





Tenant Improvements For:

Date: 12/30/22  
Issued For: PERMIT

REVISIONS		
No.	Date	Description
△ 3.17.23		CITY COMMENTS



PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	58Y5 ENGINEERS
ELECTRICAL	58Y5 ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS



NO.

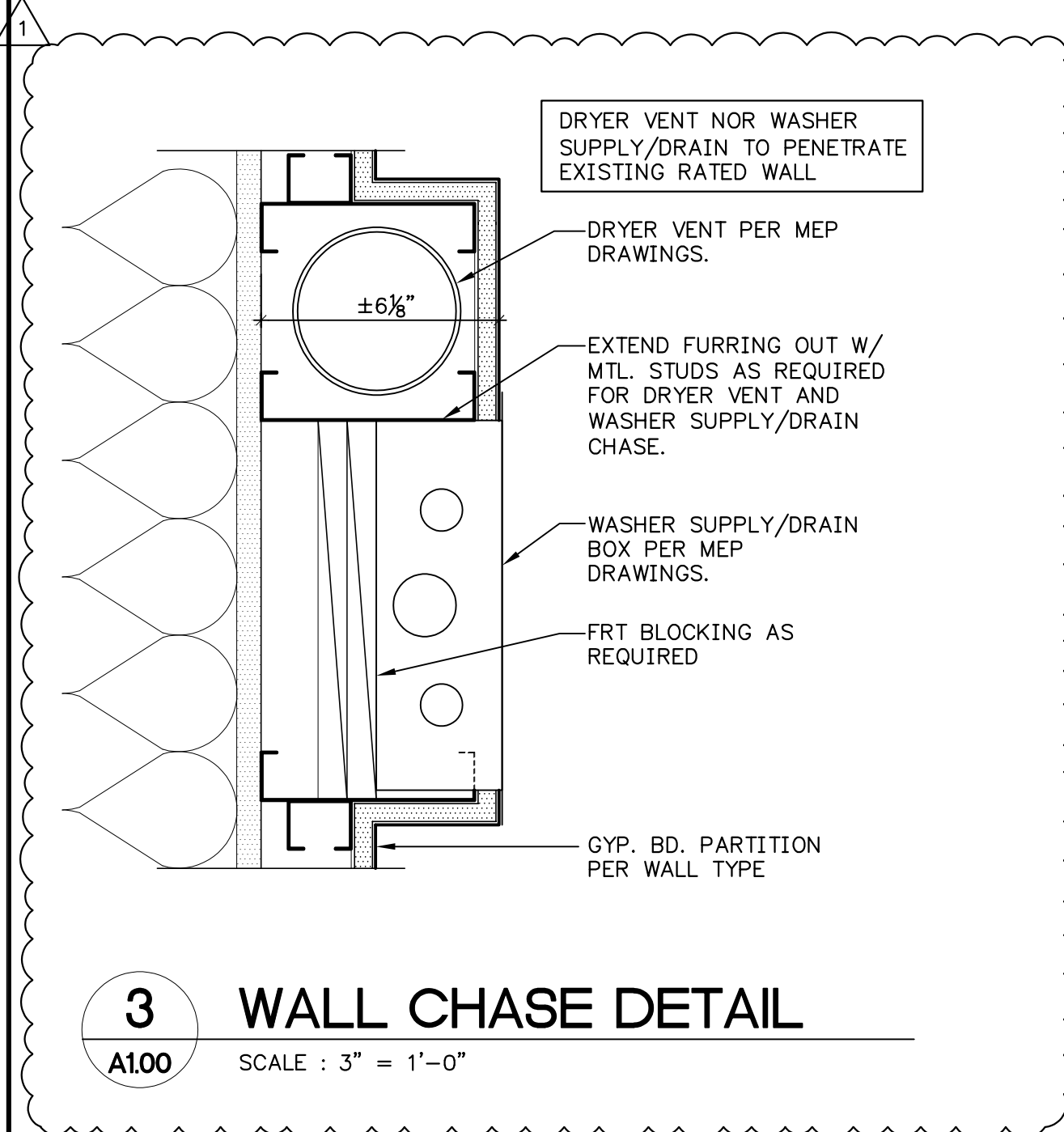
KS - MO  
Commercial & Residential  
913 + 904 - 6734

A1.00

©2022

To Be Located At:

F45  
Lee's Summit



### 3 WALL CHASE DETAIL

SCALE : 3" = 1'-0"

A1.00

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

Tenant Improvements For:

F45 Lee's Summit

Date: 12/30/22

Issued For: PERMIT

REVISIONS		
No.	Date	Description



PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	5BY5 ENGINEERS
ELECTRICAL	5BY5 ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS



KS - MO  
Commercial & Residential  
913 + 904 - 6734

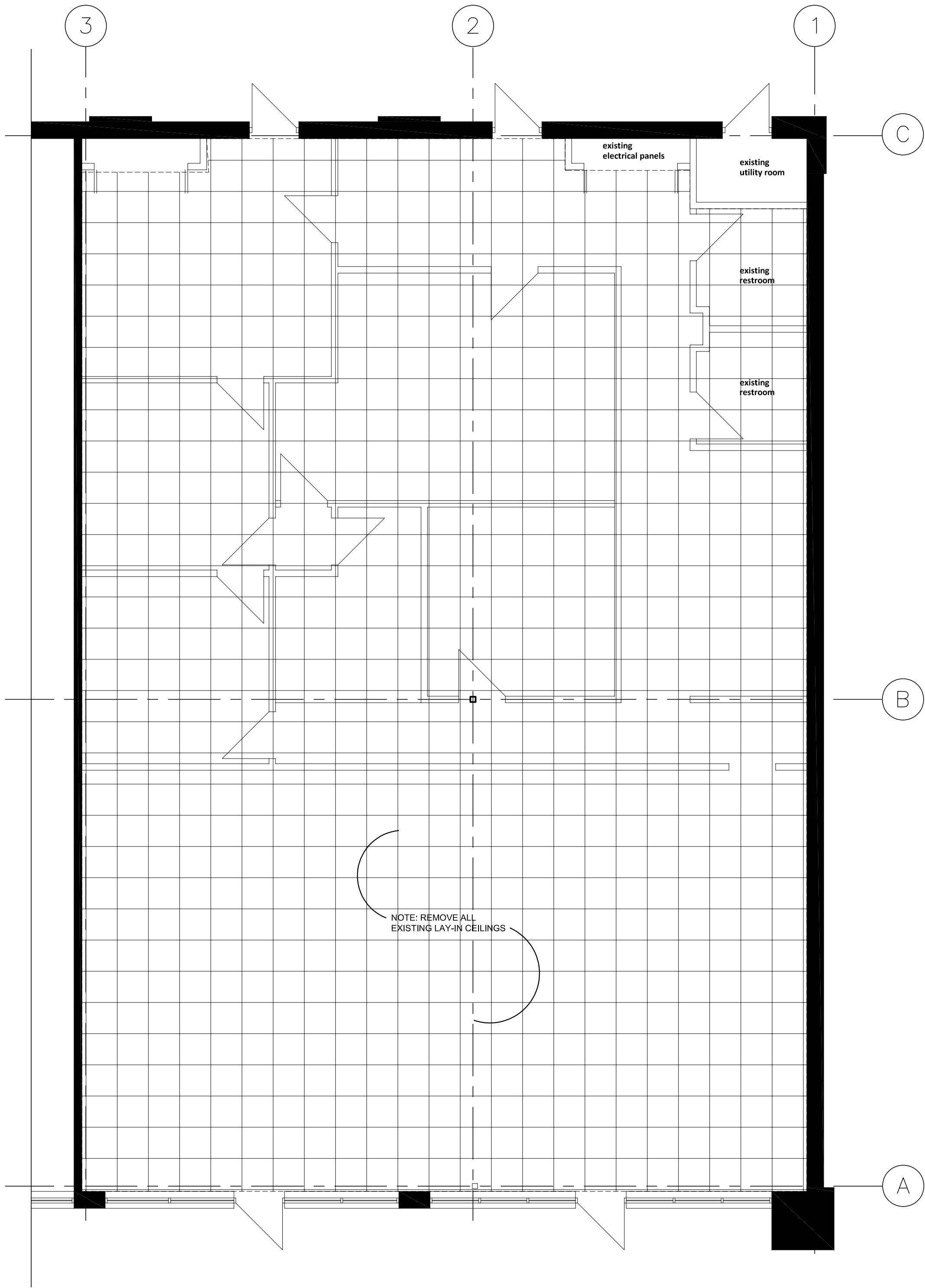
NO.

D1.01

DEMOLITION NOTES:

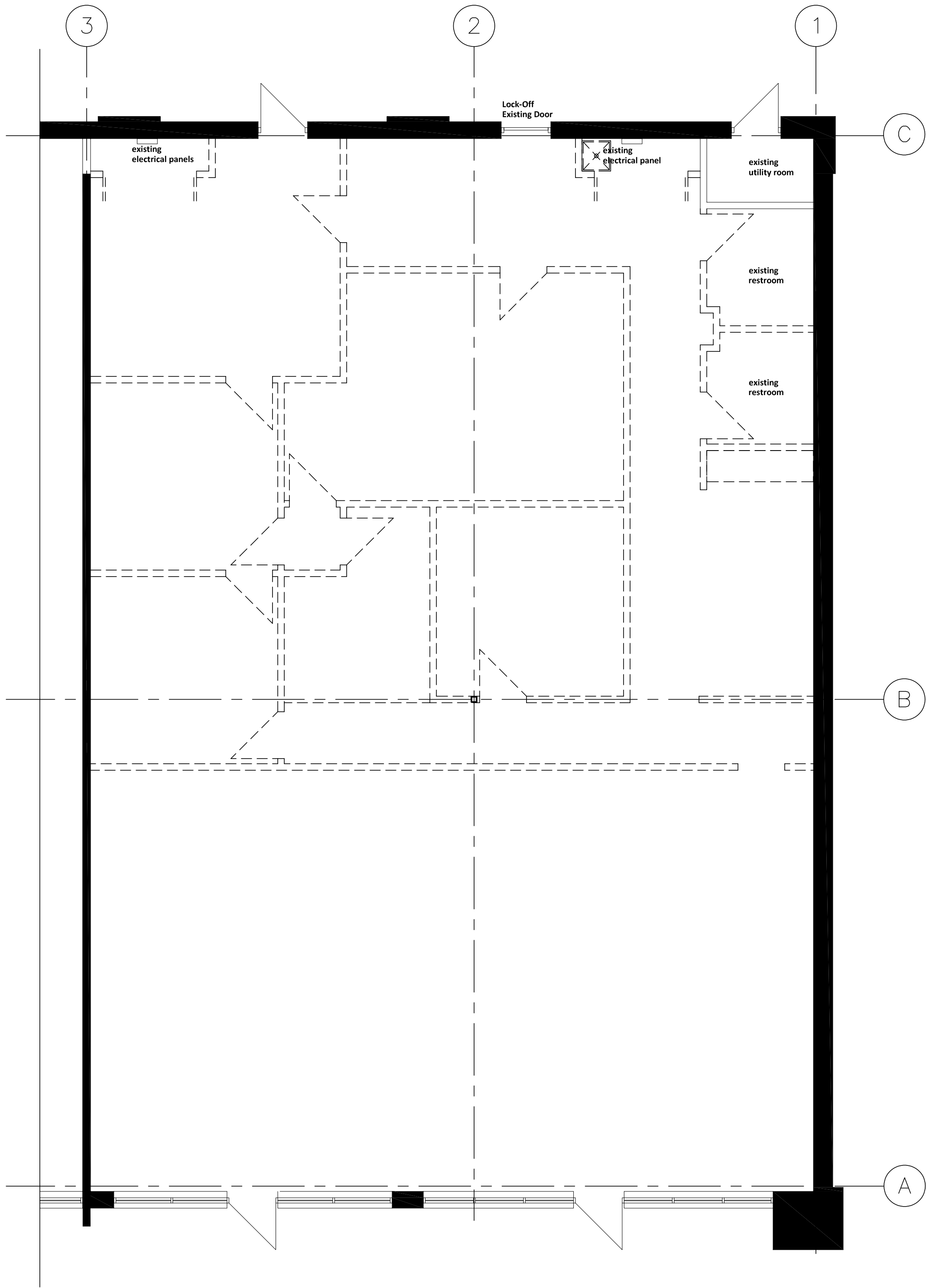
1. DEMO EXIST. MTL. STUD/GYPSUM BD. PARTITIONS, FURRING AND CEILINGS FULLY TO EXTENTS SHOWN.
2. REMOVE EXISTING PLUMBING ELEMENTS/FIXTURES. CAP LINES BELOW FLOOR & SALVAGE FIXTURES WHERE POSSIBLE.
3. REMOVE ALL EXISTING FLOORING.

- 1 MODIFY EXISTING ROOF DRAIN AS REQUIRED TO BE FULLY ENCLOSED IN NEW WALL CAVITY.
- 2 SALVAGE DRINKING FOUNTAIN FOR REUSE.
- 3 RELOCATE EXISTING ELECTRIC PANELS PER ELECTRICAL DWGS.
- 4 SALVAGE FIRE EXTINGUISHER FOR REUSE. LOCATION TBD.



2 DEMO REFLECTED CEILING PLAN

D1.01 SCALE : 3/16" = 1'-0"



1 DEMO PLAN

D1.01 SCALE : 3/16" = 1'-0"



GENERAL NOTES:

1. CONTRACTOR TO REVIEW AND VERIFY ELECTRICAL REQUIREMENTS INCLUDING LOCATIONS OF EXISTING AND NEW OUTLETS INDICATED. REF ELECTRICAL PLAN
2. PATCH AND REPAIR ALL HOLES IN EXISTING WALLS TO REMAIN (TYP.)
3. REF. ELEVATIONS FOR EXERCISE EQUIPMENT BLOCKING & MOUNTING NOTES.
4. SHOWER "PAN" TO BE SLOPED TO TRENCH DRAIN PER PLAN. ALL OTHER FLOOR DRAINS (FD) TO BE NON-SLOPED AREA DRAINS.

CONSTRUCTION NOTES:

- 1 LOOK OFF EXISTING DOOR AND REMOVE HARDWARE. INSULATE AND INFILL DOORWAY ON INTERIOR SIDE AS REQUIRED TO MATCH EXISTING WALL THICKNESS. ADD CONTRAST LETTERING SIGNAGE ON OUTSIDE OF DOOR TO READ "THIS DOOR BLOCKED".
- 2 GYP. BD. WALL FURRED OUT AS SHOWN TO END OF TURF FLOORING.
- 3 MODIFY WALL TYPE AS REQUIRED TO CLOSELY MATCH WALL TYPE SHOWN ON PLAN.

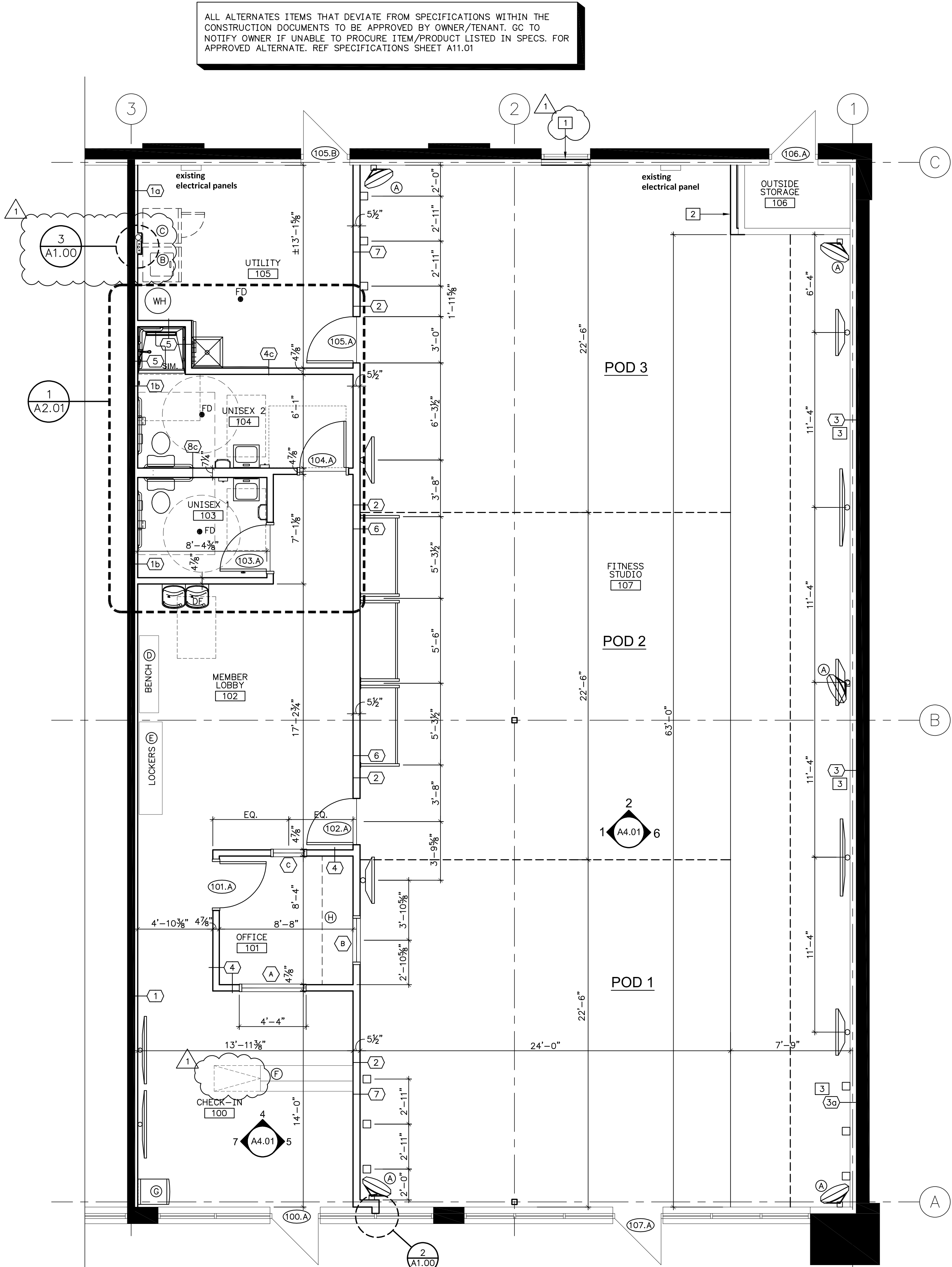
PARTIAL EQUIPMENT LIST:

- A WALL-MOUNTED FANS, TYP. OF 5 (REF SPECIFICATIONS)
- B WASHER (OWNER PROVIDED - CONTRACTOR INSTALLED)
- C DRYER (OWNER PROVIDED - CONTRACTOR INSTALLED)
- D MEMBER BENCH (OWNER PROVIDED)
- E LOCKERS (OWNER PROVIDED)
- F CHECK-IN DESK (OWNER PROVIDED - CONTRACTOR INSTALLED)
- G FREESTANDING DRINKS REFRIGERATOR (REF SPECIFICATIONS)
- H OFFICE DESKTOP (OWNER PROVIDED - CONTRACTOR INSTALLED)

PARTIAL SPECIFICATIONS:

(SEE COMPLETE SPECIFICATIONS ON SHEET A11.01)

CERAMIC TILE				
CT-1	Restroom Walls	Daltile	Museo Block Grey Mix MU37	12 x 24, 5'H or full tile
CT-2	Restroom Floors	Daltile	Museo Natural Grey	12 x 24, Natural Grey MU32
CT-3	Shower Floor	Daltile	Museo Abstract Mosaic	2 x 3, Natural Grey MU32
	Cove	Schluter	Dilex-HKW	9mm, w/ Inside and Outside Trims
	Tile Grout	Mapei	105 Driftwood	
	Termination Bar	Schluter	SCHIENE - H	
PAINT				
PT-1	All Walls	Sherwin Williams	SW7005 Pure White	Eggshell
PT-2	Restroom Walls	Sherwin Williams	SW7005 Pure White	Semi-Gloss
PT-3	Doors & All Frames	Sherwin Williams	SW6545 Majestic Purple	Semi-Gloss
PT-4	Ceiling Dryfall	Sherwin Williams	Dry Fog White Flat	Apply over Exposed steel framing (not on K-13)
FLOORING				
SC	Concrete Floor	Grind & Polish Smooth	2 - Coats Clear Sealer/Hardener	NOTE: If concrete floor is not consistent use alt. LVT below
LVT-1	LVT (luxury vinyl tile)	Next Floor	Patina 419015 Antique Brass	18 x 24
RB	Rubber Base	Roppe or Armstrong	4" Black	4"
RT	Rubber Floor Tile	Pods	3.2' x 3.2'	(owner provided, mastic and installed by contractor)
TF	Synthetic Turf Flooring	Owner Provided		(owner provided, mastic and installed by contractor)
ACCESSORIES				
	ADA Grab Bars	Bobrick	B-6806	Size per location and code
	Restroom Mirrors	Bobrick	B-165	18 x 36
	Sanitary Napkin Disposal	Bobrick	B-270	
	Soap Dispenser	Bobrick	B-2111	Surface Mounted
	Toilet Paper Holder	Bobrick	B-4288	
	Shower Rod & Curtain	Bobrick	B-6047 / B-204	
	Shower ADA Seat	Bobrick	B-5181	
	Shower Shelf	Gatco	Model 1455	Wall Mounted
	Door Robe Hook	Bobrick	B-6717 / B-6727	
	Mop Rack	Bobrick	B-223	
	Washer Box	Oatey	Center drain outlet box	
	Shelving - Utility Room	HDX	21656PS	
PLUMBING				
DF	Drinking Fountain	Elkay	EXSTL8WS-SS	Stainless Steel w/Bottle Filler
	Lavatory Bathroom Sink	American Standard	Lucerne 0356.041	White, 20 x 18
	Restroom Sink Faucet	Moen	8554	Battery Powered, Chrome
	Sink Faucet (alternate)	American Standard	605B.204 / PK00.PAC	Innsbrook Selectronic SS, Hardwired Motion Sensor
	Toilet in Restroom	Gerber	Pressure Assist H/C	White, Ultra Flush 20-318
	Shower Head	Luxart Classico II	LC2SYS60-CP	
	Shower Mixing Valve	Olympia	Temp / Pressure Balanced	
	Mop Sink & Faucet	Fiat	MSB2424 & 830 AA	
	Shower Trench Drain	Tru-Line	304 SS w/ S Style Grate	Length by location
	Water Heater	State	PCE-50-20LS	50 gal
	Floor Drain	Sioux Chief	832 Series	Nickel Bronze
	Clean Out	Sioux Chief	852 Series	Nickel Bronze
ELECTRONICS & LIGHTING				
	Linear Light Fixture	Warehouse Lighting	BEAMLED8 or 4-DID-130W-3CT-DMV-WH	4' & 8' Direct/Indirect, Suspended w/10' cords
	Bathroom Recessed	HE Williams	4DR-TL	
	Bathroom Recessed	Lotus 4" Rec'd LED	LD4R-35K-HO-4R-WRWT	Alternate
	Lobby Refrigerator	IDW	G-9 Upright 7.2 cu.ft.	
	Entry Hanging Pendant	NOT USED		TBD / Alternate
	Cover Plates	White at Painted Walls, Stainless at Tiled Walls		
	Occupancy Sensors			All Areas
	Hand Dryer	AIKE	AK2903HD	
	Wall Fans in Workout	Pods	Comfort Zone 16" Oscillating	White, Installed @ 8'-9" above finish floor (AFF.) x 5 locations
DOORS & DOOR HARDWARE				
	Door Hinges	Hager	BB1279 4 1/2 x 4 1/2 US267	Or Equal
	Door Hardware Passage	Schlage D Series	Saturn US 626	
	Restroom Door Deadbolt	Falcon	D271 - 626	
	Utility Room Lock	Simplex	L1021S-626	
	Panic Bar Door Hardware	Von Duprin	22EO SP28 36"	Install on all egress doors where Code Requires
	Door Closers	Dorma	8600 689 Finish	Locate Where Code Requires
	Push Pulls	Rockwood	102 x 70C US 626	
	Door Floor Stop	Rockwood	441 Low Dome US 626	
	Door Wall Stop	Rockwood	403	
DRYWALL & ACOUSTIC ATTENUATION				
	Caulk @ Sound Walls	Sound Seal	OSI SC-175	
	Acoustic Ceiling Spray	International Cellulose	K-13 White	On exposed metal deck in workout room between structure
	Acoustic Duct Liner	Johns Manville	Permacote Linacoustic	Install inside mechanical hard duct where possible in workout
	Speaker Hangars	Kinetics Noise Control	RD55 Neoprene Isolator	Ari Lesser - ar@bfiaoustics.com



1 CONSTRUCTION PLAN  
A101 SCALE : 1/4" = 1'-0"

Tenant Improvements For:

Date: 12/30/22  
Issued For: PERMIT

REVISIONS

No.	Date	Description
1	3.17.23	CITY COMMENTS



PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	58BY5 ENGINEERS
ELECTRICAL	58BY5 ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS



NO.

A1.01







To Be Located At:

1138 NE Douglas Rd  
Lee's Summit, MO 64086

Tenant Improvements For:

F45  
Lee's Summit

Date: 12/30/22  
Issued For: PERMIT

REVISIONS	
No.	Date
1	3.17.23
Description	CITY COMMENTS



PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	58Y5 ENGINEERS
ELECTRICAL	58Y5 ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS

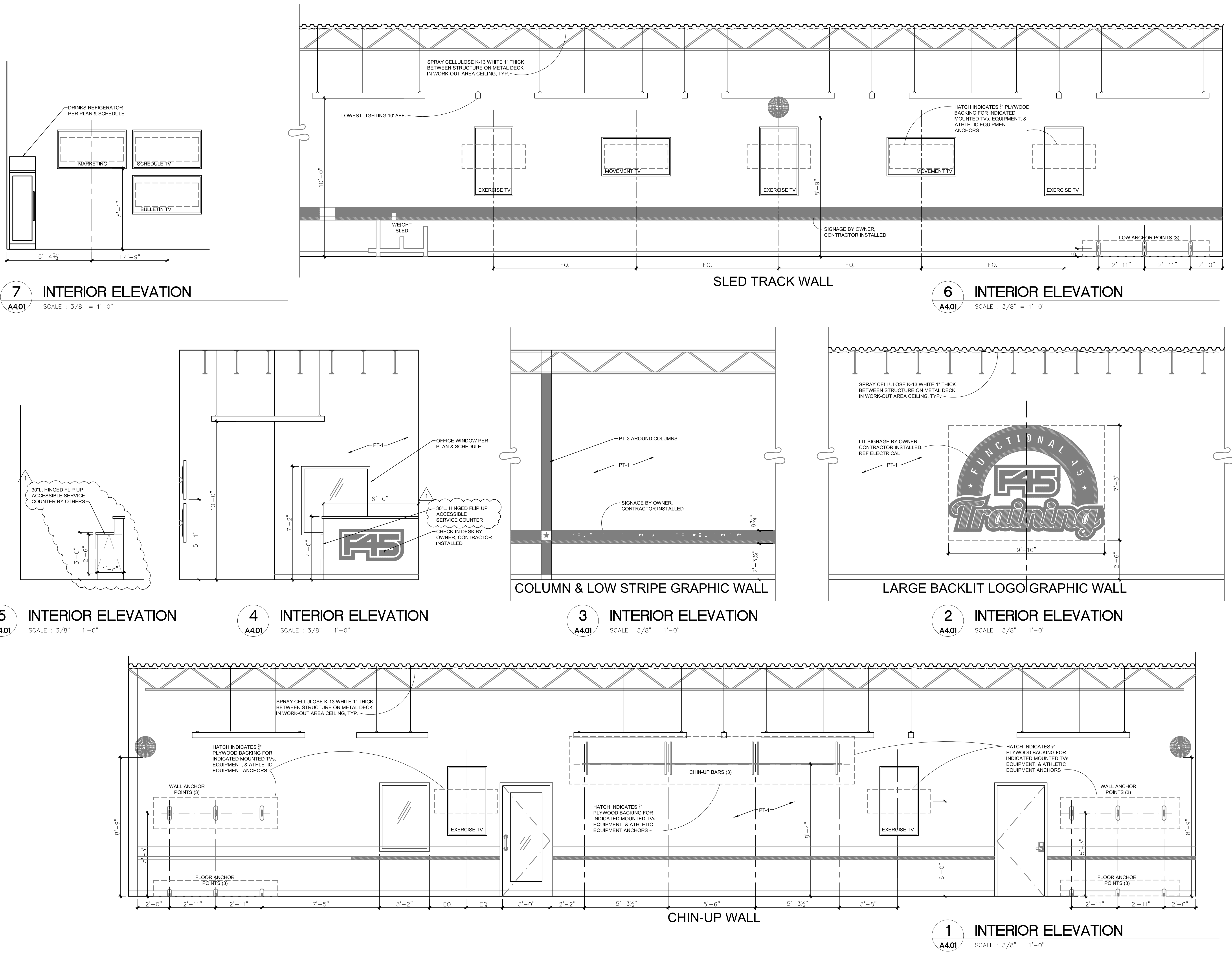
MOMENTUM  
ARCHITECTURE+DESIGN

KS - MO  
Commercial & Residential  
913 + 904 - 6734

NO.

A4.01

©2022



7 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

6 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

5 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

4 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

3 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

2 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"

1 INTERIOR ELEVATION  
A4.01 SCALE : 3/8" = 1'-0"



ROOM FINISH SCHEDULE													DOOR AND FRAME SCHEDULE												
ROOM		FLR.	BASE				WALLS				CEILING		REMARKS	DOOR / WINDOW				FRAME		RATING	DETAILS			HARDWARE	REMARKS
			N	E	S	W	N	E	S	W	MAT.	HT.		NO.	SIZE (WxHxTh)	TYPE	MAT.	TYPE	MAT.		JAMB	HEAD	SILL		
100	CHECK-IN	LVT	RB-1	RB-1	RB-1	RB-1	PT-1	PT-1	PT-1	PT-1	PT-4	E		100.A	3'-0"x7'-0" (F.V)	E	-	-	-	-	-	-	-	E	1)
101	OFFICE	LVT	RB-1	RB-1	RB-1	RB-1	PT-1	PT-1	PT-1	PT-1	SAT-1	9-0		101.A	3'-0"x7'-0"x1¾"	W1	WD	1	HM	-	-	-	-	LA.1	-
102	MEMBER LOBBY	LVT	RB-1	RB-1	RB-1	RB-1	PT-1	PT-1	PT-1	PT-1	PT-4	E		102.A	3'-0"x7'-0"x1¾"	W2	WD	1	HM	-	-	-	-	PP.1	-
103	UNISEX 1	CT-2	CT-S	CT-S	CT-S	CT-S	PT-2 CT-1	PT-2 CT-1	PT-2 CT-1	PT-2 CT-1	GB	9-0		A	4'-4"x4'-4" (WINDOW)	-	-	2	HM	-	-	-	-	-	-
104	UNISEX 2	CT-2	CT-S	CT-S	CT-S	CT-S	PT-2 CT-1	PT-2 CT-1	PT-2 CT-1	PT-2 CT-1	GB	9-0		B	3'-2"x4'-4" (WINDOW)	-	-	3	HM	-	-	-	-	-	2)
105	UTILITY	SC	RB-1	RB-1	RB-1	RB-1	PT-1	PT-1	PT-1	PT-1	E	-		C	2'-4"x4'-4" (WINDOW)	-	-	4	HM	-	-	-	-	-	-
106	STORAGE		NOT IN SCOPE - REFERENCE ONLY											103.A	3'-0"x7'-0"x1¾"	W1	WD	1	HM	-	-	-	-	LA.3	-
107	FITNESS STUDIO	RT/TF	RB-1	RB-1	RB-1	RB-1	PT-1	PT-1	PT-1	PT-1	KP	-	1)	104.A	3'-0"x7'-0"x1¾"	W1	WD	1	HM	-	-	-	-	LA.3	-
														105.A	3'-0"x7'-0"x1¾"	W1	WD	1	HM	-	-	-	-	LK.2	-
														105.B	3'-0"x7'-0"x1¾"	E	-	-	-	-	-	-	-	E	1)
														106.A	3'-0"x7'-0"x1¾"	NOT IN SCOPE - REFERENCE ONLY									
														107.A	3'-0"x7'-0" (F.V.)	E	-	-	-	-	-	-	-	E	1)

FINISH SCHEDULE LEGEND	
<b>FLOOR FINISHES</b> REFERENCE ROOM FINISH PLAN AND INTERIOR ELEVATIONS FOR SPECIFIC FINISH DESIGNATION IF FINISH SCHEDULE INDICATES GENERAL FINISH	
CT:	(CERAMIC TILE W/ 3/4" MAX. GROUT JOINTS SEALED W/ SILICONE SEALER) PROVIDE CRACK BRIDGING MEMBRANE OVER ALL CONTROL JOINTS AND COLD JOINT IN SLAB
CT-1:	MFR: DALTILE, STYLE/COLOR: MUSEO, BLOCK GREY MIX MU37, SIZE:12"x24", PATTERN: BRICK, GROUT COLOR: MAPEI, 105 DRIFTWOOD
CT-2:	MFR: DALTILE, STYLE/COLOR: MUSEO NATURAL GREY, SIZE:12"x24" MU32, PATTERN: BRICK, GROUT COLOR: MAPEI, 105 DRIFTWOOD
CT-3:	MFR: DALTILE, STYLE/COLOR: MUSEO ABSTRACT MOSAIC, SIZE:2"x3" MU32, PATTERN: BRICK, GROUT COLOR: MAPEI, 105 DRIFTWOOD
LVT:	(LUXURY VINYL TILE)
LVT:	MFR: NEXT FLOOR, SERIES:"PATINA", COLOR:419015 ANTIQUE BRASS, SIZE: 18"x24"; INSTALLATION PATTERN: PER MFR
RT:	(RUBBER SPORT FLOOR TILE)
RT:	MFR: PROVIDED BY OWNER; INSTALLATION: BRICK PATTERN, GLUE DOWN AT EDGES
TF:	(SYNTHETIC TURF)
TF:	MFR: PROVIDED BY OWNER. COLOR: BLUE; INSTALLATION: PER MANUFACTURER
SC:	(EXPOSED SEALED CONCRETE POLISHED AND FINISHED W/ CURE-N-SEAL)
E:	EXISTING TO REMAIN
<b>BASE FINISHES</b> REFERENCE ROOM FINISH PLAN AND INTERIOR ELEVATIONS FOR SPECIFIC FINISH DESIGNATION IF FINISH SCHEDULE INDICATES GENERAL FINISH	
RB:	(VULCANIZED RUBBER WALL BASE)
RB-1:	SIZE: 4", STYLE: COVE; MFR: ROPPE; 100, COLOR: BLACK
CT-S:	<u>CT-1 WALL TILE ON SCHLUTER DILEX HKW</u> (COVE - GREY)
<b>WALL FINISHES</b> REFERENCE ROOM FINISH PLAN AND INTERIOR ELEVATIONS FOR SPECIFIC FINISH DESIGNATION IF FINISH SCHEDULE INDICATES GENERAL FINISH	
PT:	SATIN FINISH ACRYLIC LATEX PAINT OVER GYPSUM WALLBOARD; 2 COATS OVER MFR'S SUGGESTED PRIMER. SEMI-GLOSS FINISH AT "WET" AND HIGH USE AREAS - REF FIN. NOTES
PT-1:	MFR: SHERWIN WILLIAMS, SHEEN: EGGSHELL, COLOR: SW7005 "PURE WHITE"
PT-2:	MFR: SHERWIN WILLIAMS, SHEEN: SEMI-GLOSS, COLOR: SW7005 "PURE WHITE"
PT-3:	MFR: SHERWIN WILLIAMS, SHEEN: SEMI-GLOSS, COLOR: SW6545 "MAJESTIC PURPLE"
PT-4:	MFR: SHERWIN WILLIAMS, DRY FOG WHITE FLAT
FRP:	FIBERGLASS REINFORCED PLASTIC WALL PANELS W/ STANDARD BATTENS, EDGE AND CORNER TRIM (MFR: TBD, COLOR: WHITE)
EXT:	EXISTING TO REMAIN
<b>CEILING FINISHES</b> REFERENCE ROOM FINISH PLAN AND INTERIOR ELEVATIONS FOR SPECIFIC FINISH DESIGNATION IF FINISH SCHEDULE INDICATES GENERAL FINISH	
SAT:	SUSPENDED ACOUSTICAL TILE CEILING
SAT-1:	SIZE: 24"x48", MFR: ARMSTRONG, STYLE: CORTEGA SECOND LOOK SCORED 24"x24", GRID: 15/16" HEAVY DUTY WHITE
GB:	SATIN FINISH ACRYLIC LATEX PAINT OVER GYPSUM WALLBOARD; 2 COATS OVER PRIMER - PT-2
KP:	K-13 ACOUSTICAL CELLULOSE INSULATION ON METAL EXPOSED METAL DECK. PAINT ALL REMAINING EXPOSED OVERHEAD STEEL - SW WATERBORNE ACRYLIC DRYFALL, WHITE
E:	EXISTING TO REMAIN
<b>REMARKS</b>	
1. ALL OVERHEAD EXPOSED STEEL IS TO BE PAINTED AFTER APPLICATION AND MFR RECOMMENDED DRYING TIME OF K13 ACOUSTICAL CELLULOSE SPRAY.	
<b>GENERAL FINISH NOTES</b>	
1. PAINT ALL NEW DOORS, DOORS AND WINDOW FRAMES W/ 2 COATS OF SEMI-GLOSS, ACRYLIC LATEX PAINT, PT-3 - UNLESS OTHERWISE NOTED.	
2. PROVIDE THE FOLLOWING TRANSITION STRIPS AT LOCATIONS WHERE DISSIMILAR FLOOR MATERIALS MEET:	
RUBBER FLOORING TO CONCRETE: (FLOORING INSTALLER VERIFY)	
CERAMIC TILE TO CONCRETE: (FLOORING INSTALLER VERIFY)	
CERAMIC TILE TO LVT: (FLOORING INSTALLER VERIFY)	
3. ROOM FINISH SCHEDULE IS FOR GENERAL COORDINATION OF FINISHES. REFERENCE CONSTRUCTION PLAN (A1.01) AND FINISH PLAN (A8.02) AND INTERIOR ELEVATION(S) FOR COORDINATION OF ALL FINAL FINISHES.	
4. FINISHES NOT SPECIFIED TO BE COORDINATED WITH TENANT/CONTRACTOR.	
5. APPROXIMATE HEIGHT OF EXISTING CEILING GRID = 9'-0" A.F.F. (FIELD VERIFY PRIOR TO CONSTRUCTION)	

# DOOR LEGEND

## DOOR TYPES

SOLID CORE FLUSH PAINT  
GRADE WOOD DOOR (FINISH  
W/ 2 COATS SEMI-GLOSS  
ACRYLIC LATEX PAINT)

(W1)

SOLID CORE FULL GLASS  
WOOD DOOR. (FINISH W/ 2  
COATS SEMI-GLOSS ACRYLIC  
LATEX PAINT)

(W2)

## FRAME TYPES

16 GA. HOLLOW MTL. FRAME  
W/ WELDED CORNERS  
(FINISH W/ 2 COATS SEMI-  
GLOSS ACRYLIC LATEX PAINT)

(1)

HOLLOW METAL FRAME W/ ¼"  
CLEAR TEMPERED GLASS (FINISH  
W/ 2 COATS SEMI-GLOSS  
ACRYLIC LATEX PAINT)

(2)

(3)

(4)

## REMARKS LEGEND

1. VERIFY EXISTING HARDWARE IS ADA COMPLIANT AND IN SERVICEABLE CONDITION.
2. ADD ONE-WAY WINDOW FILM ON STUDIO SURFACE.

## HARDWARE SETS

### GENERAL NOTES:

1. ALL HARDWARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA)
2. ALL DOOR HARDWARE SHALL BE FINISH US260 OR EQUIVALENT.
3. ALL LATCHSETS AND LOCKSETS SHALL BE EQUIPPED WITH LEVER TYPE OPERATING TRIM.
4. ALL CLOSERS SHALL BE LOCATED ON ROOM SIDES OF DOORS.
5. CONTRACTOR'S HARDWARE CONSULTANT SHALL BE RESPONSIBLE FOR DETERMINING APPROPRIATE HARDWARE FUNCTION AND OPTIONS.
6. CONTRACTOR SHALL COORDINATE FINAL KEYING WITH OWNER.

### (LK) INTERIOR LATCHSET/ LOCKSETS

#### SET # LA.1 (INTERIOR SINGLE W/ LOCK - OFFICE)

- HINGES ("HAGER" BB1279 4½ x4½)
- LOCKSET ("SCHLAGE" D-SERIES, SATURN 626)
- DOOR STOP ("ROCKWOOD" 403)
- SILENCERS ("ROCKWOOD" 608-RKW)

#### SET # LK.2 (INTERIOR SINGLE W/ LOCK & CLOSER - UTIL ROOM)

- HINGES ("HAGER" BB1279 4½ x4½)
- LOCKSET ("SIMPLEX" L1021S-626)
- CLOSER ("DORMA" 8600-689 SERIES)
- DOOR STOP ("ROCKWOOD" 403)
- SILENCERS ("ROCKWOOD" 608-RKW)

#### SET # LA.3 (INTERIOR SINGLE W/ LOCK - TOILETS)

- HINGES ("HAGER" BB1279 4½ x4½)
- LATCHSET ("SCHLAGE" D-SERIES, SATURN 626)
- DEADBOLT ("FALCON" 0271-626)
- CLOSER ("DORMA" 8600-689 SERIES)
- DOOR STOP ("ROCKWOOD" 403)
- SILENCERS ("ROCKWOOD" 608-RKW)

### (AL) ALUMINUM DOORS

#### SET # AL.1 (INTERIOR SINGLE ALUMINUM)

- HINGES ("HAGER" BB1279 4½ x4½)
- CLOSER (HEAVY DUTY - BY DOOR MFR.)
- PUSH/PULLS (MATCH EXISTING)
- DEAD LATCH ("ADAMS-RITE" 4510 DEAD LATCH W/ 4560 LEVER TRIM)
- THRESHOLD ("PEMKO" 2005 AS OR EQUAL)
- WEATHERSTRIP
- BOTTOM SWEEP ("PEMKO" 345 2AV OR EQUAL)

### (PP) PUSH/PULLS

#### SET # PP.1 (INTERIOR SINGLE PUSH/PULL - FITNESS ROOM)

- HINGES ("HAGER" BB1279 4½ x4½)
- PUSH/PULL ("ROCKWOOD" 102x70C US 626)
- CLOSER ("DORMA" 8600-689 SERIES)
- KICKPLATES (2) ("ROCKWOOD" K1038 8"x34")
- DOOR STOP ("ROCKWOOD" 441)
- SILENCERS ("ROCKWOOD" 608-RKW)

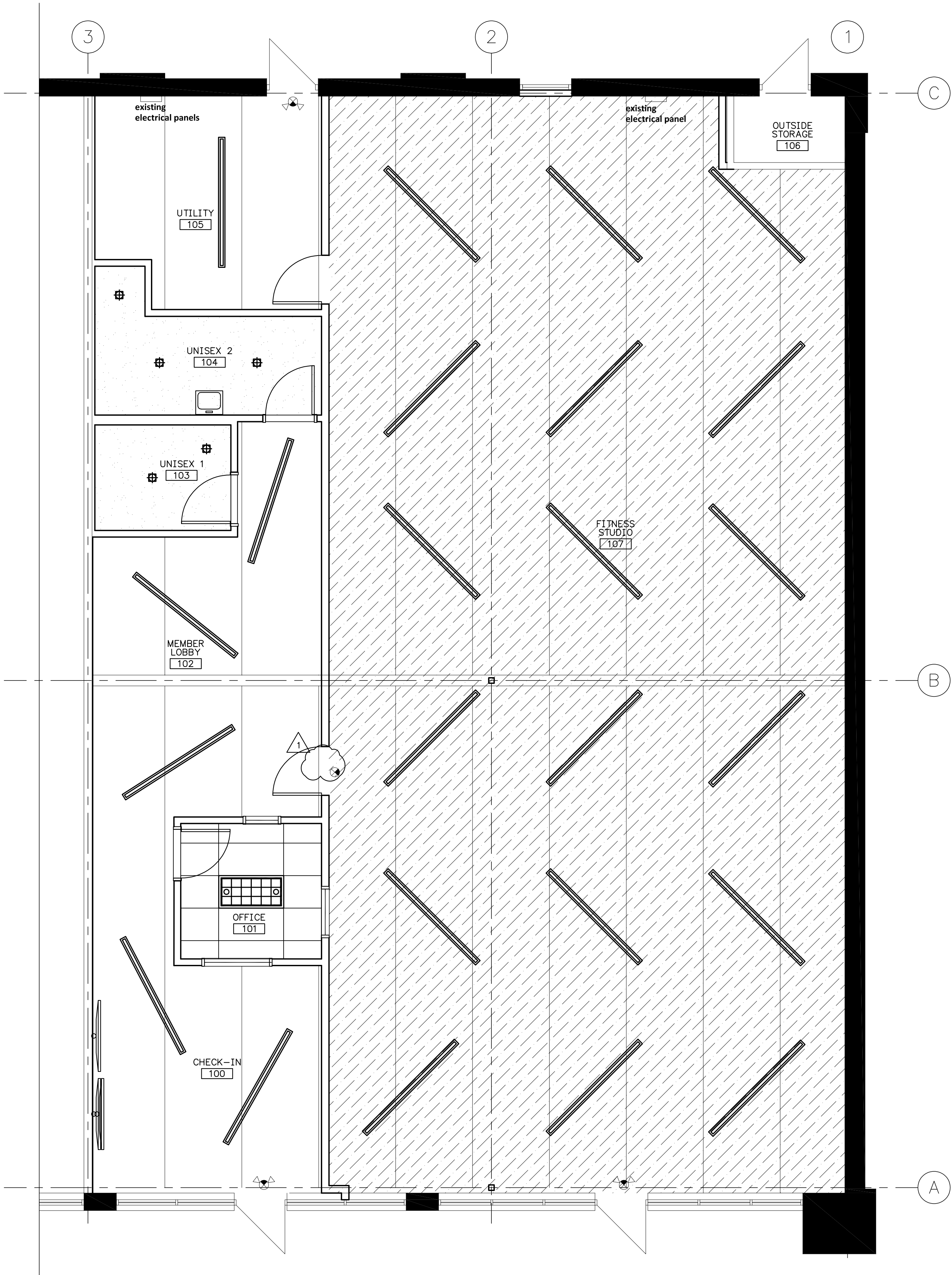


CEILING CONSTRUCTION NOTES:

1. LAYOUT SHOWN FOR REFERENCE ONLY. REF LIGHTING AND MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO REVIEW AND VERIFY LOCATIONS OF MECHANICAL EQUIPMENT INCLUDING DIFFUSERS, RETURN AIR GRILLES, AND THERMOSTATS.
3. CONTRACTOR TO REVIEW AND VERIFY LOCATIONS OF LIFE SAFETY EQUIPMENT INCLUDING EXIT SIGNS AND OCCUPANT NOTIFICATION DEVICES.
- CONTRACTOR TO REVIEW AND VERIFY LOCATIONS OF LIFE SAFETY EQUIPMENT INCLUDING EXIT SIGNS AND OCCUPANT NOTIFICATION DEVICES.

REFLECTED CEILING LEGEND

- NEW GYP. BD. CEILING
- 1" SPRAYON CELLULOSE K-13 ACOUSTIC INSULATION
- NEW 2'x4' SUSPENDED ACOUSTICAL TILE CEILING AND NEW OR EXISTING GRID.
- RECESSED CAN LIGHT  
REF SPECIFICATIONS
- WALL SCONCE, REF SPECIFICATIONS
- 4' OR 8' LED STRIP PENDANT LIGHT  
REF SPECIFICATIONS
- WALL MOUNTED AUDIO SPEAKER, REF SPECIFICATIONS
- EXIST. SUPPLY AIR DIFFUSER TO REMAIN. REF. MECHANICAL
- NEW LOCATION FOR RELOCATED SUPPLY AIR DIFFUSER. VERIFY LOCATIONS WITH MECHANICAL CONTRACTOR.
- EXIST. RETURN AIR GRILLE TO REMAIN. VERIFY LOCATIONS WITH MECHANICAL CONTRACTOR.
- NEW/RELOCATED RETURN AIR GRILLE. VERIFY LOCATIONS WITH MECHANICAL CONTRACTOR
- EXIST. EXIT SIGN TO REMAIN
- EXIST. EXIT SIGN TO BE REMOVED. SALVAGE FOR REINSTALLATION
- NEW LOCATION FOR RELOCATED EXIT SIGN
- EXIST. EMERGENCY LIGHT TO REMAIN
- EXIST. EMERGENCY LIGHT TO BE REMOVED. SALVAGE FOR REINSTALLATION
- NEW/ RELOCATED EMERGENCY LIGHT
- EXIST. HORN/STROBE TO REMAIN
- EXIST. HORN/STROBE TO BE REMOVED. SALVAGE FOR REINSTALLATION
- NEW/ RELOCATED HORN/STROBE

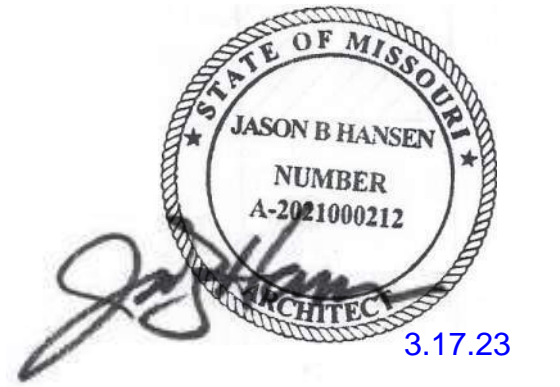


1 REFLECTED CEILING PLAN  
SCALE : 1/8" = 1'-0"

Tenant Improvements For:

Date: 12/30/22  
Issued For: PERMIT

REVISIONS		
No.	Date	Description
1	3.17.23	CITY COMMENTS



PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	5BYS ENGINEERS
ELECTRICAL	5BYS ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS



KS - MO  
Commercial & Residential  
913 + 904 - 6734

NO.

A9.01

©2022



To Be Located At:

Tenant Improvements For:

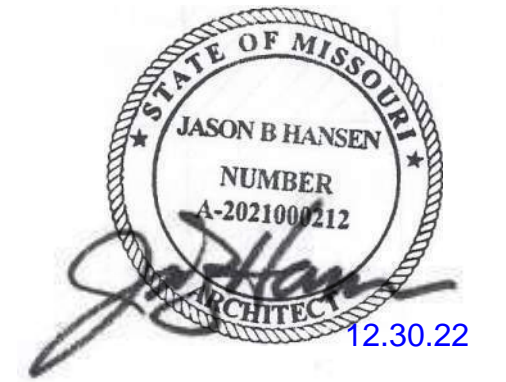
Date:

Issued For:

PERMIT

REVISIONS

No.	Date	Description



PROJECT TEAM

ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
STRUCTURAL	
MECHANICAL	58BY5 ENGINEERS
ELECTRICAL	58BY5 ENGINEERS
FIRE PROTECTION	
CONTRACTOR	HAWTHORN PROJECTS



NO.

KS - MO  
Commercial & Residential  
913 + 904 - 6724

A11.01

	MaD Fitness Group			12/08/2022 Update						
	F45 Spec Book		VE all specifications with owner approval							
	All changes/substitutions to be approved by owner									
Division	Item		Location	MFG	Model	Other	Color/Misc	Website	Add'l Contact Info	Revision
Plumbing	Water Fountain	Standard	Hallway-per plan	Elkay	EXSTL8WS	With Bottle Filler	SS			
Plumbing	Water Fountain	Alternate	Hallway-per plan	Halsey Taylor	HTHB-HA	CG8BLSS	SS			
Plumbing	Sink Wall	Standard	Bathroom	American Standard	Lucerne 0356.041	20 x 18	White			
Plumbing	Sink Wall	Alternate	Bathroom	Gerber	Monticello II	20 x 18	White			9/22/2022
Plumbing	Toilet	Standard	Bathroom	Gerber	Pressure assist H/C	Ultra Flush 20-318	White			
Plumbing	Faucet-Sink	Standard	Bathroom	Moen	8554	Battery powered	Chrome			9/12/2022
Plumbing	Faucet-Sink	Alternate	Bathroom	American Standard	605B.204/PK00.PAC	Innsbrook Selectronic	SS			
Plumbing	Shower Hand Held	Standard	Bathroom	Luxart Classico II	LC2SYS60-CP		SS			
Plumbing	Shower Valve	Standard	Bathroom	Olympia	Temp/Pressure Balanced		SS			
Plumbing	Mop Floor Sink and Faucet	Standard	Utility	Fiat MSB2424 and 830 AA Faucet		Or equal floor mounted	White			
Plumbing	Mop Rack	Standard	Utility	Bobrick B-223 Mop holder			SS			
Plumbing	Water Heater	Standard	Utility- floor/or hung	State 50-Gallon	PCE-50-20LS	50 Gallon				
Plumbing	Water Heater	Alternate	Utility- floor/or hung	A O Smith 50-Gallon	DEL 50	50 Gallon				
Plumbing	Trench Drain	Standard	Shower	Tru-Line	304 SS with S Style grate	SS	Length by location			
Plumbing	Trench Drain	Alternate	Shower	Zurn	ZS880	SS	Length by location			
Plumbing	Washer Box	Standard	Utility	Oatey	Center drain outlet box	38934	White			
Plumbing	Floor Drain	Standard	Bathrooms/Laundry per plan	Sioux Chief	832 Series	Or equal	Nickel Bronze			
Plumbing	Clean Out	Standard	Per code - adjustable	Sioux Chief	852 Series	Or equal	Nickel Bronze			
Tile	Tile-Bathroom Wall	Standard	Bathroom	Daltile	Museo Block Grey Mix MU37	12 x 24 (Horizontal)	Total to 5' height or full tile	<a href="https://www.daltile.com/products/concrete-look/museo/grey-mix">https://www.daltile.com/products/concrete-look/museo/grey-mix</a>		
Tile	Tile-Bathroom Wall	Alternate	Bathroom	Daltile	Museo Block White Mix MU36	12 x 24 (Horizontal)	Only if MU37 not available	<a href="https://www.daltile.com/products/concrete-look/museo/white-mix">https://www.daltile.com/products/concrete-look/museo/white-mix</a>		
Tile	Tile-Bathroom Floor	Standard	Bathroom	Daltile	Museo Natural Grey MU32	12 x 24	Natural Grey MU32	<a href="https://www.daltile.com/prd">https://www.daltile.com/prd</a>	Running bond pattern	
Tile	Tile-Shower Floor	Standard	Bathroom	Daltile	Museo Abstract Mosaic MU32	2 x 3	Natural Grey MU32	<a href="https://www.daltile.com/products/concrete-look/museo/natural-grey">https://www.daltile.com/products/concrete-look/museo/natural-grey</a>		
Tile	Tile- Base	Standard	Bathroom	Schluter Cove at base	Dilex-HKW	9 MM			With inside/outside trims	9/12/2022
Tile	Tile- Grout	Standard	Bathroom	Mapei	105 Driftwood	All tile				8/11/2022
Flooring	Sealed Concrete	Standard	Utility/Storage		Use LVT when floor unsuitable to be exposed		Use LVT when floor unsuitable to be exposed			
Flooring	Vinyl	Alternate	Utility/Storage	Armstrong Excelon Field Gray 51927	Use when floor unsuitable to be exposed		Use when floor unsuitable to be exposed			
Flooring	Sealed/Polished Concrete	Standard	Common areas	Office/Reception/Corridors	Use LVT when floor unsuitable to be exposed		Use LVT when floor unsuitable to be exposed			
Flooring	Floor-LVT	Standard	Common areas	Next Floor	Patina 419015 Antique Brass	18 x 24	<a href="https://www.roeselheck.com/">https://www.roeselheck.com/</a>		Dori Blitzstein blitzstein@msn.com	
Flooring	Floor-LVT (Ga and Fl locations)	Standard	Common areas	Next Floor	Patina 419015 Antique Brass	18 x 24	<a href="https://www.dunn-rasbury@a-msupply.com">Dunn_Rasbury@a-msupply.com</a>		<a href="mailto:jill_turner@a-msupply.com">jill_turner@a-msupply.com</a>	
Flooring	Floor-LVT	Alternate	Common areas	Armstrong	Braco 331 Mortar	Only used when Next Floor product is not available				
Flooring	Cove base	Standard	As required per plan	Roppe or Armstrong	4" Black					
Flooring	Rubber Gym Tile	Standard	Pods	Provided by owner	3.2' x 3.2' Install in offset pattern	Adhesive only required at edges	Brick/Staggered pattern NOT Aligned	<a href="#">F45 Flooring - Installation Use.pdf</a>	<a href="#">F45 Flooring - Installation Use.pdf</a>	9/12/2022
Flooring	Rubber Gym Tile	Standard	Transition to LVT	Provided by flooring installer	Tarkett	CRS-40-D	Black			9/22/2022
Flooring	Astroturf Track	Standard	Sled Tracks	Provided by owner	7.8" wide	Follow manufacturer instructions	Blue	<a href="#">F45 Flooring - Installation Use.pdf</a>	<a href="#">F45 Flooring - Installation Use.pdf</a>	10/31/2022
Flooring	Astroturf Track Adhesive	Standard	Sled Tracks	Provided by flooring installer	Mapei Ultrabond G21	Follow manufacturer instructions		<a href="#">F45 Flooring - Installation Use.pdf</a>	<a href="#">F45 Flooring - Installation Use.pdf</a>	12/6/2022
Specialties	Grab Bar	Standard	Bathroom	Bobrick	B-6806	Size per plan				
Specialties	Mirror	Standard	Bathroom above Sink	Bobrick	B-165	18" x 36"				
Specialties	Sanitary Napkin Disposal	Standard	Bathroom	Bobrick	B-270		Both restrooms			
Specialties	Soap Dispenser	Standard	Bathroom	Bobrick	B-2111	Surface Mounted				
Specialties	Toilet tissue	Standard	Bathroom	Bobrick	B-4288					
Specialties	Shower rod/curtain	Standard	Bathroom	Bobrick	B6047/B204					
Specialties	Shower seat	Standard	Bathroom	Bobrick	B5181					
Specialties	Shower Shelf	Standard	Shower	Gatco	Model 1455	Wall mount shelf	SS - Must be installed at time of tiling			8/11/2022
Specialties	Robe hook	Standard	Bathroom	Bobrick	B6717/B6727					
Specialties	Hand Dryers	Standard	Bathroom	AIKE	AK2903HD	Match available voltage	Remove cord and wire direct			
Specialties	Hand Dryers	Alternate	Bathroom	Xlerator	White	Match available voltage	<b>Only when AIKE is not available</b>			
Specialties	Paper Towel Dispenser	Alternate	Bathroom	Tork	Xpress Multi fold	When electric is not available for hand dryers				
Specialties	Baby Changer-ONLY WHEN REQ'D	When Req.	Bathroom	Koala Kare	KB301 Grey-01	Or per drawing when required	<b>ONLY WHEN REQUIRED by CODE</b>		ONLY WHEN REQUIRED by CODE	10/11/2022
Specialties	Wall Fans	Standard	Pods	Comfort Zone 16" Oscillating	Model CZ16WR	With remote control	White - order from Amazon \$34.59 or price match from Home Depot	<a href="https://www.amazon.com/g">https://www.amazon.com/g</a>	5' Total (1 each corner & 1 center over sled track)	9/12/2022
Specialties	Shelving	Standard	Utility Room	HDX	Model 21656PS	Confirm size based on space	Chrome		Available at Home Depot	8/11/2022
Electrical	Light Fixture	Standard	Everywhere but bathrooms	Warehouse Lighting	BEAMLED8 or 4- DID-130W-3CT-DMV WH	4' and 8' Direct/Indirect	White suspended (60% down/40% up) with beam canopy kits and 10' cords	<a href="https://www.warehouse-lighting.com/">https://www.warehouse-lighting.com/</a>	<a href="https://trison-my.sharepoint.com/per">https://trison-my.sharepoint.com/per</a>	11/2/2022
Electrical	Light Fixture-Add'l cable when req'd	Standard			Add'l cable when required to extend hang of suspended light fixtures			<a href="https://www.cablemasterpowercords.com/">https://www.cablemasterpowercords.com/</a>		12/6/2022
Electrical	Light Fixture	Alternate	Everywhere but bathrooms	American Linear	2SID	4' and 8' Direct/Indirect	White 3500/4k suspended	<a href="https://www.warehouse-lighting.com/">https://www.warehouse-lighting.com/</a>	<a href="https://trison-my.sharepoint.com/per">https://trison-my.sharepoint.com/per</a>	12/6/2022
Electrical	Light Fixture	Standard	Office when drop ceiling		Also use when drop ceiling in other areas with owner confirmation			<a href="https://www.warehouse-lighting.com/">https://www.warehouse-lighting.com/</a>	<a href="https://trison-my.sharepoint.com/per">https://trison-my.sharepoint.com/per</a>	12/6/2022
Electrical	Light Fixture	Standard	Bathrooms	Lotus LED LD4R-HO	LD4R-35K-HO-4R-WRWT		Recessed white reflector and trim			11/16/2022
Electrical	Light Fixture	Alternate	Bathrooms	HE Williams	4DR-TL		Recessed			
Electrical	Light Fixture	Alternate	Bathrooms	Helios 6" recessed	6R 25L40KWF Downlight		Recessed			
Electrical	Light Fixture	Standard	Utility Room	Warehouse Lighting	4' or 8' LED high bay suspended fixture per plan-Inexpensive alternative		120-277 volt 4 lamp			
Electrical	Light Fixture	NOT USED	Bathrooms-Vanity	Not used			No vanity lights by mirror only recessed lights in bathroom			
Electrical	Cover plates	Standard	White at painted walls, Stainless at tiled walls							
Electrical	Occupancy Sensors	Standard	All areas-per plan	Per plans			Or equal with approval			
Electrical	Camera receptacles	Standard	OH mount for security cameras - 1 each facing main entrance door and rear exit doors							12/5/2022
Electrical	Outlets for Large Logo sign in Pod	Standard	Rear Wall in Exercise Rm (logo Wall per plan) 3 wall receptacles for 3 piece logo sign- Center on sign horizontally; lower at 32 1/2" AFF, middle at 69 3/4" AFF and top at 108 3/4" AFF. Coordinate final outlet location with owner. Switch location per owner (in utility rm if nearby)							12/5/2022
Electrical	Reception Counter receptacle-Quad	Standard	<b>Quad</b> outlet at wall located at 18" AFF at middle of side of desk.							12/5/2022
Electrical	Locker electric receptacle	Standard	Two outlets mounted horizontally 6'-6" AFF and 12" left and right of the centerline of the lockers which are 6'-0" wide.							12/5/2022
Electrical	Refrigerator receptacle	Standard	Wall outlet in Lobby or other area to be determined based on space. Verify location with Owner							12/5/2022
Electrical	Lionheart receptacle	Standard	Ceiling mounted at center of Pods							
Electrical	Bluetooth receptacle	Standard	Per Owner in Exercise Floor (may be able to use per code outlet)							
Doors	Door Hardware Hinges	Standard	All	Hager	Hager BB1279 4 1/2 x 4 1/2 US 627		Or equal			
Doors	Door Hardware Passage	Standard	Restrooms	Schlage D Series	Saturn US 626	Passage				
Doors	Occupancy Indicator Deadbolt	Standard	Restrooms	Falcon	D271- 626		Or equal			
Doors	Door Hardware Passage	Standard	Office	Schlage D Series	Saturn US 626	Passage				
Doors	Door Hardware	Standard	Other	Schlage D Series	Saturn US 626		Where applicable			
Doors	Panic Bar	Standard	Rear exits at metal doors	Von Duprin	22EO SP28 36"	With 230L SP28 Lever trim and 7205 cylinder- or equal			Where required by code	8/11/2022
Doors	All emergency exits	Standard	At all exists which are normally locked from the exterior & have panic bars	Detex Alarm EAX-500		Mount on door with keyed alarm function				
Doors	Combo Lock	Standard	Utility Room	Simplex	L1021S-626		Or equal-VE			
Doors	Door Floor Stops	Standard	As required	Rockwood	441 Low dome US 626		Or equal			
Doors	Door Wall Stops	Standard	As required	Rockwood			Or equal			
Doors	Closers	Standard	As required	Dorma	8600 689 finish		Or equal			
Doors	Push Pull	Standard	As required	Rockwood	102 x 70C US 626		Or equal			
Mechanical	HVAC Units	Standard	Per plans or equal	117/200sf in exercise floor. MUST consider sound walls for duct layout. Standard rectangular box duct with liner acceptable			HVAC Units per plan or equal approved by Mechanical Engineer			
Mechanical	Duct liner	Standard	Johns Manville	Permacote Linacoustic			Or equal			
Mechanical	Washer	Standard	Utility Room	Maytag	MVWP575GW	White	Confirm ADA not required		<a href="#">Maytag MVWP575G Washer.pdf</a>	11/1/2022
Mechanical	Dryer	Standard	Utility Room	Maytag	MEDP575GW	White	Confirm ADA not required		<a href="#">Maytag MEDP575GW Dryer.pdf</a>	11/1/2022
Mechanical	Thermostat	Standard	Must NOT be mounted on rear wall within logo design (if Tstat is to be located on rear wall of exercise floor)							
Drywall	Sound caulk at sound walls	Standard	Sound seal	OSI	SC-175	Required at sound separation walls	Or equal			
Drywall	Sound mat at sound walls	Standard	Top track	Wallmat-Ari Lesser ari@bfiacoustics.com	3" with KAI rubber bushing	<b>ONLY REQUIRED at sound separation wall IF TENANT ABOVE</b>		<a href="mailto:michael@bfiacoustics.com">michael@bfiacoustics.com</a>		
Drywall	Sound mat at sound walls	Alternate	RARELY REQ'D-Bottom track	Wallmat-Ari Lesser ari@bfiacoustics.com	3" with KAI rubber bushing	<b>ONLY REQUIRED at sound separation wall IF SPACE BELOW</b>		<a href="mailto:michael@bfiacoustics.com">michael@bfiacoustics.com</a>		
Paint	All areas	Standard	Doors, door & window frames, columns	Sherwin Williams	SW6545 Majestic Purple semi-gloss		Purple			10/11/2022
Paint	Bathrooms	Standard	Bathroom walls/ceiling	Sherwin Williams	SW7005 Pure White semi-gloss		White			
Paint	All areas	Standard	All other walls	Sherwin Williams	SW7005 Pure White eggshell		White			
Paint	All areas	Standard	Exposed deck and steel	Sherwin Williams	Dry fog white flat	Include exposed steel at K-13 spray	Fog white			
Paint	Interior Columns	Standard	All areas-per plan	Sherwin Williams	SW6545 Majestic Purple semi-gloss					
Paint	All areas	Alternate	Exposed ductwork and sprinkler piping	Sherwin Williams	DTM white per SW specs	Alternate based on owner decision				11/9/2022
Ceiling Type	Open to Deck-see below when drop ceiling required									
Ceiling Tile	ONLY WHEN REQ'D-Acoustical Tile	Standard	Workout Area, office	Armstrong	Cirrus High NRC 563	All offices, workout only when required	Office when deck is above 14'			
Ceiling Tile	ONLY WHEN REQ'D-Acoustical Tile	Standard	Workout Area, office	USG	Millennia High NRC 76505	All offices, workout only when required	Office when deck is above 14'			
Acoustics	Acoustical Spray	Standard	Workout Area	International Cellulose	K-13 - white	Or approved equal	1" coating on decking			
F45 Equipment	Chin up bars	Standard	Center in POD 2 as possible	Attachment Bolts	1/2" x 3 1/2" lag bolts with flat washers		Bolts that come with the bars are too short			10/11/2022
F45 Equipment	Wall Anchors	Standard		Attachment Bolts	3/8" x 3 1/2" lag bolts with flat washers	All Anchors are mounted vertically	Bolts that come with the anchors are too short			11/9/2022
F45 Equipment	Floor anchors	Standard		Attachment Bolts	3/8" x 3 3/4" wedge anchors with nuts and washers		Bolts Not included with equipment			10/11/2022



LINETYPES LEGEND:

- NEW  
--- NEW -- ON ROOF  
--- EXISTING  
--- EXISTING -- ON ROOF  
- - - - - DEMOLITION

DUCTWORK LEGEND:

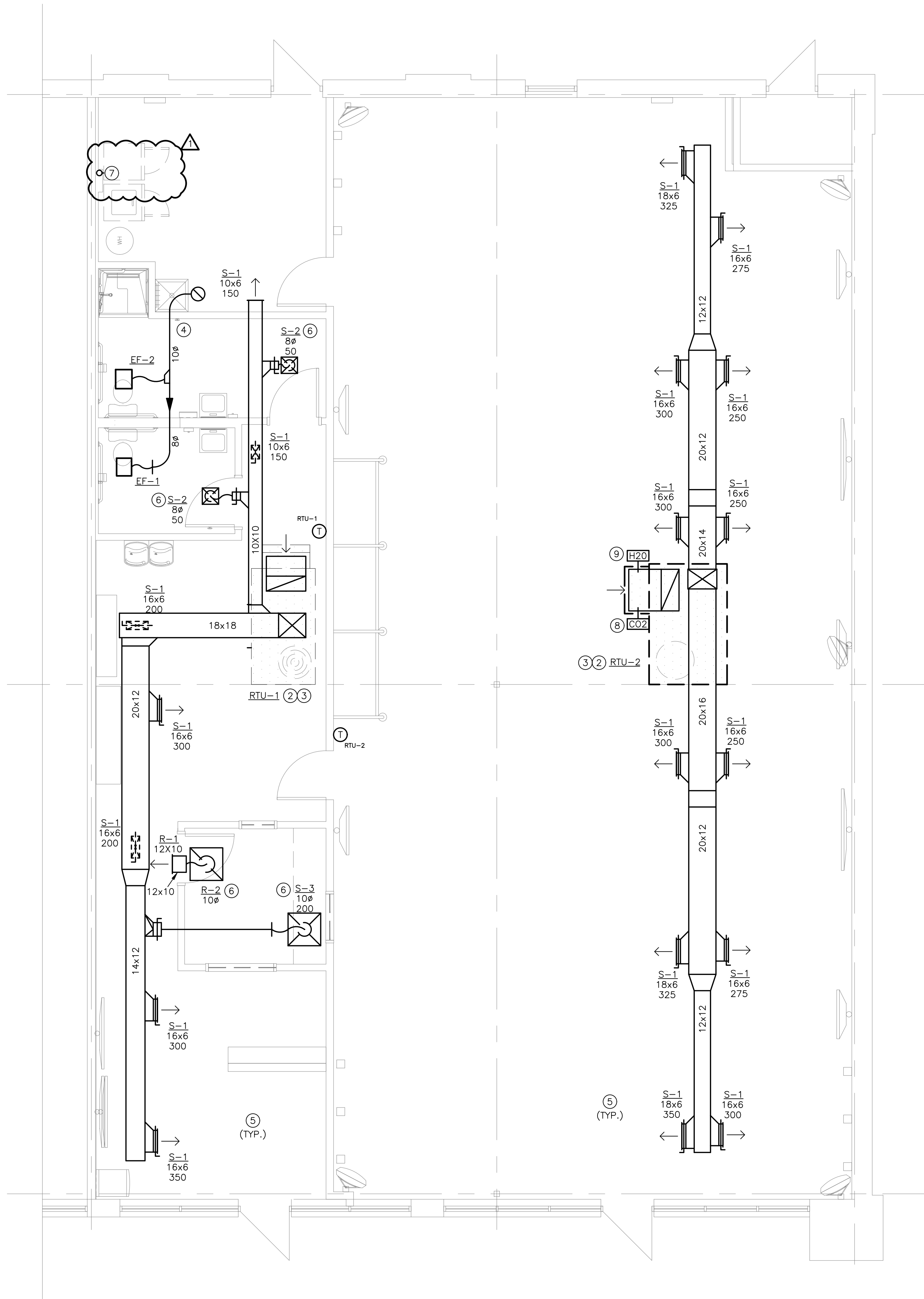
- DUCT (SINGLE LINE)  
= DUCT (DOUBLE LINE)  
○ → ROUND O/A OR S/A DOWN  
⊗ → ROUND O/A OR S/A UP  
○ → ROUND E/A OR R/A DOWN  
⊗ → ROUND E/A OR R/A UP  
▢ → RECTANGULAR O/A OR S/A DOWN  
▣ → RECTANGULAR O/A OR S/A UP  
▢ → RECTANGULAR E/A OR R/A DOWN  
▣ → RECTANGULAR E/A OR R/A UP  
⊠ O/A OR S/A DIFFUSER  
▣ E/A OR R/A GRILLE  
⊠ AIR DEVICE WITH FLEX DUCT CONNECTION  
⊠ AIR DEVICE WITH HARD DUCT CONNECTION  
F FLEXIBLE CONNECTION TO EQUIPMENT  
↓ DUCT BREAK/CONTINUATION  
M MANUAL BALANCING DAMPER  
M MOTOR-OPERATED DAMPER  
ED BACKDRAFT DAMPER  
F FIRE DAMPER  
FS FIRE/SMOKE DAMPER  
S SMOKE DAMPER  
T THERMOSTAT

ANNOTATION LEGEND:

- ABC-1 EQUIPMENT / FUTURE TAG  
○ PLAN NOTE  
⊗ CONNECT TO EXISTING  
→ AIR FLOW DIRECTION  
S-1 G/R/D TAG  
8ø NECK SIZE  
300 AIR FLOW (CFM)

ABBREVIATIONS LEGEND:

- AFF ABOVE FINISHED FLOOR  
APD AIR PRESSURE DROP  
BAS BUILDING AUTOMATION SYSTEM  
CAV CONSTANT AIR VOLUME  
CFM CUBIC FEET PER MINUTE  
(E) EXISTING  
EA EXHAUST AIR  
EAT ENTERING AIR TEMPERATURE  
EF EXHAUST FAN  
EG EXHAUST GRILLE  
ESP EXTERNAL STATIC PRESSURE  
FPM FEET PER MINUTE  
HC HEATING CAPACITY  
HP HORSEPOWER  
HUM HUMIDIFIER  
IN.WG INCHES WATER GAUGE  
LAT LEAVING AIR TEMPERATURE  
MAX MAXIMUM  
MBH 1,000 BTUH  
MIN MINIMUM  
NC NOISE CRITERIA  
OA OUTDOOR AIR  
QTY QUANTITY  
RA RETURN AIR  
REFR REFRIGERANT  
RG RETURN GRILLE  
RTU ROOFTOP UNIT  
SA SUPPLY AIR  
SC SENSIBLE COOLING CAPACITY  
SD SUPPLY DIFFUSER  
TC TOTAL COOLING CAPACITY  
TRA TO ROOF ABOVE  
TSP TOTAL STATIC PRESSURE  
VEL VELOCITY



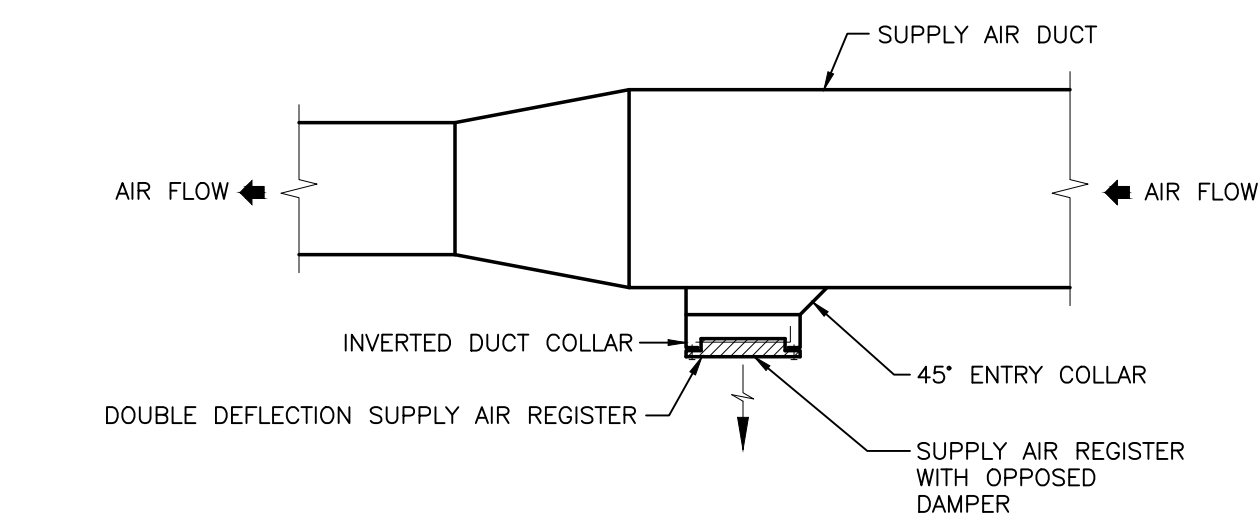
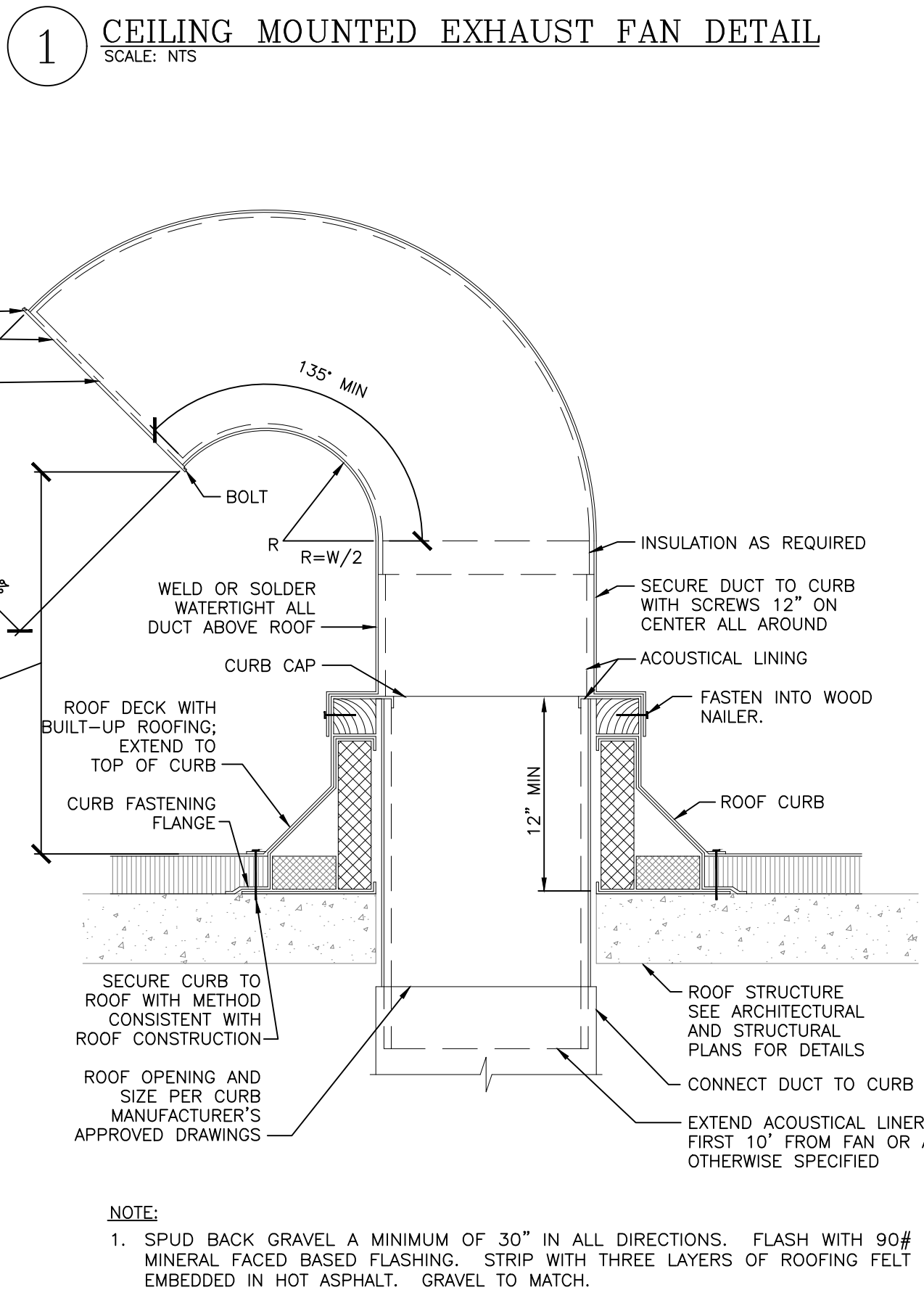
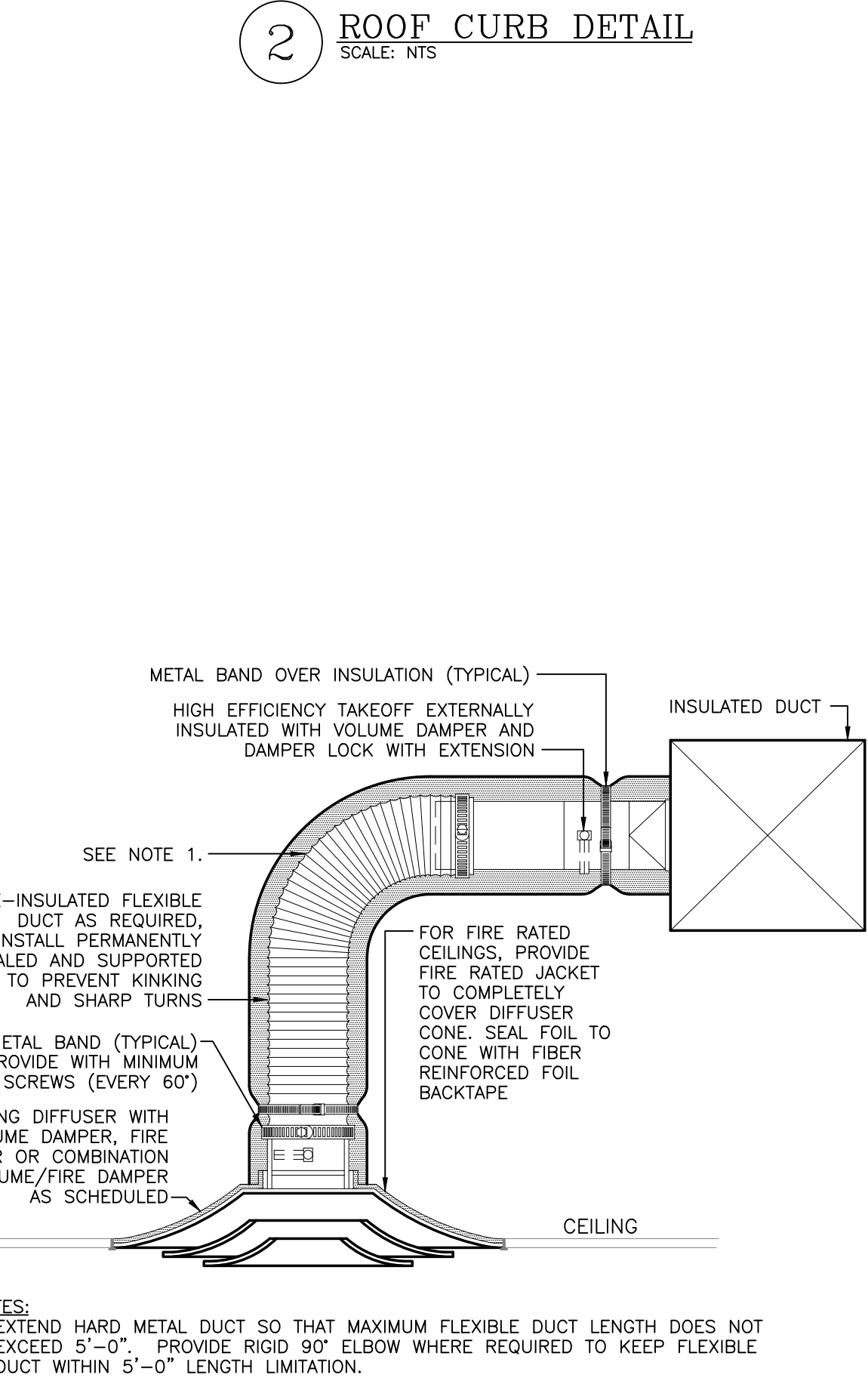
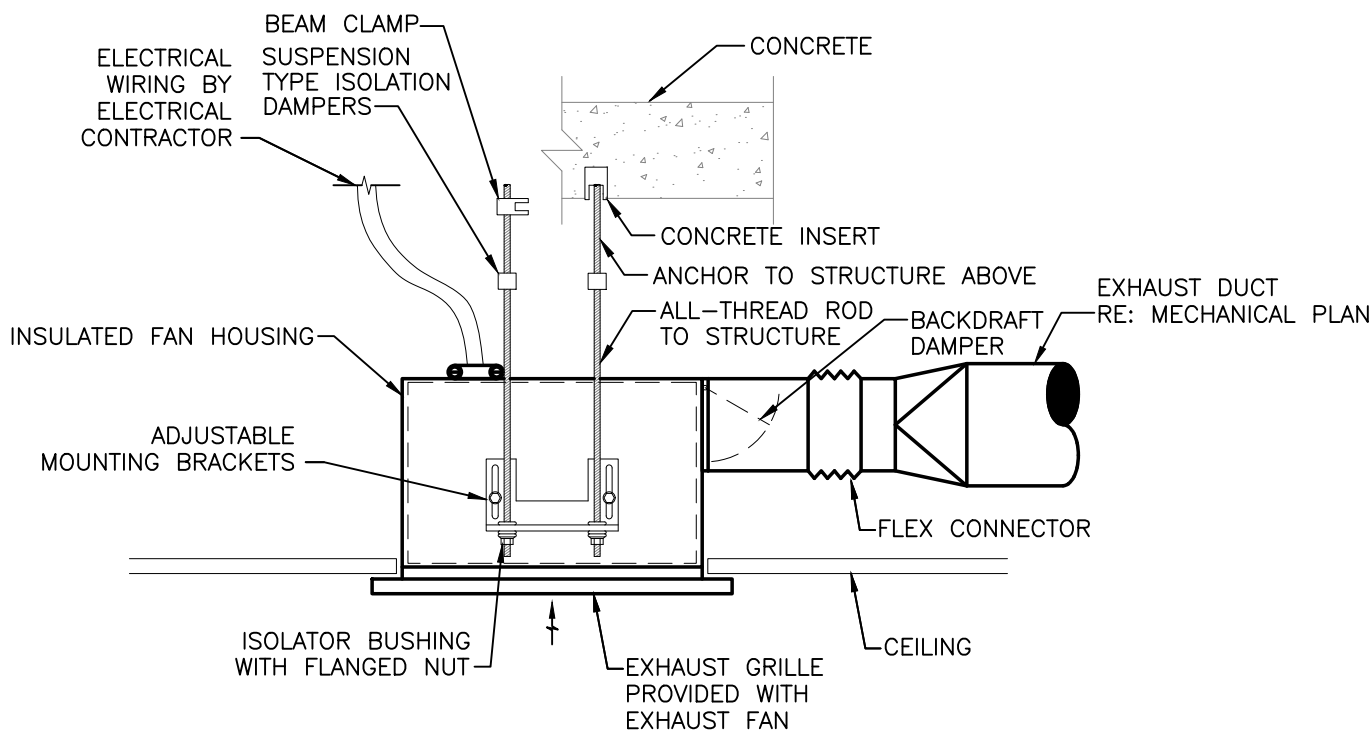
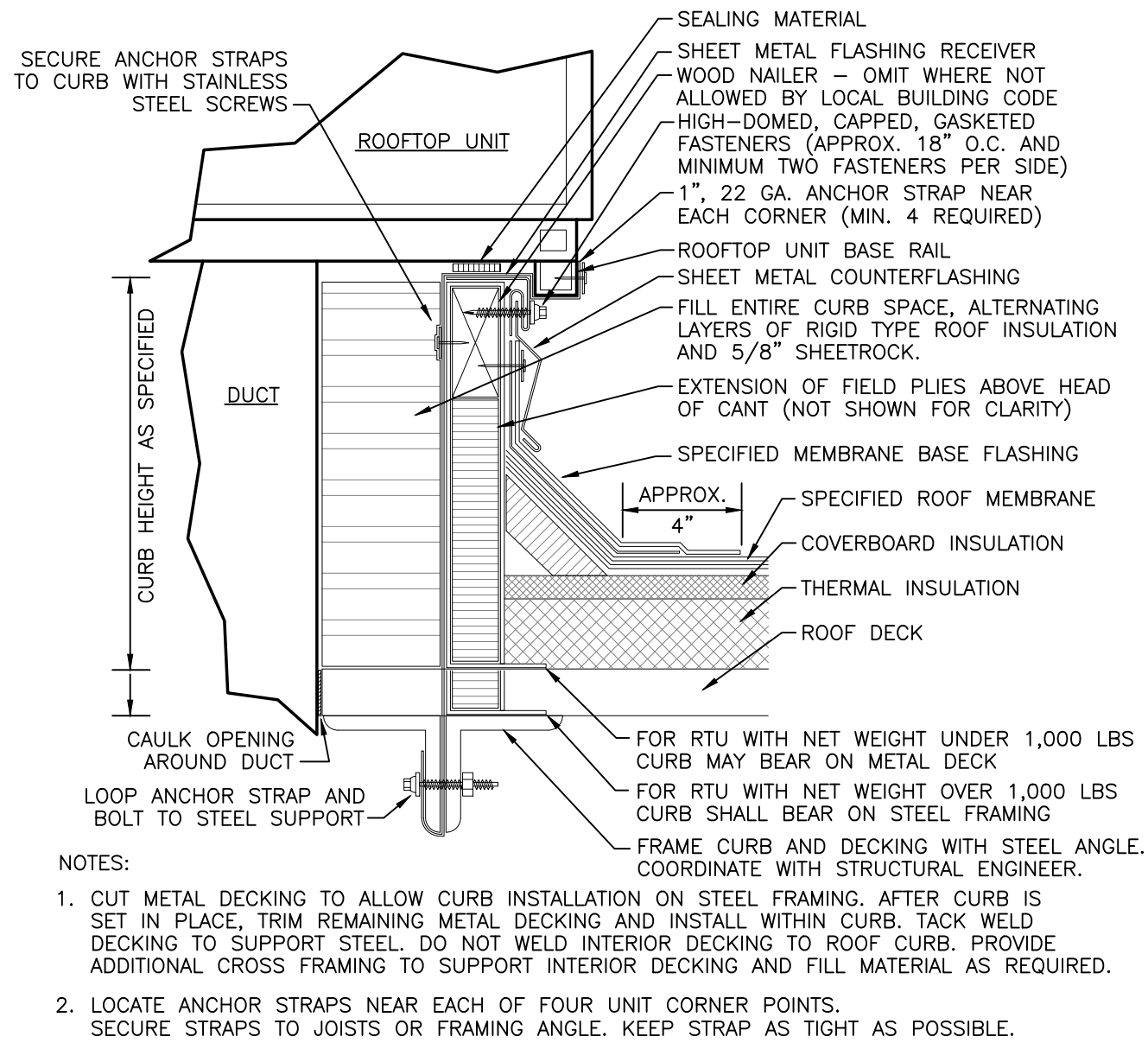


MECHANICAL GENERAL NOTES:

- DRAWINGS ARE SCHEMATIC IN NATURE AND BASED ON PRELIMINARY SITE OBSERVATION AND ORIGINAL DESIGN DRAWINGS (WHEN AVAILABLE). CONTRACTOR SHALL INVESTIGATE THE PROJECT SITE AND BECOME FULLY AWARE OF ALL FIELD CONDITIONS, CURRENT SYSTEM OPERATION, AS WELL AS COORDINATION REQUIREMENTS. COORDINATE ALL MECHANICAL WORK WITH ARCHITECTURAL DRAWINGS, EXISTING CONDITIONS, AND OTHER TRADES PRIOR TO START OF WORK.
- MECHANICAL WORK SHALL CONFORM TO APPLICABLE CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR REQUIRED ELECTRICAL POWER WIRING AND ROUGH-IN FOR LOW-VOLTAGE CONTROL WIRING. PROVIDE ALL CONTROL WIRING AND FINAL CONTROL DEVICE (E.G. THERMOSTATS).
- FABRICATE AND INSTALL DUCTWORK PER SMACNA RECOMMENDATIONS FOR THE PRESSURE CLASSIFICATIONS ENCOUNTERED.
  - LOW PRESSURE SUPPLY AIR: +2.0 IN.WG
  - RETURN AIR: -2.0 IN.WG
  - EXHAUST AIR (UPSTREAM OF FAN): -2.0 IN.WG
- PROVIDE MITERED ELBOWS AT CHANGES IN DIRECTION IN RECTANGULAR DUCTWORK. PROVIDE TURNING VANES IN ALL ELBOWS WHERE AIRFLOW CHANGES DIRECTION AT ANGLES 45° AND GREATER, EXCEPT FOR RETURN AIR TRANSFER DUCTS.
- PROVIDE ALL CONDENSATE DRAINS FOR EQUIPMENT THAT GENERATES CONDENSATE. COORDINATE WITH PLUMBING CONTRACTOR.
- PROVIDE DUCT WRAP INSULATION FOR ALL ROUND AND RECTANGULAR SUPPLY AIR DUCTWORK. DUCT WRAP INSULATION SHALL BE 2" THICK, MINIMUM R-6.0 FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.
- CONTRACTOR OPTION: PROVIDE INTERNAL LINER INSULATION FOR SUPPLY AIR DUCTWORK. INTERNAL LINER INSULATION SHALL BE 1" THICK, 2 LB/FT<sup>3</sup> ACOUSTICAL DUCT LINER INSULATION WITH MINIMUM R-6.0.
- PROVIDE INTERNAL LINER INSULATION FOR ALL RECTANGULAR RETURN AIR TRANSFER DUCTWORK. INTERNAL LINER INSULATION SHALL BE 1" THICK, 2 LB/FT<sup>3</sup> ACOUSTICAL DUCT LINER INSULATION.
- ALL LOW PRESSURE BRANCH DUCTWORK SERVING DIFFUSERS, REGISTERS AND GRILLES (GRD) SHALL BE THE SAME SIZE AS THE GRD'S NECK SIZE UNLESS NOTED OTHERWISE.
- DUCT DIMENSIONS SHOWN ON THE PLANS INDICATE THE FREE AREA DIMENSIONS. INCREASE SHEET METAL DIMENSIONS AS REQUIRED TO MEET FREE AREA DIMENSIONS WITH LINER INSTALLED.
- FLEXIBLE DUCTWORK SHALL HAVE 2" THICK, MINIMUM R-6.0 INSULATION. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH FOR SUPPLY AIR APPLICATIONS AND 3'-0" IN LENGTH FOR RETURN AIR AND EXHAUST AIR APPLICATIONS.
- PROVIDE BALANCING DAMPERS IN DUCT TAKE-OFFS TO AIR DEVICES IN LAY-IN CEILINGS, IN THE NECKS OF AIR DEVICES IN GYP BOARD CEILINGS, AND IN THE NECKS OF SIDE WALL AIR DEVICES FOR PROPER AIR BALANCING.
- TOILET ROOM EXHAUST FANS SHALL BE AS SCHEDULED. PROVIDE A MINIMUM OF 75 CFM EXHAUST PER FLUSH FIXTURE.
- COORDINATE ALL REQUIRED ROOF PENETRATIONS WITH ROOFING CONTRACTOR TO AVOID ROOF WARRANTY CONFLICTS.
- VERIFY AVAILABLE SPACE ABOVE ALL CEILINGS PRIOR TO FABRICATION OR INSTALLATION OF ANY DUCTWORK. COORDINATE DUCT INSTALLATION WITH OTHER TRADES.
- ALL DIMENSIONS SHOWN ON PLAN ARE IN INCHES, UNLESS EXPLICITLY LABELED OTHERWISE.
- PROVIDE A COMPLETE TEST AND BALANCE BY A NEBB CERTIFIED TEST AND BALANCE AGENCY.
- PROVIDE ACCESS PANELS AND ADEQUATE CLEARANCE FOR ACCESS TO ALL EQUIPMENT, VALVES, DAMPERS AND DEVICES.
- INSPECT ALL EXISTING MECHANICAL EQUIPMENT TO REMAIN. REPORT ANY DEFICIENCIES TO OWNER PRIOR TO START OF WORK.
- LABEL ALL DUCTWORK, PIPING, MAINTENANCE DEVICES, AND EQUIPMENT WITH MANUFACTURER STANDARD LABELING SYSTEMS. COORDINATE WITH OWNER FOR FINAL EQUIPMENT DESIGNATIONS.
- PROVIDE O&M MANUAL TO OWNER UPON COMPLETION OF PROJECT.

ROOFTOP UNIT SCHEDULE																																							
TAG	AREA SERVED	MANUFACTURER	MODEL	SUPPLY FAN			O/A FLOW		COOLING COIL (DX)								HOT GAS REHEAT COIL						HEATING COIL (NATURAL GAS)					ELECTRICAL			WEIGHT (LBS)	NOTES							
				FAN CONTROL	S/A FLOW (CFM)	MOTOR (HP)	ESP (IN.WG)	DCV MIN (CFM)	DCV MAX (CFM)	NOM TONS	REFR TYPE	TC (MBH)	SC (MBH)	EAT ("F DB)	LAT ("F WB)	MIN EFF (EER)	STAGES (QTY)	TC (MBH)	SC (MBH)	CLG COIL EAT ("F DB)	HGR COIL LAT ("F WB)	MIN EFF (EER)	STAGES (QTY)	OAT ("F DB)	NOM INPUT (CFH)	HC (MBH)	EAT ("F DB)	LAT ("F DB)	MIN EFF (%)	STAGES (QTY)			V/PH	MCA	MOCP				
RTU-1	COMMON AREA	LENNOX	ETR	STAGED	2,400	--	0.9	200	200	6	R-410A	74.0	72.0	80.0	67.0	52.4	50.9	--	2	--	--	--	--	--	150.0	120.0	61.4	107.5	80	2	208/3	-	-	--	N				
RTU-2	FITNESS AREA	YORK OR EQUAL	ZYG12	STAGED	3,500	5.3	1.0	600	300	10	R-410A	123.4	90.6	80.0	67.0	56.1	54.6	12.0	14.6	2	54.9	12.6	75.0	67.0	72.1	63.0	1	85.0	220.0	176.0	55.5	101.9	80	2	208/3	53.3	60	1,222	A-M

NOTES:  
A. PROVIDE WITH CONTROLLER AND CONTROL DEVICES BY MANUFACTURER. REFER TO SEQUENCES OF OPERATION.  
B. PROVIDE WITH WI-FI COMPATIBLE 7-DAY PROGRAMMABLE THERMOSTAT.  
C. PROVIDE WITH FIXED DRY BULB TYPE ECONOMIZER ASSEMBLY.  
D. PROVIDE WITH MANUFACTURER'S BAROMETRIC RELIEF DAMPER AND HOOD ASSEMBLY.  
E. PROVIDE WITH MANUFACTURER'S STANDARD INSULATED ROOF CURB WITH 1'-2" MINIMUM HEIGHT.  
F. PROVIDE WITH DUCT-MOUNTED RETURN AIR HUMIDITY SENSOR FOR DEHUMIDIFICATION CONTROL SEQUENCE.  
G. PROVIDE WITH DUCT-MOUNTED CARBON DIOXIDE SENSOR FOR DEMAND CONTROL VENTILATION (DCV) SEQUENCE.  
H. PROVIDE WITH NON-POWERED WEATHER-PROOF DUPLEX RECEPTACLE.  
I. PROVIDE WITH 2" THICK, MINIMUM MERV-8 FILTERS.  
J. PROVIDE WITH FACTORY-MOUNTED RETURN AIR SMOKE DETECTOR.  
K. PROVIDE WITH CONDENSER COIL GUARDS.  
L. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH.  
M. UNIT SIZED FOR 100°F AMBIENT CONDENSING TEMPERATURE.  
N. EXISTING UNIT TO REMAIN. CONTRACTOR TO VERIFY PROPER OPERATION AND REPORT ANY DEFICIENCIES TO OWNER.



GRILLES, REGISTERS AND DIFFUSERS							
TAG	MANUFACTURER	MODEL	MOUNTING	FACE SIZE	MAX NC	MAX DP	NOTES
S-1	PRICE	520	WALL/DUCT	SEE PLAN	30	0.1	A,C,D,E,F,G
S-2	PRICE	SCD	CEILING	12x12	30	0.1	A,B,C,F,G
S-3	PRICE	SCD	CEILING	24x24	30	0.1	A,B,C,F
R-1	PRICE	PDDR	CEILING	24x24	30	0.1	C,F
R-2	PRICE	530	WALL	SEE PLAN	30	0.1	A,C,D,G

NOTES:  
A. NECK SIZE SHOWN ON PLANS.  
B. 4 WAY THROW UNLESS INDICATED OTHERWISE ON PLANS.  
C. BAKED ENAMEL FINISH, WHITE TO MATCH CEILING/WALL COLOR. VERIFY WITH ARCHITECT PRIOR TO ORDER.  
D. FRONT BLADES PARALLEL TO HORIZONTAL DIMENSION. VERIFY WITH PLANS.  
E. PROVIDE DOUBLE DEFLECTION BARS THAT ARE ADJUSTABLE.  
F. FRAME TYPE TO MATCH CEILING/WALL CONSTRUCTION. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN.  
G. PROVIDE OPPOSED BLADE DAMPER THAT IS ADJUSTABLE FROM THE FACE OF THE DEVICE.

FAN SCHEDULE									
TAG	AREA SERVED	MANUFACTURER	MODEL	MOUNTING	AIR FLOW (CFM)	ESP (IN.WG)	MOTOR POWER	DRIVE TYPE	V/PH NOTES
EF-1	RESTROOM	GREENHECK	SP-A125	CEILING	100	0.25	20 WATTS	DIRECT	120/1 ALL
EF-2	RESTROOM, SHOWER	GREENHECK	CSP-A200	CEILING	200	0.25	133 WATTS	DIRECT	120/1 ALL

NOTES:  
A. PROVIDE WITH MANUFACTURER'S STANDARD HANGING KIT AND CEILING MOUNT TRIM.  
B. PROVIDE WITH DISCONNECT SWITCH.  
C. PROVIDE WITH BACKDRAFT DAMPER.  
D. PROVIDE WITH MANUFACTURER'S STANDARD ROOF CURB AND GOOSENECK.  
E. INTERLOCK FAN WITH ASSOCIATED RESTROOM LIGHT SWITCH

OUTSIDE AIR CALCULATIONS							
OCCUPANCY CLASSIFICATION	AREA (FT <sup>2</sup> )	OCCUPANTS (QTY)	R <sub>p</sub> (CFM/PERSON)	MIN OCCUPANT O/A FLOW (CFM)	R <sub>a</sub> (CFM/FT <sup>2</sup> )	MIN AREA O/A FLOW (CFM)	CFM TOTAL
HEALTH CLUB/WEIGHT ROOM	2107	22	20	440	0.06	126	566
RECEPTION	302	10	5	50	0.06	18	68
ENTRY LOBBY	220	3	5	15	0.06	13	28
OFFICE	72	1	5	5	0.06	4	9

REQUIRED OA CFM = 672  
PROVIDED DCV MAX OA CFM = 800  
PROVIDED DCV MIN OA CFM = 500

NOTES:  
A. R<sub>p</sub> REPRESENTS PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE PER TABLE 403.3.  
B. R<sub>a</sub> REPRESENTS AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE PER TABLE 403.3.

CALCULATIONS PER 2018 INTERNATIONAL MECHANICAL CODE



LINETYPES LEGEND:

- NEW — ABOVE SLAB
- NEW — BELOW SLAB
- EXISTING — ABOVE SLAB
- EXISTING — BELOW SLAB
- DEMOLITION

PIPING LEGEND:

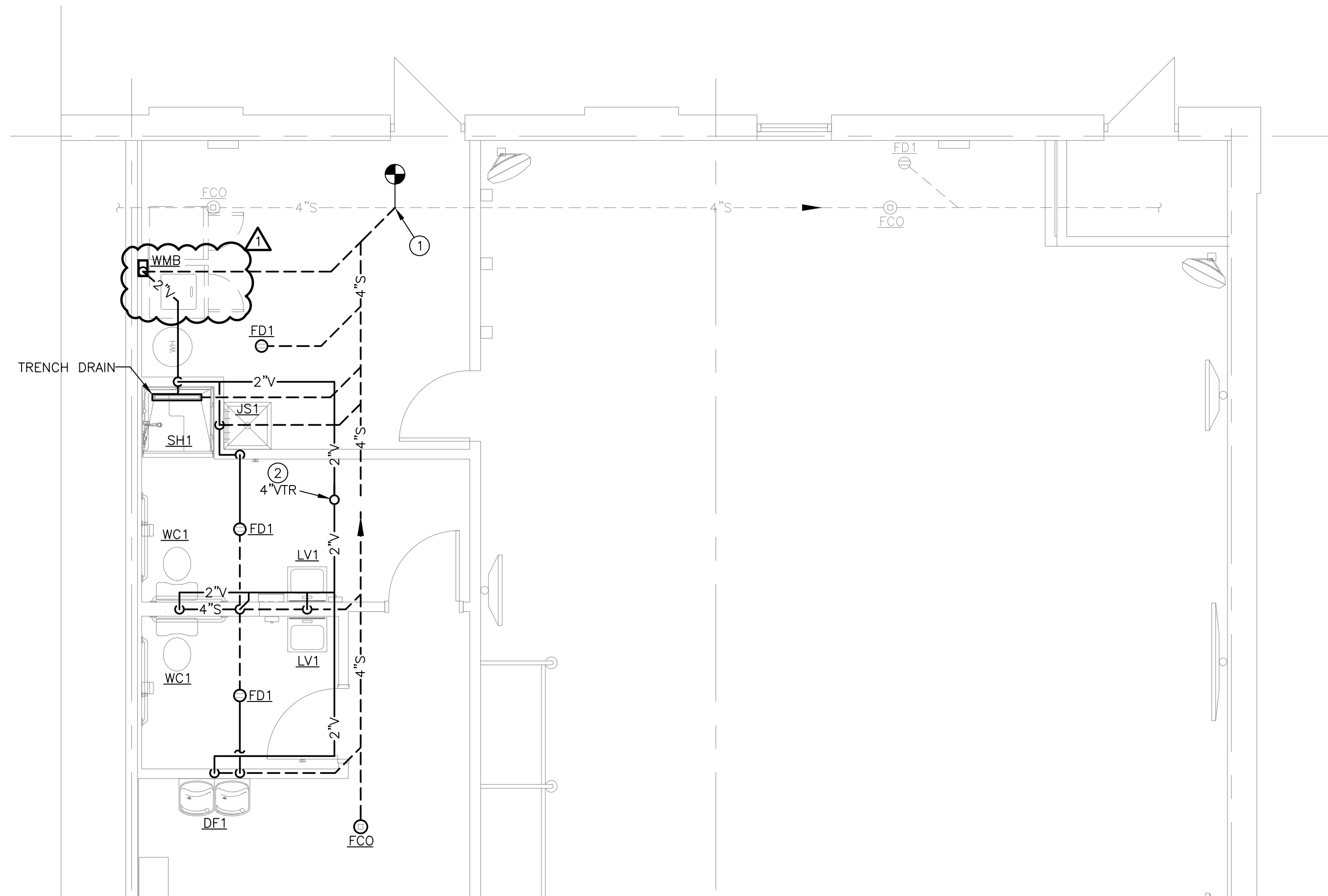
- ELBOW DOWN
- ELBOW UP
- P-TRAP
- TEE DOWN
- ELBOW UP
- SHUT-OFF VALVE (GENERIC)
- BALL VALVE
- GLOBE VALVE
- BUTTERFLY VALVE
- GATE VALVE
- CHECK VALVE
- BALANCING VALVE
- PRESSURE REDUCING VALVE
- GAS COCK
- WYE-STRAINER
- UNION
- FLANGE
- RELIEF VALVE
- AIR VENT (MANUAL / AUTOMATIC)
- FLOW DIRECTION
- PIPE BREAK / CONTINUATION
- FLOOR DRAIN
- FLOOR SINK
- FLOOR CLEANOUT
- HOSE BIBB

ANNOTATION LEGEND:

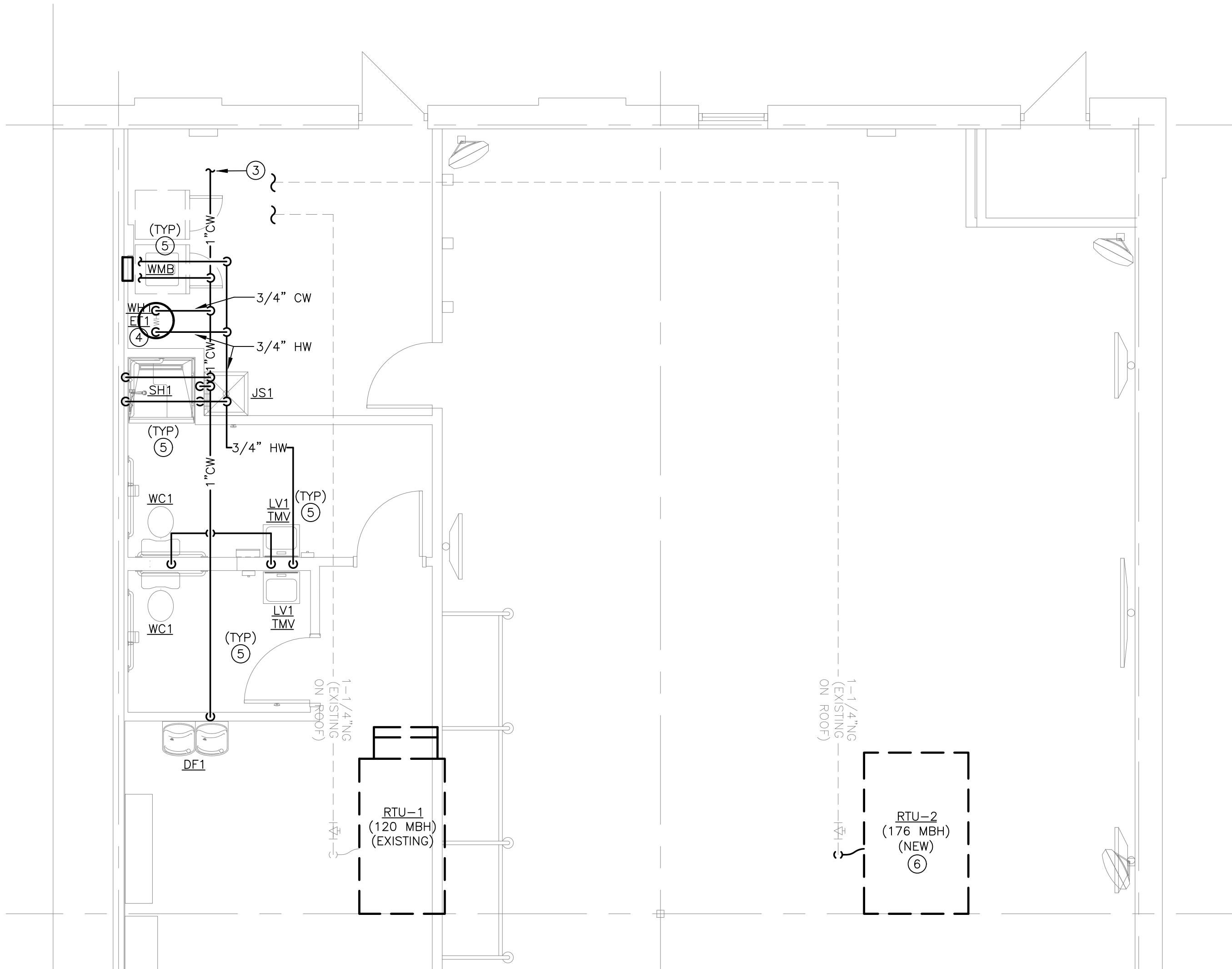
- ABC-1 EQUIPMENT / FIXTURE TAG
- PLAN NOTE
- CONNECT TO EXISTING

ABBREVIATIONS LEGEND:

- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- BOP BOTTOM OF PIPE
- BT BATHTUB
- CFH CUBIC FEET PER HOUR
- CO CLEANOUT
- CW DOMESTIC COLD WATER
- DF DRINKING FOUNTAIN
- DN DOWN
- DSN DOWNSPOUT NOZZLE
- (E) EXISTING
- ET EXPANSION TANK
- EWC ELECTRIC WATER COOLER
- EWS EYE WASH STATION
- FCO FLOOR CLEANOUT
- FD FLOOR DRAIN
- FF FINISHED FLOOR
- FFA FROM FLOOR ABOVE
- FFB FROM FLOOR BELOW
- FS FLOOR SINK
- GI GREASE INTERCEPTOR
- GPM GALLONS PER MINUTE
- HB HOSE BIBB
- HP HORSEPOWER
- HWR HOT WATER RECIRCULATION
- IE INVERT ELEVATION
- IN.WG INCHES WATER GAUGE
- JS JANITOR SINK
- LI LINT INTERCEPTOR
- LS LAUNDRY SINK
- LV LAVATORY
- MAX MAXIMUM
- MB MOP BASIN
- MBH 1,000 BTUH
- MIN MINIMUM
- NG NATURAL GAS
- NH NON-FREEZE HOSE BIBB
- NRH NON-FREEZE ROOF HYDRANT
- OD OVERFLOW ROOF DRAIN
- QTY QUANTITY
- RD ROOF DRAIN
- RP RECIRCULATION PUMP
- RPZ REDUCED PRESSURE ZONE BACKFLOW PREVENTER
- S SANITARY WASTE
- SH SHOWER
- SK SINK
- SS SERVICE SINK
- SWP SEWAGE PUMP
- TD TRENCH DRAIN
- TFA TO FLOOR ABOVE
- TFB TO FLOOR BELOW
- TMV THERMOSTATIC MIXING VALVE
- TRA TO ROOF ABOVE
- TSP TOTAL STATIC PRESSURE
- UR URINAL
- V VENT
- WC WATER CLOSET
- WH WATER HEATER
- WCO WALL CLEANOUT
- WPD WATER PRESSURE DROP



1 PLUMBING WASTE AND VENT PLAN  
SCALE: 1/4" = 1'-0"



2 PLUMBING WATER AND GAS PLAN  
SCALE: 1/4" = 1'-0"

PLUMBING PLAN NOTES:

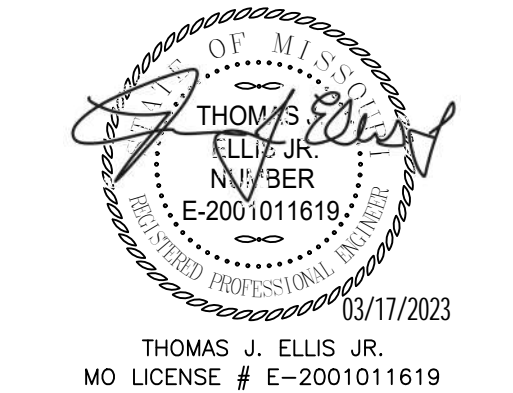
- EXTEND NEW 4" SANITARY SEWER TO EXISTING BUILDING SANITARY SEWER. FIELD VERIFY EXACT LOCATION AND FLOW DIRECTION PRIOR TO START OF WORK.
- PROVIDE NEW 4" VENT THROUGH ROOF (VTR) WHERE SHOWN. MAINTAIN A MINIMUM OF 10'-0" FROM ANY OUTDOOR AIR INTAKE OR BUILDING OPENING. RE-USE EXISTING VENT IF POSSIBLE.
- EXTEND NEW 1" DOMESTIC WATER LINE FROM EXISTING BUILDING WATER SUPPLY TO SERVE REMODEL. PROVIDE ISOLATION BALL VALVE AT CONNECTION TO BUILDING MAIN. FIELD VERIFY EXACT LOCATION PRIOR TO START OF WORK.
- LOCATE WATER HEATER ABOVE JANITOR'S SINK ON SHELF. CONNECT WATER PIPING AND EXPANSION TANK TO WATER HEATER SYSTEM PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO DETAIL ON SHEET P2.0 FOR ADDITIONAL INFORMATION.
- EXTEND COLD WATER AND HOT WATER TO PLUMBING FIXTURES INDICATED. MAKE FINAL CONNECTIONS PER PLUMBING FIXTURE CONNECTION SCHEDULE.
- RE-CONNECT NATURAL GAS TO NEW ROOFTOP UNIT AS SHOWN. PROVIDE DIRT LEG AND GAS COCK AT ROOFTOP UNIT CONNECTION. REFER TO ROOFTOP UNIT INSTALLATION INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH HVAC CONTRACTOR.

Tenant Improvements For:

Date: 03/08/23  
Issued For: For Permit

REVISIONS

No.	Date	Description
1.	3.17.23	CITY REVIEW



PROJECT TEAM

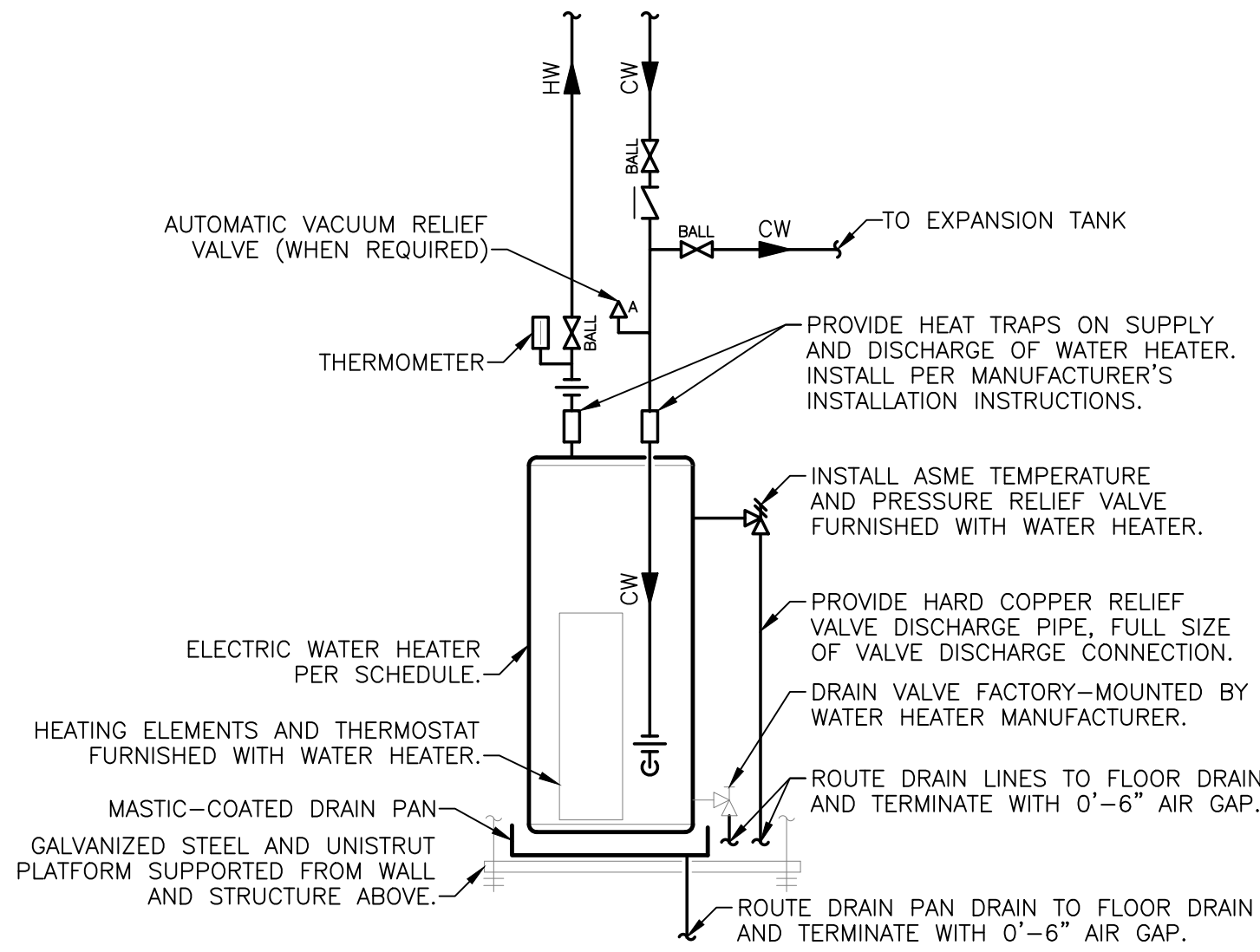
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
MECHANICAL	5BY5 ENGINEERS
PLUMBING	5BY5 ENGINEERS
ELECTRICAL	5BY5 ENGINEERS
CONTRACTOR	HAWTHORN PROJECTS

1100 Main Street, 4th Floor  
Kansas City, MO 64105  
Kansas COA: E-2361  
913-693-9449  
contact@5by5eng.com  
5by5eng.com

5BY5 ENGINEERS

NO. P1.0

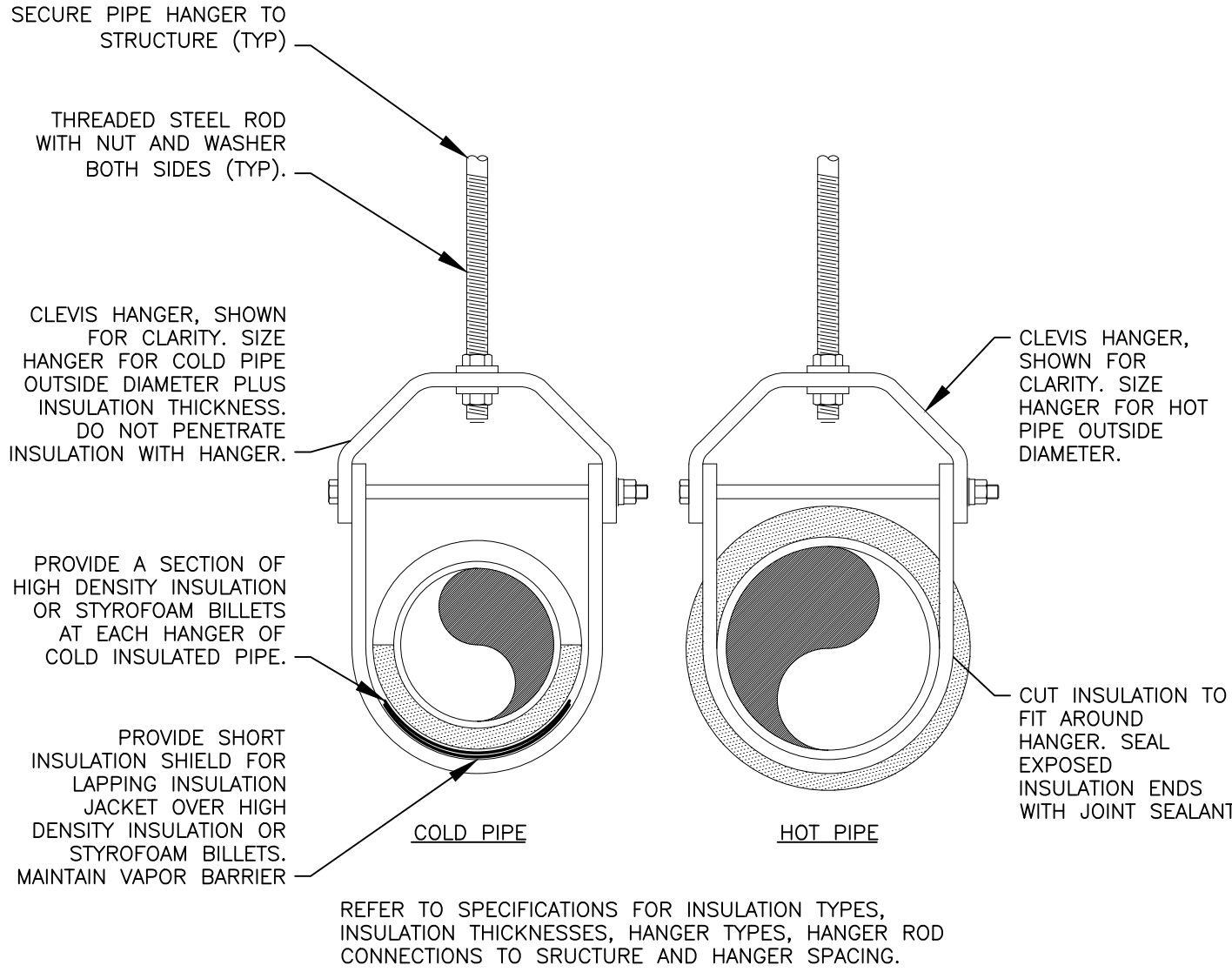




NOTES:

- STRUCTURE AND PLATFORM SHALL BE DESIGNED TO HOLD THE MAXIMUM WEIGHT OF THE WATER HEATER. CONFIRM CAPACITY OF SHELF WITH MANUFACTURER PRIOR TO INSTALLATION.

2 WATER HEATER DETAIL  
SCALE: NTS



1 INSULATED PIPE HANGER DETAIL  
SCALE: NTS

NATURAL GAS LOAD SCHEDULE						
EQUIPMENT TAG	QTY	DESCRIPTION	CFH INPUT (EACH)	TOTAL CFH		
RTU-1	1	ROOFTOP UNIT	90	90		
RTU-2	1	ROOFTOP UNIT	176	176		
			SYSTEM TOTAL = 266			
NOTES:						
A. METER DISCHARGE PRESSURE: 11 IN. WG.						
B. TOTAL DEVELOPED LENGTH: 350 FT.						
C. DESIGN NATURAL GAS PIPING SYSTEM PRESSURE DROP: 0.5 IN. WG						
D. INLET PRESSURE FOR ALL GAS-FIRED EQUIPMENT: 7 TO 11 IN. WG.						

FIXTURE CONNECTION SCHEDULE					
FIXTURE	WASTE	VENT	COLD	HOT	NOTES
CLOTHES WASHER (RESIDENTIAL)	2"	2"	1/2"	1/2"	VB
DRINKING FOUNTAIN	2"	1-1/2"	1/2"	---	---
FLOOR DRAIN	2"	2"	---	---	---
JANITOR'S SINK	2"	1-1/2"	1/2"	1/2"	VB
LAVATORY - PUBLIC	2"	1-1/2"	1/2"	1/2"	TMV
SHOWER	2"	1-1/2"	1/2"	1/2"	TMVS
WATER CLOSET (TANK TYPE)	4"	2"	1/2"	---	---
NOTES:					
AG: AIR GAP FITTING AS PROVIDED BY MANUFACTURER.					
DCV: DOUBLE CHECK VALVE ASSEMBLY, LINE SIZED, CONFORMING TO ASSE 1015.					
DCVB: DOUBLE CHECK VALVE ASSEMBLY, LINE SIZED, CONFORMING TO ASSE 1022.					
RP: REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY, LINE SIZED, CONFORMING TO ASSE 1013.					
TMV: POINT OF USE TYPE THERMOSTATIC MIXING VALVE CONFORMING TO ASSE 1070.					
TMVS: SCALD PROTECTION SHOWER/TUB VALVE, CONFORMING TO ASSE 1016.					
VB: ATMOSPHERIC TYPE VACUUM BREAKER CONFORMING TO ASSE 1020.					
INSTALL BACKFLOW PREVENTION DEVICES ON EQUIPMENT AND FIXTURES PER LOCAL WATER COMPANY REQUIREMENTS. ALL BACKFLOW PREVENTERS SHALL BE IN AN ACCESSIBLE LOCATION FOR PERIODIC INSPECTION AND TESTING.					

	MaD Fitness Group			12/08/2022 Update			
	F45 Spec Book		VE all specifications with owner approval				
All changes/substitutions to be approved by owner							
Division	Item		Location	MFG	Model	Other	Color/Misc
Plumbing	Water Fountain	Standard	Hallway-per plan	Elkay	EXSTL8WS	With Bottle Filler	SS
Plumbing	Water Fountain	Alternate	Hallway-per plan	Halsey Taylor	HTHB-HA	CG8BLSS	SS
Plumbing	Sink Wall	Standard	Bathroom	American Standard	Lucerne 0356 041	20 x 18	White
Plumbing	Sink Wall	Alternate	Bathroom	Gerber	Monticello II	20 x 18	White
Plumbing	Toilet	Standard	Bathroom	Gerber	Pressure assist H/C	Ultra Flush 20-318	White
Plumbing	Faucet-Sink	Standard	Bathroom	Moen	8554	Battery powered	Chrome
Plumbing	Faucet-Sink	Alternate	Bathroom	American Standard	605B.204/PK00.PAC	Innsbrook Selectronic	SS
Plumbing	Shower Hand Held	Standard	Bathroom	Luxart Classico II	LC2SYS60-CP		SS
Plumbing	Shower Valve	Standard	Bathroom	Olympia	Temp/Pressure Balanced		SS
Plumbing	Mop Floor Sink and Faucet	Standard	Utility	Fiat MSB2424 and 830 AA Faucet		Or equal floor mounted	White
Plumbing	Mop Rack	Standard	Utility	Bobrick B-223 Mop holder			SS
Plumbing	Water Heater	Standard	Utility- floor/or hung	State 50-Gallon	PCE-50-20LS	50 Gallon	
Plumbing	Water Heater	Alternate	Utility- floor/or hung	A O Smith 50-Gallon	DEL 50	50 Gallon	
Plumbing	Trench Drain	Standard	Shower	Tru-Line	304 SS with S Style grate	SS	Length by location
Plumbing	Trench Drain	Alternate	Shower	Zurn	ZS880	SS	Length by location
Plumbing	Washer Box	Standard	Utility	Oatey	Center drain outlet box	38934	White

PLUMBING FIXTURE SCHEDULE:

INFORMATION BELOW IS FOR GENERAL FIXTURE REQUIREMENTS ONLY. PLUMBING CONTRACTOR SHALL COORDINATE WITH OWNER AND ARCHITECT FOR EXACT FIXTURE REQUIRED FOR THE PROJECT. COORDINATE WITH OWNER FOR INFORMATION ON \*PROCURING FIXTURES AND ASSOCIATED COSTS. CONTRACTOR SHALL BE CLEAR AS TO WHAT FIXTURES ARE INCLUDED IN THEIR PROPOSED COSTS.

FIXTURES IN THIS SCHEDULE, OR THE APPROVED EQUIVALENT, SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR FURTHER REQUIREMENTS.

REFER TO TENANT SPEC BOOK SCHEDULE ON THIS SHEET FOR BASIS OF DESIGN FIXTURES AND EQUIPMENT. CONTRACTOR SHALL GET PRE-APPROVAL FROM TENANT PRIOR TO OFFERING SUBSTITUTIONS.

DF1

- ELECTRIC WATER COOLER WITH BOTTLE FILLER (ADA ACCESSIBLE): WALL-MOUNTED, BARRIER-FREE, DUAL-LEVEL, FRONT AND SIDE PUSH ACTUATOR BARS, STAINLESS STEEL BOWL, FLEXIBLE POLYESTER ELASTOMER SAFETY BUBBLER AND GALVANIZED STEEL FRONT AND SIDES, BOTTLE FILLING STATION, CHILLER WITH 8.0 GALLONS PER HOUR CAPACITY AT 50°F DRINKING WATER, 80°F INLET WATER, AND 90°F ROOM TEMPERATURE. UNIT SHALL BE LEAD FREE DESIGN AND MEET FEDERAL AND STATE LOW-LEAD REQUIREMENTS.
- TRIM: QUARTER-TURN BALL TYPE ANGLE STOP VALVE WITH RISER AND ESCUTCHEON, 1-1/4" 17-GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON.
- ACCEPTABLE MANUFACTURERS: ELKAY 'EXSTL8WS' OR EQUAL HALSEY TAYLOR 'HTHB-HA-CG8BLSS'.
- ELECTRICAL REQUIREMENTS: 120V/1ø, 6.0 FLA.

ET1

- EXPANSION TANK: 150 PSIG MAXIMUM WORKING PRESSURE, 4.5-GALLON CAPACITY, 0.45 MAXIMUM ACCEPTANCE FACTOR, AND 3/4" PIPE CONNECTION. SET THE AIR CHARGE PRESSURE TO MATCH EXISTING WATER SYSTEM PRESSURE.

FCO1

- FLOOR CLEANOUT: CAST IRON BODY, FLASHING FLANGE WITH CLAMPING COLLAR, ABS PIG, AND ADJUSTABLE, ROUND, SECURED, HEAVY DUTY SCORIATED NICKEL BRONZE TOP. INSTALL PER MANUFACTURER'S REQUIREMENTS BASED ON FLOORING TYPE USED. PROVIDE ACCESSORIES AS REQUIRED FOR PROPER INSTALLATION. COORDINATE FINISH TYPE WITH ARCHITECTURAL PLANS.

FD1

- FLOOR DRAIN: BODY MATERIAL TO MATCH CONNECTED PIPING, WITH FLANGE, INTEGRAL REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, AND 6" NICKEL BRONZE STRAINER WITH VANDAL-PROOF SCREWS. PROVIDE P-TRAP AND WASTE ARM SIZED AS INDICATED ON PLAN.
- ACCESSORIES: PROVIDE TRAP GUARD.

LV1

- WALL-MOUNTED LAVATORY (ADA ACCESSIBLE): RECTANGULAR WALL MOUNTED WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOW.
- FAUCET: FAUCET WITH 4" CENTERSET, VANDAL-RESISTANT, WITH LEVER HANDLES AND 0.5 GPM AERATOR.
- FAUCET ACCEPTABLE MANUFACTURER: MOEN #8554 OR AMERICAN STANDARD #605B.204/PK00.PAC.
- TRIM: GRID DRAIN WITH TAILPIECE, QUARTER-TURN BALL TYPE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, 1-1/4" 17-GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, CONCEALED ARM CARRIER WITH STANCHIONS TO FLOOR, AND INSULATION KIT FOR WATER AND WASTE PIPES.
- ACCEPTABLE MANUFACTURERS: AMERICAN STANDARD LUCERNE '0356.041' OR GERBER 'MONTICELLO II'.

WC1

- FLOOR-MOUNTED WATER CLOSET (ADA ACCESSIBLE): TANK TYPE WHITE VITREOUS CHINA FIXTURE WITH ELONGATED BOWL, 1.6 GALLON PER FLUSH, SIPHON FLUSH ACTION, AND CLOSE-COUPLED TANK WITH TRIP LEVER ON THE WIDE SIDE OF THE STALL.
- TRIM: WHITE OPEN-FRONT CONTOURED, SOLID PLASTIC, HEAVY-DUTY, SEAT-LESS-COVER WITH SELF-SUSTAINING HINGES AND STAINLESS STEEL BOLTS; QUARTER-TURN BALL TYPE ANGLE STOP VALVE WITH RISER AND CHROME-PLATED ESCUTCHEON.
- ACCEPTABLE MANUFACTURER: GERBER PRESSURE ASSIST H/C 'ULTRA-FLUSH 20-318'.

WCO1

- WALL CLEANOUT: CAST IRON CLEANOUT TEE, COUNTER-SUNK CAST IRON PLUG WITH GASKET SEAL, AND STAINLESS STEEL ROUND COVER WITH SCREW.

WH1

- WATER HEATER: ELECTRIC, 50 GALLON, 4.5 kW INPUT, 18 GALLON PER HOUR RECOVERY AT 100°F TEMPERATURE RISE AND 140°F OPERATING TEMPERATURE. PROVIDE WITH DUAL-ELEMENT, NON-SIMULTANEOUS HEATING ELEMENTS. PROVIDE ALL WATER CONNECTIONS, VALVES, AND SPECIALS PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- ELECTRICAL REQUIREMENTS: 208V/1ø, 21.6 FLA.
- BASIS OF DESIGN: A.O. SMITH MODEL # DEL-50.

WMB

- WASHING MACHINE BOX: STEEL BOX, STEEL FACEPLATE, TOP INLET WATER SUPPLIES WITH QUARTER TURN BALL VALVES AND 2" BOTTOM OUTLET DRAIN.
- TRIM: 24" LONG TAILPIECE AND 2" DIAMETER P-TRAP.
- BASIS OF DESIGN: OATEY CENTER DRAIN #38934

PLUMBING GENERAL NOTES:

- DRAWINGS ARE SCHEMATIC IN NATURE AND BASED ON PRELIMINARY SITE OBSERVATION AND ORIGINAL DESIGN DRAWINGS (WHEN AVAILABLE). CONTRACTOR SHALL INVESTIGATE THE PROJECT SITE AND BECOME FULLY AWARE OF ALL FIELD CONDITIONS, CURRENT SYSTEM OPERATION, AS WELL AS COORDINATION REQUIREMENTS. COORDINATE ALL PLUMBING WORK WITH ARCHITECTURAL DRAWINGS, EXISTING CONDITIONS, AND OTHER TRADES PRIOR TO BID OR START OF WORK.

- PLUMBING WORK SHALL CONFORM TO APPLICABLE CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

- PRIOR TO START OF WORK, CONTRACTOR SHALL CAMERA ALL EXISTING UNDERGROUND SANITARY SEWER LINES. VERIFY UNDERGROUND PIPING LOCATION, DEPTH AND FLOW DIRECTION. REPORT ANY PIPING DAMAGE OR LOCATION DISCREPANCIES TO ENGINEER AND/OR OWNER PRIOR TO START OF WORK.

- EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OF CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (E.G. DOMESTIC WATER, SEWER, VENT, AND NATURAL GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANIES.

- SANITARY WASTE, VENT, AND STORM PIPING BELOW GRADE SHALL BE SCHEDULE 40 PVC WITH SOLVENT-WELDED JOINTS.

- SANITARY WASTE, VENT, AND STORM PIPING ABOVE GRADE SHALL BE NO-HUB CAST IRON IN RETURN AIR PLENUM APPLICATIONS. PVC OR ABS PIPING CAN BE USED IN AREAS OTHER THAN RETURN AIR PLENUMS AS ALLOWED BY CODE.

- SLOPE SANITARY PIPING AS FOLLOWS: 1/4" PER FOOT FOR PIPE SIZES 2-1/2" AND SMALLER, AND 1/8" PER FOOT FOR PIPE SIZES 3" AND LARGER.

- COORDINATE CONDENSATE DRAIN REQUIREMENTS WITH THE HVAC CONTRACTOR AND OTHER TRADES.

- PROVIDE WATER SUPPLY SHUT-OFF VALVES ON EACH TOILET ROOM GROUP AND TO MISCELLANEOUS EQUIPMENT.

- PROVIDE SIZE "A" WATER HAMMER ARRESTORS ON SUPPLY TO ALL PLUMBING FIXTURES.

- PROVIDE STOP VALVES ON ALL INDIVIDUAL PLUMBING FIXTURE SUPPLIES.

- COORDINATE SELECTION OF ALL PLUMBING FIXTURES WITH ARCHITECT AND OWNER. ALL HANDICAPPED FIXTURES (WHERE REQUIRED) SHALL COMPLY WITH A.D.A. REQUIREMENTS.

- DOMESTIC WATER PIPING ABOVE GRADE SHALL BE TYPE L COPPER WITH WROUGHT FITTINGS AND SOLDERED JOINTS.

- INSULATE NEW DOMESTIC COLD WATER, HOT WATER, HOT WATER RECIRCULATION, INTERIOR CONDENSATE DRAIN, AND STORM PIPING WITH MINIMUM 1" FIBERGLASS INSULATION (MINIMUM R-4.0) WITH PAPER COVERING.

- ALL NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH MALLEABLE FITTINGS. SUPPORT PIPING AT INTERVALS NOT TO EXCEED THOSE LISTED IN TABLE 415.1 OF THE INTERNATIONAL FUEL GAS CODE.

- PROVIDE RUST-INHIBITOR PAINT ON ALL NATURAL GAS PIPING LOCATED EXTERIOR TO THE BUILDING.

- PROVIDE A.G.A. APPROVED GAS COCKS AND DIRT LEGS AT CONNECTIONS TO ALL GAS-FIRED EQUIPMENT.

- INSTALL ALL PLUMBING EQUIPMENT, FIXTURES, VALVES, ETC. PER MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE ADDITIONAL APPURTENANCES PER MANUFACTURER'S INSTALLATION REQUIREMENTS.

- INSTALL CLEANOUTS AT EVERY END OF SANITARY PIPING RUNS, AT MINIMUM OF EVERY 100'-0" OF SANITARY PIPING, AND AT EVERY CHANGE IN DIRECTION GREATER THAN 45'. REFER TO SECTION 708 OF THE INTERNATIONAL PLUMBING CODE FOR ADDITIONAL REQUIREMENTS.

- ALL FLOOR DRAINS SHALL HAVE A 2" THROAT AND P-TRAP UNLESS NOTED OTHERWISE.

- PLUMBING CONTRACTOR SHALL INSPECT ALL PLUMBING EQUIPMENT TO REMAIN. REPORT ANY DEFICIENCIES TO OWNER PRIOR TO START OF WORK.

- CONTRACTOR SHALL LABEL ALL PIPING, VALVES AND EQUIPMENT WITH MANUFACTURER STANDARD LABELING SYSTEMS. COORDINATE WITH OWNER FOR FINAL EQUIPMENT DESIGNATIONS.

- WHERE ALLOWED BY CODE, CROSS-LINKED POLYETHYLENE (PEX) PIPING MAY BE USED IN LIEU OF COPPER PIPING. ADJUST SIZING OF PIPING FOR REDUCED FREE AREA OF PEX PIPING. ALL PEX PIPE ROUTED IN RETURN AIR PLENUMS MUST MEET THE FLAME SPREAD RATING AND SMOKE DEVELOPED RATING FOR SUCH APPLICATIONS.

Tenant Improvements For:

F45 Lee's Summit

Date:

12/30/22

Issued For:

STEP 1 FOR REVIEW

REVISIONS

No.	Date	Description

THOMAS J. ELLIS JR.  
MO LICENSE # E-2001011619  
01/18/2023

PROJECT TEAM

ARCHITECT MOMENTUM ARCHITECTURE+DESIGN

MECHANICAL 58BY5 ENGINEERS

PLUMBING 58BY5 ENGINEERS

ELECTRICAL 58BY5 ENGINEERS

CONTRACTOR HAWTHORN PROJECTS

1100 Main Street, 4th Floor  
Kansas City, MO 64105  
Kansas COA: E-2361  
913-693-9449  
contact@58by5eng.com  
58by5eng.com

58BY5 ENGINEERS

NO.

P2.0



To Be Located At:

Lee's Summit

1138 NE Douglas Street  
Lee's Summit, MO 64086

Tenant Improvements For:

F45  
Lee's Summit

Date:

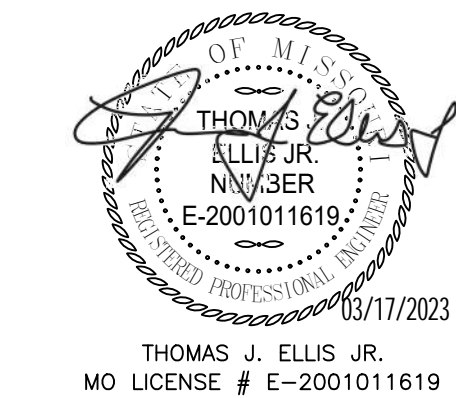
03/08/23

Issued  
For:

For Permit

REVISIONS

No.	Date	Description
1.	3.17.23	CITY REVIEW



PROJECT TEAM

ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
MECHANICAL	5BY5 ENGINEERS
PLUMBING	5BY5 ENGINEERS
ELECTRICAL	5BY5 ENGINEERS
CONTRACTOR	HAWTHORN PROJECTS

1100 Main Street, 4th Floor  
Kansas City, MO 64105  
Kansas COA: E-2361  
913-693-9449  
contact@5by5eng.com  
5by5eng.com

5BY5  
ENGINEERS

NO.

E1.0

ELECTRICAL GENERAL NOTES:

- REFERENCE SHEET E3.0 FOR ELECTRICAL GENERAL NOTES.

ELECTRICAL POWER PLAN NOTES:

- EXISTING 200A 120/208V BRANCH PANEL SHALL REMAIN AND RE-USED IN NEW CONSTRUCTION.
- EXISTING JUNCTION BOX IN CANOPY FOR STORE SIGNAGE. CONFIRM ACTUAL SIGN LOCATION IN FIELD. MAINTAIN CIRCUITING AND TIMECLOCK ABOVE PANEL 'T4'.
- COORDINATE RECEPTACLE AND DATA OUTLET LOCATION WITH CASEWORK INSTALLER AND SHOP-DRAWINGS.
- COORDINATE T.V. RECEPTACLE AND DATA STUB HEIGHT AND LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- COORDINATE FAN RECEPTACLE HEIGHT AND LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- DUCT SMOKE DETECTOR ON EXISTING RTU TO REMAIN. RELOCATE 'TEST/RESET' BUTTON INTO OFFICE IN ACCESSIBLE LOCATION.
- DUCT SMOKE DETECTOR ON NEW RTU. INSTALL 'TEST/RESET' BUTTON IN OFFICE IN ACCESSIBLE LOCATION.
- CONNECT 120V CIRCUIT TO WP/GFI RECEPTACLED PROVIDED WITH RTU.
- RECEPTACLE AT STRUCTURE FOR CAMERA. FINAL LOCATION TO BE DETERMINED IN FIELD.
- (2) RECEPTACLES MOUNTED AT 6'-6" WITH EACH LOCATED 12" OFF OF THE CENTERLINE OF THE LOCKER/CUBBIE CABINET.
- CONNECT EXHAUST FAN TO SWITCHED RESTROOM LIGHTING CIRCUIT. VERIFY OCC. SENSOR SWITCH IS CAPABLE OF CONTROLLING EXHAUST FAN.
- NEW QUAD RECEPTACLE AND 2'x4'x3/4" SHEET OF PLYWOOD FOR TELCO BACKBOARD. CONFIRM LOCATION WITH TENANT.

LINE TYPES LEGEND:

- NEW
- EXISTING OR BY OTHERS
- DEMOLITION

LIGHTING LEGEND:

- CEILING MOUNTED LIGHT FIXTURE, 2'x2' OR 2'x4'
  - CEILING MOUNTED LIGHT FIXTURE, 2'x2' OR 2'x4' (NIGHT LIGHT OR EMERGENCY CIRCUIT)
  - STRIP LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR LENGTH.
  - WALL-MOUNT SCONCE OR WALL BRACKET LIGHT FIXTURE.
  - RECESSED WALL WASH CAN LIGHT FIXTURE.
  - RECESSED, SURFACE, OR STEM HUNG LIGHT FIXTURE.
  - SINGLE FACE EXIT LIGHT FIXTURE, WALL OR CEILING MOUNT, WITH FIELD CONFIGURABLE ARROWS. PROVIDE DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. SHADED AREA INDICATES EXIT LIGHT FACE.
  - DOUBLE FACE EXIT LIGHT FIXTURE, WALL OR CEILING MOUNT, WITH FIELD CONFIGURABLE ARROWS. PROVIDE DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. SHADED AREA INDICATES EXIT LIGHT FACE.
  - COMBINATION SINGLE FACE EXIT/EMERGENCY LIGHT FIXTURE, WALL OR CEILING MOUNT, WITH FIELD CONFIGURABLE ARROWS. PROVIDE DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. SHADED AREA INDICATES EXIT LIGHT FACE.
- NOTE: REFER TO LIGHT FIXTURE SCHEDULE AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND MOUNTING HEIGHTS.

POWER LEGEND:

- INDICATES ABOVE COUNTER (TYP)
  - DUPLEX RECEPTACLE MOUNTED AT +18" AFF TO CENTER OF RECEPTACLE (UNO). ABOVE COUNTER RECEPTACLES SHALL BE +48" AFF (UNO).
  - DUPLEX ISOLATED GROUND RECEPTACLE MOUNTED AT +18" AFF TO CENTER OF RECEPTACLE (UNO). ABOVE COUNTER RECEPTACLES SHALL BE +48" AFF (UNO).
  - DUPLEX RECEPTACLE ON STAND-BY GENERATOR POWER, MOUNTED AT +18" AFF TO CENTER OF RECEPTACLE (UNO). RECEPTACLES SHOWN ABOVE COUNTER SHALL BE +48" AFF (UNO).
  - FLOOR-MOUNTED DUPLEX OR FOURPLEX RECEPTACLE MOUNTED IN PVC FLOORBOX, OR POKE-THRU
  - SPECIAL RECEPTACLE, NUMBER REFERS TO "NEMA" CONFIGURATION. MOUNT AT +18" AFF TO CENTER OF RECEPTACLE (UNO).
  - FOURPLEX RECEPTACLE MOUNTED AT +18" AFF TO CENTER OF RECEPTACLE (UNO). RECEPTACLES SHOWN TO BE ABOVE COUNTER SHALL BE +48" AFF (UNO)
  - FLUSH MOUNT COMBINATION POWER AND VOICE/DATA FLOORBOX.
  - SINGLE POLE WALL MOUNT TOGGLE SWITCH. MOUNT AT +48" AFF TO CENTER OF SWITCH.
  - WALL MOUNTED OCCUPANCY SENSOR SWITCH. MOUNT AT +48" AFF TO CENTER OF SWITCH.
  - WALL MOUNTED OCCUPANCY SENSOR SWITCH WITH 0-10V DIMMING CONTROL. MOUNT AT +48" AFF TO CENTER OF SWITCH.
  - WALL MOUNTED LOW VOLTAGE SWITCH WITH 0-10V DIMMING CONTROL. MOUNT AT +48" AFF TO CENTER OF SWITCH.
  - CEILING MOUNTED OCCUPANCY SENSOR.
  - ROOM CONTROLLER/POWER PACK FOR LIGHT FIXTURE CONTROL. DEVICE SHALL BE CONCEALED IN CEILING.
  - VOICE OPENING. PROVIDE RING WITH STRING TO ABOVE CEILING. DEVICES SHOWN TO BE COUNTER SHALL BE +48" AFF (UNO).
  - DATA OPENING. PROVIDE RING WITH STRING TO ABOVE CEILING. DEVICES SHOWN TO BE COUNTER SHALL BE +48" AFF (UNO).
  - COMBINATION VOICE/DATA OPENING. PROVIDE RING WITH STRING TO ABOVE CEILING. DEVICES SHOWN TO BE COUNTER SHALL BE +48" AFF (UNO).
  - FLUSH FLOOR MOUNT VOICE/DATA OUTLET MOUNTED IN PVC FLOORBOX.
  - DISCONNECT SWITCH, STARTER, & COMBINATION STARTER/DISCONNECT SWITCH. SIZE AS INDICATED ON DRAWINGS.
  - ELECTRICAL PANEL BOARD, FLUSH OR SURFACE MOUNT
  - JUNCTION BOX
- NOTE: LINE THROUGH DEVICE INDICATES TO BE MOUNTED ABOVE COUNTERTOP OR CABINET. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS IF NOT INDICATED ON POWER PLAN.
- REFER TO LIGHTING CONTROL DEVICE SCHEDULE AND ARCHITECTURAL DRAWINGS FOR FURTHER INFORMATION.

WIRING LEGEND:

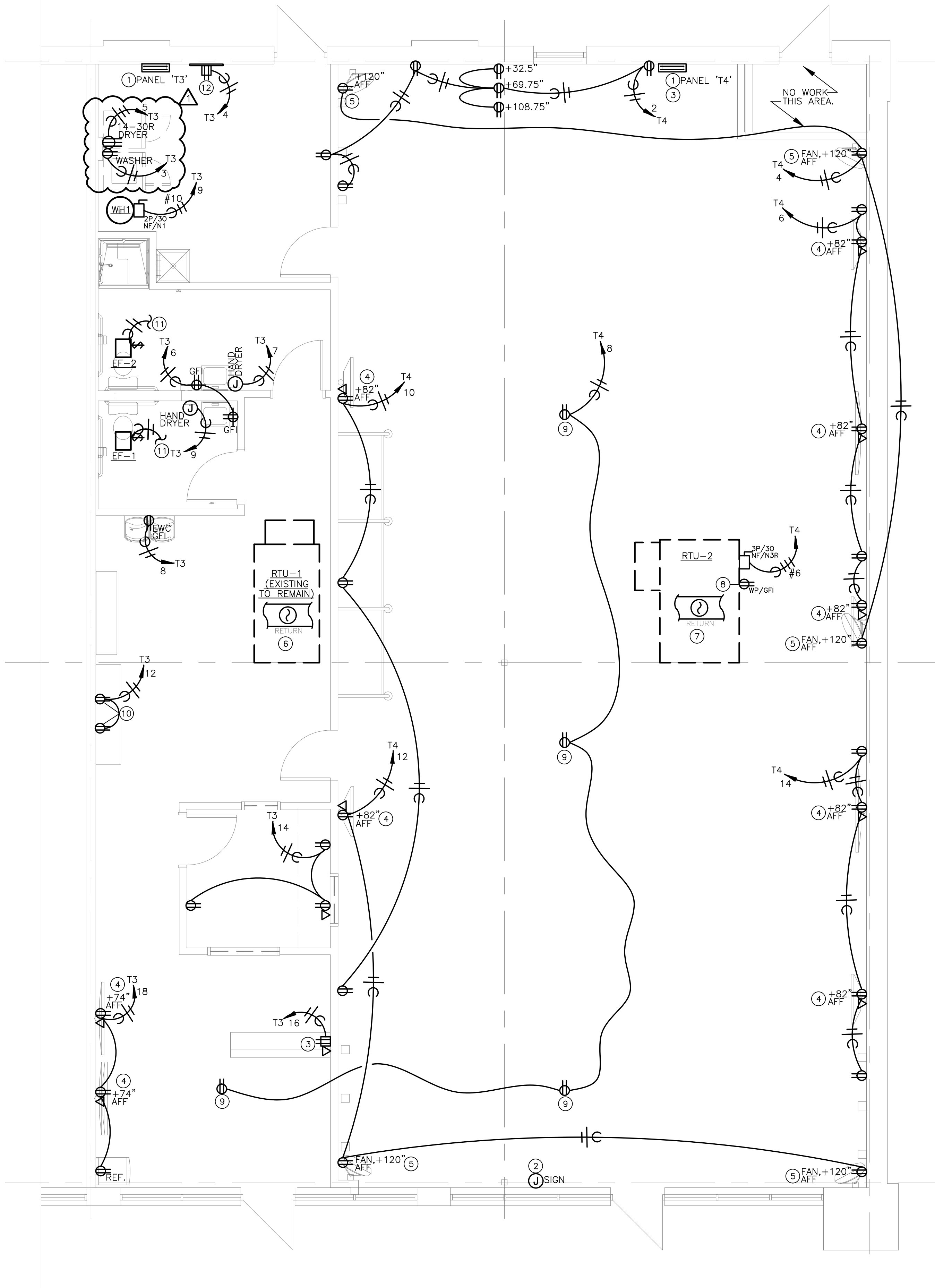
- HOMERUN TO PANELBOARD WITH NUMBER AND SIZE OF CONDUCTORS INDICATED ON PLANS. WHEN NO WIRING TICK MARKS ARE SHOWN, CONTRACTOR SHALL ASSUME MINIMUM OF (3) #12 CONDUCTORS.
- GROUNDING CONDUCTOR.
- CONDUIT OR CIRCUIT BREAK/CONTINUATION.
- CONDUIT WITH ENDCAP FOR FUTURE USE.
- GROUNDING SOURCE.

FIRE ALARM LEGEND:

- SMOKE DETECTOR / HEAT DETECTOR
- COMBINATION AUDIO/VISUAL DEVICE, +80" AFF
- VISUAL DEVICE, +80" AFF
- PULL STATION, +48" AFF
- FIRE/SMOKE DAMPER
- SPRINKLER FLOW AND TAMPER SWITCH
- SUPPLY DUCT/PLENUM MOUNT SMOKE DETECTOR
- RETURN DUCT/PLENUM MOUNT SMOKE DETECTOR
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR PANEL
- FIRE ALARM DOOR HOLD
- FIRE ALARM DOOR RELEASE
- FIRE SPRINKLER FLOW/TAMPER SUPERVISORY PANEL. PROVIDE (2) DEDICATED PHONE LINES AS REQUIRED.

ABBREVIATIONS LEGEND:

- AFF ABOVE FINISHED FLOOR
- ED EXISTING TO BE DEMOLISHED
- EM EMERGENCY
- ER EXISTING TO BE REPLACED
- ETR EXISTING TO REMAIN
- GFCI GROUND FAULT CURRENT INTERRUPTER
- NL NIGHT LIGHT
- TR TAMPER RESISTANT
- UNO UNLESS NOTED OTHERWISE
- WP WEATHER PROTECTED COVER / GFCI



1 ELECTRICAL POWER PLAN  
SCALE: 1/4" = 1'-0"





LIGHT FIXTURE SCHEDULE										
TYPE	MANUFACTURER	MODEL	LIGHT SOURCE	WATTS	VOLTAGE	COLOR TEMP	DIMMABLE	FINISH	DESCRIPTION	NOTES
A	WARELIGHT	BEAMLED8-DID-130W-3CT-DMV-WH	INTEGRAL LED	130	UNV	3500	0/10V	WHITE	8' DIRECT/INDIRECT LINEAR PENDANT HUNG FROM STRUCTURE. CONFIRM MOUNTING HEIGHT WITH TENANT.	1-4
B	WARELIGHT	BEAMLED4-DID-65W-3CT-DMV-WH	INTEGRAL LED	65	UNV	3500	0/10V	WHITE	4' DIRECT//INDIRECT LINEAR PENDANT HUNG FROM STRUCTURE. CONFIRM MOUNTING HEIGHT WITH TENANT.	1-4
C	LOTUS LED LIGHTING	LD4R-D5K-HO-4R-4R-BR-WT	INTEGRAL LED	18	UNV	3500	0/10V	WHITE	4.5" WET LOCATION APPROVED CAN LIGHT FIXTURE.	1-4
EM	LITHONIA QUANTUM SERIES	ELM2 LED	INTEGRAL LED	2.2	UNV	NA	NA	WHITE	EMERGENCY WALL MOUNTED FIXTURE. FIXTURE SHALL BE PROVIDED WITH INTEGRAL EMERGENCY 90 MINUTE BATTERY PACK.	1-4
X1	LITHONIA QUANTUM SERIES	LQM-R LED	INTEGRAL LED	3	UNV	NA	NA	WHITE	SINGLE FACE LED EXIT LIGHT FIXTURE WITH BATTERY PACK, RED LETTERS AND FIELD CONFIGURED ARROWS.	1-4
X1EM	LITHONIA QUANTUM SERIES	LHQM'R LED	INTEGRAL LED	3.8	UNV	NA	NA	WHITE	COMBINATION EMERGENCY EGRESS /SINGLE FACE LED EXIT LIGHT FIXTURE WITH BATTERY PACK, RED LETTERS AND FIELD CONFIGURED ARROWS.	1-4
X1EMR	LITHONIA QUANTUM SERIES	LHQM-R-HO-RO LED WITH WLA-T-Q REMOTE HEAD	INTEGRAL LED	3.8	UNV	NA	NA	WHITE	COMBINATION EMERGENCY EGRESS /SINGLE FACE LED EXIT LIGHT FIXTURE WITH HIGH OUTPUT BATTERY PACK FOR REMOTE HEADS, RED LETTERS AND FIELD CONFIGURED ARROWS.	1-4
NOTES: 1. COORDINATE ALL LIGHT FIXTURE SELECTIONS AND/OR SUBSTITUTIONS WITH ARCHITECT, OWNER AND/OR ENGINEER PRIOR TO ORDER. 2. PROVIDE LIGHTING CONTROLS THAT ARE COMPATIBLE WITH FIXTURES PROVIDED. 3. COORDINATE WITH ARCHITECT, OWNER AND/OR ENGINEER FOR DIMMING REQUIREMENTS PRIOR TO INSTALLATION. 4. PROVIDE ALL COMPONENTS AND ACCESSORIES AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION.										

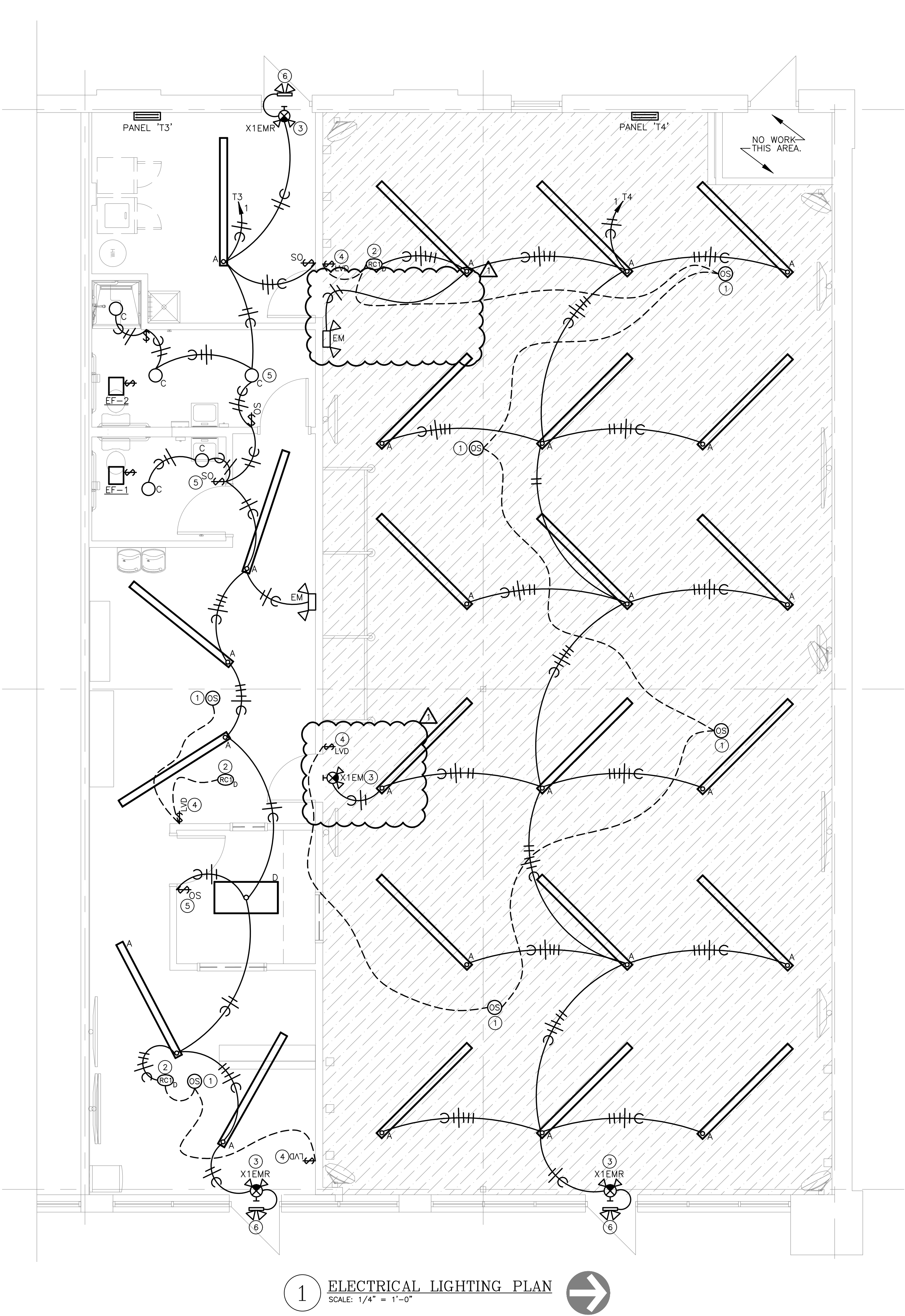
LIGHTING CONTROL DEVICE SCHEDULE									
TAG	MANUFACTURER AND MODEL SERIES		COVERAGE AREA (WxD OR RADIUS Ø)	VOLTAGE	MODE SETTINGS	DIMMING	TIME DELAY	DEVICE FINISH COLOR	SENSOR NOTES
WALL SWITCH OCCUPANCY SENSORS									
S OS	WATTSTOPPER PW-301	SINGLE-RELAY PASSIVE INFRARED OCCUPANCY SENSOR WALL SWITCH WITH MANUAL OVERRIDE BUTTON.	MAJOR 30' x 35' MINOR 15' x 20'	120/277V	MANUAL ON AUTO OFF	N/A	15 MIN	WHITE	1
S OS2	WATTSTOPPER DW-100	SINGLE-RELAY DUAL TECHNOLOGY PASSIVE INFRARED OCCUPANCY SENSOR WALL SWITCH WITH MANUAL OVERRIDE BUTTON.	MAJOR 30' x 35' MINOR 15' x 20'	120/277V	MANUAL ON AUTO OFF	N/A	15 MIN	WHITE	1
CEILING MOUNTED DAYLIGHT / OCCUPANCY SENSORS									
OS	WATTSTOPPER LMDC-100	CEILING MOUNT ULTRASONIC DIGITAL OCCUPANCY SENSOR. 360 DEGREE COVERAGE. PLUG-AND-PLAY CONFIGURATION, (2) RJ45 PORTS, LCD DISPLAY, IR RECEIVER, CONFIGURATION BUTTONS.	ULT MAJOR 25' X 25' PIR 32' Ø	24V	-	-	-	WHITE	2
POWER SUPPLIES/ROOM CONTROLLERS									
RC1-D	WATTSTOPPER LMRC-211	DIGITAL SINGLE-RELAY ON/OFF/DIMMING ROOM CONTROLLER. 0-10V DIMMING. MAXIMUM 20A TOTAL LOAD RATING. PLUG-AND-PLAY CONFIGURATION, (4) RJ45 PORTS, LED STATUS INDICATORS, CONFIGURATION BUTTONS, PLENUM RATED.	-	120/277V LOAD, 24VDC CONTROL OUTPUT	AUTO ON AT 50%, AUTO OFF		-	-	2,4
LOW VOLTAGE & LINE VOLTAGE SWITCHES AND DIMMERS									
D	WATTSTOPPER RH4FBL3PW	0-10V DIMMING WALL SWITCH.	-	120V/277V	-	0-10V	-	WHITE	2,3,4
LVD	WATTSTOPPER LMDM-101	DIGITAL DIMMING WALL SWITCH. LOWER CASE DESIGNATES LIGHTING ZONE CONTROLLED BY SWITCH & ROOM CONTROLLER.	-	24VDC	-		-	WHITE	2,3,4
LV	WATTSTOPPER LMSW-101	DIGITAL NON-DIMMING WALL SWITCH.	-	24VDC	-		-	WHITE	2,3,4
GENERAL NOTES:									
A. SENSOR LAYOUT BASED ON WATTSTOPPER COVERAGE PATTERNS. ADJUST QUANTITIES AND LOCATIONS FOR ALTERNATE MANUFACTURERS LISTED BELOW PER MANUFACTURER SPECIFIC SPACING CRITERIA.									
B. nLIGHT, SENSOR SWITCH, COOPER-GREENGATE, CRESTRON, HUBBELL BUILDING AUTOMATION, AND LEVITON ARE CONSIDERED EQUIVALENT MANUFACTURES FOR SUBMISSION AS AN APPROVED MANUFACTURER, CONTINGENT ON LISTINGS APPROPRIATE FOR THE APPLICATION.									
C. DURING SHOP DRAWINGS, PROVIDE LIGHTING PLANS SHOWING LOCATION, MOUNTING HEIGHT, ORIENTATION AND COVERAGE AREAS FOR EACH OCCUPANCY SENSOR FOR REVIEW AND APPROVAL BY ENGINEER. ALSO INCLUDE ON PLANS OTHER CEILING MOUNTED SYSTEMS, SHOWING COORDINATION WITH CEILING DEVICES INCLUDING BUT NOT LIMITED TO HVAC SUPPLY AND RETURN GRILLES, SPRINKLERS, AND LIGHT									
D. PROVIDE ALL SENSORS BY THE SAME MANUFACTURER.									
E. PROVIDE COPIES OF SENSOR AND POWER SUPPLY OPERATION INSTRUCTIONS TO OWNER.									
F. PROVIDE WALL SWITCH AND CEILING SENSORS WITH AN ADJUSTABLE TIME DELAY RANGE OF 0-30 MIN, UNO.									
G. DO NOT INSTALL LINE VOLTAGE SENSORS ON GFCI PROTECTED CIRCUITS.									
H. FIELD-SET DEVICES TO THE ON MODE INDICATED IN TABLE. DISABLE ANY VISIBLE/AUDIBLE ALERT SETTINGS, AND SET SENSITIVITIES TO MAXIMUM LEVELS.									
I. PROVIDE ALL LOW VOLTAGE WIRING BETWEEN SENSORS, DEVICES, AND POWER SUPPLIES AS REQUIRED AND PER MANUFACTURER RECOMMENDATIONS.									
J. WHERE OCCUPANCY SENSORS USE BOTH PIR AND ULTRASONIC TECHNOLOGIES, PROGRAM OFF MODES (MAINTAIN OCCUPANCY AND RE-TRIGGER) TO TRIGGER ON A SIGNAL FROM EITHER TECHNOLOGY.									
K. WHERE MULTIPLE LOW VOLTAGE SWITCHES ARE CONNECTED WITHIN THE SAME SPACE, PROGRAM THE SWITCHES TO CONTROL THE LIGHTING IN THE EXACT SAME MANNER, UNO.									
SENSOR NOTES:									
1. CONNECT NEUTRAL CONDUCTOR TO SENSOR.									
2. NETWORK WITH OTHER 'DLM' COMPONENTS USING PRE-TERMINATED CAT 5e CABLING WITH RJ-45 JACKS.									
3. PROVIDE PROVIDE UNSWITCHED HOT, NEUTRAL AND GROUND TO ROOM CONTROLLER.									
4. 0-10V DIMMING CONDUCTORS SHALL BE CLASS 2 CABLE WITH (2) #18 CU PER UL REQUIREMENTS.									

ELECTRICAL GENERAL NOTES:

- REFERENCE SHEET E3.0 FOR ELECTRICAL GENERAL NOTES.

ELECTRICAL LIGHTING PLAN NOTES:

- LOW VOLTAGE OCCUPANCY SENSOR MOUNTED AT CEILING/STRUCTURE. PROVIDE CATAGORY CABLE BACK TO ROOM CONTROL MONDULE. REFER TO LIGHTING CONTROL SCHEDULE FOR MORE INFORMATION.
- ROOM CONTROL MODULE MOUNTED ABOVE CEILING (AT STRUCTURE) IN ACCESSIBLE LOCATION. PROVIDE CONTROLLED WIRING TO LIGHTING IN AREA. PROVIDE (2) #18 0-10V DIMMING CONDUCTORS TO EACH LIGHT FIXTURE FROM ROOM CONTROLLER.
- ROUTE UNSWITCHED HOT TO ALL EMERGENCY LIGHT FIXTURES AND EXIT SIGNS.
- PROVIDE DIMMING LOW VOLTAGE PADDLE SWITCH AND CONNECT TO ROOM CONTROLLER WITH CATAGORY CABLE. REFERENCE LIGHTING CONTROL SCHEDULE FOR FURTHER INFORMATION.
- PROVIDE NEW OCCUPANCY SENSING WALL MOUNTED LIGHT SWITCH. REFERENCE LIGHTING CONTROL DEVICE SCHEDULE FOR ADDITIONAL INFORMATION.
- EXTERIOR REMOTE EMERGENCY EGRESS FIXTURE MOUNTED ABOVE EXTERIOR EGRESS DOOR. FIXTURE SHALL BE POWERED OFF OF EXIT FIXTURE HIGH OUTPUT BATTERY.

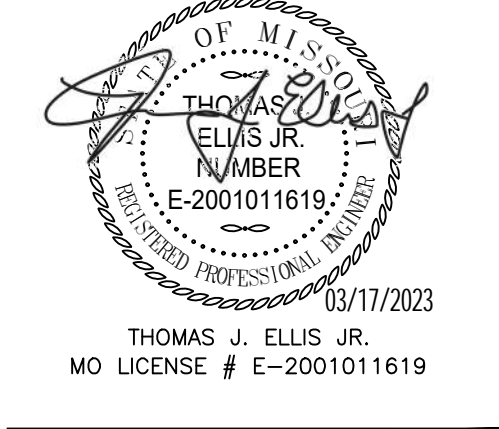


1 ELECTRICAL LIGHTING PLAN  
SCALE: 1/4" = 1'-0"

Tenant Improvements For:

Date: 03/08/23  
Issued For: For Permit

REVISIONS		
No.	Date	Description
1.	3.17.23	CITY REVIEW



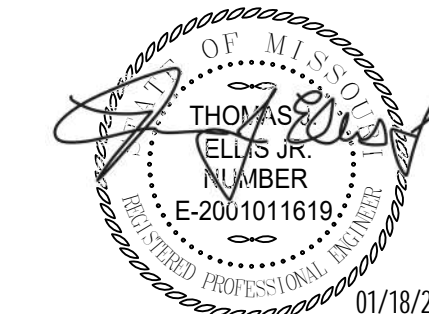
PROJECT TEAM	
ARCHITECT	MOMENTUM ARCHITECTURE+DESIGN
MECHANICAL	5BY5 ENGINEERS
PLUMBING	5BY5 ENGINEERS
ELECTRICAL	5BY5 ENGINEERS
CONTRACTOR	HAWTHORN PROJECTS

1100 Main Street, 4th Floor  
Kansas City, MO 64105  
Kansas COA: E-2361  
913-693-9449  
contact@5by5eng.com  
5by5eng.com

5BY5 ENGINEERS

NO. E2.0





ELECTRICAL GENERAL DEMOLITION NOTES:

- REFERENCE ARCHITECTURAL DRAWINGS FOR FULL EXTENT OF DEMOLITION WORK AND PHASING. NOTIFY ARCHITECT, ENGINEER, AND/OR OWNER, AS APPLICABLE, OF ANY CONFLICTS OR DISCREPANCIES BETWEEN DRAWINGS AND JOBSITE CONDITIONS PRIOR TO SUBMITTING BID.
- COORDINATE DEMOLITION AND REMOVAL OF EXISTING EQUIPMENT AND LIGHTING SYSTEMS WITH ARCHITECTURAL PHASING DRAWINGS AND OWNER TO ALLOW NECESSARY SYSTEMS TO REMAIN OPERATIONAL DURING CONSTRUCTION.
- UNLESS NOTED OTHERWISE, DISPOSE OF ALL ELECTRICAL EQUIPMENT, LIGHT FIXTURES, AND DEVICES SHOWN TO BE REMOVED. COORDINATE WITH THE OWNER THE ITEMS TO BE SALVAGED, AND THE LOCATION FOR STORAGE. AVOID DAMAGING SALVAGED ITEMS DURING DEMOLITION WORK AND DURING TRANSPORT TO OWNER'S DESIGNATED STORAGE LOCATION.
- WHERE ALTERATION OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, RACEWAYS, OR WIRING DEVICES AFFECTS EXISTING SURFACES/FINISHES: REPAIR/PAINT AFFECTED SURFACE TO MATCH EXISTING ADJACENT SURFACE IN ACCORDANCE WITH OWNER REQUIREMENTS. MAINTAIN FIRE RATING OF ALL FLOORS, WALLS, AND CEILINGS THAT ARE RATED.
- WHERE DEMOLITION WORK INTERRUPTS ELECTRICAL CONTINUITY OF CIRCUITS THAT ARE TO REMAIN IN USE: PROVIDE NECESSARY DEVICES AND RELATED CIRCUITRY TO MAINTAIN ELECTRICAL CONTINUITY IN ACCORDANCE WITH OWNER REQUIREMENTS. RE-CIRCUIT REUSED ELECTRICAL EQUIPMENT, LIGHT FIXTURES, AND WIRING DEVICES PREVIOUSLY POWERED FROM DEMOLISHED EQUIPMENT TO NEW OR TEMPORARY EQUIPMENT AS NEEDED.
- COORDINATE DISCONNECTION OF POWER TO EQUIPMENT BEING DEMOLISHED / REMOVED / RELOCATED WITH OTHER TRADES PRIOR TO START OF WORK. REMOVE ALL ELECTRICAL EQUIPMENT, LIGHT FIXTURES, RACEWAYS, WIRING DEVICES, AND RELATED CIRCUITRY NOT BEING REUSED IN ALL ACCESSIBLE AREAS INCLUDING FLOORS, WALLS, AND CEILINGS THAT ARE TO BE REMOVED.
- ELECTRICAL EQUIPMENT, RACEWAYS, AND RELATED CIRCUITRY ABANDONED IN PLACE SHALL BE PERMANENTLY DISCONNECTED FROM ALL POWER SOURCES, INSULATED FROM CONTACT WITH OTHER LIVE ELECTRICAL WIRING/DEVICES, AND IDENTIFIED AT TERMINATIONS AS NO LONGER BEING IN SERVICE. CABLES/WIRING NOT BEING REUSED SHALL BE REMOVED UNLESS IDENTIFIED FOR FUTURE USE. CARE SHOULD BE TAKEN DURING THE REMOVAL PROCESS TO PROTECT THE EXISTING REUSED CABLES/WIRING FROM DAMAGE.

ELECTRICAL GENERAL NOTES:

- DRAWINGS ARE SCHEMATIC IN NATURE AND BASED ON PRELIMINARY SITE OBSERVATION AND ORIGINAL DESIGN DRAWINGS (WHEN AVAILABLE). PRIOR TO BID, CONTRACTOR SHALL INVESTIGATE THE PROJECT SITE AND BECOME FULLY AWARE OF ALL FIELD CONDITIONS, CURRENT EXISTING OPERATION AS WELL AS COORDINATION REQUIREMENTS. COORDINATE ALL MECHANICAL WORK WITH ARCHITECTURAL DRAWINGS, EXISTING CONDITIONS AND OTHER TRADES PRIOR TO BID OR START OF WORK.
- ELECTRICAL WORK SHALL CONFORM TO APPLICABLE CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. REFER TO ARCHITECTURAL CODE PLANS FOR SPECIFIC CODE REFERENCES.
- COORDINATE ELECTRICAL WORK WITH ALL OTHER PROJECT TRADES (E.G. ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, ETC.).
- COORDINATE EXACT LOCATIONS OF ALL LIGHT FIXTURES AND ELECTRICAL DEVICES WITH ARCHITECTURAL DRAWING AND OTHER TRADES PRIOR TO ROUGH-IN. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRE TO PROPERLY INSTALL ALL SYSTEMS.
- INSTALL PULL STRING IN ALL EMPTY CONDUIT/RACEWAY. TERMINATE CONDUIT STUB-UP WITH A NYLON BUSHING.
- COLOR FOR RECEPTABLES, SWITCHES, NETWORK DEVICES AND COVER PLATES SHALL MATCH. DEVICE COLOR SHALL WHITE. DEVICE PLATES SHALL BE PLASTIC ON GYPBOARD WALLS AND STAINLESS STEEL ON TILED WALLS.
- ELECTRICAL CONTRACTOR SHALL INSPECT ALL ELECTRICAL EQUIPMENT TO REMAIN. REPORT ANY DEFICIENCIES TO OWNER PRIOR TO START OF WORK.
- ALL CONDUCTORS SHALL BE INSTALLED IN METALLIC (EMT) CONDUIT, AND INSTALLED IN A NEAT AND WORKMANLIKE MANNER PER THE RECOGNIZED EDITION OF THE NATIONAL ELECTRIC CODE (NEC). CONDUIT SHALL BE 1/2" MINIMUM USING STEEL SET-SCREW FITTINGS. HOME RUNS SHALL CONFORM TO NEC REQUIREMENTS FOR CONDUIT FILL, AND SHALL CONTAIN NO MORE THAN 6 CURRENT CARRYING CONDUCTORS. IF NEUTRALS ARE SHARED FOR ANY REASON, CIRCUIT BREAKER THE HANDLES SHALL BE INSTALLED AT THE PANEL.
- AT CONTRACTOR'S OPTION, MC CABLE CAN BE USED IN FURRED WALLS, ABOVE CEILINGS AND IN OTHER CONCEALED SPACES WHERE ALLOWED BY NEC. MC CABLE MAY BE ROUTED EXPOSED IF ROUTED NEATLY ALONG BUILDING STRUCTURE AND TIGHTLY STRAPPED AND SUPPORTED.
- CONTRACTOR SHALL VERIFY ALL ROUGH-IN LOCATIONS AND QUANTITIES FOR GENERAL USE POWER AND DATA WITH OWNER AND/OR ARCHITECT PRIOR TO INSTALLATION.
- ALL CONDUCTORS SHALL BE COPPER WITH #12 AWG MINIMUM, (UNLESS NOTED OTHERWISE).
- CONTRACTOR SHALL LABEL ALL RECEPTABLES, BOXES, PANELBOARDS, ETC. WITH PANEL, CIRCUIT NUMBER, ETC. WITH PANEL AND CIRCUIT NUMBERS. RECEPTABLE COVERS SHALL BE LABELED USING PRINTED LABEL WITH 1/2" HIGH LETTERS. COORDINATE WITH OWNER FOR FINAL PANEL AND EQUIPMENT DESIGNATIONS AND LABELING REQUIREMENTS.

PANELBOARD PANEL 'T3' (EXISTING)																
BUS AMPS:		225A		LOCATION:		ELECTRICAL ROOM		GROUND BUS:		YES						
MAIN SIZE / TYPE:		MLO		NEMA RATING:		NEMA 1		ISOL. GROUND BUS:		NO						
VOLTS/PHASE:		208Y/120V, 3PH, 4W		AFC VALUE:				FEED THRU LUGS:		NO						
MOUNTING:		SURFACE		AIC RATING:		22k AIC		SECTIONS:		1 OF 1						
CKT #	CIRCUIT DESCRIPTION	BREAKER		WIRE SIZE	NOTES	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	NOTES	WIRE SIZE	BREAKER		CIRCUIT DESCRIPTION	CKT #
		AMPS	P				A	B	C				P	AMPS		
1	LIGHTING	20	1			800	1,300			500			1	20	SIGN CIRCUIT (EXISTING)	2
3	CLOTHES WASHER	20	1			1,000		1,360		360			1	20	RECEPTACLE - TELCO BOARD	4
5	CLOTHES DRYER	30	2	#10		2,000			2,360	360			1	20	RECEPTACLES - RESTROOMS	6
7	-	-	-			2,000	2,180			180			1	20	RECEPTACLE - ELEC. WATER COOLER	8
9	WATER HEATER (WH1)	30	2	#10		1,900		2,440		540			1	20	RECEPTACLE - LOBBY	10
11	-	-	-			1,900			2,260	360			1	20	RECEPTACLES - CUBBIES	12
13	SPARE	20	1			0	540			540			1	20	RECEPTACLES - OFFICE	14
15	SPARE	20	1			0		0		0			1	20	RECEPTACLES - RECEPTION DESK	16
17	SPARE	20	1			0			0	0			1	20	SPARE	18
19	SPARE	20	1			0	0			0			1	20	SPARE	20
21	SPARE	20	1			0		0		0			1	20	SPARE	22
23	SPARE	20	1			0			0	0			1	20	SPARE	24
25	SPARE	20	1			0	0			0			1	20	SPARE	26
27	SPARE	20	1			0		0		0			1	20	SPARE	28
29	SPARE	20	1			0			0	0			1	20	SPARE	30
31	SPARE	20	1			0	0			0			1	20	SPARE	32
33	SPARE	20	1			0		0		0			1	20	SPARE	34
35	SPARE	20	1			0			0	0			1	20	SPARE	36
37	SPARE	20	1			0	3,000			3,000			-	-	-	38
39	SPARE	20	1			0		3,000		3,000	ETR		3	45	ROOF TOP UNIT 'RTU-2' (EXISTING)	40
41	SPARE	20	1			0			3,000	3,000			-	-	-	42
PER PHASE SUB-TOTALS							7,020	6,800	7,620							
TOTAL CONNECTED PANELBOARD (VA)							21,440			LEGEND:						
TOTAL CONNECTED PANELBOARD (AMPS)							60			TS - VIA TIME SWITCH						
TOTAL PANELBOARD DEMAND (VA)							13,965			FA - FIRE ALARM / RED / LOCKING TAB						
TOTAL PANELBOARD DEMAND (AMPS)							39			EM - EMERGENCY LTG. / LOCKING TAB						
							FP - REFER TO FLOOR PLAN DRAWING.									
							ETR - EXISTING TO REMAIN									
							ST - SHUNT TRIP									
							LCK - LOCKING TAB									
							GF - GROUND FAULT INTERRUPTER									
							OL - RE: ONE-LINE DIAGRAM									

PANEL BOARD PANEL 'T4' (EXISTING)																
BUS AMPS:		225A		LOCATION:		REAR OF STUDIO ROOM		GROUND BUS:		YES						
MAIN SIZE / TYPE:		MLO		NEMA RATING:		NEMA 1		ISOL. GROUND BUS:		NO						
VOLTS/PHASE:		208Y/120V, 3PH, 4W		AFC VALUE:				FEED THRU LUGS:		NO						
MOUNTING:		SURFACE		AIC RATING:		22k AIC		SECTIONS:		1 OF 1						
CKT #	CIRCUIT DESCRIPTION	BREAKER AMPS	P	WIRE SIZE	NOTES	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	NOTES	WIRE SIZE	BREAKER P	AMPS	CIRCUIT DESCRIPTION	CKT #
1	LIGHTING	20	1			1,200	2,460			1,260			1	20	RECEPTACLES	2
3	SPARE	20	1			0		540		540			1	20	RECEPTACLES	4
5	SPARE	20	1			0			900	900			1	20	RECEPTACLES	6
7	SPARE	20	1			0	720			720			1	20	RECEPTACLES - SEC. CAMERAS	8
9	SPARE	20	1			0		540		540			1	20	RECEPTACLES	10
11	SPARE	20	1			0			540	540			1	20	RECEPTACLES	12
13	SPARE	20	1			0	720			720			1	20	RECEPTACLES	14
15	SPARE	20	1			0		0		0			1	20	SPARE	16
17	SPARE	20	1			0			0	0			1	20	SPARE	18
19	SPARE	20	1			0	0			0			1	20	SPARE	20
21	SPARE	20	1			0		0		0			1	20	SPARE	22
23	SPARE	20	1			0			0	0			1	20	SPARE	24
25	SPARE	20	1			0	0			0			1	20	SPARE	26
27	SPARE	20	1			0		0		0			1	20	SPARE	28
29	SPARE	20	1			0			0	0			1	20	SPARE	30
31	-	-	-			7,020	7,020			0			1	20	SPARE	32
33	PANEL 'T3' (EXISTING)	100	3			6,800		6,800		0			1	20	SPARE	34
35	-	-	-			7,620			7,980	360			1	20	SPARE	36
37	SPARE	20	1			0	5,000			5,000			-	-	-	38
39	SPARE	20	1			0		5,000		5,000		#6	3	60	ROOF TOP UNIT 'RTU-2'	40
41	SPARE	20	1			0			5,000	5,000			-	-	-	42
PER PHASE SUB-TOTALS							15,920	12,880	14,420							
TOTAL CONNECTED PANELBOARD (VA)							43,220			LEGEND:						
TOTAL CONNECTED PANELBOARD (AMPS)							120			TS - VIA TIME SWITCH						
TOTAL PANELBOARD DEMAND (VA)							36,045			FA - FIRE ALARM / RED / LOCKING TAB						
TOTAL PANELBOARD DEMAND (AMPS)							100			EM - EMERGENCY LTG. / LOCKING TAB						
										LCK - LOCKING TAB						
										GF - GROUND FAULT INTERRUPTER						
										FP - REFER TO FLOOR PLAN DRAWING.						
										OL - ONE-LINE DIAGRAM						

11100 Main Street, 4th Floor  
Kansas City, MO 64105  
Kansas COA: E-2361  
913-689-9449  
contact@5by5eng.com  
5by5eng.com

**5BY5**  
**ENGINEERS**