#### DOCUMENT 00 90 00 ADDENDUM

ADDENDUM NO. [3] Date: September 29, 2021

RE: LA FARGE SCHOOL DISTRICT ADDITION AND RENOVATION

301 W. ADAMS STREET LA FARGE, WI 54639 HSR PROJECT NO. 19041-1

FROM: HSR Associates, Inc

100 Milwaukee Street La Crosse, WI 54603 (608) 784-1830

**To:** Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated September 2021. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disgualification.

This Addendum consists of [4] pages, [3] specification sections and [35] 30 x 42 drawings.

#### **CHANGES TO PRIOR ADDENDA:**

- 1. Architectural drawing A090, A103, A107, and A112 were reissued as part of Addendum #1. Revisions of these drawings for Addendum #3 are described below.
- 2. Plumbing drawings P090, P091, P092, P093, P105, and P106 were reissued as part of Addendum #1. Revisions of these drawings for Addendum #3 are described below.
- 3. Plumbing drawings P001, P091, P093, P100, P101, P102, P104, and P400 were reissued as part of Addendum #2. Revisions of these drawings for Addendum #3 are described below

#### **CHANGES TO SPECIFICATIONS:**

- 4. Section 03 30 00 Cast-In-Place Concrete revised section attached hereto
  - a. Added Related Requirements item 1.02 I. to require coordination between slab and vehicle lift manufacturer.
- 5. Section 14 45 00 Vehicle Lifts revised section attached hereto
  - a. Revised Comparable Manufacturer item 2.01 C.2. to remove Titan Lifts.
- 6. Section 26 41 14 Transient Voltage Surge Suppression
  - a. Revised 2.01 Manufacturer: Replace original item D. with the following:
    - D. SSI-Spec Pro
    - E. Substitutions: Under provisions of Section 01 63 00.
- 7. Section 32 31 13 Chain Link Fencing and Gates revised section attached hereto
  - a. Revised fence height from 6 feet tall to 8 feet tall.

#### **CHANGES TO DRAWINGS**

- 8. Sheet A000 COVER SHEET 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Updated list of plumbing drawings.
- 9. Sheet A090 LOWER LEVEL DEMO SEGMENT A & B 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Added work to demo plumbing fixture.
- 10. Sheet A091 FIRST FLOOR DEMO PLAN SEGMENT A 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Added slab demo to accommodate plumbing.
- 11. Sheet A093 FIRST FLOOR DEMO PLAN SEGMENT C 30 x 42 attached hereto
  - Revisions clouded on drawing.
  - b. Added slab demo to accommodate plumbing.
- 12. Sheet A103 LOWER LEVEL SEGMENT A 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Added plumbing fixture.
- 13. Sheet A104 LOWER LEVEL SEGMENT B 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Revised locations of slab replacement.
- 14. Sheet A105 FIRST FLOOR SEGMENT A 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Revised locations of slab replacement.
- 15. Sheet A106 FIRST FLOOR SEGMENT B 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Added chases.
- 16. Sheet A107 FIRST FLOOR SEGMENT C 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Revised locations of slab replacement.
- 17. Sheet A112 FIRST FLOOR RCP SEGMENT B 30 x 42 attached hereto
  - a. Revisions clouded on drawing.
  - b. Revised reflected ceiling plan for lighting changes
  - c. Added chase at the stair.
- 18. Sheet P001 PLUMBING GENERAL INFORMATION 30 x 42 attached hereto
  - a. Revisions clouded on Drawing.
  - b. Revisions to Plumbing Schedules
  - c. Floor Sink, FS-1, added.
- 19. Sheet P090 LOWER LEVEL PLUMBING DEMO PLANS SEG A & B 30 x 42 attached hereto
  - a. Revisions clouded on Drawing.
  - b. Demo scope of work added/clarified.
- 20. Sheet P091 FIRST FLOOR PLUMBING DEMO PLAN SEG A 30 x 42 attached hereto
  - a. Revisions clouded on Drawing.
  - b. Demo scope of work added/clarified.
  - c. Keynote updated.

#### 21. Sheet P093 FIRST FLOOR PLUMBING DEMO PLAN - SEG C 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. Demo scope of work added/clarified.
- c. Keynote added.

#### 22. Sheet P100 LOWER LEVEL PLUMBING PLAN - SEG A 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. Keynotes updated.

#### 23. Sheet P101 LOWER LEVEL PLUMBING PLAN – SEG B 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. Keynotes added/updated.

#### 24. Sheet P102 FIRST FLOOR PLUMBING PLAN – SEG A 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. Keynotes added.

#### 25. Sheet P103 FIRST FLOOR PLUMBING PLAN - SEG B 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. Keynotes added.

#### 26. Sheet P104 FIRST FLOOR PLUMBING PLAN – SEG C 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. Keynotes added.

#### 27. Sheet P105 ROOF PLUMBING PLAN – SEG A 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. New work scope added/clarified.
- c. General Note 2 deleted.
- d. Keynotes added/updated.

#### 28. Sheet P106 ROOF PLUMBING PLAN - SEG B 30 x 42 attached hereto

- a. Revisions clouded on Drawing.
- b. General Note 2 deleted.

#### 29. Sheet P400 PLUMBING ENLARGED PLANS 30 x 42 attached hereto

- a. Replace Sheet with New Sheet
- b. New work scope added/clarified.

#### 30. Sheet P401 PLUMBING ENLARGED PLANS 30 x 42 attached hereto

- a. Replace Sheet with New Sheet
- b. New work scope added/clarified.

#### 31. Sheet P402 PLUMBING ENLARGED PLANS 30 x 42 attached hereto

- a. Replace Sheet with New Sheet
- b. Demo/New work scope added/clarified.

#### 32. Sheet P403 PLUMBING ENLARGED PLANS 30 x 42 attached hereto

- a. New Sheet as part of the Construction Documents
- 33. Sheet P500 PLUMBING DETAILS 30 x 42 attached hereto
  - a. Replace Sheet with New Sheet
  - b. Details added/clarified.

- 34. <u>Sheet P600 PLUMBING ISOMETRICS DOMESTIC WATER SEG A1</u> 30 x 42 attached hereto a. New Sheet as part of the Construction Documents
- 35. Sheet P601 PLUMBING ISOMETRICS DOMESTIC WATER SEG B 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 36. Sheet P602 PLUMBING ISOMETRICS DOMESTIC WATER SEG A2 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 37. Sheet P603 PLUMBING ISOMETRICS DOMESTIC WATER SEG C1 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 38. Sheet P604 PLUMBING ISOMETRICS DOMESTIC WATER SEG C2 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 39. Sheet P605 PLUMBING ISOMETRICS WASTE AND VENT SEG A 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 40. Sheet P606 PLUMBING ISOMETRICS WASTE AND VENT SEG B 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 41. Sheet P607 PLUMBING ISOMETRICS WASTE AND VENT SEG C1 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents
- 42. Sheet P608 PLUMBING ISOMETRICS WASTE AND VENT SEG C2 30 x 42 attached hereto
  - a. New Sheet as part of the Construction Documents

#### **PRIOR APPROVALS**

- 43. Section 22 34 00 Fuel-Fired, Domestic Water Heaters
  - a. Watts Regulator (Expansion Tank)
  - b. State Industries (Water Heater)
- 44. Section 22 41 00 Plumbing Fixtures
  - c. American Standard (Faucets and Flush Valves)
  - d. Fiat Products (Mop Basin)

**END OF DOCUMENT 00 90 00** 

# SECTION 03 30 00 CAST-IN-PLACE CONCRETE

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Elevated concrete slabs on form deck.
- B. Floors, slabs on grade.
- C. Concrete shear walls, elevator shaft walls, and foundation walls.
- D. Fiber reinforcement.
- E. Joint devices associated with concrete work.
- F. Miscellaneous concrete elements, including equipment pads.
- G. Underslab vapor barrier.
- H. Concrete curing.

#### 1.02 RELATED REQUIREMENTS

- A. Refer to Structural Drawings for additional design information.
- B. Section 01 40 00 Quality Requirements
- C. Section 03 10 00 Concrete Forming and Accessories: Forms and accessories for formwork.
- D. Section 03 20 00 Concrete Reinforcing.
- E. Section 07 92 00 Joint Sealants: Products and installation for sealants and joint fillers for saw cut joints and isolation joints in slabs.
- F. Section 07 13 00 Sheet Waterproofing: Preparing concrete surfaces to receive waterproofing.
- G. Division 9 Floor Finishes: Restrictions for compatibility of flooring adhesives in regards to curing compounds, sealers and slab moisture content.
- H. Section 09 05 61 Common Work Results for Flooring Preparation: Additional floor flatness testing at large format tile locations.
- I. Section 14 45 00 Vehicle Lifts: Lift selection affects control joint placement and slab thickness. Coordinate with lift installer. Basis of design lift instructions indicate 4 1/4" slab thickness and no adjacent control joints.

#### 1.03 REFERENCE STANDARDS

- A. ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; 1991 (Reapproved 2009).
- B. ACI 301 Specifications for Structural Concrete; 2010 (Errata 2012).
- C. ACI 302.1R Guide for Concrete Floor and Slab Construction; 2004 (Errata 2007).
- D. ACI 304R Guide for Measuring, Mixing, Transporting, and Placing Concrete; 2000.
- E. ACI 305R Hot Weather Concreting; 2010.
- F. ACI 306R Cold Weather Concreting; 2010.
- G. ACI 308R Guide to Curing Concrete; 2001 (Reapproved 2008).
- H. ACI 318 Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2016).
- I. ASTM C1609/C1609M Standard Test Method for Flexural Performance of Fiber-Reinforced Concrete (Using Beam With Third-Point Loading); 2012.
- J. ASTM C33/C33M Standard Specification for Concrete Aggregates; 2016.
- K. ASTM C39/C39M Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2016b.
- L. ASTM C94/C94M Standard Specification for Ready-Mixed Concrete; 2016a.

- M. ASTM C109/C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens); 2016a.
- N. ASTM C150/C150M Standard Specification for Portland Cement; 2016.
- O. ASTM C171 Standard Specification for Sheet Materials for Curing Concrete; 2016.
- P. ASTM C260/C260M Standard Specification for Air-Entraining Admixtures for Concrete; 2010a (Reapproved 2016).
- Q. ASTM C494/C494M Standard Specification for Chemical Admixtures for Concrete; 2016.
- R. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2015.
- S. ASTM C881/C881M Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2015.
- T. ASTM C1059/C1059M Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 2013.
- U. ASTM C1107/C1107M Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2014a.
- V. ASTM D8139 Standard Specification for Semi-Rigid, Closed-Cell Polypropylene Foam, Preformed Expansion Joint Fillers for Concrete Paving and StructuralConstruction; 2017.
- W. ASTM E1155 Standard Test Method for Determining F(F) Floor Flatness and F(L) Floor Levelness Numbers; 2014.
- X. ASTM E1155M Standard Test Method for Determining F(F) Floor Flatness and F(L) Floor Levelness Numbers (Metric); 2014.
- Y. ASTM E1643 Standard Practice for Selection, Design, Installation and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs; 2011.
- Z. ASTM E1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs; 2011.

#### 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
  - 1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- C. Control Joint Drawings: Prior to start of concrete work submit drawings showing proposed construction and control joints for slabs.
- D. Samples: Submit samples of underslab vapor retarder to be used.
- E. Test Reports: Submit report for each test or series of tests specified.
- F. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.
- G. Laboratory design of concrete mixes and laboratory test reports for concrete materials to Architect/Engineer for approval prior to proceeding with any concrete work. Including but not limited to the following:
  - 1. Aggregates: Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
  - 2. Admixtures required to meet job and environment requirements.
- H. Material Certificates: For each of the following, signed by manufacturers:
  - 1. Cementitious materials.
  - Admixtures.
- Concrete placement schedule. Submit to Architect/Engineer for review prior to placing any concrete.

J. Copies of delivery tickets for each load of concrete delivered to Project shall be submitted with closeout documents.

#### 1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301 and ACI 318.
- B. Follow recommendations of ACI 305R when concreting during hot weather.
- C. Follow recommendations of ACI 306R when concreting during cold weather.
- D. Contractor shall confirm and coordinate various requirements, restrictions or special conditions (i.e. slump, surface finish, curing and sealing compatibility) with floor finish suppliers prior to placing concrete.

#### PART 2 PRODUCTS

#### 2.01 FORMWORK

A. Comply with requirements of Section 03 10 00.

#### 2.02 REINFORCEMENT MATERIALS

- A. Comply with requirements of Section 03 20 00.
- B. Slab-On-Grade Poly Fiber Reinforcement Systems: (To be used in lieu of interior welded wire fabric)
  - 1. Synthetic Structural Fiber Reinforcement: Provide synthetic structural fibers complying with the following requirements:
    - Synthetic structural fibers shall meet requirements of ASTM C 1116, Paragraph 4.1.3, Type III.
    - b. Synthetic structural fibers shall be monofilament, made of polypropylene or polypropylene/polyethylene blend.
    - c. Synthetic structural fibers shall have a minimum length of 1.38 inches (35 mm) and a maximum length of 2.00 inches (51 mm).
    - d. Specific gravity between 0.90 and 0.95.
    - e. Synthetic structural fibers shall have an aspect ratio (length divided by equivalent diameter of fiber) between 60 and 100.
    - f. Dosage rate:
      - Slab-On-Grades: 5.0 lbs/cubic yard or the addition rate to achieve the concrete required minimum equivalent flexural strength, fe3 of 165 psi for a concrete with a compressive strength of 4,000 psi at 28 days. Determined from the manufacturer's test data verifying fiber performance in concrete based on ASTM C1609/C1609M, utilizing the beam size 6" x 6"x 20" (fe3) calculated using JCI-SF4 method.
    - g. Synthetic structural fibers shall be:
      - 1) Grace STRUX, 90/40 synthetic fiber.
      - 2) Propex Concrete Systems, Novomesh 950 Synthetic Fiber.
      - 3) Euclid Chemical Company, Tuf-Strand SF.

#### 2.03 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type I Normal Portland type.
  - 1. Acquire cement for entire project from same source.
- B. Air Entraining Portland Cement: ASTM C 150, Type 1A.
- C. Fine and Coarse Aggregates: ASTM C33/C33M.
  - 1. Acquire aggregates for entire project from same source.
- D. Fly Ash: ASTM C618, Class C.
- E. Calcined Pozzolan: ASTM C618, Class C.
- F. Water: Clean and not detrimental to concrete in accordance with ASTM C1602/C1602M.

#### 2.04 ADMIXTURES

- A. Except for air entraining and water reducing, admixtures are not permitted without approval of Architect/Engineer. Submit manufacturer's information to A/E with historical stress testing.
- B. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- C. Air Entrainment Admixture: ASTM C260/C260M. Use for exterior walls, exterior slabs, walks, platforms, ramps, steps, portions of parking ramp and other concrete exposed to freezing and thawing. Air entrainment not allowed at interior floor slabs.
  - 1. Products:
    - a. Darex II W.R. Grace.
    - b. AEA 92S Euclid.
    - c. Catexol AE 260 Axim Concrete Technologies
    - d. General Resource Technology Polychem SA-50
    - e. MasterAir Series Master Builders Solutions
    - f. Substitutions: See Section 01 60 00 Product Requirements.
- D. Mid-Range Water Reducing: ASTM C494/C494M Type A or Type F.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Daracem 65 W.R. Grace.
    - b. Eucon MR Euclid.
    - c. Catexol 3500N" Axim Concrete Technologies
    - d. General Resource Technology KB-1200
    - e. MasterPolyheed Series" Master Builders Solutions
    - f. Substitutions: See Section 01 60 00 Product Requirements.
- E. High Range Water Reducing Admixture (Super Plasticizer: ASTM C494/C494M Type F or type G.
  - 1. Products: Subject to compliance with requirements, provide one of the following
    - a. Daracem 19 W.R. Grace.
    - b. ADVA 100 W.R. Grace & Co.
    - c. Catexol 1000SP-MN Axim Concrete Technologies
    - d. General Resource Technology Melchem Superplasticizer
    - e. MasterRheobuild 1000 or MasterGlenium Series Master Builders Solutions
    - f. Substitutions: See Section 01 60 00 Product Requirements.
- F. Water Reducing, Non-Chloride Accelerating Admixture: ASTM C494/C494M Type C or E.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Polarset W.R. Grace.
    - b. Catexol 2000RHE Axim Concrete Technologies
    - c. General Resource Technology Polychem Superset
    - d. MasterSet AC 534 or MasterSet FP 20 Master Builders Solutions
    - e. Substitutions: See Section 01 60 00 Product Requirements.
- G. Water Reducing and Retarding Admixture: ASTM C494/C494M Type D.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Daratard 17 W.R. Grace.
    - b. Eucon Retarder 100 Euclid.
    - c. Catexol 1000R Axim Concrete Technologies
    - d. MasterSet R Series or MasterSet DELVO Series Master Builders Solutions
    - e. Substitutions: See Section 01 60 00 Product Requirements.
- H. Water Reducing Admixture: ASTM C494/C494M Type A.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. WRDA 82 W.R. Grace.
    - b. MasterPozzolith Series Master Builders Solutions
    - c. Catexol 1000N Axim Concrete Technologies

d. Substitutions: See Section 01 60 00 - Product Requirements.

#### 2.05 ACCESSORY MATERIALS

- A. Underslab Vapor Retarder:
  - Sheet Material: ASTM E1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. Single ply polyethylene is prohibited.
  - 2. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations.
  - Manufacturers:
    - a. Henry Company; Moistop Ultra 10: www.henry.com/#sle.
    - b. Inteplast Group; Barrier-Bac VB-250: www.barrierbac.com/#sle.
    - c. ISI Building Products; Viper VaporCheck II 10-mil (Class A): www.isibp.com/#sle.
    - d. Poly-America; Husky Yellow Guard 10-mil Vapor Barrier: www.yellowguard.com/#sle.
    - e. Stego Industries, LLC; Stego Wrap 10 mil: www.stegoindustries.com.
    - f. W. R. Meadows, Inc; PERMINATOR Class A 10 mils (0.25 mm): www.wrmeadows.com/#sle.
    - g. Vaporblock VB10 by Raven Industries: www.vaporblock.com
    - h. Substitutions: See Section 01 60 00 Product Requirements.
- B. Non-Shrink Cementitious Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
  - 1. Grout: Comply with ASTM C1107/C1107M.
  - 2. Minimum Compressive Strength at 48 Hours, ASTM C109/C109M: 2,000 pounds per square inch.
  - 3. Minimum Compressive Strength at 28 Days, ASTM C109/C109M: Strength rating per Material Strengths and Standards in the structural drawings.
  - 4. Flowable Products:
    - a. Five Star Products, Inc; Five Star Fluid Grout 100: www.fivestarproducts.com/#sle.
    - b. W. R. Meadows, Inc; 588-10K: www.wrmeadows.com/#sle.
    - c. Substitutions: See Section 01 60 00 Product Requirements.
  - 5. Low-Slump, Dry Pack Products:
    - a. Five Star Products, Inc; Five Star Grout: www.fivestarproducts.com/#sle.
    - b. SpecChem, LLC; SC Multipurpose Grout: www.specchemllc.com/#sle.
    - c. W. R. Meadows. Inc: PAC-IT: www.wrmeadows.com/#sle.
    - d. Substitutions: See Section 01 60 00 Product Requirements.
- C. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf.
- D. Moisture-Retaining Cover: ASTM C171; clear polyethylene, white polyethylene, or white burlap-polyethylene sheet.
- E. Bond Breaker: 4 mil plastic, 15# building paper, or vapor retarder returned up on wall.

#### 2.06 BONDING AND JOINTING PRODUCTS

- A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.
  - 1. Manufacturers:
    - a. Kaufman Products Inc; SureBond: www.kaufmanproducts.net/#sle.
    - b. SpecChem, LLC; Strong Bond Acrylic Bonder: www.specchemllc.com/#sle.
    - c. W. R. Meadows, Inc; ACRY-LOK-: www.wrmeadows.com/#sle.
    - d. Substitutions: See Section 01 60 00 Product Requirements.
- B. Epoxy Bonding System:
  - 1. Manufacturers:
    - a. Adhesives Technology Corporation; \_\_\_\_\_: www.atcepoxy.com/#sle.

- b. Dayton Superior Corporation; Slow Set Bonding Agent: www.daytonsuperior.com/#sle.
- c. Kaufman Products Inc; SurePoxy HM EPL: www.kaufmanproducts.net/#sle.
- d. Kaufman Products Inc; SurePoxy HM Class B: www.kaufmanproducts.net/#sle.
- e. SpecChem, LLC; SpecPoxy 1000, SpecPoxy 2000, SpecPoxy 3000, or SpecPoxy 3000FS: www.specchemllc.com/#sle.
- f. W. R. Meadows, Inc; Rezi-Weld Gel Paste, Rezi-Weld Gel Paste State, Rezi-Weld 1000: www.wrmeadows.com/#sle.
- g. Substitutions: See Section 01 60 00 Product Requirements.
- C. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
  - 1. Material: ASTM D8139, semi-rigid, closed-cell polypropylene foam.
  - 2. Manufacturers:
    - a. Nomaco, Inc; Isoflex: www.nomaco.com.
    - b. Sakrete: Concrete Expansion Joint. www.sakrete.com
    - c. Quikcrete: Concrete Expansion Joint. www.quikrete.com
    - d. Greensteak: Polypropylene Expansion Board with Expansion Board Cap. www.greenstreak.com
    - e. Substitutions: See Section 01 60 00 Product Requirements.
- D. Slab Contraction Joint Device: Preformed linear strip intended for pressing into wet concrete to provide straight route for shrinkage cracking.
  - Manufacturers:
    - a. W. R. Meadows, Inc; Speed-E-Joint: www.wrmeadows.com/#sle.
    - b. Greenstreak: Zipcap. www.greenstreak.com
    - c. Substitutions: See Section 01 60 00 Product Requirements.
- E. Slab Construction Joint Devices: Combination keyed joint form and screed, galvanized steel or plastic, with minimum 1 inch diameter holes for conduit or rebars to pass through at 6 inches on center; ribbed steel stakes for setting. Removable screed cap to form minimum 1/4 inch wide by 3/8 inch deep joint.
  - 1. Provide removable plastic cap strip that forms wedge-shaped joint for sealant installation.
  - 2. Height: To suit slab thickness.
  - 3. Manufacturers:
    - Form-A-Key Concrete Specialties Products: Key-Loc Joint System with #3017
       Clean-Strip Cap. www.formakey.com
    - b. Greenstreak: Screed Cap. www.greenstreak.com
    - c. Substitutions: See Section 01 60 00 Product Requirements.

#### 2.07 CURING MATERIALS

- A. Evaporation Reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.
  - 1. Manufacturers:
    - a. Dayton Superior Corporation; Aquafilm Concentrate J74: www.daytonsuperior.com/#sle.
    - b. SpecChem, LLC; SpecFilm Concentrate or SpecFilm: www.specchemllc.com/#sle.
    - c. W. R. Meadows, Inc ; Evapre or Evapre-RTU: www.wrmeadows.com/#sle.
    - d. Substitutions: See Section 01 60 00 Product Requirements.
- B. Curing and Sealing Compound, Low Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.
  - 1. Vehicle: Water-based.
  - 2. Solids by Mass: 25 percent, minimum.
  - 3. VOC Content: OTC compliant.
  - Manufacturers:

- a. Concrete Sealers USA; TS202 Acrylic WB-25 Topical Sealer w/ Low Gloss: www.concretesealersusa.com/#sle.
- b. Dayton Superior Corporation: www.daytonsuperior.com/#sle.
- c. Euclid Chemical Company; DIAMOND CLEAR VOX: www.euclidchemical.com/#sle.
- d. ProSpec: Cure & Seal WB 1315. www.tccmaterials.com
- e. SpecChem; Cure & Seal 25. www.specchemllc.com
- f. Lucas Products: #7200 Cure Seal Water Based. www.rmlucas.com
- g. W. R. Meadows, Inc; VOCOMP-25: www.wrmeadows.com/#sle.
- h. TK Products; TK TRI-SEAL 1315. www.tkproducts.com
- i. Substitutions: See Section 01 60 00 Product Requirements.
- C. Curing and Sealing Compound, High Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.
  - 1. Vehicle: Solvent-based.
  - 2. Solids by Mass: 25 percent, minimum.
  - 3. VOC Content: Ozone Transport Commission (OTC) compliant.
  - 4. Manufacturers:
    - a. Master Builders Solutions: MasterKure CC 300 SB.
    - b. BRICKFORM: BRICKFORM Gem Cure and Seal 1315 650 VOC: www.brickform.com/#sle.
    - c. Kaufman Products Inc; Krystal 25: www.kaufmanproducts.net/#sle.
    - d. TK Products: Tri-Kure and Seal 1315. www.tkproducts.com
    - e. W. R. Meadows, Inc; Decra-Seal: www.wrmeadows.com/#sle.
- D. Moisture-Retaining Sheet: ASTM C171.
  - 1. Curing paper, regular.
  - 2. Polyethylene film, white opaque, minimum nominal thickness of 4 mil, 0.004 inch.
  - 3. White-burlap-polyethylene sheet, weighing not less than 3.8 ounces per square yard.
- E. Water: Potable, not detrimental to concrete.

#### 2.08 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.
  - 1. Replace as much Portland cement as possible with fly ash, ground granulated blast furnace slag, silica fume, or rice hull ash as is consistent with ACI recommendations.
- B. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.
- C. Normal Weight Concrete: Design all concrete mixes from the following table of requirements:

	W/C	%AIR	MAX	MIN
	MAX	+-1%	SLUMP	f'c(psi)
			(inches)	28 day
Concrete backfilled or protected				
from weather:				
a. Footings:	0.55		4	Refer to Struct Dwgs
b. Foundation walls:	0.50	6	4	Refer to Struct Dwgs
c. Slabs on Steel Form Deck & Topping:	0.50		4	Refer to Struct Dwgs

d.	Slabs - Interior on Grade:	0.50	3	Refer to
				Struct
				Dwgs

- 1. Fly Ash Content: Maximum 20 percent of cementitious materials by weight when used alone.
  - a. At walls, piers, interior slab on grade, bond beams and metal pan stairs: A maximum of 50 percent total replacement of portland cement with fly ash at a 1:1 ratio; up to 350 pounds, with a maximum 20 percent fly ash.
  - b. At exposed columns, exterior slab on grade and miscellaneous non-scheduled concrete: A maximum of 20 percent total replacement of Portland cement with fly ash at a 1:1 ratio where freeze-thaw durability and exposure to deicers is likely; up to 350 pounds, with a maximum 20 percent fly ash.
- 2. Calcined Pozzolan Content: Maximum 10 percent of cementitious materials by weight.
  - Note: Total of combination of flyash and calcined pozzalon shall not exceed 20 percent.
- 3. Maximum Coarse Aggregate Size: For footings 1 1/2 inch.
- Maximum Coarse Aggregate Size: For slabs, walls, precast plank topping and piers: 3/4 inch.

#### **2.09 MIXING**

- A. Transit Mixers: Comply with ASTM C94/C94M except where requirements in table above are more restrictive.
- B. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or exceeds the maximum permissible slump.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

#### 3.02 PREPARATION

- A. Inspect all excavations and/or prepared subgrade for suitability of pouring concrete. No standing water, organic material, debris, etc., should be present. Slab subgrade should be compacted as specified and have optimum moisture content.
- B. Points of concrete placement shall be clean, damp but not wet surfaces, or properly consolidated fills, but never soft mud, dry porous earth, or frozen ground.
- C. Verify that forms are clean and free of rust before applying release agent.
- D. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.
- E. Contractor shall make certain that references to all related sections for floor finishes and their substrate finish requirements are complied with including but not limited to; mix/slump, flatness, curing/sealing compounds, curing timeframe, aggregate colors etc.
- F. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.
  - 1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
  - 2. Use latex bonding agent only for non-load-bearing applications.
- G. Interior Slabs on Grade: Install vapor retarder under interior slabs on grade. Comply with ASTM E1643. Lap joints minimum 6 inches. Seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. Repair damaged vapor retarder before covering.

- 1. Vapor Retarder Over Granular Fill: Install compactible granular fill before placing vapor retarder as indicated on drawings. Do not use sand.
- H. Repair underslab vapor barrier damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.

#### 3.03 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304R.
- B. Place concrete for floor slabs in accordance with ACI 302.1R.
- C. Ensure reinforcement, inserts, and embedded parts will not be disturbed during concrete placement.
- D. Addition of water or admixtures to concrete on site without written approval of Architect/Engineer is prohibited and shall be grounds for rejection.
- E. Convey concrete from mixing to point of placement rapidly and continuously until unit of operation is completed using methods which prevent segregation or loss of ingredients. Deposit at or very near final placement position. Use chutes such that the concrete slides in the chute and does not flow. For vertical drops more than 5 feet, utilize tremies or similar devices to prevent segregation of concrete ingredients. Do not convey or handle concrete in containers or devices made of aluminum.
- F. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.
- G. Consolidate placed concrete by vibration so the concrete is thoroughly worked around reinforcement, around embedded items, and into corners of forms, eliminating air or stone pockets which may cause honeycombing, pitting, or planes of weakness. Use mechanical vibrators with a minimum frequency of 7,000 revolutions per minute, operated by competent workmen. Use of vibrators to move concrete within forms is not permitted. Insert and withdraw vibrators at many points, from 18 to 30 inches apart for 5 to 10 seconds duration. Keep a spare vibrator on the Project Site during all concrete placement operations. Use vibrators of internal type, apply directly to concrete, not through formwork, except in sections too thin to permit insertion of internal type, in which case, employ use of form vibrators approved by Architect/Engineer.
- H. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.
- I. Concrete in vertical members shall have been in place at least four hours before concrete in horizontal or vertical members resting thereon is placed.
- J. Placing concrete shall be continuous between vertical construction joints. Make vertical construction joints at approximately the center of a panel or beam, in a straight line to the full depth. See Project Drawings for location of architecturally delineated construction joints.

#### 3.04 SLAB JOINTING

- A. Locate joints as indicated on drawings.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
  - 1. Install wherever necessary to separate slab from other building members, including columns, walls, equipment foundations, footings, stairs, manholes, sumps, and drains.
  - 2. Conform to Section 07 92 00 for finish joint sealer requirements.
- D. Saw Cut Contraction Joints: Saw cut joints as soon as joints can be cut without joint deformation; use 3/16 inch thick blade and cut at least 1 inch deep but not less than one quarter (1/4) the depth of the slab. Apply specified sealant from 07 92 00 flush with floor.
- E. Construction Joints: Where not otherwise indicated, use metal combination screed and key form, with removable top section for joint sealant.

F. Separate slabs on grade from vertical surfaces with bond break of #15 felt, 6 mil poly or slab vapor barrier.

#### 3.05 STRUCTURAL COMPONENT JOINTS

- A. Construction joints for walls and continuous wall footings shall have reinforcing cross joints so that shear keys will not be necessary. Construction joints will be located at Contractor's discretion and will be at such locations that each section can be filled in one continuous operation.
- B. Construction joints for concrete beams and structural slabs shall be at mid-span. Reinforcing shall extend through joint. No horizontal joint will be allowed.
- C. Construction joints for concrete columns shall be at underside of each floor level.

#### 3.06 FLOOR FLATNESS AND LEVELNESS TOLERANCES

- A. An independent testing agency, as specified in Section 01 40 00, will inspect finished slabs for compliance with specified tolerances.
- B. Minimum F(F) Floor Flatness and F(L) Floor Levelness Values:
  - 1. Exposed to View and Foot Traffic: F(F) of 20; F(L) of 15, on-grade only.
  - 2. Under Thick-Bed Tile: F(F) of 20; F(L) of 15, on-grade only.
  - 3. Under Carpeting: F(F) of 25; F(L) of 20, on-grade only.
  - 4. Under Thin Resilient Flooring and Thinset Tile: F(F) of 35; F(L) of 25, on-grade only.
- C. Measure F(F) Floor Flatness and F(L) Floor Levelness in accordance with ASTM E1155 (ASTM E1155M), within 48 hours after slab installation; report both composite overall values and local values for each measured section.
- D. Correct the slab surface if composite overall value is less than specified and if local value is less than two-thirds of specified value or less than F(F) 13/F(L) 10.
- E. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

#### 3.07 COLD WEATHER REQUIREMENTS

- A. Cold weather requirements govern when minimum ambient temperature is expected to fall below 40 degrees F.
  - 1. Concrete will not be placed on frozen ground.
  - 2. Mix, place, protect and cure concrete in strict accordance with ACI 306 R-88 "cold Weather Concreting".

#### 3.08 HOT WEATHER REQUIREMENTS

- A. Hot weather requirements govern when maximum ambient temperature is expected to rise above 85 degrees F.
- B. Mix, place, protect and cure concrete in strict accordance with ACI 305R.
- C. Admixtures proposed for construction under these conditions, such as water-reducing retarders, shall be tested thoroughly with concrete mixes for this job. All aspects of concrete construction applicable shall be considered before approval. Submit specifications on retarder to Engineer for approval with concrete mix designs.
- D. Batch, mix and transport concrete per ACI 304R.
- E. Water curing will be required for hot weather construction.

#### 3.09 CONCRETE FINISHING

- A. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
  - 1. Surfaces to Receive Thin Floor Coverings: "Steel trowel" as described in ACI 302.1R thin floor coverings include carpeting, resilient flooring, thin set ceramic tile, thin set quarry tile, and epoxy terrazzo. High gloss finish from power trowel not acceptable.
  - 2. Surfaces to be Sealed: Troweled finish.

- B. Exterior Foundation Wall Surface Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height. Fill tie break-off holes with grout flush with wall.
- C. Surfaces to Receive Thick Floor Coverings: "Wood float" as described in ACI 302.1R; thick floor coverings include quarry tile, ceramic tile, and Portland cement terrazzo with full bed setting system.
- D. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:
  - 1. Smooth Rubbed Finish: Wet concrete and rub with carborundum brick or other abrasive, not more than 24 hours after form removal.
  - 2. Other Surfaces to Be Left Exposed: Trowel as described in ACI 302.1R, minimizing burnish marks and other appearance defects.

#### 3.10 CURING AND PROTECTION

- A. Take every precaution to ensure that all concrete operations are performed promptly and without interruption.
- B. Moisture cure slabs only. Exception; where curing/sealing compounds are indicated.
- C. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- D. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
  - 1. Normal concrete: Not less than seven days.
  - 2. High early strength concrete: Not less than four days.
- E. Begin final curing after initial curing but before surface is dry.
- F. Formed Surfaces: Cure by moist curing with forms in place for full curing period.
- G. Surfaces Not in Contact with Forms:
  - 1. Slabs and Floors To Receive Adhesive-Applied Flooring: Curing compounds and other surface coatings are usually considered unacceptable by flooring and adhesive manufacturers. If such materials must be used, either obtain the approval of the flooring and adhesive manufacturers prior to use or remove the surface coating after curing to flooring manufacturer's satisfaction.
  - 2. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water-fog spray or saturated burlan
  - 3. Final Curing: Begin after initial curing but before surface is dry.
    - a. Moisture-Retaining Cover: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches and sealed by waterproof tape. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
    - b. Curing/Sealing Compound (At sealed concrete locations only): Apply in two coats at right angles, using application rate recommended by manufacturer.

#### 3.11 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 40 00 Quality Requirements.
- B. Provide free access to concrete operations at project site and cooperate with appointed firm.
- C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
- D. Record time, place, mix design, quantity, slump, concrete temperature, air temperature and weather conditions, cylinders taken, date shoring is removed, curing and other data pertaining to concrete placement.

- E. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.
- F. Compressive Strength Tests: ASTM C39/C39M. For each test, mold and cure four concrete test cylinders. Obtain test samples for first 50 cu yd or less of each class of concrete placed. Cast one set of four test cylinders for each additional 100 cu. yd.
  - 1. Test one (1) cylinder at 7 days and two (2) cylinders at 28 days and (1) on hold.
  - 2. For first set of cylinders cast for slab-on-grade, test one (1) cylinder at 3 days. Analyze probable 28 day strength. Inform Architect/Engineer immediately by telephone if there appears to be concern for achieving required 28 day strength.
  - 3. If reasonable consistency of slump and air tests is recorded on 4 consecutive tests, testing company may reduce requirements to test every 150 cu. yds.
- G. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- H. Deviation from specifications shall be grounds for rejection.
- Addition of water or admixtures to concrete on site without written approval of Architect/Engineer is prohibited and shall be grounds for rejection.

#### 3.12 MOISTURE TESTING

A. Testing requirements are addressed in Section 09 05 61.

#### 3.13 DEFECTIVE CONCRETE

- A. Test Results: The testing agency shall report test results in writing to Architect and Contractor within 24 hours of test.
- B. Defective Concrete: Concrete not complying with required lines, details, dimensions, tolerances or specified requirements.
- C. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
- D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area.

#### **END OF SECTION**

#### SECTION 14 45 00 VEHICLE LIFTS

#### **PART 1: GENERAL**

#### 1.01 WORK INCLUDED

A. Vehicle lift including safety equipment, controls and accessories for installation in a automotive service bay.

#### 1.02 RELATED WORK

- A. Section 03 30 00 Cast-In-Place Concrete: Coordinate supporting slab requirements.
- B. Electrical: Division 26.

#### 1.03 REFERENCES

- A. ANSI/ALI ALIS: 2009 (R2015) Standard for Automotive Lifts Safety Requirements for Installation and Service.
- B. ANSI/ALI ALCTV: 2017 Standard for Automotive Llfts Safety Requirements for Construction, Testing, and Validation
- C. ALI: Automotive Lift Institute.

#### 1.04 SUBMITTALS

- A. Submit the following:
  - Product Data: Manufacturer's catalog information edited to indicate specific products and related accessories to be provided for this Project. Include specifications and replacement parts list.
  - 2. Shop drawings: Showing all details of construction, location of electrical connections, anchorages, relationship to adjoining construction and load reactions.
  - 3. Instructions: Operation and maintenance of lift equipment.
  - 4. Certification: Documentation of manufacturer approval of the distributor and installer.

#### 1.05 WARRANTY

- A. Provide manufacturer's standard warranty.
- B. Correct defective Work within a one year period after Date of Substantial Completion.

#### 1.06 QUALITY ASSURANCE

- A. Installer Qualifications
  - 1. Factory trained authorized company.
  - 2. Insured for complete operations of installation.
- B. Install in accordance with manufacturer instructions.
- C. Provide lift compliant with ANSI/ALI ALCTV: 2017 Standard for Automotive Llfts Safety Requirements for Construction, Testing, and Validation. Provide ALI gold label certified lift.

#### **PART 2: PRODUCTS**

#### 2.01 VEHICLE LIFT

- A. Provide complete assembly for a functional single-source installation including but not limited to; Control console, hydraulic system (hoses, pipes, pumps, reservoirs etc.), electrical wiring and circuits, safety features, motors, disconnects and waterproofing.
- B. Basis of Design:
  - 1. Manufacturer: Design based on; Rotary Lift; www.rotarylift.com
  - Model: SPOA10N700BL
- C. Comparable Manufacturers:
  - Challenger Lifts; www.challengerlifts.com
- D. NOTE: IT IS THE RESPONSIBILITY OF THE AWARDED SUPPLIER TO CONFIRM ALL REQUIRED DIMENSIONS AND ROUGHINS AND SUBMIT TO THE GENERAL PRIME

# CONTRACTOR ON A TIMELY BASIS FOR PROPER PREPARATION OF UNDERFLOOR WIRING AND REINFORCED OR THICKENED SLAB IF NECESSARY.

- E. Provide manufacturer specified shims or otherwise follow manufacturer requirements for installation of lift on a sloped slab.
- F. Dimensions, Capacities and Requirements: Refer to manufacturer datasheet for the basis of design model.

#### **PART 3: EXECUTION**

#### 3.01 EXAMINATION

- A. Verify that supporting structure meets the requirements for installation.
- B. Notify A/E of unsatisfactory conditions.
- C. Proceeding with installation indicates approval of conditions.

#### 3.02 INSTALLATION

- A. Install lift in accordance with manufacturer's directions.
- B. Contractor shall operate and test lift in presence of A/E and Owner.

#### 3.03 ADJUST AND CLEAN

- A. Adjustments
  - 1. Adjust lift to operate to within accepted design tolerances.
  - 2. Lubricate all equipment in accordance with accepted manufacturer's instructions.
- B. Clean Up
  - 1. Remove all loose materials and fillings resulting from this work.
  - 2. Clean floor of dirt, oil and grease.
  - 3. Remove crating and packing materials from premises.

#### 3.04 TRAINING

- A. Provide acceptable training of personnel. The quality of the training shall be such that at the conclusion of the specified training time, each individual with their assigned category, shall be capable of safely operating the system.
- B. For all types of training, the associated technical data shall be on hand at the time of instruction, and its use and interpretation shall be covered.
- C. All instructions and materials, both oral and written, shall be in the English language.

#### **END OF SECTION**

# SECTION 32 31 13 CHAIN LINK FENCING AND GATES

#### **PART 1 – GENERAL**

- 1.1 SECTION INCLUDES
  - A. 8' Tall Black Chain Link Fencing
  - B. Service Gates
  - C. Pedestrian Gates
- 1.2 SHOP DRAWINGS AND PRODUCT DATA
  - A. Submit shop drawings and product data.
  - B. Clearly indicate plan layout, grid, spacing of components, accessories, fittings, and anchorage.
  - C. Submit manufacturer's installation instructions and procedures.
- 1.3 REFERENCES
  - A. ASTM A491 -Standard Specification for Aluminum Coated Steel Chain Link Fence Fabric
  - B. ASTM A392 -Standard Specification for Hot Dipped Zinc Coated Galvanized Steel Chain Link Fence Fabric
  - C. ASTM 1428 -Standard Test Method for Weight of Coating on Aluminum-Coated Iron or Steel Articles
  - D. ASTM A120 -Standard Specification for Pipe, Steel, Black and Hot-Dipped Zinc-Coated (galvanized) Welded and Seamless, for Ordinary Uses
  - E. ASTM E8 -Tension Testing of Metallic Materials
  - F. ASTM F552 -Standard Definitions of Terms Relating to Chain Link Fencing
  - G. ASTM F567 -Standard Practice for Installation of Chain Link Fence
  - H. ASTM F626 -Standard Specification for Fence Fittings
  - I. ASTM F669 -Standard Specification for Strength Requirements of Metal Posts and Rails for Industrial Chain Link Fence
  - J. FS RR-F-191J -Fencing, Wire and Post, Metal (and Gates, Chain Link Fence Fabric, and Accessories)
  - K. RFS RR-F-00191 0 -Fencing, Wire and Post

#### **PART 2 - PRODUCTS**

- 2.1 MATERIALS. ALUMINUM COATED OR GALVANIZED
  - A. ASTM A569 SS-40 Pipe.
  - B. Chain Link Fence:
    - 1. Aluminum-coated steel, in accordance with ASTM A491. Thoroughly degrease, rinse, and coat fabric with clear acrylic lacquer by the complete immersion process in line with the weaving process before taking up into rolls for shipment. Minimum weight of aluminum coating is 0.40 oz/ft for 6 and 9 gauge, as measured in accordance with ASTM A428.
    - 2. Hot dipped, zinc coated, steel (galvanized) in accordance with ASTM A392. Minimum weight of coating shall be 2 oz. per sq. ft.

- 3. Vinyl Coated Fence in accordance with ASTM F668 fuse bonded class 2b or polyester, polyolefin elastomer powder coating per ASTM F1043. Minimum 9 gauge mesh, as measured in accordance with ASTM A428, for vinyl coating.
- C. Tension Wire: Aluminized-coated steel, in a marcelled or coil spring configuration to provide stretch ability.
- D. Fittings: In compliance with ASTM F626, galvanized steel.
- F. Stair/ ADA hand railings as fabricated per site details.

#### 2.2 COMPONENTS

- A. Posts:
  - 1. 8' Tall Fence: SS-40 4.64 lbs/ft. 2.875" outside diameter
- B. Corner and Terminal Posts:
  - 1. 8' Tall SS-40 4.64 lbs./ft 2.875" outside diameter.
- C. Corner and terminal posts for service gates:
  - 1. 25' Wide or Less SS-40 6.56 lbs./ft 4" outside diameter
  - 2. 26' Wide or Greater Sch 40 18.97 lbs/ft 6.625" outside diameter
- D. Top and Brace Rail (Straight Run): SS-40 1.84 lbs/ft 1.66" outside diameter tubular section.

Top Rail (Curves): SS-30 1.59 lbs/ft 1.66" outside diameter tubular section.

- E. Chain Link Fabric:
  - 1. 2" mesh woven from 9 gauge aluminized steel wire, top selvage knuckled bottom selvage knuckled in accordance with ASTM A491 (General Fence Areas)
- F. Bottom Tension Wire: 7 gauge galvanized or aluminized steel.
- G. Tie Wires for securing chain link fabric to horizontal rails and to line posts over 2.375" OD: 6 gauge aluminum alloy wire.
- H. Hog Rings for securing chain link fabric to tension wire: 12 gauge aluminum alloy wire.

#### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Landscape finish grading shall be completed prior to setting line posts. Install line posts, corner posts, terminal posts and horizontal rails with brace bands, rail ends, rail sleeves, line post caps, tension bands, tension bars, chain link fabric and gates to provide a rigid structure for fence. Use manufacturer's standard fittings, fasteners and hardware.
- B. Space line posts uniformly and on 8' foot maximum centers.
- C. Line posts driven a minimum of 5' deep on 8' tall fencing.
- D. Set posts plumb and true to line and grade.
- E. Corner and terminal posts set in 48" x 12" concrete footings or as indicated on the plan set documents. Hold concrete 3" below finish grade.
- F. Position bottom of fabric 1.5" above finished grade with tension wire stretched taut between terminal posts 2" to 3" above bottom of fabric.
- G. Knuckle top and bottom standards of all fabric.
- H. Pass top rail through line post caps/angled arm and attach securely to terminal posts.
- I. Install brace rail and adjustable truss rod between end, corner and gate posts and first line post.

- J. Stretch chain link fabric taut between terminal posts, supporting its weight as necessary with temporary tie wires.
- K. Attach fabric to end, corner and gate posts with tension bars and tension bands, using one less band than height of fabric of feet, or approximately 14" on center.
- L. Attach fabric to horizontal rails and line posts with tie tires and to tension wire with hog rings, five (5) tie wires, or hog rings per 10' bay, or approximately 24" on center. Fence fabric shall be placed on the inside of posts around track and placed on the outside of posts along perimeter fence.
- M. Install gates and adjust true to fence line and grade.

#### 3.2 CLEAN UP

- A. Dispose of excessive material to certified landfill.
- B. All pipe, concrete, fabric and miscellaneous parts shall be removed from site.
- C. Grade subgrade to within 1" of finish subgrade after work is completed.

#### 3.3 UTILITY LOCATES

A. All required Diggers Hotline locates and private utility locates shall be ordered and paid for by each contractor requiring the locate service.

#### **END OF SECTION**

# Page Intentionally Left Blank

# LA FARGE SCHOOL DISTRICT ADDITION AND RENOVATION 301 WEST ADAMS STREET LA FARGE, WISCONSIN

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.

100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

HSR #19041

# SEPTEMBER 2021

# **BID DOCUMENTS**

# **INDEX OF DRAWINGS**

A		
	GENERAL	
A000	COVER SHEET	
A001	ADA MOUNTING HEIGHTS	
A002	LIFE SAFETY PLANS	
A003	CONSTRUCTION SITE STAGING	
A004	CONSTRUCTION PHASING PLAN	

	CIVIL	
C100	DEMOLITION PLAN	
C101	LAYOUT PLAN	
C102	GRADING PLAN	
C103	EROSION CONTROL PLAN	
C104	UTILITY PLAN	
C105	DETAILS	

# PROJECT TEAM PROJECT ARCHITECT: HSR ASSOCIATES, INC. TIM RUPPERT

truppert@hsrassociates.com 608.784.1830 **JOB CAPTAIN:** HSR ASSOCIATES, INC. TRENT SCHOTT tschott@hsrassociates.com 608.784.1830 HSR ASSOCIATES, INC. **PROJECT TECHNICIAN: DAVID HANNU** dhannu@hsrassociates.com 608.784.1830 **SPECIFICATIONS:** HSR ASSOCIATES, INC. TOBIN FAUCHEUX tfaucheux@hsrassociates.com 608.784.1830 INTERIOR DESIGNER: HSR ASSOCIATES, INC. **SARAH BRAATZ** sbraatz@hsrassociates.com 608.784.1830 **CIVIL ENGINEER:** POINT OF BEGINNING, INC. JIM LUNDBERG, P.E. jiml@pobinc.com 715.344.9999 STRUCTURAL ENGINEER: RA SMITH wayne.vandenbergh@rasmith.com 608.421.5316 PLUMBING ENGINEER: **TIMOTHY WENDT, P.E.** twendt@otie.com

608.241.6725

608.784.1830

608.784.1830

**SCOTT GERZSIK** 

**MECHANICAL ENGINEER:** 

**ELECTRICAL DESIGNER:** 

HSR ASSOCIATES, INC.

HSR ASSOCIATES, INC.

jberan@hsrassociates.com

sgerzsik@hsrassociates.com

**JAKE BERAN, P.E.** 

# **LOWER LEVEL - OVERALL FIRST FLOOR - OVERALL SECOND FLOOR - OVERALL LOWER LEVEL - SEGMENT A LOWER LEVEL - SEGMENT B FIRST FLOOR - SEGMENT A FIRST FLOOR - SEGMENT B FIRST FLOOR - SEGMENT C** FIRST FLOOR - SEGMENT C ALT BID **SECOND FLOOR - SEGMENT A** LOWER LEVEL RCP - SEGMENT A & B **FIRST FLOOR RCP - SEGMENT A FIRST FLOOR RCP - SEGMENT B** FIRST FLOOR RCP - SEGMENT C **SECOND FLOOR RCP - SEGMENT A EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS INTERIOR ELEVATIONS INTERIOR ELEVATIONS** INT. ELEVATIONS, CASEWORK **SECTIONS WALL SECTIONS WALL SECTIONS WALL SECTIONS STAIR SECTIONS DETAILS DETAILS DETAILS WALL TYPES** DOOR SCHEDULE AND FRAME TYPES

**ARCHITECTURAL** 

**LOWER LEVEL DEMO - SEGMENT A & B** 

FIRST FLOOR DEMO PLAN - SEGMENT A

FIRST FLOOR DEMO PLAN - SEGMENT B

FIRST FLOOR DEMO PLAN - SEGMENT C

**SECOND FLOOR DEMO PLAN - SEGMENT A** 

	<b>INTERIOR DESIGN</b>
ID101	LOWER LEVEL - SEGMENT A & B
ID102	FIRST FLOOR - SEGMENT A
ID103	FIRST FLOOR - SEGMENT B
ID104	FIRST FLOOR - SEGMENT C
ID105	SECOND FLOOR - SEGMENT A
ID600	MASTER COLOR SCHEDULE

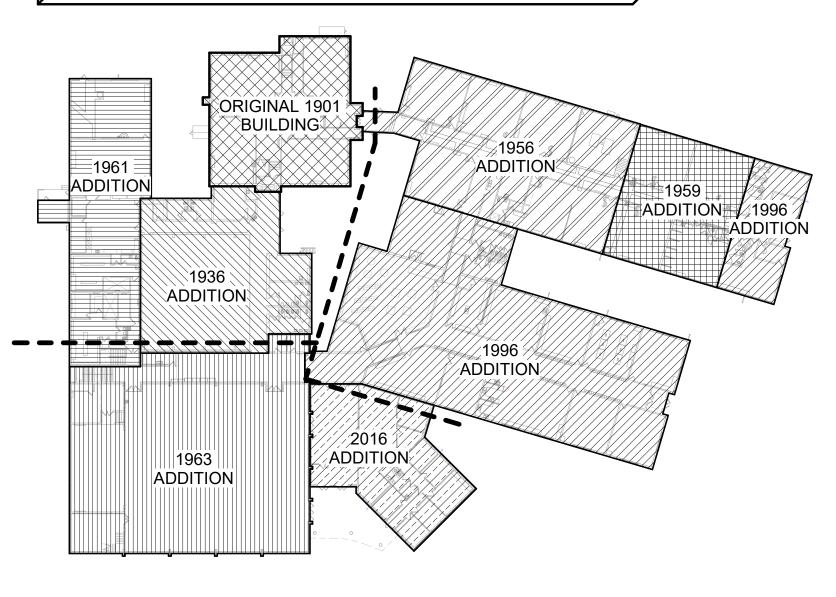
# STRUCTURAL S001 STRUCTURAL NOTES S002 STRUCTURAL SCHEDULES S103 FOUNDATION PLAN S104 FOUNDATION PLAN S105 FRAMING PLAN S106 FRAMING PLAN S107 FRAMING PLAN S108 FRAMING PLAN S108 FRAMING PLAN S800 FOUNDATION DETAILS S801 FOUNDATION DETAILS S810 FRAMING DETAILS

**PLUMBING** 

LOWER LEVEL PLUMBING DEMO PLANS - SEG A & B

**PLUMBING GENERAL INFORMATION** 

11. 230	
P091	FIRST FLOOR PLUMBING DEMO PLAN - SEG A
P092	FIRST FLOOR PLUMBING DEMO PLAN - SEG B
P093	FIRST FLOOR PLUMBING DEMO PLAN - SEG C
P100	LOWER LEVEL PLUMBING PLAN - SEG A
P101	LOWER LEVEL PLUMBING PLAN - SEG B
P102	FIRST FLOOR PLUMBING PLAN - SEG A
P103	FIRST FLOOR PLUMBING PLAN - SEG B
P104	FIRST FLOOR PLUMBING PLAN - SEG C
P105	ROOF PLUMBING PLAN - SEG A
P106	ROOF PLUMBING PLAN - SEG B
P400	PLUMBING ENLARGED PLANS
P401	PLUMBING ENLARGED PLANS
P402	FIRST FLOOR PLUMBING ENLARGED PLANS - SEG C
P403	FIRST FLOOR PLUMBING ENLARGED PLANS - SEG C
P500	PLUMBING DETAILS
P600	PLUMBING ISOMETRICS - DOMESTIC WATER - SEG A1
P601	PLUMBING ISOMETRICS - DOMESTIC WATER - SEG B
P602	PLUMBING ISOMETRICS - DOMESTIC WATER - SEG
	A2
P603	PLUMBING ISOMETRICS - DOMESTIC WATER - SEG C1
P604	PLUMBING ISOMETRICS - DOMESTIC WATER - SEG C2
P605	PLUMBING ISOMETRIC - WASTE AND VENT - SEG A
P606	PLUMBING ISOMETRIC - WASTE AND VENT - SEG B
P607	PLUMBING ISOMETRIC - WASTE AND VENT - SEG C1
	PLUMBING ISOMETRIC - WASTE AND VENT - SEG C2



**BUILDING KEY** 

# **MECHANICAL HVAC LOWER LEVEL PIPING REMOVAL - SEG. A&B HVAC LOWER LEVEL PIPING REMOVAL - SEG. C HVAC PIPING REMOVAL - SEG. A&B HVAC PIPING REMOVAL - SEG. C HVAC LOWER LEVEL DUCTWORK REMOVAL - SEG. A&B HVAC DUCTWORK REMOVAL - SEG. B HVAC DUCTWORK REMOVAL - SEG. C HVAC LOWER LEVEL PIPING REMODEL - SEG. A&B HVAC PIPING REMODEL - SEG. A HVAC PIPING REMODEL - SEG. B HVAC PIPING REMODEL - SEG. C HVAC LOWER LEVEL DUCTWORK REMODEL - SEG. A&B HVAC DUCTWORK REMODEL - SEG. A HVAC DUCTWORK REMODEL - SEG. B HVAC DUCTWORK REMODEL - SEG. C HVAC 2ND FLOOR PLAN ENLARGED PLANS DUST COLLECTION PLAN HVAC SECTIONS**

**HVAC SCHEMATICS** 

**AHU DETAILS** 

**HVAC DETAILS** 

**HVAC DETAILS** 

**HVAC DETAILS** 

**HVAC DETAILS** 

**HVAC DETAILS** 

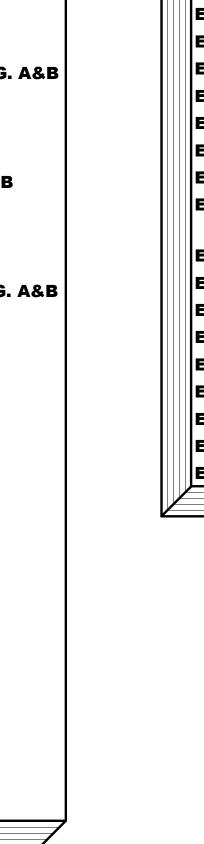
**HVAC SCHEDULES** 

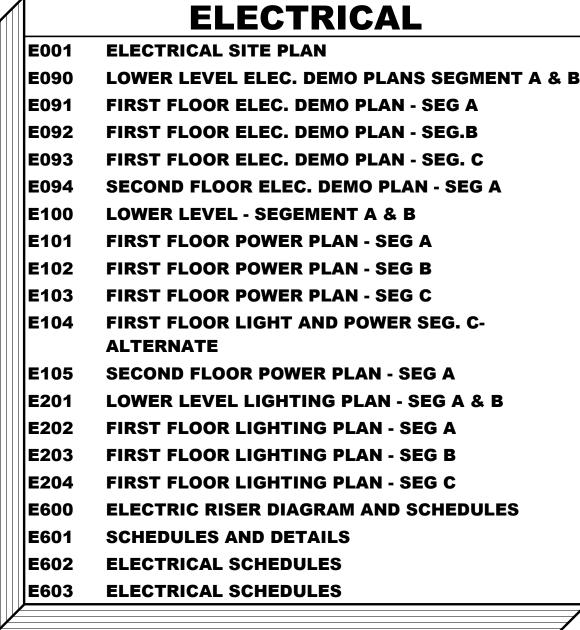
**HVAC SCHEDULES** 

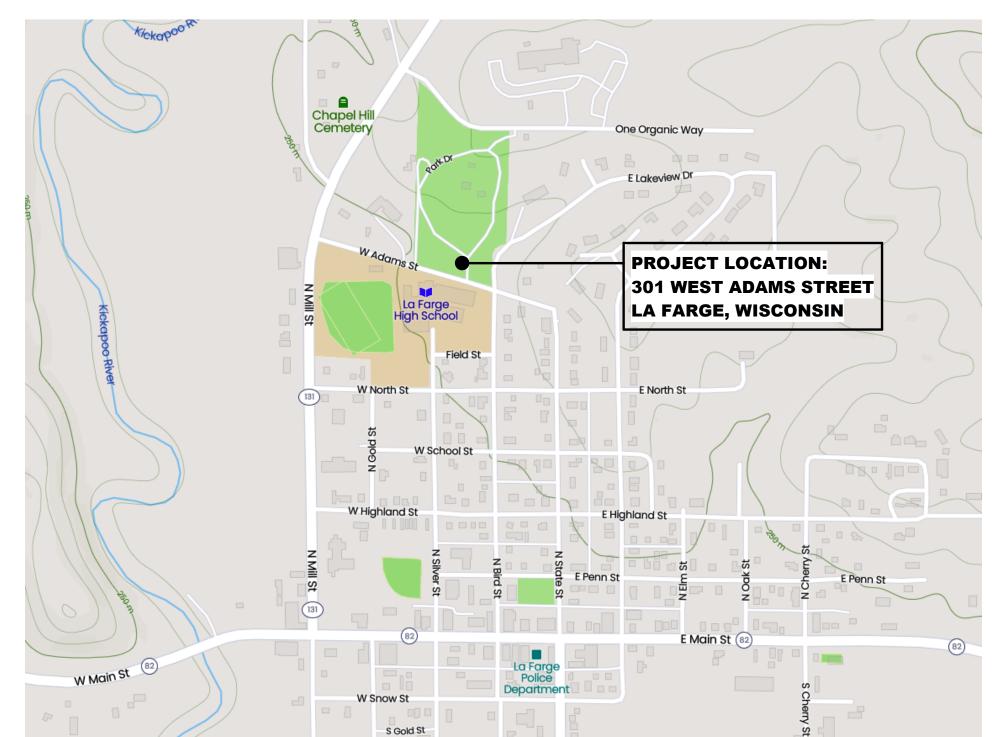
**HVAC SCHEDULES** 

**HVAC SCHEDULES** 

**CONTROL SCHEMATICS** 

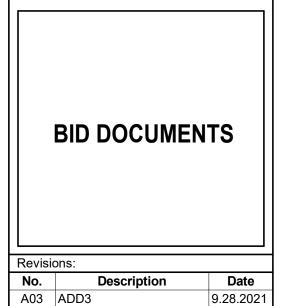












**HSR Project Number:** 

Key Plan:

19041-1

**SEPTEMBER 2021** 

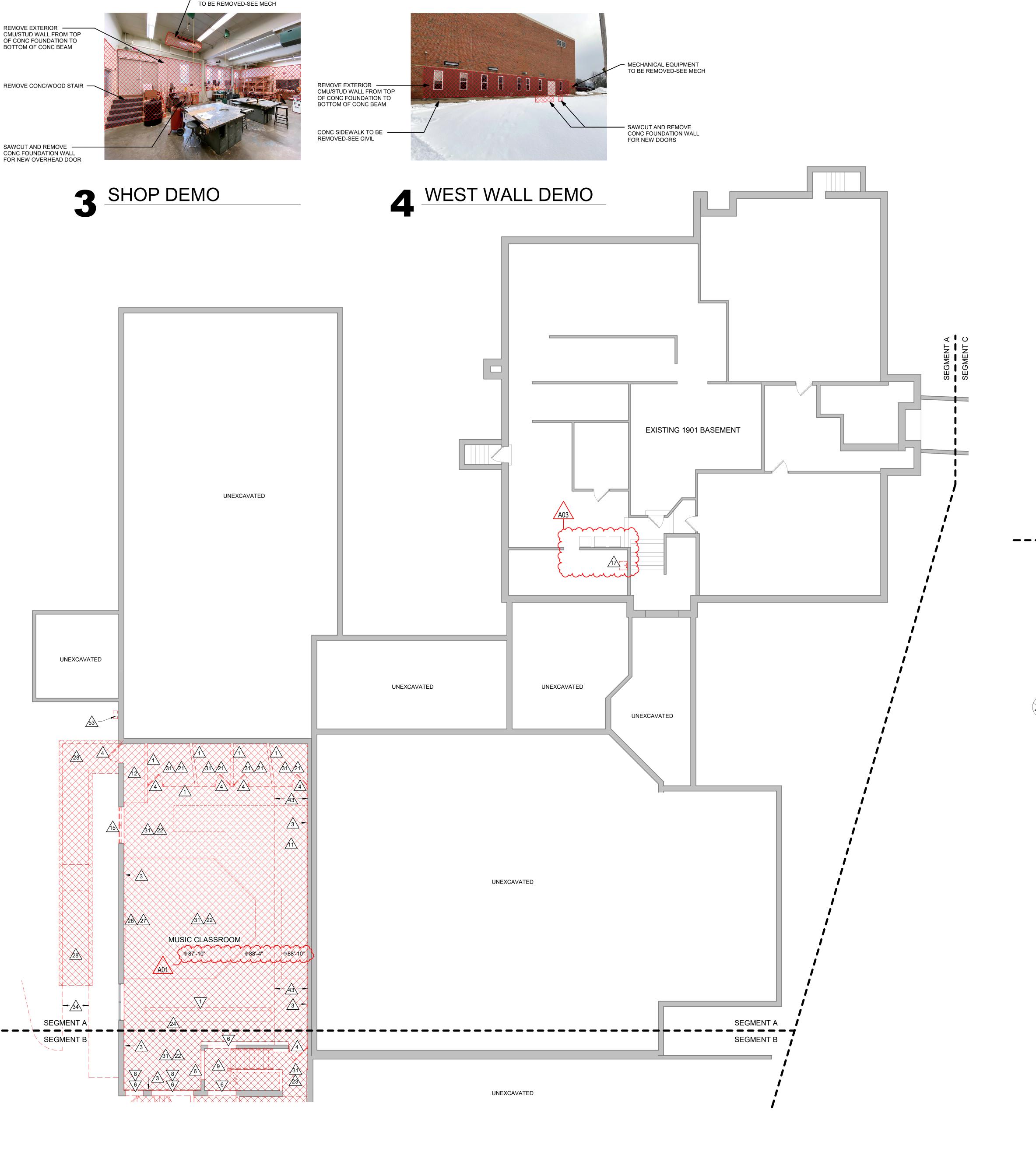
Graphic Scale:

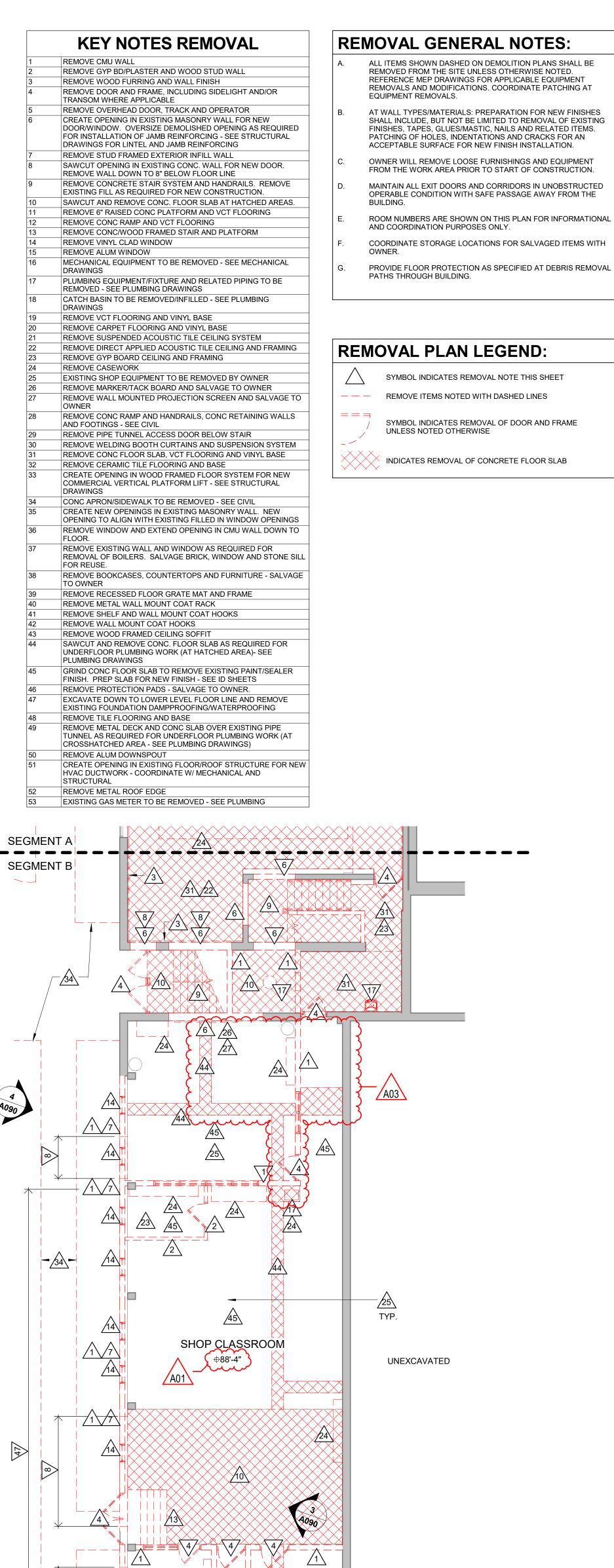
VARIES

Last Update:

9/29/2021 3:11:17 PM

**A000** 





HSR Project Number:

SEPTEMBER 2021

KEY PLAN 💮

**BID DOCUMENTS** 

9/27/2021 9:18:15 AM

ARCHITECTURE

INTERIOR DESIGN

HSR ASSOCIATES INC.

100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

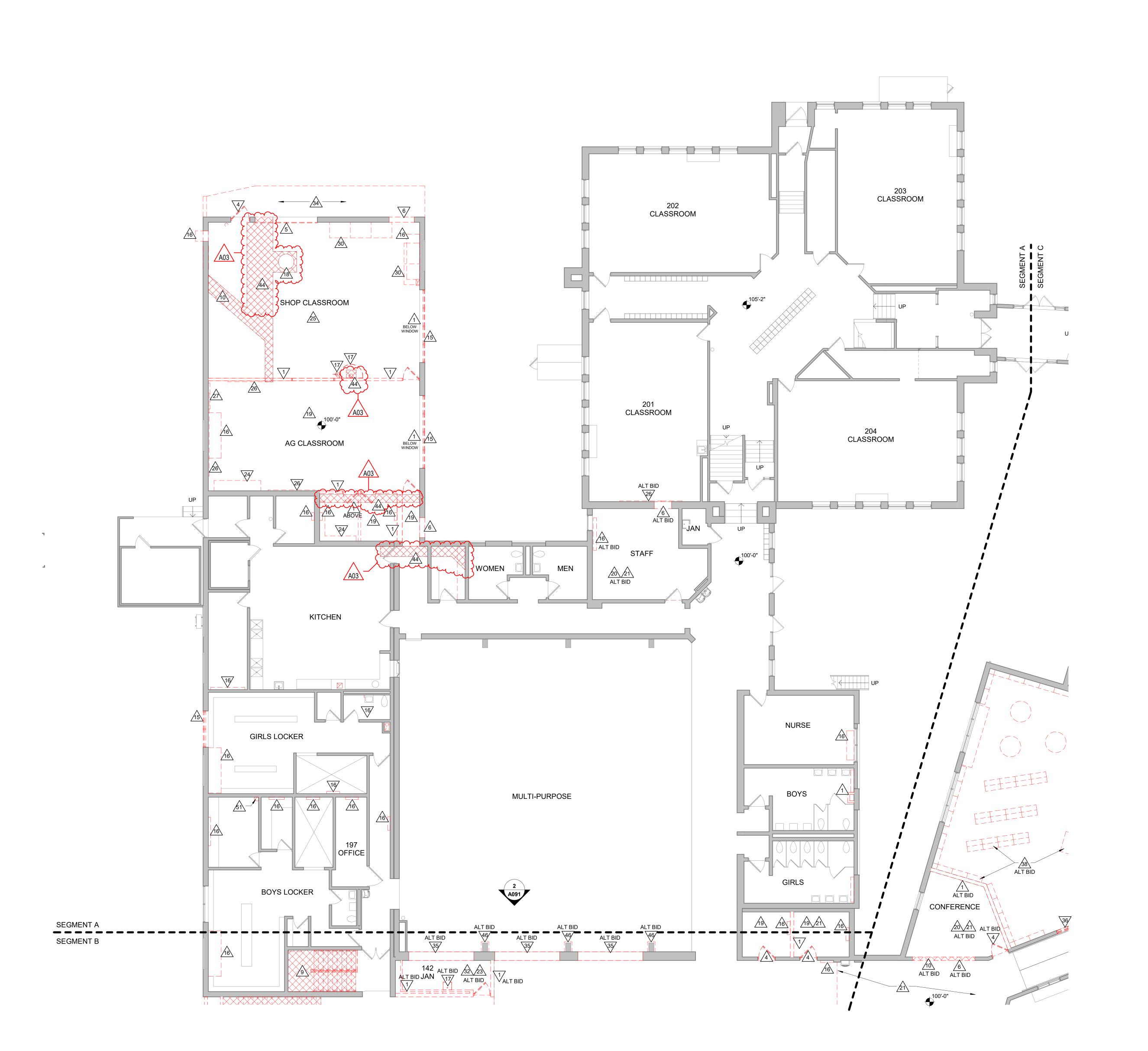
PHONE: 608.784.1830

FAX: 608.782.5844

www.hsrassociates.com

Consultant:

MECHANICAL EQUIPMENT



# REMOVAL GENERAL NOTES:

- ALL ITEMS SHOWN DASHED ON DEMOLITION PLANS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED. REFERENCE MEP DRAWINGS FOR APPLICABLE EQUIPMENT REMOVALS AND MODIFICATIONS. COORDINATE PATCHING AT EQUIPMENT REMOVALS.
- AT WALL TYPES/MATERIALS: PREPARATION FOR NEW FINISHES SHALL INCLUDE. BUT NOT BE LIMITED TO REMOVAL OF EXISTING FINISHES, TAPES, GLUES/MASTIC, NAILS AND RELATED ITEMS. PATCHING OF HOLES, INDENTATIONS AND CRACKS FOR AN ACCEPTABLE SURFACE FOR NEW FINISH INSTALLATION.
- OWNER WILL REMOVE LOOSE FURNISHINGS AND EQUIPMENT FROM THE WORK AREA PRIOR TO START OF CONSTRUCTION.
- MAINTAIN ALL EXIT DOORS AND CORRIDORS IN UNOBSTRUCTED OPERABLE CONDITION WITH SAFE PASSAGE AWAY FROM THE
- ROOM NUMBERS ARE SHOWN ON THIS PLAN FOR INFORMATIONAL
- AND COORDINATION PURPOSES ONLY. COORDINATE STORAGE LOCATIONS FOR SALVAGED ITEMS WITH
- PROVIDE FLOOR PROTECTION AS SPECIFIED AT DEBRIS REMOVAL PATHS THROUGH BUILDING.



ARCHITECTURE

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

Consultant:

REMOVAL PLAN LEGEND:

SYMBOL INDICATES REMOVAL NOTE THIS SHEET REMOVE ITEMS NOTED WITH DASHED LINES

> SYMBOL INDICATES REMOVAL OF DOOR AND FRAME UNLESS NOTED OTHERWISE

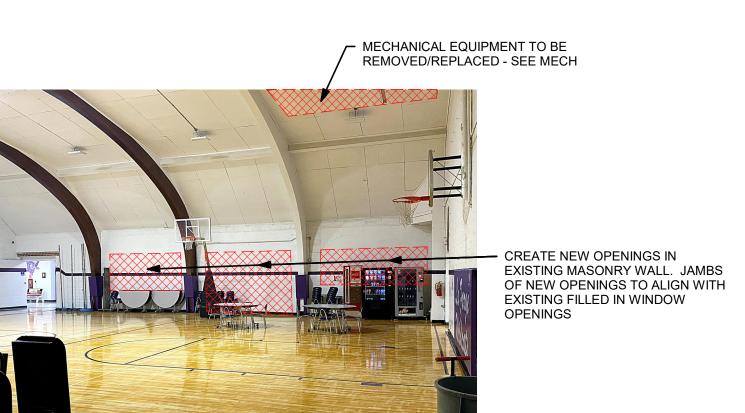
INDICATES REMOVAL OF CONCRETE FLOOR SLAB

# **KEY NOTES REMOVAL**

REMOVE CMU WALL REMOVE GYP BD/PLASTER AND WOOD STUD WALL REMOVE WOOD FURRING AND WALL FINISH REMOVE DOOR AND FRAME, INCLUDING SIDELIGHT AND/OR

DRAWINGS FOR LINTEL AND JAMB REINFORCING

- TRANSOM WHERE APPLICABLE REMOVE OVERHEAD DOOR, TRACK AND OPERATOR CREATE OPENING IN EXISTING MASONRY WALL FOR NEW DOOR/WINDOW. OVERSIZE DEMOLISHED OPENING AS REQUIRED FOR INSTALLATION OF JAMB REINFORCING - SEE STRUCTURAL
- REMOVE STUD FRAMED EXTERIOR INFILL WALL SAWCUT OPENING IN EXISTING CONC. WALL FOR NEW DOOR. REMOVE WALL DOWN TO 8" BELOW FLOOR LINE REMOVE CONCRETE STAIR SYSTEM AND HANDRAILS. REMOVE EXISTING FILL AS REQUIRED FOR NEW CONSTRUCTION.
- SAWCUT AND REMOVE CONC. FLOOR SLAB AT HATCHED AREAS. REMOVE 6" RAISED CONC PLATFORM AND VCT FLOORING REMOVE CONC RAMP AND VCT FLOORING
- REMOVE CONC/WOOD FRAMED STAIR AND PLATFORM REMOVE VINYL CLAD WINDOW REMOVE ALUM WINDOW
- MECHANICAL EQUIPMENT TO BE REMOVED SEE MECHANICAL DRAWINGS PLUMBING EQUIPMENT/FIXTURE AND RELATED PIPING TO BE
- REMOVED SEE PLUMBING DRAWINGS CATCH BASIN TO BE REMOVED/INFILLED - SEE PLUMBING
- REMOVE VCT FLOORING AND VINYL BASE REMOVE CARPET FLOORING AND VINYL BASE
- REMOVE SUSPENDED ACOUSTIC TILE CEILING SYSTEM REMOVE DIRECT APPLIED ACOUSTIC TILE CEILING AND FRAMING REMOVE GYP BOARD CEILING AND FRAMING REMOVE CASEWORK
- EXISTING SHOP EQUIPMENT TO BE REMOVED BY OWNER REMOVE MARKER/TACK BOARD AND SALVAGE TO OWNER REMOVE WALL MOUNTED PROJECTION SCREEN AND SALVAGE TO
- REMOVE CONC RAMP AND HANDRAILS, CONC RETAINING WALLS AND FOOTINGS SEE CIVIL REMOVE PIPE TUNNEL ACCESS DOOR BELOW STAIR
- REMOVE WELDING BOOTH CURTAINS AND SUSPENSION SYSTEM REMOVE CONC FLOOR SLAB, VCT FLOORING AND VINYL BASE REMOVE CERAMIC TILE FLOORING AND BASE CREATE OPENING IN WOOD FRAMED FLOOR SYSTEM FOR NEW COMMERCIAL VERTICAL PLATFORM LIFT - SEE STRUCTURAL
- CONC APRON/SIDEWALK TO BE REMOVED SEE CIVIL CREATE NEW OPENINGS IN EXISTING MASONRY WALL. NEW OPENING TO ALIGN WITH EXISTING FILLED IN WINDOW OPENINGS
- REMOVE WINDOW AND EXTEND OPENING IN CMU WALL DOWN TO REMOVE EXISTING WALL AND WINDOW AS REQUIRED FOR REMOVAL OF BOILERS. SALVAGE BRICK, WINDOW AND STONE SILL
- REMOVE BOOKCASES, COUNTERTOPS AND FURNITURE SALVAGI REMOVE RECESSED FLOOR GRATE MAT AND FRAME
- REMOVE METAL WALL MOUNT COAT RACK REMOVE SHELF AND WALL MOUNT COAT HOOKS REMOVE WALL MOUNT COAT HOOKS REMOVE WOOD FRAMED CEILING SOFFIT
- SAWCUT AND REMOVE CONC. FLOOR SLAB AS REQUIRED FOR UNDERFLOOR PLUMBING WORK (AT HATCHED AREA)- SEE GRIND CONC FLOOR SLAB TO REMOVE EXISTING PAINT/SEALER
- FINISH. PREP SLAB FOR NEW FINISH SEE ID SHEETS REMOVE PROTECTION PADS - SALVAGE TO OWNER. EXCAVATE DOWN TO LOWER LEVEL FLOOR LINE AND REMOVE EXISTING FOUNDATION DAMPPROOFING/WATERPROOFING
- REMOVE TILE FLOORING AND BASE REMOVE METAL DECK AND CONC SLAB OVER EXISTING PIPE TUNNEL AS REQUIRED FOR UNDERFLOOR PLUMBING WORK (AT CROSSHATCHED AREA - SEE PLUMBING DRAWINGS)
- REMOVE ALUM DOWNSPOUT CREATE OPENING IN EXISTING FLOOR/ROOF STRUCTURE FOR NEW HVAC DUCTWORK - COORDINATE W/ MECHANICAL AND STRUCTURAL
- REMOVE METAL ROOF EDGE EXISTING GAS METER TO BE REMOVED - SEE PLUMBING



--- CREATE NEW OPENINGS IN EXISTING FILLED IN WINDOW

SOUTH MULTIPURPOSE DEMO ALTERNATE BID

**BID DOCUMENTS** 

HSR Project Number:

19041-1

SEPTEMBER 2021

KEY PLAN 💮

A03 ADD3 0' 2' 4' 8' 12' 9/27/2021 9:19:07 AM



**REMOVAL GENERAL NOTES:** 

ALL ITEMS SHOWN DASHED ON DEMOLITION PLANS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED.
REFERENCE MEP DRAWINGS FOR APPLICABLE EQUIPMENT
REMOVALS AND MODIFICATIONS. COORDINATE PATCHING AT

AT WALL TYPES/MATERIALS: PREPARATION FOR NEW FINISHES SHALL INCLUDE, BUT NOT BE LIMITED TO REMOVAL OF EXISTING FINISHES, TAPES, GLUES/MASTIC, NAILS AND RELATED ITEMS. PATCHING OF HOLES, INDENTATIONS AND CRACKS FOR AN ACCEPTABLE SURFACE FOR NEW FINISH INSTALLATION.

OWNER WILL REMOVE LOOSE FURNISHINGS AND EQUIPMENT FROM THE WORK AREA PRIOR TO START OF CONSTRUCTION.

- MAINTAIN ALL EXIT DOORS AND CORRIDORS IN UNOBSTRUCTED OPERABLE CONDITION WITH SAFE PASSAGE AWAY FROM THE
- ROOM NUMBERS ARE SHOWN ON THIS PLAN FOR INFORMATIONAL
- PHONE: 608.784.1830 FAX: 608.782.5844 PROVIDE FLOOR PROTECTION AS SPECIFIED AT DEBRIS REMOVAL www.hsrassociates.com

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

HSR ASSOCIATES INC.

100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

Consultant:

# REMOVAL PLAN LEGEND:

SYMBOL INDICATES REMOVAL NOTE THIS SHEET

REMOVE ITEMS NOTED WITH DASHED LINES

SYMBOL INDICATES REMOVAL OF DOOR AND FRAME UNLESS NOTED OTHERWISE

INDICATES REMOVAL OF CONCRETE FLOOR SLAB

AD

HSR Project Number:

Key Plan:

19041-1

SEPTEMBER 2021

KEY PLAN 💮

**BID DOCUMENTS** 

Description

0' 2' 4' 8' 12'

9/29/2021 9:25:05 AM

A03 ADD3

Graphic Scale:

# **KEY NOTES REMOVAL**

REMOVE CMU WALL
REMOVE GYP BD/PLASTER AND WOOD STUD WALL REMOVE WOOD FURRING AND WALL FINISH

REMOVE DOOR AND FRAME, INCLUDING SIDELIGHT AND/OR TRANSOM WHERE APPLICABLE REMOVE OVERHEAD DOOR, TRACK AND OPERATOR CREATE OPENING IN EXISTING MASONRY WALL FOR NEW

DRAWINGS FOR LINTEL AND JAMB REINFORCING REMOVE STUD FRAMED EXTERIOR INFILL WALL SAWCUT OPENING IN EXISTING CONC. WALL FOR NEW DOOR. REMOVE WALL DOWN TO 8" BELOW FLOOR LINE REMOVE CONCRETE STAIR SYSTEM AND HANDRAILS. REMOVE

EXISTING FILL AS REQUIRED FOR NEW CONSTRUCTION. SAWCUT AND REMOVE CONC. FLOOR SLAB AT HATCHED AREAS. REMOVE 6" RAISED CONC PLATFORM AND VCT FLOORING REMOVE CONC RAMP AND VCT FLOORING

REMOVE CONC/WOOD FRAMED STAIR AND PLATFORM REMOVE VINYL CLAD WINDOW REMOVE ALUM WINDOW

MECHANICAL EQUIPMENT TO BE REMOVED - SEE MECHANICAL PLUMBING EQUIPMENT/FIXTURE AND RELATED PIPING TO BE

REMOVED - SEE PLUMBING DRAWINGS CATCH BASIN TO BE REMOVED/INFILLED - SEE PLUMBING REMOVE VCT FLOORING AND VINYL BASE

REMOVE SUSPENDED ACOUSTIC TILE CEILING SYSTEM REMOVE DIRECT APPLIED ACOUSTIC TILE CEILING AND FRAMING REMOVE GYP BOARD CEILING AND FRAMING

EXISTING SHOP EQUIPMENT TO BE REMOVED BY OWNER REMOVE MARKER/TACK BOARD AND SALVAGE TO OWNER REMOVE WALL MOUNTED PROJECTION SCREEN AND SALVAGE TO

REMOVE CONC RAMP AND HANDRAILS, CONC RETAINING WALLS AND FOOTINGS - SEE CIVIL REMOVE PIPE TUNNEL ACCESS DOOR BELOW STAIR REMOVE WELDING BOOTH CURTAINS AND SUSPENSION SYSTEM

REMOVE CERAMIC TILE FLOORING AND BASE CREATE OPENING IN WOOD FRAMED FLOOR SYSTEM FOR NEW COMMERCIAL VERTICAL PLATFORM LIFT - SEE STRUCTURAL

CONC APRON/SIDEWALK TO BE REMOVED - SEE CIVIL CREATE NEW OPENINGS IN EXISTING MASONRY WALL. NEW OPENING TO ALIGN WITH EXISTING FILLED IN WINDOW OPENINGS

REMOVE WINDOW AND EXTEND OPENING IN CMU WALL DOWN TO REMOVE EXISTING WALL AND WINDOW AS REQUIRED FOR REMOVAL OF BOILERS. SALVAGE BRICK, WINDOW AND STONE SILL FOR REUSE.

REMOVE BOOKCASES, COUNTERTOPS AND FURNITURE - SALVAGE

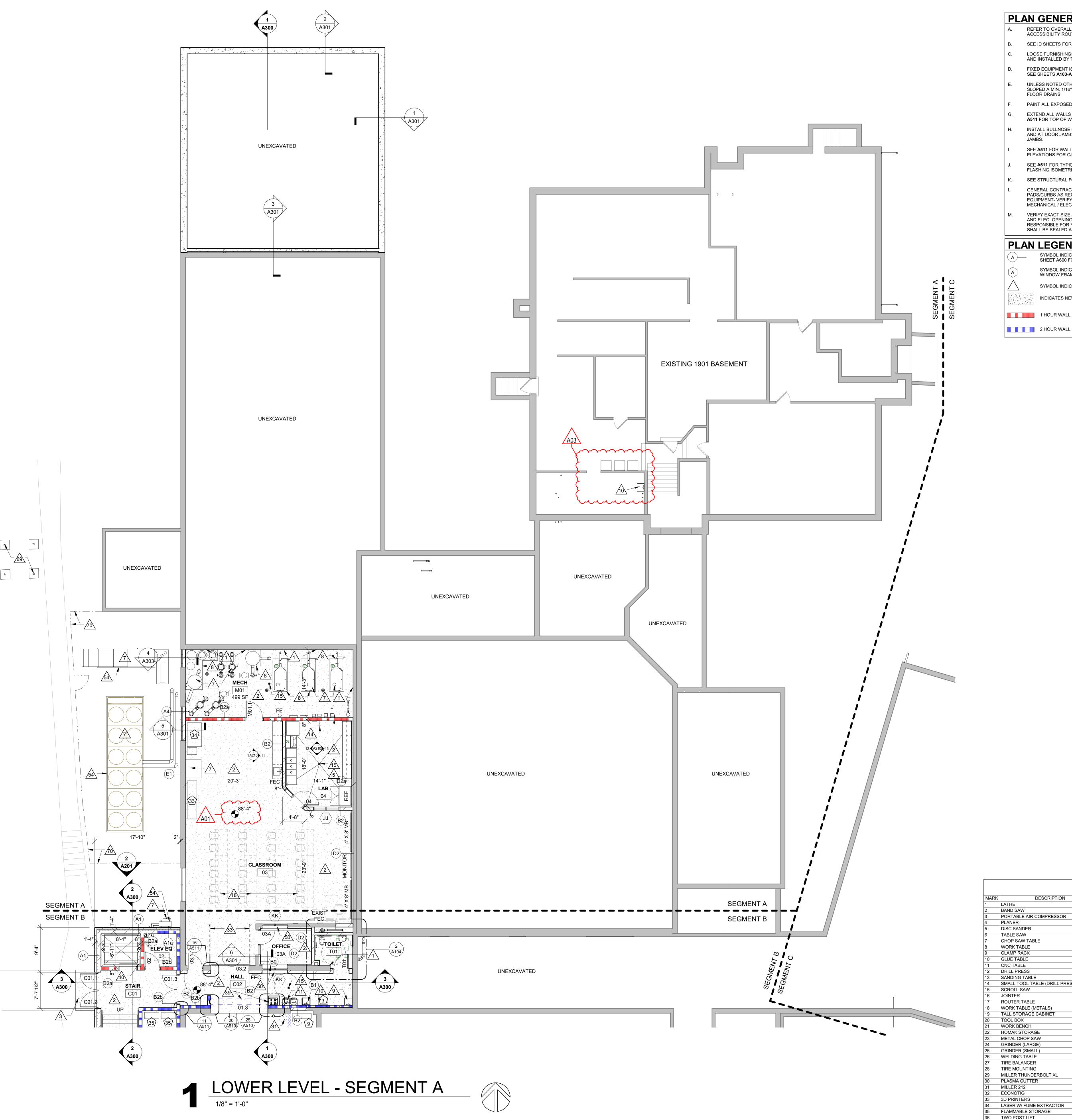
REMOVE RECESSED FLOOR GRATE MAT AND FRAME REMOVE METAL WALL MOUNT COAT RACK REMOVE SHELF AND WALL MOUNT COAT HOOKS REMOVE WALL MOUNT COAT HOOKS

REMOVE WOOD FRAMED CEILING SOFFIT SAWCUT AND REMOVE CONC. FLOOR SLAB AS REQUIRED FOR UNDERFLOOR PLUMBING WORK (AT HATCHED AREA)- SEE PLUMBING DRAWINGS GRIND CONC FLOOR SLAB TO REMOVE EXISTING PAINT/SEALER

FINISH. PREP SLAB FOR NEW FINISH - SEE ID SHEETS REMOVE PROTECTION PADS - SALVAGE TO OWNER. EXCAVATE DOWN TO LOWER LEVEL FLOOR LINE AND REMOVE

REMOVE METAL DECK AND CONC SLAB OVER EXISTING PIPE TUNNEL AS REQUIRED FOR UNDERFLOOR PLUMBING WORK (AT CROSSHATCHED AREA - SEE PLUMBING DRAWINGS) REMOVE ALUM DOWNSPOUT

REMOVE METAL ROOF EDGE EXISTING GAS METER TO BE REMOVED - SEE PLUMBING



**PLAN GENERAL NOTES:** 

- REFER TO OVERALL PLANS FOR FIRE RATING LOCATIONS AND ACCESSIBILITY ROUTES.
- SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
- LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED AND INSTALLED BY THE OWNER.
- FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION. SEE SHEETS A103-A104 FOR ALL EQUIPMENT NOTES.
- UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED A MIN. 1/16": 12" TO FLOOR DRAINS - TO "CENTER", IF NO
- FLOOR DRAINS.
- PAINT ALL EXPOSED STEEL LINTELS.
- EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE **A511** FOR TOP OF WALL DETAILS.
- INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW
- SEE **A511** FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
- SEE **A511** FOR TYPICAL HEAD FLASHING AND THROUGH-WALL FLASHING ISOMETRIC DETAILS.
- SEE STRUCTURAL FOR SLAB CONTROL JOINTS.

SHALL BE SEALED AFTER UTILITY INSTALLATION

- GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL EQUIPMENT- VERIFY SIZE, PROFILE & LOCATION WITH MECHANICAL / ELECTRICAL.
- VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AND ELEC. OPENINGS - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING

# **PLAN LEGEND:**

SYMBOL INDICATES WALL TYPE - SEE SHEET A600 FOR WALL TYPE DETAILS.

SYMBOL INDICATES WINDOW TYPE. SEE SHEET A601 FOR WINDOW FRAME ELEVATIONS. SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET

INDICATES NEW/INFILLED CONC FLOOR SLAB

2 HOUR WALL

# **KEY NOTES PLAN**

- 1 PATCH EXISTING WALL AT REMOVED PARTITION
  2 CONC. FLOOR SLAB AND UNDERSLAB FILL- SEE STRUCTURAL
  3 CONC. STOOP SEE STRUCTURAL
- CMU INFILL AT EXISTING DOOR OPENING SLOPE CONC. FLOOR SLAB TO DRAIN - SEE PLUMBING
- BOLLARD SEE CIVIL MECHANICAL EQUIPMENT - SEE MECHANICAL CONC. HOUSEKEEPING PAD - COORDINATE W/ MECHANICAL
- MOB BASIN SEE PLUMBING UTILITY SINK - SEE PLUMBING
- ELECTRIC WATER COOLER SEE PLUMBING EMERGENCY EYEWASH - SEE PLUMBING

- STADIUM LIGHT TO REMAIN
- FENCE W/ GATE- SEE CIVIL

36" x 48" B LABEL FIRE RATED ACCESS DOOR PLUMBING EQUIPMENT - SEE PLUMBING COORDINATE STAIR LANDING FRAMING WITH RAIN LEADER - SEE PLBC

HAND WASH STATION - SEE PLUMBING COLD WATER HOSE BIBB - SEE PLUMBING FLOOR DRAIN - SEE PLUMBING 6 PATCH CONC FLOOR SLAB AT PLUMBING DEMOLITION APPLY FLOOR LEVELING COMPOUND (AT HATCHED AREA) AND PREP FOR NEW FLOORING FINISH FURNITURE N.I.C. ALIGN NEW WALL TO EDGE OF EXISTING WINDOW TRIM ALIGN NEW WALL WITH EXISTING WALL CEILING MOUNTED THERAPY SWING - VERIFY LOCATION W/ OWNER. SEE STRUCTURAL FOR REQUIRED SUPPORT. WELDING BOOTH - 7'-0" HIGH CMU PARTITIONS, WELDING CURTAIN AND 23 REBUILD EXTERIOR WALL (TYPE 'E4') TO MATCH EXISTING. REUSE SALVAGED WINDOW. 36" x 36" FLOOR ACCESS DOOR NEW PIPE TUNNEL BELOW - SEE 2/A107 EXISTING FLOOR ACCESS DOOR TO REMAIN CMU INFILL AT REMOVED MECHANICAL UNIT 28 STEEL ACCESS LADDER REMOVE WALL BRACKET FROM EXISTING STEEL HANDRAIL AT ENLARGED WINDOW. GRIND HANDRAIL SMOOTH AND TOUCH-UP PAINT TO MATCH EXISTING. JAMBS OF NEW OPENING TO ALIGN WITH EXISTING FILLED IN WINDOW OPENING - VERIFY SIZE EXISTING SUMP TO REMAIN - SEE PLUMBING NEW METAL DECK AND CONC SLAB INFILL (AT HATCHED AREA) - FLUSH WITH EXISTING FLOORING OVERHEAD DOOR TRACKS ABOVE CEILING MOUNTED PRIVACY CURTAIN AND TRACK 35 EXISTING UNIT VENTILATORS TO BE ABANDONED IN PLACE - SEE MECHANICAL 36 CONC RETAINING WALL, RAISED CONC PLATFORM AND STAIRS - SEE 37 STAINLESS STEEL HANDRAIL AND BRACKETS - RETURN TO WALL AT 38 STAINLESS STEEL GUARDRAIL - SEE SHEET A303 39 ACCORDION FOLDING FIRE PARTITION, OVERHEAD TRACK AND STORAGE POCKET ELEVATOR PIT ACCESS LADDER BY ELEV SUPPLIER COMMERCIAL VERTICAL PLATFORM LIFT - VERIFY SHAFT SIZE W/ MFR PROVIDE BLOCKING IN WALL AS REQUIRED FOR VERTICAL LIFT -COORDINATE W/ LIFT MFR NEW FLOOR FINISH THIS ROOM - SEE ID SHEETS FULL-HEIGHT SLATWALL OVER EXISTING CMU WALL PATCH CONC FLOOR SLAB AT REMOVED MASONRY WALL-INSTALL VCT AND BASE TO MATCH ADJACENT [ATTIC STOCK]. PROVIDE METAL TRANSITION FLOOR PLATE AT WOOD FLOOR IN ROOM 147 1 5/8" ALUM PIPE GUARDRAIL/HANDRAIL (POWDERCOATED) 6'-0" W. HINGED 1 5/8" ALUM PIPE GATE W/ LATCH(POWDERCOATED) PATCH CONC FLOOR SLAB AT ELEC/PLBG TRENCHING EXISTING LOUVER TO REMAIN, INFILL INTERIOR WALL OPENING BEHIND LOUVER PER DETAIL 14/A511 - SEE MECHANICAL SOLID SURFACE WINDOW STOOL SOLID SURFACE COUNTER PATCH VCT FLOORING AND VINYL BASE - USE OWNER'S ATTIC STOCK EXISTING CASEWORK TO REMAIN CONC EQUIPMENT PAD - SEE CIVIL EXISTING ALUM DOWNSPOUT. DISCONNECT DOWNSPOUT FROM STORM DRAIN BOOT AND ADD ELBOW AND EXTENSION AT BOTTOM TO DRAIN TO GRADE. ADD HEAT TAPE TO DOWNSPOUT. EXISTING ALUM DOWNSPOUT. ADD EXTENSION AT BOTTOM TO DRAIN TO GRADE. ADD HEAT TAPE TO DOWNSPOUT. NEW ALUM DOWNSPOUT W/ HEAT TAPE. DRAIN TO GRADE. EXISTING ALUM DOWNSPOUT, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL). ADD HEAT TAPE TO DOWNSPOUT NEW ALUM DOWNSPOUT W/ HEAT TAPE, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL). TERMINATE WALL AT UNDERSIDE OF EXISTING AC TILE CEILING - SEE NEW GAS METER - SEE PLUMBING PATCH WALL, CEILING AND FLOOR FINISHES AT REMOVED CHASE PIPE ENCLOSURE BY MECH. TOUCH-UP WALL PAINT AT REMOVED HVAC/ELEC/PLBG PATCH WALL FINISH AT REMOVED MARKER/TACKBOARD PATCH CONC FLOOR SLAB AS REQ'D AT REMOVED PARTITIONS 1 1/4" DIA. (1.66" O.D.) STEEL PIPE HANDRAIL (PAINT) - RETURN TO FLOOR AT ENDS RETAINING WALL - SEE CIVIL

HSR Project Number: 19041-1 **SEPTEMBER 2021** Drawn By: Key Plan:

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

HSR ASSOCIATES INC.

100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

PHONE: 608.784.1830

FAX: 608.782.5844

www.hsrassociates.com

Consultant:

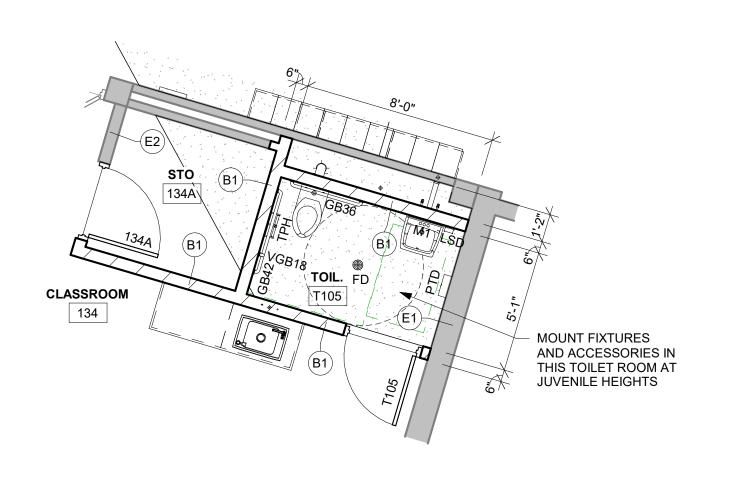
KEY PLAN

**BID DOCUMENTS** 

A01 ADD1 A03 ADD3 9.28.2021 Graphic Scale: 0' 2' 4' 8' 12'

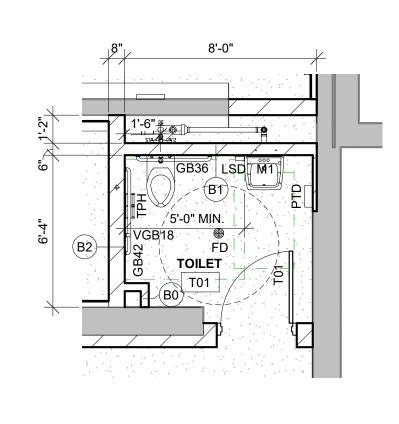
9/27/2021 9:20:58 AM





3 ENLARGED TOILET RM PLAN

1/4" = 1'-0"



2 ENLARGED TOILET RM PLAN

1/4" = 1'-0"

ACCESSORY SCHEDULE SEE NOTES / MOUNTING INFORMATION ON A002					
ABBREVIATION	ITEM	STD. MNT. HEIGHT	JUVENILE MNT. HEIGHT		
СН	COAT HOOK (DOUBLE)	TOP @ 46" A.F.F.			
GB36	1 1/2" DIA. GRAB BAR, 36" LONG. SEE PLANS FOR CONFIG./DIMS.	CENTER @ 34" A.F.F.	CENTER @ 20"-25" A.F.F.		
GB42	1 1/2" DIA. GRAB BAR, 42" LONG. SEE PLANS FOR CONFIG./DIMS.	CENTER @ 34" A.F.F.	CENTER @ 20"-25" A.F.F.		
LSD	LIQUID SOAP DISP. (OFCI)	BOT @ 42" A.F.F.	BOT @ 38" A.F.F.		
MBH	MOP AND BROOM HOLDER	TOP @ 72" A.F.F.			
M1	1'-6"W X 3'-0"H MIRROR WITH FRAME	BOT @ 40" A.F.F. MAX.	BOT @ 40" A.F.F. MAX.		
МВ	MARKER BOARD	BOT @ 36" A.F.F.			
PTD	PAPER TOWEL DISPENSER (OFCI)	BOT @ 46" A.F.F.	BOT @ 38" A.F.F.		
ТВ	TACK BOARD	BOT @ 36" A.F.F.			
TPH	DBL TOILET PAPER HOLDER (OFCI)	BOT @ 24" A.F.F.	BOT @ 14"-17" A.F.F.		

BOT @ 40" A.F.F.

BOT @ 26"-30" A.F.F.

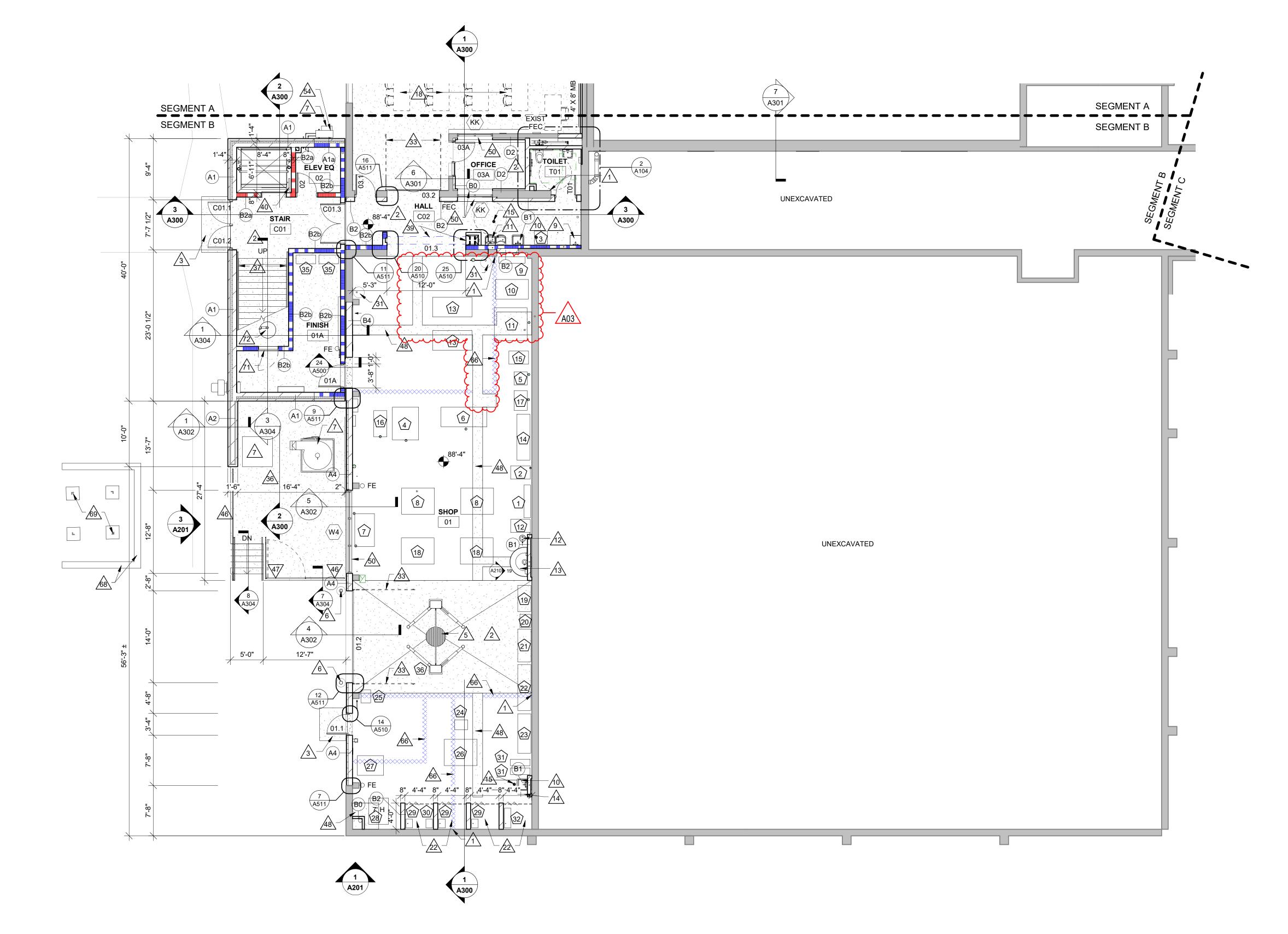
# **ACCESSORIES GENERAL NOTES:**

VGB18 1 1/2" DIA. VERTICAL GRAB BAR - 18" LONG

- NOT ALL ACCESSORIES REFERENCED ON SHEET A002 ARE INCLUDED IN THIS PROJECT. SEE ENLARGED FLOOR PLANS / ELEVATION SHEETS FOR ACCESSORIES LOCATIONS / LAYOUT. ALL ACCESSORIES TO BE - PROVIDED AND INSTALLED BY CONTRACTOR, UNLESS NOTED OTHERWISE CONFIRM EXACT LOCATION OF EACH ACCESSORY WITH OWNER PRIOR TO INSTALLATION.
- SURFACE MOUNTED ACCESSORIES SHALL BE INSTALLED OVER OFCI = OWNER FURNISHED, CONTRACTOR INSTALLED BASIS OF DESIGN MODEL PROVIDED BY OWNER; VERIFIED FOR PLACEMENT COORDINATION

PROVIDE INSULATION WRAP AT EXPOSED PIPING AT SINKS

WHERE NO OTHER PROTECTION IS PROVIDED



LOWER LEVEL - SEGMENT B



# **PLAN GENERAL NOTES:**

- REFER TO OVERALL PLANS FOR FIRE RATING LOCATIONS AND ACCESSIBILITY ROUTES.
- SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
- LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED
- AND INSTALLED BY THE OWNER. FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION.
- SEE SHEETS A103-A104 FOR ALL EQUIPMENT NOTES. UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED A MIN. 1/16": 12" TO FLOOR DRAINS - TO "CENTER", IF NO
- FLOOR DRAINS. PAINT ALL EXPOSED STEEL LINTELS.
- EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE
- **A511** FOR TOP OF WALL DETAILS. INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE
- AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW
- SEE **A511** FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
- SEE **A511** FOR TYPICAL HEAD FLASHING AND THROUGH-WALL
- FLASHING ISOMETRIC DETAILS.
- SEE STRUCTURAL FOR SLAB CONTROL JOINTS. GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT
- PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL EQUIPMENT- VERIFY SIZE, PROFILE & LOCATION WITH MECHANICAL / ELECTRICAL.

SHALL BE SEALED AFTER UTILITY INSTALLATION

VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AND ELEC. OPENINGS - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING

# **PLAN LEGEND:**

SYMBOL INDICATES WALL TYPE - SEE SHEET A600 FOR WALL TYPE DETAILS.

SYMBOL INDICATES WINDOW TYPE. SEE SHEET A601 FOR WINDOW FRAME ELEVATIONS.

INDICATES NEW/INFILLED CONC FLOOR SLAB

2 HOUR WALL

SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET

1 HOUR WALL

# **KEY NOTES PLAN**

- PATCH EXISTING WALL AT REMOVED PARTITION CONC. FLOOR SLAB AND UNDERSLAB FILL- SEE STRUCTURAL CONC. STOOP - SEE STRUCTURAL
- CMU INFILL AT EXISTING DOOR OPENING
- SLOPE CONC. FLOOR SLAB TO DRAIN SEE PLUMBING BOLLARD - SEE CIVIL MECHANICAL EQUIPMENT - SEE MECHANICAL
- CONC. HOUSEKEEPING PAD COORDINATE W/ MECHANICAL MOB BASIN - SEE PLUMBING
- UTILITY SINK SEE PLUMBING ELECTRIC WATER COOLER - SEE PLUMBING
- EMERGENCY EYEWASH SEE PLUMBING
- HAND WASH STATION SEE PLUMBING COLD WATER HOSE BIBB - SEE PLUMBING
- FLOOR DRAIN SEE PLUMBING
- PATCH CONC FLOOR SLAB AT PLUMBING DEMOLITION APPLY FLOOR LEVELING COMPOUND (AT HATCHED AREA) AND PREP FOR NEW FLOORING FINISH
- FURNITURE N.I.C. ALIGN NEW WALL TO EDGE OF EXISTING WINDOW TRIM
- ALIGN NEW WALL WITH EXISTING WALL CEILING MOUNTED THERAPY SWING - VERIFY LOCATION W/ OWNER. SEE STRUCTURAL FOR REQUIRED SUPPORT.
- WELDING BOOTH 7'-0" HIGH CMU PARTITIONS, WELDING CURTAIN AND 23 REBUILD EXTERIOR WALL (TYPE 'E4') TO MATCH EXISTING. REUSE SALVAGED WINDOW.
- 36" x 36" FLOOR ACCESS DOOR
- NEW PIPE TUNNEL BELOW SEE 2/A107 EXISTING FLOOR ACCESS DOOR TO REMAIN
- CMU INFILL AT REMOVED MECHANICAL UNIT STEEL ACCESS LADDER
- REMOVE WALL BRACKET FROM EXISTING STEEL HANDRAIL AT ENLARGED WINDOW. GRIND HANDRAIL SMOOTH AND TOUCH-UP PAINT
- TO MATCH EXISTING. JAMBS OF NEW OPENING TO ALIGN WITH EXISTING FILLED IN WINDOW
- OPENING VERIFY SIZE EXISTING SUMP TO REMAIN - SEE PLUMBING NEW METAL DECK AND CONC SLAB INFILL (AT HATCHED AREA) - FLUSH
- WITH EXISTING FLOORING OVERHEAD DOOR TRACKS ABOVE
- CEILING MOUNTED PRIVACY CURTAIN AND TRACK 35 EXISTING UNIT VENTILATORS TO BE ABANDONED IN PLACE - SEE MECHANICAL
- 36 CONC RETAINING WALL, RAISED CONC PLATFORM AND STAIRS SEE STRUCT
- 37 STAINLESS STEEL HANDRAIL AND BRACKETS RETURN TO WALL AT 38 STAINLESS STEEL GUARDRAIL - SEE SHEET A303
- 39 ACCORDION FOLDING FIRE PARTITION, OVERHEAD TRACK AND STORAGE POCKET
- 40 ELEVATOR PIT ACCESS LADDER BY ELEV SUPPLIER 41 COMMERCIAL VERTICAL PLATFORM LIFT - VERIFY SHAFT SIZE W/ MFR
- PROVIDE BLOCKING IN WALL AS REQUIRED FOR VERTICAL LIFT -COORDINATE W/ LIFT MFR
- NEW FLOOR FINISH THIS ROOM SEE ID SHEETS
- FULL-HEIGHT SLATWALL OVER EXISTING CMU WALL 45 PATCH CONC FLOOR SLAB AT REMOVED MASONRY WALL-INSTALL VCT AND BASE TO MATCH ADJACENT [ATTIC STOCK]. PROVIDE METAL
- TRANSITION FLOOR PLATE AT WOOD FLOOR IN ROOM 147 1 5/8" ALUM PIPE GUARDRAIL/HANDRAIL (POWDERCOATED) 6'-0" W. HINGED 1 5/8" ALUM PIPE GATE W/ LATCH(POWDERCOATED) PATCH CONC FLOOR SLAB AT ELEC/PLBG TRENCHING EXISTING LOUVER TO REMAIN, INFILL INTERIOR WALL OPENING BEHIND
- LOUVER PER DETAIL 14/A511 SEE MECHANICAL SOLID SURFACE WINDOW STOOL SOLID SURFACE COUNTER
- PATCH VCT FLOORING AND VINYL BASE USE OWNER'S ATTIC STOCK EXISTING CASEWORK TO REMAIN
- CONC EQUIPMENT PAD SEE CIVIL EXISTING ALUM DOWNSPOUT. DISCONNECT DOWNSPOUT FROM
- STORM DRAIN BOOT AND ADD ELBOW AND EXTENSION AT BOTTOM TO DRAIN TO GRADE. ADD HEAT TAPE TO DOWNSPOUT. EXISTING ALUM DOWNSPOUT. ADD EXTENSION AT BOTTOM TO DRAIN
- TO GRADE. ADD HEAT TAPE TO DOWNSPOUT. NEW ALUM DOWNSPOUT W/ HEAT TAPE. DRAIN TO GRADE
- EXISTING ALUM DOWNSPOUT, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL). ADD HEAT TAPE TO DOWNSPOUT
- NEW ALUM DOWNSPOUT W/ HEAT TAPE, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL). TERMINATE WALL AT UNDERSIDE OF EXISTING AC TILE CEILING - SEE
- NEW GAS METER SEE PLUMBING PATCH WALL, CEILING AND FLOOR FINISHES AT REMOVED CHASE
- PIPE ENCLOSURE BY MECH. TOUCH-UP WALL PAINT AT REMOVED HVAC/ELEC/PLBG
- PATCH WALL FINISH AT REMOVED MARKER/TACKBOARD PATCH CONC FLOOR SLAB AS REQ'D AT REMOVED PARTITIONS
- 1 1/4" DIA. (1.66" O.D.) STEEL PIPE HANDRAIL (PAINT) RETURN TO FLOOR AT ENDS
- RETAINING WALL SEE CIVIL STADIUM LIGHT TO REMAIN FENCE W/ GATE- SEE CIVIL

**EQUIPMENT SCHEDULE** 

CRAFTSMAN

PCS 31230

JJ-6CSX

THINDERBOLT XL No

HYPERTHERM POWERMAX 380 N

ROTARY LIFT SPOA10 10,000# N

ROCKWELL

SAWSTOP

BALDOR

BALDOR

MILLER

MILLER

MILLER

UNIVERSAL

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING EXISTING

EXISTING

DESCRIPTION

SMALL TOOL TABLE (DRILL PRESS/MORTISE) EXISTING

PORTABLE AIR COMPRESSOR

DISC SANDER

WORK TABLE

CLAMP RACK

GLUE TABLE

DRILL PRESS

SCROLL SAW

JOINTER

TOOL BOX

WORK BENCH

HOMAK STORAGE

METAL CHOP SAW

GRINDER (LARGE)

GRINDER (SMALL)

WELDING TABLE TIRE BALANCER

TIRE MOUNTING

PLASMA CUTTER

MILLER 212 ECONOTIG

3D PRINTERS

MILLER THUNDERBOLT

LASER W/ FUME EXTRACTOR

FLAMMABLE STORAGE TWO POST LIFT

SANDING TABLE

ROUTER TABLE

WORK TABLE (METALS)

TALL STORAGE CABINET

CNC TABLE

CHOP SAW TABLE

TABLE SAW

- 36" x 48" B LABEL FIRE RATED ACCESS DOOR
- PLUMBING EQUIPMENT SEE PLUMBING COORDINATE STAIR LANDING FRAMING WITH RAIN LEADER - SEE PLBG

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

ARCHITECTURE

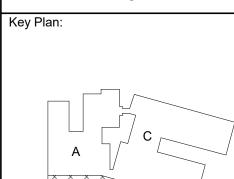
ENGINEERING

INTERIOR DESIGN

www.hsrassociates.com Consultant:

HSR Project Number: 19041-1

**SEPTEMBER 2021** Drawn By:



KEY PLAN

**BID DOCUMENTS** 

Description A03 ADD3

Graphic Scale: **VARIES** 

9/27/2021 9:21:51 AM



### PLAN GENERAL NOTES:

- ACCESSIBILITY ROUTES.
- SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS. LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED
- AND INSTALLED BY THE OWNER. FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION.
- SEE SHEETS A103-A104 FOR ALL EQUIPMENT NOTES. UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED A MIN. 1/16": 12" TO FLOOR DRAINS - TO "CENTER", IF NO FLOOR DRAINS.
- PAINT ALL EXPOSED STEEL LINTELS.
- EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE **A511** FOR TOP OF WALL DETAILS.
- INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW
- SEE **A511** FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
- SEE **A511** FOR TYPICAL HEAD FLASHING AND THROUGH-WALL FLASHING ISOMETRIC DETAILS.
- SEE STRUCTURAL FOR SLAB CONTROL JOINTS. GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL EQUIPMENT- VERIFY SIZE, PROFILE & LOCATION WITH
- MECHANICAL / ELECTRICAL. VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AND ELEC. OPENINGS - GENERAL CONTRACTOR SHALL BE

SHALL BE SEALED AFTER UTILITY INSTALLATION

RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING

# **PLAN LEGEND:**

SYMBOL INDICATES WALL TYPE - SEE SHEET A600 FOR WALL TYPE DETAILS.

SYMBOL INDICATES WINDOW TYPE. SEE SHEET A601 FOR WINDOW FRAME ELEVATIONS. SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET

INDICATES NEW/INFILLED CONC FLOOR SLAB 1 HOUR WALL

2 HOUR WALL

# **KEY NOTES PLAN**

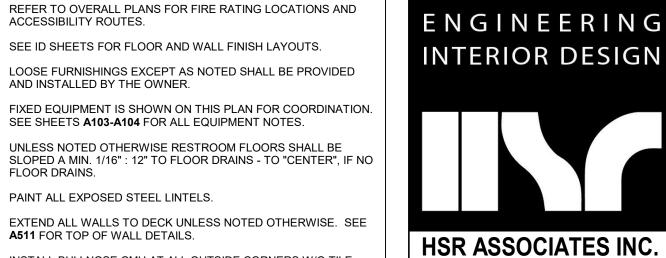
- PATCH EXISTING WALL AT REMOVED PARTITION CONC. FLOOR SLAB AND UNDERSLAB FILL- SEE STRUCTURAL CONC. STOOP - SEE STRUCTURAL
- CMU INFILL AT EXISTING DOOR OPENING SLOPE CONC. FLOOR SLAB TO DRAIN - SEE PLUMBING BOLLARD - SEE CIVIL
- MECHANICAL EQUIPMENT SEE MECHANICAL CONC. HOUSEKEEPING PAD - COORDINATE W/ MECHANICAL MOB BASIN - SEE PLUMBING
- ELECTRIC WATER COOLER SEE PLUMBING EMERGENCY EYEWASH - SEE PLUMBING

UTILITY SINK - SEE PLUMBING

- HAND WASH STATION SEE PLUMBING COLD WATER HOSE BIBB - SEE PLUMBING
- FLOOR DRAIN SEE PLUMBING PATCH CONC FLOOR SLAB AT PLUMBING DEMOLITION APPLY FLOOR LEVELING COMPOUND (AT HATCHED AREA) AND PREP
- FOR NEW FLOORING FINISH FURNITURE N.I.C.
- ALIGN NEW WALL TO EDGE OF EXISTING WINDOW TRIM ALIGN NEW WALL WITH EXISTING WALL
- CEILING MOUNTED THERAPY SWING VERIFY LOCATION W/ OWNER. SEE STRUCTURAL FOR REQUIRED SUPPORT. WELDING BOOTH - 7'-0" HIGH CMU PARTITIONS, WELDING CURTAIN AND
- REBUILD EXTERIOR WALL (TYPE 'E4') TO MATCH EXISTING. REUSE SALVAGED WINDOW.
- 36" x 36" FLOOR ACCESS DOOR NEW PIPE TUNNEL BELOW - SEE 2/A107
- EXISTING FLOOR ACCESS DOOR TO REMAIN CMU INFILL AT REMOVED MECHANICAL UNIT
- STEEL ACCESS LADDER REMOVE WALL BRACKET FROM EXISTING STEEL HANDRAIL AT ENLARGED WINDOW. GRIND HANDRAIL SMOOTH AND TOUCH-UP PAINT
- TO MATCH EXISTING. JAMBS OF NEW OPENING TO ALIGN WITH EXISTING FILLED IN WINDOW OPENING - VERIFY SIZE
- EXISTING SUMP TO REMAIN SEE PLUMBING NEW METAL DECK AND CONC SLAB INFILL (AT HATCHED AREA) - FLUSH WITH EXISTING FLOORING
- OVERHEAD DOOR TRACKS ABOVE CEILING MOUNTED PRIVACY CURTAIN AND TRACK 5 EXISTING UNIT VENTILATORS TO BE ABANDONED IN PLACE - SEE
- CONC RETAINING WALL, RAISED CONC PLATFORM AND STAIRS SEE
- STAINLESS STEEL HANDRAIL AND BRACKETS RETURN TO WALL AT STAINLESS STEEL GUARDRAIL - SEE SHEET A303
- 39 ACCORDION FOLDING FIRE PARTITION, OVERHEAD TRACK AND STORAGE POCKET
- ELEVATOR PIT ACCESS LADDER BY ELEV SUPPLIER COMMERCIAL VERTICAL PLATFORM LIFT - VERIFY SHAFT SIZE W/ MFR
- PROVIDE BLOCKING IN WALL AS REQUIRED FOR VERTICAL LIFT COORDINATE W/ LIFT MFR NEW FLOOR FINISH THIS ROOM - SEE ID SHEETS

4 FULL-HEIGHT SLATWALL OVER EXISTING CMU WALL

- PATCH CONC FLOOR SLAB AT REMOVED MASONRY WALL-INSTALL VCT AND BASE TO MATCH ADJACENT [ATTIC STOCK]. PROVIDE METAL TRANSITION FLOOR PLATE AT WOOD FLOOR IN ROOM 147
- 1 5/8" ALUM PIPE GUARDRAIL/HANDRAIL (POWDERCOATED) 6'-0" W. HINGED 1 5/8" ALUM PIPE GATE W/ LATCH(POWDERCOATED)
- PATCH CONC FLOOR SLAB AT ELEC/PLBG TRENCHING EXISTING LOUVER TO REMAIN, INFILL INTERIOR WALL OPENING BEHIND LOUVER PER DETAIL 14/A511 - SEE MECHANICAL SOLID SURFACE WINDOW STOOL
- SOLID SURFACE COUNTER PATCH VCT FLOORING AND VINYL BASE - USE OWNER'S ATTIC STOCK EXISTING CASEWORK TO REMAIN CONC EQUIPMENT PAD - SEE CIVIL
- EXISTING ALUM DOWNSPOUT. DISCONNECT DOWNSPOUT FROM STORM DRAIN BOOT AND ADD ELBOW AND EXTENSION AT BOTTOM TO DRAIN TO GRADE. ADD HEAT TAPE TO DOWNSPOUT.
- EXISTING ALUM DOWNSPOUT. ADD EXTENSION AT BOTTOM TO DRAIN TO GRADE. ADD HEAT TAPE TO DOWNSPOUT.
- NEW ALUM DOWNSPOUT W/ HEAT TAPE. DRAIN TO GRADE. 8 EXISTING ALUM DOWNSPOUT, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL). ADD HEAT TAPE TO DOWNSPOUT
- NEW ALUM DOWNSPOUT W/ HEAT TAPE, TIE INTO NEW STORM DRAIN SYSTEM (SEE CIVIL).
- TERMINATE WALL AT UNDERSIDE OF EXISTING AC TILE CEILING SEE NEW GAS METER - SEE PLUMBING
- PATCH WALL, CEILING AND FLOOR FINISHES AT REMOVED CHASE PIPE ENCLOSURE BY MECH.
- TOUCH-UP WALL PAINT AT REMOVED HVAC/ELEC/PLBG PATCH WALL FINISH AT REMOVED MARKER/TACKBOARD PATCH CONC FLOOR SLAB AS REQ'D AT REMOVED PARTITIONS
- 1 1/4" DIA. (1.66" O.D.) STEEL PIPE HANDRAIL (PAINT) RETURN TO FLOOR AT ENDS
- RETAINING WALL SEE CIVIL STADIUM LIGHT TO REMAIN
- FENCE W/ GATE- SEE CIVIL 36" x 48" B LABEL FIRE RATED ACCESS DOOR PLUMBING EQUIPMENT - SEE PLUMBING
- COORDINATE STAIR LANDING FRAMING WITH RAIN LEADER SEE PLBG



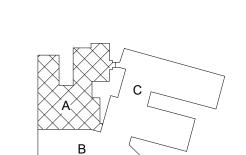
ARCHITECTURE

100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com Consultant:

HSR Project Number:

SEPTEMBER 2021

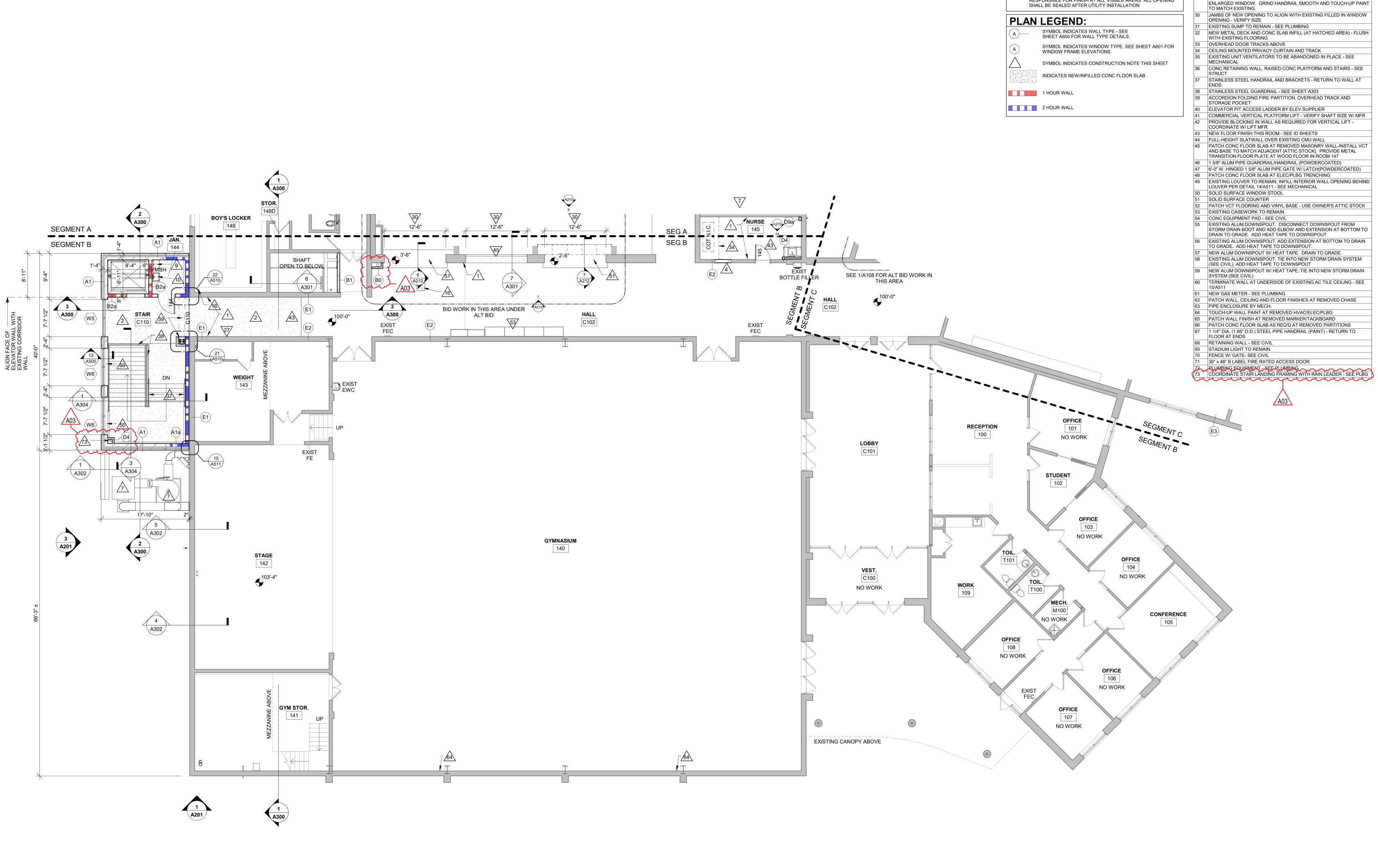
Key Plan:



KEY PLAN

**BID DOCUMENTS** 

9/27/2021 9:22:32 AM



**KEY NOTES PLAN** REFER TO OVERALL PLANS FOR FIRE RATING LOCATIONS AND

BOLLARD - SEE CIVIL

MOB BASIN - SEE PLUMBING

UTILITY SINK - SEE PLUMBING

FLOOR DRAIN - SEE PLUMBING

FOR NEW FLOORING FINISH

FURNITURE N.I.C.

SALVAGED WINDOW.

STEEL ACCESS LADDER

4 36" x 36" FLOOR ACCESS DOOR

NEW PIPE TUNNEL BELOW - SEE 2/A107

EXISTING FLOOR ACCESS DOOR TO REMAIN

CMU INFILL AT REMOVED MECHANICAL UNIT

PLAN GENERAL NOTES:

SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.

SEE SHEETS A103-A104 FOR ALL EQUIPMENT NOTES.

LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED

FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION.

SLOPED A MIN. 1/16": 12" TO FLOOR DRAINS - TO "CENTER", IF NO

EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE

INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE

AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW

SEE **A511** FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND

SEE **A511** FOR TYPICAL HEAD FLASHING AND THROUGH-WALL

GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT

PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL

VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB

RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING

AND ELEC. OPENINGS - GENERAL CONTRACTOR SHALL BE

EQUIPMENT- VERIFY SIZE, PROFILE & LOCATION WITH

ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.

SEE STRUCTURAL FOR SLAB CONTROL JOINTS.

UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE

ACCESSIBILITY ROUTES.

FLOOR DRAINS.

AND INSTALLED BY THE OWNER.

PAINT ALL EXPOSED STEEL LINTELS.

**A511** FOR TOP OF WALL DETAILS.

FLASHING ISOMETRIC DETAILS.

MECHANICAL / ELECTRICAL.

PATCH EXISTING WALL AT REMOVED PARTITION CONC. FLOOR SLAB AND UNDERSLAB FILL- SEE STRUCTURAL CONC. STOOP - SEE STRUCTURAL CMU INFILL AT EXISTING DOOR OPENING

ELECTRIC WATER COOLER - SEE PLUMBING

16 PATCH CONC FLOOR SLAB AT PLUMBING DEMOLITION

ALIGN NEW WALL TO EDGE OF EXISTING WINDOW TRIM

APPLY FLOOR LEVELING COMPOUND (AT HATCHED AREA) AND PREP

CEILING MOUNTED THERAPY SWING - VERIFY LOCATION W/ OWNER.

23 REBUILD EXTERIOR WALL (TYPE 'E4') TO MATCH EXISTING. REUSE

REMOVE WALL BRACKET FROM EXISTING STEEL HANDRAIL AT

WELDING BOOTH - 7'-0" HIGH CMU PARTITIONS, WELDING CURTAIN AND

EMERGENCY EYEWASH - SEE PLUMBING

HAND WASH STATION - SEE PLUMBING COLD WATER HOSE BIBB - SEE PLUMBING

ALIGN NEW WALL WITH EXISTING WALL

SEE STRUCTURAL FOR REQUIRED SUPPORT.

INTERIOR DESIGN SLOPE CONC. FLOOR SLAB TO DRAIN - SEE PLUMBING MECHANICAL EQUIPMENT - SEE MECHANICAL CONC. HOUSEKEEPING PAD - COORDINATE W/ MECHANICAL



ARCHITECTURE

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

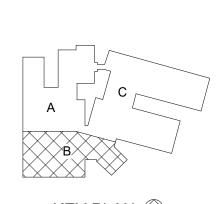
www.hsrassociates.com

Consultant:

HSR Project Number: 19041-1

**SEPTEMBER 2021** Drawn By:

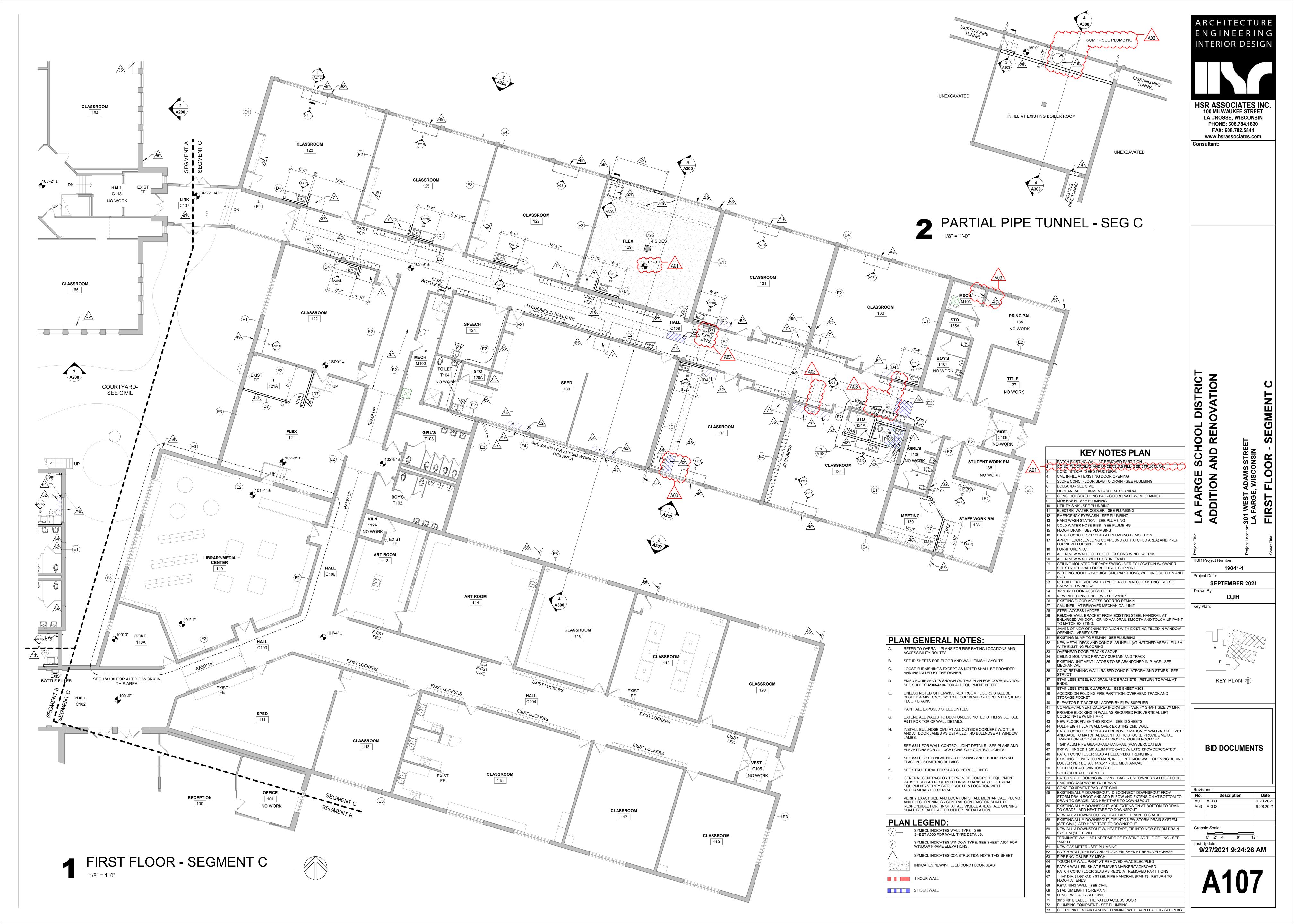
Key Plan:

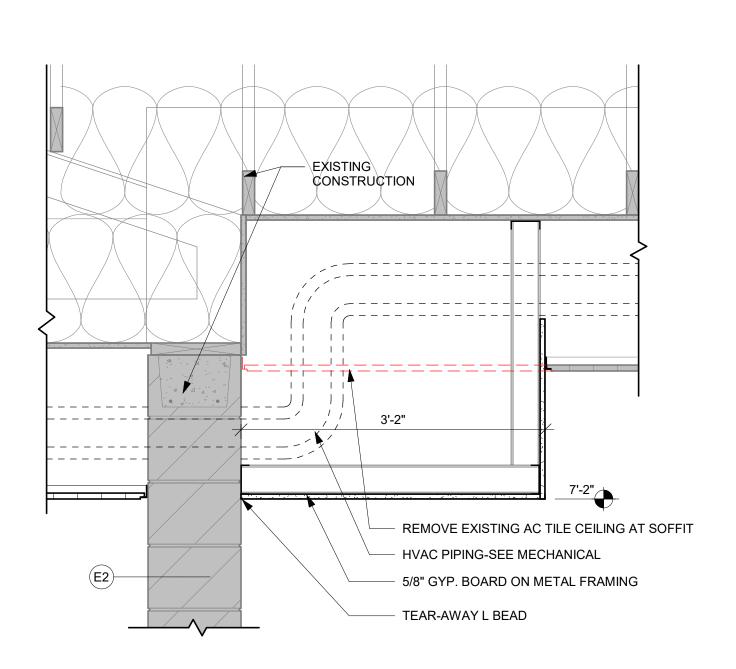


KEY PLAN

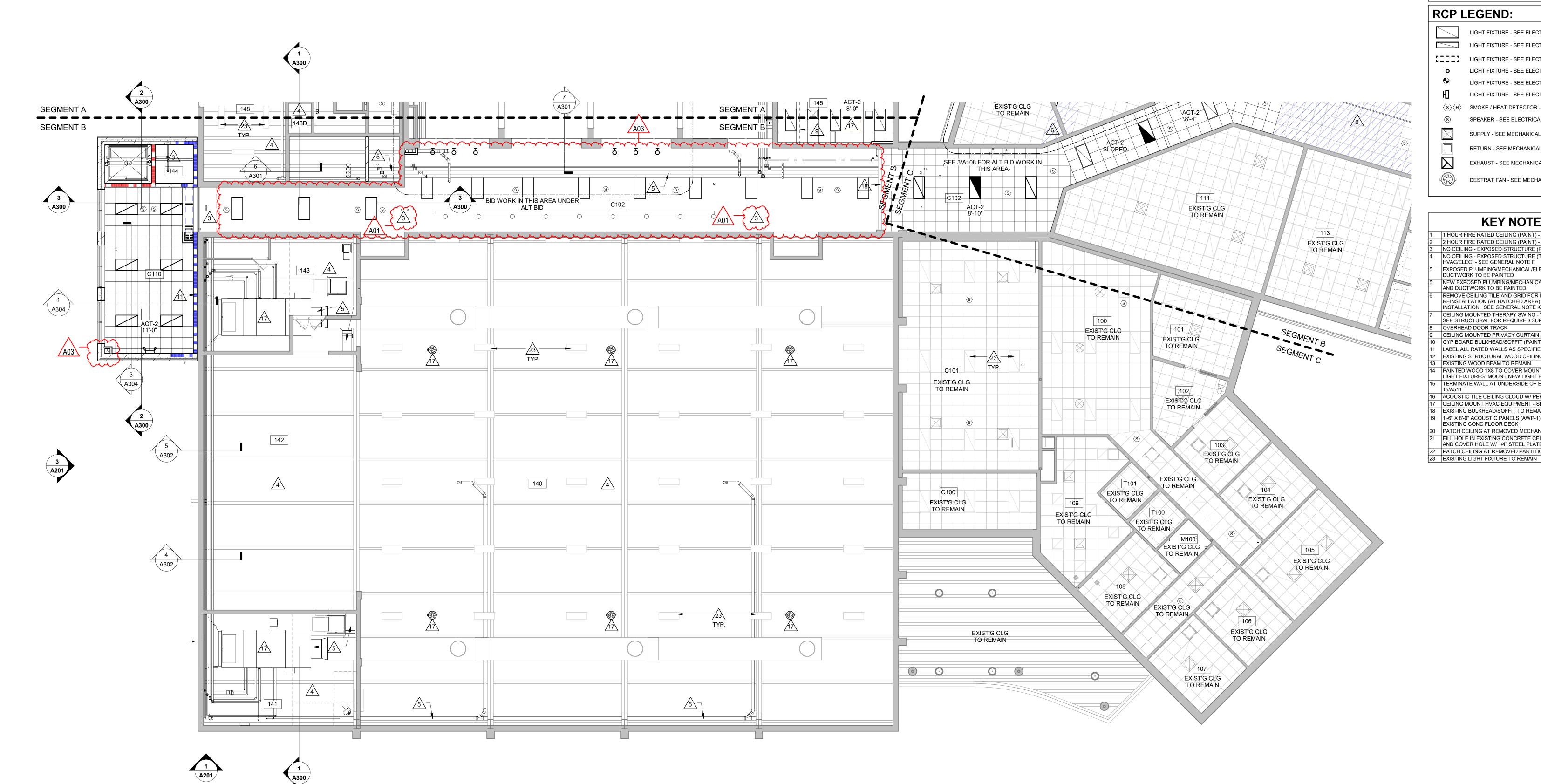
**BID DOCUMENTS** 

9/27/2021 9:23:25 AM





SOFFIT DETAIL



# RCP GENERAL NOTES:

- REFER TO MECHANICAL AND PLUMBING CEILING ACCESS PANEL LOCATIONS & SIZES.
  - SEE MECHANICAL FOR CEILING GRILLE INFORMATION.
  - SEE ELECTRICAL FOR LIGHTING TYPES.
- ALL INTERIOR PARTITIONS TO EXTEND TO BOTTOM OF DECK UNLESS OTHERWISE NOTED. CLOSE DECK FLUTES AT TOP OF WALL WITH NEOPRENE FILLER OR FIRESTOPPING SYSTEM. IN GYP/STUD PARTITIONS SEE SPECIFICATION FOR LEVEL OF FINISH ABOVE FINISHED CEILING.
- ALL REMAINING ANNULAR SPACE AROUND ITEMS PENETRATING WALLS SHALL BE NEATLY SEALED. PENETRATIONS OF FIRE RATED WALLS SHALL BE FIRESTOPPED WITH THE SAME AS THE
- WHERE NO CEILING/EXPOSED STRUCTURE UNLESS NOTED OTHERWISE, CONTRACTOR SHALL KEEP ALL MEP ABOVE OR EVEN WITH THE LEVEL OF THE LIGHTS. MEP SHALL RUN IN NEAT ORDERLY APPEARANCE GENERALLY PARALLEL OR PERPENDICULAR TO FINISHED STRUCTURE. WALLS IN THESE ROOMS TO RUN TO DECK AND ALL STRUCTURE / MEP
- COMPONENTS ARE TO BE PAINTED. ALL EXTERIOR EXPOSED STEEL LINTELS/HEADERS SHALL BE GALVANIZED, PRIMED AND PAINTED UNLESS NOTED OTHERWISE.

REFER TO INTERIOR DESIGN SHEETS FOR OTHER FINISHES.

ALL NEW EXPOSED DUCTWORK IS TO BE PAINT-GRIP STEEL AND

- HANGERS AND SUPPORTS: MECHANICAL, PLUMBING, ELECTRICAL AND OTHER CABLING CONTRACTORS SHALL NOT HANG OR SUPPORT THE WORK FROM THE ROOF DECK IN ANY FASHION. CONDUIT RUNS SHALL NOT BE LAID ON ROOF DECK NOR LAID ON THE STRUCTURAL SUPPORT THAT SUPPORTS THE ROOF DECK. NO FASTENERS SHALL PENETRATE ROOF DECK BY ANY TRADE OTHER THAN THE ROOFING CONTRACTOR FOR THE NEW ROOF
- CONFIRM EXACT LOCATION OF OVERHEAD PROJECTORS AND OTHER CEILING MOUNTED EQUIPMENT WITH OWNER / MANUFACTURER PRIOR TO INSTALLATION. SEE EQUIPMENT PLANS FOR ADDITIONAL EQUIPMENT.
- REMOVE CEILING TILE FOR MEP ACCESS AS REQUIRED. REPLACE CEILING TILE DAMAGED DURING CONSTRUCTION. CEILING TYPES INSTALLED AS NOTED ON PLANS. SEE SPECIFICATIONS FOR ADDITIONAL SYSTEM INFORMATION.

FACED GYP, **ACT-4**=HIGH PERFORMANCE

ACT-1=SQUARE EDGE, ACT-2=TEGULAR EDGE, ACT-3=VINYL

# RCP LEGEND:

LIGHT FIXTURE - SEE ELECTRICAL LIGHT FIXTURE - SEE ELECTRICAL

LIGHT FIXTURE - SEE ELECTRICAL LIGHT FIXTURE - SEE ELECTRICAL

LIGHT FIXTURE - SEE ELECTRICAL S H SMOKE / HEAT DETECTOR - SEE ELECTRICAL SPEAKER - SEE ELECTRICAL

LIGHT FIXTURE - SEE ELECTRICAL

SUPPLY - SEE MECHANICAL

RETURN - SEE MECHANICAL

EXHAUST - SEE MECHANICAL DESTRAT FAN - SEE MECHANICAL

# **KEY NOTES RCP**

1 HOUR FIRE RATED CEILING (PAINT) - SEE 2/A110 2 HOUR FIRE RATED CEILING (PAINT) - SEE 3/A110

NO CEILING - EXPOSED STRUCTURE (PAINT) - SEE GENERAL NOTE F NO CEILING - EXPOSED STRUCTURE (TOUCH-UP PAINT AT REMOVED HVAC/ELEC) - SEE GENERAL NOTE F EXPOSED PLUMBING/MECHANICAL/ELECTRICAL PIPING, CONDUIT AND DUCTWORK TO BE PAINTED NEW EXPOSED PLUMBING/MECHANICAL/ELECTRICAL PIPING, CONDUIT

AND DUCTWORK TO BE PAINTED REMOVE CEILING TILE AND GRID FOR MEP WORK, SALVAGE FOR REINSTALLATION (AT HATCHED AREA). REINSTALL AFTER MEP INSTALLATION. SEE GENERAL NOTE K FOR ADDITIONAL SCOPE AREAS. CEILING MOUNTED THERAPY SWING - VERIFY LOCATION W/ OWNER.

SEE STRUCTURAL FOR REQUIRED SUPPORT. OVERHEAD DOOR TRACK CEILING MOUNTED PRIVACY CURTAIN AND TRACK

GYP BOARD BULKHEAD/SOFFIT (PAINT) - SEE 4/A110 LABEL ALL RATED WALLS AS SPECIFIED IN SPEC SECTION 07 05 53 EXISTING STRUCTURAL WOOD CEILING (PAINT)

EXISTING WOOD BEAM TO REMAIN PAINTED WOOD 1X8 TO COVER MOUNTING HOLES FROM REMOVED LIGHT FIXTURES MOUNT NEW LIGHT FIXTURE TO 1X8. TERMINATE WALL AT UNDERSIDE OF EXISTING AC TILE CEILING - SEE

ACOUSTIC TILE CEILING CLOUD W/ PERIMETER TRIM - SEE SPEC CEILING MOUNT HVAC EQUIPMENT - SEE MECH

8 EXISTING BULKHEAD/SOFFIT TO REMAIN (PAINT) 19 1'-6" X 8'-0" ACOUSTIC PANELS (AWP-1) ATTACHED TO UNDERSIDE OF EXISTING CONC FLOOR DECK

PATCH CEILING AT REMOVED MECHANICAL CHASE FILL HOLE IN EXISTING CONCRETE CEILING/ROOF W/ BATT INSULATION AND COVER HOLE W/ 1/4" STEEL PLATE 2 PATCH CEILING AT REMOVED PARTITION

LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

Consultant:

HSR ASSOCIATES INC. 100 MILWAUKEE STREET

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

O EN

HSR Project Number: 19041-1

AD

**SEPTEMBER 2021** Drawn By:

Key Plan:

KEY PLAN

**BID DOCUMENTS** 

9/27/2021 9:25:09 AM



## PLUMBING GENERAL INFORMATION

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

POUNDS PER SQUARE INCH

POLYVINYL CHLORIDE

POTABLE WATER

REVERSE OSMOSIS

ROOF DRAIN

DETECTORS

RESIN PIPE

SANITARY SEWER

SILT DENSITY INDEX

SQUARE FEET

SPECIFICATION

SQUARE FEET

STANDARD

STAINLESS STEEL

STORM WATER

TRENCH DRAIN

TEMPERATURE

100,000 BTU

TRAP PRIMER

THERMOSTAT

AGRICULTURE

VENT/VOLT

MANAGEMEN<sup>\*</sup> VA CFM VA CFM CONSULTING SUPPORT

SERVICE

WASTE

DISPOSA

WATER CLOSE

WALL CLEANOUT

WATER GAUGE

WALL HYDRAN

WASTE STACK

YARD HYDRANT

WATER, OIL, GAS

U.S. DEPARTMENT OF

VA CFM: VA CONSTRUCTION & FACILITIES

VETERANS ADMINISTRATION

VOLTAGE IN ALTERNATING

VETERANS ADMINISTRATION

WWW.CFM.VA.GOV/TIL/INDEX.ASP

MEDICAL CENTER

VETERANS HEALTH

VARIABLE SPEED DRIVE

WASTE ANESTHESIA GAS

WATER HAMMER ARRESTOR

WATER SUPPLY FIXTURE UNITS

WATER PRESSURE DROP

VENT THROUGH ROOF

ADMINISTRATION

TYPICAL

TOTAL DYNAMIC HEAD

TETRAFLUOROETHYLENE

THERMOPLASTIC HIGH-HEAT

RESISTANT NYLON COATED WIRE

THERMOPLASTIC HEAT & WATER

RESISTANT NYLON COATED WIRE

THERMOSTATIC MIXING VALVE

TEMPERATURE AND PRESSURE

SMACNA: SHEET METAL AND AIR

SHOWER

STORM DRAIN MANHOLE

NATIONAL ASSOCIATION

PVDF:

SQFT:

TSTAT:

USDA:

CSS:

WAGD:

POLYTETRAFLUOROETHYLENE

POLYVINYLIDENE FLUORIDE

REVOLUTIONS PER MINUTE

RESISTANCE TEMPERATURE

STANDARD CUBIC FEET PER

CONDITIONING CONTRACTORS

STERILE PROCESSING SERVICES

SAYBOLT UNIVERSAL SECOND

TEMPERATURE CONTROL VALVE

TOTALLY ENCLOSED FAN-COOLED

STEAM WORKING PRESSURE

REINFORCED THERMOSETTING

			PIPING ABBREVIATIONS
ABS:	ACRYLONITRILE BUTADIENE	GAL:	GALLON
AC:	STYRENE ALTERNATING CURRENT	GCO: GPD:	GRADE CLEANOUTS GALLONS PER DAY
ACR:	AIR CONDITIONING AND	GPH:	GALLONS PER HOUR
A/E:	REFRIGERATION ARCHITECT/ENGINEER	GPM: GPR:	GALLONS PER MINUTE GAS PRESSURE REGULATOR
AFF:	ABOVE FINISH FLOOR	GRS:	GAS REGULATOR STATION
AFG: AG:	ABOVE FINISH GRADE AIR GAP	GT: GVTR:	GREASE TRAP GAS VENT THROUGH ROOF
AG. AI:	ANALOG INPUT	GVIII.	GAS VENT THROUGHTROOF
AISI:	AMERICAN IRON AND STEEL INSTITUTE	H&CW: HB:	HOT AND COLD WATER HOSE BIBB
AO:	ANALOG OUTPUT	HD:	HUB DRAIN
ASHRAE:	AMERICAN SOCIETY OF HEATING REFRIGERATION, AIR	HDPE: HEFP:	HIGH DENSITY POLYETHYLENE HEALTHCARE ENVIRONMENT AND
	CONDITIONING ENGINEERS	11611.	FACILITIES PROGRAM
ASJ: ASME:	ALL SERVICE JACKET AMERICAN SOCIETY OF	HEX:	(REPLACEMENT FOR OCAMES) HEAT EXCHANGER
AOIVIL.	MECHANICAL ENGINEERS	HG:	MERCURY
ASPE:	AMERICAN SOCIETY OF PLUMBING ENGINEERS	HOA: HP:	HANDS-OFF-AUTOMATIC HORSEPOWER
ASR:	AUTOMATIC SPRINKLER RISER	HVE:	HIGH VOLUME EVACUATION
AWG:	AMERICAN WIRE GAUGE	HW: HWCP:	HOT WATER HOT WATER CIRCULATING PUMP
BACNET:	BUILDING AUTOMATION AND	HWR:	HOT WATER CIRCULATING FUMP
BAG:	CONTROL NETWORK SILVER-COPPER-ZINC BRAZING	HYD: HZ:	HYDRANT HERTZ
DAG.	ALLOY	ΠZ.	HERIZ
BAS: BCUP:	BUILDING AUTOMATION SYSTEM SILVER-COPPER-PHOSPHORUS	ID: IE:	INSIDE DIAMETER INVERT ELEVATION
BCUP.	BRAZING ALLOY	INV:	INVERT ELEVATION
BF: BFP:	BOTTLE FILLER REDUCED PRESSURE BACKFLOW	IPC: IPS:	INTERNATIONAL PLUMBING CODE IRON PIPE SIZE
DFF.	PREVENTER	IPS.	IRON PIPE SIZE
BHP: BTU:	BRAKE HORSEPOWER BRITISH THERMAL UNIT	JS:	JANITOR'S SINK
BTU/H:	BRITISH THERMAL UNIT PER HOUR	KG:	KILOGRAM
BSG:	BOROSILICATE GLASS PIPE	KPA: KW:	KILOPASCAL KILOWATT
C:	CELSIUS	KWH:	KILOWATT HOUR
CD: CDA:	COMPACT DISK COPPER DEVELOPMENT	L:	LAVATORY
CDA.	ASSOCIATION	LB:	LAVATORY POUND
CGA: CFM:	COMPRESSED GAS ASSOCIATION CUBIC FEET PER MINUTE	LBS/HR:	POUNDS PER HOUR LIQUID NATURAL GAS
CO:	CLEANOUT	L/MIN:	LITERS PER MINUTE
COR:	CONTRACTING OFFICER'S REPRESENTATIVE	L/S:	LITERS PER SECOND
CPVC:	CHLORINATED POLYVINYL	M:	METER
CR:	CHLORIDE CHLOROPRENE	MA: MAV:	MEDICAL AIR MEDICAL AIR VENT
CRS:		MAX:	MAXIMUM
CV: CW:	CONTROL VALVE COLD WATER	MBH:	
CXA:	COMMISSIONING AGENT	MER: MFG:	MANUFACTURER
DB:	DECIBELS	IVI( ¬,	MILLIGRAM MILLIGRAMS PER LITER
DB: DB(A): DDC:	DECIBELS (A WEIGHTED)	ML:	MILLILITER
DDC: DFU:	DIRECT DIGITAL CONTROL DRAINAGE FIXTURE UNITS	MM:	
DI:	DIGITAL INPUT	MIN: MV:	MEDICAL VACUUM
DI: DISS:	DEIONIZED WATER DIAMETER INDEX SAFETY SYSTEM	N2:	NITROGEN
DN: DO:	DOWN/DIAMETER NOMINAL	N20:	NITROGEN OXIDE
DO: DOE:	DIGITAL OUTPUT DEPARTMENT OF ENERGY	NC: NF: NG:	NORMALLY CLOSED OIL FREE DRY (NITROGEN)
DVD:		NG:	NATURAL GAS
DW: DWG:	DISHWASHER DRAWING	NIC: NO:	
DWV:	DRAINAGE, WASTE AND VENT	NOM:	NOMINAL
(E):	EXISTING	NPTF: NPS:	NATIONAL PIPE THREAD FEMALE NOMINAL PIPE SIZE
ECC:	ENGINEERING CONTROL CENTER AKA BAS	NPT:	NOMINAL PIPE THREAD
EL:	ELEVATION	NTS:	NOT TO SCALE
EPA:	ENVIRONMENTAL PROTECTION AGENCY	O2: OC:	OXYGEN ON CENTER
EPACT:	ENERGY POLICY ACT	OC. OCAMES:	
EPDM:	ETHYLENE PROPYLENE DIENE MONOMER	OD: OR:	OUTSIDE DIAMETER OPERATING ROOM
EPT:	ETHYLENE PROPYLENE	OSD:	OPEN SIGHT DRAIN
ETO:	TERPOLYMER ETHYLENE OXIDE	OS&Y: OXY:	OUTSIDE STEM AND YOKE OXYGEN
F:	FAHRENHEIT	PA:	PASCAL
FAR:	FEDERAL ACQUISITION REGULATIONS	PBPU:	PREFABRICATED BEDSIDE PATIENT UNITS
FCO: FD:	FLOOR CLEANOUT FLOOR DRAIN	PD:	PRESSURE DROP OR DIFFERENCE
FD: FDC:	FIRE DEPARTMENT (HOSE)	PDI:	PLUMBING AND DRAINAGE INSTITUTE
FNPT:	CONNECTION FEMALE NATIONAL PIPE THREAD	PG:	PRESSURE GAUGE
FOP:	FUEL OIL PUMP	PH: PID:	POWER OF HYDROGEN PROPORTIONAL-INTEGRAL-
FOR: FOS:	FUEL OIL RETURN FUEL OIL SUPPLY	PLC:	DIFFERENTIAL PROGRAMMABLE LOGIC
FOV:	FUEL OIL VENT	ı LO.	CONTROLLERS

# PIPING SYSTEM LABELS

	PIPING STSTEM L		
WATER PIPI	NG SYSTEMS:	GENERAL:	
	COLD WATER	<b>————</b> то е	BE DEMOLISHED
	HOT WATER	NEW	/ WORK
	HOT WATER RETURN	——— EXIS	TING
		NOTE:	
DRAIN, WAS	TE AND VENT SYSTEMS:	(E) PRIOR TO SYSTEM	TYPE DENOTES EXISTING I
SAN	SANITARY		
—— ST ——	STORM		$\wedge$
V	VENT		A03
CWW	CLEARWATER WASTE		
—— D ——	DRAIN		
—— PD ——	PUMPED DISCHARGE		
P	PROPANE		
—— G——	NATURAL GAS		
	DRAINS AND (	CLEANOUTS	
•	FLOOR DRAIN	—   CO	CLEANOUT
©	HUB DRAIN	○— FCO	FLOOR CLEANOUT
		e। ol wco	WALL CLEANOUT

PIPE VALVES AND SPECIALTIES

BALANCING VALVE

ISOLATION VALVE

ISOLATION VALVE

**GAS PRESSURE** 

REGULATOR

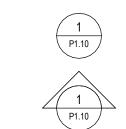
(NORMALLY OPEN)

(NORMALLY CLOSED)

PIPE FITTINGS

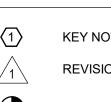
———	FLANGE		ELBOW DOWN
	UNION		ELBOW UP
<del></del>	ANCHOR		TEE DOWN
	LINE CONTINUATION BREAK	<del></del>	TEE UP
<b></b>	FLOW ARROW		PIPE CAP
	PIPELINE STRAINER	$\overline{\qquad}$	DOUBLE WYE
Ý	VENT THROUGH THE ROOF	<u> </u>	WYE

# **GENERAL SYMBOLS**



DETAIL REFERENCE TOP DESIGNATES DETAIL NUMBER DESIGNATES SHEET NUMBER SECTION REFERENCE TOP DESIGNATES SECTION NUMBER

DESIGNATES SHEET NUMBER



KEY NOTE REVISION TAG

BALL VALVE

**BUTTERFLY VALVE** 

PRESSURE GAUGE

**THERMOMETER** 

POINT OF CONNECTION

POINT OF DISCONNECTION

# WATER HAMMER ARRESTORS

FLUOROELASTOMER POLYMER

VA CONSTRUCTION & FACILITIES

FOIL-SCRIM-KRAFT FACING

MANAGEMENT, FACILITY

STANDARDS SERVICE

FIXTURE UNITS

FLOW SWITCH

NOMINAL PIPE DIAMETER IN.	NOMINAL PIPE DIAMETER MM	FIXTURE UNITS	REF. WH201 BEND STANDARD
1/2"	15	1 - 11	Α
3/4"	20	12 - 32	В
1"	25	33 - 60	С
1 1/4"	32	61 - 113	D
1 1/2"	40	114 - 154	E
2"	50	155 - 330	F

BUILDING DEMAND		139	GPM		
MINIMUM STATIC PRESSURE AT STREET				60	PSIG
ELEVATION DIFFERENCE BETWEEN SERVICE CONNECTION AND CRITICAL FIXTURE				-4	PSIG
PRESSURE DROP IN 70' OF 3" PIPE				-1	PSIG
PRESSURE D	ROP OF THE FOLLOWING COMPONENTS				
	WATER SOFTENER			-15	PSIG
	WATER METER			-2	PSIG
	BACKFLOW PREVENTER			-5	PSIG
MINIMUM PRESSURE AT CRITICAL FIXTURE				-15	PSIG
	AVAILABLE PRESSURE			18	PSIG
DEVELOPED LENGTH OF SYSTEM FROM SERVICE TO CRITICAL FIXTURE (630 FT x 1.5)		945	FT		
				1.9	PSIG/100FT

ATMOSPHERE

POLYPROPYLENE

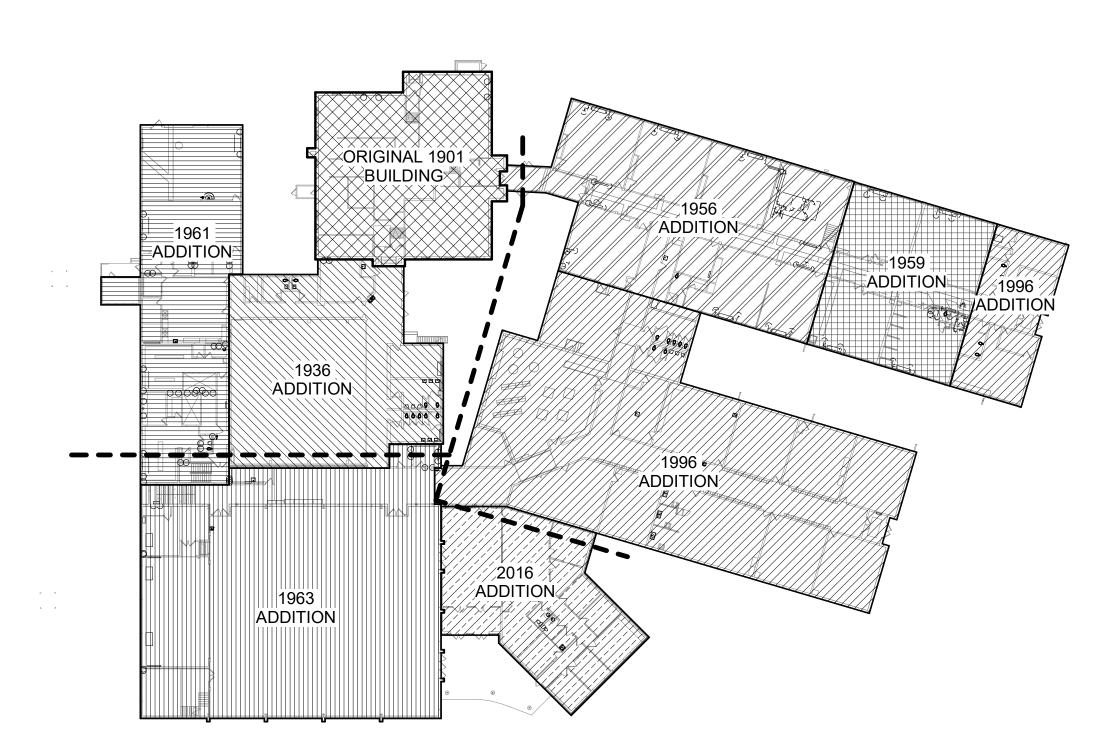
PARTS PER BILLION

PARTS PER MILLION

PRESSURE REDUCING VALVE

POUNDS PER SQUARE INCH

POUNDS PER SQUARE INCH



**BUILDING KEY** 

#### PLUMBING SPECIALTIES SCHEDULE 3/4" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, ASSE® LISTED 1013, EPOXY COATED CAST IRON BODY, 1/4 TURN BALL VALVES AND INDIRECT WASTE FITTING. TOP ENTRY ACCESS COVER FOR ACCESS TO INTERNALS. ACCEPTABLE MANUFACTURERS: WATTS LF009, ZURN, WADE THERMAL EXPANSION TANK, NON-ASME, REMOVABLE BLADDER, 14.8 GAL., 150 PSIG RATING ACCEPTABLE MANUFACTURERS: WESSELS MODEL 12 TX FLOOR DRAIN, 6" DIA, NICKEL BRONZE ADJUSTABLE TOP, CAST-IRON BODY, THREADED FLASHING COLLAR, 3" OUTLET. ACCEPTABLE MANUFACTURERS: ZURN Z415B, SMITH, WADE. FLOOR DRAIN, 9" DIA, ACID RESISTING EPOXY COATED CAST-IRON BODY AND ADJUSTABLE TOP, THREADED | FLASHING COLLAR, 3" OUTLET. ACCEPTABLE MANUFACTURERS: ZURN Z550, SMITH, WADE FLOOR SINK, 8"x8"x6" DEEP, WHITE ACID RESISTING PORCELING ENAMEL INTERIOR AND TOP, INTERIOR BOTTOM DOME STRAINER. 1/2 GRATE, FLASHING COLLAR, 3" OUTLET. ACCEPTABLE MANUFACTURERS: ZURN Z1910, SMITH, WADE. FLOOR CLEANOUT, ROUND, NICKEL BRONZE, ADJUSTABLE SCORIATED SECURED TOP, CAST IRON BODY AND PLUG, OUTLET SIZE SHALL MATCH PIPE SIZE. "CO" SHALL BE CAST IN TOP. ACCEPTABLE MANUFACTURERS: ZURN Z1400, SMITH, WADE. GREASE INTERCEPTOR, 20 GPM FLOW RATING, 40 LBS GREASE CAPACITY PER PDI. ACCEPTABLE MANUFACTURERS: MIFAB LIL-20, SCHIER, ROCKFORD GAS PRESSURE REGULATOR, 2 PSIG INLET PRESSURE, 7"-14" W.C. (1/2 PSIG) OUTLET PRESSURE. VENT EACH REGULATOR TO THE BUILDING EXTERIOR. REFER TO PLUMBING AND MECHANICAL SCHEDULES FOR CAPACITY REQUIREMENTS. ACCEPTABLE MANUFACTURERS: FISHER HSR, ITRON, SENSUS, MAXITROL HOSE BIBB, INTERIOR, VACUUM BREAKER, BRASS BODY, ROUGH BRASS FINISH, WALL CLAMP, 3/4" MALE HOSE THREAD, ROUND METAL HANDLE OPERATOR. ACCEPTABLE MANUFACTURERS: WOODFORD 24, ZURN, WADE. ROOF DRAIN, 15" DIA, COATED CAST-IRON BODY WITH MEMBRANE FLASHING CLAMP AND LOW SILHOUETTE POLY DOME, REFER TO DRAWINGS FOR OUTLET SIZE. ACCEPTABLE MANUFACTURERS: ZURN Z100, SMITH, WADE SECONDARY ROOF DRAIN, 15" DIA, COATED CAST-IRON BODY WITH MEMBRANE FLASHING CLAMP AND LOW SILHOUETTE POLY DOME, 2" INTERNAL WATER DAM, REFER TO DRAWINGS FOR OUTLET SIZE. ACCEPTABLE MANUFACTURERS: ZURN Z100, SMITH, WADE DOWNSPOUT NOZZLE, NICKEL BRONZE BODY, WALL FLANGE AND OUTLET NOZZLE, REFER TO DRAWINGS FOR INLET SIZE. ACCEPTABLE MANUFACTURERS: ZURN Z100, SMITH, WADE WALL HYDRANT, FREEZELESS, AUTODRAINING, VACUUM BREAKER, BRASS BODY, CHROME PLATED FACE, WALL CLAMP, 3/4" MALE HOSE THREAD, LOOSE-KEY OPERATOR. ACCEPTABLE MANUFACTURERS: WOODFORD 65, ZURN, WADE. WALL CLEANOUT, BODY AND PLUG SHALL BE OF SAME MATERIAL AS PIPE WITH ROUND STAINLESS STEEL COVER PLATE AND CENTER SCREW INTO PLUG. ACCEPTABLE MANUFACTURERS: ZURN Z1446, SMITH, WADE. PLUMBING EQUIPMENT SCHEDULE AIR COMPRESSOR, PRESSURE LUBRICATED TWO-STAGE, 460 VOLT / 3 PHASE, 1.5 HP, SOLID CAST IRON BELT DRIVEN PUMP, MAGNETIC STARTER, 80 GALLON STORAGE, OIL SIGHT GLASS, 175 PSI MIN, 22.5 CFM, 3/4" TANK OUTLET, VERTICAL TANK ARRANGEMENT. ACCEPTABLE MANUFACTURERS: QUINCY MODEL QP -7.5 PRO AIR, KAISER. CIRCULATING PUMP, 2 GPM @ 10' OF HEAD. 0.1 HP, 115 V, 0.55 AMPS WITH 3'-0" POWER CORD. ACCEPTABLE MANUFACTURERS: GRUNDFOS ALPHA1 25-60 130, BELL & GOSSETT GAS-FIRED WATER HEATER, TANKLESS STYLE, 180 MBH INPUT, HIGH-EFFICIENCY CONDENSING, 8.0 MAX.

# **GENERAL NOTES**

SUMP, 48" DEEP WITH SEALED LID.

1. CONFORM TO ALL REQUIREMENTS OF THE CURRENT CODES AND OTHER APPLICABLE REGULATIONS FOR THE PROJECT.

GPM, SPARK IGNITION SYSTEM, MICROPROCESSOR CONTROLS, 115 VOLT / 1 PH POWER.

SEWAGE EJECTOR, DUPLEX, TWO SUBMERSIBLE GRINDER 1 HP PUMPS WITH 56 GPM CAPCITY AT 10 FEET

SEALED LID WITH GASKET, REMOTE CONTROL / ANNUNCIATOR PANEL, PUMPS SHALL BE CONTROLLED BY

SUMP PUMP, SIMPLEX, 30 GPM @ 15 FT. HEAD, 115 VOLTS, 2.3 FLA, 4.1 LRA, 2 POLE, 3450 RPM, OIL-MINDER

SYSTEM WITH NEMA 4X WATERTIGHT ENCLOSURE, STAINLESS STEEL SENSOR PROBES, SINGLE DIRECT

PLUG-IN POWER, EQUIPPED WITH LEVEL SENSORS/FLOATS TO INCLUDE LOW LEVEL CUT OFF AND HIGH

AND HIGH AMPERAGE CONDITIONS, LED INDICATOR LIGHTS FOR OIL SPILL, POWER, HIGH LIQUID LEVEL,

LEVEL ALARM. SOLID STATE PANEL COMPLETE WITH REMOTE MONITORING CIRCUIT FOR OIL, HIGH LIQUID,

OF HEAD, 2" PUMP OUTLET, 460 VOLT/ 3-PHASE 1750 RPM MOTORS, AIR FILLED HERMETICALLY SEALED STAINLESS STEEL SHAFT, CAST IRON MOTOR SHELL, CLASS F INSULATION, 20 FT LONG POWER CABLE,

MINIMUM LEVEL FLOAT, LEAD PUMP FLOAT, LAG PUMP FLOAT AND ALARM LEVEL FLOAT. 36" DIAMETER

ACCEPTABLE MANUFACTURERS: AO SMITH ATI-340H, STATE, BRADLEY-WHITE

ACCEPTABLE MANUFACTURERS: WEIL, LIBERTY, ZOELLER

OVERLOAD AND PUMP RUN. INCLUDE 30" x 30" x 24" DEEP SUMP.

ACCEPTABLE MANUFACTURERS: WEIL, LIBERTY, ZOELLER

- 2. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND
- 3. COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCE
- 4. PROVIDE ACCESS PANELS FOR ALL ITEMS UNDER THIS SECTION REQUIRING SERVICING, INSPECTION, MAINTENANCE AND ADJUSTMENT.
- 5. OMISSIONS: IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE INSTALLATION. SHOULD THERE BE OMISSIONS, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE A / E TO SUCH
- 6. THE INSTALLATION SHALL CONFORM TO THE LATEST APPLICABLE INDUSTRY STANDARDS UNLESS SPECIFICALLY NOTED OTHERWISE.
- 7. ADDITIONAL WORK: THE DESIGN IS BASED ON EQUIPMENT AS DESCRIBED IN THE DRAWINGS. ANY CHANGE IN ELECTRICAL, WIRING, CONDUIT, CONNECTIONS, PIPING, CONTROLS, AND OPENINGS REQUIRED BY ALTERNATE EQUIPMENT SPECIFIED AND SUBMITTED AND APPROVED SHALL BE PAID FOR BY THIS CONTRACTOR.
- 8. PRODUCT DELIVERY, STORAGE AND HANDLING: FURNISH NEW FIXTURES. MATERIALS AND ACCESSORIES BEARING THE MANUFACTURER'S IDENTIFICATION. COORDINATE DELIVERIES TO AVOID INTERFERENCE OF CONSTRUCTION AND DELAYS, PROTECT PRODUCTS DURING DELIVERY. STORAGE, INSTALLATION, AND THE REMAINDER OF THE CONSTRUCTION PERIOD AFTER INSTALLATION.
- 9. PREPARATION: VISIT THE WORK SITE AND BECOME FULLY AWARE OF ALL EXISTING CONDITIONS. INVESTIGATE THE CONTRACT DOCUMENTS AND MAKE PROPER PROVISIONS TO AVOID INTERFERENCE OR CONSTRUCTION DELAYS. FURNISH OTHER TRADES WITH INFORMATION TO PROPERLY LOCATE AND SIZE OPENINGS IN THE STRUCTURE REQUIRED FOR THIS WORK. FURNISH ANCHOR BOLTS, SLEEVES, INSERTS AND SUPPORT REQUIRED FOR THIS WORK.
- 10. INSTALLATION: PERFORM WORK USING PERSONNEL SKILLED IN THE TRADE INVOLVED. PROVIDE COMPETENT SUPERVISION. FURNISH NEW MATERIALS. AND ACCESSORIES BEARING THE MANUFACTURER'S IDENTIFICATION, AND CONFORMING TO THE RECOGNIZED COMMERCIAL STANDARDS.
- 11. FIELD QUALITY CONTROL: TEST SYSTEMS IN ACCORDANCE WITH APPLICABLE STANDARDS, CODES AND MANUFACTURER'S RECOMMENDATIONS. PERFORM TESTS IN THE PRESENCE OF GOVERNMENT
- 12. CLEANING AND ADJUSTING: AT THE COMPLETION OF THE WORK, ALL PARTS OF THE INSTALLATION SHALL BE THOROUGHLY CLEANED. PIPE, VALVES, AND FITTINGS SHALL BE CLEANSED OF GREASE, METAL CUTTINGS, AND SLUDGE THAT MAY HAVE ACCUMULATED BY OPERATION OF THE SYSTEM FOR TESTING ANY STOPPAGE OR DISCOLORATION OR OTHER DAMAGE TO PARTS OF THE BUILDING, ITS FINISH, OR FURNISHINGS, FAILURE TO PROPERLY CLEAN THE PIPING SYSTEM DUE TO THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT COST TO THE OWNER.

## PLUMBING FIXTURE SCHEDULE

WATER COOLER WITH BOTTLE FILLING STATION, SELF-CONTAINED, WALL MOUNT, BY-LEVEL. FRONT AND SIDE PUSH BUTTON. 14 GAUGE STAINLESS STEEL CABINET, ONE-PIECE HEAVY DUTY CONSTRUCTION. 8.0 GPH AT 50 DEGREE F AT 90 DEGREE AMBIENT. PROVIDE CHROME PLATED BRASS STOP, STAINLESS STEEL BRAIDED SUPPLY, DRAIN, 1-1/4" BRASS P-TRAP WITH CLEANOUT PLUG AND TAILPIECE ADA COMPLIANT, LEAD-FREE DESIGN COMPLIANT TO NSF/ANSI-61.

ACCEPTABLE MANUFACTURERS: ELKAY EMABFTL8WSSK, OASIS, HALSEY-TAYLOR EMERGENCY EYE/FACE WASH. BARRIER FREE, YELLOW IMPACT RESIST PLASTIC BOWL AND DUST COVER, 304 SS ACTIVATION PUSH HANDLE, CHROME-PLATED STAY-OPEN BALL VALVE, HEAVY GAUGE CAST ALUMINUM WALL BRACKET WITH SAFETY YELLOW COATING, 1-1/4" DRAIN, P-TRAP AND TAILPIECE.

ACCEPTABLE MANUFACTURERS: BRADLEY S19224FWPT, HAWS, ACORN ACCESSIBLE LAVATORY, WALL MOUNT VITREOUS CHINA WITH CONCEALED CARRIER ARM, 3 HOLE AT 4" CENTERS. PROVIDE CHROME PLATED BRASS SUPPLIES LOOSE KEY SUPPLIES, PERFORATED GRID DRAIN, 1-1/2" BRASS P-TRAP WITH CLEANOUT PLUG AND OFFSET TAILPIECE. PROVIDE

WALL-MOUNTED LAVATORY CARRIER SUITABLE FOR MASONRY WALL INSTALLATION. 34" RIM HEIGHT. ADA COMPLIANT.

ACCEPTABLE MANUFACTURERS: KOHLER K-2032, AMERICAN STANDARD, ELKAY. LAVATORY FAUCET, BATTERY POWERED, SENSOR FAUCTET, BELOW-DECK THERMOSTATIC MIXING VALVE, 0.5 GPM FLOW RATE. INSTALLATION SHALL BE IN COMPLIANCE WITH ADA SECTION 4.19. ACCEPTABLE MANUFACTURERS: SLOAN SF-2350, KOHLER, MOEN, DELTA, CHICAGO FAUCET.

IS NOT ACCEPTABLE. ACCEPTABLE MANUFACTURERS: TRUEBRO "HANDI-LAV GUARD 2", MCQUIRE "PRO WRAP", BROCAR "TRAP WRAP".

PROVIDE PRE-MANUFACTURED TRAP AND SUPPLY INSULATION KIT. FIELD FABRICATION COVERING

JUVENILE LAVATORY, WALL MOUNT VITREOUS CHINA WITH CONCEALED CARRIER ARM, 3 HOLE AT 4" CENTERS. PROVIDE CHROME PLATED BRASS SUPPLIES LOOSE KEY SUPPLIES, PERFORATED GRID DRAIN, 1-1/2" BRASS P-TRAP WITH CLEANOUT PLUG AND OFFSET TAILPIECE. PROVIDE WALL-MOUNTED LAVATORY CARRIER SUITABLE FOR MASONRY WALL INSTALLATION. 24" MINUMUM KNEE CLEARANCE, 29" RIM HEIGHT. ADA COMPLIANT

LAVATORY FAUCET, BATTERY POWERED, SENSOR FAUCTET, BELOW-DECK THERMOSTATIC MIXING VALVE, 0.5 GPM FLOW RATE. INSTALLATION SHALL BE IN COMPLIANCE WITH ADA SECTION 4.19. ACCEPTABLE MANUFACTURERS: SLOAN SF-2350, KOHLER, MOEN, DELTA, CHICAGO FAUCET. PROVIDE PRE-MANUFACTURED TRAP AND SUPPLY INSULATION KIT. FIELD FABRICATION COVERING IS NOT ACCEPTABLE.

ACCEPTABLE MANUFACTURERS: KOHLER K-2032, AMERICAN STANDARD, ELKAY.

"TRAP WRAP". MOB BASIN, MOLDED STONE, 24" X 24" X 10", WHITE, STAINLESS STEEL DRAIN, 3" OUTLET, PROVIDE MOP HANGER, HOSE AND HOSE BRACKET. PROVIDE FRP PANELS TO WALL SURFACES ABOVE MOP BASIN. PROVIDE STAINLESS STEEL BUMPERGUARDS ON EXPOSED SIDES.

ACCEPTABLE MANUFACTURERS: TRUEBRO "HANDI-LAV GUARD 2", MCQUIRE "PRO WRAP", BROCAR

SERVICE FAUCET, TWO HANDLE MIXING FAUCET, CHROME PLATED, INTEGRAL VACUMM BREAKER, INTEGRAL STOPS, PAIL HOOK, 3/4" MALE HOSE THREAD SPOUT. PROVIDE HOSE END VACUUM

ACCEPTABLE MANUFACTURERS: MUSTEE 63M, ZURN, WILLIAMS. SINK, SINGLE BOWL, 18 GA, TYPE 304 SATIN FINISH, DROP-IN, 25" x 21-1/4" x 6-1/2" BOWL, 3-1/2" DIA CENTER DRAIN. STAINLESS STEEL STRAINER BASKET WITH RUBBER SEAL, CHROME PLATED CAST BRASS TAILPIECE AND P-TRAP WITH CLEANOUT, 3/8" BRASS ANGLE STOPS WITH STAINLESS STEEL BRAIDED SUPPLIES.

ACCEPTABLE MANUFACTURERS: ELKAY LRAD252165, AMERICAN STANDARD, KOHLER SINK FAUCET, 8" CENTERSET DECK MOUNT FAUCET WITH 8" GOOSENECK RIGID SPOUT, 4" WRISTBLADE HANDLES, CHROME-PLATED CONSTRUCTION. NSF 61 & 372. ACCEPTABLE MANUFACTURERS: CHICAGO FAUCETS 1100-GN8AE3-317AB, ELKAY, KOHLER, T&S

SINK, DOUBLE BOWL, 18 GA, TYPE 304 SATIN FINISH; DROP-IN, 31-1/2" x 21-1/4" x 7-7/8" DEEP BOWLS. 3-1/2" DIA CENTER DRAINS, STAINLESS STEEL STRAINER BASKETS WITH RUBBER SEAL, CHROME PLATED CAST BRASS TAILPIECES AND P-TRAPS WITH CLEANOUTS, 3/8" BRASS ANGLE STOPS WITH STAINLESS STEEL BRAIDED SUPPLIES.

ACCEPTABLE MANUFACTURERS: ELKAY LR3321, AMERICAN STANDARD, KOHLER SINK FAUCET, 8" CENTERSET DECK MOUNT FAUCET WITH 8" GOOSENECK SWING SPOUT, 4" WRISTBLADE HANDLES, CHROME-PLATED CONSTRUCTION. NSF 61 & 372. ACCEPTABLE MANUFACTURERS: CHICAGO FAUCETS 1100-GN8AE3-317AB, ELKAY, KOHLER, T&S

SCULLERY SINK, THREE COMPARTMENT, 18 GA, TYPE 304 SATIN FINISH, 90" x 23-13/16" x 43-3/4", 18" x 18" x 14" BOWLS, 18" DRAINBOARDS ON BOTH SIDES, STAINLESS STEEL LEGS, 3-1/2" DIA CENTER DRAINS, STAINLESS STEEL STRAINER BASKETS WITH RUBBER SEAL,CHROME PLATED CAST BRASS TAILPIECES AND P-TRAPS WITH CLEANOUTS, 3/8" BRASS ANGLE STOPS WITH STAINLESS STEEL BRAIDED SUPPLIES. PROVIDE ADDITIONAL SUPPORT BEHIND BACKSPLASH TO ENSURE RIGID

FAUCET INSTALLATION. ACCEPTABLE MANUFACTURERS: ELKAY S3C18X18-2-18X, AMERICAN STANDARD, KOHLER SINK FAUCET, 8" CENTERSET BACKSPLASH MOUNTED FAUCET, 21" DOUBLE-JOINTED SWING SPOUT WITH 5-1/4" GOOSENECK SPOUT, 2-3/8" HANDLES, CHROME-PLATED CONSTRUCTION. NSF 61 & 372,

ACCEPTABLE MANUFACTURERS: CHICAGO FAUCETS 445-DJ21ABCP, ELKAY, AMERICAN STANDARD,

CLASSROOM SINK, SINGLE BOWL, 18 GA, TYPE 304 SATIN FINISH, DROP-IN, 25" x 19-1/2" x 6-1/2" BOWL, 3-1/2" DIA CENTER DRAIN. STAINLESS STEEL GRID STRAINER, CHROME PLATED CAST BRASS TAILPIECE AND P-TRAP WITH CLEANOUT, 3/8" BRASS ANGLE STOPS WITH STAINLESS STEEL BRAIDED

SINK FAUCET, 8" CENTERSET DECK MOUNT FAUCET WITH 7" GOOSENECK RIGID SPOUT, 2-5/8" WRISTBLADE HANDLES, CHROME-PLATED CONSTRUCTION. NSF 61 & 372. ADA COMPLIANT. ACCEPTABLE MANUFACTURERS: ELKAY LKD2439C, CHICAGO FAUCETS, KOHLER, T&S BRASS BUBBLER, CHROME-PLATED BRASS, PUSH-BUTTON, FLEXIBLE ANTI-MICROBIAL MOUITH GUARD. ADA ACCEPTABLE MANUFACTURERS: ELKAY LK1141A, KOHLER, CHICAGO FAUCETS, T&S BRASS

ACCEPTABLE MANUFACTURERS: ELKAY DRKAD22265, AMERICAN STANDARD, KOHLER

SINK, SINGLE BOWL, 18 GA, TYPE 304 SATIN FINISH, DROP-IN, 25" x 21-1/4" x 10-1/8" BOWL, 3-1/2" DIA CENTER DRAIN. STAINLESS STEEL STRAINER BASKET WITH RUBBER SEAL, CHROME PLATED CAST BRASS TAILPIECE AND P-TRAP WITH CLEANOUT, 3/8" BRASS ANGLE STOPS WITH STAINLESS STEEL BRAIDED SUPPLIES. SK-5 ACCEPTABLE MANUFACTURERS: ELKAY DLR252110, AMERICAN STANDARD, KOHLER

SINK FAUCET, 8" CENTERSET DECK MOUNT FAUCET WITH 8" GOOSENECK SWING SPOUT, 4" WRISTBLADE HANDLES, CHROME-PLATED CONSTRUCTION. NSF 61 & 372. ACCEPTABLE MANUFACTURERS: CHICAGO FAUCETS 1100-GN8AE3-317AB, KOHLER, T&S BRASS SERVICE SINK, MOLDED STONE, 20" X 24" X 14 3/8" DEEP, WALL HUNG, WALL BRACKET. MOUNT AT 34"

2-HANDLE FAUCET, P-TRAP, ANGLE STOPS, BRAIDED STAINLESS STEEL SUPPLIES. ACCEPTABLE MANUFACTURERS: MUSTEE 18W, FIAT, WILLIAMS, ZURN. ACCESSIBLE HEIGHT WATER CLOSET, WALL MOUNTED WITH CARRIER, FLUSH-VALVE TYPE, WHITE

VITREOUS CHINA, 1-1/2" TOP INLET, ELONGATED BOWL, 17"-19" SEAT HEIGHT, 2-1/8" TRAP PASSAGEWAY, SIPHON JET FLUSH ACTION, ADA COMPLIANT. ACCEPTABLE MANUFACTURERS: KOHLER K-4325, AMERICAN STANDARD, CRANE, TOTO FLUSH VALVE, SENSOR ACTIVATED, BATTERY POWERED, POLISHED CHROME PLATED, WALL AND SPUD ESCUTCHEON, 1.6 GPF, ADA COMPLIANT.

ACCEPTABLE MANUFACTURERS: SLOAN G2 8111-1.6, AMERICAN STANDARD, KOHLER, TOTO SEAT, EXTRA HEAVY, OPEN FRONT, SOLID ANTI-MICROBIAL PLASTIC, WHITE SELF-SUSTAINING CHECK HINGE, AND STAINLESS STEEL POSTS AND NUTS. ACCEPTABLE MANUFACTURERS: BEMIS, AMERICAN STANDARD, KOHLER

JUVENILE WATER CLOSET, FLOOR-MOUNTED, FLUSH-VALVE TYPE, WHITE VITREOUS CHINA, 1-1/2" TOP INLET, ELONGATED BOWL, 13-3/4" RIM HEIGHT, 2-1/8" TRAP PASSAGEWAY, SIPHON JET FLUSH ACTION, ADA COMPLIANT.

ACCEPTABLE MANUFACTURERS: KOHLER K-96059-SS, AMERICAN STANDARD, CRANE, TOTO FLUSH VALVE, SENSOR ACTIVATED, BATTERY POWERED, POLISHED CHROME PLATED, WALL AND WC-2 SPUD ESCUTCHEON, 1.6 GPF, ADA COMPLIANT. ACCEPTABLE MANUFACTURERS: SLOAN G2 8111-1.6, AMERICAN STANDARD, KOHLER, TOTO

SEAT, EXTRA HEAVY, OPEN FRONT, SOLID ANTI-MICROBIAL PLASTIC, WHITE SELF-SUSTAINING CHECK HINGE, AND STAINLESS STEEL POSTS AND NUTS. ACCEPTABLE MANUFACTURERS: BEMIS, AMERICAN STANDARD, KOHLER

WASH FOUNTAIN, SEMI-CIRCULAR, 14 GA #4 POLISHED STAINLESS STEEL, SINGLE COMPARTMENT. 54" X 9" DEEP WITH BACKSPLASH, 28" RIM HEIGHT, SINGLE SPRAYHEAD OPERATION, AIR VALVE HAND CONTROLS, WALL-OUTLET, THERMOSTATIC MIXING VALVE, NO SOAP DISPENSER.

ACCEPTABLE MANUFACTURERS: BRADLEY WF2704, HAWS, ACORN

HSR ASSOCIATES INC 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

ARCHITECTURE

INTERIOR DESIGN

PROJECT NUMBER: 2021082

HSR Project Number:

Project Date: **SEPTEMBER 2021** 

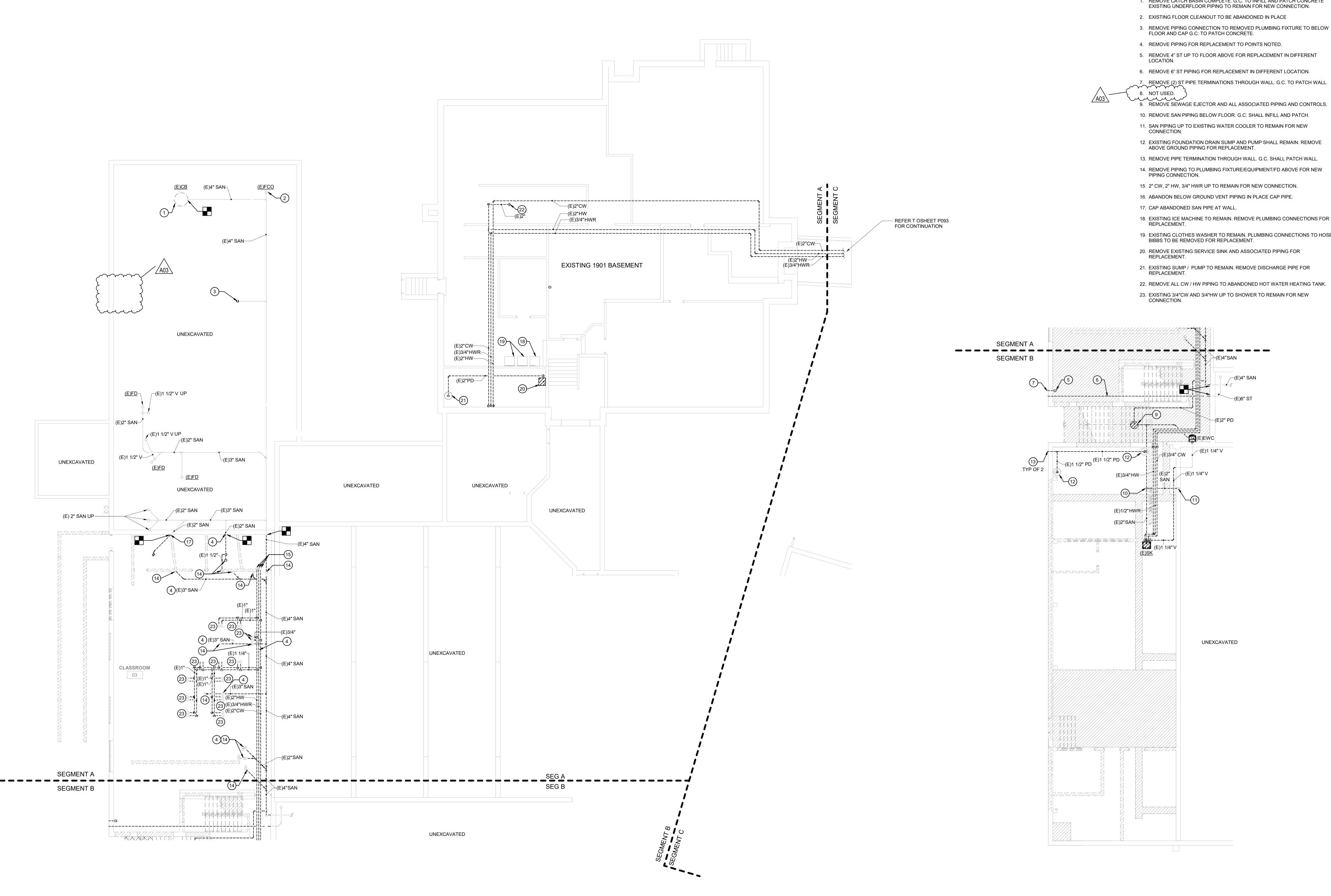
OTIE Key Plan:

BID DOCUMENTS

Revisions: A01 ADD1 A02 ADD2 9.23.21 A03 ADD3 9.28.21

NONE 9/29/2021 1:45:31 PM

Graphic Scale:



**GENERAL NOTES: PLUMBING** 

1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT

# # PLUMBING DEMOLITION PLAN KEYNOTES

1. REMOVE CATCH BASIN COMPLETE. G.C. TO INFILL AND PATCH CONCRETE

7. REMOVE (2) ST PIPE TERMINATIONS THROUGH WALL. G.C. TO PATCH WALL.

9. REMOVE SEWAGE EJECTOR AND ALL ASSOCIATED PIPING AND CONTROLS.

10. REMOVE SAN PIPING BELOW FLOOR. G.C. SHALL INFILL AND PATCH.

11. SAN PIPING UP TO EXISTING WATER COOLER TO REMAIN FOR NEW

12. EXISTING FOUNDATION DRAIN SUMP AND PUMP SHALL REMAIN. REMOVE

14. REMOVE PIPING TO PLUMBING FIXTURE/EQUIPMENT/FD ABOVE FOR NEW

15. 2" CW, 2" HW, 3/4" HWR UP TO REMAIN FOR NEW CONNECTION.

18. EXISTING ICE MACHINE TO REMAIN. REMOVE PLUMBING CONNECTIONS FOR

19. EXISTING CLOTHES WASHER TO REMAIN. PLUMBING CONNECTIONS TO HOSE

20. REMOVE EXISTING SERVICE SINK AND ASSOCIATED PIPING FOR

21. EXISTING SUMP / PUMP TO REMAIN. REMOVE DISCHARGE PIPE FOR

22. REMOVE ALL CW / HW PIPING TO ABANDONED HOT WATER HEATING TANK.

ARCHITECTURE INTERIOR DESIGN



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

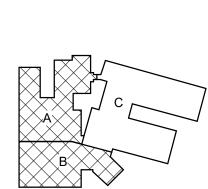
www.hsrassociates.com

PROJECT NUMBER: 2021082

HSR Project Number:

SEPTEMBER 2021

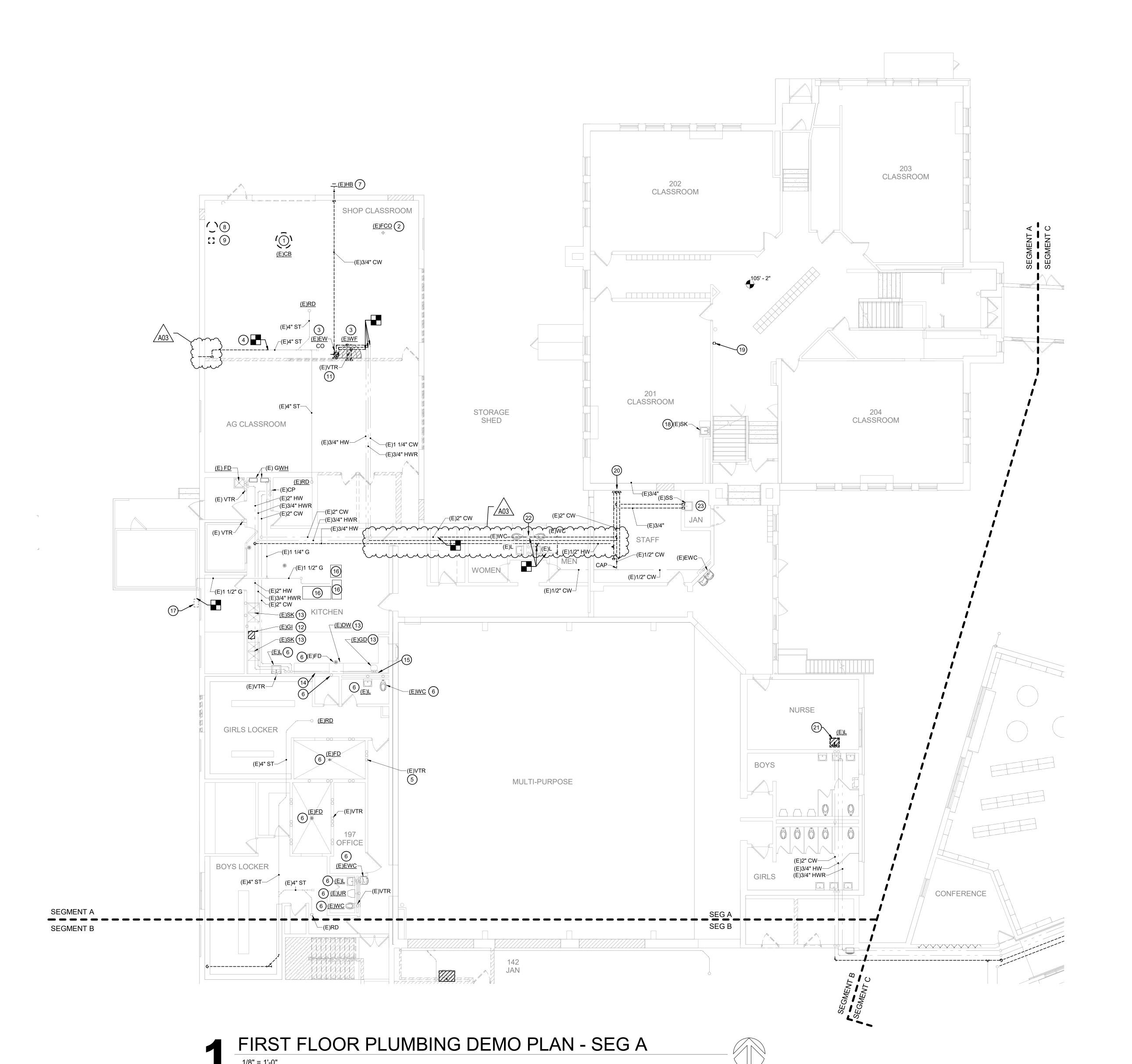
OTIE



KEY PLAN 💮

**BID DOCUMENTS** 

9/29/2021 1:45:35 PM



# **GENERAL NOTES: PLUMBING**

EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/F.

# **# PLUMBING DEMOLITION PLAN KEYNOTES**

- 1. REMOVE CATCH BASIN. REFER TO SHEET P090 FOR DETAILS.
- 2. EXISTING FLOOR CLEANOUT TO E ABANDONED IN PLACE.
- A03
- 3. REMOVE PLUMBING FIXTURE AND ASSOCIATED PIPING.

  4. REMOVE ST PIPING FROM POINT NOTED DOWN TO WALL TERMINATION. G.C.
  - TO PATCH WALL.

    5. REMOVE ST PIPING FROM POINT NOTED DOWN TO WALL TERMINATION. G.G.
  - 6. EXISTING PLUMBING FIXTURE / EQUIPMENT / FLOOR DRAINS TO REMAIN. REFER TO SHEET P090 FOR PIPING REPLACEMENT.
  - 7. REMOVE WALL HYDRANT AND ASSOCIATED PIPING REMOVE ABANDONED
  - UNDERFLOOR PIPING CONNECTION BELOW FLOOR. G.C. TO PATCH FLOOR.
  - 8. REMOVE EXISTING AIR COMPRESSOR AND ALL CONNECTED PIPING IN SPACE. TURN COMPRESSOR OVER TO OWNER.
  - 9. REMOVE COMPRESSED AIR HOSE REEL AND TURN OVER TO OWNER.
  - 10. EXISTING PLUMBING FIXTURE TO REMAIN.
  - 11. EXISTING VTR TO REMAIN FOR NEW CONNECTION.
  - 13. EXISTING PLUMBING FIXTURE/EQUIPMENT AND ASSOCIATED PIPING TO REMAIN.

12. REMOVE EXISTING GREASE INTERCEPTOR FOR REPLACEMENT.

- 14. EXISTING 2" CW, 3/4" HWR, 2" HW TO REMAIN.
- 15. EXISTING 2" CW, 3/4" HWR, 2" HW DN TO FLOOR BELOW TO REMAIN.
- 16. EXISTING COOKING EQUIPMENT AND ASSOCIATED GAS PIPING CONNECTIONS
- 17. UTILITY TO REMOVE GAS METER SET. P.C. TO REMOVE PIPING SERVING BUILDING (AFTER METER) TO POINT SHOWN.
- 18. EXISTING PLUMBING FIXTURE TO REMAIN. REMOVE CW/HW PIPING FOR REPLACEMENT.
- 19. REMOVE CW PIPING COMPLETE.
- 20. REMOVE 2" CW, 2" HW, 3/4" HWR DN. REFER TO SHEET P090 FOR CONTINUATION
- 21. REMOVE EXISTING PLUMBING FIXTURE. EXISTING ROUGH IN PIPING TO BE MODIFIED TO ACCOMMODATE NEW FIXTURE.
- 22. EXISTING CW PIPING SERVING WATER CLOSETS TO REMAIN FOR NEW CONNECTION.
- 23. REMOVE EXISTING SERVICE SINGK AND ASSOCIATATED PIPING FOR REPLACEMENT. EXSTING SAN/V PIPING CONNECT TO BE MODIFIED AS REQUIRED FOR NEW FIXTURE.

ARCHITECTURE ENGINEERING



INTERIOR DESIGN

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

Consultant:

www.hsrassociates.com

PROJECT NUMBER : 2021082

4

MO PLAN - SEG

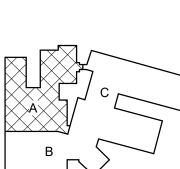
ADAMS STREET
WISCONSIN
FLOOR PLUMBING

oject Location:

HSR Project Number:

ct Date:
SEPTEMBER 2021

OTIE



BID DOCUMENTS

 No.
 Description
 Date

 A01
 ADD1
 9.20.21

 A02
 ADD2
 9.23.21

 A03
 ADD3
 9.28.21

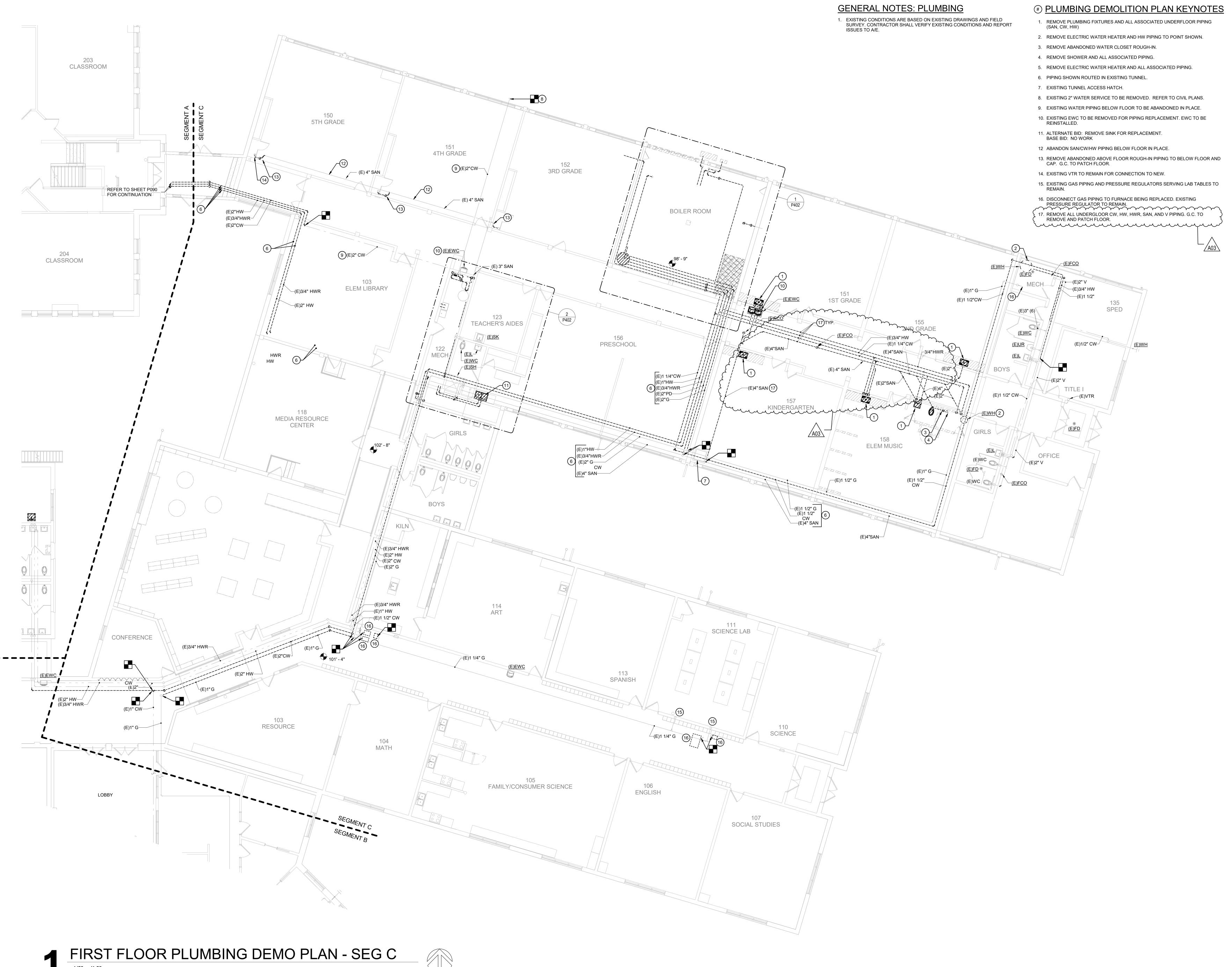
Graphic Scale:

0' 2' 4' 8' 12'

Last Update:

9/29/2021 1:45:38 PM

P091



ARCHITECTURE ENGINEERING INTERIOR DESIGN



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

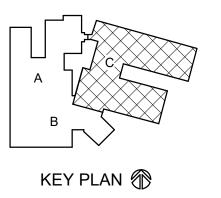
Total Integrated Enterprises

www.hsrassociates.com

PROJECT NUMBER: 2021082

HSR Project Number: **SEPTEMBER 2021** 

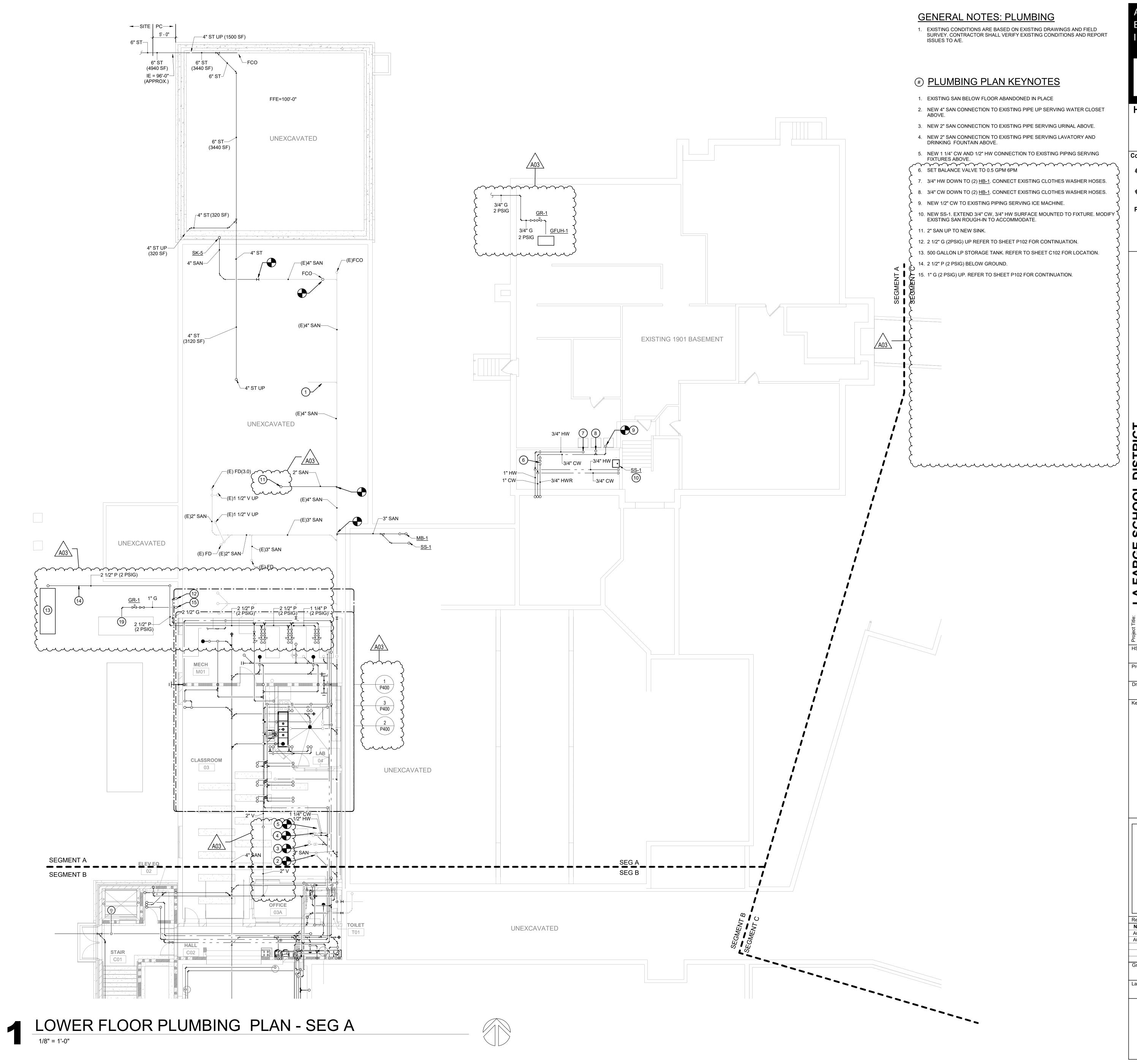
OTIE



**BID DOCUMENTS** 

9/29/2021 1:45:42 PM

P093



ARCHITECTURE ENGINEERING INTERIOR DESIGN



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

Consultant:

ONEIDA

Total Integrated

Enterprises

www.hsrassociates.com

PROJECT NUMBER : 2021082

3 PLAN - SEG

ST ADAMS STREET
GE, WISCONSIN
TER LEVEL PLUMBII

HSR Project Number:

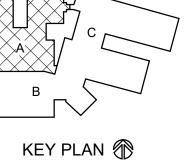
19041-1
ct Date:

SEPTEMBER 2021

n By:

OTIE

Key Plan:



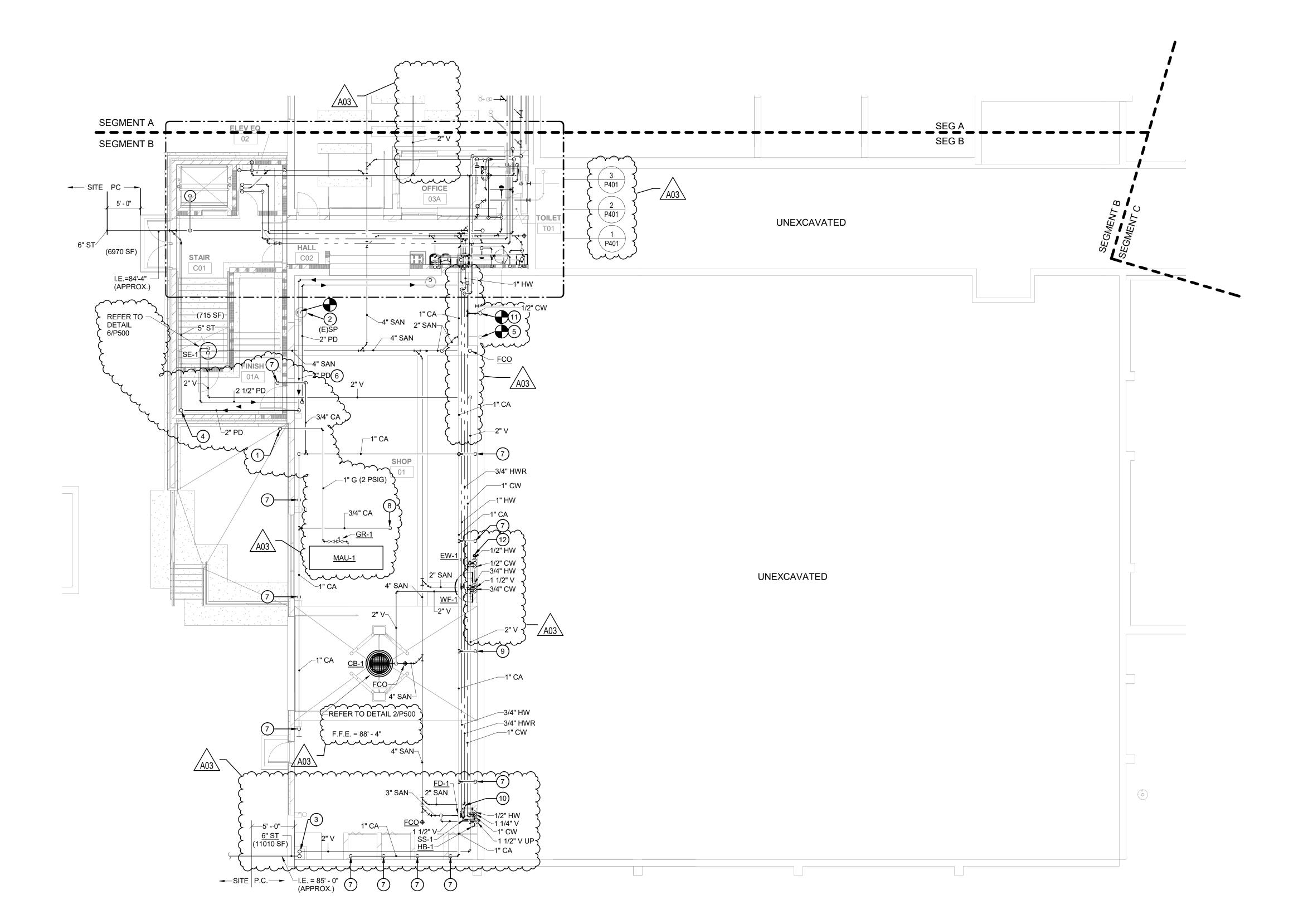
BID DOCUMENTS

No. Description II
A02 ADD2 9.28
A03 ADD3 9.28

Graphic Scale:

Last Update: 9/29/2021 1:11:28 PM

P100



LOWER LEVEL PLUMBING PLAN - SEG B

1/8" = 1'-0"

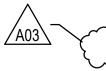


#### **GENERAL NOTES: PLUMBING**

1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/E.

## **#** PLUMBING PLAN KEYNOTES

- 1. 1" G (2PSIG) UP TO ROOF. REFER TO SHEET P106 FOR CONTINUATION.
- 2. EXISTING FOUNDATION DRAINAGE SUMP/PUMP. EXTEND NEW 2" PD PUMP FROM EXISTING PUMP TO POINT SHOWN REFER TO DETAIL 3/P500.



- 3. 4" ST UP IN SHAFT ABOVE. 4. 2" V AND 6" ST UP. REFER TO SHEET P103 FOR CONTINUATION.
- 5. NEW 2" SAN CONNECTION TO EXISTING SAN PIPE UP SERVING EXISTING WATER COOLER IN GYM. 6. INSTALL NEW 2" PD AS HIGH AS POSSIBLE.
- 7. 1/2" CA DOWN TO QUICK DISCONNECT FITTING. VERIFY LOCATION WITH
- 8. PROVIDE NEW HOSE REEL WITH 30'-0" HOSE.
- 9. INSTALL EXISTING HOSE REEL REMOVED FROM EXISTING AUTO SHOP.



11. NEW 1/2" CW CONNECTION TO EXISTING PIPING SERVING DRINKING FOUNTAIN IN GYM.



12. 3" HUB DRAIN. 

ARCHITECTURE ENGINEERING INTERIOR DESIGN



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

www.hsrassociates.com

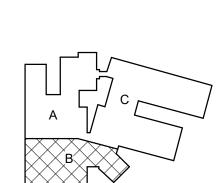


PROJECT NUMBER: 2021082



HSR Project Number:

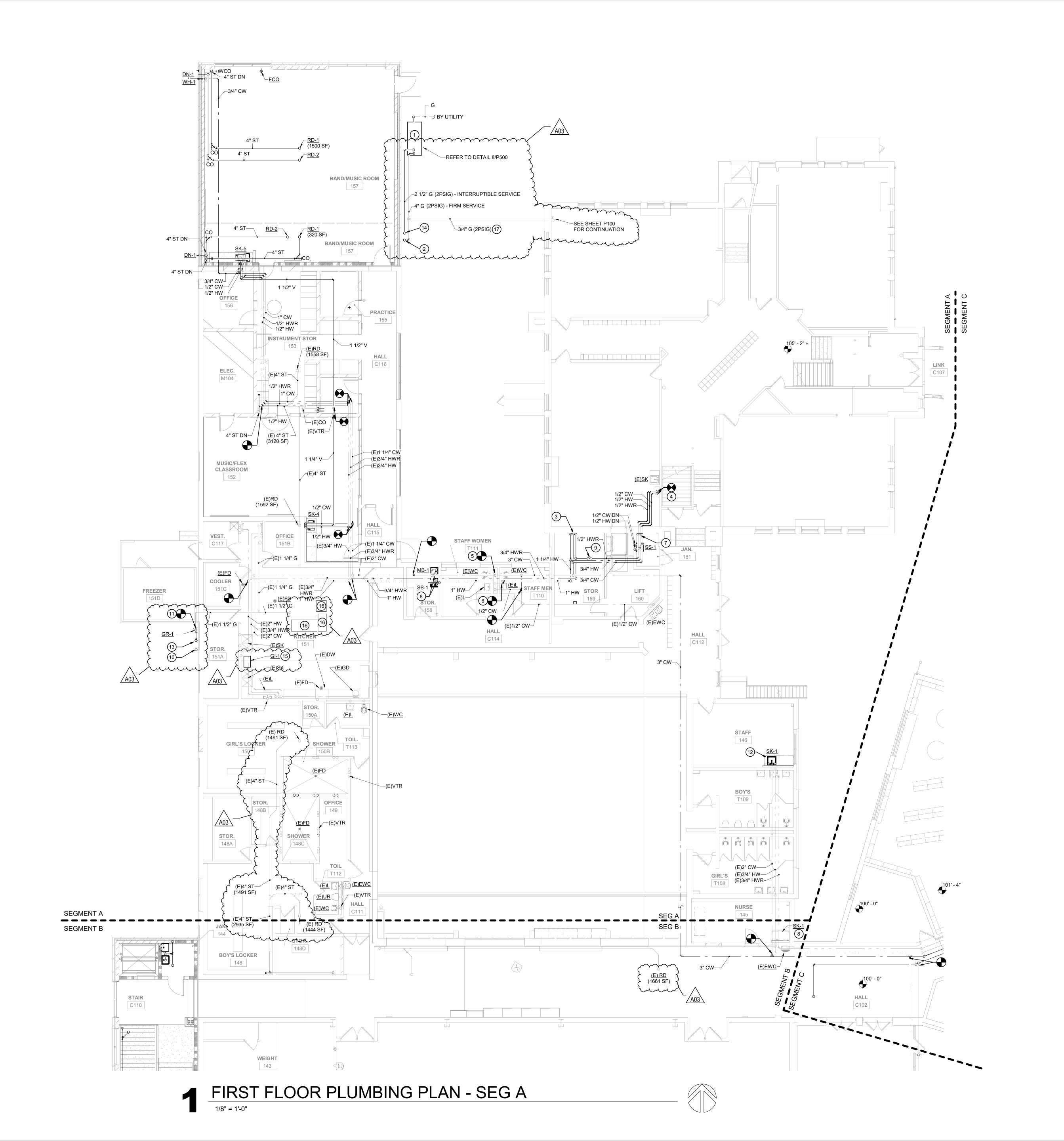
**SEPTEMBER 2021** 



KEY PLAN 🚯

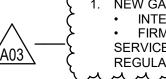
**BID DOCUMENTS** 

Last Update: 9/29/2021 1:45:46 PM



1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT

## **#** PLUMBING PLAN KEYNOTES



1. NEW GAS SERVICE BY UTILITY SERVICE CONSISTS OF THE FOLLOWING: INTERRUPTIBLE SERVICE (NEW BOILERS ONLY): 4500 CFH FIRM SERVICE (BUILDING EXCLUDING NEW BOILERS): 5140 CFH. SERVICE SHALL SUPPLY 2 PSIG DISCHARGE PRESSURE. METERS, REGULATORS, AND PIPING AND PIPING UPSTREAM BY UTILITY. 1. 4" G (2 PSIG) UP TO THE ROOF. REFER TO SHEET P105 FOR CONTINUATION.

- 2. 1" CW, 1" HW, AND 3/4" HWR PIPING DOWN TO SERVE FIXTURE IN THE 1901 BLDG BASEMENT. REFER TO SHEET P100 FOR CONTINUATION.
- 3. 1/2" NEW CW, 1/2" HW CONNECTIONS TO EXISTING SINK ROUGH-IN.
- 4. NEW 1 1/4" CW CONNECTION TO EXISTING PIPING SERVING THE EXISTING WATER CLOSETS.

6. 1/2" CW, 1/2" HW, 1/2" HWR DOWN TO SERVE EXISTING SINK IN CLASSROOM.

- 5. NEW 1/2" HW CONNECTION TO PIPING SERVING THE EXISTING LAVATORIES.
- 7. 3/4" CW, 3/4" HW DN TO SERVE NEW MB AND SS. PIPING SHALL BE EXPOSED IN
- 8. SET BALANCE VALVE AT 0.5 GPM.
- 9. 2 1/2" G (2 PSIG) UP AND DN.
- 10. NEW 1 1/2" G (2 PSIG) CONNECTION TO EXISTING G PIPE SERVING KITCHEN. INSTALL <u>GR-1</u> TO CUT PRESSURE TO 1/2 PSIG. CONNECTED LOAD IS 1168 CFH.

11. NEW SINK. MODIFY EXISTING ROUGH-INS TO ACCOMMODATE.



- 13. 2" G (2 PSIG) UP AND 1" (2 PSIG) DN. 14. 2 1/2" G (2 PSIG) UP TO ROOF. REFER TO SHEET P105 FOR CONTINUATION.
- 15. INSTALL NEW GI-1 IN SAME LOCATION AS EXISTING. MODIFY PIPING AS REQUIRED TO ACCOMMODATE.
- 16. EXISTING COOKING EQUIPMENT.
- 17. 3/4" G (2 PSIG) UNDERGROUND TO SERVE NEW UNIT HEATER IN 1901 BUILDING BASEMENT.

ARCHITECTURE ENGINEERING



INTERIOR DESIGN

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

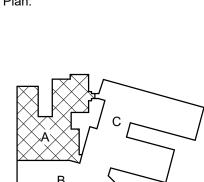
www.hsrassociates.com

Total Integrate Enterprises

PROJECT NUMBER: 2021082

HSR Project Number:

SEPTEMBER 2021 OTIE

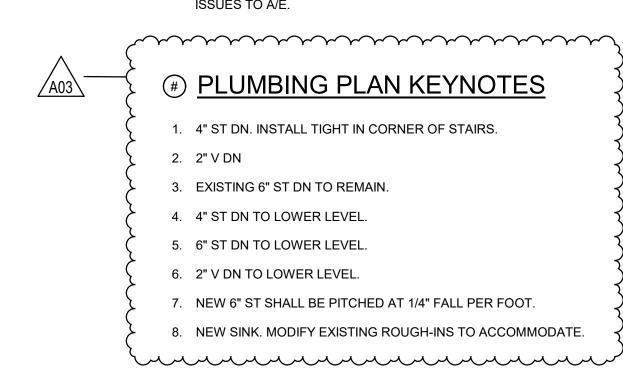


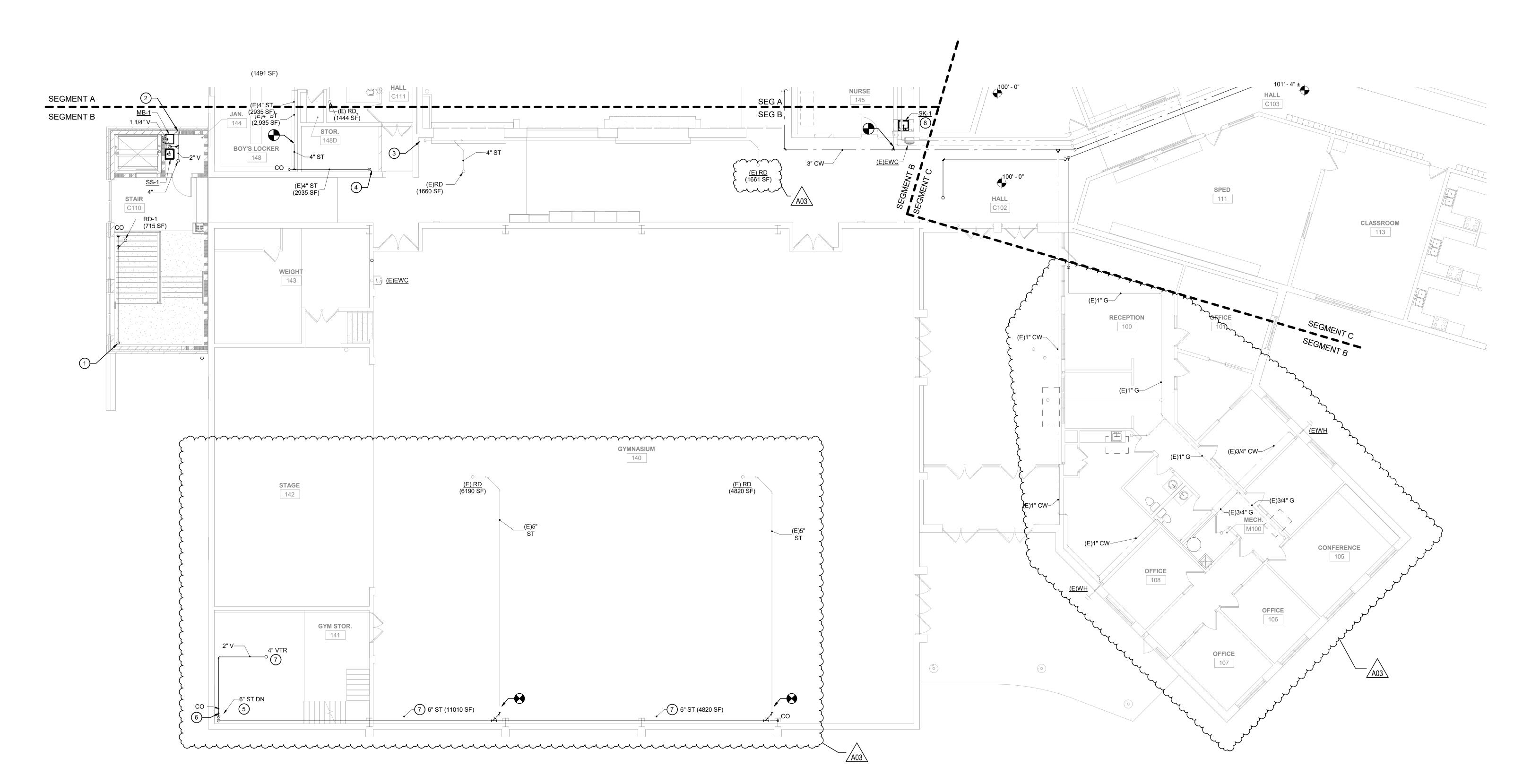
KEY PLAN 🚯

**BID DOCUMENTS** 

Last Update: 9/29/2021 1:45:51 PM

EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/E.





FIRST FLOOR PLUMBING PLAN - SEG B

1/8" = 1'-0"





HSR ASSOCIATES INC.
100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

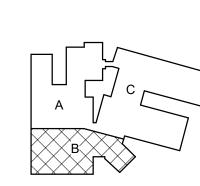
Total Integrated
Enterprises

PROJECT NUMBER: 2021082

HSR Project Number:

SEPTEMBER 2021

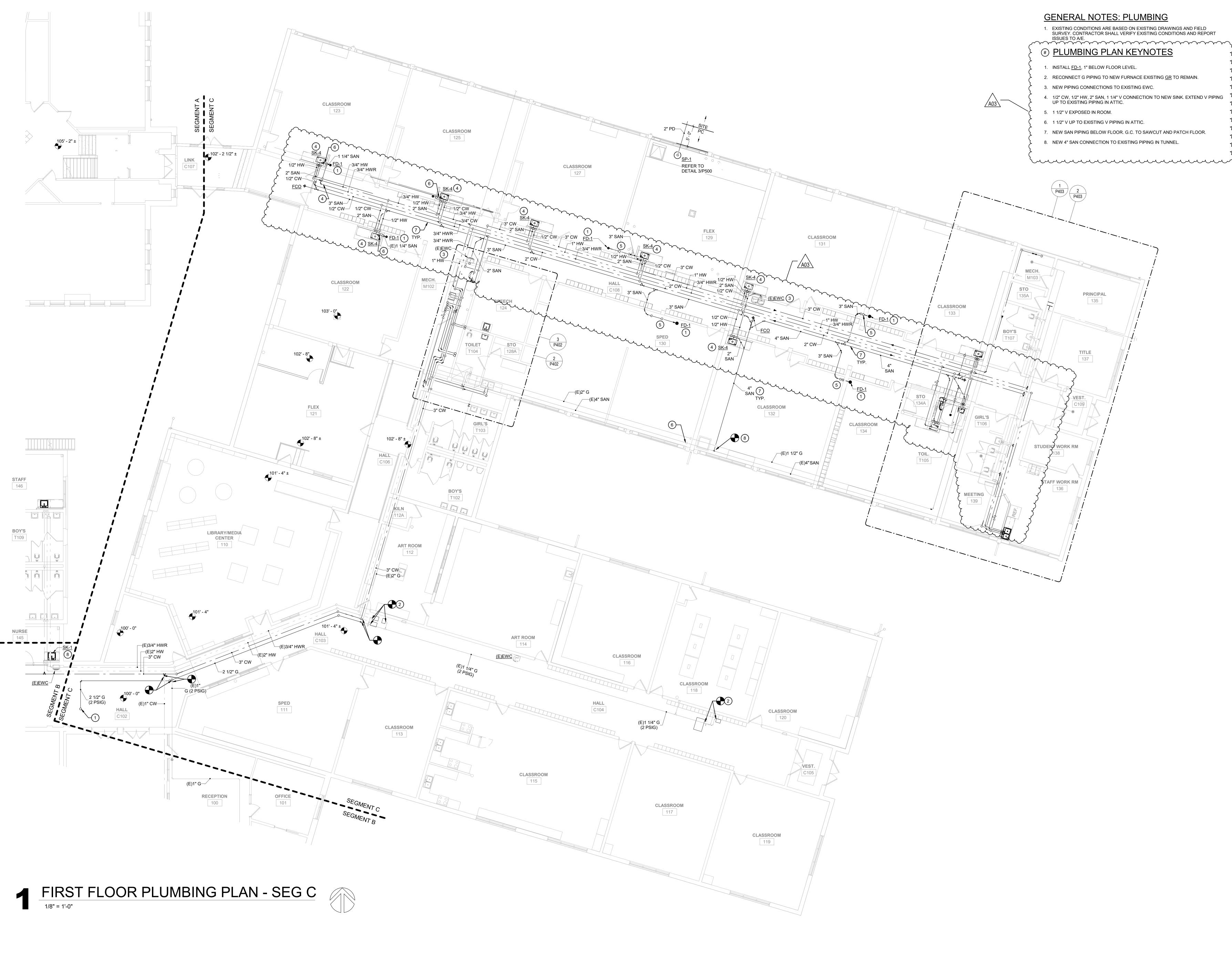
OTIE Key Plan:



KEY PLAN 🚯

**BID DOCUMENTS** 

9/29/2021 1:45:53 PM



ARCHITECTURE
ENGINEERING
INTERIOR DESIGN



HSR ASSOCIATES INC.

100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Total Integrated Enterprises

PROJECT NUMBER : 2021082

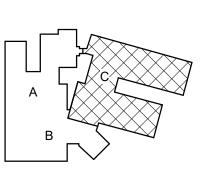
FEST ADAMS STREET

RGE, WISCONSIN

HSR Project Number:

t Date:
SEPTEMBER 2021

OTIE



KEY PLAN 💮

BID DOCUMENTS

 No.
 Description
 I

 A02
 ADD2
 9.23

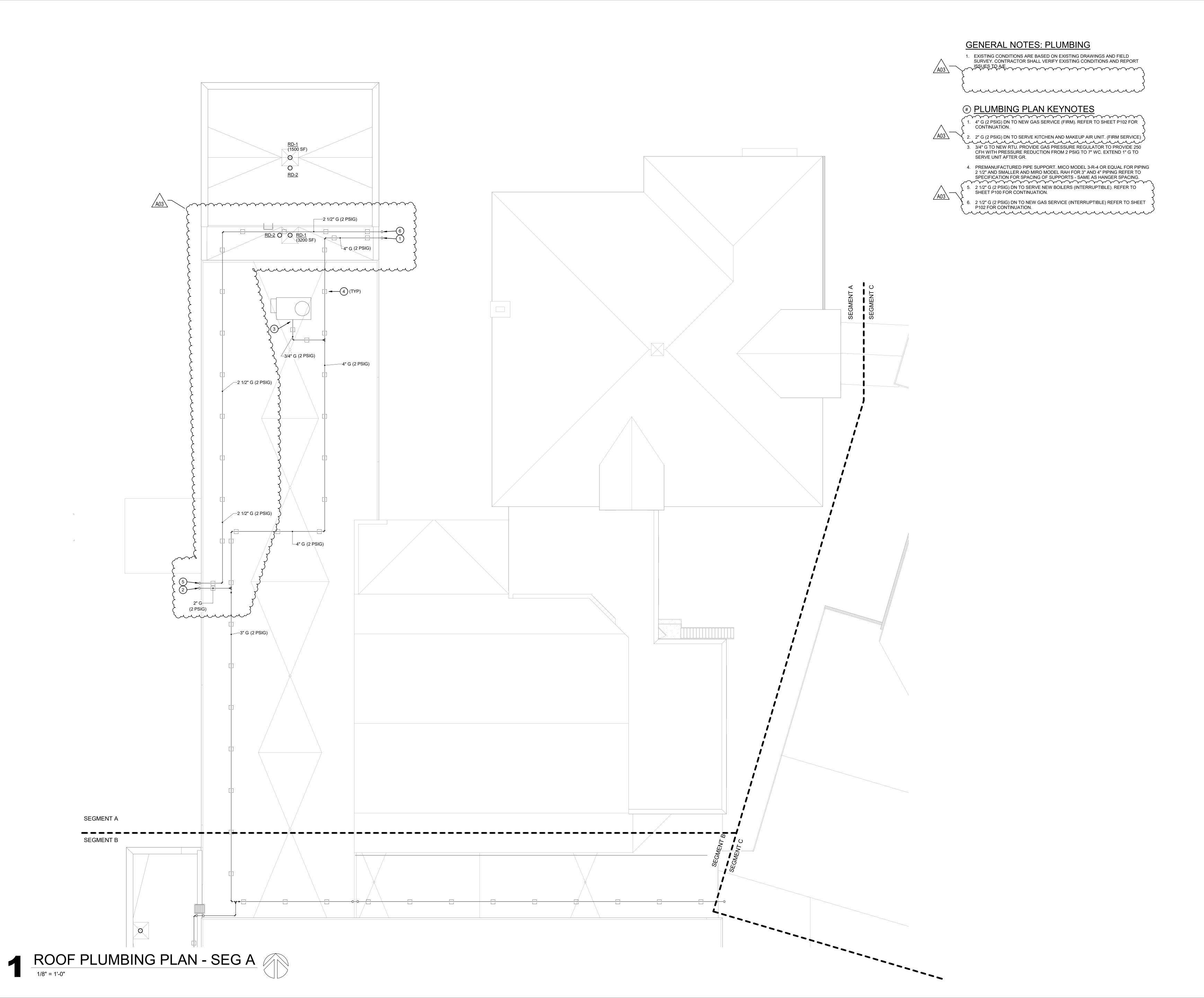
 A03
 ADD3
 9.28

Graphic Scale:

 0'
 2'
 4'
 8'
 12'

Last Update: 9/29/2021 1:45:59 PM

P104



ENGINEERING INTERIOR DESIGN

ARCHITECTURE

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830

www.hsrassociates.com

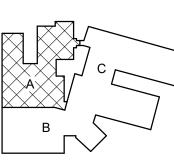
FAX: 608.782.5844

PROJECT NUMBER: 2021082

HSR Project Number:

**SEPTEMBER 2021** 

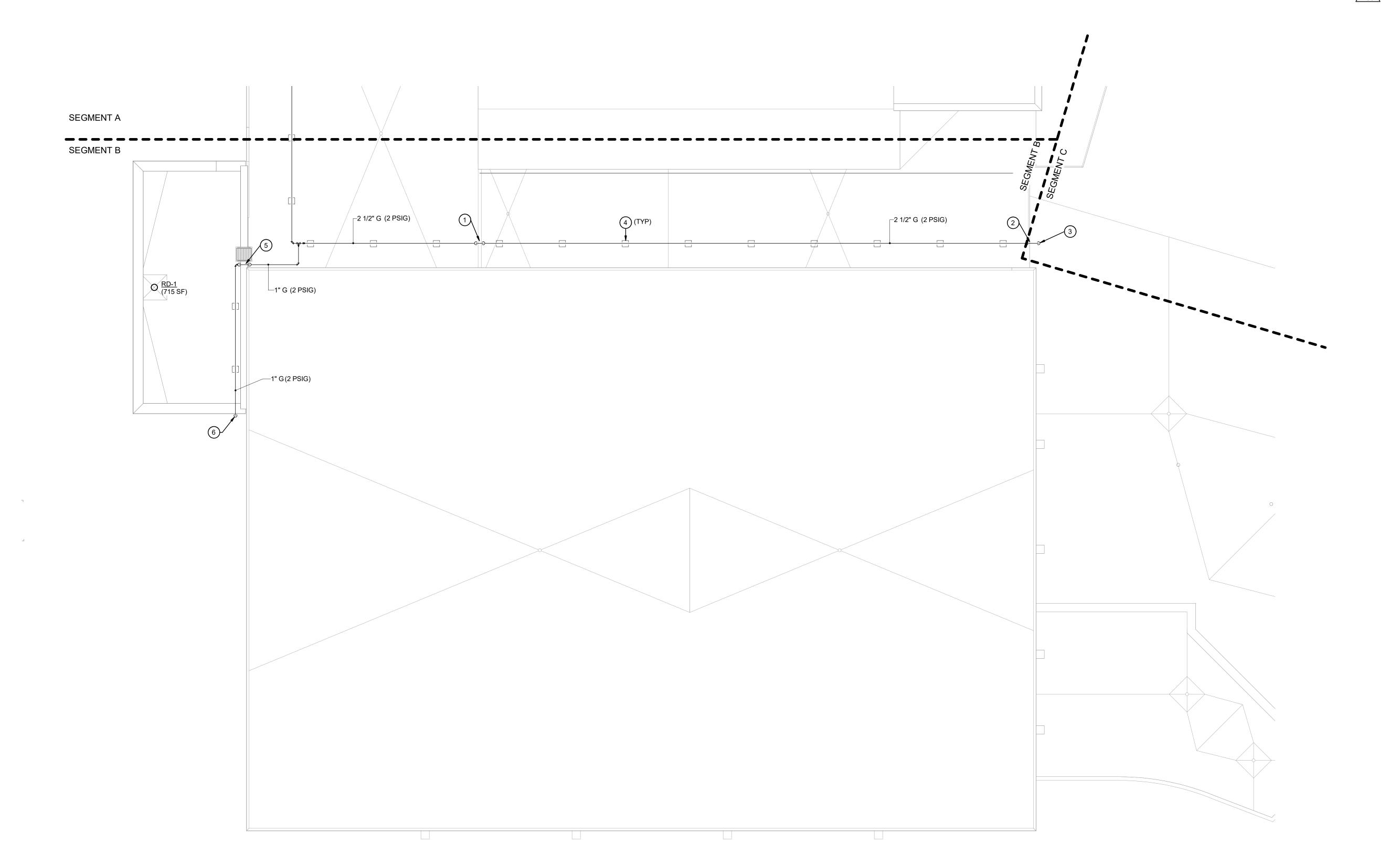
OTIE



KEY PLAN 🚯

**BID DOCUMENTS** 

Last Update: 9/29/2021 1:46:00 PM



EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/E.

 TO A A CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/E.

## **#** PLUMBING PLAN KEYNOTES

- 1. ROUTE PIPING OVER EXISTING ROOF TRANSITION.
- 2. RISE UP TO HIGHER ROOF.

SPACING.

- 2 1/2" G DOWN TO ABOVE CEILING. REFER TO SHEET P103 FOR CONTINUATION. PROVIDE PIPE BOOT/FLASHING. ROOF WORK SHALL MEET EXISTING ROOF SYSTEM WARRANTY REQUIREMENT.
- 4. PREMANUFACTURED PIPE SUPPORT. MIRO MODEL 3-R-4 OR EQUAL FOR PIPING 2 1/2" AND SMALLER AND MIRO MODEL RAH FOR 3" OR 4" PIPING. REFER TO SPECIFICATION FOR SPACING OF SUPPORTS SAME A HANGER
- RISE UP AND OVER ROOF TRANSITION BETWEEN ACCESS LADDER AND EXISTING BUILDING.
- 1" G DN TO SERVE NEW MAKE-UP AIR UNIT IN SHOP CLASSROOM. REFER TO SHEET P101 FOR CONTINUATION.

AND REPORT

HED ASSOCIATES II

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN



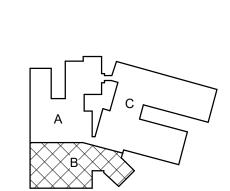
PROJECT NUMBER : 2021082

01 WEST ADAMS STREET A FARGE, WISCONSIN

HSR Project Number:

19041-1 ect Date: SEPTEMBER 2021

ОТІ



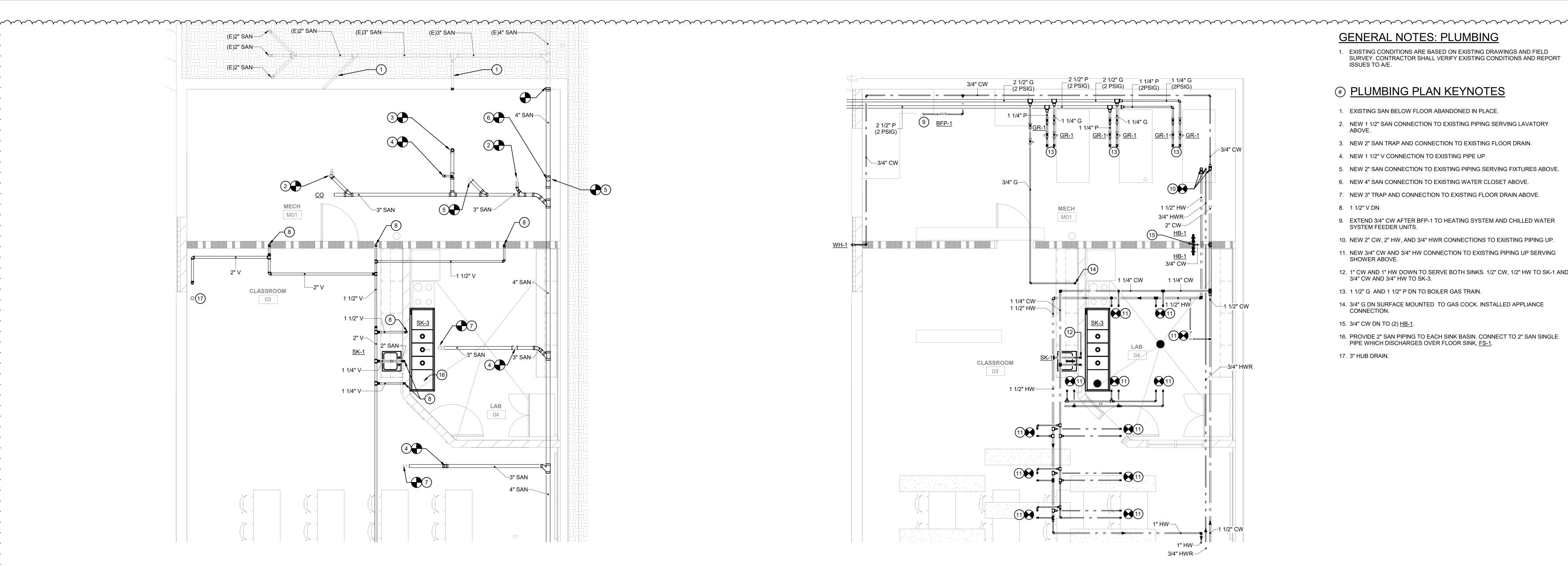
KEY PLAN 👚

BID DOCUMENTS

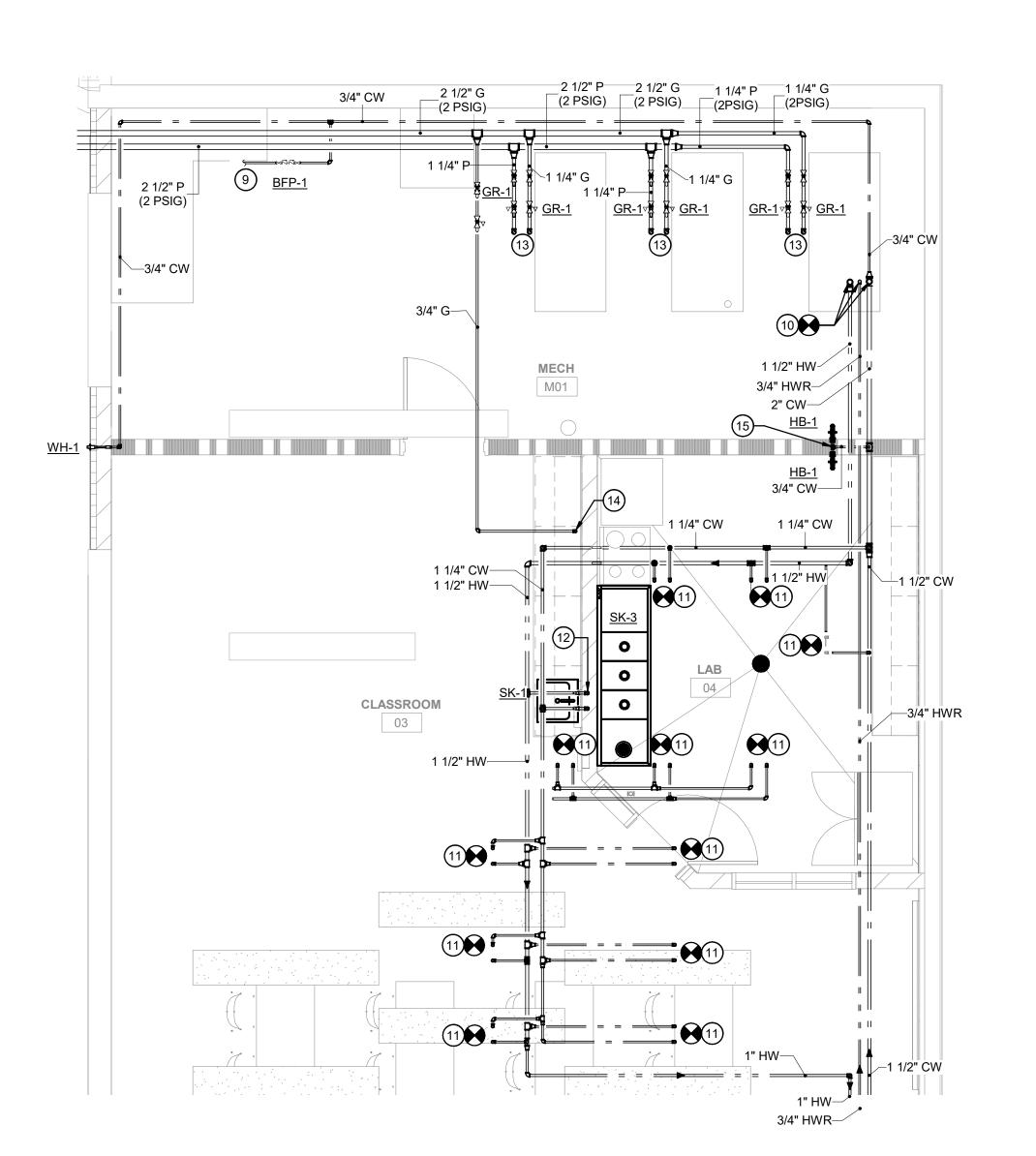
Last Update: 9/29/2021 1:46:02 PM

P106





LOWER LEVEL ABOVE FLOOR PLUMBING ENLARGED PLAN - SEG A - WASTE AND VENT



#### **GENERAL NOTES: PLUMBING**

1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT

#### # PLUMBING PLAN KEYNOTES

- 1. EXISTING SAN BELOW FLOOR ABANDONED IN PLACE.
- 2. NEW 1 1/2" SAN CONNECTION TO EXISTING PIPING SERVING LAVATORY
- 3. NEW 2" SAN TRAP AND CONNECTION TO EXISTING FLOOR DRAIN.
- 4. NEW 1 1/2" V CONNECTION TO EXISTING PIPE UP.
- 5. NEW 2" SAN CONNECTION TO EXISTING PIPING SERVING FIXTURES ABOVE.
- 6. NEW 4" SAN CONNECTION TO EXISTING WATER CLOSET ABOVE.
- 7. NEW 3" TRAP AND CONNECTION TO EXISTING FLOOR DRAIN ABOVE.
- 9. EXTEND 3/4" CW AFTER BFP-1 TO HEATING SYSTEM AND CHILLED WATER SYSTEM FEEDER UNITS.
- 10. NEW 2" CW, 2" HW, AND 3/4" HWR CONNECTIONS TO EXISTING PIPING UP.
- 11. NEW 3/4" CW AND 3/4" HW CONNECTION TO EXISTING PIPING UP SERVING SHOWER ABOVE.
- 12. 1" CW AND 1" HW DOWN TO SERVE BOTH SINKS. 1/2" CW, 1/2" HW TO SK-1 AND 3/4" CW AND 3/4" HW TO SK-3.
- 13. 1 1/2" G AND 1 1/2" P DN TO BOILER GAS TRAIN.
- 14. 3/4" G DN SURFACE MOUNTED TO GAS COCK. INSTALLED APPLIANCE CONNECTION.

15. 3/4" CW DN TO (2) HB-1.

8. 1 1/2" V DN.

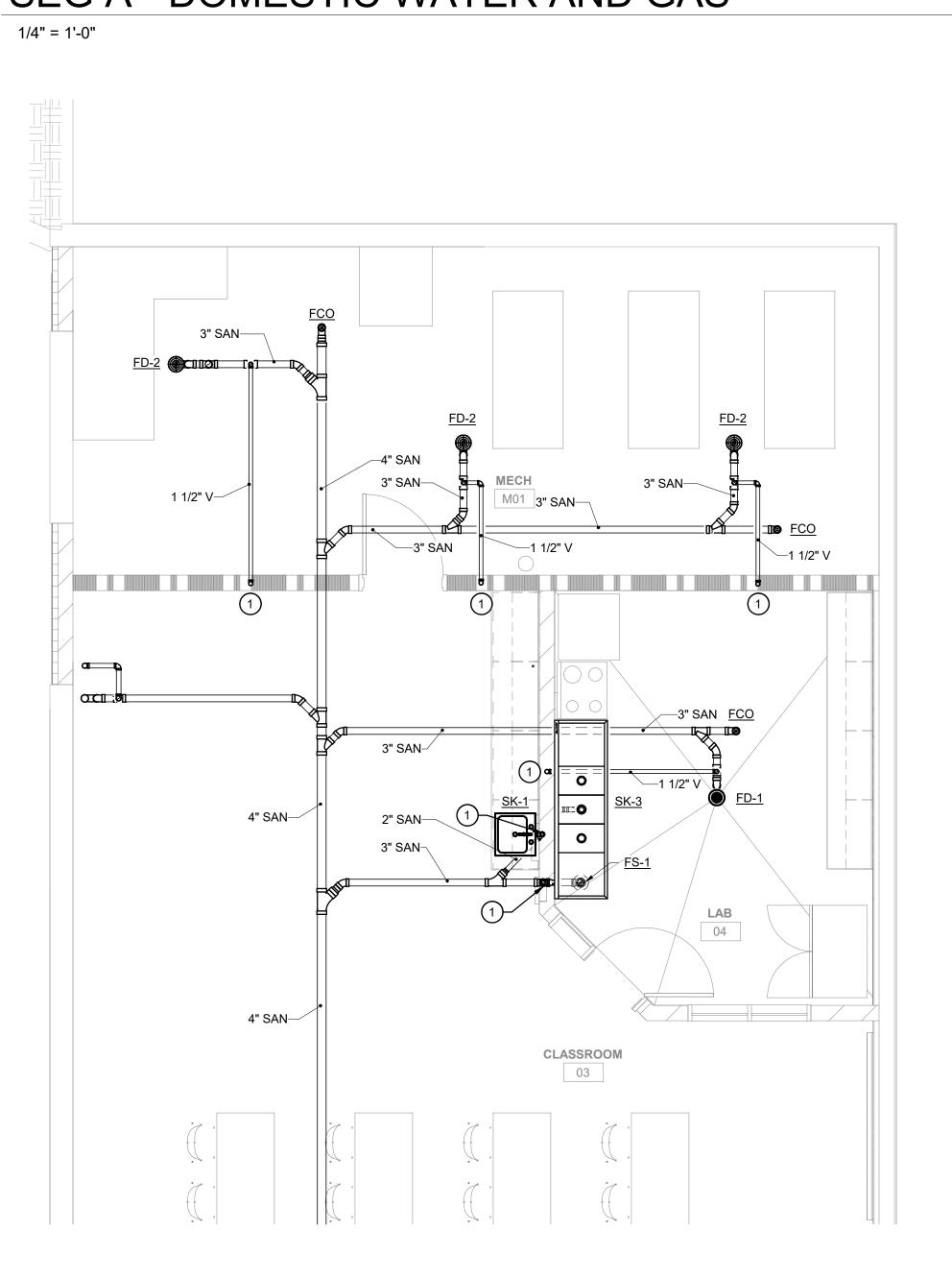
PIPE WHICH DISCHARGES OVER FLOOR SINK, FS-1. 17. 3" HUB DRAIN.

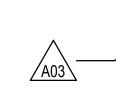
16. PROVIDE 2" SAN PIPING TO EACH SINK BASIN. CONNECT TO 2" SAN SINGLE

LOWER LEVEL ABOVE FLOOR PLUMBING ENGLARGED PLAN -2 SEG A - DOMESTIC WATER AND GAS

1/4" = 1'-0"







**BID DOCUMENTS** 

**SEPTEMBER 2021** 

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

HSR ASSOCIATES INC. 100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

PHONE: 608.784.1830 FAX: 608.782.5844

www.hsrassociates.com

PROJECT NUMBER: 2021082

9/29/2021 1:46:05 PM



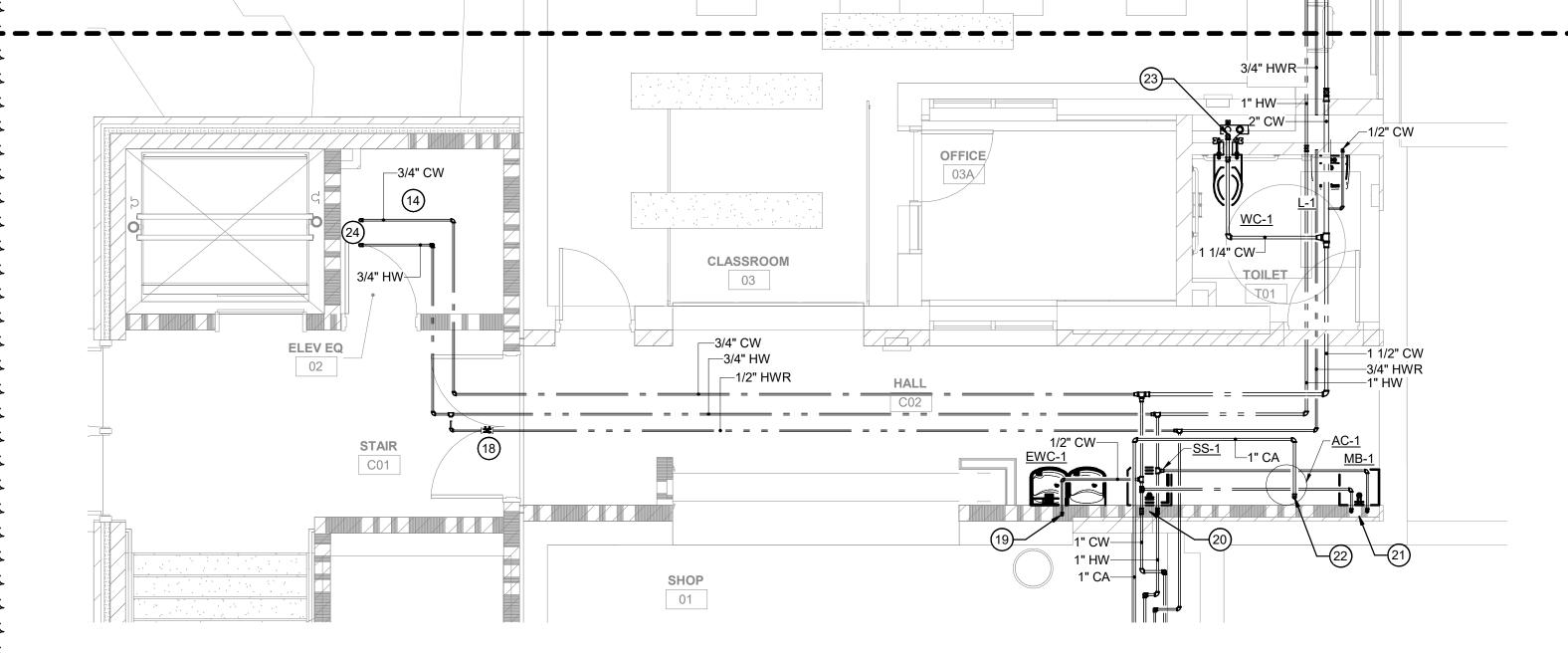
1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT.

#### # PLUMBING PLAN KEYNOTES

- 1. 1 1/2" V UP.
- 2. 3" SAN UP.
- 3. 2" SAN UP.
- 4. 6" ST UP.
- 5. 4" SAN UP. 6. EXISTING 6" ST UP.
- 7. 4" SAN DN.
- 8. 2" V DN.
- 9. 1 1/4" V DN.
- 10. 6" ST DN.
- 11. 1 1/2" V DN.
- 12. EXISTING FOUNDATION DRAINAGE SUMP/PUMP EXTEND NEW 2" PD FROM EXISTING PUMP TO POINT SHOWN. REFER TO DETAIL 3/P500.
- 13. 2" SAN UP TO <u>SS-1</u>.
- 14. PIPING TO BE INSTALLED ABOVE RATED CEILING.

16. 1 1/2" V DN TO MOP BASIN PIPING AND 2" V UP.

- 15. 3" SAN UP TO MOP BASIN.
- 17. 3" SAN DN.
- 18. SET BALANCE VALVE TO 0.5 GPM.
- 19. 1/2" CW DN TO <u>EWC-1</u>.
- 20. 1/2" CW, 1/2" HW DN TO SS-1.
- 21. 3/4" CW, 3/4" HW DN TO MB-1.
- 22. 1" CA DN TO AC-1.
- 23. 1 1/4" CW DN TO WC-1. INSTALL WATTER HAMMER ARRESTOR.
- 24. 3/4" CW, 3/4" HW UP TO SERVE <u>MB-1</u> AND <u>SS-1</u> ON FLOOR ABOVE.

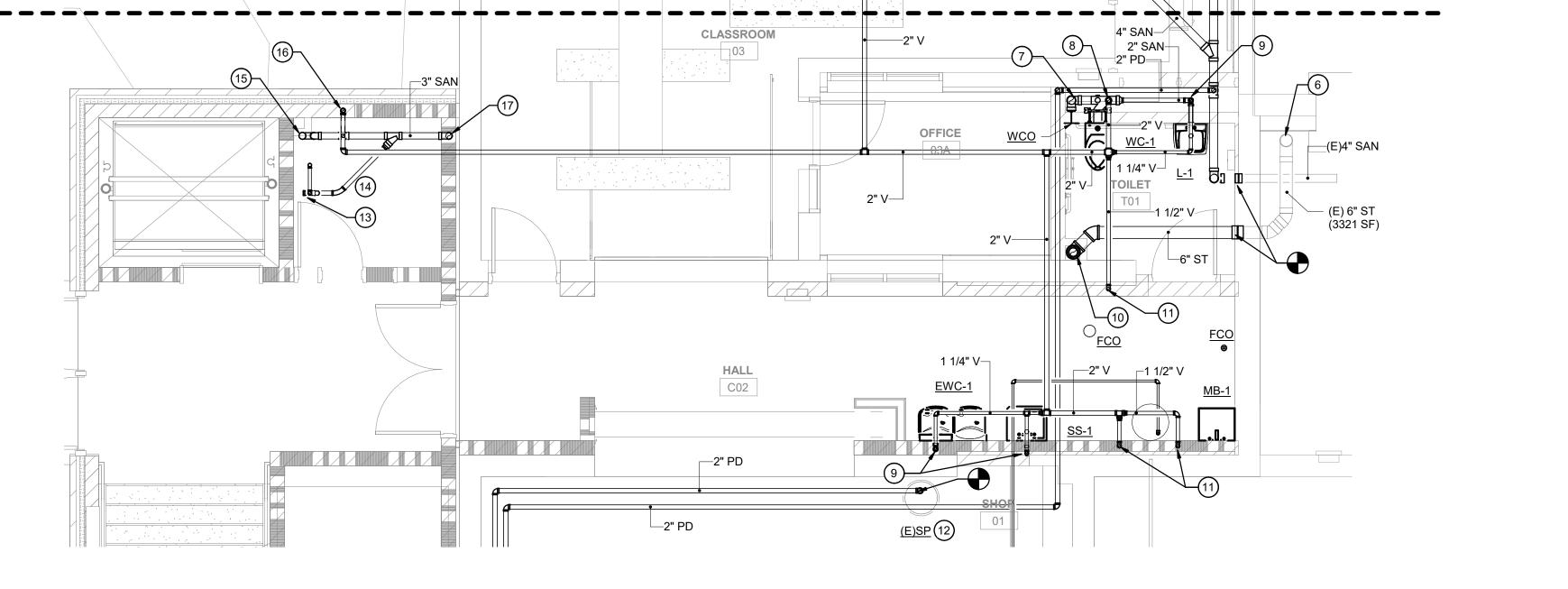


LOWER LEVEL ABOVE FLOOR PLUMBING ENLARGED PLAN - SEG 3 B - DOMESTIC WATER AND COMPRESSED AIR

1/4" = 1'-0"

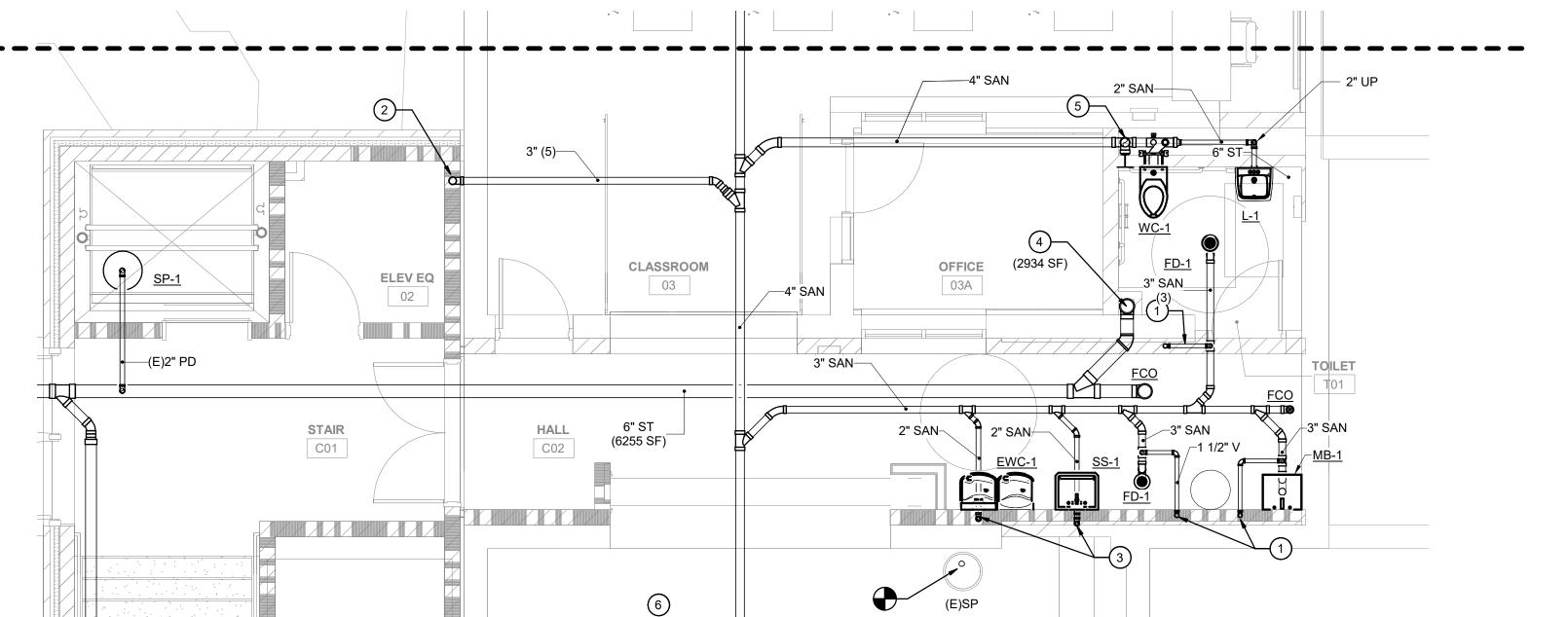


 $\lambda$ 



LOWER LEVEL ABOVE FLOOR PLUMBING ENLARGED PLAN - SEG

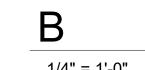
B - WASTE AND VENT



**BID DOCUMENTS** 

9/29/2021 2:06:08 PM

LOWER LEVEL UNDERFLOOR PLUMBING ENLARGED PLAN - SEG



INTERIOR DESIGN

HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

ARCHITECTURE

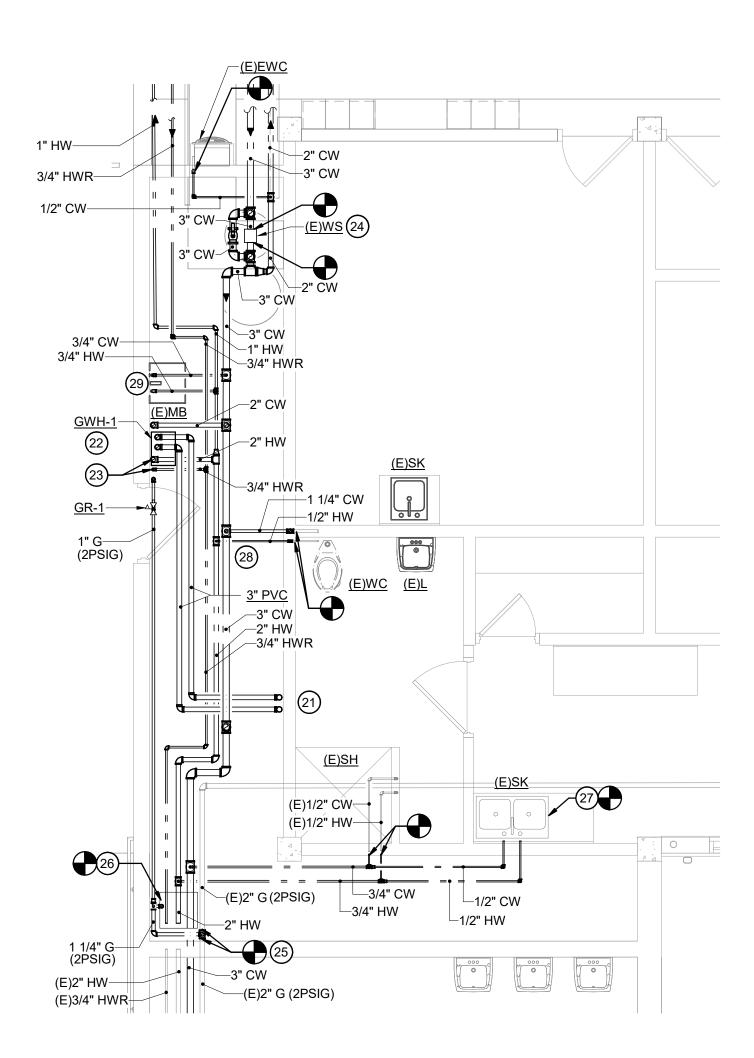
ENGINEERING

www.hsrassociates.com

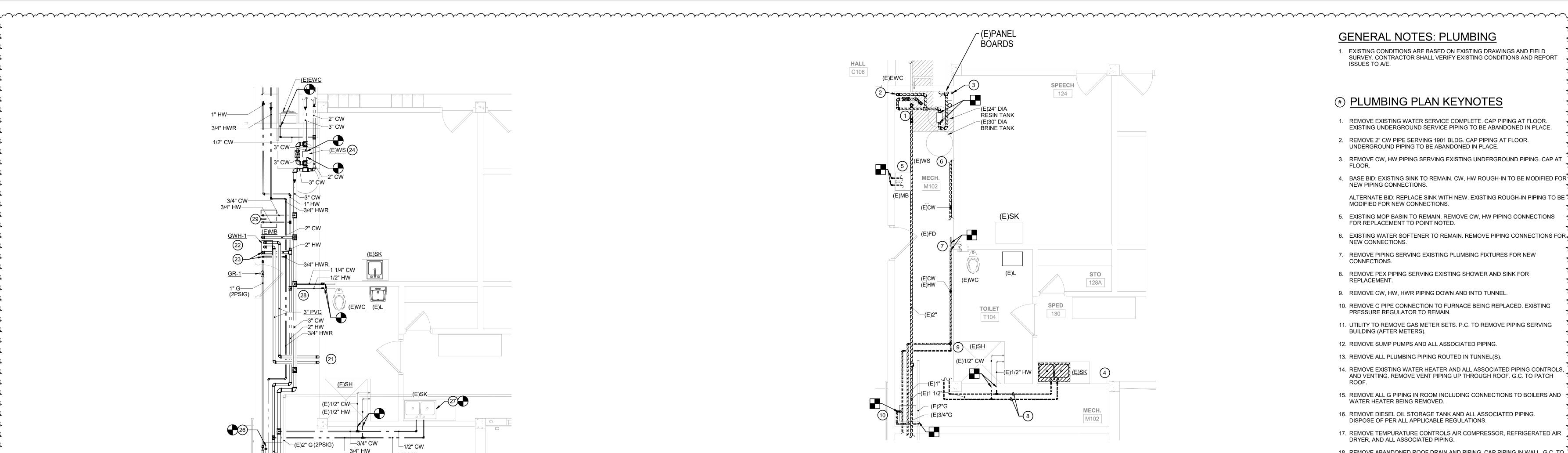
PROJECT NUMBER: 2021082

**SEPTEMBER 2021** 

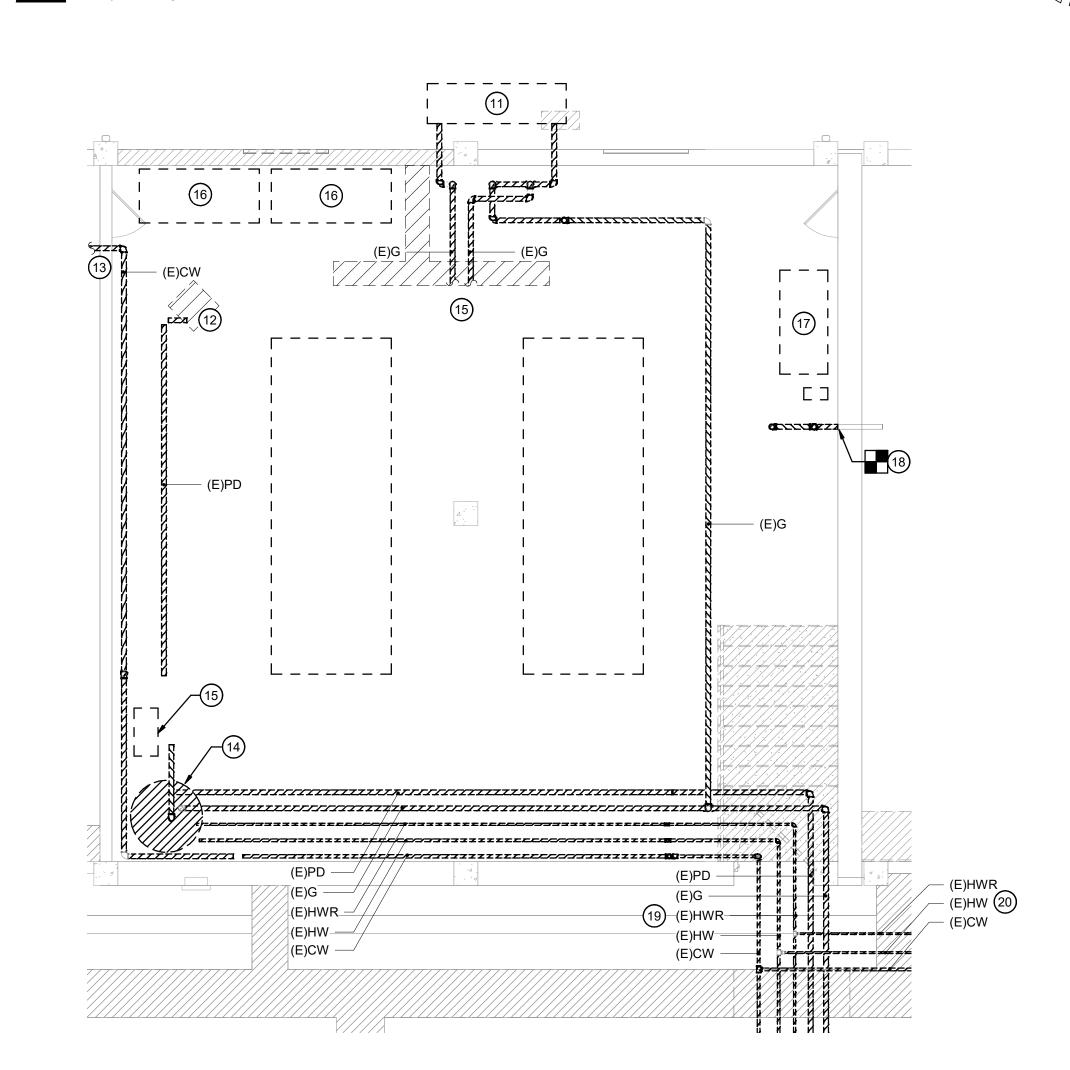
KEY PLAN 👚



FIRST FLOOR PLUMBING ENLARGED PLAN - SEG C



# PLUMBING ENLARGED DEMO PLAN - SEG C



#### GENERAL NOTES: PLUMBING

1. EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT

#### **# PLUMBING PLAN KEYNOTES**

- 1. REMOVE EXISTING WATER SERVICE COMPLETE. CAP PIPING AT FLOOR. EXISTING UNDERGROUND SERVICE PIPING TO BE ABANDONED IN PLACE.
- 2. REMOVE 2" CW PIPE SERVING 1901 BLDG. CAP PIPING AT FLOOR.
- UNDERGROUND PIPING TO BE ABANDONED IN PLACE.
- 4. BASE BID: EXISTING SINK TO REMAIN. CW, HW ROUGH-IN TO BE MODIFIED FOR  $\$ NEW PIPING CONNECTIONS.

3. REMOVE CW, HW PIPING SERVING EXISTING UNDERGROUND PIPING. CAP AT

- ALTERNATE BID: REPLACE SINK WITH NEW. EXISTING ROUGH-IN PIPING TO BE \( \) MODIFIED FOR NEW CONNECTIONS.
- 5. EXISTING MOP BASIN TO REMAIN. REMOVE CW, HW PIPING CONNECTIONS FOR REPLACEMENT TO POINT NOTED.
- 6. EXISTING WATER SOFTENER TO REMAIN. REMOVE PIPING CONNECTIONS FOR NEW CONNECTIONS.
- 7. REMOVE PIPING SERVING EXISTING PLUMBING FIXTURES FOR NEW CONNECTIONS.
- 8. REMOVE PEX PIPING SERVING EXISTING SHOWER AND SINK FOR REPLACEMENT.
- 9. REMOVE CW, HW, HWR PIPING DOWN AND INTO TUNNEL.
- 10. REMOVE G PIPE CONNECTION TO FURNACE BEING REPLACED. EXISTING PRESSURE REGULATOR TO REMAIN.
- 11. UTILITY TO REMOVE GAS METER SETS. P.C. TO REMOVE PIPING SERVING BUILDING (AFTER METERS).
- 12. REMOVE SUMP PUMPS AND ALL ASSOCIATED PIPING.

DISPOSE OF PER ALL APPLICABLE REGULATIONS.

REFER TO SHEET P093 FOR CONTINUATION.

- 13. REMOVE ALL PLUMBING PIPING ROUTED IN TUNNEL(S).
- 14. REMOVE EXISTING WATER HEATER AND ALL ASSOCIATED PIPING CONTROLS, AND VENTING. REMOVE VENT PIPING UP THROUGH ROOF. G.C. TO PATCH
- 15. REMOVE ALL G PIPING IN ROOM INCLUDING CONNECTIONS TO BOILERS AND WATER HEATER BEING REMOVED.
- 16. REMOVE DIESEL OIL STORAGE TANK AND ALL ASSOCIATED PIPING.
- 17. REMOVE TEMPURATURE CONTROLS AIR COMPRESSOR, REFRIGERATED AIR DRYER, AND ALL ASSOCIATED PIPING.
- 18. REMOVE ABANDONED ROOF DRAIN AND PIPING. CAP PIPING IN WALL. G.C. TO PATCH WALL AND ROOF ASSEMBLIES.
- 19. REMOVE ALL PIPING IN TUNNEL. REFER TO SHEET P093 FOR CONTINUATION.
- 20. REMOVE PIPING CONNECTIONS TO UNDERFLOOR PIPING BEING REMOVED.
- 21. 3" PVC (SOLID CORE) VENT AND INTAKE PIPING FROM WATER HEATER UP
- THROUGH ROOF PER MANUFACTURERS REQUIREMENTS. INSTALL BOOT FLASHING AT ROOF PENETRATION. G.C. TO PATCH ROOF.
- 22. MOUNT NEW GWH-1 ON WALL PER MANUFACTURERS REQUIREMENTS. 23. 3/4" HWR DN TO DHW CIRC PUMP, CP-1. REFER TO DETAIL 10/P500 FOR
- WATER HEATER PIPING. 24. MAKE NEW CW CONNECTIONS TO EXISTING WATER SOFTENER. SEE DETAIL
- 4/P500 FOR PIPING. 25. NEW 1 1/4" G CONNECTION TO SERVE NEW GWH-1 AND FURNACE.
- 26. NEW 1" G (2 PSIG) CONNECTION TO EXISTING FURNACE PIPING. EXISTING GAS < PRESSURE REGULATOR TO REMAIN. MAKE NEW CONNECTION TO NEW
- 27. NEW 1/2" CW, 1/2" HW PIPING ROUGH-IN TO SINK. PROVIDE NEW STOPS AND
- 28. NEW 1 1/4" CW AND 1/2" HW CONNECTION TO PIPING TO SERVE EXISTING
- 29. NEW 3/4" CW, 3/4" HW DOWN TO NEW FAUCET SERVING THE EXISTING MOP BASIN. NEW FAUCET SHALL BE SIMILAR TO MB-1 FAUCET (REFER TO PLUMBING SCHEDULES) BUT SUITABLE FOR EXPOSED PIPING INSTALLATION.

ARCHITECTURE ENGINEERING INTERIOR DESIGN



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844

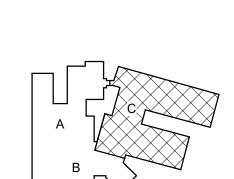
www.hsrassociates.com

Total Integral Enterprises

PROJECT NUMBER: 2021082

HSR Project Number:

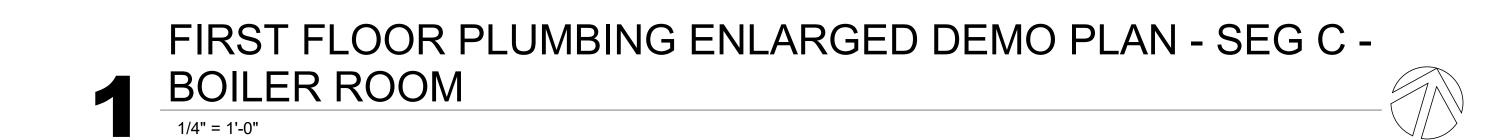
**SEPTEMBER 2021** OTIE



KEY PLAN

**BID DOCUMENTS** 

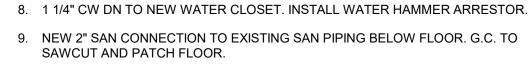
9/29/2021 1:46:12 PM



EXISTING CONDITIONS ARE BASED ON EXISTING DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND REPORT ISSUES TO A/E.

## **#** PLUMBING PLAN KEYNOTES

- 1. NEW 1 1/4" V CONNECTION TO EXISTING VTR.
- 2. NEW V CONNECTIONS TO EXISTING VTR.
- 3. NEW 4" WATER SERVICE. REFER TO DETAIL 10/P500.
- 4. EXISTING G PIPING IS LOCATED IN TUNNEL.
- 5. NEW G CONNECTION TO NEW FURNACE EXISTING GR TO REMAIN.
- 6. 1/2" CW, 1/2" HW CONNECTIONS.
- 7. SET BALANCE VALVE TO 0.5 GPM 6PM.





olimins 
olimins

HSR Project Number:

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

HSR ASSOCIATES INC.

100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

PHONE: 608.784.1830 FAX: 608.782.5844

www.hsrassociates.com

PROJECT NUMBER: 2021082

**SEPTEMBER 2021** 

KEY PLAN 🚯

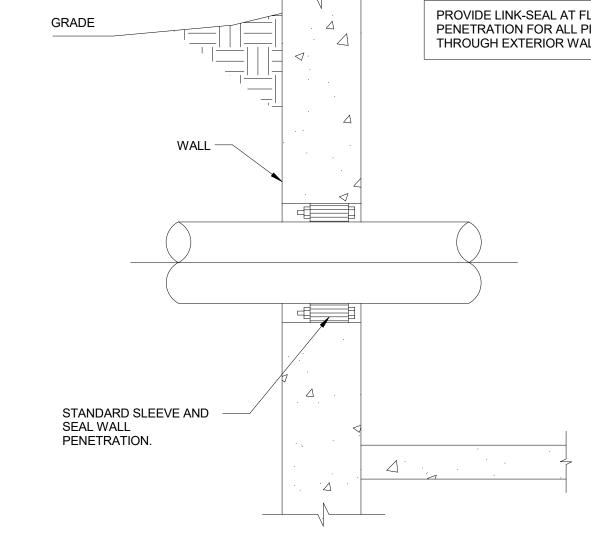
**BID DOCUMENTS** 

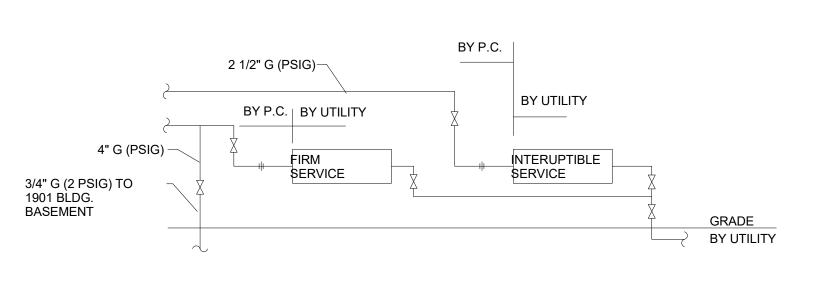
9/29/2021 2:03:35 PN

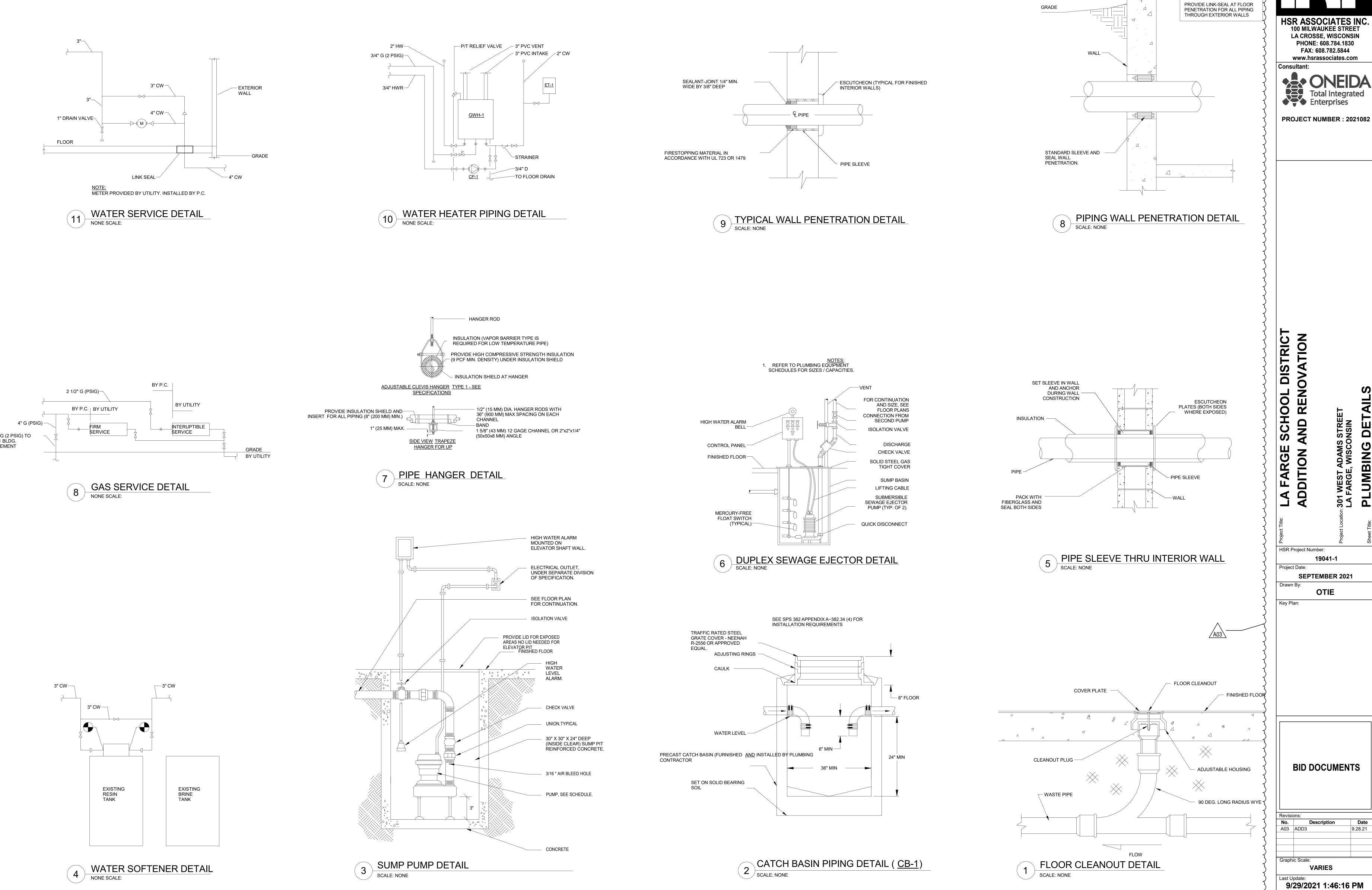
FIRST FLOOR ENLARGED PLUMBING PLAN - SEG C - WASTE AND

FIRST FLOOR ENLARGED PLUMBING PLAN - SEG C - DOMESTIC WATER AND GAS

1/4" = 1'-0"

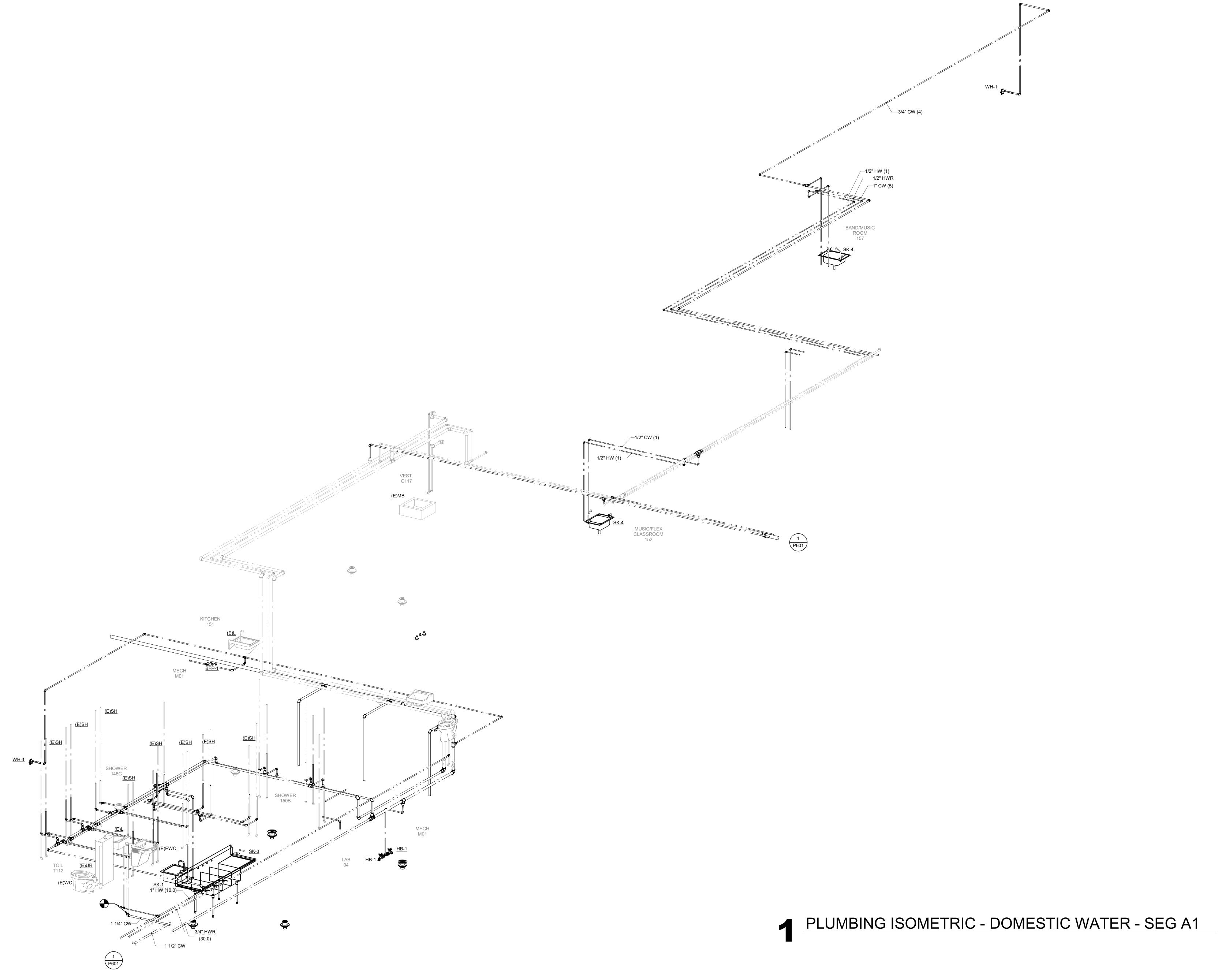






egreen modellarge m

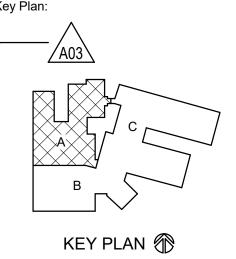




 $\lambda$ ARCHITECTURE ENGINEERING INTERIOR DESIGN HSR ASSOCIATES INC.
100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082

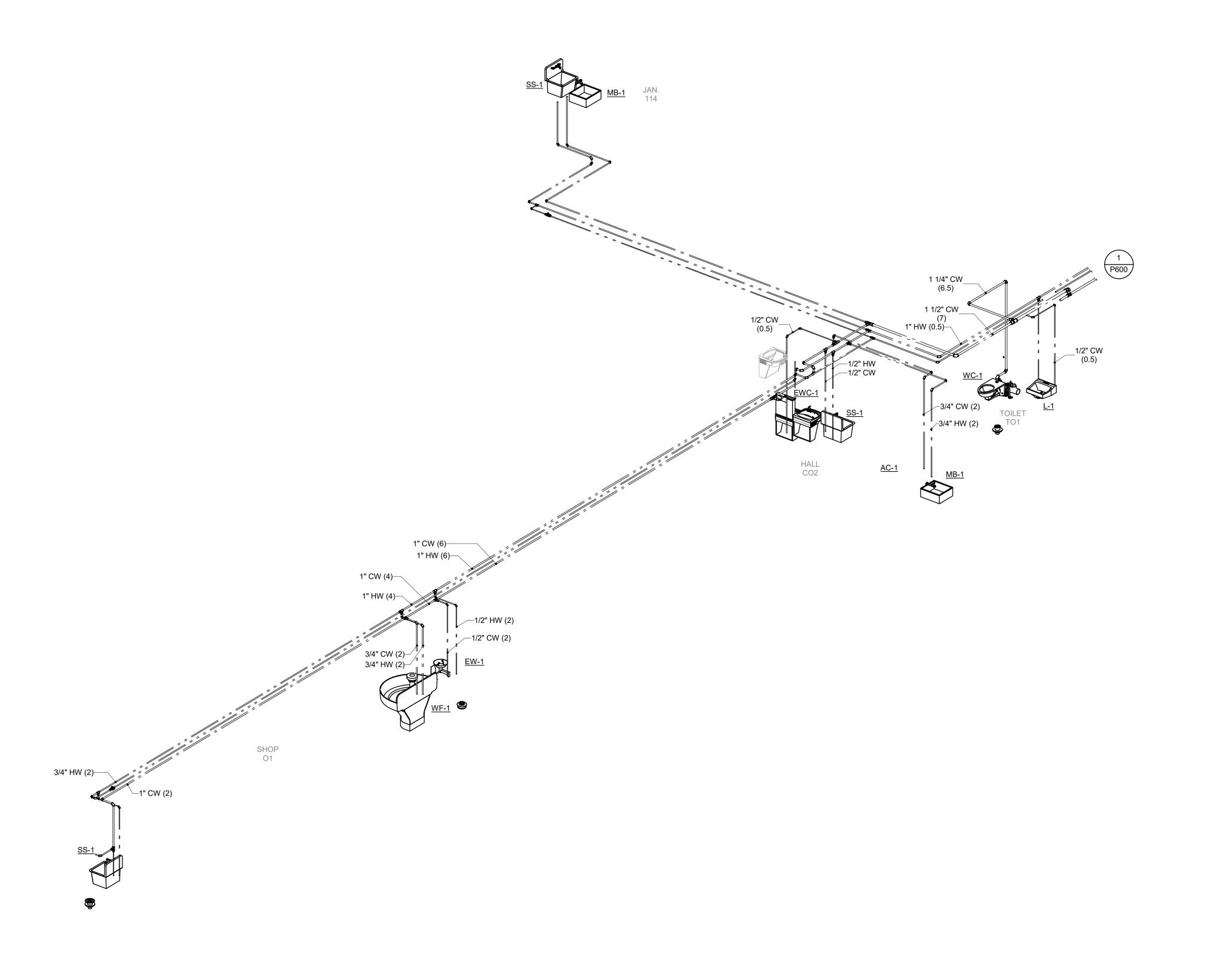
HSR Project Number:

**SEPTEMBER 2021** 



**BID DOCUMENTS** 

9/29/2021 1:46:18 PM



 $\lambda$ 

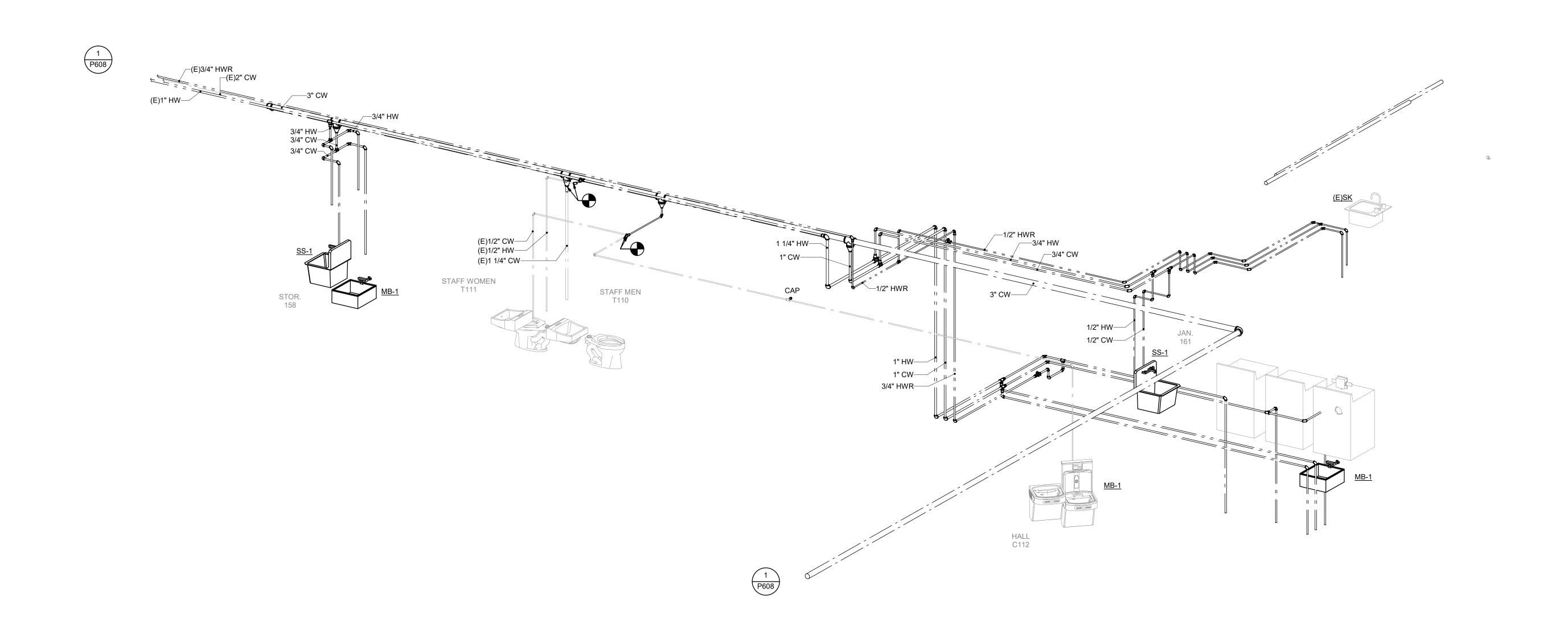
HSR ASSOCIATES INC.
100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 **SEPTEMBER 2021 BID DOCUMENTS** 

ARCHITECTURE

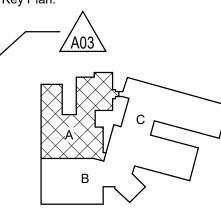
ENGINEERING

INTERIOR DESIGN

9/29/2021 2:01:18 PM



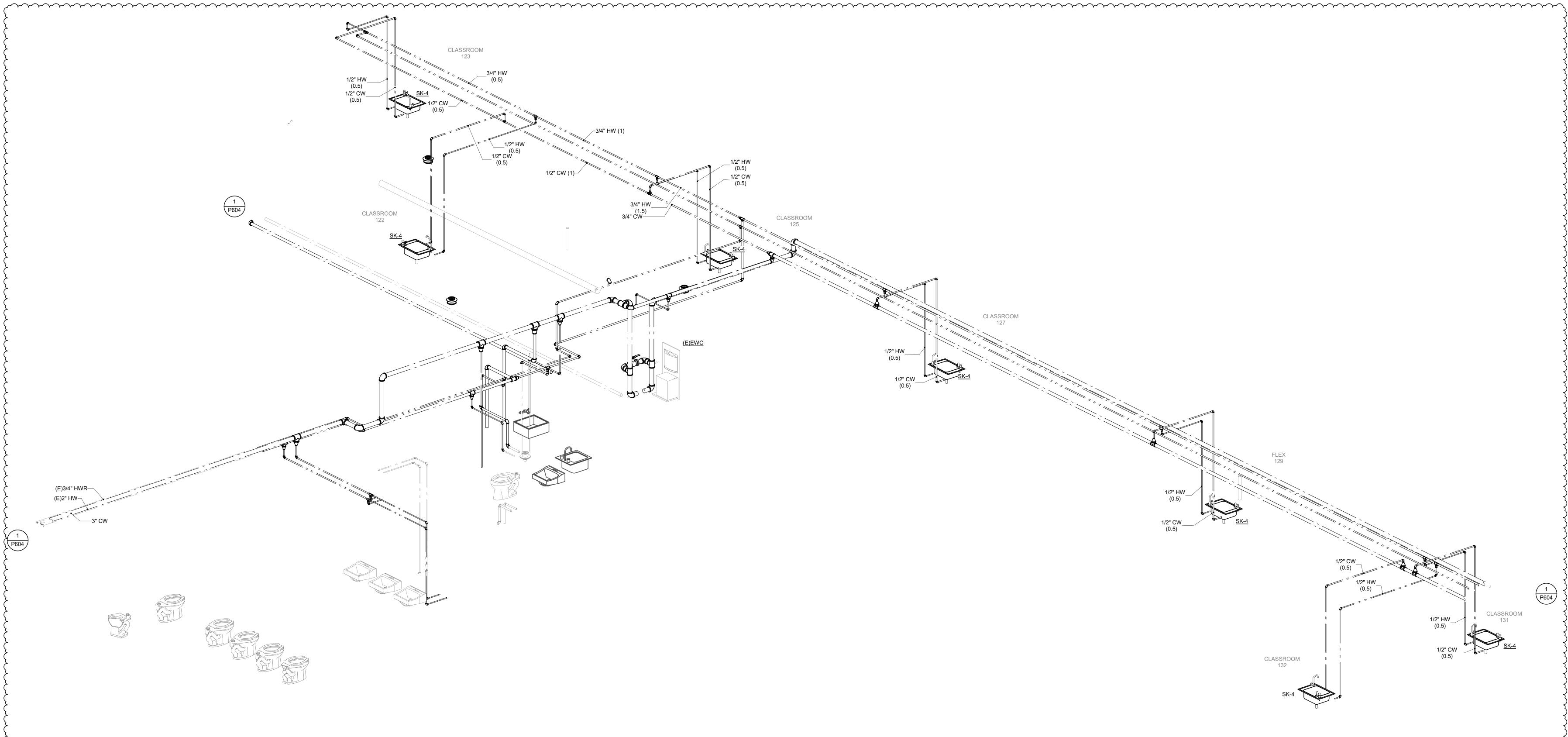
 $\lambda$ ARCHITECTURE ENGINEERING INTERIOR DESIGN HSR ASSOCIATES INC.
100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 **SEPTEMBER 2021** 

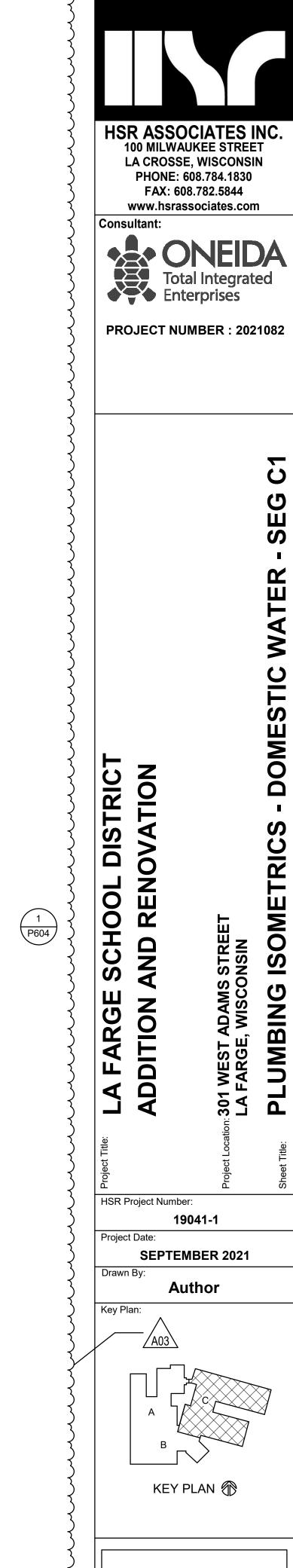


KEY PLAN 🚯

**BID DOCUMENTS** 

9/29/2021 12:49:21 PM





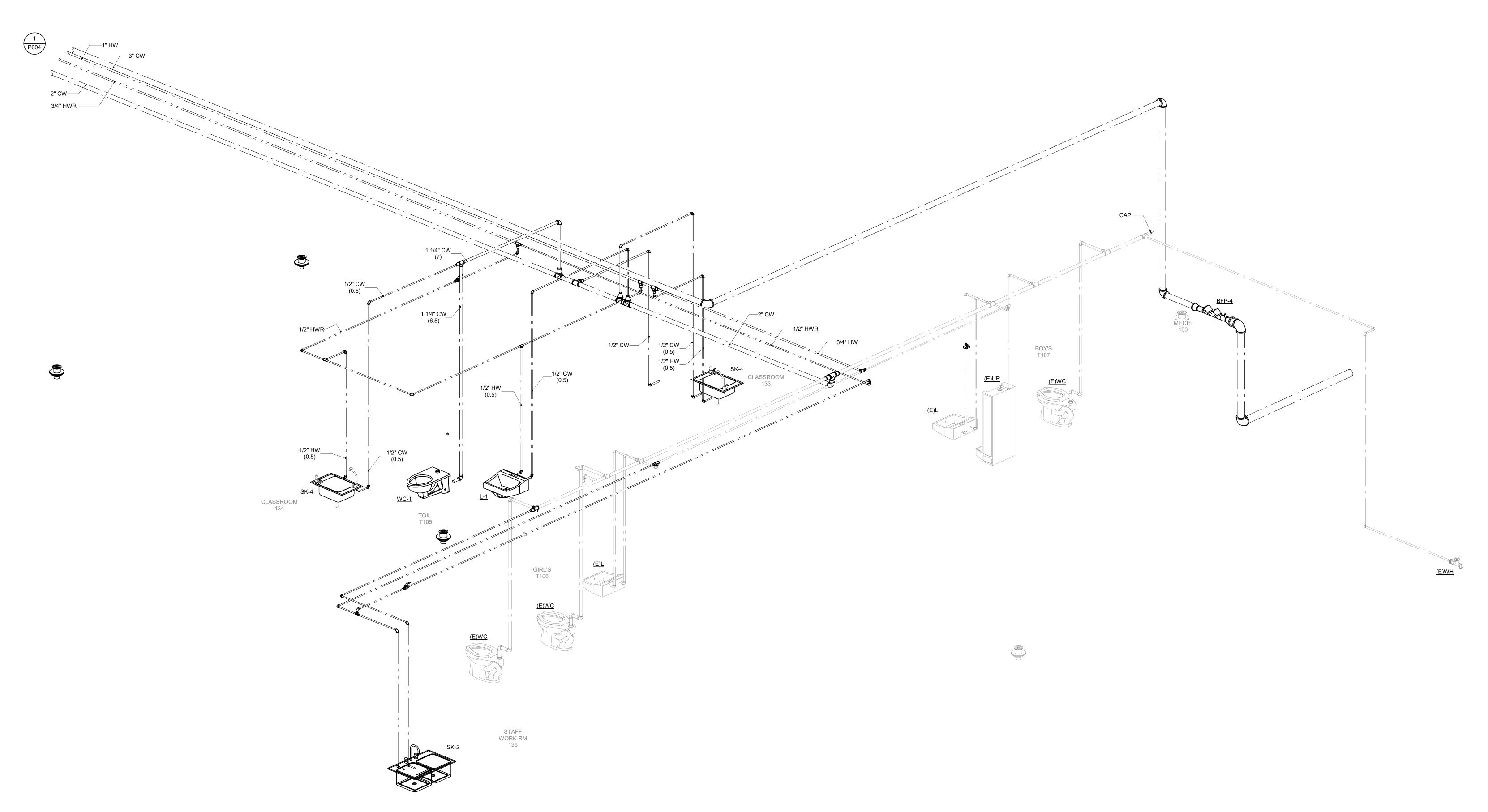
ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

9/29/2021 1:59:21 PM

**BID DOCUMENTS** 

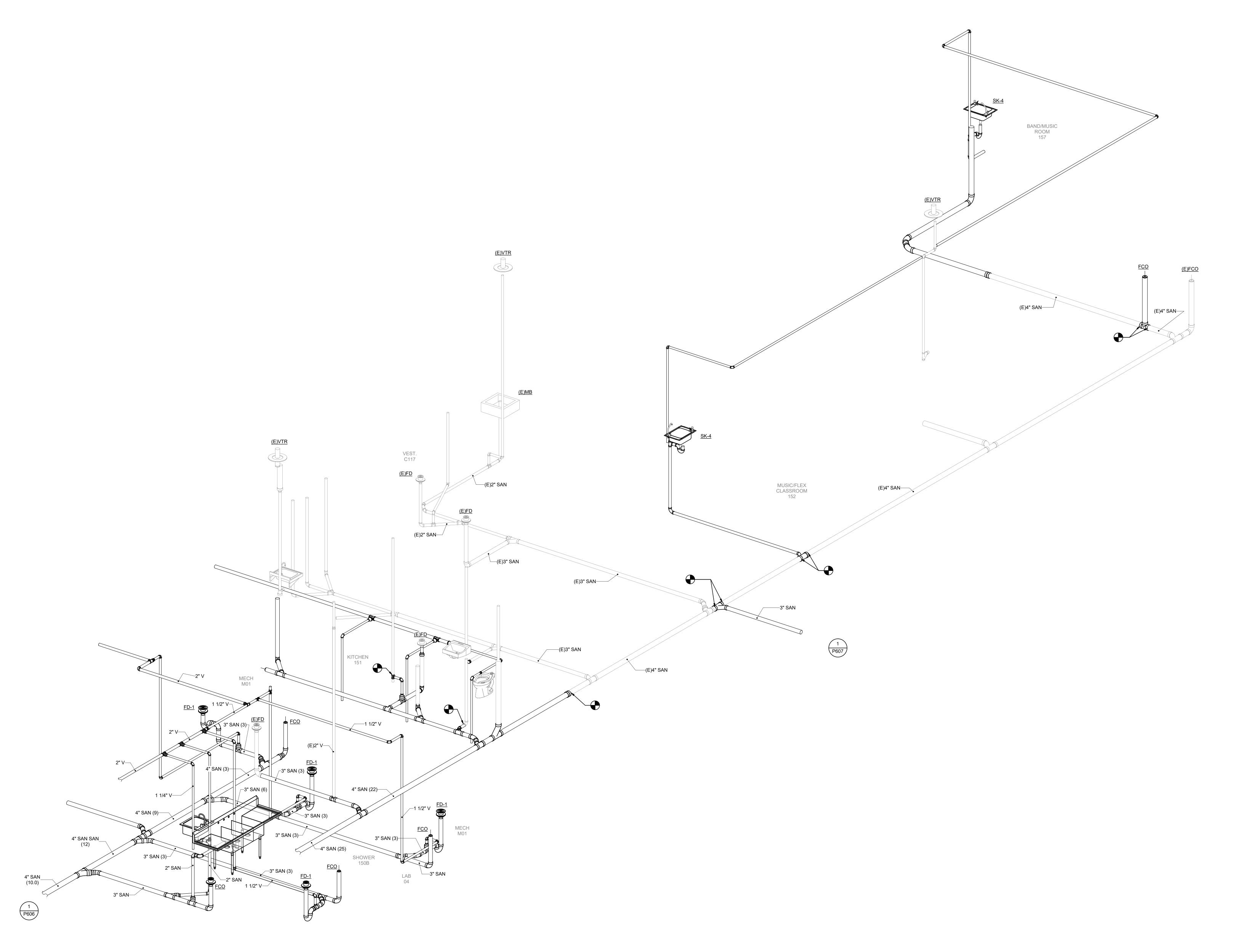


ARCHITECTURE ENGINEERING INTERIOR DESIGN HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 HSR Project Number: **SEPTEMBER 2021** 

KEY PLAN 💮

**BID DOCUMENTS** 

Graphic Scale: 9/29/2021 1:46:23 PM



 $\lambda$ 

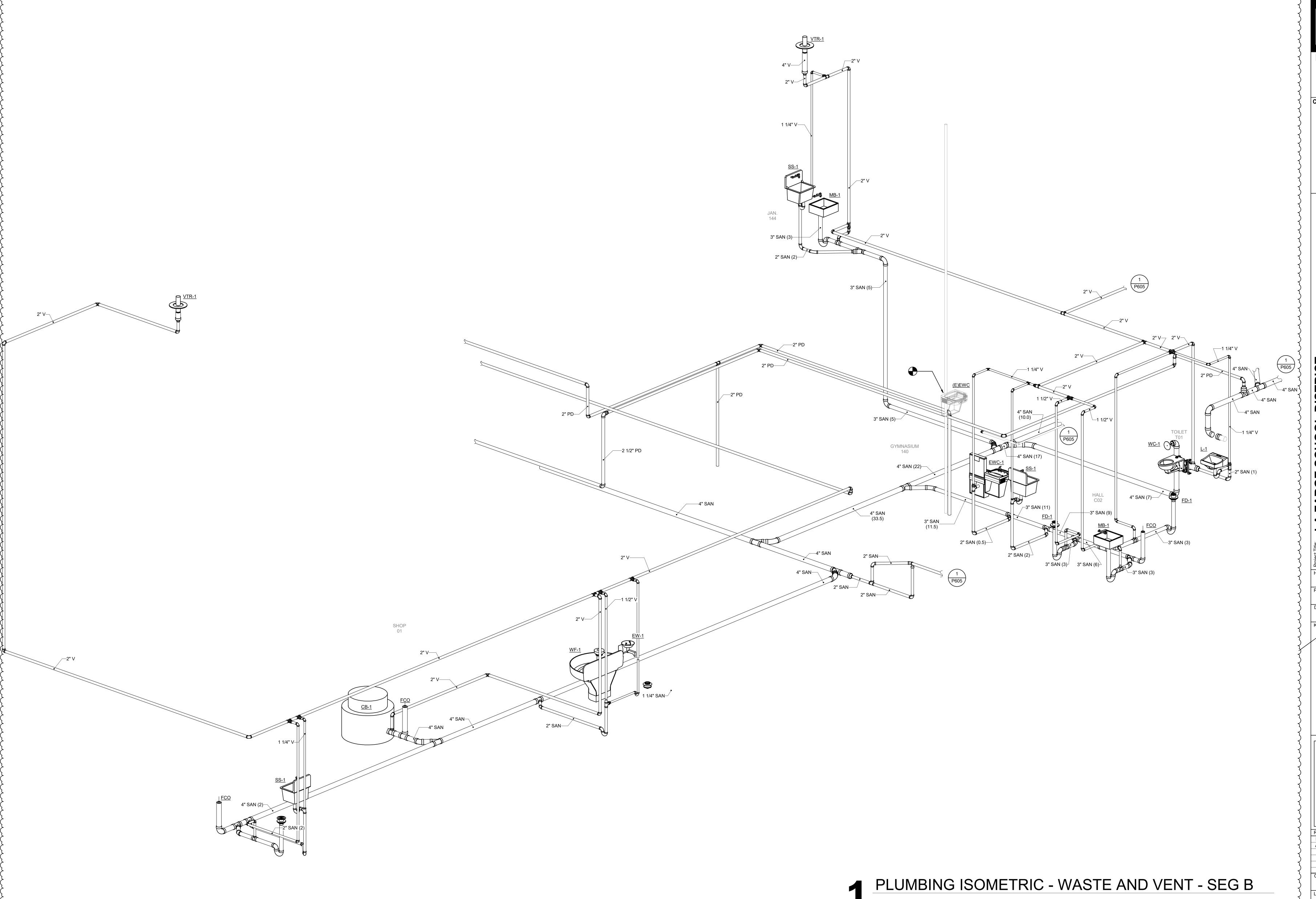
HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 HSR Project Number: **SEPTEMBER 2021** KEY PLAN 💮 **BID DOCUMENTS** 9/29/2021 1:46:24 PM

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

PLUMBING ISOMETRIC - WASTE AND VENT - SEG A

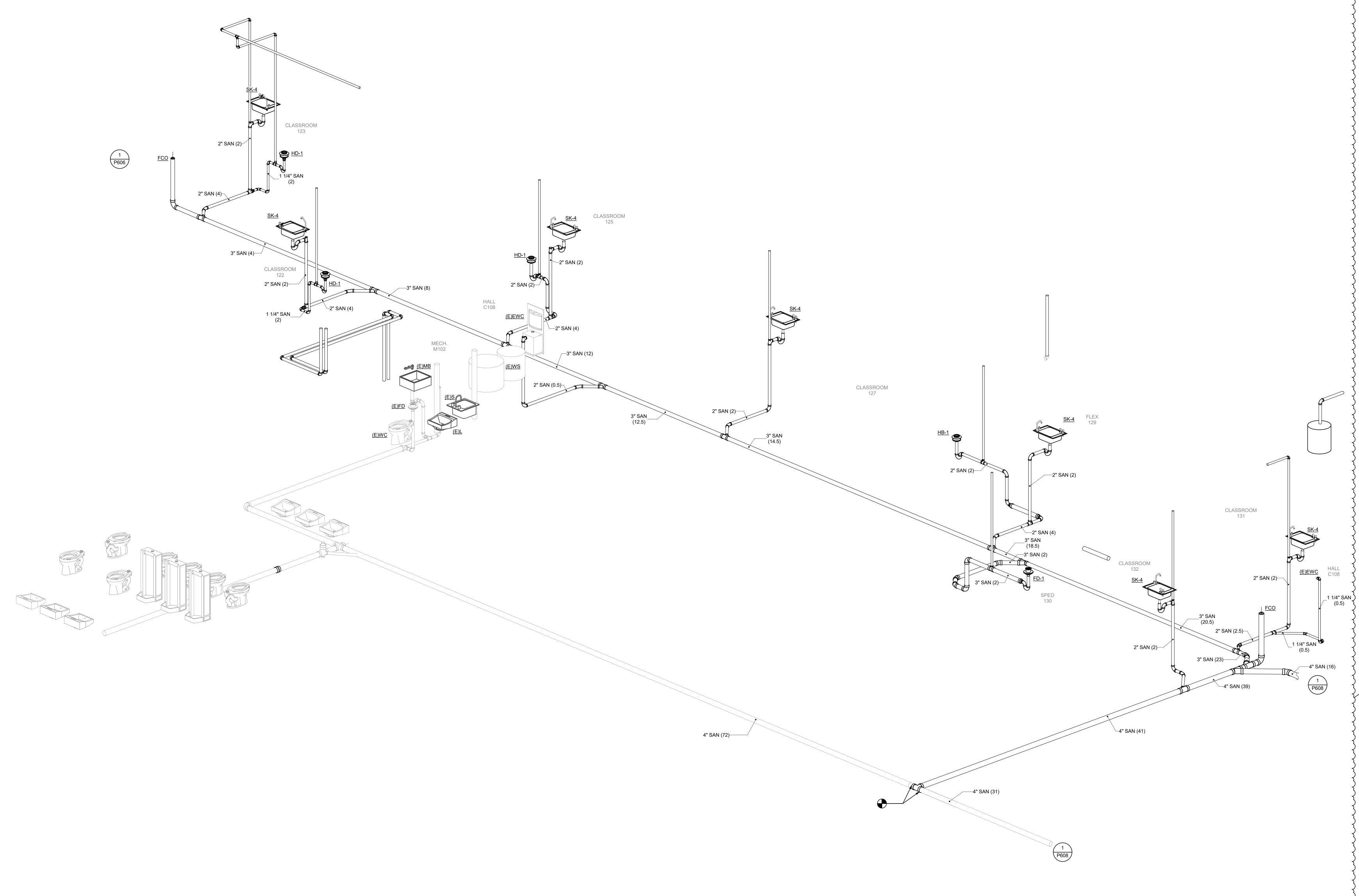


 $\lambda$ ARCHITECTURE ENGINEERING INTERIOR DESIGN HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 HSR Project Number: **SEPTEMBER 2021** 

KEY PLAN 💮

**BID DOCUMENTS** 

9/29/2021 1:46:26 PM



 $\lambda$ 

PLUMBING ISOMETRIC - WASTE AND VENT - SEG C1



LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Total Integrated Enterprises

PROJECT NUMBER : 2021082

NOVATION FIRST AND VIEWS

ADDITION AND REI

R Project Number:

19041-1
ject Date:
SEPTEMBER 2021
wwn By:

Key Plan:
A03

KEY PLAN

BID DOCUMENTS

Revisions:

No. Description Date 
A03 ADD3 9.28.2

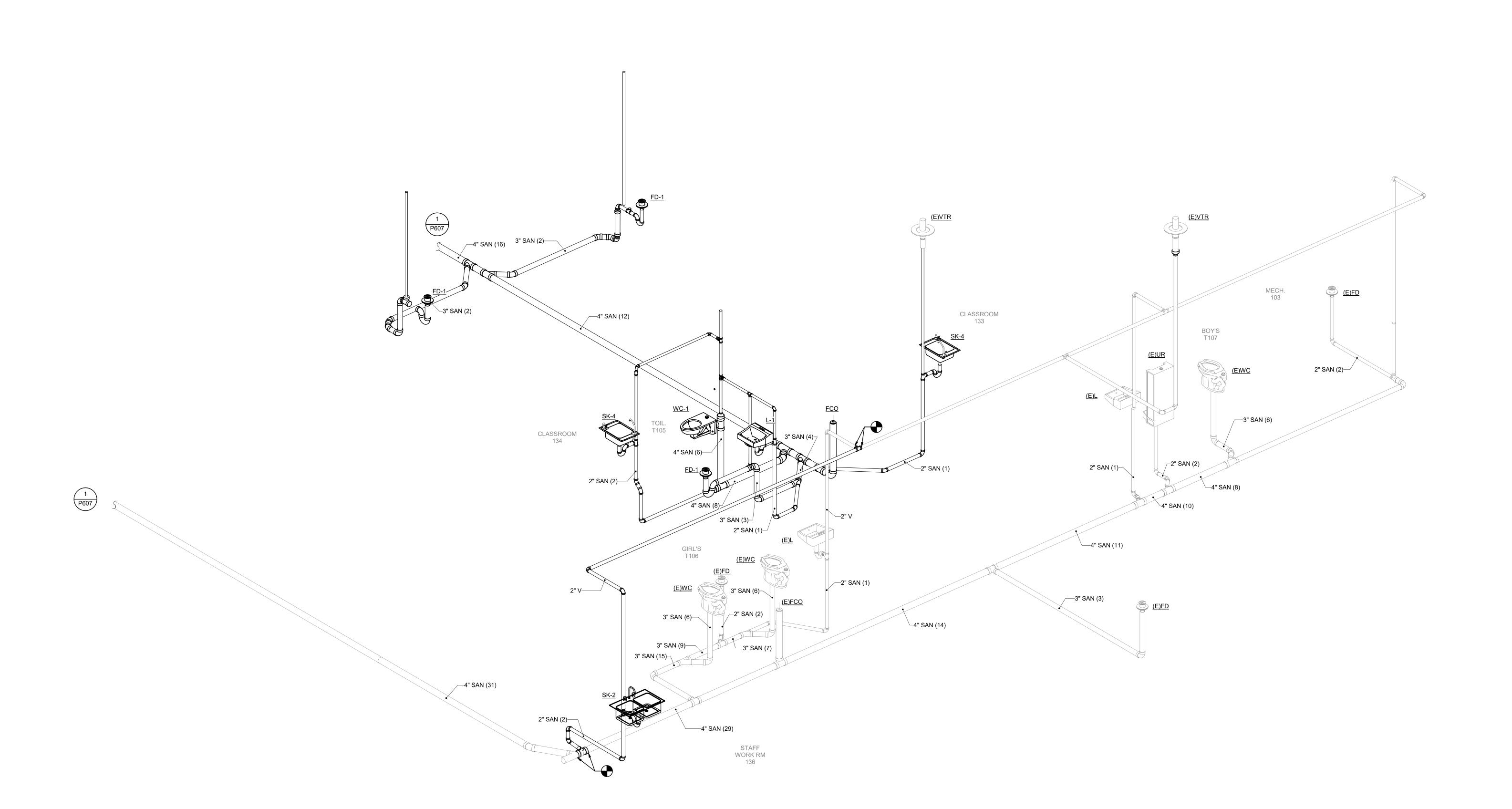
Graphic Scale:

VARIES

Last Update:

9/29/2021 1:57:29 PM

DC07



 $\lambda$ 

HSR ASSOCIATES INC.
100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com PROJECT NUMBER: 2021082 HSR Project Number: **SEPTEMBER 2021** KEY PLAN 🚯 **BID DOCUMENTS** Graphic Scale: 9/29/2021 1:46:29 PM

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN