | PERFORMANCE | SUSTAINABILITY

SCHOOL DISTRICT ADDITION AND

RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108 Moline, IL 61265 P: 309.517.5545 F: 309.517.5540

www.legat.com

CONSTRUCTION MANAGER

Russel Construction

4700 E 53rd Street
Davenport, IA 52807
563.459.5600

CIVIL ENGINEER

RTM

www.russelco.com

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

IMEG

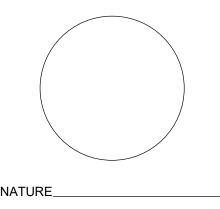
623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com



GNATURE\_\_\_\_\_

NO. DESCRIPTION DATE

PROJECT

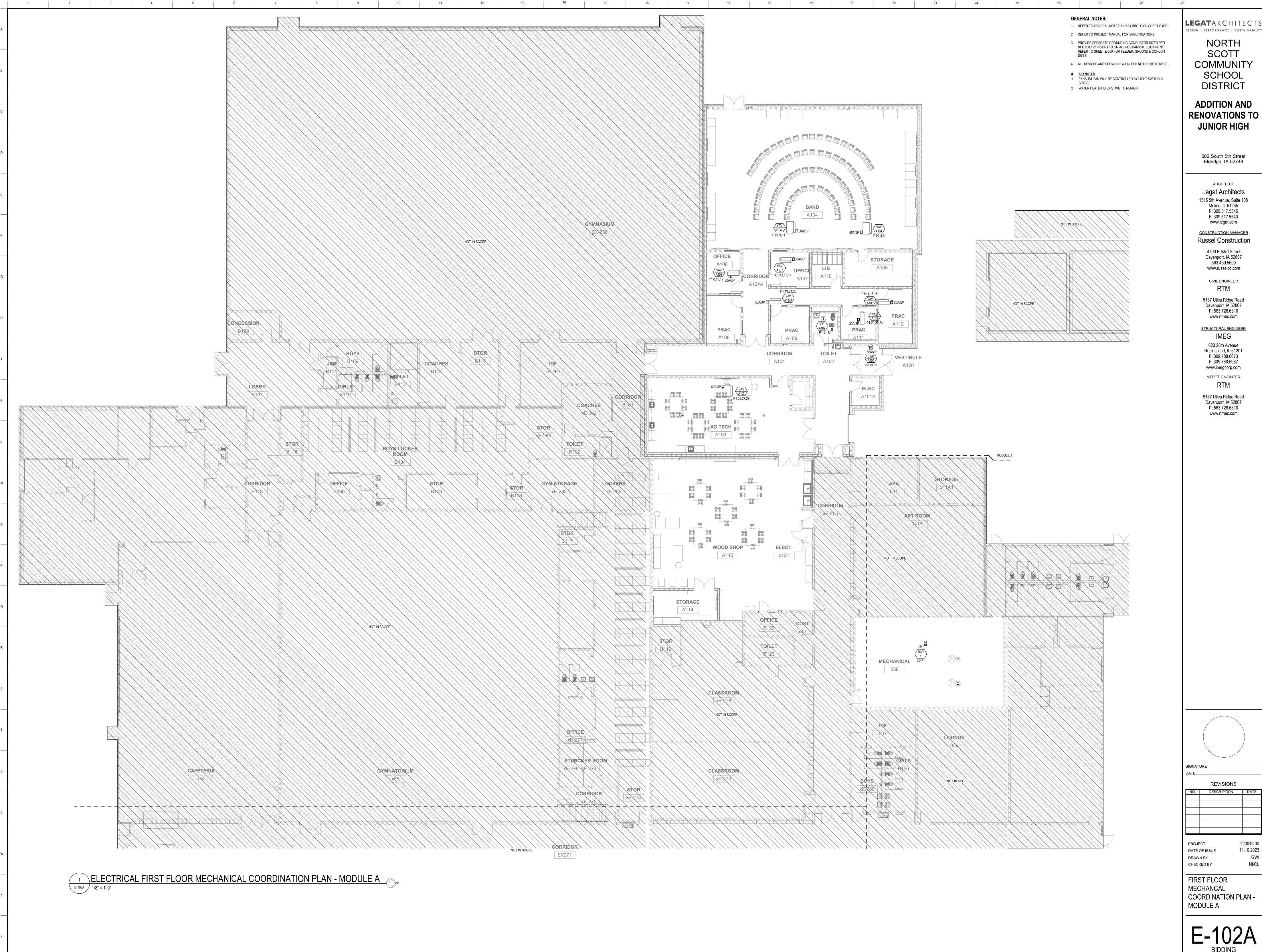
DATE OF ISSUE

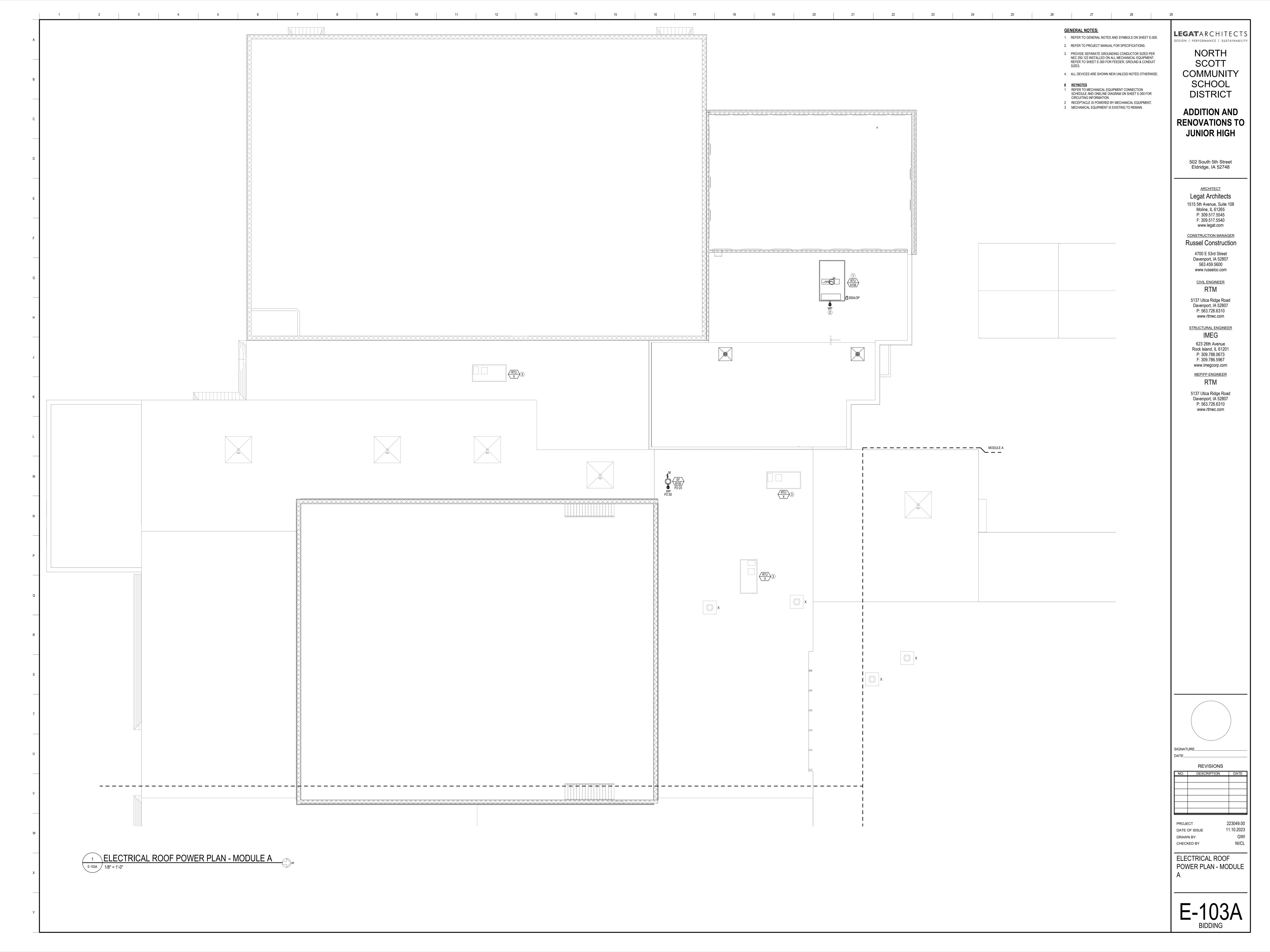
DRAWN BY

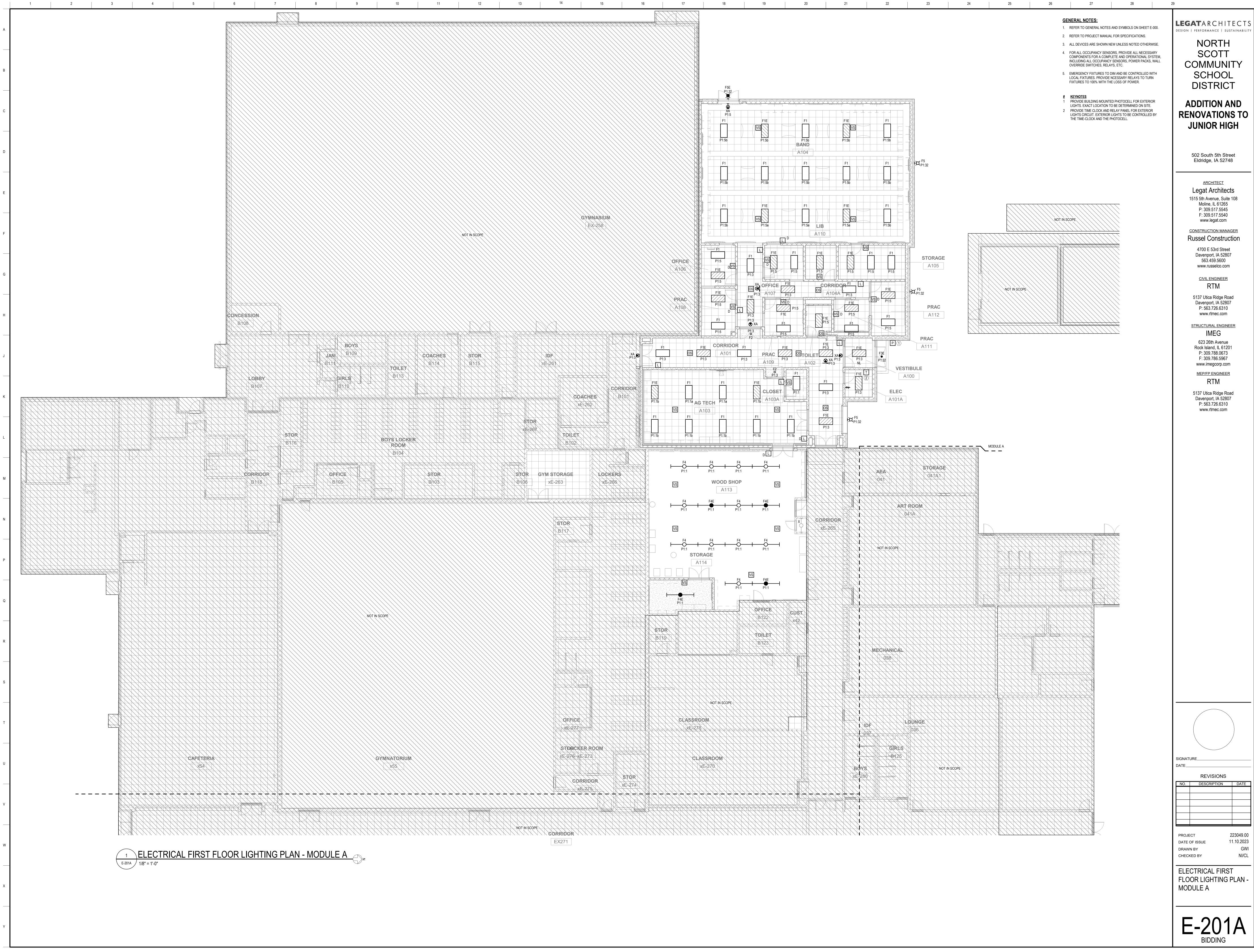
CHECKED BY

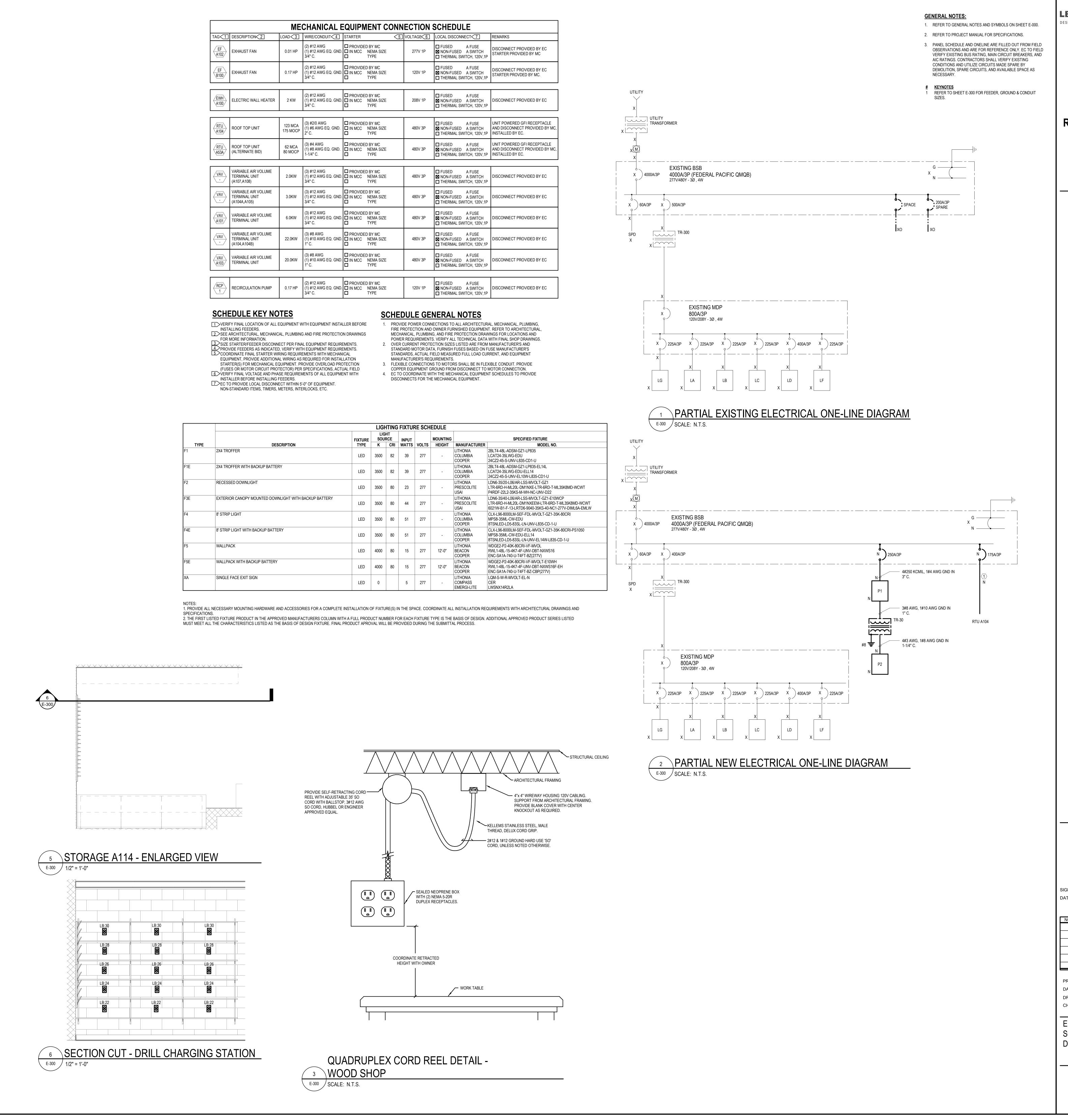
ELECTRICAL FIRST FLOOR PLANS -MODULE B

E-101









LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH

NORTH SCOTT COMMUNITY SCHOOL

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265

P: 309.517.5545

F: 309.517.5540

www.legat.com

<u>CONSTRUCTION MANAGER</u>

Russel Construction

4700 E 53rd Street
Davenport, IA 52807
563.459.5600
www.russelco.com

CIVIL ENGINEER

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310

www.rtmec.com

STRUCTURAL ENGINEER

IMEG
623 26th Avenue
Rock Island, IL 61201
P: 309.788.0673
F: 309.786.5967

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road

Davenport, IA 52807

www.rtmec.com

P: 563.726.6310

www.imegcorp.com

SIGNATURE\_\_\_\_\_DATE\_\_\_\_\_REVISIONS

REVISIONS

NO. DESCRIPTION DATE

223049.00

11.10.2023

NI/CL

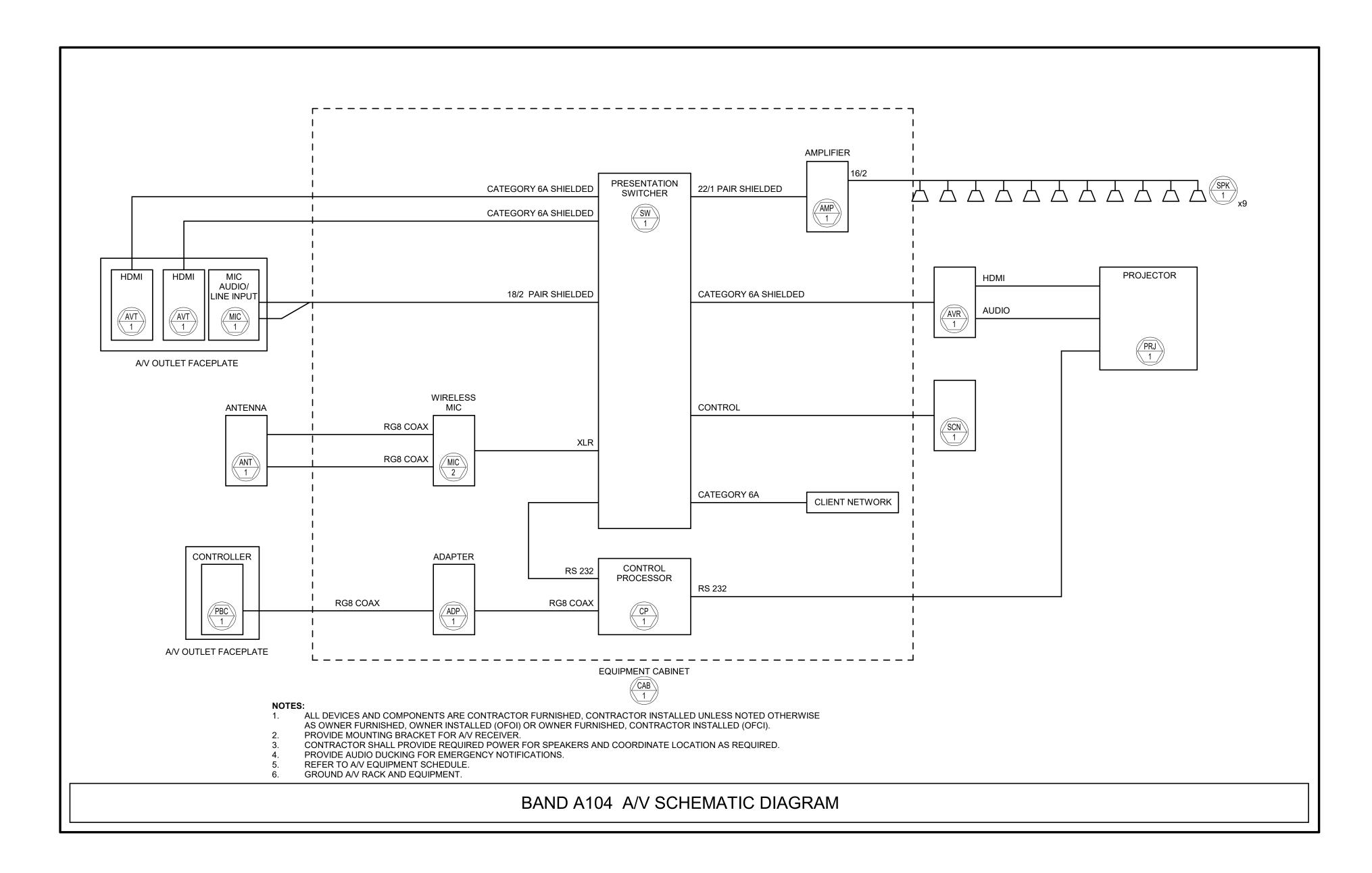
PROJECT
DATE OF ISSUE
DRAWN BY
CHECKED BY

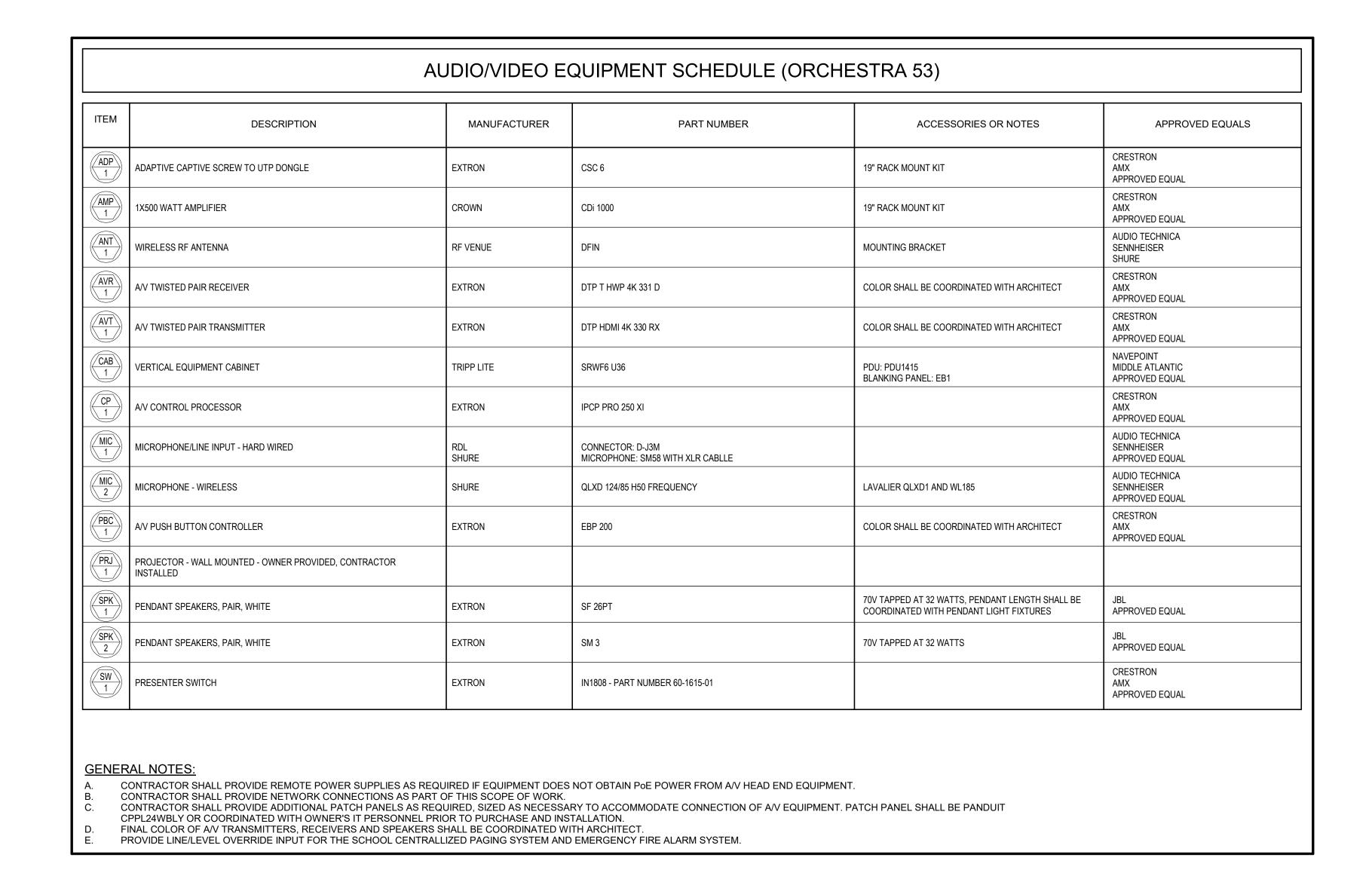
ELECTRICAL ONE-LINE, SCHEDULES, AND DETAILS

E-300 BIDDING

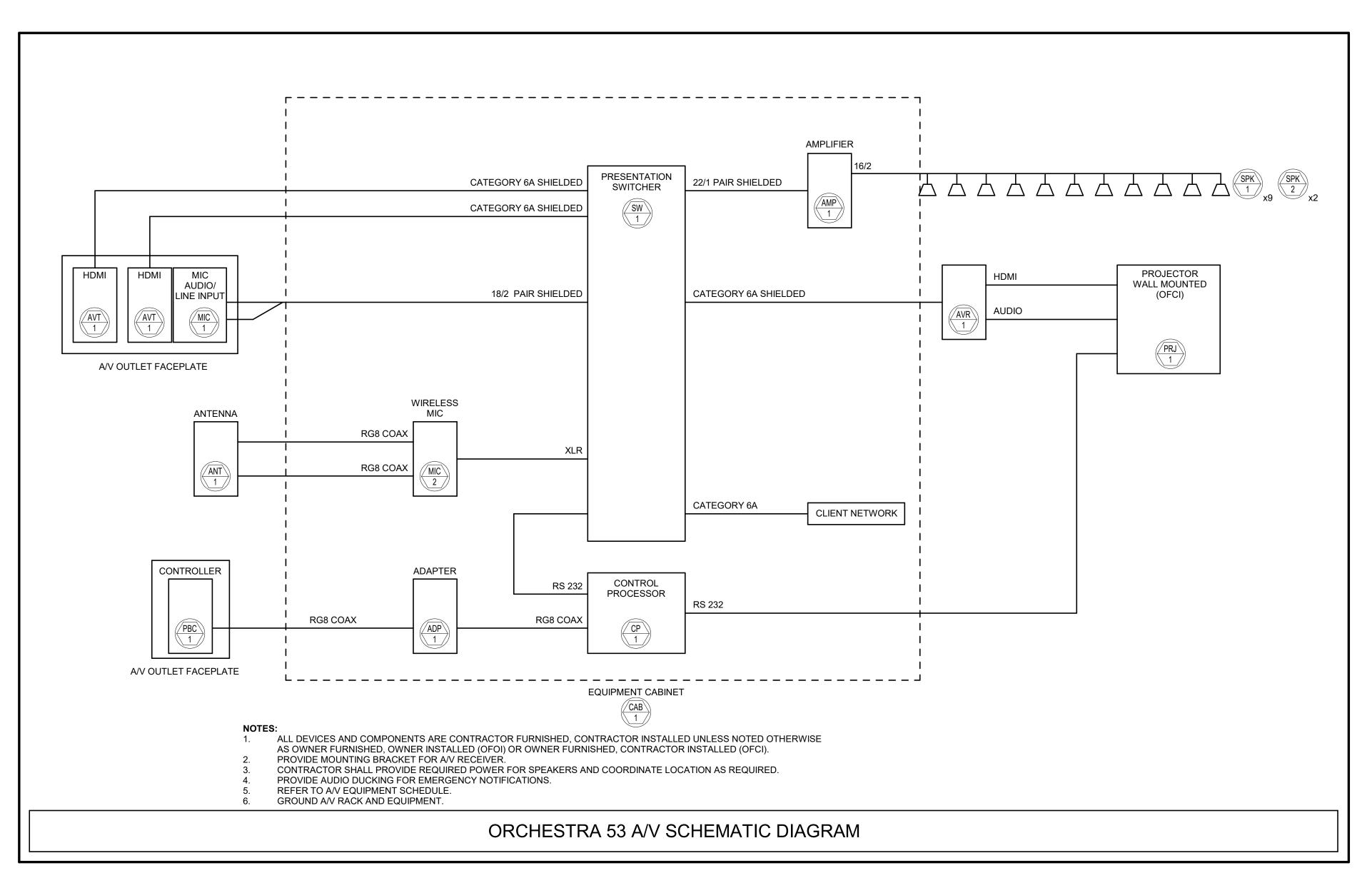
ASSESTITUTE CONTROLLED NOTE	M	DESCRIPTION	MANUFACTURER	PART NUMBER	ACCESSORIES OR NOTES	APPROVED EQUALS
IXX0 WATT AMPLIFIER  OFON  OF HOME  OF	DP 1	ADAPTIVE CAPTIVE SCREW TO UTP DONGLE	EXTRON	CSC 6	19" RACK MOUNT KIT	AMX
AV TWISTED PAR RECEIVER  AV TWISTED PAR TRANSMITTER  EXTRON  DTP 1 HWP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVENUE DATA RECEIVER  AV TWISTED PAR TRANSMITTER  EXTRON  DTP 1 HWP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVENUE DATA RECEIVER  AV TWISTED PAR TRANSMITTER  EXTRON  DTP 1 HWP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVENUE DATA RECEIVER  AV TWISTED PAR TRANSMITTER  EXTRON  DTP 1 HWP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVENUE DATA RECEIVER  AV TWISTED PAR TRANSMITTER  EXTRON  DTP 1 HWP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVENUE DATA RECEIVER  AV CONTROL PROCESSOR  EXTRON  BY 1 DEPPROVED EQUAL  AVENUE DATA RECEIVER  AV CONTROL PROCESSOR  EXTRON  BY 1 DEPPROVED EQUAL  AVENUE DATA RECEIVER  AV CONTROL PROCESSOR  EXTRON  BY 1 DEPPROVED EQUAL  AVENUE DATA RECEIVER  AV CONTROL PROCESSOR  EXTRON  BY 1 DEPPROVED EQUAL  AVENUE DATA RECEIVER  AVENUE DATA RECEIVER  AV CONTROL PROCESSOR  EXTRON  BY 1 DEPPROVED EQUAL  AVENUE DATA RECEIVER  AVENUE DATA	MP 1	1X500 WATT AMPLIFIER	CROWN	CDi 1000	19" RACK MOUNT KIT	AMX
AV TWISTED PAIR RECEIVER  EXTRON  DTP 1 HUMP 4K 331 D  COLOR SHALL BE COORDINATED WITH ARCHITECT  AMX APPROVED EQUAL  PROVED TO ALL  APPROVED EQUAL  APPROVED	ANT 1	WIRELESS RF ANTENNA	RF VENUE	DFIN	MOUNTING BRACKET	SENNHEISER
TRIPP LITE SRWF6 U36 PDU-PDU1415 BLANKING PAREL: EB1 NAMEPOINT MIDDLE ATLANTIC APPROVED EQUAL  AV CONTROL PROCESSOR EXTRON IPCP PRO 250 XI  MICROPHONELINE INPUT - HARD WIRED PLANTING APPROVED EQUAL  MICROPHONELINE INPUT - HARD WIRED PLANTING APPROVED EQUAL  MICROPHONE - WIRELESS SHURE DLANTING APPROVED EQUAL  AV PUSH BUTTON CONTROLLER EXTRON EBP 200 COLOR SHALL BE COORDINATED WITH ARCHITECT APPROVED EQUAL  APPR	AVR 1	A/V TWISTED PAIR RECEIVER	EXTRON	DTP T HWP 4K 331 D	COLOR SHALL BE COORDINATED WITH ARCHITECT	AMX
VERTICAL EQUIPMENT CABINET  TRIPP LITE  SRWFG USB  PDL POUL 1415 BLANKING PARE: EB1  MIDGLE ATLANTIC APPROVED EQUAL  CRESTRON AND AND AND AND AND AND AND AND AND AN	AVT 1	A/V TWISTED PAIR TRANSMITTER	EXTRON	DTP HDMI 4K 330 RX	COLOR SHALL BE COORDINATED WITH ARCHITECT	AMX
AV CONTROL PROCESSOR  EXTRON  IPCP PRO 250 XI  MICROPHONELINE INPUT - HARD WIRED  RDL SHURE  CONNECTOR: D.J3M MICROPHONE - WIRELESS  SHURE  QUXD 124/85 H50 FREQUENCY  LAVALIER QLXD1 AND WL185  AV PUSH BUTTON CONTROLLER  AV PUSH BUTTON CONTROLLER  EXTRON  EBP 200  COLOR SHALL BE COORDINATED WITH ARCHITECT  AV PROJECTOR - CEILING MOUNTED/PENDANT  VIVITEK  DU7295Z  DA-PPROVED EQUAL  SPR. PROJECTOR SCREEN, 137 DIAGONAL, 16-10, TENSIONED, WALL MOUNT, MATTE WHITE. PROVIDED REQUIRED MOUNTING HARDWARE.  SPR. PRESENTER SWITCH  EXTRON  IN1808 - PART NUMBER 60-1615-01  IN1808 - PART NUMBER 60-1615-01		VERTICAL EQUIPMENT CABINET	TRIPP LITE	SRWF6 U36		MIDDLE ATLANTIC
MICROPHONE/LINE INPUT - HARD WIRED SHURE CONNECTOR. D-J3M MICROPHONE: SM58 WITH XLR CABLLE  AUDIO TECHNICA SENNHEISER APPROVED EQUAL  AUDIO TECHNICA SENNHEISER APPROVED AV PUSH BUTTON CONTROLLER  AV PUSH BUTTON CONTROLLER  EXTRON  EBP 200  COLOR SHALL BE COORDINATED WITH ARCHITECT  AVPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  PROJECTOR - CEILING MOUNTED/PENDANT  VIVITEK  DU7295Z  COLOR SHALL BE COORDINATED WITH ARCHITECT  APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  FR.J  PROJECTOR SCREEN, 137' DIAGONAL, 16.10, TENSIONED, WALL MOUNT, MATTE WHITE, PROVIDED REQUIRED MOUNTING HARDWARE.  SF. APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  FR.J  PENDANT SPEAKERS, PAIR, WHITE  EXTRON  IN1808 - PART NUMBER 60-1615-01  IN1808 - PART NUMBER 60-1615-01		A/V CONTROL PROCESSOR	EXTRON	IPCP PRO 250 XI		AMX
MICROPHONE - WIRELESS  SHURE  QLXD 124/85 H50 FREQUENCY  LAVALIER QLXD1 AND WL185  SENNHEISER APPROVED EQUAL  CRESTRON AMX APPROVED EQUAL  CRESTRON AMX APPROVED EQUAL  PROJECTOR - CEILING MOUNTED/PENDANT  VIVITEK  DU7295Z  DA-LITE  70192LS  PROJECTOR SCREEN, 137* DIAGONAL, 16:10, TENSIONED, WALL MOUNT, MATTE WHITE. PROVIDED REQUIRED MOUNTING HARDWARE.  PENDANT SPEAKERS, PAIR, WHITE  EXTRON  SF 26PT  PROSECTOR SWEES, PAIR, WHITE  EXTRON  SF 26PT  LAVALIER QLXD1 AND WL185  SENNHEISER APPROVED EQUAL  CRESTRON AMX APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  APPROVED EQUAL  CRESTRON AMX APPROVED EQUAL  CRESTRON AMX APPROVED EQUAL  CRESTRON AMX AMX	——→I	MICROPHONE/LINE INPUT - HARD WIRED				SENNHEISER
PRJ PROJECTOR - CEILING MOUNTED/PENDANT VIVITEK DU7295Z APPROVED EQUAL  PROJECTOR SCREEN, 137" DIAGONAL, 16:10, TENSIONED, WALL MOUNT, MATTE WHITE. PROVIDED REQUIRED MOUNTING HARDWARE.  PENDANT SPEAKERS, PAIR, WHITE EXTRON SF 26PT TOV TAPPED AT 32 WATTS, PENDANT LENGTH SHALL BE COORDINATED WITH PENDANT LIGHT FIXTURES  PRESENTER SWITCH EXTRON IN1808 - PART NUMBER 60-1615-01  CRESTRON AMX		MICROPHONE - WIRELESS	SHURE	QLXD 124/85 H50 FREQUENCY	LAVALIER QLXD1 AND WL185	SENNHEISER
PROJECTOR SCREEN, 137" DIAGONAL, 16:10, TENSIONED, WALL MOUNT, MATTE WHITE. PROVIDED REQUIRED MOUNTING HARDWARE.  PENDANT SPEAKERS, PAIR, WHITE  PENDANT SPEAKERS, PAIR, WHITE  EXTRON  PRESENTER SWITCH  PRESENTER SWITCH  PROJECTOR SCREEN, 137" DIAGONAL, 16:10, TENSIONED, WALL MOUNT, MATTE WHITE PROVIDED REQUIRED MOUNTING HARDWARE.  APPROVED EQUAL  APPROVED EQUAL  OVER 1701 TAPPED AT 32 WATTS, PENDANT LENGTH SHALL BE COORDINATED WITH PENDANT LIGHT FIXTURES  OR STRON  APPROVED EQUAL  CRESTRON  AMX	PBC 1	A/V PUSH BUTTON CONTROLLER	EXTRON	EBP 200	COLOR SHALL BE COORDINATED WITH ARCHITECT	AMX
PROJECTOR SCREER, 137 DIAGONAL, 16.10, TENSIONED, WALL MOUNT, MATTE WHITE. PROVIDED REQUIRED MOUNTING HARDWARE.   DA-LITE	PRJ 1	PROJECTOR - CEILING MOUNTED/PENDANT	VIVITEK	DU7295Z		APPROVED EQUAL
PENDANT SPEAKERS, PAIR, WHITE  SF 26PT  COORDINATED WITH PENDANT LIGHT FIXTURES  APPROVED EQUAL  CRESTRON  APPROVED EQUAL  CRESTRON  AMX	SCN 1		DA-LITE	70192LS		APPROVED EQUAL
AWA		PENDANT SPEAKERS, PAIR, WHITE	EXTRON	SF 26PT	· · · · · · · · · · · · · · · · · · ·	
AFFINOVED EQUAL	SW 1	PRESENTER SWITCH	EXTRON	IN1808 - PART NUMBER 60-1615-01		

PROVIDE LINE/LEVEL OVERRIDE INPUT FOR THE SCHOOL CENTRALLIZED PAGING SYSTEM AND EMERGENCY FIRE ALARM SYSTEM.





1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 27 | 28 | 29



LEGATARCHITECTS
DESIGN | PERFORMANCE | SUSTAINABILITY

NORTH
SCOTT
COMMUNITY
SCHOOL
DISTRICT

ADDITION AND RENOVATIONS TO JUNIOR HIGH

502 South 5th Street Eldridge, IA 52748

ARCHITECT

Legat Architects

1515 5th Avenue, Suite 108

Moline, IL 61265
P: 309.517.5545
F: 309.517.5540

www.legat.com

<u>CONSTRUCTION MANAGER</u>

Russel Construction

4700 E 53rd Street Davenport, IA 52807 563.459.5600 www.russelco.com

CIVIL ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

STRUCTURAL ENGINEER

IMEG

623 26th Avenue Rock Island, IL 61201 P: 309.788.0673 F: 309.786.5967 www.imegcorp.com

MEP/FP ENGINEER

RTM

5137 Utica Ridge Road Davenport, IA 52807 P: 563.726.6310 www.rtmec.com

REVISIONS

NO. DESCRIPTION DATE

11.10.2023

PROJECT

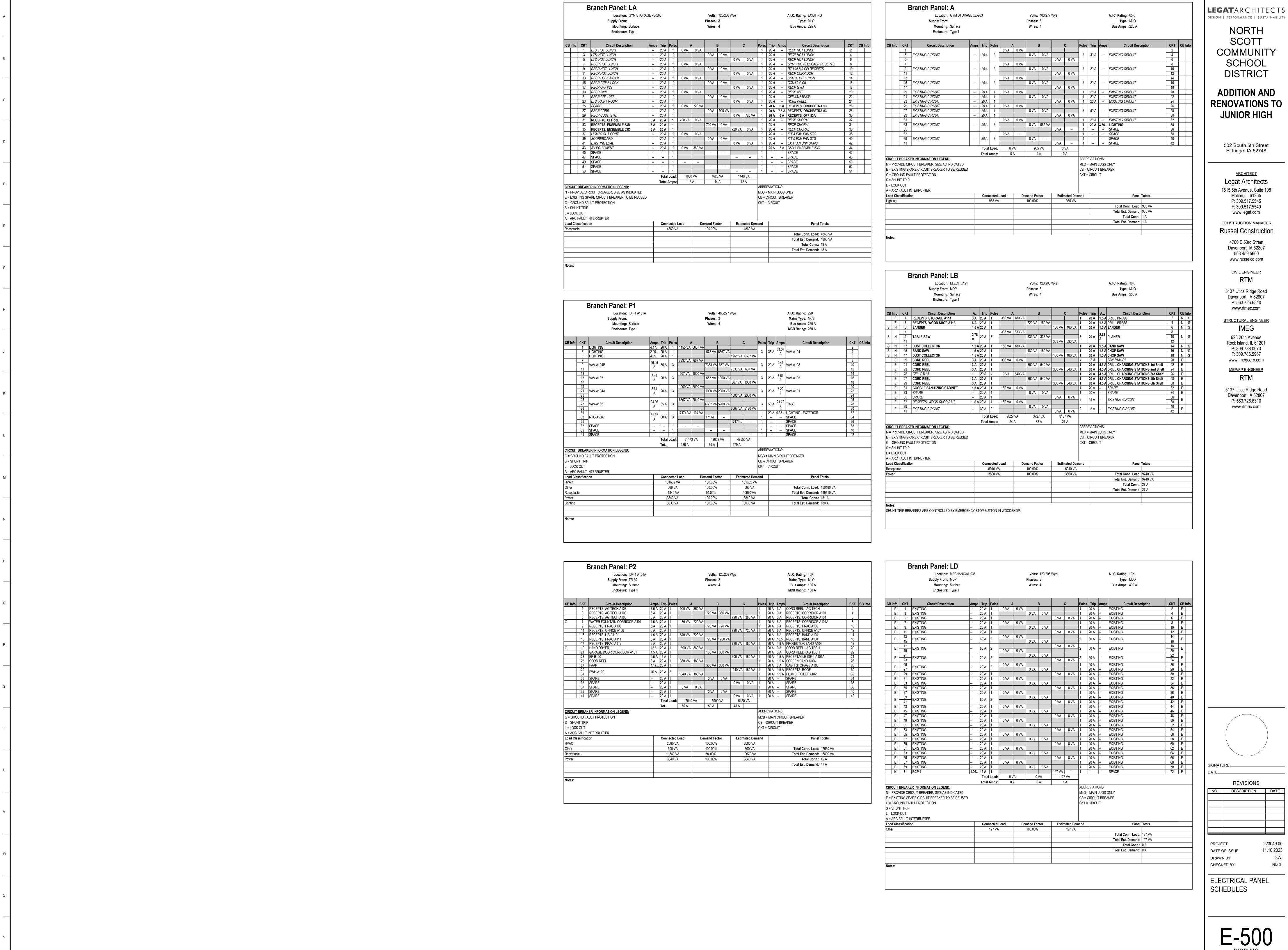
DRAWN BY CHECKED BY

DATE OF ISSUE

ELECTRICAL A/V

DIAGRAM AND

SCHEDULE



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 25 | 26 | 27 | 28 | 29