

# PERFECT PROMOTIONS

PROJECT ADDRESS:  
1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081



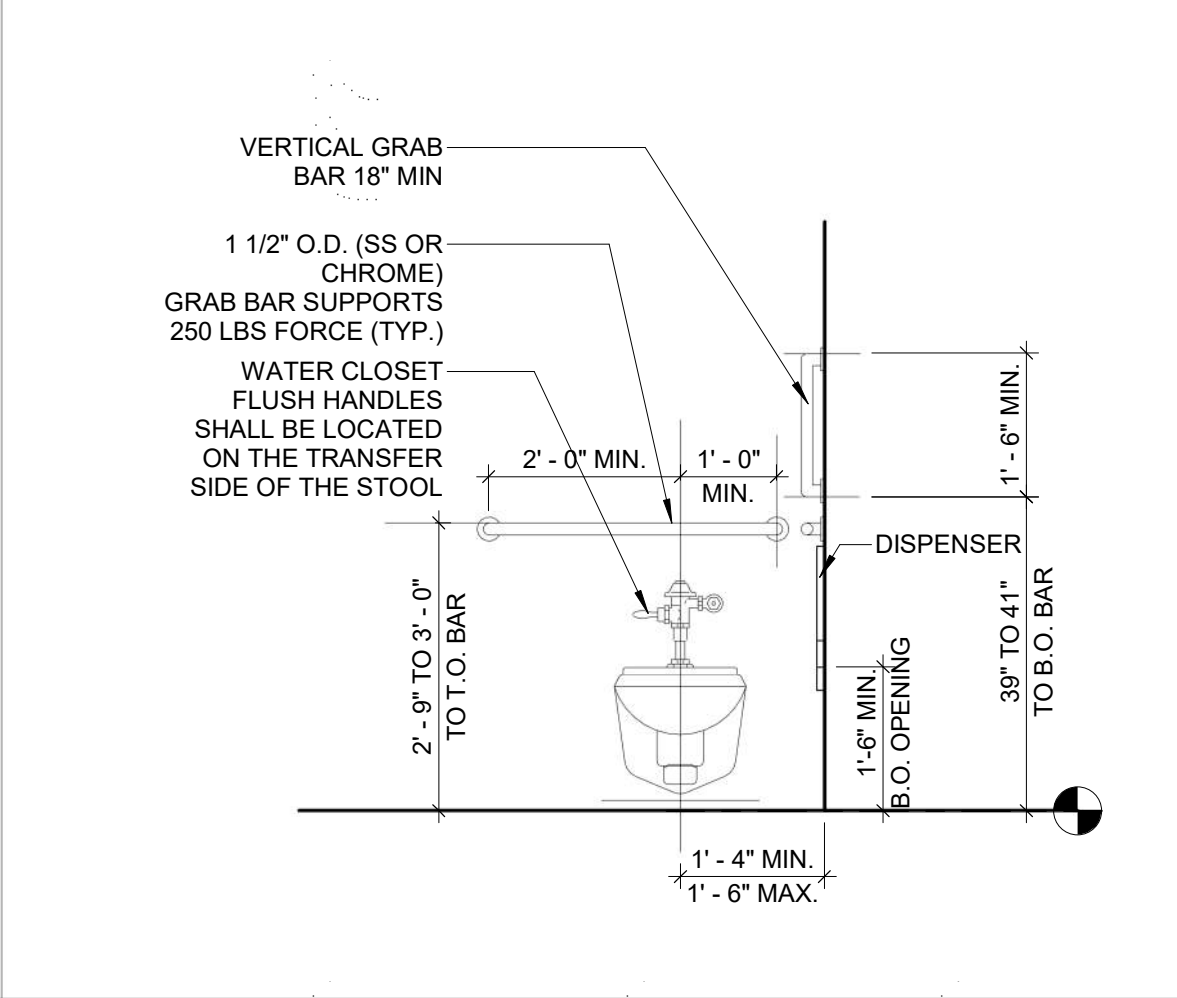
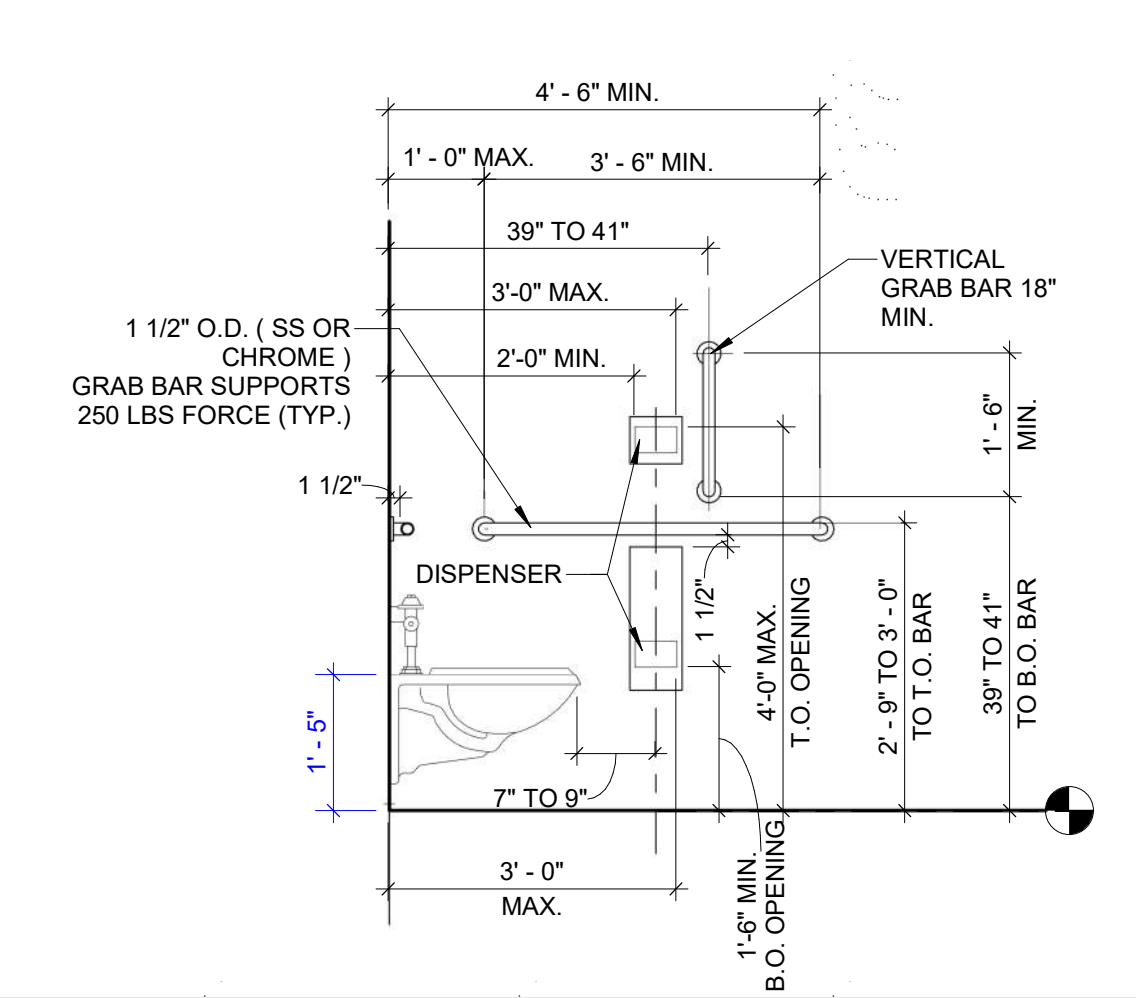
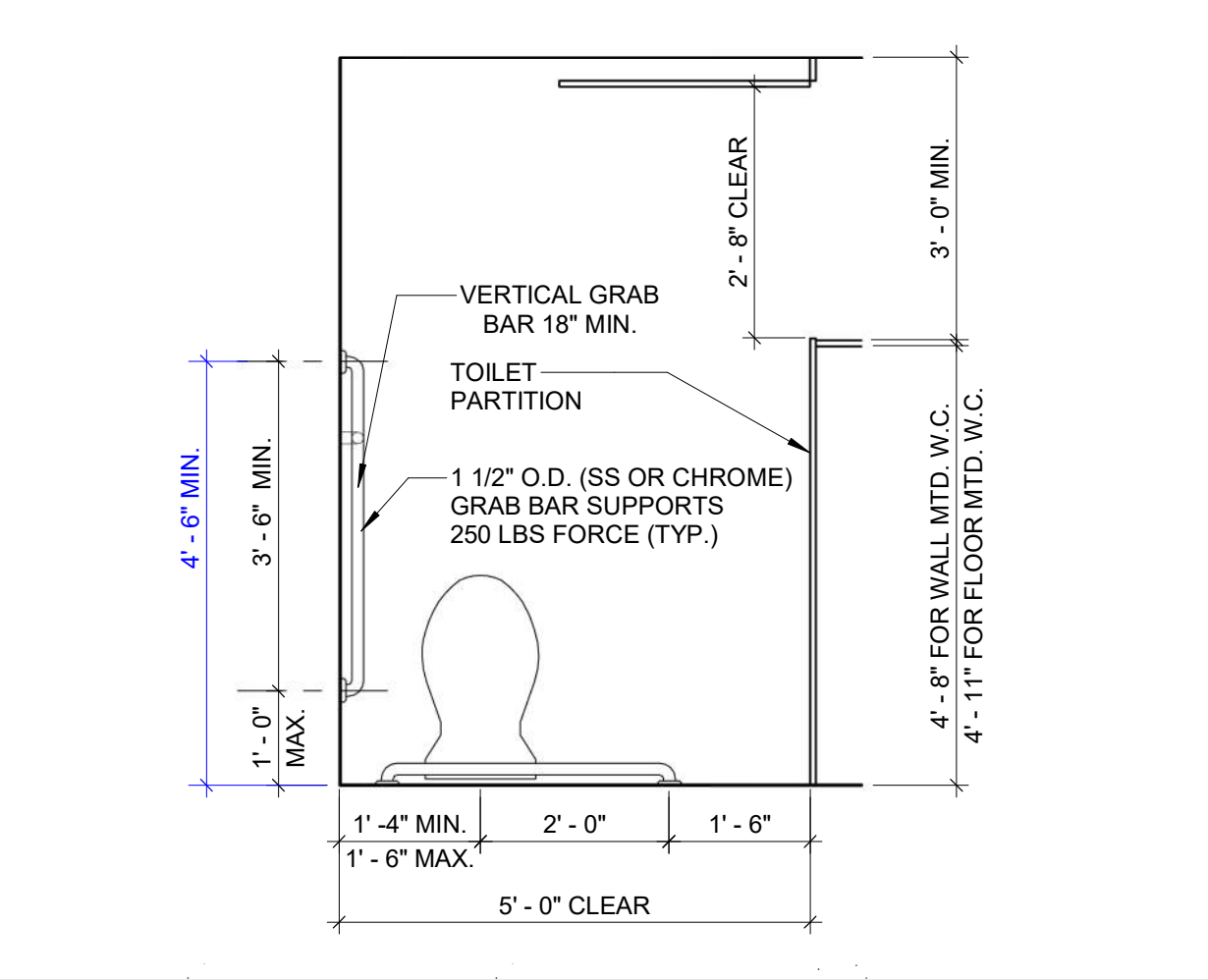
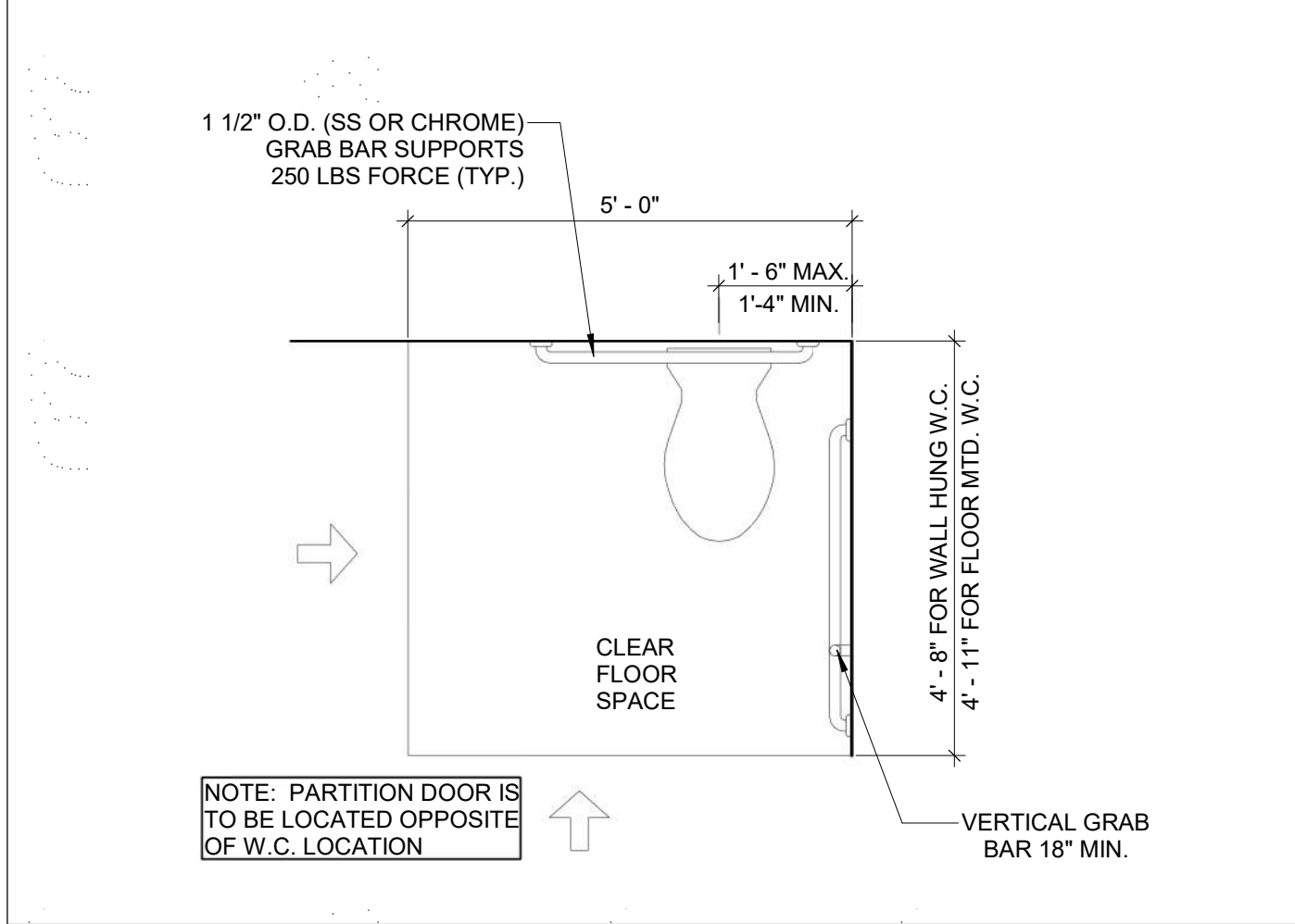
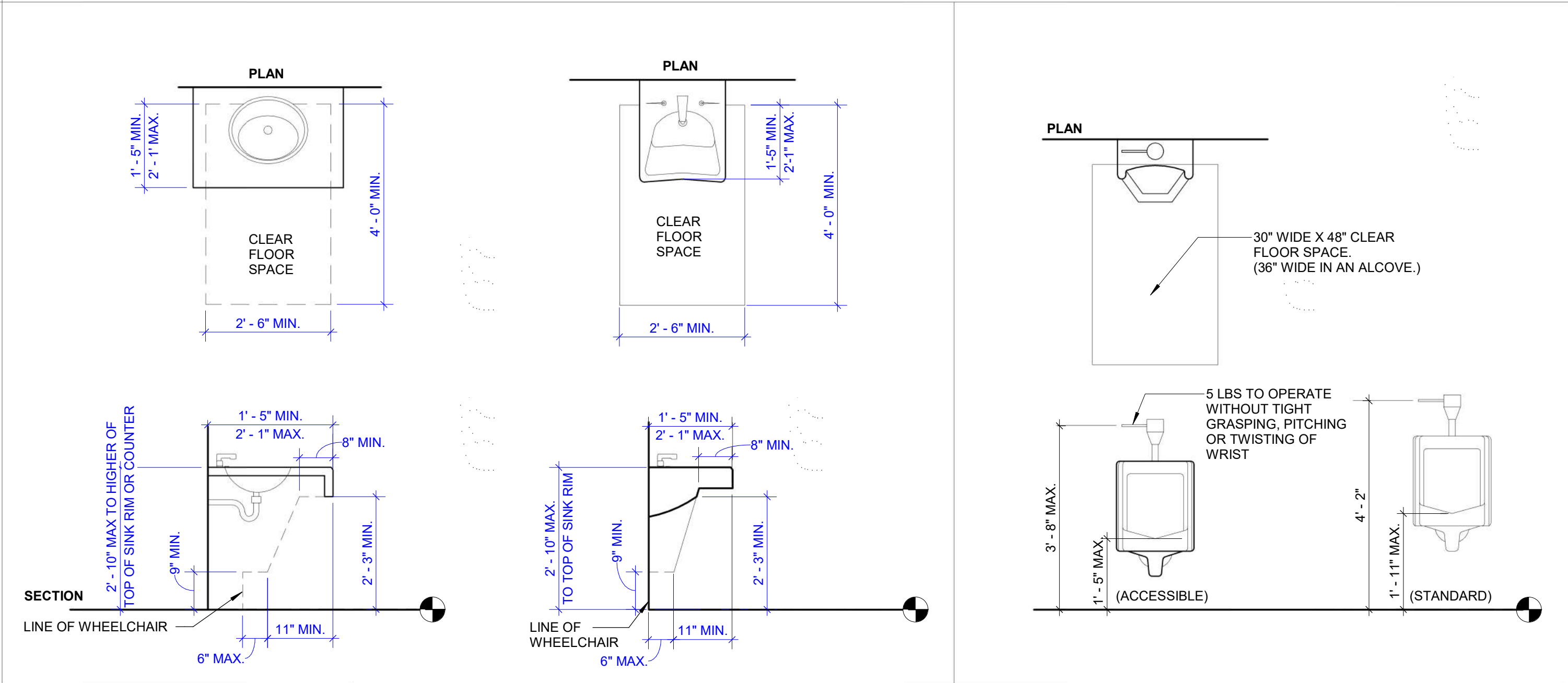
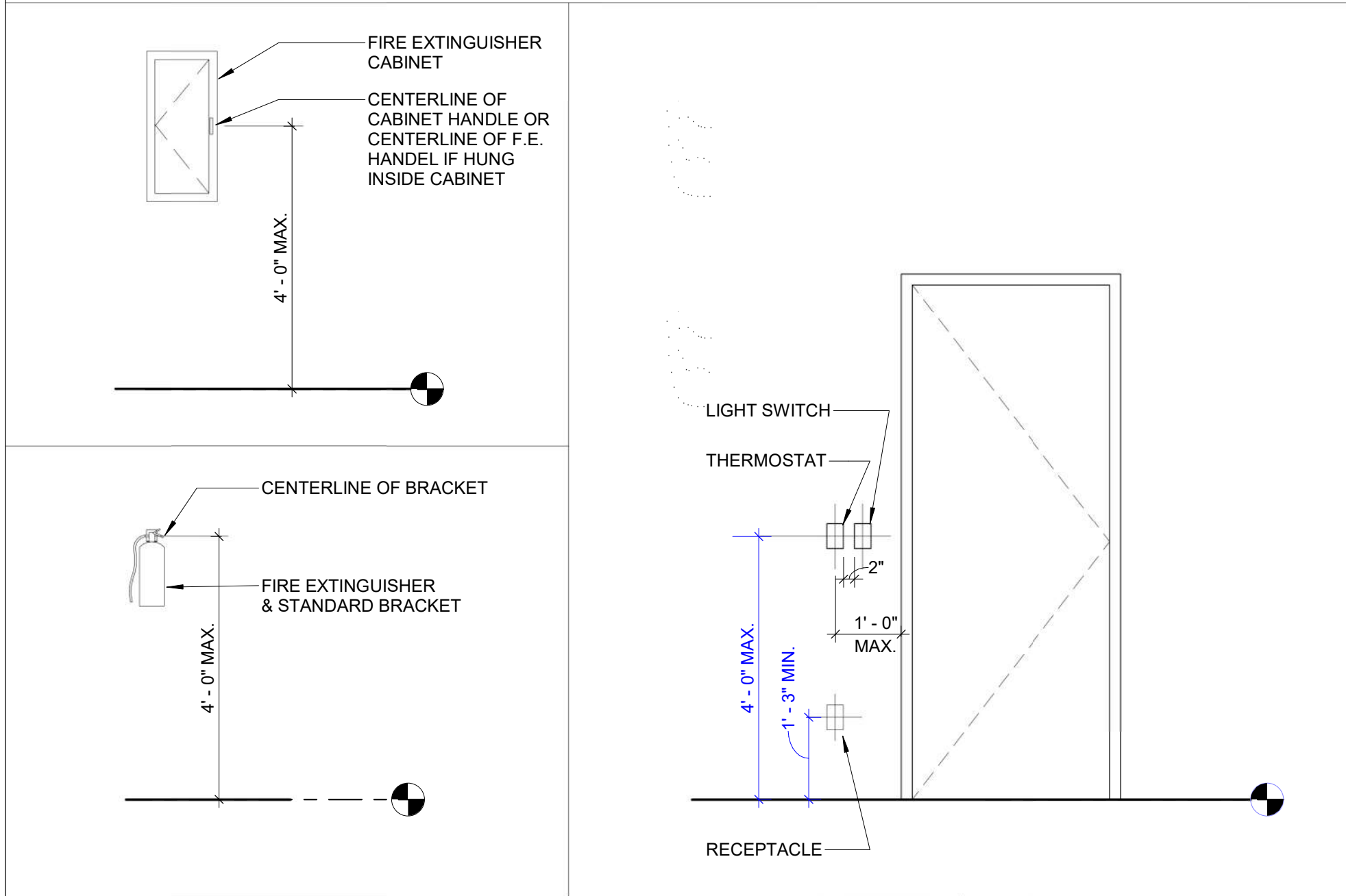
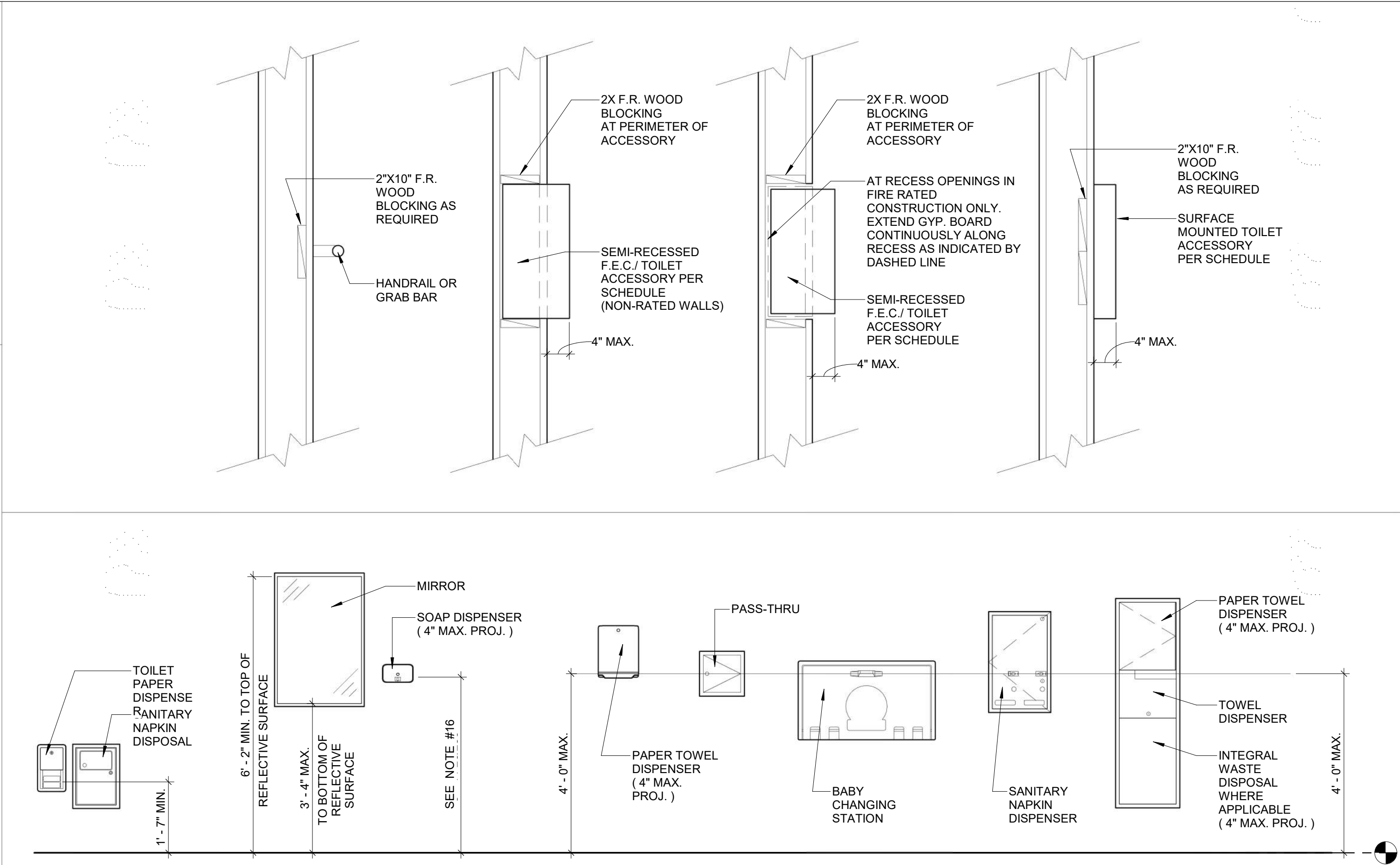
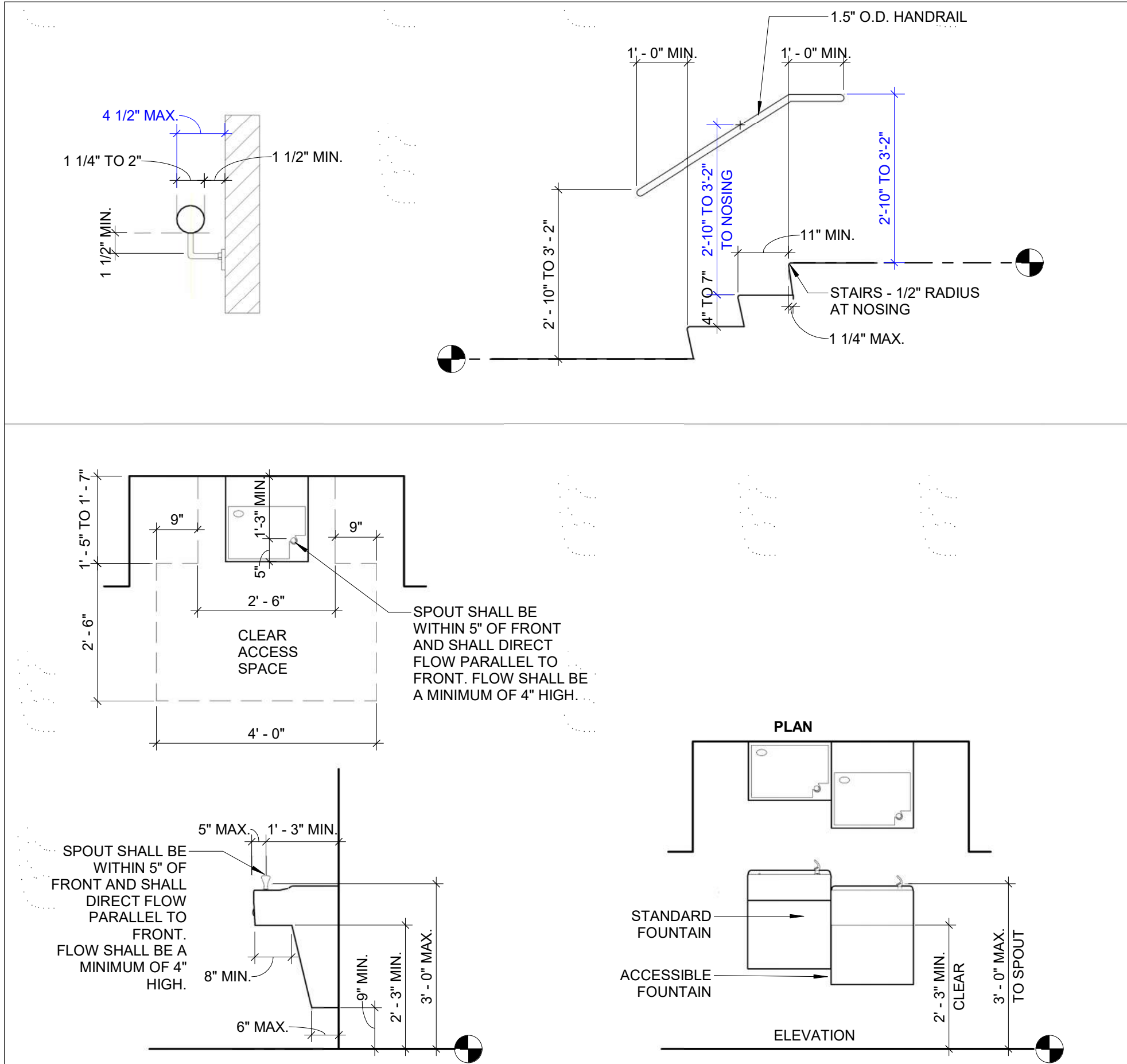
COPYRIGHT © 2022.  
HIVE DESIGN COLLABORATIVE, INC.

**HIVE DESIGN COLLABORATIVE, INC.**  
1617 WALNUT ST., KANSAS CITY, MO 64108  
816.581.6363









GENERAL NOTES - ACCESSIBILITY GUIDELINES:

- NOTE: ALL DIMENSIONS ARE MEASURED FROM FLOOR, UNLESS NOTED OR SHOWN OTHERWISE.
- ADA UNOBSTRUCTED REACH RANGES: ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- ELEVATORS: STANDARD CALL BUTTONS: 35" TO 48" TO C.L. & PROTRUDE 1" MAX. ADA CALL BUTTONS: 42" TO C.L. (TYP.) & 48" MAX. (3/4" SMALLEST DIM.). ADA VISIBLE SIGNALS: 72" MIN. TO C.L. (2 1/2" SMALLEST DIM.). TACTILE SIGNAL ON HOISTWAY: 60" TO BASE OF CHARACTERS W/ TACTILE STAR & 2" HIGH CHARACTERS.
- DOOR HARDWARE (TO CENTER OF HARDWARE): STANDARD MOUNTING HEIGHTS: PUSH PLATES = 42". PULL HANDLES = 42". KNOBS/ LEVERS = 40". PANIC EXIT = 42". CENTERLINE OF BAR, KICKPLATES: WIDTH = DOOR WIDTH MINUS 2", CENTER, HEIGHT = 16" FROM B.O. DOOR. THRESHOLDS: STANDARD = 1/2" MAX. AT EXT. SLIDING DOORS = 3/4" MAX. ADA HARDWARE = 34" MIN. TO 48" MAX.
- DRINKING FOUNTAINS & EWCS (TO SPOUT): STANDARD = 38" MIN., 43" MAX. ADA = 38" MAX. (27" MIN. CLEAR KNEE SPACE)
- COUNTERTOPS (TO SINK RIM/ COUNTERTOP): ADA = 28" MIN. TO 34" MAX.
- WATER CLOSETS (TO TOP OF SEAT): STANDARD = 14" TO 15". ADA (TO TOP OF SEAT) = 17" TO 19". ADA FLUSH CONTROLS = 44" MAX.
- URINALS (TO RIM): STANDARD = 24" MAX. ADA = 17" MAX. ADA FLUSH CONTROLS = 44" MAX.
- LAVATORIES (TO SINK RIM/ COUNTERTOP): STANDARD = 38" MAX. ADA = 34" MAX. (29" MIN. CLEAR KNEE SPACE)
- MIRRORS (TO B.O. REFLECTIVE SURFACE): STANDARD = VARIES. ADA = 40" MAX.
- GRAB BARS - ADA (TO TOP OF BAR): WATER CLOSETS = 33" MIN. TO 36" MAX. SHOWERS = 33" MIN. TO 36" MAX. (FROM B.O. SHOWER). BATHTUBS: TOP BAR = 33" MIN. TO 36" MAX. BOT. BAR = 9" ABOVE T.O. TUB
- SHOWER HEADS (FROM FLOOR TO HEAD): STANDARD = 72" TO 84". ADA = SPRAY UNIT W/ HOSE 60" LONG MIN. ADA = FIXED SHOWER HEAD = 48" AFF.
- SHOWER CONTROLS (TO CONTROL AREA): STANDARD = 48" MAX. (TO TOP), ADA = 38" MIN. TO 48" MAX.
- SHOWER ROD (FROM FLOOR TO C.L.): STANDARD = 78" MAX.
- TOILET ROOM PARTITIONS: TOILETS = 12" TO BOT. & 70" TO TOP. URINALS = 18" TO BOT. & 60" TO TOP
- TOILET PAPER DISPENSERS (TO C.L. OF OUTLET): STANDARD = 24". ADA = 19" MIN. TO 24" MAX.
- WALL MOUNTED SOAP DISPENSERS (TO C. L. OF PUSH BUTTON): STANDARD = 40". ADA = VARIES. RE. OBSTRUCTED AND UNOBSTRUCTED REACH RANGES, ADA SIDE REACH = 46" MAX. ABOVE SINK INCOUNTER.
- PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (TO TOWEL SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SHOWER HAND DRYER (TO PUSH SWITCH): STANDARD = 44" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SANITARY NAPKIN DISPENSER (TO C.L. OF COIN SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SANITARY NAPKIN DISPOSAL (TO TOP OF UNIT): STANDARD = 28" MAX. ADA = 19" MIN. TO 24" MAX. (TO OPNG.)
- TOILET SEAT COVER DISPENSERS (TO OPNG.): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SHelves: ADA = 48" MAX.
- COAT HOOKS: STANDARD = 68". ADA = 48" MAX.
- CHALKBOARDS, TACKBOARDS & MARKERBOARDS: STANDARD = 32" TO 39" (TO B.O. BOARD OR CHALKTRAY). STANDARD = 80" (RECOMMENDED, TO T.O. BOARD)
- THERMOSTATS & CONTROL DEVICES (TO TOP): ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX.
- LIGHT SWITCHES & CARD READERS (TO C.L.): LOCATE 6" FROM DOOR JAMB. ADA = 48" MAX. CONVENIENCE RECEPTACLES - ELECTRICAL/ TELEPHONE/ DATA (TO C.L.): STANDARD = 18". ADA = 15" MIN.
- EXIT LIGHTS - WALL MOUNTED: 2" MIN. BELOW CEILING. 2" MIN. ABOVE DOOR FRAME. EQUAL SPACE FROM CEILING TO TOP OF FRAME
- FIRE EXTINGUISHERS (TO TOP, U.N.O.): GROSS WT. 40 LBS. OR LESS = 60" MAX. GROSS WT. MORE THAN 40 LBS. = 42" MAX. ADA = 40" MAX. (B.O. CABINET)
- FIRE ALARM PULL STATIONS (TO LEVER): STANDARD = 48" MAX. ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX.
- SMOKE AND/OR HEAT DETECTORS: STANDARD = CEILING HEIGHT
- HORN/ SPEAKER VISUAL SIGNALS: STANDARD = 80" AFF. OR 6" BELOW CEILING - WHICHEVER IS LOWER.
- ROOM SIGNAGE (TO C.L.): STANDARD = 60" HIGH AFF. & WITHIN 18" OF LATCH SIDE OF DOOR

NOTES



PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

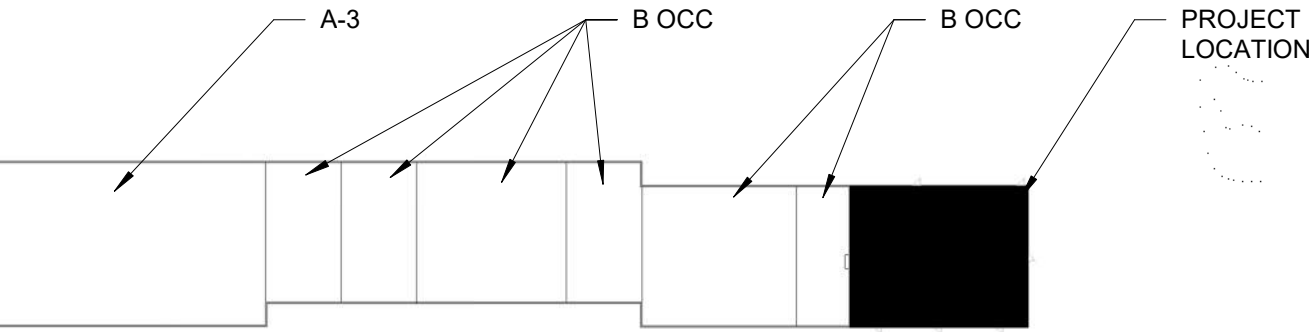
rev date description

ACCESSIBILITY GUIDELINES

sheet number

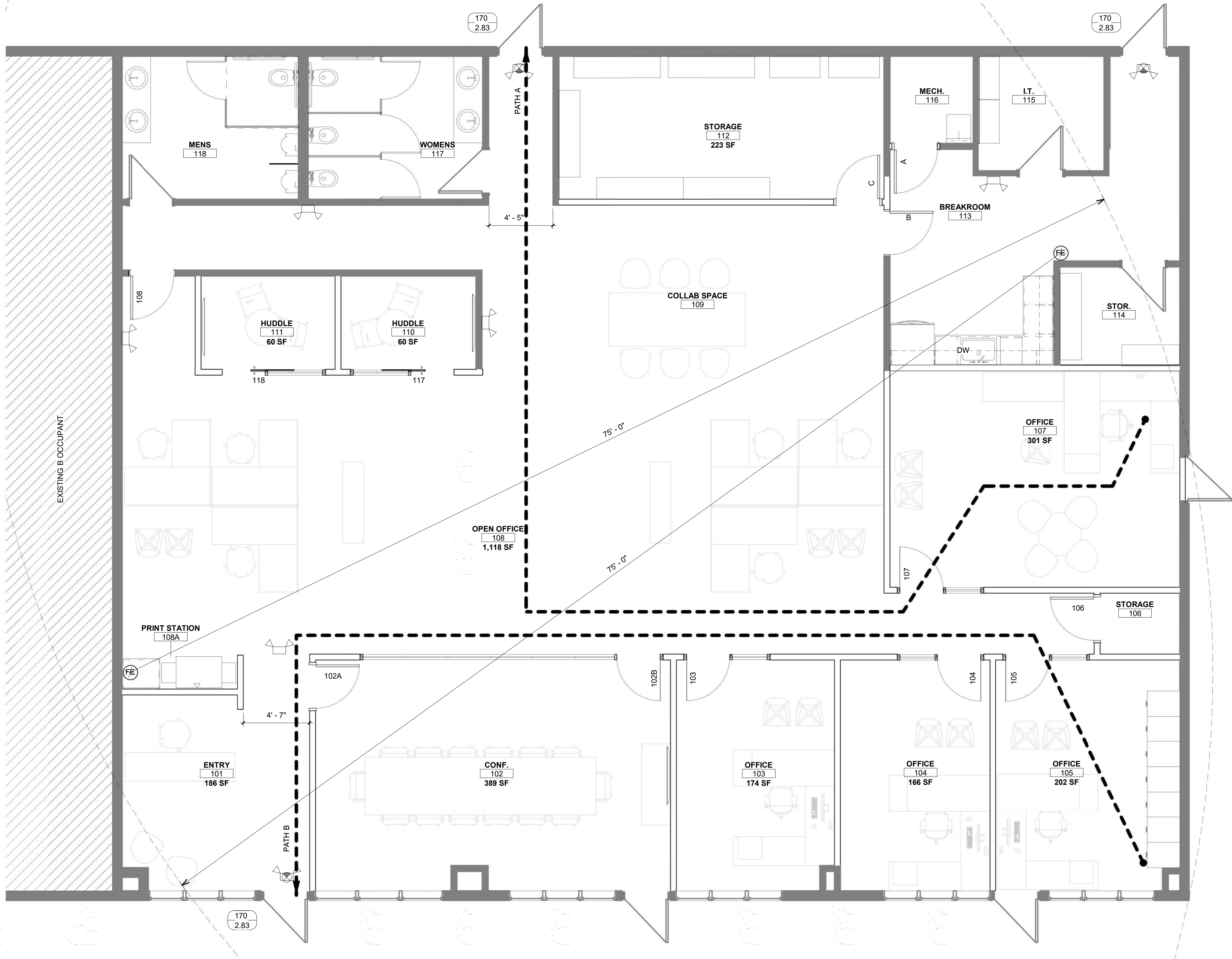
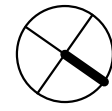
G002





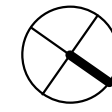
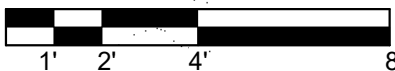
## 2 KEY PLAN

1" = 80'-0"



## 1 CODE PLAN

1/4" = 1'-0"



### CODE PLAN LEGEND

#### ROOM OCCUPANT LOAD

101 ROOM NUMBER  
ROOM NAME  
150 SF SQUARE FEET OF SPACE OR ROOM

XXX ALLOWABLE NUMBER OF OCCUPANTS  
XX EXIT WIDTH IN DECIMAL FEET

**EXIT WIDTH FACTORS:**  
STAIRS: 0.3" PER OCCUPANT SERVED  
DOORS: 0.2" PER OCCUPANT SERVED

FE FIRE EXTINGUISHER

## CODE SYMBOL KEY

1/16" = 1'-0"

### CODE INFORMATION SUMMARY:

SUBJECT	DATA	REFERENCE
PROJECT DESCRIPTION	RENOVATION OF AN EXISTING OFFICE SPACE FOR A NEW TENANT	
JURISDICTION	LEE'S SUMMIT, MO	
APPLICABLE CODE	2018 IBC 2018 IEBC 2012 IECC 2018 IMC NFPA 70 2017 NEC 2018 UPC 2018 IFGC 2016 ASME A17.1 2016 NFPA 72 2016 NFPA 13 2015 GA 216 UL CURRENT	
ADA STANDARDS	2010 ADA STANDARDS FOR ACCESSIBLE DESIGN	
OCCUPANCY CLASS	B (BUSINESS) OCC. IN A SEPARATED, MIXED-USE BUILDING	SECTION 303
CONSTRUCTION TYPE	V-B	SECTION 601
FIRE PROTECTION	AUTOMATIC SPRINKLER NO FIRE ALARM SYSTEM EXISTING FIRE EXTINGUISHER(S) REQUIRED	CHAPTER 9
ALLOWABLE HEIGHT AND AREA	40 FT / 9,000 (NS)	SECTION 504 & 506
FLOOR AREA (GROSS)	4,247 S.F.	TABLE 1004.5
OCCUPANT LOAD	44	TABLE 1004.5
EXITS REQUIRED	1	SECTION 1006
EXITS PROVIDED	3	
EXIT ACCESS TRAVEL DISTANCE	86'-7"	SECTION 1016

### PLUMBING FIXTURE REQUIREMENT: IBC 2018 TABLE 2902.1

PLUMBING FIXTURE	MALE		FEMALE		TOTAL	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED	REQUIRED	PROVIDED
WATER CLOSETS	2	3	2	3	4	6
LAVATORIES	1	2	1	2	2	4
DRINKING FOUNTAINS	-	-	-	-	1	0*
SERVICE SINKS	-	-	-	-	1	1

\*OWNER TO PROVIDE BOTTLED WATER AT ALL TIMES FOR EMPLOYEES & GUESTS.

### CODE - OCCUPANCY CALCULATIONS

Room Name	Number	Area	Space Function (1004.1.2)	Load Factor	Occupancy Load Factor Net or Gross (1004.1.2)	# of People
-----------	--------	------	---------------------------	-------------	---	-------------

### LEVEL 1

PRINT STATION	108A	19 SF	Business areas	150	gross	1
STORAGE	106	23 SF	Accessory storage areas, mechanical equipment rooms	300	gross	1
MECH.	116	35 SF	Accessory storage areas, mechanical equipment rooms	300	gross	1
STOR.	114	57 SF	Accessory storage areas, mechanical equipment rooms	300	gross	1
HUDDLE	<varies>	121 SF	Business areas	150	gross	2
I.T.	115	69 SF	Accessory storage areas, mechanical equipment rooms	300	gross	1
CIRCULATION	113A	90 SF	Circulation	0		0
WOMENS	117	120 SF	(none)			0
MENS	118	121 SF	(none)			0
BREAKROOM	113	161 SF	Assembly, without fixed, Unconcentrated (tables and chairs)	15	net	11
OFFICE	104	166 SF	Business areas	150	gross	2
OFFICE	103	174 SF	Business areas	150	gross	2
ENTRY	101	186 SF	Business areas	150	gross	2
OFFICE	105	202 SF	Business areas	150	gross	2
STORAGE	112	223 SF	Accessory storage areas, mechanical equipment rooms	300	gross	1
OFFICE	107	301 SF	Business areas	150	gross	3
COLLAB SPACE	109	326 SF	Business areas	150	gross	3
CONF.	102	389 SF	Business areas	150	gross	3
OPEN OFFICE	108	1,118 SF	Business areas	150	gross	8
Grand total:	20	3,899 SF	Business areas			44

### EGRESS (COMMON PATH OF TRAVEL)

TYPE	DISTANCE
Egress Path A	89' - 3"
Egress Path B	86' - 7"

## CODE SUMMARY

1" = 1'-0"



## PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

rev date description

## CODE PLAN

sheet number

# G100



SECTION 01 10 00 - SUMMARY

1. Project Name: Perfect Promotions
2. Owner's Name: Bernell Rice - Property Owner
3. Architect's Name: HIVE Design Collaborative, Inc.
4. The Project to cut into the existing structure and install new doors.
5. Coordinate with Owner / Tenant on all items to be supplied and installed by Owner.
6. Coordinate with Owner / Tenant on occupancy requirements during the construction period.
7. Coordinate with Owner / Tenant to minimize conflict and to facilitate building operations.
8. Coordinate with Owner / Tenant on Utility Operations and Shutdowns.
9. Provide access to and from spaces as required by law and by Owner.
10. Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
11. Do not obstruct roadways, sidewalks, or other public ways without permit.

SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES

1. Coordinate requirements with Owner / Tenant on all pricing and payment procedures.

SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

1. Coordinate requirements with Owner / Tenant for progress meetings, construction schedules, shop drawings and submittals.

SECTION 01 40 00 - QUALITY REQUIREMENTS

1. For products and workmanship specified by reference to a document or documents not included in these specifications, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
2. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
3. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
4. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.
5. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
6. Comply with manufacturers' instructions, including each step in sequence.
7. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
8. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
9. Have Work performed by persons qualified to produce required and specified quality.
10. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
11. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.
12. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
13. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
14. Adjust products to appropriate dimensions; position before securing products in place.
15. Replace Work or portions of the Work not conforming to specified requirements.
16. If, in the opinion of the Owner or Architect, it is not practical to remove and replace the Work, the Owner or Architect will direct an appropriate remedy or adjust payment.

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

1. Coordinate requirements and restrictions with Owner / Tenant on all temporary utilities, facilities, barriers and enclosures as well as security, vehicle access, parking, waste removal and project signs.

SECTION 01 60 00 - PRODUCT REQUIREMENTS

1. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
2. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
3. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
4. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
5. Provide new products unless specifically required or permitted by the Contract Documents.
6. Where all other criteria are met, Contractor shall give preference to products that are extracted, harvested, and/or manufactured closest to the location of the project, have longer documented life span under normal use, result in less construction waste, and are made of vegetable materials that are rapidly renewable.
7. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
8. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
9. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
10. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to materials.
11. Transport and handle products in accordance with manufacturer's instructions.
12. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
13. Arrange for the return of packing materials, such as wood pallets, where economically feasible.
14. Store and protect products in accordance with manufacturers' instructions.

SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

1. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
2. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
3. Examine and verify specific conditions described in individual specification sections.
4. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
5. Verify that utility services are available, of the correct characteristics, and in the correct locations.
6. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

PREPARATION

1. Clean substrate surfaces prior to applying next material or substance.
2. Seal cracks or openings of substrate prior to applying next material or substance.
3. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

GENERAL INSTALLATION REQUIREMENTS

1. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
2. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
3. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
4. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
5. Make neat transitions between different surfaces, maintaining texture and appearance.

ALTERATIONS

1. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
2. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
3. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
4. Clean existing systems and equipment.
5. Do not begin new construction in alterations areas before demolition is complete.

CUTTING AND PATCHING

1. Whenever possible, execute the work by methods that avoid cutting or patching.
2. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to specified condition.
3. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
4. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
5. Restore work with new products in accordance with requirements of Contract Documents.
6. Fit work air tight to pipes, sleeves, ducts, conduits, and other penetrations through surfaces.
7. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of the penetrated element.
8. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit. Match color, texture, and appearance.
9. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

PROGRESS CLEANING

1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
2. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
3. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
4. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

PROTECTION OF INSTALLED WORK

1. Protect installed work from damage by construction operations.
2. Provide special protection where specified in individual specification sections.
3. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
4. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
5. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
6. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
7. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

ADJUSTING

1. Adjust operating products and equipment to ensure smooth and unhindered operation.
2. FINAL CLEANING AND CLOSEOUT PROCEDURES
3. Use cleaning materials that are nonhazardous.
4. The Project to cut into the existing structure and install new doors.
5. Coordinate with Owner / Tenant on all items to be supplied and installed by Owner.
6. Coordinate with Owner / Tenant on occupancy requirements during the construction period.
7. Coordinate with Owner / Tenant to minimize conflict and to facilitate building operations.
8. Coordinate with Owner / Tenant on Utility Operations and Shutdowns.
9. Provide access to and from spaces as required by law and by Owner.
10. Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
11. Do not obstruct roadways, sidewalks, or other public ways without permit.

SECTION 01 79 00 - CLOSEOUT SUBMITTALS

PROJECT RECORD DOCUMENTS

1. Maintain on site one set of the following record documents; record actual revisions to the Work: Drawings, Addenda, Change Orders and other modifications to the Contract.
2. Ensure entries are complete and accurate, enabling future reference by Owner.
3. Store record documents separate from documents used for construction.
4. Record information concurrent with construction.
5. Record Drawings: Legibly mark each item to record actual construction including: Field changes of dimension and detail. Details not on original Contract drawings.

OPERATION AND MAINTENANCE DATA

1. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including location of supplies and replacement parts.
2. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
3. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
4. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

1. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

OPERATION AND MAINTENANCE MANUALS

1. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
2. Prepare data in the form of an instructional manual.

WARRANTIES AND BONDS

1. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
2. Verify that documents are in proper form, contain full information, and are notarized.
3. Co-execute submittals when required.
4. Retain warranties and bonds until time specified for submittal.

SECTION 02 41 19 - SELECTIVE STRUCTURE DEMOLITION

1. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
2. Obtain required permits.
3. Comply with applicable requirements of NFPA 241.
4. Provide, erect, and maintain temporary barriers and security devices.
5. Conduct operations to minimize effects on and interference with adjacent spaces, structures and occupants.
6. Do not close or obstruct roadways or sidewalks without permit.
7. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
8. Do not begin removal until receipt of notification to proceed from Owner.
9. Protect existing structures and other elements that are not to be removed.
10. Provide bracing and shoring.
11. Prevent movement or settlement of adjacent structures.
12. Stop work immediately if adjacent structures appear to be in danger.
13. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner.
14. Perform demolition in a manner that maximizes salvage and recycling of materials.
15. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only. Verify that construction and utility arrangements are as shown. Report discrepancies to Architect before beginning demolition.
16. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
17. Maintain waterproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
18. Remove existing work as indicated and as required to accomplish new work.
19. Remove existing systems and equipment as indicated.
20. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
21. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
22. Verify that abandoned services serve only abandoned facilities before removal.
23. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap and tag with identification.
24. Protect existing work to remain.
25. Prevent movement of structure; provide shoring and bracing if necessary.
26. Perform cutting to accomplish removals neatly and as specified for cutting new work.
27. Repair adjacent construction and finishes damaged during removal work.
28. Patch as specified for patching new work.
29. Remove debris, junk, and trash from site.
30. Leave site in clean condition, ready for subsequent work.

SECTION 06 10 00 - ROUGH CARPENTRY

1. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies. If no species is specified, provide any species graded by any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee and who provides grading service for the species and grade.
2. Dimension Lumber for Concealed Applications: Nominal sizes as indicated on Drawings, S4S. Moisture Content: S-dry or MC19.
3. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring: S4S, No. 2 or Standard Grade Lumber. Standard or No. 3 Boards.
4. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood, or medium density fiberboard, 3/4 inch thick; Lumber spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
5. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
6. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements indicate. Kiln dry wood after treatment to a maximum moisture content of 19 percent for Lumber and 15 percent for plywood. Treat rough carpentry items as indicated.
7. Fire Retardant Treatment: Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread rating of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.
8. Prevent exposure to precipitation during shipping, storage, or installation.
9. Provide Lumber stamped with grade mark unless otherwise indicated.
10. Lumber fabricated from old growth timber is not permitted.
11. Select material sizes to minimize waste.
12. Reuse scrap to the greatest extent possible.
13. Provide temporary ventilation during and immediately after installation of treated wood sufficient to remove indoor air contaminants.
14. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
15. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
16. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
17. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; spacers, ducts, conduits, and other penetrations through surfaces.
18. Install board over wall board indicated as part of the fire-rated assembly. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs. Install adjacent boards without gaps.
19. Framing Member Tolerances: 1/4 inch from true position, maximum.
19. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

SECTION 06 20 00 - FINISH CARPENTRY

1. Softwood Lumber: As indicated on Drawings, maximum moisture content of 6 percent; with vertical grain, of quality suitable for transparent finish.
2. Hardwood Lumber: As indicated on Drawings, maximum moisture content of 6 percent ; with vertical grain, of quality suitable for transparent finish.
3. Softwood Plywood: Not Exposed to View: Any face species, veneer core; PS 1 Grade A-B; glue type as recommended for application.
4. Softwood Plywood Exposed to View: Face species as indicated, plain sawn, medium density fiberboard core; glue type as recommended for application.
5. Hardwood Plywood: Face species as indicated, plain sawn, book matched, medium density fiberboard core; glue type as recommended for application.
6. Particleboard: ANSI A208.1; composed of wood chips, sawdust, or flakes of medium density, made with waterproof resin binders; of grade to suit application; sanded faces.
7. Hardboard: AHA A135.4; Pressed wood fiber with resin binder, Class 1 - Tempered, 1/4 inch thick, smooth one side (S1S).
8. Protect work from moisture damage.
9. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI Architectural Woodwork Standards for Premium Grade.

10. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by authority having jurisdiction.
11. Wood fabricated from old growth timber is not permitted.
12. Shop assemble work for delivery to site, permitting passage through building openings.
13. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
14. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
15. Install work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards requirements for grade indicated.
16. Set and secure materials and components in place, plumb and level.
17. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.
18. Maximum Variation from True Position: 1/16 inch.
19. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

SECTION 06 41 00 - ARCHITECTURAL WOOD CASEWORK

1. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI Architectural Woodwork Standards for Premium Grade.
2. Wood Veneer Faced Cabinets: Premium grade.
3. Plastic Laminate Faced Cabinets: Custom grade.
4. Protect units from moisture damage.
5. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.
6. Wood fabricated from old growth timber is not permitted.
7. Adhesive: Type recommended by fabricator to suit application.
8. Grommets: Standard plastic grommets for cut-outs, in color as indicated.
9. Hardware: BHMA A156.9, types as indicated for quality grade specified.
10. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and adjustable chrome finish, for nominal 1 inch spacing adjustments.
11. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers, unless otherwise indicated on Drawings.
12. Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish, unless otherwise indicated on Drawings.
13. Catches: Magnetic.
14. Drawer Slides: Full extension, Static load capacity as required by drawer size, side mounted, steel with polished finish.
15. Hinges: European style concealed self-closing type, steel with polished finish, unless otherwise indicated on Drawings.
16. Assembly and Workmanship: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.
17. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
18. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

SECTION 07 84 00 - FIRESTOPPING

1. Comply with firestopping manufacturer's recommendations for temperature and conditions during and after installation.
2. Firestopping: Any material meeting requirements.
3. Fire Ratings: See Drawings for required systems and ratings.
4. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter that could adversely affect bond of firestopping material.
5. Remove incompatible materials that could adversely affect bond.
6. Install materials in manner described in fire test report and in accordance with manufacturer's instructions, completely closing openings.
7. Do not cover installed firestopping until inspected by authority having jurisdiction.
8. Install labeling required by code.
9. Clean adjacent surfaces of firestopping materials.
10. Protect adjacent surfaces from damage by material installation.

SECTION 07 90 05 - JOINT SEALERS

1. General Purpose Interior Sealant for interior wall and ceiling control joints, joints between door and window frames and wall surfaces, and other interior joints for which no other type or sealant is indicated: Acrylic emulsion latex; ASTM C834, Type OP, Grade NF single component, paintable.
2. Bathroom/Tile Sealant for joints between wall, floor, and window/plumbing fixtures and for wall surfaces and joints between kitchen and bath countertops and wall surfaces: White silicone, ASTM C920. Uses I, M and A; single component, mildew resistant.
3. Acoustical Sealant bead between top stud runner and structure and between bottom stud track and floor: Permanently tacky non-hardening butyl sealant.
4. Interior Floor Joint Sealant for joints between floor and wall surfaces: Polyurethane, self-leveling; ASTM C920, Grade P, Class 25, Uses T, M and A; single component.
5. Sealants and Primers - General: Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.
6. Sealant colors to be selected by Architect from manufacturer's standard range.
7. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.
8. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
9. Perform installation in accordance with ASTM C1193.
10. Perform acoustical sealant application work in accordance with ASTM C919.
11. Measure joint dimensions and size joint backer to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
12. Install bond breaker where joint backing is not used.
13. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
14. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
15. Tool joints concave.
16. Protect sealants until cured.

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

1. Steel Door and Frame Manufacturers: Assa Abloy, Steelcraft or equal, unless otherwise indicated on Drawings.
2. Requirements for All Doors and Frames: Comply with ANSI/HCC A117.1, door and top closures. Flush with top of faces and edges, beveled on both edges, smooth texture, factory primed for field finishing.
3. Glazed Lights: Non-removable stops on non-secure side, sizes and configurations as indicated on drawings.
4. Hardware Preparation: In accordance with BHMA A156.115, with reinforcement welded in place, in addition to other requirements specified in door grade standard.
5. Galvanizing for Units in Wet Areas: All components hot-dipped zinc-iron alloy-coated (galvannealed), manufacturer's standard coating thickness.
6. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with all the specified requirements for each type; where two requirements conflict, comply with the most stringent.
7. Exterior Steel Doors: ANSI A250.8 Level 3, physical performance Level A, Model 2, seamless. All components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness.
8. Interior Steel Doors, Non-Fire-Rated: ANSI A250.8 Level 1, physical performance Level C, Model 2, seamless, 1-3/4 inches thick.
9. Interior Steel Doors, Fire-Rated: ANSI A250.8 Level 2, physical performance Level B, Model 2, seamless. Fire Rating as indicated on Door and Frame Schedule, tested in accordance with applicable code. Provide units listed and labeled by UL. Attach fire rating label to each fire rated unit.
10. Interior Steel Doors, Sound-Rated: ANSI A250.8 Level 2, physical performance Level B, Model 2, seamless. STC Rating of Entire Door, Frame, and Hardware Assembly as indicated on Drawings, calculated in accordance with ASTM E413, tested in accordance with ASTM E90 or ASTM E1408.
11. Interior Door Frames: Fully welded type complying with the requirements of grade specified for corresponding door.
12. Frames for Wood Doors: Fully welded type complying with frame requirements specified in ANSI A250.8 for Level 1, 18 gage.
13. Frames for Sound-Rated Wood Doors: Fully welded type complying with frame requirements specified in ANSI A250.8 for Level 1, 16 gage.
14. Exterior Door Frames: Face welded, seamless with joints filled. All components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness.
15. Interior Door Frames, Fire-Rated: Fully welded type, fire rating same as door, labeled.
16. Frames for Interior Glazing or Borrowed Lights: Construction and face dimensions to match door frames, unless otherwise indicated on Drawings.
17. Removable Stops: Formed sheet steel, milled corners.
18. Silencers: Resilient rubber, fitted into drilled hole; 3 on strike side of single door, 3 on center mullion of pairs, nd 2 on head of pairs without center mullions.
19. Temporary Frame Spreaders: Provide for all factory- or shop-assembled frames.
20. Primer: Rust-inhibiting, complying with ANSI A250.10, door manufacturer's standard.
21. Store in accordance with NAAMM HMMMA 840.
22. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion.
23. Install in accordance with the requirements of the specified door grade standard and NAAMM HMMMA 840.
24. In addition, install fire rated units in accordance with all applicable codes.
25. Maximum Diagonal Distortion: 1/16 in measured with straight edge, corner to corner.
26. Adjust for smooth and balanced door movement.
27. Adjust sound control doors so that seals are fully engaged when door is closed. Test sound control doors for force to close, latch, and unlatch in accordance with ASTM E1408; adjust as required to comply.

SECTION 08 14 16 - FLUSH WOOD DOORS

1. Wood Veneer Faced Door Manufacturers: Graham Wood Doors, Eggers Industries or equal, unless otherwise indicated on Drawings.
2. All Doors: Premium Grade Quality Level, in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
3. 5-ply or 7-ply Wood Veneer Faced Doors, unless otherwise indicated on Drawings: scribing and site cutting.
3. Interior Doors: 1-3/4 inches thick unless otherwise indicated; flush construction. Provide solid core doors at all locations.
4. Fire Rated Doors: Tested to ratings indicated on drawings in accordance with jurisdiction having authority: UL or WH (ITS) labeled without any visible seals when door is open.
5. Sound Retardant Doors: Minimum STC as indicated on drawings, calculated in accordance with ASTM E413, tested in accordance with ASTM E1408.
6. Non-Rated Solid Core and 20 Minute Rated Doors: Particleboard core, Type PC, plies and faces as indicated on Drawings.
7. Fire Rated Doors: Mineral core, Type FD, plies and faces as indicated on Drawings; with core blocking as required to provide adequate anchorage of hardware without through-bolting.
8. Sound Retardant Doors: Equivalent to Type PC construction with core as required to achieve rating specified; plies and faces as indicated on Drawings.
9. Wood Veneer Facing for Transparent Finish: Ash A135.4, Class 1 - Tempered, S2S (smooth two sides) hardboard, composition face, 1/8 inch thick.
11. Package, deliver and store doors in accordance with specified quality standard.
12. Protect doors with resilient packaging sealed with heat shrunk plastic. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges with tinted sealer if stored more than one week. Break seal on site to permit ventilation.
13. Provide manufacturer's warranty for the duration of the installation.
14. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.
15. Fabricate doors in accordance with door quality standard specified.
16. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
17. Provide edge clearances in accordance with the quality standard specified.
18. Install doors in accordance with manufacturer's instructions and specified quality standard. Install fire-rated doors in accordance with NFPA 80 requirements.
19. Use machine tools to cut or drill for hardware.
20. Coordinate installation of doors with installation of frames and hardware.

SECTION 08 31 00 - ACCESS DOORS AND PANELS

1. Manufacturers: Accudor Products Inc, Milcor, or equal.
2. Door and Frame Units: Steel factory fabricated, fully assembled units with corner joints welded, filled, and ground flush; square and without rick or warp; coordinate requirements with assemblies units are to be installed in.
3. Verify that rough openings are correctly sized and located.
4. Install units in accordance with manufacturer's instructions.
5. Install frames plumb and level in openings. Secure rigidly in place.
6. Position units to provide convenient access to the concealed work requiring access.

SECTION 08 71 00 - DOOR HARDWARE

1. Coordinate the manufacture, fabrication, and installation of products onto which door hardware will be installed.
2. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
3. Convey Owner's keying requirements to manufacturers.
4. Provide all hardware specified or required to make doors fully functional, compliant with applicable codes, and secure to the extent indicated.
5. Provide all items of a single type of the same model by the same manufacturer.
6. Provide products that comply with the following: Applicable provisions of federal, state, and local codes. ANSI/HCC A117.1, American National Standard for Accessible and Usable Buildings and Facilities. Applicable provisions of NFPA 101, Life Safety Code. Fire-Rated Doors: NFPA 80. All Hardware on Fire-Rated Doors : Listed and classified by UL as suitable for the purpose specified and indicated.
7. Hardware for Smoke and Draft Control Doors: Provide hardware that enables door assembly to comply with air leakage requirements of the applicable code. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.
7. Electrically Operated and/or Controlled Hardware: Provide all power supplies, power transfer hinges, relays, and interface needed for proper operation; provide wiring between hardware and control components and to building power connection.
8. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as instructed by the manufacturer.
9. Verify that electric power is available to power operated devices and of the correct characteristics.
10. Install hardware in accordance with manufacturer's instructions and specifications and applicable codes.
11. Use templates provided by hardware item manufacturer.
12. Do not install surface mounted items until finishes applied to substrate are complete.
13. Install hardware on fire-rated doors and frames in accordance with code and NFPA 80.
14. Mounting heights for hardware from finished floor to center line of hardware item: Steel doors and frames: Comply with DHI "Recommended Locations for Architectural Hardware for Steel Doors and Frames."
- For wood doors: Comply with DHI "Recommended Locations for Architectural Hardware for Wood Flush Doors."
15. Adjust work under provisions of Section 01 70 00.
16. Adjust hardware for smooth operation.
17. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

SECTION 08 80 00 - GLAZING

1. Single Vision Glazing: Fully tempered float glass, clear tint, ¼ inch thickness. Applications: All interior glazing unless otherwise indicated.
2. Fire-Rated Safety Glazing: Glass ceramic safety glazing, ¼ inch thickness, fire rating as indicated on Drawings. Applications: Provide this type of glazing in the following locations:
3. Single Safety Glazing: Non-fire-rated, fully tempered float glass, clear tint, ½ inch thickness. Applications: Provide this type of glazing in the following locations: Glazed lights in doors, except fire doors. Glazed sidelights to doors, except in fire-rated walls and partitions. Other locations required by applicable federal, state, and local codes and regulations. Other locations indicated on the drawings.
4. Float Glass: All glazing is to be float glass unless otherwise indicated. Annealed Type: ASTM C1036, Type I, transparent flat, Class 1 clear, Quality Q3 (glazing select). Heat-Strengthened and Fully Tempered Types: ASTM C1048.
5. Glass-Ceramic Safety Glazing: UL- or WH-listed as fire-protection-rated glazing and complying with 16 CFR 1201 test requirements for Category II without the use of a surface-applied film.
6. Silicone Sealant : Single component; neutral curing; capable of water immersion without loss of properties; non-bleeding, non-staining; ASTM C920, Type S, Grade NS, Class 25, Uses M, A, and G; cured Shore A hardness of 15 to 25, color as selected.
7. Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness, ASTM C864 Option I. Length of 0.1 inch for each square foot of glazing or minimum 4 inch x width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.
8. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness, ASTM C864 Option I. Minimum 3 inch long x one half the height of the glazing stop x thickness to suit application, self adhesive on one face.
9. Glazing Tape: Preformed butyl compound with integral resilient tube spacing device, 10 to 15 Shore A durometer hardness; coated on release paper; black color.
10. Glazing Clips: Manufacturer's standard type.
11. Verify that openings for glazing are correctly sized and within tolerance.
12. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and ready to receive glazing.
13. Prime surfaces scheduled to receive sealant.
14. Install sealants in accordance with ASTM C1193 and FGMA Sealant Manual.
15. Install sealant in accordance with manufacturer's instructions.

INSTALLATION - INTERIOR DRY METHOD (TAPE AND TAPE)

1. Cut glazing tape to length and self against permanent stops, projecting 1/16 inch (1.6 mm) above sight line.
2. Place setting blocks at 1/4 points with edge block no more than 6 inches from corners.
3. Rest glazing on setting blocks and push against tape for full contact at perimeter of pane or unit.
4. Place glazing tape on free perimeter of glazing in same manner described above.
5. Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.

INSTALLATION - INTERIOR WET METHOD (COMPOUND AND COMPOUND)

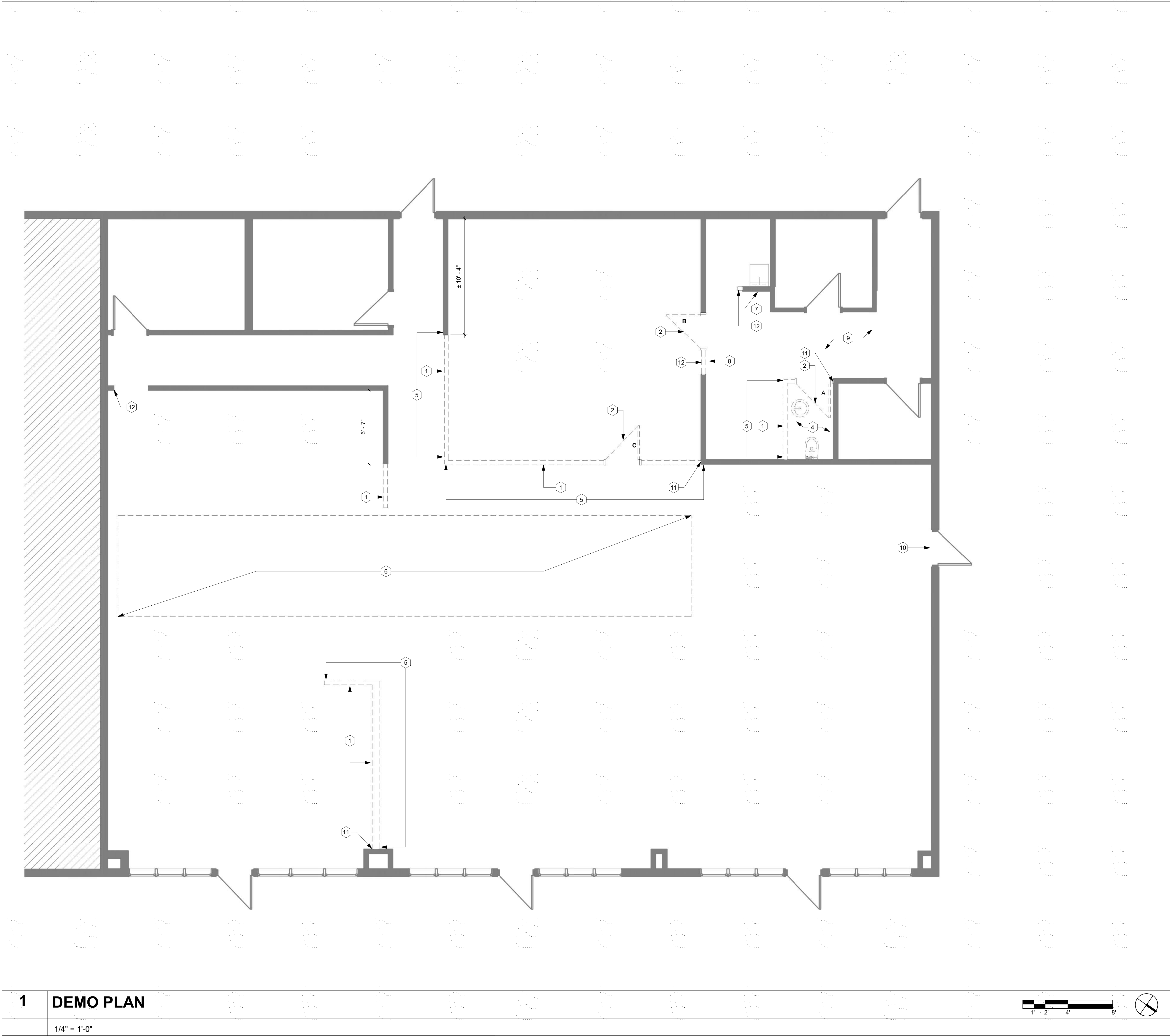
1. Install glazing resting on setting blocks. Install applied stop and center pane by use of spacer shims at 24 inch centers, kept 1/4 inch below sight line.
2. Locate and secure glazing pane using glazers' clips.
3. Fill gaps between glazing and stops with glazing compound until flush with sight line. Tool surface to straight line.
4. Glazing Tape: Preformed butyl compound with integral resilient tube spacing device, 10 to 15 Shore A durometer hardness; coated on release paper; black color.
1. Install plastic film with adhesive, applied in accordance with film manufacturer's instructions.
2. Place without air bubbles, creases or visible distortion.
3. Fit tight to glass perimeter with razor cut edge.

## &lt;



<div><div>SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES</div><div><div><div><div>1. Provide completed assemblies complying with ASTM C840 and GA-216.</div><div>2. Interior Partitions Indicated as Sound-Rated: STC as indicated calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.</div><div>3. Fire Rated Assemblies: Comply with applicable requirements of ICC IBC or GA-800 for the particular assembly. Provide construction equivalent to that listed for the particular assembly in the current UL Fire Resistance Directory.</div><div>4. Manufacturers - Metal Framing, Connectors, and Accessories: ClarkDietrich, Scafo, or equal.</div><div>5. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf.</div><div>6. Studs: "C" shaped with flat or formed webs.</div><div>7. Runners: U shaped, sized to match studs.</div><div>8. Ceiling Channels: C shaped.</div><div>9. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.</div><div>10. Partition Head to Structure Connections: Provide mechanical anchorage devices that accommodate deflection using slotted holes, screws and anti-friction bushings, preventing rotation of studs while maintaining structural performance of partition. Maintain lateral load resistance and vertical movement capacity required by applicable code, when evaluated in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members. Material: ASTM A653/A653M steel sheet, SS Grade 50/340, with G60/Z180 hot dipped galvanized coating. Provide components UL-listed for use in UL-listed fire-rated head of partition joint systems indicated on drawings. Deflection and Firestop Track: Provide mechanical anchorage devices as described above that accommodate deflection while maintaining the fire-rating of the wall assembly.</div><div>11. Manufacturers - Gypsum-Based Board: National Gypsum Company, USG Corporation or equal.</div><div>12. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M, sizes to minimize joints in place, ends square cut. Application: Use for vertical surfaces and ceilings, unless otherwise indicated. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed. Thickness: Vertical Surfaces: 5/8 inch. Ceilings: 1/2 inch. Multi-Layer Assemblies: Thicknesses as indicated on drawings.</div><div>13. Impact-Rated Wallboard: Tested to Level 3 soft-body and hard-body impact in accordance with ASTM C1629. Application: High-traffic areas indicated. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273. Type: Fire-resistance rated Type X, UL or WH listed. Thickness: 5/8 inch. Edges: Tapered.</div><div>14. Backing Board For Wet Areas: Application: Surfaces behind tile in wet areas including tub and shower surrounds and shower ceilings. Glass-Mat-Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in ASTM C1178.</div><div>15. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place, ends square cut. Application: Vertical surfaces behind thinset tile, except in wet areas. Type: Regular and Type X, in locations indicated. Type X Thickness: 5/8 inch. Regular Board Thickness: 5/8 inch. Edges: Tapered.</div><div>16. Ceiling Board: Special sag-resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place, ends square cut. Application: Ceilings, unless otherwise indicated. Thickness: 1/2 inch. Edges: Tapered.</div><div>17. Acoustical Sound Dampening Wall and Ceiling Board: Two layers of heavy paper faced, high density gypsum board separated by a viscoelastic polymer layer and capable of achieving STC rating of 50 or more in typical stud wall assemblies as calculated in accordance with ASTM E413 and when tested in accordance with ASTM E90. Thickness: 1/2 inch. Long Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.</div><div>18. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: ___ inch.</div><div>19. Acoustic Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.</div><div>20. Joint Materials: ASTM C475 and as recommended by gypsum board manufacturer for project conditions.</div><div>21. High Build Drywall Surface: Vinyl acrylic latex-based primer for spray application, designed to take the place of skim coating and separate paint primer in achieving Level 5 finish.</div><div>22. Screws for Attachment to Steel Members Less Than 0.03 inch In Thickness, to Wood Members, and to Gypsum Board: ASTM C1002; self-piercing tapping type.</div><div>23. Screws for Attachment to Steel Members From 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws for application of gypsum board to loadbearing steel studs.</div><div>24. Metal Framing: Install in accordance with ASTM C754 and manufacturer's instructions.</div><div>25. Suspended Ceilings and Soffits: Space framing and furring members as indicated.</div><div>26. Studs: Space studs as indicated. Extend partition framing to structure where indicated and to ceiling in other locations.</div><div>27. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.</div><div>28. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.</div><div>29. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.</div><div>30. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.</div><div>31. Acoustic Sealant: Install in accordance with manufacturer's instructions. Place one bead continuously on substrate before installation of perimeter framing members. Place continuous bead at perimeter of each layer of gypsum board. In non-fire-rated construction, seal around all penetrations by conduit, pipe, ducts, and rough-in boxes.</div><div>32. Board Installation: Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations. Install gypsum board parallel to framing, with ends and edges occurring over firm bearing.</div><div>33. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.</div><div>34. Installation on Metal Framing: Use screws for attachment of all gypsum board.</div><div>35. Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.</div><div>36. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board with sealant.</div><div>37. Control Joints: Place control joints not more than 30 feet apart on walls and ceilings over 50 feet long, unless otherwise indicated on Drawings.</div><div>38. Corner Beads: Install at external corners, using longest practical lengths.</div><div>39. Finish gypsum board in accordance with levels defined in ASTM C840.</div><div>40. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.</div><div>41. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.</div><div>42. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.</div><div>43. Level 1: Fire rated wall areas above finished ceilings, whether or not accessible in the completed construction.</div><div>44. Level 0: Temporary partitions and surfaces indicated to be finished in later stage of project.</div><div>45. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes. Feather coats of joint compound so that camber is maximum 1/32 inch.</div><div>46. Where Level 5 finish is indicated, spray apply high build drywall surface over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.</div><div>47. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.</div></div><div><div>SECTION 09 30 00 - TILING</div><div><div><div>1. Standard Grout. Any type specified in ANSI A118.6 or A118.7.</div><div>2. Verify that surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.</div><div>3. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer.</div><div>4. Protect surrounding work from damage.</div><div>5. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.</div><div>6. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions.</div><div>7. Install tile and thresholds and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and The Tile Council of North America Handbook recommendations.</div><div>8. Lay tile to pattern indicated. Do not interrupt tile pattern through openings unless otherwise indicated.</div><div>9. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.</div><div>10. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.</div><div>11. Install ceramic accessories rigidly in prepared openings.</div><div>12. Install non-ceramic trim in accordance with manufacturer's instructions.</div><div>13. Install thresholds where indicated.</div><div>14. Sound tile after setting. Replace hollow sounding units.</div><div>15. Keep expansion joints free of adhesive or grout. Apply sealant to joints.</div><div>16. Allow tile to set for a minimum of 48 hours prior to grouting.</div><div>17. Grout tile joints. Use standard grout unless otherwise indicated.</div><div>18. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.</div><div>19. Over interior concrete substrates, install in accordance with The Tile Council of North America Handbook Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.</div><div>20. At tiled shower receptors install in accordance with The Tile Council of North America Handbook Method B415, mortar bed floor, and W244, thin-set over cementitious backer unit walls.</div><div>21. Over gypsum wallboard on wood or metal studs install in accordance with The Tile Council of North America Handbook Method W243, thin-set with dry-set or latex-Portland cement bond coat, unless otherwise indicated.</div><div>22. Do not permit traffic over finished floor surface for 4 days after installation.</div></div></div><div><div>SECTION 09 51 00 - ACOUSTICAL CEILINGS</div><div><div><div>1. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.</div><div>2. Acoustical Units - General: ASTM E1264, Class A.</div><div>3. Units for Installation in Fire-Rated Suspension System: Listed and classified for the fire-resistive assembly the suspension system is a part of.</div><div>4. Suspension System Manufacturers: Same as for acoustical units indicated on Drawings.</div><div>5. Suspension Systems - General: ASTM C635; die cut and interlocking components, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required.</div><div>6. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.</div><div>7. Perimeter Moldings: Same material and finish as grid.</div><div>8. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.</div><div>9. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.</div><div>10. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.</div></div></div></div></div></div></div></div>	<div><div>SECTION 09 51 00 - ACOUSTICAL CEILINGS (CONTINUED)</div><div><div><div>11. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.</div><div>12. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.</div><div>13. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.</div><div>14. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.</div><div>15. Do not eccentrically load system or induce rotation of runners.</div><div>16. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.</div><div>17. Use longest practical lengths.</div><div>18. Overlap and rivet corners.</div><div>19. Install acoustical units in accordance with manufacturer's instructions.</div><div>20. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.</div><div>21. Fit border trim neatly against abutting surfaces.</div><div>22. Install units after above-ceiling work is complete.</div><div>23. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.</div><div>24. Cutting Acoustical Units: Make field cut edges of same profile as factory edges.</div><div>25. Lay acoustical insulation for a distance of 48 inches either side of acoustical partitions as indicated.</div><div>26. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.</div><div>27. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.</div></div></div><div><div>RESILIENT BASE</div><div><div><div>1. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.</div><div>2. Maintain minimum 70 degrees F ambient temperature 24 hours prior to, during and 24 hours after installation.</div><div>3. Scribe and fit to door frames and other interruptions.</div></div></div><div><div>SECTION 09 68 00 - CARPETING</div><div><div><div>1. Store materials in area of installation for minimum period of 24 hours prior to installation.</div><div>2. Maintain minimum 70 degrees F ambient temperature 24 hours prior to, during and 24 hours after installation.</div><div>3. Ventilate installation area during installation and for 72 hours after installation.</div><div>4. Sub-Floor Filler: Type recommended by carpet manufacturer.</div><div>5. Adhesives - General: Compatible with materials being adhered; maximum VOC content of 50 g/L; CRI Green Label certified.</div><div>6. Seam Adhesive: Recommended by manufacturer.</div><div>7. Contact Adhesive: Recommended by carpet manufacturer; releasable type.</div><div>8. Verify that surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive carpet.</div><div>9. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of adhesives to sub floor surfaces.</div><div>10. Cementitious Sub-floor Surfaces: Verify that substrates are dry enough and ready for resilient flooring installation by testing for moisture and pH. Test in accordance with ASTM F710.</div><div>11. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.</div><div>12. Prepare floor substrates as recommended by flooring and adhesive manufacturers.</div><div>13. Starting installation constitutes acceptance of sub-floor conditions.</div><div>14. Install carpet in accordance with manufacturer's instructions and CRI Carpet Installation Standard.</div><div>15. Verify carpet match before cutting to ensure minimal variation between dye lots.</div><div>16. Lay out carpet and locate seams in accordance with shop drawings:</div><div>17. Locate seams in area of least traffic, out of areas of pivoting traffic, and parallel to main traffic.</div><div>18. Do not locate seams perpendicular through door openings.</div><div>19. Align run of pile in same direction as anticipated traffic and in same direction on adjacent pieces.</div><div>20. Locate changes of color or pattern between rooms under door centerline.</div><div>21. Provide monolithic color, pattern, and texture match within any one area.</div><div>22. Install carpet light and flat on subfloor, well fastened at edges, with a uniform appearance.</div><div>23. Trim carpet neatly at walls and around other interruptions.</div><div>24. Remove excess adhesive from floor and wall surfaces without damage.</div><div>25. Clean and vacuum carpet surfaces.</div></div></div><div><div>SECTION 09 72 00 - WALL COVERINGS</div><div><div><div>1. Extra Materials: Deliver to Owner full thirty rolls of wall covering equal to 5 percent of amount of each type installed, packaged with protective covering for storage.</div><div>2. Adhesive: Type recommended by wall covering manufacturer to suit application to substrate.</div><div>3. Substrate Filler, Primer and Sealer: As recommended by adhesive and wall covering manufacturers; compatible with substrate.</div><div>4. Verify that substrate surfaces are prime painted and ready to receive work, and conform to requirements of the wall covering manufacturer.</div><div>5. Measure moisture content of surfaces using an electronic moisture meter. Do not apply wall coverings if moisture content of substrate exceeds level recommended by wall covering manufacturer.</div><div>6. Treat areas as necessary to ensure no pigment bleeding through wall covering.</div><div>7. Apply adhesive and wall covering in accordance with manufacturer's instructions.</div><div>8. Apply wall covering smooth, without wrinkles, gaps or overlaps. Eliminate air pockets and ensure full bond to substrate surface. Butt edges tightly.</div><div>9. Install seams vertical and plumb. Horizontal seams are not acceptable.</div><div>10. Do not seam within 2 inches of internal corners or within 6 inches of external corners.</div><div>11. Where wall covering backs into cavels, or on metal wallboard or plaster stops, apply with contact adhesive within 6 inches of wall covering termination. Ensure full contact bond.</div><div>12. Remove excess adhesive at finished seams, perimeter edges, and adjacent surfaces using cleaning methods recommended by wall covering manufacturer.</div><div>13. Clean wall coverings of excess adhesive, dust, dirt, and other contaminants.</div></div></div><div><div>SECTION 09 80 00 - ACOUSTIC TREATMENT</div><div><div><div>1. Principal Products:</div><div>A. Acoustic panel treatment - walls</div><div>B. Acoustic baffle treatment - ceilings</div><div>2. Submit Product Data: For manufacturer's product lines and accessories. Include construction details, mounting, material descriptions, dimensions of individual components and profiles, and finishes.</div><div>3. Shop Drawings: Include mounting devices and details; details at panel head, base, joints, and corners; and details at ceiling, floor base, and wall intersections. Indicate panel edge and core materials. Include plans and elevations showing panel sizes and direction of fabric weave and pattern matching.</div><div>4. Provide Maintenance Data: For sound-absorbing wall units to include in maintenance manuals. Include fabric manufacturers' written cleaning and repair recommendations.</div><div>5. Provide Flame spread/smoke developed index with Class A fire rated certification when tested in accordance with ASTM E84.</div><div>6. Installer's Qualifications: A firm experienced in producing acoustic treatment similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.</div><div>7. Comply with manufacturers' written instructions for minimum and maximum temperature and humidity requirements for shipment, storage, and handling.</div><div>8. Deliver materials in unopened bundles.</div><div>9. Store materials in cool, dry, well ventilated area out of direct sunlight and away from heat sources.</div><div>10. Do not allow water to come into direct contact with material during storage.</div><div>11. Do not store materials longer than 6 months.</div><div>12. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer.</div><div>13. Verify field measurements before fabrication.</div><div>14. Obtain acoustic treatment systems from single source from single manufacturer.</div><div>15. General Requirements for Acoustic Treatment: Provide systems that comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."</div><div>16. Fire-Test-Response Characteristics: Provide fabric systems meeting the following requirements as determined by testing identical products by UL 723, UBC, or another testing and inspecting agency acceptable to authorities having jurisdiction.</div><div>A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.</div><div>1. Flame-Spread Index: 25or less.</div><div>2. Smoke-Developed Index: 450 or less.</div><div>b. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 or NFPA 266.</div><div>17. Provide equivalent size, color and pattern as product listed on drawings.</div><div>18. Provide manufacturer's standard core material.</div><div>19. Install acoustic wall panels using manufacturer's recommended installation products and methods.</div><div>20. Install acoustic ceiling panels according with manufacturer's standard aircraft wire secured to substrate.</div><div>21. Edge Construction: Manufacturer's standard frame, cross runner, frame connectors and end caps. Color to match panels.</div><div>22. Acoustical Performance: Sound absorption NRC of 0.90 according to ASTM C 423 for Type A mounting according to ASTM E 795.</div><div>23. Examine fabric, fabricated units, substrates, areas, and conditions, for compliance with requirements, installation tolerances, and other conditions affecting performance of sound-absorbing wall units.</div><div>24. Proceed with installation only after unsatisfactory conditions have been corrected.</div><div>25. Comply with manufacturer's written instructions for installation of acoustic treatment units using type of mounting devices indicated. Mount units securely to supporting substrate.</div><div>26. Unroll acoustic panels sheets and allow 1 to stabilize before cutting and fitting.</div><div>27. Align and level fabric pattern and grain among adjacent units.</div><div>28. Install wall units in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.</div><div>29. Install ceiling units in locations indicated with edges in alignment with walls and other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.</div><div>30. Variation from Alignment with Surfaces: Plus or minus 1/16 inch.</div><div>31. Variation from Level or Slope: Plus or minus 1/16 inch.</div><div>32. Variation of Panel Joints from Hairline: Not more than 1/16 inch wide.</div><div>33. Vacuum clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.</div><div>34. Remove spills immediately using clean damp cloth or with soap and water.</div></div></div></div></div></div></div></div>	<div><div>SECTION 09 90 00 - PAINTING AND COATING</div><div><div><div>1. Scope: Finish all interior and exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.</div><div>2. Mechanical and Electrical: In finished areas, paint all insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated on Drawings.</div><div>3. Do Not Paint or Finish the Following Items: Items fully factory-finished unless specifically so indicated; materials and products having factory-applied primers are not considered factory finished. Items indicated to receive other finishes. Items indicated to remain unfinished. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment. Floors, unless specifically so indicated. Ceramic and other tiles. Glass. Acoustical materials, unless specifically so indicated. Concealed pipes, ducts, and conduits.</div><div>4. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.</div><div>5. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.</div><div>6. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.</div><div>7. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.</div><div>8. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature conditions.</div><div>9. Provide lighting level of 80 ft candles measured mid-height at substrate surface.</div><div>10. Provide all paint and coating products used in any individual system from the same manufacturer; no exceptions.</div><div>11. Provide all paint and coating products from the same manufacturer to the greatest extent possible.</div><div>12. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.</div><div>13. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.</div><div>14. Supply each coating material in quantity required to complete entire project's work from a single production run.</div><div>15. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.</div><div>16. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.</div><div>17. Volatile Organic Compound (VOC) Content:</div><div>18. Provide coatings that comply with the most stringent requirements specified in the following: 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings. Architectural coatings VOC limits of State in which the project is located.</div><div>19. Colors: As indicated on Drawings. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.</div><div>20. Paint for Wood, Opaque: One coat of latex primer sealer. Two coats of latex enamel.</div><div>21. Paint for Wood, Transparent, Varnish, No Stain: One coat sealer.</div><div>22. Paint for Wood, Transparent, Varnish, Stain: Filler coat (for open grained wood only). One coat of stain. One coat sealer. One coat of varnish.</div><div>23. Paint for Concrete/Masonry, Opaque: One coat of block filler. Two coats of alkyd enamel.</div><div>24. Paint for Ferrous Metals, Unprimed: One coat of latex primer. Two coats of latex enamel.</div><div>25. Paint for Ferrous Metals, Primed: Touch-up with latex primer. Two coats of latex enamel.</div><div>26. Paint for Gypsum Board/Plaster: One coat of latex primer. Two coats of latex enamel.</div><div>27. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.</div><div>28. Patching Material: Latex filler.</div><div>29. Fastener Head Cover Material: Latex filler.</div><div>30. Clean surfaces thoroughly and correct defects prior to coating application.</div><div>31. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.</div><div>32. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.</div><div>33. Seal surfaces that might cause bleed through or staining of topcoat.</div><div>34. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.</div><div>35. Concrete and Unit Masonry Surfaces to be Painted: Remove dirt, loose mortar, scale, sand, and alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.</div><div>36. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.</div><div>37. Galvanized Surfaces to be Painted: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.</div><div>38. Corroded Steel and Iron Surfaces to be Painted: Prepare using at least SSPC-PC 2 (hand tool cleaning) or SSPC-SP 3 (power tool cleaning), followed by SSPC-SP 1 (solvent cleaning).</div><div>39. Uncoordinated Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand or power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.</div><div>40. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.</div><div>41. Interior Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.</div><div>42. Interior Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.</div><div>43. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with clear sealer.</div><div>44. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.</div><div>45. Apply products in accordance with manufacturer's instructions.</div><div>46. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.</div><div>47. Apply each coat to uniform appearance.</div><div>48. Sand wood and metal surfaces lightly between coats to achieve required finish.</div><div>49. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.</div><div>50. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.</div><div>51. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.</div></div></div><div><div>SECTION 10 44 00 - FIRE PROTECTION SPECIALTIES</div><div><div><div>1. Fire Extinguishers, Fire Extinguisher Cabinets and Accessories: Ansul, Inc., Pyro-Chem, or equal.</div><div>2. Fire Extinguishers - General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent. Provide extinguishers labeled by UL for the purpose specified and indicated.</div><div>3. Extinguisher Brackets: Formed steel, galvanized and enamel finished.</div><div>4. Install in accordance with manufacturer's instructions.</div><div>5. Install cabinets plumb and level in wall openings, 54 inches from finished floor to inside bottom of cabinet.</div><div>6. Secure rigidly in place.</div><div>7. Place extinguishers and accessories in cabinets and on wall brackets.</div></div></div><div><div>SECTION 11 31 00 - RESIDENTIAL APPLIANCES</div><div><div><div>1. Verify utility rough-ins are present and correctly located.</div><div>2. Install in accordance with manufacturer's instructions.</div><div>3. Anchor built-in equipment in place.</div><div>4. Adjust operating equipment to efficient operation.</div><div>5. Remove packing materials from equipment.</div><div>6. Wash and clean equipment.</div></div></div><div><div>SECTION 12 36 00 - COUNTERTOPS</div><div><div><div>1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.</div><div>2. Quality Standard: Premium Grade, in accordance with AIA/ANAC/NI Architectural Woodwork Standards.</div><div>3. Medium Density Fiberboard for Supporting Substrate: ANSI A208.2.</div><div>4. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.</div><div>5. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.</div><div>6. Join lengths of tops using best method recommended by manufacturer.</div><div>7. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.</div><div>8. Solid Surfacing: Fabricate tops up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.</div><div>9. Wall-Mounted Counters: Provide skirts, aprons, brackets, and braces as indicated on drawings.</div><div>10. Do not begin installation until substrate materials have been properly prepared.</div><div>11. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.</div><div>12. Clean surfaces thoroughly prior to installation.</div><div>13. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.</div><div>14. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.</div><div>15. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch.</div><div>16. Seal joint between back/end splashes and vertical surfaces.</div><div>17. Variation From Horizontal: 1/8 inch in 10 feet, maximum.</div><div>18. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.</div><div>19. Field Joints: 1/8 inch wide, maximum.</div><div>20. Clean countertops surfaces thoroughly.</div><div>21. Protect installed products until completion of project.</div><div>22. Touch-up, repair or replace damaged products before Substantial Completion.</div></div></div></div></div></div></div>	<div><div>SECTION 12 24 13 - ROLLER WINDOW SHADES</div><div><div><div>1. Provide product as indicated on drawings or approved equal by Architect.</div><div>2. Product shall have a manual operation.</div><div>3. Mounting: Inside mount and top mount.</div><div>4. Configuration: Single Solar Shadecloth</div><div>5. Solar Shadecloth: 3% Openness. Color as indicated on drawings.</div><div>6. Hardware Finish: To be selected by architect from manufacturer's full range.</div><div>7. Install window treatment in accordance with manufacturer's instructions.</div><div>8. Maximum Variation of Gap at Window Opening Perimeter: 1/4 inch.</div><div>9. Maximum Offset From Level: 1/8 inch.</div><div>10. Adjust window treatment for smooth operation.</div><div>11. Clean shade and valance surfaces just prior to occupancy.</div></div></div></div>
	<div><div><div>PERFECT PROMOTIONS</div><div><div>1469 SW Market Street LEE'S SUMMIT, MO 64081</div><div>HIVE DESIGN COLLABORATIVE, INC. 1617 WALNUT STREET, KANSAS CITY, MO 64108 816.581.6363</div></div></div><div><div><div>COPYRIGHT © 2022 HIVE DESIGN COLLABORATIVE, INC.</div><div>seal/signature</div><div><div>MARK M. PORTT MOORE ARCHITECT A-2021000028</div></div></div><div><div>05.25.22</div><div>project number2022-018</div><div>date05.25.2022</div><div>issued forPERMIT</div><div>revdatedescription</div></div><div><div>SHEET SPECS</div><div>G501</div></div></div></div>		





DEMOLITION KEY NOTES:

- 1 DEMO EXISTING NON-BEARING WALL. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- 2 REMOVE EXISTING DOOR AND ASSOCIATED HARDWARE. SALVAGE & PROTECT FOR REINSTALLATION. REFER TO FLOORPLAN FOR NEW LOCATION OF EXISTING DOOR.
- 3 DEMO EXISTING CARPET FLOORING. PREP CONCRETE TO BE EXPOSED AND SEALED.
- 4 DEMO EXISTING PLUMBING FIXTURES AND ACCESSORIES. CAP PLUMBING AND REPAIR FLOORING AS REQUIRED.
- 5 REPAIR FLOORING AS REQUIRED AFTER DEMOLITION OF WALL.
- 6 REMOVE EXISTING CAN LIGHT FIXTURES IN FUTURE OPEN OFFICE AREA. SALVAGE & PROTECT FOR REINSTALLATION.
- 7 CAP EXISTING PLUMBING IN WALL, RE: MEP. SEE GENERAL DEMO NOTE 10.
- 8 CAP EXISTING PLUMBING IN FLOOR OR ABOVE CEILING, RE: MEP. SEE GENERAL DEMO NOTE 10.
- 9 DEMO EXISTING FRP ON WALLS. PATCH AND REPAIR WALLS AS NECESSARY TO RECEIVE NEW FINISH.
- 10 REMOVE, SALVAGE AND PROTECT EXISTING EXIT LIGHT OVER DOOR. COORDINATE STORAGE LOCATION WITH PROPERTY MANAGER. PATCH AND REPAIR WALL AS NECESSARY TO RECEIVE NEW FINISH.
- 11 PATCH AND REPAIR WALL AS NECESSARY TO RECEIVE NEW FINISH.
- 12 REMOVE WALL AS NECESSARY TO ACCOMMODATE NEW DOOR.

GENERAL DEMOLITION NOTES:

- 1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
- 2. CONTRACTOR TO VISIT PROJECT SITE AND BUILDING PRIOR TO BID.
- 3. CONTRACTOR TO PROTECT EXISTING FINISHES ADJACENT TO DEMOLITION WORK.
- 4. CONTRACTOR TO PATCH AND REPAIR ALL WORK, ESPECIALLY WORK ADJACENT TO EXISTING AREAS, AS REQUIRED.
- 5. CONTRACTOR TO REPAIR ANY AREAS DAMAGED DURING DEMOLITION.
- 6. CONTRACTOR TO COORDINATE DEMOLITION OPENINGS WITH NEW FLOOR PLANS.
- 7. PROTECT ALL ITEMS TO REMAIN (WALLS, PLUMBING FIXTURES, PIPING, HVAC UNITS, COLUMNS, ETC).
- 8. BUILDING TO REMAIN SECURE DURING DEMOLITION AND CONSTRUCTION.
- 9. REMOVE EXISTING GYP BOARD AS NECESSARY TO PROVIDE NEW BLOCKING IN EXISTING WALLS FOR NEW CASEWORK AND EQUIPMENT. REPAIR ANY PUNCTURES OR TEARS TO THE VAPOR BARRIER AT THE EXTERIOR WALLS.
- 10. REMOVE AND CAP ALL WATER, WASTE, GAS, ELECTRICAL CONDUIT, AND ANY OTHER LINES NO LONGER TO BE USED TO 1" BELOW TOP OF CONCRETE SLAB. TERMINATE ANY ROOF PENETRATION LINES 6" BELOW ROOF DECK. DO NOT REMOVE ANY EXISTING OR CREATE ANY NEW ROOF PENETRATIONS AS PART OF THE DEMOLITION WORK.



PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

rev date description

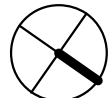
DEMOLITION PLAN

sheet number

AD100

1 DEMO PLAN

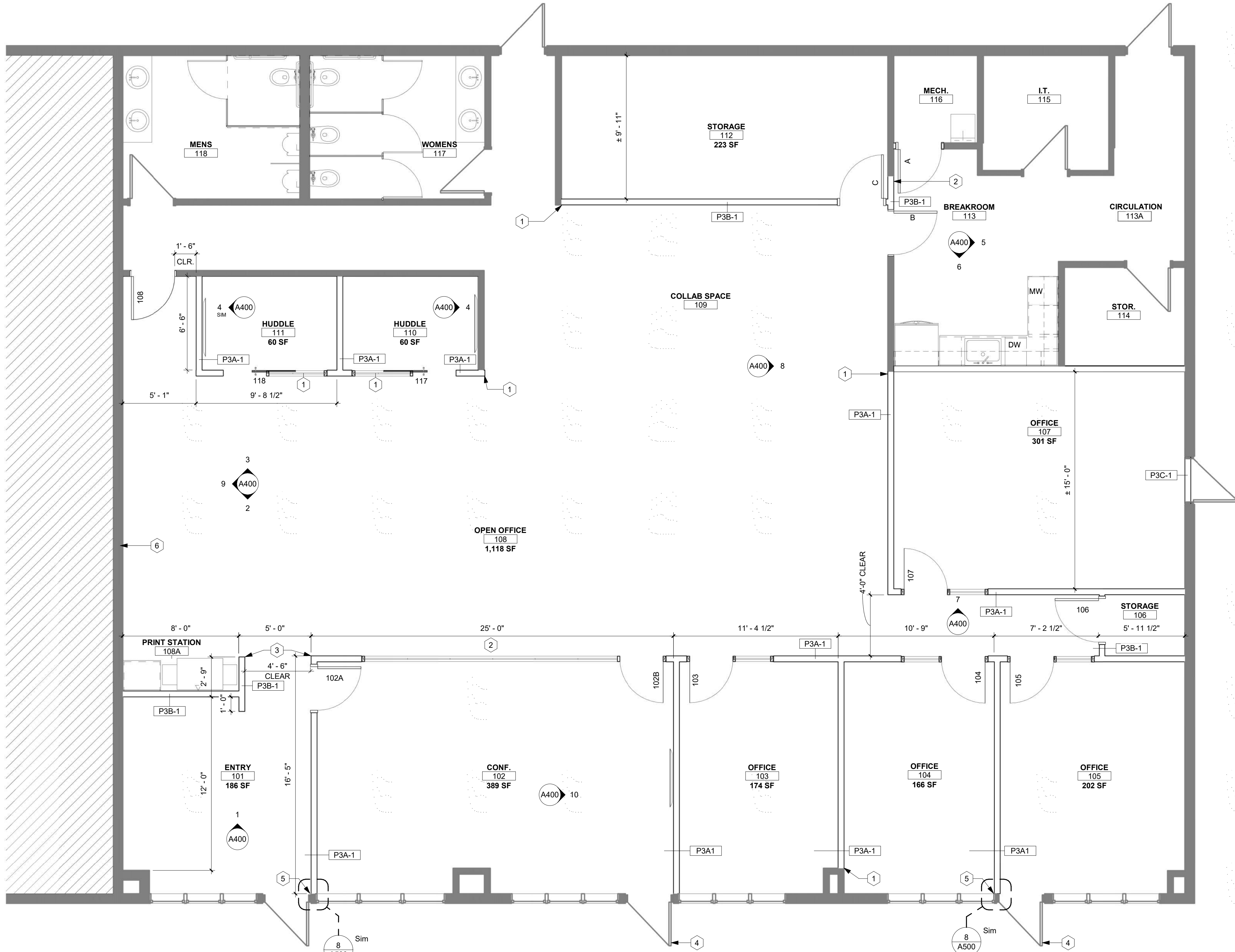
1/4" = 1'-0"



NOTES

1/4" = 1'-0"





**FLOOR PLAN KEY NOTES:**

- 1 ALIGN FACE OF NEW GYP WALL WITH FACE OF EXISTING GYP WALL.
- 2 ALIGN NEW GYP WALL WITH EXISTING WALL. WIDTH OF NEW WALL SHALL MATCH WIDTH OF EXISTING WALL.
- 3 ALIGN FACES OF NEW GYP WALLS.
- 4 LOCK DOOR & REMOVE EXISTING EXTERIOR HARDWARE. TURN OVER HARDWARE TO BUILDING OWNER.
- 5 CENTER NEW WALL ON EXISTING MULLION. TRIM EXPOSED WALL EDGE WITH BRAKE METAL WRAP TO MATCH EXIST STOREFRONT.
- 6 THE EXISTING DEMISING WALL SHALL EXTEND TO THE DECK; CONTRACTOR TO VERIFY.

**GENERAL NOTES - FLOOR PLANS:**

1. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
2. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR. ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
3. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
4. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
5. RE: FINISH LEGEND, FINISH SCHEDULE AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
6. ALL GLAZING IN CODE SPECIFIED "HAZARDOUS LOCATIONS" (i.e. DOORS, SIDE LITES, ETC.) SHALL COMPLY WITH THE SAFETY GLAZING REQUIREMENTS AS OUTLINED IN SECTIONS 2406 AND 2406.3 OF THE IBC.



**PERFECT PROMOTIONS**

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

**HIVE DESIGN COLLABORATIVE, INC.**  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

rev date description

**FLOOR PLAN**

sheet number

**NOTES**

1/4" = 1'-0"

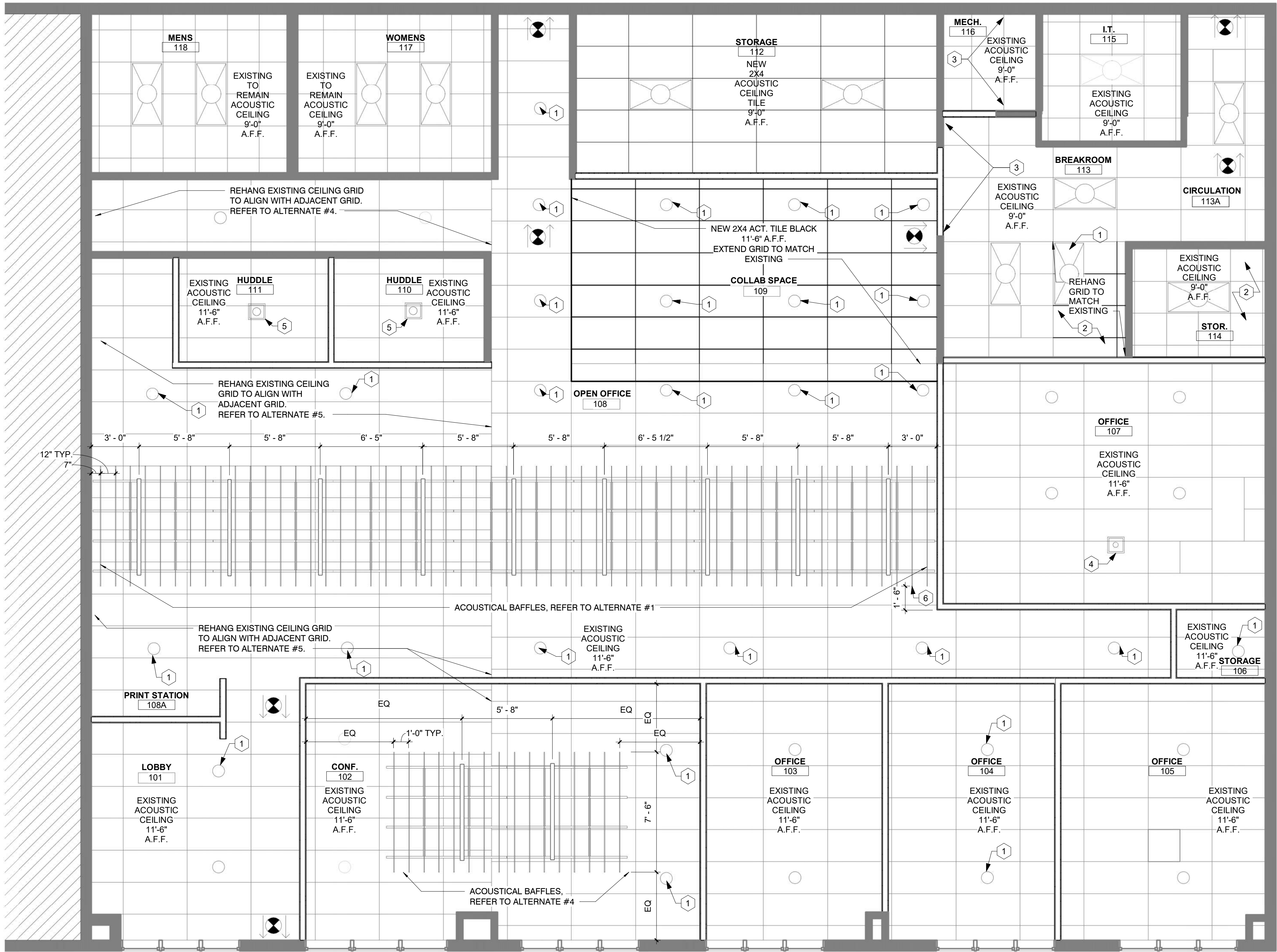
**A100**

**1 FLOOR PLAN**

1/4" = 1'-0"







REFLECTED CEILING PLAN SYMBOLS:

- 9'-0" CEILING HEIGHT
- EXISTING SUSP. CEILING SYSTEM
- NEW SUSP. CEILING SYSTEM
- EXISTING 2X4 LIGHT FIXTURE
- NEW 2X4 LIGHT FIXTURE, RE: MEP
- EXISTING RETURN/ SUPPLY VENT, REFER TO MEP FOR NEW RETURN AND SUPPLY AIR LOCATIONS
- EXISTING RECESSED CAN LIGHTING
- RELOCATED EXISTING RECESSED CAN LIGHTING
- PENDANT LIGHT FIXTURE, RE: MEP
- LINEAR PENDANT LIGHT FIXTURE, RE: MEP
- ACOUSTIC BAFFLE, RE: FINISH LEGEND
- FIRE EXIT SIGN

CEILING PLAN KEY NOTES:

- RELOCATE EXISTING LIGHT FIXTURE, RE: MEP.
- REPLACE SOILED OR STAINED TILES, MATCH EXISTING, REFER TO GENERAL NOTE 15.
- REPAIR GRID AND INFILL TILES, MATCH EXISTING, REFER TO GENERAL NOTE 14.
- INSTALL PENDANT LIGHT CENTERED ON TABLE BELOW, REFER TO OWNER FOR FURNITURE PLAN.
- INSTALL PENDANT LIGHT CENTERED IN ROOM.
- CENTER ACOUSTICAL BAFFLES OVER WORKSTATIONS, VERIFY WORKSTATION SIZE & LAYOUT WITH ARCHITECT PRIOR TO INSTALLATION, REFER TO ALTERNATE #3.

GENERAL NOTES- REFLECTED CEILING PLANS:

- DIMENSIONS SHOWN ON THE REFLECTED CEILING PLANS ARE TO THE FACE OF GYP. BOARD (FOG), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
- ALL CEILING HEIGHTS AS SHOWN ON PLANS AND DETAILS ARE FROM SLAB OR TILE FLOOR (FINISHED FLOOR) TO FINISH CEILING.
- AT ALL GYP. BD. SOFFITS: EXTEND GYP. BD. UP 6 INCHES ABOVE ADJACENT CEILING.
- RE: DETAILS FOR ADDITIONAL CONDITIONS AND CEILING HEIGHT INFORMATION.
- RE: FINISH LEGEND AND FINISH SCHEDULE FOR ROOM CEILING FINISHES.
- CEILING TILES/GRID TO BE CENTERED IN THE ROOM, UNLESS NOTED OTHERWISE.
- RECESSED LIGHTING, SPEAKERS, SMOKE DETECTORS, ETC. AND PENDANT LIGHT FIXTURES - SHALL BE CENTERED IN CEILING TILE OR GYP. BD. CEILING, UNLESS NOTED OTHERWISE.
- RE: INTERIOR ELEVATIONS FOR LOCATION OF WALL MOUNTED LIGHT FIXTURES.
- RE: ELECTRICAL SHEETS AND SPECIFICATIONS FOR DETAILED INFORMATION ON LIGHT FIXTURE SCHEDULE.
- RE: MECHANICAL SHEETS AND SPECIFICATIONS FOR DETAILED INFORMATION ON DIFFUSERS.
- COORDINATE ALL PENDANT MOUNTED LIGHT FIXTURES IN EQUIPMENT AREAS WITH EXPOSED STRUCTURE.
- COORDINATE ALL CEILING MOUNTED EQUIPMENT WITH CASEWORK BELOW.
- IF THERE IS A CONFLICT BETWEEN ANY ABOVE-CEILING MECHANICAL / ELECTRICAL / PLUMBING WORK & THE SCHEDULED OR SHOWN CEILING HEIGHT, CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- REPAIR GRID AND INFILL TILES AS NECESSARY; MATCH EXISTING ADJACENT CEILING TILE AND GRID FINISH & COLOR.
- REPLACE ALL DAMAGED AND/OR SOILED ACOUSTICAL CEILING TILES; MATCH EXISTING CEILING TILE PATTERN AND COLOR.

NOTES

1/8" = 1'-0"



PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

rev date description

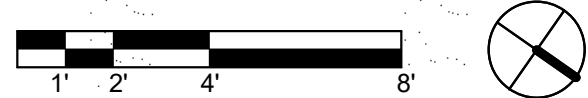
REFLECTED  
CEILING PLAN

sheet number

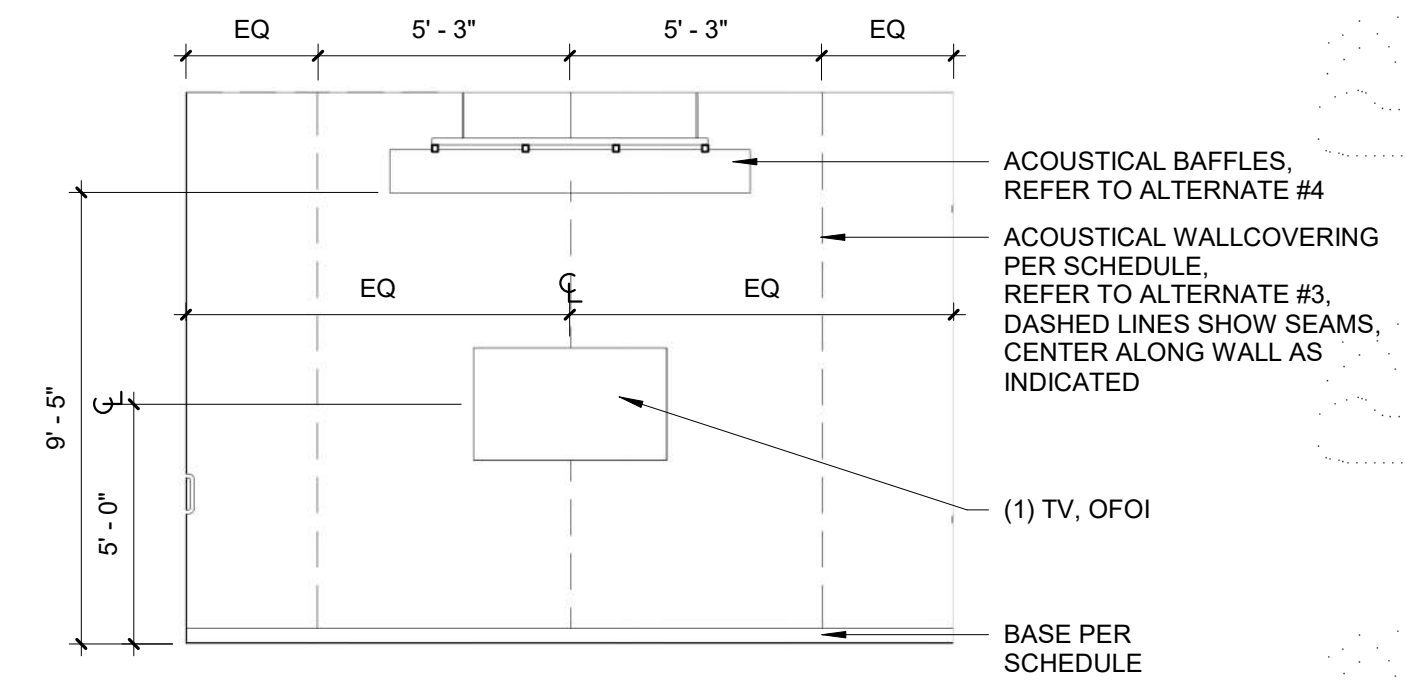
A101

1 FIRST FLOOR RCP

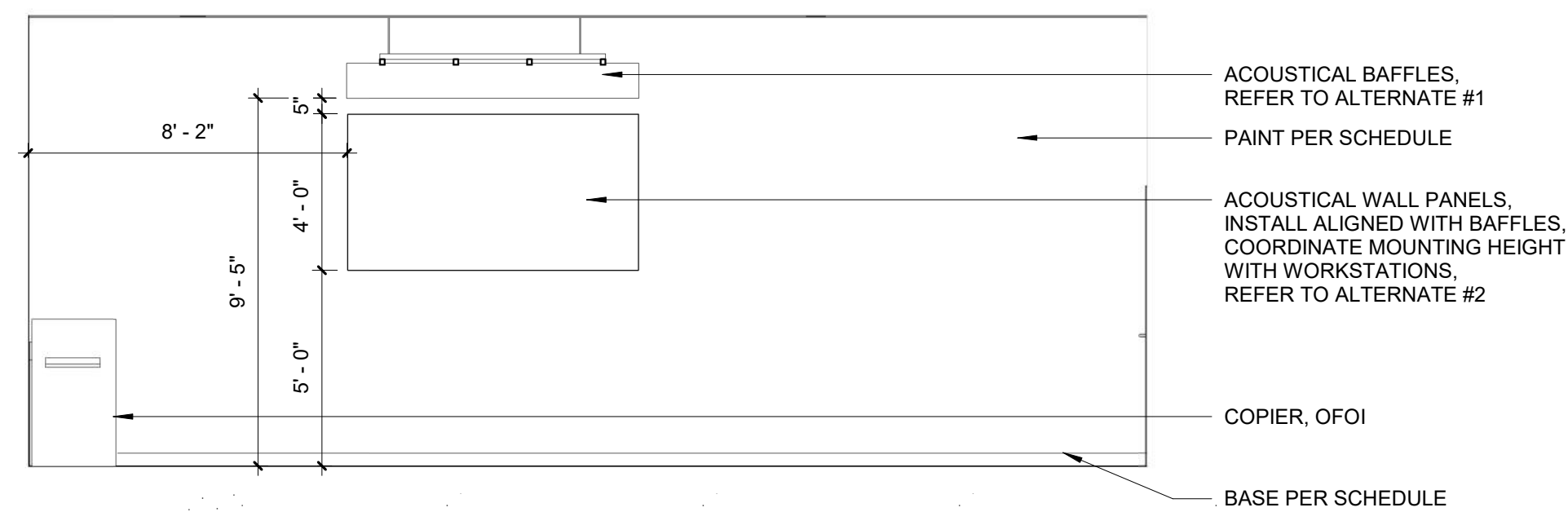
1/4" = 1'-0"



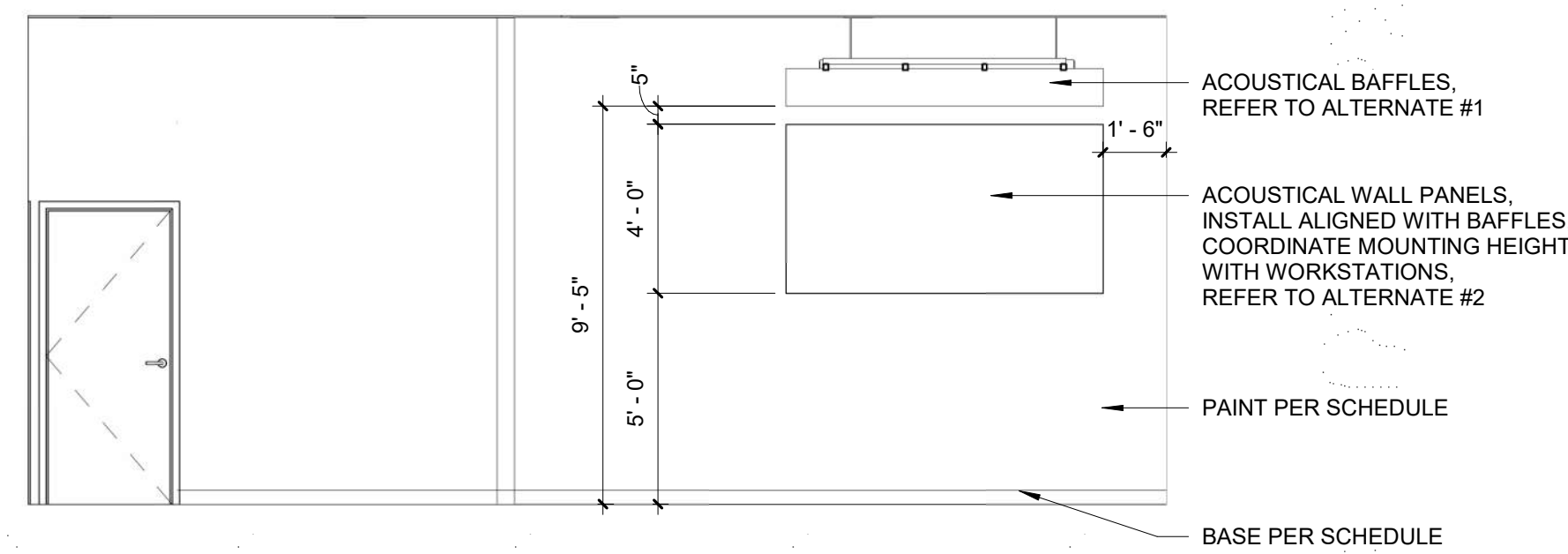




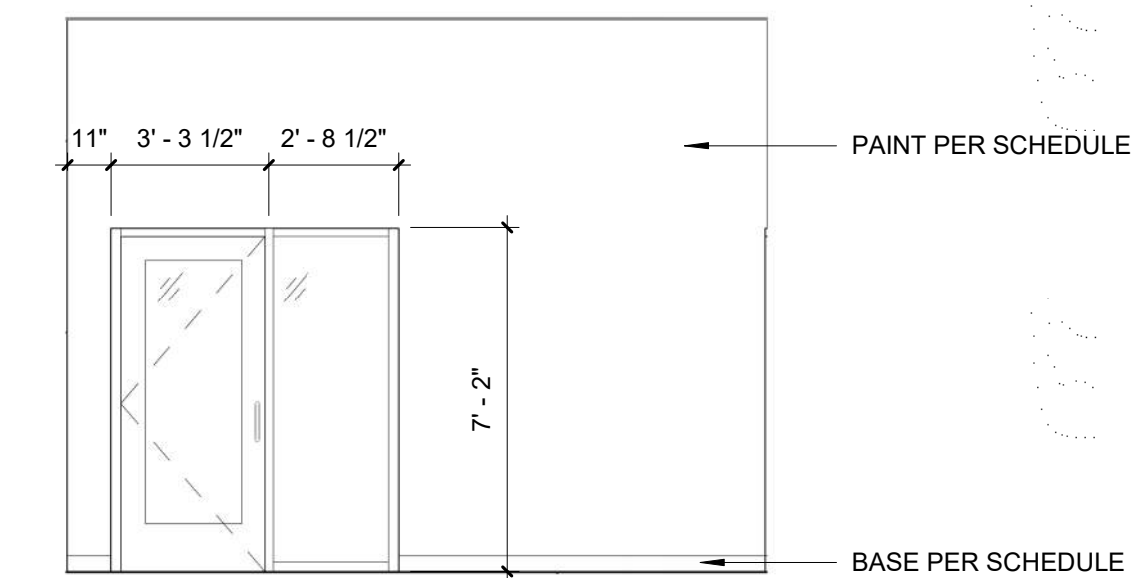
10	CONFERENCE ELEVATION
----	----------------------

$$1/4" = 1'-0"$$


## 9 OPEN OFFICE ELEVATION

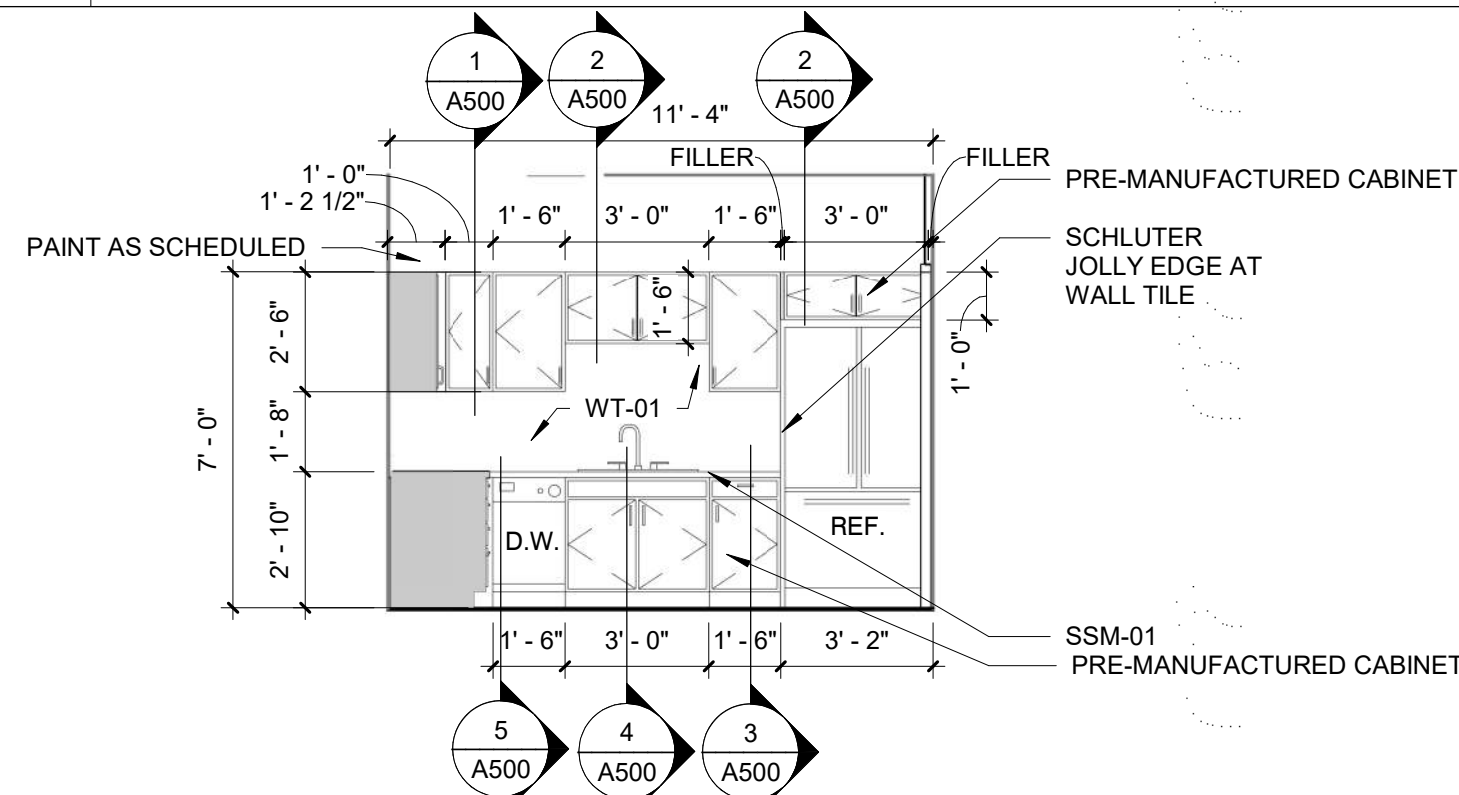
$$1/4" = 1'-0"$$


## 8 OPEN OFFICE ELEVATION

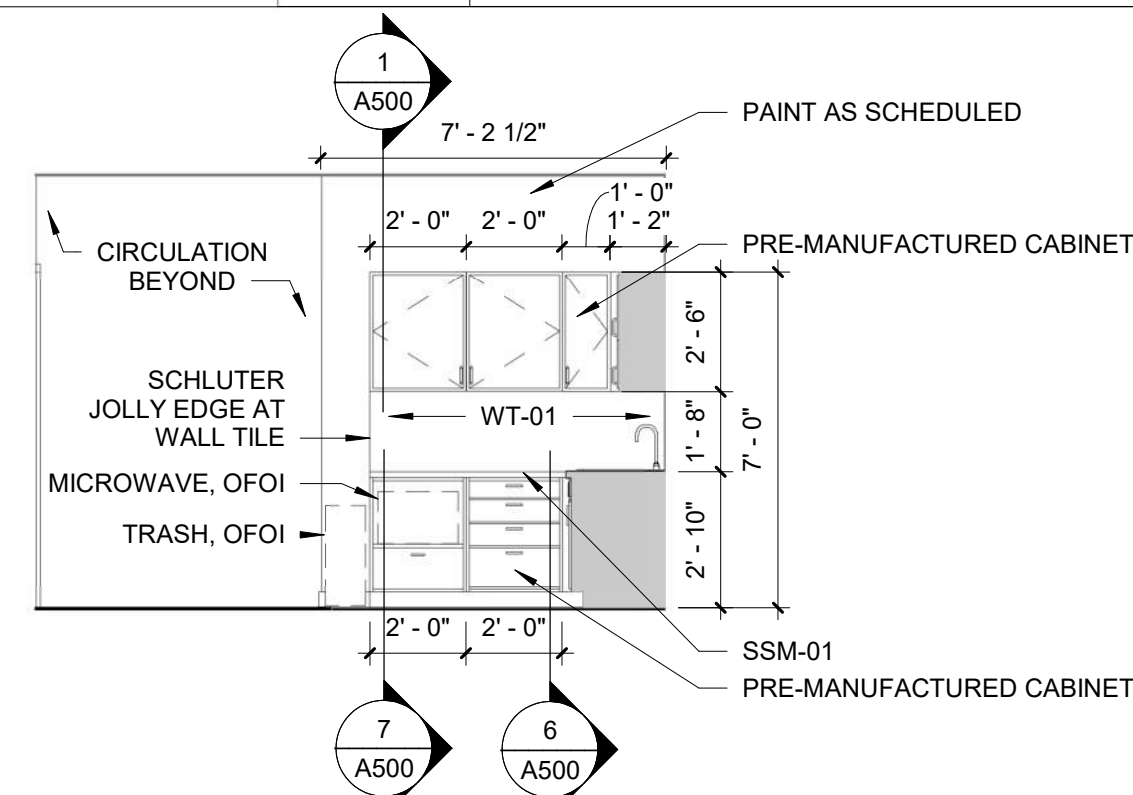
$$1/4'' = 1'-0''$$


ALL GLASS STOREFRONT  
SYSTEMS TO HAVE 1/4"  
TEMPERED GLASS

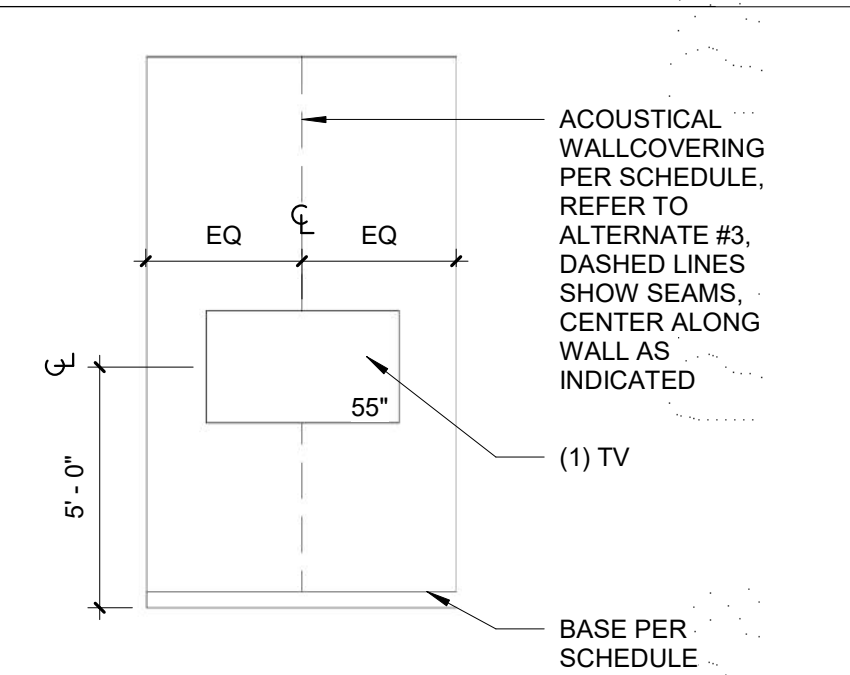
## 7 CEO OFFICE ELEVATION

$$1/4'' = 1'-0''$$


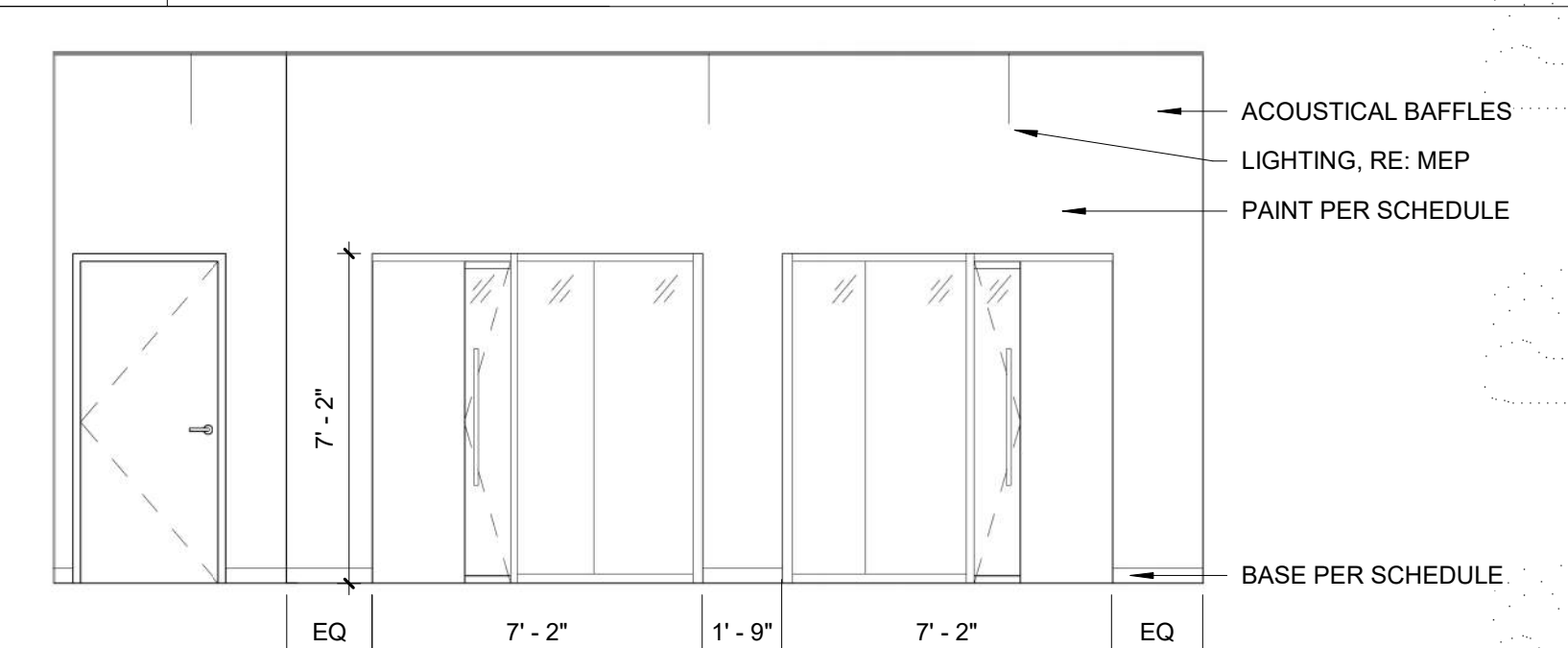
6	BREAK ROOM ELEVATION
---	----------------------

$$1/4" = 1'-0"$$


5	BREAK ROOM ELEVATION
---	----------------------

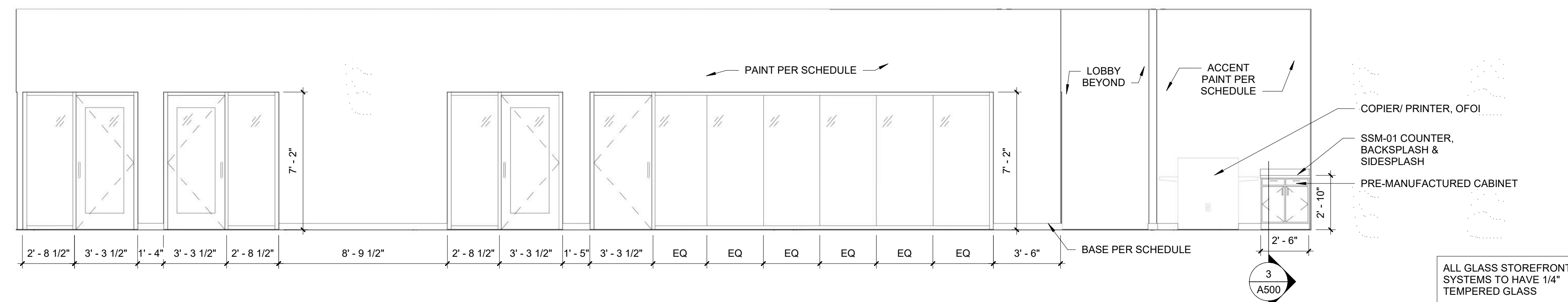
$$1/4'' = 1'-0''$$


4	HUDDLE ELEVATION
---	------------------

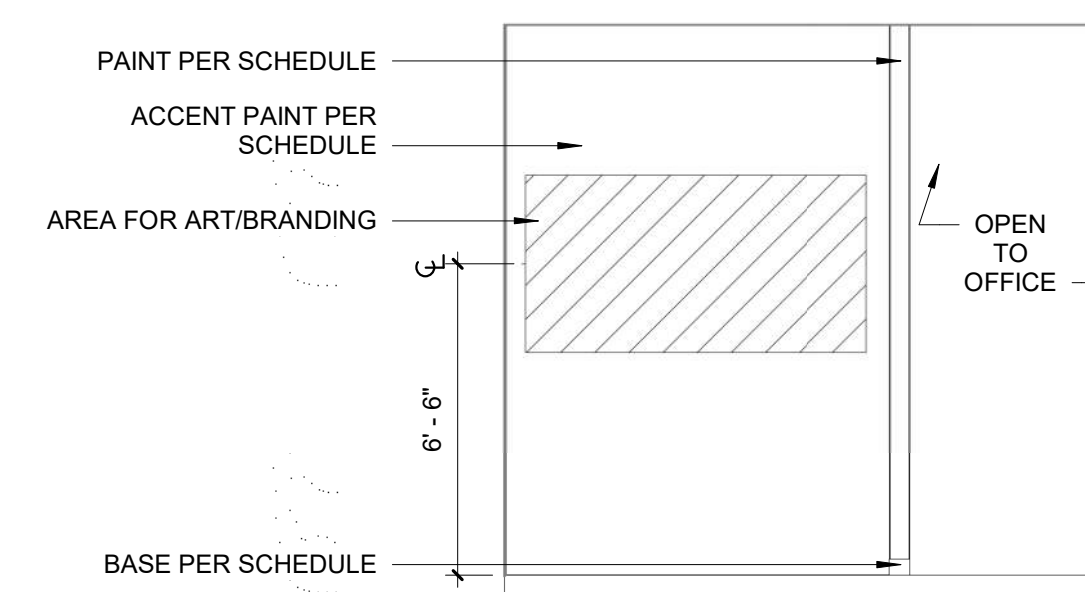
$$1/4" = 1'-0"$$


ALL GLASS STOREFRONT  
SYSTEMS TO HAVE 1/4" TEMPERED GLASS

3	HUDDLES ELEVATION
---	-------------------

$$1/4'' = 1'-0''$$


2	OPEN OFFICE ELEVATION
---	-----------------------

$$1/4" = 1'-0"$$


1	RECEPTION ELEVATION
---	---------------------

$$1/4" = 1'-0"$$


## PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

**HIVE DESIGN COLLABORATIVE, INC.**  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

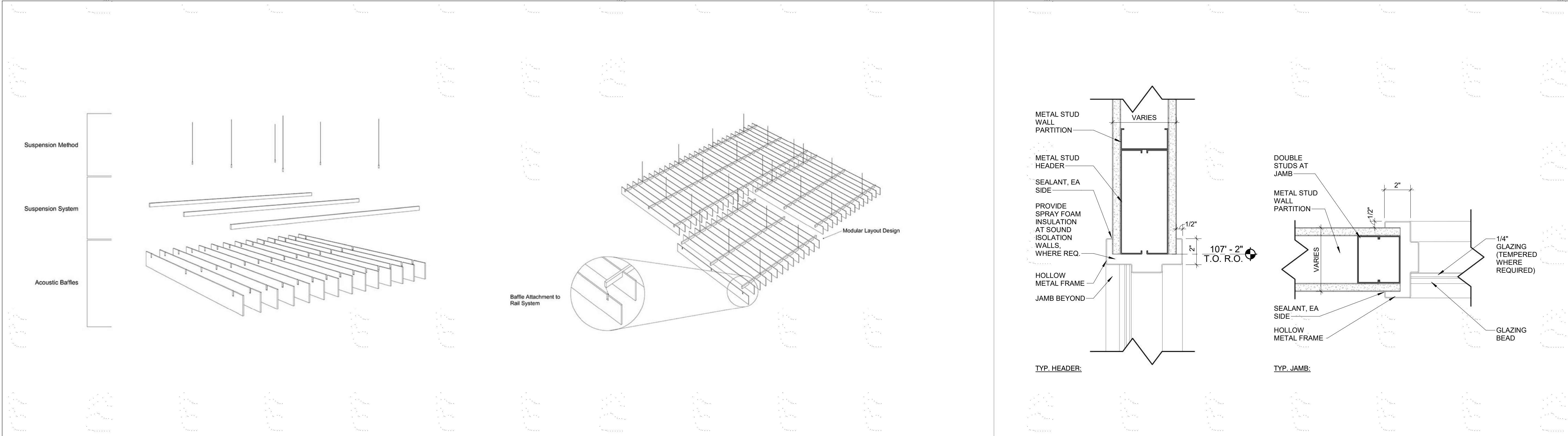
issued for		PERMIT
rev	date	description

## INTERIOR ELEVATIONS

sheet number

# A400





11	DETAIL -ACOUSTICAL BAFFLES (ALTERNATE 1 & 4)	10	DETAIL - HOLLOW METAL GLAZING
	3" = 1'-0"		3" = 1'-0"
9	DETAIL - INTERIOR STOREFRONT	8	WALL AT MULLION DETAIL
	3" = 1'-0"		3" = 1'-0"
5	COUNTER W/ DW	3	DOOR & DRAWER BASE
	1" = 1'-0"		1" = 1'-0"
4	SINK BASE	2	SHORT UPPER
	1" = 1'-0"		1" = 1'-0"
6	4 DRAWER BASE	1	UPPER
	1" = 1'-0"		1" = 1'-0"



PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number 2022-018

date 05.25.2022

issued for PERMIT

rev date description

CASEWORK  
SECTIONS &  
INTERIOR  
DETAILS

sheet number

A500



ROOM FINISH SCHEDULE											
RM. NO.	ROOM NAME	FLOORS		WALL FINISH			CEILING FINISH	CASEWORK			COMMENTS
		FLOOR	WALL BASE	NORTH WALL	EAST WALL	SOUTH WALL		COUNTER TOP	BASE CABINET	UPPER CABINET	
101	ENTRY	SC-01	RWB-01	PNT-01	PNT-01	PNT-02	PNT-01	-			
102	CONF.	CPT-01	RWB-01	PNT-03	AWC-01	PNT-01	AWC-01	ACB-01			SEE ALTERNATES 3 & 4
103	OFFICE	CPT-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
104	OFFICE	CPT-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
105	OFFICE	CPT-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
106	STORAGE	SC-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
107	OFFICE	CPT-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
108	OPEN OFFICE	SC-01	RWB-01	PNT-01	PNT-01/ AWP-01	PNT-01	PNT-01/ AWP-01	ACB-01			SEE ALTERNATES 1, 2, & 5
108A	PRINT STATION	SC-01	RWB-01	PNT-04	PNT-01	PNT-01	PNT-01				
109	COLLAB SPACE	SC-01	RWB-01	-	PNT-01	PNT-01	PNT-01	ACT-01			
110	HUDDLE	CPT-01	RWB-01	PNT-01	PNT-01	PNT-01	AWC-02				SEE ALTERNATE 3
111	HUDDLE	CPT-01	RWB-01	PNT-01	AWC-02	PNT-01	PNT-01				SEE ALTERNATE 3
112	STORAGE	SC-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
113	BREAKROOM	SC-01	RWB-01	PNT-01/ WT-01	PNT-01	PNT-01	PNT-01/ WT-01	ACT-03	SSM-01	HPL-01	
113A	CIRCULATION	SC-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
114	STOR.	-	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
115	I.T.	-	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
116	MECH.	SC-01	RWB-01	PNT-01	PNT-01	PNT-01	PNT-01	-			
117	WOMENS	-	-	-	-	-	-	-			
118	MENS	-	-	-	-	-	-	-			

ALTERNATES:

1. ALTERNATE #1: PROVIDE ACOUSTICAL CEILING BAFFLES (ACB-01) SUSPENDED FROM CEILING IN THE OPEN OFFICE. REFER TO RCP FOR QUANTITY AND LAYOUT. REFER TO FINISH LEGEND FOR PRODUCT INFORMATION.
2. ALTERNATE #2: PROVIDE ACOUSTICAL WALL PANELS (AWP-01) ON WALL. REFER TO ELEVATIONS FOR QUANTITY AND LAYOUT. REFER TO FINISH LEGEND FOR PRODUCT INFORMATION.
3. ALTERNATE #3: PROVIDE ACOUSTICAL WALL COVERINGS (AWC-01 & AWC-02) ON WALL. REFER TO FINISH PLAN AND FINISH SCHEDULE FOR LOCATION. REFER TO FINISH LEGEND FOR PRODUCT INFORMATION.
4. ALTERNATE #4: PROVIDE ACOUSTICAL CEILING BAFFLES (ACB-01) SUSPENDED FROM CEILING IN THE CONFERENCE ROOM. REFER TO RCP FOR QUANTITY AND LAYOUT. REFER TO FINISH LEGEND FOR PRODUCT INFORMATION.
4. ALTERNATE #5: REHANG EXISTING ACOUSTICAL CEILING GRID TO EXTENTS AS SHOWN ON THE RCP. ALIGN WITH EXISTING GRID. REUSE EXISTING CEILING GRID AND EXISTING CEILING TILE.

DOOR SCHEDULE											
DOOR #	ROOM: NAME	WIDTH	HEIGHT	DOOR MATERIAL	DOOR TYPE	FRAME MATERIAL	FIRE RATING	HARDWARE	HEAD	JAMB	REMARKS
102A	CONF.	3'-0"	7'-0"	WOOD	B	HM	-	1	3/A600	2/A600	
102B	CONF.	3'-0"	7'-0"	GLASS	A	ALUM.	-	1	10/A500	10/A500	
103	OFFICE	3'-0"	7'-0"	GLASS	B	HM	-	1	10/A500	10/A500	
104	OFFICE	3'-0"	7'-0"	GLASS	B	HM	-	1	10/A500	10/A500	
105	OFFICE	3'-0"	7'-0"	GLASS	B	HM	-	1	10/A500	10/A500	
106	STORAGE	3'-0"	7'-0"	WOOD	A	HM	-	2	3/A600	2/A600	
107	OFFICE	3'-0"	7'-0"	GLASS	B	HM	-	1	10/A500	10/A500	
108	OPEN OFFICE	3'-0"	7'-0"	WOOD	A	HM	-	3	3/A600	2/A600	
117	HUDDLE	3'-0"	7'-0"	GLASS	C	ALUM.	-	1	10/A500	10/A500	
118	HUDDLE	3'-0"	7'-0"	GLASS	C	ALUM.	-	1	10/A500	10/A500	
A	MECH.	3'-0"	7'-0"	-	-	-	-	-	-	-	EXISTING
B	BREAKROOM	3'-0"	7'-0"	-	-	-	-	-	-	-	EXISTING
C	STORAGE	3'-0"	7'-0"	-	-	-	-	-	-	-	EXISTING

GENERAL NOTES:

1. HM REFERS TO HOLLOW METAL
2. AL REFERS TO ALUMINUM
3. WD REFERS TO WOOD
4. ALL INTERIOR ALUMINUM DOORS & FRAMES ARE TO BE FINISHED TO MATCH ADJACENT EXTERIOR ALUMINUM WINDOW FRAME. U.N.O. REFER TO FINISH LEGEND & GENERAL INTERIOR FINISH NOTES FOR FINISH OF INTERIOR DOORS AND FRAMES.
6. ALL GLAZING IN CODE SPECIFIED "HAZARDOUS LOCATIONS" (I.E. DOORS, SIDE LITES, ETC.) SHALL COMPLY WITH THE SAFETY GLAZING REQUIREMENTS AS OUTLINED IN SECTIONS 2406 AND 2406.3 OF THE IBC.
7. HARDWARE SET 1: PRIVACY DOOR HARDWARE.
8. HARDWARE SET 2: STORAGE DOOR HARWARE.
9. HARDWARE SET 2: PASSAGE DOOR HARWARE.

DOOR HEADER / JAMB SCHEDULE

OPENING	HEADER	JAMB STUDS
UP TO 4'-0"	2'-6" 18 GA	(2) 18 GA
4'-1" TO 8'-0"	2'-8" 16 GA	(3) 18 GA
8'-1" TO 12'-0"	2'-10" 16 GA	(4) 18 GA

NOTES:

1. FOR OPENINGS GREATER THAN 12'-0": STUDS ARE SUPPORTED VERTICALLY BY STRUCTURE AND HORIZONTALLY BY DIAGONAL BRACING. PROVIDE HEADER AND JAMB STUDS PER 8'-0" OPENING.
2. INCREASE JAMB STUD GAUGE IF HEIGHT REQUIRES IT.

GENERAL NOTES - WINDOW TYPES/ GLASS TYPES:

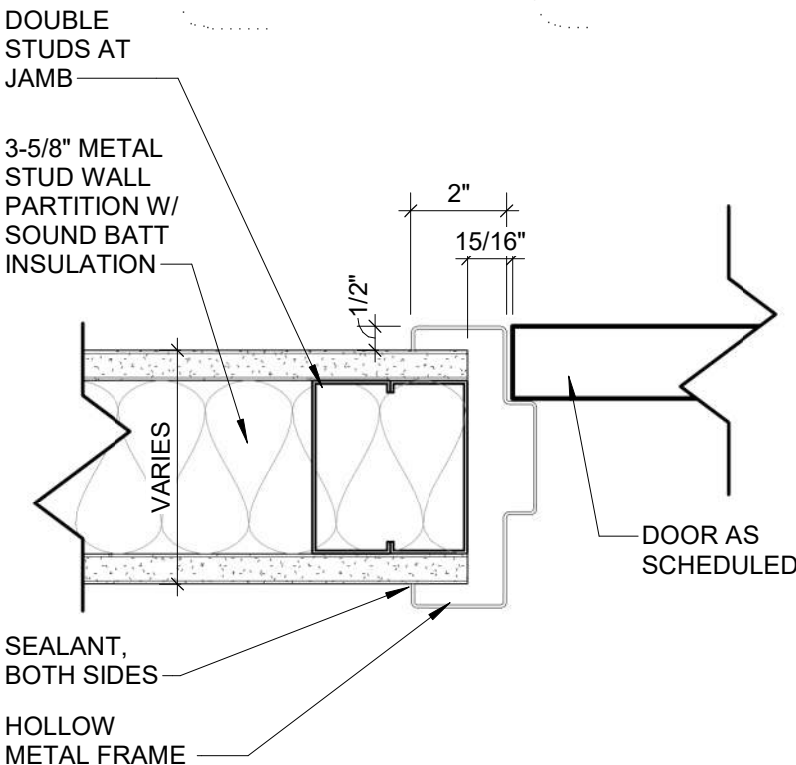
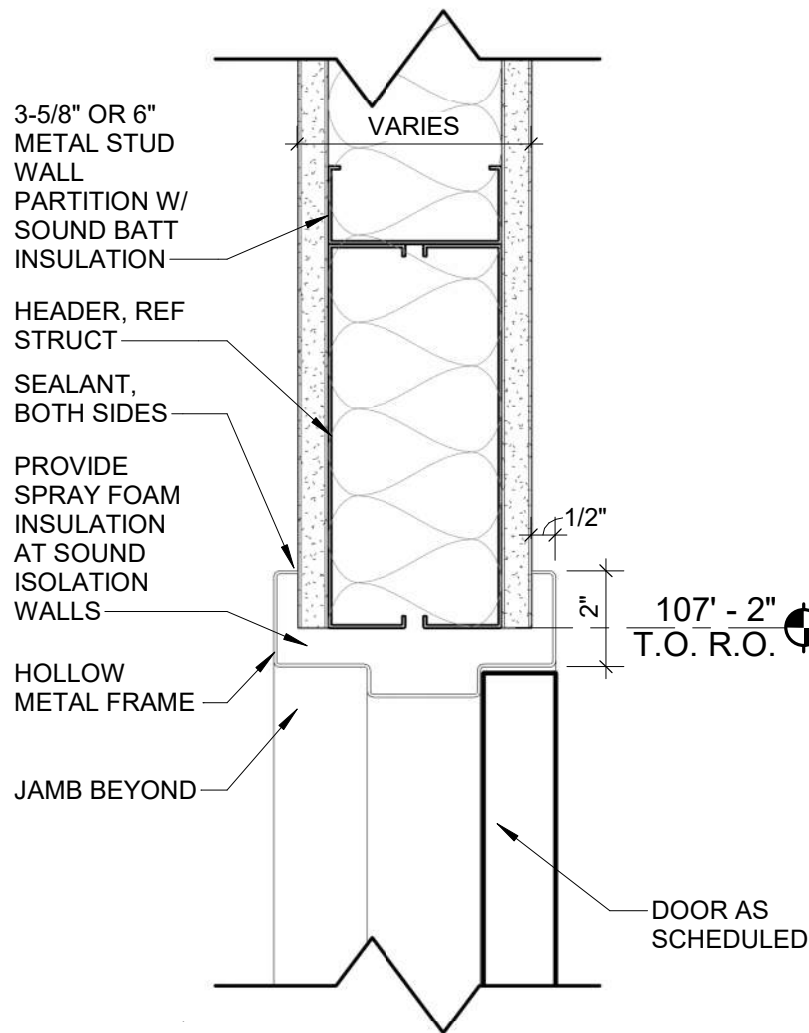
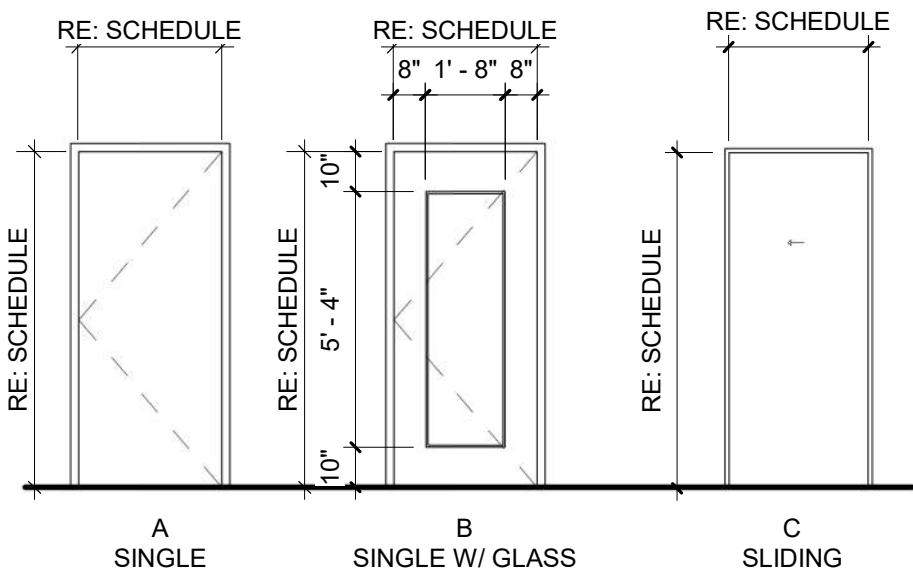
1. ALL DIMENSIONS ARE TO ROUGH OPENING AND TO TOP OR BOTTOM OF MULLION, UNLESS NOTED OR SHOWN OTHERWISE.
2. ALL OPENINGS ARE TO BE FIELD VERIFIED, AND NOTED AS SUCH ON SHOP DRAWINGS, PRIOR TO ARCHITECT'S REVIEW.
3. ALL GLAZING IN CODE SPECIFIED "HAZARDOUS LOCATIONS" (I.E. DOORS, SIDE LITES, ETC.) SHALL COMPLY WITH THE SAFETY GLAZING REQUIREMENTS AS OUTLINED IN SECTIONS 2406 AND 2406.3 OF THE IBC.

DOOR SCHEDULE

1 1/2" = 1'-0"

GLAZING NOTES

1/4" = 1'-0"



DOOR TYPES - INTERIOR

1/4" = 1'-0"

3

HM DOOR HEAD

3" = 1'-0"

2

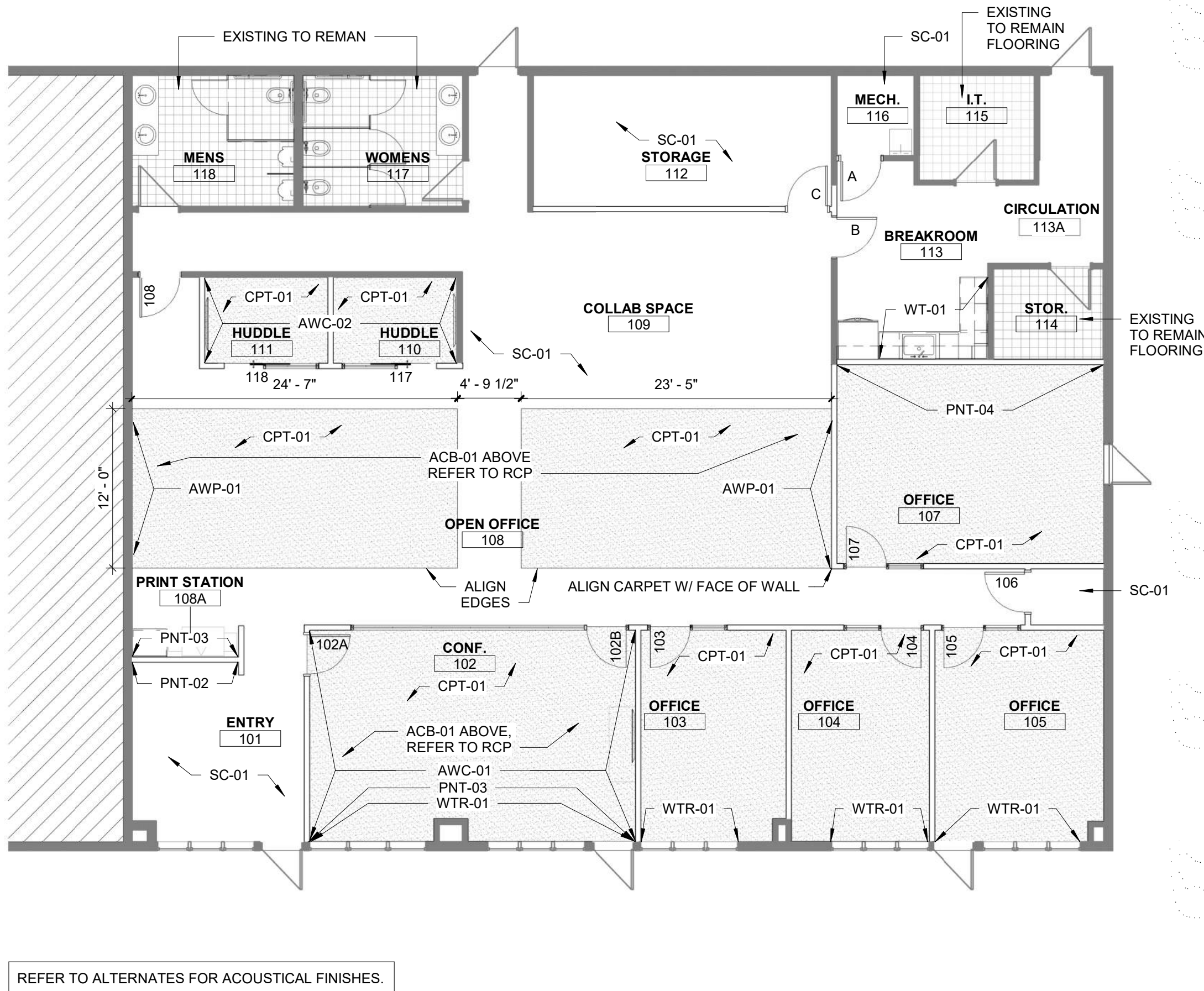
HM DOOR JAMB

3" = 1'-0"

HIVE - FINISH LEGEND				
CODE	MATERIAL	MANUFACTURER	STYLE, COLOR, SIZE	NOTES
FLOOR				
CPT-01	CARPET TILE	J&J	BOUCLE', KNOT, 12"X 48" PLANK	ASHLAR INSTALLATION
SC-01	SEALED CONCRETE	-	MATCH EXISTING CONCRETE	-
BASE				
RWB-01	RUBBER WALL BASE	TARKETT	COVE, 63 BURNT UMBER, 4"H	COILS ONLY
WALLS				
AWC-01	ACOUSTICAL WALL COVERING	DESIGN TEX	WANNABE, NAVY, 63"W	SEE ALTERNATE 3
AWC-02	ACOUSTICAL WALL COVERING	DESIGN TEX	WANNABE, GRAVEL, 63"W	SEE ALTERNATE 3
AWP-01	ACOUSTICAL WALL PANEL	CSI POSHFELT	PROFILE SURFACES 001, COLOR TO MATCH ACB-01, 4'-0"x 9'-0", LENGTH TO MATCH BAFFLES	SEE ALTERNATE 2; OR APPROVED EQUAL PRODUCT
PNT-01	PAINT	SHERWIN WILLIAMS	FROSTY WHITE 6196, EGSHELL	FIELD COLOR
PNT-02	PAINT	SHERWIN WILLIAMS	ROBUST ORANGE, 6628 EGSHELL	ACCENT COLOR
PNT-03	PAINT	SHERWIN WILLIAMS	NAVAL 6244, EGSHELL	ACCENT COLOR
PNT-04	PAINT	SHERWIN WILLIAMS	BYTE BLUE 6498, EGSHELL; BLUE GREY COLOR TO BE DETERMINED	ACCENT COLOR
PNT-05	PAINT	SHERWIN WILLIAMS	COLOR TO MATCH RWB-01 WALL BASE	DOOR FRAME COLOR
WT-01	WALL TILE	DALTILE	KEYSTONES, 1"X1", D014	GROUT: MAPEI, 27 SILVER
CEILING				
ACB-01	ACOUSTICAL CEILING BAFFLE	CSI POSHFELT	SINGLE BAFFLES 001, 108"x 12"x 3/4", COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF SOLID COLORS	SEE ALTERNATE 1 & 4; OR APPROVED EQUAL PRODUCT
ACT-01	ACOUSTICAL CEILING TILE	ARMSTRONG	24"X 48" BLACK TILE AND BLACK GRID	MATCH EXISTING CEILING TILE AND GRID
ACT-02	ACOUSTICAL CEILING TILE	ARMSTRONG	24"X 24" WHITE TILE AND WHITE GRID	MATCH EXISTING CEILING TILE AND GRID
ACT-03	ACOUSTICAL CEILING TILE	ARMSTRONG	24"X 48" WHITE TILE AND WHITE GRID	MATCH EXISTING CEILING TILE AND GRID
ETR	EXISTING TO REMAIN	-	-	-
CASEWORK				
-	PRE-MANUFACTURED CASEWORK	RTA CABINET STORE	RADNOR SLAB, DARK GREY	-
SSM-01	SOLID SURFACE MATERIAL	LX HAUSYS	HI MACS, ARTIC WHITE S006	-
MISCELLANEOUS				
FTR-01	FLOOR TRANSITION	TARKETT	EG-63-H, EDGE GUARD, 63 BURNT UMBER (COLOR TO MATCH RWB-01)	CARPET TO SEALED CONCRETE
WD-01	WOOD DOOR	VT INDUSTRIES	STAIN TO MATCH EXISTING WOOD DOORS	OR EQUAL PRODUCT BY OTHERS
WTR-01	WINDOW TREATMENT	DRAPER	SHEERWEAVE, 3% OPACITY, V22 CHARCOAL/GREY	FASCIA COLOR TO MATCH EXTERIOR WINDOW FRAME

GENERAL NOTES - INTERIOR FINISHES:

1. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ROOM ON THE FINISH SCHEDULE, REFER TO FINISH PLANS, ELEVATIONS, AND/OR REFLECTED CEILING PLAN FOR CLARIFICATION.
2. ALL FINISHES SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS LATEST WRITTEN SPECIFICATIONS AND INITIAL MAINTENANCE INSTRUCTIONS.
3. NEW DRYWALL SURFACES SHALL RECEIVE (1) COAT OF PRIMER AND (2) FINISH COATS.
4. INSTALLATION OF NEW FINISHES BY THE CONTRACTOR SHALL INDICATE ACCEPTANCE OF WALL AND FLOOR PREPARATION, AND FULL RESPONSIBILITY FOR COMPLETED WORK.
5. CONTRACTOR SHALL SUBMIT TO TENANT, FOR REVIEW AND APPROVAL, SAMPLES OR DRAW DOWNS OF FINISHES AND MATERIALS SPECIFIED IN FINISH SCHEDULE.
6. EXISTING SUB FLOOR SHALL BE FLASH-PATCHED AT ALL AREAS WHERE FLOOR IS NOT LEVEL OR TRUE.
7. GENERAL CONTRACTOR SHALL VERIFY WITH TENANT THE PLACEMENT OF ALL ATTIC STOCK OF NEW FINISH MATERIALS, I.E.: CARPET, WALL BASE, ETC. FOR TENANT STORAGE.
8. INSTALL METAL TRANSITION STRIP WHERE WALL TILE MEETS PAINTED GYP. BD. WALL IN ALL VERTICAL AND/ OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE.
9. HOLLOW METAL FRAMES SHALL RECEIVE PNT-05 PAINT WITH SEMI-GLOSS FINISH.
10. REFER TO PLAN NORTH ARROW ON FINISH PLAN FOR WALL MATERIAL LOCATIONS IN FINISH SCHEDULE.
11. WHERE '-' IS SHOWN IN THE FINISH SCHEDULE, THE EXISTING FINISHES ARE TO REMAIN.
12. WHERE 'ETR' EXISTING TO REMAIN IS SHOWN IN THE CEILING. REPLACE ANY DAMAGED TILES AS NEEDED. NEW TILES TO MATCH EXISTING.
13. REFER TO ALTERNATES FOR ACOUSTICAL FINISHES FOR THE WALL AND CEILING.



REFER TO ALTERNATES FOR ACOUSTICAL FINISHES.

1

FINISH PLAN

1/8" = 1'-0"



PERFECT PROMOTIONS

1469 SW Market Street  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.

1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



05.25.22

project number

2022-018

date

05.25.2022

issued for

PERMIT

rev

date

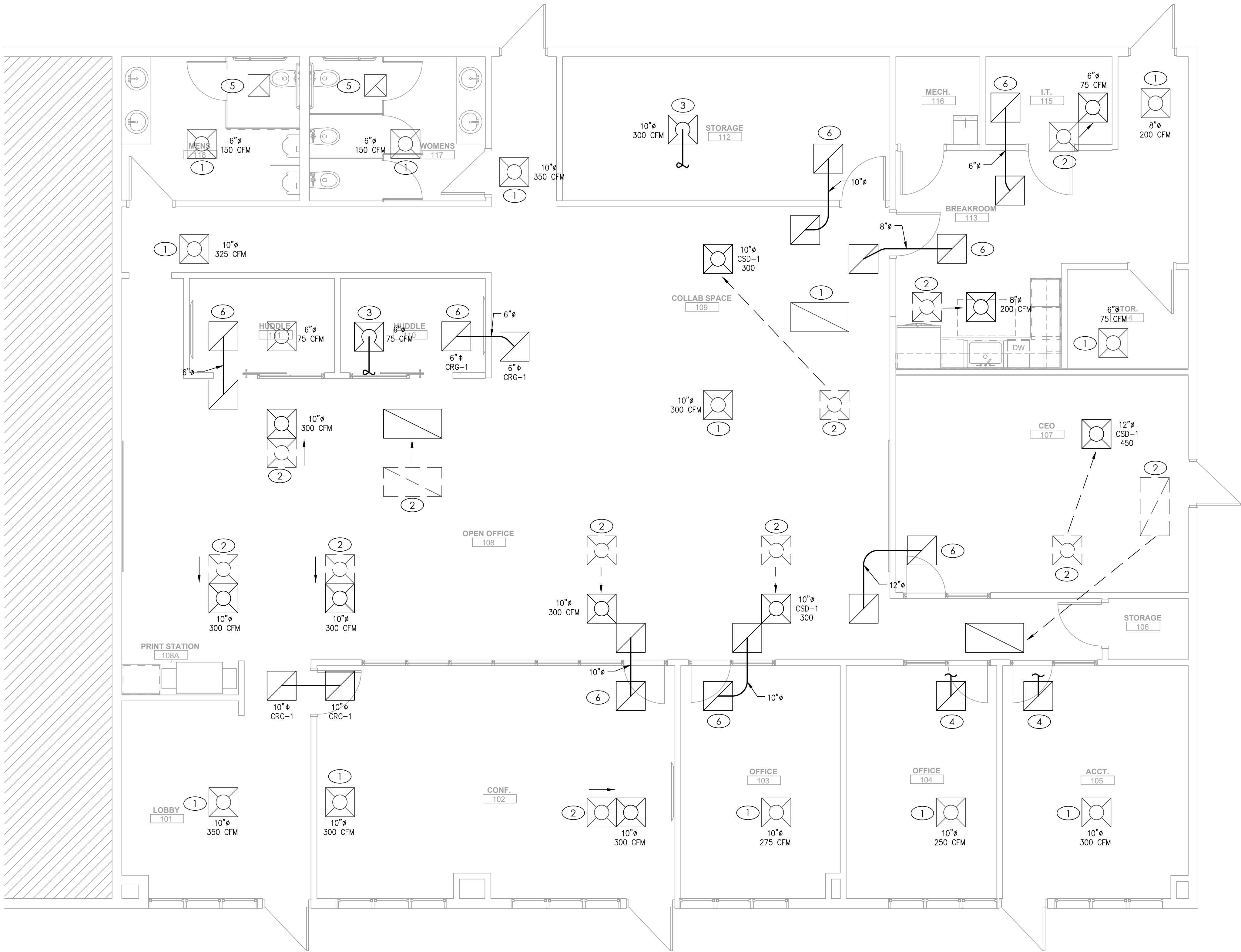
description

FINISH PLAN,  
LEGEND &  
SCHEDULES

sheet number

A600





MECHANICAL PLAN

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

1



MECHANICAL SPECIFICATIONS

- GENERAL PROVISIONS:
  - PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEMS OUTLINED.
  - OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY AUTHORITIES.
  - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
  - DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
  - CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
  - FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE MECHANICAL AND DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.

- INSULATION:
  - ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
  - DUCTWORK INSULATION:
    - DUCT COVERING: 3/4 LB/CF, FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER AND FACING. THICKNESS AS SCHEDULED, INSTALLATION IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. DUCT COVERING SHALL BE MINIMUM R-6.
    - SUPPLY AIR DUCT: 2"
    - RETURN AIR DUCT: 2"

- TESTING, BALANCING AND CLEANING:
  - DUCTWORK AND PIPING SHALL BE BALANCED. BALANCING SHALL INCLUDE THE BALANCING OF THE AIR DISTRIBUTION SYSTEMS TO PROVIDE DESIGN QUANTITIES INDICATED.

- DUCTWORK:
  - ALL DUCTWORK UNLESS OTHERWISE INDICATED SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G60 ZINC COATING IN ACCORDANCE WITH ASTM A 525, AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.
  - DUCTWORK METAL GAUGES, REINFORCING, ETC SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION FOR A 2" WATER GAUGE STATIC PRESSURE.
  - ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.

- FLEXIBLE DUCT:
  - ATCO #086 (R-6), OR EQUAL.
  - FACTORY APPLIED INSULATION AND VAPOR BARRIER, 1-1/2" THICK.
  - MAXIMUM LENGTH OF 6'-0".

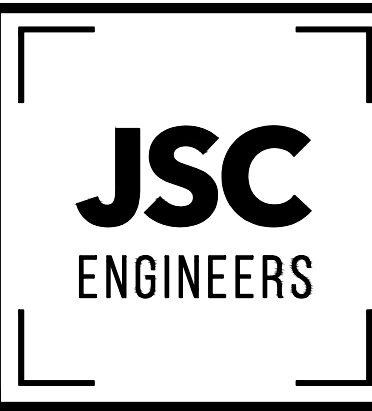
- REMODELING WORK:
  - THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
  - CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.

KEYED PLAN NOTES

- EXISTING DIFFUSER/RETURN TO REMAIN.
- RELOCATE EXISTING SUPPLY DIFFUSER/RETURN GRILLE. EXTEND DUCTWORK AS NECESSARY TO MAKE CONNECTION AT NEW LOCATION.
- NEW DIFFUSER EQUAL TO TITUS PAS. COORDINATE COLOR WITH ARCHITECT. CONNECTION SUPPLY DUCT TO NEAREST MAIN TRUNK.
- PROVIDE RETURN GRILLE EQUAL TO TITUS PAR. COORDINATE COLOR WITH ARCHITECT. MAKE 10" DUCT CONNECTION TO EXISTING RETURN AIR TRUNK IN AREA.
- EXISTING EXHAUST FAN TO REMAIN. FIELD VEIFY EXHAUST TERMINATES TO EXTERIOR.
- PROVIDE RETURN GRILLE ON EACH SIDE OF WALL, TITUS PAR OR EQUAL, WITH FLEX DUCT BETWEEN GRILLES.



MEP ENGINEER



MO COA NO. 2012006786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108  
phone: (816) 272-5285, email: jsmothers@jsscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081  
HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

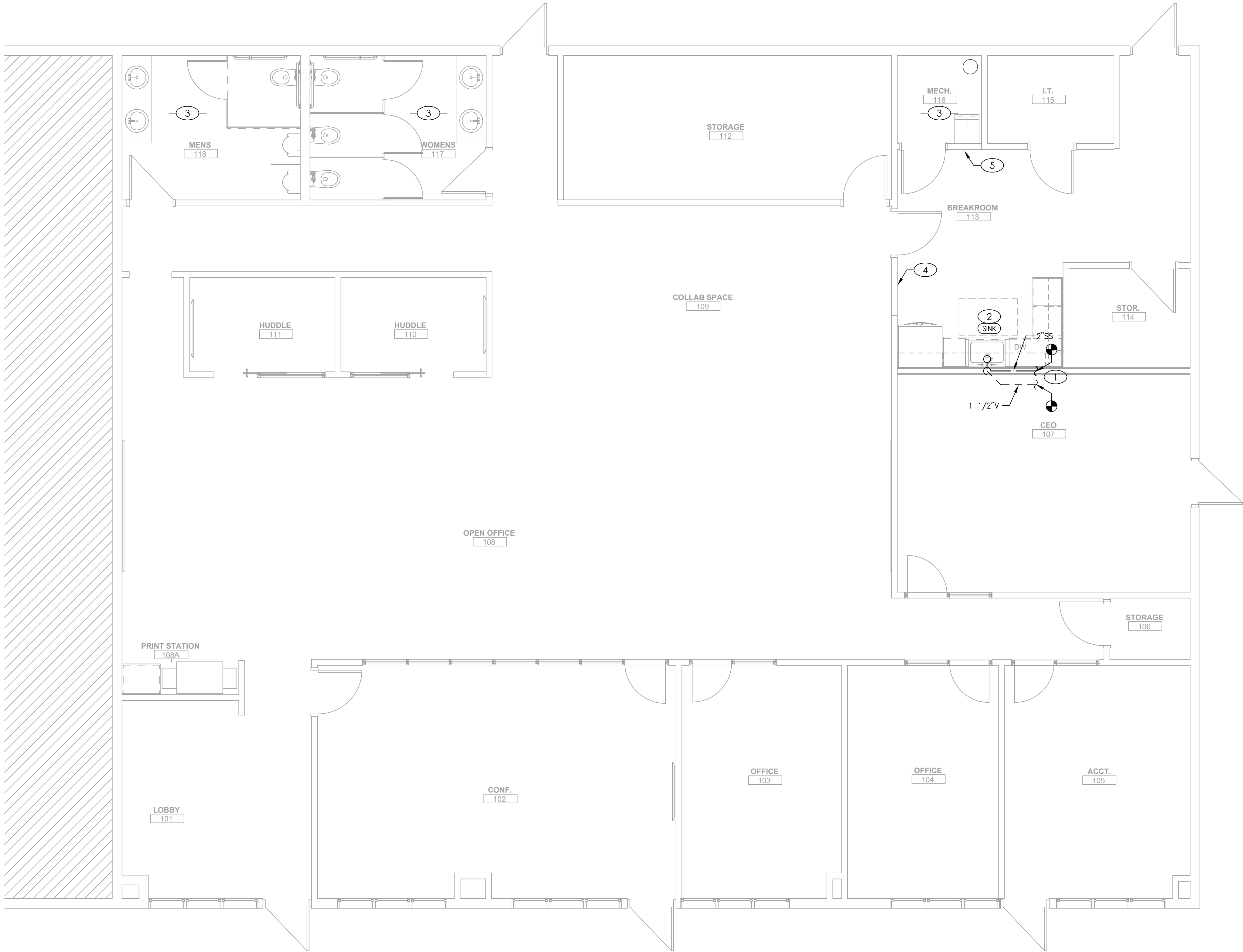
rev date description

MECHANICAL PLAN

sheet number

M101





PLUMBING PLAN - WASTE AND VENT

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

1



PLUMBING SPECIFICATIONS

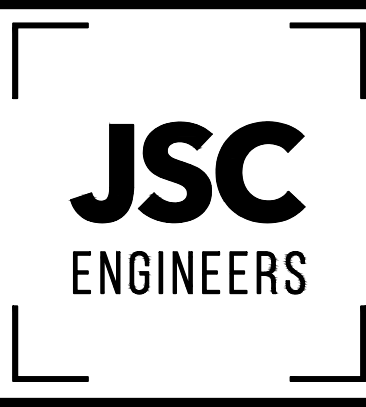
1. GENERAL PROVISIONS:
- PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING SYSTEMS OUTLINED.
  - OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY AUTHORITIES.
  - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
  - CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
  - INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID.
  - FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.
  - INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK. COORDINATE WITH WORK OF OTHER SECTIONS. COMPLY WITH APPLICABLE REGULATIONS AND CODE REQUIREMENTS. PROVIDE PROPER CLEARANCES FOR SERVING.
  - INCLUDE ALL BASIC MATERIALS AND CONSTRUCTION METHODS INCLUDING PIPES, PIPE FITTINGS, AND SPECIALTIES AND SUPPORTING DEVICES, VALVES, PIPE AND VALVE IDENTIFICATION, PUMPS, VIBRATION ISOLATION, ETC.
  - FURNISH ADEQUATE ACCESS PANELS AND DOORS TO ALLOW FOR FUTURE PIPING ALTERATIONS, REPLACEMENT, AND MAINTENANCE OF PIPING. PROPERLY IDENTIFY ALL ACCESS PANELS AND DOORS.
2. PLUMBING:
- PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.
  - ALL EXPOSED PIPE IN FINISHED AREAS SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE.
  - PROVIDE CLEANOUTS AT EACH CHANGE IN DIRECTION AND AT 100 FOOT INTERVALS IN STRAIGHT RUNS.
  - ALL SEWER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.
    - INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALL.
    - INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL.
3. PIPING
- DOMESTIC COLD, HOT, AND HOT WATER RECIRCULATING (ABOVEGROUND).
    - TYPE L HARD DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERED FITTINGS.
    -
  - SANITARY SEWER AND VENTS (UNDERGROUND, INTERIOR TO BUILDING).
    - WASTE, DRAIN AND VENT PIPE AND FITTINGS, THROUGHOUT THE BUILDING BELOW THE BASE SLAB TO THE LOCATIONS NOTED OUTSIDE OF THE BUILDING SHALL BE ASTM D2665 POLYVINYL CHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
    - SEWER LINES SHALL BE LOCATED IN GENERAL AS SHOWN ON THE DRAWINGS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN SUCH A MANNER AS TO MAINTAIN PROPER CLEARANCES AND SUFFICIENT SLOPE TO ENSURE DRAINAGE.
4. INSULATION:
- ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
  - PIPE INSULATION (ABOVE GRADE):
    - THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN\*SQ-FT\*F OR LESS.
    - FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRESSURE SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000.
    - INSULATION SCHEDULE:
      - DOMESTIC HOT WATER: 1"
4. TESTING, BALANCING AND CLEANING:
- ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION.
  - SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS.
  - DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.
5. REMODELING WORK:
- THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
  - CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.

KEYED PLAN NOTES

- MAKE CONNECTION TO EXISTING SANITARY SEWER & VENT PIPING FROM PREVIOUS RESTROOM REMOVED IN DEMOLITION SCOPE. LOCATE EXACT TIE-IN POINT ON SITE PRIOR TO CONSTRUCTION.
- PROVIDE DISHWASHER DRAIN TO CONNECTION AT GARBAGE DISPOSAL. ROUTE TO UNDERSIDE OF COUNTERTOP TO CREATE HIGH LOOP THEN BACK DOWN TO GARBAGE DISPOSAL CONNECTION.
- EXISTING PLUMBING EQUIPMENT & PIPING IN THIS ROOM IS TO REMAIN. CONFIRM THAT ALL EQUIPMENT & CONNECTIONS EXIST IN COMPLIANCE WITH LOCAL CODES & ORDINANCES PRIOR TO COMPLETION OF CONSTRUCTION.
- DEMO & CAP EXISTING PIPING IN FLOOR OR ABOVE CEILING AND REPAIR FLOOR AS NECESSARY TO MATCH SURROUNDING CONDITIONS. COORDINATE EXACT SCOPE REQUIREMENTS WITH GC PRIOR TO CONSTRUCTION.
- CAP EXISTING PLUMBING IN WALL. COORDINATE EXACT SCOPE REQUIREMENTS WITH GC PRIOR TO CONSTRUCTION.



MEP ENGINEER



MO COA NO. 2012006786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108

phone: (816) 272-5285, email: jsmothers@jscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

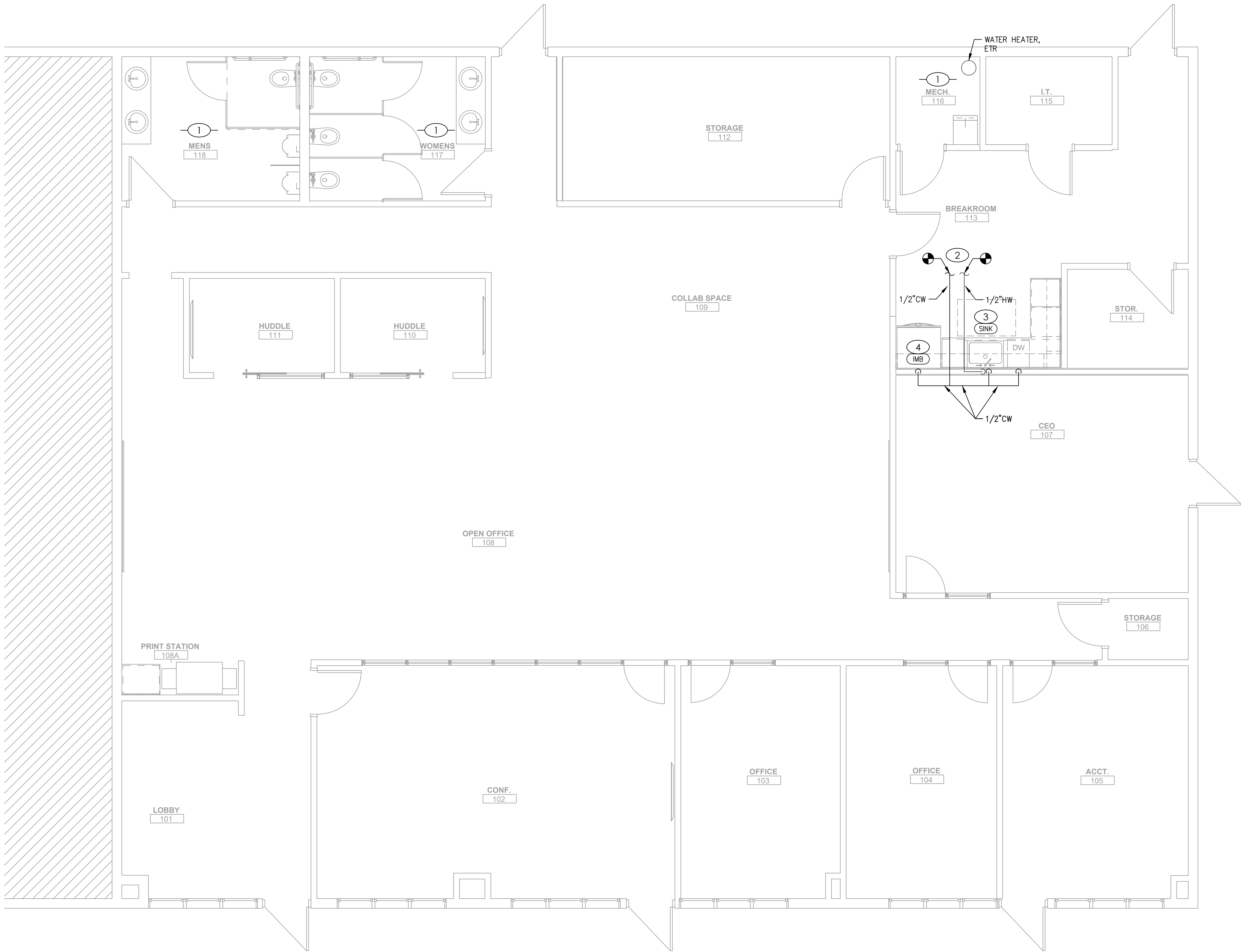
rev	date	description
-----	------	-------------

PLUMBING PLAN

sheet number

P101





PLUMBING PLAN - WATER

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

1



GENERAL NOTES

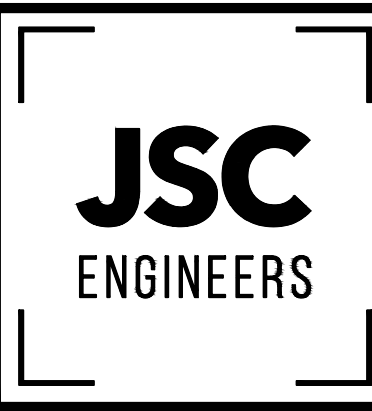
- A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- B. COORDINATE INSTALLATION OF MECHANICAL AND PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.
- C. NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AROUND EQUIPMENT.
- D. BRANCH DUCTWORK SHALL BE THE SAME SIZE AS NECK SIZE SHOWN UNLESS OTHERWISE NOTED.
- E. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- F. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

# KEYED PLAN NOTES

1. EQUIPMENT, FIXTURES, AND PIPING IN THIS ROOM ARE EXISTING TO REMAIN.
2. MAKE CONNECTION TO EXISTING COLD & HOT WATER PIPING IN AREA.
3. PROVIDE UNDERMOUNT SINK: ELKAY ELUH211510PD, SINGLE BASIN, STAINLESS STEEL, WITH SINGLE LEVER PULL-OUT FAUCET (DELTA 9113-DST), CHROME FINISH. PROVIDE FLEXIBLE SS RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT, AND BADGER 5 1/2HP GARBAGE DISPOSAL.
4. PROVIDE ICE MAKER OUTLET BOX WITH WATER HAMMER ARRESTOR, SIOUX CHIEF MODEL 696 OR EQUAL.



MEP ENGINEER



MO COA NO. 2012008786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108  
phone: (816) 272-5285, email: jsmothers@jscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081  
  
HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

rev	date	description
-----	------	-------------

PLUMBING PLAN

sheet number

P102



ELECTRICAL SPECIFICATIONS

PART I – GENERAL

A. GENERAL

1. FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS.
- A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS.
- B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT.
- C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.

2. OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.

3. OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.

4. INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.

5. FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/CC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.

6. PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.

B. RELATED WORK BY OTHERS

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH SERVING UTILITY COMPANY.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE. COORDINATE WITH LOCAL UTILITY COMPANIES.

C. CODES, REGULATIONS, AND STANDARDS

1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.
2. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:
- A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
- B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.
- C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
- D. AMERICAN NATIONAL STANDARDS INSTITUTE.
- E. INTERNATIONAL BUILDING CODE.

D. INSPECTION OF SITE

1. PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.
2. ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

E. STORAGE AND HANDLING OF MATERIAL

1. DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
2. ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.
3. COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

F. CLEANUP

1. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

G. EXCAVATION, CUTTING, AND FITTING

1. PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE DEEMED NECESSARY.
2. PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

H. DRAWINGS

1. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK. DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS; OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

I. COOPERATION WITH OTHER CONTRACTORS

1. COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS.
2. CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.
3. COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY SERVICES WITH THE GENERAL CONTRACTOR.
4. COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.

J. RECORD DRAWINGS

1. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.
2. AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

PART II – PRODUCTS AND EXECUTION

A. MATERIALS

1. ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

B. SHOP DRAWINGS AND APPROVALS

1. THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL, OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE

- ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL.
2. THE CONTRACTOR SHALL SUBMIT (3) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS TO THE GC:

- A. LIGHTING FIXTURE CUTS AND PERFORMANCE DATA.
- B. OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION PANELS.
- C. OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS.
- D. WIRING DEVICES AND COVERPLATES.
- E. ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS.

C. SYSTEM GROUNDING

1. GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
2. GROUNDED CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
3. A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT.
4. GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE
5. WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.
6. RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
7. IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.
8. IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

D. WIRE

1. CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
- A. ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS SHALL BE ALUMINUM ALLOY AA-8000 SERIES.
2. THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE ORANGE, NEUTRAL WIRES SHALL BE 120V-WHITE [277V-GREY], LIVE WIRES 480Y/277V SHALL BE BROWN (PHASE A), ORANGE (PHASE B), AND YELLOW (PHASE C); AND LIVE WIRES 208Y/120V AND 120/240V SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C). WHERE BOTH 208Y/120V AND 120/240V EXIST IN THE SAME BUILDING, THE CONDUCTORS OF EACH CONFIGURATION SHALL BE SEPARATELY IDENTIFIED (NOT THE SAME COLORS). "HIGH-LEG" PHASE OF DELTA SYSTEM SHALL ALWAYS BE MARKED ORANGE. CIRCUIT SHALL BE LABELED IN EACH J-BOX.
- A. ALL CONDUCTORS SHALL BE RATED 600 VOLT.
3. SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" SPlice KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR APPROVED EQUAL.
4. PROVIDE SOLID CONDUCTOR FOR 10 AWG AND SMALLER.
5. NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.
6. MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

CONDUIT

1. ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS, WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE, SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
2. WHERE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROUGH CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APLETON, OR EQUAL).
3. COVER METALLIC CONDUIT IN CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 LAPPED TO PROVIDE 20 MIL THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT.
4. SCHEDULE 40 PVC CONDUIT SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL APPROVED AND CEMENTED JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENDS GREATER THAN 22" SHALL BE WRAPPED RIGID GALVANIZED STEEL ELBOWS.
5. FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
7. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PUL STRING TO FACILITATE INSTALLATION OF FUTURE WIRE.
8. WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTORS AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS.
9. CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
10. CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

E. OUTLET, PULL, AND JUNCTION BOXES

1. EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET, SHALL BE PROVIDED WITH A CODE SIZED, STEEL OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE METAL AND CODE SIZED.
2. BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
3. BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES.
4. BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

G. WIRING DEVICES (COMMERCIAL)

1. WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT.
2. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE, NEMAS-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
3. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
4. RECEPTACLES IN OUTDOOR AREAS AND LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

H. SERVICE ENTRANCE SECTION

1. THE SERVICE ENTRANCE EQUIPMENT SHALL BE AS INDICATED ON THE DRAWINGS. EQUIPMENT SHALL CARRY THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY REGULATIONS.
2. SERVICE ENTRANCE EQUIPMENT SHALL BE PROVIDED WITH A FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTALLY TAPERED BUSSING SHALL NOT BE ALLOWED.

I. DISTRIBUTION PANELS

1. DISTRIBUTION PANELS SHALL BE PROVIDED WITH FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTAL TAPERED BUSSING SHALL NOT BE ALLOWED.
2. ACCEPTABLE MANUFACTURERS – CUTLER HAMMER, SIEMENS, SQUARE D OR GENERAL ELECTRIC
3. FACTORY ASSEMBLED DEAD FRONT, METAL ENCLOSED, AND SELF-SUPPORTING SWITCH BOARD ASSEMBLY CONFORMING T NEMA PB 2 AND UL 891, AND COMPLETE FROM INCOMING LINE TERMINALS TO LOAD SIDE TERMINATIONS.
4. LINE AND LOAD TERMINATIONS:ACCESSIBLE FROM FRONT ONLY OF THE SWITCH BOARD. SUITABLE FOR CONDUCTOR MATERIALS AND NUMBER OF CONDUCTORS USED.
5. BUS CONNECTIONS: BOLTED. ACCESSIBLE FROM FRONT FOR MAINTENANCE. PROVIDE BELLEVILLE WASHERS FOR PROPERLY TORQUE ALL CONNECTIONS
6. PROVIDE FULLY-RATED NEUTRAL BUS AND FULLY RATED GROUND BUS MATCHING MATERIAL USED FOR MAIN BUS.
7. FUTURE PROVISIONS: FULLY EQUIP SPACES FOR FUTURE DEVICES WITH BUSSING AND BUS CONNECTIONS SUITABLY INSULATED AND BRACED FOR SHORT CIRCUIT CURRENTS. CONTINUOUS CURRENT RATING AS INDICATED ON DRAWINGS.
8. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

H. PANEL BOARDS

1. CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 3ø PANELS
2. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
3. THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

K. LOAD CENTER

1. CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER/EATON WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
2. THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE AND DOUBLE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE OF THE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.
- A.A.A. CIRCUIT BREAKERS SHALL BE PLUG-IN TYPE
3. WIRE TERMINATION FOR PANEL BOARDS AND CIRCUIT BREAKERS SHALL BE LISTED AS SUITABLE FOR 75 DEGREES C.
4. PROVIDE A TYPEWRITTEN CIRCUIT INDEX BEHIND CLEAR PLASTIC COVER ON INSIDE OF DOOR. INFORMATION SHALL INCLUDE ROOM AND TYPE LOAD SERVED. ALL CIRCUIT BREAKERS SHALL BE IDENTIFIED, INCLUDING SPARES. INDEX CARD FRAME SHALL BE METAL, SECURED TO DOOR. PANEL BOARDS/LOAD CENTERS TO BE PROVIDED WITH COPPER BUSSING ONLY.

L. LIGHTING FIXTURES

1. PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMP FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND DRIVERS TO MEET THE EXISTING CEILING CONDITION.

M. LIGHTING CONTROL

1. FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS.
2. TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL HAVE SIZE AND NUMBER OF POLES AS REQUIRED.
- PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED.

J. TELEPHONE AND CABLE TELEVISION SYSTEMS

1. TELEPHONE WALL OUTLETS SHALL CONSIST OF NO LESS THAN 2-1/8" DEEP BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.
2. CABLE TELEVISION OUTLETS SHALL CONSIST OF NO LESS THAN 2-1/8" DEEP BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

K. GUARANTEE

1. GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

L. REMODELING WORK

1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
2. CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.
3. DEMOLITION: DISCONNECT, DEMOLISH, AND REMOVE ABANDONED MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT TO BE SALVAGED OR REMAIN.
4. DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND EQUIPMENT NOT INDICATED TO BE SALVAGED.
5. PROTECT MATERIALS INDICATED TO REMAIN.

M. FIRE SEALING NOTES

1. COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
2. COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
3. DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
4. COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER; WITH THE SUBSTRATES FORMING OPENINGS; AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
5. PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
6. PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
7. FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS.
8. PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILINGS, FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

SYMBOLS LEGEND

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

LIGHTING FIXTURES – SYMBOL/LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHEDULE

- LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)
- FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- TRACK LIGHT
- DOWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- DOWNLIGHT FIXTURE
- WALL MOUNTED FIXTURE
- PENDANT MOUNTED FIXTURE
- WALL WASHER
- SINGLE FACE EXIT SIGN – UNIVERSAL MOUNTED
- SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DUAL HEADED EMERGENCY UNIT
- COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT

LIGHTING CONTROLS

- S SINGLE POLE SWITCH @ +48" UNLESS NOTED
- Sabc SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE LETTER INDICATES FIXTURE CONTROLLED.
- S3 3-WAY SWITCH @ +48" UNLESS NOTED
- S4 4-WAY SWITCH @ +48" UNLESS NOTED
- Sd DIMMER SWITCH – SIZE AS REQUIRED @ +48" UNLESS NOTED
- Sm MANUAL MOTOR STARTER
- Sos WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ +48" UNLESS NOTED.
- SLV TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/O--10V DIMMING. SWITCH @ +48" UNLESS NOTED. PROVIDE EXTRA CONTROL CABLES NEEDED TO FIXTURE CONTROLLED.
- CS LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR
- PC LIGHTING CONTROLS POWER PACK
- PH PHOTOCELL
- TC TIMECLOCK

POWER DISTRIBUTION

- SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD
- 277/480V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/208V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO
- TRANSFORMER

POWER DEVICES

- SPECIAL HEAVY DUTY RECEPTACLE – SIZE AS NOTED. @ +18" UNLESS NOTED
- 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED
- FIRE RATED POKE THRU WITH TYPE INDICATED
- FLUSH FLOOR BOX WITH TYPE INDICATED
- SINGLE RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
- GFCI-RATED DUPLEX RECEPTACLE
- ARC FAULT RATED DUPLEX RECEPTACLE
- TAMPER RESISTANT RATED DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE @ 18" UNLESS NOTED
- JUNCTION BOX
- DISCONNECT SWITCH – SIZE AND TYPE NOTED
- COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE "1"

AUXILIARY SYSTEMS

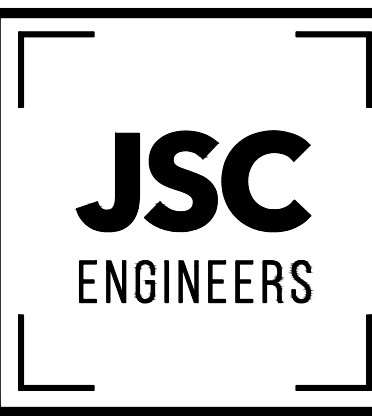
- MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN
- TELEPHONE OUTLET@ +18" UNLESS NOTED
- DATA OUTLET @ +18" UNLESS NOTED
- COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED
- TELEVISION OUTLET @ +60" UNLESS NOTED
- SMOKE DETECTOR
- HEAT DETECTOR
- DUCT SMOKE DETECTOR
- REMOTE TEST STATION WITH INDICATING LIGHT. MOUNT AT 48" AFF UNO.
- AUXILIARY SYSTEM TERMINAL CABINET

GENERAL

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT RUN BELOW FLOOR OR GRADE
- HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES.
- INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.
- (E) OR ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN



MEP ENGINEER



MO COA NO. 2012008786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108  
phone: (816) 272-5285, email: jsmothers@jsscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081

HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

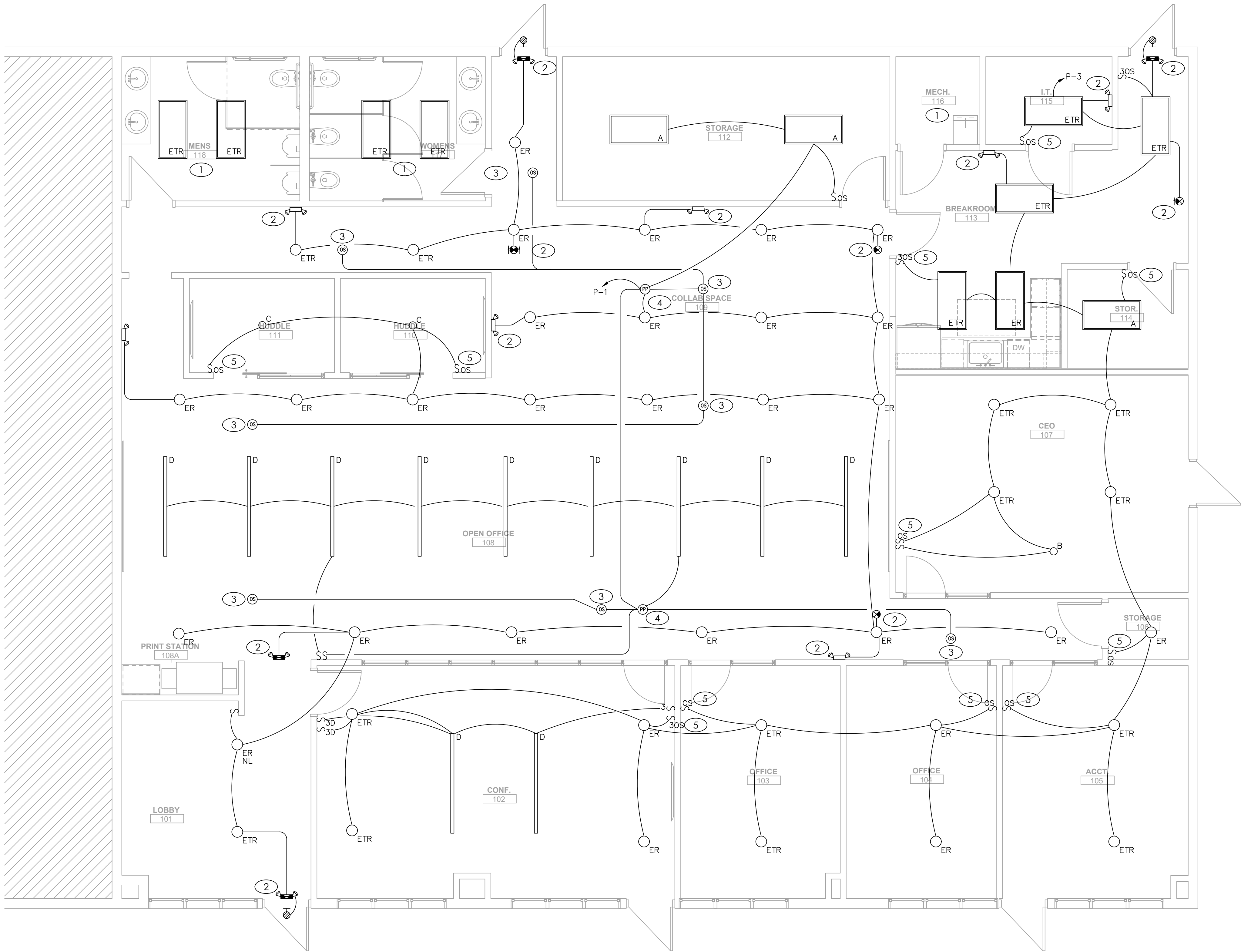
rev date description

ELECTRICAL  
SYMBOLS AND  
SPECIFICATIONS

sheet number

E100





LIGHTING PLAN

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

1



GENERAL NOTES

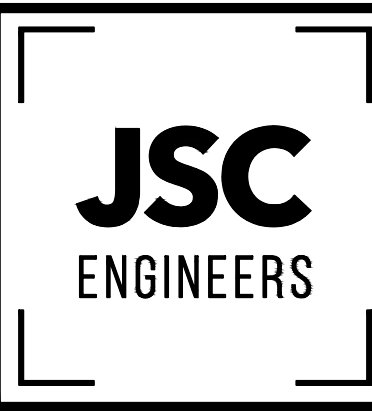
- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- G. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- H. MAXIMUM NUMBER OF UNGROUNDED WIRES IN ANY CONDUIT SHALL BE THREE. ADDITIONAL WIRES ARE ACCEPTABLE IF WIRE SIZE IS INCREASED TO ALLOW FOR DERATING PER CODE. PROVIDE ADDITIONAL WIRES FOR SWITCHING AS REQUIRED.
- I. FIRE ALARM, AUDIO/VIDEO AND SURVEILLANCE SYSTEMS BY OTHERS.
- J. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- K. ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- L. ALL FIXTURES AND DEVICES EXISTING AND NOT NOTED FOR WORK IN THIS SCOPE ARE TO REMAIN.

# KEYED PLAN NOTES

1. LIGHTING FIXTURES AND CONTROLS IN THIS ROOM ARE EXISTING TO REMAIN.
2. MAKE CONNECTION TO EXIT/EMERGENCY LIGHT VIA UNSWITCHED HOT CONDUCTOR.
3. CEILING MOUNTED OCCUPANCY SENSOR. SENSORWORX SWX-200 SERIES OR PRE-BID APPROVED EQUAL. MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
4. LIGHTING CONTROLS POWER PACK. SENSORWORX SWX-900 SERIES OR PRE-BID APPROVED EQUAL. MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
5. WALL SWITCH OCCUPANCY SENSOR. SENSORWORX SWX-100 SERIES OR PRE-BID APPROVED EQUAL. MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.



MEP ENGINEER



MO COA NO. 2012008786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108  
phone: (816) 272-5285, email: jsmothers@jscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081  
  
HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

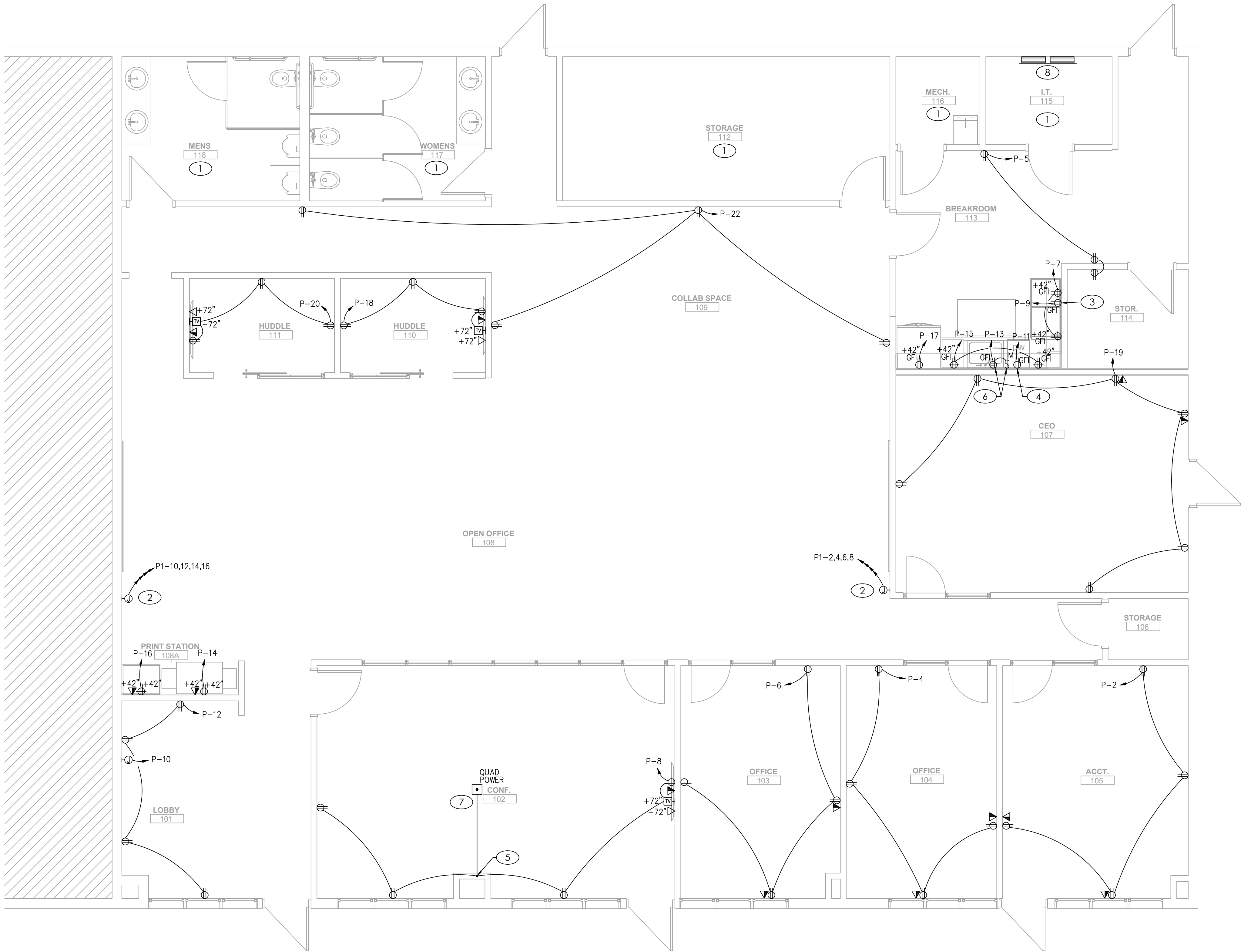
rev date description

ELECTRICAL  
PLANS

sheet number

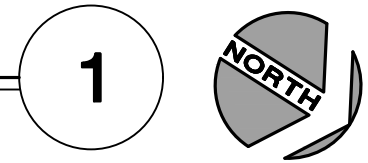
E101





POWER PLAN

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



GENERAL NOTES

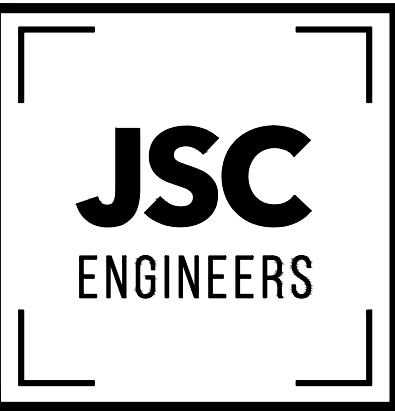
- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- G. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- H. MAXIMUM NUMBER OF UNGROUNDED WIRES IN ANY CONDUIT SHALL BE THREE. ADDITIONAL WIRES ARE ACCEPTABLE IF WIRE SIZE IS INCREASED TO ALLOW FOR DERATING PER CODE. PROVIDE ADDITIONAL WIRES FOR SWITCHING AS REQUIRED.
- I. FIRE ALARM, AUDIO/VIDEO AND SURVEILLANCE SYSTEMS BY OTHERS.
- J. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- K. ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- L. ALL FIXTURES AND DEVICES EXISTING AND NOT NOTED FOR WORK IN THIS SCOPE ARE TO REMAIN.

KEYED PLAN NOTES

- 1. POWER/DATA IN THIS ROOM IS EXISTING TO REMAIN.
- 2. PROVIDE BACKBOX FOR OWNER-PROVIDED 8-WIRE FURNITURE POWER FEED. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO CONSTRUCTION.
- 3. RECEPTACLE FOR MICROWAVE INSTALLED BELOW COUNTERTOP. INSTALL RECEPTACLE IN AN ACCESSIBLE MANNER.
- 4. RECEPTACLE FOR DISHWASHER INSTALLED BELOW COUNTERTOP. INSTALL RECEPTACLE IN AN ACCESSIBLE MANNER.
- 5. CONDUIT ROUTED DOWN IN WALL TO WIREMOLD RACEWAY.
- 6. RECEPTACLE FOR DISPOSAL INSTALLED BELOW COUNTERTOP AND SWITCH TO TURN DISPOSAL ON/OFF INSTALLED ABOVE COUNTER. INSTALL RECEPTACLE IN AN ACCESSIBLE MANNER.
- 7. ELECTRICAL WIRING TO BE INSTALLED IN WIREMOLD RACEWAY AND ROUTED TO SURFACE MOUNTED FLOOR BOX. WIREMOLD RACEWAY TO BE LEGRAND CONNECTRAC OR EQUAL. BASIS OF DESIGN CONNECTRAC SPECIFICATION: CTXP0.1-09-251c-SV WITH QUAD POWER/DATA RECEPTACLE AND OTHER ACCESSORIES AS NECESSARY TO INSTALL ACCORDING TO MANUFACTURER'S LITERATURE.
- 8. EXISTING PANELBOARDS TO REMAIN. REFER TO PANELBOARD SCHEDULES ON SHEET E201 FOR MORE INFORMATION.



MEP ENGINEER



MO COA NO. 2012006786 / KS COA NO. E-2818  
1925 CENTRAL ST., STE. 201  
KANSAS CITY, MO 64108  
phone: (816) 272-5285, email: jsmothers@jsscengineers.com

PERFECT PROMOTIONS

1469 SW MARKET STREET  
LEE'S SUMMIT, MO 64081  
HIVE DESIGN COLLABORATIVE, INC.  
1617 WALNUT STREET, KANSAS CITY, MO 64108  
816.581.6363

COPYRIGHT © 2022  
HIVE DESIGN COLLABORATIVE, INC.

seal/signature



project number 22-083

date 05.25.2022

issued for PERMIT

rev date description

ELECTRICAL  
PLANS

sheet number

E102



PANELBOARD: P (EXISTING)										FED FROM: <div>Utility</div>										LINE-SIDE LUGS: MECHANICAL									
BUS AMPS: 400A										AIC RATING: CONTRACTOR TO VERIFY AND NOTIFY EOR										EQUIPMENT GROUND BUS									
MAIN SIZE/TYPE: MLO										SERVES: Perfect Promotions																			
VOLTS/PHASE: 208Y/120V, 3PH, 4W										MOUNTING: SURFACE																			
SECTION: 1										LOCATION: IT Closet																			
CKT NO.	DESCRIPTION	VOLTAMPS/PHASE			WIRE NO.	BKR AMP	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE			DESCRIPTION	CKT NO.															
		A	B	C						A	B	C																	
1	LTG - LIGHTS	500			12	20	1	1	20	12			RCPT - ACCOUNTING	2															
3	LTG - LIGHTS		600		12	20	1	1	20	12		720	RCPT - OFFICE 104	4															
5	RCPT - BREAKROOM/STORAGE			540	12	20	1	1	20	12			720	RCPT - OFFICE 103	6														
7	RCPT - BREAKROOM	1,000			12	20	1	1	20	12	1,300		RCPT - CONFERENCE	8															
9	RCPT - MICROWAVE		1,500		12	20	1	1	20	12		1,500	PWR - NEON SIGN	10															
11	***RCPT - DISHWASHER			1,176	12	20	1	1	20	12			720	RCPT - LOBBY	12														
13	RCPT - DISPOSAL	1,350			12	20	1	1	20	12	1,500		RCPT - PRINTER/COPIER	14															
15	RCPT - BREAKROOM		1,000		12	20	1	1	20	12		500	RCPT - MAIL/LABELING	16															
17	RCPT - REFRIGERATOR			800	12	20	1	1	20	12		840	RCPT - HUDDLE 110	18															
19	RCPT - CEO	1,080			12	20	1	1	20	12		840	RCPT - HUDDLE 111	20															
21	SPARE				20	1	1	20	12			720	RCPT - COLLAS SPACE	22															
23	SPARE				20	1	1	20	12				SPARE	24															
25	SPARE				20	1	1	20	12	250			EMERGENCY LIGHTS	26															
27	SPARE				20	1	1	20					SPARE	28															
29	SPARE				20	1	1	20					SPARE	30															
31	SPARE				20	2	1	20					SPARE	32															
33	SPARE				20	1	20	12			900		I.T.	34															
35	SPARE				20	1	1	20					SPARE	36															
37	SPARE				20	2	1	20					SPARE	38															
39	SPARE				20	2	1	20					SPARE	40															
41	GFI RECEPTACLE ON ROOF			360	12	20	1	1	20				SPARE	42															
SUBTOTAL		3,910	3,100	2,876						20,460	19,940	17,610	SUBTOTAL																
TOTAL PHASE A - VA		24,370	LOAD		CONN VA		DF	LEAD		CONN VA		DF																	
AMPS		203	COOLING		40,320		1.00	REFRIG																					
TOTAL PHASE B - VA		23,040	HEATING				0	SIGN/DISP				1.25																	
AMPS		192	LIGHTING		1,600		1.25	KITCHEN				1.00																	
TOTAL PHASE C - VA		20,486	RECEPTACLES		25,776		10/5	EXISTING				1.25																	
AMPS		171	MOTORS					LRG MOTOR				1.00	TOTAL DEMAND																
TOTAL PN/LBD - VA		67,896	SUPP HEAT				1.00	SHOW/STW				1.25	80,408 VA																
AMPS		188	MISC EQUIP		200		1.00	LTG TRCK				1.00	168 A																
PANELBOARD NOTES																													
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN																													
*** = GFCI-TYPE BREAKER																													

## ELECTRICAL PANEL SCHEDULES

SCALE : NO SCALE

2

PANELBOARD: P1 (EXISTING)										FED FROM: P										LINE-SIDE LUGS: MECHANICAL									
BUS AMPS: 400A										AIC RATING: CONTRACTOR TO VERIFY AND NOTIFY EOR										EQUIPMENT GROUND BUS									
MAIN SIZE/TYPE: MLO										SERVES: Perfect Promotions																			
VOLTS/PHASE: 208Y/120V, 3PH, 4W										MOUNTING: SURFACE																			
SECTION: 1										LOCATION: IT Closet																			
CKT NO.	DESCRIPTION	VOLTAMPS/PHASE			WIRE NO.	BKR AMP	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE			DESCRIPTION	CKT NO.															
		A	B	C						A	B	C																	
1	HALL/BATH LIGHTS	250			12	20	1				720			2															
3	SPARE					20	1	3	20	12		720		PWR - FURN FEED 1.1,2,3	4														
5	EMERGENCY LIGHTS			250	12	20	1					720			6														
7	SPARE				20	1	1	20	12		720			PWR - FURN FEED 1.4	8														
9	SPARE				20	1						720			10														
11	SPARE				20	1			20	12			720	PWR - FURN FEED 2.1,2,3	12														
13	SPARE				20	1					720				14														
15	SPARE				20	1	1	20	12			720		PWR - FURN FEED 2.4	16														
17	SPARE				20	1	1	20						SPARE	18														
19	SPARE				20	1	1	20						SPARE	20														
21	SPARE				20	1	1	20						SPARE	22														
23	SPARE				20	1	1	20	12				200	ALARM	24														
25	SPARE				20	1					3,840				26														
27	SPARE				20	2	3	40	8			3,840		SOUTH RTU	28														
29	SPARE												3,840		30														
31	SPARE				20	1					4,800				32														
33	SPARE				20	1	3	50	6			4,800		NORTHWEST RTU	34														
35	SPARE				20	1							4,800		36														
37	SPARE										4,800				38														
39	SPARE				20	3	3	50	6				4,800	NORTHEAST RTU	40														
41	SPARE												4,800		42														
SUBTOTAL		250		250							15,600	15,600	15,080	SUBTOTAL															
TOTAL PHASE A - VA		15,850																											
LOAD																													
AMPS		132																											
TOTAL PHASE B - VA		15,600																											
LOAD																													
AMPS		130																											
TOTAL PHASE C - VA		15,330																											
LOAD																													
AMPS		128																											
TOTAL PN/LBD - VA		46,780													46,905 VA														
AMPS		130													130 A														
PANELBOARD NOTES																													
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN																													

ELECTRIC SERVICE SINGLE LINE DIAGRAM IS EXISTING TO REMAIN. NO MODIFICATIONS ARE BEING MADE TO THE ELECTRICAL SERVICE DISTRIBUTION EQUIPMENT IN THIS SCOPE.

## SINGLE LINE DIAGRAM

SCALE : NO SCALE

1



MEP ENGINEER

