ADDENDUM NO. 1

October 11, 2023

Bid Package No. 2 - LOWELL HIGH SCHOOL RENOVATIONS AND NEW SPORTS COMPLEX
Lowell, IN 46356

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated September 25, 2023 by Gibraltar Design. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 1-2 and attached Addendum No. 1 from Gibraltar Design dated October 10, 2023 and consisting of 10 pages, Specification Section 09 33 00 - Rolling Doors and Grilles, Revised Specification Section 23 09 93 - Sequence of Operation, and 39 drawings.

A. <u>SPECIFICATION SECTION 00 00 20 – TABLE OF CONTENTS</u>

1. **Add:**

   Specification Section 08 33 00 - Rolling Doors and Grilles

B. <u>SPECIFICATION SECTION 00 12 00 - MULTIPLE CONTRACT SUMMARY</u>

BID CATEGORY NO. 3 - GENERAL TRADES

1. **Add:**

   Specification Section 08 33 00 - Rolling Doors and Grilles

2. **Add:**

Clarification No. 22:
The **Bid Category No. 1 Contractor** is responsible to provide any special requirements and grading to provide equipment access for lifts and lulls. All disturbed areas shall be restored to their original state.

ADDENDUM ONE

Addendum One (AD.01) to the drawings and specifications prepared by Gibraltar Design for **Lowell High School Renovations and New Sports Complex** for Tri-Creek School Corporation, Lowell, Indiana.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original contract documents. All Contractors shall acknowledge on their bid form that they have received this Addendum and include the appropriate content of same within their bid proposal.

SPECIFICATIONS

1. Specification Section 00 01 10 Table of Contents

A. Add Specification Section 08 33 00 Rolling Doors and Grilles, to the Table of Contents.

B. Revise 10 11 00 Marker boards and Chalkboards to: "10 11 00 Markerboards and Corkboards"

C. Revise Specification Section 28 31 01 Addressable Fire Alarm System – High School to "28 31 01 Addressable Fire Alarm System – Lowell High School"

2. Specification Section 08 33 00 Rolling Doors and Grilles

A. Add specification section 08 33 00 Rolling Doors and Grilles, included in this Addendum to the Project Manual.

3. Specification Section 10 28 13 Toilet Accessories

A. Add the following paragraphs 2.3 K and 2.3 L to read:

1. "K. Shower Rod: Stainless steel rod and flanges, 1 inch diameter, minimum 22 gage. Acceptable Manufacturers and product are as follows:
   a. Bobrick Series B-6107
   b. Bradley 963
   c. ASI 1214.
   d. AJ UX1-B"

2. "L. Shower Curtain: Vinyl shower curtain, 42 inches wide by 72 inches high; opaque, matte white vinyl, 0.008 inch thick; heat sealed grommets at 6 inches on center; hemmed sides and bottom; stainless steel hooks. Provide one for each shower rod."

4. Specification Section 23 09 93 Sequence of Operation

A. Replace Specification Section 23 09 93, Sequence of Operation, with Specification Section 23 09 93 included in this Addendum.

5. Specification Section 21 05 01 Fire Protection Demolition for Remodeling

A. Revise footer to read:

1. "Fire Protection Demolition for Remodeling 21 05 01"

6. Specification Section 22 05 01 Plumbing Demolition for Remodeling

A. Revise footer to read:

1. "Plumbing Demolition for Remodeling 22 05 01"

7. Specification Section 23 05 01 Mechanical Demolition for Remodeling

A. Revise footer to read:

1. "Mechanical Demolition for Remodeling 23 05 01"

8. Specification Section 23 81 50 Terminal Units

A. Revise footer to read:

1. "Terminal Units 23 81 50"

9. Specification Section 26 09 23 Lighting Controls - Timeclocks

A. Revise footer to read:

1. "Lighting Controls - Timeclocks 26 09 23"

10. Specification Section 26 24 17 Existing Switchboards and Panelboards

A. Revise footer to read:

1. "Existing Switchboards and Panelboards 26 24 17"

11. Specification Section 27 05 28 Section 27 05 28 Conduit for Communication Systems

A. Revise Specification Title:

1. Remove "Division 27 – Communications"
2. Title shall only read "Section 27 05 28 Conduit for Communication Systems"

12. Specification Section 27 10 00 Section 27 10 00 Communication Distribution

A. Revise Specification Title:

1. Remove "Division 27 – Communications"
2. Title shall only read "Section 27 10 00 Communication Distribution"

13. Specification Section 28 31 01 Addressable Fire Alarm Systems – Lowell High School

A. Revise footer to read:

1. "Addressable Fire Alarm Systems – Lowell High School 28 31 01"

14. Specification Section 28 31 02 Addressable Fire Alarm System – Athletic Complex

A. Revise Footer to read:

1. "Section 28 31 02 Addressable Fire Alarm Systems – Athletic Complex"

DRAWINGS

1. **Sheet G-101, Sheet Index Volume 1**
   A. Revise Sheet Index – Volume One, Site Buildings, General:
      1. Remove "G-201-SB Site Buildings – Life Safety Plans"
2. **Sheet G-103, Sheet Index Volume 2**
   A. Revise Sheet Index – Volume One, Site Buildings, General:
      1. Remove "G-201-SB Site Buildings – Life Safety Plans".
3. **Sheet G-101, Sheet Index Volume 1**
   A. Revise Sheet Index – Volume Two, North Star Building, General:
      1. Revise "G-101-NS North Star Building Sheet Index – Volume 2" to read as follows".
         a. "G-103-NS North Star Building Sheet Index – Volume 2"
4. **Sheet G-101, Sheet Index Volume 1**
   A. Revise Sheet Index – Volume One, North Star Building, Architectural:
      1. Remove sheet "A-830-NS North Star Building Second Floor Pattern Plan"
5. **Sheet G-103, Sheet Index Volume 2**
   A. Revise Sheet Index – Volume One, North Star Building, Architectural:
      1. Remove sheet "A-830-NS North Star Building Second Floor Pattern Plan"
6. **Sheet G-103, Sheet Index Volume 2**
   A. Revise Sheet Index – Volume Two, North Star Building, General:
      1. Revise sheet "G-101-NS North Star Building Sheet Index – Volume 2" to read as follows:
         a. "G-103-NS North Star Building Sheet Index – Volume 2"
7. **Sheet G-101-NS, North Star Building Sheet Index - Volume 1**
   A. Revise Sheet Index – Volume 1, Architectural:
      1. Remove sheet "A-830-NS North Star Building Second Floor Pattern Plan"
8. **Sheet G-103-NS, North Star Building Sheet Index - Volume 2**
   A. Revise Sheet Index – Volume 1, Architectural:
      1. Remove sheet "A-830-NS North Star Building Second Floor Pattern Plan"
9. **Sheet G-101-SB, Site Buildings - Sheet Index - Volume 1**
   A. Revise Sheet Index – Volume 1, General:
      1. Remove sheet "G-201-SB Site Buildings – Life Safety Plans"

10. Sheet G-103-SB, Site Buildings - Sheet Index - Volume 2

A. Revise Sheet Index – Volume 1, General:

1. Remove sheet "G-201-SB Site Buildings – Life Safety Plans"

11. Sheet G-204-NS

A. Refer to revised full size drawing included in this Addendum for the following revision.

1. Update Code summary and floor plans as indicated.

12. Sheet G-301

A. Refer to revised full size drawing included in this Addendum for the following revision.

1. Add wall type as indicated.

13. Sheet S-001 – NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Remove designation (4/ S-303) under "General Masonry Notes", for note 4 and add A.C. I. after the word, "Per" and a period after "details".
2. Revise and add to the "Masonry Wall Panel Schedule", (See updated detail sheet).
3. Revise "Ground Snow Load" value to 25 PSF from 20 PSF within the "General Design Notes".

14. Sheet SL-101-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Add and revise two entry doorways lintels for football locker room. (Refer to updated plan)

15. Sheet S-302-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. In details 9, 10/ S-302 showing precast floor deck supports on masonry bearing wall add wall reinforcing information that extends into bearing course at bond beam.

16. Sheet SF-101-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. At front entry canopy on north side of building change roof framing to 8" at 1'-4" O.C. from 10" at at 2'-0" O.C.
2. Add support per 1/A-415 Section at L8x8x1/2" w/ ½" adhesive masonry anchors at 1'-0" on center.
3. Add elevated floor slab information "B" for the area between stair tower and locker room.

17. Sheet A-820-AD

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise as indicated.
2. Interior finish clarifications.

18. Sheet A-102-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.
   1. Revise dimensions as indicated.
   2. Revise wall construction as indicated.
   3. Revise storefront and wall construction as indicated.
      a. Revise storefront to move South.
   4. Revise construction around Patio as indicated.

19. Sheet A-412-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:
   1. Revise Detail 3 construction as indicated.
      a. Revise detail to account for recessed door.

20. Sheet A-413-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:
   1. Revise Detail 1 construction as indicated.
      a. Revise Cut Stone with Engraved Lettering.
      b. Revise top of wall and railing as indicated.
   2. Revise Detail 2 construction as indicated.
      a. Revise top of wall and railing as indicated.
   3. Revise Detail 3 construction as indicated.
      a. Revise top of wall and railing as indicated.
      b. Revise section as indicated.
   4. Revise Details 5 and 6 construction as indicated.
      a. Revise to accommodate adjustment for top of wall and railing as indicated.

21. Sheet A-417-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:
   1. Revise Detail 1 construction as indicated.
      a. Revise Storefront to move South.
      b. Revise configuration of masonry. Refer to Structural.
   2. Revise Detail 3 construction as indicated.
      a. Revise to account for stainless steel counter.
   3. Revise Detail 5 construction as indicated.
      a. Revise configuration of masonry. Refer to Structural.

22. Sheet A-430-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:
   1. Revise Detail 7 construction as indicated.
   2. Revise Detail 4, 11 construction as indicated.
      a. Relocate controller as indicated.

b. Graphically represent wall furring.

23. Sheet A-501-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise detail 1 locker base as indicated.
2. Revise details 7, 8, 9 as indicated.
    a. Revise details to accommodate to of wall and railing adjustment and clarify alignment of stone cap joints.

24. Sheet A-601-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Revise Door and Frame Schedule as indicated.
    a. Revise Doors -A-201A and A-201B, to account for spandrel glass in storefront. Revise Storefront to move South.
    b. Revise Doors A-204A and A-209A as indicated.

25. Sheet A-610-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise Storefront SF9 as indicated
2. Revise Hollow Metal (HM) Elevation HM8 as indicated.

26. Sheet A-611-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise details, 8, 9, 10 as indicated.
    a. Revise storefront to move South.
2. Add detail 14 and 15 as indicated.
    a. Revise storefront to move South.
3. Add detail 16 as indicated.
    a. Detail accounts for recessed door transition.

27. Sheet A-801-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise interior finishes as indicated.

28. Sheet A-802-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise interior finishes as indicated.

29. Sheet A-820-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise as indicated.
2. Interior finish clarifications.

30. Sheet A-101-CB

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise as indicated.

a. Relocate Knox Box and Fire Alarm Annunciator Panel

31. Sheet A-410-CB

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Revise Detail 2 construction as indicated.
    a. Revise to account for stainless steel counter.

32. Sheet A-801-CB

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise interior finishes as indicated.

33. Sheet A-820-CB

A. Refer to revised full size drawing included in this Addendum for the following revisions.

1. Revise as indicated.
2. Interior finish clarifications.

34. Sheet M-102-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Remove Plan Notes 1 and 4. (Not Used).
2. Remove flues and intakes through roof as indicated on plan with Notes 1 and 4 referenced.

35. Sheet M-101-CB

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Add exhaust fan, ductwork and grille for storage Room A-115.

36. Sheet P-101-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Added Invert Elevation of 4" waste pipe exiting the building from the grease interceptor (P-19).
2. Revised waste and vent piping not to be in conflict with foundation footer.
3. Revised location of 4" storm pipe exiting the building not to be in conflict with foundation footer.

37. Sheet P-201-NS

A. Refer to revised full size drawing included in this Addendum for the following revisions:

1. Added Plan Note #59.
2. Revised locations of floor cleanout.
3. Revised water and waste piping drops to be in wall.
4. Add exhaust fan, ductwork and grille for Storage Room A-115. Fan shall run continuously and connected to campus BMS.

38. Sheet E-002-AD

A. Refer to revised full size drawing included in this Addendum, which includes as

minimum the following revisions:

1. Adding and modifying Plan Notes.
2. Adding Plan Notes to the plan.

39. Sheet E-101-AD

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions.

1. Noting select electrical equipment.
2. Adding Plan Notes.

40. Sheet TD-101-AD

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions.

1. Revised existing communications devices in MEDIA CENTER V-105.
2. Revised existing Communication devices in SGI M-106.
3. Revised existing Communication devices in SGI M-107.
4. Revised existing Communication devices in OFFICE M-113.
5. Revised existing Communication and Security devices in CREATION STATION M-115.
6. Revised existing Communication devices in I.T. M-111.
7. Revised existing Security devices in CORRIDOR M-124.
8. Revised existing handhole to be removed outside of CREATION STATION M-107.
9. Revised existing Security devices outside COPY ROOM/WORK M-112.
10. Revised and added sheet notes.

41. Sheet T-101-AD

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions.

1. Revised and added Communications devices and sheet notes to Media Center M-101.
2. Added communication devices to SGI-M-105.
3. Added communication devices to SGI-M-104.
4. Added communication devices to SGI-M-103.
5. Added communication devices to SGI-M-102.
6. Added communication devices to Office M-109.
7. Added communication devices to Work M-107.
8. Added security devices to M-111.
9. Added control tags to security devices in Vestibule M-130.
10. Added security device outside of deputy Treasure M-120.
11. Added telecom connection and sheet notes to Elec/ Tech M-106.
12. Revised and added to Sheet Note Block.

42. Sheet ED101-NS

A. Refer to revised full size drawing included in this Addendum which includes as minimum the following revisions.

1. Modifying select Demolition Plan Notes.

43. Sheet E-101-NS

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Deleting extra set of Plane Notes.
2. Modifying select Plan Notes and deleting select Plan Notes.

44. Sheet E-201-NS

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Deleting extra set of Plane Notes.
2. Modifying select Plan Notes and adding select Plan Notes.

45. Sheet E-202-NS

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Adding the video/power outlets for the ceiling mounted video projector.
2. Adding video/power outlet for input rough-in for ceiling mounted video projector.

46. Sheet E-601-NS

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Adding stamp and signature to title block.

47. Sheet G-103-CB

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Adding stamp and signature to title block.

48. Sheet E-101-CB

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

B. Moving the fire alarm system remote annunciator.

C. Moving the receptacles for the data equipment.

D. Adding electrical connection o the new exhaust fan EF-CB2.

49. Sheet E-601-CB

A. Refer to revised full size drawing included in this Addendum, which includes as minimum the following revisions:

1. Adding stamp and signature to title block.

Pages 1 through 10, inclusive, Toilet Accessories paragraph 2.3 K and 2.3 L of Specification Section 10 28 13, Specification Section 08 33 00, 23 09 93 and Thirty Nine (39) Full-Size Drawings, constitute the total makeup of **Addendum One**.

GIBRALTAR DESIGN

Joseph P. Briggs

Y:\23-115 Tri-Creek SC - Lowell HS New Stadium\Specs\ADDENDUM ONE\AD01.docx

SECTION 08 33 00
ROLLING DOORS AND GRILLES

1 General

1.1 Section Includes

A. Rolling counter doors; manually operated.

1.2 Related Sections

A. Section 05 50 00 - Miscellaneous Metals: Support framing.

B. Section 08 71 00 - Door Hardware: Cylinder core and keys.

1.3 References

A. UL 325 - Safety Door, Drapery, Gate, Louver, and Window Operators and Systems.

B. ASTM A653 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. ASTM B221 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.

1.4 System Descrition

A. Design Uniform Wind Load: In accordance with requirements of Indiana Building Code applicable codes.

B. Face mounted and manual operation at Concessions A-101.

1.5 Submittals

A. Submit shop drawings under provisions of Division 1.

1. Provide pertinent dimensioning, general construction, component connections and details, anchorage methods, hardware location, wiring diagrams, and installation details.

2 Products

2.1 Rolling Doors And Grilles - Acceptable Manufacturers

A. Overhead Door Corporation, Dallas, Texas.

B. Wayne-Dalton Corporation, Mt. Hope, Ohio.

C. The Cookson Company, Phoenix, Arizona.

D. Cornell Iron Works, Inc., Mountaintop, Pennsylvania.

2.2 Materials

A. Curtain:

1. Exterior Counter Doors: Slat profile and width as recommended by the manufacturer; endlocks and windlocks on alternate slats or as required; hood baffle; aluminum bottom bar.

a. Insulated Counter Doors: Minimum 22 gage steel slats with minimum 24 gage steel backing; G90 coating in accordance with ASTM A653; fill between steel face and backing with nominal 2 pound density polyurethane insulation.

B. Curtain Guides:

1. Non-Labeled Counter Doors: Extruded aluminum angles of required sizes and configurations; with continuous pile strips.

C. Roller Shaft (Counterbalance): Steel pipe and helical steel spring system capable of producing sufficient torque to assure easy operation of curtain from any position; adjustable spring tension; deflection not to exceed 0.03 inch per foot of span.

D. Housing: 24 gauge galvanized steel; internally reinforced to maintain rigidity and form.

1. Provide hood baffle at insulated doors.

E. Brackets: Steel plate to support curtain and counterbalance assembly on sealed ball bearings, form end closure, and support housing.

F. Locking: Furnish cylinder locking devices at all Counter doors.

G. Weatherstripping: Water and rot proof, resilient type; located along jamb edges, bottom of curtain, and within housing.

2.3 Operation

A. Manual Push Up Operation at Concessions Stand.

1. Lift handles on bottom bar.

2.4 Finish

A. Ferrous Metal: Coat surfaces, except working machinery and galvanized steel, with a factory coat of rust inhibiting primer.

B. Service Doors: Baked on or Powder Coated Finish, as selected from Manufacturers standard color selections.

C. Aluminum: Clear anodized finish.

3 Execution

3.1 Installation

A. Install rolling doors in accordance with manufacturer's instructions.

B. Fit, align, and adjust door assembly assemblies level and plumb; provide smooth operation.

END OF SECTION

SECTION 23 09 93
SEQUENCE OF OPERATION

1General

1.1 Section Includes

This section covers temperature control sequences for the High School Administration Addition, Community Building, Site Buildings and North Star Building. The list below is for the various pieces of equipment used and is broken down per building.

A. Packaged Rooftop Unit Control.

B. Modular Indoor Air Handling Units

C. Modular Indoor DOAS Units

D. Air Cooled Packaged Chiller

E. Gas Fired Condensing Boilers

F. Chilled and heating water pumps

G. Fan Coil Units

H. Unit Heaters

I. Fan Powered VAV Terminal Units

J. VAV Terminal Units

K. Heating Water Baseboard Radiation and convectors

L. Electric Heating Units

M. Mini Split Air Conditioning Unit Control.

N. Cabinet Heater Control.

O. Building Pressure Control.

P. Exhaust Fan Control.

Q. Lighting contact control

R. Occupied/Unoccupied Zone Control.

1.2 Related Sections

A. Section 23 05 00 - General HVAC Requirements.

B. Section 23 05 13 - Motors.

C. Section 23 05 93 - Testing, Adjusting and Balancing.

D. Section 23 09 13 - Automatic Temperature Control System.

E. Section 23 09 63 - Instrument Devices.

F. Section 23 20 00 – Hydronic Pumps

G. Section 23 34 23 - Power Ventilators.

H. Section 23 52 16 – Condensing Gas Fired Boilers

I. Section 23 81 12 – Packaged Rooftop Air Conditioning Units

J. Section 23 73 00 – Packaged Air Handling Units

K. Section 23 64 25 – Air Cooled Chillers

L. Section 23 81 12 – Packaged Rooftop Units.

M. Section 23 81 15 – Air Terminal Units

N. Section 23 81 26 - Split Air Conditioning Units.

O. Section 23 81 50 - Terminal Heat Transfer Units.

1.3 System Description

A. This Specification Section defines the manner and method by which each building automation system functions. Requirements for each type of building system control are specified herein. Equipment, devices, and system components required for the building automation system are specified in other Specification Sections.

1.4 Submittals

A. Submit submittals under provisions of Specification Division 1.

B. Submit diagrams indicating each mechanical system controlled and the respective control system components required, including component setting(s), component adjustable range of control and component operating limits.

C. Submit with diagrams the mechanical system written sequence of operation description.

D. Include draft copies of graphic displays indicating mechanical system components, control system components, and controlled function status and values.

1.5 Project Record Documents

A. Submit documents under provisions of Specification Division 1.

B. Accurately record actual set points and settings of controls, including changes to sequences made after submission of shop drawings.

2Products

Not Used.

3Execution

3.1 Centralized Equipment Coordination:

A. Provide interface to the existing school campus automation system, control panels, control devices, graphic solutions, and software programs a master software program to coordinate equipment operation. Each building shall have a "master" control panel interfaced with the campus system to allow for standalone operation should the communications network fail. The building master panels shall communicate over the owner's fiber optic network.

B. The coordination program shall provide the following function:

1. Outdoor Air Temperature:

    a. Utilize existing outdoor air temperature sensor, verify correct calibration. Provide software and error checking to exclude unreliable temperature readings.

2. Relative Humidity:

    a. Utilize existing outdoor air relative humidity sensor, verify correct calibration. Provide software and error checking to exclude unreliable relative humidity readings.

3. Outdoor Air Dew-point Control:

    a. Using the outdoor air humidity reading and the outdoor air temperature reading, calculate the outdoor air dew-point.

    b. Provide a continuous monitoring of the calculated dew-point. Provide an information block within each System graphic that indicates the current outdoor air dew-point.

    c. If the calculation of the outdoor air dew-point fails or the building automation system communication link fails provide a default to disable the economizer control (revert to minimum unit outdoor air control).

HIGH SCHOOL ADMINISTRATION ADDITION HVAC CONTROL SEQUENCES

3.2 Packaged Rooftop Unit Control:

A. Unit controls shall be provided by the unit manufacturer for use as a multi-zone VAV system control connecting to fan powered VAV terminal units and single zone VAV terminal units. Unit manufacturer shall provide all the control devices associated with the packaged unit controls.

B. Existing building BMS communications interface shall be provided with the unit controller and coordinated by the manufacturer.

3.3 VAV Terminal Unit Control:

A. When connecting to the existing air handling unit controls following the existing control sequences using the following as a minimum. This will also apply to the VAV terminal unit connections to the proposed Packaged Rooftop Air Handling Unit.

B. Morning Warm-up Mode:

1. Primary air system (air handler) is indexed on

2. Upon signal from the building automation system, the terminal unit controller shall fully open the primary air volume damper and disable the heating coil control (coil control valve to fully open) until the signal is removed.

3. Once air handler return air temperature set point is achieved, the building automation system shall command the terminal units to their occupied mode operation.

C. Occupied Mode:

1. When the primary air system (air handler) is operating, the terminal unit controller modulates respective inlet damper to allow air flow from the primary air system (air handler).

2. As primary supply air duct pressure varies, terminal unit controller modulates respective inlet damper to maintain constant primary air flow independent of system pressure variations.

3. As space temperature sensor senses reduced cooling demand, terminal unit controller modulates respective inlet damper to maintain the zone temperature cooling set point.

4. As space temperature sensor senses no cooling demand, terminal unit controller reduces inlet damper air flow to its minimum cooling air flow. Before heating is initiated, control enters an adjustable no-load dead-band. On sensing need for heat, terminal unit controller resets inlet damper to "Design Heating CFM" and modulates a normally open Heating Water valve to maintain the space temperature heating set point.

5. Through the building automation system, provide terminal units with fully adjustable minimum/maximum primary air flow conditions.

D. Unoccupied Mode:

1. Variable Air Volume Terminal Units shall not have an unoccupied mode control strategy.

E. Monitoring: Provide control and monitoring points as indicated on Contract Documents. Provide a graphic for each terminal unit (identify within graphic the associated air handling unit) in all system graphics.

3.4 Fan Powered Terminal Unit Control:

A. When connecting to the existing air handling unit controls following the existing control sequences using the following as a minimum. This will also apply to the Fan Powered Terminal Unit connections to the proposed Packaged Rooftop Air Handling Unit.

B. Morning Warm-up Mode:

1. Primary air system (air handler) is indexed on

2. Upon signal from the building automation system, the terminal unit controller shall fully open the primary air volume damper and disable the heating coil control (coil control valve to fully open) until the signal is removed. Terminal Unit fan shall start and run continuously.

3. Once air handler return air temperature set point is achieved, the building automation system shall command the terminal units to their occupied mode operation.

C. Occupied Mode:

1. Fan shall run continuously. When primary air system is operating, the controller modulates the primary variable volume damper to allow air flow from the central system.

2. As central duct system pressure varies, controller modulates inlet volume damper to maintain constant primary air flow independent of pressure variations.

3. As space temperature sensor senses reduced cooling demand, controller modulates volume damper to maintain the zone temperature cooling setpoint.

4. As space temperature sensor senses no cooling, controller reduces air flow to its minimum cooling air flow. Before heating is initiated, control enters an adjustable no-load dead-band. On sensing need for more heat, a normally open hot water heating valve is modulated to maintain the zone temperature heating setpoint.

D. Unoccupied Mode:

1. Central Fan System Off: Fan shall stop and primary air damper fully close. As room temperature falls to the unoccupied heating setpoint, the fan and heating coil control cycles to maintain the unoccupied temperature setpoint. Provide an adjustable on/off dead-band to prevent excessive cycling.

2. Central Fan System On: Fan shall stop and primary damper fully close. When the zone temperature is below the unoccupied heating setpoint or above the unoccupied cooling setpoint, the fan shall start and controller modulate the primary variable volume damper from the central system to maintain the unoccupied setpoints.

3.5 Mini Split Air-Cooled Conditioning Unit Control:

A. Temperature Control Contractor shall provide building automation system unit points to facilitate integration into the building DDC controls.

B. Temperature Control Contractor shall provide and install interlock control wiring (24 VAC) between indoor (ductless) evaporator unit and remote located air-cooled condensing unit (DX cooling). Evaporator unit is equipped with a remote space thermostat and controller.

1. Temperature Control Contractor shall install a DDC monitoring sensor as indicated on the Contract Documents.

3.6 Cabinet Heater Control:

A. Occupied Mode:

1. Wall mounted remote space temperature sensor shall cycle the fan and heating water control valve to maintain a set point of 65 degrees F. (adjustable).

2. The occupied space air temperature set point shall be controlled by the programming within the building automation system.

3. If the space sensor detects a space temperature two (2) degrees F. (adjustable) below set point, the two-position (normally open) heating coil control valve shall open and the supply fan shall be enabled to maintain the desired temperature setting.

B. Unoccupied Mode:

1. Space temperature set point shall be 60 degrees F. (adjustable).

2. The unoccupied space air temperature set point shall be controlled by the programming within the building automation system.

3. If the space sensor detects a space temperature two (2) degrees F. (adjustable) below set point, the two-position heating coil control valve shall open and the supply fan shall be enabled to maintain the desired temperature setting.

3.7 Building Pressure Control:

A. Provide outdoor and indoor static pressure probes for system serving New Administration Addition. Terminate indoor static pressure lines within an empty thermostat cover.

B. Through an electronic differential pressure transmitter, maintain the building zone static pressure to plus 0.05-inch WC (adjustable).

C. Provide proportional integral control to modulate the associated relief damper(s) through a continuously variable output.

D. ***The Testing, Adjusting and Balancing Contractor shall establish building air pressurization set point.***

E. The relief damper operation shall be coordinated with the hour/day/month scheduling program operation of the associated systems. When the systems are not in operation the relief damper(s) shall not be in operation (fully closed).

3.8 Exhaust Fan Control:

A. Exhaust fans shown to be automatic within the exhaust fan schedule shall be controlled by the occupied/unoccupied zone(s) assigned within the same schedule.

B. Temperature Control Contractor shall furnish contact closures from a building automation panel to each zone contactor which controls designated exhaust fans. The contact closure shall control a magnetic contactor which will in turn activate the exhaust fans assigned to the occupied/unoccupied zone indicated.

C. The Electrical Contractor shall provide the magnetic contactor and all the wiring to the Hand/Off/Automatic switch, exhaust fans, contactor, disconnect switches and related equipment. Control contact wiring from the building automation system panel to the Hand/Off/Automatic selector switch of the exhaust fan magnetic starter shall be by Temperature Control Contractor.

3.9 Exterior Lighting Zone Control:

A. Temperature Control Contractor shall provide input/output devices, relays, programming, conduit, interlock and control wiring to interface the building automation system communication network with exterior security/site lighting relays R-1 through and including R-8. Reference Electrical Relay Schedule on Contract Document E-601.

1. **Each** exterior lighting relay shall be mapped as a **standalone building automation system point and totally independent lighting zone control**. Provide a system graphic for each lighting zone control.

2. The exterior lighting zone operation shall incorporate an hour/day/month scheduling program as directed/established by the school.

B. Mount components in control panel with a removable cover. Lighting Zone Control Panel shall be located near the exterior lighting control cabinet.

3.10 Occupied/Unoccupied Zone Control:

A. The building shall be divided into Occupied/Unoccupied zones as indicated below.

No	zone	Area Description	Override Location
1		Administration Addition	As directed
2		Media Center Renovation	As directed

B. The building automation system shall index the individual zones between occupied and unoccupied cycles through the hour/day/month scheduling program. Start and stop of the packaged rooftop unit, terminal units, and specific exhaust fans shall be coordinated between the Occupied/Unoccupied cycle routine and the optimum start routine to provide the desired building temperatures during occupancy. During the optimum start (morning warm-up) routine the exhaust fans shall remain indexed off.

C. Any override pushbuttons shall be identified with an engraved tag attached above the button. Tag shall indicate the occupied/unoccupied zone using approved zone identification. Submit identification tag nomenclature to school for approval before final installation.

COMMUNITY BUILDING HVAC CONTROL SEQUENCES

Note: Community Building is a three-season operation and shall be shut down and winterized during Winter based upon owner occupancy schedule. No mechanical cooling is provided and heating sized for tempering and not full heating loads.

3.11 Electric Heater (wall and ceiling) Control:

A. Integral thermostat (furnished by unit manufacturer) shall cycle fan and electric coil as required to maintain space set point (50 deg F.) temperature (adjustable).

3.12 Exhaust Fan Control:

A. Exhaust fan shown to be automatic and shall be controlled by the occupied/unoccupied zone(s) assigned.

B. Temperature Control Contractor shall furnish contact closures from a building automation panel to each zone contactor which controls designated exhaust fan. The contact closure shall control a magnetic contactor which will in turn activate the exhaust fans assigned to the occupied/unoccupied zone indicated.

3.13 Occupied/Unoccupied Zone Control:

A. The building shall be divided into Occupied/Unoccupied zones as indicated below.

No	zone	Area Description	Override Location
1		Community Building	As directed

B. The building automation system shall index the building between occupied and unoccupied cycles through the hour/day/month scheduling program. Start and stop of the exhaust fans and disabling of electric heaters shall be coordinated between the Occupied/Unoccupied cycle routine and the optimum start routine to provide the desired building temperatures during occupancy.

C. An override pushbutton located in the Concessions area shall be identified with an engraved tag attached above the button. Tag shall indicate the occupied/unoccupied zone using an approved zone identification. Submit identification tag nomenclature to school for approval before final installation.

SITE BUILDING HVAC CONTROL SEQUENCES

3.14 Electric Heater (wall and ceiling) Control:

A. Integral thermostat (furnished by unit manufacturer) shall cycle fan and electric coil as required to maintain space set point (60 deg F.) temperature (adjustable).

3.15 PTAC Unit Control:

A. Integral fan control/thermostat (furnished by unit manufacturer) shall cycle fan and electric heat or DX heat pump as required to maintain space set point temperature (adjustable).

NORTH STAR HVAC CONTROL SEQUENCES

3.16 Chilled Water System

A. Chilled water system consists of a single air-cooled packaged chiller with variable speed primary chilled water pumps.

B. The chilled water system shall be shut down by owner based upon winter occupancy schedule and chiller drained and winterized. No glycol shall be used within chilled water system. Electric heat tracing is to be provided for the exterior piping and evaporator.

C. Temperature Control Contractor shall provide all devices, including the circulating pump variable frequency drives (VFD). The sensor wells and differential pressure taps shall be provided by the Temperature Control Contractor and installed by the Mechanical Contractor. All control interlock wiring, conduit, supports, etc. required by boiler management panel and all field mounted sensors/devices shall be installed and coordinated by the Temperature Control Contractor including the water flow sensor and remote water pressure transducer.

D. Electrical Contractor shall provide 120-volt wiring to the Chilled Water Chiller Plant Control System Panel, the Chiller Management Control Panel module.

E. Manual/Automatic Control:

1. The chiller and pumps shall function independently of the DDC controller when their individual Hand/Off/Automatic (HOA) switches are in the hand position. The chiller start/stop shall be controlled by the chiller management control panel as specified elsewhere.

2. The chiller and pumps start/stop shall be controlled by the temperature control panel when the individual HOA switches are in the automatic positions.

3. The chiller and recirculation pumps shall be selected through a manual switch located on the chilled water system management control panel.

4. Assignment of the lead and recirculation pump shall be made when the chilled water system is started. This assignment sequence shall rotate every seven days, on a weekend. The lead and lag equipment designations shall be adjustable at the local DDC controller and at the remote system terminal by the operator.

F. Chiller System Startup:

1. The chiller control shall have a manual summer/winter switch.

2. The chilled water system startup shall be initiated manually by building operation personnel at the beginning of each cooling season. Thereafter, the control system shall operate the chiller system in the summer mode when the outdoor air temperature is greater than 60 degrees F.

G. Chilled Water Setpoint:

1. The chilled water setpoint shall be set at the chiller control panel. The chilled water temperature setpoint shall be 42 degrees F. (adjustable).

2. The chilled water setpoint shall be controlled by the chiller control panel when its local remote switch is in the local mode. The chilled water setpoint shall be controlled by a remote input from the DDC controller when the chiller control panel local remote switch is in the remote position. The chilled water temperature shall be reset from 42 to 46 degrees F as the outside temperature varies from 85 to 55 degrees F.

H. Chiller Operation:

1. Summer Mode:

a. The chiller system shall start when any day/night zone assigned to the system is in the day mode.

b. Start the recirculation pump and chiller, open the chiller isolation valve. When the chiller's water flow switch is made the chiller control panel shall start and operate the chiller as described in the chiller specification.

c. Chiller/Circulating Pump Failure Sequence: If a chiller fails, as indicated by a chiller alarm, start the lag chiller and signal an alarm. If a recirculation pump fails, as indicated by the pump differential pressure switch, disable the pump and signal an alarm. Provide a differential pressure switch for each pump.

d. Circulating Pump Failure Sequence: If a chiller fails, as indicated by a chiller alarm, or the lead primary recirculation pump fails, as indicated by the pump differential pressure switch, disable the failed equipment, start the lag pump and signal an alarm. Provide a differential pressure switch for each pump.

e. When all the day/night zones associated with the chiller system are in the night mode the chiller shall be commanded to stop. Stop the recirculation pumps 15 minutes after the chiller has stopped.

2. Winter Operation:

a. When the system switches to winter operation, stop the chiller.

b. Chiller shall not operate during winter months as dictated by owner's seasonal schedules.

3. All safety controls to be furnished and adjusted by the Chiller Manufacturer. The Temperature Control Contractor shall provide all interlock and control wiring between the chiller remote control panel and to all field-mounted sensors supplied by the Chiller Manufacturer. Conduit run outside chiller control panel to inside the mechanical room shall be provided by the Electrical Contractor, wiring shall be by this Contractor.

I. System Monitoring:

1. Monitoring/Control Points: Provide the monitoring and control points as indicated within this specification and on the drawings. All points and control settings shall be capable of being read and adjusted at the local DDC controller panel and at a remote system terminals. Provide a graphic for this system on all system graphic stations.

J. The following points shall be transmitted/received by the control software through the BACnet MS/TP interface to the BMS. The points listed shall be duplicated for each chilled water pump, refrigerant circuit, etc.

K. Chilled Water System Control points:

1. The following points shall be transmitted/received by the CPCS through the chiller interface to the BMS. The points listed shall be duplicated for each chilled water pump, etc. (when applicable).
2. Chiller Enable/Disable
3. Building Chilled Water Set Point
4. Building Chilled Water Supply Temperature
5. Building Chilled Water Return Temperature
6. Outdoor Air Temperature
7. Building Chilled Water Differential Pressure
8. Chilled Water Pump VFD Status
9. Chilled Water Pump VFD Signal
10. Chilled Water Pump VFD Operating Hertz
11. Chilled Water Pump VFD Failure Alarm
12. Chiller Start/Stop Command
13. Chiller Compressor Running Status
14. Chiller Flow Switch Status
15. Chiller Chilled Water Set Point

16. Chiller Leaving Water Supply Temperature
17. Chiller Entering Return Water Temperature
18. Chiller RLA Percentage
19. Chiller Failure Alarm
20. Chiller Evaporator Differential Pressure

3.17 Hot Water Heating System Control:

A. Heating water system consists of two gas fired condensing boilers with individual isolation valves and variable speed primary heating water pumps.

B. Boiler Control:

1. The boiler manufacturer shall provide a pre-wired and self-contained boiler management panel for control/modulation of the heating water boilers. Temperature Control Contractor shall install boiler management panel as indicated on the Contract Documents. Boiler Management Panel shall operate the individual boiler(s).

2. The boiler manufacturer shall provide the appropriate interface communication card(s) and/or gateways at each boiler management panel as required for seamless interface to the existing open protocol building automation system.

3. The Temperature Control Contractor shall provide the Hot Water Heating Plant Control System (HPCS) outlined below and be responsible for the installation as outlined, including the building automation system controller, control wiring, programming, checkout and school's personnel training on the system.

4. Temperature Control Contractor shall provide all devices, including the circulating pump variable frequency drives (VFD). The sensor wells and differential pressure taps shall be provided by the Temperature Control Contractor and installed by the Mechanical Contractor. All control interlock wiring, conduit, supports, etc. required by boiler management panel and all field mounted sensors/devices shall be installed and coordinated by the Temperature Control Contractor including the water flow sensor and remote water pressure transducer.

5. The appropriate interface from the boiler manufacturer shall be provided that shall transmit the points from the boiler management panel to the HPCS as listed in this Contract Document.

C. Heating System Startup:

1. The hot water heating system startup shall be initiated manually (local or remote) by the owners designated building engineer at the beginning of each heating season. Thereafter, the Heating Panel Control System (HPCS) shall be initiated by an enable/disable command as transmitted from the BAS system.

2. The HPCS shall operate the hot water heating system in the winter mode when the outdoor air temperature is equal to or less than 65 degrees F. (adjustable) and in the summer mode when the outdoor air temperature is greater than 65 degrees F. (adjustable). If the outdoor air temperature is greater than 65 degrees F. (adjustable) system shall respond to the supply water reset schedule to allow for dehumidification reheat control when required.

    a. This command may be overridden by owner's designated personnel with the proper password.

D. Hot Water Heating Set Point:

1. The leaving hot water set point shall be reset by HPCS from 180 to 140 degrees F (adjustable) as the outdoor air temperature changes. Reset the heating water between outdoor air temperature of 25 deg F. and below (180) to 55 deg F. and above (140).

E. Boiler Management Panel shall perform the following functions:

1. Upon a building zone demand for heating and outdoor air temperature meets heating system start criteria; the BAS sends an enable signal to start the boiler system.

    a. Designated owner personnel may override heating operational start criteria and indexed on heating system manually.

    b. Provide an adjustable temperature dead band to prevent excessive boiler cycling.

2. The modular boilers shall be staged on and modulated by the boiler management panel to maintain the hot water heating supply setpoint. Boilers control shall incorporate a lead/lag sequence that changed the lead boiler every two weeks to allow for comparative runtimes.

3. Boiler Management Panel shall monitor its sensors and interlocks to detect heating system fault(s) and control sequenced shutdown of the heating boiler group. If the lead boiler shall fail, the lag boiler shall take over and operate as the lead boiler and an alarm shall be initiated.

4. Via the HPCS, Temperature Control Contractor shall connect to the **individual** modular heating boiler panel contacts and monitor the **individual** boiler start/stop, boiler on/off status, automatic boiler isolation valve and boiler fault alarm.

5. On system start command verification from the Boiler Management Panel, send a start heating system lead circulating pump signal to the HPCS.

F. Temperature Control Contractor shall mount and wire the water supply temperature sensors and safety controls provided by the Boiler Manufacturer. Temperature Control Contractor shall provide all control and interlock wiring required between the HPCS, boiler management panel and the individual boiler modules.

G. Electrical Contractor shall provide 120-volt wiring to the Hot Water Heating Plant Control System Panel, the Boiler Management Control Panel, and each individual boiler module.

H. Provide monitoring of the hot water heating system supply water temperature, each hot water heating system pump status. Provide specific and identifiable alarms for high/low heating system supply water temperature, and heating system circulating pump failure (each pump). Provide a differential pressure switch for each heating system pump.

I. Hot Water Heating Pump Rotation:

1. Assignment of the lead and stand-by hot water heating pump shall be made when the hot water heating system is started. The BAS shall automatically rotate the lead and lag circulation pumps once per week (on a weekend). Provide a point to the BAS to allow selection of either automatic pump rotation. See "Pump Failure Sequence" in this contract Document.

2. Failure Sequences: If the lead hot water heating pump fails, as indicated by the appropriate pump differential pressure switch, disable the failed heating water pump and signal an alarm. The lag hot water heating pump shall start. Provide a differential pressure switch for each pump.

3. Building Power Failure (Heating Mode): Temperature Control Contractor shall automatically enable/restart hot water heating water circulating pumps upon restoration of building electrical power. Coordinate/interlock sequence with the heating plant control system operation.

J. Heating Plant Control System Operation:

1. <u>Winter Operation:</u>

a. Upon receiving an enable signal from the building automation system, the hot water heating system shall be enabled when any building zone assigned to the system is in the occupied mode.

b. The lead boiler(s) automatic isolation valve(s) shall open, hot water heating circulating pump shall start and gradually ramp up (as indexed by the appropriate VFD) and modulate to maintain the system differential pressure set point (+2psig/-0psig)(adjustable). Coordinate with the Test and Balance Contractor.

c. On proof of continuous **minimum** heating water flow (when applicable) and a time lag of 2 minutes (adjustable), the lead heating boiler(s) shall start and operate under control of the boiler management control panel as described in Specification Section 23 52 16 - Condensing Gas Fired Boilers.

d. When the building automation system transmits a heating water disable command, the heating system boilers shall begin sequencing to the off position and their respective automatic isolation valves shall close, with the exception of the lead boiler automatic isolation valve, which shall remain open. The hot water heating system circulating pump shall continue to operate for an additional 15 minutes (adjustable) or until the boiler management control panel indicates a safe shutdown condition, whichever is longer.

e. Failure Sequence: If a boiler fails, as indicated by the boiler management control panel, indicate an alarm via the BMS. The hot water heating system circulating pump shall continue to operate and the isolation valve shall close.

f. When all building zones associated with the hot water heating system are in the unoccupied mode and space temperatures meet unoccupied set points, the HPCS shall command boiler management control panel to begin sequencing boiler(s) to the off position and their respective automatic isolation valve(s), with the exception of the lead boiler automatic isolation valve, which shall remain open. After an additional 15 minutes (adjustable) disable the lead heating water pump or until the boiler management control panel indicates a safe shutdown condition, whichever is longer.

1) When there are more than two (2) requests (adjustable)) for heating from the building zones to meet the unoccupied heating, temperature set point and the outdoor air temperature is less than 65 degrees (adjustable) the hot water heating system shall be enabled.

2. Summer Operation:

a. Boilers shall operate to maintain as in occupied control the lowered supply temperatures based upon the reset schedule to allow for building dehumidification control supplying water to reheat coils on DOAS AHU's NS-2, NS-3 and NS-4 along with AHU-NS-1.

3. All safety controls to be furnished and adjusted by the Boiler Manufacturer. The Temperature Control Contractor shall provide all interlock and control wiring between the HPCS, boiler management control panel, safety controls, and all field-mounted sensors supplied by the Boiler Manufacturer.

K. System Monitoring:

1. Provide the monitoring and control points as indicated within Contract Documents. All points and control settings shall be capable of being read and adjusted at a local/remote building automation system terminal.

2. Provide a color graphic for hot water heating system as indicated within Specification Section 23 09 13 - Automatic Temperature System.

L. Point List (Minimum):

1. The following points shall be transmitted/received by the HPCS through the appropriate interface to the FMS. The points listed shall be duplicated for each boiler, each hot water heating water pump, etc. (when applicable)

   a. HPCS Enable/Disable

   b. Outdoor Air Temperature

   c. Boiler Start/Stop Command

   d. Boiler Automatic Isolation Valve Position

   e. Boiler Failure Alarm

   f. Heating System Supply Temperature

   g. Heating System Return Temperature

   h. Heating System Water Set Point

   i. Hot Water Heating Pump VFD Status

   j. Hot Water Heating Pump VFD Signal

   k. Hot Water Heating Pump VFD Operating Hertz

   l. Hot Water Heating Pump Failure Alarm

   m. Building Heating Water Differential Pressure

   n. Heating System Low Temperature Alarm (Return)

   o. Heating System High Temperature Alarm (Supply)

   p. Heating System Low Water Alarm

3.18 Constant Air Volume Heating and Cooling 100% OA Air Handling Unit Control: (AHU-NS4):

A. Systems consists of small constant volume dedicated 100% outdoor air volume air handling unit with chilled water, preheat and reheat water coils, exhaust fan EF-NS3 interlock, 100% outdoor air damper. System serves the locker area Drying Room.

B. System is designed for 24/7/365 operation to provide drying of stored athletic equipment.

C. Mode of Operation:

1. The constant volume air handler shall have a fan Hand/Off/Automatic switch. In the hand position, the fan shall run continuously based upon owner occupancy scheduling. All temperature and fan system safeties shall remain functional as described below. In the automatic position, the DDC system shall control all system functions as described herein.

    a. Heating Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, heating water preheat coil control valve and face/bypass dampers shall modulate to maintain room temperature (adjustable) sensed from a remote room thermostat.

    b. Cooling Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, chilled water cooling coil control valve shall modulate to maintain room temperature (adjustable) sensed from a remote room thermostat.

    c. Dehumidification Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, cooling coil control valve shall open to 100% for dehumidification on a call from the remote humidity sensor within the room and reheat valve to modulate to maintain room temperature (adjustable) sensed from a remote room thermostat.

2. The air handler shall have an occupied and an unoccupied heating and cooling temperature set point. The air handling unit shall be in either the occupied or unoccupied mode as determined by the hour/day/month scheduling program within the standalone DDC controller. The temperature set point shall be adjustable through the air handler DDC controller and through the building automation system (BAS) remote terminal.

D. Safety Interlocks:

1. Freeze Protection: Through a minimum of two (2) freeze-stat interlocks, stop the supply fan, fully close the outdoor air damper(s), when the heating coil discharge air temperature drops below 40 degrees F. (adjustable). Also, fully close the chilled water coil control valve, fully open Heating Water coil control valve (Heating Water coil recirculation pump shall continue operation) and signal a "freeze protection" alarm via the building automation system.

    a. Provide for two (2) automatic resets thru DDC controller. Upon three (3) occurrences revert to manual reset.

    b. Low discharge air temperature count shall be reset (to zero) on a daily basis.

E. Supply Air Control:

1. Supply Air Fan (Continuous supply air fan operation and exhaust fan interlock within occupied mode): On any command to start, start the supply fan which shall open the outside air damper and start the exhaust fan and open the exhaust discharge damper through BMS interlock. Failure of dampers opening, supply fan starting or exhaust fan starting shall shut down the system and send an alarm through the BMS.

2. The DDC controller shall monitor the air dampers position and provide a graphic point on the BMS.

F. Monitoring: Provide monitoring and control points as indicated on Contract Documents. Provide a graphic for each air handling unit on all system graphic stations.

3.19 Constant Air Volume Heating and Cooling Air Handling Unit Control: (AHU-NS3):

A. Systems consists of constant volume dedicated 100% outdoor air volume air handling unit with chilled water, preheat and reheat water coils, exhaust fan EF-NS2 interlock, 100% outdoor air damper. System serves the locker area and toilet/shower ventilation make-up air.

B. System is designed for 24/7/365 operation to provide ventilation and make-up air to locker area and toilet/shower ventilation make-up air.

C. Mode of Operation:

1. The constant volume air handler shall have a fan Hand/Off/Automatic switch. In the hand position, the fan shall run continuously based upon owner occupancy scheduling. All temperature and fan system safeties shall remain functional as described below. In the automatic position, the DDC system shall control all system functions as described herein.

a. Heating Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, heating water preheat coil control valve and face/bypass dampers shall modulate to maintain unit discharge temperature of 70 deg F. (adjustable) sensed from a discharge duct temperature sensor.

b. Cooling Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, chilled water cooling coil control valve shall modulate to maintain unit discharge temperature of 70 deg F. (adjustable) sensed from a discharge duct temperature sensor.

c. Dehumidification Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, cooling coil control valve shall open to 100% for dehumidification on a call from the discharge duct humidity sensor at the air handling unit and reheat valve to modulate to maintain discharge temperature (adjustable) sensed from a discharge duct temperature sensor.

2. The air handler shall have an occupied and an unoccupied heating and cooling temperature set point. The air handling unit shall be in either the occupied or unoccupied mode as determined by the hour/day/month scheduling program within the standalone DDC controller. The temperature set point shall be adjustable through the air handler DDC controller and through the building automation system (BAS) remote terminal.

D. Safety Interlocks:

1. Freeze Protection: Through a minimum of two (2) freeze-stat interlocks, stop the supply fan, fully close the outdoor air damper(s), when the heating coil discharge air temperature drops below 40 degrees F. (adjustable). Also, fully close the chilled water coil control valve, fully open Heating Water coil control valve (Heating Water coil recirculation pump shall continue operation) and signal a "freeze protection" alarm via the building automation system.

a. Provide for two (2) automatic resets thru DDC controller. Upon three (3) occurrences revert to manual reset.

b. Low discharge air temperature count shall be reset (to zero) on a daily basis.

2. Smoke Detection: Stop the fan system and close the outdoor air damper(s) through a hardwired interlock when smoke is detected by either duct smoke detector. Signal a "smoke detection" alarm.

E. Supply Air Control:

1. Supply Air Fan (Continuous supply air fan operation and exhaust fan interlock within occupied mode): On any command to start, start the supply fan which shall open the outside air damper and start the exhaust fan and open the exhaust discharge damper through BMS interlock. Failure of dampers opening, supply fan starting or exhaust fan starting shall shut down the system and send an alarm through the BMS.

2. The DDC controller shall monitor the air dampers position and provide a graphic point on the BMS.

F. Monitoring: Provide monitoring and control points as indicated on Contract Documents. Provide a graphic for each air handling unit on all system graphic stations.

3.20 Constant Air Volume Heating and Cooling Air Handling Unit Control: (AHU-NS2):

A. Systems consists of constant volume dedicated 100% outdoor air volume air handling unit with chilled water, preheat and reheat water coils, exhaust fan EF-NS1 interlock, 100% outdoor air damper. System serves the locker area and toilet/shower ventilation make-up air.

B. System is designed for 24/7/365 operation to provide ventilation and make-up air to locker area and toilet/shower ventilation make-up air.

C. Mode of Operation:

1. The constant volume air handler shall have a fan Hand/Off/Automatic switch. In the hand position, the fan shall run continuously based upon owner occupancy scheduling. All temperature and fan system safeties shall remain functional as described below. In the automatic position, the DDC system shall control all system functions as described herein.

a. Heating Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, heating water preheat coil control valve and face/bypass dampers shall modulate to maintain unit discharge temperature of 70 deg F. (adjustable) sensed from a discharge duct temperature sensor.

b. Cooling Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, chilled water cooling coil control valve shall modulate to maintain unit discharge temperature of 70 deg F. (adjustable) sensed from a discharge duct temperature sensor.

2. Dehumidification Mode: Supply fan shall run continuously interlocked with the exhaust fan. Outside air damper is at 100% open, cooling coil control valve shall open to 100% for dehumidification on a call from the discharge duct humidity sensor at the air handling unit and reheat valve to modulate to maintain discharge temperature (adjustable) sensed from a discharge duct temperature sensor. Dehumidification mode shall end when space relative humidity drops to 55% (adjustable).

3. The air handler shall have an occupied and an unoccupied heating and cooling temperature set point. The air handling unit shall be in either the occupied or unoccupied mode as determined by the hour/day/month scheduling program within the standalone DDC controller. The temperature set point shall be adjustable through the air handler DDC controller and through the building automation system (BAS) remote terminal.

D. Safety Interlocks:

1. Freeze Protection: Through a minimum of two (2) freeze-stat interlocks, stop the supply fan, fully close the outdoor air damper(s), when the heating coil discharge air temperature drops below 40 degrees F. (adjustable). Also, fully close the chilled water coil control valve, fully open Heating Water coil control valve (Heating Water coil recirculation pump shall continue operation) and signal a "freeze protection" alarm via the building automation system.

   a. Provide for two (2) automatic resets thru DDC controller. Upon three (3) occurrences revert to manual reset.

   b. Low discharge air temperature count shall be reset (to zero) on a daily basis.

2. Smoke Detection: Stop the fan system and close the outdoor air damper(s) through a hardwired interlock when smoke is detected by either duct smoke detector. Signal a "smoke detection" alarm.

E. Supply Air Control:

1. Supply Air Fan (Continuous supply air fan operation and exhaust fan interlock within occupied mode): On any command to start, start the supply fan which shall open the outside air damper and start the exhaust fan and open the exhaust discharge damper through BMS interlock. Failure of dampers opening, supply fan starting or exhaust fan starting shall shut down the system and send an alarm through the BMS.

2. The DDC controller shall monitor the air dampers position and provide a graphic point on the BMS.

F. Monitoring: Provide monitoring and control points as indicated on Contract Documents. Provide a graphic for each air handling unit on all system graphic stations.

3.21 AHU-NS1: Single Zone Variable Air Volume Air Handling Unit

A. Systems consists of constant air volume air handling unit with chilled water, preheat and reheat water coils. System serves the Second Floor meeting space and ancillary spaces.

B. The unit mounted controller shall report to the BMS for command control the unit as follows:

C. Mode of Operation:

1. The air handler shall have a Hand/Off/Automatic switch. In the hand position, the fan shall run continuously. All temperature and fan system safeties shall remain functional as described below. In the automatic position, the DDC system shall control all system functions as described.

2. The air handler shall have an occupied and an unoccupied heating and cooling space temperature setpoint. The air handler shall be in either the occupied or unoccupied mode as determined by the hour/day/month scheduling program within the standalone DDC controller. The space temperature setpoint shall be adjustable through the air handler DDC controller and through the building management system (BMS) remote terminal.

3. The air handler shall derive the space temperature space temperature sensor located the Meeting space.

D. Safety Interlocks:

1. Freeze Protection: Through a minimum of two freezestat interlocks, stop the fan and close the outdoor air damper(s) when the heating coil discharge air temperature drops below 40 degrees F (adjustable). Also, signal a "freeze protection" alarm, fully open the unit valves to the coils and start the heating coil circulating pump.

   a. Provide for two (2) automatic resets thru DDC controller. Upon third occurrence revert to manual reset.

2. Smoke Detection: Stop the fan system and close the outdoor air damper(s) through a hardwired interlock when smoke is detected by either duct smoke detector. Signal a "smoke detection" alarm.

E. Supply Air Pressure Control:

1. On any command to start, start the fan and open the outside air and return air dampers to their respective minimum positions.

F. Dehumidification Mode:

1. Relative humidity sensor shall be located adjacent to the space temperature sensor within the Meeting space. Should space relative humidity rise above 60% (adjustable), the valves associated with the chilled water coil shall modulate as required to maintain a discharge temperature of 48 degrees (adjustable) and the valves associated with the unit's reheat hot water coil shall modulate as required to maintain maintain room temperature.

2. Dehumidification mode shall end when space relative humidity drops to 55% (adjustable).

G. Occupied Mode:

1. The supply fan shall operate continuously.

2. The outside air damper shall modulate as required to maintain the CO2 level set point of 1100 ppm (adjustable). CO2 sensor shall be located in the Meeting space adjacent to the humidity and temperature sensors.

3. Heating Mode: In the heating mode, the valve associated with the preheat hot water coil shall modulate as required to maintain room temperature of 68° F. (adjustable). The valve associated with the cooling coil shall be fully closed.

4. Cooling Mode: In the cooling mode, the valve associated with the chilled water coil shall modulate as required to maintain the room temperature set point of 72° F. (adjustable) The valves associated with the preheat and reheat water coils shall be fully closed.

5. An enthalpy-based economizer damper shall be engaged whenever outdoor air conditions permit.

H. Unoccupied Mode:

1. Heating Mode: Outside air damper and the control valves associated with the preheat and reheat hot water coils and chilled water coil shall be fully closed. The supply fan shall cycle on as required to maintain a reduced space temperature of 60°F (adjustable). When supply fan is on, the control valve associated with the preheat hot water coil or chilled water coil shall modulate as required to maintain the room temperature of 60˚ F. (adjustable) and the valve associated with the reheat hot water coil shall modulate as required to maintain the humidity levels if dehumidification is required (adjustable). Provide optimize start to transition from unoccupied mode to occupied mode.

2. Cooling Mode: Outside air damper and the control valves associated with the preheat and reheat hot water coils and chilled water coil shall be fully closed. The supply fan shall cycle on as required to maintain an elevated space temperature of 80°F (adjustable). When supply fan is on, the control valve associated with the chilled water coil shall modulate as required to maintain the room temperature (adjustable). Provide optimize start to transition from unoccupied mode to occupied mode.

I. Outdoor Air Damper Override: Provide through the DDC system, a manual override of the outdoor air damper(s) to allow the unit to operate in the occupied mode with the outdoor air dampers fully closed and the return damper open.

J. Monitoring: Provide monitoring and control points as indicated on Drawings. Provide a graphic for each air handler on all system graphic stations.

K. Monitoring: Provide the monitoring and control points as indicated on Drawings. Provide a graphic for each air handler on all system graphic stations.

3.22 Unit Heater Control

A. A single temperature DDC room thermostat shall cycle the fan and a normally open actuated valve on the heating coil to maintain the desired temperature setpoint (adjustable).

B. The unit shall be arranged to start the unit fan when the control valve is 75 percent open and stop the fan when the valve is fully closed.

C. There are two (2) "attic" mounted unit heaters which require a unit mounted DDC thermostat for each unit. The fan shall cycle and an open actuated valve on the heating coil for continuous flow through coil (for freeze protection) to maintain the desired space temperature setpoint (adjustable). REFER TO THE "LOW BUILDING TEMPERATURE CONTROL" for additional point alarming.

3.23 Fan Coil Unit Control

A. The unit shall be controlled through the BAS as follows:

B. Occupied Mode:

1. Fan shall operate continuously.

2. The outside air damper shall be open.

3. Heating: The modulating two-way control valve associated with the hot water coil shall modulate as required to maintain the heating space set point temperature (adjustable). The modulating valve associated with the chilled water coil shall be fully closed.

4. Cooling: The modulating control valve associated with the chilled water coil shall modulate as required to maintain the cooling space set point temperature (adjustable). The modulating valve associated with the hot water coil shall be fully closed.

C. Unoccupied Mode:

1. Heating Mode: Outside air damper and the control valves associated with the hot water coil and chilled water coil shall be fully closed. The fan shall cycle on as required to maintain a reduced space temperature of 60°F (adjustable). When fan is on, the control valve associated with the hot water coil shall modulate as required to maintain the supply air discharge temperature of 90˚ F. (adjustable). Provide optimize start to transition from unoccupied mode to occupied mode.

2. Cooling Mode: Outside air damper and the control valves associated with the hot water coil and chilled water coil shall be fully closed. The fan shall cycle on as required to maintain an elevated space temperature of 80°F (adjustable). When fan is on, the control valve associated with the chilled water coil shall modulate as required to maintain the supply air discharge temperature of 55˚ F. (adjustable). Provide optimize start to transition from unoccupied mode to occupied mode.

D. Safety Devices:

1. When mixed air temperature falls below 35˚ F. (adjustable), freeze-stat shall shut down supply fan, close outside air damper, open return air damper, fully open heating valve and signal an alarm.

3.24 Mini Split Air-Cooled Conditioning Unit Control:

A. Temperature Control Contractor shall provide building automation system unit points to facilitate integration into the building DDC controls.

B. Temperature Control Contractor shall provide and install interlock control wiring (24 VAC) between indoor (ductless) evaporator unit and remote located air-cooled condensing unit (DX cooling). Evaporator unit is equipped with a remote space thermostat and controller.

1. Temperature Control Contractor shall install a DDC monitoring sensor as indicated on the Contract Documents.

3.25 Radiation And Convector Control

A. A single temperature DDC room thermostat shall cycle a normally open actuated heating water valve to maintain the desired temperature setpoint (adjustable).

3.26 Cabinet Heater Control:

A. Occupied Mode:

1. Wall mounted remote space temperature sensor shall cycle the fan and heating water control valve to maintain a set point of 65 degrees F. (adjustable).

2. The occupied space air temperature set point shall be controlled by the programming within the building automation system.

3. If the space sensor detects a space temperature two (2) degrees F. (adjustable) below set point, the two-position (normally open) heating coil control valve shall open and the supply fan shall be enabled to maintain the desired temperature setting.

B. Unoccupied Mode:

1. Space temperature set point shall be 60 degrees F. (adjustable).

2. The unoccupied space air temperature set point shall be controlled by the programming within the building automation system.

3. If the space sensor detects a space temperature two (2) degrees F. (adjustable) below set point, the two-position heating coil control valve shall open and the supply fan shall be enabled to maintain the desired temperature setting.

3.27 Electric Heater (Concessions ceiling) Control:

A. Integral thermostat (furnished by unit manufacturer) shall cycle fan and electric coil as required to maintain set point (60 deg F.) temperature (adjustable).

3.28 Low Building Temperature Control:

A. If any monitored space temperature within any designated building zone falls below 40 degrees F. (adjustable), signal an alarm via the building automation system. Alarm shall be transmitted via e-mail and numeric/alphanumeric pager(s) as directed by School.

3.29 Exhaust Fan Control

A. All exhaust fans shown to be automatic on the Fan Schedule shall be controlled by the Day/Night zone assigned on the schedule.

B. All exhaust fans shown to be controlled by thermostats shall start and open its associated intake air damper, when present, when the room temperature rises above the temperature setpoint. Provide a single temperature thermostat.

C. Provide interlock wiring between exhaust fans and DOAS units to start and stop fan when air handling units start and stop. Exhaust fan dampers shall be fully closed upon fan shut down. DOAS unit outside air dampers shall be fully closed upon unit shut down. ***REFER TO THE DOAS AIR HANDLING UNITS NS-2, NS-3 AND NS-4 FOR ADDITIONAL CONTROL INTERFACE NOTES.***

D. Provide interlock wiring to EF- from AHU- to start fan when air handling units start and stop.

E. All exhaust fans shown to be controlled by timers shall be locally controlled by timers supplied by the Electrical Contractor.

F. All exhaust fans shown to be manual shall have a manual switch provided by the electrical contractor and be interlocked through an automatic contactor controlled by the day/night control schedule of the zone indicated.

G. This Contractor shall furnish contact closures from a DDC panel for each zone contactor which controls exhaust fans. The contact shall control a magnetic contactor which will in turn activate all of the exhaust fans assigned the Day/Night zone.

H. The Electrical Contractor shall provide the contactor and all the wiring to the Hand/Off/Automatic switch, exhaust fans, contactor, disconnect switches and related equipment. Control contact wiring from the DDC control panel to the Hand/Off/Automatic selector switch shall be by this Contractor.

3.30 Occupied/Unoccupied Zone Control:

A. The building shall be divided into Occupied/Unoccupied zones as indicated below.

No	zone	Area Description	Override Location
1		North Star Building	As directed

B. The building automation system shall index the individual zones between occupied and unoccupied cycles through the hour/day/month scheduling program. Start and stop of the air handing units, terminal units, and specific exhaust fans shall be coordinated between the Occupied/Unoccupied cycle routine and the optimum start routine to provide the desired building temperatures during occupancy. During the optimum start (morning warm-up) routine the exhaust fans shall remain indexed off.

C. Manual override of the occupied/unoccupied control of zones shall be provided by a manual pushbutton located as shown on the above schedule. Verify final location with School before installation. When manually activated, the override shall index the zone to the occupied mode for a two-hour period (adjustable). The zone shall then revert to its scheduled mode. The operating mode of any zone shall be adjustable through any local or remote building automation system terminal or local DDC controller.

D. All override pushbuttons shall be identified with an engraved tag attached above the button. Tag shall indicate the occupied/unoccupied zone using approved zone identification. Submit identification tag nomenclature to school for approval before final installation.

APPENDIX A

This Appendix identifies the function of the control system points list for the building management system and DDC control systems shown on Drawings.

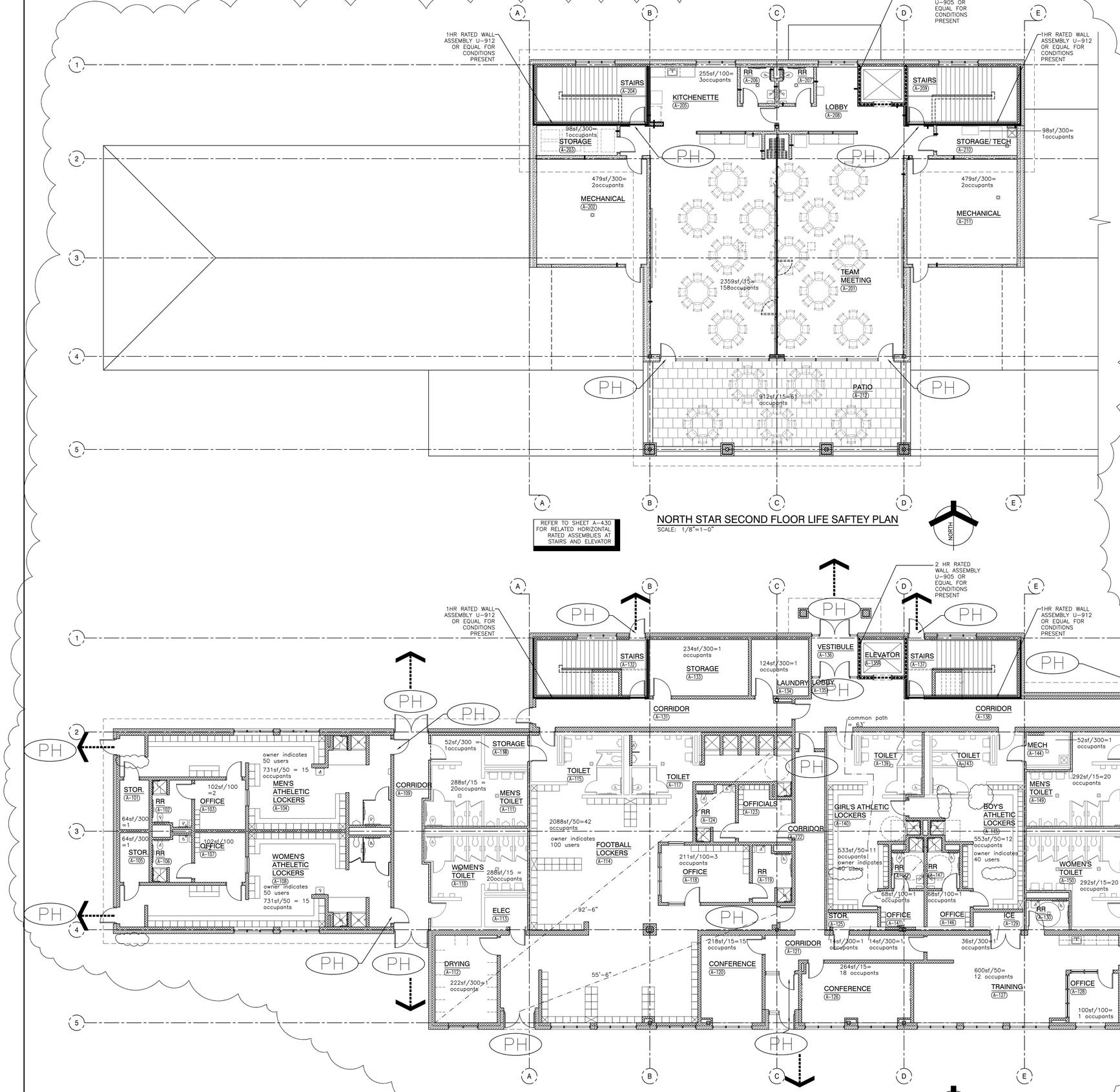
Column Descriptions:

1.	Tag Number	The identifying number of the device to be monitored. The roughly follows industry standard ISA S5.1. These tag numbers are used on the control drawings and in the sequence of operation description.
2.	Description	An identifying description of the points function.
3.	Device Spec.	The hard ware specification for the device monitored or controlled as listed in section 23 09 63.
4.	Signal Type	The general type of device input or output.
5.	Notes	Special notations to clarify device application.

The following columns indicate which DDC application features should be used with the individual devices. Their usage is indicated by an "X" in the appropriate column. Final applications should be reviewed with the Owner and Architect/Engineer as specified.

6.	High Alarm	When the measured condition goes above set limits an alarm condition should be indicated.
7.	Low Alarm	When the measured condition goes above set limits an alarm condition should be indicated.
8.	Fail Alarm	When a point fails to give a proper indication of status after a command or an unacceptable condition indication. Examples are pump not indicating its status after being commanded to start, freezestats or pressure switches tripping.
9.	Time Tot.	The time the point is in the on conditions should be accumulated.
10.	Analog Tot.	The analog value of the point which is monitored should be accumulated in the appropriate engineering units.
11.	Trend	The point monitored should be sampled and stored at 15-minute intervals (adjustable) and be made available for realtime trend plotting and/or historical trend plotting on a graphic, soft copy and/or hard copy device. A minimum of 12 hours shall be stored in the DDC controller not the BAS front end.

END OF SECTION



NORTH STAR SECOND FLOOR LIFE SAFTEY PLAN

SCALE: 1/8"=1-0"

NORTH STAR FIRST FLOOR LIFE SAFTEY PLAN

SCALE: 1/8"=1-0"

LIFE SAFETY GENERAL NOTE:

LIFE SAFETY INFORMATION IS PROVIDED FOR USE BY ALL CONTRACTORS. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH CODE REQUIREMENTS (INCLUDING BUT NOT LIMITED TO: RATED ASSEMBLIES, FIRE PROTECTION, FIRESTOPPING, DAMPERS, AND HARDWARE) INDICATED INCLUDING CONDITIONS WHERE THESE REQUIREMENTS ARE NOT DETAILED. REPORT CONFLICTS OR DISCREPANCIES TO THE ARCHITECT FOR RESOLUTION PRIOR TO STARTING WORK.

AD-1

Applicable Code:	2014 Indiana Building Code (IBC)
Building/Project Description:	Renovation of existing 1-story building of 2,506 sq ft + addition of 13,115 sq ft to the 1st floor and 2nd story addition of 6,248 sq ft. Building will include sports locker rooms, athletics offices, training room, concessions, and large 2nd floor meeting room.
Occupancy Classifications:	Educational use areas for students through the 12th grade - E Occupancy [305.1] Concessions and offices - B Occupancy [304.1]
Construction Type:	Type VB (combustible, unprotected) Construction permitted based upon allowable area for non-separated occupancies [503.1]
Allowable Area based upon B Occupancy:	Tabular Area: 9,000 sf Table 503 Sprinkler Increase: 18,000 sf 506.3 Frontage Increase: + 6,750 sf 506.2 Allowable Area: 33,750 sf Actual Area: 15,621 sf
Allowable Height based upon E Occupancy:	2 stories permitted, 2 stories actual [504.2]
Occupancy Separations:	Occupancy separations not required, based upon compliance with non-separated occupancies [508.3]
Building Elements - Fire-resistive Requirements	Building elements, including, bearing walls and roof are permitted to be of combustible, unprotected construction. [Table 601] Exterior walls are permitted to be of nonrated, combustible, since having at least 10 feet of fire separation distance [Table 602]
Floor Openings and Penetrations, Shafts:	Egress stairs connecting only 2 floors are permitted to be unenclosed [1009.3, exc. 1] Ducts are permitted to connect up to 2 floor levels where floors are nonrated without shaft protection, where the annular space is filled with a noncombustible material [717.6.3] Noncombustible penetrating items (excluding ducts) are permitted to connect up floor levels where floors are nonrated without shaft protection, where the annular space is filled with a noncombustible material [714.4.2.1]
Incidental Use Separations:	None applicable to this project [Table 509]
Egress Corridors:	Egress corridors are permitted to be nonrated based upon automatic sprinkler protection throughout [1018.1]
Means of Egress:	2 means of egress are required from rooms with a calculated occupant load of 50 or more, or where exceeding 75 feet common path of travel in E Occupancy spaces and 100 feet in B Occupancy spaces [1015.1]
Exit Access Travel Distance:	The maximum travel distance to an exterior exit is permitted to be a maximum of 250 feet for E Occupancy, and 300 feet for B Occupancy [1016.2]
Panic Hardware:	Panic hardware is required on means of egress doors serving a calculated occupant load of 50 or more from E Occupancy areas Not required for B Occupancy areas [1008.1.10]
Automatic Sprinklers:	Automatic sprinklers are required based upon an E Occupancy fire area greater than 12,000 square feet [903.2.3]
Fire Alarm System:	Manual fire alarm system required based upon an occupant load of 30 or more. [907.2.3] Manual pull stations are not required based upon sprinkler actuation of the fire alarm system
Smoke Detectors:	Smoke detectors are required for HVAC shutdown for systems delivering in excess of 2,000 cfm [606.1, IMC]

SQUARE FOOTAGE ANALYSIS

EXISTING RENOVATED FIRST FLOOR	2,506 SQ. FT.
EXISTING SECOND FLOOR	N/A SQ. FT.
EXISTING RENOVATED TOTAL	2,506 SQ. FT.
NEW FIRST FLOOR	13,115 SQ. FT.
NEW SECOND FLOOR	6,248 SQ. FT.
NEW TOTAL	19,363 SQ. FT.
GRAND TOTAL	21,869 SQ. FT.

LIFE SAFETY PLAN LEGEND

DOORS WITH PANIC HARDWARE	PH
MAJOR EGRESS ROUTES	
2 HOUR CONSTRUCTION	
1 HOUR CONSTRUCTION	

AD-1

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
23-115
DATE
09/25/23
COORDINATED BY
TA
DRAWN BY
TA
CHECKED BY
TA/NW

JOSEPH P. BRIGGS REGISTERED ND. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

DRAWING

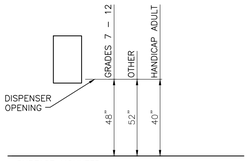
NORTH STAR BUILDING FIRST AND SECOND FLOOR LIFE SAFETY PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

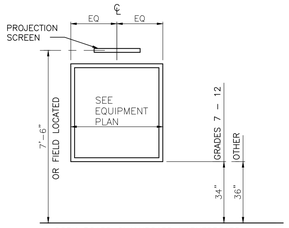
SHEET

G-204-NS

Tuesday, 10/10/2023 - 9:10 AM - LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\02 GENRL\G-204-NS.DWG

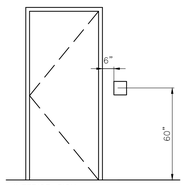


SURFACE MOUNTED
PAPER TOWEL DISPENSER

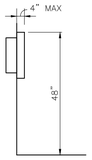


CORK BOARD CHALKBOARD MARKERBOARD
PROJECTION SCREEN MULTI MEDIA DISPLAY BOARD

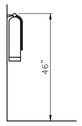
NOTE: VERIFY HEIGHT WITH OWNER



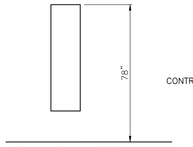
INTERIOR SIGN



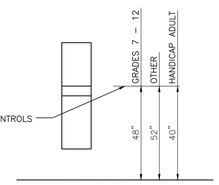
FIRE EXTINGUISHER CABINET



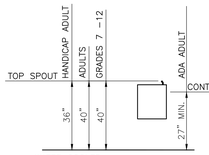
FIRE EXTINGUISHER WALL HUNG



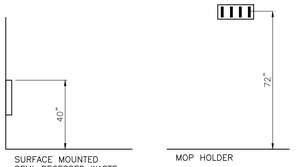
24" W X 60"H MIRROR



RECESSED & SURFACE MOUNTED
COMBINATION TOWEL AND WASTE
RECEPTACLE

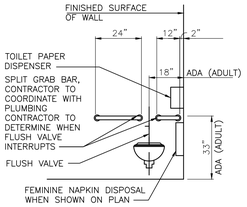


WATER COOLER
DRINKING FOUNTAIN CUSPIDOR

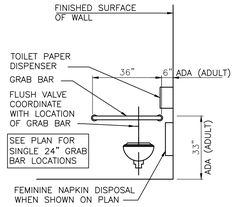


SURFACE MOUNTED
SEMI–RECESSED WASTE
RECEPTACLE

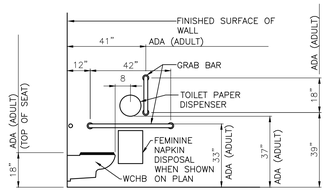
MOP HOLDER

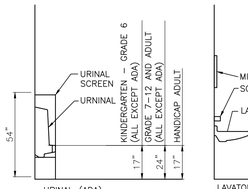


FEMININE NAPKIN DISPOSAL WHEN SHOWN ON PLAN

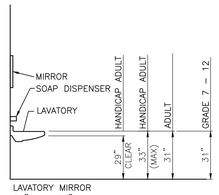


FEMININE NAPKIN DISPOSAL WHEN SHOWN ON PLAN

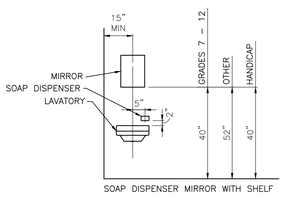




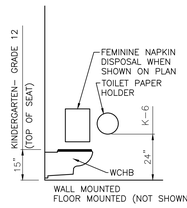
URINAL (ADA)
URINAL SCREEN



LAVATORY MIRROR
24" W X 30" H



SOAP DISPENSER MIRROR WITH SHELF



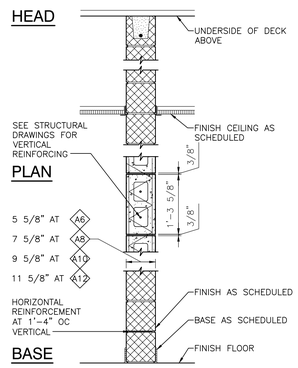
WALL MOUNTED
FLOOR MOUNTED (NOT SHOWN)

WATER CLOSET – CHILDREN

NOT ALL ITEMS SHOWN MAY APPLY FOR THIS PROJECT

MOUNTING HEIGHTS

2 / G-301



A6 6" CMU EXTENDS TO BOTTOM OF DECK ABOVE.

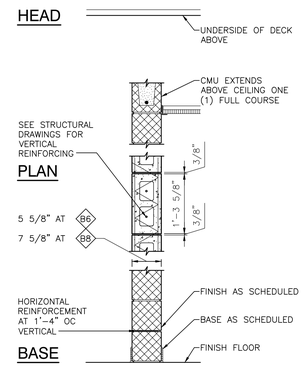
A8 8" CMU EXTENDS TO BOTTOM OF DECK ABOVE.

A10 10" CMU EXTENDS TO BOTTOM OF DECK ABOVE.

A12 12" CMU EXTENDS TO BOTTOM OF DECK ABOVE.

PARTITION TYPE "A"

SCALE: 3/4" = 1'–0"



B6 6" CMU EXTENDS ONE COURSE ABOVE CEILING. 4" STUD w/ GYPSUM BOARD TO STRUCTURE ABOVE AS INDICATED IN DRAWINGS.

B8 8" CMU EXTENDS ONE COURSE ABOVE CEILING. 4" STUD w/ GYPSUM BOARD TO STRUCTURE ABOVE AS INDICATED IN DRAWINGS.

PARTITION TYPE "B"

SCALE: 3/4" = 1'–0"

GENERAL PARTITION NOTES:

A. REFER TO FINISH PLANS FOR WALL FINISH AND BASE INFORMATION.

B. REFER TO WALL SECTIONS FOR EXTERIOR WALL CONSTRUCTION.

C. PROVIDE MOLD/MOISTURE RESISTANT GYPSUM BOARD ON WALLS WITH OPERABLE PLUMBING FIXTURES AND WITHIN 4 FEET OF DRINKING FOUNTAINS, WATER COOLERS AND BOTTLE FILLERS UNLESS NOTED OTHERWISE.

D. ALL WALLS THAT ARE NOT INDICATED TO EXTEND TO THE UNDERSIDE OF DECK ABOVE SHELL EXTEND TO 4" MINIMUM ABOVE FINISHED CEILING UNLESS NOTED OTHERWISE.

E. PROVIDE LATERAL BRACING FOR PARTITIONS WHICH EXTEND ABOVE CEILING.

F. PROVIDE SPECIFIED TILE BACKER BOARD AT ALL WALLS SCHEDULED TO RECEIVE CERAMIC OR PORCELAIN.

G. PROVIDE ABUSE RESISTANT GYPSUM BOARD WHERE INDICATED ON DRAWINGS AND IN ALL CORRIDORS, COLUMNS AND PASSAGES INDICATED TO RECEIVE GYPSUM BOARD. AT WALLS TO RECEIVE WALL COVERING PER FINISH PLANS DISREGARD ABUSE RESISTANT GYPSUM REQUIREMENT AND PROVIDE STANDARD GYPSUM BOARD.

H. REFER TO STRUCTURAL DRAWINGS FOR BOND BEAMS AND VERTICAL REINFORCING AT MASONRY WALLS, UNLESS NOTED OTHERWISE.

I. STEEL STUD FRAMING SHALL BE ATTACHED/BRACED TO STRUCTURAL FRAMING AND NOT TO ROOF DECK, UNLESS NOTED OTHERWISE.

J. ISOLATE NON–LOAD–BEARING STUD FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF VERTICAL LOADS WHILE PROVIDING LATERAL SUPPORT AS SPECIFIED.

K. PACK DECK FLUTE VOIDS AT NON–RATED WALLS WITH MINERAL WOOL. FILL DECK FLUTE VOIDS AT RATED WALLS WITH FIRESTOPPING. REFER TO PROJECT MANUAL.

L. PROVIDE FIRE RESISTIVE RATED GYPSUM WALL BOARD AT ALL RATED ASSEMBLIES TO MEET ASSEMBLY REQUIREMENTS.

M. PROVIDE FIRE RESISTIVE JOINT SYSTEMS EQUAL TO WALL RATING AT ALL PENETRATIONS AND AT HEAD/FLOOR INTERSECTIONS WITH RATED ASSEMBLIES.

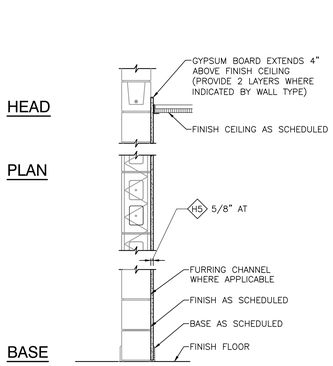
N. PROVIDE ACOUSTICAL INSULATION AT INTERIOR WALLS NOTED TO RECEIVE BLANKET INSULATION.

O. PROVIDE ACOUSTICAL SEALANT AT WALL SILL, HEAD, PENETRATIONS, AND ADDITIONAL SPECIFIED SOUND ATTENUATION COMPONENTS AT SOUND RATED WALLS.

P. STUD SPACING SHALL BE 16" O.C. UNLESS NOTED OTHERWISE.

Q. REFER TO BUILDING SECTIONS AND WALL SECTIONS FOR BOTTOM OF ROOF DECK HEIGHT ABOVE FINISHED FLOOR. FIELD VERIFY EXISTING CONDITIONS AND NOTIFY DESIGN TEAM OF CONFLICTS.

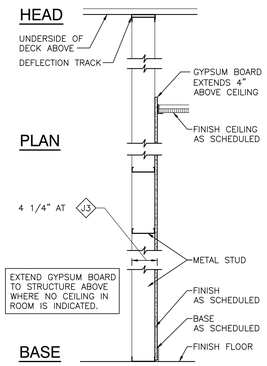
R. ALL WALLS EXTENDING TO DECK SHALL BE TREATED AS SOUND RESISTANT WALLS.



H5 ONE (1) LAYER OF 5/8" GYPSUM BOARD OVER WALL CONSTRUCTION. TREATED FURRING STRIPS AS REQUIRED.

PARTITION TYPE "H"

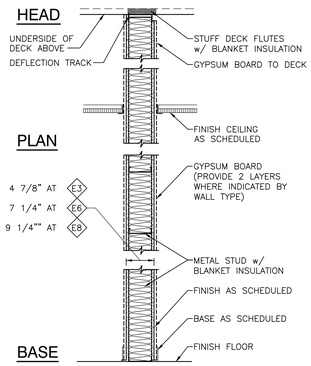
SCALE: 3/4" = 1'–0"



J3 3 5/8" METAL STUD w/ 5/8" GYPSUM BOARD ON ONE SIDE.

PARTITION TYPE "J"

SCALE: 3/4" = 1'–0"



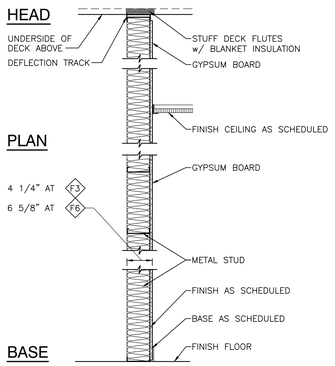
E3 3 5/8"" METAL STUD w/ 5/8" GYPSUM BOARD ON BOTH SIDES.

E6 6" METAL STUD w/ 5/8" GYPSUM BOARD ON BOTH SIDES.

E8 8" METAL STUD w/ 5/8" GYPSUM BOARD ON BOTH SIDES.

PARTITION TYPE "E"

SCALE: 3/4" = 1'–0"

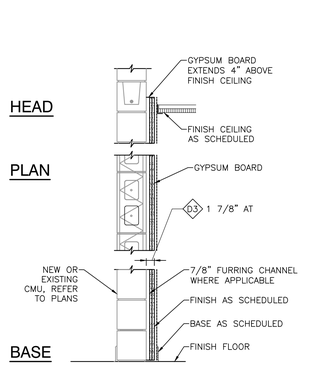


F3 3 5/8"" METAL STUD w/ BLANKET INSULATION AND 5/8" GYPSUM BOARD ON ONE SIDE.

F6 6" METAL STUD w/ BLANKET INSULATION AND 5/8" GYPSUM BOARD ON ONE SIDE.

PARTITION TYPE "F"

SCALE: 3/4" = 1'–0"



AD–1

D2 7/8" FURRING CHANNEL AND ONE (1) LAYERS OF 5/8" GYPSUM BOARD OVER CMU.

D3 7/8" FURRING CHANNEL AND TWO (2) LAYERS OF 1/2" GYPSUM BOARD OVER CMU.

PARTITION TYPE "D"

SCALE: 3/4" = 1'–0"

WALL PARTITION TYPES

1 / G-301

GENERAL PROJECT NOTES:

(APPLY TO ENTIRE DRAWING SET)

A. ALL CONTRACTORS SHALL CHECK ENTIRE SET OF CONTRACT DOCUMENTS FOR THE EXTENT OF WORK.

B. EACH TRADE SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

C. EACH TRADE SHALL COORDINATE WITH THE APPROPRIATE CONTRACTOR(S) AND VERIFY SIZE AND LOCATION OF ALL RECESSES, CHASES, PADS, & OPENINGS REQUIRED FOR MECHANICAL, ELECTRICAL AND OTHER EQUIPMENT.

D. EACH TRADE SHALL COORDINATE WITH THE APPROPRIATE CONTRACTOR(S) AND VERIFY LOCATION, HEIGHT, AND DEPTH OF BULKHEADS PRIOR TO BULKHEAD CONSTRUCTION.

E. THE BOTTOM OF ALL CONVECTOR FAN COIL, AND UNIT HEATER RECESSES SHALL BE INSTALLED A MINIMUM OF 6" AND A MAXIMUM OF 12" ABOVE FLOOR LINE. PLACE MASONRY LINTELS AT UNCUT COURSING HEIGHT. COORDINATE OPENINGS WITH APPROPRIATE CONTRACTOR(S).

F. FLOOR ELEVATIONS, GRADES, DIMENSIONS, CLEARANCES, AND CONDITIONS OF EXISTING CONSTRUCTION INDICATED ON THESE DRAWINGS SHALL BE FIELD VERIFIED BY ALL CONTRACTOR(S). REPORT CONFLICTS OR DISCREPANCIES TO THE ARCHITECT FOR RESOLUTION PRIOR TO STARTING WORK.

G. ALL ITEMS OF EQUIPMENT OR MATERIALS NOT MARKED OR INDICATED AS EXISTING ARE NEW AND SHALL BE FURNISHED BY THE APPROPRIATE CONTRACTOR.

H. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING INDICATED ON THE ARCHITECTURAL DRAWINGS RELATED TO INSTALLATION OR REMOVAL OF WORK OF THE MECHANICAL AND ELECTRICAL TRADES. ALL REQUIRED CUTTING MAY NOT BE SHOWN. ANY ADDITIONAL CUTTING AND PATCHING REQUIRED, WHICH IS NOT INDICATED ON THE ARCHITECTURAL DRAWINGS, SHALL BE THE RESPONSIBILITY OF THE TRADE REQUIRING THE ACCESS, AS PROVIDED FOR IN THE SPECIFICATIONS.

I. PLUMBING AND ELECTRICAL ITEMS (SUCH AS SINKS, TOILETS, PANELS, ETC.) MAY APPEAR "DASHED" FOR DEMOLITION ON SEVERAL DRAWINGS INCLUDING ARCHITECTURAL SHEETS. REMOVAL OF THESE ITEMS SHALL BE BY THE APPROPRIATE TRADES.

J. ALL ITEMS NOTED FOR REMOVAL SHALL BE REMOVED COMPLETELY, INCLUDING ENTIRE SYSTEMS OF SUSPENSION, ANCHORS, CLIPS, AND ADHESIVES, ETC. RELATED TO THAT ITEM. REMOVAL SHALL BE PERFORMED CAREFULLY TO MINIMIZE DAMAGE, PARTICULARLY ITEMS TO BE SALVAGED FOR REUSE OR RETURNED TO THE OWNER.

SYMBOL LEGEND:

- 99 / AE997 — DETAIL: REFERENCE NUMBER / SHEET NUMBER
- 99 / AE997 — SECTION CUT: REFERENCE NUMBER / SHEET NUMBER
- 99 / AE997 — INTERIOR ELEVATION: REFERENCE NUMBER / SHEET NUMBER
- 99 — MISCELLANEOUS CASEWORK: ELEVATION NUMBER (SEE SHEET A8.01)
- U–999 — ROOM NUMBER: UNIT / ROOM
- EU–999 — EXISTING ROOM NUMBER: UNIT / ADDITIONAL
- U1A / D991 — DOOR NUMBER: UNIT / ROOM
- 9 — WINDOW NUMBER
- 99 — PLAN NOTE
- 99 — DEMOLITION NOTE
- A / B — UNIT BREAK

MATERIAL INDICATIONS:

IN GENERAL, THE MATERIAL INDICATIONS SHOWN BELOW ARE TYPICAL. HOWEVER, ALL MATERIAL INDICATIONS PRESENTED HERE MAY NOT BE USED ON THIS PARTICULAR PROJECT. THESE SYMBOLS TYPICALLY INDICATE THE MATERIALS WHEN SECTIONED THROUGH ON PLANS, DETAILS AND WALL SECTIONS.

FACE BRICK; SOLID SURFACE; LIGHTWEIGHT BLOCK; TERRAZZO; CONCRETE; EIFS; CONCRETE BLOCK; MARBLE; WOOD BLOCKING; BLANKET INSULATION; PLASTER OR GYPSUM BOARD; CUT STONE; FINISH WOOD; RIGID INSULATION

LINE SYMBOLOGY:

IN GENERAL THE FOLLOWING LINE SYMBOLOGY CONVENTIONS APPLY TO THE ENTIRE SET OF DRAWINGS FOR THIS PROJECT. EXISTING AND DEMOLITION SYMBOLOGY APPLY TO ADDITION AND RENOVATION PROJECTS ONLY.

"SCREENED" BACKGROUND LINES (LIGHT GRAY LINES) INDICATE EXISTING CONSTRUCTION WALLS, PIPES, LIGHTS, ETC.

HEAVY DASHED LINES INDICATE DEMOLITION ITEMS ON DEMOLITION DRAWINGS. DEMOLITION DRAWINGS ALSO INDICATE DEMOLITION WORK WITH "LIGHT" DASHED LINES WHEN DEMOLITION WORK IS NOT SPECIFICALLY RELATED TO THE CURRENT SHEET. (FOR EXAMPLE: WALLS BEING REMOVED APPEAR AS HEAVY DASHED LINES ON THE ARCHITECTURAL PLANS AND APPEAR AS LIGHT DASHED LINES ON HVAC, LIGHTING, ETC. PLANS.)

SOLID LINES ON NEW ("NON–DEMOLITION") DRAWINGS INDICATE NEW WORK.

PLAN EXAMPLES:

- EXISTING WALL
- EXISTING WALL TO BE REMOVED
- NEW STUD WALL
- NEW CMU WALL

ARCHITECTURAL ABBREVIATIONS:

THE ARCHITECTURAL ABBREVIATIONS LISTED BELOW ARE TYPICAL. HOWEVER ALL ABBREVIATIONS PRESENTED HERE HAVE NOT BEEN USED ON THIS PARTICULAR PROJECT. SEE ROOM FINISH SCHEDULE LEGENDS FOR ADDITIONAL ABBREVIATIONS USED ONLY ON THE ROOM FINISH SCHEDULE.

AC	ACOUSTICAL	GA	GAGE	RB	RUBBER BASE
AFF	ABOVE FINISHED FLOOR	GALV	GALVANIZED	RC	ROOF CONDUCTOR
		GYP	GYPSUM	RD	ROOF DRAIN
ALUM	ALUMINUM			REINF	REINFORCING, OR REINFORCEMENT
ALT	ALTERNATE	HM	HOLLOW METAL		
ANOD	ANODIZED	HORIZ	HORIZONTAL	RESIL	RESILIENT
ARCH	ARCHITECTURAL			REV	REVISION
		ID	INSIDE DIAMETER	RM	ROOM
BD	BOARD	INSUL	INSULATED, OR INSULATION	RO	ROUGH OPENING
BLK	BLOCK			RV	ROOF VENT
BLKHD	BULKHEAD	INT	INTERIOR		
				SF	SQUARE FEET
CAB	CABINET	JAN	JANITOR	SIM	SIMILAR
CB	CHALKBOARD			SM	SMOOTH
CEM	CEMENT,	KCP	KEENE'S CEMENT PLASTER	SPEC	SPECIFICATION
CER	CERAMIC			SQ	SQUARE
CPCI	CONTRACTOR FURNISHED OWNER INSTALLED	LAV	LAVATORY	SS	STAINLESS STEEL
		LTWT	LIGHTWEIGHT	ST. A	STEEL ANGLE
				ST. C	STEEL CHANNEL
CL	CENTERLINE			ST. M	STEEL M–SHAPE
CLG	CEILING	MARB	MARBLE	ST. P	STEEL STRUCTURAL TUBE
CJ	CONTROL JOINT	MB	MARKERBOARD		
CLRM	CLASSROOM	MAS	MASONRY	ST. W	STEEL W–SHAPE
CONC	CONCRETE	MAX	MAXIMUM	STD	STANDARD
CONF	CONFERENCE	MC	MISC. STEEL CHANNEL	STL	STEEL
CONT	CONTINUOUS	MECH	MECHANICAL	STOR	STORAGE
CORK	CORKBOARD	MIN	MINIMUM	SYNTH	SYNTHETIC
CSWK	CASEWORK	MISC	MISCELLANEOUS	SYS	SYSTEM
CT	CERAMIC TILE	MO	MASONRY OPENING		
		MR	MOISTURE RESISTANT	TEL	TELEPHONE
DEG	DEGREE	MTD	MOUNTED	TER	TERRAZZO
DEMO	DEMOLITION	MTL	METAL	TYP	TYPICAL
DF	DRINKING FOUNTAIN				
DIA	DIAMETER	NA	NOT APPLICABLE	UNFIN	UNFINISHED
DN	DOWN	NTS	NOT TO SCALE		
				VB	VINYL BASE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	OC	ON CENTER	VCT	VINYL COMPOSITION TILE
		OD	OUTSIDE DIAMETER		
ELEC	ELECTRICAL	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	VEN.	VENEER
EQ	EQUAL			VERT	VERTICAL
EQUIP	EQUIPMENT	OFOI	OWNER FURNISHED OWNER INSTALLED	VFOI	VENDOR FURNISHED OWNER INSTALLED
EWC	ELECTRIC WATER COOLER	OFVI	OWNER FURNISHED VENDOR INSTALLED	VFVI	VENDOR FURNISHED VENDOR INSTALLED
EXIST	EXISTING	OFF	OFFICE	VIN.	VINYL
EX	EXPANSION JOINT	ORD	OVERFLOW ROOF DRAIN	VWC	VINYL WALL COVERING
EXT	EXTERIOR				
		PERF	PERFORATED	W/	WITH
FD	FLOOR DRAIN	PL	PLATE	W/O	WITHOUT
FE	FIRE EXTINGUISHER	PLAM	PLASTIC LAMINATE	WD	WOOD
FEC	FIRE EXTINGUISHER CABINET	PLAS	PLASTER	WSCT	WAINSCOT
		PORC	PORCELAIN	WWF	WELDED WIRE FABRIC
FRP	FIBERGLASS REINFORCED PANEL	PRCST	PRECAST		
		PTN	PARTITION		
FWC	FABRIC WALL COVERING	QT	QUARRY TILE		
		QTY	QUANTITY		

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23–115

DATE 09/25/23

COORDINATED BY TA

DRAWN BY NW

CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD–1	10/10/23	ADDENDUM NO. 1

DRAWING

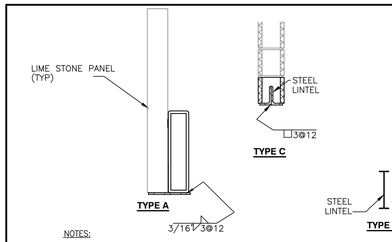
TYPICAL ACCESSIBLE MOUNTING HEIGHTS, WALL TYPES, ABBREVIATIONS, SYMBOLOGY, AND LEGEND

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

G-301



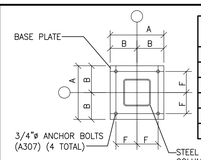
NOTES:

1. TYPE A AND B LINTELS SHALL BEAR ON TWO FULLY GROUTED CORES FULL HEIGHT TYPE C LINTELS SHALL BEAR ON TWO FULLY GROUTED COURSES OR SOLID MASONRY.
2. ALL LINTELS AT EXTERIOR LOCATIONS OR OTHERWISE SUBJECT TO WEATHER OR CORROSIVE ATMOSPHERE SHALL BE GALVANIZED. SEE SPECIFICATIONS.
3. AT "TYPE A" AND "TYPE B" LINTELS, PLATE LENGTH TO BE MASONRY OPENING MINUS 1/4" EACH END (1/2" TOTAL).
4. BEARING PLATE REQUIRED AT END OF SPECIAL LINTEL UNLESS OTHERWISE NOTED
5. "C" INDICATES COLUMN CONNECTION REQUIRED AT ONE OR BOTH ENDS. SEE PLANS FOR LOCATION.

MARK	SIZE	CONTINUOUS PLATE		ELEVATION	TYPE
		TOP	BOTTOM		
SL-1	W8x30	–	–	5/A-416	B
SL-2	HSS4x16x1/2	–	3/8"x 1'-3"	1/A-413	A

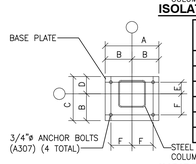
SPECIAL LINTEL SCHEDULE

SCALE: NTS



COLUMN SIZE	MARK					
	A	B	C	D	E	F
HSS10x10	16"	8"	---	---	---	6 1/2"
HSS8x8	14"	7"	---	---	---	5 1/2"
HSS7x7	13"	6 1/2"	---	---	---	5"
HSS6x6	12"	6"	---	---	---	4 1/2"
HSS5x5	11"	5 1/2"	---	---	---	4"
HSS4x4	10"	5"	---	---	---	3 1/2"

ISOLATED PIER AND FOOTING



COLUMN SIZE	MARK						
	A	B	C	D	E	F	
HSS10x10	16"	8"	13 1/2"	5 1/2"	4"	6 1/2"	
HSS8x8	14"	7"	11 1/2"	4 1/2"	3"	5 1/2"	
HSS7x7	13"	6 1/2"	10 1/2"	4"	2 1/2"	5"	
HSS6x6	12"	6"	9 1/2"	3 1/2"	2"	4 1/2"	
HSS5x5	11"	5 1/2"	8 1/2"	3"	1 1/2"	4"	
HSS4x4	10"	5"	7 1/2"	2 1/2"	1"	3 1/2"	

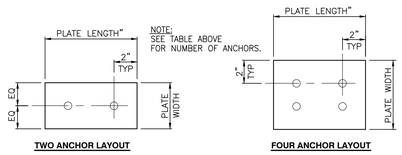
INSIDE CORNER AND ALONG WALL

TYPICAL BASE PLATE

NTS

BEARING PLATE SCHEDULE

BEARING PLATE MARK	SIZE THK x W x L	NUMBER ANCHOR RODS	REMARKS
BP1	1/2" x 9" x 9"	4	TYPICAL BEAM BEARING
BP2	1/2" x 6" x 9"	3	CORNER BEAM BEARING
BP3	1/2" x 9" x 1'-2"	4	BEAM BEARING



BEARING PLATE SCHEDULE

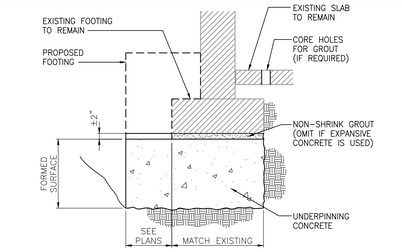
SCALE: NTS

PANEL MARK	CMU THICKNESS (BACK-UP)	VERTICAL REINFORCING		TOP OF BOND BEAM ELEVATIONS	REMARKS	DETAIL
		SIZE	SPA			
PANEL 1	8"	#5	40"	113'-4"	INSP	1,2/ A-401
PANEL 2	8"	#5	36"	113'-4", 128'-0"	INSP	3,4/ A-401
PANEL 3	12"	#5	48"	112'-8"	INSP	3/ A-401

NOTE:
1. (INSP) = MASONRY INSPECTION REQUIRED (SEE SPECIFICATIONS.
2. FOR HORIZONTAL JOINT REINFORCING SIZE AND SPACING SEE SPECIFICATIONS.
3. REINFORCING SCHEDULED HERE IN APPLIES TO THAT PORTION OF THE WALL ABOVE THE FOUNDATION WALL. SEE FOUNDATION PLANS FOR FOUNDATION WALL REINFORCING.
4. ALL REINFORCED MASONRY WALLS TO HAVE BOND BEAM AT OR NEAR TOP OF WALL. (HORZ BAR SIZE; 8" CMU: 2-#6, 10" CMU: 2-#6)

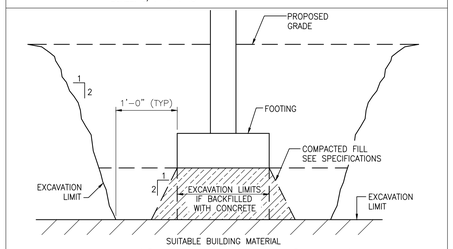
AD-1

MASONRY WALL PANEL SCHEDULE



FOUNDATION UNDERPINNING

SCALE: 3/4" = 1'-0"



TYPICAL UNDERCUTTING DETAIL

SCALE: 3/4" = 1'-0"

SLAB SCHEDULE

MARK	DEPTH	REINFORCEMENT	REMARKS
A	4"	WWF 6x6 W2.1xW2.1	6" DRAINAGE FILL
B	4 1/2"	WWF 6x6 W2.1xW2.1	USE 2" – 20GA COMPOSITE DECK

NOTE:
1. VAPOR BARRIER TO BE PROVIDED DIRECTLY UNDER SLAB AND MAY BE OMITTED FOR EXTERIOR SLABS. (15 MIL)
2. SEE SPECIFICATION 03001 FOR FIBER-ADDITIVE REQUIREMENTS.
3. SEE DETAIL FOR CLARIFICATION.

PAD SCHEDULE

NOTE: ALL PADS ARE DESIGNED FOR 2500 PSF SOIL BEARING.

MARK	WIDTH	DEPTH	LENGTH	REINFORCEMENT (1/2 EACH WAY)
P4	4'-0"	1'-0"	4'-0"	10 – #5
P5	5'-0"	1'-2"	5'-0"	12 – #5
P6	6'-0"	1'-6"	6'-0"	14 – #5

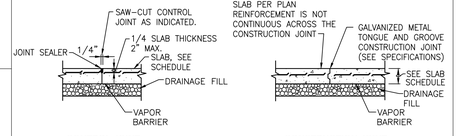
FOOTING SCHEDULE

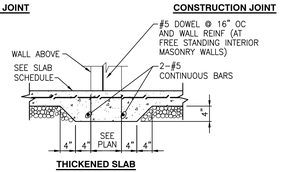
MARK	WIDTH	DEPTH	REINFORCEMENT
F24	24"	12"	3–#5 LONGITUDINAL #5 AT 24" O.C. TRANSVERSE

NOTE:
ALL WALL FOOTINGS ARE DESIGNED FOR 2000 PSF SOIL BEARING

PIER SCHEDULE

MARK & SIZE	REINFORCING	
	VERTICAL	TIES
PR20– 20"x20"	4 – #6	#3 @ 12"
PR32– 32"x32"	8 – #6	#3 @ 12"

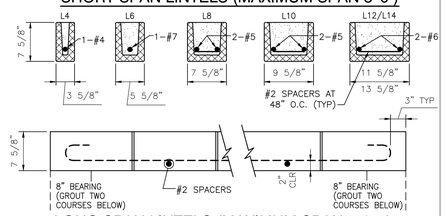




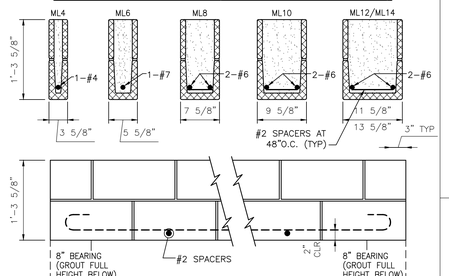
TYPICAL SLAB ON GRADE

SCALE: 3/4" = 1'-0"

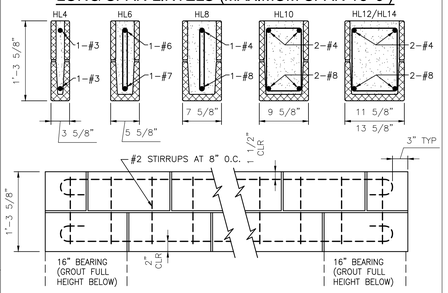
SHORT SPAN LINTELS (MAXIMUM SPAN 8'-0")



LONG SPAN LINTELS (MAXIMUM SPAN 12'-0")



LONG SPAN LINTELS (MAXIMUM SPAN 16'-0")

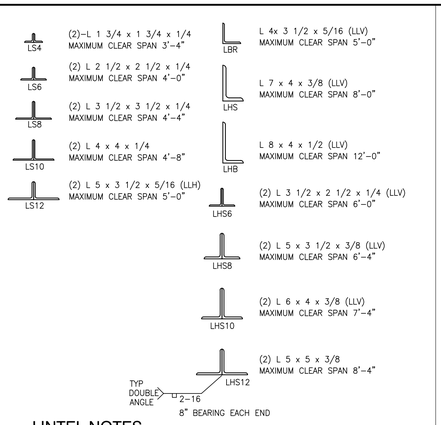


CMU LINTEL NOTES

1. FILL 4" AND 6" MASONRY UNITS WITH FINE GROUT AND ALL OTHERS WITH COARSE GROUT. REFER TO SPECIFICATIONS SECTION DETAILS.
2. ALL REINFORCING BARS ARE HOOKED AT THE ENDS.
3. FOR TYPE OF CMU AND TYPE OF BOND REFERENCE SPECIFICATION SECTION 04200.
4. LINTELS SHALL BEAR ON SOLID CMU OR BEAR ON 2 FILLED COURSED, UON.
5. MAXIMUM SPANS DO NOT APPLY TO LOAD BEARING WALLS.
6. BOND PATTERN OF LINTEL TO MATCH ADJACENT WALL.
7. BOTTOM OF LINTEL SHALL BE SMOOTH MASONRY WITH NO CORES EXPOSED.
8. 14" LINTELS MAY BE MADE UP OF TWO PIECES OF 8" BOND BEAM UNITS IF 14" BOND BEAM UNITS ARE NOT AVAILABLE. (JOINT TO BE AT CENTER OF WALL)
9. FURNISH AND INSTALL ALL LINTELS REQUIRED FOR ALL OPENING IN MASONRY, INCLUDING MECHANICAL AND ELECTRICAL WORK, WHETHER SPECIFICALLY NOTED ON DRAWINGS OR NOT.

CMU LINTEL SCHEDULE

SCALE: NTS



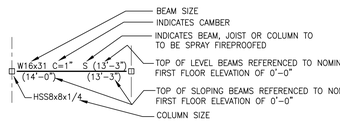
LINTEL NOTES

1. LINTELS SHALL BEAR ON SOLID MASONRY OR ON TWO CMU COURSES FULLY GROUTED, UON.
2. FURNISH AND INSTALL ALL LOOSE LINTELS REQUIRED FOR ALL OPENINGS IN MASONRY, INCLUDING MECHANICAL AND ELECTRICAL WORK, WHETHER SPECIFICALLY NOTED ON DRAWINGS OR NOT.
3. ALL LINTELS AT EXTERIOR LOCATIONS OR OTHERWISE SUBJECT TO WEATHER OR CORROSIVE ATMOSPHERE SHALL BE GALVANIZED.

STEEL LINTEL SCHEDULE

STRUCTURAL LEGEND

#	SEE PLAN NOTES
	CONCRETE
	INDICATES THICKEN SLAB UNDER WALL SEE DETAIL ON S-001 AND COORDINATE WITH ARCH PLANS.
P4[99'-0"]	CONCRETE PAD AND TOP OF PAD ELEVATION BELOW NOMINAL FIRST FLOOR ELEVATION.
LBR, ML8, SL-1	INDICATES STEEL, MASONRY OR SPECIAL LINTEL. SEE STEEL LINTEL SCHEDULE , CMU LINTEL SCHEDULE OR SPECIAL LINTEL SCHEDULE ON THIS DRAWING.
RD, RDE RO, ROE AND FO	ROOF OR FLOOR OPENING. SEE GENERAL STRUCTURAL STEEL NOTES FOR FRAME INFORMATION. VERIFY LOCATION WITH CONTRACTOR REQUIRING OPENING. WHERE OPENING SIZE IS NOT GIVEN, COORDINATE WITH CONTRACTOR REQUIRING OPENING FOR EXACT SIZE.
1 S-001	SECTION, DETAIL, OR ELEVATION
R	1 1/2", 20 GAUGE TYPE "B" GALVANIZED METAL ROOF DECK AND DIRECTION OF SPAN.
F	2", 20 GAUGE COMPOSITE GALVANIZED METAL COMPOSITE FLOOR DECK AND DIRECTION OF SPAN.
A	INDICATES CONCRETE SLAB. SEE SLAB SCHEDULE.
BP1	INDICATES MASONRY WALL BEARING PLATE SIZE (SEE S-001 FOR BEARING PLATE SCHEDULE)
PANEL 2	INDICATES MASONRY REINFORCED WALL PANEL. SEE MASONRY PANEL SCHEDULE.



STRUCTURAL ABBREVIATIONS

ALT	ALTERNATE	LAT	LATERAL
ARCH	ARCHITECTURAL	LONG	LONGITUDINAL
B/	BOTTOM OF	MAX	MAXIMUM
BM	BEAM	MECH	MECHANICAL
BOTT	BOTTOM	MIN	MINIMUM
BRG	BEARING	MAS	MASONRY
CL	CENTERLINE	N	NORTH
CMU	CONCRETE MASONRY UNIT	NIC	NOT IN CONTRACT
C TO C	CENTER TO CENTER	NO/#	NUMBER
CLR	CLEAR/CLEARANCE		
COL	COLUMN	O.C.	ON CENTER
CONC	CONCRETE	O TO O	OUT TO OUT
CONSTR	CONSTRUCTION	OPNG	OPENING
CONT	CONTINUOUS	OPP HD	OPPOSITE HAND
CONTR	CONTRACTOR		
		PL	PLATE
DET	DETAIL	PSF	POUNDS PER SQUARE FOOT
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
E	EAST	REF	REFER TO
EA	EACH	REINF	REINFORCING
EF	EACH FACE	REQ'D	REQUIRED
ELEC	ELECTRICAL		
EL	ELEVATION	S	SOUTH
EQU	EQUAL	SECT	SECTION
EQUIP	EQUIPMENT	SIM	SIMILAR
EW	EACH WAY	SPA	SPACE
EXIST	EXISTING	SPEC	SPECIFICATIONS
EXP	EXPANSION	STD	STANDARD
		STL	STEEL
FIN	FINISH	STRUCT	STRUCTURAL
FL	FLOOR		
FDN	FOUNDATION	T/	TOP OF
FTG	FOOTING	TOM	TOP OF MASONRY
		TOS	TOP OF STEEL
GA	GAUGE	THK	THICK/THICKNESS
GC	GENERAL CONTRACTOR	TYP	TYPICAL
HORIZ	HORIZONTAL	UON	UNLESS OTHERWISE NOTED
HS	HIGH STRENGTH		
		VIF	VERIFY IN FIELD
JST	JOIST	VERT	VERTICAL
JT	JOINT		
		W	WEST
L	ANGLE	W/	WITH
LLH	LONG LEG HORIZONTAL	WWF	WELDED WIRE FABRIC
LLV	LONG LEG VERTICAL		

GENERAL DESIGN NOTES

1. BUILDING CODE 2014
   INTERNATIONAL BUILDING CODE – (WITH INDIANA ADMENDMENTS)
2. DESIGN LOADS:

   ROOF LOADS: DL (PSF)

GENERAL	CLASSROOM	CORRIDORS	OFFICE	ENTRY
34	32	65	32	29

   FLOOR LOADS: DL (PSF)

MEZZ/ STORAGE
150

   FLOOR LOADS: LL (PSF) — GENERAL 40
   ROOF LOADS: LL (PSF) — GENERAL 20
3. SNOW LOAD INFORMATION: AD-1
   GROUND SNOW LOAD (Pg) 25 PSF + DRIFT
   SNOW EXPOSURE FACTOR (Ce) – 0.9
   SNOW LOAD IMPORTANCE FACTOR (Is) – 1.1
   THERMAL FACTOR (Ct) – 1.0
   FLAT ROOF SNOW LOAD (Pf) – 28 PSF
4. WIND LOAD INFORMATION:
   BASIC WIND SPEED; V ult – 120 MPH
   WIND IMPORTANCE FACTOR – 1.15
   BUILDING CATEGORY – III
   WIND EXPOSURE – C
   INTERNAL PRESSURE COEFFICIENT (GCpi) – ±0.18
5. SEISMIC DESIGN DATA:
   SEISMIC USE GROUP – II
   SPECTRAL RESPONSE COEFFICIENTS
   Sds – 0.14
   Sd1 – 0.10
   SITE CLASS – D
   BASIC SEISMIC-FORCE-RESISTING SYSTEM – 2P
   DESIGN BASE SHEAR (V) – 0.043W
   ANALYSIS PROCEDURE – EQUIVALENT LATERAL FORCE

GENERAL FOUNDATION/CONCRETE NOTES

1. ALL CONCRETE SHALL BE STONE/GRAVEL AGGREGATE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS NOTED IN THE SPECIFICATIONS.
2. ALL REINFORCING STEEL SHALL CONFORM, TO ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE.
3. ALL FOOTINGS AND PADS ARE DESIGNED TO BEAR ON UNDISTURBED SOIL WITH AN ALLOWABLE BEARING CAPACITY OF 2000 PSF.

GENERAL STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE STANDARD SPECIFICATION FOR STRUCTURAL STEEL, ASTM A992, UNLESS NOTED OTHERWISE.
2. ALL JOIST ANCHORS, BEAM BEARING PLATES, LINTELS, METAL DECK ANCHORS, AND NEEDLE BEAMS ARE TO BE FURNISHED BY THE STRUCTURAL METALS CONTRACTOR AND INSTALLED BY THE MASONRY CONTRACTOR.
3. PROVIDE CURB ANGLES 3x3x1/4 TO SUPPORT ROOF DECK AT OPENINGS, UNLESS NOTED OTHERWISE.
4. STRUCTURAL STEEL FABRICATOR SHALL PROVIDE STEEL FILLERS ON BEAM FLANGES WHERE REQUIRED FOR THE BEARING OF METAL DECK.
5. STRUCTURAL STEEL FABRICATOR SHALL PROVIDE SUPPORTS FOR METAL DECK AT PERIMETER COLUMNS, BUILDING CORNERS AND ALL OTHER LOCATIONS AS REQUIRED FOR COMPLETE INSTALLATION OF DECK.

GENERAL STEEL DECK NOTES

1. METAL DECK MANUFACTURER SHALL PROVIDE 6" WIDE, 22 GAUGE COVER PLATES AT ALL DECK SPLICE LOCATIONS WHERE THE ROOF DECK HAS A CHANGE IN DIRECTION OR SLOPE.
2. METAL DECK MANUFACTURER SHALL PROVIDE RECESSED SUMP PANS TO ACCOMMODATE ROOF DRAINS IN ALL METAL ROOF DECKS.

GENERAL MASONRY NOTES

1. ALL CONCRETE MASONRY ASSEMBLAGES ARE DESIGNED FOR AN ULTIMATE COMPRESSIVE STRENGTH f'm = 1500 PSI.
2. ALL BEAMS AND LINTELS WHICH BEAR ON MASONRY SHALL BEAR A MINIMUM OF 8 INCHES ONTO MASONRY UNLESS OTHERWISE NOTED.
3. BLOCK WALLS SHALL BE LAID UP IN A RUNNING BOND PATTERN UNLESS OTHERWISE NOTED.
4. PROVIDE BRACING FOR ALL NON-LOAD BEARING BLOCK PARTITION WALLS PER A.C.I. THE TYPICAL BRACING DETAILS. AD-1
5. ALL MASONRY WALLS OR FOUNDATIONS (INTERIOR AND EXTERIOR) SHALL BE REINFORCED WITH #5 AT 48" C TO C UNLESS OTHERWISE NOTED.

GENERAL PRECAST CONCRETE PLANKS NOTES

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT RELEASE OF PRESTRESS STRANDS AND 6500 PSI AT 28 DAYS.
2. PRESTRESSING STRANDS SHALL BE UNCOATED, 7 WIRE LOW RELAXATION CONFORMING TO ASTM C-416, PORTLAND CEMENT ASTM C-150, CONCRETE AGGREGATES ASTM C-33.
3. NO ADMIXTURES ARE ALLOWED TO BE USED IN THE CONCRETE MIX. THE SUPERIMPOSED LOADS AS INDICATED ON THE DRAWINGS. THE GENERAL DESIGN OF THE SLAB SHALL CONFORM TO ACI 318-20.
4. COORDINATE EXACT LOCATION OF ALL LOAD BARING WALLS BY STRUCTURAL AND ARCHITECTURAL PLANS. (SEE: SF-101-NS, A-101-NS)
5. COORDINATE EXACT LOCATION AND SIZE OF MASONRY ELEVATOR SHAFT WITH MANUFACTURE.
6. COORDINATE EXACT LAYOUT OF ALL FLOOR PLANK PENETRATIONS WITH THE MECH, ELEC OR PLUMBING INSTALLING CONTRACTOR.

UNDERPINNING NOTES

1. EXISTING FOOTING SCHEDULE SHALL BE HAND EXCAVATED IN LENGTHS (PARALLEL TO EXISTING WALL) NOT GREATER THAN SIX (6) FEET AND TO THE WIDTH OF THE EXISTING FOOTING. EXCAVATED AREAS SHALL BE SPACED AT NOT LESS THAN EIGHTEEN (18) FEET ON CENTERS SO THAT NO MORE THAN ONE-THIRD (1/3) OF THE EXISTING FOOTING IS UNDERCUT AT ANY TIME. EXCAVATING SHALL BE DONE FROM THE EXTERIOR OF THE EXISTING FOUNDATION. (SEE 7/S-301)
2. UNDERPIN FOOTINGS SHALL BE FORMED AGAINST EARTH EXCEPT FOR EXPOSED SURFACES WHICH SHALL BE FORMED. ALL EARTH SHALL BE REMOVED FROM THE ADJOINING FACE OF UNDERPIN FOOTINGS PRIOR TO PLACING THE ADJACENT SEGMENT.
3. THE SPACE (2 INCHES MINIMUM) BETWEEN BOTTOM OF EXISTING FOOTING AND TOP OF UNDERPIN FOOTING LSHALL BE PACKED WITH NON-SHRINK GROUT AFTER THE UNDERPIN FOOTING HAS CURED FOR 72 HOURS. NO EXCAVATION OF ADJACENT UNDERPIN SEGMENTS SHALL BE MADE UNTIL NON-SHRINK GROUT IS CURED TO A 2,000 PSI COMPRESSIVE STRENGTH, ACCORDING TO MANUFACTURERS DATA.
4. IF THE UNDERPINNING OPERATION RESULTS IN THE UNDERMINING OF THE EXISTING EXTERIOR SLAB, AFTER UNDERPINNING IS COMPLETED, GROUT SHALL BE PUMPED THROUGH CORED HOLES IN THE EXISTING SLAB. GROUTING SHALL BEGIN AT ONE END. GROUT SHALL BE PUMPED INTO THE HOLE UNTIL IT IS FULL OR LUNTILL GROUT BEGINS TO SHOW IN THE ADJACENT HOLE. GROUTING SHALL THEN PROCEED AT THE NEXT ADJACENT HOLE.
5. UNDERPINNING CONCRETE SHALL BE f'c = 1,500 PSI AT 28 DAYS.
6. AS AN ALTERNATIVE TO NOTE 3, EXPANSIVE CEMENT CONCRETE (TYPE K) MAY BE USED, AND THE GROUTING STEP MAY BE OMITTED. IF EXPANSIVE CEMENT CONCRETE IS USED, FORMED SURFACES SHALL BE SECURELY BRACED TO PREVENT MOVEMENT DURING THE CURING.
7. THE INSTALLING FOUNDATION CONTRACTOR OR OWNER MUST VERIFY WHAT TYPE OF IN PLACE SHORING AND REPAIRS OR REPLACEMENT OF THE EXISTING BRICK FOUNDATION WALL IS REQUIRED. IN PLACE JACKING OF PORTIONS OF THE HOUSE CURRENTLY BEING SUPPORTED BY THE BRICK FOUNDATION IS TO BE DETERMINED BY THE INSTALLING FOUNDATION REPAIR CONTRACTOR WITH OWNERS APPROVAL PRIOR TO REMOVAL AND REPLACEMENT WITH CMU. (FIELD VERIFY)

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY RM
DRAWN BY RM
CHECKED BY RM JPB

ROGER MALONE REGISTERED NO. PE 19900200 STATE OF INDIANA PROFESSIONAL ENGINEER

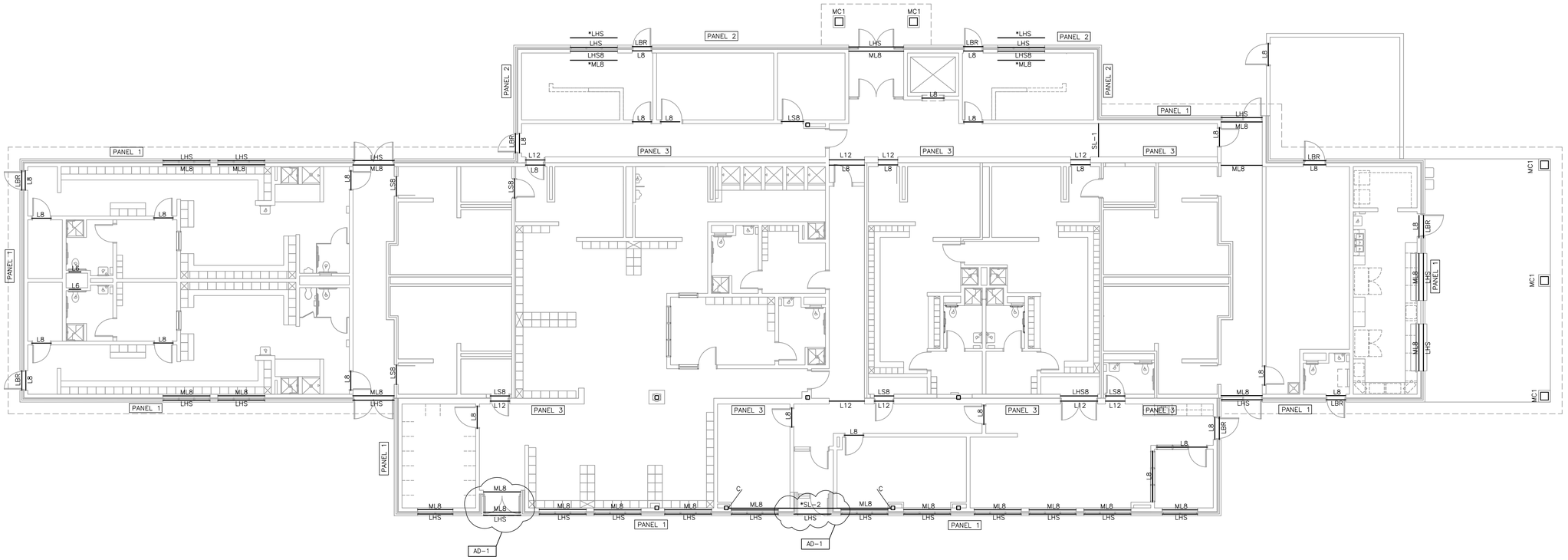
REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR STRUCTURAL SECTIONS, DETAILS AND NOTES

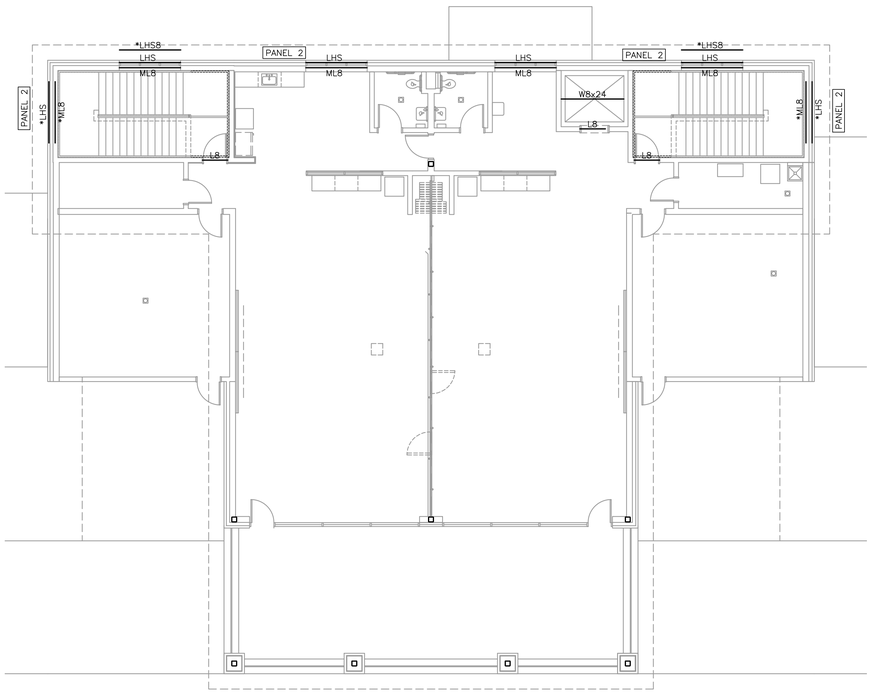
PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
S-001-NS



NORTH STAR BUILDING - FIRST LEVEL MASONRY / LINTEL PLAN

SCALE: 1/8" = 1'-0"



NORTH STAR BUILDING - SECOND LEVEL MASONRY / LINTEL PLAN

SCALE: 1/8" = 1'-0"

MASONRY PANEL REINFORCING/LINTEL PLAN NOTES

1. SEE DRAWING S-001 FOR NOTES, SCHEDULES AND TYPICAL DETAILS.
2. SEE DRAWING S-001 FOR MASONRY WALL LINTEL DETAILS.
3. SEE DRAWING S-001 FOR MASONRY AND STEEL LINTEL SCHEDULES.
4. VERIFY ALL LINTEL OPENINGS AND ELEVATIONS WITH ARCHITECTURAL PLAN.
5. SL-? INDICATES SPECIAL LINTEL REQUIRED. SEE DRAWING S-001 FOR SPECIAL LINTEL SCHEDULE.
6. PANEL ? INDICATES MASONRY WALL PANEL. SEE DRAWING S-001 FOR MASONRY PANEL SCHEDULE AND REINFORCEMENT REQUIREMENTS.
7. FOR MULTI-SPAN CONTINUOUS LINTELS MAINTAIN 16" MINIMUM CMU BETWEEN OPENINGS UNLESS OTHERWISE NOTED.
8. * INDICATES LINTEL REQUIRED FOR MECHANICAL OPENING. COORDINATE SIZE AND LOCATION WITH DIVISION 15.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY RM
DRAWN BY RM
CHECKED BY RM JPB

ROGER MALONE REGISTERED NO. PE 19800200 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING FIRST AND SECOND FLOOR MASONRY / LINTEL PLANS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
SL-101-NS

Tuesday, 10/10/2023 - 10:45 AM - LAST SAVED BY:RMALONE
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\04 STRC\S101.DWG

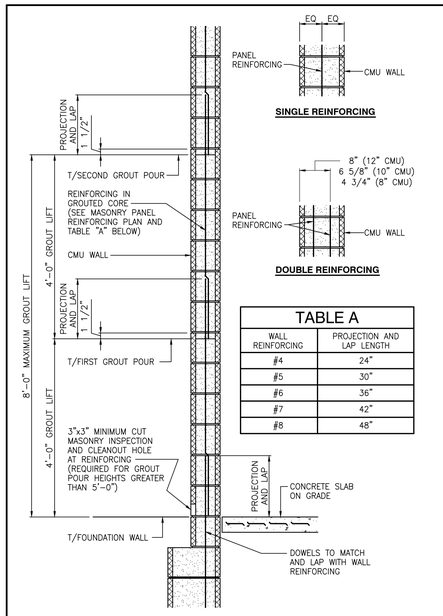
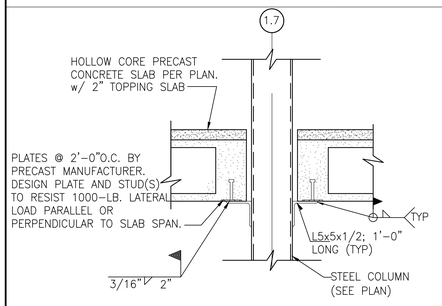


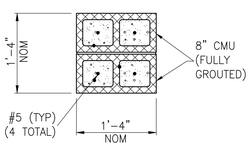
TABLE A	
WALL REINFORCING	PROJECTION AND LAP LENGTH
#4	24"
#5	30"
#6	36"
#7	42"
#8	48"

NOTE:
SEE MASONRY PANEL SCHEDULE FOR REINFORCING REQUIREMENTS.
MULTI-WYTHE WALLS MAY REQUIRE REINFORCING IN EACH WYTHE.

TYPICAL REINFORCED CMU WALL
SCALE: 3/4" = 1'-0"
15 S-302



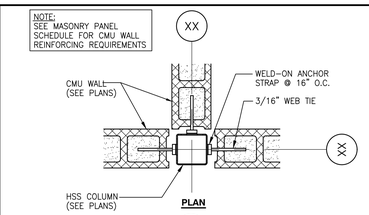
HOLLOW-CORE BEARING AT COLUMN
SCALE: NTS
16 S-302



EL 98"-8" TO EL BOT (SEE ARCH)

CMU COLUMNS (MC1)
SCALE: 1" = 1'-0"
17 S-302

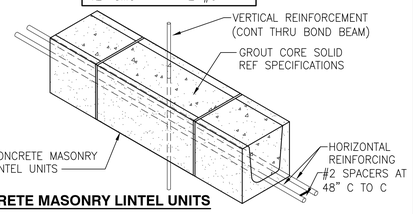
NOTE:
SEE MASONRY PANEL SCHEDULE FOR CMU WALL REINFORCING REQUIREMENTS



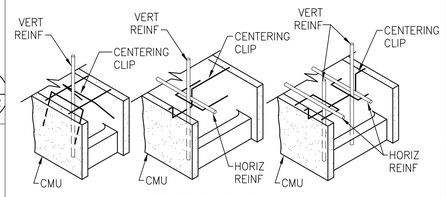
TYPICAL COLUMN ATTACHMENT TO CMU
SCALE: 1" = 1'-0"
12 S-302

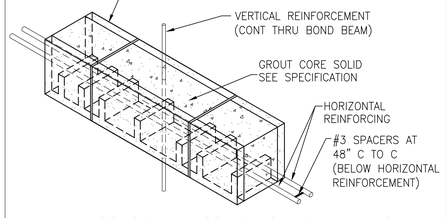
NOTE:
ALL BOND BEAMS SHALL BE CONTINUOUS AND SHALL BE FILLED WITH GROUT AND REINFORCED AS FOLLOWS:

BOND BEAM	REINFORCING
4" CMU	1-#3
6" CMU	1-#4
8" CMU	2-#6
10" CMU	2-#6
12" CMU	2-#6



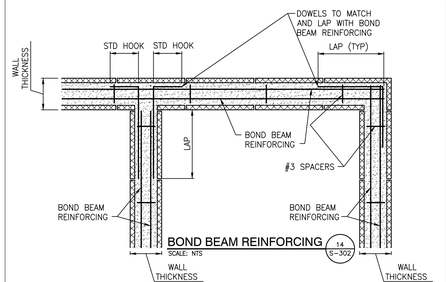
CONCRETE MASONRY LINTEL UNITS



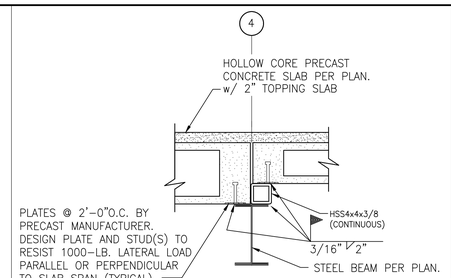


CONCRETE MASONRY BOND BEAM UNITS

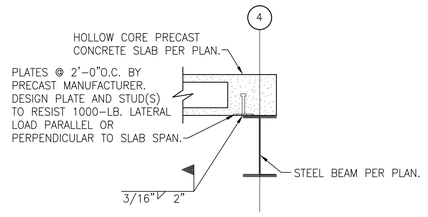
TYPICAL CMU BOND BEAM
SCALE: NTS
13 S-302



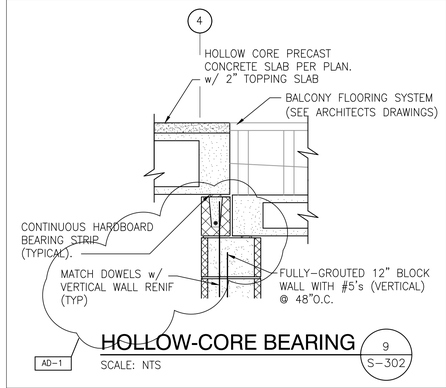
BOND BEAM REINFORCING
SCALE: NTS
14 S-302



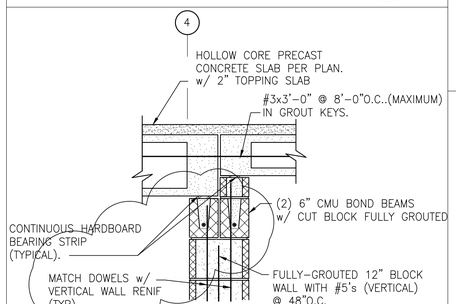
HOLLOW-CORE BEARING
SCALE: NTS
7 S-302



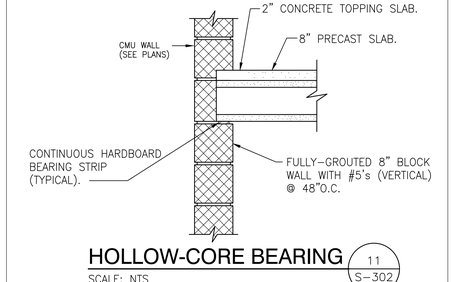
HOLLOW-CORE BEARING
SCALE: NTS
8 S-302



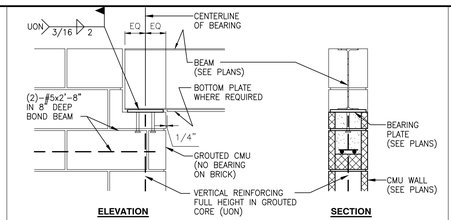
HOLLOW-CORE BEARING
SCALE: NTS
9 S-302



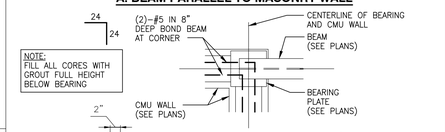
HOLLOW-CORE BEARING
SCALE: NTS
10 S-302



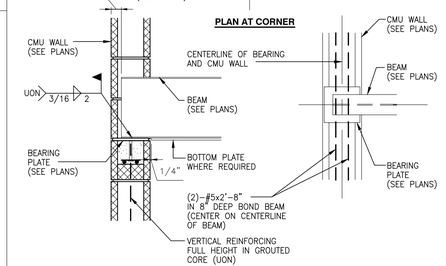
HOLLOW-CORE BEARING
SCALE: NTS
11 S-302



A. BEAM PARALLEL TO MASONRY WALL

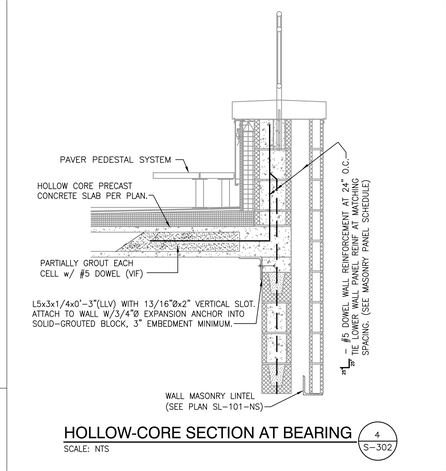


NOTE:
FILL ALL CORES WITH GROUT FULL HEIGHT BELOW BEARING

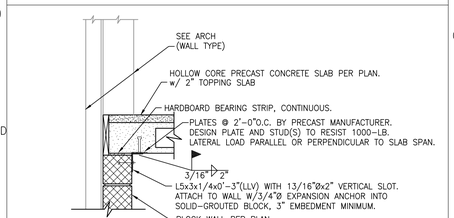


B. BEAM PERPENDICULAR TO MASONRY WALL

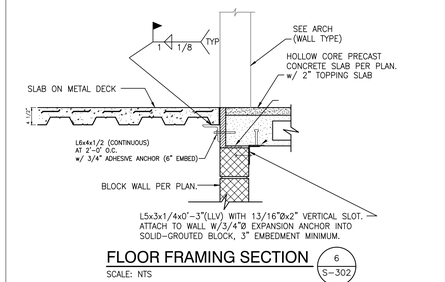
BEAM BEARING ON MASONRY
SCALE: 1" = 1'-0"
4 S-302



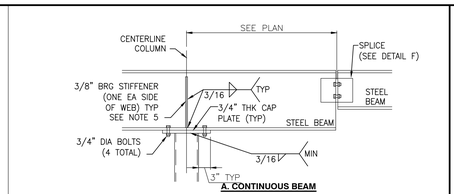
HOLLOW-CORE SECTION AT BEARING
SCALE: NTS
4 S-302



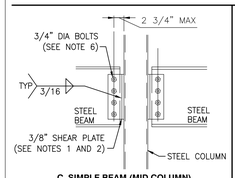
HOLLOW-CORE BEARING
SCALE: NTS
5 S-302



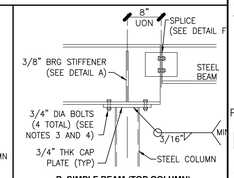
FLOOR FRAMING SECTION
SCALE: NTS
6 S-302



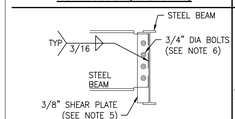
A. CONTINUOUS BEAM



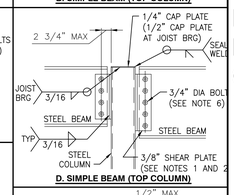
C. SIMPLE BEAM (MID COLUMN)



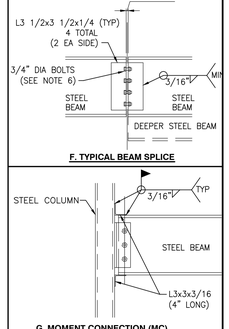
B. SIMPLE BEAM (TOP COLUMN)



E. SIMPLE BEAM (MID BEAM)



D. SIMPLE BEAM (TOP COLUMN)



F. TYPICAL BEAM SPLICE

G. MOMENT CONNECTION (MC)

NOTES:

1. WT-SHAPE (WELD ALL AROUND PER STRUCTURAL WELDING CODE, AWS D1.1)

   HSS4-WT4x6.5, HSS6-WT4x6.5, HSS7-WT4x10.5, HSS8-WT4x14, HSS10-WT5x22.5, HSS12-WT6x26.5

2. SHEAR PLATES WELDED TO FACE OF COLUMN MAY BE USED IN LIEU OF WT FOR COLUMNS WITH WALL THICKNESS' OF 1/2" OR GREATER. SHEAR PLATES TO BE 5/8" THICK FOR W27 BEAMS AND LARGER.
3. EXTEND DEEPER BEAM OVER TOP OF COLUMNS AND FRAME OTHER MEMBERS INTO IT UNLESS OTHERWISE NOTED.
4. AT CORNERS OR END WALLS USE 2 BOLTS AND EXTEND BEAM AND CAP PLATE 1/2" BEYOND EXTERIOR FACE OF COLUMN.
5. SHEAR PLATES WELDED TO WEB OF BEAM TO BE 5/8" THICK FOR W27 BEAMS AND LARGER.
6. DESIGN CONNECTIONS IN ACCORDANCE WITH AISC FOR REACTIONS INDICATED ON PLANS UNLESS OTHERWISE NOTED. WHERE REACTIONS ARE NOT SHOWN, THE CONNECTION SHALL BE DESIGNED FOR THE 50% OF THE TOTAL ALLOWABLE UNIFORM LOAD ON THE SPAN PER THE LATEST EDITION OF THE ASIC MANUAL.
7. DOUBLE ANGLES MAY BE USED IN LIEU OF WT AND SHEAR PLATES. (MINIMUM THICKNESS OF ANGLES SHALL BE 1/4" AND OUTSTANDING LEG SHALL BE 3 1/2" MINIMUM).

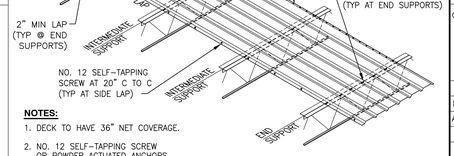
BEAM CONT AT COLUMN (DETAIL A)
TYP BEAM AT COLUMN (DETAIL B)
BEAM TO SIDE OF COLUMN (DETAIL C OR D)
BEAM / COLUMN MOMENT (DETAIL G)

PLAN LEGEND

TYPICAL STEEL FRAMING DETAILS
SCALE: NTS
1 S-302

TYPICAL EDGE SUPPORTS

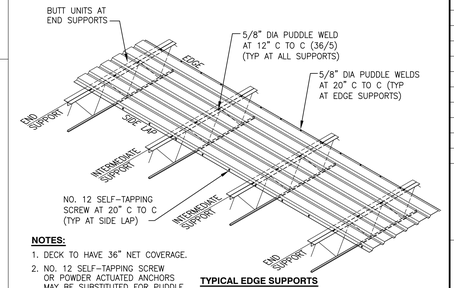
1. ANGLE AT ADJACENT WALL.
2. ANGLE OR BENT PLATE AT EAVE.



NOTES:

1. DECK TO HAVE 36" NET COVERAGE.
2. NO. 12 SELF-TAPPING SCREW OR POWDER ACTUATED ANCHORS MAY BE SUBSTITUTED FOR PUDDLE WELDS.

TYPICAL ROOF DECK ATTACHMENT
SCALE: NTS
2 S-302



NOTES:

1. DECK TO HAVE 36" NET COVERAGE.
2. NO. 12 SELF-TAPPING SCREW OR POWDER ACTUATED ANCHORS MAY BE SUBSTITUTED FOR PUDDLE WELDS.

TYPICAL EDGE SUPPORTS

1. ANGLE OR BENT PLATE AT ADJACENT WALL.
2. ANGLE OR BENT PLATE AT EDGE OF SLAB.

TYPICAL COMPOSITE FLOOR DECK ATTACHMENT
SCALE: NTS
3 S-302

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY RM
DRAWN BY RM
CHECKED BY RM JPB

ROGER W. MALONE REGISTERED NO. PE 19800200 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

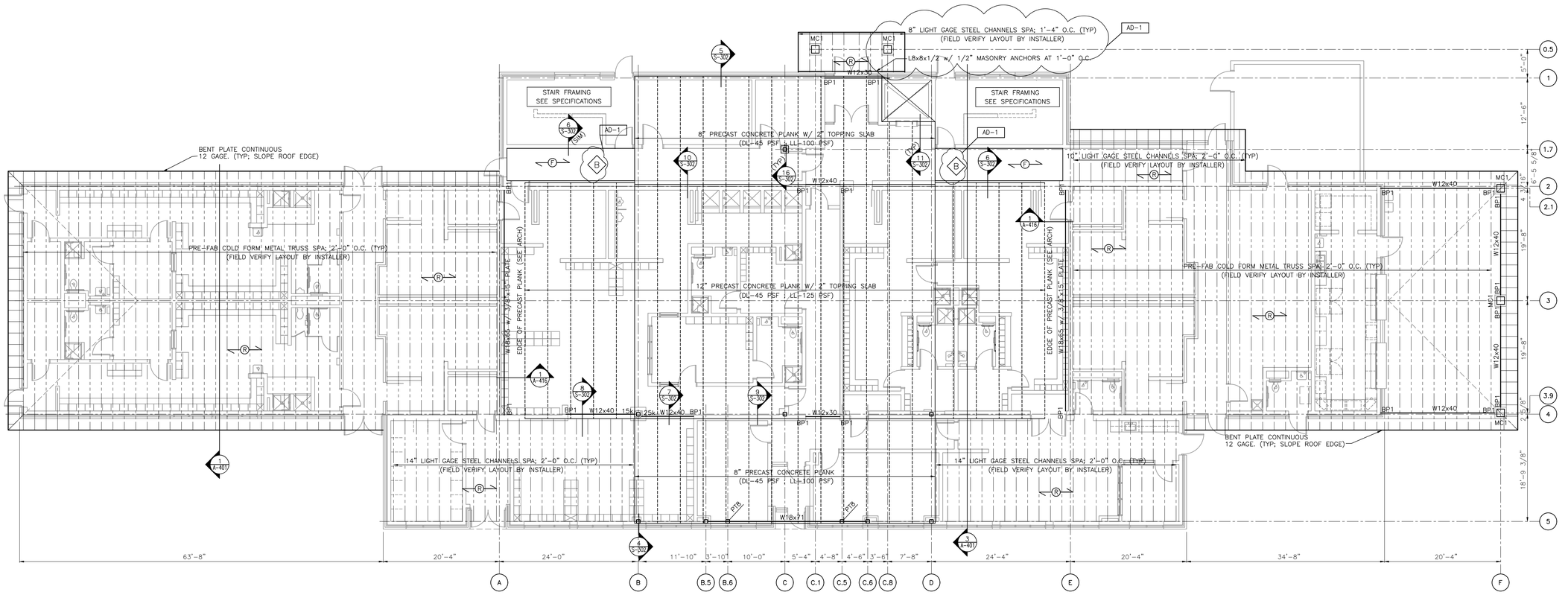
MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING STRUCTURAL SECTIONS AND DETAILS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
S-302-NS

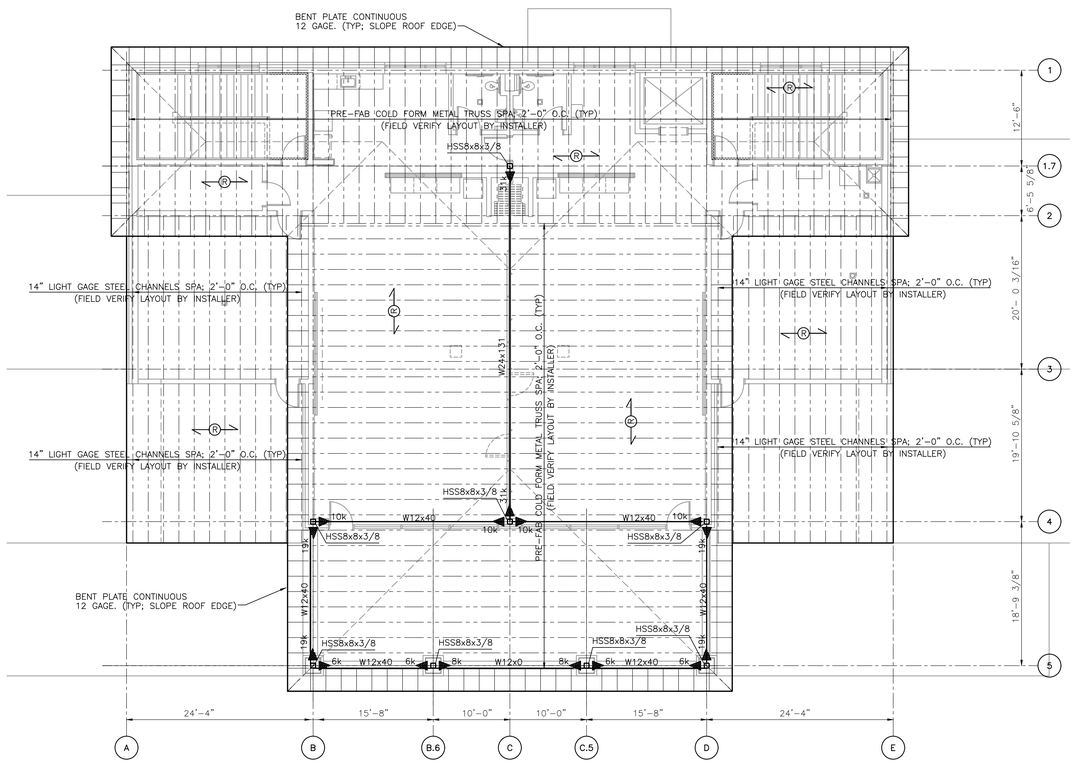
Tuesday, 10/10/2023 - 10:44 AM - LAST SAVED BY:RMALONE
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\04 STRC\S-302.DWG



NORTH STAR BUILDING - FIRST LEVEL ROOF AND FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"

NORTH



NORTH STAR BUILDING - SECOND LEVEL ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

NORTH

FRAMING PLAN NOTES

1. SEE SHEET S-001 FOR GENERAL NOTES, STRUCTURAL LEGEND, SCHEDULES AND TYPICAL DETAILS.
2. ALL ELEVATIONS ARE REFERENCED FROM A FINISH FLOOR ELEVATION OF 100'-0" PER AREA. SEE PLAN AND VERIFY WITH ARCHITECTURAL FLOOR PLANS
3. PRE-FAB TRUSSES ARE TO INSTALLED PER TRUSS MANUFACTURE LAID OUT PER CONTRACTOR PLANNED SEQUENCE OF COMPLETION. (SEE SPECIFICATION)
4. SEE ARCHITECT FOR ALL BUILDING LAYOUT DIMENSIONS.
5. "TEMPORARY BRACING NEEDED UNTIL ROOF METAL DECK DIAPHRAGM INSTALLED."
6. SEE DRAWINGS S-301 THROUGH S-303 FOR STEEL FRAMING DETAILS.
7. ▶ – INDICATES BEAM AT COLUMN MOMENT CONNECTION. (SEE 1G-S302)

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY RM
DRAWN BY RM
CHECKED BY RM JPB

ROGER MALONE REGISTERED NO. PE 19800200 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING ROOF AND SECOND FLOOR FRAMING PLANS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
SF-101-NS

FINISH LEGEND

	SURFACE	MARK	DESCRIPTION	MANUFACTURER	PATTERN/FINISH	NUMBER/COLOR	SIZE	COMMENTS
	CEILING MATERIALS							
		ACT1	ACOUSTICAL CEILING	ARMSTRONG	FINE FISSURED SECOND LOOK	1765 WHITE	24" X 48"	SCORED, ANGLED TEGULAR
		ACT2	ACOUSTICAL CEILING	ARMSTRONG	CLEAN ROOM VL	868 WHITE	24" X 24"	
		ACT3	ACOUSTICAL CEILING	ARMSTRONG	FINE FISSURED	1728 WHITE	24" X 24"	ANGLED TEGULAR
		ACT4	ACOUSTICAL CEILING	ARMSTRONG	CALLA	282 WHITE	24" X 24"	TEGULAR SQUARE SMOOTH
		P5	PAINT	SHERWIN WILLIAMS	--	SW 7007 CEILING BRIGHT WHITE	--	
		W3	WALL COATING	SHERWIN WILLIAMS	--	SW 7004 SNOWBOUND		
	WALL BASE							
AD-01		B1	VINYL	TARKETT	--	BURNT UMBER 63	4" COVE	
		TB	PORCELAIN TILE BASE	CROSSVILLE	CROSS-COLORS MINGLES	GRAPHITE A850	6" COVE	
	FLOOR MATERIALS							
		C1	CARPET TILE	TARKETT	FLAME EDIT 11612	COMMONGROUND 22404	24" X 24"	VERTICAL ASHLAR
		C2	WALK OFF CARPET TILE	TARKETT	ABRASIVE ACTION II 02578	WINTER GRAY 19103	24" X 24"	
		LVT1	LUXURY VINYL TILE	TARKETT	ID LATITUDE ABSTRACT	VILLA WHITE 7563	18" X 18"	
AD-01		STR	RESILIENT STAIR TREADS	TARKETT	--	BURNT UMBER 63	--	TREAD, RISER, AND STRINGER
		FT1	FLOOR TILE	CROSSVILE	CROSS- COLORS MINGLES	GRAPHITE A850	6" X 6"	
	WALL MATERIALS							
		P1	PAINT	SHERWIN WILLIAMS	--	SW 7029 AGREEABLE GRAY	--	
		P2	PAINT	SHERWIN WILLIAMS	--	SW 7016 MINDFUL GRAY	--	
		P3	PAINT	SHERWIN WILLIAMS	--	SW 7004 SNOWBOUND	--	
		P4	PAINT	SHERWIN WILLIAMS	--	SW 7066 GRIZZLE GRAY	--	DOOR FRAMES
		P5	SEE CEILING MATERIALS		--			
		W3	SEE CEILING MATERIALS		--			
		WC1	WALL COVERING	MOMENTUM	WHAT THE HEMP	AZ53276WP GRAPH GREY		
		WC2	WALL COVERING	MOMENTUM	SWITCH	SG3014 SHALE	--	
		WC3	WALL COVERING	MOMENTUM	WINTON	L2-WN-03 DRYSTONE	--	
		WC4	WALL COVERING	MOMENTUM	HAYDEN	L2-HN-05 BUFF	--	
		WC5	WALL COVERING	P3TEC	BEVEL, TYPE III	CLAY MASK	--	
		WT1	CERAMIC WALL TILE	AMERICAN OLEAN	COLOR STORY WALL, GLOSSY	STABLE 0055	3" X 6"	INSTALL STAGGERED JOINT; SUBWAY
		WT2	CERAMIC WALL TILE	AMERICAN OLEAN	COLOR STORY WALL, GLOSSY	STORM GRAY 0017	3" X 6"	INSTALL STAGGERED JOINT; SUBWAY
		WT2	PORCELAIN WALL TILE	CROSSVILLE	BLEND	AVORIO 3+ L204B	1M X 3M	INSTALL VERTICAL, EQUALLY CENTERED
	CASEWORK AND MILLWORK							
		PL1	PLASTIC LAMINATE	WILSONART	FINE VELVET TEXTURE 38	RIVER CHERRY 7937	--	
		PL2	PLASTIC LAMINATE	WILSONART	FINE VELVET TEXTURE 38	OILED SOAPSTONE 4882	--	
		PL3	PLASTIC LAMINATE	PIONITE	--	CINDER GRAY CONCRETE	--	
		PL4	PLASTIC LAMINATE	NEVAMAR	SUEDE SD	WHITE ESSENCE ES7001T	--	
		SS1	SOLID SURFACE	CORIAN	--	NEUTRAL AGGREGATE	--	
		SS2	SOLID SURFACE	CORIAN	--	LINEN	--	WINDOW SILLS
	MISCELLANEOUS							
		RS1	WINDOW ROLLER SHADE	MECHO	--	--	--	--
		CG	CORNER GUARD	INPRO	--	--	--	--
		TRIM1	METAL TRIM	SCHLUTER	RONDEC	ALUMINUM SATIN ANODIZED	--	--
		TRIM2	METAL TRIM	FRY REGLET	WALLCOVERING TRIM FIELD	ANODIZED, BRUSHED	--	--
		TRIM3	METAL TRIM	FRY REGLET	MILLWORK CORNER	POWDER COAT	--	--
			WOOD DOOR STAIN		RED OAK CLEAR STAIN	--	--	--

ETR = EXISTING TO REMAIN

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

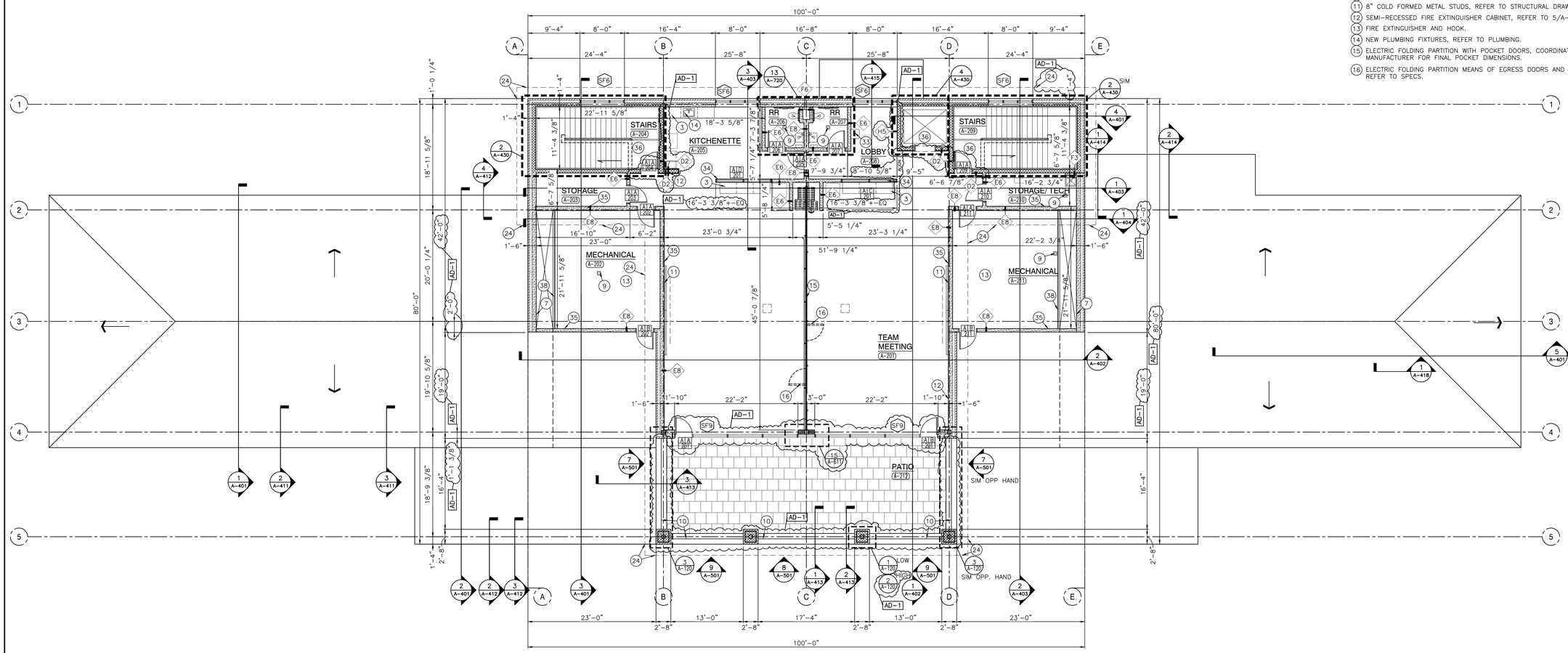
REVISIONS

MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
NEW ADMIN AND MEDIA CENTER FINISH LEGEND

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-820-AD



NORTH STAR BUILDING SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

NORTH

17. ROLLING COUNTER DOOR, REFER TO RELATED SECTIONS.
18. KNOX BOX.
19. PROVIDE CONCRETE EQUIPMENT PAD UNDER CHILLER, REFER TO MECHANICAL AND STRUCTURAL. VERIFY SIZE AND LOCATION.
20. CONCRETE SLAB, REFER TO STRUCTURAL.
21. WALL CONSTRUCTION TO ANCHOR ON TOP OF MASONRY WALL CONSTRUCTION BELOW AND SEAL CEILING AT BOTTOM OF ROOF OR FLOOR HORIZONTAL. REFER TO WALL TYPES.
22. FIRE ALARM CONTROL PANEL– REFER TO ELECTRICAL.
23. DISPLAY/ TV MONITOR. REFER TO EQUIPMENT PLANS.
24. LINE OF ROOF ABOVE. REFER TO ROOF PLAN, SECTIONS, AND DETAILS.
25. CONCRETE MASONRY LOCKER BASE, REFER TO 1/A–501.
26. LOCKER TYPE "A" AND BASE, REFER TO 1/A–501.
27. LOCKER TYPE "B" AND BASE, REFER TO 1/A–501.
28. LOCKER TYPE "C" AND BASE, REFER TO 1/A–501.
29. LOCKER TYPE "D" AND BASE, REFER TO 1/A–501.
30. LOCKER TYPE "E" AND BASE, REFER TO 1/A–501.
31. ACCESSIBLE LOCKER.
32. REFER TO MEP AND EQUIPMENT PLANS FOR SPECIALTY EQUIPMENT IN THIS ROOM.
33. ACCESSIBLE ELECTRIC WATER COOLER WITH BOTTLE FILLER AND BUBBLER, REFER TO PLUMBING.
34. ALTERNATE: ELECTROLYTIC GLAZING.
35. COLD FORMED METAL STUD LOAD BEARING WALL.
36. RATED WALL ASSEMBLY– REFER TO G–SERIES.
37. DEDICATION PLAQUE.
38. OSHA APPROVED GUARD RAIL, COORDINATE FINAL LOCATIONS WITH MEP.

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'–0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO BE RUNNING BOND UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. WHERE NEW CMU WALLS INTERSECT EXISTING CMU WALLS AT A CORNER OR ARE ALIGNED WITH EXISTING CMU WALLS, TOOTH NEW CMU INTO EXISTING CMU UNLESS NOTED OTHERWISE.

L. REFER TO DEMOLITION SHEETS FOR ADDITIONAL PATCHING AND REPAIR WORK.

M. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL

N. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

O. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

PLAN LEGEND:

INDICATES STOREFRONT, CURTAIN WALL, OR WINDOW SYSTEM. REFER TO A–600 SERIES DRAWINGS FOR ELEVATIONS AND DETAILS.

INDICATES WALL TYPES REFER TO G–201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. CONCRETE VOID SLAB/WALK, REFER TO STRUCTURAL.
2. CARD READER – SEE ELECTRICAL AND TECHNOLOGY. COORDINATE BACK TO NEW MEDIA CENTER.
3. CASEWORK AND/OR MILLWORK. REFER TO EQUIPMENT PLANS.
4. ACCESSIBLE HEIGHT AND STANDARD MOUNTED HEIGHT ELECTRIC WATER COOLER, REFER TO PLUMBING.
5. CONCESSIONS CASEWORK AND EQUIPMENT, REFER TO EQUIPMENT PLAN AND MEP.
6. PUSH PAD FOR ADA OPERATOR.
7. ATTIC ACCESS, REFER 12/A–501
8. FIRE ALARM ANNUNCIATOR PANEL, REFER TO ELECTRICAL.
9. FLOOR DRAIN, REFER TO PLUMBING.
10. POWDER COATED ALUMINUM GUARD RAIL.
11. 8" COLD FORMED METAL STUDS, REFER TO STRUCTURAL DRAWINGS.
12. SEMI–RECESSED FIRE EXTINGUISHER CABINET, REFER TO 5/A–501.
13. FIRE EXTINGUISHER AND HOOK.
14. NEW PLUMBING FIXTURES, REFER TO PLUMBING.
15. ELECTRIC FOLDING PARTITION WITH POCKET DOORS, COORDINATE WITH MANUFACTURER FOR FINAL POCKET DIMENSIONS.
16. ELECTRIC FOLDING PARTITION MEANS OF EGRESS DOORS AND HARDWARE. REFER TO SPECS.

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23–115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

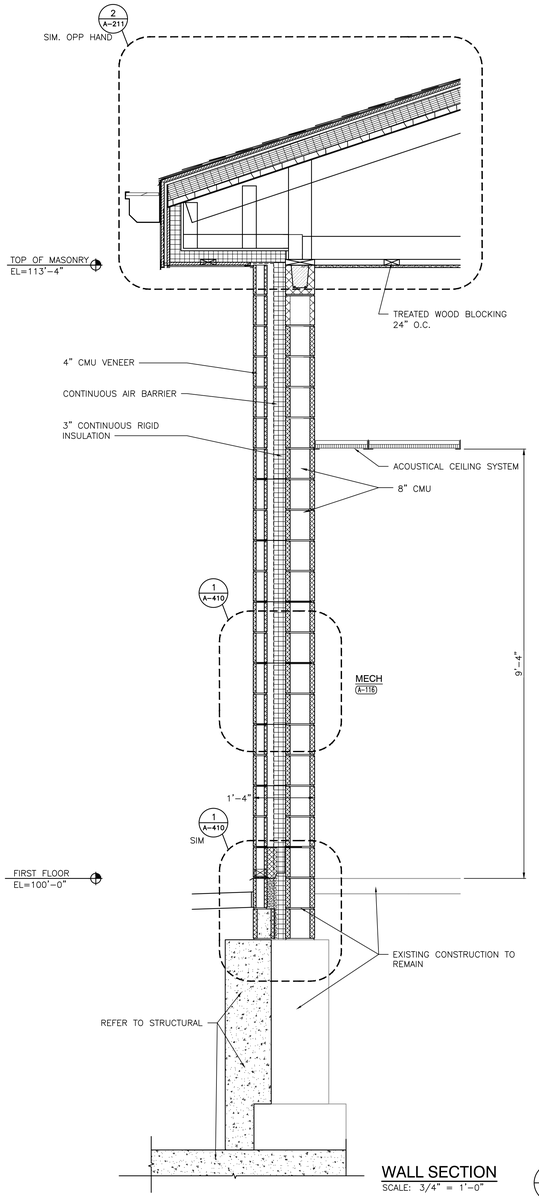
MARK	DATE	ISSUED FOR
AD–1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING SECOND FLOOR PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

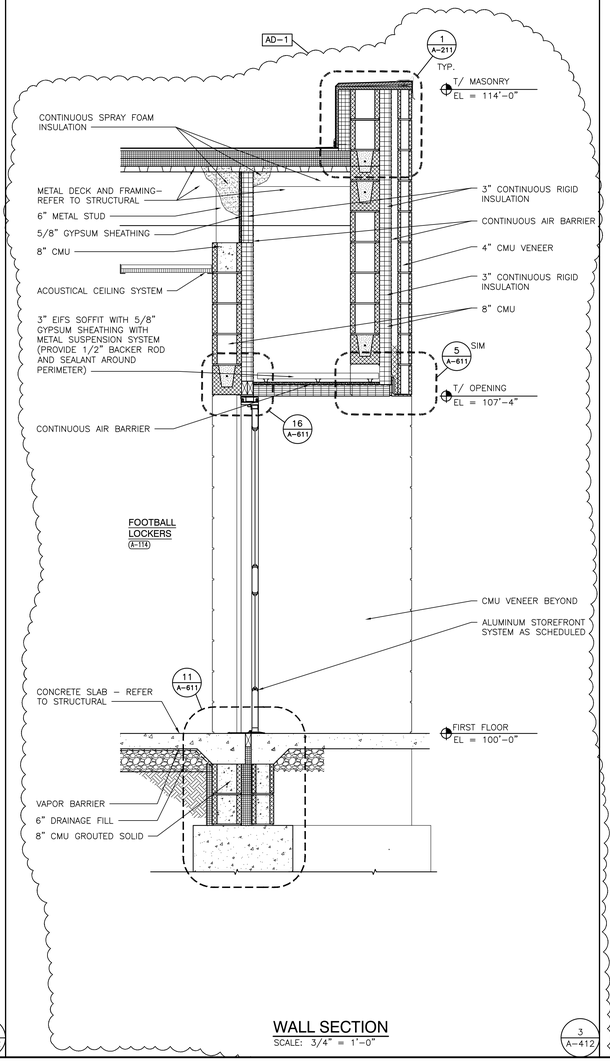
SHEET
A-102-NS

Friday, 10/6/2023 – 8:47 AM – LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC – LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-102.DWG



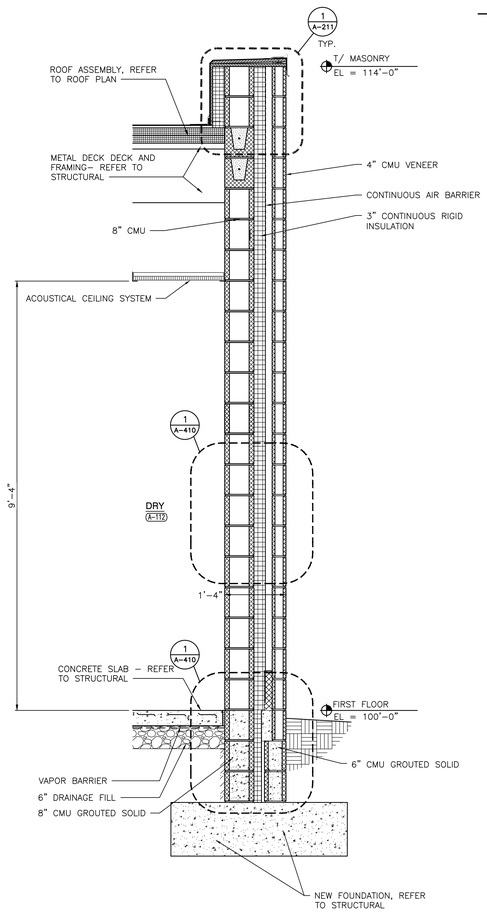
WALL SECTION
SCALE: 3/4" = 1'-0"

4
A-412



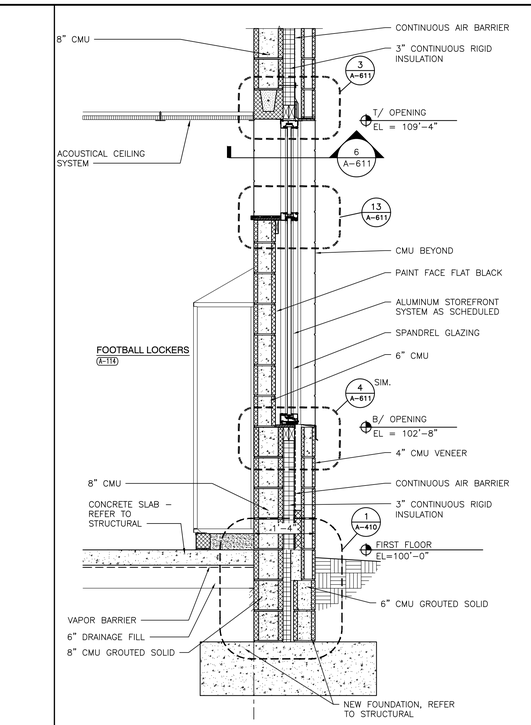
WALL SECTION
SCALE: 3/4" = 1'-0"

3
A-412



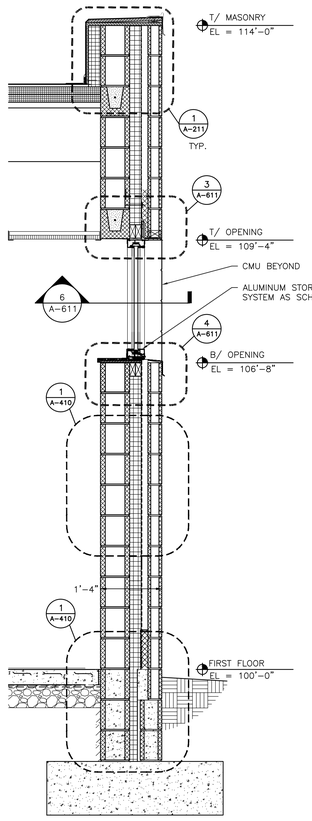
WALL SECTION
SCALE: 3/4" = 1'-0"

2
A-412



WALL SECTION
SCALE: 3/4" = 1'-0"

5
A-412



REFER TO 2/A-412 FOR
TYPICAL NOTES AND DETAILS

WALL SECTION
SCALE: 3/4" = 1'-0"

1
A-412

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS
REGISTERED
NO. 11600109
STATE OF INDIANA
ARCHITECT

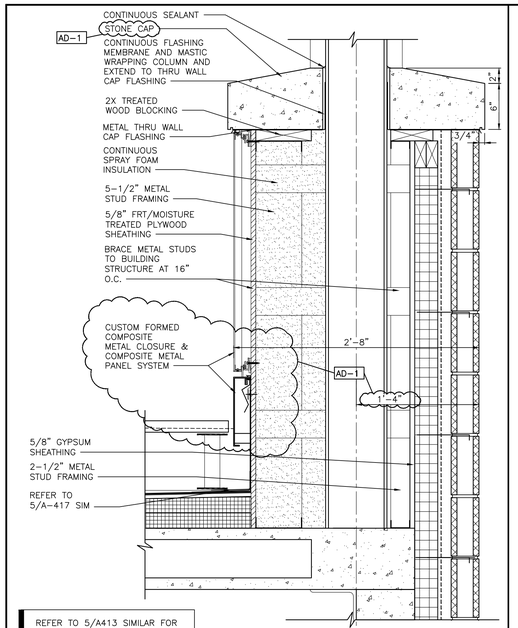
REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING WALL SECTIONS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

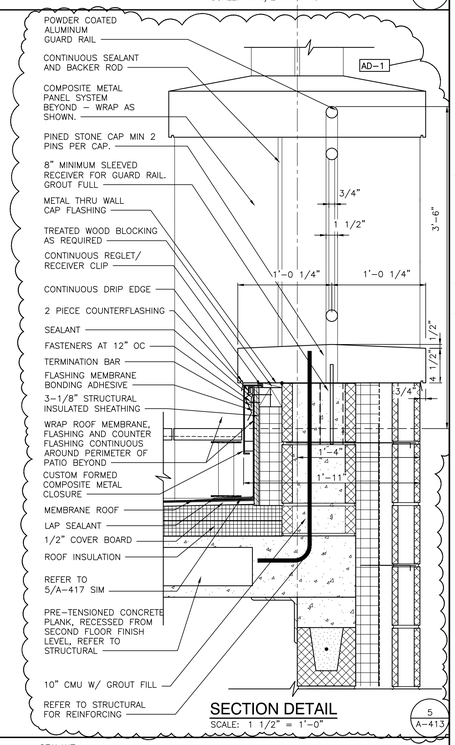
SHEET
A-412-NS



REFER TO 5/A413 SIMILAR FOR ADDITIONAL NOTES

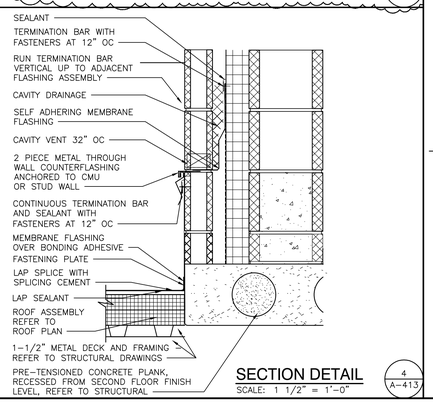
SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

6 A-413



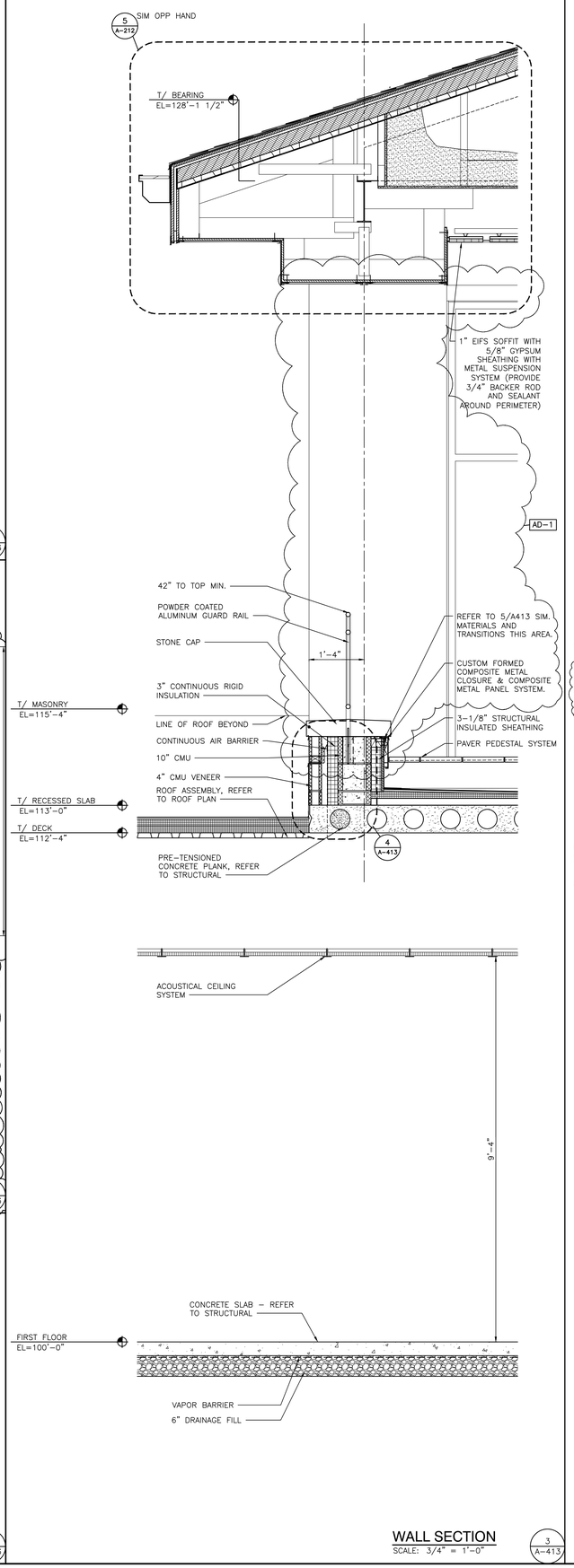
SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

5 A-413



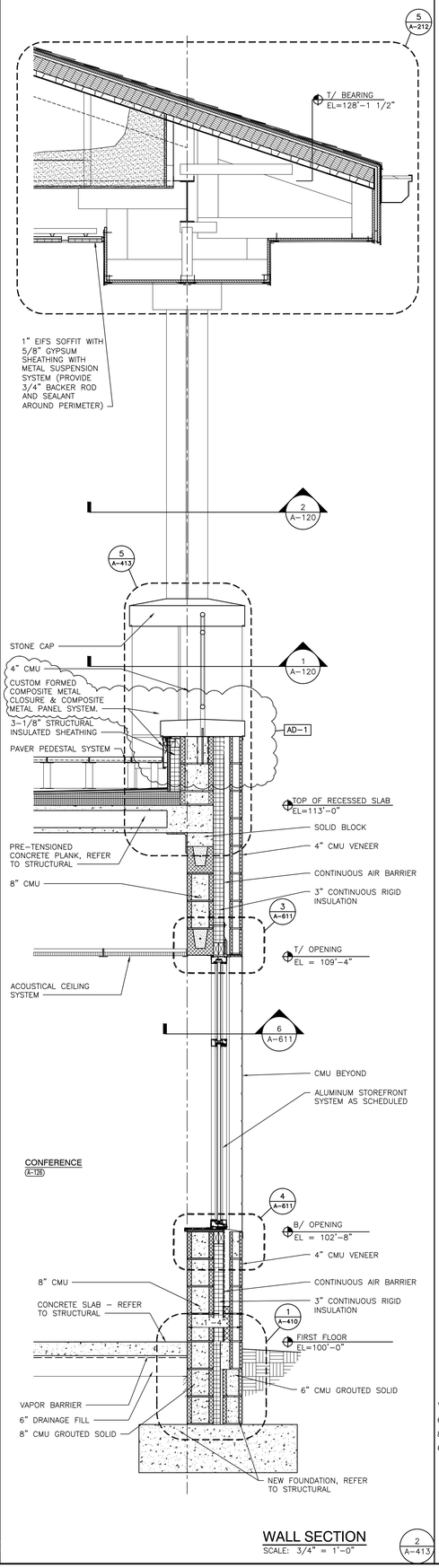
SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

4 A-413



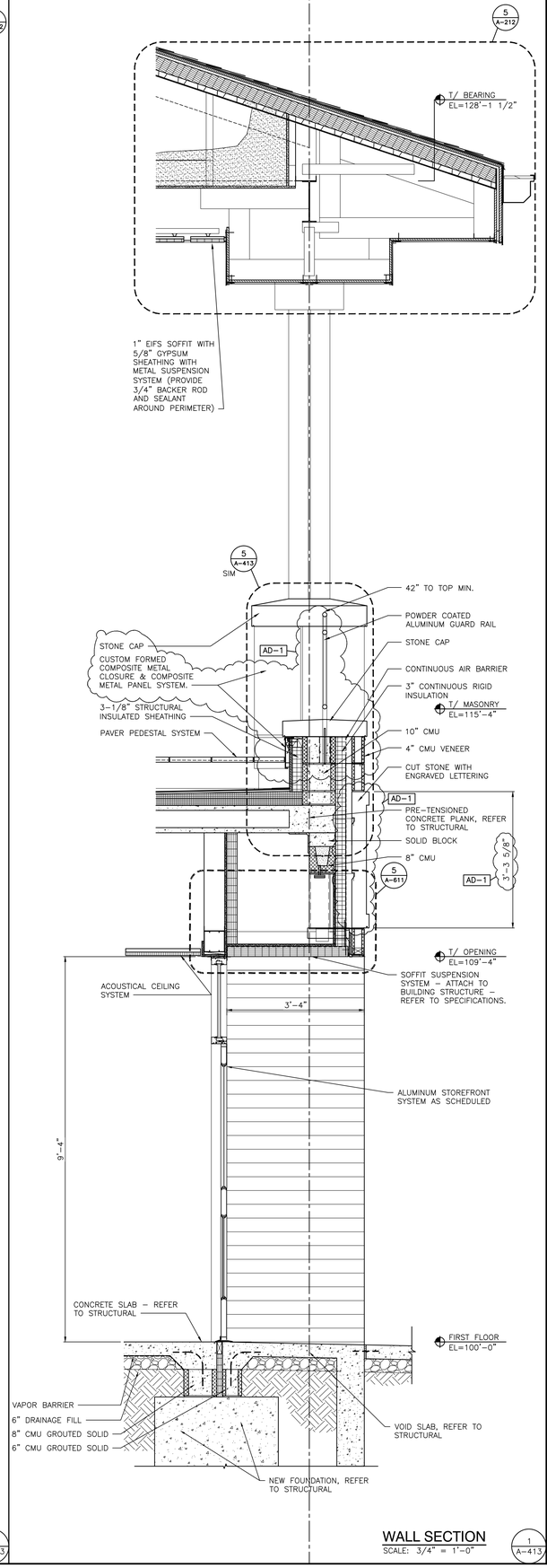
WALL SECTION
SCALE: 3/4" = 1'-0"

3 A-413



WALL SECTION
SCALE: 3/4" = 1'-0"

2 A-413



WALL SECTION
SCALE: 3/4" = 1'-0"

1 A-413

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW/TA
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING

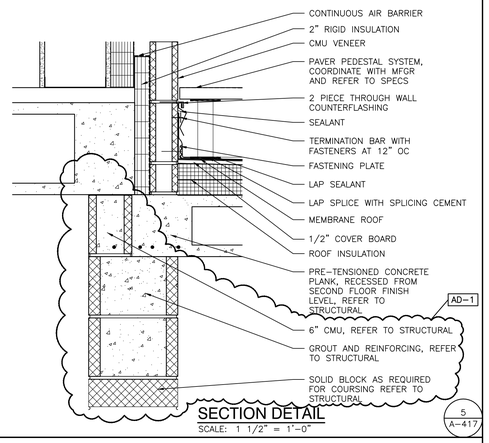
NORTH STAR BUILDING WALL SECTIONS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

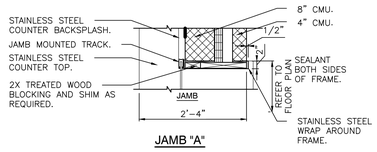
A-413-NS

Friday, 10/6/2023 – 10:20 AM – LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-413.DWG

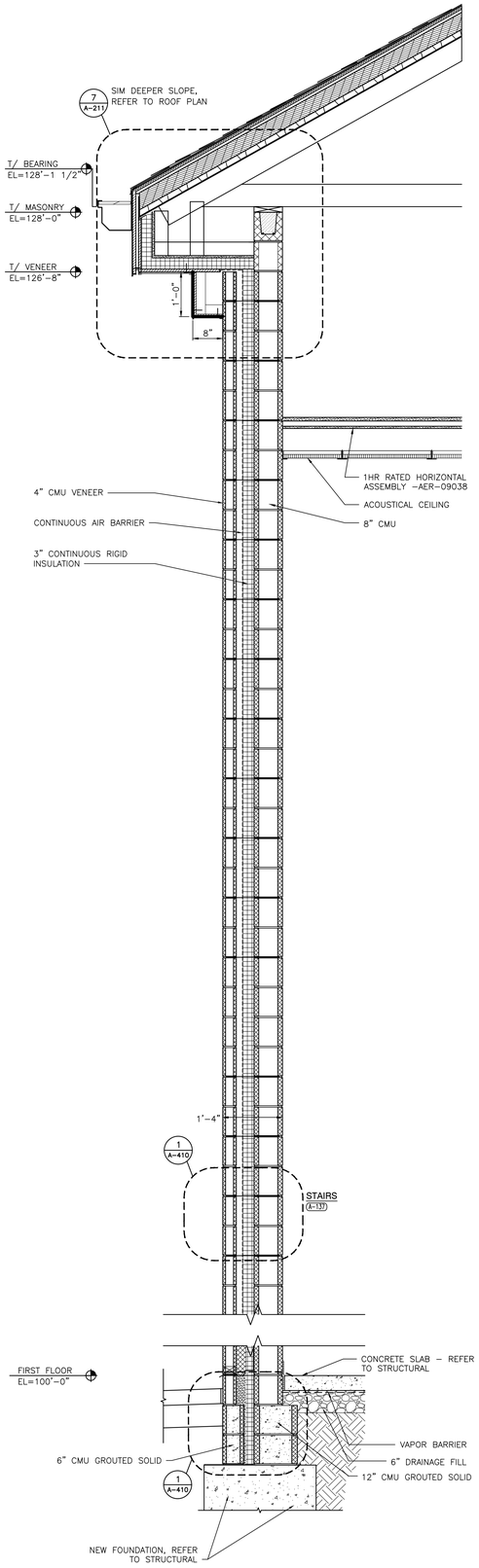


SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

5 / A-417

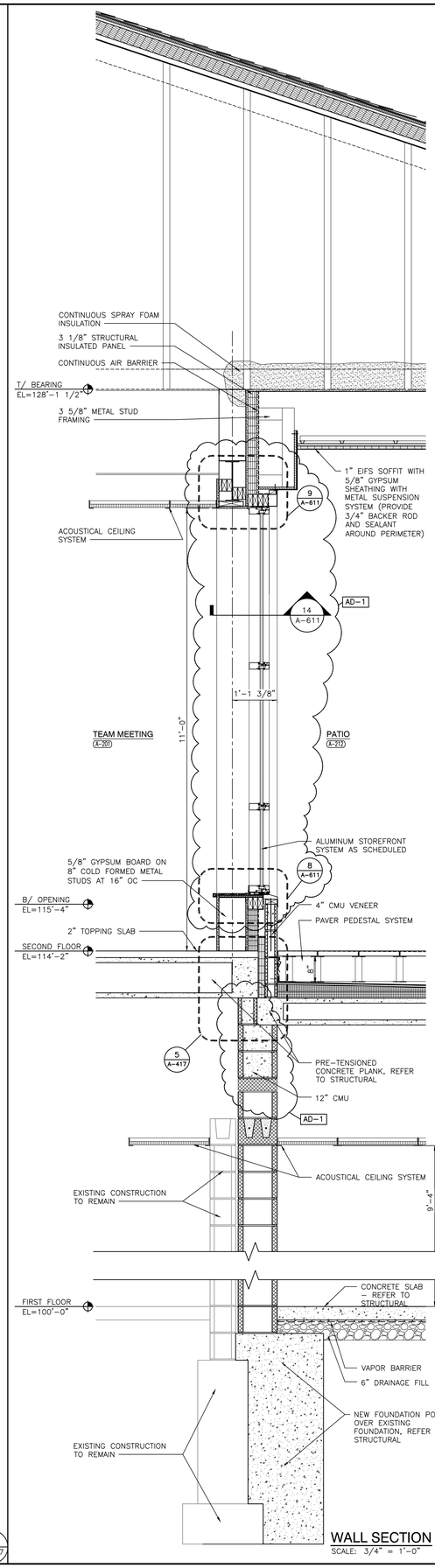


JAMB "A"



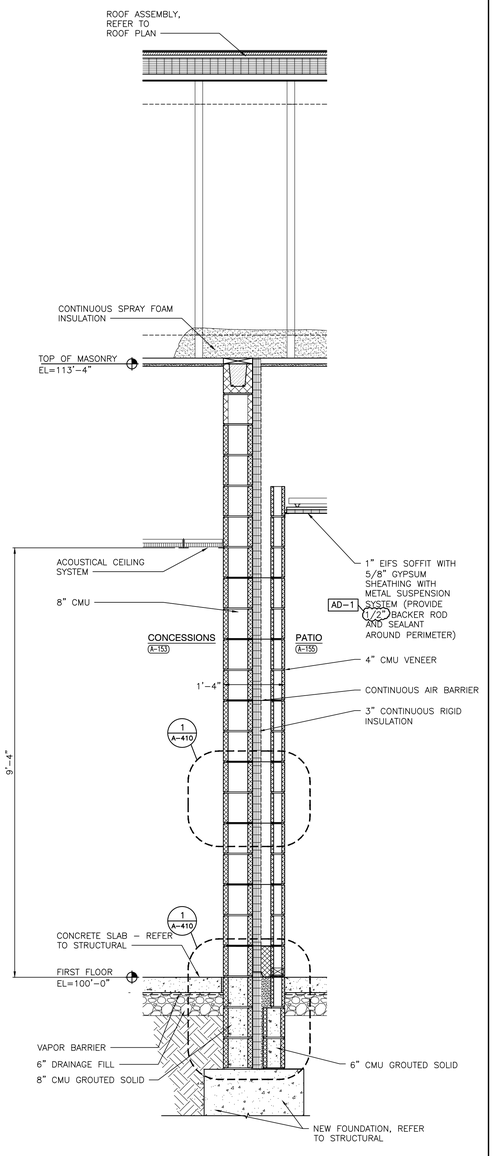
WALL SECTION
SCALE: 3/4" = 1'-0"

2 / A-417



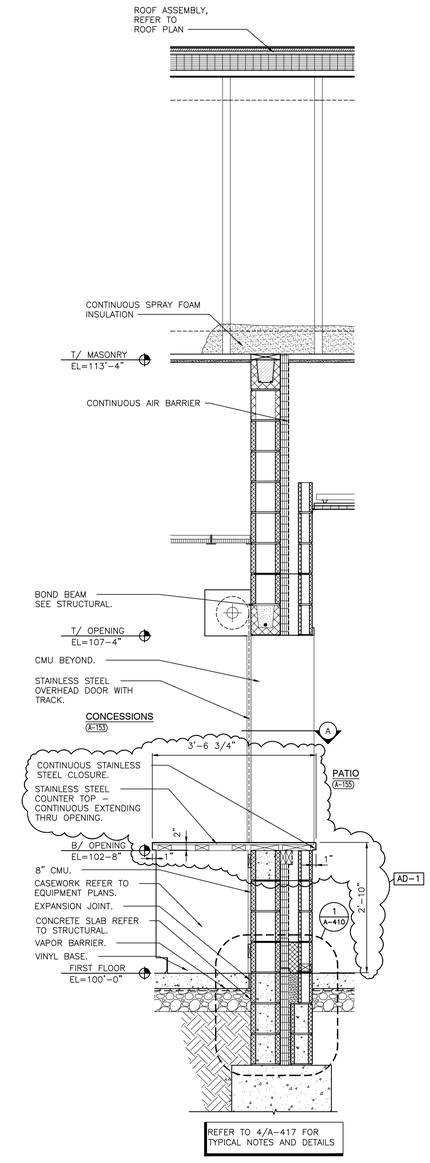
WALL SECTION
SCALE: 3/4" = 1'-0"

1 / A-417



WALL SECTION
SCALE: 3/4" = 1'-0"

4 / A-417



WALL SECTION
SCALE: 3/4" = 1'-0"

3 / A-417

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED ND. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING

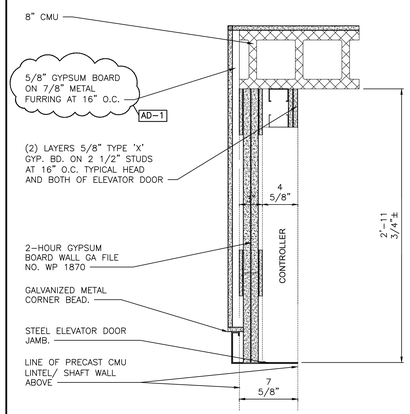
NORTH STAR BUILDING WALL SECTIONS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

A-417-NS

Friday, 10/6/2023 - 4:54 PM - LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-417.DWG



WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE			
GA FILE NO. WP 1870	PROPRIETARY[1]	2 HOUR FIRE	35 to 39 STC SOUND

SOLID GYPSUM WALLBOARD, PROTECTED STEEL H MEMBERS

Two 1" x 24" proprietary type X gypsum panels installed vertically between floor and ceiling runners and friction fit into "H" members 24" o.c. One layer 1/4" x 6" wide strips proprietary type X gypsum wallboard applied to each side over steel flanges and runners with 1" Type S drywall screws 12" o.c. **(NLB)**

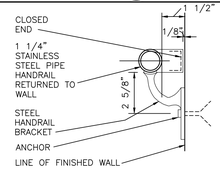
PROPRIETARY GYPSUM BOARD

G-P Gypsum - 1/4" ToughRock® Fireguard® C
- 1" ToughRock® Fireguard® Shaftliner

Thickness: 3"
Limiting Height: Refer to manufacturer
Approx. Weight: 9½ psf
Fire Test: WHI 495-0743, 1-28-86; WHI 495-0744, 1-30-86; CTC 1869-0438, 9-22-87
Sound Test: Estimated

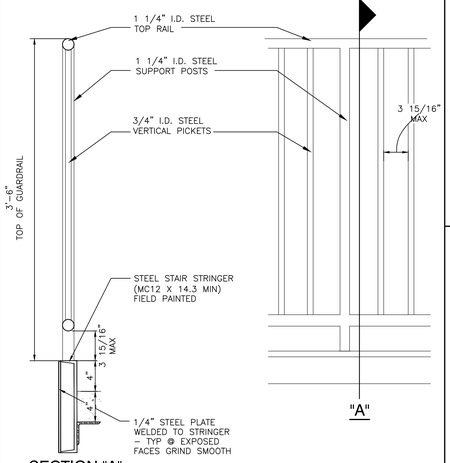
PLAN DETAIL
SCALE: 1 1/2" = 1'-0"

11 / A-430



PAINTED STEEL HANDRAIL BRACKET
SCALE: 3" = 1'-0"

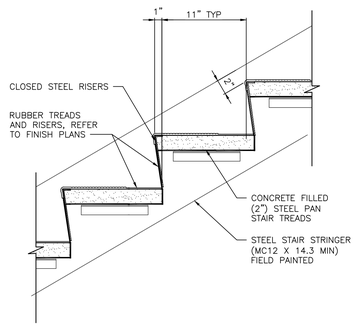
10 / A-430



SECTION "A"

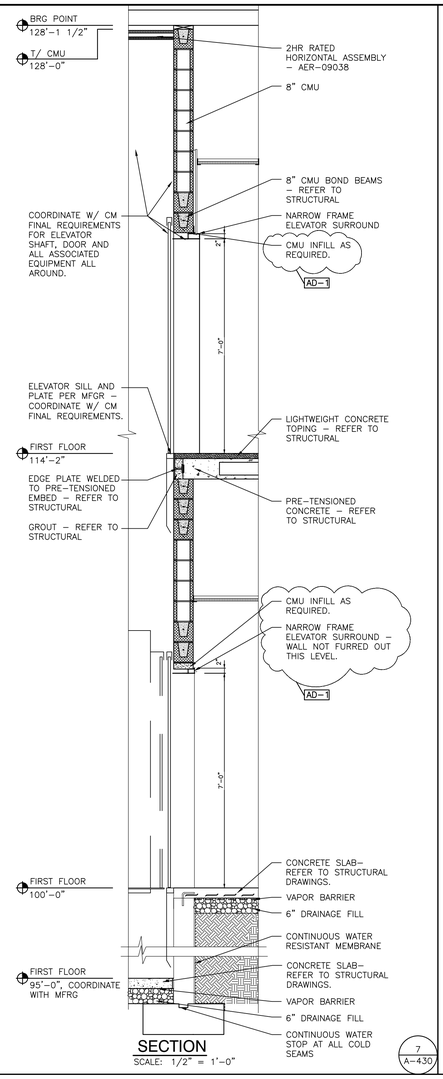
STEEL GUARDRAIL
SCALE: 1 1/2" = 1'-0"

9 / A-430



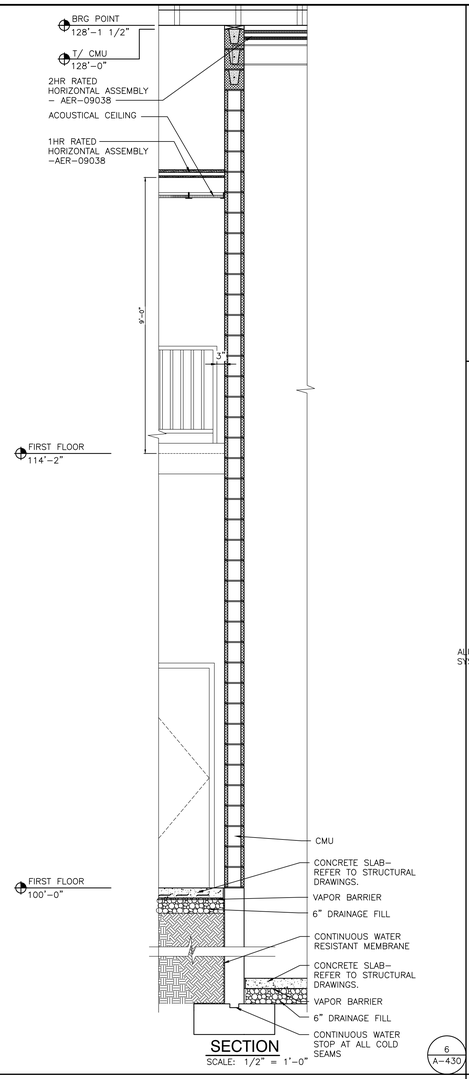
RISER DETAIL
SCALE: 1 1/2" = 1'-0"

8 / A-430



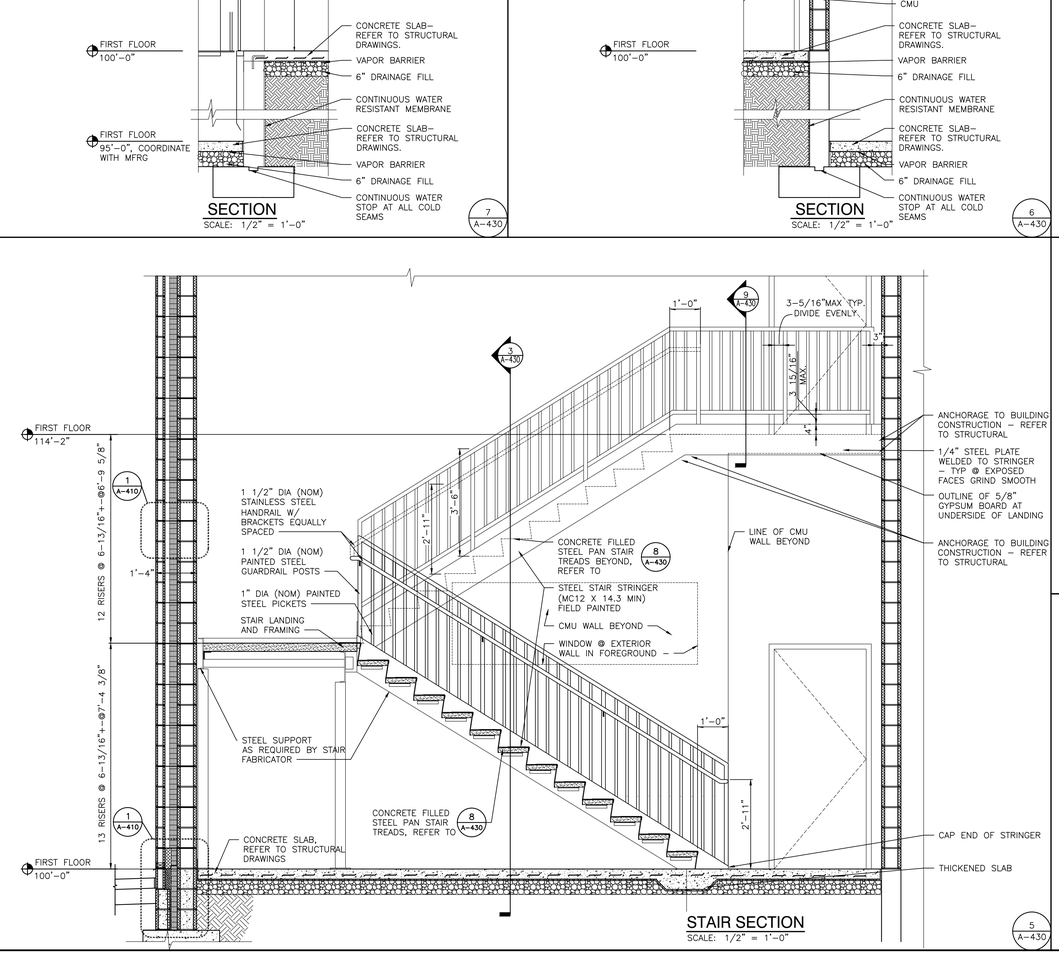
SECTION
SCALE: 1/2" = 1'-0"

7 / A-430



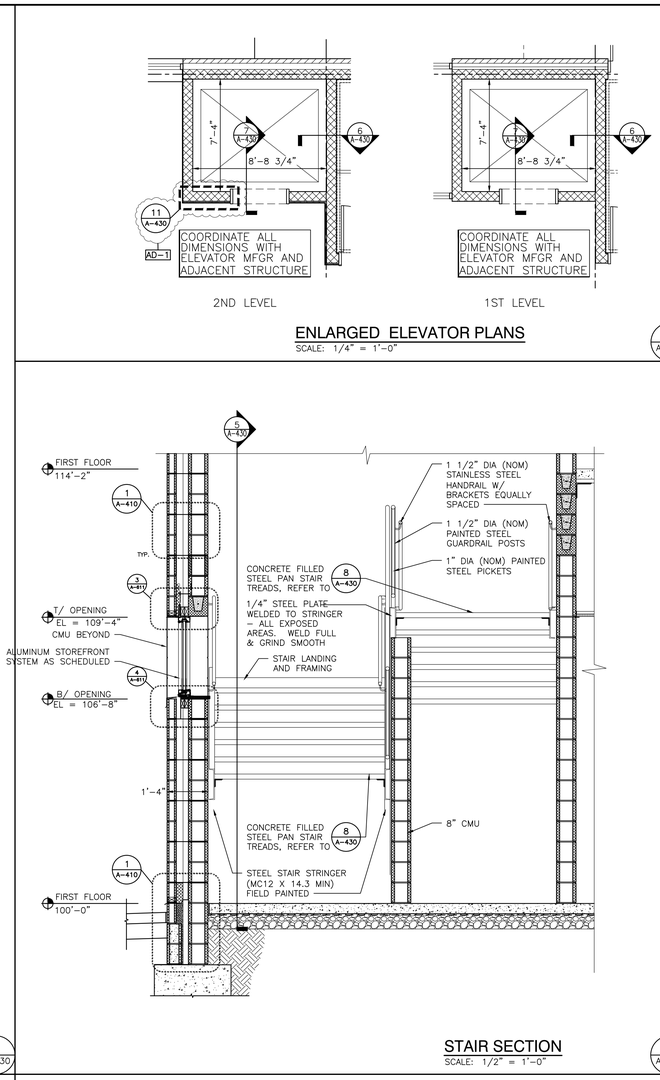
SECTION
SCALE: 1/2" = 1'-0"

6 / A-430



STAIR SECTION
SCALE: 1/2" = 1'-0"

5 / A-430

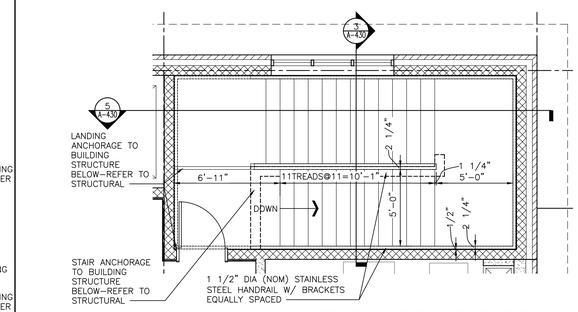


ENLARGED ELEVATOR PLANS
SCALE: 1/4" = 1'-0"

4 / A-430

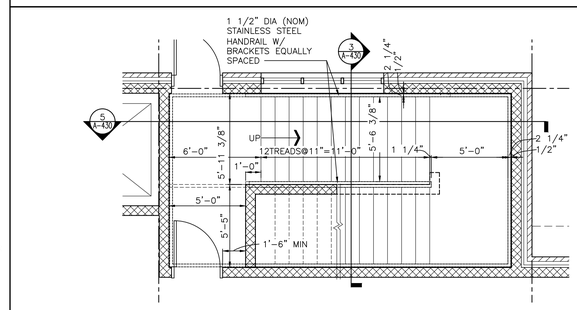
STAIR SECTION
SCALE: 1/2" = 1'-0"

3 / A-430



ENLARGED SECOND FLOOR STAIR PLAN
SCALE: 1/4" = 1'-0"

2 / A-430



ENLARGED FIRST FLOOR STAIR PLAN
SCALE: 1/4" = 1'-0"

1 / A-430

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY TA
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

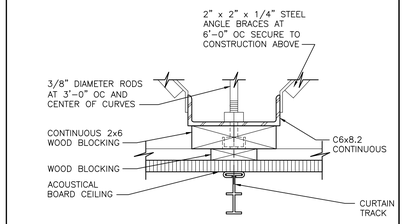
MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING ENLARGED STAIR AND ELEVATOR PLANS AND SECTIONS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

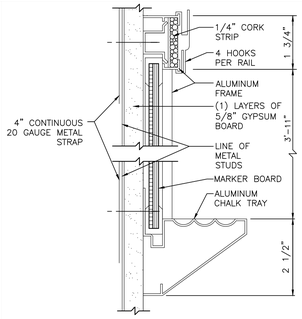
SHEET
A-430-NS

Friday, 10/6/2023 – 11:17 AM – LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-430.DWG

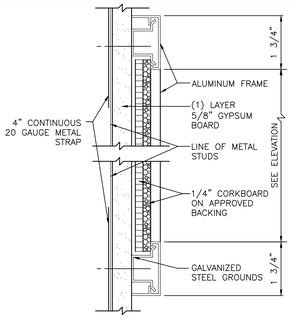


CUBICAL CURTAIN TRACK DETAIL
SCALE: 3" = 1'-0"

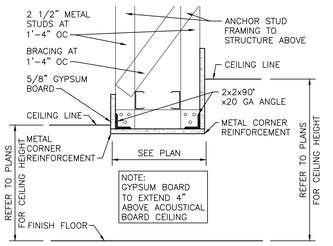
11 / A-501



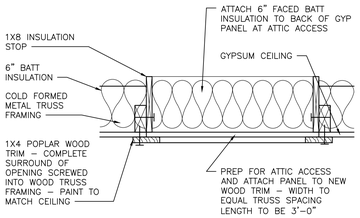
SECTION "A"
SCALE: 6" = 1'-0"



SECTION "B"
SCALE: 6" = 1'-0"

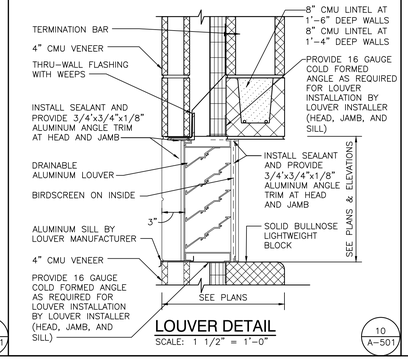


DETAIL "B"



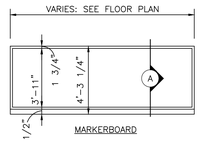
ATTIC ACCESS
SCALE: 1 1/2" = 1'-0"

12 / A-501

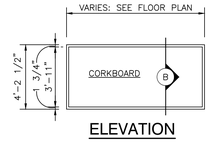


LOUVER DETAIL
SCALE: 1 1/2" = 1'-0"

10 / A-501



ELEVATION

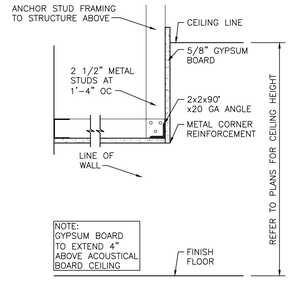


ELEVATION

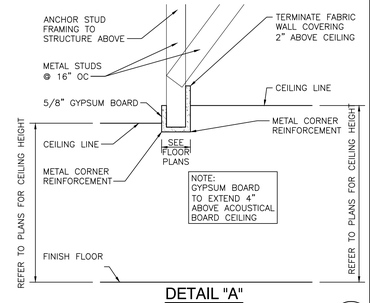
NOTES:
1. SEE FLOOR PLANS FOR LOCATION.
2. SEE ROOM FINISH SCHEDULE FOR WALL FINISH
3. MOUNTING HEIGHT AS DIRECTED BY ARCHITECT

MARKERBOARDS AND CORKBOARDS
SCALE: 1/4" = 1'-0"

6 / A-501

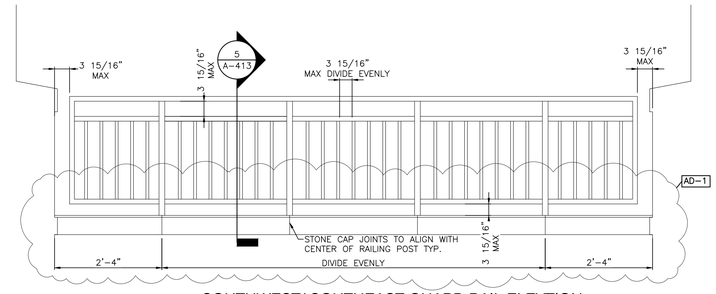


DETAIL "C"



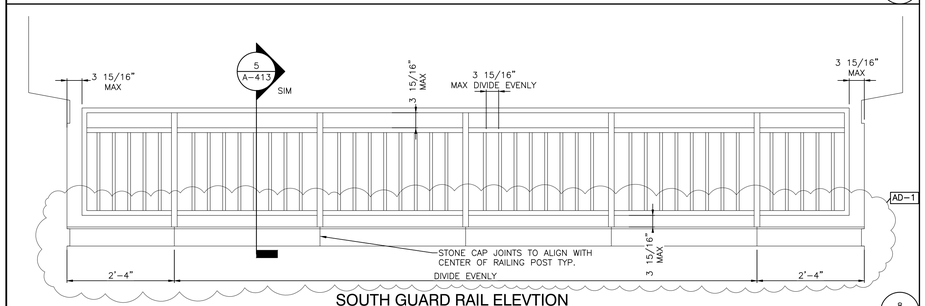
DETAIL "A"
BULKHEAD DETAILS
SCALE: 1 1/2"=1'-0"

2 / A-501



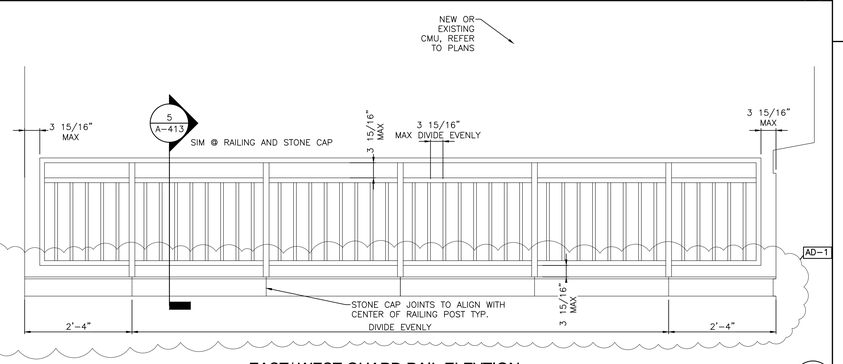
SOUTHWEST/ SOUTHEAST GUARD RAIL ELEVTION
SCALE: 3/4" = 1'-0"

9 / A-501



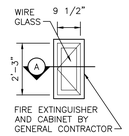
SOUTH GUARD RAIL ELEVTION
SCALE: 3/4" = 1'-0"

8 / A-501



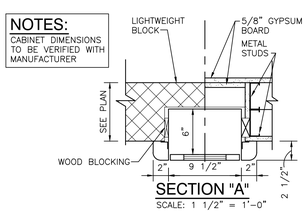
EAST/ WEST GUARD RAIL ELEVTION
SCALE: 3/4" = 1'-0"

7 / A-501



ELEVATION
NOT TO SCALE

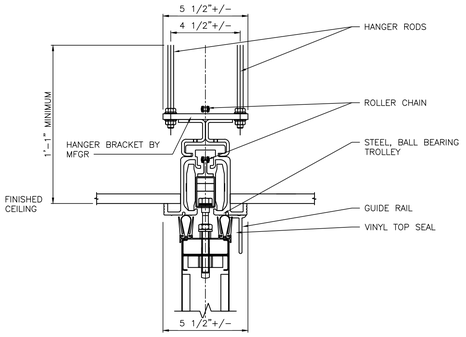
NOTES:
CABINET DIMENSIONS TO BE VERIFIED WITH MANUFACTURER



SECTION "A"
SCALE: 1 1/2" = 1'-0"

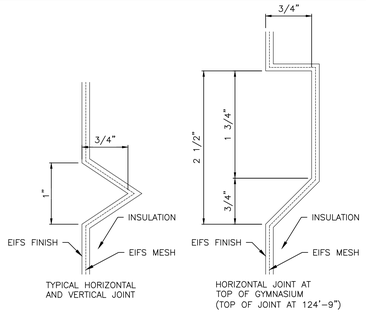
SEMI-RECESSED FIRE EXTINGUISHER CABINET
SCALE: 1 1/2" = 1'-0"

5 / A-501



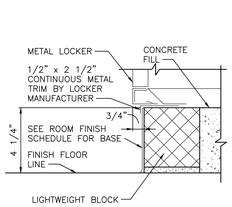
FOLDING PARTITION HEAD
SCALE: 3" = 1'-0"

4 / A-501

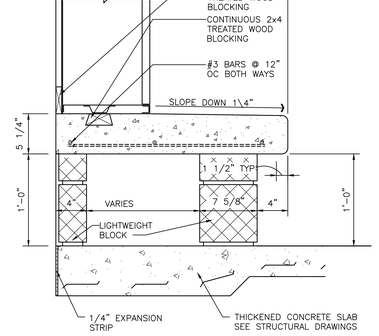


EIFS RECESS DETAIL
SCALE: 1'-0" = 1'-0"

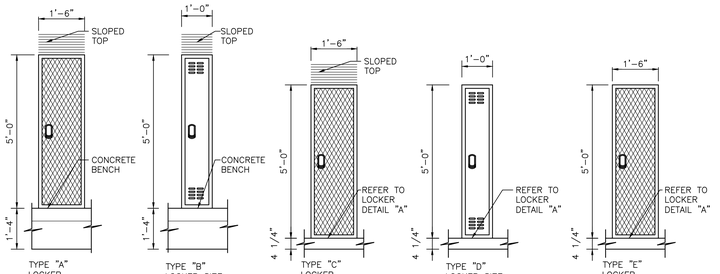
3 / A-501



LOCKER DETAIL A
SCALE: 1 1/2" = 1'-0"



LOCKER BENCH
SCALE: 1 1/2" = 1'-0"



TYPICAL LOCKER ELEVATIONS & DETAILS
SCALE: 1/2" = 1'-0"

1 / A-501

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING TYPICAL DETAILS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

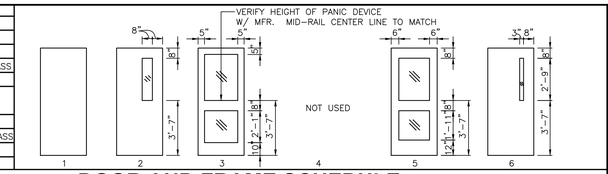
SHEET
A-501-NS

Friday, 10/6/2023 - 8:58 AM - LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM \23-115 DRAWINGS\05 ARCH\A-501.DWG

DOOR AND FRAME SCHEDULE

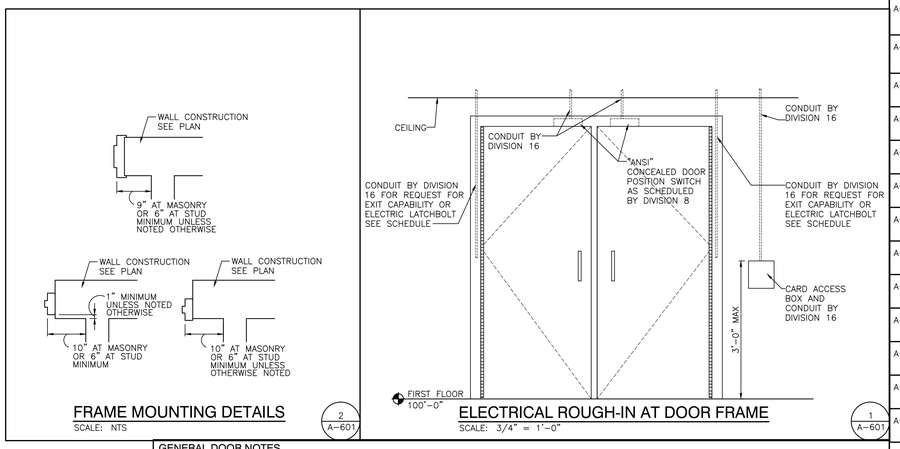
NO	DESCRIPTION	TYPE	DOOR SIZE (WxH) (INCHES)	MATERIAL	LOU	GLASS DOOR	GLASS SIDE LGT	GLASS TRA	FRAME MAT'L	FRAME WIDTH	FRAME JAMB	FRAME HEAD	FRAME SILL	FRAME ELEV	LABEL	HARDWARE EXIT DEVICE	HARDWARE CLOSER	NOTES
A-201A	SINGLE	1	36 x 86	AL AD-1		G	G,C	G,C	AL	6" AD-1	14/A611	SEE ELEV	10/A611	SF9		YES	YES	4,7,9
A-201B	SINGLE	1	36 x 86	AL		G	G,C	G,C	AL	6"	14/A611	SEE ELEV	10/A611	SF9		YES	YES	4,7,9
A-201C	BORROWED LIGHT	--	--	--	--	--	A,F	--	HM	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM8		--	--	6
A-201D	BORROWED LIGHT	--	--	--	--	--	A,F	--	HM	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM8		--	--	6
A-202A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-202B	SINGLE	1	36 x 68	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-203A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-204A	SINGLE	6	36 x 86	HM		D			HM	10 3/8" AD-1	SEE ELEV	SEE ELEV	SEE ELEV	HM1	60MIN	YES	YES	4,7
A-205A	SINGLE	2	36 x 86	WD		A			HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-206A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-207A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-209A	SINGLE	6	36 x 86	WD		D			HM1	10 3/8" AD-1	SEE ELEV	SEE ELEV	SEE ELEV	HM1	60MIN	YES	YES	4,7
A-210A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-211A	SINGLE	1	36 x 86	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-211B	SINGLE	1	36 x 68	WD					HM1	8 3/8"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-134A	SINGLE	2	42 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-136A	DOUBLE	3	PR 36 x 86	AL		B	B	B	AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF7		YES	YES	1,3,4,5,7
A-136B	DOUBLE	3	PR 36 x 86	AL		B	B	B	AL	4 1/2"	SEE ELEV	SEE ELEV	SEE ELEV	SF7		YES	YES	4,5,7
A-137A	SINGLE	3	36 x 86	AL		B		B	AL	8 3/4"	SEE ELEV	SEE ELEV	11/A-611	SF10		YES	YES	4,7
A-137B	SINGLE	6	36 x 86	HM		D			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1	60MIN	-	YES	
A-139A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-141A	SINGLE	2	36 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	-	
A-142A	SINGLE	1	36 x 86	HM					HM	6 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-143A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-144A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-145A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	-	
A-146A	SINGLE	2	36 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	-	
A-147A	SINGLE	1	36 x 86	HM					HM	6 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-148A	SINGLE	3	36 x 86	AL		B	B		AL	8 3/4"	SEE ELEV	SEE ELEV	11/A-611	SF2		YES	YES	4,7
A-148B	SINGLE	6	36 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		YES	YES	
A-148C	SINGLE	3	36 x 86	AL		B	B		AL	8 3/4"	SEE ELEV	SEE ELEV	11/A-611	SF2		YES	YES	1,2,4,7
A-149A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-150A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-151A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-151B	SINGLE	1	42 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		YES	YES	4,7
A-152A	SINGLE	1	36 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		-	YES	4,7
A-153A	SINGLE	1	42 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		-	YES	4,7
A-153B	OVERHEAD DOOR	--	--							--								
A-153C	OVERHEAD DOOR	--	--							--								
A-156A	SINGLE	1	42 x 86	FRP					AL	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	SF1		YES	YES	4,7

GLASS SCHEDULE	
MK	GLASS TYPES
A	1/4" CLEAR TEMPERED
B	1" CLEAR INSUL. GLASS
C	1" INSUL. SPANDREL GLASS
D	1/4" FIRE RATED
E	3/8" LAMINATED SAFETY GLASS
F	ELECTROLITIC GLASS
G	1" INSULATED TINTED GLASS



DOOR AND FRAME SCHEDULE

NO	DESCRIPTION	TYPE	DOOR SIZE (WxH) (INCHES)	MATERIAL	LOU	GLASS DOOR	GLASS SIDE LGT	GLASS TRA	FRAME MAT'L	FRAME WIDTH	FRAME JAMB	FRAME HEAD	FRAME SILL	FRAME ELEV	LABEL	HARDWARE EXIT DEVICE	HARDWARE CLOSER	NOTES
A-101A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	-	
A-102A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-103A	SINGLE	2	36 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-103B	BORROWED LIGHT	--	--	--	--	--	A	--	HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM2		--	--	-
A-104A	SINGLE	1	36 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		YES	YES	4,7
A-104B	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		YES	YES	
A-105A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	-	
A-106A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-107A	SINGLE	2	36 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-107B	BORROWED LIGHT	--	--	--	--	--	A	--	HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM2		--	--	-
A-108A	SINGLE	1	36 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		YES	YES	4,7
A-108B	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		YES	YES	
A-109A	DOUBLE	5	PR 40 x 86	AL		B			AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF5		YES	YES	4,7
A-109B	DOUBLE	5	PR 40 x 86	AL		B			AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF5		YES	YES	1,2,4,5,7
A-110A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-111A	EXISTING SINGLE	--	--	--	--	--	--	--	EXIST	8 3/4"	EXIST	EXIST	EXIST	--		--	YES	-
A-112A	SINGLE	2	42 x 86	HM		A			HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-113A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-114A	DOUBLE	2	PR 36 x 86	FRP		B			AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF5		YES	YES	4,7
A-114B	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		YES	YES	
A-115A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-116A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-118A	SINGLE	1	36 x 86	HM			E		HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM7		-	YES	
A-118B	BORROWED LIGHT	--	--	--	--	--	E	--	HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM4		--	--	-
A-118C	BORROWED LIGHT	--	--	--	--	--	E	--	HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM2		--	--	-
A-119A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-120A	SINGLE	2	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-121A	SINGLE	3	36 x 86	AL					AL	8 3/4"	SEE ELEV	SEE ELEV	11/A-611	SF8		YES	YES	4,7
A-121B	SINGLE	3	36 x 86	AL					AL	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	SF8		YES	YES	
A-122A	SINGLE	6	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		YES	YES	
A-123A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-124A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-125A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-126A	SINGLE	2	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-127A	SINGLE	1	42 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		YES	YES	4,7
A-127B	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-128A	SINGLE	1	36 x 84	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM3		-	YES	
A-128B	BORROWED LIGHT	--	--	--	--	--	A	--	HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM4		--	--	-
A-129A	DOUBLE	1	PR 36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM5		-	-	
A-130A	SINGLE	1	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-131A	SINGLE	1	36 x 86	FRP					AL	4 1/2"	SEE ELEV	SEE ELEV	11/A-611	SF1		-	YES	4,7
A-131B	SINGLE	6	36 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	
A-132A	SINGLE	3	36 x 86	AL			B		AL	8 3/4"	SEE ELEV	SEE ELEV	11/A-611	SF10		YES	YES	4,7
A-132B	SINGLE	6	36 x 86	HM			D		HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1	60MIN	-	YES	
A-133A	SINGLE	1	42 x 86	HM					HM	8 3/4"	SEE ELEV	SEE ELEV	SEE ELEV	HM1		-	YES	



FRAME MOUNTING DETAILS

SCALE: NTS

2 / A-601

ELECTRICAL ROUGH-IN AT DOOR FRAME

SCALE: 3/4" = 1'-0"

1 / A-601

GENERAL DOOR NOTES

A. JAMB, HEAD, AND SILL DO NOT SHOW WALL CONSTRUCTION. SEE FLOOR PLAN FOR WALL MATERIALS.
B. SEAL ALL JAMBS AND HEADS WHERE FRAMES MEET EXPOSED MASONRY AND/OR GYPSUM BOARD.
C. PROVIDE A SCRIBE MOLD AT ALL EXTERIOR DOOR FRAMES AND WHERE NOTED ON DRAWINGS. SCRIBE MOLD TO BE 3/4" X 3/4" X 1/8" MIN. METAL AT EXTERIOR OF METAL FRAMES AND AT BOTH SIDES OF ALUMINUM FRAMES. SET SCRIBE MOLDS IN SEALANT.
D. PROVIDE GLAZING AND GLASS STOPS AS REQUIRED.
E. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS, BOTH NEW AND EXISTING.
F. SHIM SPACE IS NOT SHOWN ON DOOR FRAME ELEVATIONS FOR ALUMINUM STOREFRONT. TAKE THESE DIMENSIONS INTO ACCOUNT AND ADJUST DIMENSIONS ACCORDINGLY.
G. FOR DOOR POSITION WITHIN WALL REFER TO FRAME MOUNTING DETAIL 2-A601.
H. FOR ELECTRICAL ROUGH-IN AT DOORS REFER TO DETAIL 1-A601.
I. FOR HOLLOW METAL FRAME ELEVATIONS (HM) REFER TO 1-A610. FOR HOLLOW METAL (HM) FRAME PROFILES REFER TO 4-A610.
J. FOR ALUMINUM STOREFRONT ELEVATIONS (SF) REFER TO 2-A610. FOR STOREFRONT (SF) FRAME PROFILES REFER TO 3-A610.
K. REFER TO FLOOR PLANS FOR LOCATIONS OF ADA PUSH PADS FOR POWER ASSISTED OPERATORS.

DOOR SCHEDULE NOTES (REMARKS):

1. PANIC DEVICE TO HAVE ELECTRIC LATCH BOLT. PREPARE FRAME FOR ELECTRIFIED HINGE.
2. DOOR TO BE CONTROLLED BY CARD READER/FOB. REFER TO ELECTRICAL DRAWINGS FOR ROUGH IN.
3. PROVIDE POWER ASSISTED OPERATOR ON ONE LEAF OF DOUBLE DOORS.
4. PROVIDE ALUMINUM THRESHOLD SET IN FULL BED OF MASTIC.
5. KEYED REMOVABLE MULLION.
6. ALTERNATE: PROVIDE ELECTROLYTIC GLAZING AS INDICATED.
7. PREPARE DOOR AND FRAME FOR DOOR POSITION SWITCH.
8. PROVIDE DOOR RELEASE ON AI PHONE LOCATED AT RECEPTION DESK.
9. PANIC WITH AFTER HOURS ALARM. UPON JURISDICTION HAVING AUTHORITY APPROVED, PROVIDE KEYED DEADBOLT.
10. PROVIDE DROP SEAL, SOUND GASKETING, AND ADA COMPLIANT THRESHOLD
11. PROVIDE SOUND GASKETING

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

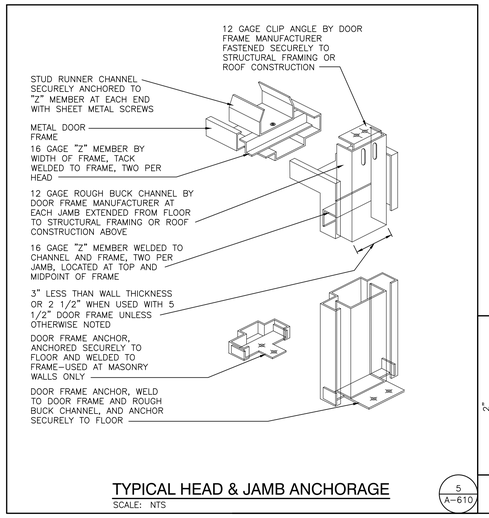
REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

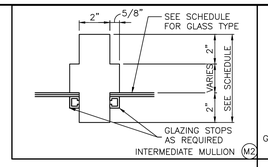
DRAWING
NORTH STAR BUILDING DOOR SCHEDULE AND DETAILS

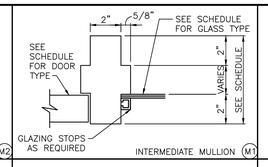
PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

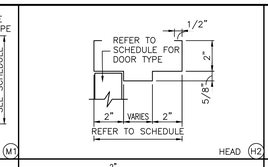
SHEET
A-601-NS

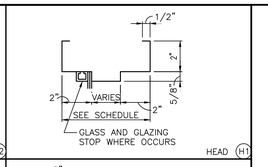


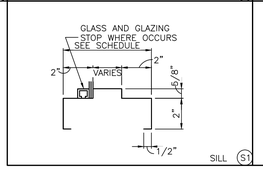
TYPICAL HEAD & JAMB ANCHORAGE (5 / A-610)
SCALE: NTS

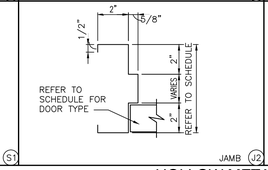


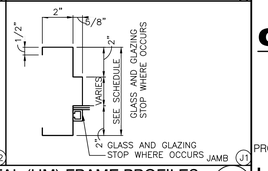




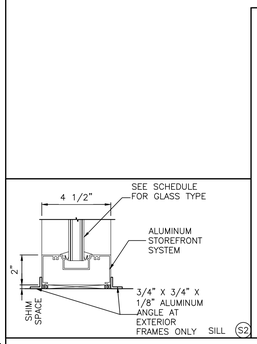


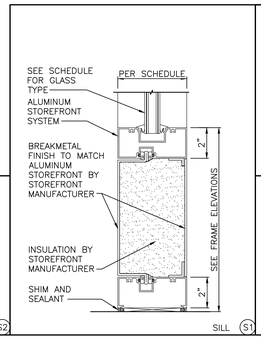


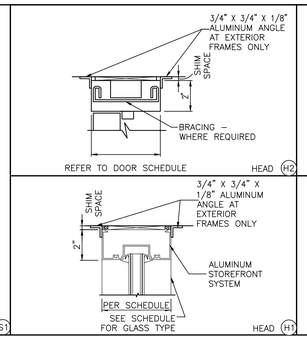


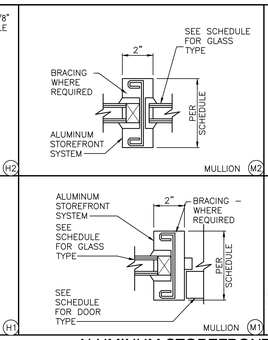


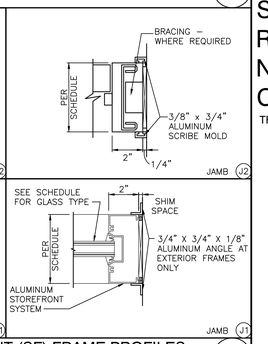
HOLLOW METAL (HM) FRAME PROFILES (4 / A-610)
SCALE: 3" = 1'-0"



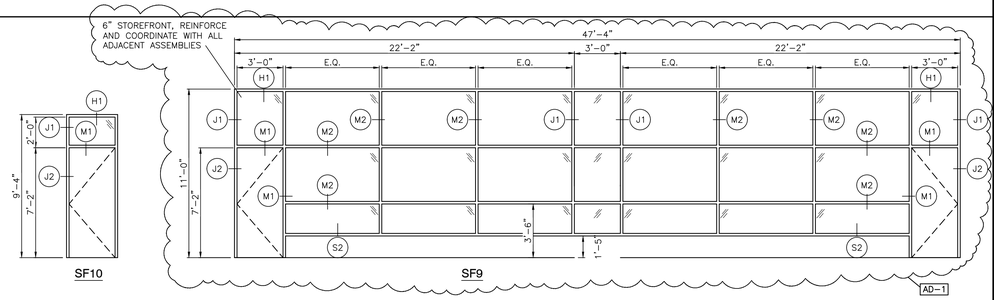






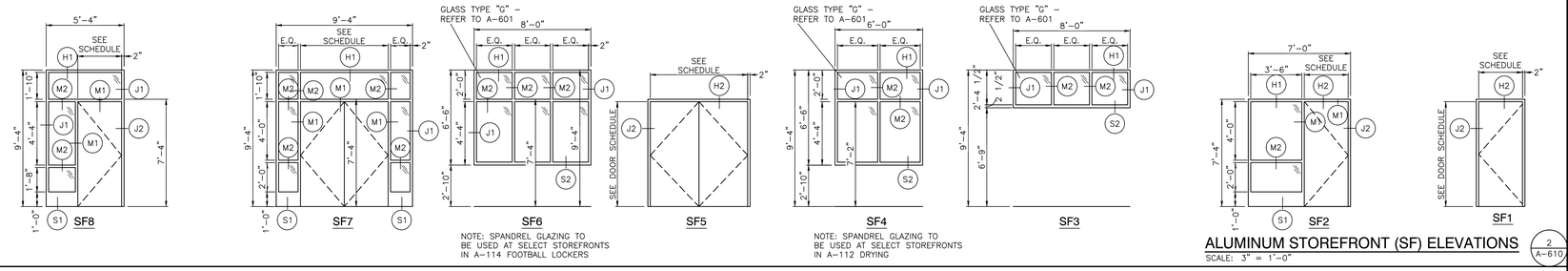


ALUMINUM STOREFRONT (SF) FRAME PROFILES (3 / A-610)
SCALE: 3" = 1'-0"



NOTES - ALUMINUM STOREFRONT (SF)

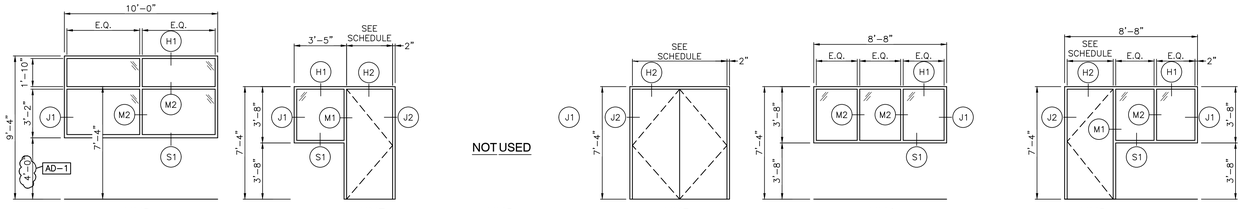
1. FOR STOREFRONT HEAD, JAMB, AND SILL DETAILS REFER TO WALL SECTIONS AND ALUMINUM STOREFRONT (SF) FRAME PROFILES
2. PROVIDE SHIM SPACE, BACKER ROD, AND SEALANT AROUND PERIMETER OF ALL FRAMES WHERE FRAMING ABUTS DISSIMILAR MATERIAL
3. PROVIDE FOAM INSULATION IN SHIM SPACE AROUND PERIMETER OF ALL EXTERIOR STOREFRONT FRAMING
4. DIMENSIONS SHOWN ARE NOMINAL. FIELD VERIFY ALL DIMENSIONS SHOWN PRIOR TO FABRICATION AND INSTALLATION
5. ALL FRAMES IN EXTERIOR WALLS SHALL BE THERMALLY BROKEN WITH 1" INSULATED GLAZING
6. REFER TO DOOR AND FRAME SCHEDULE FOR GLASS SCHEDULE
7. ALL GLAZING SHALL CONFORM TO STATE AND LOCAL CODES
8. PROVIDE 3/4" X 3/4" X 1/8" ALUMINUM SCRIBE MOLD AT PERIMETER OF BOTH SIDES ON ALL FRAMES UNLESS NOTED OTHERWISE. SET SCRIBE MOLDS IN SEALANT.



ALUMINUM STOREFRONT (SF) ELEVATIONS (2 / A-610)
SCALE: 3" = 1'-0"

NOTES - HOLLOW METAL (HM)

1. FOR HOLLOW METAL HEAD, JAMB AND SILL DETAILS REFER TO WALL SECTIONS AND HOLLOW METAL (HM) FRAME PROFILES .
2. PROVIDE SEALANT AROUND PERIMETER OF ALL FRAMES.
3. DIMENSIONS SHOWN ARE NOMINAL. FIELD VERIFY ALL DIMENSIONS SHOWN PRIOR TO FABRICATION AND INSTALLATION.
4. JAMB, HEAD, AND SILL DO NOT SHOW WALL CONSTRUCTION. SEE FLOOR PLAN FOR WALL MATERIALS. SEE ROOM FINISH SCHEDULE FOR WALL FINISHES.
5. PROVIDE GLAZING AND GLASS STOPS AS REQUIRED
6. ALTERNATE: PROVIDE ELECTROLITE GLAZING AS SHOWN.
7. ALL GLAZING SHALL CONFORM TO STATE AND LOCAL CODES.



HOLLOW METAL (HM) ELEVATIONS (1 / A-610)
SCALE: 3" = 1'-0"

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23–115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

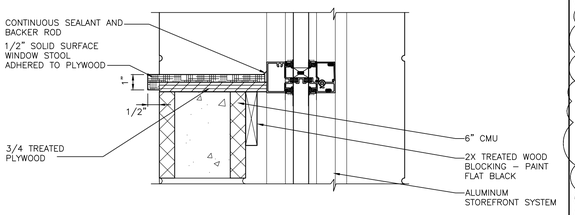
MARK	DATE	ISSUED FOR
AD–1	10/10/23	ADDENDUM NO. 1

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

DRAWING
NORTH STAR BUILDING DOOR AND WINDOW FRAMES, PROFILES, ELEVATIONS, AND DETAILS

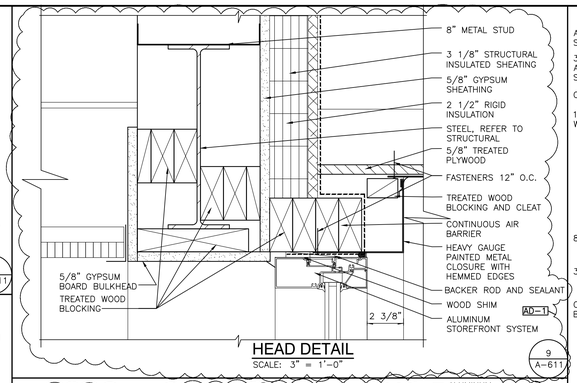
PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-610-NS



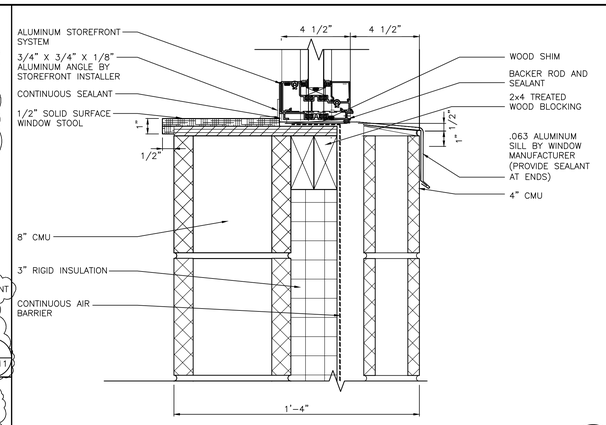
SILL DETAIL
SCALE: 3" = 1'-0"

13 / A-611



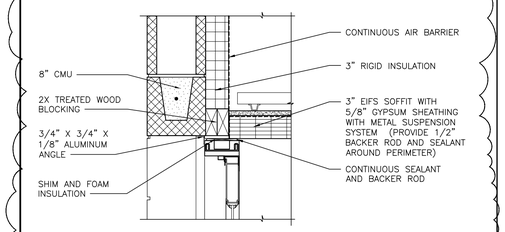
HEAD DETAIL
SCALE: 3" = 1'-0"

9 / A-611



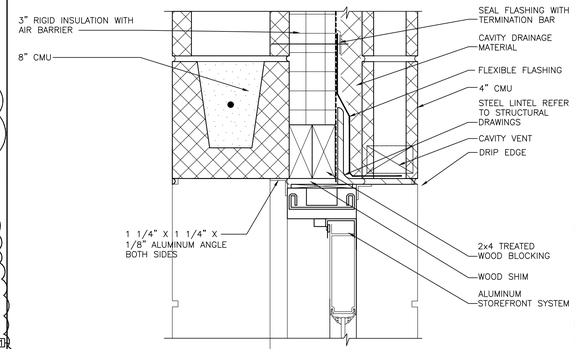
SILL DETAIL
SCALE: 3" = 1'-0"

4 / A-611



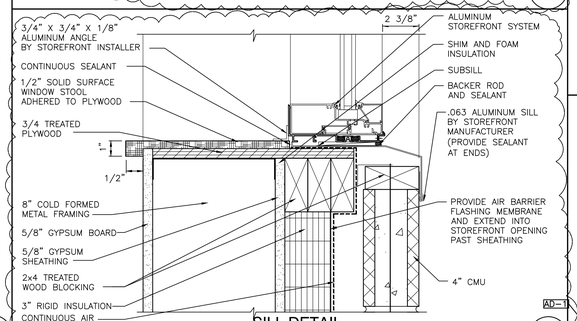
HEAD DETAIL
SCALE: 1 1/2" = 1'-0"

16 / A-611



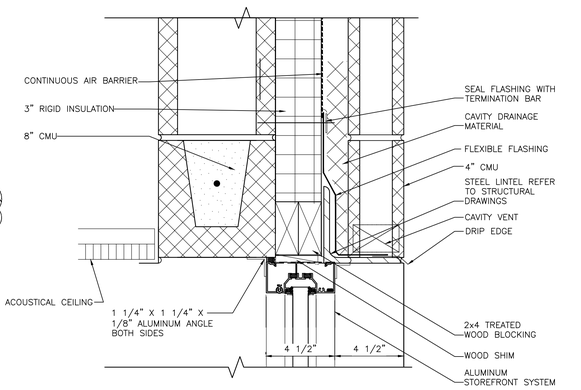
HEAD DETAIL
SCALE: 3" = 1'-0"

12 / A-611



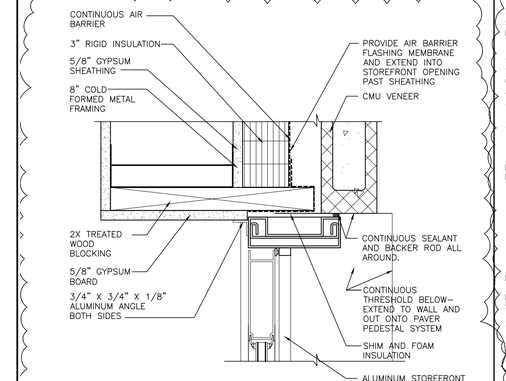
SILL DETAIL
SCALE: 3" = 1'-0"

8 / A-611



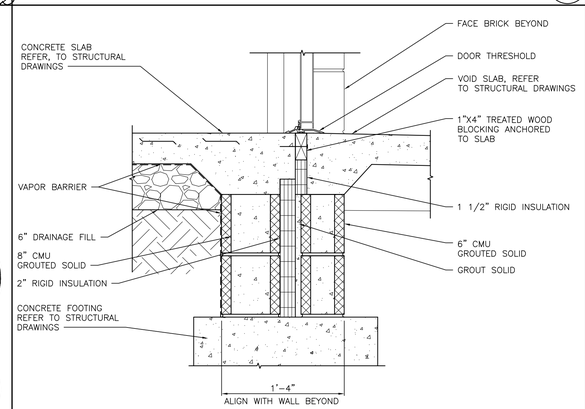
HEAD DETAIL
SCALE: 3" = 1'-0"

3 / A-611



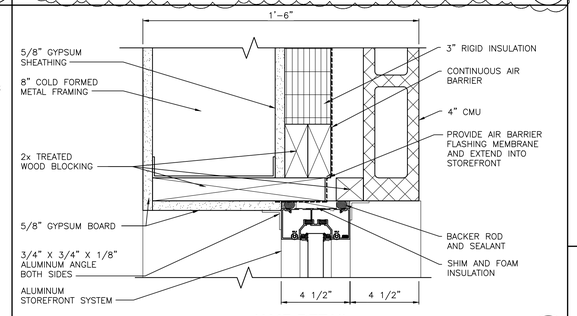
JAMB DETAIL
SCALE: 1 1/2" = 1'-0"

15 / A-611



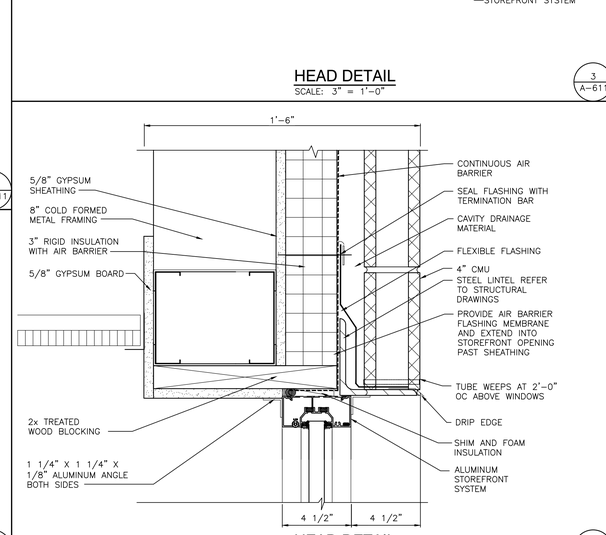
DOOR SLAB DETAIL
SCALE: 1 1/2" = 1'-0"

11 / A-611



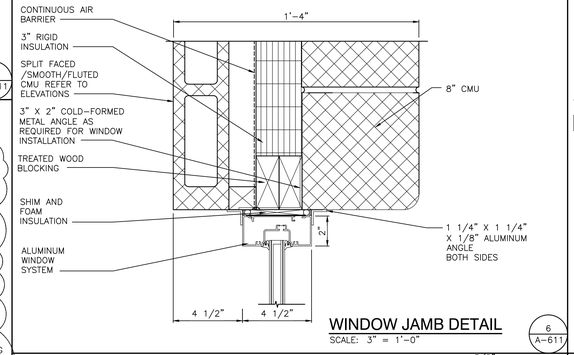
JAMB DETAIL
SCALE: 3" = 1'-0"

7 / A-611



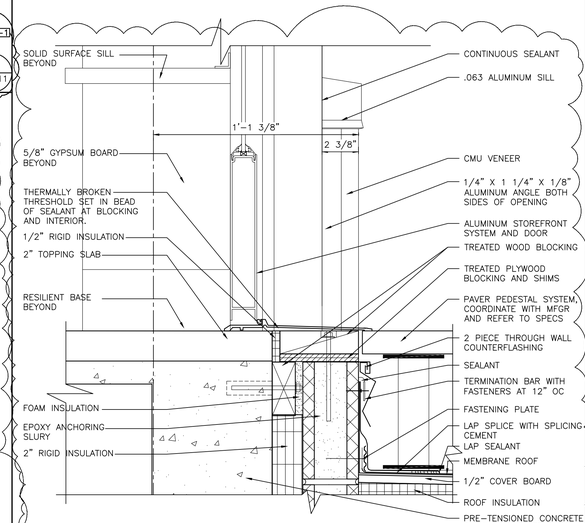
HEAD DETAIL
SCALE: 3" = 1'-0"

2 / A-611



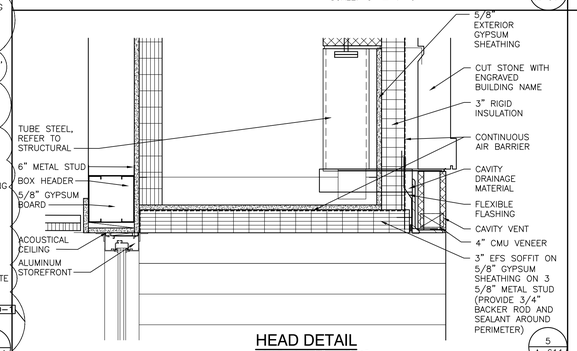
WINDOW JAMB DETAIL
SCALE: 3" = 1'-0"

6 / A-611



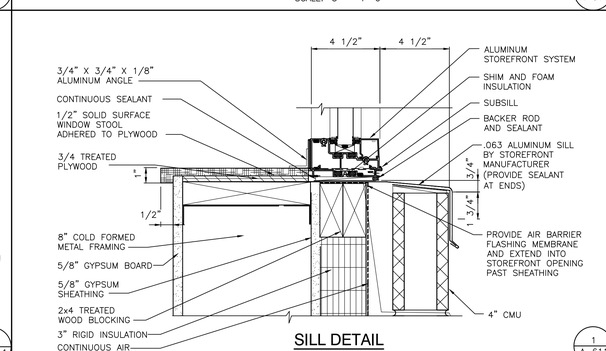
SILL DETAIL
SCALE: 3" = 1'-0"

10 / A-611



HEAD DETAIL
SCALE: 1 1/2" = 1'-0"

5 / A-611



SILL DETAIL
SCALE: 3" = 1'-0"

1 / A-611

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY NW
CHECKED BY TA/NW

REGISTERED JOSEPH P. BRIGGS NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING

NORTH STAR BUILDING WINDOW DETAILS

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

A-611-NS

Friday, 10/6/2023 - 9:45 AM - LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-611.DWG

GENERAL FINISH PLAN NOTES:

A. REFERENCE FINISH LEGEND FOR FINISH INFORMATION.

B. REFERENCE FLOOR PATTER PLANS, EQUIPMENT PLANS, INTERIOR ELEVATIONS, REFLECTED CEILING PLANS AND WRITTEN SPECIFICATIONS FOR ADDITIONAL FINISH INFORMATION.

C. PRIOR TO INSTALLATION OF NEW FINISHES CONTRACTOR SHALL INSPECT ALL SUBSTRATES. IF A SUBSTRATE IS DEEMED UNACCEPTABLE THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO RECTIFY THE SITUATION OR CONTACT THE ARCHITECT WITH THE CONCERN. PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE CONSTRUED THAT THE INSTALLER AND /OR FINISHER HAS ACCEPTED SAID SUBSTRATE. NO CHANGE ORDER WILL BE ISSUED TO RECTIFY CONCEALED, OR UNSATISFACTORY SUBSTRATE ONCE FINISH WORK HAS PROCEEDED.

D. PREPARE ALL WALL CONSTRUCTION, NEW AND EXISTING, TO RECEIVE NEW FINISHES AS PER MANUFACTURE'S RECOMMENDED INSTALLATION METHODS AND MATERIALS FOR ALL FINISHES.

E. ALL FLOORING IS TO BE LEVELED WITHIN 1/4" IN 10'-0" WITH LATEX MATERIAL. MOISTURE CONTENT IN AREA IS TO BE TESTED PRIOR TO INSTALLATION OF FLOORING MATERIAL. CONTRACTOR TO INSTALL FLOORING PER MANUFACTURER'S RECOMMENDED METHOD.

F. FLOORING CONTRACTOR TO SUBMIT A SEAMING DIAGRAM FOR FLOORING MATERIAL INCLUDING NOTATION OF MATERIAL DIRECTION.

G. ALL FLOORING TRANSITIONS SHALL COMPLY WITH ADA GUIDELINES.

H. ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, FIRE EXTINGUISHER CABINETS, ETC, THAT ARE NOTED TO BE PAINTED, SHALL BE PAINTED WITH ALKYD TYPE PAINT. COLOR TO BE COORDINATED WITH DESIGNER UNLESS OTHERWISE NOTED.

I. CONTRACTOR TO PROVIDE AND INSTALL FLOORING TRANSITIONS AS INDICATED ON THE FLOOR PATTERN PLANS. WHERE NONE ARE NOTED, CONTRACTOR SHALL VERIFY REQUIRED TYPE/COLOR WITH ARCHITECT.

J. ALL FLOOR FINISH TRANSITIONS AT DOORS SHALL BE CENTERED UNDER DOOR UNLESS NOTED OTHERWISE.

K. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL NEW INTERIOR WALL AND CEILING FINISHES WILL BE CLASS B MINIMUM, WITH A FLAME SPREAD RATING OF 75 MAXIMUM, AND A SMOKE DEVELOPED INDEX OF 450 MAXIMUM, PER IBC SECTION 803.

L. PAINT ALL SIDES OF NEW AND EXISTING DOOR FRAMES P3 UNLESS NOTED OTHERWISE.

M. EXPOSED SURFACES OF DUCTWORK TO BE PAINTED TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE.

FINISH SYMBOL LEGEND:

P1	WALL FINISH
C1	FLOOR FINISH
B1	BASE FINISH
--	MISC FINISH INFORMATION

FLOOR TRANSITION STRIP AS REQUIRED

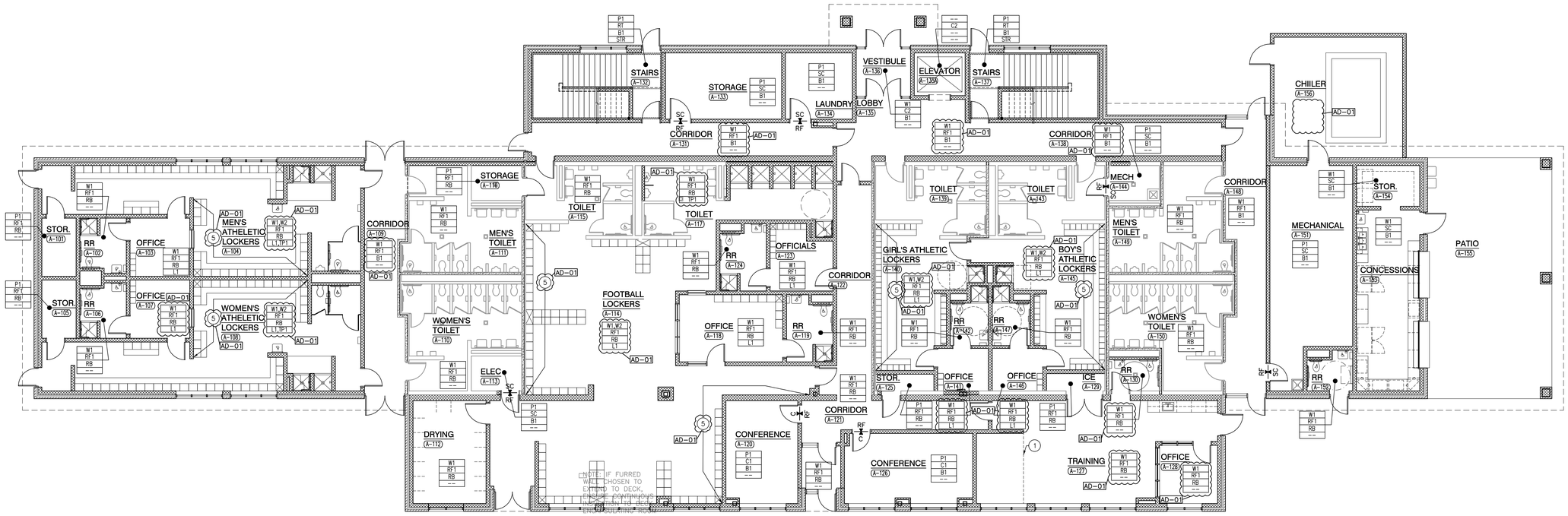
INDICATES DIRECTION OF MATERIAL GRAIN

FINISH PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS PLAN)

1. PRIVACY CURTAIN, PC1
2. WALL TILE, WT1, FULL HEIGHT, SCHLUTER STRIP AT END OF TILE RUN. STOP TILE 9" FROM CORNER TO ALLOW FOR CORNER GUARD. WALLCOVERING WRAPS TO END OF TILE RUN.
3. WALL TILE, WT2, FULL HEIGHT, SCHLUTER STRIP AT OUTSIDE CORNERS
4. WALL TILE, WT1, UP TO 54" A.F.F. WITH SCHLUTER STRIP AT TOP OF TILE RUN. PAINT ABOVE, UNLESS NOTED OTHERWISE.
5. WALLCOATING, W2
6. WALLCOVERING, WC2
7. FOLDING PARTITION, WALLCOVERING, WC2

AD-01



NORTH STAR BUILDING FIRST FLOOR FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

REGISTERED JOSEPH P. BRIGGS NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
NORTH STAR BUILDING FIRST FLOOR FINISH PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-801-NS

Monday, 10/9/2023 - 11:43 AM - LAST SAVED BY:ASCOTT
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-801-NS.DWG

GENERAL FINISH PLAN NOTES:

A. REFERENCE FINISH LEGEND FOR FINISH INFORMATION.
B. REFERENCE FLOOR PATTER PLANS, EQUIPMENT PLANS, INTERIOR ELEVATIONS, REFLECTED CEILING PLANS AND WRITTEN SPECIFICATIONS FOR ADDITIONAL FINISH INFORMATION.
C. PRIOR TO INSTALLATION OF NEW FINISHES CONTRACTOR SHALL INSPECT ALL SUBSTRATES. IF A SUBSTRATE IS DEEMED UNACCEPTABLE THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO RECTIFY THE SITUATION OR CONTACT THE ARCHITECT WITH THE CONCERN. PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE CONSTRUED THAT THE INSTALLER AND /OR FINISHER HAS ACCEPTED SAID SUBSTRATE. NO CHANGE ORDER WILL BE ISSUED TO RECTIFY CONCEALED, OR UNSATISFACTORY SUBSTRATE ONCE FINISH WORK HAS PROCEEDED.
D. PREPARE ALL WALL CONSTRUCTION, NEW AND EXISTING, TO RECEIVE NEW FINISHES AS PER MANUFACTURE'S RECOMMENDED INSTALLATION METHODS AND MATERIALS FOR ALL FINISHES.
E. ALL FLOORING IS TO BE LEVELED WITHIN 1/4" IN 10'-0" WITH LATEX MATERIAL. MOISTURE CONTENT IN AREA IS TO BE TESTED PRIOR TO INSTALLATION OF FLOORING MATERIAL. CONTRACTOR TO INSTALL FLOORING PER MANUFACTURER'S RECOMMENDED METHOD.
F. FLOORING CONTRACTOR TO SUBMIT A SEAMING DIAGRAM FOR FLOORING MATERIAL INCLUDING NOTATION OF MATERIAL DIRECTION.
G. ALL FLOORING TRANSITIONS SHALL COMPLY WITH ADA GUIDELINES.
H. ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, FIRE EXTINGUISHER CABINETS, ETC, THAT ARE NOTED TO BE PAINTED, SHALL BE PAINTED WITH ALKYD TYPE PAINT. COLOR TO BE COORDINATED WITH DESIGNER UNLESS OTHERWISE NOTED.
I. CONTRACTOR TO PROVIDE AND INSTALL FLOORING TRANSITIONS AS INDICATED ON THE FLOOR PATTERN PLANS. WHERE NONE ARE NOTED, CONTRACTOR SHALL VERIFY REQUIRED TYPE/COLOR WITH ARCHITECT.
J. ALL FLOOR FINISH TRANSITIONS AT DOORS SHALL BE CENTERED UNDER DOOR UNLESS NOTED OTHERWISE.
K. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL NEW INTERIOR WALL AND CEILING FINISHES WILL BE CLASS B MINIMUM, WITH A FLAME SPREAD RATING OF 75 MAXIMUM, AND A SMOKE DEVELOPED INDEX OF 450 MAXIMUM, PER IBC SECTION 803.
L. PAINT ALL SIDES OF NEW AND EXISTING DOOR FRAMES P3 UNLESS NOTED OTHERWISE.
M. EXPOSED SURFACES OF DUCTWORK TO BE PAINTED TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE.

FINISH SYMBOL LEGEND:

P1	WALL FINISH
C1	FLOOR FINISH
B1	BASE FINISH
--	MISC FINISH INFORMATION

FLOOR TRANSITION STRIP AS REQUIRED

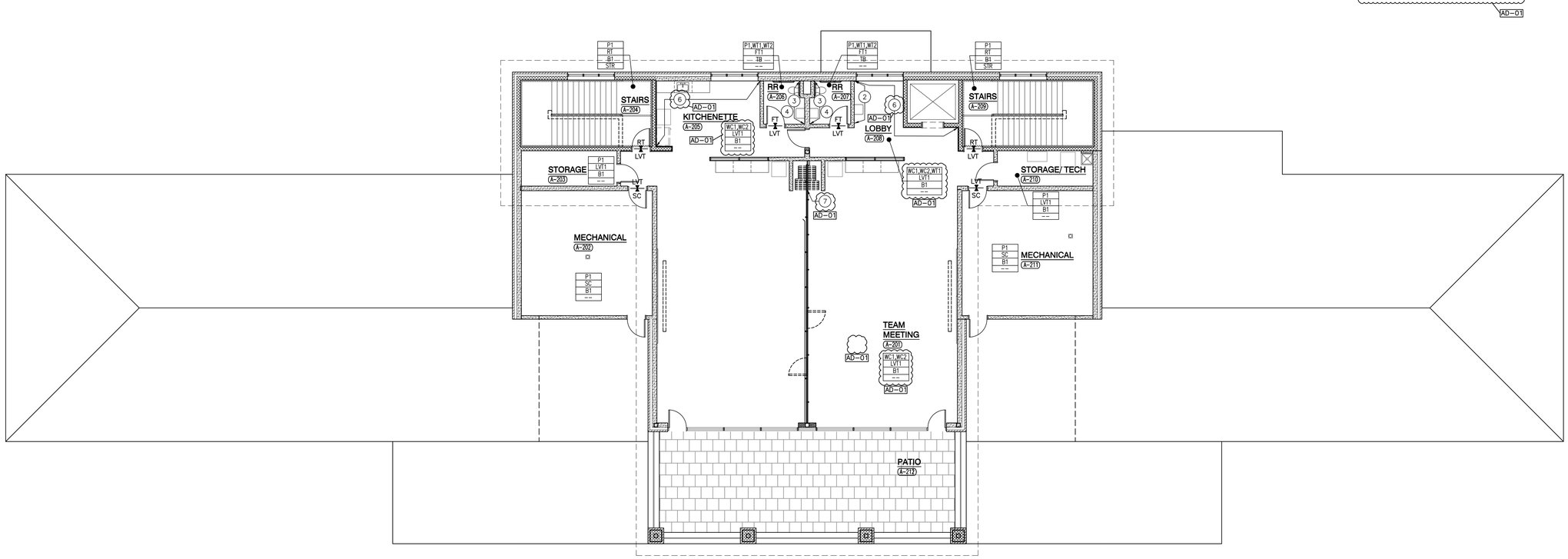
INDICATES DIRECTION OF MATERIAL GRAIN

FINISH PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS PLAN)

1. PRIVACY CURTAIN, PC1
2. WALL TILE, WT1, FULL HEIGHT, SCHLUTER STRIP AT END OF TILE RUN. STOP TILE 9" FROM CORNER TO ALLOW FOR CORNER GUARD. WALLCOVERING WRAPS TO END OF TILE RUN.
3. WALL TILE, WT2, FULL HEIGHT, SCHLUTER STRIP AT OUTSIDE CORNERS
4. WALL TILE, WT1, UP TO 54" A.F.F. WITH SCHLUTER STRIP AT TOP OF TILE RUN; PAINT ABOVE, UNLESS NOTED OTHERWISE.
5. PAINT, P2
6. WALLCOVERING, WC2
7. FOLDING PARTITION, WALLCOVERING, WC2

AD-01



NORTH STAR BUILDING SECOND FLOOR FINISH PLAN

SCALE: 1/8" = 1'-0"

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
NORTH STAR BUILDING SECOND FLOOR FINISH PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-802-NS

FINISH LEGEND

SURFACE	MARK	DESCRIPTION	MANUFACTURER	PATTERN/FINISH	NUMBER/COLOR	SIZE	COMMENTS
CEILING MATERIALS							
	ACT1	ACOUSTICAL CEILING	ARMSTRONG	FINE FISSURED	1728 WHITE	24" X 24"	WITH HUMIGUARD PLUS
	ACT1	ACOUSTICAL CEILING	ARMSTRONG	FINE FISSURED	1728 WHITE	24" X 24"	ANGLED TEGULAR
	ACT3	ACOUSTICAL CEILING	ARMSTRONG	CLEAN ROOM VL	868 WHITE	24" X 24"	--
	ACT4	ACOUSTICAL CEILING	ARMSTRONG	CALLA	282 WHITE	24" X 24"	TEGULAR SQUARE SMOOTH
	P4	PAINT	SHERWIN WILLIAMS	--	CEILING BRIGHT WHITE / 7007	--	--
WALL BASE							
	B1	WALL BASE	TARKETT	--	BURNT UMBER 63	4" COVE	--
	TB	TILE BASE	AMERICAN OLEAN	UNGLAZED MOSAICS	LIGHT SMOKE SPC 0A04	5" BUILT-UP COVE	--
	RB	RESINOUS BASE	SHERWIN WILLIAMS	DECO QUARTZ BC23	METEOR SHOWER	4" COVE	--
FLOOR MATERIALS							
	C1	CARPET TILE	--	--	--	--	--
	C2	WALK-OFF CARPET TILE	TARKETT	ABRASIVE ACTION II 02578	WINTER GRAY 19103	24" X 24"	INSTALL MONOLITHIC
	LVT1	LUXURY VINYL TILE	--	--	--	--	--
	FT1	FLOOR TILE	AMERICAN OLEAN	UNGLAZED MOSAICS	LIGHT SMOKE SPC 0A04	2" X 2"	--
	SC	SEALED CONTRETE	--	--	--	--	--
	RF1	RESINOUS FLOOR	SHERWIN WILLIAMS	DECO QUARTZ BC23	METEOR SHOWER	--	--
	RT	RUBBER TILE	JOHNSONITE	MICRO TONE	NIGHTOWL WG HNSP-LC6	--	HAMMERED TEXTURE
	STR	STAIR TREAD AND RISER	TARKETT	--	BURNT UMBER 63	--	TREAD, RISER, AND STRINGER
WALL MATERIALS							
	P1	PAINT	SHERWIN WILLIAMS	--	SW 7029 AGREEABLE GRAY	--	--
	P2	PAINT	SHERWIN WILLIAMS	--	CUSTOM COLOR RED	--	SEE NOTE 1
	P3	PAINT	SHERWIN WILLIAMS	--	SW 7066 GRIZZLE GRAY	--	DOOR FRAMES
	P4	SEE CEILING MATERIALS					
	P5	PAINT	SHERWIN WILLIAMS	--	--	--	DOORS
	W1	WALLCOATING	SHERWIN WILLIAMS	--	SW 7029 AGREEABLE GRAY	--	--
	W2	WALLCOATING	SHERWIN WILLIAMS	--	CUSTOM COLOR RED	--	SEE NOTE 1
	WC1	WALLCOVERING	--	--	--	--	--
	WC2	WALLCOVERING	--	--	--	--	--
	WT1	WALL TILE	AMERICAN OLEAN	COLOR STORY WALL, GLOSSY	STABLE 0055	3" X 6"	--
	WT2	WALL TILE	AMERICAN OLEAN	COLOR STORY WALL, GLOSSY	STORM GRAY 0017	3" X 6"	--
CASEWORK AND MILLWORK							
	PL1	PLASTIC LAMINATE	--	--	--	--	--
	PL2	PLASTIC LAMINATE	--	--	--	--	--
	PL3	PLASTIC LAMINATE	--	--	--	--	--
	PL4	PLASTIC LAMINATE	--	--	--	--	--
	SS1	SOLID SURFACE	--	--	--	--	--
	SS2	SOLID SURFACE	CORIAN	--	PEARL GRAY	--	WINDOW SILLS
	SST	STAINLESS STEEL	--	--	--	--	--
MISCELLANEOUS							
	RS1	WINDOW ROLLER SHADE	MECHO	--	--	--	--
	PC1	PRIVACY CURTAIN	--	--	--	--	--
	L1	LOCKERS	LYON	--	DOVE GRAY DD	--	--
	TP1	TOILET PARTION	HINDY HIDERS	ORANGE PEEL	BLACK	--	--
	CG	CORNER GUARD	--	STAINLESS STEEL	--	--	--
		WOOD DOOR STAIN	--	--	--	--	--

* NOTE 1 – CUSTOM COLOR RED TO MATCH SCHOOL COLOR

AD-01

ENTIRE SHEET IS SUBMITTED FOR ADDENDUM 2

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

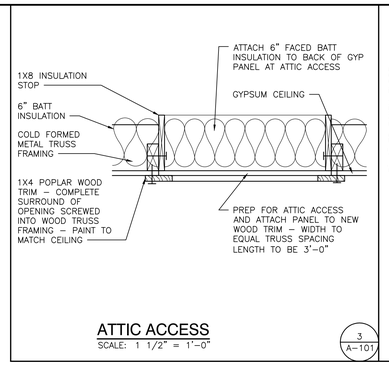
REVISIONS

MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
NORTH STAR BUILDING FINISH LEGEND

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

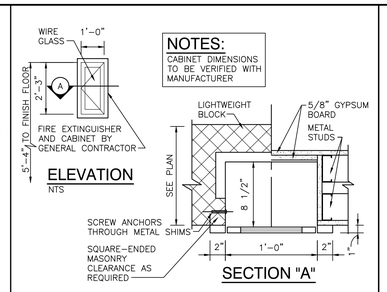
 SHEET
A-820-NS



ATTIC ACCESS

SCALE: 1 1/2" = 1'–0"

3 / A–101



ELEVATION

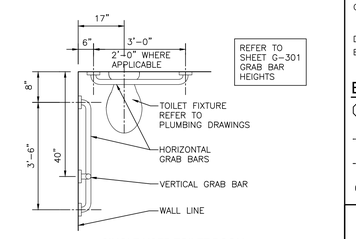
NTS

SECTION "A"

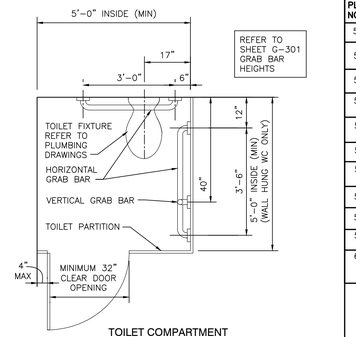
SEMI-RECESSED FIRE EXTINGUISHER CABINET

SCALE: 1 1/2" = 1'–0"

2 / A–101



SINGLE USER TOILET ROOM



TOILET COMPARTMENT

ACCESSIBLE FACILITIES

SCALE: 1/2" = 1'–0"

1 / A–101

GENERAL EQUIPMENT PLAN NOTES:

A. REFER TO SPECIFICATIONS AND FINISH LEGEND FOR ADDITIONAL INFORMATION.
B. FIELD VERIFY ALL DIMENSIONS.
C. CASEWORK AND/OR MILLWORK INSTALLER TO COORDINATE ELECTRICAL AND PLUMBING WORK. REFER TO ELECTRICAL DRAWINGS AND SCHEDULES FOR ELECTRICAL DEVICE TYPES, HEIGHTS, AND LOCATIONS.
D. REFER TO G SERIES DRAWINGS FOR MOUNTING HEIGHTS.
E. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ROOM ACCESSORIES.

EQUIPMENT PLAN LEGEND:

(--) INDICATES CASEWORK ELEVATION SYMBOL – REFER TO A–800 SERIES DRAWINGS FOR ELEVATIONS AND DETAILS.
------ INDICATES ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE BY OWNER. (NOT INCLUDED IN CONSTRUCTION CONTRACT).
- - - - INDICATES BULKHEADS OR OTHER OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
(TV) TELEVISION MONITOR, REFER TO TECHNOLOGY DRAWING.

OWNER EQUIPMENT SCHEDULE

COMMUNITY BUILDING - CONCESSIONS

PLAN NOTE	PRODUCT MODEL NUMBERS TBD	DESCRIPTION	SERVICE REQUIREMENTS
50	LOOSE FURNITURE	INDICATED ON PLAN FOR ELECTRICAL & TECHNOLOGY COORDINATION	AS REQD
51	WIRE RACKS	RACKS LINING PERIMETER OF STORAGE	
52	POPCORN	2'–3" X 1'–8" COOKING AREA	220V
53	COUNTER TOP WARMER	2'–6" X 1'–8"	POWER
54	POP COOLER	4'–6" X 2'–11" FREESTANDING COOLER FOR DRINKS	POWER
55	FOOD WARMER	2'–3" X 1'–9" WARMING AREA	POWER
56	WIRE RACKS	RACKS ABOVE 3 COMPARTMENT SINK & AROUND STORAGE	
57	UPRIGHT FREEZER	2'–8" X 2'–5" FREEZER WITHIN STORAGE	POWER
58	UPRIGHT REFRIGERATOR	2'–8" X 2'–5" REFRIGERATOR WITHIN STORAGE	POWER
59	––	MICROWAVE	POWER
60	3–COMPARTMENT SINK UNIT	3'–8" X 6'–0" 3–COMPARTMENT SINK, 1'–4" X 1'–8" COMPARTMENT SIZE, REQUIRES GREASE TRAP	WATER/SAN

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.
B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.
C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.
E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'–0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.
F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.
I. INTERIOR CMU WALLS ARE TO BE RUNNING BOND UNLESS NOTED OTHERWISE.
J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.
K. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL

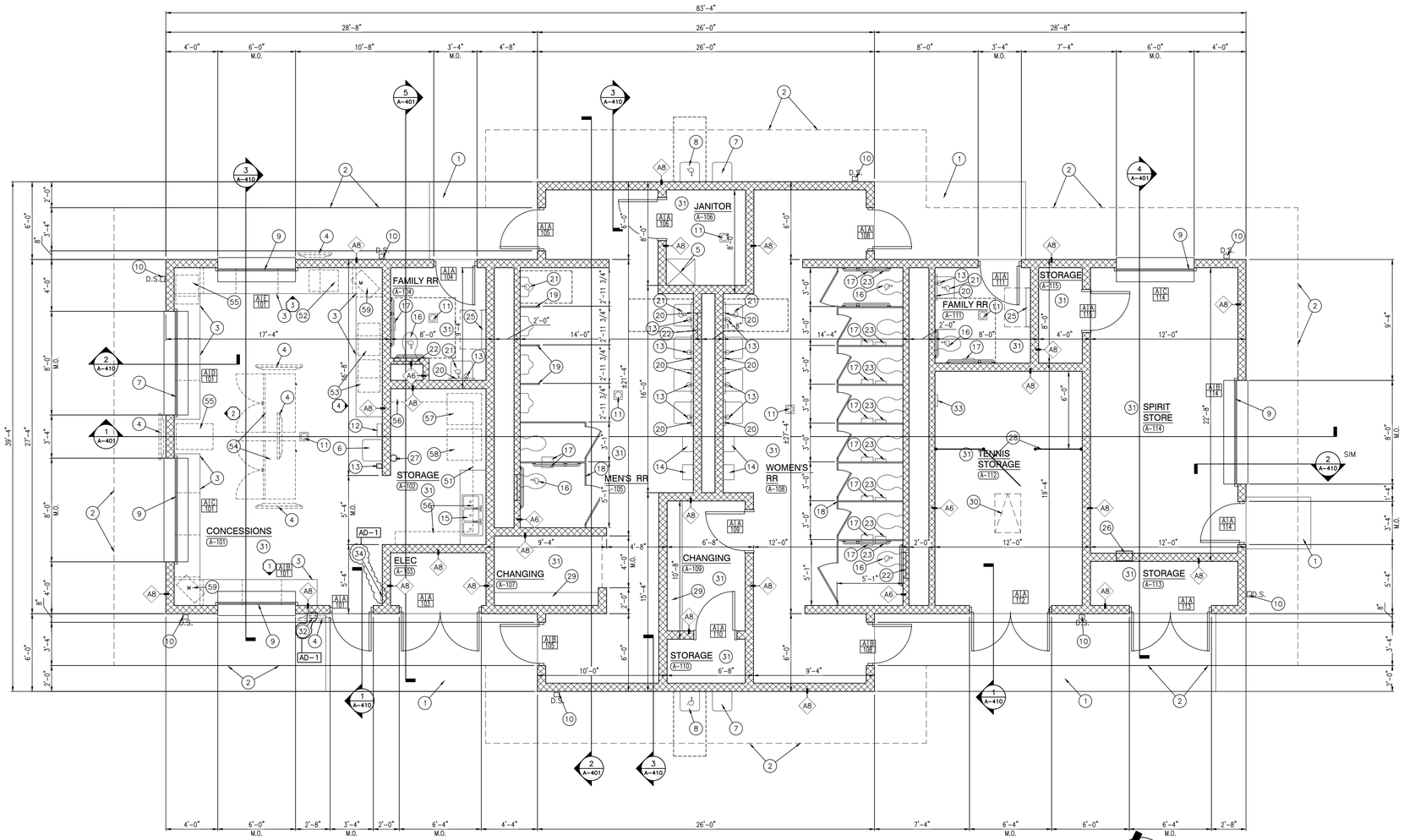
PLAN LEGEND:

INDICATES STOREFRONT, CURTAIN WALL, OR WINDOW SYSTEM. REFER TO A–600 SERIES DRAWINGS FOR ELEVATIONS AND DETAILS.
INDICATES WALL TYPES REFER TO G–201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. CONCRETE STOOP/VOID SLAB, REFER TO STRUCTURAL DRAWINGS.
2. DASHED LINE INDICATES ROOF ABOVE. REFER TO ROOF PLAN.
3. CASEWORK AND/OR MILLWORK (TYPICAL), REFER TO EQUIPMENT PLANS.
4. DISPLAY/TV MONITOR (TYP), REFER TO ELECTRICAL PLANS.
5. MOP SINK, REFER TO PLUMBING DRAWINGS.
6. WALL SINK, REFER TO PLUMBING DRAWINGS.
7. ELECTRIC WATER COOLER WITH BUBBLER, REFER TO PLUMBING DRAWINGS.
8. ACCESSIBLE ELECTRIC WATER COOLER WITH BUBBLER, REFER TO PLUMBING DRAWINGS.
9. ROLLING COUNTER DOOR. — 2 / A–410
10. ALUMINUM DOWNSPOUT AND BOOT, REFER TO ROOF PLAN.
11. FLOOR DRAIN, REFER TO PLUMBING DRAWING.
12. PAPER TOWEL DISPENSER. OFCI
13. SOAP DISPENSER. OFCI
14. HAND DRYER
15. THREE COMPARTMENT SINK REFER TO PLUMBING.
16. ACCESSIBLE FACILITIES.
17. TOILET PAPER HOLDER. (OFCI)
18. TOILET PARTITION.
19. URINAL SCREEN WALL.
20. 2'–0" W x 3'–0" H MIRROR WITH BOTTOM OF REFLECTIVE SURFACE MOUNTED AT 40"A.F.F.
21. ACCESSIBLE FIXTURE (LAVATORY/URNAL). SEE PLUMBING DRAWINGS.
22. 24"x24" ACCESS PANEL. MOUNT TOP OF PANEL AT 5'–4" A.F.F. COORDINATE LOCATION W/ SENSOR HEIGHT.
23. FEMININE NAPKIN DISPOSAL.
24. 2'–0" x 5'–0" MIRROR BOTTOM @ 1'–4" A.F.F.
25. CHANGING TABLE.
26. SEMI–RECESSED FIRE EXTINGUISHER CABINET. — 2 / A–101
27. FIRE EXTINGUISHER HOOK (WALL MOUNTED).
28. 6'–0" HIGH CHAIN LINK FENCE WITH 4'–0" WIDE GATE WITH LATCH AND STOREROOM LOCKSET
29. CHANGING ROOM BENCH (18" TO TOP OF BENCH)
30. ATTIC ACCESS PANEL REFER TO 3/A–101
31. CEILING TO BE GYPSUM BOARD AT 10'–1" AFF PAINT P1.
32. KNOX BOX
33. FIRE ALARM CONTROL PANEL – REFER TO ELECTRICAL DRAWINGS.
34. FIRE ALARM ANNUNCIATOR PANEL – REFER TO ELECTRICAL DRAWINGS.



COMMUNITY BUILDING FLOOR PLAN

SCALE: 1/4" = 1'–0"

NORTH

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23–115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY CJA
CHECKED BY UPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD–1	10/10/23	ADDENDUM NO. 1

DRAWING

COMMUNITY BUILDING FLOOR PLAN

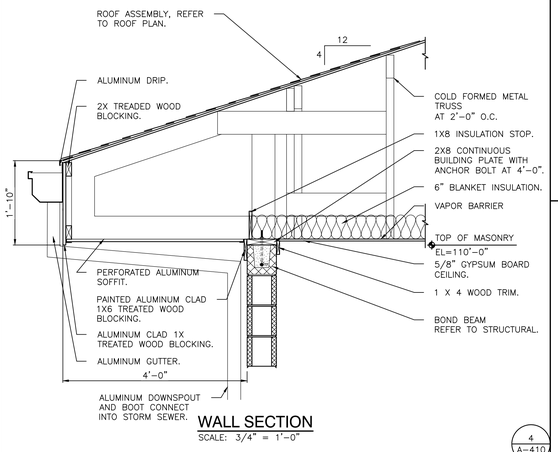
PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

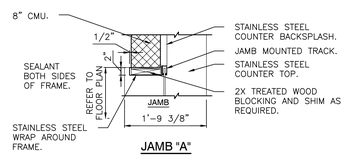
A-101-CB

Tuesday, 10/10/2023 – 7:06 AM – LAST SAVED BY:TALLEN
Y:\23–115 TRI–CREEK SC – LOWELL HS NEW STADIUM\23–115 DRAWINGS\05 ARCH\A–101 – CB.DWG

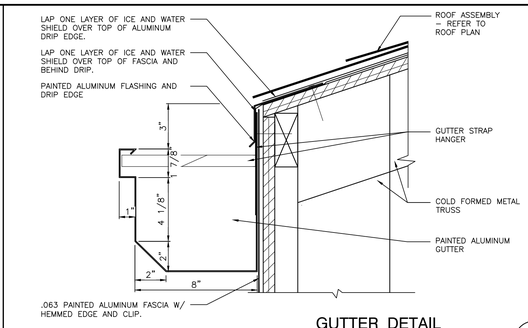


WALL SECTION
SCALE: 3/4" = 1'-0"

4 / A-410

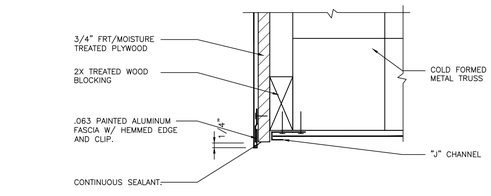


JAMB "A"



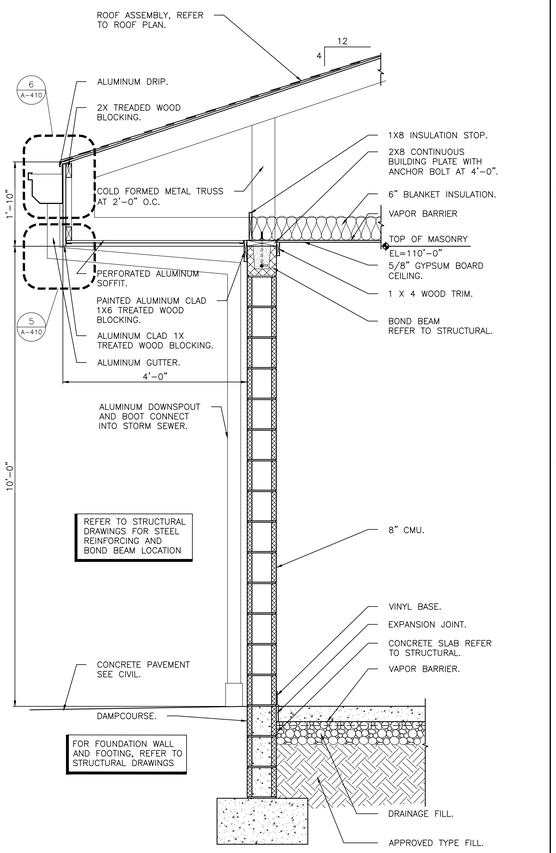
GUTTER DETAIL
SCALE: 3" = 1'-0"

6 / A-410



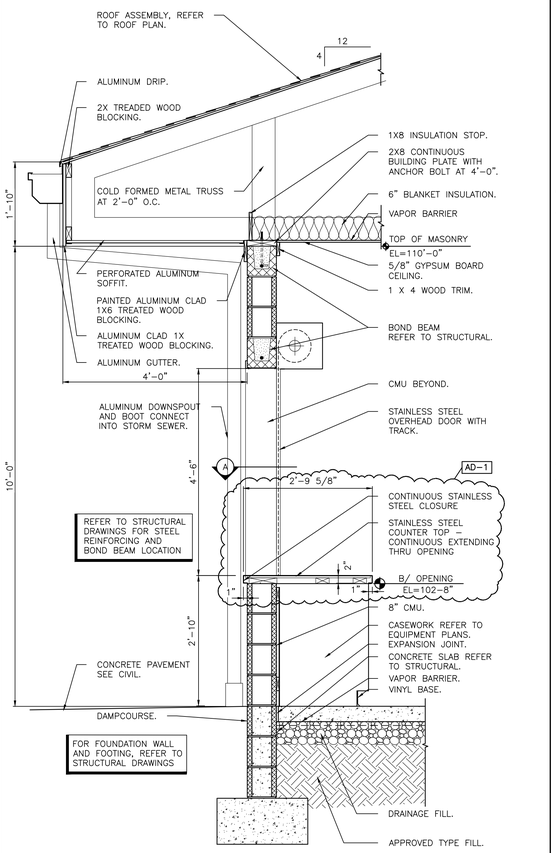
ROOF VENT EVE DETAIL
SCALE: 3" = 1'-0"

5 / A-410



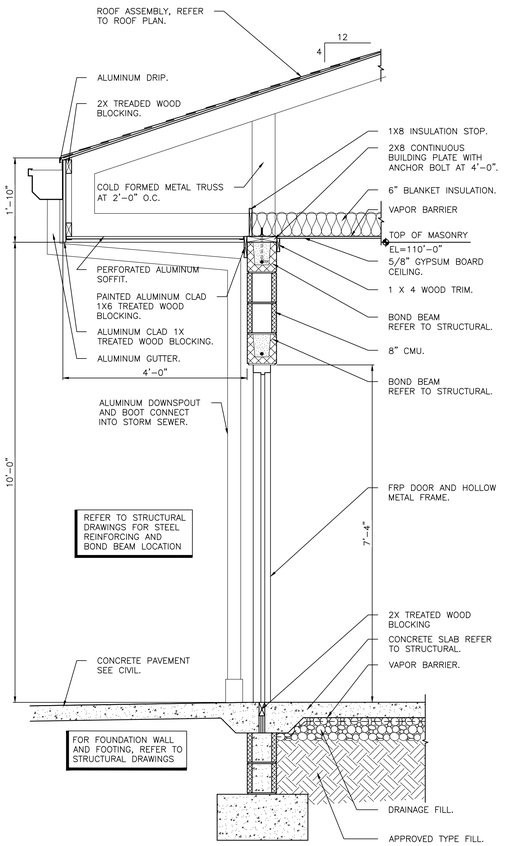
WALL SECTION
SCALE: 3/4" = 1'-0"

3 / A-410



WALL SECTION
SCALE: 3/4" = 1'-0"

2 / A-410



WALL SECTION
SCALE: 3/4" = 1'-0"

1 / A-410

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY CJA
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
COMMUNITY BUILDING WALL SECTIONS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-410-CB

Friday, 10/6/2023 - 12:57 PM - LAST SAVED BY:TALLEN
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\05 ARCH\A-410 - CB.DWG

GENERAL FINISH PLAN NOTES:

A. REFERENCE FINISH LEGEND FOR FINISH INFORMATION.

B. REFERENCE FLOOR PATTERN PLANS, EQUIPMENT PLANS, INTERIOR ELEVATIONS, REFLECTED CEILING PLANS AND WRITTEN SPECIFICATIONS FOR ADDITIONAL FINISH INFORMATION.

C. PRIOR TO INSTALLATION OF NEW FINISHES CONTRACTOR SHALL INSPECT ALL SUBSTRATES. IF A SUBSTRATE IS DEEMED UNACCEPTABLE THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO RECTIFY THE SITUATION OR CONTACT THE ARCHITECT WITH THE CONCERN. PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE CONSTRUED THAT THE INSTALLER AND /OR FINISHER HAS ACCEPTED SAID SUBSTRATE. NO CHANGE ORDER WILL BE ISSUED TO RECTIFY CONCEALED, OR UNSATISFACTORY SUBSTRATE ONCE FINISH WORK HAS PROCEEDED.

D. PREPARE ALL WALL CONSTRUCTION, NEW AND EXISTING, TO RECEIVE NEW FINISHES AS PER MANUFACTURE'S RECOMMENDED INSTALLATION METHODS AND MATERIALS FOR ALL FINISHES.

E. ALL FLOORING IS TO BE LEVELED WITHIN 1/4" IN 10'-0" WITH LATEX MATERIAL. MOISTURE CONTENT IN AREA IS TO BE TESTED PRIOR TO INSTALLATION OF FLOORING MATERIAL. CONTRACTOR TO INSTALL FLOORING PER MANUFACTURER'S RECOMMENDED METHOD.

F. FLOORING CONTRACTOR TO SUBMIT A SEAMING DIAGRAM FOR FLOORING MATERIAL INCLUDING NOTATION OF MATERIAL DIRECTION.

G. ALL FLOORING TRANSITIONS SHALL COMPLY WITH ADA GUIDELINES.

H. ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, FIRE EXTINGUISHER CABINETS, ETC, THAT ARE NOTED TO BE PAINTED, SHALL BE PAINTED WITH ALKYD TYPE PAINT. COLOR TO BE COORDINATED WITH DESIGNER UNLESS OTHERWISE NOTED.

I. CONTRACTOR TO PROVIDE AND INSTALL FLOORING TRANSITIONS AS INDICATED ON THE FLOOR PATTERN PLANS. WHERE NONE ARE NOTED, CONTRACTOR SHALL VERIFY REQUIRED TYPE/COLOR WITH ARCHITECT.

J. ALL FLOOR FINISH TRANSITIONS AT DOORS SHALL BE CENTERED UNDER DOOR UNLESS NOTED OTHERWISE.

K. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL NEW INTERIOR WALL AND CEILING FINISHES WILL BE CLASS B MINIMUM, WITH A FLAME SPREAD RATING OF 75 MAXIMUM, AND A SMOKE DEVELOPED INDEX OF 450 MAXIMUM, PER IBC SECTION 803. AD-01

L. PAINT ALL SIDES OF NEW DOOR FRAMES (P3) UNLESS NOTED OTHERWISE.

M. EXPOSED SURFACES OF DUCTWORK TO BE PAINTED TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE.

FINISH SYMBOL LEGEND:

P1	WALL FINISH
C1	FLOOR FINISH
B1	BASE FINISH
--	MISC FINISH INFORMATION

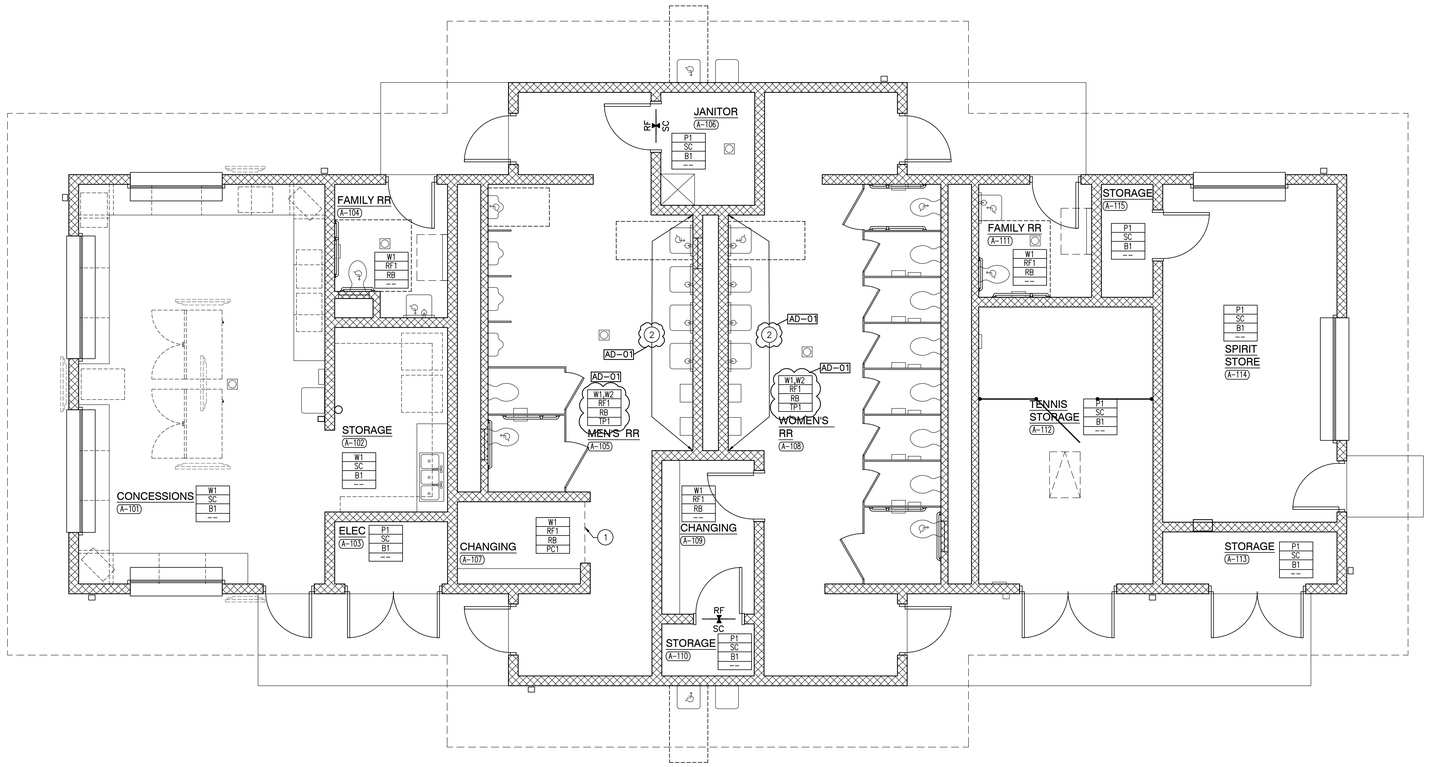
FLOOR TRANSITION STRIP AS REQUIRED

INDICATES DIRECTION OF MATERIAL GRAIN

FINISH PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS PLAN)

1. PRIVACY CURTAIN, PC1
2. WALLCOATING, W2 — AD-01



COMMUNITY BUILDING FINISH PLAN

SCALE: 1/4" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
COMMUNITY BUILDING FINISH PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
A-801-CB

FINISH LEGEND

SURFACE	MARK	DESCRIPTION	MANUFACTURER	PATTERN/FINISH	NUMBER/COLOR	SIZE	COMMENTS
CEILING MATERIALS							
	P1	PAINT	SHERWIN WILLIAMS	--	CEILING BRIGHT WHITE / 7007	--	--
WALL BASE							
	B1	WALL BASE	TARKETT	--	BURNT UMBER 63	4" COVE	--
	RB	RESINOUS BASE	SHERWIN WILLIAMS	DECO QUARTZ BC23	METEOR SHOWER	4" COVE	--
FLOOR MATERIALS							
	RF1	RESINOUS FLOOR	SHERWIN WILLIAMS	DECO QUARTZ BC23	METEOR SHOWER	--	--
	SC	SEALED CONTRETE	--	--	--	--	--
WALL MATERIALS							
	P1	SEE CEILING MATERIALS					
	P2	PAINT	SHERWIN WILLIAMS	--	CUSTOM COLOR RED	--	SEE NOTE 1
	P3	PAINT	SHERWIN WILLIAMS	--	SW7066 GRIZZLE GRAY	--	DOOR FRAMES
	P4	PAINT	SHERWIN WILLIAMS	--	--	--	DOORS
	W1	WALLCOATING	SHERWIN WILLIAMS	--	SW 7029 AGREEABLE GRAY	--	--
	W2	WALLCOATING	SHERWIN WILLIAMS	--	CUSTOM COLOR RED	--	SEE NOTE 1
CASEWORK AND MILLWORK							
	PL1	PLASTIC LAMINATE	--	--	--	--	--
	SST	STAINLESS STEEL	--	--	--	--	--
MISCELLANEOUS							
	TP1	TOLIET PARTION	HINDY HIDERS	ORANGE PEEL	BLACK	--	--
	PC1	PRIVACY CURTAIN	--	--	--	--	--

* NOTE 1 – CUSTOM COLOR RED TO MATCH SCHOOL COLOR

AD-01

ENTIRE SHEET IS SUBMITTED FOR ADDENDUM 2

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY TA
DRAWN BY ACS
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

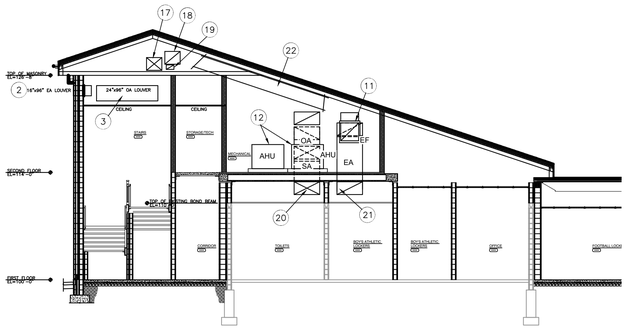
MARK	DATE	ISSUED FOR
AD-01	10/10/23	ADDENDUM 1

DRAWING
COMMUNITY BUILDING FINISH LEGEND

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

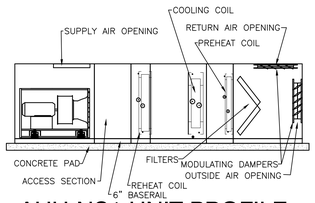
 SHEET
A-820-CB

ROOM LEGEND	
ROOM NO.	ROOM NAME
A–201	TEAM MEETING
A–202	MECHANICAL
A–203	STORAGE/TECH
A–204	STAIRS
A–205	KITCHENETTE
A–206	RESTROOM
A–207	RESTROOM
A–208	LOBBY
A–209	STAIRS
A–210	STORAGE
A–211	MECHANICAL
A–212	SEATING



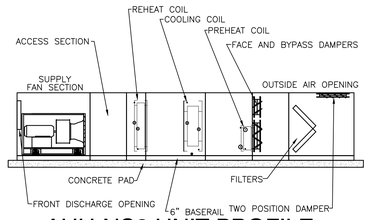
SECOND FLOOR MECHANICAL ROOM SECTION

SCALE: 1/8" = 1'–0"



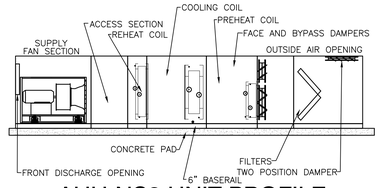
AHU-NS1 UNIT PROFILE

SCALE: NO SCALE



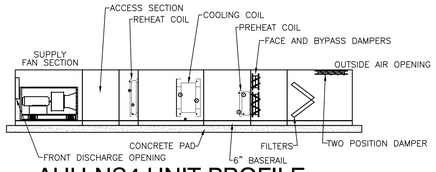
AHU-NS2 UNIT PROFILE

SCALE: NO SCALE



AHU-NS3 UNIT PROFILE

SCALE: NO SCALE



AHU-NS4 UNIT PROFILE

SCALE: NO SCALE

DIFFUSER / GRILLE CONNECTION DUCT

MARK	BRANCH DUCT SIZE
CD–A	6"ø
CD–B	8"ø
CD–C	10"ø
CD–D	12"ø
CD–E	14"ø
RG–A	12"x10"
RG–B	24"x12"
EG–A	6"x4"
EG–B	12"x6"
EG–C	14"x6"
EG–D	16"x8"

BRANCH DUCT SIZES INDICATED IN THIS TABLE FROM DIFFUSER TO MAIN FOR CLARITY ON FLOOR PLAN.

PIPE CONNECTIONS

EQUIP. NO.	ROOM SERVED	REHEAT PIPE SIZE	PREHEAT PIPE SIZE	CHW PIPE SIZE	AD–1
AHU–NS1	MEETING A–201	2"	1 1/4"	2"	
AHU–NS2	DOAS SYSTEM	1 1/2"	1 1/2"	2"	
AHU–NS3	DOAS SYSTEM	2"	2"	2"	
AHU–NS4	DRYING ROOM A–112	1"	1"	1 1/4"	
UH–NS2	MECH ROOM A–210	3/4"	NA	NA	
UH–NS3	MECH ROOM A–202	3/4"	NA	NA	
BBR–NS1	MEETING A–201	3/4"	NA	NA	
BBR–NS2	MEETING A–201	3/4"	NA	NA	

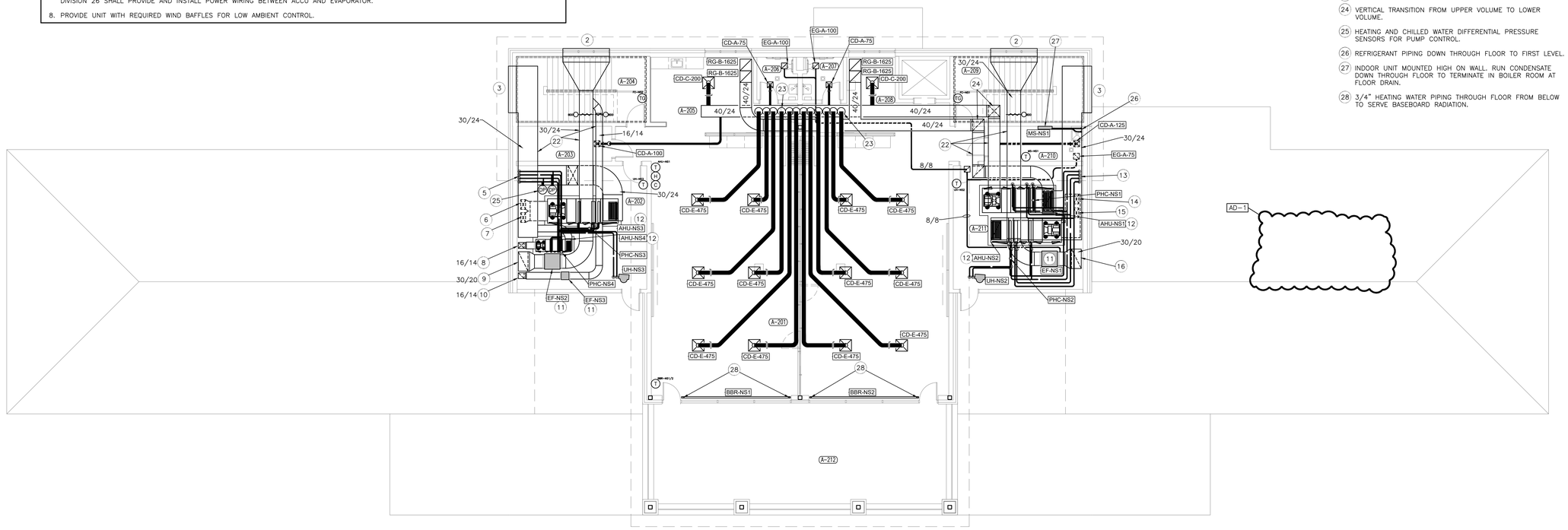
NOTE: SEE SCHEDULE ON M601 FOR 2 AND 3 WAY VALVE APPLICATIONS.

MINI SPLIT AIR CONDITIONING UNIT SCHEDULE

MS/ACCU NO.	ROOM SERVED	MITSUBISHI MODEL NO. **SEE NOTE #1	TOTAL CAPACITY CLG / HTG	EVAPORATOR DATA					ACCU DATA				SEE NOTES
				CFM	FLA	MCA	VOLTS	PHASE	MOCP	MCA	VOLTS	PHASE	
NS1	A114	PUY–A12NKA7/PKA–A12HA7	12	425	.33	1	208	1	30.0	11	208	1	ALL

NOTES:

1. EVAPORATOR AND ACCU TO BE A PACKAGED SYSTEM. ONE EVAP INDOOR UNIT PER SYSTEM. BMS INTERFACE TO CONTROLS.
2. INSTALL ACCU ON 12" (TALL) MANUFACTURER PROVIDED STANDS.
3. UNIT TO BE CONTROLLED BY A WALL MOUNTED WIRED REMOTE THERMOSTAT.
4. INDOOR UNIT TO HAVE A SELF CONTAINED INTERNAL CONDENSATE PUMP.
5. UNIT TO HAVE LIQUID AND SUCTION LINESET PIPING, COMPLETE WITH REFRIGERANT CHARGE.
6. UNIT TO HAVE 0°F (MINIMUM) LOW AMBIENT CONTROLS.
7. EVAPORATOR TO BE POWERED FROM ACCU TERMINAL BLOCK, MCA LISTED FOR ACCU IS FOR BOTH ACCU AND EVAPORATOR. DIVISION 26 SHALL PROVIDE AND INSTALL POWER WIRING BETWEEN ACCU AND EVAPORATOR.
8. PROVIDE UNIT WITH REQUIRED WIND BAFFLES FOR LOW AMBIENT CONTROL.



NORTH STAR BUILDING SECOND FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'–0"

GENERAL NOTES:

1. SEE SHEET M–001 FOR GENERAL MECHANICAL NOTES, LEGEND AND SCHEDULES.
2. SEE SHEET M–501 FOR MECHANICAL DETAILS.

PLAN NOTES:

1. not used.
2. 96"x16" EXHAUST LOUVER IN WALL ABOVE WINDOW, SEE ARCHITECTURAL PLANS.
3. 96"x24" OUTSIDE AIR LOUVER IN WALL, SEE ARCHITECTURAL PLANS.
4. not used
5. 2 1/2" CHS/CHR.HS/HR PIPING MAINS FROM BELOW.
6. 20/16 OUTSIDE AIR SUPPLY DUCT DOWN TO BELOW.
7. 20/16 OUTSIDE AIR SUPPLY DUCT DOWN TO BELOW.
8. 16/14 OUTSIDE AIR SUPPLY DUCT DOWN TO BELOW.
9. 30/20 EXHAUST DUCT FROM BELOW.
10. 16/14 EXHAUST DUCT FROM BELOW.
11. EXHAUST FAN SUSPENDED FROM STRUCTURE.
12. AIR HANDLING UNIT SET ON 4" CONCRETE CURB.
13. 2 1/2" CHS/CHR/HS/HR MAINS FROM BELOW.
14. 20/16 OUTSIDE AIR SUPPLY DUCT DOWN TO BELOW.
15. 20/16 OUTSIDE AIR SUPPLY DUCT DOWN TO BELOW.
16. 30/20 EXHAUST DUCT FROM BELOW.
17. SUPPLY AIR DUCT WITHIN ABOVE CEILING VOLUME.
18. RETURN AIR DUCT WITHIN ABOVE CEILING VOLUME.
19. EXHAUST DUCT WITHIN ABOVE CEILING VOLUME.
20. OUTSIDE AIR DUCT ABOVE FIRST FLOOR CEILING.
21. EXHAUST AIR DUCT ABOVE FIRST FLOOR CEILING.
22. DUCT TO FOLLOW ANGLE OF ROOF STRUCTURE TO LARGE VOLUME ABOVE SECOND FLOOR CEILING.
23. BRANCH DUCTS OUT OF TOP OF MAIN SUPPLY DUCT.
24. VERTICAL TRANSITION FROM UPPER VOLUME TO LOWER VOLUME.
25. HEATING AND CHILLED WATER DIFFERENTIAL PRESSURE SENSORS FOR PUMP CONTROL.
26. REFRIGERANT PIPING DOWN THROUGH FLOOR TO FIRST LEVEL.
27. INDOOR UNIT MOUNTED HIGH ON WALL. RUN CONDENSATE DOWN THROUGH FLOOR TO TERMINATE IN BOILER ROOM AT FLOOR DRAIN.
28. 3/4" HEATING WATER PIPING THROUGH FLOOR FROM BELOW TO SERVE BASEBOARD RADIATION.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23–115
DATE 09/25/23
COORDINATED BY AAW
DRAWN BY AAW
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED ARCHITECT NO. 11600109 STATE OF INDIANA

REVISIONS

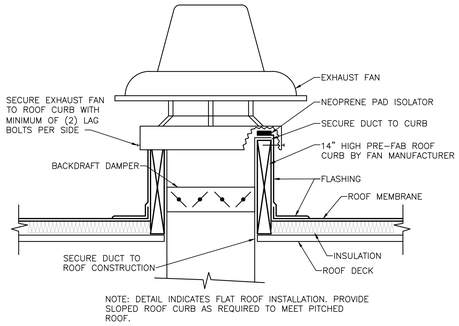
MARK	DATE	ISSUED FOR
AD–1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING SECOND FLOOR MECHANICAL PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
M-102-NS

Monday, 10/9/2023 – 2:22 PM – LAST SAVED BY:TWINSLOW
Y:\23-115 TRI-CREEK SC – LOWELL HS NEW STADIUM\23-115 DRAWINGS\07 MECH\M-102NS.DWG



NOTE: DETAIL INDICATES FLAT ROOF INSTALLATION. PROVIDE SLOPED ROOF CURB AS REQUIRED TO MEET PITCHED ROOF.

ROOF EXHAUST FAN MOUNTING DETAIL

NOT TO SCALE

EXHAUST FAN SCHEDULE

EF NO.	AREA EXHAUSTED	TYPE	GREENHECK MODEL NUMBER	BACKDRAFT DAMPER SIZE	CFM	SP. " OF W.C.	FAN RPM	MOTOR DATA HP	MOTOR DATA VOLTS	MOTOR DATA PHASE	CONTROL NOTE	SEE NOTE
CB1	COMMUNITY BUILDING	ROOF	GB-140	16/16	1275	0.375	932	1/4	120	1	1	3,5
AD-1 CB2	COMMUNITY BUILDING	CEILING	SP-A390-VG	8/8	200	0.125	835	0.02	120	1	1	

NOTES:
1. CONTINUOUS OPERATION.
2. MANUAL SWITCH OPERATION.
3. ROOF CURB MOUNTED.
4. PROVIDE WITH FAN SPEED CONTROLLER, FOR BALANCING ONLY. SPEED CONTROLLER SHALL BE INSTALLED WITHIN FAN HOUSING, OUT OF SIGHT.
5. PROVIDE WITH MOTORIZED BACKDRAFT DAMPER, DISCONNECT SWITCH AND 14" TALL SLOPED ROOF CURB.
6. EXHAUST FAN SHALL BE CONTROLLED BY THE REMOTE MOUNTED THERMOSTAT. INTERLOCK EXHAUST FAN WITH MOTORIZED DAMPERS ASSOCIATED WITH EXHAUST FAN AND INTAKE LOUVER..

ELECTRIC HEATER SCHEDULE

MARK	EXAMPLE MANUFACTURER MODEL NO.	LOCATION	ARRANGEMENT	CFM	CAP. MBH	EAT	ELECTRICAL KW	ELECTRICAL AMPS	ELECTRICAL VOLTS	ELECTRICAL PHASE	REMARKS
EH CB1-10	Q-MARK CDF-548	VARIOUS	SURFACE MTD. CEILING HEATER	300	10.2	65	3.0	14.4	277	1	NOTE 2
EWH CB1-9	Q-MARK AWH-4404F	VARIOUS	ARCHITECURAL WALL HEATER	100	10.2	65	3.0	14.4	277	1	NOTE 1

NOTES:
1. WALL HEATER SHALL HAVE TRIM KIT FOR SURFACE MOUNT, DISCONNECT SWITCH AND INTEGRAL TAMPER PROOF THERMOSTAT.
2. CEILING HEATER SHALL HAVE TRIM KIT FOR SURFACE MOUNTING, DISCONNECT SWITCH AND INTEGRAL TAMPER PROOF THERMOSTAT.

CEILING FAN SCHEDULE

CF MARK	EXAMPLE MANUFACTURER MODEL NO.	LOCATION	FAN TYPE AND DESCRIPTION	SERVICE	CFM	RPM	DRIVE TYPE	MOTOR DATA HP (AMPS)	MOTOR DATA RPM	MOTOR DATA VOLTS	MOTOR DATA PHASE	REMARKS
CB1	QMARK LEADING EDGE 36201	CONCESSIONS	HEAVY DUTY CEILING FAN	CIRCULATION	12,500 MAX	395	DIRECT	.65 AMPS	395	120	1	36", WHITE, NOTE 1
CB2	QMARK LEADING EDGE 36201	CONCESSIONS	HEAVY DUTY CEILING FAN	CIRCULATION	12,500 MAX	395	DIRECT	.65 AMPS	395	120	1	36", WHITE, NOTE 1
CB3	QMARK LEADING EDGE 36201	CONCESSIONS	HEAVY DUTY CEILING FAN	CIRCULATION	12,500 MAX	395	DIRECT	.65 AMPS	395	120	1	36", WHITE, NOTE 1

NOTES:
1. PROVIDE FAN WITH 12" DOWNROD AND WALL MOUNTED FAN SPEED CONTROLLER (WITH ON/OFF SWITCH) BY FAN MANUFACTURER, INSTALLED BY EC.

GENERAL NOTES:

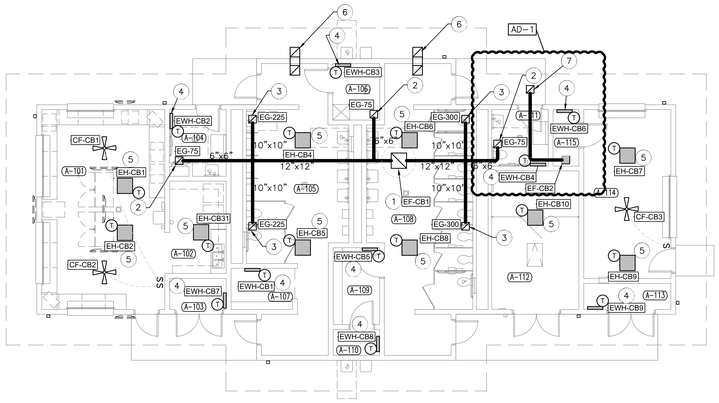
1. SEE SHEET M-001-NS FOR GENERAL MECHANICAL NOTES, LEGEND.

PLAN NOTES:

1. EXHAUST FAN ON ROOF ABOVE. SET ON SLOPED ROOF CURB. 20"x20" EXHAUST DUCT UP TO FAN.
2. 6"x6" EXHAUST GRILLE IN CEILING.
3. 14"x10" EXHAUST GRILLE IN CEILING.
4. ELECTRIC WALL HEATER WITH INTEGRAL THERMOSTAT. SET THERMOSTAT AT 60deg F.
5. RECESSED CEILING HEATER WITH INTEGRAL THERMOSTAT. SET THERMOSTAT AT 60deg F.
6. 14"x14" LOUVER IN SOFFIT AND 14"x14" TRANSFER GRILLE IN CEILING OF RESTROOM. LINED INSULATED TRANSFER DUCT SHALL HAVE A MOTORIZED DAMPER INTERLOCKED WITH EXHAUST FAN. DAMPER SHALL BE CLOSED UPON FAN SHUT DOWN.
7. AD-1 10"x10" LOUVER IN SOFFIT AND 10"x8" EXHAUST DUCT FROM EXHAUST FAN CB-2 IN ROOM A-115.

ROOM LEGEND

ROOM NO.	ROOM NAME
A-101	CONCESSIONS
A-102	STORAGE
A-103	ELECTRICAL
A-104	FAMILY RESTROOM
A-105	MEN'S RESTROOM
A-106	JANITOR
A-107	CHANGING
A-108	WOMEN'S RESTROOM
A-109	CHANGING
A-110	STORAGE
A-111	FAMILY RESTROOM
A-112	TENNIS STORAGE
A-113	STORAGE
A-114	SPIRIT STORE
A-115	STORAGE



COMMUNITY BUILDING MECHANICAL FLOOR PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
23-115
DATE
09/25/23
COORDINATED BY
AAW
DRAWN BY
AAW
CHECKED BY
JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

DRAWING
COMMUNITY BUILDING MECHANICAL FLOOR PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

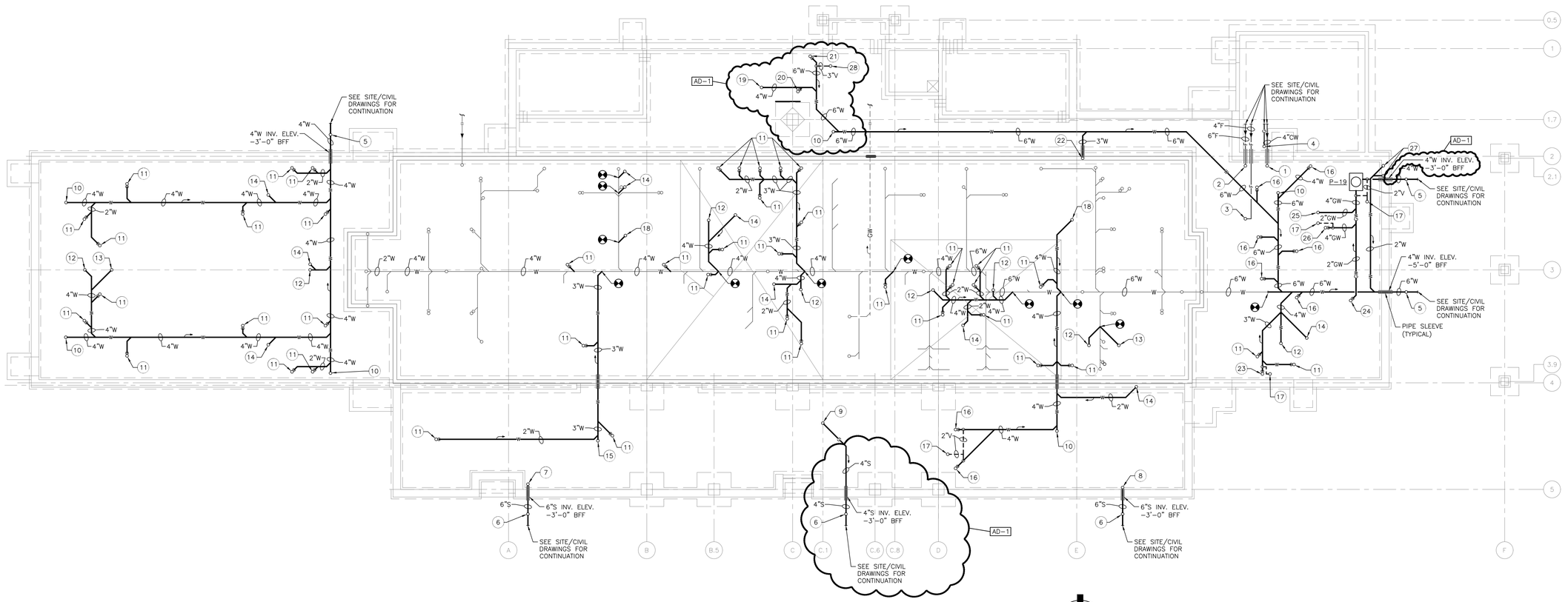
SHEET
M-101-CB

GENERAL NOTES:

1. SEE SHEET P-001 FOR GENERAL PLUMBING NOTES AND LEGEND.
2. SEE SHEET P-501 FOR PLUMBING DETAILS.
3. SEE SHEET P601 FOR PLUMBING SCHEDULES.

PLAN NOTES:

(1) 4" INCOMING DOMESTIC COLD WATER SERVICE UP.
(2) 6" INCOMING FIRE PROTECTION WATER SERVICE UP.
(3) 4"F FROM ABOVE AND OUT TO FIRE DEPARTMENT CONNECTION.
(4) INCOMING GAS SERVICE FROM GAS COMPANY UP.
(5) 4"W UP TO EXTERIOR CLEANOUT (ECO).
(6) 4"S UP TO EXTERIOR CLEANOUT (ECO).
(7) 6"S UP IN VOID OF LOCKERS ABOVE.
(8) 6"S UP IN CHASE ABOVE.
(9) 4"S UP IN CHASE ABOVE.
(10) 4"W UP TO FLOOR CLEANOUT (FCO).
(11) 2"W WITH P-TRAP UP TO FLOOR DRAIN.
(12) 4"W UP IN CHASE ABOVE.
(13) 2"W UP IN CHASE ABOVE.
(14) 2"W UP IN WALL ABOVE.
(15) 3"W UP TO FLOOR CLEANOUT (FCO).
(16) 4"W WITH P-TRAP UP TO FLOOR DRAIN.
(17) 2"V UP IN WALL ABOVE.
(18) 4"W UP IN VOID OF LOCKERS ABOVE.
(19) 4"W UP IN WALL ABOVE.
(20) 3"W WITH P-TRAP UP TO FLOOR DRAIN.
(21) 6"W WITH P-TRAP UP TO FLOOR DRAIN.
(22) 3"W UP IN WALL ABOVE.
(23) 3"W WITH P-TRAP UP TO MOP BASIN.
(24) 2"GW WITH P-TRAP UP TO FLOOR DRAIN.
(25) 2"GW UP IN WALL ABOVE.
(26) 4"GW WITH P-TRAP UP TO FLOOR DRAIN.
(27) 2"W UP IN BLOCK WALL ABOVE.
(28) 3"V UP IN WALL ABOVE.



NORTH STAR BUILDING FOUNDATION PLUMBING PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PJD
DRAWN BY PJD
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING FOUNDATION PLUMBING PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
P-101-NS

Monday, 10/9/2023 - 2:28 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\08 PLUM\P-101-NS.DWG

PLAN NOTES: (CONT.)

(46) 2"V FROM BELOW FLOOR SLAB RISE IN WALL.

(47) 1 1/2"CW DROP IN CHASE. 2"V RISE. 4"W DOWN. PROVIDE WHA-A ON COLD WATER PIPE BEFORE WATER CLOSET CONNECTION.

(48) 3/4"CW & 3/4"HW UP ALONG WALL ABOVE. 2"W UP IN WALL ABOVE.

(49) 1 1/2"V RISE IN WALL. 2"W DOWN.

(50) 2"CW DROP IN CHASE. ROUTE 2"CW HEADER IN CHASE. PROVIDE WHA-C ON COLD WATER PIPE BEFORE LAST WATER CLOSET CONNECTION.

(51) 3/4"CW & 3/4"HW DROP IN CHASE. 1 1/2"V RISE. 2"W DOWN.

(52) 2"CW DROP IN CHASE. 4"V RISE. 4"W DOWN. ROUTE 2"CW HEADER IN CHASE. PROVIDE WHA-B ON COLD WATER PIPE BEFORE LAST WATER CLOSET CONNECTION.

(53) HOT WATER RETURN BALANCING VALVE STATION. BALANCE TO 3.0 GPM.

(54) CONNECT NEW 4"V TO EXISTING 4"V FROM CHASE.

(55) 2"V RISE IN CHASE. 4"W DOWN.

(56) 1/2"CW UP ALONG WALL ABOVE.

(57) 1/2"CW UP IN WALL ABOVE.

(58) SHUT-OFF VALVES TO BE SHUT OFF FOR WINTER MONTHS.

AD-1 (59) 4"W DOWN IN WALL.

SPECIAL NOTES:

1. EXTERIOR DRINKING FOUNTAINS (P-8 AND P-9) ON BUILDING TO BE SHUT DOWN COMPLETELY FOR WINTER. COLD WATER PIPING AND FIXTURES TO BE COMPLETELY WINTERIZED. DRINKING FOUNTAIN TRAPS TO BE FILLED WITH BIODEGRADABLE TYPE ANTIFREEZE SOLUTION.
2. PLUMBING CONTRACTOR TO PROVIDE TO THE OWNER A TYPED OUT DOCUMENT INDICATING A COMPLETE STEP BY STEP PROCEDURE ON HOW TO WINTERIZE THE EXTERIOR DRINKING FOUNTAINS COMPLETELY FOR THE WINTER.

PLAN NOTES: (CONT.)

(19) 3"S UP TO ROOF DRAIN.

(20) 3"S UP TO OVERFLOW DRAIN.

(21) 4"S UP TO ROOF DRAIN.

(22) 4"S UP TO OVERFLOW DRAIN.

(23) 4"S DOWN IN CHASE.

(24) 6"S DOWN IN CHASE.

(25) 6"S DOWN IN VOID OD LOCKERS.

(26) 3/4"CW DROP IN WALL.

(27) 1/2"CW DROP IN WALL. INSTALL WATER FILTER FURNISHED WITH ICE MACHINE. ROUTE DRAIN LINE FROM ICE MACHINE TO HUB DRAIN.

(28) 4"V RISE IN CHASE. 4"W DOWN.

(29) 1 1/2"V RISE IN CHASE. 2"W DOWN.

(30) 1 1/2"CW & 3/4"HW DROP IN CHASE. PROVIDE WHA-A ON COLD WATER PIPE BEFORE WATER CLOSET CONNECTION. CONNECT NEW 3/4"CW & 3/4"HW TO EXISTING 3/4"CW & 3/4"HW PIPING DROPS IN CHASE SERVING EXISTING FIXTURES.

(31) CONNECT NEW 2 1/2"CW TO EXISTING 2 1/2"CW PIPE DROP IN CHASE SERVING EXISTING FIXTURES.

(32) CONNECT NEW 3/4"CW & 3/4"HW TO EXISTING 3/4"CW & 3/4"HW PIPING DROPS IN WALL SERVING EXISTING FIXTURE.

(33) CONNECT NEW 3/4"CW & 3/4"HW TO EXISTING 3/4"CW & 3/4"HW PIPING DROPS IN CHASE SERVING EXISTING FIXTURES.

(34) CONNECT NEW 2"CW TO EXISTING 2"CW PIPE DROP IN CHASE SERVING EXISTING FIXTURES.

(35) 3"V FROM BELOW FLOOR SLAB RISE IN WALL.

(36) 2"W WITH P-TRAP UP TO FLOOR DRAIN.

(37) 2"CW & 4"W UP IN CHASE ABOVE. PROVIDE WHA-B ON COLD WATER PIPE BEFORE LAST WATER CLOSET CONNECTION.

(38) 3/4"CW, 3/4"HW & 2"W UP IN WALL ABOVE.

(39) 3/4"CW & 2"W UP IN WALL ABOVE.

(40) 3"W DOWN IN WALL.

(41) 3/4"CW, 3/4"HW & 2"V UP IN WALL ABOVE. 3"W WITH P-TRAP UP TO MOP BASIN.

(42) 4"W WITH P-TRAP UP TO FLOOR DRAIN.

(43) 4"W DOWN IN VOID OF LOCKERS.

(44) 3/4"CW UP IN WALL ABOVE.

(45) 3/4"CW & 3/4"HW DROP IN WALL.

GENERAL NOTES:

1. SEE SHEET P-001 FOR GENERAL PLUMBING NOTES AND LEGEND.
2. SEE SHEET P-501 FOR PLUMBING DETAILS.
3. SEE SHEET P-601 FOR PLUMBING SCHEDULES.

PLAN NOTES:

(1) INCOMING GAS FROM BELOW GRADE BY GAS COMPANY.

(2) GAS METER AND GAS PRESSURE REGULATOR SET BY GAS COMPANY. TOTAL CONNECTED LOAD IS 3,200,000 BTUH. PRESSURE REQUIRED DOWNSTREAM OF GAS METER SET IS 14"WC. IF GAS PRESSURE PROVIDED BY GAS COMPANY IS HIGHER THAN 14"WC., THEN PC TO PROVIDE AN ADDITIONAL GAS PRESSURE REGULATOR TO REGULATE PRESSURE FROM HIGHER PRESSURE TO 14"WC. TOTAL DEVELOPED LENGTH IS 175'.

(3) 4"G RISE ALONG WALL.

(4) 1 1/4"G, 3/4"CW & 3/4"HW DROP ALONG WALL. PROVIDE GAS SHUT-OFF VALVE, 6" DIRT LEG AND UNION BEFORE CONNECTION TO DRYER.

(5) 2 1/2"G DROP TO HVAC BOILER.

(6) 2"G DROP TO EACH DOMESTIC WATER HEATER. PROVIDE GAS SHUT-OFF VALVE, 6" DIRT LEG AND UNION BEFORE CONNECTION TO WATER HEATER.

(7) 6" INCOMING FIRE PROTECTION WATER SERVICE.

(8) 4" INCOMING DOMESTIC WATER SERVICE.

(9) 1"CW TO HVAC HEATING MAKE-UP WATER SYSTEM.

(10) 1"CW TO HVAC COOLING MAKE-UP WATER SYSTEM.

(11) 4"V UP. 4" VTR.

(12) 2"V FROM BELOW FLOOR RISE IN WALL.

(13) 3/4"CW DROP IN BLOCK WALL. 1 1/2"V RISE. 2"W DOWN.

(14) 3/4"CW & 3/4"HW(140') DROP IN WALL (TYP. FOR 2). ROUTE SINK DRAIN LINES TO FLOOR DRAIN.

(15) 3/4"CW & 3/4"HW DROP IN WALL. 1 1/2"V RISE. 2"W DOWN. 3/4"CW DROP. 2"V FROM BELOW FLOOR SLAB RISE IN WALL.

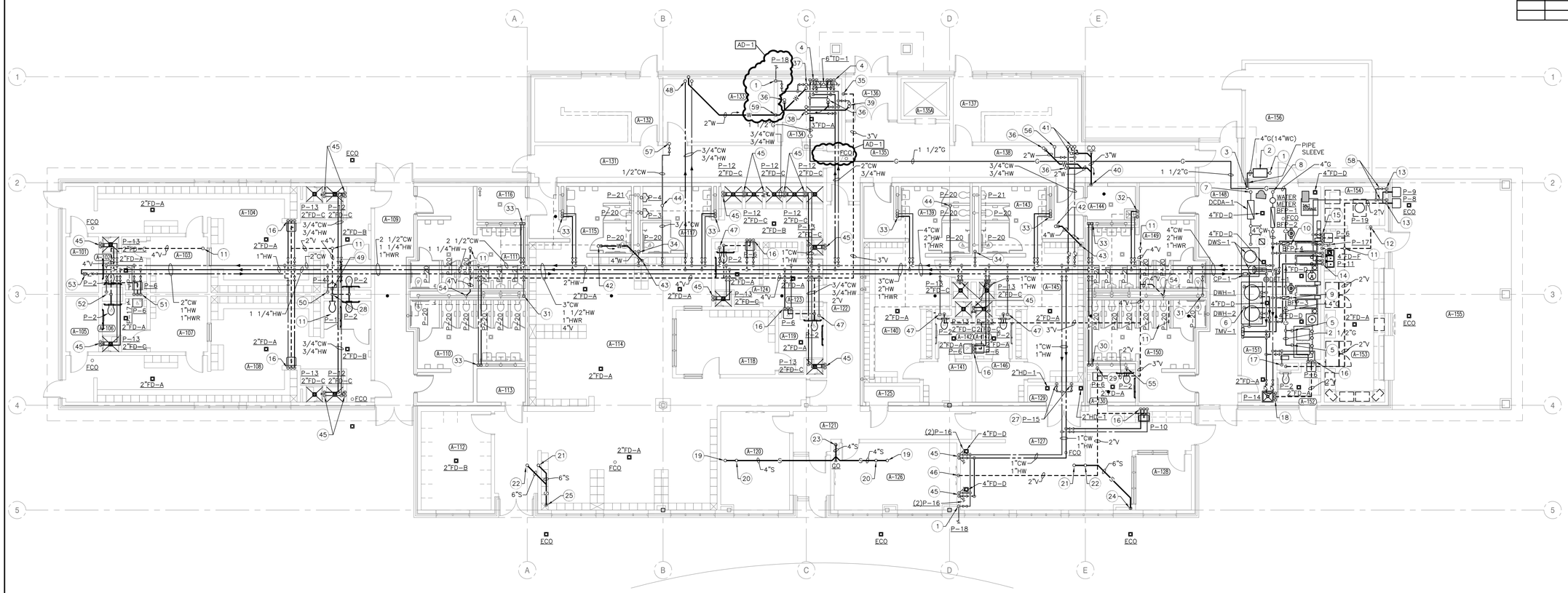
(16) 3/4"CW & 3/4"HW DROP IN WALL. 1 1/2"V RISE. 2"W DOWN.

(17) 1 1/2"CW DROP IN CHASE. 2"V RISE. 4"W DOWN. PROVIDE WHA-A ON COLD WATER PIPE BEFORE CONNECTION TO WATER CLOSET.

(18) 3/4"CW & 3/4"HW DROP IN WALL. 2"V FROM BELOW FLOOR SLAB RISE IN WALL. 3"W DOWN FROM MOP BASIN.

ROOM LEGEND

ROOM NO.	ROOM NAME
A-101	STORAGE
A-102	RESTROOM
A-103	OFFICE
A-104	MEN ATHLETIC LOCKERS
A-105	STORAGE
A-106	RESTROOM
A-107	OFFICE
A-108	WOMEN ATHLETIC LOCKERS
A-109	CORRIDOR
A-110	WOMEN'S TOILET
A-111	MEN'S TOILET
A-112	DRYING
A-113	ELECTRICAL
A-114	FOOTBALL LOCKERS
A-115	TOILET
A-116	MECHANICAL
A-117	TOILET
A-118	OFFICE
A-119	RESTROOM
A-120	CONFERENCE
A-121	CORRIDOR
A-122	CORRIDOR
A-123	OFFICIALS
A-124	RESTROOM
A-125	STORAGE
A-126	CONFERENCE
A-127	TRAINING
A-128	OFFICE
A-129	ICE
A-130	RESTROOM
A-131	CORRIDOR
A-132	STAIRS
A-133	STORAGE
A-134	LAUNDRY
A-135	LOBBY
A-135A	ELEVATOR
A-136	VESTIBULE
A-137	STAIRS
A-138	CORRIDOR
A-139	TOILET
A-140	GIRLS ATHLETIC LOCKERS
A-141	OFFICE
A-142	RESTROOM
A-143	TOILET
A-144	MECHANICAL
A-145	BOYS ATHLETIC LOCKERS
A-146	OFFICE
A-147	RESTROOM
A-148	CORRIDOR
A-149	MEN'S TOILET
A-150	WOMEN'S TOILET
A-151	MECHANICAL
A-152	RESTROOM
A-153	CONCESSIONS
A-154	STORAGE
A-155	PATIO
A-156	CHILLER



NORTH STAR BUILDING FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PJD
DRAWN BY PJD
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

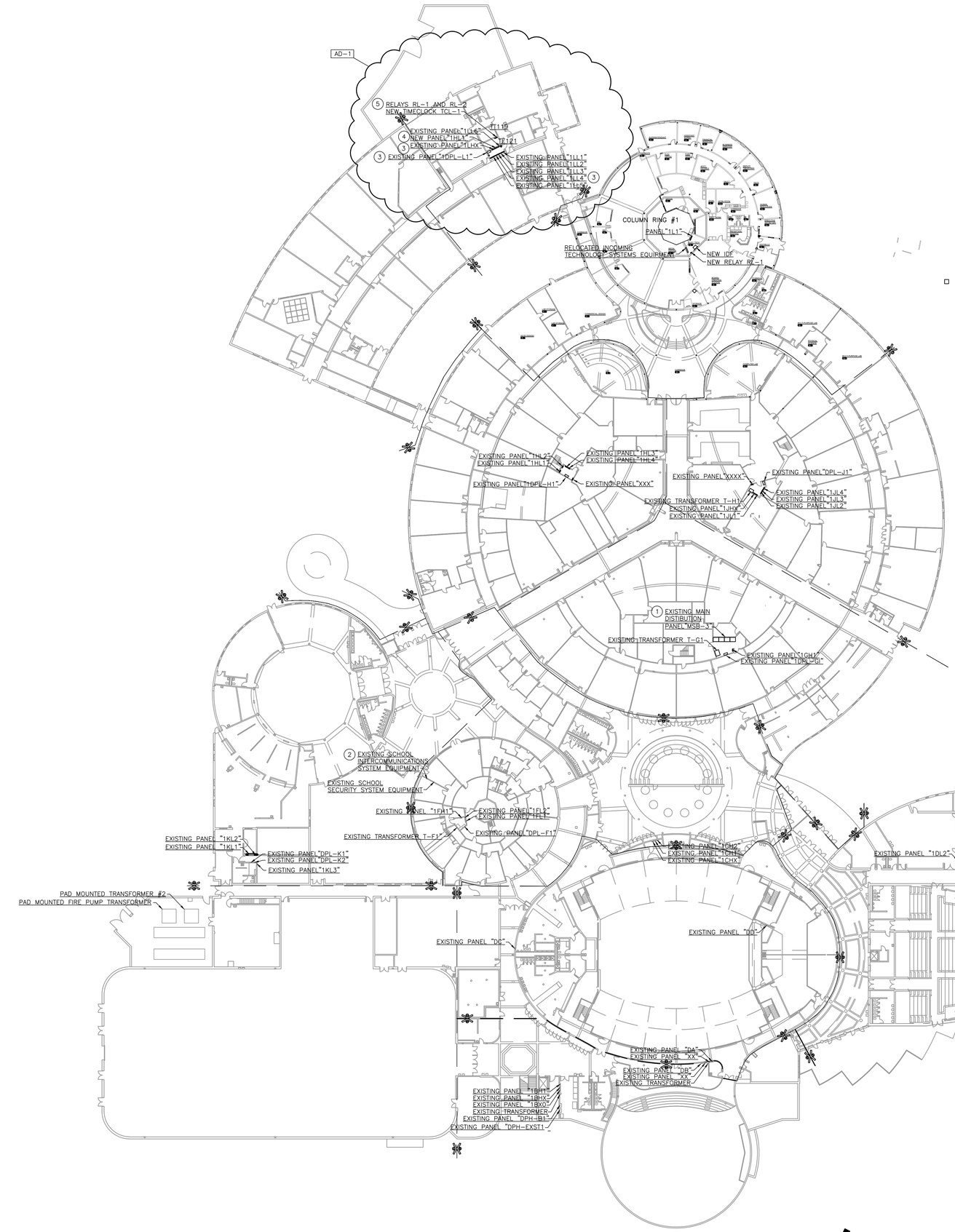
MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING FIRST FLOOR PLUMBING PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
P-201-NS

Monday, 10/9/2023 - 2:32 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\08 PLUM\P-201-NS.DWG



OVERALL ELECTRICAL FIRST FLOOR PLAN

SCALE: 1/32" = 1'-0"

NORTH

GENERAL NOTES:

1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.

AD-1

ELECTRICAL PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

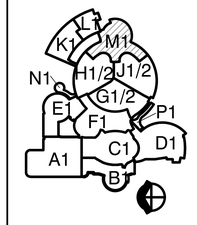
1. MODIFY EXISTING MAIN DISTRIBUTION PANEL "MDP3" AS SHOWN ON THE PARTIAL POWER DISTRIBUTION DIAGRAM ON SHEET E-701-AD.
2. PROVIDE ALL LABOR AND MATERIAL TO PROPERLY MODIFY THE EXISTING SCHOOL INTERCOMMUNICATIONS SYSTEM EQUIPMENT AS NECESSARY TO ACCOMMODATE THE NEW SPEAKERS, EQUIPMENT, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
3. MODIFY EXISTING PANELBOARDS AS SHOWN ON THE PANEL SCHEDULES ON SHEET E-602-AD.
4. PROVIDE NEW PANEL "1LH1' TO REPLACE EXISTING PANEL "1LH1", INTERCEPT EXISTING CIRCUITS SERVING EXISTING LIGHTING FIXTURES, EQUIPMENT ,ETC. THAT REMAIN AND EXTEND TO NEW PANEL "1LLH1". CONNECT NEW PANEL TO THE EXISTING FEEDER.
5. TORK DZS200BP TWO CHANNEL TIMECLOCK TCL-1. CHANNEL ONE CONTROLS RELAY RL-1 (EAST PARKING LOT LIGHTS), CHANNEL TWO CONTROLS RELAY RL-2 (SCHOOL SIGN) (CIRCUIT 1LH1-53). RELAYS PROVIDED AS PART OF THE SITE, BLEACHERS AND DRAINAGE PROJECT. CONNECT THESE RELAYS TO TO THE TIMECLOCK TCL-1.

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION



GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115

DATE 09/25/23

COORDINATED BY PCB

DRAWN BY PCB JVC

CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

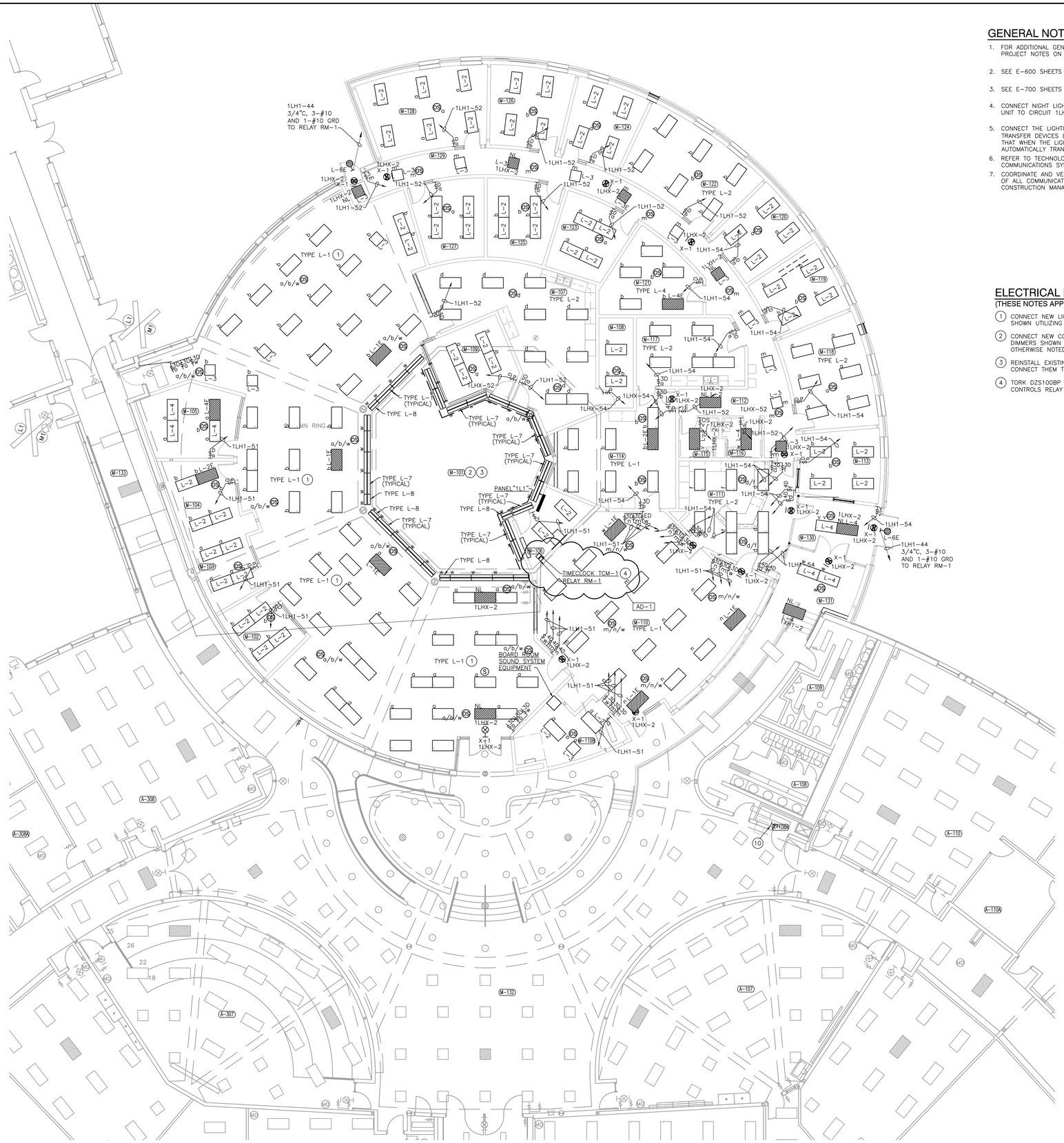
REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NEW ADMIN AND MEDIA CENTER - OVERALL ELECTRICAL FIRST FLOOR PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-002-AD



GENERAL NOTES:

1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.
4. CONNECT NIGHT LIGHTS/EMERGENCY LIGHTS AND EXIT SIGNS IN THIS UNIT TO CIRCUIT 1LHX-2 AHEAD OF ANY CONTROLS.
5. CONNECT THE LIGHTING FIXTURES WITH EMERGENCY GENERATOR TRANSFER DEVICES (GTD'S) SHOWN IN THIS UNIT TO CIRCUIT 1LHX-4 SO THAT WHEN THE LIGHTING FIXTURE SENSES LOSS OF NORMAL POWER, IT AUTOMATICALLY TRANSFERS OVER TO THE EMERGENCY CIRCUIT.
6. REFER TO TECHNOLOGY DRAWINGS FOR TECHNOLOGY AND COMMUNICATIONS SYSTEMS EQUIPMENT, DEVICES, CABLING, ETC..
7. COORDINATE AND VERIFY EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL COMMUNICATIONS SYSTEM EQUIPMENT WITH OWNER, CONSTRUCTION MANAGER AND ARCHITECT PRIOR TO ROUGHING-IN

ELECTRICAL PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

1. CONNECT NEW LIGHTING FIXTURES IN THIS ROOM TO THE NEW WALL DIMMERS SHOWN UTILIZING THE EXISTING LIGHTING CIRCUITS, UNLESS OTHERWISE NOTED.
2. CONNECT NEW COVE LIGHTING FIXTURES IN THIS ROOM TO THE NEW WALL DIMMERS SHOWN UTILIZING THE EXISTING COVE LIGHTING CIRCUITS, UNLESS OTHERWISE NOTED.
3. REINSTALL EXISTING WALL MOUNTED SPEAKER INTO THE NEW COVE WALLS AND CONNECT THEM TO THE EXISTING SCHOOL INTERCOMMUNICATIONS SYSTEM.
4. TORK DZS100BP SINGLE CHANNEL TIMECLOCK TLC-1. CHANNEL ONE CONTROLS RELAY RM-1 (BUILDING SECURITY LIGHTS) (CIRCUIT 1LH1-55).

ROOM LEGEND

ROOM NO.	ROOM NAME
M-101	MEDIA CENTER
M-102	SGI
M-103	SGI
M-104	SGI
M-105	SGI
M-106	ELECTRICAL/TECH
M-107	WORK
M-108	STORAGE
M-109	OFFICE
M-110	BOARD/CREATION STATION
M-110B	STORAGE
M-111	RECEPTION/WAITING
M-112	CORRIDOR
M-113	EXECUTIVE SECRETARY
M-114	EXECUTIVE WORK
M-115	RESTROOM
M-116	RESTROOM
M-117	WORK ROOM
M-118	HUMAN RESOURCES
M-119	TECH
M-120	DEPUTY TREASURER
M-121	VAULT
M-122	BUSINESS SERVICES
M-123	ACCT. PAYABLE
M-124	FINANCIAL ASSISTANT
M-125	FLEX OFFICE
M-126	ASSIST. SUPERINTENDENT
M-127	FLEX OFFICE
M-128	SUPERINTENDENT
M-129	CORRIDOR
M-130	VESTIBULE
M-131	CORRIDOR
M-132	CORRIDOR
M-133	CORRIDOR

NEW ADMIN AND MEDIA CENTER ELECTRICAL FIRST FLOOR LIGHTING PLAN - UNIT "M1"

SCALE: 1/8" = 1'-0"

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB JVC
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

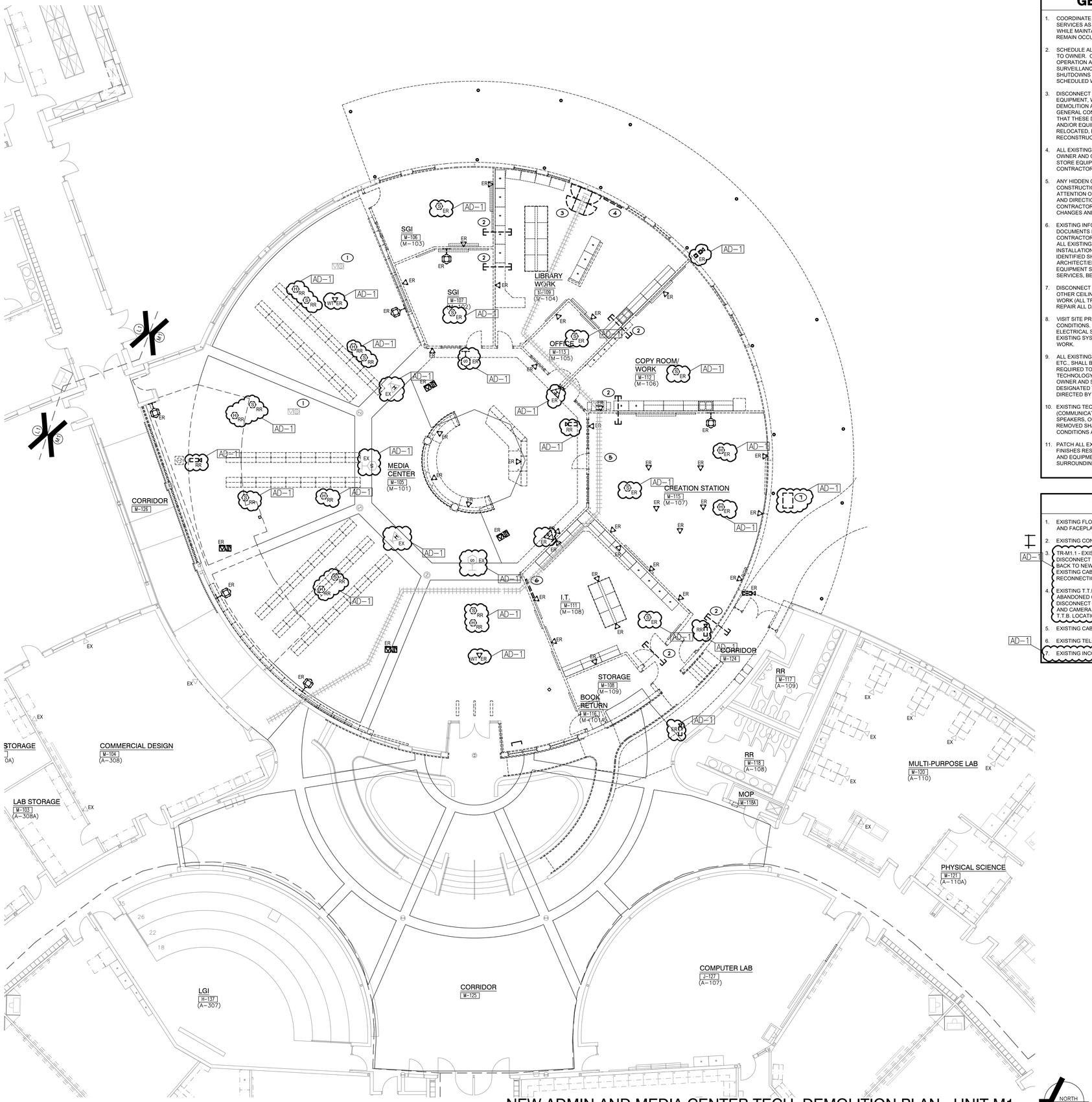
MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NEW ADMIN AND MEDIA CENTER ELECTRICAL FIRST FLOOR LIGHTING PLAN - UNIT "M1"

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-101-AD

Wednesday, 10/4/2023 - 2:34 PM - LAST SAVED BY:JCHAMBERS
Y:\23-110 TRI-CREEK SC - LOWELL HS NEW ENTRY AND MEDIA CENTER\23-110 DRAWINGS\09 ELEC\E-101-AD.DWG



NEW ADMIN AND MEDIA CENTER TECH. DEMOLITION PLAN - UNIT M1

1/8" = 1'-0"

GENERAL NOTES

1. COORDINATE PHASING OF WORK AND PROVIDE TEMPORARY SERVICES AS REQUIRED FOR THE IMPLEMENTATION OF ALL WORK WHILE MAINTAINING SERVICES TO PORTIONS OF BUILDING TO REMAIN OCCUPIED.
2. SCHEDULE ALL WORK TO AVOID DOWNTIME AND INCONVENIENCE TO OWNER. OWNER'S EXISTING FACILITY SHALL REMAIN IN OPERATION AT ALL TIMES, INCLUDING ACCESS CONTROL, VIDEO SURVEILLANCE, AND OTHER SPECIAL SYSTEMS. ALL REQUIRED SHUTDOWNS OF EXISTING FACILITY UTILITIES SHALL BE SCHEDULED WITH OWNER'S OPERATING PERSONNEL.
3. DISCONNECT AND REMOVE EXISTING TECHNOLOGY DEVICES, EQUIPMENT, WIRING, ETC., AS REQUIRED TO FACILITATE DEMOLITION AND RECONSTRUCTION WORK. COORDINATE WITH GENERAL CONSTRUCTION. THE CONTRACTOR IS HEREBY ADVISED THAT THESE DRAWINGS MAY NOT INDICATE ALL EXISTING WIRING AND/OR EQUIPMENT WHICH MUST BE REMOVED, REWORKED, RELOCATED, ETC., TO ACCOMMODATE DEMOLITION AND RECONSTRUCTION WORK IN THE EXISTING BUILDING.
4. ALL EXISTING EQUIPMENT SHALL REMAIN PROPERTY OF THE OWNER AND OWNER SHALL DETERMINE IF CONTRACTOR IS TO STORE EQUIPMENT ON SITE AT OWNER SELECTED LOCATION OR IF CONTRACTOR IS TO ABANDON OR REMOVE EQUIPMENT FROM SITE.
5. ANY HIDDEN CONDITIONS IDENTIFIED THROUGH THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITTEN FORM FOR REVIEW AND DIRECTION. FAILURE TO DO SO SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR ANY AND ALL REQUIRED CHANGES AND COSTS TO CORRECT SAID HIDDEN CONDITION.
6. EXISTING INFORMATION IDENTIFIED ON THE CONTRACT DOCUMENTS IS SCHEMATIC ONLY AS AN AID TO THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY ADDRESS ALL EXISTING CONDITIONS FOR A COMPLETE AND PROPER INSTALLATION OF NEW SYSTEMS. ALL EXISTING EQUIPMENT NOT IDENTIFIED SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR REVIEW AS TO WHETHER THE EQUIPMENT SHALL REMAIN AND BE RECONNECTED TO THE NEW SERVICES, BE RELOCATED, BE ABANDONED, ETC.
7. DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND ANY OTHER CEILING DEVICES AS REQUIRED FOR INSTALLATION OF WORK (ALL TRADES). REINSTALL UPON COMPLETION OF WORK. REPAIR ALL DAMAGED FIXTURES AND DEVICES.
8. VISIT SITE PRIOR TO BIDDING TO DETERMINE ALL FIELD CONDITIONS. VERIFY ALL EXISTING INTERIOR AND EXTERIOR ELECTRICAL SYSTEMS TO VERIFY QUANTITIES AND LOCATIONS OF EXISTING SYSTEMS TO DETERMINE FULL EXTENT OF DEMOLITION WORK.
9. ALL EXISTING TECHNOLOGY AND/OR SECURITY DEVICES, CONDUIT, ETC., SHALL BE REMOVED AS NOTED ON DRAWINGS AND AS REQUIRED TO MEET NEW SCOPE OF WORK. ALL EXISTING TECHNOLOGY EQUIPMENT SHALL REMAIN PROPERTY OF THE OWNER AND SHALL BE PROPERLY STORED ON SITE, OR DESIGNATED TO BE ABANDONED AND REMOVED FROM SITE AS DIRECTED BY OWNER.
10. EXISTING TECHNOLOGY AND/OR SECURITY DEVICES (COMMUNICATION OUTLETS, CAMERAS, CARD READRES, SPEAKERS, OUTLET BOXES, CONDUIT, ETC.) WITHIN WALLS TO BE REMOVED SHALL BE DISCONNECTED COMPLETELY. VERIFY EXACT CONDITIONS AND QUANTITIES IN FIELD.
11. PATCH ALL EXISTING CEILING, FLOOR, WALL AND SURROUNDING FINISHES RESULTING FROM REMOVAL OF EXISTING MATERIALS AND EQUIPMENT SO THAT FINISH WILL MATCH EXISTING IN SURROUNDING AREAS.

SHEET NOTES

1. EXISTING FLOOR BOX TO BE REPLACED. REMOVE EXISTING JACKS AND FACEPLATE. REMOVE EXISTING CABLE BACK TO THE SOURCE.
2. EXISTING CONDUIT SLEEVES TO BE REMOVED.
3. TR-M1.1 - EXISTING TELECOM CABINETS TO BE RELOCATED. DISCONNECT EXISTING BACKBONE FIBER CONNECTION AND PULL BACK TO NEW RACK LOCATION. DISCONNECT AND REMOVE EXISTING CABLING, NOTING LOCATIONS SERVED, FOR RECONNECTION. COORDINATE EXACT REQUIREMENTS IN FIELD.
4. EXISTING T.T.B. TO BE REMOVED. DISCONNECT AND REMOVE ABANDONED COAX CABLING AND EQUIPMENT, COMPLETE. DISCONNECT AND RELOCATE EXISTING DOOR ACCESS HARDWARE AND CAMERA POWER SUPPLIES. EXTEND EXISTING WIRING TO NEW T.T.B. LOCATION, REINSTALL AND CONNECT.
5. EXISTING CABLE TRAY TO REMAIN.
6. EXISTING TELECOM DEMARC TO BE RELOCATED.
7. EXISTING INCOMING FIBER HAND HOLE TO BE REMOVED.

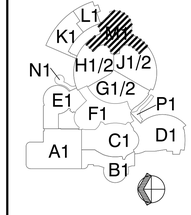
GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

MILLIES
ENGINEERING GROUP
(219) 924-8400
www.milliesengineeringgroup.com

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION



GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
23-115
DATE
09/22/23
COORDINATED BY
SM
DRAWN BY
JC,SM
CHECKED BY
DJ

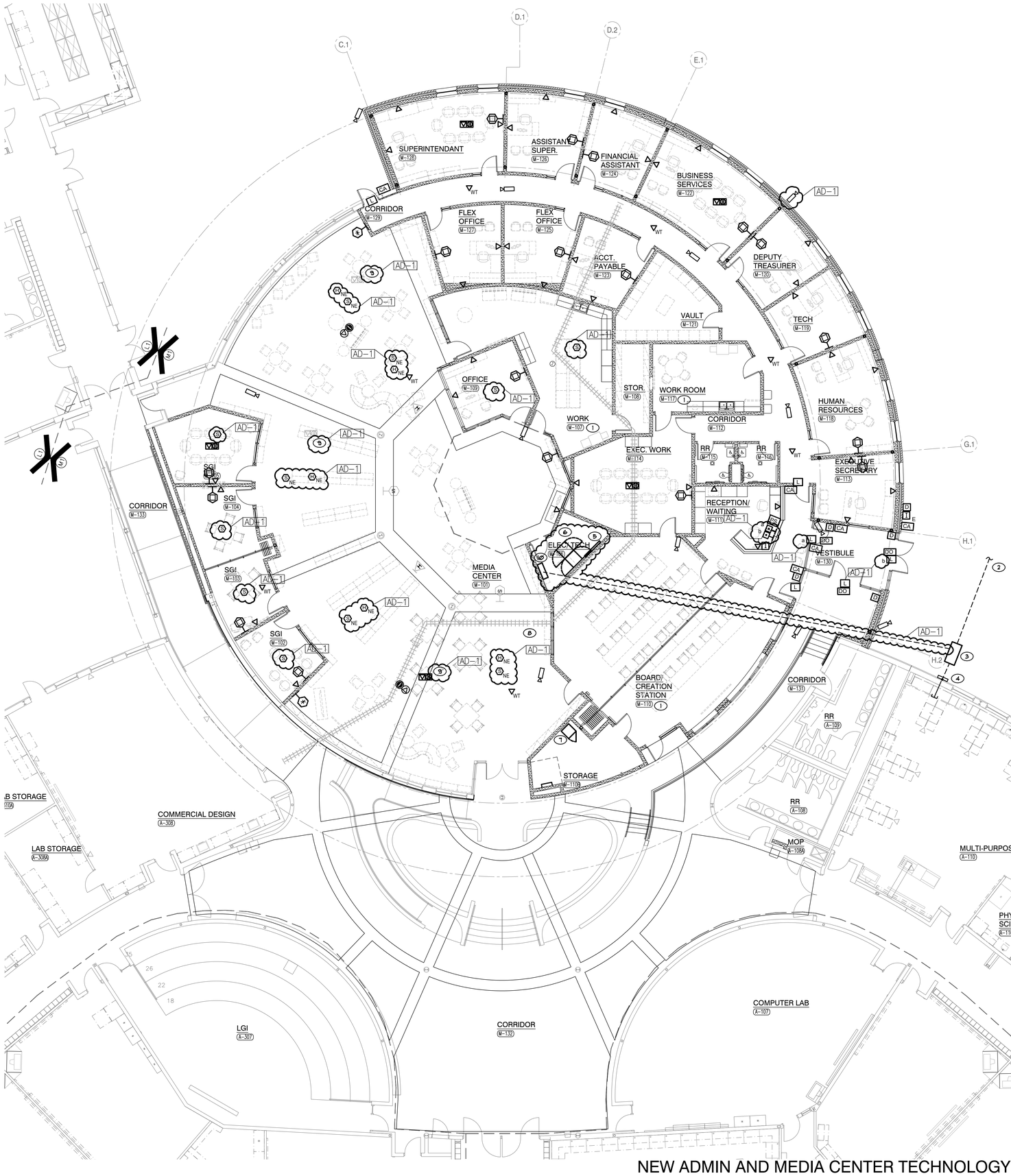
REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 01

DRAWING
NEW ADMIN AND MEDIA CENTER TECH. DEMOLITION PLAN - UNIT M1

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
TD-101-AD



NEW ADMIN AND MEDIA CENTER TECHNOLOGY PLAN - UNIT M1

1/8" = 1'-0"

NORTH

GENERAL NOTES

1. ALL NEW HORIZONTAL CABLES TO BE ROUTED TO TR-M1.1.

SHEET NOTES

1. SEE ENLARGED PLAN OF THIS ROOM ON SHEET T-401-AD FOR ADDITIONAL WORK IN THIS ROOM.
2. DIRECTIONAL BORE NEW PVC 4"C. FOR TELECOM SERVICE ROUTED TO EXISTIN GRISER POLE AT CORNER OF HOLTZ RD AND E COMMERCIAL AVE. COORDINATE EXACT ROUTING AND REQUIREMENTS WITH TELECOM SERVICE PROVIDER.
3. NEW TELECOM SERVICE VAULT AND PEDESTAL.

AD-1

4. EXTEND NEW 4" GRSC. UP BUILDING EXTERIOR. PROVIDE 36"X36" PULL BOX OR AS SIZED PER UTILITY STANDARDS AND STUB INTO EXISTING ACCESSIBLE CEILING SPACE FOR EXTENSION OF TEMPORARY TELECOM SERVICE FIBER AND COAX. COORDINATE EXACT REQUIREMENTS WITH TELECOM SERVICE PROVIDER. REMOVE SURFACE MOUNTED CONDUITS AND PULL BOX, AND REPAIR ALL FINISHES TO MATCH EXISTING AFTER INSTALLATION OF PERMANENT TELECOM SERVICE.

5. NEW 4'X8' T.T.B.
6. RELOCATED TR-M1.1 TELECOM CABINETS.
7. NEW A/V EQUIPMENT RACK.

AD-1

8. INTERCEPT EXISTING CABLE TRAY AND EXTEND AS INDICATED.
9. PROVIDE NEW DUPLEX DATA OUTLET WITHIN EXISTING FLOOR BOX TO BE REPLACED.
10. NEW FIBER ENTRY PULL BOX. PROVIDE 36" X 36" WALL MOUNTED PULL BOX PER UTILITY COMPANY STANDARDS. EXTEND (3) 4"C. BELOW GRADE TO NEW UTILTIY COMPANY VAULT. EXTEND (3) 4"C. UP TO ACCESSIBLE CEILING SPACE. COORDIANTE EXACT REQUIREMENTS AND PHASING WITH UTILITY COMPANY PRIOR TO ROUGH-IN. EXISTING FIBER SERVICE SHALL REMAIN OPERATIONAL UNTIL NEW INSTALLATION CAN BE COMPLETED.

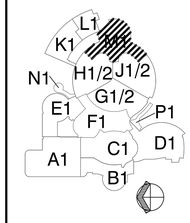
GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

MILLIES ENGINEERING GROUP
(219) 924-8400
www.milliesengineeringgroup.com

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION



GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/22/23
COORDINATED BY SM
DRAWN BY JC,SM
CHECKED BY DJ

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 01

DRAWING
NEW ADMIN AND MEDIA CENTER TECHNOLOGY PLAN - UNIT M1

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
T-101-AD

GENERAL ELECTRICAL DEMOLITION NOTES:

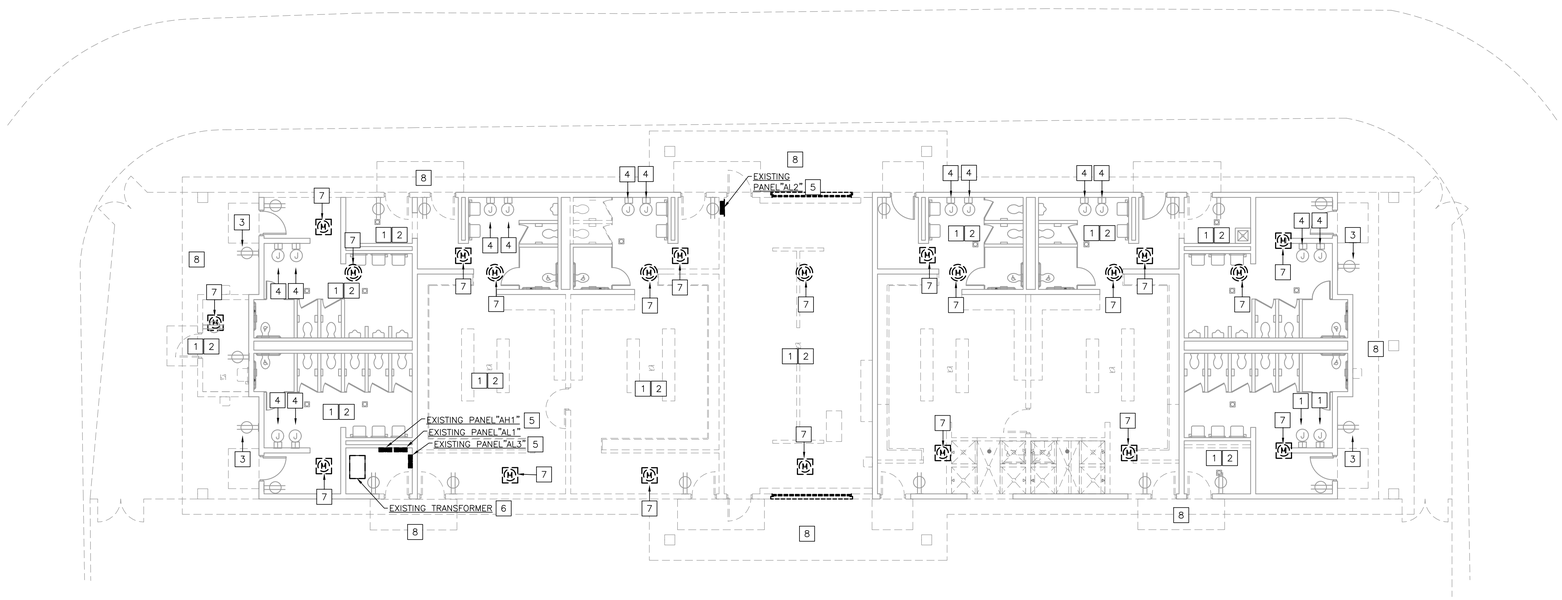
1. FOR ADDITIONAL GENERAL ELECTRICAL DEMOLITION NOTES SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.

2. DISCONNECT EXISTING EQUIPMENT WITH ELECTRICAL CONNECTIONS BEING DEMOLISHED AS SHOWN ON THE ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS. THESE ITEMS INCLUDE AIR HANDLING UNITS, CABINET HEATERS, FAN POWERED BOXES, EXHAUST FANS, PUMPS, WATER HEATERS, DISPLAY CASES, ETC.

DEMOLITION PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

1. REMOVE EXISTING LIGHTING FIXTURES AND CONTROLS IN THIS ROOM. REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WIRING DEVICES IN THIS ROOM AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE, UNLESS OTHERWISE NOTED.
3. REMOVE EXISTING RECEPTACLE AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE, UNLESS OTHERWISE NOTED.
4. REMOVE EXISTING HAND DRYER AND ASSOCIATED WIRING BACK TO THE SOURCE, UNLESS OTHERWISE NOTED.
5. EXISTING PANELBOARD BEING REMOVED AS PART OF THE LOWELL HIGH SCHOOL SITE, BLEACHERS AND TURF/DRAINAGE PROJECT. REMOVE OR MODIFY BRANCH CIRCUIT WIRING AS NOTED. (AD-1)
6. EXISTING TRANSFORMER BEING REMOVED AS PART OF THE LOWELL HIGH SCHOOL SITE, BLEACHERS AND TURF/DRAINAGE PROJECT.
7. DISCONNECT EXISTING MECHANICAL EQUIPMENT IN THIS ROOM AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE, UNLESS OTHERWISE NOTED.
8. REMOVE EXISTING EXTERIOR LIGHTING AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE, UNLESS OTHERWISE NOTED.



NORTH STAR BUILDING FIRST FLOOR ELECTRICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB JVC
CHECKED BY UPB

JOSEPH P. BIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING FIRST FLOOR ELECTRICAL DEMOLITION PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
ED101-NS

Friday, 10/6/2023 - 11:22 AM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\ED101-NS.DWG

GENERAL NOTES:

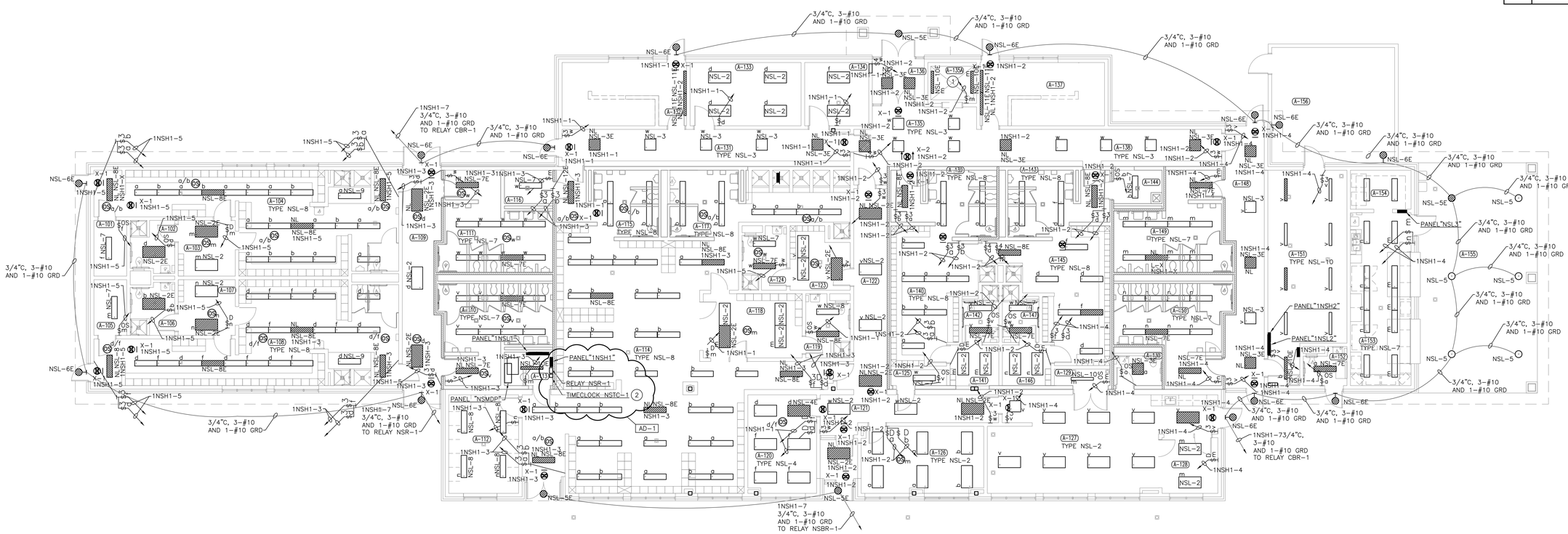
1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.
4. PANELBOARDS PROVIDED IN LOWELL HIGH SCHOOL, BLEACHERS AND TURF/DRAINAGE PROJECT. CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT WIRNG FROM THESE PANELBOARDS AND PROVIDE NEW TYPE CIRCUIT DIRECTORY IDENTIFYING ITEMS SERVED AND ALL SPARE/SPACES.

ELECTRICAL PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

1. PROVIDE LIGHTING FIXTURES AND LIGHT SWITCH IN ELEVATOR PIT. VERIFY EXACT LOCATION WITH ELEVATOR INSTALLER, CONSTRUCTION MANAGER, PRIOR TO ROUGH-IN.
2. TORK DZS100BP SINGLE CHANNEL TIMECLOCK NSTC-1. CHANNEL ONE CONTROLS RELAY NSR-1 (BUILDING SECURITY LIGHTS) (CIRCUIT 1NSH1-9). AD-1

ROOM LEGEND	
ROOM NO.	ROOM NAME
A-101	STORAGE
A-102	RESTROOM
A-103	OFFICE
A-104	MEN ATHLETIC LOCKERS
A-105	STORAGE
A-106	RESTROOM
A-107	OFFICE
A-108	WOMEN ATHLETIC LOCKERS
A-109	CORRIDOR
A-110	WOMEN'S TOILET
A-111	MEN'S TOILET
A-112	DRYING
A-113	ELECTRICAL
A-114	FOOTBALL LOCKERS
A-115	TOILET
A-116	MECHANICAL
A-117	TOILET
A-118	OFFICE
A-119	RESTROOM
A-120	CONFERENCE
A-121	CORRIDOR
A-122	CORRIDOR
A-123	OFFICIALS
A-124	RESTROOM
A-125	STORAGE
A-126	CONFERENCE
A-127	TRAINING
A-128	OFFICE
A-129	ICE
A-130	RESTROOM
A-131	CORRIDOR
A-132	STAIRS
A-133	STORAGE
A-134	LAUNDRY
A-135	LOBBY
A-135A	ELEVATOR
A-136	VESTIBULE
A-137	STAIRS
A-138	CORRIDOR
A-139	TOILET
A-140	GIRLS ATHLETIC LOCKERS
A-141	OFFICE
A-142	RESTROOM
A-143	TOILET
A-144	MECHANICAL
A-145	BOYS ATHLETIC LOCKERS
A-146	OFFICE
A-147	RESTROOM
A-148	CORRIDOR
A-149	MEN'S TOILET
A-150	WOMEN'S TOILET
A-151	MECHANICAL
A-152	RESTROOM
A-153	CONCESSIONS
A-154	STORAGE
A-155	PATIO
A-156	CHILLER



NORTH STAR BUILDING FIRST FLOOR ELECTRICAL LIGHTING PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED ND. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING

NORTH STAR BUILDING FIRST FLOOR ELECTRICAL LIGHTING PLAN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET

E-101-NS

Wednesday, 10/4/2023 - 3:40 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-101-NS.DWG

GENERAL NOTES:

1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.
4. PANELBOARDS PROVIDED IN LOWELL HIGH SCHOOL, BLEACHERS AND TURF/DRAINAGE PROJECT. CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT WIRNG FROM THESE PANELBOARDS AND PROVIDE NEW TYPE CIRCUIT DIRECTORY IDENTIFYING ITEMS SERVED AND ALL SPARE/SPACES.
5. SEE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION AND ELECTRICAL REQUIREMENTS. COORDINATE WITH OWNER, CONSTRUCTION MANAGER AND ARCHITECT AND VERIFY EXACT LOCATIONS AND REQUIREMENTS OF THE VOIVE/DATA AND VIDEO EQUPMENT AND DEVICES PRIOR TO ROUGHING-IN.

ELECTRICAL PLAN NOTES:

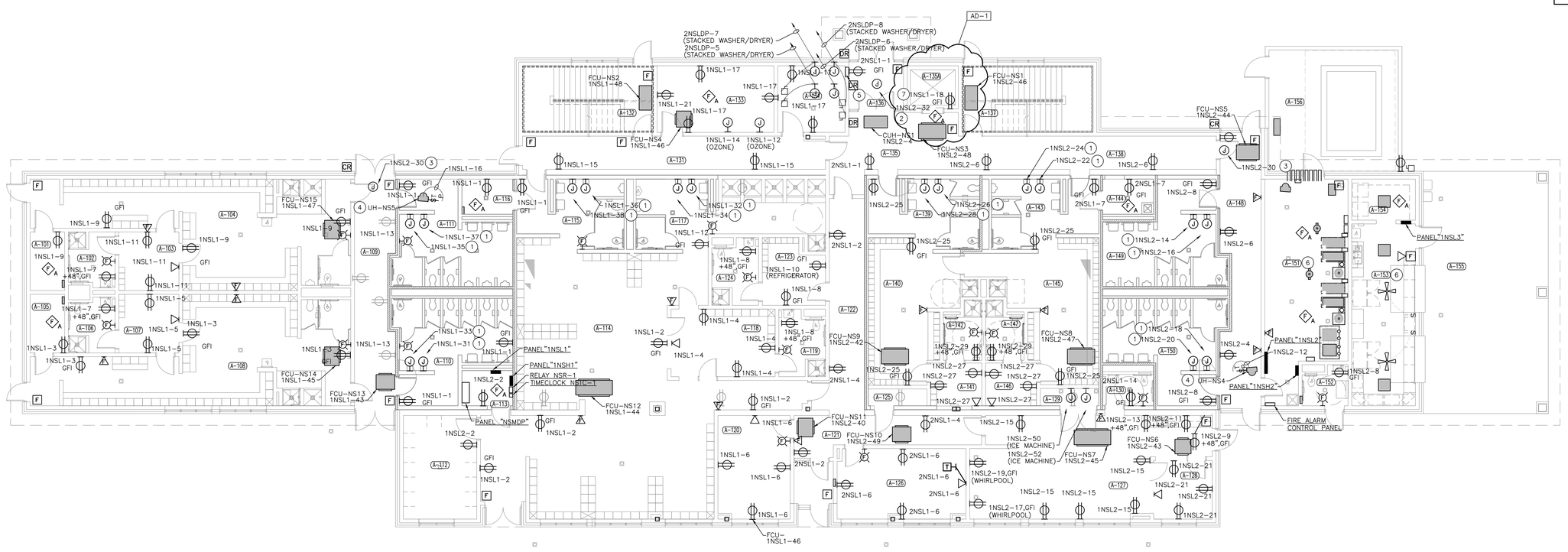
(THESE NOTES APPLY TO THIS SHEET ONLY)

1. PROVIDE POWER CONNECTION FOR ELECTRIC HAND DRYER.
2. PROVIDE POWER CONNECTION FOR AUTOMATIC DOOR.
3. PROVIDE POWER CONNECTION FOR CARD READER.
4. PROVIDE MANUAL MOTOR STARTER WITH THERMAL OVERLAODS AND PILOT LIGHT IN THE ATTIC NEAR THE UNIT HEATER. PROVIDE THE APPROPRIATE SUPPORTS.
5. FIRE ALARM SYSTEM REMOTE ANNUNCIATOR.
6. SEE ENLARGED PLAN OF THIS ROOM ON SHEET E-401-NS FOR ADDITIONAL WORK IN THIS ROOM.
7. PROVIDE GFI TYPE RECEPTACLE IN ELEVATOR PIT.

AD-1

ROOM LEGEND

ROOM NO.	ROOM NAME
A-101	STORAGE
A-102	RESTROOM
A-103	OFFICE
A-104	MEN ATHLETIC LOCKERS
A-105	STORAGE
A-106	RESTROOM
A-107	OFFICE
A-108	WOMEN ATHLETIC LOCKERS
A-109	CORRIDOR
A-110	WOMEN'S TOILET
A-111	MEN'S TOILET
A-112	DRYING
A-113	ELECTRICAL
A-114	FOOTBALL LOCKERS
A-115	TOILET
A-116	MECHANICAL
A-117	TOILET
A-118	OFFICE
A-119	RESTROOM
A-120	CONFERENCE
A-121	CORRIDOR
A-122	CORRIDOR
A-123	OFFICIALS
A-124	RESTROOM
A-125	STORAGE
A-126	CONFERENCE
A-127	TRAINING
A-128	OFFICE
A-129	ICE
A-130	RESTROOM
A-131	CORRIDOR
A-132	STAIRS
A-133	STORAGE
A-134	LAUNDRY
A-135	LOBBY
A-135A	ELEVATOR
A-136	VESTIBULE
A-137	STAIRS
A-138	CORRIDOR
A-139	TOILET
A-140	GIRLS ATHLETIC LOCKERS
A-141	OFFICE
A-142	RESTROOM
A-143	TOILET
A-144	MECHANICAL
A-145	BOYS ATHLETIC LOCKERS
A-146	OFFICE
A-147	RESTROOM
A-148	CORRIDOR
A-149	MEN'S TOILET
A-150	WOMEN'S TOILET
A-151	MECHANICAL
A-152	RESTROOM
A-153	CONCESSIONS
A-154	STORAGE
A-155	PATIO
A-156	CHILLER



NORTH STAR BUILDING FIRST FLOOR ELECTRICAL POWER PLAN

SCALE: 1/8" = 1'-0"

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING FIRST FLOOR ELECTRICAL POWER PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-201-NS

Wednesday, 10/4/2023 - 3:57 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-201-NS.DWG

GENERAL NOTES:

1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.
4. PANELBOARDS PROVIDED IN LOWELL HIGH SCHOOL, BLEACHERS AND TURF/DRAINAGE PROJECT. CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT WIRNG FROM THESE PANELBOARDS AND PROVIDE NEW TYPE CIRCUIT DIRECTORY IDENTIFYING ITEMS SERVED AND ALL SPARE/SPACES.
5. SEE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION AND ELECTRICAL REQUIREMENTS. COORDINATE WITH OWNER, CONSTRUCTION MANAGER AND ARCHITECT AND VERIFY EXACT LOCATIONS AND REQUIREMENTS OF THE VOIVE/DATA AND VIDEO EQUPMENT AND DEVICES PRIOR TO ROUGHING-IN.

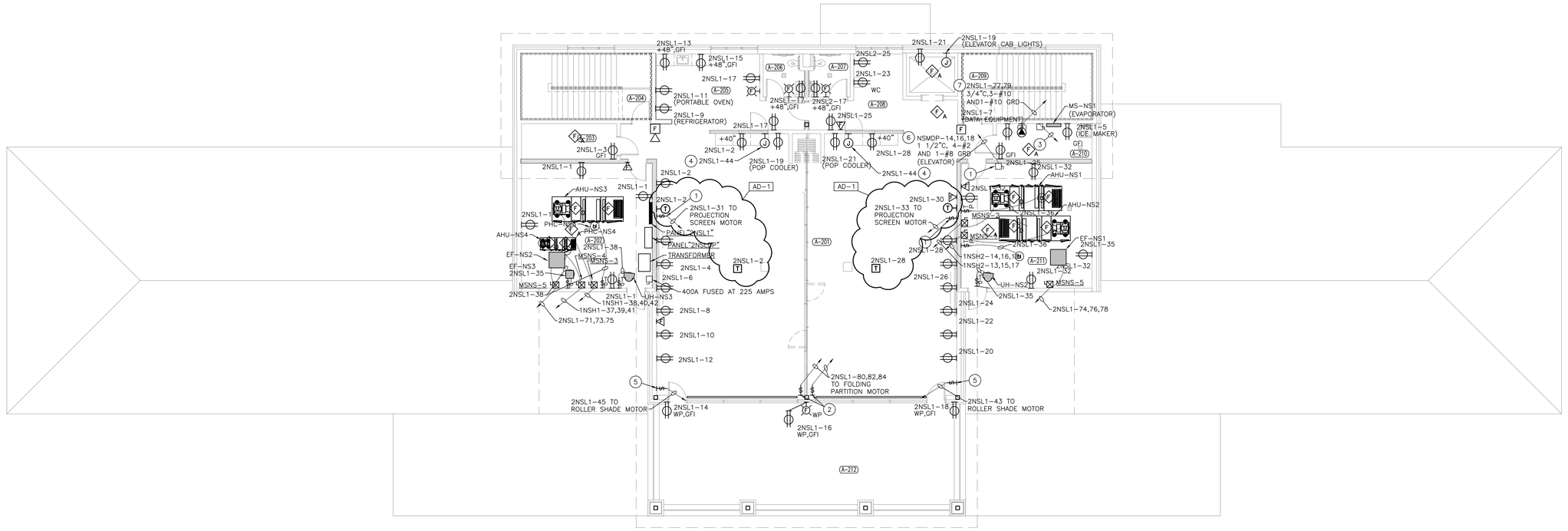
ROOM LEGEND

ROOM NO.	ROOM NAME
A-201	TEAM MEETING
A-202	MECHANICAL
A-203	STORAGE/TECH
A-204	STAIRS
A-205	KITCHENETTE
A-206	RESTROOM
A-207	RESTROOM
A-208	LOBBY
A-209	STAIRS
A-210	STORAGE
A-211	MECHANICAL
A-212	SEATING

ELECTRICAL PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

1. MOTORIZED PROJECTION SCREEN CONTROLLER BY PROJECTION SCREEN INSTALLER INSTALLED BY DIVISION 26.-
2. MOTORIZED FOLDING PARTITION CONTROLLER BY FOLDING PARTITION INSTALLER INSTALLED BY DIVISION 26.
3. PROVIDE POWER CONNECTION FROM MS-NS1 (ACCU) TO MS-NS1 (EVAPORATOR).
4. PROVIDE POWER CONNECTIONS FOR ELECTROLYTIC GLASS. COORDINATE WITH ELECTROLYTIC GLASS INSTALLER TO DETERMINE EXACT ELECTRICAL REQUIREMENTS AND PROVIDE ALL LABOR AND MATERIAL TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. (ALTERNATE BID).
5. MOTORIZED ROLLING SHADES CONTROLLER BY ROLLING SHADES INSTALLER INSTALLED BY DIVISION 26.
6. PROVIDE 3P-30 AMP FUSIBLE DISCONNECT FUSED AT 30 AMPS FOR ELEVATOR AND CONNECT TO THE CIRCUIT INDICATED. COORDINATE AND VERIFY EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH ELEVATOR INSTALLER, CONSTUCTION MANAGER AND ARCHITECT PRIOR TO ROUGHING-IN.
7. PROVIDE A 208 VOLT SINGLE PHASE 30 AMP RECEPTACLE FOR THE DATA EQUIPMENT. VERIFY EXACT ELECTRICAL REQUIREMENTS WITH THE OWNER, CONSTRUCTION MANAGER AND ARCHITECT PRIOR TO ROUGHING-IN.



NORTH STAR BUILDING SECOND FLOOR ELECTRICAL POWER PLAN

SCALE: 1/8" = 1'-0"

NORTH

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
23-115
DATE
09/25/23
COORDINATED BY
PCB
DRAWN BY
PCB
CHECKED BY
JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

DRAWING
NORTH STAR BUILDING SECOND FLOOR ELECTRICAL POWER PLAN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-202-NS

Wednesday, 10/4/2023 - 5:02 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-202-NS.DWG

NORTH STAR BUILDING LIGHTING RELAY SCHEDULE

MARK & TYPE	ITEM	CONTROLLED CIRCUIT(S)	COIL CKT.	COIL VOLT	ROOM NO.	CONTACTS	SELECTOR SWITCH	CONTROL	SEE NOTES
NSR-1 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	NORTH STAR BUILDING EXTERIOR LIGHTS	1NSH1-7	1NSH1-9	277	A-113	N.O.	HOA	TIMECLOCK	1,2,4,5,6

NOTES:
1. FURNISH NEMA 1 ENCLOSURE WITH HINGED COVER UNLESS OTHERWISE NOTED.
2. ELECTRICALLY HELD.
3. MECHANICALLY HELD.
4. PROVIDE SELECTOR SWITCH IN RELAY ENCLOSURES WITH LOOP AND BRIDLE STRAPS FROM MAIN DEPARTMENT TO HINGED COVER FOR SELECTOR SWITCHES.
5. FURNISH FUSE PROTECTION FOR COIL CIRCUIT.
6. ALL RELAYS AND SELECTOR SWITCHES SHALL BE PREWIRED BY MANUFACTURER.

MOTOR STARTER SCHEDULE

MARK	ITEM	NEMA SIZE	HP	ROOM NO.	CONTROL		SEE NOTES
					ENCL.	REMOTE	
MSNS-1	AIR HANDLING UNIT AHUNS-1	0	7 1/2	A-211	SA	---	1,3,5,7,8
MSNS-2	AIR HANDLING UNIT AHUNS-2	0	7 1/2	A-211	SA	---	1,3,5,7,8
MSNS-3	AIR HANDLING UNIT AHUNS-3	0	7 1/2	A-202	SA	---	1,3,5,7,8
MSNS-4	AIR HANDLING UNIT AHUNS-4	0	7 1/2	A-202	SA	---	1,3,5,7,8
MSNS-5	EXHAUST FAN EF-NS1	0	1	A-211	SA	---	1,3,5,7,8
MSNS-6	EXHAUST FAN EF-NS2	0	1	A-202	SA	---	1,3,5,7,8

NOTES:
1. MOTOR STARTERS SHALL BE 3-POLE COMBINATION TYPE WITH NEMA 1 ENCLOSURE.
2. MOTOR STARTERS SHALL HAVE 480/120 VOLT CONTROL CIRCUIT TRANSFORMER WITH CONTROL CIRCUIT FUSES.
3. MOTOR STARTERS SHALL HAVE 120 VOLT COIL AND 600 VOLT CONTACTS.
4. 120 VOLT MOMENTARY CONTACT PUSH BUTTON: P=ON-OFF; T=TEST BUTTON; T2=HI-LO TEST PUSH BUTTON; P02=HI-LO-OFF.
5. 120 VOLT MAINTAINED CONTACT SELECTOR SWITCH: S=ON-OFF; S2=HI-LOW; SO2=HI-LO-OFF; SA=HAND-OFF-AUTOMATIC.
6. PILOT LIGHTS SHALL BE FURNISHED WITH ALL REMOTE CONTROL UNITS.
7. MOTOR STARTERS SHALL BE SINGLE SPEED.
8. MOTOR STARTER SHALL HAVE ONE NORMALLY OPEN CONTACT.

LOWELL HIGH SCHOOL SCHOOL NORTH STAR BUILDING LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURERS	VOLTAGE	LIGHT SOURCE	MINIMUM LUMENS	DEGREE K.	MAXIMUM WATTAGE	DIMMING	MOUNTING	DESCRIPTION
NSL-1	METALUX SB24CZ-LD5-50S-UNV-L840-CD1-EQ-CLIP-PAF DAYBRITE 2RGX-60L-840-RS-UNV-DIM LITHONIA 2BLT4BA-60L-ADP-EZ1-LP840-EQCLIP-PAF COLUMBIA RLA24-40-VL-G-ED1-U	MVOLT	LED	6000 (6221/6000 /6051/ 7630)	4000	52.2/60/ 46/77	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS AND MULTI-VOLT LED DIMMING DRIVER. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-1E	METALUX SB24CZ-LD5-60S-UNV-L840-CD1-EQ-CLIP-PAF-GTD DAYBRITE 2FGXG-60L-840-4-RS-UNV-DIM-GTD/E LITHONIA 2BLT8A4-60L-ADP-EZ1-LP840-EQCLIP-PAF-GTD COLUMBIA RLA24-40-VL-G-ED1-U-GTD	MVOLT	LED	6000 (6221/6000 /6051/ 7630)	4000	52.2/60/ 46/77	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, MULTI-I-VOLT LED DIMMING DRIVER AND INTEGRAL INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-2	METALUX SB24CZ-LD5-50S-UNV-L840-CD1-EQ-CLIP-PAF DAYBRITE 2FGXG-50L-840-4-RS-UNV-DIM LITHONIA 2BLT4BA-48L-ADP-EZ1-LP840-EQCLIP-PAF COLUMBIA RLA24-40-ML-G-ED1-U	MVOLT	LED	4800 (5190/ 5000/ 4839/5200)	4000	40.7/41/ 38/52	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS AND MULTI-VOLT LED DIMMING DRIVER. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-2E	METALUX SB24CZ-LD5-50S-UNV-L840-CD1-EQ-CLIP-PAF-GTD DAYBRITE 2FGXG-50L-840-4-RS-UNV-DIM-GTD/E LITHONIA 2BLT4BA-48L-ADP-EZ1-LP840-EQCLIP-PAF-GTD COLUMBIA RLA24-40-ML-G-ED1-U-GTD	MVOLT	LED	4800 (5190/ 5000/ 4839/5200)	4000	40.7/41/ 38/52	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, MULTI-I-VOLT LED DIMMING DRIVER AND INTEGRAL INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-3	METALUX 22CZ-LD5-44S-UNV-L840-CD1-DF-22W-U-PAF DAYBRITE 2FGXG-40L-840-2-RS-UNV-DIM LITHONIA 2BLTBA2-40L-ADP-EZ1-LP840-DGA22-PAF COLUMBIA RLA22-40-VL-G-ED1-U	MVOLT	LED	4000 (4091/4000 /4102/ 4750)	4000	36.4/34/ 31/42	0-10V 1% DIMMING	GRID	2X2 RECESSED MOUNTED FLANGED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH MULTI-VOLT LED DIMMING DRIVER. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-4	METALUX 24CZ-LD5-40S-UNV-L840-CD1-EQ-CLIP-PAF DAYBRITE 2FGXG-40L-840-RS-UNV-DIM LITHONIA 2BLTBA4-40L-ADP-EZ1-LP840-EQCLIP-PAF COLUMBIA RLA24-40-LW-G-ED1-U	MVOLT	LED	4000 (4124/ 4000/4023/ 4340)	4000	29/31/ 31/42	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS AND MULTI-VOLT LED DIMMING DRIVER. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-4E	METALUX SB24CZ-LD5-40S-UNV-L840-CD1-EQ-CLIP-PAF-GTD DAYBRITE 2FGXG-40L-840-RS-UNV-DIM-GTD/E LITHONIA 2BLTBA4-40L-ADP-EZ1-LP840-EQCLIP-PAF-GTD COLUMBIA RLA24-40-LW-G-ED1-U-GTD	MVOLT	LED	4000 (4124/ 4000/4023/ 4340)	4000	29/31/ 31/42	0-10V 1% DIMMING	GRID	2X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, MULTI-I-VOLT LED DIMMING DRIVER AND INTEGRAL INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-5E	HALO PD6-30-D010-PDM6A-840-61V-C-EM LITHONIA LDN6-40/30-L06AR-LSS-MVOLT-EZ10-ELRSD LIGHTOLIER 6RNEM6-Z6RDL30940WOCDD2-10U PRESCOLITE LTR-H-ML-30L-DM1-LTR-6RD-T-ML-40K8-MD-SSEMST-B24	MVOLT	LED	3000 (2963/ 3033.9/ 3182/2993)	4000	36.4/34.69/ 31.2/ 41.50	0-10V	RECESSED	6" ROUND RECESSED MOUNTED DOWNLIGHT WITH CLEAR ALZAK REFLECTOR, MULTI-VOLT LED DRIVER AND INTEGRAL COLD WEATHER EMERGENCY BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE. UL LISTED FOR DAMP LOCATIONS. FIXTURE SHALL BE IC RATED.
NSL-6	LITHONIA WSQ LED-P4-40K-SR3-MVOLT-CBA MCGRAW EDISON ISS-SA1E-740-U-T3-CBA GARDCO 106L-32L-700-NW-G1-3-UNV-STD-FIN HUBBELL QSP2-24L-70-4K7-3-XXX-XXX	120/277	LED	6500 (6547/7129 /7242/ 7939)	4000	61/58.2/70 /87	NONE	WALL	WALL MOUNTED OUTDOOR WEATHERPROOF QUARTER SPHERE CUTOFF TYPE LIGHTING FIXTURE WITH LED LAMPS, LED DRIVER. UL LISTED FOR WET LOCATIONS. COLOR TO BE SELECTED BY THE ARCHITECT.
NSL-6E	LITHONIA WSQ LED-P4-40K-SR3-MVOLT-E20WC-CBA MCGRAW EDISON ISS-SA1E-740-U-T3-CBP-CBA GARDCO 106L-32L-700-NW-G1-3-UNV-STD-FIN-EBPC HUBBELL QSP2-24L-70-4K7-3-XXX-XXX-EH	120/277	LED	6500 (6547/7129 /7242/ 7939)	4000	61/58.2/70 /87	NONE	WALL	WALL MOUNTED OUTDOOR WEATHERPROOF QUARTER SPHERE CUTOFF TYPE LIGHTING FIXTURE WITH LED LAMPS, LED DRIVER AND COLD WEATHER EMERGENCY BATTERY PACK. UL LISTED FOR WET LOCATIONS. COLOR TO BE SELECTED BY THE ARCHITECT.
NSL-7	METALUX SB14CZ-LD5-39S-UNV-L840-CD1-PAF-EQCLIP-U DAYBRITE 1FGXG-40L-840-RS-UNV-DIM LITHONIA BLTBA4-40L-ADP-EZ1-ADP-EZ1-LP840-LATC-PAF	MVOLT	LED	4000 (4119/4000 /4062/ 4160)	4000	35.7/34/ 34/39	0-10V 1% DIMMING	GRID	1X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS AND MULTI-VOLT LED DIMMING DRIVER. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-7E	METALUX SB14CZ-LD5-39S-UNV-L840-CD1-PAF-EQCLIP-U-GTR2 DAYBRITE 1FGXG-40L-840-RS-UNV-DIM-GTD/E LITHONIA BLTBA4-40L-ADP-EZ1-ADP-EZ1-LP840-LATC-PAF-GTD	120/277	LED	4000 (4119/4000 /4062/ 4160)	4000	35.7/34/ 34/39	0-10V 1% DIMMING	GRID	1X4 RECESSED GRID MOUNTED DIRECT/INDIRECT LED TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, MULTI-I-VOLT LED DIMMING DRIVER AND INTEGRAL INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTIC FEATURS. FIXTURE SHALL BE PROVIDED WITH BOTTOM ACCESS.
NSL-8	METALUX 14GR-LD5-40-A125-UNV-L840-CD1-PAF-EQ-CLIP-U COLUMBIA LJT14-40MLG-FSA12125-EU-PAF-EQCLIP LITHONIA GTL-4-40L-A12125-EZ1-LP840-LATC-PAF	120/277	LED	4000 (4045/ 4222/ 3938.5)	4000	38.8/38/ 40.1	NONE	GRID	1X4 RECESSED GRID MOUNTED LED LENS TROFFER TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, ACRYLIC LENS (0.125 MINIMUM THICKNESS) AND MULTI-VOLT LED DRIVER.
NSL-8E	METALUX 14GR-LD5-40-A125-UNV-L840-CD1-PAF-EQ-CLIP-U-EL14WSD COLUMBIA LJT14-40MLG-FSA12125-EU-PAF-EQCLIP-ELL14SD LITHONIA GTL-4-33L-A12125-EZ1-LP840-LATC-PAF-	120/277	LED	4000 (4045/ 4222/ 3938.5)	4000	38.8/38/ 40.1	NONE	GRID	1X4 RECESSED GRID MOUNTED LED LENS TROFFER TYPE LIGHTING FIXTURE WITH EARTHQUAKE CLIPS, ACRYLIC LENS (0.125 MINIMUM THICKNESS). MULTI-VOLT LED DRIVER AND INTEGRAL EMERGENCY BATTERY UNIT WITH SELF-DIAGNOSTIC FEATURE.
NSL-9	FAIL SAFE GRW-12-4-FA-LD4-64-40-A12125-UNV-EDC1 COLUMBIA LJT14-40MLG-FSA12125-EDU-FK14 -WL LITHONIA	MVOLT	LED	5322	4000	42	NONE	RECESSED FLANGE	1X4 RECESSED MOUNTED FLANGED CHASSIS, LED LAMPS, FRAMED LENS, WET LOCATION TROFFER TYPE LIGHTING FIXTURE WITH ACRYLIC LENS (0.125 MINIMUM THICKNESS) AND MULTI-VOLT LED DRIVER. UL LISTED FOR WET LOCATIONS.
NSL-10	METALUX 4SNLED-LD5-33SL-LW-UNV-L840-CD1-U DAYBRITE FSS440L840-UNV-DIM-DACHXX LITHONIA ZL1N-L48-SMR-3000LM-FST-MVOLT-40K-80CRI-WH COLUMBIA MPS4-40HL-C-W-EDU-CSHC	120/277	LED	3000 (3504/4000 /3723/ 5720)	4000	28/31/31/ 41.7	NONE	PENDANT	4' PENDANT MOUNTED INDUSTRIAL LIGHTING FIXTURE WITH LENSED AND WIDE DISTRIBUTION
NSL-10E	METALUX 4SNLED-LD5-33SL-LW-UNV-L840-CD1-U-EM DAYBRITE FSS440L840-UNV-DIM-DACHXX-EM LITHONIA ZL1N-L48-SMR-3000LM-FST-MVOLT-40K-80CRI-WH-EM COLUMBIA MPS4-40HL-C-W-EDU-CSHC-EM	120/277	LED	3000 (3504/4000 /3723/ 5720)	4000	28/31/31/ 41.7	NONE	PENDANT	4' PENDANT MOUNTED INDUSTRIAL LIGHTING FIXTURE WITH LENSED, WIDE DISTRIBUTION AND INTERNAL BATTERY UNIT.
NSL-11	METALUX 4SWLED-LD4-36SL-LW-UNV-L840-HCD1-SVPD1-U COLUMBIA ESL-4-40-HL-FAW-EDU-ELL14-NXOS LITHONIA WL4-40L-EZ1-LP840-MSD7	MVOLT	LED	5322	4000	42	NONE	WALL	4' WALL MOUNTED LIGHTING FIXTURE WITH 0-10 VOLT NON-DIMMING DRIVER, INTEGRAL OCCUPANCY SENSOR AND INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTICS UNIT. FIXTURE SHALL BE ILLUMINATED AT 50 PERCENT AT ALL TIMES AND INCREASE TO 100 PERCENT WHEN IT SENSES OCCUPANCY. (STAIRS)
NSL-12	METALUX 14GR-LD5-40-A125-UNV-L840-CD1-PAF-EQ-CLIP-U COLUMBIA LJT14-40MLG-FSA12125-EU-PAF-EQCLIP LITHONIA GTL-4-40L-A12125-EZ1-LP840-LATC-PAF	120/277	LED	4000 (4045/ 4222/ 3938.5)	4000	38.8/38/ 40.1	NONE	RECESSED FLANGE	1X4 RECESSED MOUNTED LED LENS TROFFER TYPE LIGHTING FIXTURE WITH FLANGED TRIM, ACRYLIC LENS (0.125 MINIMUM THICKNESS) AND MULTI-VOLT LED DRIVER.
NSL-12E	METALUX 14GR-LD5-40-A125-UNV-L840-CD1-PAF-EQ-CLIP-U-EL14WSD COLUMBIA LJT14-40MLG-FSA12125-EU-PAF-EQCLIP-ELL14SD LITHONIA GTL-4-33L-A12125-EZ1-LP840-LATC-PAF-	120/277	LED	4000 (4045/ 4222/ 3938.5)	4000	38.8/38/ 40.1	NONE	RECESSED FLANGE	1X4 RECESSED MOUNTED LED LENS TROFFER TYPE LIGHTING FIXTURE WITH FLANGE TRIM, ACRYLIC LENS (0.125 MINIMUM THICKNESS). MULTI-VOLT LED DRIVER AND INTEGRAL EMERGENCY BATTERY UNIT WITH SELF-DIAGNOSTIC FEATURE.
NL-13	STARTEK LIGHTINGHYDRO BEAM DIRECT HYROD-4-1000-SD-50K-80-CBA-RM-U-1C	120/277	LED	4000	4000	35	NONE	WALL	4' WALL MOUNTED LIGHTING FIXTURE WITH 0-10 VOLT NON-DIMMING DRIVER RATED FOR WET LOCATIONS.
X1	SURE-LITES CX61R EMERGI-LITE BAPXN-1R LITHONIA LES-1R DUAL LITE SESR-BN	120/277	LED			1	NONE	SURFACE	SURFACE MOUNTED DIE CAST ALUMINUM EXIT SIGN WITH SINGLE BRUSHED ALUMINUM STENCIL FACE WITH RED LETTERS (ARROWS AS INDICATED ON DRAWINGS).
X2	SURE-LITES CX61R EMERGI-LITE BAPXN-2R LITHONIA LES2R DUAL LITE SEDR-BN	120/277	LED			1	NONE	SURFACE	SURFACE MOUNTED DIE CAST ALUMINUM EXIT SIGN WITH DOUBLE BRUSHED ALUMINUM STENCIL FACE WITH RED LETTERS (ARROWS AS INDICATED ON DRAWINGS), NI-CAD BATTERY AND SELF DIAGNOSTIC FEATURE.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB/JVC
CHECKED BY JPB AD-1

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
NORTH STAR BUILDING ELECTRICAL SCHEDULES

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-601-NS

Monday, 10/9/2023 - 10:24 AM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-601-NS.DWG

SHEET INDEX- VOLUME 1

SHEET INDEX- VOLUME 2

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
23-115
DATE
09/25/23
COORDINATED BY
TA
DRAWN BY
NW AD-1
CHECKED BY
TA/NW

JOSEPH P. BRIGGS
REGISTERED
NO.
11600109
STATE OF
INDIANA
ARCHITECT

REVISIONS

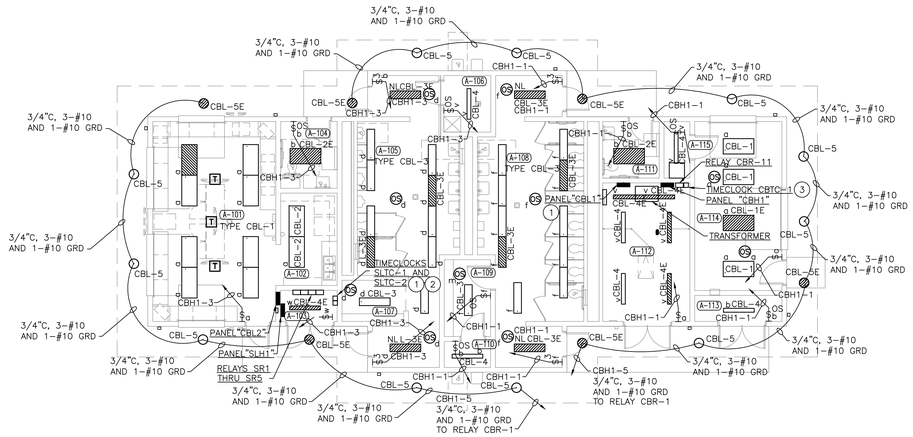
MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
COMMUNITY BUILDING SHEET INDEX- VOLUME 2

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
G-103-CB

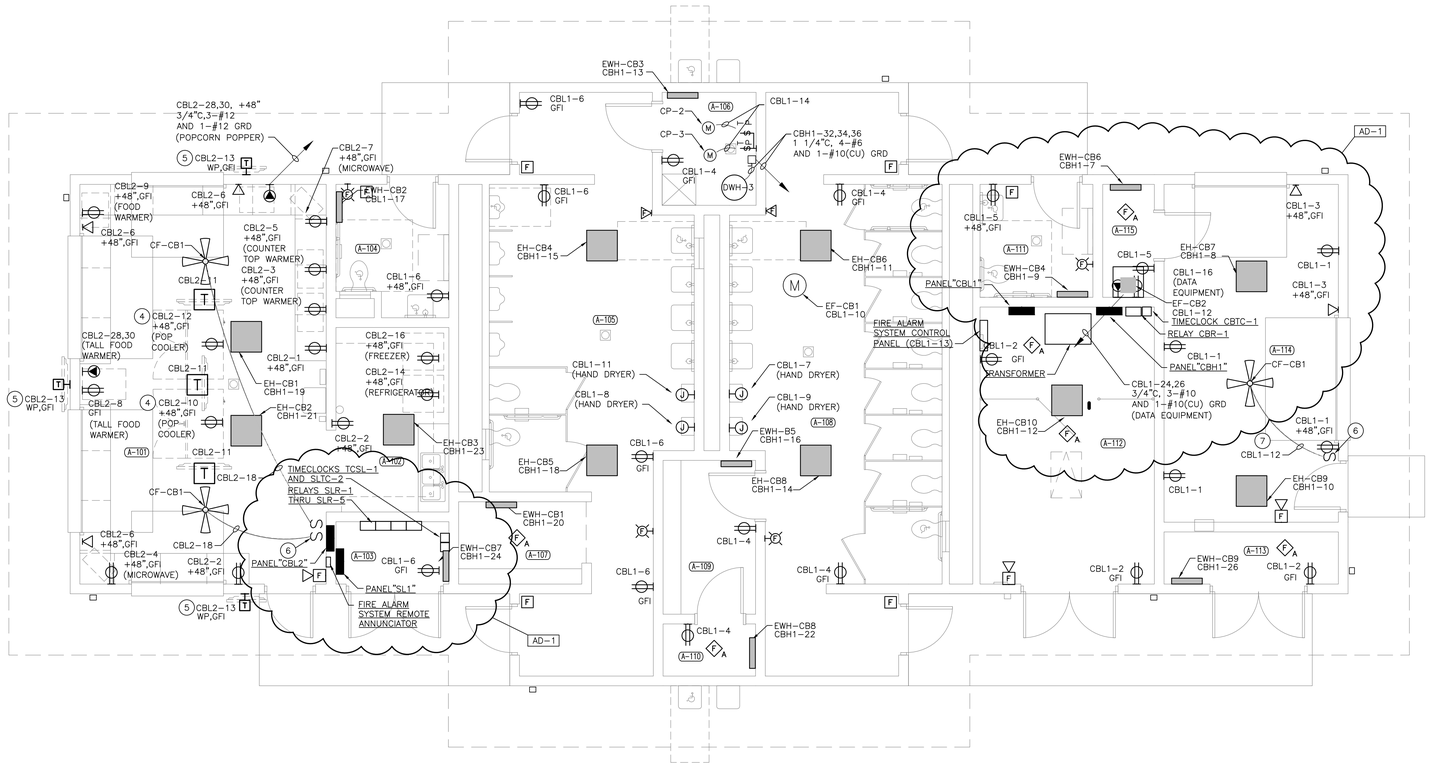
Monday, 10/9/2023 – 1:59 PM – LAST SAVED BY:NWESLEY
Y:\23-115 TRI-CREEK SC – LOWELL HS NEW STADIUM\23-115 DRAWINGS\02 GENR\G-103-CB.DWG



COMMUNITY BUILDING ELECTRICAL LIGHTING PLAN

SCALE: 1/8" = 1'-0"

NORTH



COMMUNITY BUILDING ELECTRICAL POWER PLAN

SCALE: 1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. FOR ADDITIONAL GENERAL ELECTRICAL NOTES, SEE GENERAL ELECTRICAL PROJECT NOTES ON SHEET E-001.
2. SEE E-600 SHEETS FOR ELECTRICAL DETAILS AND SCHEDULES.
3. SEE E-700 SHEETS FOR ELECTRICAL DISTRIBUTION DIAGRAMS.
4. PANELBOARDS PROVIDED IN LOWELL HIGH SCHOOL SITE, BLEACHERS ANDTURF/DRAINAGE PROJECT. CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT WIRNG FROM THESE PANELBOARDS AND PROVIDE NEW TYPE CIRCUIT DIRECTORY IDENTIFYING ITEMS SERVED AND ALL SPARE/SPACES.

ELECTRICAL PLAN NOTES:

(THESE NOTES APPLY TO THIS SHEET ONLY)

1. TORK DZS200BP FOUR CHANNEL DIGITAL TIMECLOCK SLTC-1. PROVIDED AS PART OF LOWELL HIGH SCHOOL SITE, BLEACHERS AND TURF/DRAINAGE PROJECT. CHANNEL ONE CONTROLS RELAY SR-1 (WEST WALKWAY LIGHTS), CHANNEL TWO CONTROLS RELAY SR-2 (EAST WALKWAY LIGHTS), CHANNEL THREE CONTROLS RELAY SR-3 (SOUTHWEST PARKING LOT LIGHTS) AND CHANNEL FOUR CONTROLS RELAY SR-4 (SOUTHEAST PARKING LOT LIGHTS. (CIRCUIT SLH1-13).
2. TORK DZS200BP TWO CHANNEL DIGITAL TIMECLOCK SLTC-2. PROVIDED AS PART OF LOWELL HIGH SCHOOL SITE, BLEACHERS AND TURF/DRAINAGE PROJECT. CHANNEL ONE CONTROLS RELAY SR-5 (ATHLETIC FIELD ENTRANCE LIGHTS) AND CHANNEL TWO IS A SPARE (NORTH DRIVE LIGHTS). (CIRCUIT SLH1-15). PROVIDED AS PART OF SITE, BLEACHERS AND TURF/DRAINAGE PROJECT.
3. TORK DZS2 SINGLE CHANNEL TIME CLOCK CBTC-1 TO CONTROL RELAY CBR-1 (BUILDING EXTERIOR LIGHTS).
4. PROVIDE RECEPTACLE IN THE CEILING FOR THE POP COOLER. VERIFY EXACT LOCATION WITH ARCHITECT AND CONSTRUCTION MANAGER PRIOR TO ROUGHING-IN.
5. PROVIDE POWER RECEPTACLES AND DATA OUTLETS WITH WEATHERPROOF-IN-USE COVERS. VERIFY EXACT LOCATION WITH ARCHITECT AND CONSTRUCTION MANAGER PRIOR TO ROUGHING-IN.
6. CEILING FAN CONTROLLER BY CEILING FAN INSTALLER. VERIFY EXACT LOCATION WITH ARCHITECT AND CONSTRUCTION MANAGER PRIOR TO ROUGHING-IN.
7. PROVIDE A 208 VOLT SINGLE PHASE 30 AMP RECEPTACLE FOR THE DATA EQUIPMENT. VERIFY EXACT ELECTRICAL REQUIREMENTS WITH THE OWNER, CONSTRUCTION MANAGER AND ARCHITECT PRIOR TO ROUGHING-IN.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
COMMUNITY BUILDING ELECTRICAL PLANS

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

SHEET
E-101-CB

Wednesday, 10/4/2023 - 3:04 PM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-101-CB.DWG

SITE DEVELOPMENT/COMMUNITY BUILDING LIGHTING RELAY SCHEDULE

MARK & TYPE	ITEM	CONTROLLED CIRCUIT(S)	COIL CKT.	COIL VOLT	ROOM NO.	CONTACTS	SELECTOR SWITCH	CONTROL	SEE NOTES
SR-1 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	WEST WALKWAY LIGHTS	SLH1-1,3	SLH1-13	277	A-103	N.O.	HOA	TIMECLOCK	1,2,4,5,6
SR-2 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	EAST WALKWAY LIGHTS	SLH1-5,7	SLH1-13	277	A-103	N.O.	HOA	TIMECLOCK	1,2,4,5,6
SR-3 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	SOUTHWEST PARKING LOT LIGHTS	SLH1-7,9	SLH1-13	277	A-103	N.O.	HOA	TIMECLOCK	1,3,4,5,6
SR-4 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	SOUTHEAST PARKING LOT LIGHTS	SLH1-2,4	SLH1-13	277	A-103	N.O.	HOA	TIMECLOCK	1,2,4,5,6
SR-5 SQUARE D #8903 SERIES W/ NEMA 3R ENCLOS.	ATHLETIC FIELD ENTRANCE LIGHTS	SLH1-15	SLH1-15	277	A-103	N.O.	HOA	TIMECLOCK	1,2,4,5,6
CBR-1 SQUARE D #8903 SERIES W/	COMMUNITY BUILDING EXTERIOR LIGHTS	CBH1-5	CBH1-2	277	A-112	N.O.	HOA	TIMECLOCK	1,2,4,5,6

NOTES:
1. FURNISH NEMA 1 ENCLOSURE WITH HINGED COVER UNLESS OTHERWISE NOTED.
2. ELECTRICALLY HELD.
3. MECHANICALLY HELD.
4. PROVIDE SELECTOR SWITCH IN RELAY ENCLOSURES WITH LOOP AND BRIDLE STRAPS FROM MAIN DEPARTMENT TO HINGED COVER FOR SELECTOR SWITCHES.
5. FURNISH FUSE PROTECTION FOR COIL CIRCUIT.
6. ALL RELAYS AND SELECTOR SWITCHES SHALL BE PREWIRED BY MANUFACTURER.

LIGHTING RELAY SCHEDULE FOR REFERENCE ONLY. LIGHTING RELAYS PROVIDED AS PART OF THE LOWELL HIGH SCHOOL SITE, BLEACHERS AND TURF/DRAINAGE PROJECT. CONTRACTOR SHALL PROVIDE ALL ASSOCIATED BRANCH CIRCUIT WIRING TO THE COMMUNITY BUILDING EXTERIOR LIGHTS.

LOWELL HIGH SCHOOL COMMUNITY BUILDING LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURERS	VOLTAGE	LIGHT SOURCE	MINIMUM LUMENS	DEGREE K.	MAXIMUM WATTAGE	DIMMING	MOUNTING	DESCRIPTION
CBL-1	LITHONIA CPX-2X4-6000LM-80CRI-40K-SWL-MIN1-EZT-MVOLT METALUX 24FP6440C COLUMBIA CFP24-55/41/7540	120/277	LED	6000 (6037/6506/7564)	4000	43.25/62.2/56	0-10V 1% DIMMING	SURFACE	2X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH SURFACE MOUNTING KIT AND DIMMING DRIVER.
CBL-1E	LITHONIA CPX-2X4-6000LM-80CRI-40K-MIN1-EZT-MVOLT-E10WCP METALUX 24FP6440C COLUMBIA CFP24-55/41/7540-PLD10M	120/277	LED	6000 (6037/6506/7564)	4000	43.25/62.2/56	0-10V 1% DIMMING	SURFACE	2X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH SURFACE MOUNTING KIT, DIMMING DRIVER AND INTEGRAL EMERGENCY BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE.
CBL-2	LITHONIA CPX-2X4-5000LM-80CRI-40K-SWL-MIN1-ZT-MVOLT METALUX 24FP6440C COLUMBIA CFP24-55/41/3440	120/277	LED	4800 (5194/6506/5030)	4000	39.29/62.2/40	0-10V 1% DIMMING	SURFACE	2X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH SURFACE MOUNTING KIT AND DIMMING DRIVER.
CBL-2E	LITHONIA CPX-2X4-5000LM-80CRI-40K-SWL-MIN1-EZT-MVOLT-E10WCP METALUX 24FP6440C-EL14W COLUMBIA CFP24-55/41/3440-PLD10M	120/277	LED	4800 (5194/6506/5030)	4000	39.29/62.2/40	0-10V 1% DIMMING	SURFACE	2X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH LED DIMMING DRIVER, SURFACE MOUNTING KIT AND INTEGRAL EMERGENCY BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE.
CBL-3	LITHONIA CPX-1X4-5000LM-80CRI-40K-SWL-MIN1-EZT-MVOLT METALUX 14FP264OC COLUMBIA CFP14-55/41/3980	120/277	LED	4000 (5086/4226/3980/4375)	4000	39.2/38.83/31	0-10V 1% DIMMING	SURFACE	1X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH LED DIMMING DRIVER.
CBL-3E	LITHONIA CPX-1X4-5000LM-80CRI-40K-SWL-MIN1-EZT-MVOLT-E10WCP METALUX 14FP264OC COLUMBIA CFP14-55/41/3440-PLD10M ENERGY HARNESS EHF-PANBL-1X4DS-45-277-CDM	120/277	LED	4000 (5086/4226/3980/4375)	4000	39.2/38.83/31	0-10V 1% DIMMING	SURFACE	1X4 SURFACE MOUNTED LED FLAT PANEL TYPE LIGHTING FIXTURE WITH LED DIMMING DRIVER INTEGRAL/EXTERNAL EMERGENCY BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE.
CBL-4	METALUX 4SNLED-LD5-33SL-LW-UNV-L840-CD1-U COLUMBIA MPS4-40MW-CW-ED-U LITHONIA ZL1D-L48-SMR-5000LM-FST-MVOLT-40K-80CRI-WH	120/277	LED	3504/3702/4028	4000	28/30.4/30	NONE	PENDANT	4' PENDANT MOUNTED INDUSTRIAL LIGHTING FIXTURE WITH LENSED AND WIDE DISTRIBUTION
CBL-4E	METALUX 4SNLED-LD5-33SL-LW-UNV-L840-CD1-U-EL14WST COLUMBIA MPS4-40MW-CW-ED-U-ELL14ST LITHONIA ZL1D-L48-SMR-5000LM-FST-MVOLT-40K-80CRI-WH-EL14ST	120/277	LED	3504/3702/4028	4000	28/30.4/30	NONE	PENDANT	4' PENDANT MOUNTED INDUSTRIAL LIGHTING FIXTURE WITH LENSED, WIDE DISTRIBUTION AND INTEGRAL EMERGENCY BATTERY UNIT WITH SELF-DIAGNOSTIC FEATURE.
CBL-5	HALO PD6-30-D010-PDM6A-840-61V-C LITHONIA LDN6-40/30-L06AR-LSS-MVOLT-EZ10	MVOLT	LED	2963/3033.9	4000	36.4/34.69	0-10V	RECESSED	6" ROUND RECESSED MOUNTED DOWNLIGHT WITH CLEAR ALZAK REFLECTOR AND MULTI-VOLT LED DIMMING DRIVER. UL LISTED FOR DAMP LOCATIONS. FIXTURE SHALL BE IC RATED.
CBL-5E	HALO PD6-30-D010-PDM6A-840-61V-C-EM LITHONIA LDN6-40/30-L06AR-LSS-MVOLT-EZ10-ELRSD	MVOLT	LED	2963/3033.9	4000	36.4/34.69	0-10V	RECESSED	6" ROUND RECESSED MOUNTED DOWNLIGHT WITH CLEAR ALZAK REFLECTOR, MULTI-VOLT LED DIMMING DRIVER AND INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTIC FEATURE. UL LISTED FOR DAMP LOCATIONS. FIXTURE SHALL BE IC RATED.
CBL-6	LITHONIA WSR-LED-P4-40K-SR3-MVOLT-DDBXD MCGRAW EDISON ISS-SA1F-740-U-T3-BZ HUBBELL RD12-24L-90-4K7-3-UNV-DB	120/277	LED	6547/7827/XXXX	4000	61/66/XX	NONE	WALL	WALL MOUNTED OUTDOOR WEATHERPROOF CUTOFF TYPE LIGHTING FIXTURE WITH LED LAMPS AND LED DRIVER. UL LISTED FOR WET LOCATIONS. COLOR TO BE SELECTED BY THE ARCHITECT.
CBL-6E	LITHONIA WSR LED-P4-40K-SR3-MVOLT-E20WC-DDBXD MCGRAW EDISON ISS-SA1F-740-U-T3-BZ-CBP HUBBELL RD12-24L-90-4K7-3-UNV-DB-EH	120/277	LED	6547/7827/XXXX	4000	61/66/XX	NONE	WALL	WALL MOUNTED OUTDOOR WEATHERPROOF CUTOFF TYPE LIGHTING FIXTURE WITH LED LAMPS, LED DRIVER AND COLD WEATHER EMERGENCY BATTERY PACK. UL LISTED FOR WET LOCATIONS. COLOR TO BE SELECTED BY THE ARCHITECT.
CBL-7E	METALUX 4SWLED-LD4-36SL-LW-UNV-L840-HCD1-SVPD1-U COLUMBIA ESL-4-40-HL-FAW-EDU-ELL14-NXOS LITHONIA WL4-40L-EZ1-LP840-MSD7	MVOLT	LED	5322	4000	42	NONE	WALL	4' WALL MOUNTED LIGHTING FIXTURE WITH 0-10 VOLT NON-DIMMING DRIVER, INTEGRAL OCCUPANCY SENSOR AND INTEGRAL BATTERY UNIT WITH SELF DIAGNOSTICS UNIT. FIXTURE SHALL BE ILLUMINATED AT 50 PERCENT AT ALL TIMES AND INCREASE TO 100 PERCENT WHEN IT SENSES OCCUPANCY. (STAIRS)
X-1	SURE-LITES CX71R-SD DUAL LITE SESR-BN-E-I LITHONIA LES1R-ELN-SD	120/277	LED			1	NONE	SURFACE	SURFACE MOUNTED DIE CAST ALUMINUM EXIT SIGN WITH SINGLE STENCIL FACE, RED LETTERS (ARROWS AS INDICATED ON DRAWINGS), NI-CAD BATTERY AND SELF DIAGNOSTICS FEATURE.
X-2	SURE-LITES CX72R-SD DUAL LITE SEDR-BN-E1 LITHONIA LES2R-ELN-SD	120/277	LED			1	NONE	SURFACE	SURFACE MOUNTED DIE CAST ALUMINUM EXIT SIGN WITH DOUBLE STENCIL FACE, RED LETTERS (ARROWS AS INDICATED ON DRAWINGS), NI-CAD BATTERY AND SELF DIAGNOSTICS FEATURE.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX
TRI-CREEK SCHOOL CORPORATION

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 23-115
DATE 09/25/23
COORDINATED BY PCB
DRAWN BY PCB/JVC
CHECKED BY JPB AD-1

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-1	10/10/23	ADDENDUM NO. 1

DRAWING
COMMUNITY BUILDING ELECTRICAL SCHEDULES

PROJECT
LOWELL HIGH SCHOOL - RENOVATIONS & NEW SPORTS COMPLEX

 SHEET
E-601-CB

Monday, 10/9/2023 - 10:23 AM - LAST SAVED BY:JCHAMBERS
Y:\23-115 TRI-CREEK SC - LOWELL HS NEW STADIUM\23-115 DRAWINGS\09 ELEC\E-601-CB.DWG