



TSP, Inc.
600 Kansas City St.
Rapid City, SD 57701
(605) 343-6102
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS



PROJECT TITLE

SDSTA - SANFORD UNDERGROUND RESEARCH FACILITY ROSS & YATES ROOF DRAIN REPLACEMENT

LEAD, SD

ISSUES

DD	11/10/2016	DESIGN DEVELOPMENT
MARK	DATE	DESCRIPTION

ISSUE DATE	DRAWN BY
04/30/2021	CHM
PROJECT #	CHECKED BY
03201389	CHM

SHEET TITLE

MECHANICAL TITLE SHEET

SHEET NUMBER

M-001

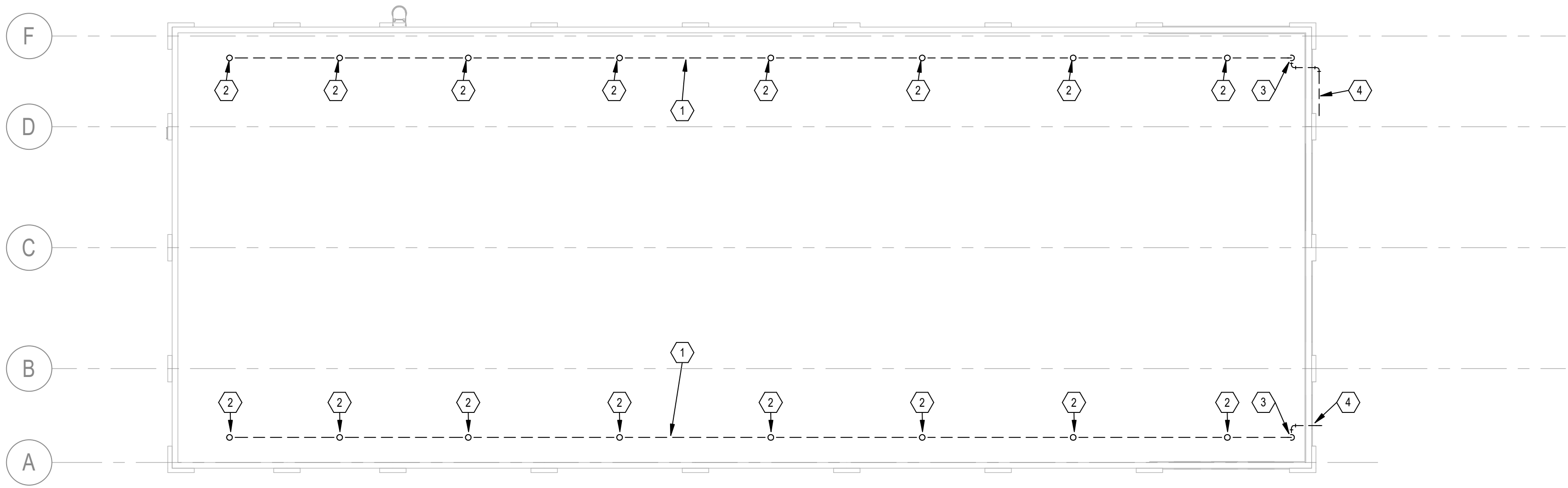
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LISTED DRAWINGS SCALES UNLESS REDUCED FROM ORIGINAL 30" x 42" FORMAT

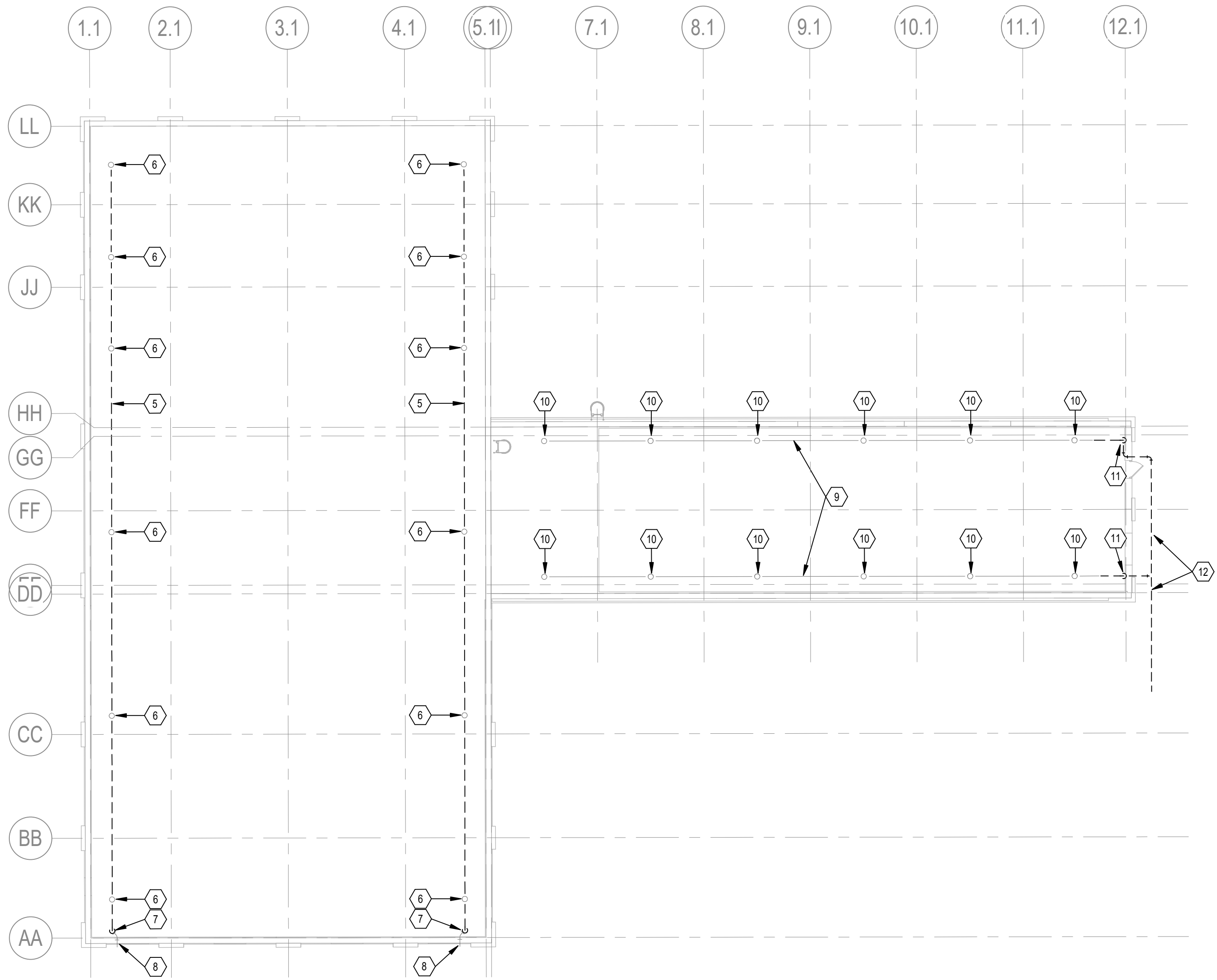
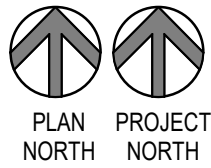
100% CONSTRUCTION SUBMITTAL

GENERAL MECHANICAL SYMBOLS		PLUMBING AND PIPING SYMBOLS		ABBREVIATIONS		PROJECT GENERAL NOTES	
00 1 Room 1 REVISION NUMBER - SHOWN ON PLANS POINT WHERE NEW CONNECTS TO EXISTING NUMBER OF DETAIL ON SHEET NUMBER OF SHEET WHERE DETAIL APPEARS KEYNOTE CONTINUATION SYMBOL ROOM NAME AND NUMBER		2" 18" / 12" SLOPE PIPE SIZE TAG (DIAMETER) ABOVE GROUND PIPING PIPE SLOPE TAG BELOW GROUND PIPING PIPE INVERT ELEVATION TAG EXISTING PIPE TAG PIPING BEING DEMOLISHED ACID VENT ACID WASTE ACID WASTE BELOW CHILLED WATER RETURN CHILLED WATER SUPPLY COMBINATION WASTE & VENT COMPRESSED AIR CONDENSATE DRAINAGE CONDENSATE RETURN CONDENSER WATER RETURN CONDENSER WATER SUPPLY DEIONIZED WATER DISTILLED WATER DOMESTIC COLD WATER DOMESTIC COLD WATER-FILTERED DOMESTIC COLD WATER-HARD DOMESTIC COLD WATER-SOFT DOMESTIC HOT WATER DOMESTIC HOT WATER 140° DOMESTIC HOT WATER RECIRCULATING DOMESTIC HOT WATER RECIRCULATING 140° DUAL TEMP WATER RETURN DUAL TEMP WATER SUPPLY GEOTHERMAL RETURN GEOTHERMAL SUPPLY GLYCOL HOT WATER RETURN GLYCOL HOT WATER SUPPLY GREASE VENT GREASE WASTE HEATING WATER RETURN HEATING WATER SUPPLY MITIGATION VENT NATURAL GAS NATURAL GAS 2LB OIL VENT OIL WASTE PROPANE GAS PUMP DISCHARGE REFRIGERANT REFRIGERANT LIQUID REFRIGERANT SUCTION REFRIGERANT HOT GAS STEAM - HP STEAM - HP CONDENSATE STEAM - MP STEAM - MP CONDENSATE STEAM - LP STEAM - LP CONDENSATE SANITARY VENT SANITARY WASTE SANITARY WASTE-BELOW STORM DRAINAGE STORM DRAINAGE OVERFLOW BELOW STORM DRAINAGE OVERFLOW STORM DRAINAGE OVERFLOW BELOW		& Ø AB ABV AC AD ADD ADL AFF AFUE AG ALT ALUM AP APPROX ARCH AV AW AUTO B BLDG BLW BM BO BOT BSMT BTU BTWH BTWN CAP CB CCW CCV CFM CHW CL CLG CO COL COMB CONC CONF CON CONSTR COORD CTR CUB CV CW CW D DET DIA DIA DISCH DIV DW DW EA EAT EL ELEC ELEV EP EQ EQUIP EW EA EAH EXIST EXP EXPJT EXT F FD FD FDV FHC FLOOR FLEX FLG FUEL OIL FOV FOR FOS FPM FRP FS FS FTG FTG FTR FUT GA GALV GEN GENL GR GR GW HB HO HO HORZ HTG HTR HW HYD ID INDIRECT INCH INLET INSULATION INTERIOR INVERT INCHES WATER GAUGE JOIST SPACE JOINT LAB LB LBHR LAT LF LDC LOW PRESSURE LPG LIQUID PETROLEUM GAS LS LVR LVR LVR M MAN MATERIAL MANUAL MANUAL AIR VENT MAX MOTORIZED BYPASS DAMPER ONE THOUSAND BTU PER HOUR ONE THOUSAND CUBIC FEET MAKE-UP COLD WATER MOTORIZED DAMPER MECH MECHANICAL MFR MANUFACTURER MH MANHOLE MIN MINIMUM MISC MISCELLANEOUS MTR MAKE-UP AIR NECK NO NOISE CRITERIA NC NORMALLY CLOSED NOT IN CONTRACT NO NOT TO SCALE O OXYGEN OUTSIDE AIR ON CENTER OVERFLOW OPENING OPNG ORD OVERFLOW ROOF DRAIN PD POST INDICATOR VALVE PLBG PLUMBING PAR PARTIAL PREL PRELIMINARY PRESS PRESSURE PRV PRESSURE REDUCING VALVE PSI POUNDS PER SQUARE INCH PSIG POUNDS PER SQUARE INCH GAUGE PW POTABLE WATER PWR POWER DUCT RISER RIA RETURN AIR RCP RADIANT CEILING PANEL RD ROOF DRAIN REC RECESSED RED REDUCER REFRIG REFRIGERATION RH RELATIVE HUMIDITY REQD REQUIRED REV REVERSE RUA RELIEF AIR RM ROOM RPM REVOLUTIONS PER MINUTE RW RAIN WATER SF SQUARE FOOT SIA SUPPLY AIR SAN SANITARY SCHED SCHEDULE SECT SECTION SF SQUARE FOOT SD SMOKE DAMPER SHT SHEET SM SIMILAR SLV SLEEVE SM SURFACE MOUNT SP STANDPIPE SP STATIC PRESSURE SPEC SPECIFICATION SPS STATIC PRESSURE STATION SQ SQUARE SR SUCTION REFRIGERANT SSD SOL SUBORRAN SS STAINLESS STEEL STD STANDARD STR STEAM STRUCT STRUCTURAL SUCT SUCTION SUSP SUSPENDED T THERMISTAT TC TEMPERATURE CONTROL PANEL TD TEMPERATURE DROP TDR TRENCH DRAIN TEFC TOTALLY ENCLOSED FAN COOLED TEMP TEMPERATURE TYP TYPICAL UPD UNDER FLOOR DUCT UG UNDERGROUND VAC VACUUM V VARIABLE VAV VARIABLE AIR VOLUME VEL VELOCITY VENT VENTILATION VERT VERTICAL VOL VOLUME VTR VENT THROUGH ROOF W WASTE WB WET BULB WCO WALL CLEAN OUT WH WALL HYDRANT		DEMO 1 WHERE EQUIPMENT AND/OR FIXTURES ARE INDICATED TO BE REMOVED, THE EXISTING SERVICES SHALL BE CAPPED AND CONCEALED BEHIND FINISHED SURFACES. ABANDONED BRANCH SERVICES SHALL BE REMOVED BACK TO THE MAINS AND CAPPED, UNLESS OTHERWISE INDICATED. DEMO 2 REMOVE ANY ABANDONED OR UNUSED PIPE AND/OR DUCT OPENINGS. DEMO 3 THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND PAINTING TO MATCH EXISTING WALLS, FLOORS, AND CEILINGS WHERE APPLICABLE. EXST 1 REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES. EXST 2 THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING, PRIOR TO FINAL BID, ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS WITHIN TENANT SPACE AND WITHIN CLOSE PROXIMITY OF TENANT SPACE. EXST 3 THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR ON THE EXISTING EQUIPMENT AND ITS ACCESSORIES AS FOLLOWS: INSPECT, REPAIR, OR REPLACE THE VALVES, JOINTS, CLEANOUTS AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND PROPER OPERATING SYSTEM. THIS CONTRACTOR SHALL ALSO VISIT THE SITE, PRIOR TO FINAL BIDDING, AND VERIFY ALL EXISTING SITE CONDITIONS, PROVIDE ALL MATERIAL AND COMPONENTS AS NEEDED TO BRING THE UNITS TO FULL COMPLIANCE OF THE LANDLORD'S CRITERIA AND LOCAL AUTHORITY HAVING JURISDICTION. EXST 4 WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK. NEW 1 THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AS WELL AS THOSE WHICH CAN BE REASONABLY ANTICIPATED INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS INVOLVED ON THIS PROJECT. NEW 2 FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE. NEW 3 LOCATE PIPING AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT. NEW 4 PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN. NEW 5 FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER TO DETAILS, SCHEDULES, AND SPECIFICATIONS. NEW 6 INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. NEW 7 LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWING, ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD. NEW 8 INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS. NEW 9 MATERIALS AND EQUIPMENT SHOWN ON PLANS SHALL BE NEW AND FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE INDICATED. NEW 10 THIS CONTRACTOR IS RESPONSIBLE FOR ALL SLEEVES AND/OR OPENINGS WHERE REQUIRED TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOOR SLABS, WALLS, BRIDGING AND BEAMS EXCEPT WHERE OTHERWISE INDICATED. NEW 11 THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES. NEW 12 WHERE NEW SERVICES ARE SHOWN CONNECTING TO EXISTING, VERIFY EXACT LOCATION AND SIZE OF EXISTING. NEW 13 EXISTING SERVICES SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED. NEW 14 ALL DUCTS, PIPING, FIXTURES, ETC., WHICH ARE DASHED AND/OR INDICATED BY NOTE ON DEMOLITION PLANS SHALL BE REMOVED. NEW 15 ALL PLUMBING SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH NATIONAL, STATE, AND LOCAL CODES. NEW 16 WHERE MATERIAL IS INDICATED TO BE REMOVED, IT SHALL REMAIN THE PROPERTY OF THE OWNER. THIS CONTRACTOR SHALL DISPOSE OF MATERIAL AS DIRECTED BY THE OWNER. NEW 17 PIPE PENETRATIONS OF RATED WALLS AND FLOORS SHALL BE SLEEVED AND PROPERLY FIRE SEALED. NEW 18 ALL PIPE AND DUCT PENETRATIONS OF SMOKE PARTITION WALLS SHALL BE PROPERLY SEALED TO RESIST THE PASSAGE OF SMOKE AS REQUIRED BY THE LOCAL AUTHORITY.	
HVAC SYMBOLS							
16"x8" 1							

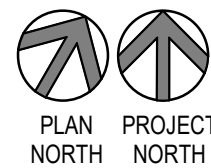
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A1 OVERALL PLUMBING DEMOLITION PLAN - ROSS HOIST BUILDING
SCALE: 1/16" = 1'-0"



A3 OVERALL PLUMBING DEMOLITION PLANS - YATES HOIST BUILDING
SCALE: 1/16" = 1'-0"



KEYNOTES

- 1 REMOVE AND REPLACE EXISTING CAST IRON ROOF DRAINAGE PIPING IN ROSS HOIST BUILDING AS INDICATED ON PLAN IN HEAVY DASHED LINE. ROOF DRAIN PIPING SHALL BE REPLACED FROM ALL EXISTING ROOF DRAIN BODIES DN TO BUILDING PENETRATION THROUGH WINDOW. PREPARE EXISTING ROOF DRAINS FOR NEW CONNECTION TO PVC PIPING. EXISTING PIPE SIZE SERVING ROOF DRAINS ESTIMATED AT 4". CONTRACTOR TO FIELD VERIFY. EXISTING ROOF DRAINAGE MAINS ARE LOCATED ABOVE LAY-IN T-BAR CEILING AT AN ESTIMATED ELEVATION OF 60'-0" AFF. REMOVE ALL HANGERS AND ACCESSORIES FOR EXISTING PIPING. REFERENCE SHEET PL702 FOR ADDITIONAL INFORMATION.
- 2 REPLACE EXISTING ROOF DRAIN VERTICAL LEADERS FROM BASE OF ROOF DRAIN BODY TO HORIZONTAL LEADERS. ROOF DRAIN BODIES LOCATED AT AN ESTIMATED ELEVATION OF 63' 6" AFF.
- 3 REPLACE EXISTING CAST IRON ROOF DRAINAGE VERTICAL LEADER PIPING WITH NEW SCHEDULE 40 PVC PIPING DN TO LOCATION WHERE PIPING EXITS THE BUILDING THROUGH WINDOW. NEW PIPING FROM EXTERIOR TO 2'-0" WITHIN BUILDING SHALL BE NEW SCHEDULE 40 NO HUB CAST IRON PIPING. INSTALL AND INSULATE PER SPECIFICATIONS.
- 4 REMOVE AND REPLACE EXISTING PVC EXTERIOR ROOF DRAIN PIPING. PIPING TO BE REPLACED WITH CAST IRON. REUSE EXISTING BUILDING PENETRATION THROUGH WINDOW AND SPILL TO GRADE. REFERENCE SHEET PL702 FOR ADDITIONAL INFORMATION.
- 5 REMOVE AND REPLACE EXISTING CAST IRON ROOF DRAINAGE PIPING IN YATES HOIST BUILDING AS INDICATED ON PLAN IN HEAVY DASHED LINE. ROOF DRAIN PIPING SHALL BE REPLACED FROM ALL EXISTING ROOF DRAIN BODIES DN TO BUILDING PENETRATION THROUGH FOUNDATION WALL. PREPARE EXISTING ROOF DRAINS FOR NEW CONNECTION TO PVC PIPING. EXISTING PIPE SIZE SERVING ROOF DRAINS ESTIMATED AT 4". CONTRACTOR TO FIELD VERIFY. EXISTING ROOF DRAINAGE MAINS ARE LOCATED ABOVE LAY-IN T-BAR CEILING AT AN ESTIMATED ELEVATION OF 54'-9" AFF. REMOVE ALL HANGERS AND ACCESSORIES FOR EXISTING PIPING. REFERENCE SHEET PL701 FOR ADDITIONAL INFORMATION.
- 6 REPLACE EXISTING ROOF DRAIN VERTICAL LEADERS FROM BASE OF ROOF DRAIN BODY TO HORIZONTAL LEADERS. ROOF DRAIN BODIES LOCATED AT AN ESTIMATED ELEVATION OF 58' 2" AFF.
- 7 REPLACE EXISTING CAST IRON ROOF DRAINAGE VERTICAL LEADER PIPING WITH NEW SCHEDULE 40 PVC PIPING DN TO LOCATION WHERE PIPING EXITS THE BUILDING THROUGH FOUNDATION WALL. NEW PIPING FROM EXTERIOR TO 2'-0" WITHIN BUILDING SHALL BE NEW SCHEDULE 40 NO HUB CAST IRON PIPING. INSTALL AND INSULATE PER SPECIFICATIONS.
- 8 REMOVE AND REPLACE EXISTING PVC EXTERIOR ROOF DRAIN PIPING. PIPING TO BE REPLACED WITH CAST IRON. REUSE EXISTING BUILDING PENETRATION THROUGH FOUNDATION WALL AND SPILL TO GRADE. REFERENCE SHEET PL701 FOR ADDITIONAL INFORMATION.
- 9 SECTION OF HORIZONTAL ROOF DRAIN PIPING SHOWN IN LIGHT SOLID LINE TO REMAIN. SECTION SHOWN IN HEAVY DASHED LINE TO BE REMOVED. ELEVATION ESTIMATED AT 50'-0" AFF.
- 10 EXISTING ROOF DRAIN AND ASSOCIATED PIPING TO REMAIN WITHIN YATES MOTOR GENERATOR ROOM.
- 11 REPLACE EXISTING CAST IRON ROOF DRAINAGE VERTICAL LEADER PIPING WITH NEW SCHEDULE 40 PVC PIPING DN TO LOCATION WHERE PIPING EXITS THE BUILDING. NEW PIPING FROM EXTERIOR TO 2'-0" WITHIN BUILDING SHALL BE NEW SCHEDULE 40 NO HUB CAST IRON PIPING. INSTALL AND INSULATE PER SPECIFICATIONS.
- 12 REMOVE EXTERIOR PVC PIPING. SOUTHEAST PIPING PENETRATION THROUGH EXTERIOR WALL TO BE REUSED. NORTHEAST PIPING TO RECEIVE NEW PENETRATION. REFERENCE ISOLATION VIEWS FOR GENERAL LOCATION.

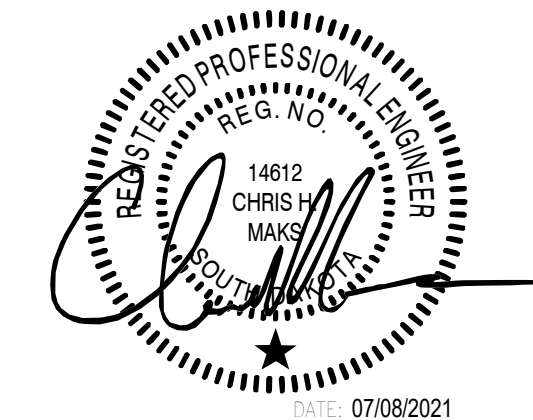
ALL EXISTING ROOF DRAINS EXPECTED TO REMAIN. CONTRACTOR TO INSPECT CONDITION OF ROOF DRAINS AND PROVIDE RECOMMENDATION TO OWNER AND ENGINEER.



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PROJECT TITLE

**SDSTA - SANFORD
UNDERGROUND
RESEARCH FACILITY
ROSS & YATES ROOF
DRAIN REPLACEMENT**

LEAD, SD

ISSUES

MARK	DATE	DESCRIPTION
ISSUE DATE	04/30/2021	DRAWN BY CHM
PROJECT #	03201389	CHECKED BY CHM

SHEET TITLE

**OVERALL PLUMBING
DEMOLITION PLANS**

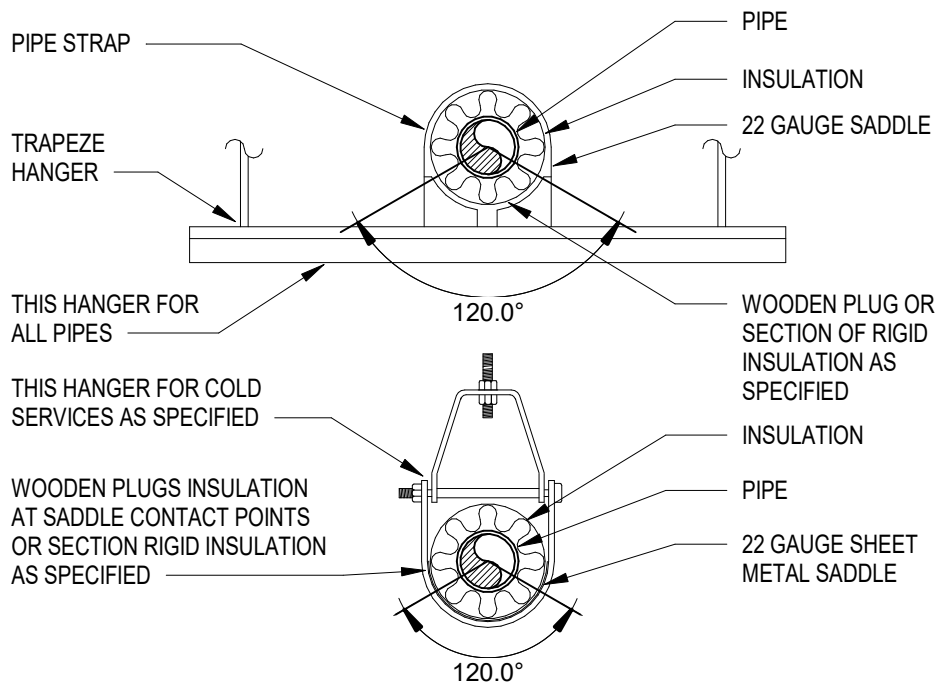
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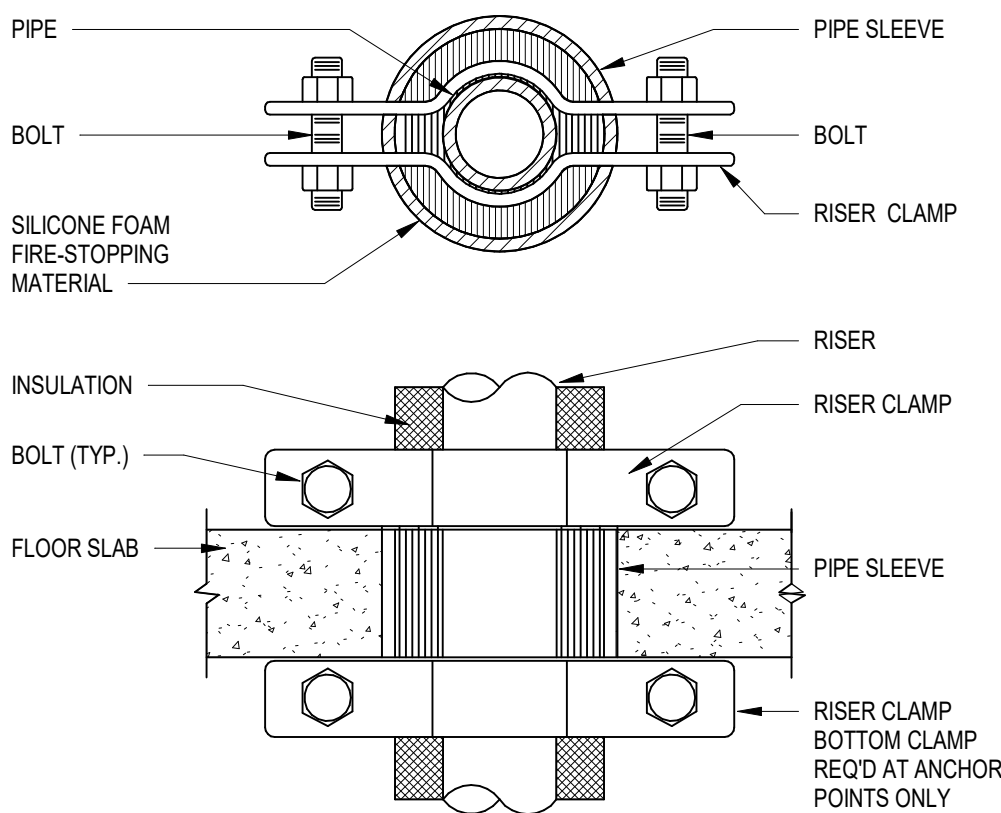
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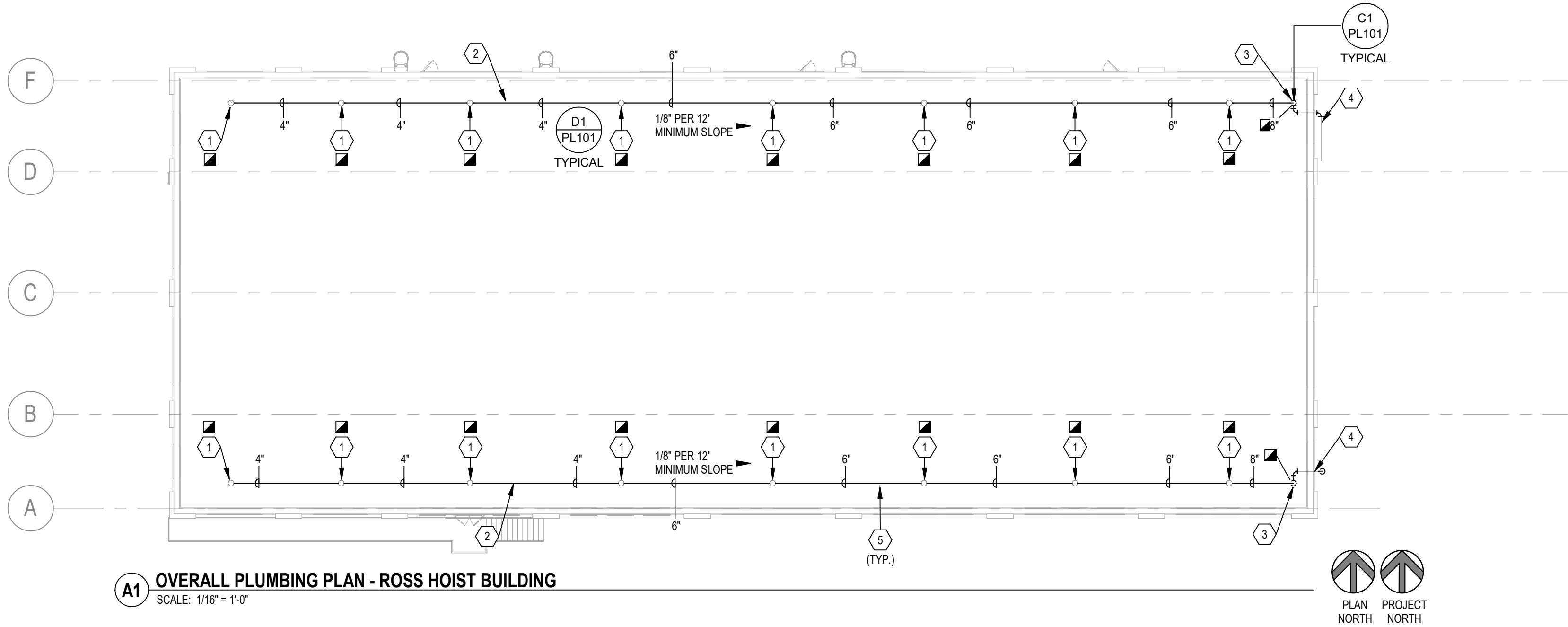
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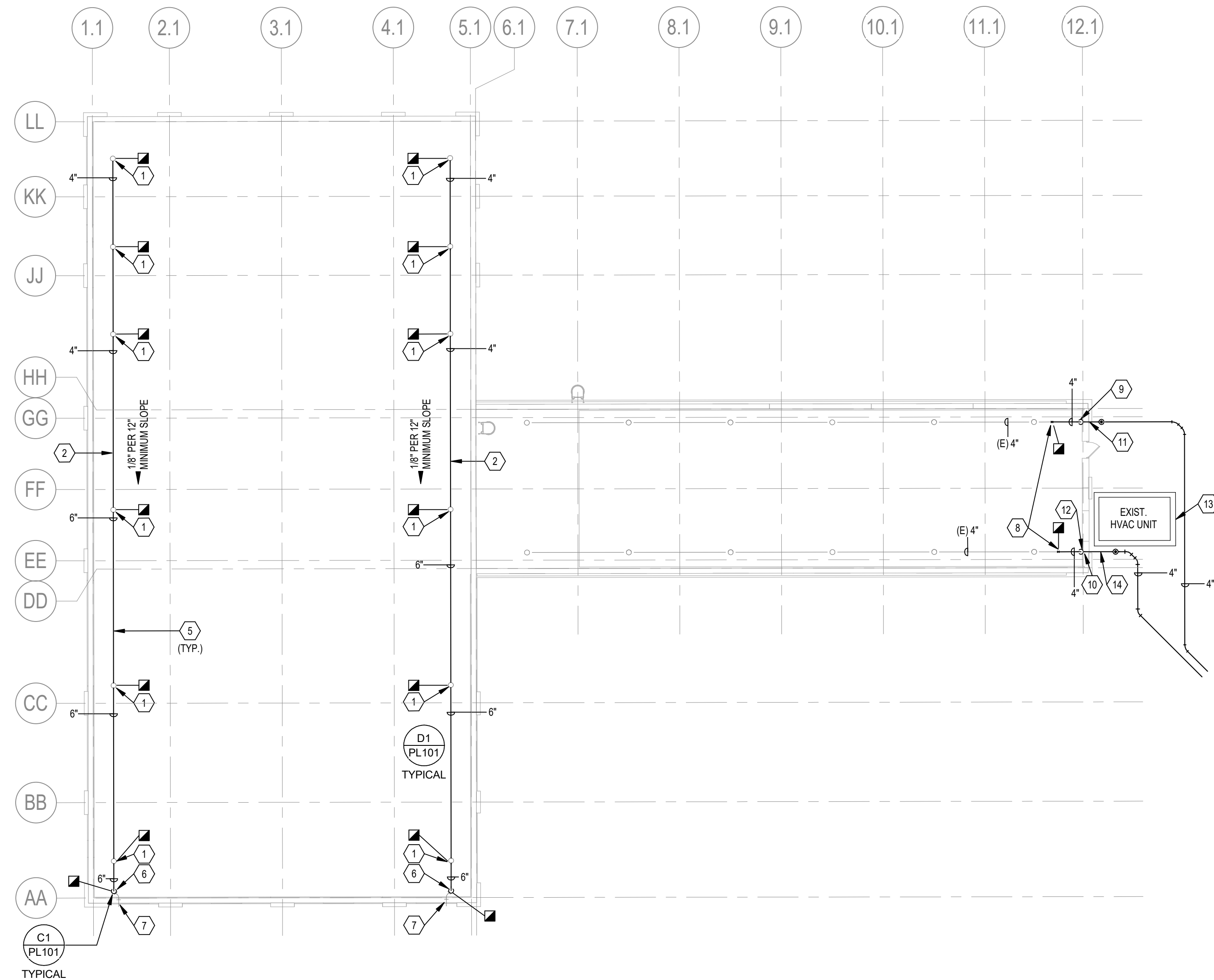
D1 HANGERS AND INSULATED SADDLES
SCALE: NOT TO SCALE



C1 SUPPORT/ANCHOR FOR PIPE RISER
SCALE: NOT TO SCALE



A1 OVERALL PLUMBING PLAN - ROSS HOIST BUILDING
SCALE: 1/16" = 1'-0"



A3 OVERALL PLUMBING PLAN - YATES HOIST BUILDING
SCALE: 1/16" = 1'-0"

KEYNOTES

- 1 NEW 4" SCHEDULE 40 PVC PIPE UP TO ROOF DRAIN. CONTRACTOR TO FIELD VERIFY EXISTING ROOF DRAIN IS 4".
- 2 NEW SCHEDULE 40 PVC ROOF DRAIN PIPING. ROUTE NEW HORIZONTAL LEADER AT THE SAME ELEVATION AS EXISTING PIPING. PROVIDE ALL NEW HANGERS, INSTALL AND INSULATE PER SPECIFICATIONS.
- 3 NEW 8" SCHEDULE 40 PVC PIPE DN TO EXISTING BUILDING PENETRATION THROUGH WINDOW. TRANSITION TO CAST IRON 2'-0" UPSTREAM OF WINDOW PENETRATION. EXTERIOR PIPING SHALL BE CAST IRON. REFERENCE SHEET PL702 FOR ADDITIONAL INFORMATION.
- 4 8" CAST IRON PIPE THROUGH EXISTING WINDOW PENETRATION. SPILL PIPING TO GRADE.
- 5 PIPE SIZE ON PLAN DENOTES MINIMUM CODE COMPLIANT PIPE SIZE. CONTRACTOR TO FIELD VERIFY EXISTING PIPE SIZE AND INSTALL THE LARGER OF THE TWO.
- 6 NEW 6" SCHEDULE 40 PVC PIPE DN TO EXISTING BUILDING PENETRATION THROUGH FOUNDATION WALL. TRANSITION TO CAST IRON 2'-0" UPSTREAM OF WALL PENETRATION. EXTERIOR PIPING SHALL BE CAST IRON. REFERENCE SHEET PL701 FOR ADDITIONAL INFORMATION.
- 7 EXISTING 6" PVC PIPE TERMINATION THROUGH WALL TO REMAIN.
- 8 CONNECT NEW SCHEDULE 40 PVC PIPING INTO EXISTING CAST IRON. CONTRACTOR TO FIELD VERIFY ELEVATIONS.
- 9 NEW 4" SCHEDULE 40 PVC PIPE DN TO NEW BUILDING PENETRATION THROUGH FOUNDATION WALL. TRANSITION TO CAST IRON 2'-0" UPSTREAM OF WALL PENETRATION. EXTERIOR PIPING SHALL BE CAST IRON. REFERENCE SHEET PL701 FOR ADDITIONAL INFORMATION. PATCH EXISTING PENETRATION THROUGH WINDOW TO MATCH EXISTING.
- 10 NEW 4" SCHEDULE 40 PVC PIPE DN TO EXISTING BUILDING PENETRATION THROUGH FOUNDATION WALL. TRANSITION TO CAST IRON 2'-0" UPSTREAM OF WALL PENETRATION. EXTERIOR PIPING SHALL BE CAST IRON. REFERENCE SHEET PL701 FOR ADDITIONAL INFORMATION.
- 11 4" CAST IRON PIPING. CORE DRILL NEW WALL PENETRATION AND ELBOW DN TO CULVERT. STUB IN TO CULVERT WITH 6" OVERLAP BETWEEN PIPE AND CULVERT.
- 12 4" CAST IRON PIPING. ROUTE THROUGH EXISTING WALL PENETRATION AND ELBOW DN TO CULVERT. STUB IN TO CULVERT WITH 6" OVERLAP BETWEEN PIPE AND CULVERT.
- 13 ROUTE UNDERGROUND PIPING TO AVOID EXISTING HVAC UNIT CONCRETE PAD FOOTPRINT. CONTRACTOR TO FIELD VERIFY DIMENSIONS AND LOCATION OF EXISTING HVAC UNIT.
- 14 ROUTE NEW EXTERIOR PIPING ABOVE EXISTING NATURAL GAS SERVICES TO HVAC UNIT. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING NATURAL GAS PIPING.

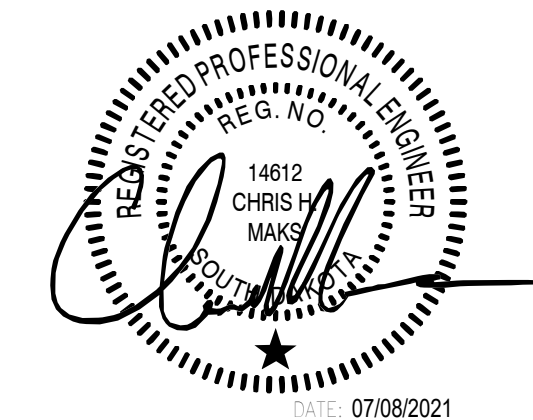
ALL NEW INTERIOR ROOF DRAIN PIPING SHALL BE SCHEDULE 40 PVC. ALL NEW EXTERIOR ROOF DRAIN PIPING SHALL BE SCHEDULE 40 NO HUB CAST IRON. CAST IRON PIPING SHALL EXTEND 2'-0" INTO BUILDING AND TRANSITION TO PVC. ALL NEW UNDERGROUND PIPING SHALL BE SCHEDULE 40 PVC.



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**OVERALL PLUMBING
PLANS**

SHEET NUMBER

PL101

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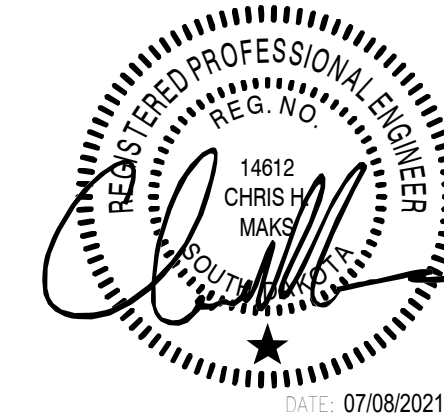
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LEAD, SD
ISSUES

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SHEET TITLE
**PLUMBING RISER
DIAGRAMS - YATES
HOIST BUILDING**

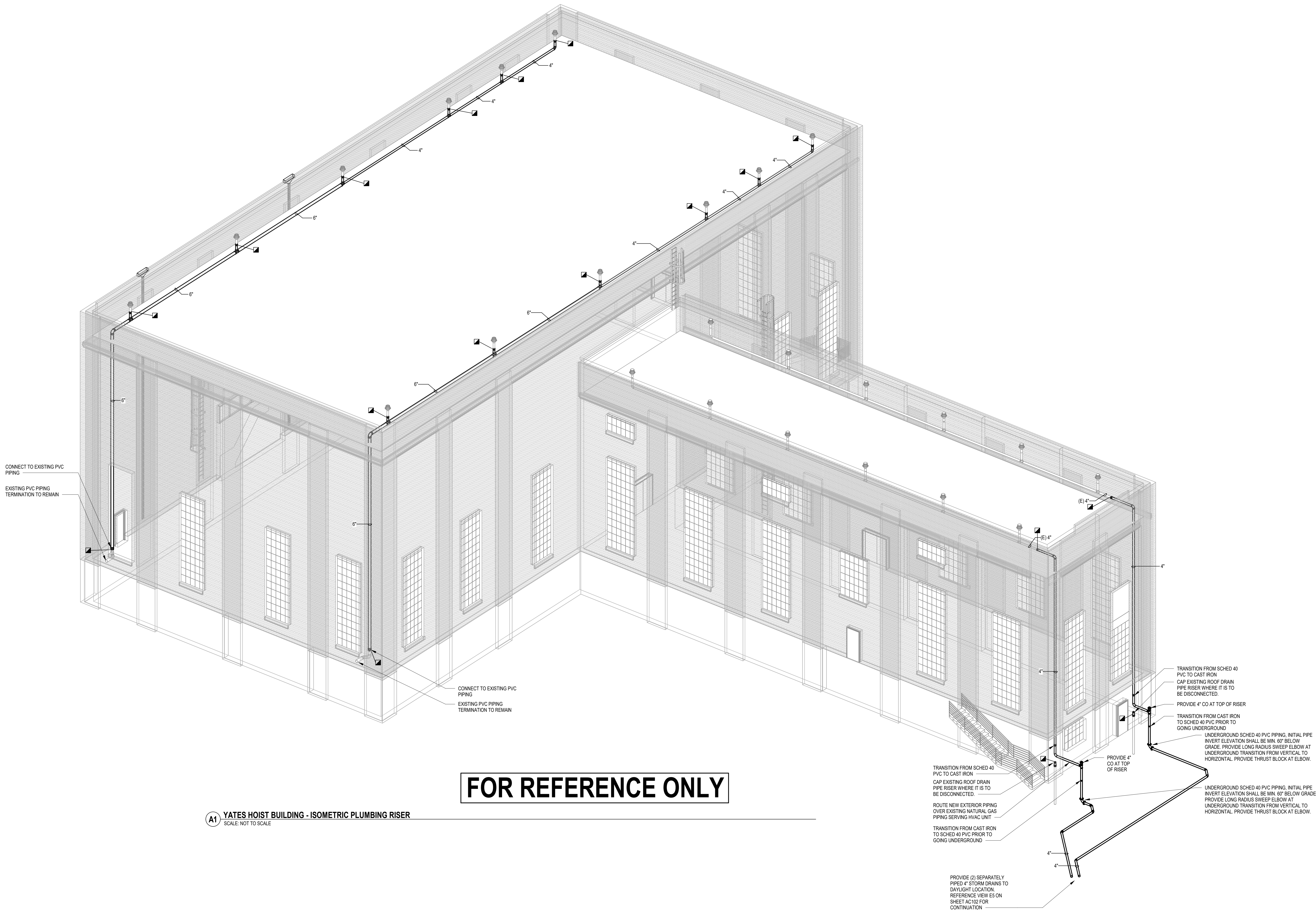
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PL701

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LISTED DRAWINGS SCALES UNLESS REDUCED FROM ORIGINAL 30 x 42
FORMAT

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FOR REFERENCE ONLY

A1 YATES HOIST BUILDING - ISOMETRIC PLUMBING RISER
SCALE: NOT TO SCALE

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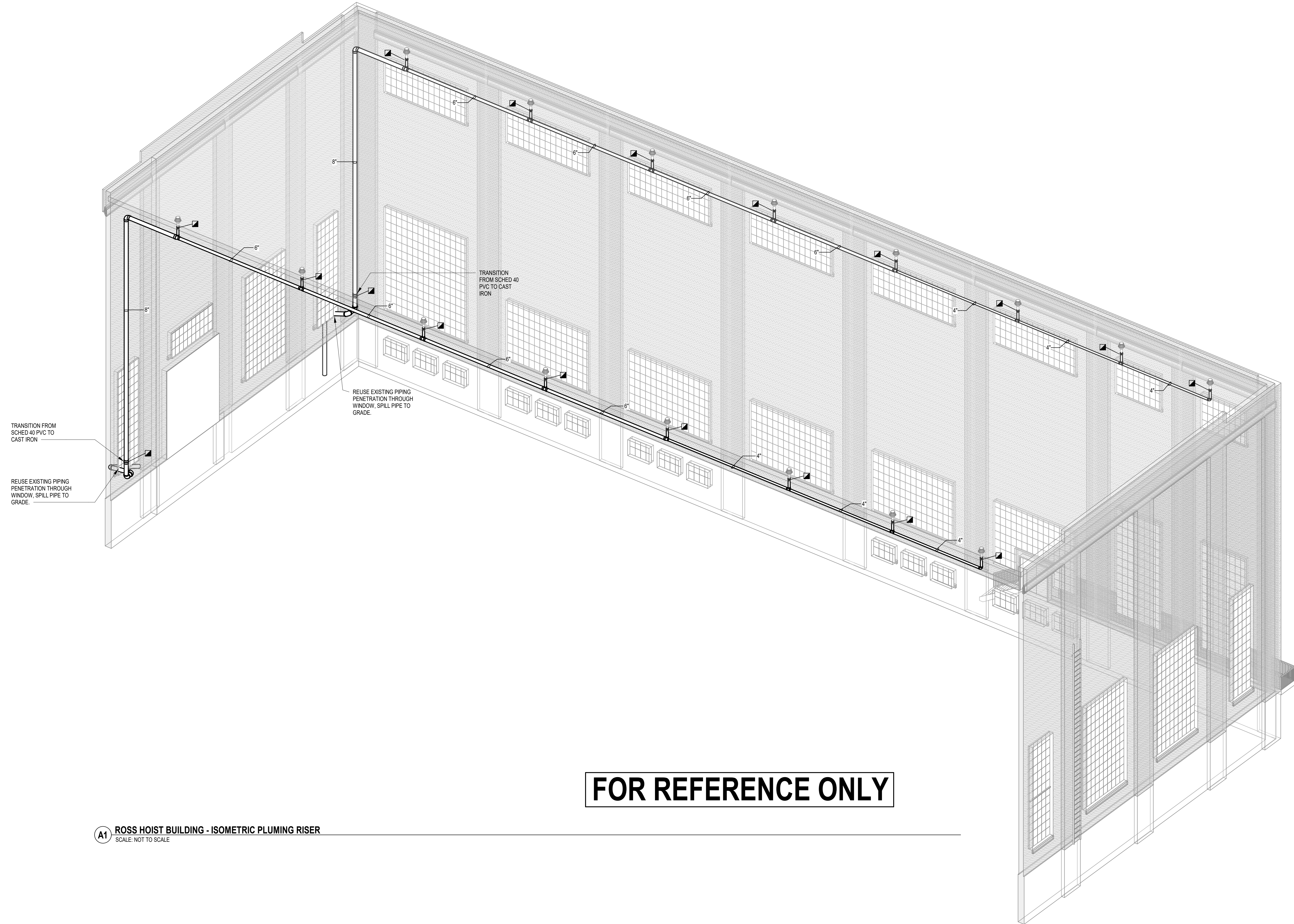
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D

C

B

A



A1 ROSS HOIST BUILDING - ISOMETRIC PLUMBING RISER
SCALE: NOT TO SCALE

FOR REFERENCE ONLY

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**PLUMBING RISER
DIAGRAM - ROSS
HOIST BUILDING**

SHEET NUMBER

PL702

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