

**Addendum No. 1**  
**January 12, 2024**

Project: **Lennox High School Addition**  
Lennox, South Dakota  
Architecture Incorporated Project No.: 2982

Architect: Architecture Incorporated

Letting: **Thursday, January 25, 2024**  
**2:00 p.m. (prevailing time)**

Location: Lennox School District Administrative Conference Room located at 305 West 5<sup>th</sup> Avenue, Lennox, SD 57039.

**Scope of this Addendum:**

To all bidders and all others to whom drawings and specifications have been issued by Architecture Incorporated, this Addendum forms a part of the Contract Documents. Acknowledge receipt of this addendum by listing its number and date in the bidder's Form of Proposal. Failure to do so may subject bidder to disqualification. This addendum modifies the drawings and specifications as follows:

**GENERAL ITEMS:**

- 1) **SECTION 011000 – SUMMARY**
  - a) CLARIFICATION: The final completion date for Phase Two work shall be August 15, **2024**.
    - i) The last sentence of Article 1.4.E. shall be changed to read:

*Final completion of all punch list items shall be completed by August 15, **2024**.*
- 2) **SECTION 042000 – UNIT MASONRY**
  - a) Disregard any / all reference to glazed structural clay tile. There are no glazed structural tile products used on this project.
- 3) **SECTION 096513 – RESILIENT BASE AND ACCESSORIES**
  - a) REVISION: Article 2.2.C.1.I shall be changed to read:
    - i) Location: G102B Stair, G103-B Stair.
  - b) Stair nosing's at Theater step aisles to be Type TS illuminated step light by Electrical Contractor. Refer to Electrical specifications for information.
- 4) **SECTION 114000 – FOOD SERVICE EQUIPMENT**
  - a) Schedule of equipment, page 19 clarification: Items number 60, 61, 62 and 63 are existing equipment as noted on the drawings.
  - b) Food service equipment schedule, item number 44 Wire Shelving: Change quantity of 18 x 48 shelves from 20 to 8 shelves.

5) SECTION 116623 – GYMNASIUM EQUIPMENT

- a) Per the Base Bid, furnish and install four (4) electrically-operated basketball goal height adjusters.
  - i) Provide goal height adjusters at the four (4) side courts ONLY.
  - ii) Units shall be adjustable from **8 to 10 feet (2.4 to 3 m)**, locking in any position within adjustment range, with visible height scale and finish matching framing.
  - iii) All necessary electrical power to be furnished and installed by Division 26.
  - iv) Electrically-operated basketball goal height adjusters shall be controlled via toggle switches located in the gym control panel.

6) SECTION 220600 – HEATING

- a) Omit Articles 1.08, 1.13, 1.14, 1.17, 1.18, 1.22 and 1.23 in their entirety.
- b) Modify Article 1.09 – ICE STORAGE TANKS as follows:

*Modular Ice Thermal Storage Tanks and Ice Tank Accessories:*

*Each of the two (2) ice storage tanks shall be a FAFCO model 715T, or equal, each capable of 107.5 tons for a minimum of four (4) hours and shall each be capable of 600 ton-hours. Flow shall be max 220 gpm per tank for discharge and 160 gpm per tank for charging. Pressure drop shall be 14 ft head at max flow. Discharge temperatures shall be at approximately 44 deg. LWT and 56 deg. EWT. Charging temperature shall be at approximately 23 deg. EWT. Charge time shall be ~ 9 hours*

*Galvanized tanks with HDPE liners are acceptable.*

- c) Modify Article 1.16 – HEATING AND COOLING SYSTEMS COIL DAMAGE PROTECTION as follows:

*Circulating ~~heating~~ CHILLED water system shall incorporate 35 percent propylene glycol by volume.*

7) SECTION 230800 – VENTILATION AND AIR CONDITIONING

- a) Add the following to Section 230800:

*BLOWER COIL UNITS:*

*Fan coil units shall be horizontal or vertical cabinet, force-flow, heating-cooling type, units suitable for a 4-pipe system. Units shall be concealed, free-standing, recessed, or semi-recessed as designated on the Drawings. All recessed or semi-recessed units shall have 4-side overlap.*

*Units shall be complete with 18 gauge steel cabinet, chilled water cooling coil, hot water heating coil, permanent cleanable type filter, drip pan, interior insulation, motor and centrifugal fan. Motor shall be ECM type with manual reset overload protection solid state variable speed control. Drain pan shall be insulated and sealed around piping passing through the drain pans. All piping below the drain pan shall be insulated. Filter access shall be through a hinged or removable door or access slot. Cabinets shall have prime coat finish.*

*Motors shall be 120 volt, single phase, 60 cycle, less than 1/2 horsepower, ECM type with either integral motor overload protection and disconnect switch or a manual motor starter with thermal overloads.*

*All capacities are based on high fan speeds.*

*Unit capacities shall be as listed in the Schedule on the Drawings. All coil ratings shall be rated at Standard ARI conditions unless noted otherwise.*

*Blower Coil Units shall be Trane, Diakin, York, Carrier, Airtherm, International, Dunham Bush or equal.*

8) **SECTION 230900 – AUTO TEMPERATURE CONTROL / BUILDING AUTOMATION SYSTEM**

- a) Add the following to Section 230900:

*Sequence of Operation:*

*Blower Coil Units:*

*During occupied operation, the BCU fan shall run continuously with the OA damper open as determined by the Building Automation System (BAS).*

*The BAS shall maintain the desired space temperature using the two-way chilled water valve, and the two-way hot water valve.*

*During unoccupied operation, the BCU fan shall be off and the BCU outside air damper shall be closed. The BAS shall cycle the AHU fan with the hot water valve full open to satisfy the unoccupied space temperature setting. Provide an override time switch located as directed by the Engineer to return the BCU to its occupied mode of operation for a specified period of time.*

*Provide a differential pressure sensor across the filters. Whenever the pressure differential across the filters exceeds the setpoint, an alarm shall be initiated at the operator's workstation.*

*Provide a discharge air temperature sensor with remote indication at the operator's workstation.  
Provide a current switch or differential pressure switch across the BCU fan to prove fan operation.*

*ERV Control:*

*During occupied operation, the ERV fans shall run continuously as determined by the Building Automation System (BAS). The BAS shall maintain the desired space temperature by modulating the two-way chilled water valve and the two two-way hot water valves.*

*During unoccupied operation, the ERV fans shall run at minimum or be off and the ERV outside and exhaust air dampers shut. The BAS shall modulate the hot water valve to prevent the air temperature from falling below 45 degrees F (adj.). Provide an override time switch located as directed by the Engineer to return the ERV to its occupied mode of operation for a specified period of time.*

*Provide a differential pressure sensor across the filters. Whenever the pressure differential across the filters exceeds the setpoint, an alarm shall be initiated at the operator's workstation.*

*Provide a discharge air temperature sensor with remote indication at the operator's workstation.  
Provide a current switch or differential pressure switch across the ERV fans to prove fan operation.  
Provide freeze protection as previously specified located on the discharge side of the heating coil which will send an alarm to the operator's workstation through the auxiliary contacts, shut off the fan motors, fully close the outside and exhaust air dampers and open the heating coil valve to full flow through the coil whenever the coil outlet air temperature falls below its setting.*

*Provide Air Temperature sensors for each of the two (2) air streams.*

*Provide status on the BAS graphic and an alarm point from the ERV Controller. The BAS Contractor shall coordinate all control parameters with the ERV supplier.*

- 9) SHEET 4.10-F-A – FLOOR PLAN – AREA F – ADD ALTERNATE
- a) Reference *revised* drawing Sheet 4.10-F-A, dated 1.11.2024, attached to the end this addendum for court sizes in GYMNASIUM F102.
- i) See Sheet 4.10-F for gymnasium equipment and floor plan notes.
- 10) SHEET 4.10-G – FLOOR PLAN – AREA G
- a) Add a 3 5/8" stud wall with 5/8" gypsum board on one side underneath STAIR G102B and STAIR G103-B as shown per *revised* drawing Sheet 4.10-G, dated 1.11.2024, attached to the end this addendum.
- b) CLARIFICATION: The entire (south) concrete masonry wall of STAIR G 103-B shall extend vertically to the underside of the floor deck above. Disregard the low / sloped portion of CMU wall originally shown per building Section C/5.20.
- c) The jambs and exposed (west) faces of the insulated precast wall panels that are visible in Corridor G101 shall be made with colored concrete and match Finish 2.
- d) Reference *revised* drawing Sheet 4.10-G, dated 1.11.2024, attached to the end this addendum for other minor changes.
- 11) SHEET 4.11-F-A – MEZZANINE PLAN – AREA F ADD ALTERNATE #1
- a) Omit the interior roof access ladder shown in Mechanical Penthouse G207; not required.
- i) Reference *revised* drawing Sheet 5.50 for the addition of an exterior roof ladder between grid GH and GJ.
- 12) SHEET 4.11-G – MEZZANINE PLAN – AREA G
- a) Omit the interior roof access ladder shown in Mechanical Penthouse G207; not required.
- i) Reference *revised* drawing Sheet 5.50 for the addition of an exterior roof ladder between grid GH and GJ.
- 13) SHEET 4.21-G – FINISH PLAN – MEZZANINE – AREA G
- a) Reference *revised* Sheet 4.21-G, dated 1.11.2024, for illuminated step light notes at Theater step aisles.
- 14) SHEET 4.31 – DOOR DETAIL / BORROWED LITE SCHEDULE & DETAILS
- a) DETAIL 8 /4.31 – The bottom of the masonry wall and gypsum board ceiling shall be at 8'-0" in lieu of 8'-8" shown per the original drawings.
- 15) SHEET 4.61-G – FURNITURE PLAN – MEZZANINE - AREA G
- a) Replace duplicate Sheet 4.60-G in the original drawing set with new drawing Sheet 4.61-G, dated 1.11.2024; reference new Sheet 4.61-G attached to the of this addendum.
- 16) SHEET 5.20 – BUILDING SECTIONS
- a) The entire (south) concrete masonry wall of STAIR G 103-B shall extend vertically to the underside of the floor deck above. Disregard the low / sloped portion of CMU wall originally shown per building Section C/5.20.

- 17) SHEET 5.30 – ENLARGED STAIR PLANS & SECTIONS
- a) CLARIFICATION: The entire (south) concrete masonry wall of STAIR G 103-B shall extend vertically to the underside of the floor deck above.
    - i) Reference the clouded area on stair plan 4/5.30 on *revised* drawing Sheet 5.30, dated 1-11-24, attached to the end of this addendum.
  - b) CLARIFICATION: As noted above, the south concrete masonry wall of STAIR G103-B shall extend to the underside of floor deck. The wall that extends above the floor shall be 6" steel stud framing with 5/8" gypsum board on each side as indicated per revised south stair section 6/5.30. Reference *revised* drawing Sheet 5.30, dated 1-11-24, attached to the end of this addendum.
  - c) Add furring channel and 5/8" gypsum board to the underside of stair as shown in revised south stair section 6/5.30. Reference *revised* drawing Sheet 5.30, dated 1-11-24, attached to the end of this addendum.
  - d) Add 3 5/8" steel stud wall with 5/8" gypsum board on one side underneath the stair as shown in revised south stair section 6/5.30. Reference *revised* drawing Sheet 5.30, dated 1-11-24, attached to the end of this addendum.
  - e) Add furring channel and 5/8" gypsum board to the underside of stair as shown in revised stair section 9/5.30. Reference *revised* drawing Sheet 5.30, dated 1-11-24, attached to the end of this addendum.
  - f) Reference *revised* drawing Sheet 5.30, dated 1.11.2024, attached to the end this addendum.
- 18) SHEET 5.31 – ENLARGED STAIR PLANS & SECTIONS
- a) Reference *revised* drawing Sheet 5.31, dated 1-11-24, attached to the end of this addendum for the following:
    - i) The north concrete masonry wall of STAIR G102-B shall extend to the underside of floor deck; wall above shall be 6" steel stud with 5/8" gypsum board on each side as indicated in the revised North stair section 10/5.31.
    - ii) Add furring channel and 5/8" gypsum board to the underside of the stair as shown in revised north stair section 10/5.31.
    - iii) Add 3 5/8" steel stud wall with 5/8" gypsum board on one side underneath the stair as shown in revised north stair section 10/5.31.
- 19) SHEET 5.50 – ROOF PLAN
- a) Reference *revised* drawing Sheet 5.50, dated 1-11-24, attached to the end of this addendum for the following:
    - i) Omit the roof access hatch shown over Mechanical Penthouse G207; not required.
    - ii) Add an exterior roof ladder at the location shown per *revised* drawing Sheet 5.50.
- 20) SHEET 5.51 – ROOF DETAILS
- a) Reference *revised* drawing Sheet 5.51, dated 1-11-24, attached to the end of this addendum for the following:
  - b) Omit roof hatch detail 10/5.51; not required.

- c) Reference new / updated roof ladder detail section 8/5.51 on *revised* drawing Sheet 5.51. This detail shall apply to the newly added exterior roof ladder between grids GH & GJ.

21) SHEET 6.10-G – REFLECTED CEILING PLAN - AREA G

- a) Reference *revised* drawing Sheet 6.10-G, dated 1-11-24, attached to the end of this addendum for the following:
- i) Add gypsum board to the underside of stair assemblies Stair G102B & Stair G103B and to the underside of the stair assembly up to Mechanical Penthouse G207.
  - ii) Clarifications regarding extent of walls required to extend vertically to structure above.

22) SHEET 11.10 – FOOD SERVICE EQUIPMENT

- a) Food Service Equipment Schedule clarification: Items number 49, 51 and 54 are existing equipment as noted in the specifications.

**MECHANICAL ITEMS:**

1) SHEET 8.40-E – FIRST FLOOR PLAN – AREA E – VENTILATION & A/C

- a) Add G12 and G13 grilles and ducts as shown for Fitness Room E103 for transfer out.

2) SHEET 8.50 – SCHEDULES

- a) Change all schedules with chilled water percentages to 35% pg and 65% water.  
b) Add G12 and G13 to REGISTER, GRILLE & DIFFUSER SCHEDULE.

**ELECTRICAL ITEMS:**

1) SHEET 9.43-E – FIRST FLOOR PLAN – AREA E – POWER & SIGNAL

- a) Reference *revised* electrical drawing Sheet 9.43-E, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.

2) SHEET 9.45-F – FIRST FLOOR PLAN – AREA F – POWER & SIGNAL

- a) Reference *revised* electrical drawing Sheet 9.45-F, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.

3) SHEET 9.46-G – FIRST FLOOR PLAN – AREA G – LIGHTING

- a) Reference *revised* electrical drawing Sheet 9.46-G, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.

4) SHEET 9.47-G – FIRST FLOOR PLAN – AREA F – POWER & SIGNAL

- a) Reference *revised* electrical drawing Sheet 9.47-G, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.

- 5) SHEET 9.48-F – MEZZANINE PLAN – AREA F – LIGHTING
- a) Reference *revised* electrical drawing Sheet 9.48-F, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.
- 6) SHEET 9.48-F-A – MEZZANINE PLAN – AREA F – LIGHTING ADD ALTERNATE
- b) Reference *revised* electrical drawing Sheet 9.48-F-A, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.
- 7) SHEET 9.60 – ELECTRICAL SYMBOLS & ABBREVIATIONS
- a) Reference *revised* electrical drawing Sheet 9.60, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.
- 8) SHEET 9.61 – ELECTRICAL SCHEDULES
- a) Reference *revised* electrical drawing Sheet 9.61, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.
- 9) SHEET 9.62 – ELECTRICAL SCHEDULES
- a) Reference *revised* electrical drawing Sheet 9.62, *revision* dated 1-11-24, attached to the end of this addendum for miscellaneous electrical modifications.

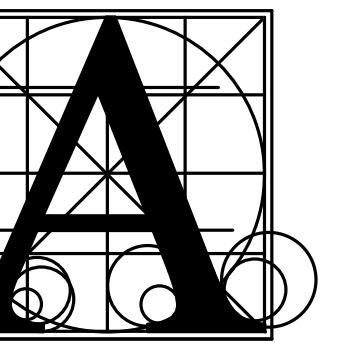
GENERAL APPROVALS:

The following material or equipment furnished by the manufacturers listed, may be substituted as equivalent providing that each item, material, and piece of equipment conforms to the design and requirement of the specifications.

SECTION	ITEM	MANUFACTURER
033000	Liquid Floor Treatment Liquid Floor Sealer Evaporation Retarder Under-slab Vapor Retarder	W.R. Meadows W.R. Meadows W.R. Meadows W.R. Meadows
034500	Architectural Precast Concrete Thin Brick Manufacturer:	Endicott Ruby Red velour
071326	Self-Adhering Sheet Waterproofing	Polyglass USA
087110	Hinges Exit Devices Strikes Accessories for pair of doors Closures Protective trim units Gasketing Thresholds	Ives Von Duprin Von Duprin Von Duprin LCN Ives Zero Zero
116623	Gymnasium Equipment	ADP Lemco
105113	Metal Lockers	Lockers Manufacturing
126100	Fixed Audience Seating	Wenger ( <i>Cavea</i> )

220600	Ice Storage Tanks	Bunham Bush
230800	Fans	Captiveaire
230800	Intake/Relief Hoods	Captiveaire
230800	Air Handling Units	VTS
230800	Mini Split Systems	LG
230800	Duct Mount Heating Coils	Greenheck
230800	Registers, Grilles & Diffusers	Greenheck

END OF ADDENDUM No. 1



# Architecture Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



# LENNOX HIGH SCHOOL ADDITION

## **FLOOR PLAN - AREA F - ADD ALTERNATE**

A diagram illustrating the alignment of different types of north. At the top, the words "TRUE NORTH", "PLAN NORTH", and "NORTH" are written diagonally from bottom-left to top-right. Below them is a circle divided into four quadrants by a horizontal and a vertical line. The vertical line is labeled with a single tick mark, while the horizontal line has two tick marks, indicating a 90-degree angle between them.

# FLOOR PLAN - AREA F (ADD ALTERNATE #1)

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

**REFERENCE SHEET FOR GYMNASIUM EQUIPMENT, AND PLAN NOTES**

**ADD ALTERNATE #1**

**BLEACHERS ARE THE SAME FOR BASE BID AND ADD ALTERNATE #1**

**PLATFORM - 81'-0"**

**THEATRE STOR.** G104

**AUX. GYM** F102

**STOR.** F103

**JAN.** F106

**RR** F104

**RR** F105

**ELEV EQUIP** D114

**SUMP** D115

**LOBBY** D116

**LOBBY** F101

**STAIR** D112

**ELEC** D113

**CONCESSIONS H** E101

**STOR.** E102

**VESTIBULE** F100

**F100-1** F100-2

**F100-3** F100-4

**F100-5** F100-6

**F100-7** F100-8

**F100-9** F100-10

**F101-1** F101-2

**F101-3** F101-4

**F102-1** F102-2

**F103** F104

**F104** F105

**F105** F106

**F106** F107

**F107** F108

**F108** F109

**F109** F110

**F110** F111

**F111** F112

**F112** F113

**F113** F114

**F114** F115

**F115** F116

**F116** F117

**F117** F118

**F118** F119

**F119** F120

**F120** F121

**F121** F122

**F122** F123

**F123** F124

**F124** F125

**F125** F126

**F126** F127

**F127** F128

**F128** F129

**F129** F130

**F130** F131

**F131** F132

**F132** F133

**F133** F134

**F134** F135

**F135** F136

**F136** F137

**F137** F138

**F138** F139

**F139** F140

**F140** F141

**F141** F142

**F142** F143

**F143** F144

**F144** F145

**F145** F146

**F146** F147

**F147** F148

**F148** F149

**F149** F150

**F150** F151

**F151** F152

**F152** F153

**F153** F154

**F154** F155

**F155** F156

**F156** F157

**F157** F158

**F158** F159

**F159** F160

**F160** F161

**F161** F162

**F162** F163

**F163** F164

**F164** F165

**F165** F166

**F166** F167

**F167** F168

**F168** F169

**F169** F170

**F170** F171

**F171** F172

**F172** F173

**F173** F174

**F174** F175

**F175** F176

**F176** F177

**F177** F178

**F178** F179

**F179** F180

**F180** F181

**F181** F182

**F182** F183

**F183** F184

**F184** F185

**F185** F186

**F186** F187

**F187** F188

**F188** F189

**F189** F190

**F190** F191

**F191** F192

**F192** F193

**F193** F194

**F194** F195

**F195** F196

**F196** F197

**F197** F198

**F198** F199

**F199** F200

**F200** F201

**F201** F202

**F202** F203

**F203** F204

**F204** F205

**F205** F206

**F206** F207

**F207** F208

**F208** F209

**F209** F210

**F210** F211

**F211** F212

**F212** F213

**F213** F214

**F214** F215

**F215** F216

**F216** F217

**F217** F218

**F218** F219

**F219** F220

**F220** F221

**F221** F222

**F222** F223

**F223** F224

**F224** F225

**F225** F226

**F226** F227

**F227** F228

**F228** F229

**F229** F230

**F230** F231

**F231** F232

**F232** F233

**F233** F234

**F234** F235

**F235** F236

**F236** F237

**F237** F238

**F238** F239

**F239** F240

**F240** F241

**F241** F242

**F242** F243

**F243** F244

**F244** F245

**F245** F246

**F246** F247

**F247** F248

**F248** F249

**F249** F250

**F250** F251

**F251** F252

**F252** F253

**F253** F254

**F254** F255

**F255** F256

**F256** F257

**F257** F258

**F258** F259

**F259** F260

**F260** F261

**F261** F262

**F262** F263

**F263** F264

**F264** F265

**F265** F266

**F266** F267

**F267** F268

**F268** F269

**F269** F270

**F270** F271

**F271** F272

**F272** F273

**F273** F274

**F274** F275

**F275** F276

**F276** F277

**F277** F278

**F278** F279

**F279** F280

**F280** F281

**F281** F282

**F282** F283

**F283** F284

**F284** F285

**F285** F286

**F286** F287

**F287** F288

**F288** F289

**F289** F290

**F290** F291

**F291** F292

**F292** F293

**F293** F294

**F294** F295

**F295** F296

**F296** F297

**F297** F298

**F298** F299

**F299** F300

**F300** F301

**F301** F302

**F302** F303

**F303** F304

**F304** F305

**F305** F306

**F306** F307

**F307** F308

**F308** F309

**F309** F310

**F310** F311

**F311** F312

**F312** F313

**F313** F314

**F314** F315

**F315** F316

**F316** F317

**F317** F318

**F318** F319

**F319** F320

**F320** F321

**F321** F322

**F322** F323

**F323** F324

**F324** F325

**F325** F326

**F326** F327

**F327** F328

**F328** F329

**F329** F330

**F330** F331

**F331** F332

**F332** F333

**F333** F334

**F334** F335

**F335** F336

**F336** F337

**F337** F338

**F338** F339

**F339** F340

**F340** F341

**F341** F342

**F342** F343

**F343** F344

**F344** F345

**F345** F346

**F346** F347

**F347** F348

**F348** F349

**F349** F350

**F350** F351

**F351** F352

**F352** F353

**F353** F354

**F354** F355

**F355** F356

**F356** F357

**F357** F358

**F358** F359

**F359** F360

**F360** F361

**F361** F362

**F362** F363

**F363** F364

**F364** F365

**F365** F366

**F366** F367

**F367** F368

**F368** F369

**F369** F370

**F370** F371

**F371** F372

**F372** F373

**F373** F374

**F374** F375

**F375** F376

**F376** F377

**F377** F378

**F378** F379

**F379** F380

**F380** F381

**F381** F382

**F382** F383

**F383** F384

**F384** F385

**F385** F386

**F386** F387

**F387** F388

**F388** F389

**F389** F390

**F390** F391

**F391** F392

**F392** F393

**F393** F394

**F394** F395

**F395** F396

**F396** F397

**F397** F398

**F398** F399

**F399** F400

**F400** F401

**F401** F402

**F402** F403

**F403** F404

**F404** F405

**F405** F406

**F406** F407

**F407** F408

**F408** F409

**F409** F410

**F410** F411

**F411** F412

**F412** F413

**F413** F414

**F414** F415

**F415** F416

**F416** F417

**F417** F418

**F418** F419

**F419** F420

**F420** F421

**F421** F422

**F422** F423

**F423** F424

**F424** F425

**F425** F426

**F426** F427

**F427** F428

**F428** F429

**F429** F430

**F430** F431

**F431** F432

**F432** F433

**F433** F434

**F434** F435

**F435** F436

**F436** F437

**F437** F438

**F438** F439

**F439** F440

**F440** F441

**F441** F442

**F442** F443

**F443** F444

**F444** F445

**F445** F446

**F446** F447

**F447** F448

**F448** F449

**F449** F450

**F450** F451

**F451** F452

**F452** F453

**F453** F454

**F454** F455

**F455** F456

**F456** F457

**F457** F458

**F458** F459

**F459** F460

**F460** F461

**F461** F462

**F462** F463

**F463** F464

**F464** F465

**F465** F466

**F466** F467

**F467** F468

**F468** F469

**F469** F470

**F470** F471

**F471** F472

**F472** F473

**F473** F474

**F474** F475

**F475** F476

**F476** F477

**F477** F478

**F478** F479

**F479** F480

**F480** F481

**F481** F482

**F482** F483

**F483** F484

**F484** F485

**F485** F486

**F486** F487

**F487** F488

**F488** F489

**F489** F490

**F490** F491

**F491** F492

**F492** F493

**F493** F494

**F494** F495

**F495** F496

**F496** F497

**F497** F498

**F498** F499

**F499** F500

**F500** F501

**F501** F502

**F502** F503

**F503** F504

**F504** F505

**F505** F506

**F506** F507

**F507** F508

**F508** F509

**F509** F510

**F510** F511

**F511** F512

**F512** F513

**F513** F514

**F514** F515

**F515** F516

**F516** F517

**F517** F518

**F518** F519

**F519** F520

**F520** F521

**F521** F522

**F522** F523

**F523** F524

**F524** F525

**F525** F526

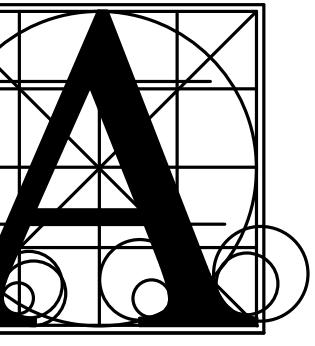
**F526** F527

**F527** F528

**F528** F529

**F529** F530

**F530**



## Architecture Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158

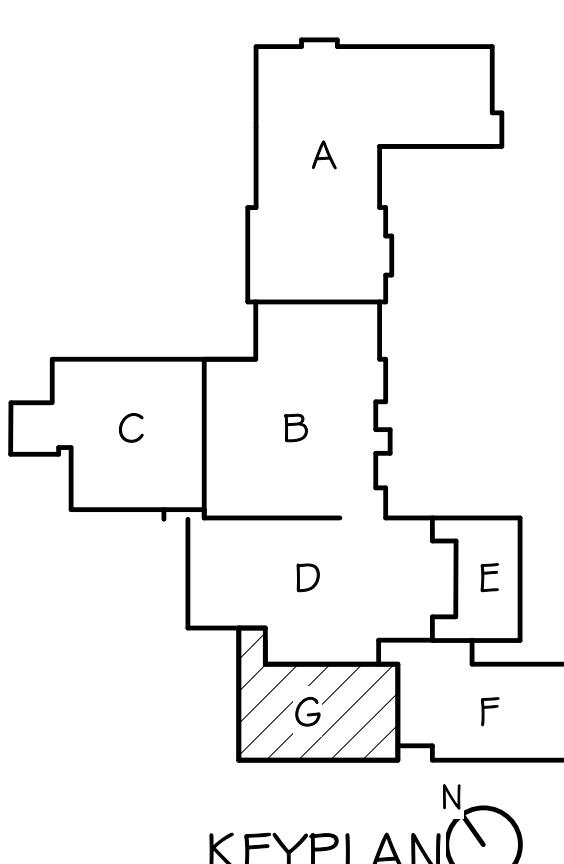


## LENNOX HIGH SCHOOL ADDITION

### FLOOR PLAN - AREA G

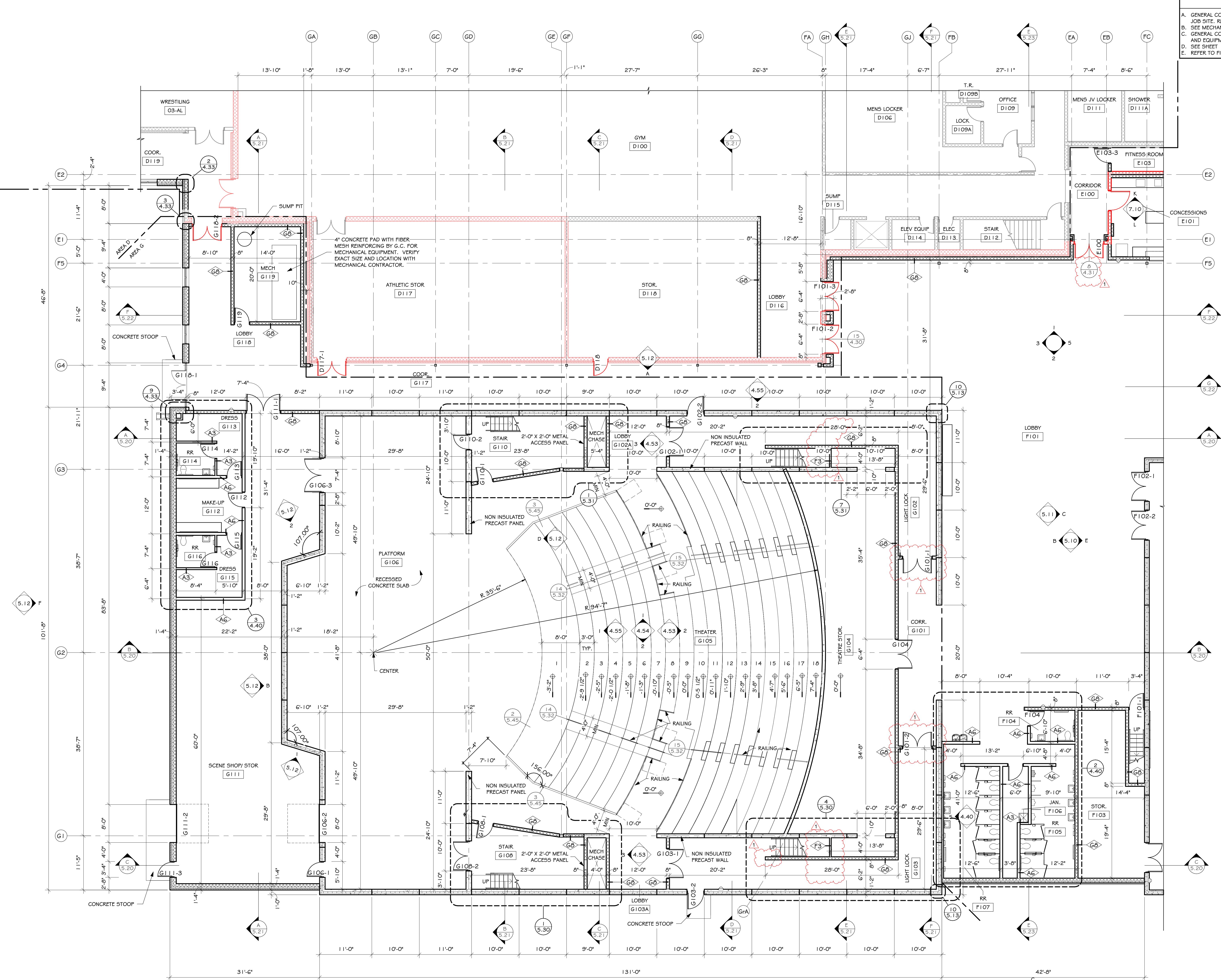
Project number 0215.2982.22  
date DECEMBER 21, 2023  
revision drawn SWP checked SRJ  
DATE 1/1/2024 DESCRIPTION ADDENDUM #1

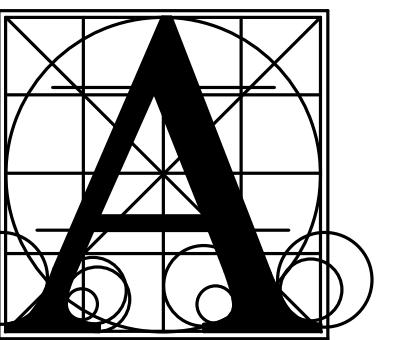
4.10-G



**GENERAL NOTES - FLOOR PLAN**

A. GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE. REPORT DISCREPANCIES TO THE ARCHITECT.  
B. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.  
C. GENERAL CONTRACTOR RESPONSIBLE FOR PROTECTION OF ALL INTERIOR FINISHES AND EQUIPMENT THAT ARE TO REMAIN.  
D. SEE SHEET 1.10 FOR WALL TYPES.  
E. REFER TO FINISH PLANS FOR BURNISHED BLOCK LOCATIONS.





**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



GENERAL NOTES - FINISH PLAN

- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AT THE JOB SITE AND NOTIFY ARCHITECT OF DISCREPANCIES.
- B. INSTALL BLOCKING AS REQUIRED IN PARTITIONS TO RECEIVE MILLWORK, COUNTERTOPS, SHELVING, VISUAL DISPLAY BOARDS, SMART BOARDS, AND WALL-MOUNTED EQUIPMENT.
- C. PROVIDE FLOOR TRANSITION STRIPS IN LOCATIONS THAT HAVE A CHANGE IN FLOORING MATERIAL. REFER TO TYPICAL TRANSITION STRIP DETAILS. ALL TRANSITION STRIPS ARE CENTERED UNDER DOOR IN CLOSED POSITION UNLESS NOTED OTHERWISE.
- D. FINISH SCHEDULES DENOTE FINISHES THROUGHOUT THE PROJECT. FOR ROOMS REFER TO THE FINISH FLOOR AND WALL PLANS, ROOM FINISH SCHEDULES, REFLECTED CEILING PLANS, AND INTERIOR ELEVATIONS.
- E. REFER TO DRAWING 4-A0 FOR FLOOR PATTERNS.

FLOOR AND WALL FINISH SYMBOLS

	FLOOR PATTERN INSTALLATION DIRECTION
	FINISH LABEL
	WALL OR BASE START/STOP INDICATOR
	FLOOR TRANSITION STRIP
	FLOOR / BASE TRANSITION MARKER

ROOM FINISH NOTES

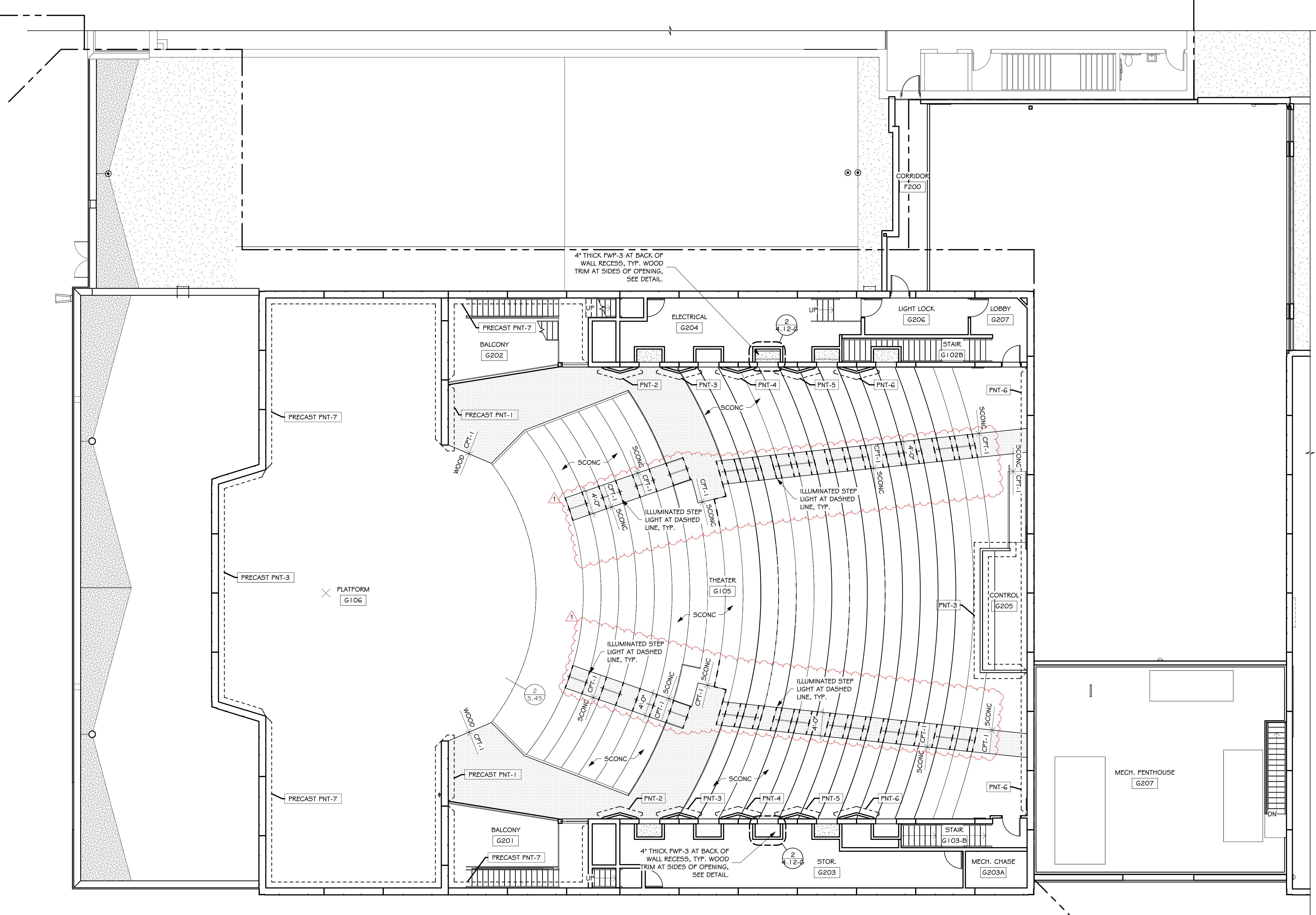
- a. MULTIPLE FLOOR FINISHES. REFER TO FINISH PLAN.
- b. MULTIPLE WALL FINISHES. REFER TO FINISH PLAN AND INTERIOR ELEVATIONS.
- c. MULTIPLE CEILING FINISHES. REFER TO REFLECTED CEILING PLAN.
- d. TILE FULL HEIGHT ON ALL WALLS. CAF WITH METAL TRIM AT TOP AND PAINT ABOVE. REFER TO ELEVATION G4-A0 FOR INSTALLATION PATTERN AND FURTHER DETAILS.
- e. TILE FULL HEIGHT ALL WALLS, UNO. SEE ELEVATION 5A-40.
- f. TILE FULL HEIGHT ON ALL SHOWER WALLS, UNO.
- g. AT CEILINGS WITH ACOUSTICAL Clouds, Drip Profiles, Paint Metal Roof Drip, AND OTHER STYLING, USE SPOT REFLECTED CEILING PLANS.
- h. FRP PANELS TO BE 1/2" X 4'0" AROUND MOP SINK. USE MANUFACTURER TRIM AND ACCESSORIES. CLEAR SEAL ALL JOINTS.
- NOT USED
- j. GYPSUM BOARD CEILING OVER SHOWER TO BE 5/8" EXTERIOR GYPSUM SOFFIT BOARD WITH POLYMER COATING.
- k. CEMENT BACKER TILE ON WOOD FLOOR. NO SEPARATE TILE BASE PROFILE. PROVIDE GROUT JOINT BETWEEN FLOOR AND WALL TILE.
- l. REMOVE AND REINSTALL EXISTING CEILING TILE AS REQUIRED FOR DUCTWORK INSTALLATION. REFER TO REFLECTED CEILING PLAN.
- m. PROVIDE COVED TILE BASE.

AREA G MEZZANINE LEVEL ROOM FINISH SCHEDULE

NUMBER	NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	NOTES
G201	BALCONY	SCONC	--	PNT-7	E5	DPPNT-7
G202	BALCONY	SCONC	--	PNT-7	E5	DPPNT-7
G203	STOR.	SCONC	--	PNT-I	E5	
G203A	MECH. CHASE	--	--	--	--	
G204	ELECTRICAL	SCONC	--	PNT-I	GWB	PNT-I
G205	CONTROL	CPT-I	RB-I	PNT-3, G	E5	DPPNT-7
G206	LIGHT LOCK	CPT-I	RB-I	PNT-3	ACT-I	
G207	MECH. PENTHOUSE	SCONC	--	--	E5	
G207	LOBBY	CPT-I	RB-I	PNT-3	ACT-I	

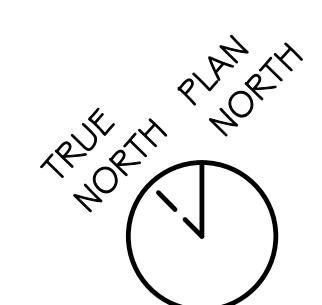
AREA G CATWALK LEVEL ROOM FINISH SCHEDULE

NUMBER	NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	NOTES
G300	WALKWAY	PLYWOOD	--	PNT-7	DPPNT-7	



MEZZANINE FINISH PLAN - AREA G

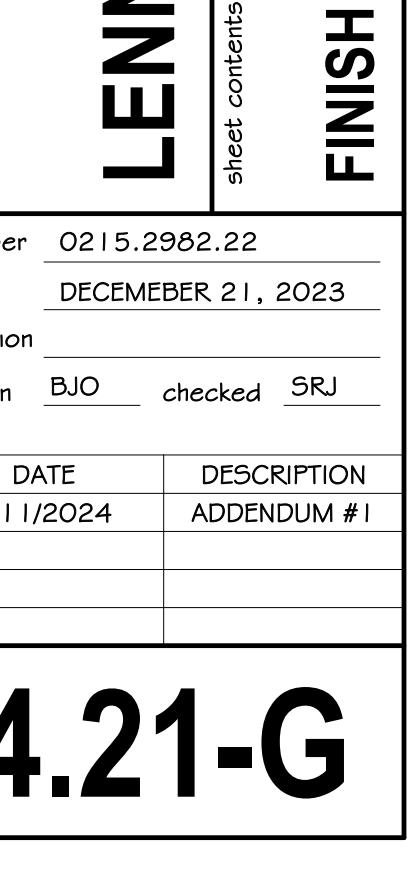
SCALE: 1/8" = 1'-0"



**LENNOX HIGH SCHOOL ADDITION**

**FINISH PLAN - MEZZANINE - AREA G**

Project	number	0215.2982.22
date	revision	DECEMBER 21, 2023
drawn	checked	BJO SRJ
DATE	DESCRIPTION	1/1/2024 ADDENDUM #1
KEYPLAN		



4.21-G

GENERAL NOTES- FLOOR PLAN

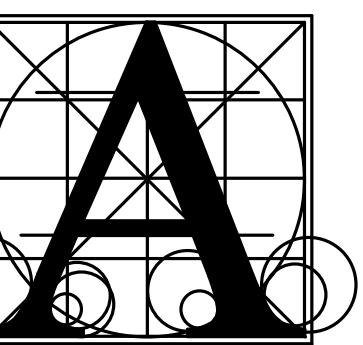
A. GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOBSITE AND REPORT DISCRENCIES TO THE ARCHITECT.

B. SEE MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

C. GENERAL CONTRACTOR RESPONSIBLE FOR PROTECTION OF ALL INTERIOR FINISHES AND EQUIPMENT THAT ARE TO REMAIN.

D. SEE SHEET I.10 FOR WALL TYPES.

E. REFER TO FINISH PLANS FOR BURNISHED BLOCK LOCATIONS.



Architecture  
Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



## LENNOX HIGH SCHOOL ADDITION

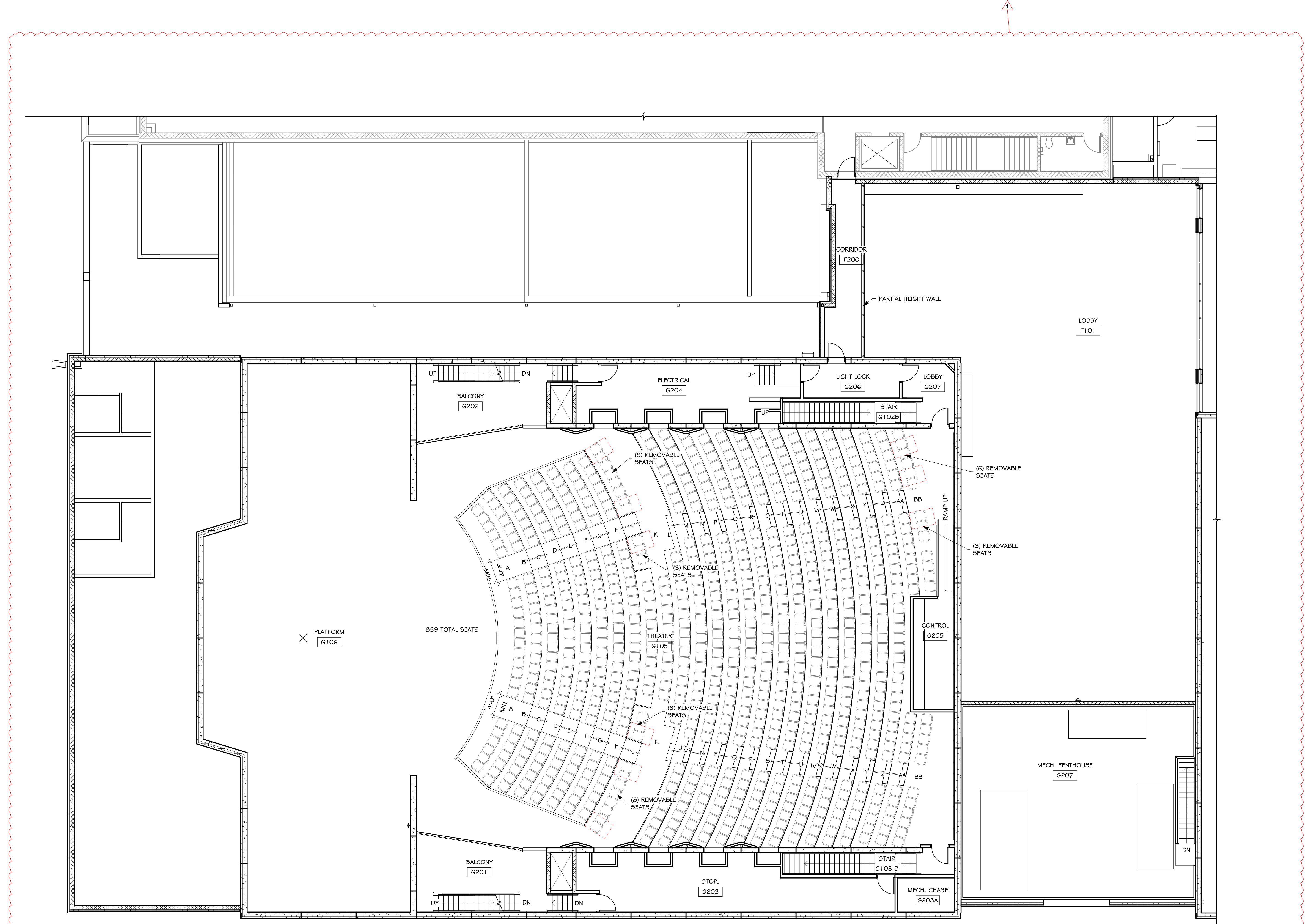
FURNITURE PLAN - MEZZANINE - AREA G

sheet contents

Project

number	0215.2982.22
date	DECEMBER 21, 2023
revision	
drawn	BJO
checked	SRJ
DATE	DESCRIPTION
1/11/2024	ADDENDUM #1

4.61-G





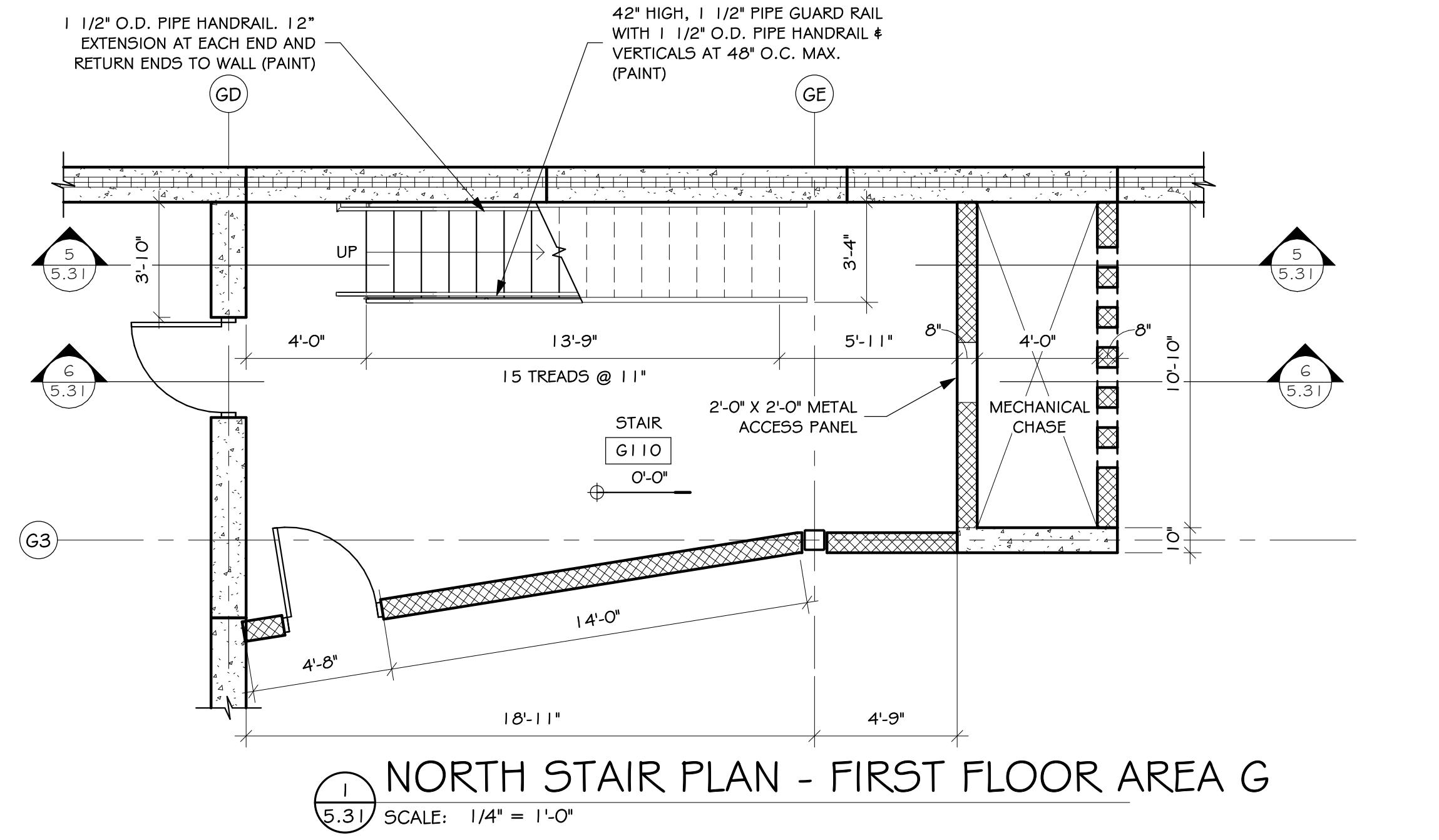


# LENNOX HIGH SCHOOL ADDITION

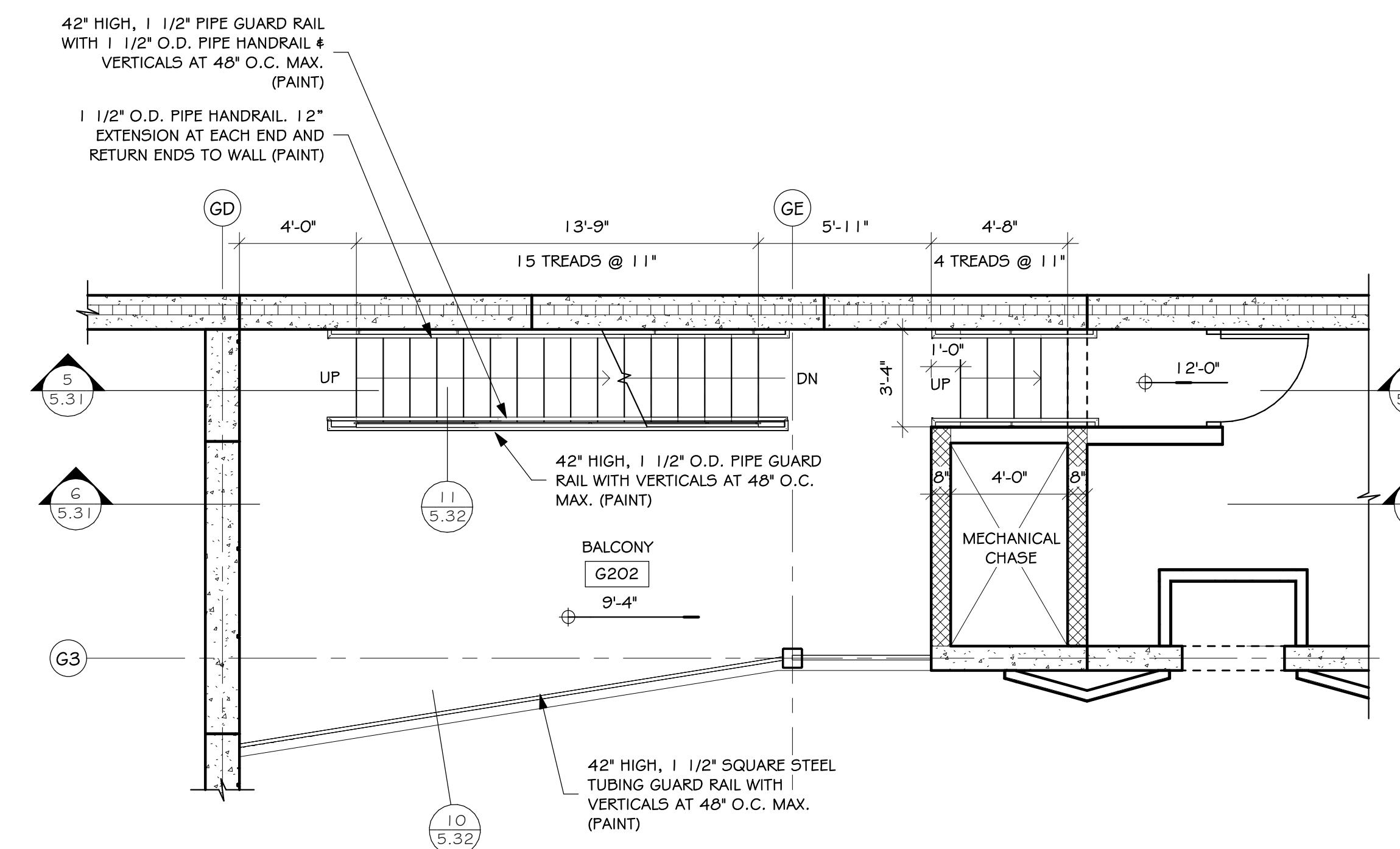
ENRARGED STAIR PLANS & SECTIONS

ENI ARGE

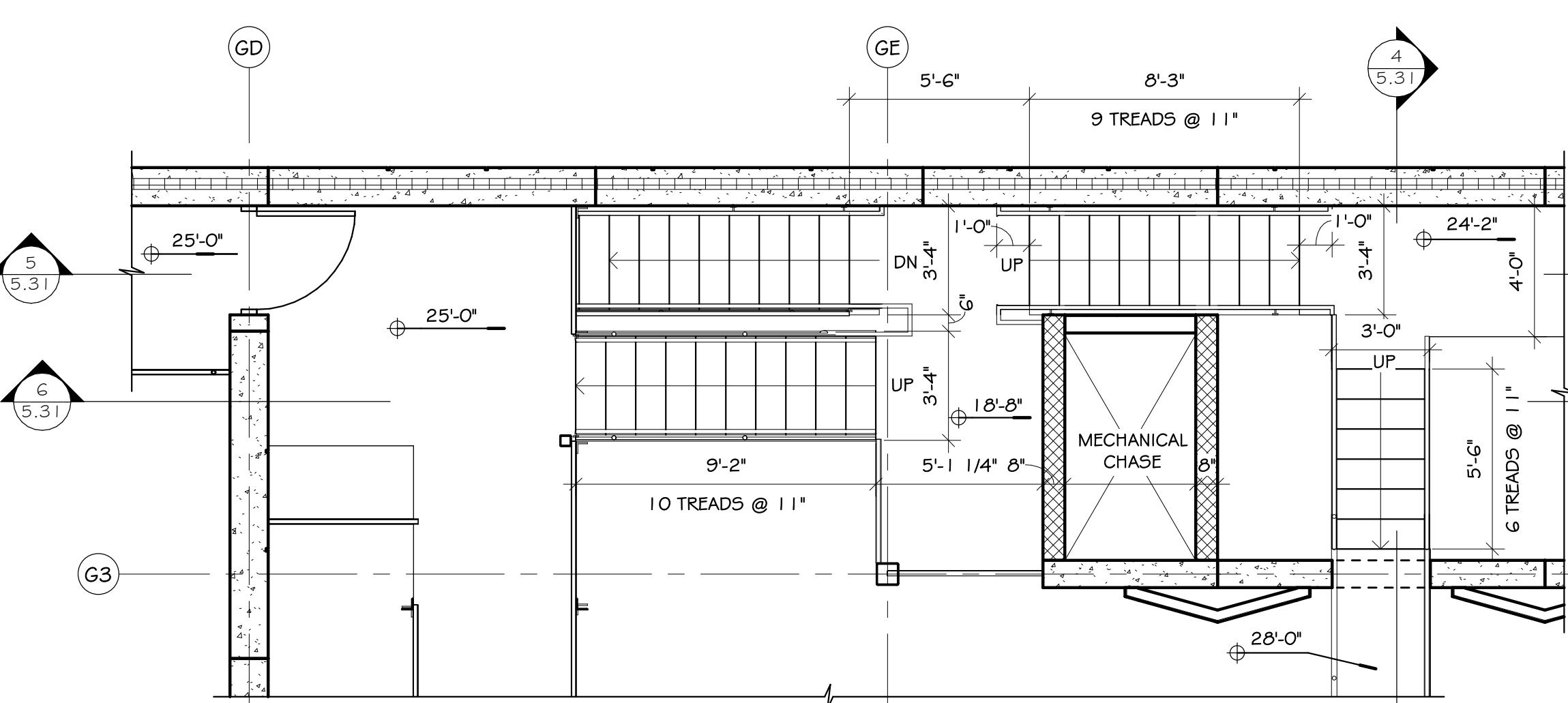
# 5.31



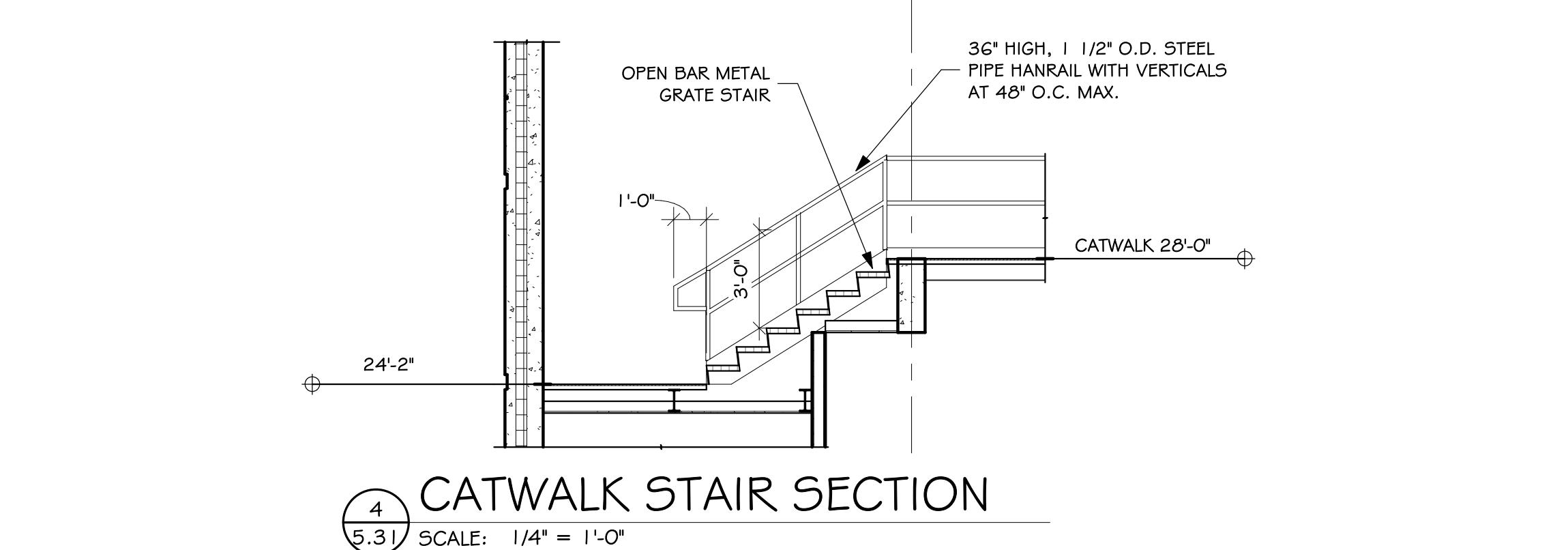
**NORTH STAIR PLAN - FIRST FLOOR AREA**



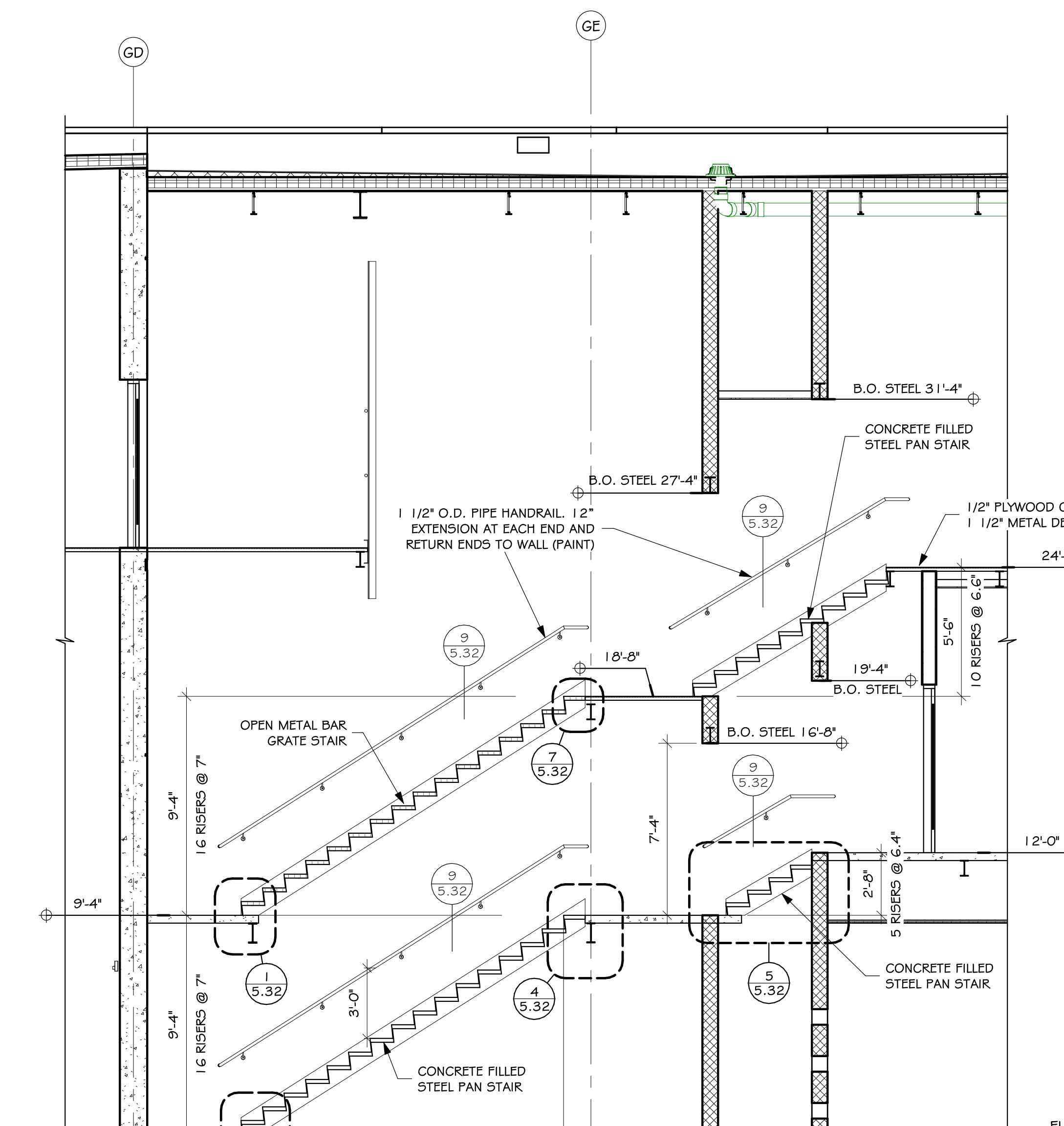
2  
5.31 NORTH STAIR PLAN - INTERMEDIATE LEVEL AREA G  
SCALE 1/4" = 1'-0"



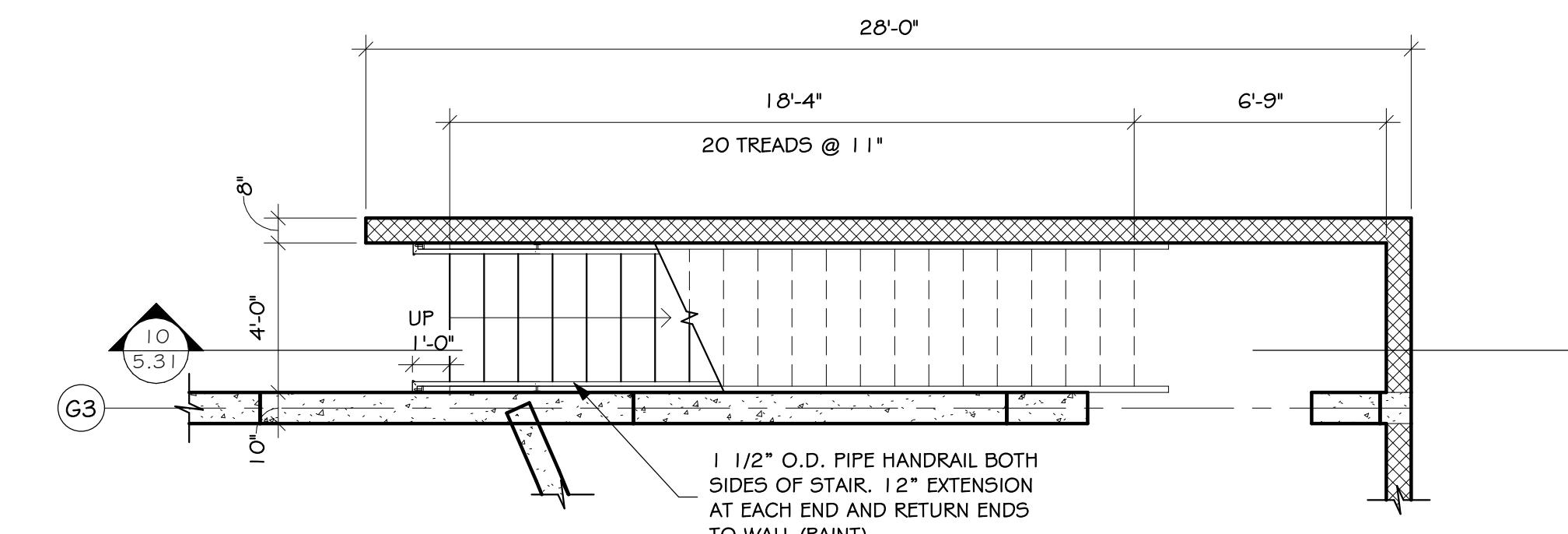
3  
5.31 NORTH STAIR PLAN - CATWALK LEVEL AREA C  
SCALE: 1/4" = 1' 0"



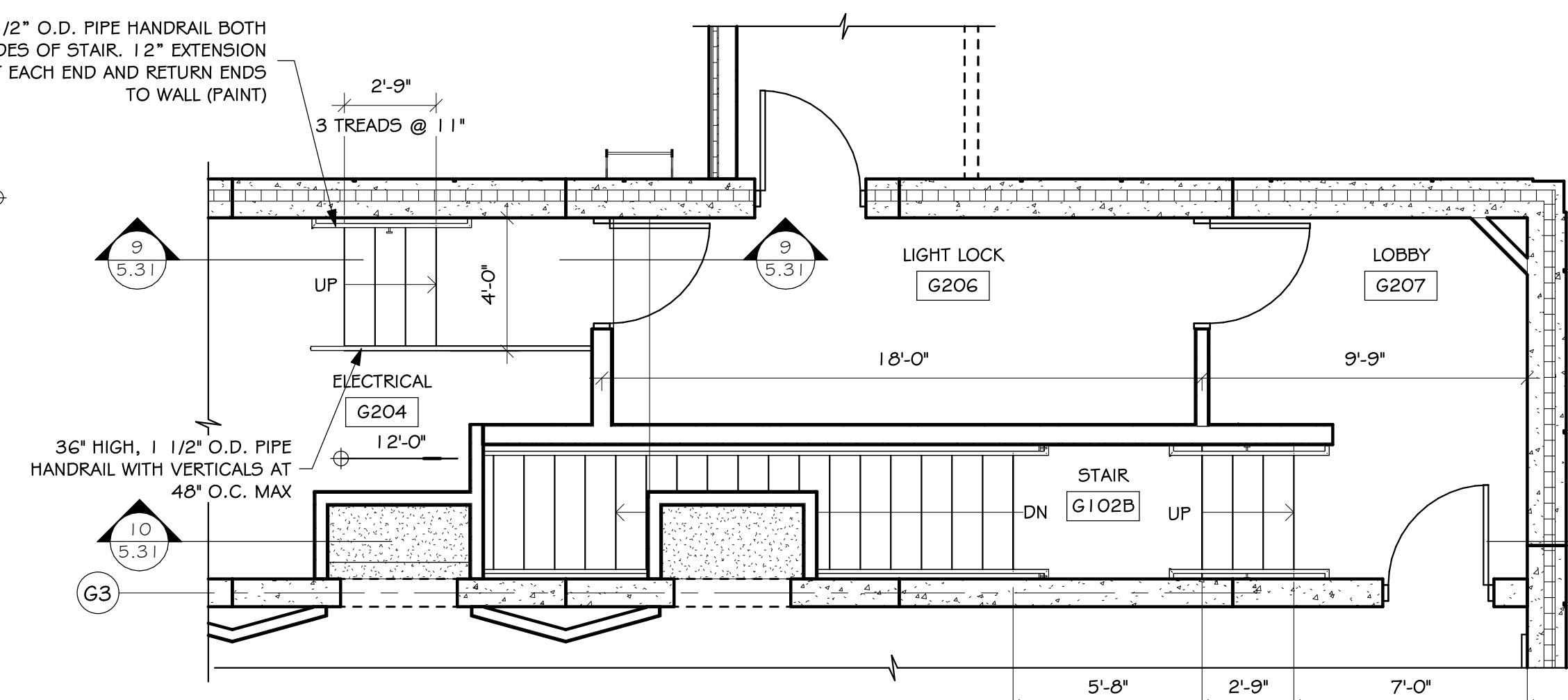
# CATWALK STAIR SECTION



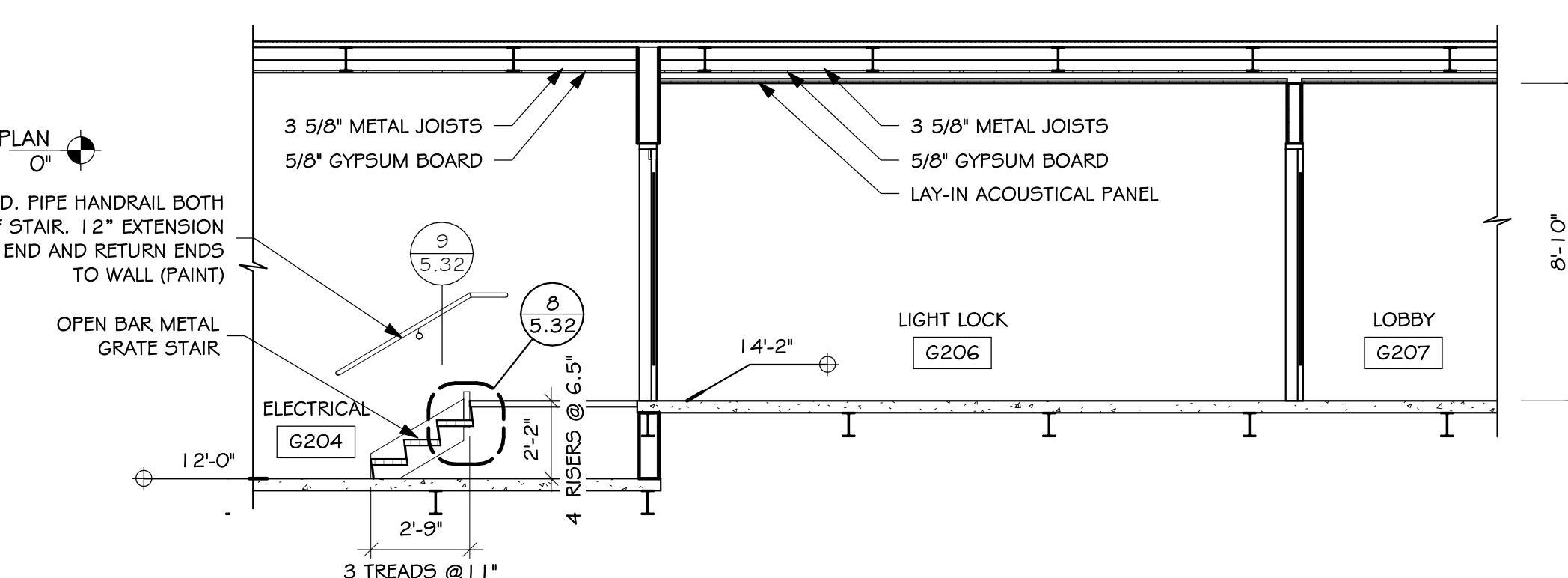
# NORTH STAIR SECTION - AREA



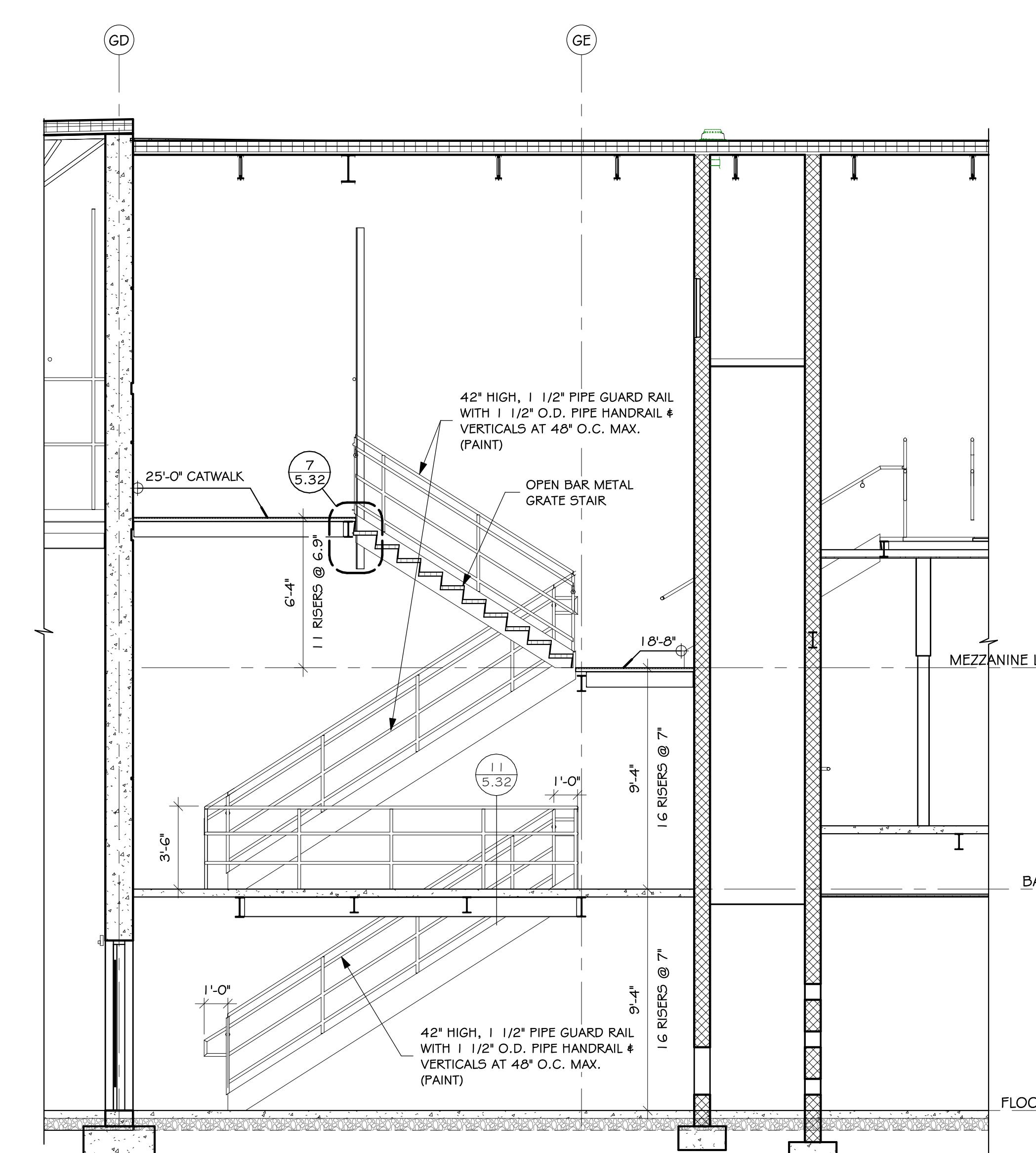
 NORTH STAIR PLAN - FIRST FLOOR AREA G  
5.31 SCALE: 1/4" = 1'-0"



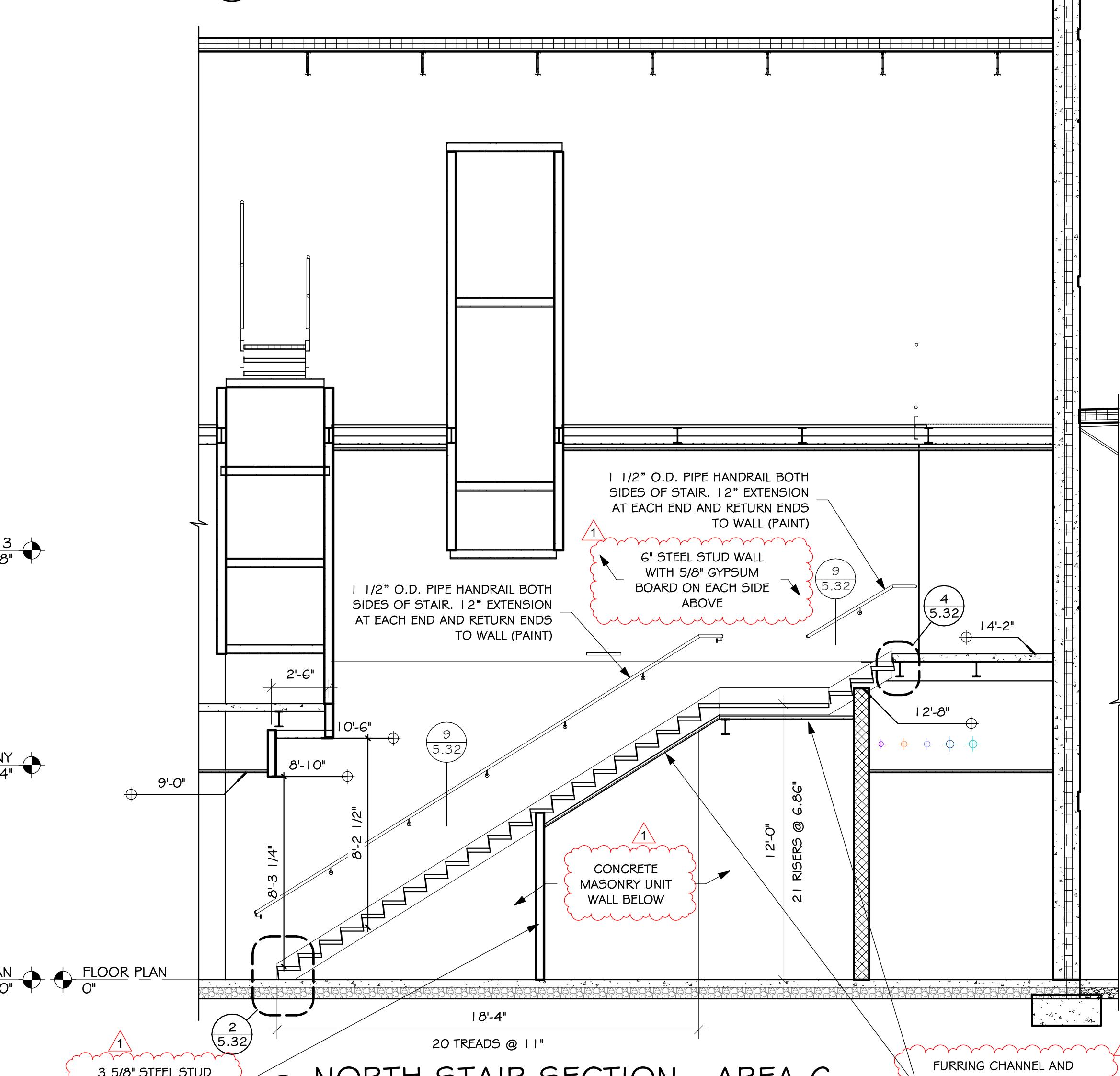
8 NORTH STAIR PLAN - MEZZANINE LEVEL AREA G



# STAIR SECTION



**NORTH STAIR SECTION - AREA**



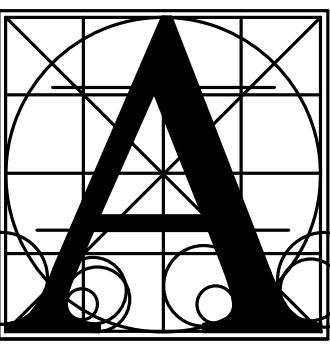
5/8" STEEL STUD  
TH 5/8" GYPSUM  
ARD ON ONE SIDE



10  
5.31

# NORTH STAIR SECTION - AREA G

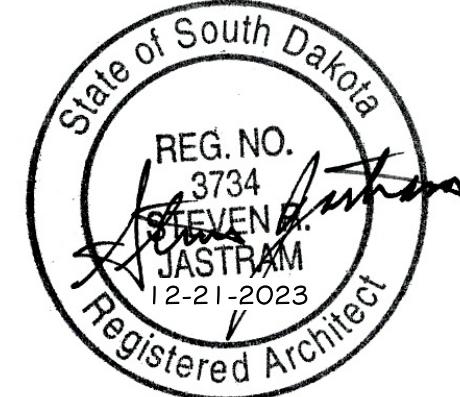
SCALE: 1/4" = 1'-0"



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158

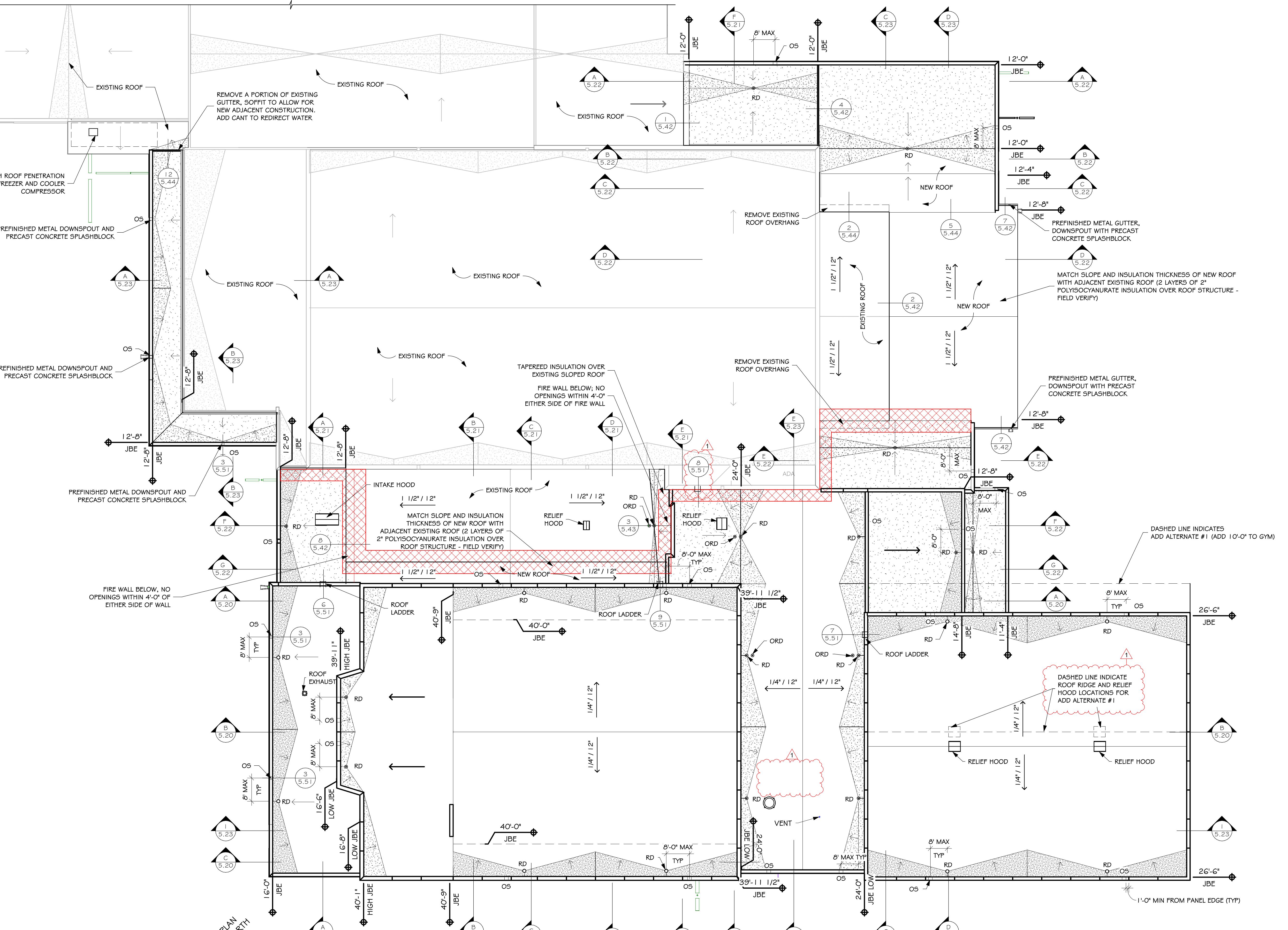


GENERAL NOTES - ROOF PLAN

- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE. REPORT DISCREPANCIES TO THE ARCHITECT.  
B. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS THAT MAY NOT BE INDICATED ON THIS SHEET.

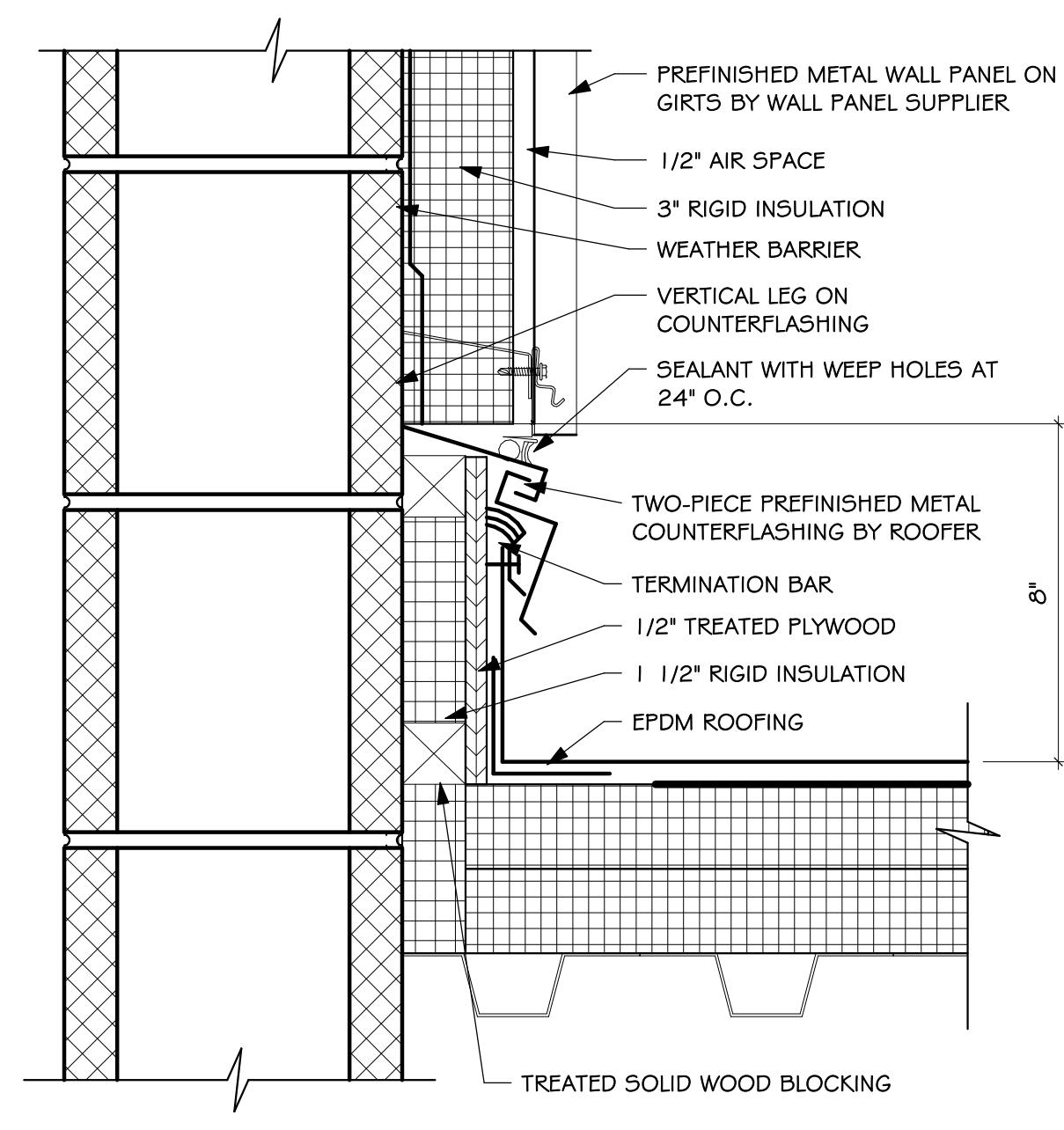
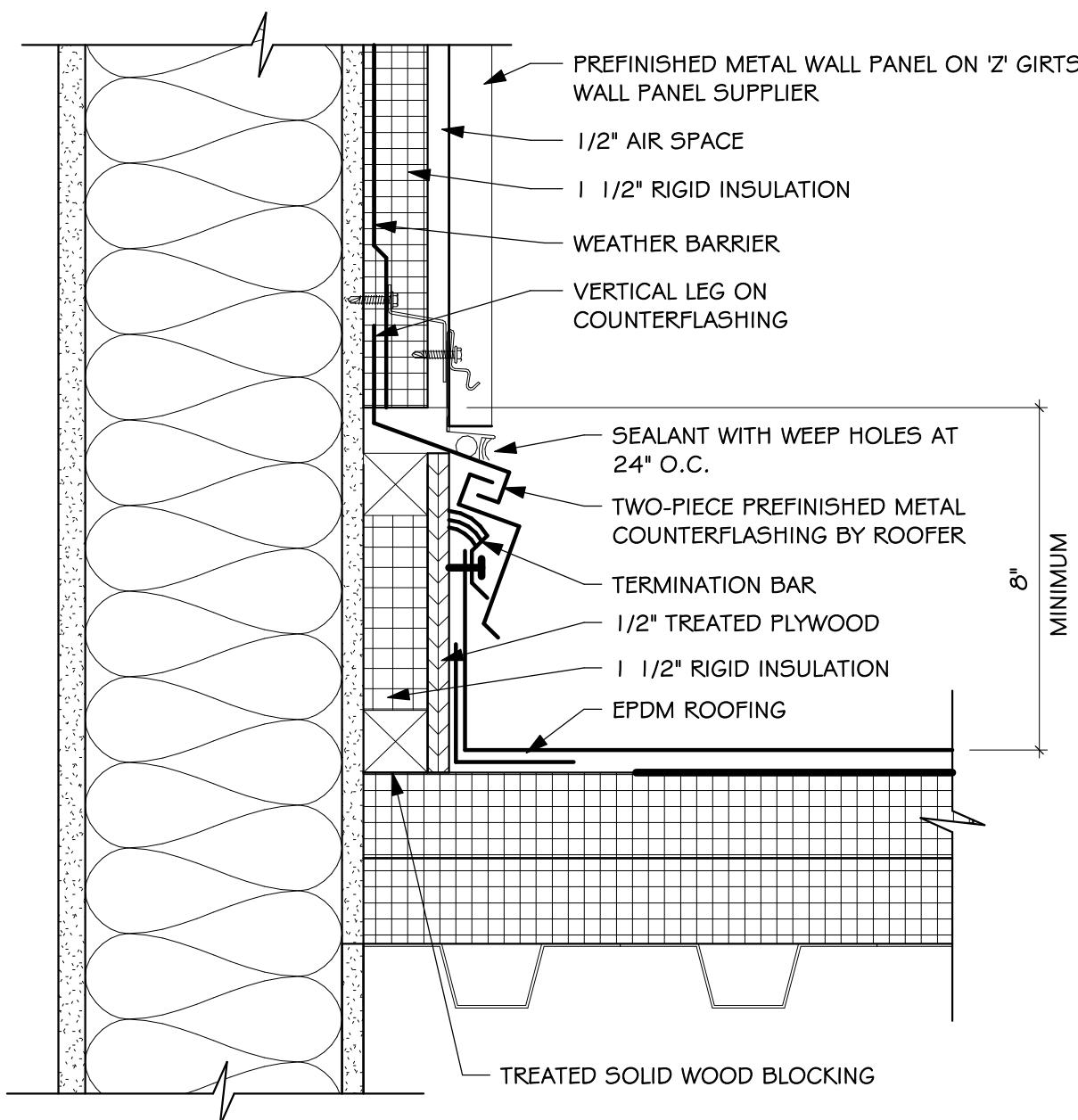
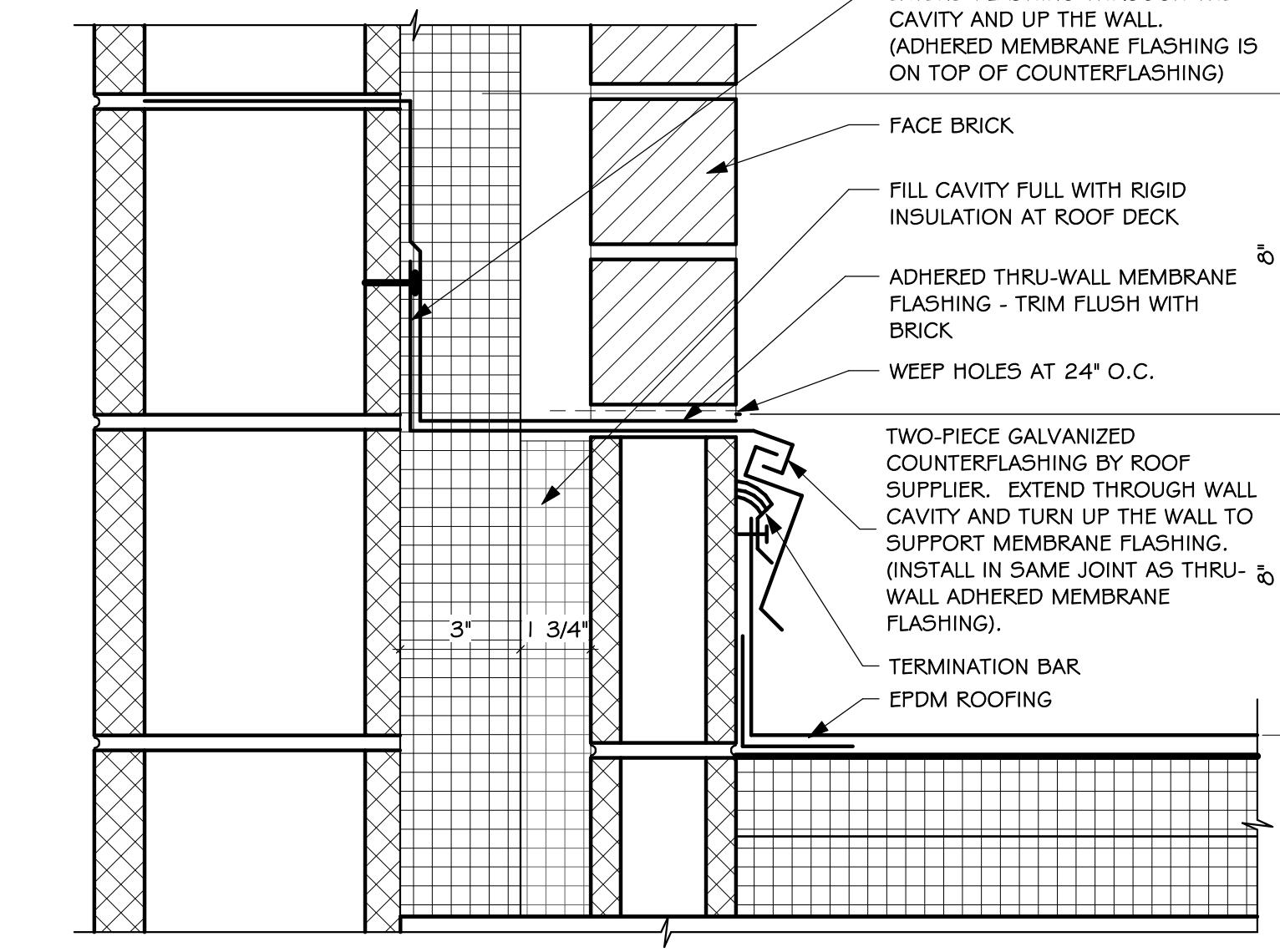
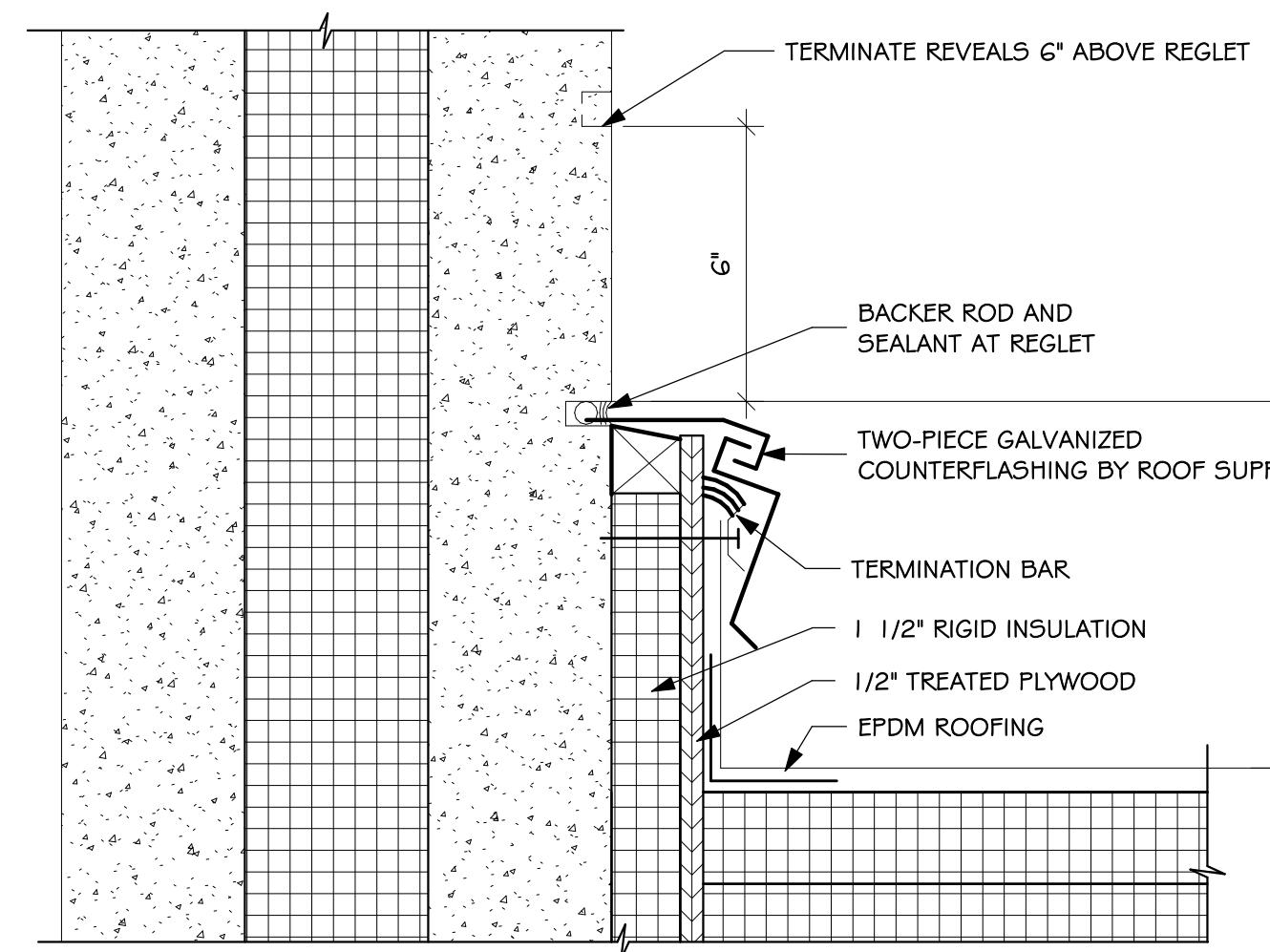
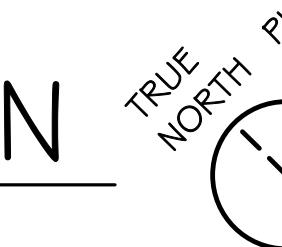
INSULATION LEGEND

	2 LAYERS OF 2.6" POLYISOCYANURATE INSULATION OVER VAPOR RETARDER OVER SLOPED ROOF STRUCTURE
	2.6" TOP LAYER POLYISOCYANURATE OVER 1/4" PER FOOT SLOPE TAPERED POLYISOCYANURATE (2.6" STARTING THICKNESS OVER VAPOR RETARDER)
	2.6" TOP LAYER POLYISOCYANURATE OVER 1/2" PER FOOT SLOPE TAPERED POLYISOCYANURATE INSULATION CANT OVER 2.6" POLYISOCYANURATE
	INDICATES DIRECTION OF ROOF SLOPE (1/4" PER FOOT MINIMUM)
	RD ROOF DRAIN, SEE MECHANICAL DRAWINGS
	OD OVERFLOW ROOF DRAIN, SEE MECHANICAL DRAWINGS
	OS OVERFLOW SCUPPER, LOCATE 2' ABOVE ROOF DRAIN
	OV VENT, SEE MECHANICAL DRAWINGS
	LOCATION OF FIRE WALL BELOW ROOF. NO OPENINGS IN THE ROOF WITHIN 4'-0" EITHER SIDE OF THE FIRE WALL, INDICATED BY HATCH PATTERN.



ROOF PLAN

SCALE: 1/16" = 1'-0"



2 THRU WALL FLASHING - PRECAST WALL

5.50

SCALE: 3" = 1'-0"

3 THRU-WALL FLASHING - MASONRY WALL

5.50

SCALE: 3" = 1'-0"

4 FLAShING AT STUDS/METAL PANELS

5.50

SCALE: 3" = 1'-0"

5 THRU WALL FLASHING - CMU/METAL PANELS

5.50

SCALE: 3" = 1'-0"

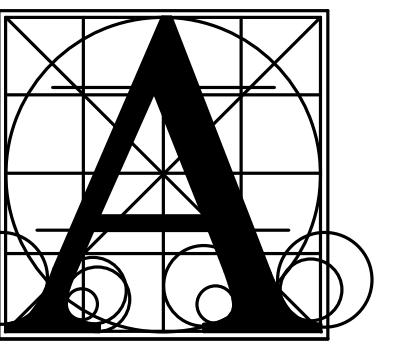
**LENNOX HIGH SCHOOL ADDITION**

ROOF PLAN AND DETAILS

Project: number 0215.2982.22  
date DECEMBER 21, 2023  
revision:  
drawn MS checked SRJ

DATE 1/1/2024 DESCRIPTION ADDENDUM #1

5.50



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



## LENNOX HIGH SCHOOL ADDITION

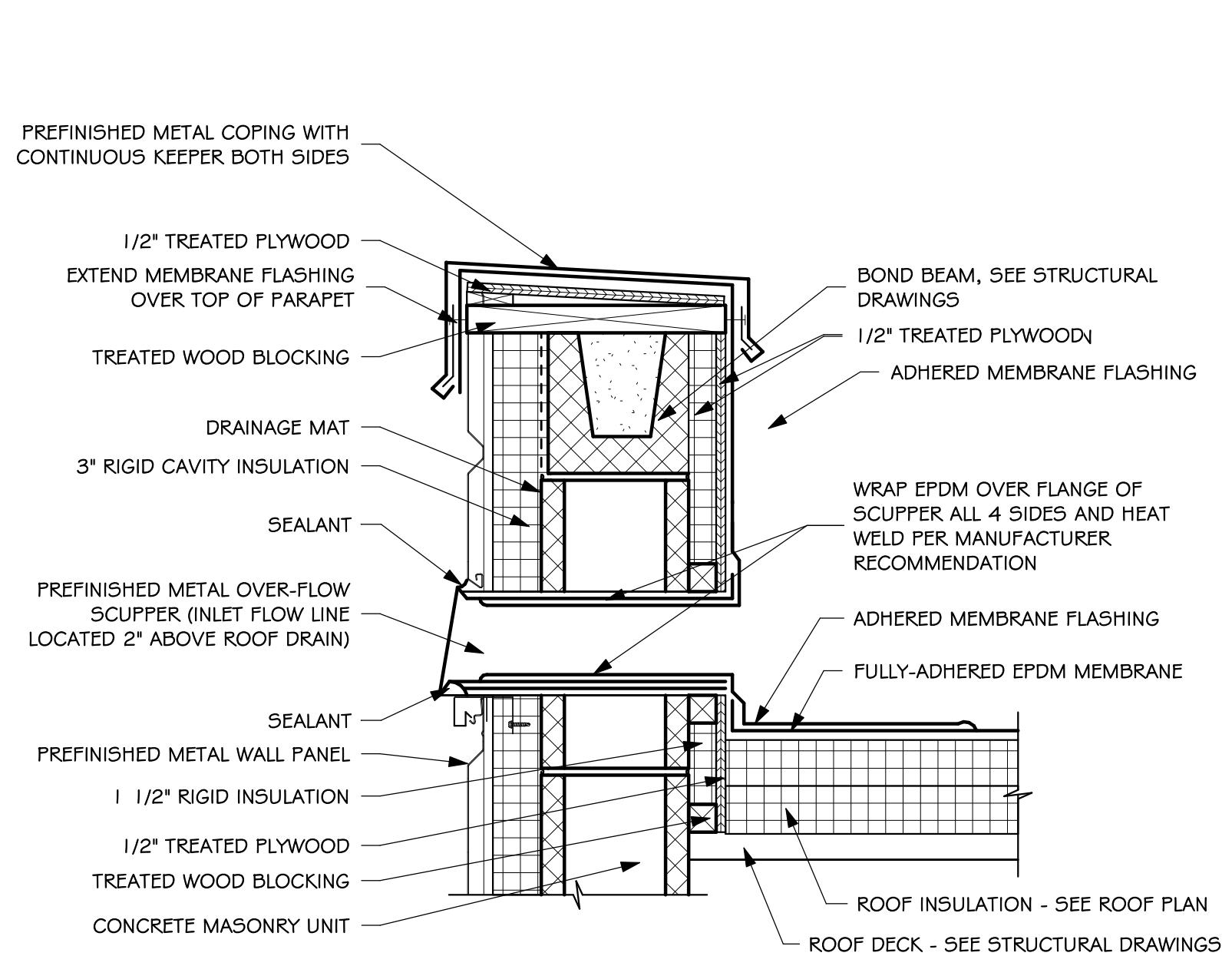
### ROOF DETAILS

sheet contents

Project

number	0215.2982.22
date	DECEMBER 21, 2023
revision	
drawn	MS
checked	SRJ
DATE	1/11/2024
DESCRIPTION	ADDENDUM #1

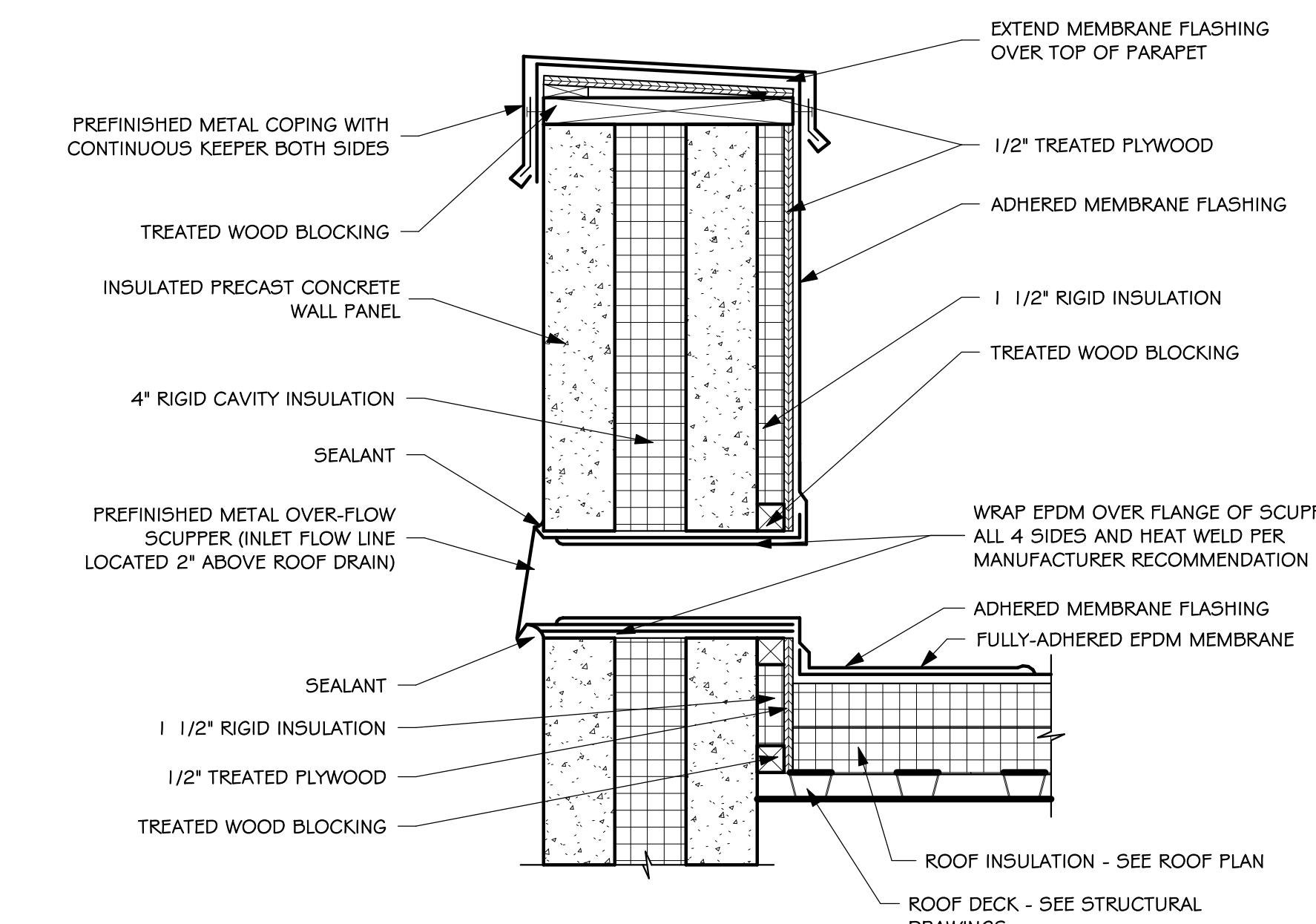
5.51



1 OVERFLOW SCUPPER - MASONRY/METAL PANEL

(5.51)

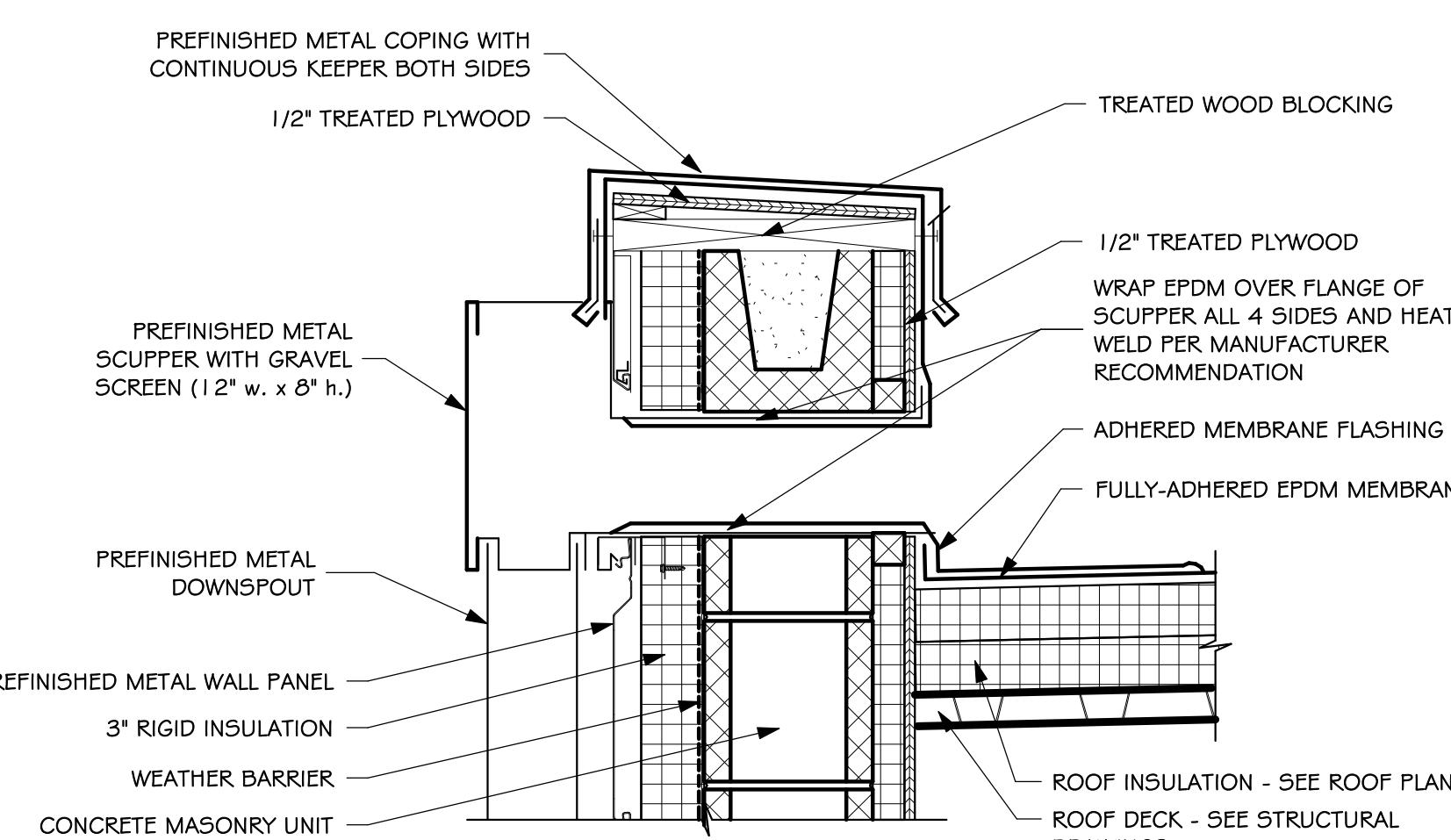
SCALE: 1 1/2" = 1'-0"



2 OVERFLOW SCUPPER - PRECAST

(5.51)

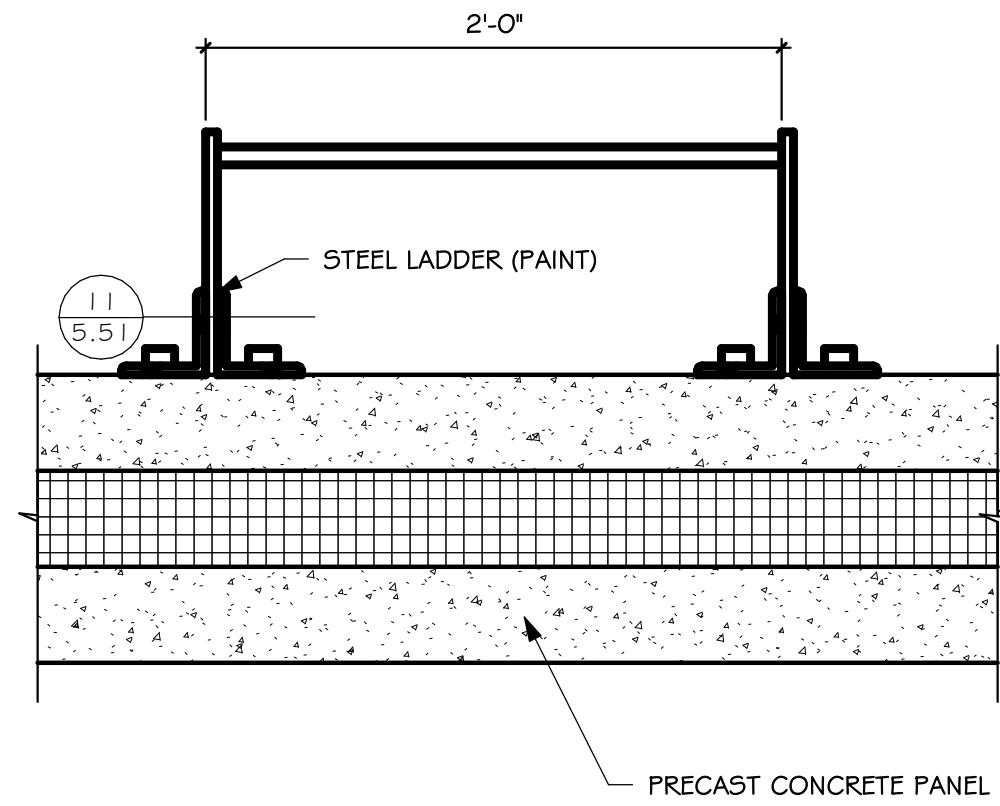
SCALE: 1 1/2" = 1'-0"



3 SCUPPER & DOWNSPOUT - MASONRY/METAL WALL PANEL

(5.51)

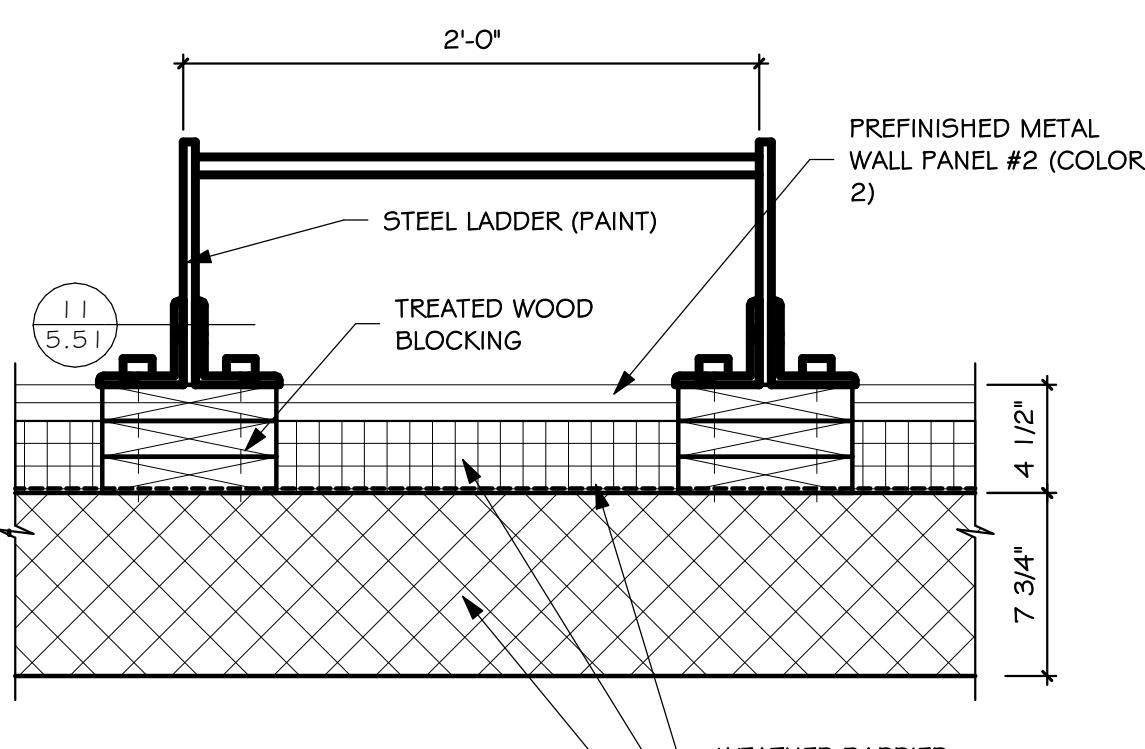
SCALE: 1 1/2" = 1'-0"



4 LADDER DETAIL - PRECAST

(5.51)

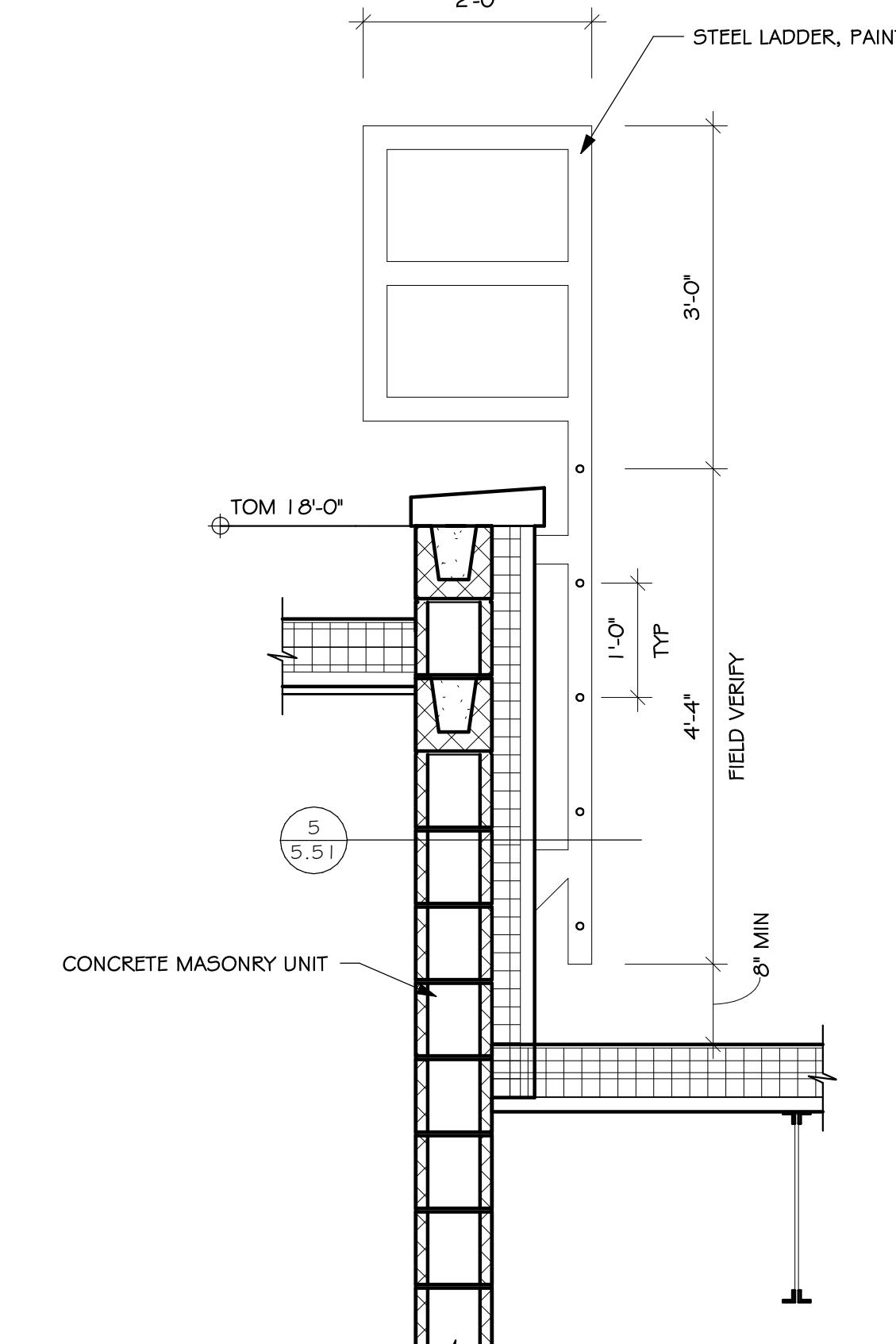
SCALE: 1 1/2" = 1'-0"



5 LADDER DETAIL - CMU/METAL WALL PANEL

(5.51)

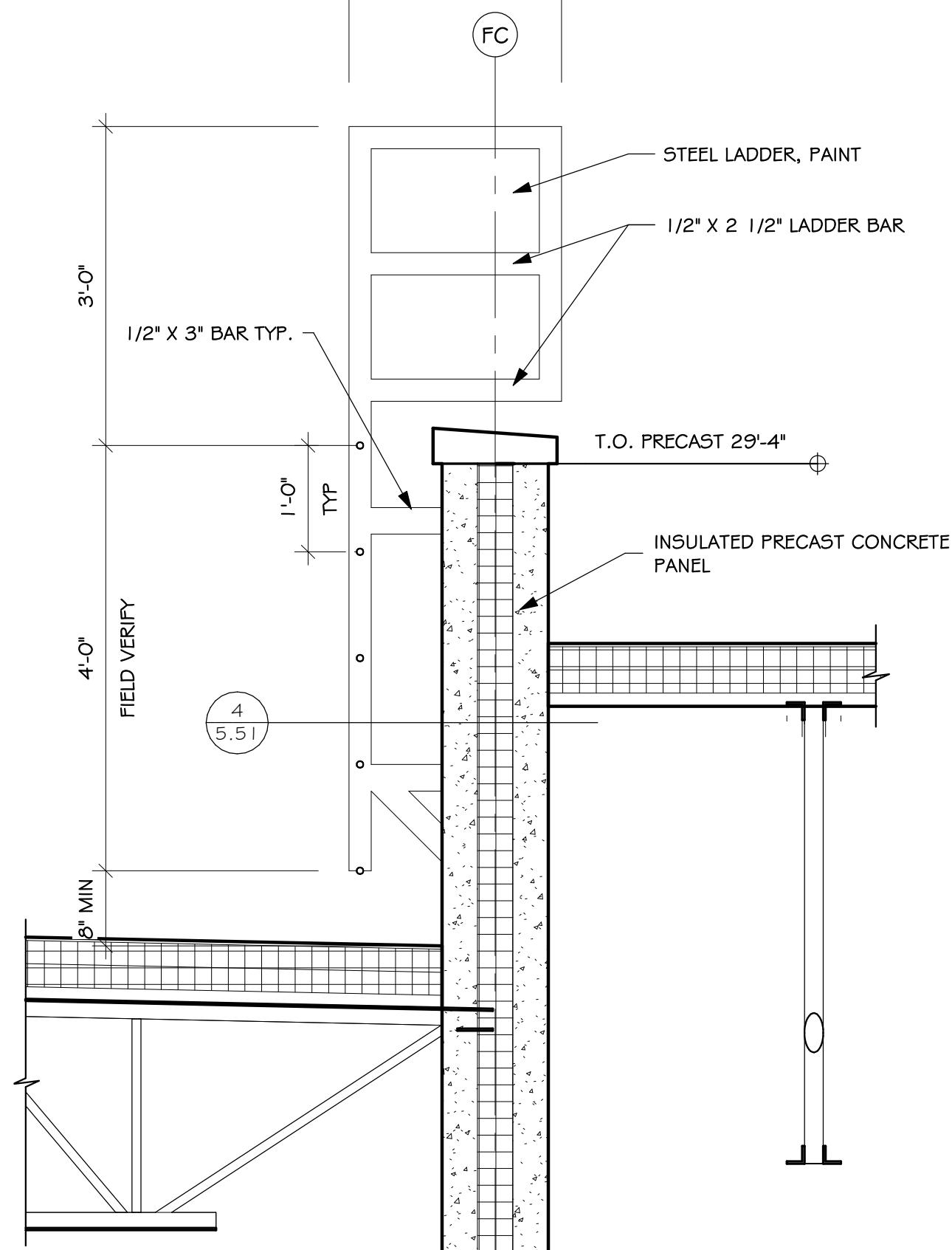
SCALE: 1 1/2" = 1'-0"



6 ROOF LADDER SECTION

(5.51)

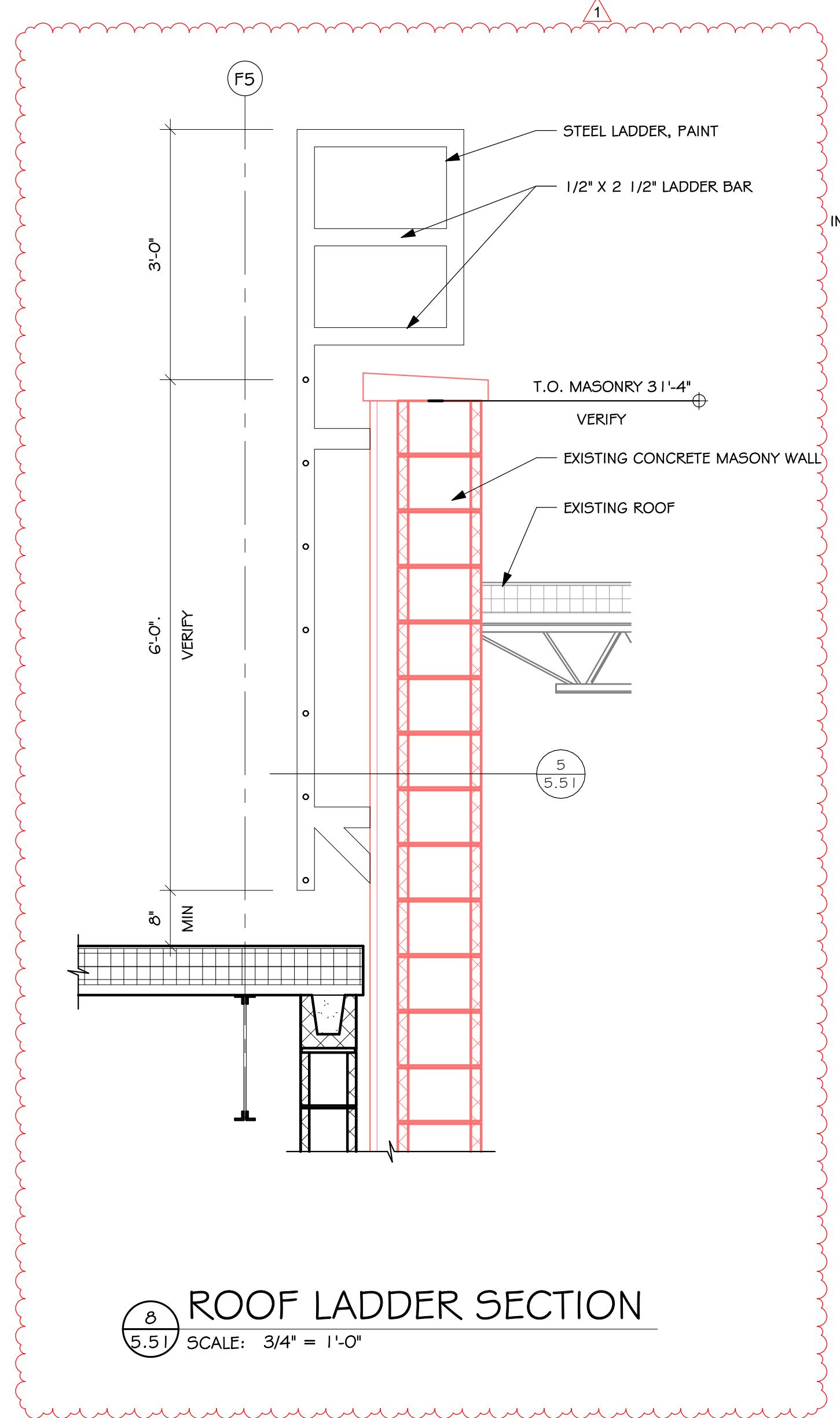
SCALE: 3/4" = 1'-0"



7 ROOF LADDER SECTION

(5.51)

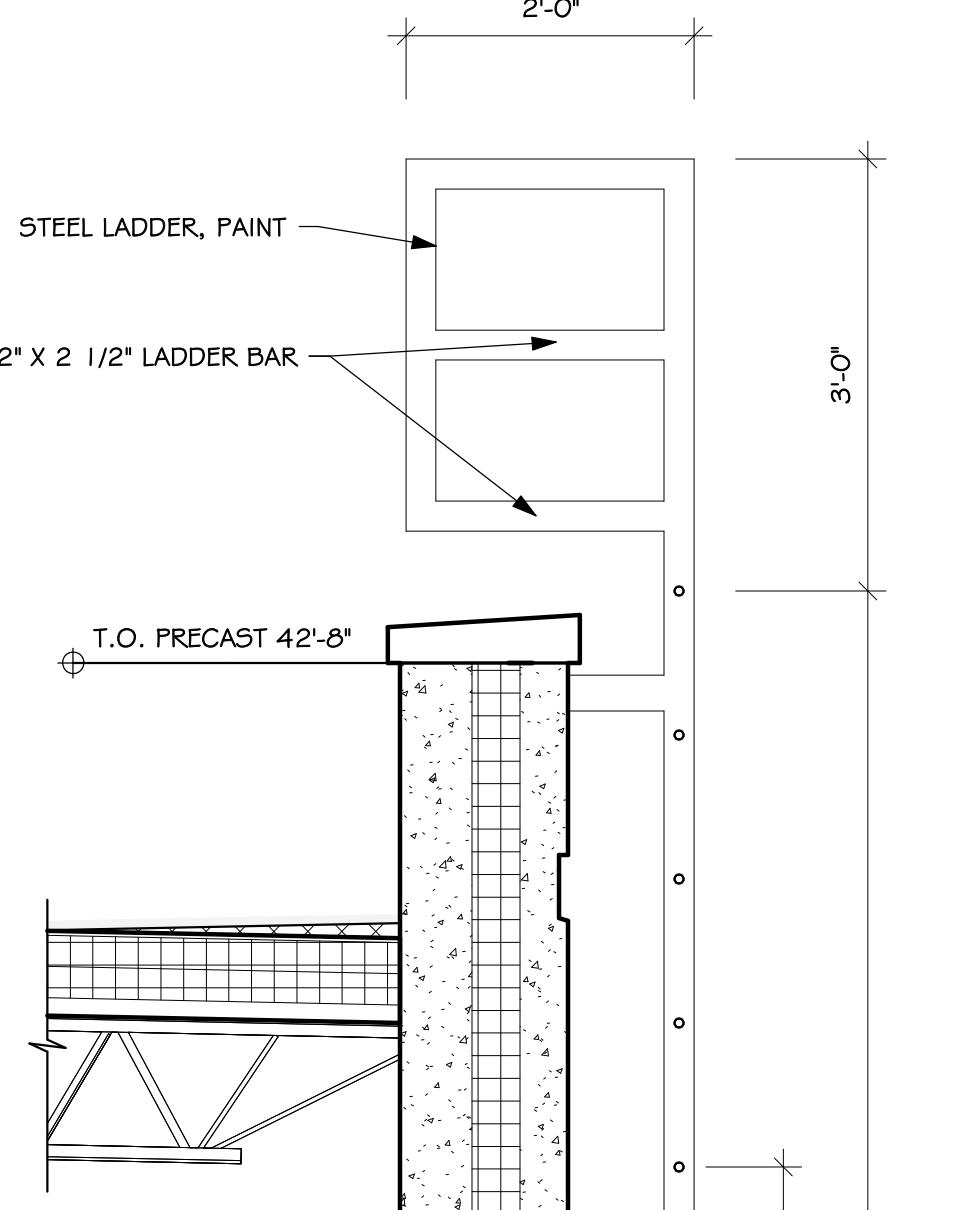
SCALE: 3/4" = 1'-0"



8 ROOF LADDER SECTION

(5.51)

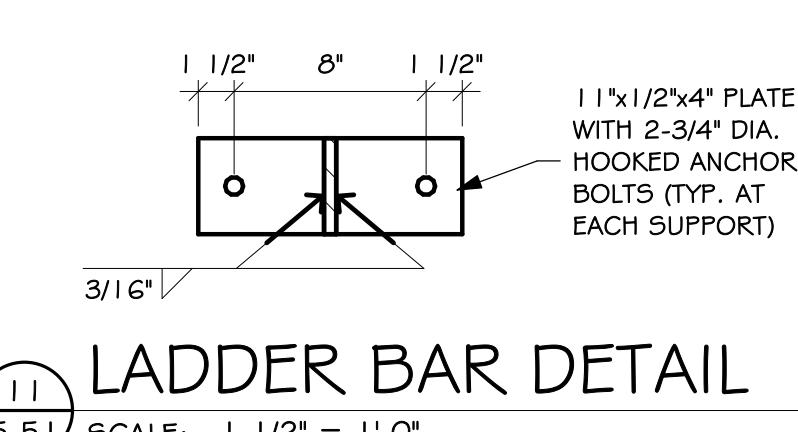
SCALE: 3/4" = 1'-0"



9 ROOF LADDER SECTION

(5.51)

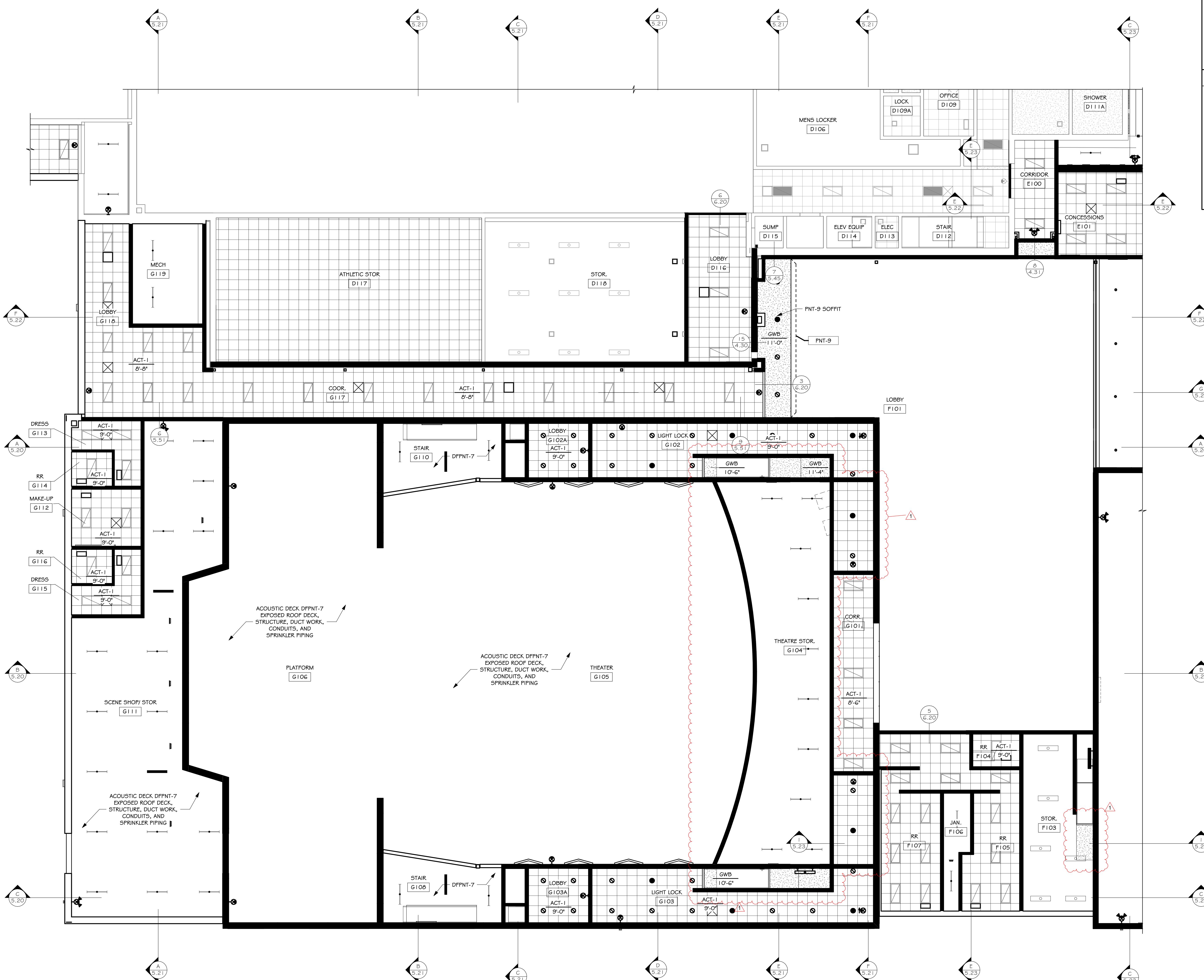
SCALE: 3/4" = 1'-0"



10 LADDER BAR DETAIL

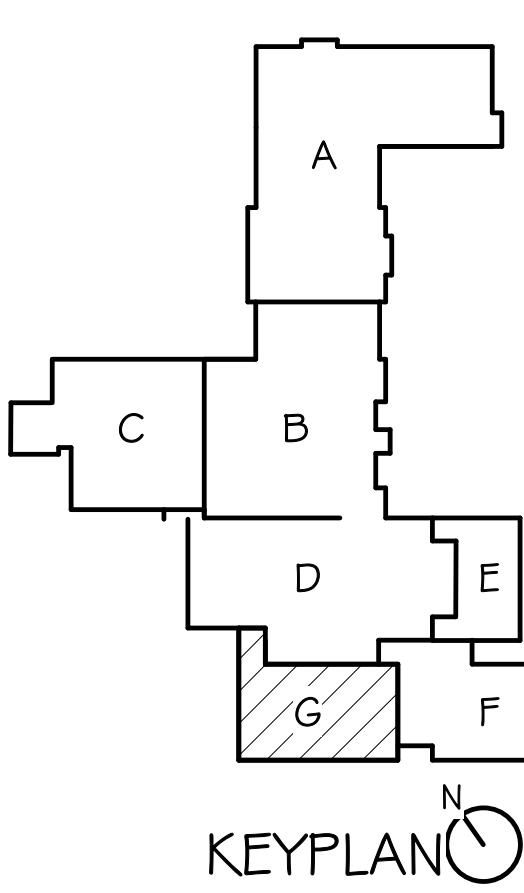
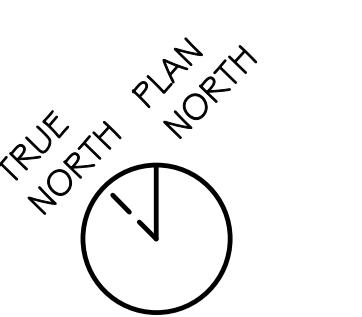
(5.51)

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



REFLECTED CEILING PLAN - FIRST FLOOR - AREA G

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

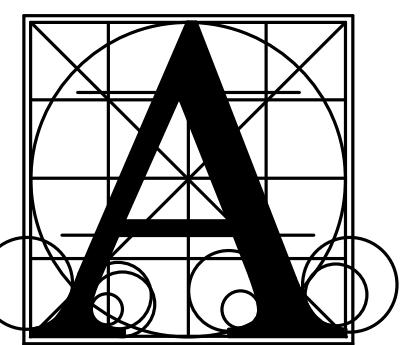


## LENNOX HIGH SCHOOL ADDITION

### REFLECTED CEILING PLAN - FIRST FLOOR - AREA G

GENERAL NOTES - REFLECTED CEILING PLAN

- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOINTS AND TIPS OF ALL EXISTING CONDUITES.
- B. MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- C. ALL BULKHEAD AND SOFFITS SHALL EXTEND 2 INCHES BELOW ADJACENT CEILING HEIGHT UNLESS NOTED OTHERWISE.
- D. REFLECTED CEILING PLANS SHOW LOCATIONS OF ITEMS THAT ARE ARCHITECTURALLY SIGNIFICANT ONLY. MECHANICAL AND ELECTRICAL ITEMS INDICATED ARE FOR REFERENCE ONLY. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS.
- E. THE HORIZONTAL AND VERTICAL FACES OF SOFFITS SPECIFIED PAINT COLOR, UNLESS NOTED OTHERWISE. REFER TO RCP FOR PAINT COLOR.



Architecture  
Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



REG. NO.  
3734  
STEVEN  
JASTAK  
12-21-2023  
Registered Architect

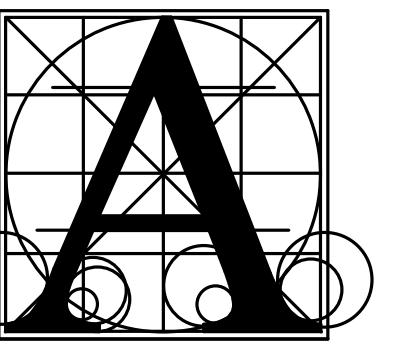
REFLECTED CEILING PLAN LEGEND	
RECESSED LIGHT	RADIANT HEATING PANEL
RECESSED LIGHT	WALL EXTENDED & SEALED TO STRUCTURE ABOVE TO PREVENT AIR/SOUND TRANSFER FROM ROOM TO ROOM
SURFACE LIGHT	WALL TO ABOVE CEILING
SURFACE LIGHT	SUPPLY GRILLE
SURFACE LIGHT	TRACK LIGHTING
	RETURN/EXHAUST GRILLE

sheet/contents

number 0215.2982.22  
date DECEMBER 21, 2023  
revision  
drawn SWP checked SRJ

DATE 1/1/2024 DESCRIPTION ADDENDUM #1

6.10-G



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158

*Damon deWitt*  
9398  
DAMON  
deWIT  
TYPICAL  
DUCTWORK  
VENTILATION



**Associated  
Consulting  
Engineering,  
Inc.**

340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.com  
ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

### FIRST FLOOR PLAN - AREA E - VENTILATION & A/C

Sheet contents

Project

number 0215.2982.22

date DECEMBER 21, 2023

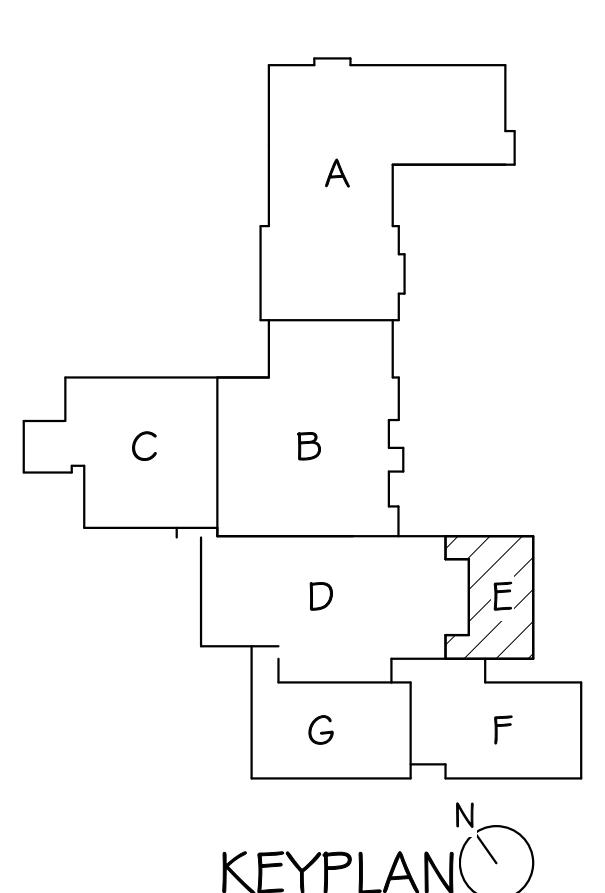
revision

drawn DDK checked Dd

DATE 01-11-2024

DESCRIPTION Addendum #1

8.40-E



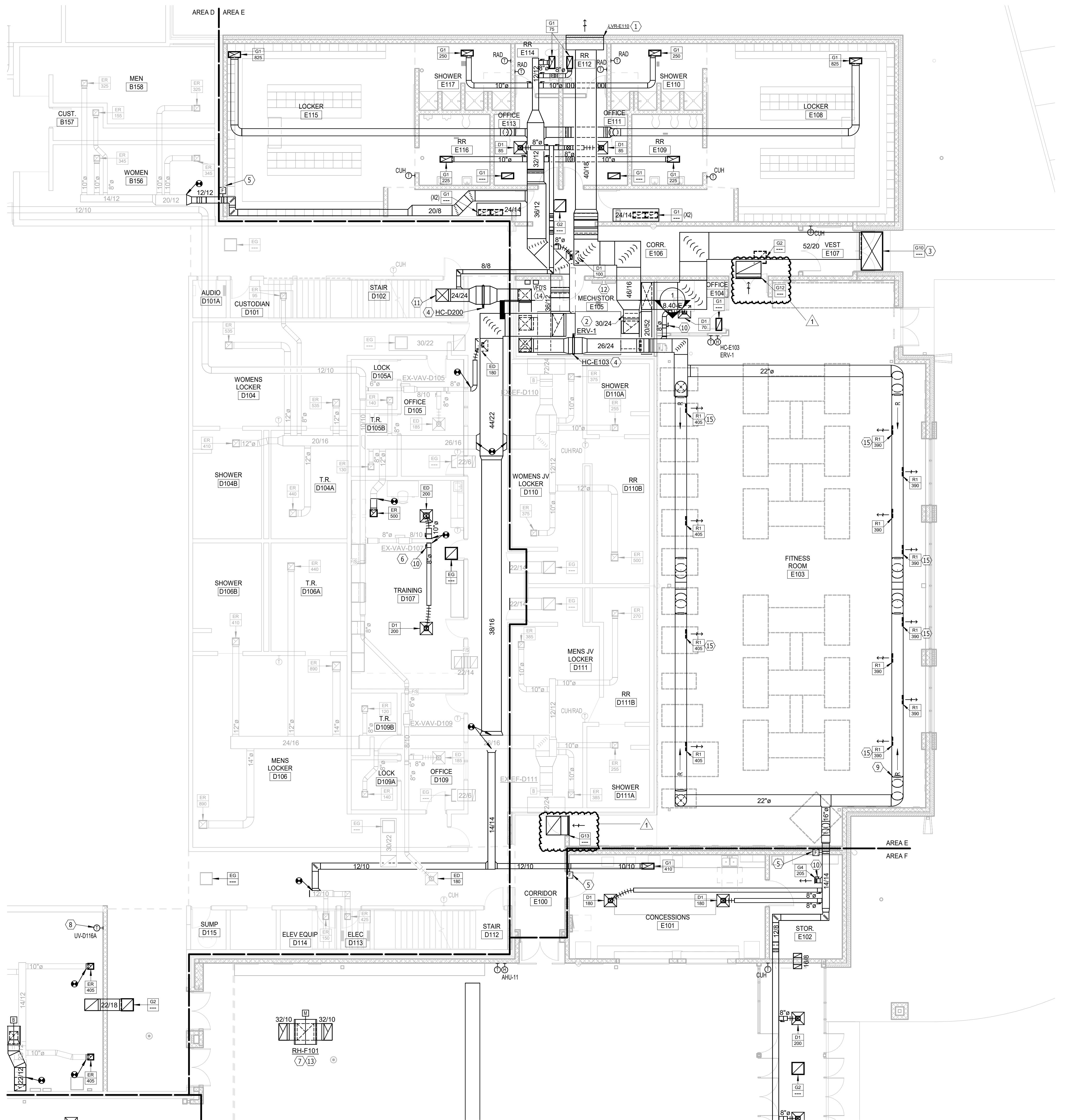
KEYPLAN

#### GENERAL SHEET NOTES

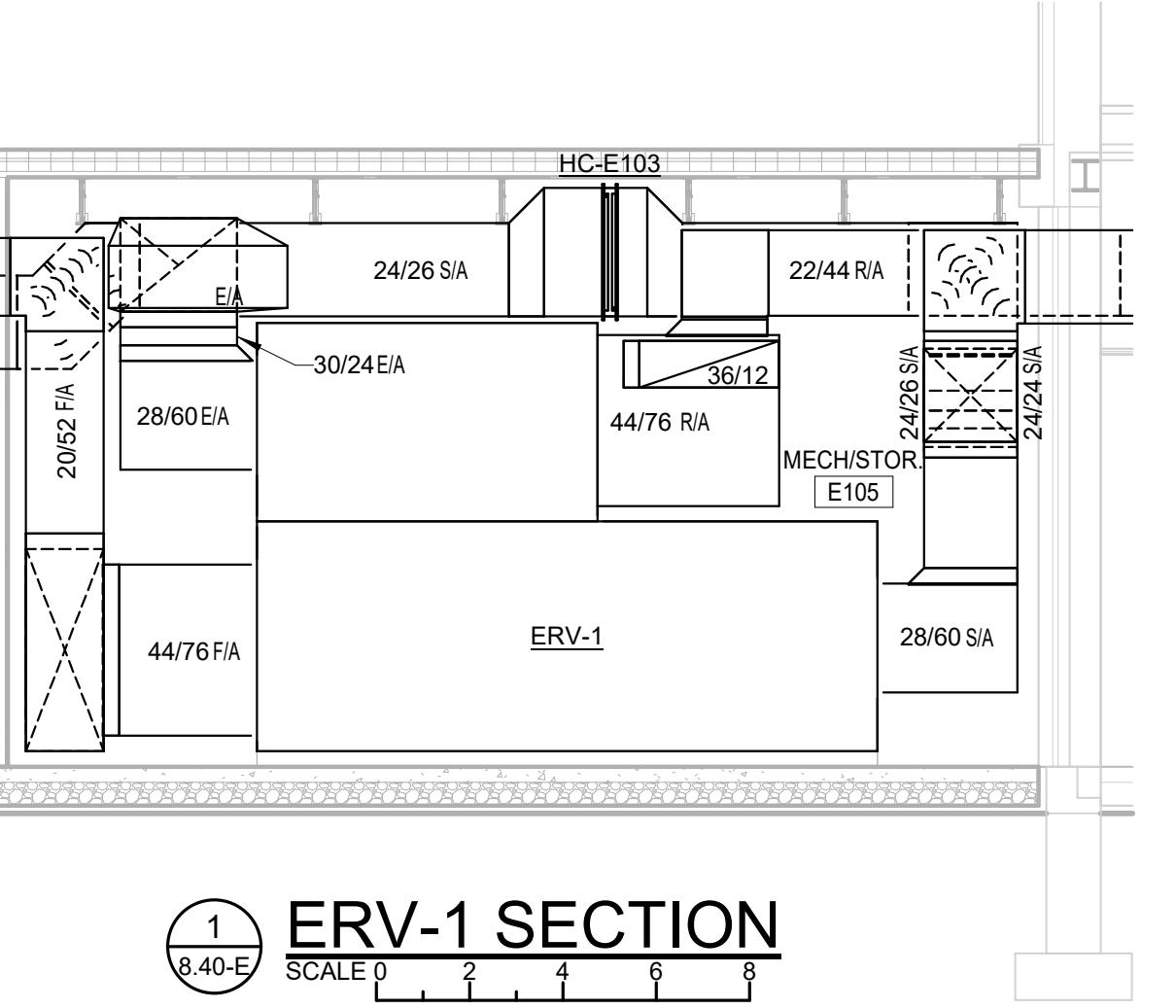
- A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTORS SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT.
- B. ON DEMO DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE EXISTING TO BE REMOVED.
- C. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO MAINTAIN, ITEMS SHOWN BOLD ARE NEW WORK.
- D. ALL EXPOSED DUCTWORK SHALL BE INSULATED OR TDC. EXPOSED DUCTWORK SHALL BE PAINT-GRIP TYPE EXCEPT IN MECHANICAL ROOMS.

#### VENTILATION NOTES

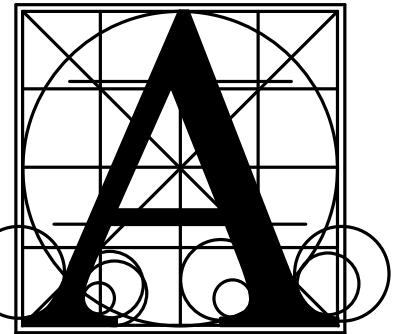
- 1 LOUVER: SEE DETAIL. LOUVER TO BE INSTALLED PARTIALLY INTO JOIST TAIL SPACES.
- 2 ENERGY RECOVERY VENTILATOR, PROVIDE WITH FLEXIBLE DUCT CONNECTIONS. COIL CLEARANCE SHALL LINE UP WITH DOOR. COORDINATE WITH GENERAL CONTRACTOR. CONTRACTOR TO VERIFY SPACE REQUIREMENTS PRIOR TO BIDDING.
- 3 GRILLE INSTALLED IN CEILING OF CANOPY FOR FRESH AIR INTAKE.
- 4 HOT WATER HEATING COIL.
- 5 FIRE DAMPER INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- 6 RE-BALANCE VAV AND EXISTING DIFFUSER TO LISTED CFMS.
- 7 RELOCATED T-STAT.
- 8 EXPOSED SPIRAL DUCTWORK. RISE AT THIS POINT IN BETWEEN JOISTS AND FOLLOWING DUCTWORK.
- 9 EXPOSED SPIRAL DUCTWORK. RISE AT THIS POINT IN BETWEEN JOISTS AND FOLLOWING DUCTWORK.
- 10 BALANCE DAMPER (TYP)
- 11 DUCT UP TO SECOND FLOOR.
- 12 ELECTRICAL EQUIPMENT SPACE. MAINTAIN REQUIRED CLEARANCES.
- 13 OPENING FOR INTAKE/RELIEF HOOD MUST BE A MINIMUM OF 4'-0" AWAY FROM RATED WALL.
- 14 ERV VFDS. COORDINATE EXACT LOCATIONS.
- 15 INSTALL REGISTERS AT A 45° ANGLE DOWN. (TYPICAL)



N  
FIRST FLOOR PLAN - AREA E - VENTILATION & A/C  
SCALE 0 4 8 12 16



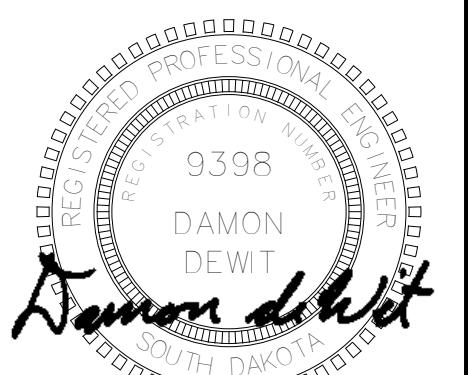
1  
0.40-F  
ERV-1 SECTION  
SCALE 0 2 4 6 8



Architecture  
Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



Associated  
Consulting  
Engineering,  
Incorporated  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 332-3720  
Fax: 335-6220  
E-mail: ace@aceinc.com  
ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

Schedules

### ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT NO.	MANUF.	MODEL NO.	SUPPLY AIR				EXHAUST AIR				OUTSIDE AIR				ROOM AIR				DISCHARGE AIR TEMP				COOLING CAPACITY				SUPPLY SIDE FILTER				OPER. WT(LBS.)	REMARKS												
			CFM	ESP	FAN HP	VOLT/PH	RPM	MCA	MOPC	CFM	ESP	FAN HP	VOLT/PH	RPM	MCA	MOPC	SUMMER DB/WB	WINTER DB/WB	SUMMER DB/WB	WINTER DB/WB	SUMMER DB/WB	T. EFF. %	WINTER DB/WB	T. EFF. %	MBH	EWT/WT	EAT	LAT	GPM	WPD	MERV	AREA(SF)	MAX FV	APD	THICK	MAX FV	APD	THICK						
ERV-1 VTS	AVS100-R-EFRCV / AVS100-L-FRV	11,000	1.5"	7.5(X2)	480/3	1730	45	60		11,000	1.5"	5(X2)	480/3	1617	31.3	45	1/2	115/1	5.7	15	95/74	-20/-20	74.0/62.0	68.0/47.0	77.9/64.4	76%	46.7/35.0	81%	348	45/55	77.9/64.4	55.0/53.7	72	9.16	13	513	0.83	2"	8	513	0.6	2"	3820	ALL

REMARKS:

1. PROVIDE SINGLE VARIABLE FREQ. DRIVES FOR DUAL FANS W/ MOTOR SHAFT GROUNDING RINGS. FAN VFD'S WILL BE BY TEMPERATURE CONTROL CONTRACTOR. WHEEL VFD TO BE INTEGRAL TO UNIT.
2. PROVIDE DIRECT DRIVE PREMIUM EFFICIENCY MOTORS.
3. COOLING COIL CAPACITIES BASED ON 60% WATER/40% PROPYLENE GLYCOL.
4. TOTAL ENERGY ALUMINUM WHEEL.

### AHU SCHEDULE

AHU NO.	MANUF.	MODE	CFM	MIN O/A	ESP	TSP	FAN MHP	BHP	VOLTS/PH	TYPE/SIZE	COOLING COIL CAPACITY				HEATING COIL CAPACITY				FILTER				COOLING CAPACITY				SUPPLY SIDE FILTER				OPER. WT(LBS.)	REMARKS		
											RPM	MBH	EAT	LAT	FV	APD	EWT	LWT	GPM	WPD	TYPE	AREA(SF)	MAX FV	APD	THICK	MAX FV	APD	THICK						
AHU-10 DAIKIN CAH032GDM	15,500	5,500	2,50	16.24	480/3	DD, PLENUM/30	1495	635.7	82.0/67.2	54.0/53.6	522	0.92	44	56	112.9	11.8	919.4	43.1	100.4	541	0.21	180	150	64.1	8.8	MERV13	78.6	350	0.55	2"	5750	ALL		
AHU-11 DAIKIN CAH010GDM	4,200	1,140	1.50	3.17	5	3.40	480/3	DD, PLENUM/16	2656	163.1	81.6/66.3	53.7/53.2	457	0.69	44	56	28.9	11.7	180.3	50.7	92.2	487	0.18	180	150	12.6	3.8	MERV8	18.9	350	0.54	2"	2350	ALL
AHU-12 DAIKIN CAH018GDM	8,500	3,665	1.50	3.65	10	7.00	480/3	DD, PLENUM/24	1568	391.4	83.6/68.5	53.8/53.5	498	0.89	44	56	67.8	16.1	656.6	36.5	111.1	523	0.37	180	150	45.4	9	MERV8	34.1	350	0.55	2"	3370	ALL
AHU-13 DAIKIN CAH014GDM	6,200	1,460	1.50	3.29	7.5	4.59	480/3	DD, PLENUM/22	1611	235.7	81.6/66.0	53.7/53.1	467	0.71	44	56	41.6	11.9	291.8	53.6	99.1	498	0.24	180	150	20	1.8	MERV8	28.3	350	0.54	2"	3025	ALL

REMARKS:

1. HEATING COIL CAPACITIES ARE BASED ON 75% WATER/25% PROPYLENE GLYCOL. COOLING COIL CAPACITIES ARE BASED ON 60% WATER/40% PROPYLENE GLYCOL.
2. FILTER APD AT MEAN LIFE.
3. DIRECT DRIVE PLENUM FAN. FAN SPEED CONTROLLED WITH A VFD PROVIDED BY TEMPERATURE CONTROL CONTRACTOR. PROVIDE PREMIUM EFFICIENCY MOTOR.
4. ACCESS SHALL BE PROVIDED INTO THE FILTER SECTION, BLENDER SECTION, BETWEEN THE HEATING AND COOLING COILS, AND FAN/PLENUM SECTION. PROVIDE 15 INCH (MIN) DOORS AND 18 INCH (MIN) SPACE BETWEEN COILS.
5. PROVIDE HEAVY DUTY 18 GAUGE STAINLESS STEEL DRAIN PANS FOR COMPLETE DRAINAGE AND WALKING TRAFFIC.
6. AIR HANDLER, ANGLED FILTER MIXING BOX, BLENDER, COOLING COIL, HEATING COIL, FAN/DISCHARGE PLENUM.

### BLOWER COIL UNIT SCHEDULE

UNIT NO.	MANUF.	MODEL NO.	TOTAL CFM				MIN O/A	ESP	MOTOR HP	RPM	V/P/H	COOLING COIL				HEATING COIL				FILTER				COOLING CAPACITY				SUPPLY SIDE FILTER				OPER. WT(LBS.)	REMARKS
			CFM	MBH	EAT	LAT						FV	APD	EWT	LWT	GPM	WPD	MBH	EAT	LAT	FV	APD	EWT	LWT	GPM	WPD	TYPE	AREA(SF)	MAX FV	APD	THICK	MAX FV	APD
BCU-G111 AAON H3-BRB-3-0-28HC-1ZQ	600	1.5	2	1760	480/3	70.4	82.0/66.2	53.3/53.3	14.5	25	44	56	143.3	46.1	10	180	150	14.9	700	ALL													
BCU-G117 AAON H3-BRB-3-0-28HA-1ZH	203	1.5	2	1760	480/3	59.2	82.1/63.1	52.0/51.9	11	16.2	44	56	108.7	61.4	7.5	180	150	2.2	670	ALL													

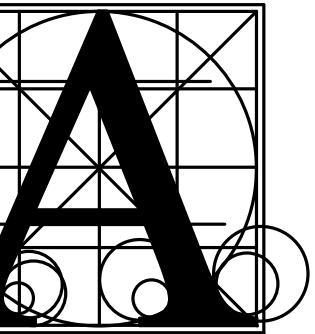
REMARKS:

1. HEATING COIL CAPACITIES ARE BASED ON 75% WATER/25% PROPYLENE GLYCOL. COOLING COIL CAPACITIES ARE BASED ON 60% WATER/40% PROPYLENE GLYCOL.
2. PROVIDE FACTORY INSTALLED VFD, SINGLE POINT POWER CONNECTION.
3. UNIT TO BE HUNG TIGHT TO STRUCTURE WITH ANTI-VIBRATION HANGING KIT. PROVIDE FLEXIBLE DUCT CONNECTIONS.

### FAN SCHEDULE

| FAN NO. | MANUF. | MODEL NO. | TYPE | LOCATION | CFM | S.P. | RPM | TIP SPEED (FPM) | MOTOR HP | ELEC. | SONS | WEIGHT (LBS.) | COOLING COIL CAPACITY | | | | HEATING COIL CAPACITY | | | | FILTER | | | | COOLING CAPACITY | | | |
<th colspan
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

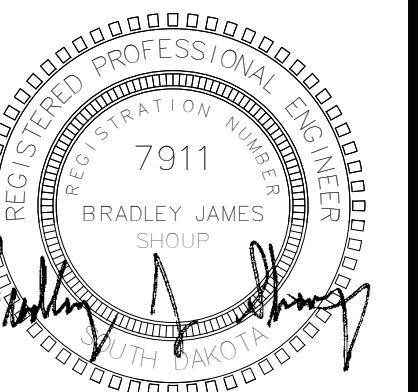




**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

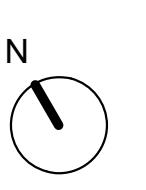
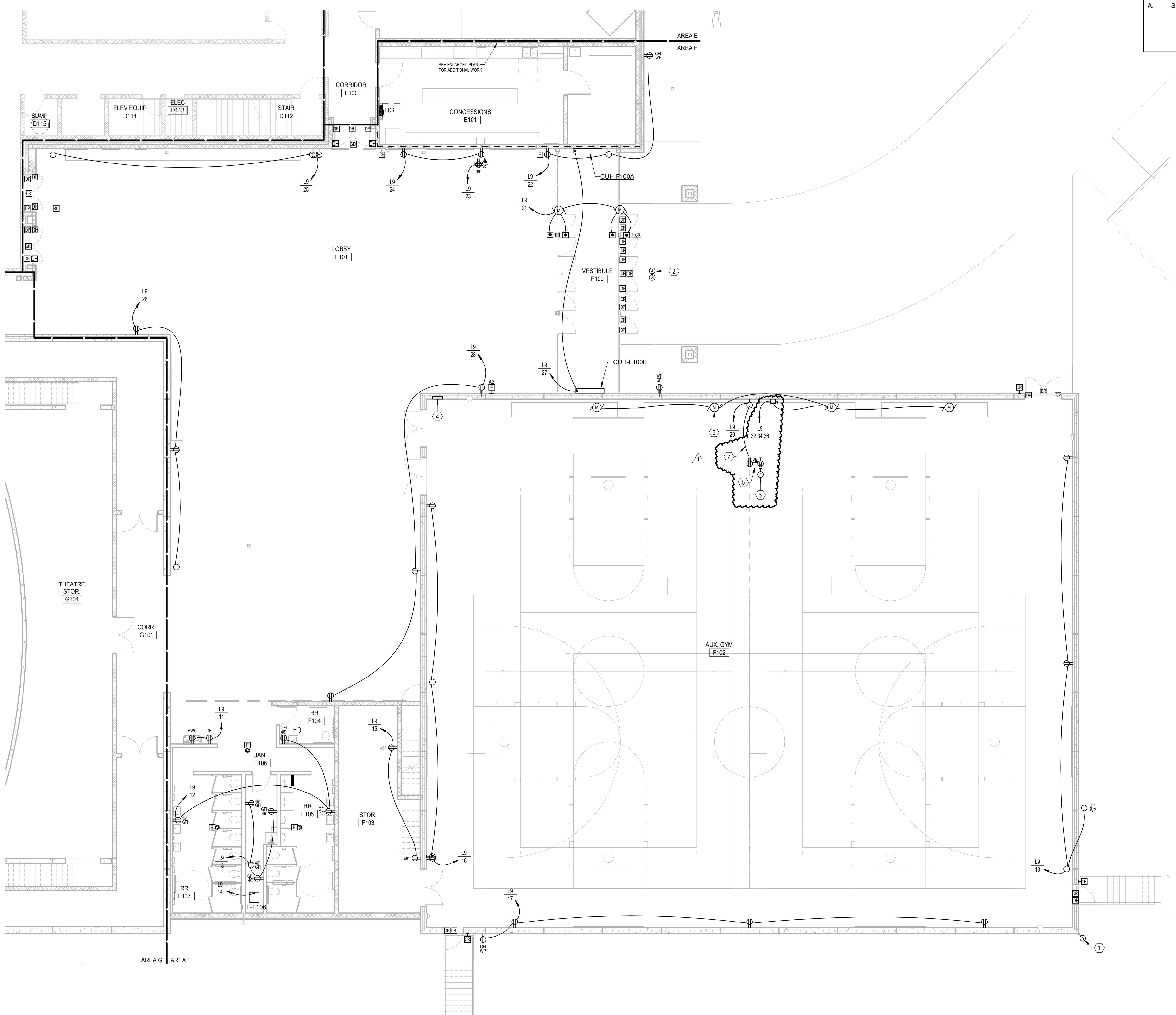
815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



**Associated  
Consulting  
Engineering,  
Inc.**  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.net  
ACEI PROJ. #123034

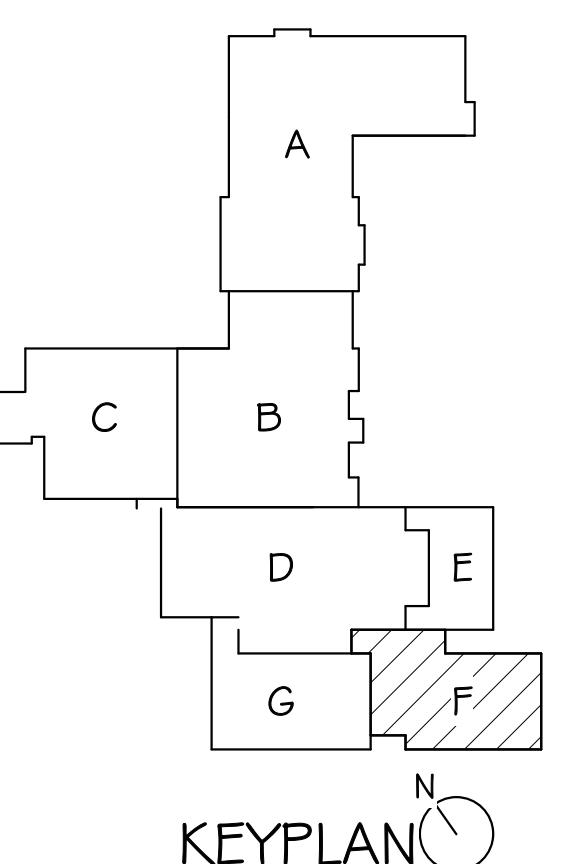
## LENNOX HIGH SCHOOL ADDITION

### FIRST FLOOR PLAN - AREA F - POWER & SIGNAL - BASE BID



FIRST FLOOR PLAN - AREA F - POWER & SIGNAL

SCALE 0 4 8 12 16



Project		Sheet Contents	
number	0215.2982.22		
date	DECEMBER 21, 2023		
revision			
drawn	KMT	checked	BJS
DATE	01-11-2024	DESCRIPTION	Addendum #1

9.45-F

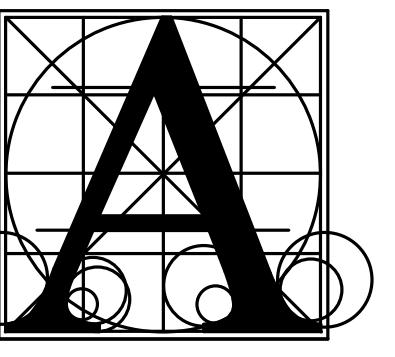
KEYPLAN

**ELECTRICAL NOTES**

1. PROVIDE PROVISION FOR FUTURE CCTV CAMERA MOUNTED ON CORNER OF BUILDING. FIELD VERIFY MOUNTING HEIGHT WITH OWNER.
2. PROVIDE PROVISION FOR FUTURE CCTV CAMERA MOUNTED IN CANOPY.
3. COORDINATE CONNECTION REQUIREMENTS WITH BLEACHER SUPPLIER.
4. GYM CONTROL PANEL "GCP" SEE DETAIL.
5. GYM SOUND SYSTEM MIC/AUX INPUT, TYPICAL.
6. LOCATE DEVICES IN FACE OF LOWEST BLEACHER RISER (COORDINATE WITH AREA F).
7. ALL CABLES FEEDING DEVICES IN FACE OF BLEACHER SHALL BE SUPPORTED TO UNDERSIDE OF BLEACHERS IN A MANNER THAT PREVENTS CABLES FROM BEING PINCHED WHEN BLEACHERS ARE MOVED IN AND OUT.

### GENERAL SHEET NOTES

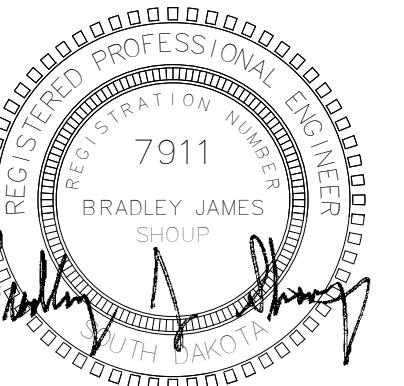
A. SEE AV DRAWINGS FOR ADDITIONAL WORK.



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

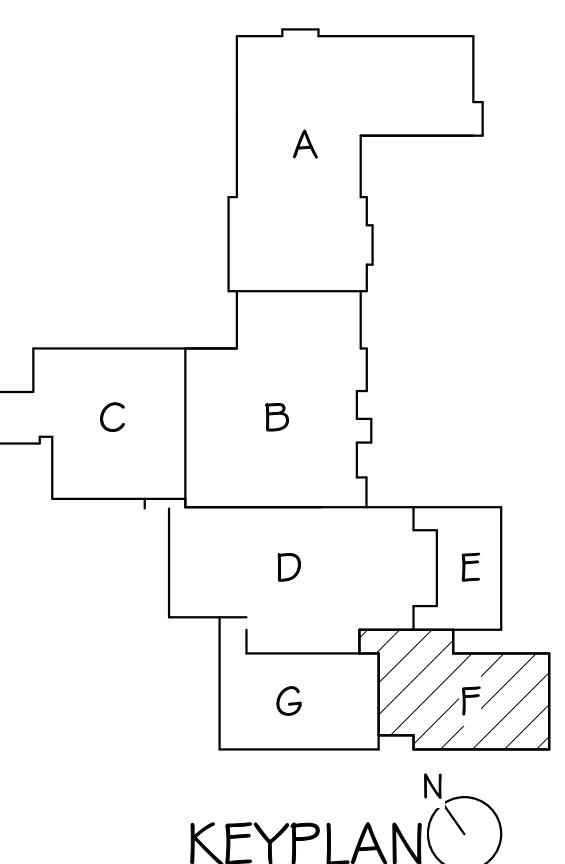
815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



**A**sociated  
**C**onsulting  
**E**ngineering,  
**I**ncorporated  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.net  
ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

FIRST FLOOR PLAN - AREA F - POWER & SIGNAL - ADD ALTERNATE



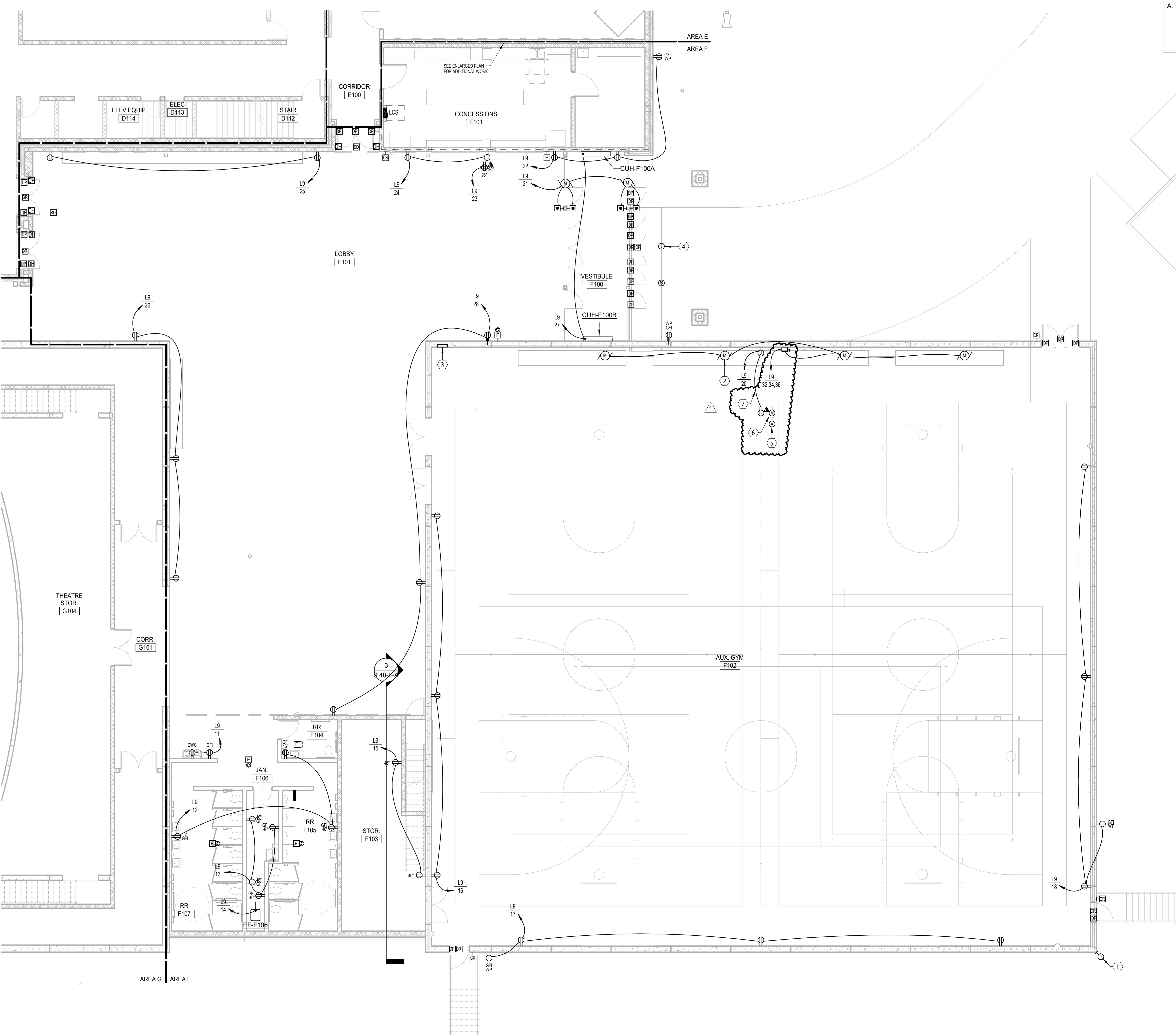
Project		Status	
number	0215.2982.22	date	DECEMBER 21, 2023
revision		drawn	KMT checked BJS
DATE	01-11-2024	DESCRIPTION	Addendum #1

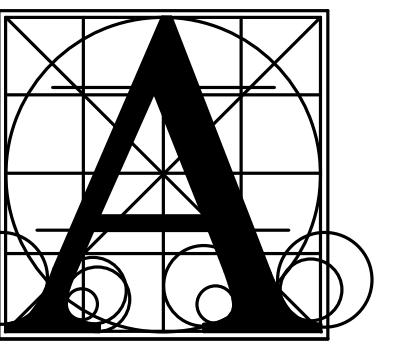
**9.45-F-A**

- ELECTRICAL NOTES**
- 1 PROVIDE PROVISION FOR FUTURE CCTV CAMERA MOUNTED ON CORNER OF BUILDING. FIELD VERIFY MOUNTING HEIGHT WITH OWNER.
  - 2 COORDINATE CONNECTION REQUIREMENTS WITH BLEACHER SUPPLIER.
  - 3 GYM CONTROL PANEL, "GCP", SEE DETAIL.
  - 4 PROVIDE PROVISION FOR FUTURE CCTV CAMERA MOUNTED IN CANOPY.
  - 5 GYM SOUND SYSTEM MIC/AUX INPUT, TYPICAL.
  - 6 LOCATE DEVICES IN FACE OF LOWEST BLEACHER RISER (COORDINATE WITH ARCHITECT).
  - 7 ALL CABLES FEEDING DEVICES IN FACE OF BLEACHER SHALL BE SUPPORTED TO UNDERSIDE OF BLEACHERS IN A MANNER THAT PREVENTS CABLES FROM BEING PINCHED WHEN BLEACHERS ARE MOVED IN AND OUT.

### GENERAL SHEET NOTES

- A. SEE AV DRAWINGS FOR ADDITIONAL WORK.

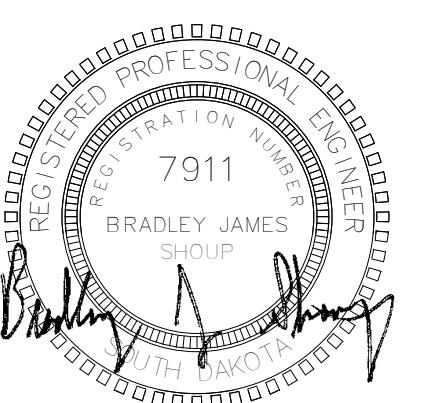




**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

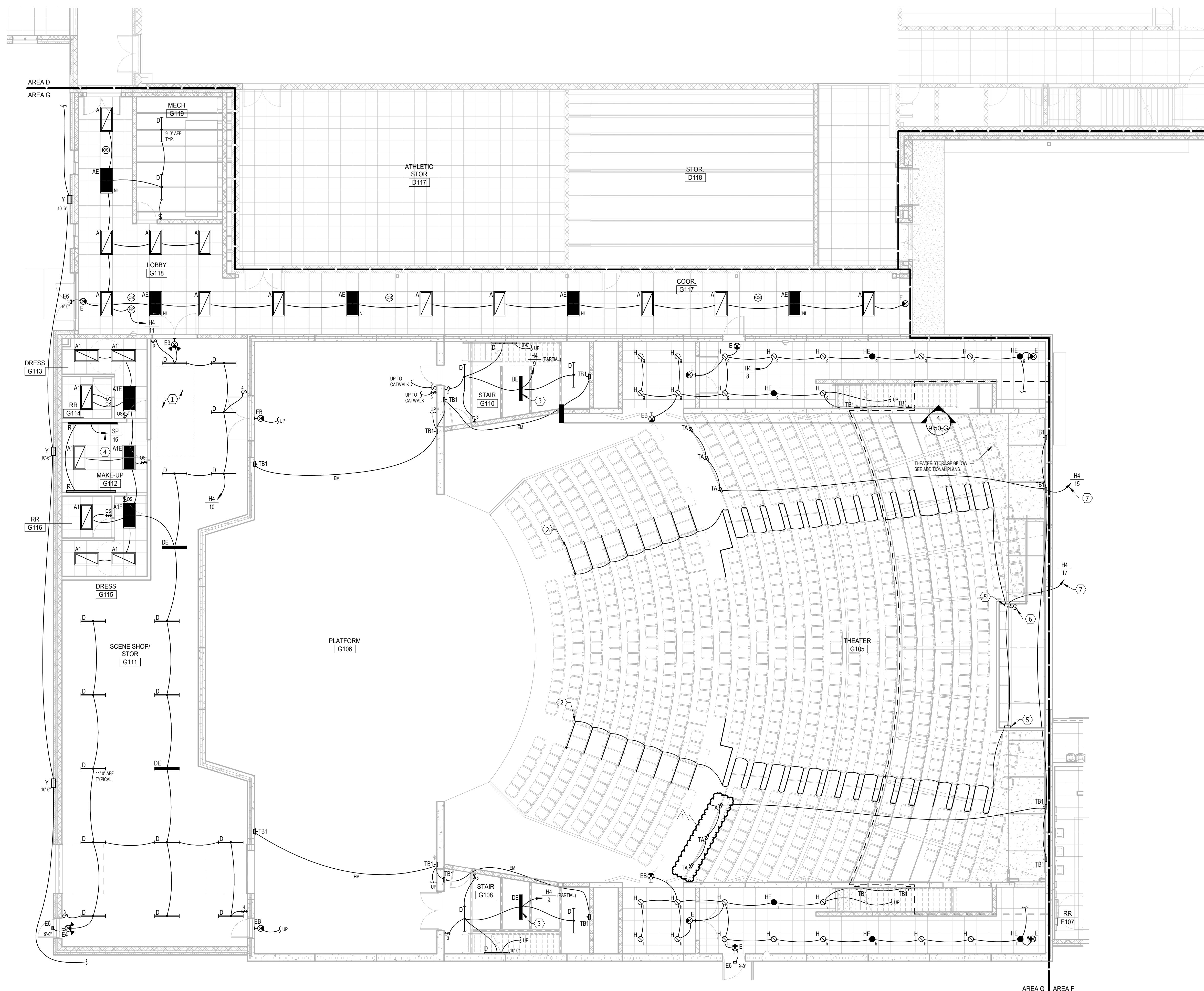
815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



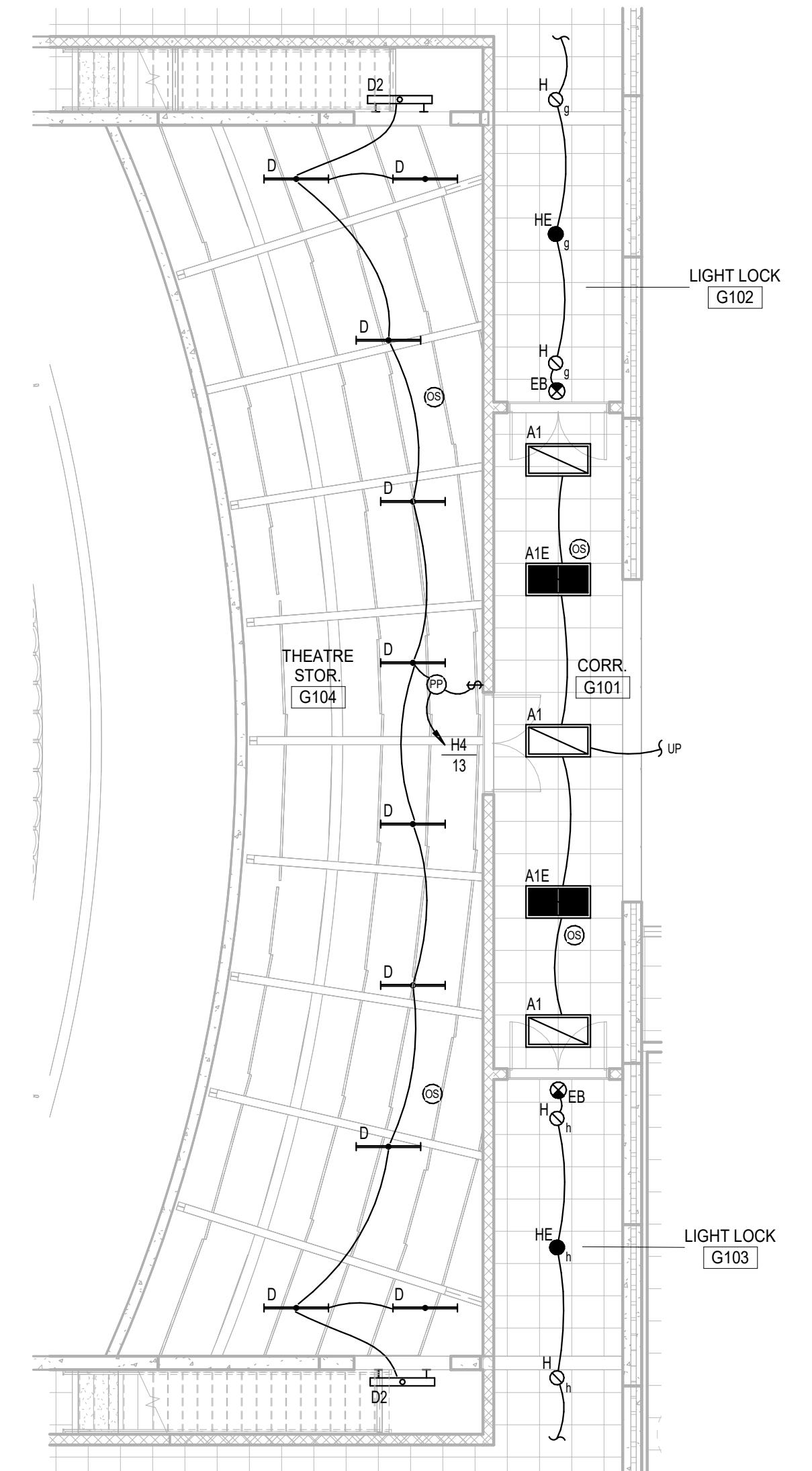
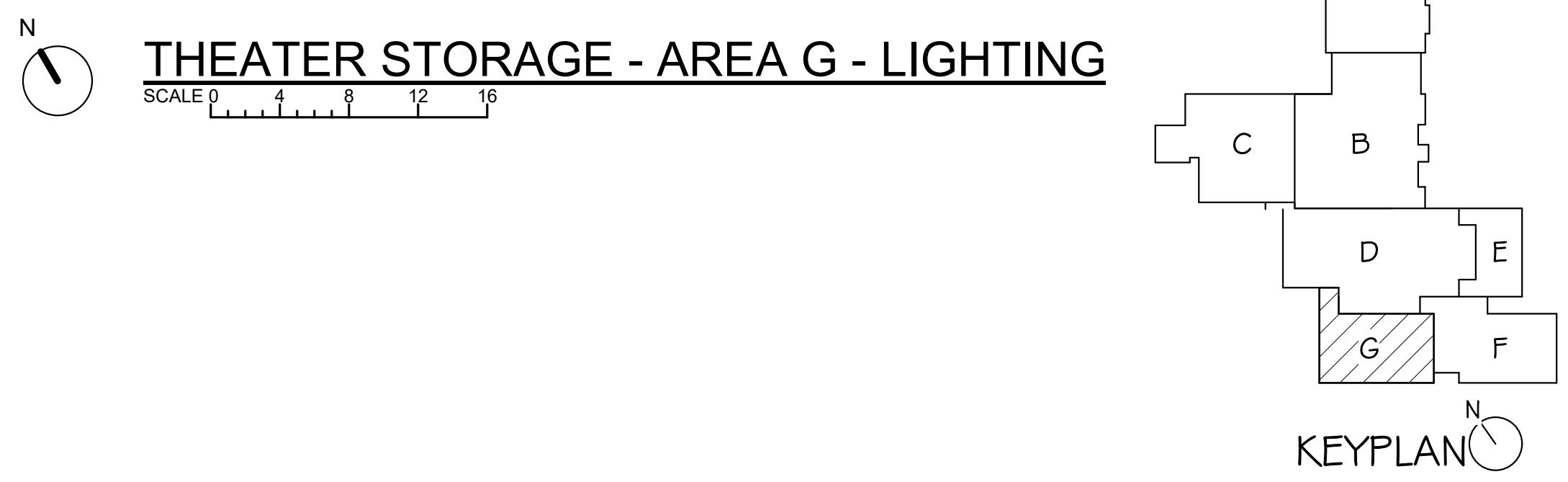
**Associated  
Consulting  
Engineering,  
Inc.**  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.com  
ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

FIRST FLOOR PLAN - AREA G - LIGHTING



**THEATER STORAGE - AREA G - LIGHTING**



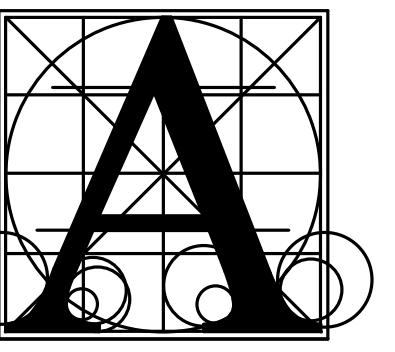
**ELECTRICAL NOTES**

- COORDINATE LIGHTING INSTALLATION WITH MECHANICAL EQUIPMENT, SHIFT AS NECESSARY.
- TYPE "TS" STEP LIGHT, TYPICAL.
- TO THE EXTEND POSSIBLE, SURFACE MOUNT TYPE "D" LUMINAIRE, TYPICAL IN THIS ROOM.
- TYPE "R" MAKE-UP MIRROR LIGHTS. MOUNT SUCH THAT THE CENTER OF FIXTURE IS 8'-6" AFF ABOVE MIRROR. ROUTE CIRCUIT THROUGH CONTACTOR "CR".
- STEP LIGHT POWER SUPPLY, 277V PRI.
- PROVIDE SWITCH TO CONTROL STEP LIGHTS TA AND TS IN THE AUDITORIUM.
- WIRE THIS CIRCUIT THRU THE SC1008 FED BY THE INVERTER.

**GENERAL SHEET NOTES**

- A. ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES, AND MOUNTING HARDWARE REQUIRED PRIOR TO PURCHASE OF ANY LIGHTING FIXTURES.
- B. ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS OF ALL DECORATIVE FIXTURES WITH SCHULER SHOOK PRIOR TO INSTALLATION.
- C. ALL STEP LIGHTS SHALL BE MOUNTED AT +2'-0" A.F.F. TO CENTER OF FIXTURE UNLESS OTHERWISE NOTED.
- D. ALL SWITCHES, DIMMERS OR BUTTON STATIONS SHALL BE MOUNTED AT +40" A.F.F. TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED. CONFIRM WITH ARCHITECTURAL DRAWINGS.

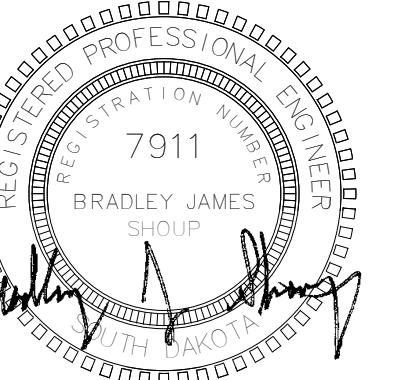
**9.46-G**



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158

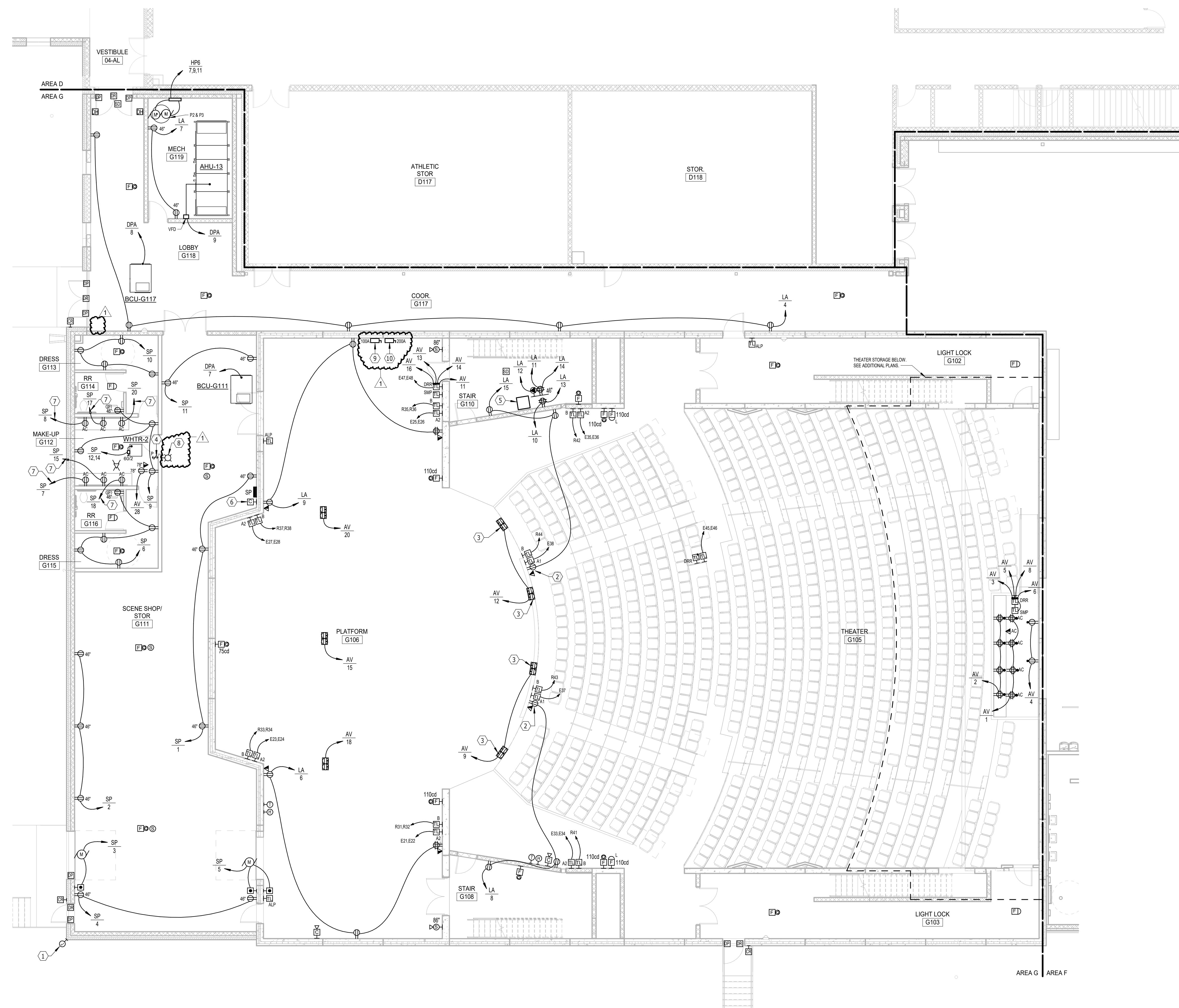


**Associated  
Consulting  
Engineering,  
Inc.**  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.com  
ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

FIRST FLOOR PLAN - AREA G - POWER & SIGNAL

FIRST FLOOR PLAN - AREA G - POWER & SIGNAL



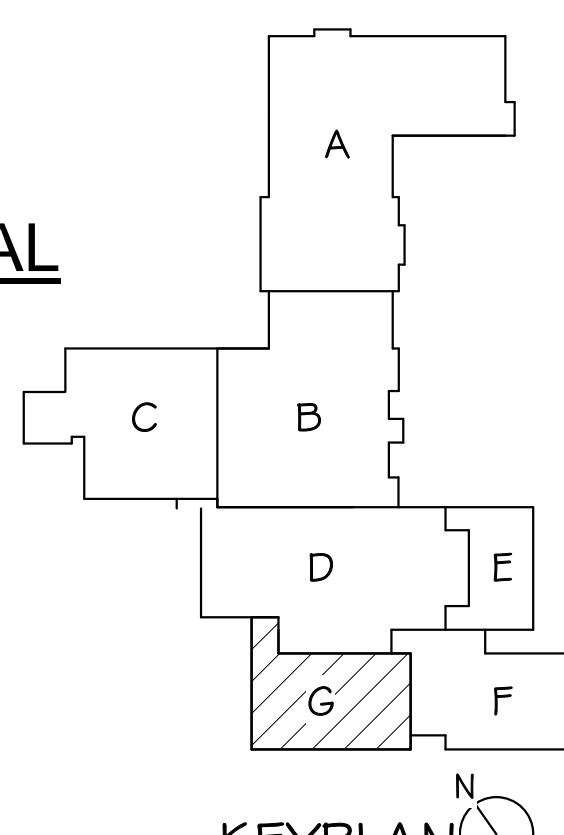
**FIRST FLOOR PLAN - AREA G - POWER & SIGNAL**

SCALE 0 4 8 12 16



**THEATER STORAGE - AREA G - POWER & SIGNAL**

SCALE 0 4 8 12 16



Project number	0215.2982.22
date	DECEMBER 21, 2023
revision	
drawn	KMT
checked	BJS
DATE	01-11-2024
DESCRIPTION	Addendum #1

**9.47-G**

# LENNOX HIGH SCHOOL ADDITION

# MEZZANINE PLAN - AREA F - LIGHTING

# MEZZANINE PLAN - AREA F - LIGHTING



# Architecture incorporated

South Main Avenue  
P. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

St Joseph Street, Suite 203  
Sioux City, South Dakota 57701  
Phone: (605) 721-1158

**A ssociated  
C onsulting  
E ngineering,  
I ncorporated**

340 S. Phillips Ave.  
Sioux Falls, SD 57104

(605) 335-3720  
Fax 335-6220

E-mail [acei@aceinet.com](mailto:acei@aceinet.com)

ACEI PROJ. #123034

LEN		sheet contents	MEZZA
er	0215.2982.22		
DECEMBER 21, 2023			
ion			
n	KMT	checked	BJS
DATE	DESCRIPTION		
-11-2024	Addendum #1		

**9.48-F**

# ELECTRICAL NOTES

ORDINATE LIGHTING INSTALLATION WITH MECHANICAL EQUIPMENT, SHIFT  
ECESSARY.

RGENCY LIGHTING INVERTERS "INV-GA" (EQUAL TO EMERGI-LITE  
-720) AND "INV-GB" (EQUAL TO EMERGI-LITE EMIU 720), AND BODINE  
20A TRANSFER DEVICES "GTD-A" AND GTD-B".

RTOR EQUAL TO EMERGI-LITE EMIU-1000.

CHLEG TO GTD DEVICE "GTD-A".

CHLEG TO GTD DEVICE "GTD-B".

## GENERAL SHEET NOTES

ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES, AND  
OUNTING HARDWARE REQUIRED PRIOR TO PURCHASE OF ANY LIGHTING  
TURES.

ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS OF ALL  
CORATIVE FIXTURES WITH SCHULER SHOOK PRIOR TO INSTALLATION.

L STEP LIGHTS SHALL BE MOUNTED AT +2'-0" A.F.F. TO CENTER OF FIXTURE  
LESS OTHERWISE NOTED.

L SWITCHES, DIMMERS OR BUTTON STATIONS SHALL BE MOUNTED AT  
" A.F.F. TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED. CONFIRM  
TH ARCHITECTURAL DRAWINGS.

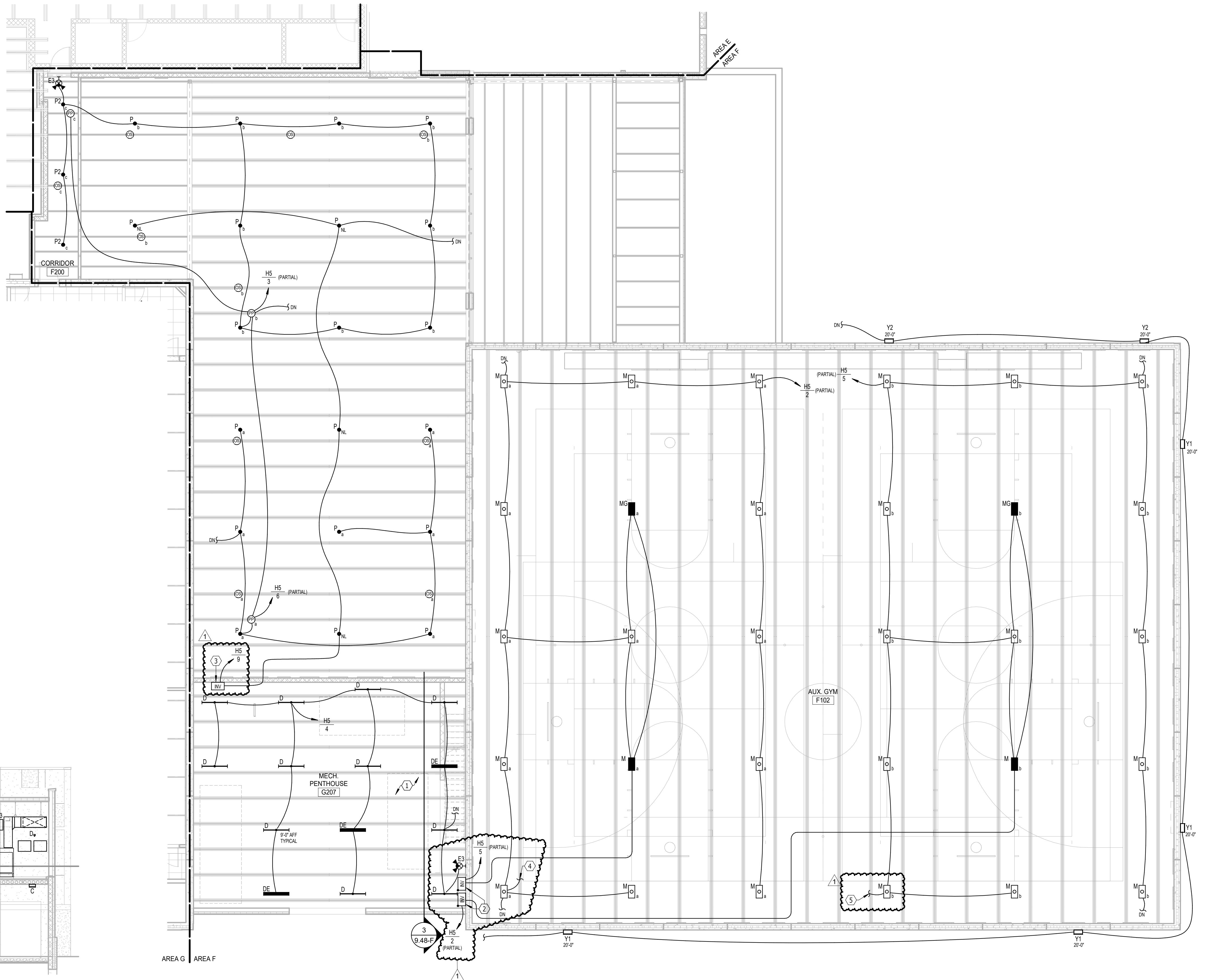
## **GENERAL SHEET NOTES**

- ORDINATE LIGHTING INSTALLATION WITH MECHANICAL EQUIPMENT, SHIFT NECESSARY.  
ERGENCY LIGHTING INVERTERS "INV-GA" (EQUAL TO EMERGI-LITE U-720) AND "INV-GB" (EQUAL TO EMERGI-LITE EMIU 720), AND BODINE D-20A TRANSFER DEVICES "GTD-A" AND GTD-B".  
ERTOR EQUAL TO EMERGI-LITE EMIU-1000.  
ITCHLEG TO GTD DEVICE "GTD-A".  
ITCHLEG TO GTD DEVICE "GTD-B".

This architectural floor plan illustrates a building section with the following key features and labels:

- Rooms and Areas:** The plan shows several rooms and areas, including a large rectangular room on the right labeled **E3**, a smaller room below it labeled **D**, a long corridor-like space labeled **C**, and a vertical column on the left labeled **D2E**.
- Structural Elements:** The plan includes a central vertical column, a horizontal beam spanning the width of the building, and a diagonal support structure.
- Labels:** Labels **A**, **B**, **C**, **D**, **D2E**, **DE**, and **E3** are placed at various points to identify specific sections or components.
- Walls:** The plan uses thick lines to represent exterior walls and internal partitions.

**3** MECH. PENTHOUSE G207  
1/8" = 1'-0"



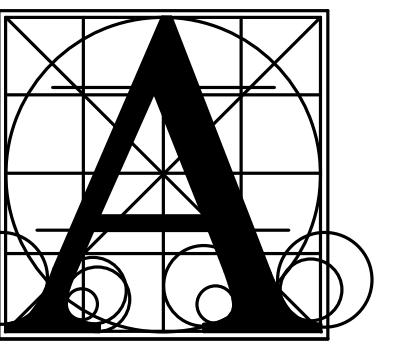
N



# MEZZANINE PLAN - AREA F - LIGHTING

SCALE 0 4 8 12 16

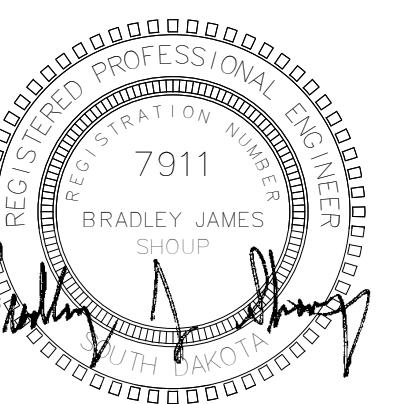




Architecture  
Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



Associated  
Consulting  
Engineering,  
Incorporated  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax 335-6220  
E-mail ace@aceinc.net  
ACEI PROJ. #120304

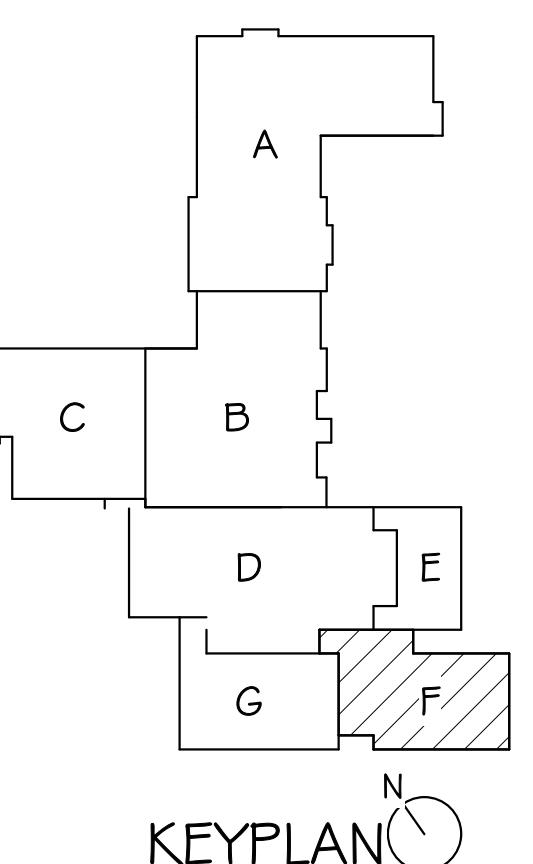
## LENNOX HIGH SCHOOL ADDITION

MEZZANINE PLAN - AREA F - LIGHTING ADD ALTERNATE

Sheet Contents

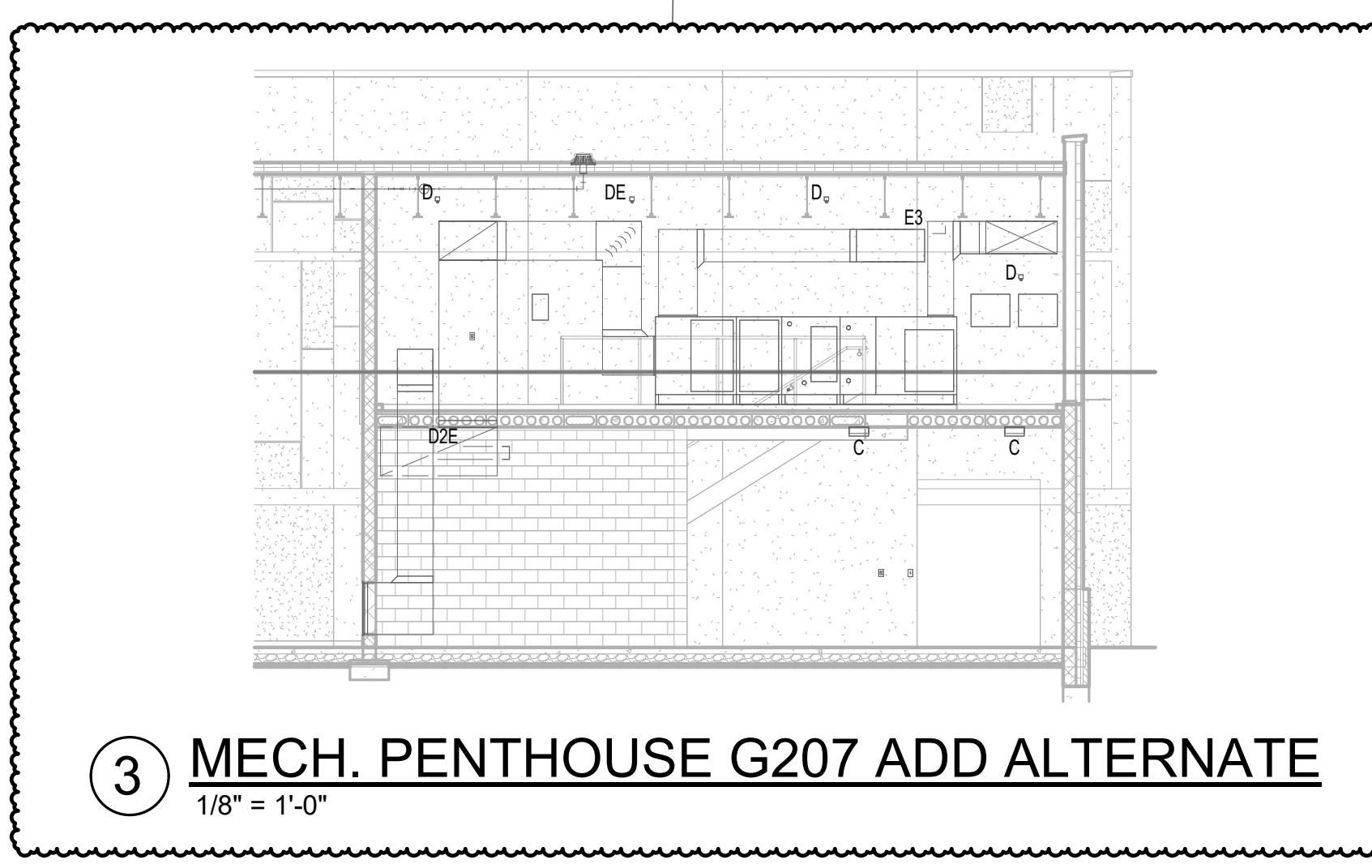
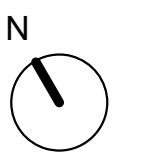
Project	number	0215.2982.22	
date	DECEMBER 21, 2023		
revision			
drawn	KMT	checked BJS	
DATE	01-11-2024	DESCRIPTION	Addendum #1

9.48-F-A

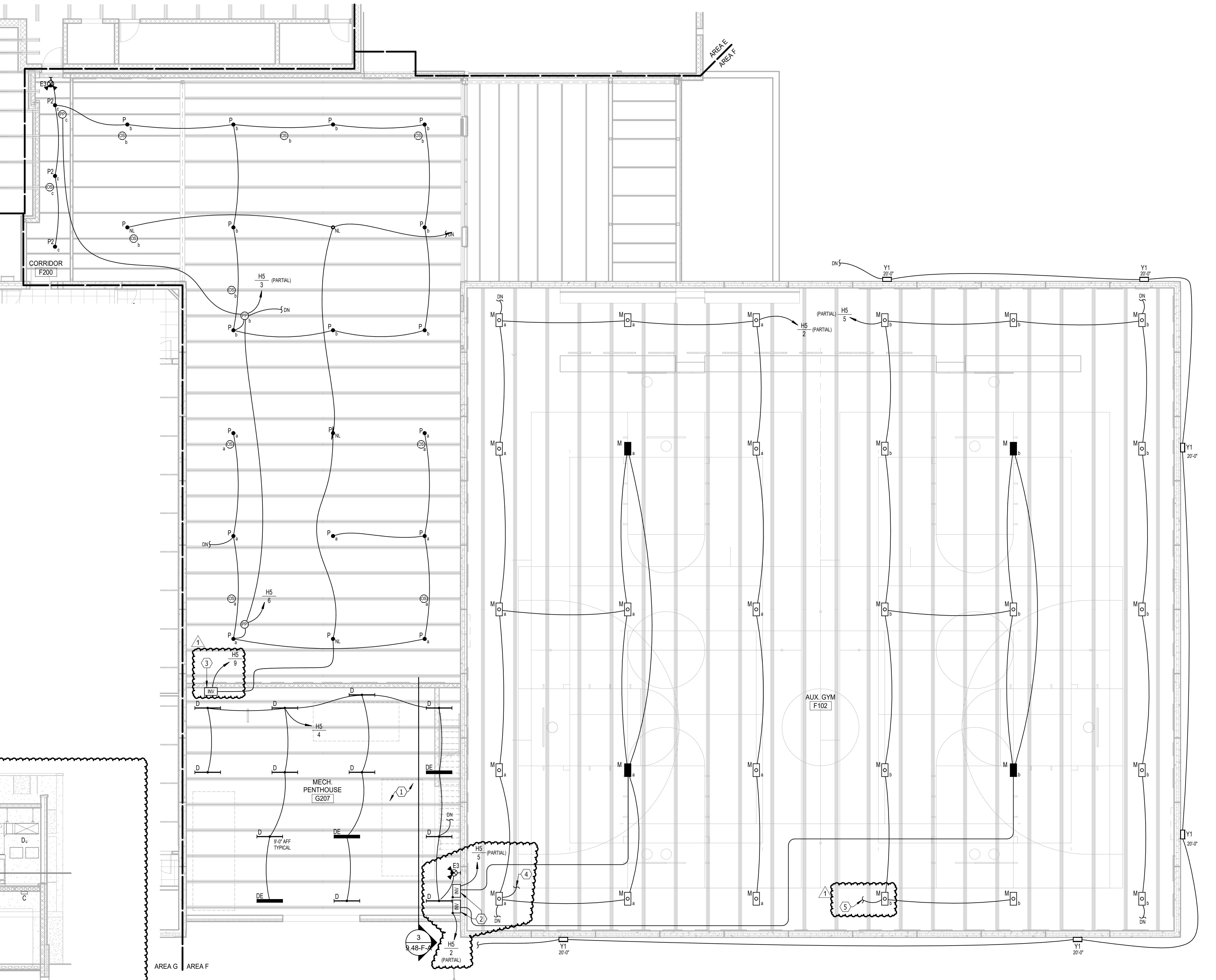


MEZZANINE PLAN - AREA F - LIGHTING ADD ALTERNATE

SCALE 1 4 8 12 16



③ MECH. PENTHOUSE G207 ADD ALTERNATE  
1/8" = 1'-0"

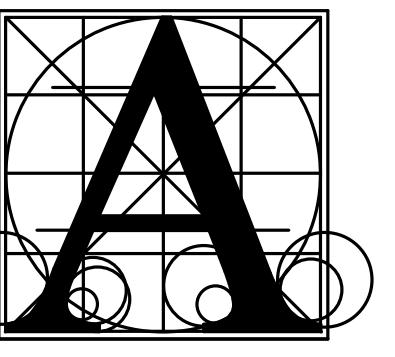


ELECTRICAL NOTES

- COORDINATE LIGHTING INSTALLATION WITH MECHANICAL EQUIPMENT, SHIFT AS NECESSARY.
- EMERGENCY LIGHTING INVERTERS "INV-GA" EQUAL TO EMERGILITE EMIU-720 AND "INV-GB" (EQUAL TO EMERGILITE EMIU 720), AND BODINE ULTRA TRANSFER DEVICE "GTD-A" AND "GTD-B".
- SWITCHING TO GTD DEVICE "GTD-A".
- SWITCHING TO GTD DEVICE "GTD-B".
- SWITCHES TO GTD DEVICE "GTD-B".

### GENERAL SHEET NOTES

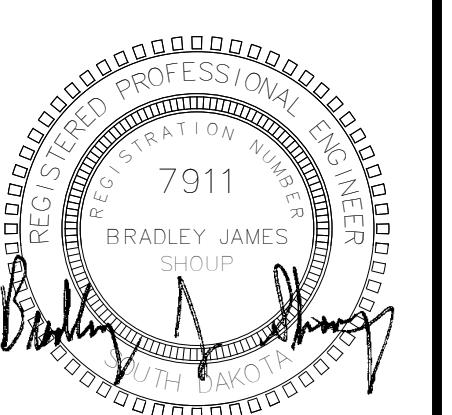
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES, AND MOUNTING HARDWARE REQUIRED PRIOR TO PURCHASE OF ANY LIGHTING FIXTURES.
- ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS OF ALL DECORATIVE FIXTURES WITH SCHULER SHOCK PRIOR TO INSTALLATION.
- ALL STEP LIGHTS SHALL BE MOUNTED AT +2'-0" A.F.F. TO CENTER OF FIXTURE UNLESS OTHERWISE NOTED.
- ALL SWITCHES, DIMMERS OR BUTTON STATIONS SHALL BE MOUNTED AT +40° A.F.F. TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED. CONFIRM WITH ARCHITECTURAL DRAWINGS.



**Architecture  
Incorporated**

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



**Associated  
Consulting  
Engineering,  
Incorporated**  
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.com  
ACEI PROJ. #123034

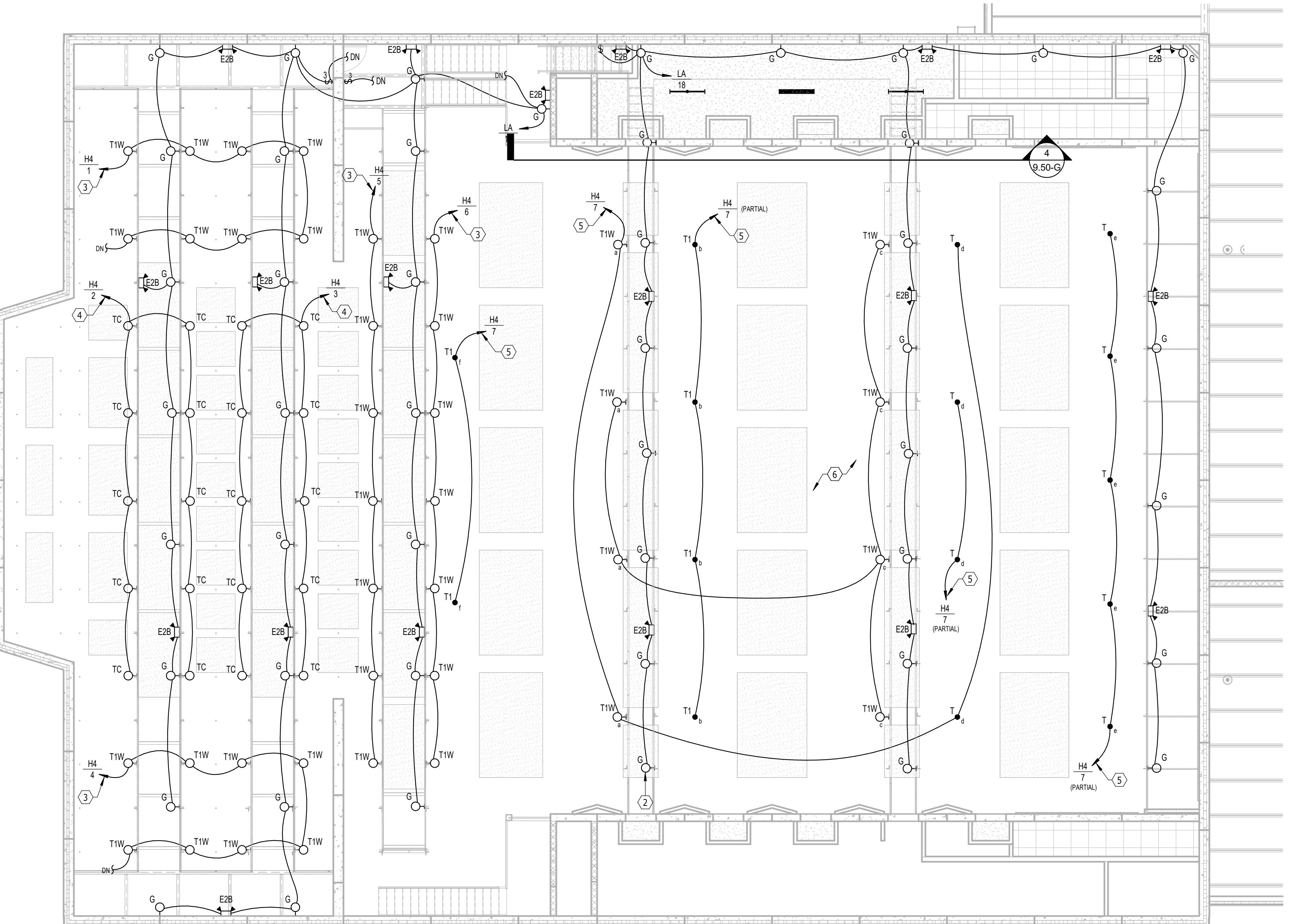
## LENNOX HIGH SCHOOL ADDITION

CATWALK PLAN - AREA G - ELECTRICAL

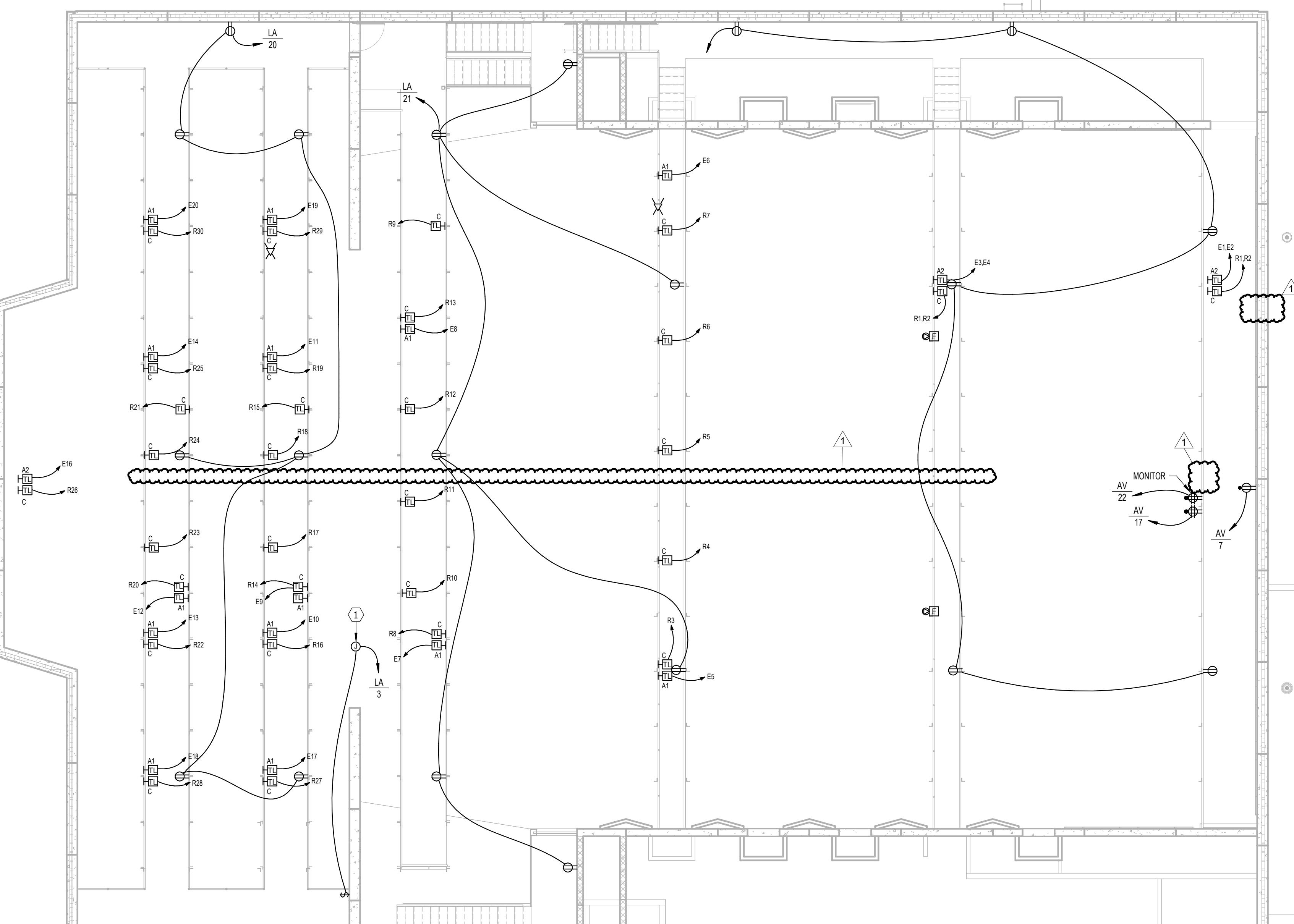
Project: **LENNOX HIGH SCHOOL ADDITION**  
Solved Contents  
number 0215.2982.22  
date DECEMBER 21, 2023  
revision  
drawn KMT checked BJS

DATE O1-11-2024 DESCRIPTION Addendum #1

**9.51-G**

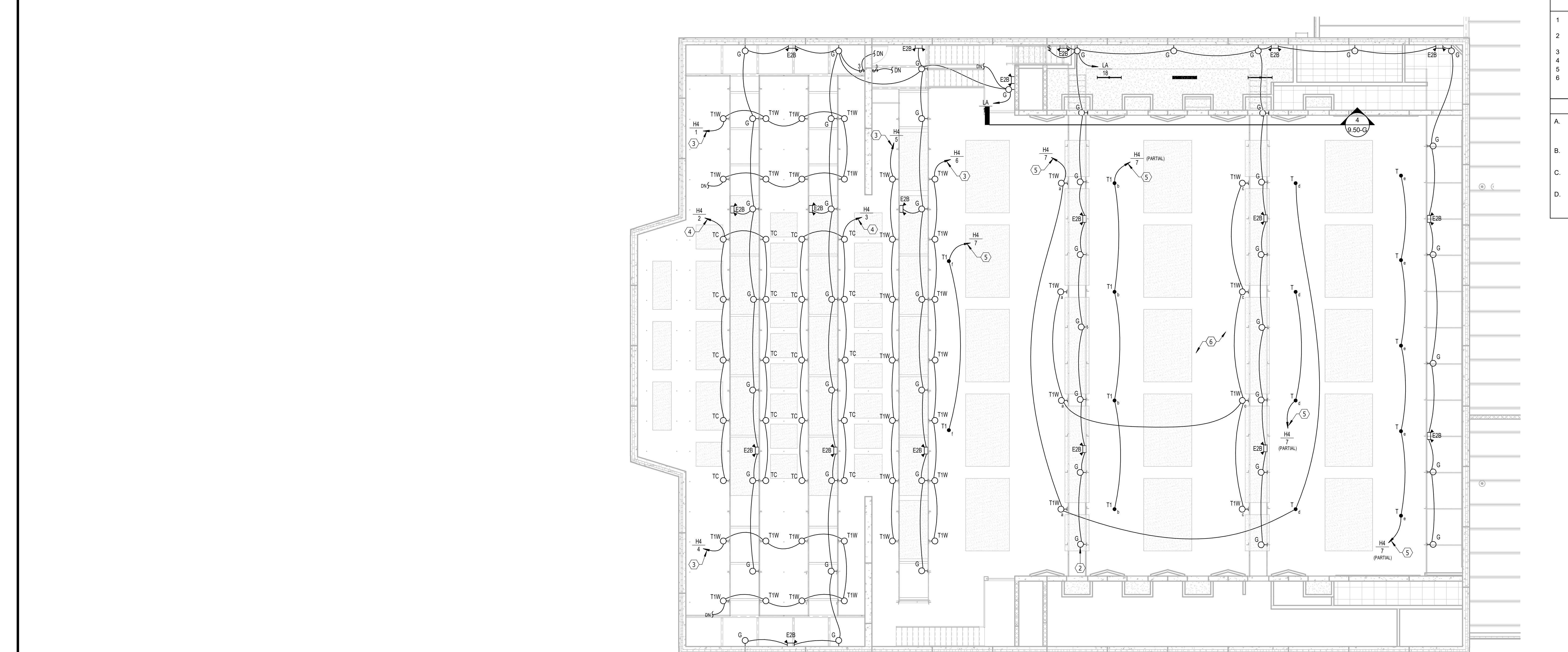


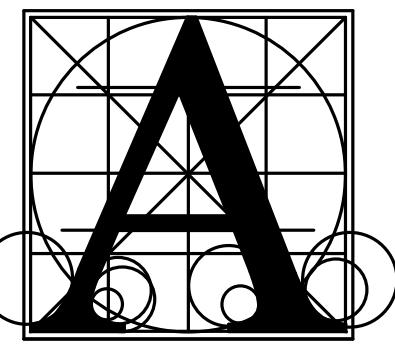
N  
CATWALK PLAN - AREA G - LIGHTING  
SCALE 0 4 8 12 16



N  
CATWALK PLAN - AREA G - POWER & SIGNAL  
SCALE 0 4 8 12 16

**KEYPLAN**

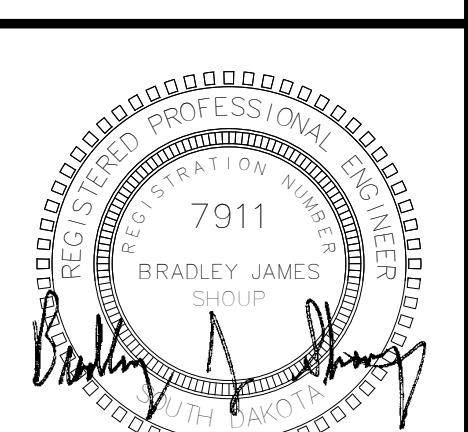




# Architecture Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



**A ssociated  
C onsulting  
E ngineering,  
I ncorporated**

340 S. Phillips Ave.  
Sioux Falls, SD 57104

# ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION
AS NOTED		SURFACE LIGHT (TYPE DENOTED)	AS NOTED		MULTIOUTLET ASSEMBLY (TYPE DENOTED)			POWER PACK
AS NOTED		WALL MOUNTED FLOODLIGHT (TYPE DENOTED)	AS NOTED		MULTIOUTLET ASSEMBLY (TYPE DENOTED)			REMOTE DRIVER
		RECESSED LIGHT (TYPE DENOTED)	94"		CLOCK (TYPE DENOTED)	86"		FIRE ALARM HORN W/STROBE (CANDELAS)
PER SCHED		POLE MOUNTED LIGHT (TYPE DENOTED)			POWER POLE (OPEN OFFICE STYLE)	86"		FIRE ALARM SPEAKER W/STROBE (CANDELAS)
PER SCHED		POLE MOUNTED FLOODLIGHT (TYPE DENOTED)			CIRCUIT BREAKER PANEL	86"		FIRE ALARM STROBE (CANDELAS)
		SURFACE LIGHT (TYPE DENOTED)			POWER OR DISTRIBUTION PANEL	46"		F.A. PULLSTATION
P1		SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)			SPECIAL CABINET (TYPE DENOTED)	46"		BEAM TYPE SMOKE DETECTORS
		RECESSED LIGHT (TYPE DENOTED)			TRANSFORMER (TYPE DENOTED)			FIRE ALARM REMOTE ANNUNCIATOR
		STRIP LIGHT (TYPE DENOTED)			MOTOR (SEE SCHEDULE)	AS NOTED		SMOKE DETECTOR (TYPE DENOTED)
AS NOTED		TRACK AND TRACK LIGHT (TYPES DENOTED)			MANUAL MTR. STR. (W/OVERLOADS)			HEAT DETECTOR
86"		EMERGENCY BATTERY LIGHT (TYPE DENOTED)			MAG. MOTOR STARTER OR CONTACTOR			DUCT SMOKE DETECTOR (TYPE DENOTED)
		EXIT SIGN (TYPE DENOTED)			COMB. MOTOR STARTER (NON-FUSED)			FIRE/SMOKE DAMPER
AS NOTED		LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH			COMB. MOTOR STARTER (FUSED)			REMOTE INDICATOR/TEST SWITCH
AS NOTED		LIGHT FIXTURE ON (EM) CRITICAL BRANCH			SAFETY DISC. SW. (NON-FUSED)			F.A. DOOR HOLDER
AS NOTED		LIGHT FIXTURE ON EMERGENCY CIRCUIT			SAFETY DISC. SW. (FUSED)			SPRINKLER FLOW SWITCH
AS NOTED		LIGHT FIXTURE WITH EMERGENCY BALLAST			BUS DUCT WITH PLUG UN DISCONNECT (FUSED)			SPRINKLER VALVE TAMPER SWITCH
		LIGHT ON CORD REEL (TYPE DENOTED)			VARIABLE FREQUENCY DRIVE			DOOR RELEASE
AS NOTED		LIGHTING CHANNEL WIRE (TYPE DENOTED)			RELAY			DOOR POSITION SWITCH
46"		SINGLE POLE SW.			OCCUPANCY SENSOR - TYPE DENOTED	46"		CARD READER
46"		2 POLE SINGLE THROW SW.			PHOTOCELL	46"		KEYPAD
46"		3-WAY SW.			TIME CONTROL SWITCH (TIME SWITCH)			MOTION DETECTOR (TYPE DENOTED)
46"		4-WAY SW.			HUMIDISTAT			ELECTROMAGNETIC LOCK
46"		KEYED SW.			THERMOSTAT			ADA PUSHBUTTON SWITCH
46"		SW. W/PILOT	PER SCHED		WALL HEATER (TYPE DENOTED)	46"		NURSE CALL MASTER STATION
46"		DIMMER SWITCH	PER SCHED		HAND OR HAIR DRYER (TYPE DENOTED)	46"		NURSE CALL EMERG. STATION
46"		OCCUPANCY SENSOR SWITCH			TELEPHONE OUTLET (TYPE DENOTED)	46"		NURSE CALL CODE BLUE EMERG. STATION
46"		TIMER SWITCH			TELECOM OUTLET (TYPE DENOTED)	46"		NURSE CALL DUTY STATION
46"		MOTOR HORSEPOWER RATED SWITCH			WIRELESS ACCESS POINT	46"		NURSE CALL STAFF STATION
18"		SINGLE RECEPT.			INTERCOM OUTLET LOCATION	46"		NURSE CALL BED STATION. SINGLE
18"		DUPLEX RECEPT.			TELEVISION OUTLET	46"		NURSE CALL BED STATION. DOUBLE.
18"		USB DUPLEX RECEPT. SEE SPECS			A/V OUTLET. SEE SPECIFICATIONS.	86"		NURSE CALL DOME LIGHT
18"		SPLIT DUPLEX RECEPT.			MULTIPLE SERVICE OUTLET (TYPE DENOTED)			NURSE CALL EQUIPMENT CABINET
18"		DUPLEX RECEPT. ON EMERGENCY CIRCUIT			FLOOR BOX, TWO DEVICES (TYPE DENOTED)	46"		NURSE CALL ANNUNCIATOR PANEL
18"		FOURPLEX RECEPT.			FLOOR BOX, FOUR DEVICES (TYPE DENOTED)	AS NOTED		CAMERA
18"		FOURPLEX RECEPT. ON EMERGENCY CIRCUIT			DICTION OUTLET LOCATION			CONDUIT CONCEALED IN WALL OR OVERHEAD
18"		DUPLEX RECEPT, ISOLATED GROUND.			WALL DICTION OUTLET LOCATION			CONDUIT TRANSITION UP
18"		FOURPLEX RECEPT, ISOLATED GROUND.			BELL			CONDUIT TRANSITION DOWN
46"		DEAD FRONT GFCI DEVICE			BUZZER			CONDUIT STUBBED OUT
AS NOTED		SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)			CHIME			CONDUIT CONCEALED, "E" INDICATES EMERGENCY
		JUNCTION BOX			PUSH BUTTON			OVERHEAD ELECTRIC
		DUPLEX FLOOR RECEPT.			SPEAKER (WALL OR CEILING MT.)			BRANCH CIRCUIT HOME RUN
		FOURPLEX FLOOR RECEPT.			HORN TYPE SPEAKER			CABLE TRAY (TYPE DENOTED)
		DUPLEX CEILING RECEPT.			VOLUME CONTROL			CONDUIT SLEEVE (SIZE DENOTED)
		FOURPLEX CEILING RECEPT.			MICROPHONE OUTLET			KEYED NOTE (SEE SCHEDULE)
AS NOTED		RECEPT ON CORD DROP (DUPLEX SHOWN)			AUXILIARY OUTLET			HATCHED SYMBOL INDICATES REMOVED
AS NOTED		RECEPT ON CORD REEL (DUPLEX SHOWN)			ANTENNA			

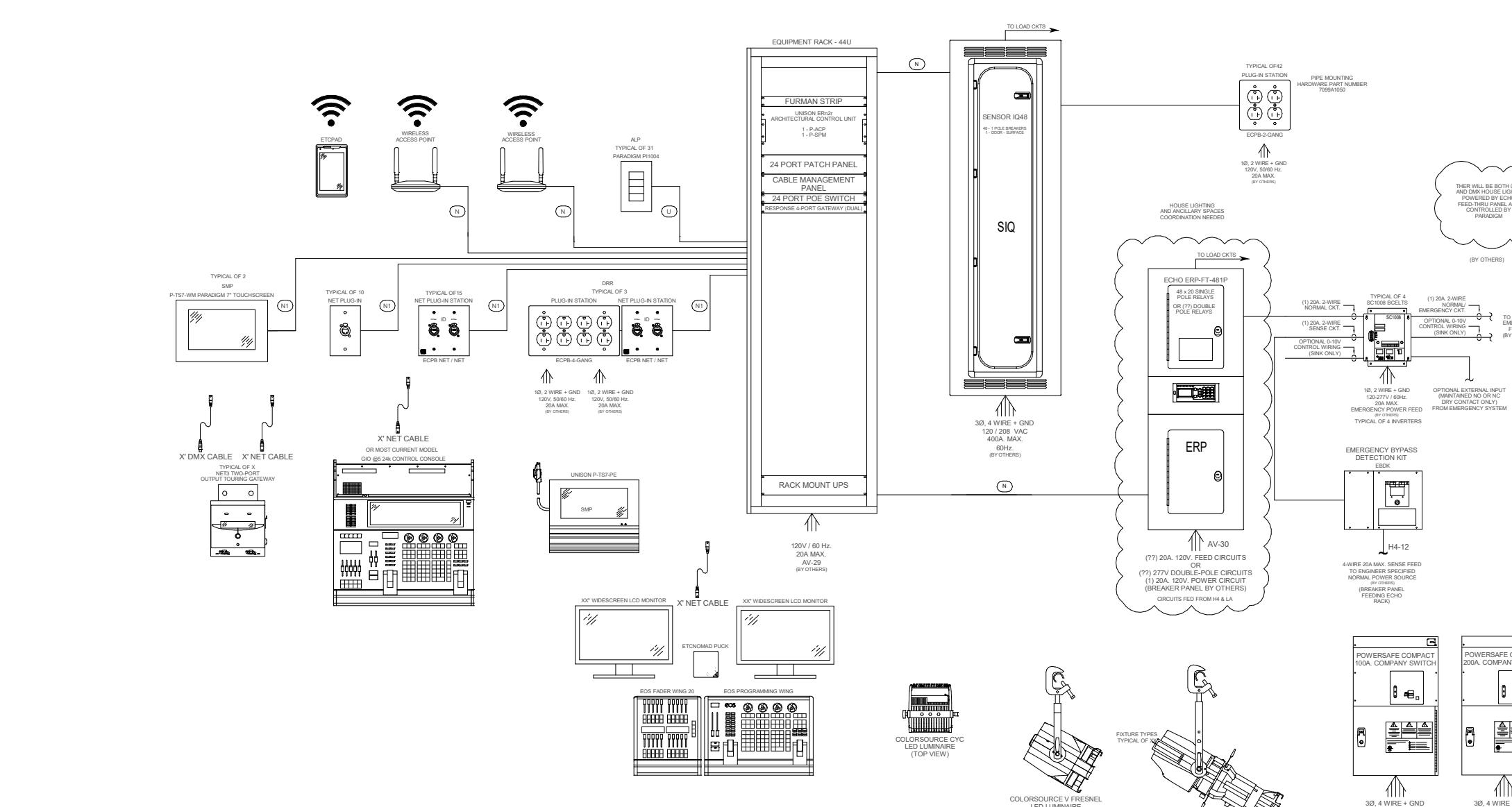
ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED.

ALL DISCHARGES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED.

# ELECTRICAL ABBREVIATIONS LIST

# ENVIRONMENTAL ADDITION

# ELECTRICAL SYMBOLS AND ABBREVIATIONS



CONTROL WIRING LEGEND		
SYMBOL	WIRE TYPE(S)	SIGNAL
(D*)	(1) BELDEN #9729	DMX INPUT
(X*)	(1) BELDEN #9729	DMX OUTPUT
(N*)	(1) BELDEN #1583A	ETCNet (Cat5e)
(N*)	(1) BELDEN #2412	ETCNet (Cat6)
(UV*)	(1) BELDEN #8471 (1) #14 AWG. STRANDED GND WIRE (2) #16 AWG. STRANDED WIRES	UNISON (WITH +24V POWER)
(U*)	(1) BELDEN #8471 (1) #14 AWG. STRANDED GND WIRE	UNISON

# THEATRICAL LIGHTING POWER AND CONTROL RISER DIAGRAM

O SCALE

FEEDER SCHEDULE														
MARK (AMPS)	4-WIRE FEEDER				3-WIRE FEEDER				"K" RATED 4-WIRE FEEDER					MARK (AMPS)
	SETS	PH	GND	C	SETS	PH	GND	C	SETS	PH	N	GND	C	
15	1	14	14	0.75	1	14	14	0.75	1	14	12	14	0.75	15
20	1	12	12	0.75	1	12	12	0.75	1	12	10	12	0.75	20
25	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	25
30	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	30
35	1	8	10	0.75	1	8	10	0.75	1	8	6	10	0.75	35
40	1	8	10	0.75	1	8	10	0.75	1	8	4	10	1.00	40
45	1	6	10	1.00	1	6	10	0.75	1	6	4	10	1.00	45
50	1	6	10	1.00	1	6	10	0.75	1	6	3	10	1.00	50
60	1	6	10	1.00	1	6	10	0.75	1	6	3	10	1.00	60
70	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	70
80	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	80
90	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.25	90
100	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.50	100
110	1	2	6	1.25	1	2	6	1.25	1	2	3/0	6	1.50	110
125	1	1	6	1.50	1	1	6	1.25	1	1	4/0	6	2.00	125
150	1	1/0	6	2.00	1	1/0	6	1.50	1	1/0	300	6	2.00	150
175	1	2/0	6	2.00	1	2/0	6	2.00	1	2/0	350	6	2.00	175
200	1	3/0	6	2.00	1	3/0	6	2.00	1	3/0	500	6	2.50	200
225	1	4/0	4	2.50	1	4/0	4	2.00	1	4/0	2-3/0	4	2.50	225
250	1	250	4	2.50	1	250	4	2.50	1	250	2-4/0	4	2.50	250
300	1	350	4	3.00	1	350	4	2.50	1	350	2-300	4	3.00	300
350	1	500	3	3.00	1	500	3	3.00	1	500	2-400	3	3.50	350
400	2	3/0	3	2.00	2	3/0	3	2.00	2	3/0	500	3	2.50	400
450	2	4/0	2	2.50	2	4/0	2	2.00	2	4/0	2-3/0	2	2.50	450
500	2	250	2	2.50	2	250	2	2.50	2	250	2-4/0	2	2.50	500
600	2	350	1	3.00	2	350	1	2.50	2	350	2-350	1	3.00	600
700	2	500	1/0	3.00	2	500	1/0	3.00	2	500	2-400	1/0	3.50	700
800	3	300	1/0	2.50	3	300	1/0	2.50	3	300	2-4/0	1/0	3.00	800
900	3	350	2/0	3.00	3	350	2/0	2.50	3	350	2-300	2/0	3.00	900
1000	3	400	2/0	3.00	3	400	2/0	2.50	3	400	2-350	2/0	3.00	1000
1200	4	350	3/0	3.00	4	350	3/0	2.50	4	350	2-300	3/0	3.00	1200
1600	5	400	4/0	3.00	5	400	4/0	2.50	5	400	2-350	4/0	3.00	1600
2000	6	400	250	3.00	6	400	250	3.00	6	400	2-350	250	3.50	2000
2500	7	500	350	3.50	7	500	350	3.00	7	500	2-400	350	3.50	2500
3000	8	500	400	3.50	8	500	400	3.00	8	500	2-400	400	4.00	3000
4000	11	500	500	3.50	11	500	500	3.00	11	500	2-400	500	4.00	3000
5000	14	500	700	3.50	14	500	700	3.00	14	700	2-400	700	4.00	3000

OTHERWISE.  
LESS THAN 300 FEET (90 METERS).

NOT EXCEED 1640 FEET (500 METERS).  
IS 498' (151 METERS) FOR THE ONE-ZONE  
ADDITIONAL WIRE LENGTHS.

TERS).  
RS) BETWEEN CONTROLLER AND REMOTE HEAD.  
ACTURING.

MOTOR & APPLIANCE FEEDER SCHEDULE (100 Amps & Less)

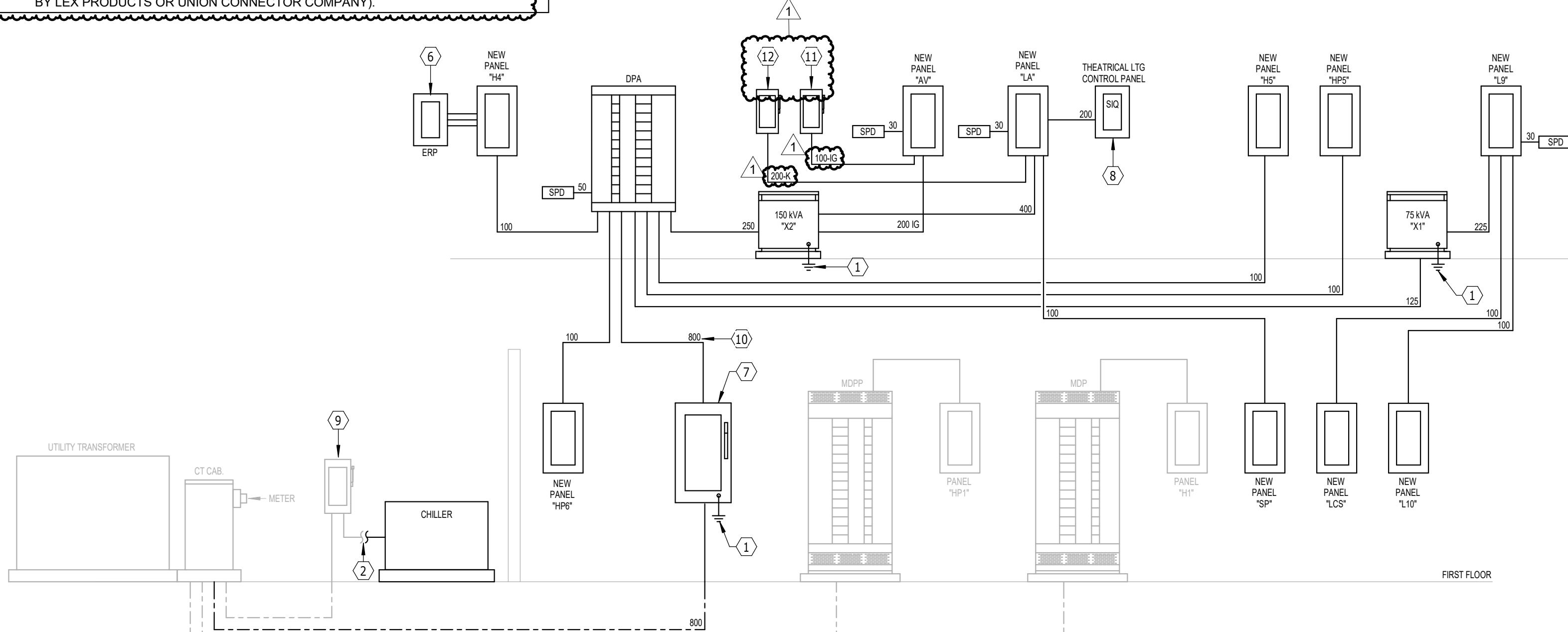
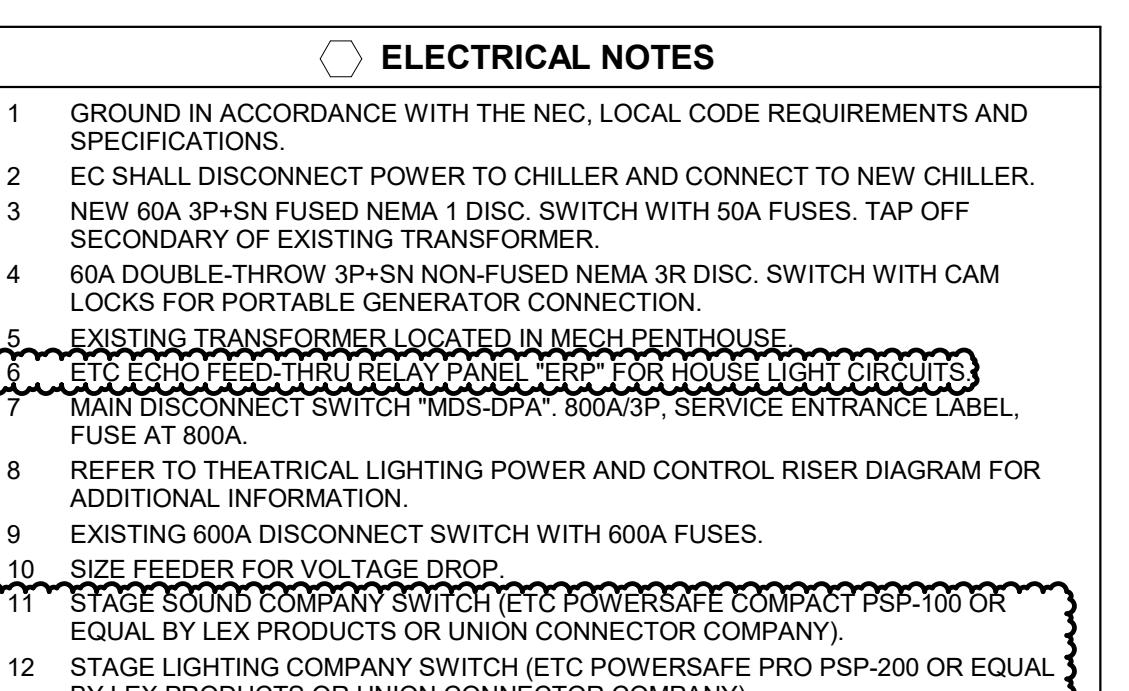
MARK (AMPS)	MOTOR LOAD (HP)		4-WIRE FEEDER			3-WIRE FEEDER			MARK (AMPS)
	480V	208V	PH	GND	C	PH	GND	C	
20	7.5 & LESS	3 & LESS	12	12	0.75	12	12	0.75	20
25	10	--	10	10	0.75	10	10	0.75	25
30	15	--	10	10	0.75	10	10	0.75	30
35	--	5	8	10	0.75	8	10	0.75	35
40	15	--	8	10	0.75	8	10	0.75	40
45	--	--	6	10	1.00	6	10	0.75	45
50	--	7.5	6	10	1.00	6	10	0.75	50
60	20	10	6	10	1.00	6	10	0.75	60
70	25	--	4	8	1.25	4	8	1.00	70
80	30	--	4	8	1.25	4	8	1.00	80
90	40	15	3	8	1.25	3	8	1.25	90
100	50	20	3	8	1.25	3	8	1.25	100

NOTES:

<b>TRANSFORMER SCHEDULE</b>				
MARK	VOLTAGE CHARACTERISTICS		KVA	NOTES
	PRIMARY	SECONDARY		
X1	480/3Ø	208/120/3Ø	75	1
X2	480/3Ø	208/120/3Ø	150	1

OTES:

1. GENERAL PURPOSE DRY-TYPE TRANSFORMER.

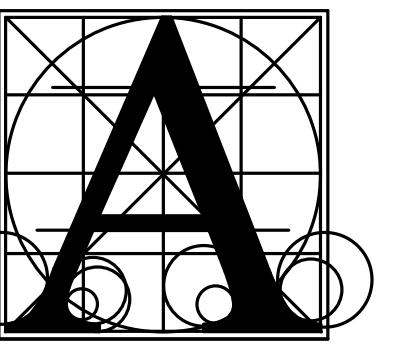


# **POWER RISER DIAGRAM**

---

# PORTABLE GENERATOR POWER RISER DIAGRAM

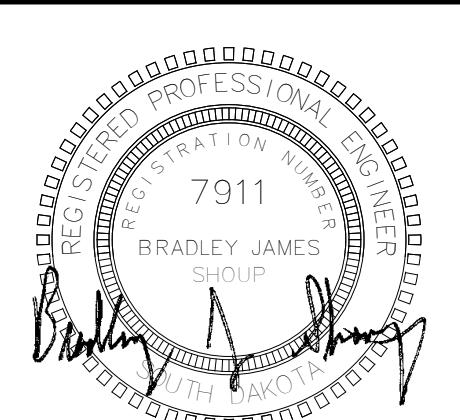




Architecture  
Incorporated

415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



Associated  
Consulting  
Engineering,  
Incorporated

340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax: 335-6220  
E-mail: ace@aceinc.net

ACEI PROJ. #123034

## LENNOX HIGH SCHOOL ADDITION

Electrical Schedules

Project  
Schedules

Index

PANELBOARD: LCS												
LOCATION: CONCESSIONS E101												
MOUNTING: RECESSED NEMA1												
MAIN DEVICE: 250 A MLO												
BUS AMPS: 250 AMPS												
SPECIAL:												
LOAD DESCRIPTION	BKR	POLES	CKT	A	B	C	CKT	POLES	BKR	LOAD DESCRIPTION		
RCPT CONCESSIONS E101	20 A	1	0.2	1.5	1.5	1.5	2	1	20 A	HOT DOG ROLLER		
REFRIGERATOR WARMER	20 A	1	1	2			4	1	20 A	RCPT CONCESSIONS E101		
ALL PURPOSE WARMER	20 A	1	5				1.5	0.2	6	1	20 A	
RCPT CONCESSIONS E101	20 A	1	7	1.2	1.2		8	1	20 A	RCPT CONCESSIONS E101		
RCPT CONCESSIONS E101	20 A	1	9				10	1	20 A	RCPT CONCESSIONS E101		
RCPT CONCESSIONS E101	20 A	1	11				0.2	0.8	12	1	20 A	
REFRIGERATOR	20 A	1	13	0.2	0.8		14	1	20 A	MOTORS CONCESSIONS		
POP CORN MACHINE	20 A	1	15	5	1.5	0.2	16	1	20 A	RCPT CONCESSIONS E101		
MOTORS CONCESSIONS...	20 A	1	17				0.8	0.2	18	1	20 A	
REFRIGERATOR	20 A	1	19	0.8	1.0		20	1	20 A	FREEZER		
COOLER	20 A	1	21				22	1	20 A	COOLER		
COOLER	20 A	1	23				0.8	0.2	24	1	20 A	
RCPT STOR. E102	20 A	1	25	0.2	0.2		26	1	20 A	RCPT CONCESSIONS E101		
RCPT CONCESSIONS E101	20 A	1	27				28					
							30					
							32					
							34					
							36					
							38					
							40					
							42					
TOTAL LOAD:				7 KVA			7 KVA			5 KVA		
TOTAL AMPS:				62 A			60 A			38 A		
LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS								
RCPT	17220 VA	79.04%	13610 VA									
MOTORS	1680 VA	100.00%	1680 VA									
NOTES:												

PANELBOARD: AV												
LOCATION: ELECTRICAL G20												
MOUNTING: SURFACE NEMA1												
MAIN DEVICE: 200 A MAIN CB												
BUS AMPS: 200 AMPS												
SPECIAL: ISOLATED GROUND BUS												
LOAD DESCRIPTION	BKR	POLES	CKT	A	B	C	CKT	POLES	BKR	LOAD DESCRIPTION		
RCPT THEATER G105	20 A	1	0.7	0.9			2	1	20 A	RCPT CONTROL G205		
RCPT CONTROL G205	20 A	1	3	0.2	0.4		4	1	20 A	RCPT THEATER G105		
RCPT CONTROL G205	20 A	1	5				0.2	0.2	6	1	20 A	
RCPT CATWALK	20 A	1	7	0.2	0.2		8	1	20 A	RCPT CONTROL G205		
RCPT STAGE G106	20 A	1	8				10					
RCPT STAGE G106	20 A	1	11				0.2	1.6	12	1	20 A	
RCPT STAGE G106	20 A	1	13	0.2	0.2		14	1	20 A	RCPT STAGE G106		
RCPT STAGE G106	20 A	1	15				16	1	20 A	RCPT STAGE G106		
RCPT CATWALK	20 A	1	17				0.4	0.8	18	1	20 A	
Spare	20 A	1	19	0.0	0.8		20	1	20 A	RCPT STAGE G106		
RCPT BALCONY G202	20 A	1	21				22	1	20 A	RCPT MAKE-UP G112		
LIGHTING AUX. RACK	20 A	1	29				30	1	20 A	ERP CONTROL		
Spare	20 A	1	31	0.0			32					
							34					
							35					
							36					
							38	3	30 A	SURGE SUPPRESSION		
COMPANY SWITCH	100 A	3	37	0.0	0.0		40	--	--	--		
--	--	--	--	41			42	--	--	--		
TOTAL LOAD:				3 KVA			4 KVA			5 KVA		
TOTAL AMPS:				25 A			34 A			40 A		
LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS								
RCPT	11628 VA	93.00%	10814 VA									
NOTES:												

PANELBOARD: SP											
LOCATION: SCENE SHOP STOR G111											
MOUNTING: SURFACE NEMA1											
MAIN DEVICE: 100 A MLO											
BUS AMPS: 100 AMPS											
SPECIAL:											