DESIGNER TO ADDRESS ANY DISCREPANCIES.

DISCREPANCIES PLEASE CALL:

EDGE OF SLAB

EQUIPMENT

**EXPANSION** 

**EXTERIOR** 

EQUIP

EXP

EXT

FD

FS

FT

GLAZ

GC

HC

INSUL

INFO

LO

MECH

MFR

MISC

MO

NIC

NTS

F

EXTERIOR

ELECTRICAL PANEL

FLOOR DRAIN OR

FIRE DEPARTMENT

FINISHED FLOOR

FINISHED GRADE

FINISHED SURFACE

FINISHED SURFACE

GYPSUM WALL BOARD

GENERAL CONTRACTOR

FOUNDATION FIRE EXTINGUISHER

FACE OF

FEET/FOOT

GLAZING

HOUR

HEIGHT

INSULATION

INFORMATION

INTERIOR

JOINT

LANDING

LINE OF

MAXIMUM

**MECHANICAL** 

PLUMBING

MINIMUM

NUMBER

MANUFACTURER

MISCELLANEOUS

MASONRY OPENING

NOT APPLICABLE

NOT IN CONTRACT

NOT TO SCALE

MECHICAL, ELECTRIC,

HANDICAPPED

OFCI

OFD

OPNG

PR

REV

RM

SPEC

STD

TGC

TOS

TOW

UNO

W/0

— EXIT ACCESS

= 86'-11"

PROJECT — LOCATION

TRAVEL DISTANCE

PAINT OR PAINTED

SEALED CONCRETE

SPECIFICATIONS

TOP OF CURB

CONTRACTOR

TELEPHONE

TOP OF SLAB

TOP OF WALL

TOP OF STEEL

UNLESS NOTED

VERIFY IN FIELD

WATER CLOSET

WATER HEATER

VINYL COMPOSITION TILE

(1) HOUR TENANT

NORTH

SÉPARATION WALL

OTHERWISE

TOP OF

TYPICAL

WOOD

WITHOUT

TENANT GENERAL

STAINLESS STEEL

PAIR

REVISION

ROOM

SIMII AR

STANDARD

SQUARE

STEEL

REQUIRED

ACOUSTIC CEILING TILE

ABOVE FINISHED FLOOR

ALUMINUM

**ANODIZED** 

APPROXIMATE

ARCHITECT

BUILDING

BFTWFFN

BOTTOM OF

CENTERLINE

CONCRETE

COLUMN

CORRIDOR

CONCRETE

DIAMETER

DOWN

DRAWING

ELEVATION

ELECTRICAL

**ELEVATION** 

**ETHYLENE** 

PROPYLENE

(ROOFING)

DIENE M-CLASS

ELEVATOR OR

**ELAVATOR** 

**DIMENSION** 

CONTINUOUS

CERAMIC TILE

DRINKING FOUNTAIN

MASONRY UNIT

CLEAR OPENING

CEILING

CLOSET

BFAM

/ARCHITECTURAL

BACK OF CURB

ANOD

BLDG

BTWN

CLG

CMU

COL

CORR

CONT

CPT

DIM

DWG

ELEV

ALL DOORS

LABELED EXIT

SHALL HAVE A

READILY VISIBLE DURABLE SIGN

THAT INDICATES;

"THIS DOOR TO

(1) HOUR TENANT-SEPARATION WALL

INDICATES EGRESS TRAVEL PATH

1 \ CODE PLAN A.01) SCALE: 1/16"=1'-0"

(2) LOCATION P A.01) SCALE: N.T.S.

LOCATION PLAN

REMAIN

UNLOCKED

SPACE IS

OCCUPIED".

WHEN THIS

APPROX

RELEASED FOR CONSTRUCTION As Noted on Plans Review

architecture | engineering 1515 DES PERES ROAD, STE 200 SAINT LOUIS, MISSOURI 63131 PHONE | 314-997-6111 FAX | 314-997-8066

# CONSULTANT

SEAL

**REVISIONS** 

DATE:

**DRAWN BY** 

CHECKED BY:

REV. DATE ISSUE

1\ 04/13/22 PERMIT REVISION 2 04/27/22 FIELD REVISION

PROJECT NUMBER: 689411

**COVER SHEET** 

A0.

01.14.22

TG

JCB

RCHITECT:  RILEAF  whitacture   angineering	1515 DES PERES ROAD SUITE 200 ST. LOUIS, MO 63131	JEFFREY CHARLES BUMB MANAGING ARCHITECT 314-997-6111 j.bumb@trileaf.com
NGINEER: CASE ngineering Inc.	796 MERUS COURT FENTON, MO 63026	MATT CASE mcase.caseengineeringinc.com
ONSTRUCTION ESIGN MANAGER: BELF ESTEEM	ANYTIME FITNESS 111 WEIR DRIVE WOODBURY, MN 55125	JULIE BUSCH 651.438.5182 julie.busch@sebrands.com
ENANT: WNER/FRANCHISEE:	LIMITLESS GAINS CORP. 1215 HIGH RIDGE RAYMORE, MO 64083	JEFF & JILLIAN DOUGHERTY jjdoughco@gmail.COM JEFF: 816.914.0406 JILLIAN: 816.810.9190
ANDLORD:	TUTERA GROUP 7611 STATE LINE ROAD	JOSEPH C. TUTERA 816 206 4496

SHEE	T IN	IDEX:
CURRENT .	SHEET NUMBER	SHEET NAME
2 .	A0.1	COVER SHEET
2 .	A1.1	DEMOLISHION PLAN
) 1 .	A2.1	ARCHITECTURAL FLOOR PLAN
	A2.2	ENLARGED TOILET ROOM PLAN & ELEVATIONS
	A3.1	FINISH PLAN
·	A3.2	SCHEDULES
·	A4.1	REFLECTED CEILING PLAN
·	A5.1	PARTITION TYPES
> ·	A6.1	DETAILS
> ·	A6.2	DETAILS
·	A6.3	DETAILS
> ·	A7.1	SPECIFICATIONS
> ·	A7.2	SPECIFICATIONS
2 .	√ M1	HVAC PLAN
> 2	/ M2	MECHANICAL SCHEDULES AND DETAILS
> ·	/ M3	MECHANICAL SPECIFICATIONS
·		ELECTRICAL POWER PLAN
> ·	E2	ELECTRICAL LIGHTING PLAN
> ·		ELECTRICAL RISER DIAGRAM & SCHEDULES
> ·		LOW VOLTAGE PLAN
·	E5	LOW VOLTAGE DETAILS
> ·		ELECTRICAL SPECIFICATIONS
·	P0	PLUMBING COVER
·		PLUMBING PLAN
> ·	\ P2	PLUMBING RISERS
·	/ P3	PLUMBING DETAILS
\	<i>)</i> P4	PLUMBING SPECIFICATIONS
/2		

DRAWING LE	GEND:		
O TITLE X000 SCALE:	DRAWING TITLE	00 X000	CALLOUT TARGET
00 A000	SECTION TARGET 0	A000 0	INTERIOR ELEVATION
ROOM NAME [000]	ROOM TAG KEY NOTE	0	KEY NOTE
000	DOOR TAG	00	PARTITION TYPE
\(\sqrt{00\}\)	REVISION		

3508 SW MARKET STREET LEE'S SUMMIT, MO 64082

# PROJECT DIRECTORY:

ARCHITECT:  TRILEAF architecture engineering	1515 DES PERES ROAD SUITE 200 ST. LOUIS, MO 63131	JEFFREY CHARLES BUMB MANAGING ARCHITECT 314-997-6111 j.bumb@trileaf.com
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CONSTRUCTION DESIGN MANAGER: SELF ESTEEM	ANYTIME FITNESS 111 WEIR DRIVE WOODBURY, MN 55125	JULIE BUSCH 651.438.5182 julie.busch@sebrands.com
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LANDLORD:	TUTERA GROUP 7611 STATE LINE ROAD KANSAS CITY, MO 64114	JOSEPH C. TUTERA 816.206.4496 jefft@tutera.com

CURRENT REVISION	SHEET	SHEET NAME					
2	A0.1	COVER SHEET					
2	A1.1	DEMOLISHION PLAN					
1	A2.1	ARCHITECTURAL FLOOR PLAN					
	A2.2	ENLARGED TOILET ROOM PLAN & ELEVATIONS					
	A3.1	FINISH PLAN					
	A3.2	SCHEDULES					
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	A5.1	PARTITION TYPES					
	A6.1	DETAILS					
	A6.2	DETAILS					
	A6.3	DETAILS					
	A7.1	SPECIFICATIONS					
	A7.2	SPECIFICATIONS					
2	) M1	HVAC PLAN					
2	) M2	MECHANICAL SCHEDULES AND DETAILS					
	) M3	MECHANICAL SPECIFICATIONS					
	) E1	ELECTRICAL POWER PLAN					
	) E2	ELECTRICAL LIGHTING PLAN					
	) E3	ELECTRICAL RISER DIAGRAM & SCHEDULES					
	) E4	LOW VOLTAGE PLAN					
	) E5	LOW VOLTAGE DETAILS					
	) E6	ELECTRICAL SPECIFICATIONS					
	) P0	PLUMBING COVER					
	) P1	PLUMBING PLAN					
	) P2	PLUMBING RISERS					
	) P3	PLUMBING DETAILS					
	) P4	PLUMBING SPECIFICATIONS					

DRAWING LE	GEND:		
O TITLE X000 SCALE:	DRAWING TITLE	00 X000	CALLOUT TARGET
00 A000	SECTION TARGET 0	A000 0	INTERIOR ELEVATION
ROOM NAME [000]	ROOM TAG KEY NOTE	0	KEY NOTE
(000) A	DOOR TAG	00	PARTITION TYPE
(00)	REVISION		

# **CODE DATA - BUILDING DESIGN INFORMATION:**

2018 INTERNATIONAL BUILDING CODE

2018 INTERNATIONAL MECHANICAL CODE

2018 INTERNATIONAL PLUMBING CODE

2018 INTERNATIONAL FIRE CODE

2017 NATIONAL ELECTRICAL CODE

2018 INTERNATIONAL FUEL & GAS CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE

TENANT BUILD OUT OF EXISTING SPACE, WORK INCLUDES INTERIOR DEMOLITION,

ADDING PARTITIONS, CEILINGS ETC. AND REVISION OF MECHANICAL, ELECTRICAL AND

ASSEMBLY-GROUP A-3

5,399 SF/50 SF PER

PERSON = 108 PERSONS

(1)HR @ ADJACENT B USE GROUP

5,399 SF

TYPE 5B

250' MAXIMUM

COMCHECK

BATHTUBS OR DRINKING

JURSDICTION:	CITY OF LEES SUMMIT
	DEVELOPMENT SERVICES
	220 SE GREEN
	LEE'S SUMMIT, MO 64063

FLOOR AREA: (NO INCREASE IN BUILDING HEIGHT OR AREA)

PROJECT SCOPE:

BUILDING:

PLUMBING:

**ELECTRICAL:** 

ACCESSIBILITY:

OCCUPANCY CLASSIFICATION:

TENANT FLOOR AREA:

**OCCUPANCY SEPARATION:** 

**FIRE PROTECTION SYSTEMS:** 

ACTUAL PROVIDED WIDTH:

EXIT ACCESS TRAVEL DISTANCE:

**ENERGY COMPLIANCE METHOD:** 

ACTUAL EXIT ACCESS TRAVEL DISTANCE:

PLUMBING FIXTURE CALCULATIONS PER 2018 IBC TABLE 2902.1

WATER CLOSETS

AUTOMATIC SPRINKLER SYSTEM: (Y OR N)

**EXITS AND EXIT ACCESS DOORWAYS** 

**CONSTRUCTION TYPE:** 

REQUIRED EXISTS:

MINIMUM WIDTH:

OCCUPANT LOAD:

**ENERGY:** 

GAS:

FIRE:

USE:

MECHANICAL:

816.969.1200

PLUMBING SYSTEMS.

2009 ANSI A117.1

2. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS SHOWN RELATING TO EXISTING CONSTRUCTION ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL ACTUAL DIMENSIONS AND CONTACT

3. ALL DIMENSIONS ARE FACE OF FINISH, FACE OF CONCRETE, TO CENTER LINES OF COLUMNS AND OTHER GRID PONTS AND TO CENTER LINES OF DOORS AND OTHER SCHEDULED OPENINGS, UNO 4. THE CONTRACTOR AND SUB-CONTRACTORS SHALL COORDINATE THE LAYOUT AND EXACT LOCATIONS OF

CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS; IF THERE ARE ANY CHANGES, REVISIONS, OR

1. EXCEPT IN DEMOLITION PLANS, AND WHERE OTHERWISE NOTED, ALL NEW CONSTRUCTION IS SHOWN

WITH SOLID DARK LINES, AND EXISTING CONSTRUCTION TO REMAIN IS SHOWN WITH "SCREENED" LINES.

ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL GOVERNING CODES.

ALL PARTITIONS, DOORS, ELECTRICAL/TELEPHONE OUTLETS, LIGHT SWITCHES AND THERMOSTATS IN THE FIELD PRIOR TO PROCEEDING. THEY SHALL ALSO VERIFY THAT NO CONFLICT EXISTS IN THE LOCATION OF ANY MECHANICAL, HVAC, TELEPHONE, ELECTRICAL, PLUMBING AND SPRINKLER EQUIPMENT (TO INCLUDE ALL PIPING DUCTWORK, CONDUIT, CABLES, ETC.), AND THAT ALL REQUIRED CLE

5. CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED. CONTRACTOR TO VERIFY THAT ALL EXISTING RATED WALLS, INCLUDING ALL PENETRATIONS, WERE CONSTRUCTED TO MEET CURRENT REQUIREMENTS FOR A RATED WALL ASSEMBLY. CONTRACTOR TO UPGRADE ANY WALLS AND PENETRATIONS THAT DO NOT COMPLY. REFER TO DRAWINGS TO IDENTIFY ACTUAL REQUIRED RATING OF WALLS.

6. ALL NEW PENETRATIONS IN EXISTING OR NEW WALLS AND CEILINGS SHALL BE FIRE-STOPPED AS REQUIRED PER TESTED LISTED ASSEMBLIES, AND SHALL MATCH THE RATING OF THE ASSEMBLY IT IS PENETRATING.

7. CONTRACTOR TO INSTALL EXIT/EMERGENCY LIGHTS AS REQUIRED BY LOCAL, STATE, OR PROVINCIAL BUILDING CODES.

8. ALL PARTITIONS, DOORS, GLAZED OPENINGS, SOFFITS, ET AL., SHALL BE STRUCTURALLY BRACED IN ACCORDANCE WITH SEISMIC CODE REQUIREMENTS.

9. WHEREVER DIAGONAL BRACING IS INDICATED OR OTHERWISE REQUIRED, INSTALL BRACING UNEXPOSED

10. ALIGN NEW WALL SURFACES WITH THE EXISTING ADJACENT OR ADJOINING SURFACES WHERE INDICATED. TAPE AND SAND THE JOINTS TO SMOOTH WITHOUT ANY VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES.

11. CORRECT ANY DEFECTS IN EXISTING BUILDING CONSTRUCTION WHICH AFFECTS QUALITY AND INSTALLATION OF THE WORK. THIS INCLUDES, BUT IS NOT LIMITED TO EXISTING UNEVEN SURFACES AND FINISHES AT GYPSUM BOARD WHERE THEY MEET THE IMPROVEMENTS. OFFSET STUDS WHERE REQUIRED TO ALIGN FINISH MATERIAL.

12. REPLACE ANY DAMAGED OR MISSING MATERIALS SUCH AS WALL BASES, CORNER TRIMS, CEILING TILES, ETC. TO MATCH EXISTING (UNLESS OTHERWISE NOTED).

13. ALL EQUIPMENT, LIGHTS OR DEVICES THAT ARE REQUIRED TO BE UL TESTED OR APPROVED SHALL HAVE A UL LISTING LABEL.

14. SMACNA STANDARDS AND DETAILS - CURRENT EDITION SHALL BE USED FOR ALL SPECIFIC ROOF PENETRATIONS, FLASHING, DUCT ASSEMBLIES, AND OTHER WHETHER SHOWN ON DRAWINGS OR NOT.

15. PROVIDE ALL REQUIRED ROOF MATERIALS TO COMPLETE WATER TIGHT FLASHING AT ALL VTR PENETRATIONS AND INTERSECTING ROOF PENETRATIONS.

16. GENERAL CONTRACTOR REQUIRED TO PROVIDE NECESSARY BLOCKING FOR ALL OWNER PROVIDED SIGNAGE, WALL-MOUNTED FIXTURES AND FURNISHINGS, AND SUPPORTS. G.C. SHALL VERIFY THE CHARACTERISTICS OF ALL EQUIPMENT, MILLWORK OR OTHER ITEMS BEING FURNISHED BY OWNER OR OWNER'S CONTRACTORS FOR WHICH G.C. IS RESPONSIBLE FOR INSTALLING. G.C. ASSUMES COMPLETE RESPONSIBILITY WHEN OWNER FURNISHED ITEMS ARE ACCEPTED AND RECEIVED BY G.C. ALL LIGHT SWITCHES, THERMOSTATS, SECURITY ALARMS, ELECTRICAL OUTLETS, ETC. MUST BE MOUNTED TO MEET ALL GOVERNING ACCESSIBILITY REQUIREMENTS FOR FLOOR & HEIGHT CLEARANCES AND ONE HAND GRASPING OPERATION.

### FIRE PROTECTION GENERAL NOTES:

CONTRACTOR TO CONTACT THE CITY TO DETERMINE IF ANY MODIFICATIONS TO SPRINKLERS AND ALARM SYSTEMS WILL BE REQUIRED TO COMPLY WITH LOCAL AND STATE CODES; INCLUDING FIRE MARSHAL. CONTRACTOR TO PROVIDE DESIGN, PERMITTING AND CONSTRUCT AS REQUIRED.

2. PROVIDE APPROPRIATE COVERAGE OF HEADS FOR PARTITION LAYOUT AS REQUIRED BY CODE PER PARTITION LAYOUT AS SHOWN. QUANTITY AND LOCATION OF HEAD TO COMPLY WITH APPLICABLE

3. PROVIDE/MODIFY FIRE ALARM SYSTEM IF REQUIRED BY LOCAL CODE.

4. PROVIDE AND INSTALL SMOKE DETECTORS AS REQUIRED BY CODE.

BEGINNING ANY WORK.

5. FIRE ALARM CONTRACTOR SHALL SUBMIT FIRE ALARM DRAWINGS TO CITY PRIOR TO BEGINNING ANY WORK.

6. FIRE SPRINKLER CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO CITY PRIOR TO

OCCUPANCY	(FIXTURES F	PER PERSON)	(FIXTURES F	PER PERSON)	SHOWERS (FIXTURES PER PERSON)	FOUNTAINS / FACILITIES (FIXTURES PER PERSON)	o mex
A-3 ASSEMBLY GYMNASIUM OCCUPANCY (REQUIREMENTS)	MALE 1:125	FEMALE 1:65	MALE 1:200	Female 1:200	-	1:500	
PLUMBING FIXTURES PROVIDED	ES		UNISEX: 4		2	1 BI-LEVEL	1 SERVICE SINK

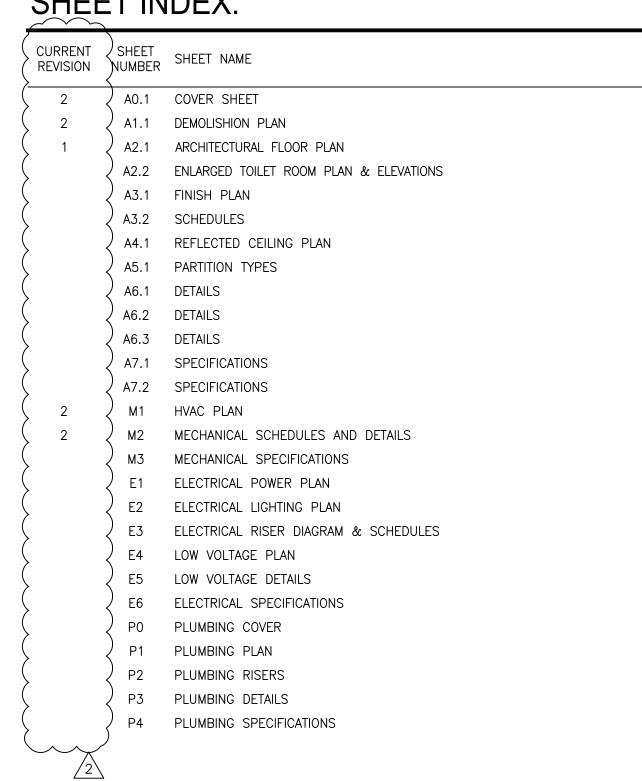
LAVATORIES

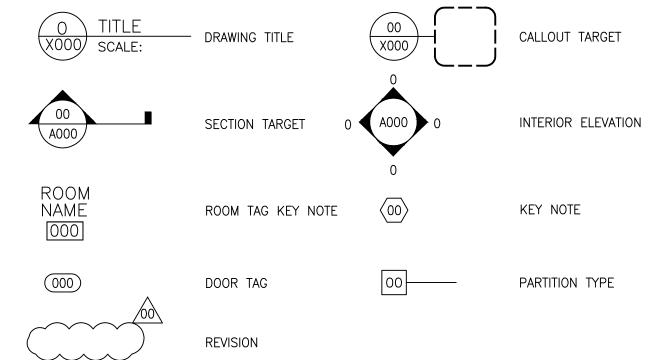
VENDOR LIST			
VENDOR	PRODUCT/SERVICE	CONTACT	PHONE/EMAIL
ARCHETYPE	INTERIOR SIGNAGE & GRAPHICS	JENNY KRUSE	(952) 641—9600 (JENNY) jennyk@archetypesign.com
SHAW INTEGRATED SOLUTIONS	CARPET, STONE FOR RETAIL LOGO WALL, VINYL PLANK	CUSTOMER SERVICE	(800) 338-9479 anytime.fitness@shawinc.com
DALTILE	TILE	AMY MCMACKEN	(734) 218-4995 amy.mcmacken@daltile.com sebrands@daltile.com
ECORE INTERNATIONAL	RUBBER FLOORING (FREE WEIGHTS) & TURF (FUNCTIONAL TRAINING)	CUSTOMER SERVICE	(515) 450-2144 mbk@ecoreintl.com
IKEA	FURNITURE		www.ikea.com\us\en
SPECIALTY LIGHTING	LIGHTING	AMANDA FOUST LINDA JARCKI	(860) 767—0110 X249 (AMANDA) amanda.foust@sslighting.com (860) 767—0110 X225 (LINDA) linda.jarcki@sslighting.com
PROVISION SECURITY	SECURITY		(866) 315-0777 projects@provisionsecurity.com
GLOBAL RETAIL ENVIRONMENTS	RETAIL LOGO WALL DISPLAY CASE, WALL PROTECTION & LOCKERS	CUSTOMER SERVICE	(800) 983-000 OR (320) 983-0000 dscharber@globalretailenvironments.com
TWIN CITY HARDWARE	DOORS, FRAMES & HARDWARE	BOB HAEN	(651) 731-7142 bhaen@tchco.com
ROLLER SHADE	SHADES	RIC BERG	(951) 245-5077 X133 ric.berg@rollashade.com
SHERWIN WILLIAMS	PAINT & DRY-ERASE COATING	LOCAL STORE	NATIONAL ACCOUNT NUMBER: 5753-1214-5 TO GET DISCOUNTED NATIONAL ACCOUNT PRICING
KENDU	LIGHTBOX	TIM HOIEN JULIANA DIAZ	TO ORDER CONTACT tim.hoien@kendu.com AND juliana.diaz@kendu.com FOR QUESTIONS CONTACT TIM HOIEN AT (612) 280-7016

### ON CENTER OUTSIDE DIAMETER **OVERHANG** OWNER FURNISHED-CONTRACTOR INSTALLED OVERFLOW DRAIN **LEITNESS** OPENING

SUMMIT CREST PLAZA

TRILEAF architecture   angineering	1515 DES PERES ROAD SUITE 200 ST. LOUIS, MO 63131	JEFFREY CHARLES BUMB MANAGING ARCHITECT 314-997-6111 j.bumb@trileaf.com
ENGINEER:		
CASE Engineering Inc.	796 MERUS COURT FENTON, MO 63026	MATT CASE mcase.caseengineeringinc.com
CONSTRUCTION DESIGN MANAGER: SELF ESTEEM	ANYTIME FITNESS 111 WEIR DRIVE WOODBURY, MN 55125	JULIE BUSCH 651.438.5182 julie.busch@sebrands.com
TENANT: OWNER/FRANCHISEE:	LIMITLESS GAINS CORP. 1215 HIGH RIDGE RAYMORE, MO 64083	JEFF & JILLIAN DOUGHERTY jjdoughco@gmail.COM JEFF: 816.914.0406 JILLIAN: 816.810.9190
LANDLORD:	TUTERA GROUP 7611 STATE LINE ROAD KANSAS CITY MO 64114	JOSEPH C. TUTERA 816.206.4496





### **DEMOLITION KEYED NOTES:**

- REMOVE EXISTING PARTITION WALLS / DOORS (SHOWN DASHED, TYP). ALL ELECTRICAL TO BE BROUGHT BACK TO NEAREST PANEL AND MADE SAFE. PATCH AND REPAIR ADJACENT SURFACES FOR NEW FINISHES.
- REMOVE EXISTING PLUMBING FIXTURE AND/OR ASSOCIATED PIPING. CAP ASSOCIATED PIPING IN WALL/FLOOR AS REQ'D. PATCH AND REPAIR ADJACENT SURFACES FOR NEW
- REMOVE EXISTING COUNTER/SHELVES/ACCESSORIES COMPLETELY. PATCH AND REPAIR ADJACENT SURFACES FOR NEW FINISHES.
- EXISTING DOOR TO BE SHUT AND LOCKED IN CLOSED POSITION. REMOVE ALL HARDWARE ADD COVER PLATE. CLEAN/REPAIR TO LIKE NEW.

FINISHES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

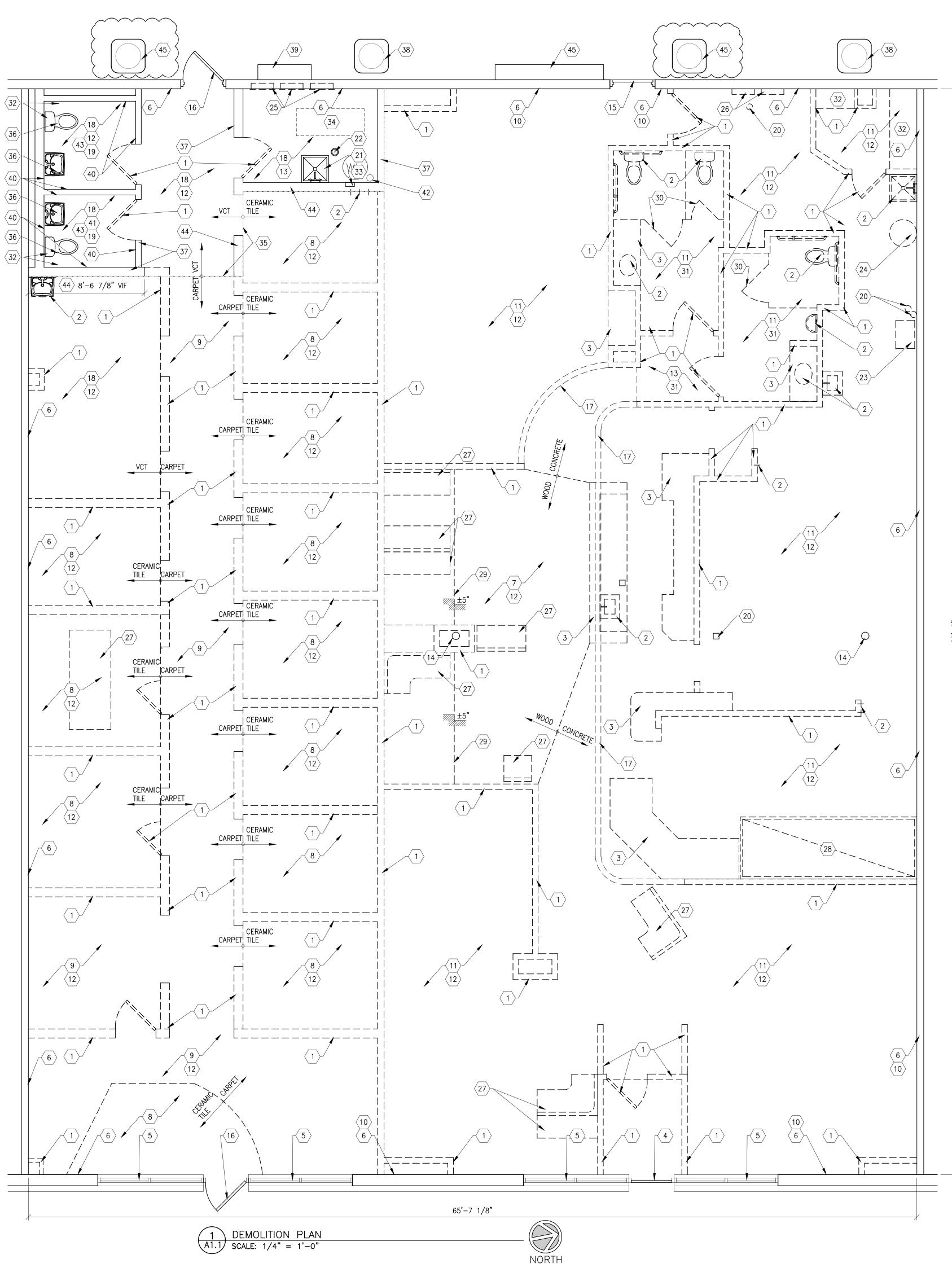
- $\langle 5 \rangle$  EXISTING STOREFRONT TO REMAIN. GC TO CLEAN AND REPAIR TO LIKE NEW CONDITION.
- REMOVE ANY FIXTURES, WALL STANDARDS, RECEPTACLES ETC. FROM EXISTING WALLS. 6 PATCH AND REPAIR GWB TO LIKE-NEW CONDITION. PREPARE FOR NEW CONSTRUCTION
- REMOVE EXISTING WOOD FLOORING AND BASE. CONCRETE FLOOR TO BE CLEANED AND REMOVE EXISTING WOOD FLOORING AND BOOL, SOCIOLE PREPED FOR NEW FLOORING. SEE FINISH PLAN FOR NEW WORK.
- REMOVE EXISTING CERAMIC TILE FLOORING. CONCRETE FLOOR TO BE CLEANED AND PREPPED FOR NEW FLOORING. SEE FINISH PLAN FOR NEW WORK.
- REMOVE EXISTING CARPET AND BASE. CONCRETE FLOOR TO BE CLEANED AND PREPPED FOR NEW FLOORING. SEE FINISH PLAN FOR NEW WORK.
- (10) REMOVE EXISTING WOOD WAINSCOT AND BASE FROM WALL. PREP FOR NEW FINISHES.
- CONCRETE FLOOR TO BE CLEANED AND PREPPED FOR NEW FLOORING. SEE FINISH PLAN FOR NEW WORK.
- REMOVE EXISTING LAY-IN CEILING, CEILING FIXTURES AND LIGHTING. PATCH AND REPAIR ADJACENT (12) WALLS AS REQUIRED. ALL ELECTRICAL CONDUIT AND WIRING TO BE REMOVED BACK TO NEAREST PANEL AND MADE SAFE. SEE ELECTRICAL DRAWINGS FOR NEW LIGHTING LAYOUT.
- EXISTING GWB CEILING TO REMAIN. PATCH AND REPAIR AS REQ'D. PREP FOR NEW CEILING FIXTURES.
- EXISTING COLUMN TO REMAIN. REMOVE FURRING & DRYWALL AND CLEAN EXISTING STEEL OF ALL DEBRIS AND PREP FOR NEW FINISH.
- EXISTING DOOR TO REMAIN. REMOVE HARDWARE, ADD COVER PLATE AND TACK WELD SHUT. CLEAN/REPAIR TO LIKE NEW.
- (16) EXISTING DOOR TO REMAIN. REPAIR AS REQUIRED. PREP FOR NEW FINISHES.
- EXISTING SOFFIT TO BE REMOVED COMPLETLY TO ROOF DECK ABOVE. PATCH AND REPAIR AS NEEDED TO EXCEPT NEW FINISHES.
- REMOVE EXISTING VCT AND BASE (WHERE APPLICABLE). CONCRETE FLOOR TO BE CLEANED AND PREPPED FOR NEW FINISHES. SEE FINISH PLAN FOR NEW WORK.
- (19) REMOVE EXISTING CERAMIC TILE WAINSCOT FROM WALL. PREP FOR NEW FINISHES.
- REMOVE FLOOR DRAIN, CAP PLUMBING 6" BELOW SLAB. PATCH AND REPAIR AS REQ'D TO RECIEVE NEW FINISHES. (TYP.)
- EXISTING MOP SINK TO REMAIN, REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- EXISTING FLOOR DRAIN TO REMAIN, REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- (23) REMOVE GREASE TRAP. PATCH AND REPAIR AS REQ'D TO RECIEVE NEW FINISHES.
- REMOVE WATER HEATER. PATCH AND REPAIR AS REQ'D TO RECIEVE NEW FINISHES.
- EXISTING ELECTRICAL PANELS TO BE REMOVED AND REPLACED WITH RELOCATED 25 EXISTING ELECTRICAL PANELS TO BE INCIDENCE FOR ADDITIONAL INFORMATION.
- EXISTING ELECTRICAL PANELS TO BE REMOVED. PATCH AND REPAIR ADJACENT SURFACES. SALVAGE FOR RELOCATION. REFER TO ELECTRICAL DRAWINGS FOR
- ADDITIONAL INFORMATION.
- PREVIOUS TENANT FIXTURE/EQUIPMENT TO BE REMOVED. PATCH AND REPAIR ADJACENT SURFACES AS REQ'D.
- EXISTING HOODS, EXHAUST FANS AND ALL KITCHEN EQUIPMENT TO BE REMOVED COMPLETLY. PATCH & REPAIR ROOF AS REQ'D. PREP FOR NEW FINISH.
- (29) WOOD PLATFORM TO BE REMOVED. PATCH AND REPAIR ADJACENT SURFACES AS REQ'D.
- TOILET PARTITIONS TO BE REMOVED. PATCH AND REPAIR ADJACENT SURFACES AS REQ'D.
- REMOVE EXISTING GWB CEILING, CEILING FIXTURES AND LIGHTING. PATCH AND REPAIR ADJACENT (31) WALLS AS REQUIRED. ALL ELECTRICAL CONDUIT AND WIRING TO BE REMOVED BACK TO NEAREST PANEL AND MADE SAFE. SEE ELECTRICAL DRAWINGS FOR NEW LIGHTING LAYOUT.
- (32) EXISTING GRAB BARS TO BE REMOVED.
- (33) WASHER/DRYER HOOK UP TO REMAIN FOR POSSIBLE REUSE.
- (34) MEZZANINE PULL DOWN ACCESS STAIRS TO REMAIN.
- (35) EXISTING MEZZANINE ABOVE TO REMAIN.
- (36) PLUMBING FIXTURES TO BE CLEANED, REPAIRED AS REQ'D AND REUSED.
- (37) WALL TO REMAIN, PATCH & REPAIRED AS REQ'D. PREP FOR NEW FINISHES.
- (38) EXISTING CONDENSING UNIT TO REMAIN. REFER TO MECHANICAL DRAWINGS.
- (39) EXISTING ELECTRICAL EQUIPMENT TO REMAIN. REFER TO ELECTRICAL DRAWINGS.
- STUD WALL TO REMAIN, REMOVE EXISTING GWB/TILE @ UNISEX ROOMS & PREP FOR NEW MOISTURE RESISTANT GYP. BD. PATCH & REPAIRED AS REQ'D. REFER TO SHEET A2.2.
- REMOVE EXISTING GWB FROM CEILING & PREP FOR NEW NEW MOISTURE RESISTANT GYP. BD. PATCH & REPAIR AS REQ'D. REFER TO SHEET A2.2.
- (42) EXISTING DRYER VENT AT GWB CEILING
- (43) EXISTING ACCESSORIES TO BE REMOVED.
- EXISTING WALL TO REMAIN. PATCH & REPAIRED AS REQ'D. PREP FOR NEW FINISHES. REFER TO SHEETS A2.1 & A4.1 FOR ADDITIONAL INFORMATION.
- angle m Existing condensing unit to be replaced refer to mechanical drawings

### **DEMOLITION GENERAL NOTES:**

- 1. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED BEFORE STARTING SELECTIVE DEMOLITION OPERATIONS.
- 2. SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
- 3. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL OR STRUCTURAL ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE THE NATURE AND EXTENT OF CONFLICT. PROMPTLY SUBMIT A WRITTEN
- 4. EXISTING SERVICES / SYSTEMS TO REMAIN: MAINTAIN SERVICES / SYSTEMS INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE.
- 5. EXISTING SERVICES / SYSTEMS TO BE REMOVED, RELOCATED OR ABANDONED: LOCATE, IDENTIFY, DISCONNECT AND SEAL OR CAP OFF INDICATED UTILITY SERVICES AND MECHANICAL / ELECTRICAL SYSTEMS SERVING AREA TO BE SELECTIVELY DEMOLISHED.
- 6. SITE ACCESS AND TEMPORARY CONTROLS: CONDUCT SELECTIVE DEMOLITION AND DEBRIS-REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- TEMPORARY FACILITIES: PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS
- 8. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED TO NEW CONSTRUCTION AND AS INDICATED.
- 9. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. USE HAND TOOLS OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING. NOT HAMMERING AND CHOPPING. TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES. TEMPORARILY COVER OPENINGS TO REMAIN.
- 10. ALL EXISTING FLOOR FINISHES TO BE REMOVED TO CONCRETE SLAB.

AND FACILITIES TO REMAIN.

- 11. REFER TO MEP DRAWINGS FOR MECHANICAL, ELECTRICAL & PLUMBING DEMOLITION.
- 12. REFER TO PLUMBING DRAWINGS FOR LOCATION OF SLAB REMOVAL AND REPLACEMENT. FIELD VERIFY EXACT LOCATION. REFER TO DETAIL 2/A2.2 FOR ADDITIONAL INFORMATION.



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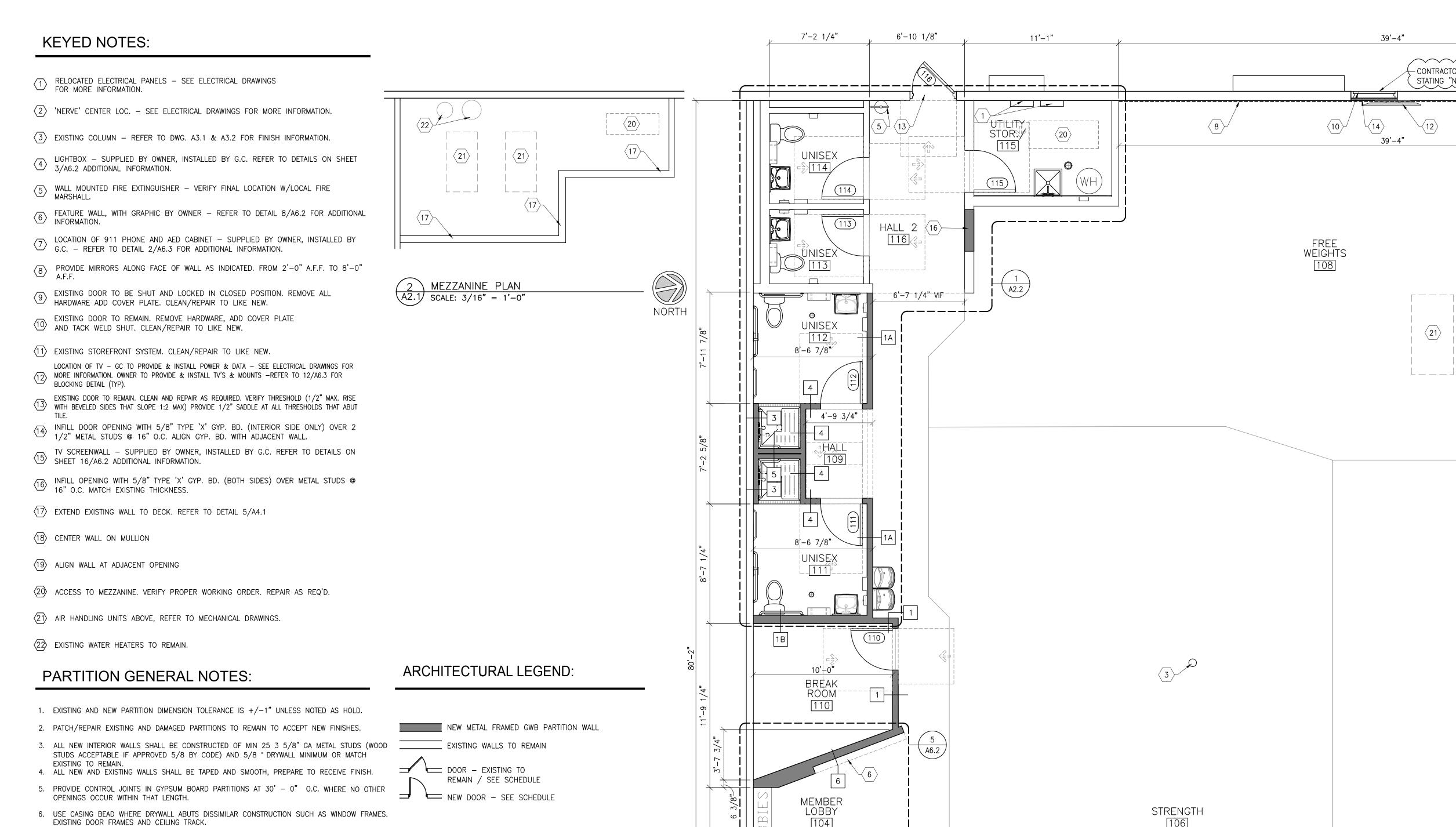
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DEMOLITION PLAN



- 7. COMPLY WITH APPLICABLE REQUIREMENTS OF ASTM C 840 AND GA 216 FOR APPLICATION AND FINISHING OF GYPSUM BOARD.
- 8. COMPLY WITH APPLICABLE REQUIREMENTS OF ASTM C 754 FOR INSTALLATION OF STEEL FRAMING.
- 9. WALLS ARE BASED ON L / 120 DEFLECTION, AND SHEATHING BOTH SIDES OR BRIDGING OR STRAPPING AT 4'-0" OC MAX (DESIGN LOAD IS 5 PSF).
- 10. DIAGONAL BRACES TO BE 3 5/8" STUD, 20 GAGE, 10'-0" MAX LENGTH WITH STRAPPING AT 4'-0" OC BOTH SIDES. RANGE OF DIAGONAL BRACING TO BE 30 TO 45 DEGREES FROM VERTICAL.
- 11. WHERE NON-LOAD BEARING WALLS EXTEND TO UNDERSIDE OF FLOOR OR ROOF ABOVE, PROVIDE FOR DEFLECTION OF APPLIED LOAD BY NESTED TRACK METHOD OR MANUFACTURED PROPRIETARY SYSTEM. REFERENCE SECTION SLIP JOINT AND SECTION SLIP JOINT (DEEP) THIS DWG.
- 12. WHEN BRACING IS PARALLEL TO A STEEL BEAM OR FRAMING MEMBER, ATTACH BRACING TO BOTTOM FLANGE OF BEAM OR FRAMING MEMBER. WHEN BRACING IS NOT PARALLEL TO A STEEL BEAM OR FRAMING MEMBER, ATTACH BRACING TO TOP FLANGE OF BEAM OR FRAMING MEMBER. DO NOT ATTACH BRACING TO ROOF DECK. WHERE GYPSUM BOARD IS INDICATED ON ONE SIDE OF METAL STUD ONLY, OR NEITHER SIDE AT PORTION OF WALL ABOVE CEILING, PROVIDE WALL STRAPPING AT 4'-0"OC AT EXPOSED STUD FACE. ALL WALL BRACING SHALL BE ABOVE CEILING WHERE A CEILING IS PROVIDED WITHIN ANY ROOM OR AREA.

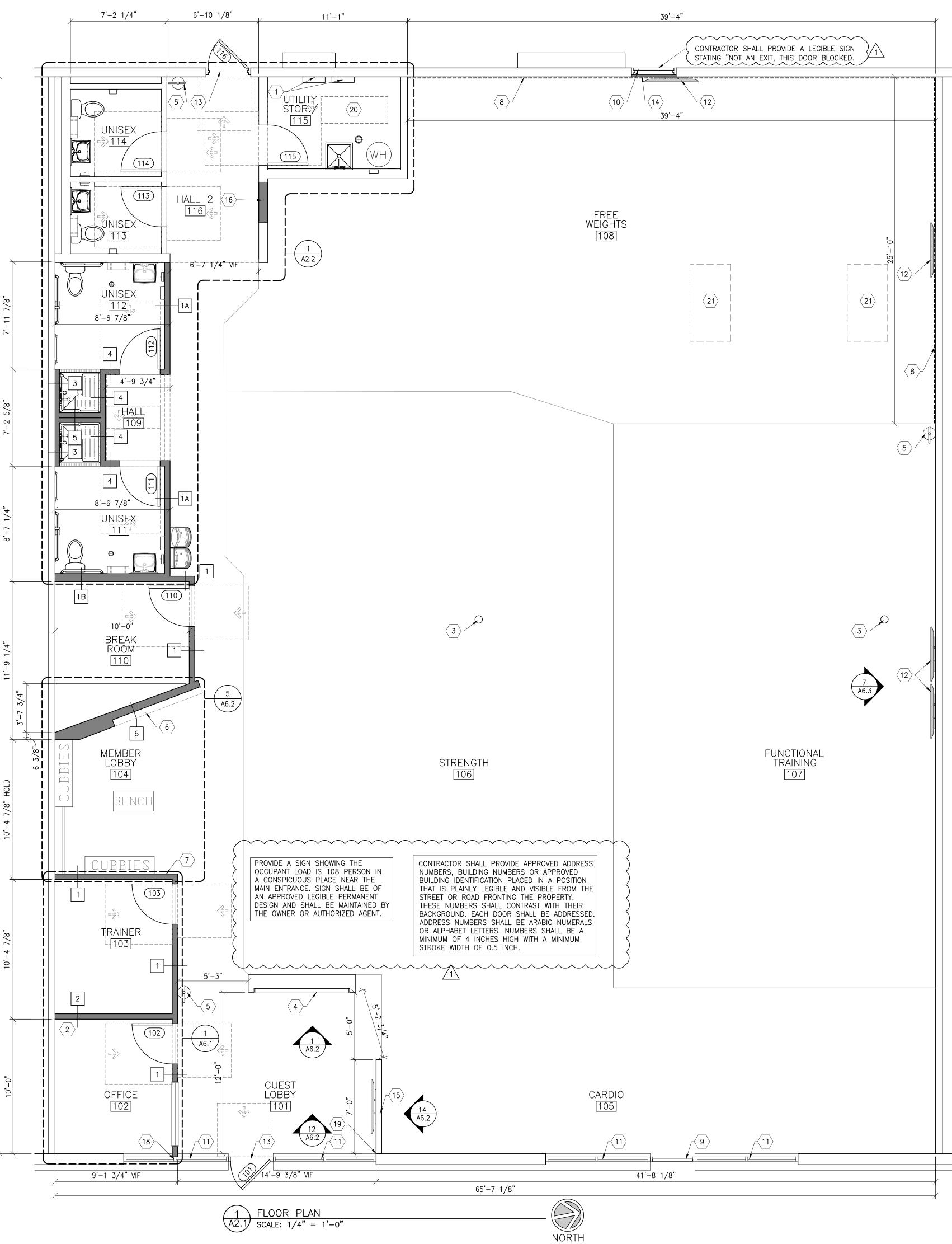
# **GENERAL NOTES:**

- 1. ALL DIMENSIONS ARE TO FINISHED FACE OF WALL, FACE OF EXISTING CONSTRUCTION (UNO).
- 2. REFER TO SHEET A3 FOR ALL WALL & FLOOR FINISHES.
- 3. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 4. REFER TO THE LATEST ANYTIME FITNESS DESIGN MANUAL FOR ALL REQUIRED FURNITURE AND ACCESSORIES - GENERAL CONTRACTOR TO ASSEMBLE AND INSTALL OWNER SUPPLIED FURNITURE - VERIFY QUANTITIES WITH OWNER.
- 5. REFER TO PLUMBING DRAWINGS FOR LOCATION OF SLAB REMOVAL AND REPLACEMENT. FIELD VERIFY EXACT LOCATION. REFER TO DETAIL 2/A2.2 FOR ADDITIONAL INFORMATION.

# **CONTRACTOR NOTES:**

GENERAL CONTRACTOR RESPONSIBILITIES

- 1. FIELD VERIFY PROJECT SPACE CONDITIONS PRIOR TO CONSTRUCTION.
- 2. PATCH / REPAIR / PREP EXISTING AND DAMAGED DEMISING WALLS TO ACCEPT NEW FINISHES.
- 3. INFILL ALL CONCRETE TRENCHING PER DETAIL 2/A2.2.



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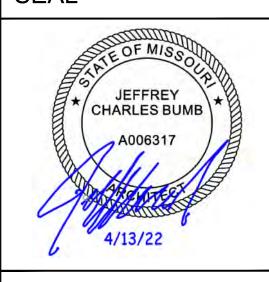
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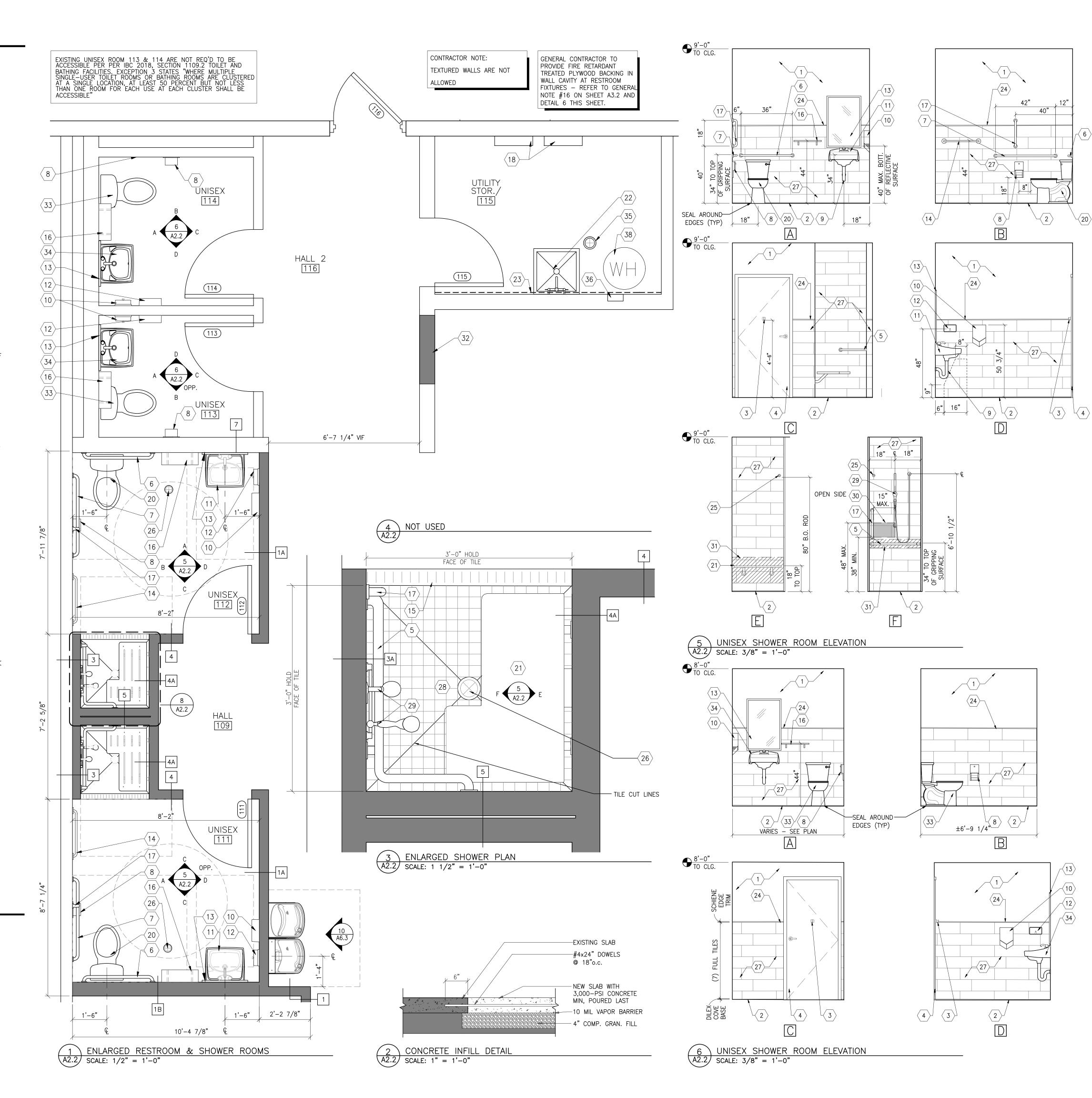
**ARCHITECTURAL** FLOOR PLAN

# KEYED NOTES:

- (1) WATER RESISTANT GYP. BD. WALL PAINT REFER TO A3.1 & A3.2.
- $\langle 2 \rangle$  SCHLUTER BASE TRIM, REFER TO SCHEDULES OF SHEET A3.2.
- 3 ROBE HOOK.
- (4) DOOR & FRAME REFER TO A3.2.
- 5 TWO WALL SHOWER GRAB BAR REFER TO 12/A6.3 FOR BLOCKING INFORMATION
- (6) 36" GRAB BAR REFER TO 12/A6.3 FOR BLOCKING INFO
- $\langle 7 \rangle$  42" GRAB BAR REFER TO 12/A6.3 FOR BLOCKING INFO
- MULTI ROLL TOILET PAPER DISPENSER B-2888 REFER TO 12/A6.3 FOR BLOCKING INFORMATION.
- 9 PROVIDE TRAP PROTECTION.
- HAND DRYER (DYSON AIRBLADE V) TO BE PURCHASED BY OWNER THROUGH ANYTIME FITNESS DASHBOARD GC TO INSTALL REFER TO ELECTRICAL DRAWINGS.
- (11) ADA COMPLIANT LAVATORY.
- (12) SOAP DISPENSER REFER TO 12/A6.3 FOR BLOCKING INFO
- 24" x 36" POLISHED PLATE GLASS MIRROR IN STAINLESS STEEL FRAME COPE WALL TILE AROUND MIRROR
- 14 24" TOWEL BAR SEE PLAN FOR LOCATION REFER TO 12/A6.3 FOR BLOCKING INF
- 15 FLOOR TRENCH DRAIN SEE PLUMBING DRAWINGS FOR MORE INFORMATION.
- (16) 4" x18" STAINLESS STEEL WALL SHELF VERIFY FINAL LOCATION WITH OWNER
- 17) 18" VERTICAL GRAB BAR.
- (18) RELOCATED ELECTRICAL PANELS SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- DRINKING FOUNTAIN WITH BOTTLE FILLING STATION PROVIDE CANE APRON, REFER TO 10/A6.3.
- ADA COMPLIANT WATER CLOSET, FLUSH CONTROL TO BE ON OPEN SIDE OF WATER CLOSET (SIDE OPPOSITE OF WALL)
- (21) ADA COMPLIANT RETRACTABLE SHOWER SEAT
- EXISTING SERVICE SINK PROVIDE MIXING VALVE AS REQ'D. SEE PLUMBING DRAWINGS FOR MORE INFORMATION.
- PROVIDE 8'-0" HIGH FRP WAINSCOT AT BACK WALL OF SERVICE SINK AND WATER HEATER AS SHOWN.
- 24 SCHLUTER TRIM, REFER TO SCHEDULES OF SHEET A3.2.
- (25) SHOWER CURTAIN ROD @ 80" AFF TO BOTTOM OF ROD.
- 26 NEW FLOOR DRAIN SEE PLUMBING DRAWINGS FOR MORE INFORMATION.
- CERMIC TILE REFER TO SCHEDULE FOR NEW DESIGN ON SHEET 3.2.
- PROVIDE POSITIVE SLOPE TO FLOOR DRAINS IF SLAB IS EXISTING, REMOVE PORTION AS NEEDED & REPOUR TO REQ'D. SPECIFICATIONS COORDINATE SLOPES W/ FLOORING CONTRACTOR TO ACHIEVE CLEAN, SMOOTH TRANSITION
- SHOWER SPRAY UNIT WITH HAND-HELD OR FIXED ABILITIES. FLEX HOSE TO BE 60" MIN.
- CONTROL PANEL WITH LEVER TYPE CONTROLS. 15" MAX. FROM CENTERLINE, LOCATE WITHIN SHADED AREA
- (31) REFER TO 12/A6.3 FOR BLOCKING INFO.
- INFILL DOOR OPENING WITH TYPE 'X' GYP. BD. (BOTH SIDES) OVER 3 5/8" METAL STUDS @ 16" O.C. ALIGN GYP. BD. WITH ADJACENT WALL.
- (33) EXISTING TOILET TO BE REUSED, CLEAN AND REPAIR TO LIKE NEW.
- (34) EXISTING LAVATORY TO BE REUSED, CLEAN AND REPAIR TO LIKE NEW.
- (35) EXISTING FLOOR DRAIN TO REMAIN.
- (36) EXISTING WASHER HOOK UP TO REMAIN.
- PROVIDE MOISTURE RESISTANT GYP. BD. @ WALLS AND CEILING.
- (38) WATER HEATER SEE PLUMBING DRAWINGS FOR MORE INFORMATION.

# **GENERAL NOTES:**

- 1. VERIFY THE LOCATION OF ALL ITEMS WITH OWNER PRIOR TO INSTALLATION.
- 2. VERIFY IF ANY OF THE PROPOSED TOILET ACCESSORIES WILL BE SUPPLIED BY OWNER.
- 3. REFER TO A3.1 & A3.2 FOR INTERIOR DECOR FINISHES.
- 4. GENERAL CONTRACTOR TO INSTALL 5/8" CEMENTITIOUS SHEATHING IN LIEU OF MOISTURE RESISTANT GYPSUM BOARD AT ALL WALL TILE LOCATIONS.
- 5. BLOCKING: REFER TO NOTE #16 UNDER GENERAL NOTES ON SHEET AO.1.
- 6. ALL RESTROOM AND SHOWER ROOM ACCESSORIES SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.
- 7. NO EXPOSED COPPER IN RESTROOM.
- 8. DO NOT TILE BEHIND RESTROOM MIRROR.
- 10. REFER TO DETAIL 11/A6.3 FOR ACCESSIBLE SIGNAGE AT RESTROOMS.
- 11. REFER TO PLUMBING DRAWINGS FOR LOCATION OF SLAB REMOVAL AND REPLACEMENT. FIELD VERIFY EXACT LOCATION. REFER TO DETAIL 2/A2.2 FOR ADDITIONAL INFORMATION.



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Lee's Summit, Missouri

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CHECKED BY:

ENLARGED TOILET
ROOM PLAN &
ELEVATIONS

TG

JCB

A2.2

# **KEYED NOTES:**

- $\langle 1 \rangle$  TILE FLOOR TRANSITION REFER TO DETAILS 2/A3.1 FOR ADDITIONAL INFORMATION.
- $\langle 2 \rangle$  SHOWER TRENCH DRAIN REFER TO PLUMBING DRAWINGS.
- $\langle 3 \rangle$  TILE (T-4) AT SHOWER FLOOR TYPICAL
- LIGHTBOX PRE-MANUFACTURED MILLWORK TO BE SUPPLIED BY OTHERS. REFER TO DETAILS 1/A6.2 FOR ADDITIONAL INFORMATION.
- $\langle 5 \rangle$  floor transition strip refer to transition type a on sheet 9/a6.3
- (6) ALIGN FLOORING TRANSITION AT CORNER OF WALL
- FEATURE WALL WITH WALL GRAPHICS SUPPLIED BY OWNER, INSTALLED BY G.C. REFER TO DETAIL 8/A6.2 FOR ADDITIONAL INFORMATION
- 8 FLOOR TRANSITION STRIP REFER DETAIL 8/A6.3

### PAINTING NOTES:

- 1. THE CEILING PAINT COLOR IS INTENDED TO ENCOMPASS THE ROOF FRAMING STRUCTURE. WALL/CEILING TRANSITION PAINT LINE TO BE A STRAIGHT LINE PARALLEL TO THE FINISHED FLOOR ELEVATION THAT EXTENDS 2" BELOW THE LOWEST STRUCTURAL ROOF MEMBER OR MOST COMMON STRUCTURAL ELEMENT IF A SINGLE BEAM IS CONSIDERABLY LOWER THAN THE MAJORITY OF THE MEMBERS. THIS DOES NOT INCLUDE ANY WALL KICKERS OR MISCELLANEOUS FRAMING MEMBERS -WALL PAINT TO EXTEND A MINIMUM OF 12'-0" ABOVE FINISHED FLOOR ELEVATION - VERIFY EXACT TRANSITION WITH OWNER.
- 2. 2. GENERAL CONTRACTOR TO PAINT ALL WALLS TO UNDERSIDE OF ROOF DECK, UNLESS THE FOLLOWING CONDITIONS ARE MET:
  - SPACE IS ENTIRELY ENCLOSED BY 4 WALLS WITH SHEATHING TO ROOF DECK. - DROPPED CEILING IS INSTALLED THROUGHOUT SPACE. - NO POSSIBILITY OF VIEWING ANY WALL AREA ABOVE CEILING FROM ANY POINT.
- 3. CEILING PAINT IS TO ACHIEVE 100% COVERAGE WITH NO BLEED THROUGHOUT. - CONTRACTOR TO PROVIDE PRIMER AND AS MANY COATS AS NECESSARY TO ACHIEVE 100% COVERAGE.
  - -THIS INCLUDES ALL DUCTWORK, PIPING, CONDUIT AND ATTACHMENTS.
- 4. ENSURE ALL PAINTED SURFACES ACHIEVE COMPLETE COVERAGE ALL SURFACES PREVIOUSLY UNFINISHED TO RECEIVE PRIMER AND TWO (2) COATS OF PAINT MINIMUM - WALL PAINT TO BE
- 5. GENERAL CONTRACTOR TO PAINT ALL WALLS PRIOR TO INSTALLATION OF ANY WALL FINISHES ON
- 6. IF FIBERGLASS SHOWER INSERTS ARE USED, PAINT WALLS ABOVE.
- 7. DOOR & WINDOW FRAMES TO MATCH ADJACENT WALL FINISHES REFER TO DETAIL 4/A6.3 BE EGGSHELL.

1. GENERAL CONTRACTOR TO INSTALL ALL VINYL FLOORING SO THAT THE PLANK IS ORIENTATED IN THE LONG DIRECTION OF THE ROOM — TYPICAL.

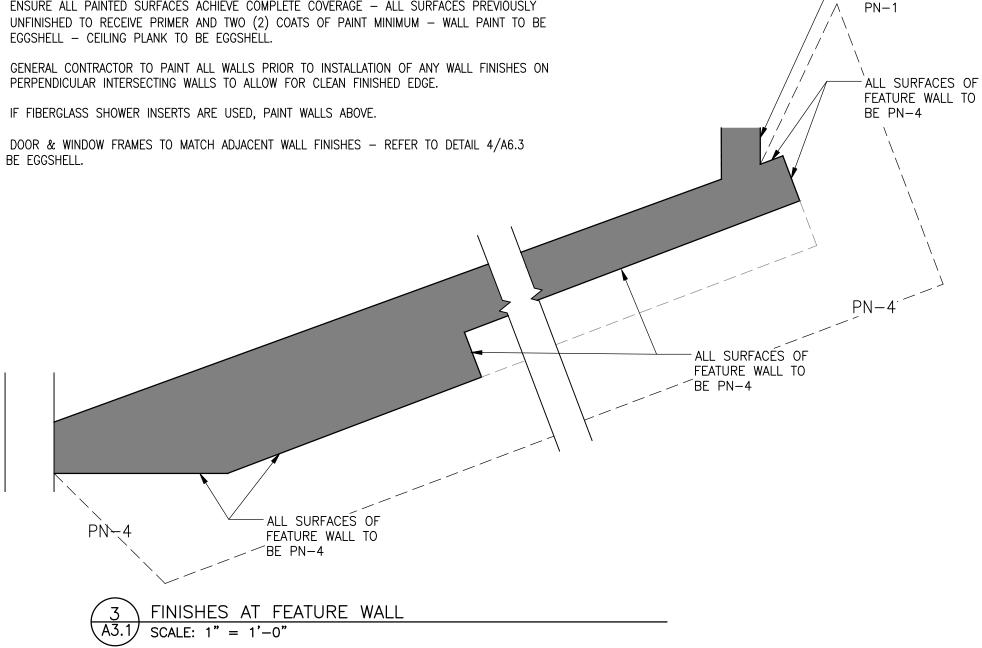
**FLOORING NOTES:** 

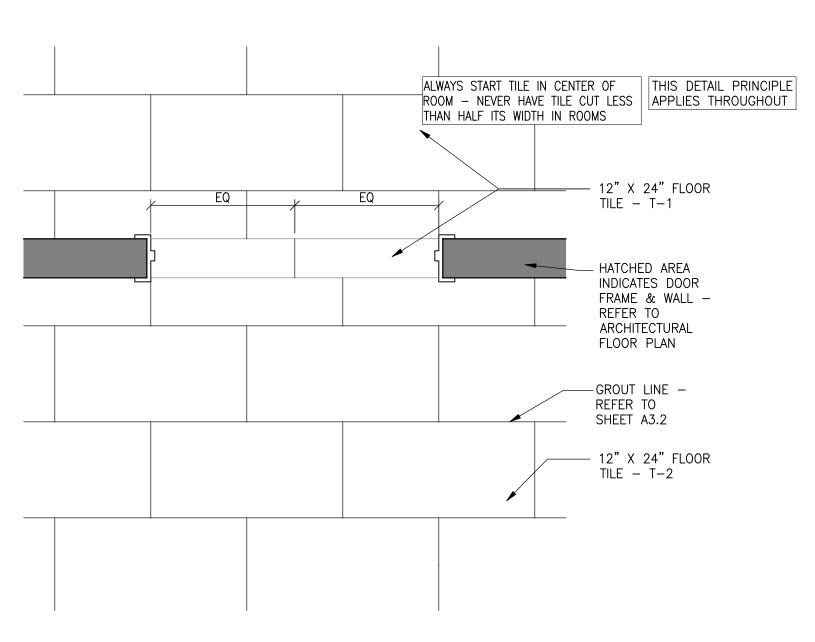
- 2. RUBBER FLOORING IS MANUFACTURED IN ROLLS THAT ARE 4'-0" WIDE, AND IN CUSTOM LENGTHS FOR EACH CLUB. CONTRACTOR IS TO ORDER MATERIAL IN THE PROPER LENGTH TO ELIMINATE BUTT JOINTS WITHIN A 4'-0' WIDE RUN. THE ONLY SEAMS THAT ARE ALLOWED ARE SEAMS BETWEEN THE 4'-0" ROLLS. THIS IS A CUSTOM PRODUCT AND MUST BE ORDERED A MINIMUM OF FOUR (4) WEEKS PRIOR TO INSTALLATION.
- TURF FLOORING IS MANUFACTURED IN ROLLS THAT ARE 6'-0" WIDE, AND IS CUSTOM LENGTHS FOR EACH CLUB. CONTRACTOR IS TO ORDER MATERIAL IN THE PROPER LENGTH TO ELIMINATE BUTT JOINTS WITHIN A 6'-0" WIDE RUN. THE ONLY SEAMS THAT ARE ALLOWED ARE SEAMS BETWEEN THE 6'-0" ROLLS. THIS IS A CUSTOM PRODUCT AND MUST BE ORDERED A MINIMUM OF FOUR (4) WEEKS PRIOR TO INSTALLATION. ORDER TURF IN FOOT INCREMENTS.
- 4. FLOORING AND WALL PROTECTION PANELS TO BE ACCLIMATED TO SPACE CONDITIONS FOR A MINIMUM OF 48 HOURS PRIOR TO INSTALLATION.

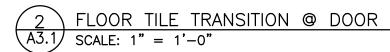
CONTRACTOR NOTE: 1. TEXTURED WALLS ARE NOT ALLOWED. 2. VERIFY/ CONFIRM ALL PAINT COLORS AND FINISH SPECS WITH CDM PRIOR TO ORDERING MATERIALS.

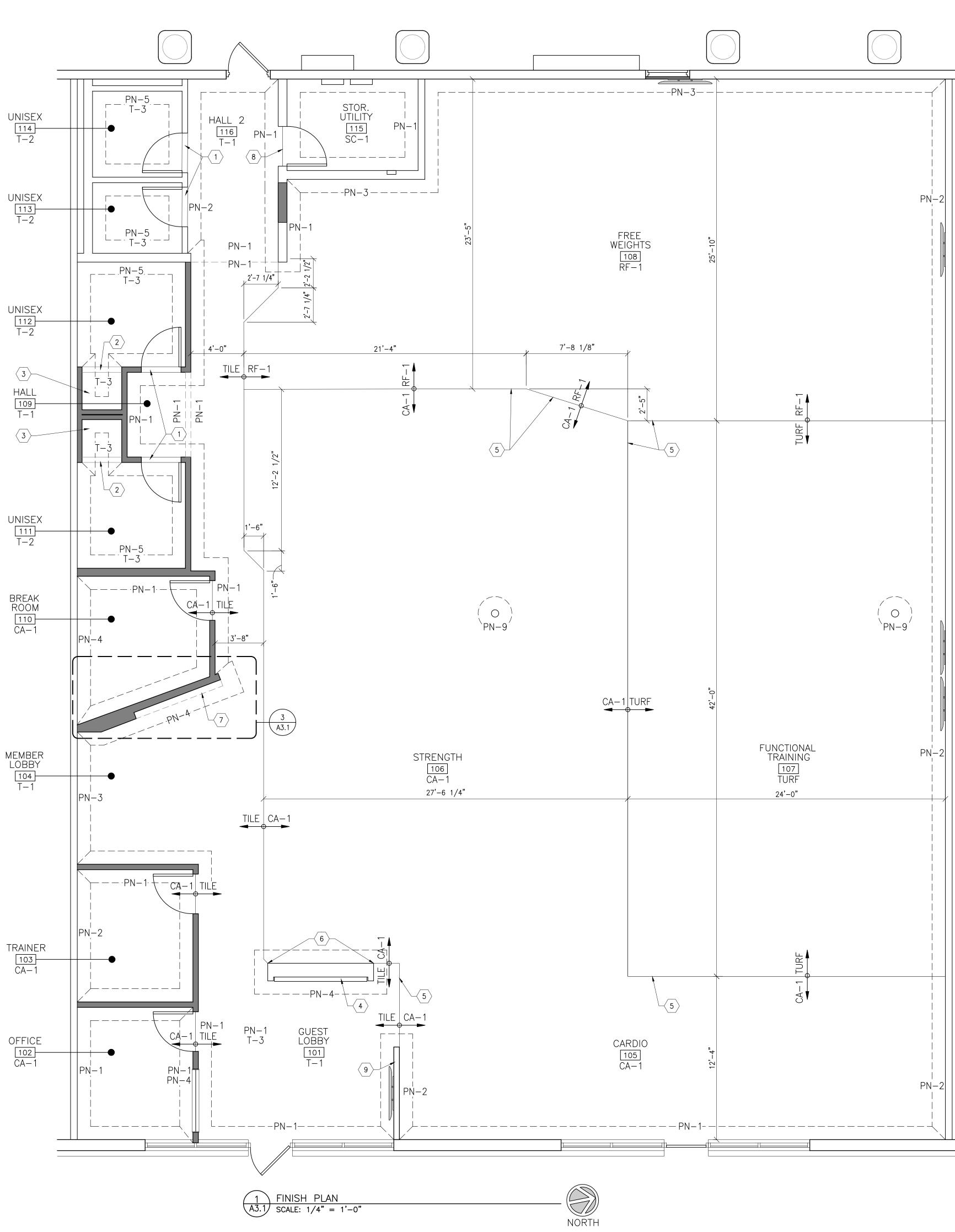
GENERAL CONTRACTOR TO PROVIDE FIRE RETARDANT TREATED BLOCKING IN WALL CAVITY AT RESTROOM FIXTURES - REFER TO GENERAL NOTE #16 ON SHEET A3.2 AND DETAIL 12/A2.2

- PAINT COLOR









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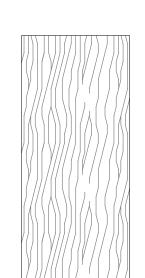
FINISH PLAN

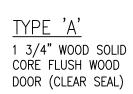
A3.1

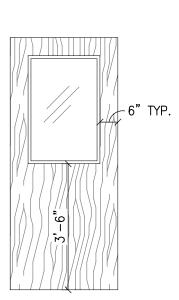
### DECOR SCHEDULE COLOR SCHEME: NEW DESIGN

	T		_					1		T
ITEM	SYMBOL	CHOICE	SPECIFICATIONS				REMARKS	FLAME / SMOKE INDEX	INSTALLED BY	SUPPLIE BY
PAINT								•		
PAINT 1	PN-1	REQUIRED	MANUFACTURER:	SHERWIN WILLIAMS	; NUMBER: SW7662 COLOR: EVE	NING SHADOW	WALL PAINT: PROMAR 200 — EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
PAINT 2	PN-2	REQUIRED	MANUFACTURER:	SHERWIN WILLIAMS	; NUMBER: SW9161 COLOR: DUS	STBLU	WALL PAINT: PROMAR 200 — EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
PAINT 3	PN-3	REQUIRED	MANUFACTURER:	SHERWIN WILLIAMS	;NUMBER: SW7069; COLOR: IRON	I ORE	WALL PAINT: PROMAR 200 - EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
		MANUFACTURER: SHERWIN WILLIAMS; COLOR: CUSTOM "NEW ANYTIME PURPLE"		-n -						
				PROMAR 200 EGG SHELL	ACRYLIC LATE	X STANDALONE				
				ONE GALLON: B2	OW02653 BASE: DEEP 6	550186935				
			CCE COLORANT	OZ	32 64	128				
PAINT 4	PN-4	REQUIRED	W1-WHITE	-		_	WALL PAINT: PROMAR 200 - EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
			G2-GREEN	-		_				
			L1-BLUE	2	38 –	_				
			R3-MAGENTA	6	57 –	_				
			Y1-YELLOW	_		_				
PAINT 5	PN-5	REQUIRED	MANUFACTURER:	SHERWIN WILLIAMS	; NUMBER: SW 7649; COLOR: S	ILVERPLATE	WALL PAINT: PROMAR 200 — EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
PAINT 9	PN-9	REQUIRED	MANUFACTURER:	SHERWIN WILLIAMS	; NUMBER: SW 7006; COLOR: E	XTRA WHITE	WALL PAINT: PROMAR 200 – EGGSHELL WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
PAINT 10	PN-10	REQUIRED	MANUFACTURER: WATERBORNE ACF		; NUMBER: SW B42W00082 COL	OR: WHITE	WALL PRIMER: ZERO VOC B28W2600	EXEMPT PER SECTION 803.2	GC	GC
OPTIONAL PAINT GRA	ADE OPTIC	NS:	TWITE TO	VIEW DIVILLE			THE TANKEN PERCENTAGE			
UPGRADED PAINT FO	R GOOD	WALL	SHERWIN WILLIAM	IS INDUSTRIAL PRE		XY K45W151 - EG	GSHELLL			
UPGRADED PAINT FO PROTECTION	R BEST \	WALL		MS INDUSTRIAL CAT 13 & PART B: B73	ALYZED WATER-BASED EPOXY 2	PART – EGGSHELL				
FLOORING / WALL	COVERI	ING	FART A. B/SWSO	or a. FAINT B. B/C	¥300					
CARPET	CA-1	REQUIRED		RER: PATCRAFT; STYLE(NUMBER): COLOR SWITCHED (802U0); MBER): DARKER HAZE (69557)		ASHLAR INSTALLATION WITH PATTERN PARALLEL TO LONG DIRECTION OF SPACE	CLASS 1	GC	GC	
RUBBER	RF-1	REQUIRED		: ECORE; STYLE: EVERLAST ROLL .OR: EL09 PUMPIN' PURPLE				EXEMPT PER SECTION 804	GC	GC
PURPLE TURF	TURF	REQUIRED	,					CLASS 1	GC	GC
TRANSITION STRIP	TS-1	REQUIRED	MANUFACTURER:	JOHNSONITE; INSE	RT NUMBER: CE-40; COLOR: BL	ACK	CONTOUR INSTALLATION: MTC-00-A STRAIGHT INSTALLATION: MT-00-A	CLASS 1	GC	GC
PORCELAIN TILE 1	T-1	PRIMARY OPTION	MANUFACTURER: STYLE: VOLUME	DALTILE; NUMBER	/ COLOR: VL70 AMPLIFY BLACK		GROUT: MAPEI FLEXCOLOR CQ; COLOR #47 CHARCOAL; INSTALLED WITH VERTICAL BRICK NARROW EDGE PATTERN (50% OVERLAP)	EXEMPT PER SECTION 804	GC	GC
PORCELAIN TILE 2	T-2	REQUIRED	MANUFACTURER: - 12"X24"; COV	DALTILE; NUMBER E BASE: DILEX—AH	/ COLOR: VL70 AMPLIFY BLACK: IK 3/8" ALUM SATIN #99995440 : 3/8" ALUM SATIN #999954228	80; OUTSIDE: 3/8"	` '	EXEMPT PER SECTION 804	GC	GC
PORCELAIN TILE 3	T-3	REQUIRED	MANUFACTURER: 8"X24"; SCHLUTE #9999533553; C	DALTILE; NUMBER/ ER WALL TRIM (TOI COVE BASE: DILEX-	: 3/8 ALUM SATIN #999934228 'COLOR: #VI12/8241P2 GRAY; S' P): SCHIENE EDGE TRIM 3/8" AL -AHK 3/8" ALUM SATIN #999954 NSIDE: 3/8" ALUM SATIN #9999	TYLE: VOLUME 1.0 - LUM SATIN 14080; OUTSIDE:	, ,	EXEMPT PER SECTION 804	GC	GC
PORCELAIN TILE 4	T-4	REQUIRED	2"X2"; COVE BAS	SE: DILEX-AHK 3/	COLOR: D311 EBONY; STYLE: KE 8" ALUM SATIN #9999544080; C ALUM SATIN #9999542286	EYSTONE MOSIAC DUTSIDE: 3/8" ALUM	GROUT: MAPEI FLEXCOLOR CQ; COLOR #47 CHARCOAL DO NOT USE IF FIBERGLASS INSERT IS USED	EXEMPT PER SECTION 804	GC	GC
CONCRETE	SC-1	REQUIRED	SEALED CONCRE	•				EXEMPT PER SECTION 804	GC	GC
CONCRETE	STC	ALTERNATE OPTION			MERIPOLISH SURE LOCK DUE / COL ECTOR CONCRETE; (STAINED) F			EXEMPT PER SECTION 804	GC	GC
WALL COVERING		<u> </u>							<u>.                                    </u>	
BASE	VB-1	REQUIRED	MANUFACTURER:	JOHNSONITE; NUM	BER: 40; COLOR: BLACK; STYLE:	6" VINYL COVE		CLASS 2	GC	GC
FIBERGLASS REINFORCED PANEL	FRP-1	REQUIRED	MANUFACTURER:	MARLITE; NUMBER:	P100; STYLE: PEBBLE (WHITE)			CLASS C	GC	GC
CEILING										
CEILING TILE	ACT-1	REQUIRED		ISION SYSTEM: DX,	2' X 2' X 3/4"; STYLE: ECLII /DXL24 (WHITE); EDGE TRIM: CO		IF CEILING TILE IS USED, MAY NOT BE APPLICABLE TO ALL LOCATIONS	CLASS A	GC	GC
MISCELLANEOUS								1		
MISCELLANEOUS PLASTIC LAMINATE COVER PLATES	L-1	REQUIRED	MANUFACTURER:	ARBORITE; NUMBE	R: P—322 CA; STYLE: JAIPUR ON	IYX	NOT APPLICABLE FOR ALL CLUBS - WALL CAP & WINDOW SILI	_ CLASS A	GC	GC

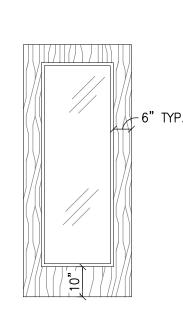
### FRAME TYPES: **DOOR TYPES:**



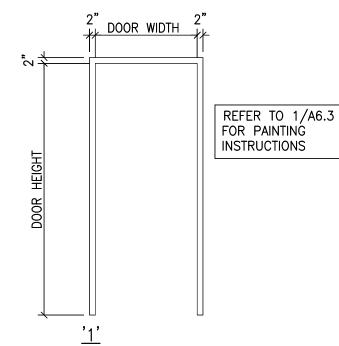




1 3/4" WOOD SOLID CORE FLUSH WOOD DOOR (CLEAR SEAL) W/ 1/4" TEMP GLAZING WINDOW 24"W x 68"H WINDOW 24"W x 36"H



1 3/4" WOOD SOLID CORE FLUSH WOOD DOOR (CLEAR SEAL) W/ 1/4" TEMP GLAZING



KNOCK DOWN HOLLOW METAL DOOR FRAME (PAINT)

### ROOM FINISH SCHEDULE

ROOM	ROOM	FLOOR	BASE	WALL		CEILING		REMARKS
NUMBER	NAME	FLOOR	DASE	WALL	TYPE	FINISH	HEIGHT	REMARKS
101	GUEST LOBBY	T-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
102	MANAGER'S OFFICE	CA-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	ACT	ACT-1	10'-0"	
103	TRAINER	CA-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	ACT	ACT-1	10'-0"	
104	MEMBER LOBBY	T-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
105	CARDIO	CA-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
106	STRENGTH	CA-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
107	FUNCTIONAL TRAINING	TURF	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
108	FREE WEIGHTS	RF-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	EXISTING	PAINT PG-10	OPEN	
109	HALL	T-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	ACT	ACT-1	10'-0"	
110	BREAK ROOM	CA-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	ACT	ACT-1	10'-0"	
111	UNISEX	T-2/4	T-2	PAINT PN-5 / T-3	GWB	PAINT PN-9	9'-0"	48" + BASE HIGH WAINSCOT W/ BULLNOSE EDGE CAP
112	UNISEX	T-2/4	T-2	PAINT PN-5 / T-3	GWB	PAINT PN-9	9'-0"	48" + BASE HIGH WAINSCOT W/ BULLNOSE EDGE CAP
113	UNISEX	T-2	T-2	PAINT PN-5 / T-3	EXIST. GWB	PAINT PN-9	8'-0"	48" + BASE HIGH WAINSCOT W/ BULLNOSE EDGE CAP
114	UNISEX	T-2	T-2	PAINT PN-5 / T-3	GWB	PAINT PN-9	8'-0"	48" + BASE HIGH WAINSCOT W/ BULLNOSE EDGE CAP
115	STOR./UTILITY	SC-1	VB-1	PAINT PN-1/ FRP	ACT	ACT-1	10'-0"	
116	HALL	T-1	VB-1	PAINT, REFER TO A3.1 FOR COLOR	ACT	ACT-1	10'-0"	

# DOOR & HARDWARE SCHEDULE

DOOR	ROOM			FRAME			RATING	HARDWARE	REMARKS	INSTALLED	SUPPLIED BY
NUMBER	NAME	SIZE	TYPE	TYPE	MATL.	FINISH	IVATING	GROUP	INLIMATING	BY	3011 LIED DI
101	GUEST LOBBY	3'-0"x7'-0"	EXIST. STORE FRONT	EXIST.	EXIST.	MRF.	-	6	1,2	GC	TWIN CITY HARDWARE
102	MANAGER'S OFFICE	3'-0"x7'-0"	С	1	НМ	PT.	-	3	2,3	GC	TWIN CITY HARDWARE
103	TRAINER	3'-0"x7'-0"	В	1	НМ	PT.	_	3	2,3	GC	TWIN CITY HARDWARE
	BREAK ROOM	3'-0"x7'-0"	В	1	НМ	PT.	ı	3	2,3	GC	TWIN CITY HARDWARE
111	UNISEX	3'-0"x7'-0"	A	1	НМ	PT.	-	2	2,3	GC	TWIN CITY HARDWARE
112	UNISEX	3'-0"x7'-0"	А	1	НМ	PT.	ı	2	2,3	GC	TWIN CITY HARDWARE
113	UNISEX	3'-0"x7'-0"	Α	1	НМ	PT.	-	2	2,3	GC	TWIN CITY HARDWARE
114	UNISEX	3'-0"x7'-0"	Α	1	НМ	PT.	-	2	2,3	GC	TWIN CITY HARDWARE
115	STOR./UTILITY	3'-0"x7'-0"	Α	1	НМ	PT.	-	4	2,3	GC	TWIN CITY HARDWARE
116	HALL 2	3'-0"x7'-0"	EXIST.	EXIST.	НМ	PT.	-	5	1,2	GC	TWIN CITY HARDWARE

# HARDWARE GROUPS:

(1) KICKPLATE (1) KICKDOWN HOLDER (1) WALL STOP (1) SILENCER
GROUP #5
(1) RIM EXIT DEVICE
REUSE REMAINDER OF
HARDWARE
analin II.a
GROUP #6
(1) RIM EXIT DEVICE NIGHT LATCH (1) ELECTRIC RIM DEVICE NIGHT LATCH
(1) RIM CYLINDER
(1) CYLINDER CORE
(1) PULLS, PROVIDE NEW IF NOT EXISTING
(1) POWER SUPPLY
REMAINDER OF HARDWARE THROUGH TWIN CITY
HARDWARE (PREFERRED VENDOR) OR APPROVED

GROUP #4

(3) HINGES

(1) DEADBOLT W/THRU BOLTS

1. REPAIR OR REPLACE DAMAGED HARDWARE TO "LIKE-NEW" CONDITION.

REKEY EXISTING LOCKS PRIOR TO TENANT TAKEOVER. 3. DOORS EQUIPPED WITH A CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED

REFER TO DETAIL 6/A6.3

EQUAL

TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM. 4. THE FORCE REQUIRED TO ACTIVATE ANY CONTROL SHALL NOT EXCEED 5 LBS.

(1) SILENCER

- 1. VERIFY CONDITION OF DOOR HARDWARE, THRESHOLD AND FRAME ARE IN GOOD WORKING ORDER REPAIR/REPLACE AS REQUIRED. HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO
- GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. 3. ALL NEW DOOR FRAMES TO BE 2" MIN. FROM ADJACENT WALL.

# ARCHITECTURAL GENERAL NOTES:

OTHERWISE.

AND CONSENT OF THE OWNER.

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE CODES, LOCAL RESTRICTIONS, ORDINANCES AND LAWS. EACH CONTRACTOR OR SUBCONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ALL APPLICABLE LAWS AND ORDER OF PUBLIC OFFICIALS WITH JURISDICTION FOR SAFETY OF PERSONS/PROPERTY. MAINTAIN FIRE RESISTANCE RATING FOR ALL
- EXISTING TENANT DEMISING WALLS. 2. DIMENSION NOTES A. ALL EXTERIOR WALLS DIMENSIONED TO EXTERIOR OF EXISTING STRUCTURE, UNLESS NOTED
- B. ALL NEW STUD WALL ASSEMBLY OPENINGS ARE NOMINAL DIMENSIONS. C. ALL DIMENSIONS ARE TO FACE OF WALL ASSEMBLY, UNLESS NOTED OTHERWISE. 3. THE GENERAL CONTRACTOR AS WELL AS ALL SUBCONTRACTORS SHALL VISIT THE SITE; VERIFY ALL DIMENSIONS BEFORE SUBMITTING A BID. NOTIFY THE OWNER OF ANY DISCREPANCIES OBSERVED, OBTAIN ALL REQUIRED PERMITS, AND VERIFY ALL SITE CONDITIONS PERTAINING TO THIS PROJECT PRIOR TO SUBMISSION OF BIDS. ANY DISCREPANCIES FOUND DURING SITE INVESTIGATION ARE TO BE REPORTED TO OWNER IN WRITING PRIOR TO BID SUBMISSION. G.C. TO ENSURE STRUCTURE IS NOT ALTERED OR DAMAGED WITH EXCEPTION OF MODIFICATIONS SHOWN ON DRAWINGS. ALL INSTALLATIONS AND ALL CONNECTIONS TO EXISTING BUILDING MECHANICAL SYSTEMS SHALL BE COORDINATED WITH AND PERFORMED UNDER THE SUPERVISION OF THE LANDLORD'S REP. VERIFY FIELD CONDITIONS PRIOR TO COMMENCEMENT OF EACH PORTION OF THE WORK. ALL EXISTING CONDITIONS, STRUCTURAL AND MECHANICAL CONNECTIONS TO ALL EXISTING BUILDING SERVICES MUST BE FIELD VERIFIED PRIOR TO SUBMISSION OF BIDS. ANY DISCREPANCIES SHALL BE REFLECTED AND NO ADJUSTMENT TO BID PRICE SHALL BE MADE AFTER BID SUBMISSION. SUBMISSION OF BID SHALL BE UNDERSTOOD AND CONSTRUED AS CONTRACTOR HAVING VERIFIED ALL EXISTING CONDITION WHETHER OR NOT SHOWN ON DRAWINGS AND HAVING TAKEN INTO ACCOUNT ANY ADJUSTMENT NECESSARY TO FULFILL THE DESIGN INTENT IN FULL AND COMPLETELY. G.C. TO COMPLY WITH OWNER'S RULES AND REGULATIONS REGARDING CONSTRUCTION WITHIN THE BUILDING. G.C. & ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE BASE BUILDING AND TO VERIFY WITH THE CLIENT BEFORE MODIFYING OR ATTACHING NEW CONSTRUCTION TO BASE BUILDING. G.C. SHALL PATCH AND REPAIR ALL EXISTING WALLS, FLOORS, CEILINGS OR OTHER SURFACES IDENTIFIED TO REMAIN THAT MAY BECOME DAMAGED DURING THE COURSE OF WORK. G.C. TO COORDINATE LAYOUT, ROUTING, AND INSTALLATION OF ALL NEW MECHANICAL, ELECTRICAL, FIRE PROTECTION, AND PLUMBING WORK WITH EXISTING MEP/FP SYSTEMS, AND WITH EXISTING STRUCTURE TO REMAIN. REPORT ALL DISCREPANCIES TO OWNER IN WRITING PRIOR TO SUBMITTING BID PACKAGE. EACH CONTRACTOR OR SUBCONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, AND LICENSES REQUIRED FOR PROPER EXECUTION OF THEIR PORTION OF THE WORK. G.C. TO ENSURE THAT A COMPLETE SET OF CONSTRUCTION DOCUMENTS IS GIVEN TO ALL SUBCONTRACTORS PRIOR TO BID SUBMISSION. G.C. SHALL VERIFY THE LOCATION OF ALL UTILITIES. POINTS OF ACCESS TO THE SITE AND MATERIAL STAGING AREA LOCATIONS FOR THE CONTRACTOR SHALL BE APPROVED BY THE OWNER PRIOR TO THE TIME THE CONTRACTOR IS GIVEN NOTICE TO PROCEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY TEMPORARY DRIVES, FENCING, BARRICADES, LIGHTING, ETC. AS NECESSARY TO PROVIDE SAFEGUARDS AND EGRESS IN AND OUT
- 4. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. COORDINATE ALL PORTIONS OF THE WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS ARE NOT INTENDED AND SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONTINUING WITH THE AFFECTED PORTIONS OF THE WORK.

OF THE EXISTING FACILITIES AND PARKING DURING CONSTRUCTION. NORMAL BUSINESS OPERATIONS CANNOT BE INTERRUPTED DURING CONSTRUCTION WITHOUT PRIOR COORDINATION

- 5. ANY DIMENSIONS, DETAILS, NOTES OR SYMBOLS THAT APPLY TO ONE UNIT, APPLIES TO ALL UNITS LIKE SITUATIONS, UNLESS NOTED OTHERWISE.
- 6. THE STATED DIMENSIONS SHALL TAKE PRECEDENCE OVER GRAPHICS. DO NOT SCALE THE DRAWINGS. THE OWNER SHOULD BE NOTIFIED OF ANY DISCREPANCIES. "LINE OF STRUCTURE" AS SHOWN AT THE HEAD CONDITIONS OF EACH PARTITION TYPE IS DIAGRAMMATIC ONLY AND DOES NOT INDICATE THE EXACT CONSTRUCTION CONDITION. RATED PARTITIONS ARE TO TERMINATE AT STRUCTURAL MEMBERS WITH A FIRE RESISTANCE RATING GREATER THAN OR EQUAL TO THE WALL RATING, WHERE REQUIRED, APPROPRIATE FRAMING AND DRYWALL IS TO BE INSTALLED TO OFFSET AROUND STRUCTURAL MEMBERS OR OTHER OBSTRUCTIONS, SUCH AS PIPING OR DUCTWORK, TO MAINTAIN FIRE RESISTANCE RATING. NON-RATED PARTITIONS THAT CONTINUE TO STRUCTURÉ ARE TO TERMINATE AT APPROPRIATE LOCATIONS TO MAINTAIN THE INTENT OF A CONTINUOUS PLANE OF ONE-LAYER OF GYPSUM BOARD SHALL SEAL TIGHT TO DECK AT INSIDE FACE OF WALL FRAMING TO MINIMIZE AIR & MOISTURE INFILTRATION TO THE BUILDING INTERIOR. ALL SHALL BE 5/8" FIRE RATED TYPE, UNLESS NOTED OTHERWISE. FIRESTOP TO BE PROVIDED AT PENETRATIONS THROUGH RATED PARTITIONS AS SPECIFIED OR AS OTHERWISE REQUIRED BY THE ASSEMBLY RATING.
- 7. DUCT PENETRATIONS OF FIRE RATED CORRIDORS, WALLS AND CEILINGS SHALL USE FIRE DAMPERS AS APPLICABLE CODES, ORDINANCES AND LAWS REQUIRE.
- PROVIDE ALL REQUIRED FIRE BLOCKING IN ACCORDANCE WITH APPLICABLE CODES, ORDINANCES
- 9. THE INSTALLATION OF AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL COMPLY WITH APPLICABLE
- 10. VERIFY THAT ALL EXISTING EXTERIOR LANDINGS ARE FLUSH WITH FINISHED FLOOR AND SLOPE AWAY FROM THE FACE OF BUILDING TO PROVIDE POSITIVE DRAINAGE, TYPICAL.
- 11. WHERE DEMOLITION OCCURS ADJACENT TO EXISTING CONSTRUCTION TO REMAIN, PATCH AND REPAIR ADJACENT CONDITIONS FOR A UNIFORM APPEARANCE.
- 12. ALL EXIT DOORS TO BE OPERABLE FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. A READILY VISIBLE SIGN SHALL BE ADJACENT TO THE DOORWAY STATING "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS".
- 13. VERIFY LOCATION, SIZE AND WALL THICKNESS REQUIRED TO RECESS MECHANICAL AND ELECTRICAL ITEMS AND MAINTAIN FIRE RATING REQUIREMENTS OF THE WALL (IF REQUIRED) AT THESE BUILT—INS: UNIT HEATERS, CONVECTORS, ELECTRICAL PANELS, FIRE EXTINGUISHERŚ, CABINETS, DUCTS, PIPING AND ALL OTHER SUCH RECESSES.
- 14. USE ONLY NON-CORROSIVE FASTENERS ON ANY PRESSURE TREATED LUMBER. WHERE EXISTING INSULATION IS REMOVED OR MISSING, PATCH AND REPLACE INSULATION TO MATCH EXISTING CONDITIONS AND MAINTAIN REQUIRED R-VALUES.
- 15. PROVIDE ALL SIGNAGE REQUIRED BY APPLICABLE CODES, ORDINANCES AND LAWS.
- 16. GENERAL CONTRACTOR REQUIRED TO PROVIDE NECESSARY BLOCKING FOR ALL OWNER PROVIDED SIGNAGE, WALL-MOUNTED FIXTURES AND FURNISHINGS, AND SUPPORTS. G.C. SHALL VERIFY THE CHARACTERISTICS OF ALL EQUIPMENT, MILLWORK OR OTHER ITEMS BEING FURNISHED BY OWNER OR OWNER'S CONTRACTORS FOR WHICH G.C. IS RESPONSIBLE FOR INSTALLING. G.C. ASSUMES COMPLETE RESPONSIBILITY WHEN OWNER FURNISHED ITEMS ARE ACCEPTED AND RECEIVED BY G.C. ALL LIGHT SWITCHES, THERMOSTATS, SECURITY ALARMS, ELECTRICAL OUTLETS, ETC. MUST BE MOUNTED TO MEET ALL GOVERNING ACCÉSSIBILITY REQUIREMENTS FOR FLOOR & HEIGHT CLEARANCES AND ONE HAND GRASPING OPERATION.
- 17. VEHICULAR ACCESS MUST BE PROVIDED AND MAINTAINED SERVICEABLE THROUGHOUT CONSTRUCTION.
- 18. CLEANING: THE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF CONSTRUCTION DEBRIS AND TRASH. REMOVE ALL COMBUSTIBLE RUBBISH DURING CONSTRUCTION FROM THE BUILDING CONTINUOUSLY AND DISPOSE OF IN A LEGAL MANNER.
- 19. AT THE TIME OF BUILDING COMPLETION, BUILDING IS TO BE THOROUGHLY CLEANED PRIOR TO TURNOVER TO OWNER, INCLUDING BUT NOT LIMITED TO VERTICAL AND HORIZONTAL SURFACES, DUCTS (INSIDE AND OUT), BAR JOIST, BEAMS & PIPING IN EXPOSED CEILINGS AS WELL AS NEW FILTERS IN ALL HVAC UNITS.
- 20. REFER TO ENGINEERED CONSTRUCTION DOCUMENTS BY OTHERS FOR ADDITIONAL PERTINENT INFORMATION.
- 21. FOR ALL AIR CONDITIONING, EXHAUST & SUPPLY FANS, HVAC & REFRIGERATION EQUIPMENT CURBS, GENERAL CONTRACTOR SHALL PROVIDE & INSTALL SUITABLE BLOCKING IN WALLS & CEILINGS TO SUPPORT FIXTURES, EQUIPMENT & CANOPIES.

RELEASED FOR CONSTRUCTION As Noted on Plans Review

**ARCHITECT** 



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CONSULTANT

SEAL





REVISIONS

REV. DATE ISSUE

DATE: 01.14.22

**DRAWN BY** TG CHECKED BY: JCB

PROJECT NUMBER: 689411

SCHEDULES

 $\overline{\langle 3 \rangle}$  5/8" TYPE "X" GWB ON 6" METAL JOISTS @ 24"O.C.

4) AIR HANDLING UNITS ABOVE, REFER TO MECHANICAL DRAWINGS.

(5) ACCESS TO MEZZANINE. VERIFY PROPER WORKING ORDER. F

### **ELECTRICAL NOTES:**

1. CONTRACTOR TO INSTALL OWNER SUPPLIED EMERGENCY 911 PHONE, INCLUDING CONNECTION TO LV / TELECOMMUNICATIONS SYSTEM AND / OR DEMARCATION POINT. VERIFY LOCATIONS WITH

2. CONTRACTOR TO PROVIDE WIRING / CONNECTION FOR CABLE TELEVISION, TELEPHONE AND DATA FROM THE DEMARCATION POINTS(S) OF USE / TERMINATION. THIS INCLUDES. BUT NOT LIMITED TO TELEPHONES AND COMPUTERS IN THE OFFICE, AND , IF APPLICABLE, THE VIRTUAL TRAINING KIOSK SYSTEM. REFER TO ELECTRICAL DRAWINGS.

3. ALL TREADMILLS TO HAVE DEDICATED CIRCUITS AND SHOWN AS THUS ON THE PANEL SCHEDULE. REFER TO ELECTRICAL DRAWINGS.

4. CEILING FAN CONTROLS NEED TO BE EITHER REMOTE CONTROLLED OR WIRED BACK TO A BREAKER AND ROOM SPECIFIC WALL SWITCH SO THEY CAN BE TURNED OFF FOR CLEANING.

# **GENERAL NOTES:**

CONTRACTOR TO INSTALL SPIRAL DUCT IN OPEN AREAS AND TO BE MANUFACTURED IN A QUALIFIED METAL SHOP — SPLIT DUCTS ASSEMBLED ON SITE ARE NOT ALLOWED — USE REGISTERS THAT DISTRIBUTE AIR DIRECTLY FROM THE DUCT, GOOSENECK EXTENSIONS ARE NOT ALLOWED.

2. IF RESTROOM WALLS STOP SHORT OF THE EXISTING ROOF DECK, GENERAL CONTRACTOR MUST PROVIDE A GYPSUM BOARD CEILING AT 9'-0" AFF OR HIGHER - SUSPENDED GYPSUM BOARD FRAMING SYSTEMS ARE NOT ALLOW.

3. GENERAL CONTRACTOR TO INSTALL CEILING MOUNTED FIXTURES AS PER ELECTRICAL PLAN — FIELD VERIFY EXISTING CONDITIONS TO ENSURE MOUNTING ELEVATION WILL PROVIDE EVEN DISTRIBUTION OF LIGHTING WITHOUT INTERRUPTION AND SHADOWS FROM EXISTING STRUCTURAL ELEMENTS AND / OR PROPOSED DUCTWORK — COORDINATE AS REQ'D. - MINIMUM ELEVATION OF FIXTURES TO BE 10'-6" AFF.

4. PAINT ALL CONDUIT AND MATERIAL TO MATCH CEILING COLOR PRIOR TO INSTALLATION — THROUGHOUT.

5. PROTECT / RELOCATE EXISTING EMERGENCY EXIT LIGHTING AS REQUIRED - REFER TO ELECTRICAL DRAWINGS.

6. PAINT ALL EXPOSED CEILING (STRUCTURAL MEMBERS / PIPES / DUCTS, ETC) PL-10.

7. CEILING WITH "OPEN TO DECK" AREAS - PAINT FROM DECK DOWN WALL TO 2'-BELOW LOWEST POINT - VERIFY WITH CORPORATE PRIOR TO PAINTING.

8. WHEN A SPRINKLER SYSTEM IS PROVIDED, THE SPRINKLER HEADS SHALL BE CENTERED IN THE LAY-IN CEILING TILE, (TYP.)

# REFLECTED CEILING LEGEND:

EXIT SIGN EMERGENCY LIGHT COMBO 7-5/8" X 48" CEILING MOUNTED L.E.D. FIXTURE

SUSPENDED ACOUSTICAL CEILING GRID AND 2' x 2' TILES

RECESSED L.E.D. DOWN LIGHT (DAMP RATED IN SHOWER)

7-5/8" X 48" SUSPENDED L.E.D. FIXTURE

2 1/2" X 4' L.E.D. FIXTURE

2' X 2' L.E.D. FIXTURE

WHITE COMMERCIAL GRADE CEILING FAN —PAINT CONDUIT TO MOTOR PRIOR TO INSTALLATION

5 3/4" X 4' L.E.D. STRIP LIGHT FIXTURE RECESSED 4" L.E.D. DOWN LIGHT FIXTURE

# SUSPENDED CEILING NOTES:

1. ALL HANGER & BRACING WIRES SHALL BE SECURED TO MAIN RUNNERS.

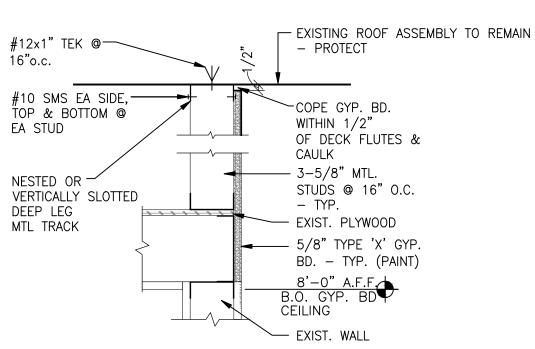
2. PROVIDE TRAPEZE OF OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTER SLOPING WIRES.

### MAIN SUPPORTS:

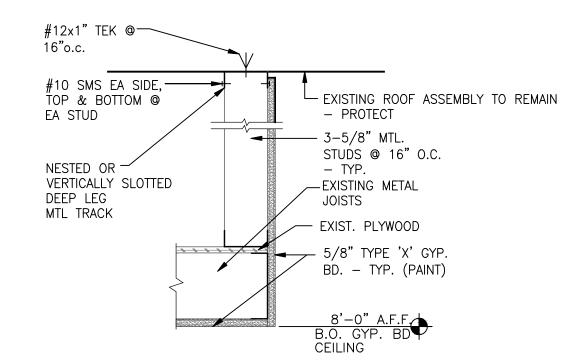
12 GAUGE HANGER WIRES AT 4'-0" EACH WAY.

PERIMETER WIRES: 12 GAUGE PERIMETER WIRES INSTALLED WITHIN 8" OF WALL AT EACH MAIN AND CROSS TEE TO WALL JUNCTURE.

<u>LIGHT FIXTURE SUPPORT:</u> 12 GAUGE WIRES ATTACHED TO MAIN OR CROSS TEES WITHIN 3" OF FIXTURE AT EACH CORNER. 12 GAUGE SAFETY WIRES ATTACHED TO FIXTURE (OPPOSITE CORNERS), EXTENDING TO STRUCTURE ABOVE. INSTALL ON SCREW AT OPPOSITE CORNERS



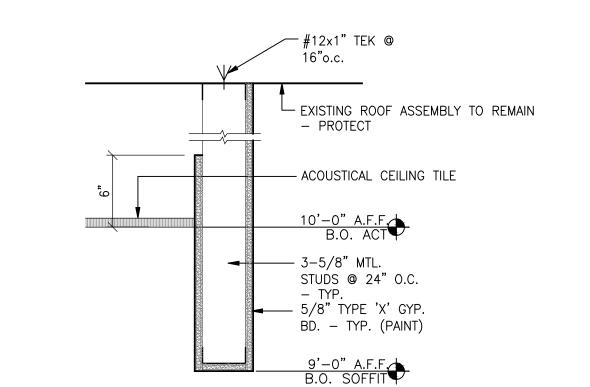
5 DETAIL A4.1 SCALE: 1 1/2" = 1'-0"

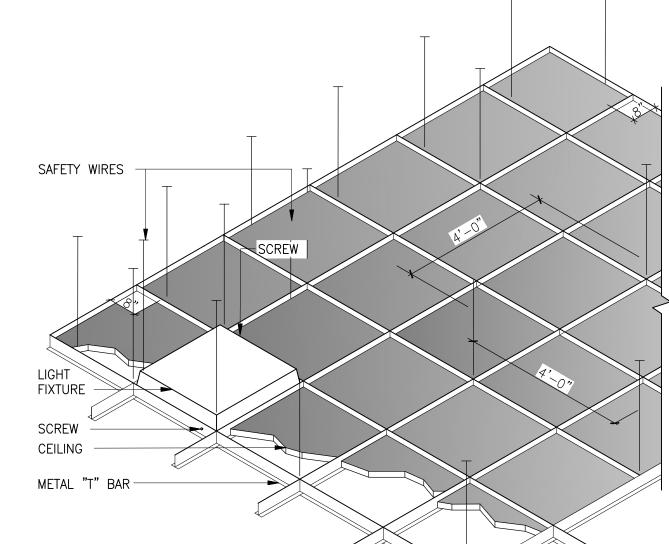


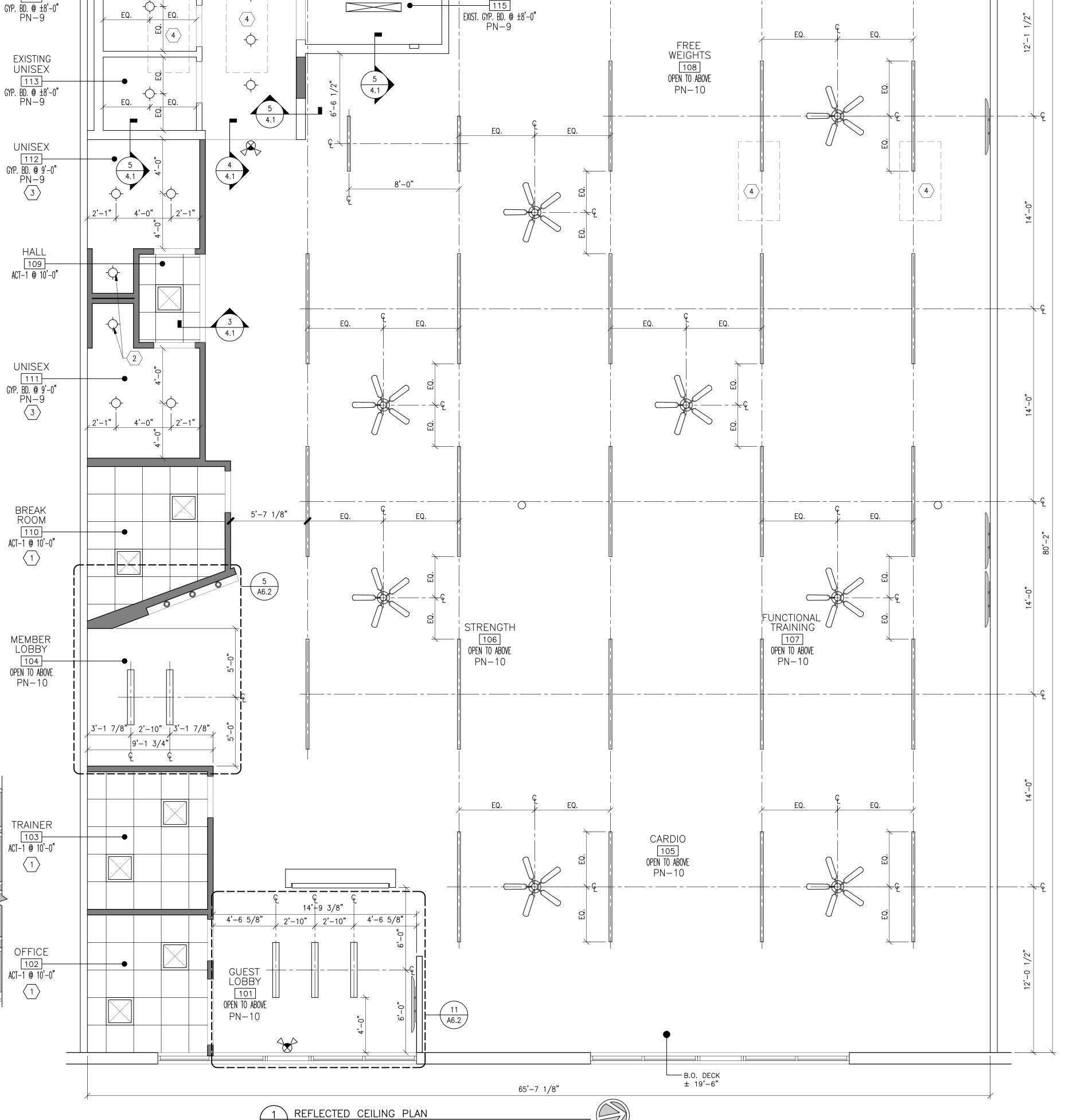
4 DETAIL @ HALL CEILING
A4.1 SCALE: 1 1/2" = 1'-0"

DROP DOWN SOFFIT @ HALL

(A4.1) SCALE: 1 1/2" = 1'-0"







NORTH

11'-0"

UTILITY

11'-0"

B.O. DECK

± 14'-6"

11'-0"

(A4.1) SCALE: 1/4" = 1'-0"

GYP. BD. @ ±8'-0"

**EXISTING** 

UNISEX

114

As Noted on Plans Review ARCHITECT Lee's Summit, Misso

5'-7 1/8"

11'-0"

CONSTRUCTION

TRILEAF

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SEAL





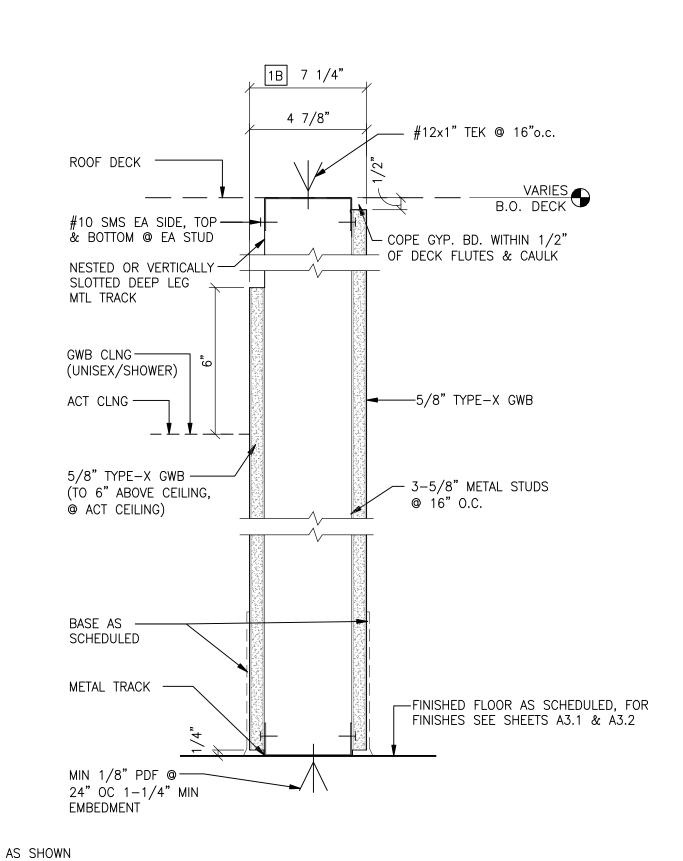
**REVISIONS** REV. DATE ISSUE DATE: 01.14.22 TG DRAWN BY: CHECKED BY: JCB

> REFLECTED **CEILING PLAN**

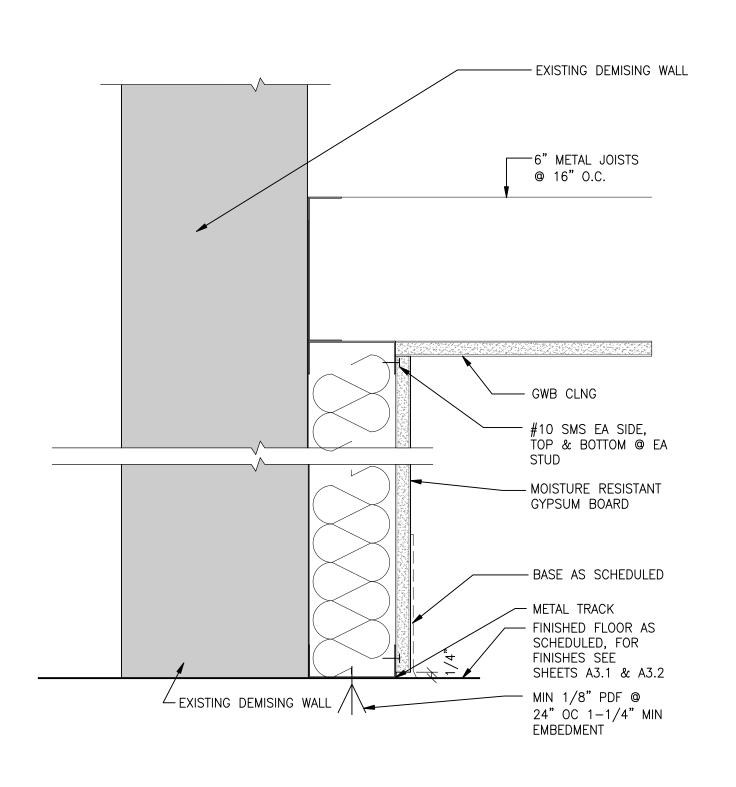
PROJECT NUMBER: 689411

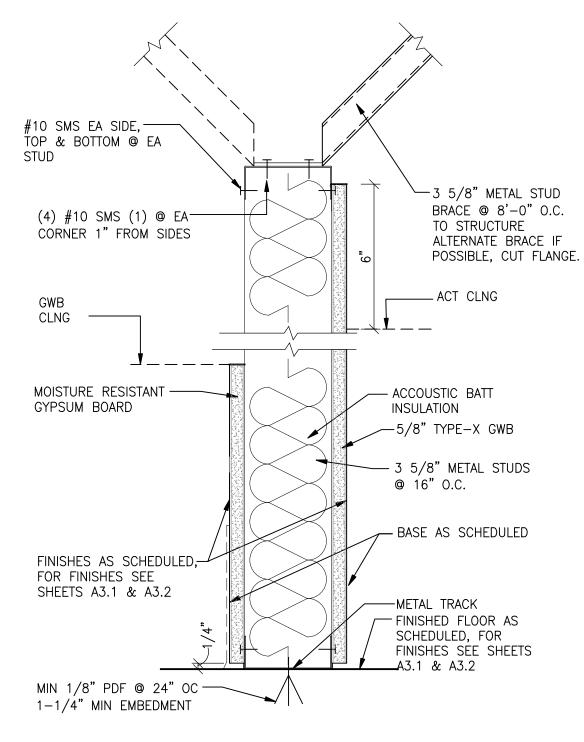
A4.1

OF FIXTURE TO MAIN OR CROSS TEES.



3 5/8" METAL STUD BRACE @ 8'-0" O.C. TO STRUCTURE ALTERNATE BRACE IF POSSIBLE, CUT FLANGE. (4) #10 SMS (1) @ EA CORNER 1" FROM SIDES #10 SMS EA SIDE, TOP & BOTTOM @ EA STUD ACT CLNG ----ACT CLNG 5/8" TYPE-X GWB —— (TO 6" ABOVE CEILING) — 3 5/8" METAL STUDS **@** 16" O.C. FINISHES AS SCHEDULED, FOR FINISHES SEE BASE AS SCHEDULED SHEETS A3.1 & A3.2 -METAL TRACK - FINISHED FLOOR AS SCHEDULED, FOR FINISHES SEE SHEETS \_\_A3.1 & A3.2 MIN 1/8" PDF @ 24" OC 1-1/4" MIN EMBEDMENT





4 AS SHOWN

PARTITION TYPE

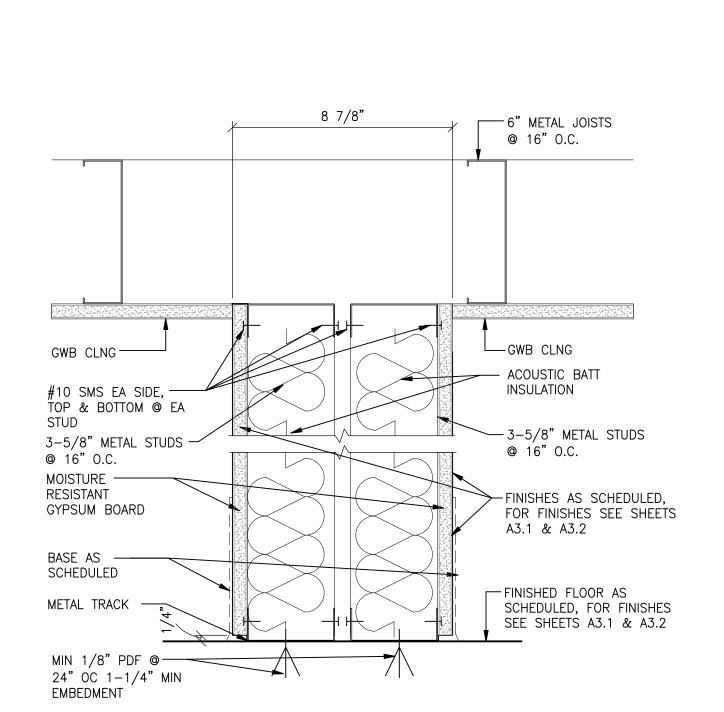
SCALE: 3'' = 1'-0''

\_\_\_\_\_\_ IINISEY SIDI

UNISEX SIDE: MOISTURE RESISTANT GWB FROM SLAB TO GWB CEILING ABOVE. PROVIDE ACOUSTIC BATT INSULATION INSIDE WALL.

UNISEX SIDE: MOISTURE RESISTANT GWB FROM SLAB TO GWB CEILING ABOVE. PROVIDE ACOUSTIC BATT INSULATION INSIDE WALL. USE 6" METAL STUDS.

1 PARTITION TYPE
SCALE: 3" = 1'-0"



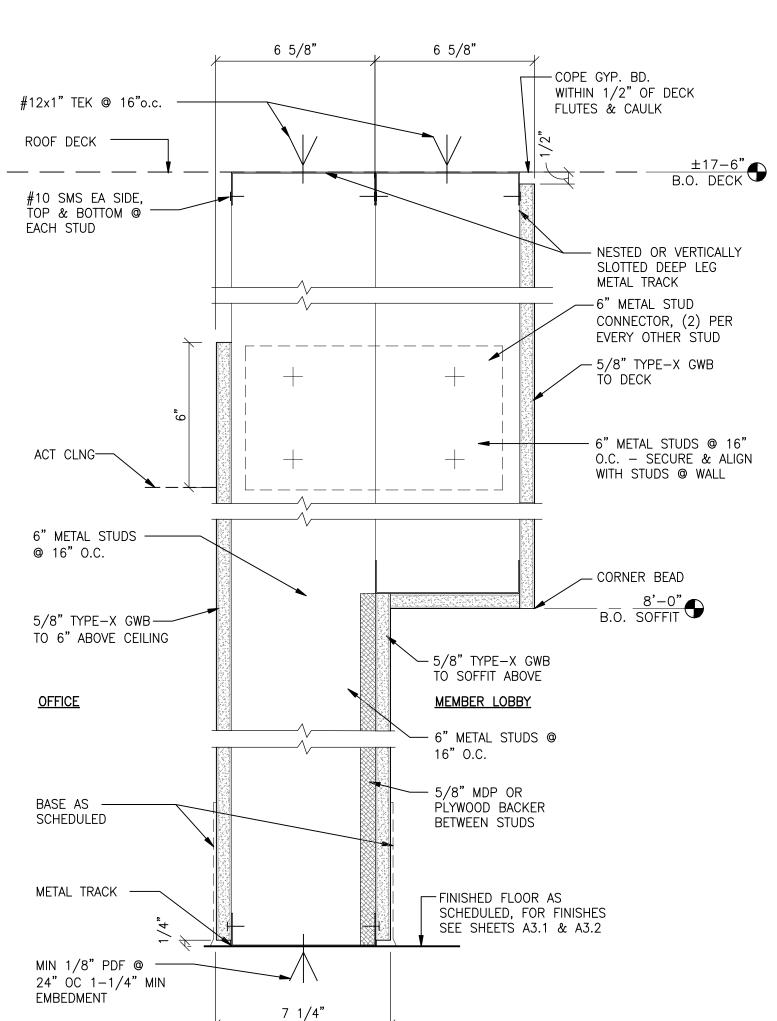
2 PARTITION TYPE

SCALE: 3" = 1'-0"

PARTITION TYPE

SCALE: 3'' = 1'-0''





PROVIDE BLOCKING / BACKING AS
REQUIRED (SEE GENERAL NOTE
#16 ON SHEET A0.1). FINISH PER
FINISH SCHEDULE, SHEET A3.2.

# WALL STUD GAUGES & HEIGHTS:

METAL STUD SIZING AND SPA PRODUCTS CAN BE SUBSTITUT		-DIETRICH PRODUCTS.	EQUIVALENT
TYPE	DESIGNATION	5 PSF L/120 M	IAX. CLEAR HEIGHT
	DESIGNATION	16" O.C.	24" O.C.
3 5/8" x 1 1/4" x 25 GA	362PDS1125-30	23'-4"	20'-5"
3 5/8" x 1 5/8" x 20 GA	362S162-33	22'-2"	18'-9"
3 5/8" x 1 5/8" x 18 GA	362S162-43	24'-1"	21'-0"
3 5/8" x 1 5/8" x 16 GA	362S162-54	25'-10"	22'-6"
3 5/8" x 1 5/8" x 14 GA	362S162-68	27'-7"	24'-1"
3 5/8" x 1 5/8" x 12 GA	362S162-97	30'-5"	26'-7"
6" x 1 5/8" x 20 GA	600S162-33	30'-9"	25'-2"
6" x 1 5/8" x 18 GA	600S162-43	35'-9"	31'-1"
6" x 1 5/8" x 14 GA	600S162-54	38'-4"	33'-6"

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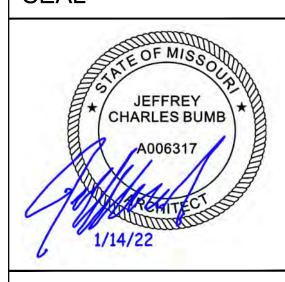
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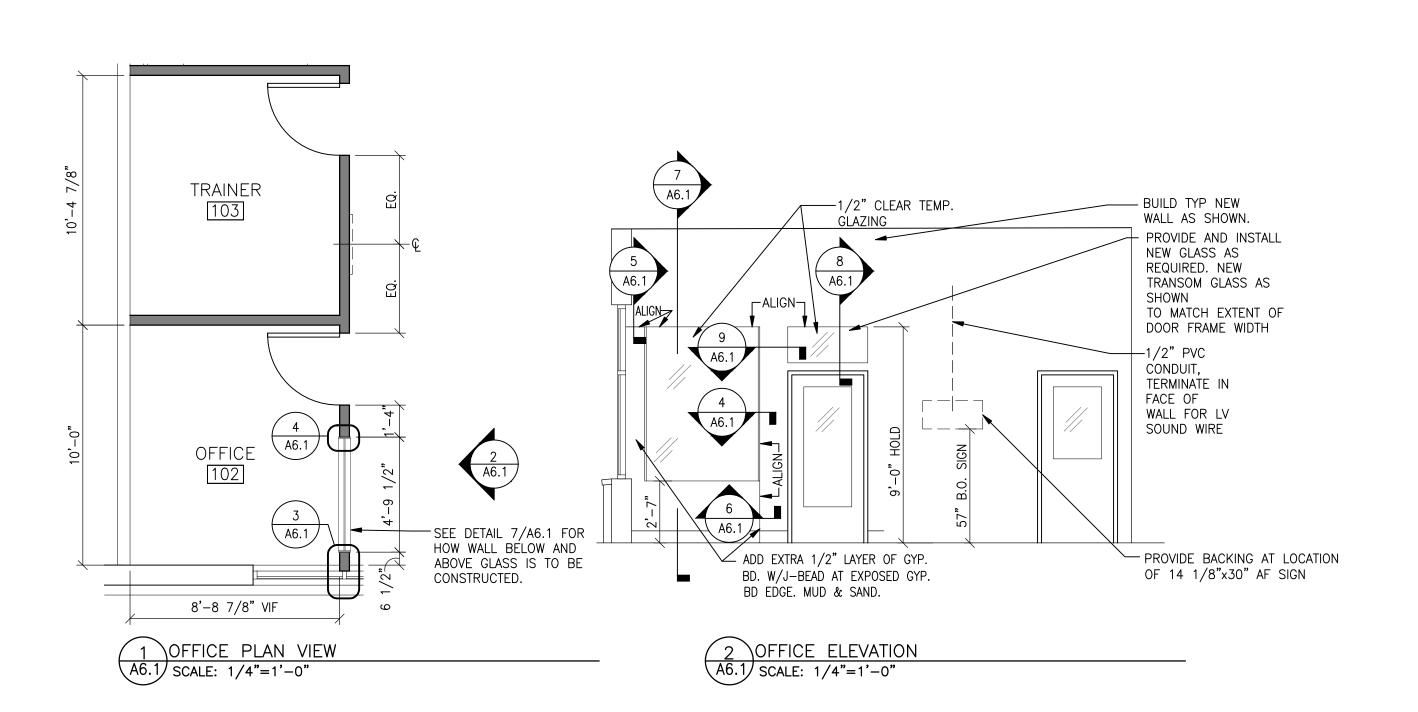
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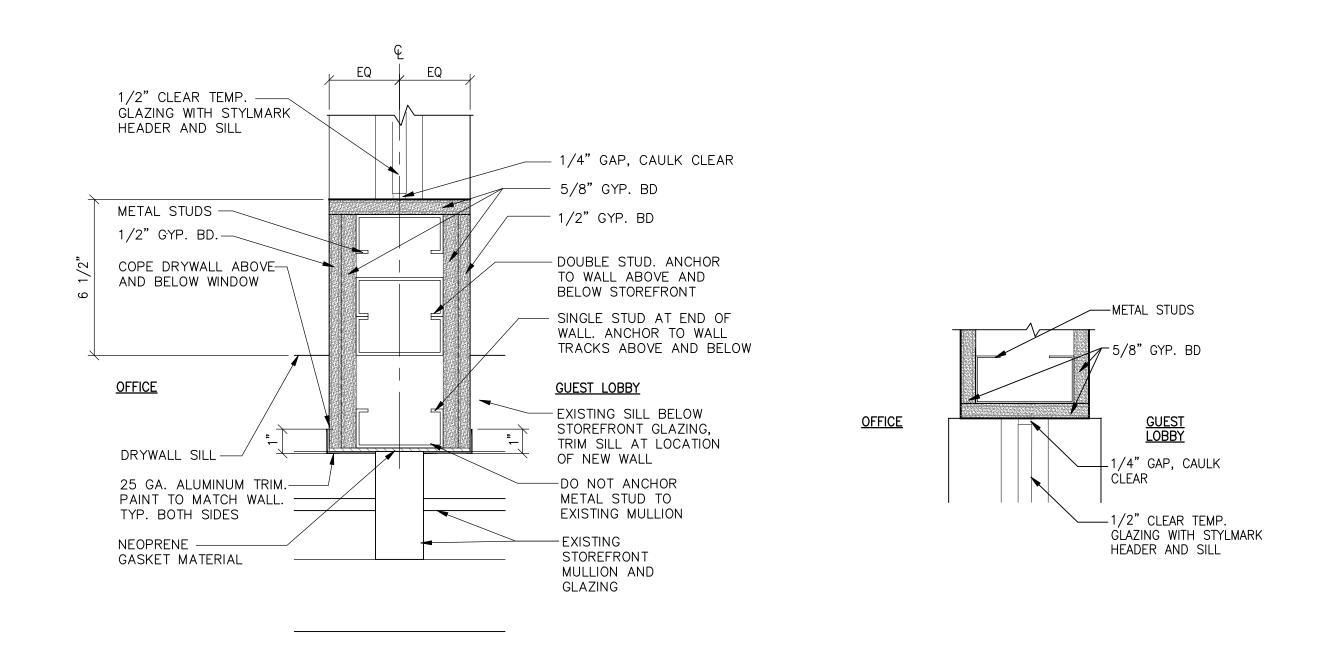
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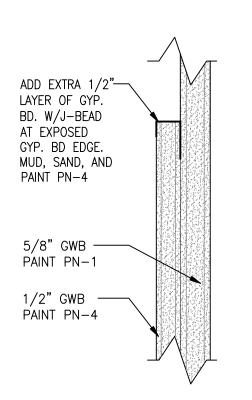
PROJECT NUMBER: 689411

PARTITION TYPES

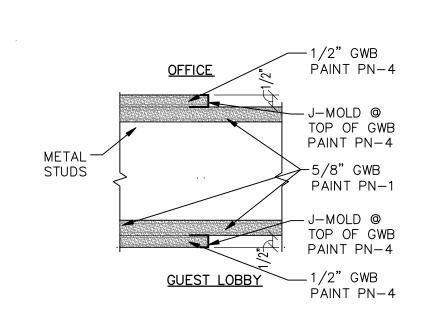
A5.1







3 OFFICE WINDOW SECTION A6.1 SCALE: 3"=1'-0"

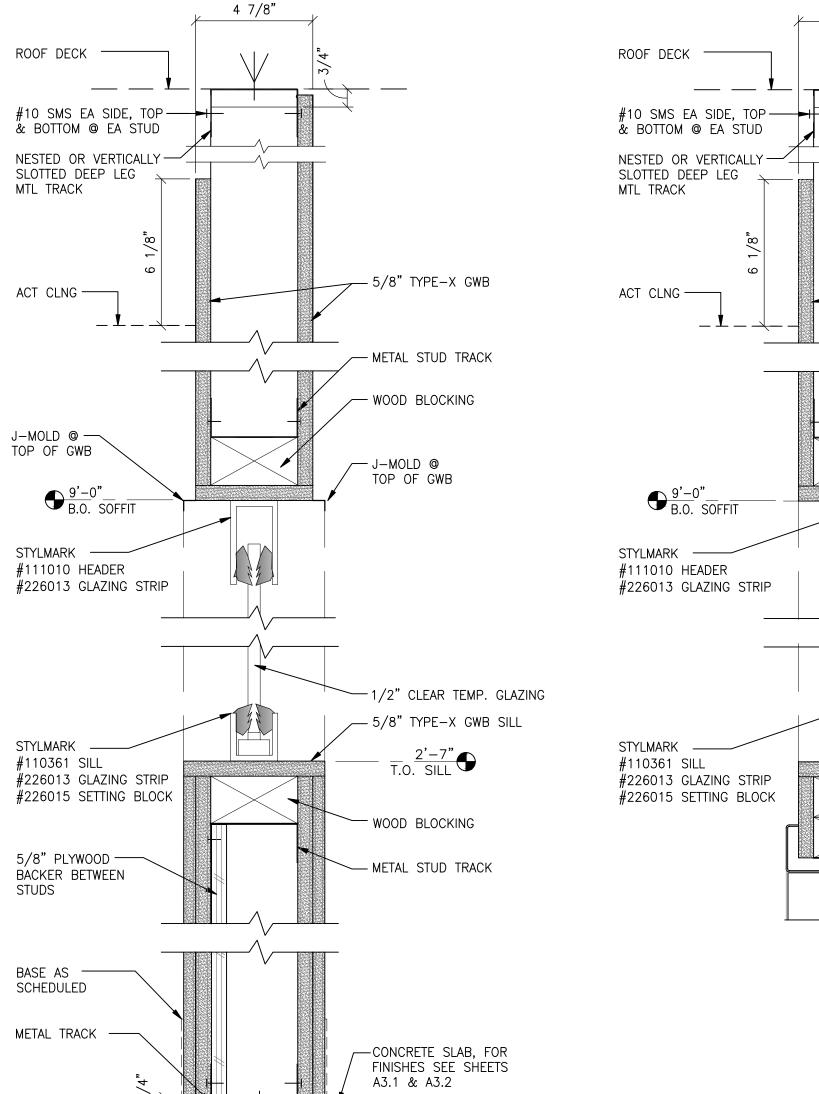


SCALE: 6"=1'-0"

6 GYP BD DETAIL A6.1 SCALE: 3" = 1'-0"

4 OFFICE WINDOW SECTION

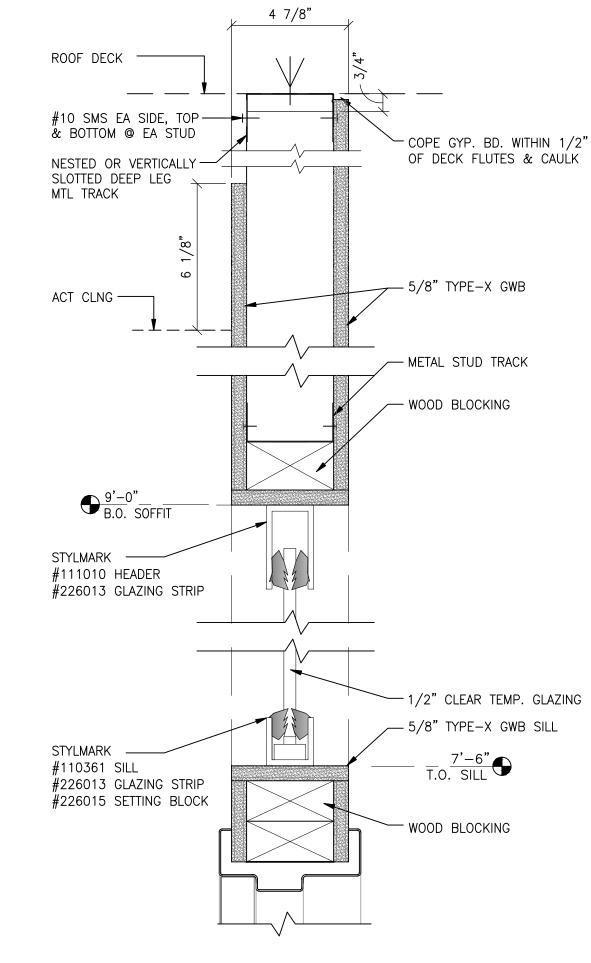
A6.1 SCALE: 3'' = 1'-0''



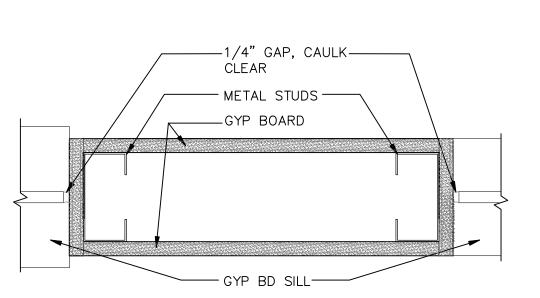
MIN 1/8" PDF @—— 24" OC 1-1/4" MIN

EMBEDMENT

7 OFFICE WINDOW SECTION A6.1 SCALE: N.T.S.







9 TRANSOM/OFFICE WINDOW SECTION
A6.1 SCALE: 3"=1'-0"



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REV. DATE ISSUE

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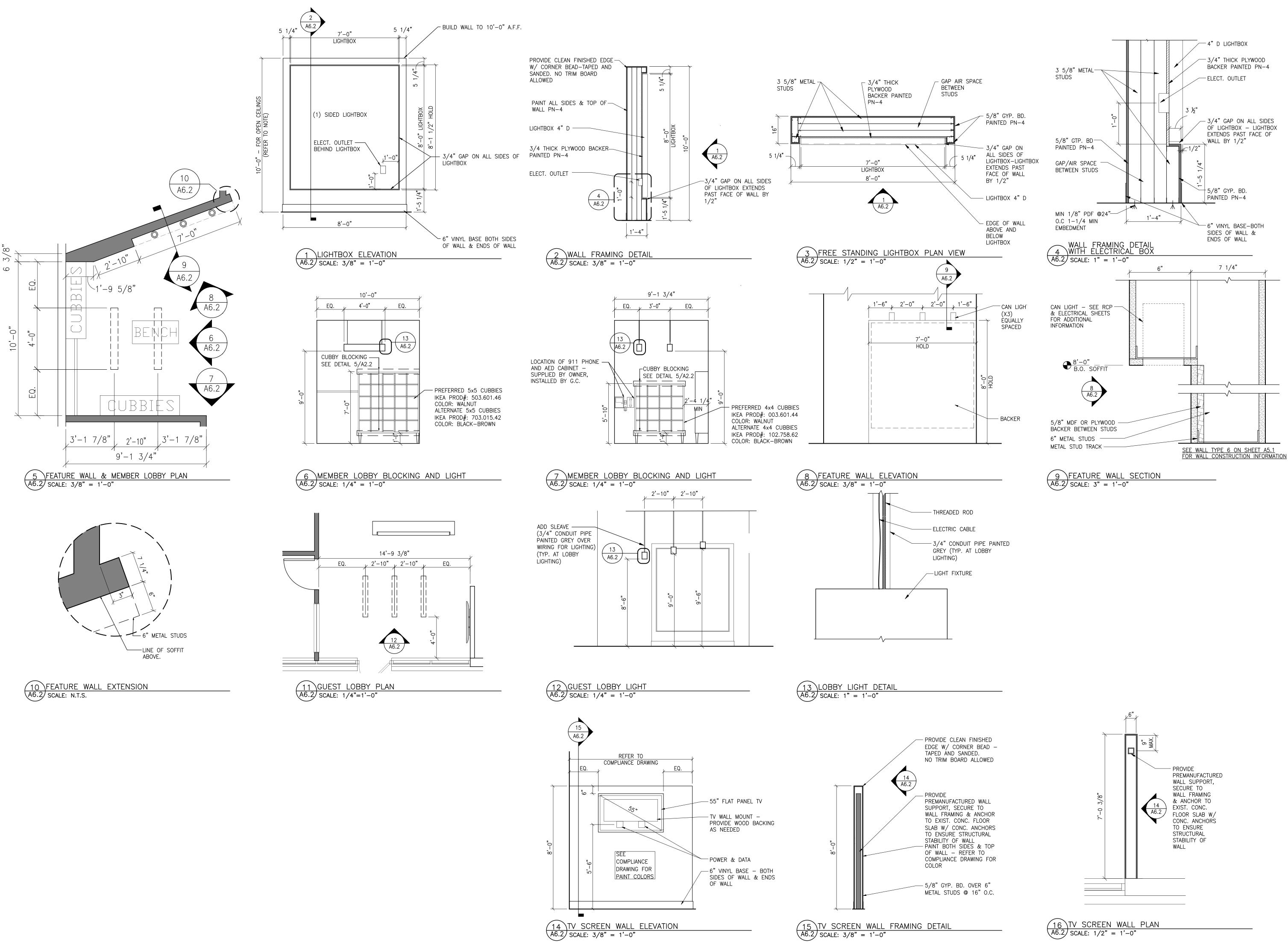
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PROJECT NUMBER: 689411

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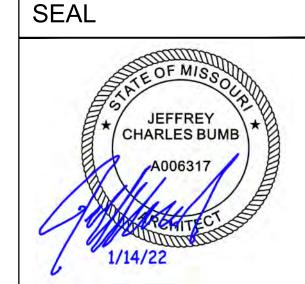
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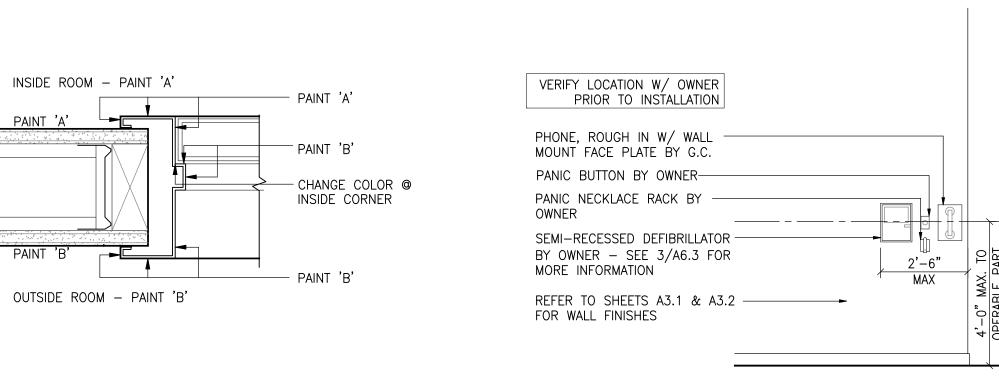




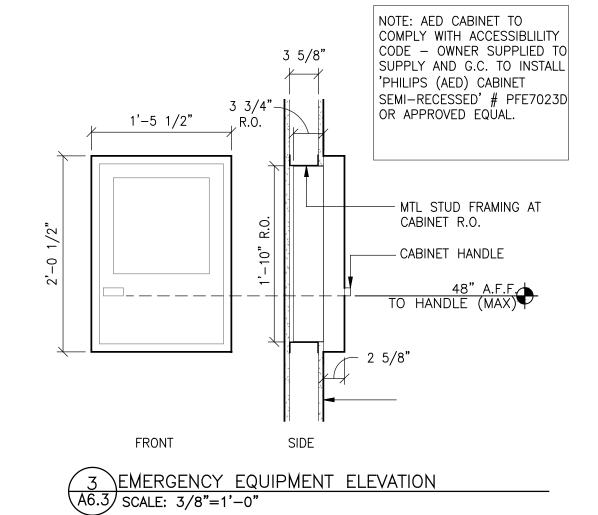
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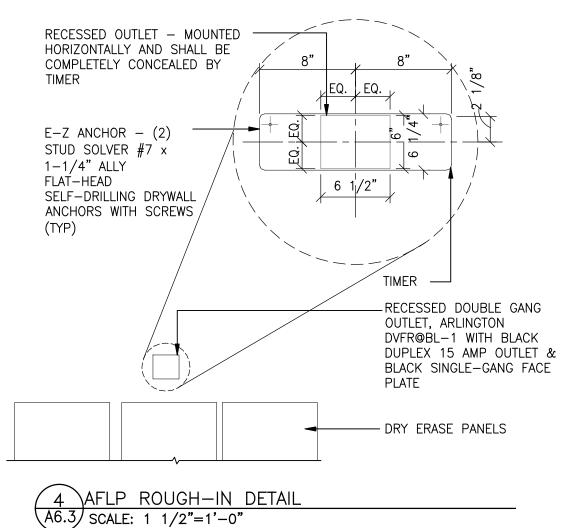
DETAILS

A6.2

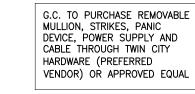


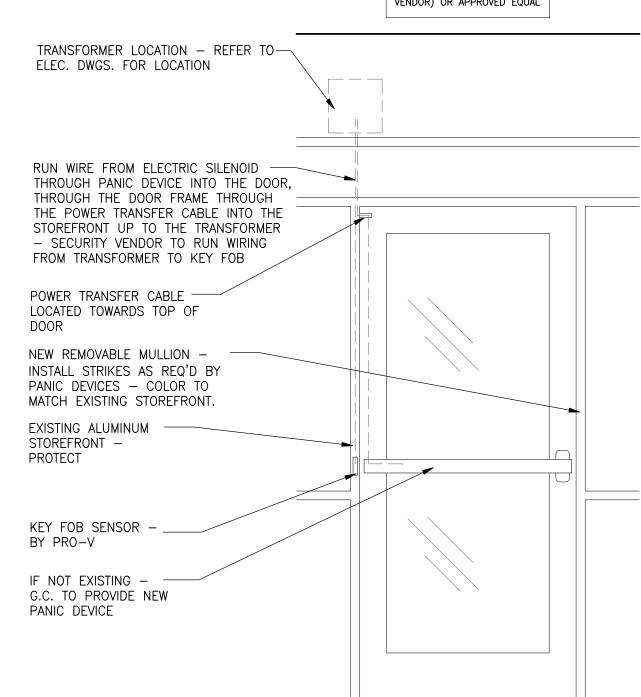


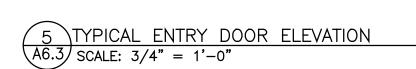


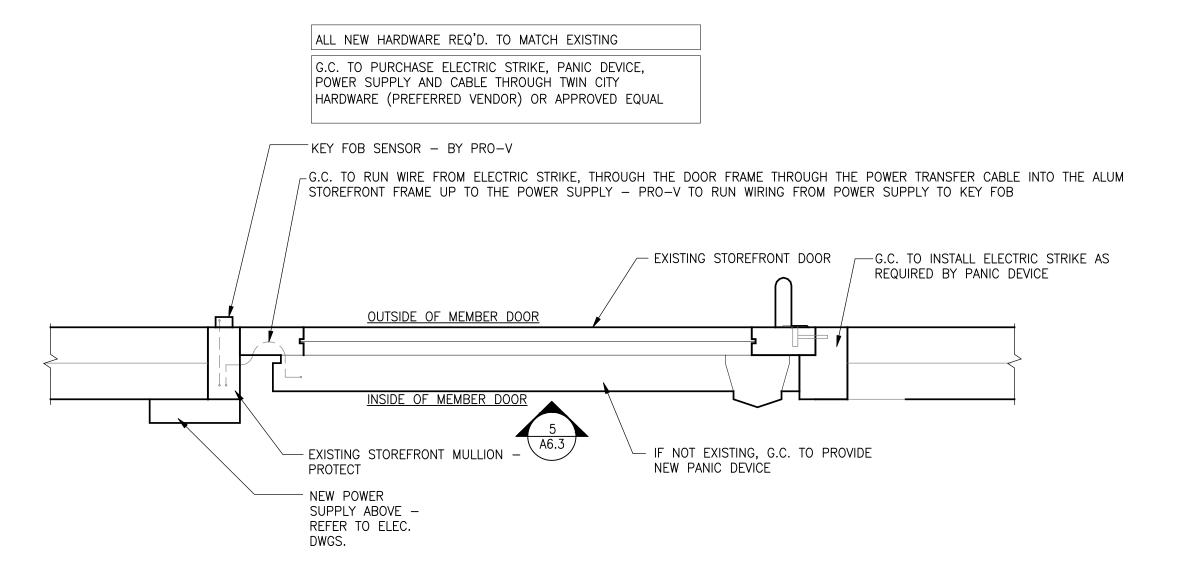




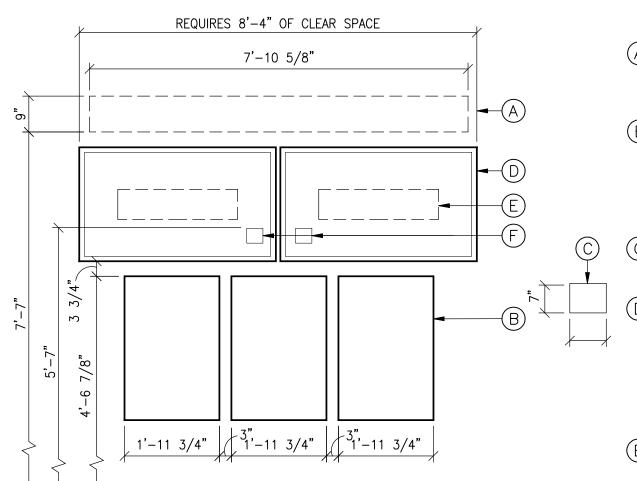








6 DOOR SECURITY DEVICE A6.3 SCALE: 1" = 1'-0"



7 AF TRAINING KIT ELEVATION
A6.3 SCALE: NTS

# PRODUCT NOTES:

(A) <u>DIMENSIONAL TITLE LETTERS</u> 1/8" CUSTOM PURPLE SINTRA -"RUNNING MAN" AND "AF" GRAPHICS -1/8" WHITE SINTRA "TRAINING" LETTERS — ROUTED — MOUNTING PATTERN – VHB TAPE ON BACK

B DIMENSIONAL TITLE LETTERS 1/4" CLEAR ACRYLIC - DIGITALLY PRINTED -2 SETS OF SINTRA CLEATS ON BACK OF EACH • PANELS ARE FOR WRITING EXERCISES • DRY ERASE WITH PRINTED HEADERS

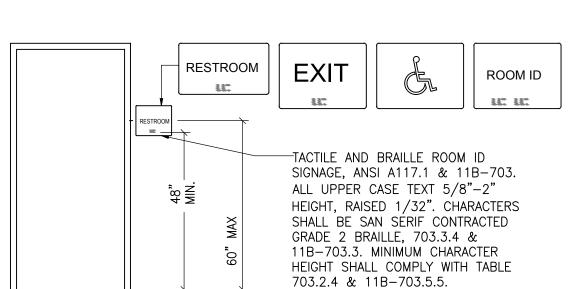
• PANELS ARE REMOVEABLE TO ALLOW FOR EASY EDITING ) <u>MINI DRY ERASE STATION BOARDS — SET OF 10</u> 9"W X 7"H - DRY ERASE BOARDS FOR WRITING INDIVIDUAL STATIONS FOR CIRCUIT TRAINING

55" FLAT PANEL TVS THIS SIZE IS REQUIRED TO MAINTAIN CLEARANCES FOR SIGNAGE AND VISIBILIT OF SCREEN CONTENT FROM A DISTANCE

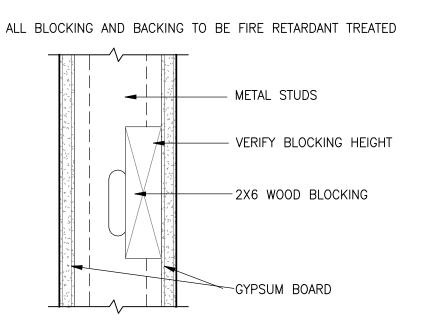
•TV1 - USE AS PRIMARY DISPLAY FOR THE HEART RATE MONITOR •TV2 - USE TO DISPLAY FUTURE EXERCISE CONTENT. IN THE INTERIM THE TV CAN BE USED AS A 2ND DISPLAY FOR THE HEART RATE MONITOR, IPAD

TIMER OR TV E TV TILTING WALL MOUNT FOR 55" TV SEE AF TRAINING CHECKLIST FOR OPTIONS. PROVIDE WOOD BACKING AS NEEDED TO SUPPORT THE MOUNT AND WEIGHT OF THE TV

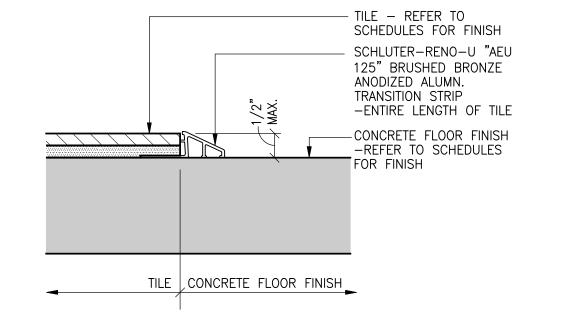
(F) POWER AND TECHNOLOGY REQUIREMENTS ONE QUADPLEX J-BOX WITH LINE VOLTAGE ONE QUADPLEX J-BOX WITH 3/4 CONDUIT IN-WALL STUBBED ABOVE WALL WITH ACCESS IN CEILING AREA FOR LOW VOLTAGE WIRING. OWNER TO CLARIFY WHICH DEVICES/TECHNOLOGY WILL BE IMPLEMENTED TO ENSURE THE CORRECT LOW VOLTAGE WIRING IS INSTALLED; I.E. CABLE TV, HEART RATE MONITOR, ETC.



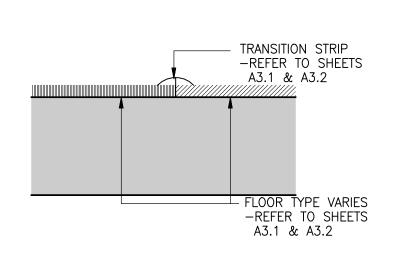
11 ACCESSIBLE SIGNAGE @ RESTROOMS
A6.3 SCALE: NTS



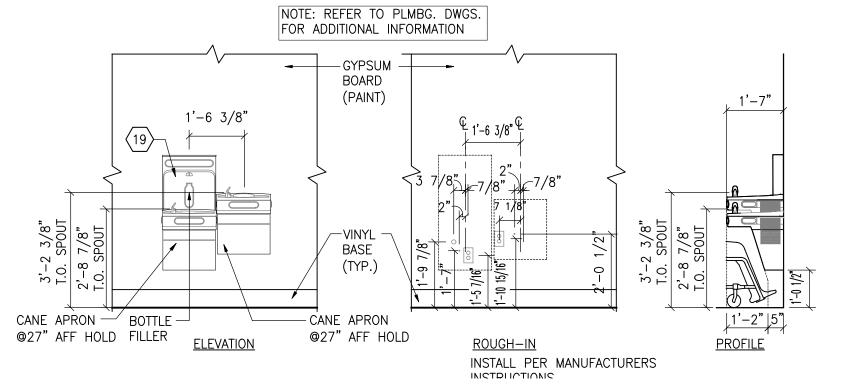
12 WOOD BLOCKING DETAIL A6.3 SCALE: 3" = 1'-0"







9 TYPICAL FLOOR TRANSITION DETAIL
A6.3 SCALE: 3" = 1'-0"



10 DRINKING FOUNTAIN ELEVATION
A6.3 SCALE: 3/8" = 1'-0"

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**DETAILS** 

PROJECT NUMBER: 689411

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A6.3

- SECTION 01010 SUMMARY OF WORK

  A. WORK OF THIS CONTRACT IS TO BE COMPLETED IN ONE PHASE AND WILL CONSIST OF GENERAL, MECHANICAL, AND ELECTRICAL CONSTRUCTION AS REQUIRED TO RENOVATE THE EXISTING SPACE SHOWN
- ON THE DRAWINGS. B. THE TENANT MAY ENTER INTO SEPARATE CONTRACTS FOR WORK INCLUDING BUT NOT LIMITED TO STORE FIXTURES, TELECOMMUNICATIONS, ASBESTOS ABATEMENT, AND BASE BUILDING MECHANICAL DISTRIBUTION SYSTEM. ITEMS NOTED "NIC" (NOT IN CONTRACT) WILL BE FURNISHED AND INSTALLED BY THE TENANT UNDER A SEPARATE CONTRACT.
- C. FIXTURES/MATERIAL AS NOTED TO BE PROVIDED BY THE MILLWORK SUPPLIER AND INSTALLED BY THE GENERAL CONTRACTOR.
- D. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE USE OF PREMISES UNDER DIRECTION OF THE TENANT AND LANDLORD, FOR WORK AND ACCESS BY SUBCONTRACTORS, TENANT OCCUPANCY OF ADJACENT SPACES. AND PROTECTION AND SAFEKEEPING OF MATERIALS USED UNDER THIS CONTRACT

CONTRACTOR IS TO REPAIR ANY DAMAGE MADE TO EXISTING BUILDING AND RESTORE-DAMAGED AREAS

- E. SEQUENCE OF WORK IS TO BE COORDINATED TO AVOID INTERFERENCE WITH NORMAL OPERATIONS AND SECURITY OF EXISTING BUILDING. PLAN WORK SEQUENCE IN ADVANCE WITH TENANT AND OWNER AND OBTAIN THEIR APPROVAL BEFORE STARTING WORK. THIS INFORMATION IS TO BE CLARIFIED IN THE PRE-CONSTRUCTION MEETING.
- F. GC IS RESPONSIBLE FOR PROVIDING POWER FOR ALL EXTERIOR SIGNAGE. SIGNAGE PROVIDED BY OWNER
- G. FIRE PROTECTION WORK IS ON A DESIGN/ BUILD BASIS, AS REQUIRED. GC IS RESPONSIBLE FOR ALL DRAWING SUBMISSIONS, MATERIALS, AND REQUIRED LABOR FOR FIRE PROTECTION SYSTEMS UNLESS
- NOTED OTHERWISE. H. GC TO VERIFY COMPLETION OF FURNITURE AND EQUIPMENT INSTALLATION.

TO CONDITIONS EXISTING PRIOR TO STARTING WORK.

- VERIFY EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES WITH THE CONSTRUCTION DRAWINGS TO THE ARCHITECT WITHIN 48 HOURS OF CONSTRUCTION START. NOTIFY OWNER AND ARCHITECT OF
- EXISTING SITE CONDITIONS THAT ARE IN CONFLICT WITH THE INTENT OF THESE DOCUMENTS. J. GENERAL CONTRACTOR TO PROVIDE A PROJECT SUPERINTENDENT TO MANAGE AND SUPERVISE THE
- K. ALL UTILITY CONNECTIONS AND METERING TO BE COORDINATED WITH OWNER'S CONSTRUCTION MANAGER. GC SHALL BE RESPONSIBLE FOR SETTING UP ALL UTILITIES INTO OWNER'S NAME AT THE
- COMMENCEMENT OF CONSTRUCTION. L. GC TO PROVIDE A WASTE CONTAINER AND PAY FOR REMOVAL SERVICE OF ALL REFUSE AND WASTE MATERIALS GENERATED BY ALL PRIME CONTRACTORS AND SUBCONTRACTORS. EACH SUBCONTRACTOR
- WILL BE RESPONSIBLE FOR CLEAN-UP AND REMOVAL OF HIS OWN WASTE MATERIALS FROM THE STORE. M. GC IS RESPONSIBLE FOR QUANTITY AND CONDITION OF ALL SHIPMENTS. GC IS TO COUNT AND CHECK ANY DAMAGED BOXES PRIOR TO SIGNING FOR THEM. ANY AND ALL SHORTAGES AND DAMAGES SHALL BE DOCUMENTED ON RECEIVING TICKETS AND REPORTED IMMEDIATELY TO OWNER UPON RECEIPT. OBTAIN
- COPIES OF ALL SIGNED RECEIVING TICKETS AND SUBMIT THESE TO OWNER ON A WEEKLY BASIS. N. GC TO PROVIDE OWNER WITH LABOR AND MATERIAL WARRANTIES AND SERVICE CONTRACTS FROM ALL SUB-CONTRACTORS AND EQUIPMENT AND MATERIALS MANUFACTURERS. THESE WARRANTIES SHALL BE IN EFFECT FOR A PERIOD OF ONE (1) YEAR FROM INSTALLATION DATE.

### SECTION 01045 - CUTTING AND PATCHING

- A. SUBMIT A WRITTEN REQUEST IN ADVANCE OF ANY CUTTING OR ALTERATION, WHICH AFFECTS THE WORK OF THE TENANT, OR THE STRUCTURAL INTEGRITY, SAFETY, VISUAL QUALITY, OR WEATHER-TIGHTNESS OF ANY OPERATIONAL ELEMENT OF THE PROJECT.
- B. CONTRACTOR IS RESPONSIBLE FOR EXECUTING WORK USING METHODS TO AVOID DAMAGE TO OTHER WORK, PROVIDING PROPER SURFACES TO RECEIVE PATCHING AND FINISHING, REFINISHING SURFACES TO MATCH ADJACENT FINISHES, MAINTAINING WATER INTEGRITY OF FACILITY AT ALL TIMES, AND PROVIDING DUST BARRIERS AS REQUIRED TO PROTECT EXISTING OR NEW WORK AND TENANT'S OPERATIONS FROM

C. AT PENETRATIONS OF FIRE-RATED WALL, CEILING, OR FLOOR CONSTRUCTION, COMPLETELY SEAL VOIDS

WITH FIRE-RATED MATERIAL FOR THE FULL THICKNESS OF THE CONSTRUCTION ELEMENT. D. PATCHED OR REFINISHED WORK SHALL NOTCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.

### SECTION 01500 - CONSTRUCTION FACILITIES

- BARRIERS: PROVIDE AS REQUIRED TO PREVENT PUBLIC ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION
- B. ENCLOSURES: PROVIDE TEMPORARY INSULATED WEATHER TIGHT CLOSURES OF OPENINGS IN EXTERIOR SURFACES TO PROVIDE ACCEPTABLE WORKING CONDITIONS AND PROTECTION FOR MATERIALS, TO HEATING AND TO PREVENT ENTRY OF UNAUTHORIZED PERSONS. ALLOW FOR TEMPORARY PROVIDE DOORS WITH SELF-CLOSING HARDWARE AND LOCKS.

### SECTION 01600 - MATERIALS AND EQUIPMENT

A. NO PRODUCTS ARE TO BE INCLUDED IN THE PROJECT, WHICH CONTAIN KNOWN HAZARDOUS MATERIALS, INCLUDING, BUT NOT LIMITED TO, ASBESTOS AND POLYCHLORINATED BIPHENYL (PCB) MATERIALS.

### SECTION 01710 - FINAL CLEANING

- EXECUTE FINAL CLEANING PRIOR TO INSPECTION FOR SUBSTANTIAL COMPLETION. USE ONLY MATERIALS AND METHODS RECOMMENDED BY MANUFACTURER OF MATERIAL BEING CLEANED. IN ADDITION TO REMOVAL OF DEBRIS AND CLEANING SPECIFIED IN OTHER SECTIONS, CLEAN INTERIOR AND EXTERIORS, EXPOSED-TO-VIEW SURFACES. REMOVE TEMPORARY PROTECTION AND LABELS NOT REQUIRED TO
- B. CLEAN ALL FINISHES FREE OF DUST, AND OTHER FOREIGN SUBSTANCES, VACUUM CARPETED SURFACES, SCRUB AND MOP HARD SURFACE FLOORS, CLEAN EQUIPMENT, PLUMBING FIXTURES, LIGHT FIXTURES, AND LAMPS. MAINTAIN WORK IN A CLEAN CONDITION UNTIL FINAL COMPLETION.
- C. GC TO LEAVE WASTE CONTAINER UNTIL INSPECTION FOR SUBSTANTIAL COMPLETION OF UNTIL ALL EQUIPMENT AND MERCHANDISE HAS BEEN UNPACKED WHICHEVER IS LATER.

### SECTION 01732 - MINOR DEMO FOR REMODELING

- A. SCOPE: INCLUDE REMOVAL OF DESIGNATED PARTITIONS: BUILDING COMPONENTS, EQUIPMENT AND FIXTURES.
- B. OCCUPANCY: CONDUCT DEMOLITION WORK IN A MANNER THAT WILL MINIMIZE DISRUPTION OF OWNER'S NORMAL OPERATIONS IN PORTIONS OF THE BUILDING IMMEDIATELY ADJACENT TO PROJECT AREA. PROVIDE ADVANCE NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNER'S NORMAL OPERATIONS. MAINTAIN PROTECTED EGRESS AND ACCESS AT ALL TIMES.
- C. CONDITION OF STRUCTURES: OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF ITEMS OR IF UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT STRUCTURES TO BE DEMOLISHED. CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND REPORT TO OWNER AND ARCHITECT IN WRITING. PENDING RECEIPT OF DIRECTIVE FROM OWNER, ADJUST DEMOLITION SCHEDULE AS NECESSARY TO CONTINUE OVERALL JOB PROGRESS WITHOUT UNDUE DELAY. IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, COMPLY WITH APPLICABLE D. REGULATIONS, LAWS AND ORDINANCES CONCERNING REMOVAL, HANDLING, AND
- PROTECTION AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION. . CLOSE OPENINGS IN EXTERIOR SURFACES TO PROTECT EXISTING WORK AND SALVAGE ITEMS FROM
- WEATHER AND EXTREMES OF TEMPERATURE AND HUMIDITY. F. ERECT AND MAINTAIN DUST-PROOF PARTITIONS AND CLOSURES AS REQUIRED TO PREVENT SPREAD OF
- DUST OR FUMES TO OCCUPIED PORTIONS OR THE BUILDING. G. WHERE DESIGNATED BY OWNER, REMOVE, PROTECT, AND/OR STORE EXISTING SALVAGED MATERIALS AND EQUIPMENT TO BE REUSED OR TURNED OVER TO OWNER. REINSTALL ITEMS DESIGNATED BY DRAWINGS
- OR SPECIFICATIONS TO FULL OPERATIONAL CONDITION. H. REMOVE AND DISPOSE OF UNSUITABLE MATERIAL, DEBRIS, AND ABANDONED ITEMS NOT MARKED FOR SALVAGE. DISPOSAL OF ALL EXISTING TO-BE-REMOVED MATERIAL OR EQUIPMENT IS THE RESPONSIBILITY
- OF THE CONTRACTOR. LOCATE, IDENTIFY, STUB OFF, AND DISCONNECT UTILITY SERVICES THAT ARE NOT INDICATED TO REMAIN. PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF BUILDING. PROVIDE ADVANCE NOTICE TO OWNER IF SHUT DOWN OF SERVICE IS NECESSARY. WORK LOCATIONS OF IDENTIFY AND INDICATE LOCATIONS ON PROJECT RECORD DOCUMENTS.
- DISCONNECTED UTILITIES. J. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION OPERATIONS.

### **SECTION 03100 - CONCRETE FORMS**

- 1.1 WORK INCLUDED
  - A. FORM WORK, SHORING, BRACING AND ANCHORAGE FOR CAST-IN-PLACE CONCRETE
- B. FORM ACCESSORIES C. STRIPPING FORMS

### PART 2 - PRODUCT

- 2.1 PRODUCT DESCRIPTION A. FORMWORK: COMPLY WITH ACI 347-68 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
  - B. FORM MATERIALS: PLYWOOD, MDO GRADE; STEEL 16 GAUGE MINIMUM SHEET; FIBERGLASS,
  - SMOOTH FACED. C. ACCESSORIES: FORM TIES, FORM RELEASE AGENTS, FILLETS, ANCHORAGES

### **SECTION 03300 - CAST-IN-PLACE CONCRETE**

### PART 1 – WORK 1.1 WORK INCLUDED

A. CAST-IN-PLACE BUILDING FRAME MEMBERS, SLABS, FOOTINGS, PIERS AND COLUMNS B. FLOORS ON METAL DECK AND INTERIOR SLABS ON FILE C. EQUIPMENT PADS

### PART 2 - PRODUCT 2.1 PRODUCT DESCRIPTION

- A. CONCRETE
  - 1. MIX IN ACCORDANCE WITH ASTM C94
  - 2. FOOTINGS AND FOUNDATION CONCRETE: 3000 PSI WITH 4" SLUMP 3. SLAB ON GRADE CONCRETE: 4000 PSI WITH 4" SLUMP
  - 4. STRUCTURAL SLABS, BEAMS, GIRDERS: 3000 PSI WITH 4" SLUMP
- 5. ADD AIR ENTRAINING AGENT TO MIX FOR CONCRETE EXPOSED TO FREEZE-THAW CYCLING B. ACCESSORIES: UNDER SLAB VAPOR BARRIER, EXPANSION, JOINT FILLERS, CONTROL JOINT KEYS,
- REGLETS DOVETAIL ANCHOR SLOTS, FLOOR SEALER, AND FLOOR HARDENER C. TESTING: THREE TEST CYLINDERS WILL BE TAKEN FOR EVERY 75 OF LESS CUBIC YARDS OF EACH CLASS OF CONCRETE PLACED EACH DAY

### SECTION 04730 - SIMULATED STONE

### 1.1 WORK INCLUDE

A. SIMULATED STONE ASSEMBLY INSTALLED AS WALL VENEER OVER A SCRATCH COAT PREPARED SUBSTRATE AS INDICATED ON DRAWINGS

### PART 2 - PRODUCT

- 2.1 PRODUCT DESCRIPTION A. SIMULATED STONE: ENGINEERED BY MANUFACTURER TO ACHIEVE SPECIFIED STRENGTH, COLOR,
  - AND TEXTURE, DESIRED HANDLING CHARACTERISTICS, AND RESISTANCE TO EFFECTS OF WEATHERING, DEGRADATION BY WEATHER B. STONE DESIGN AND COLOR:
  - 1. MANUFACTURER: PER DECOR SCHEDULE C. INSTALL PER MANUFACTURER'S SPECIFICATIONS

### SECTION 05500 - METAL FABRICATION

REQUIREMENTS

- I.1 WORK INCLUDED A. METAL FRAMING MATERIAL, FITTINGS AND RELATED SUPPORT SYSTEM ACCESSORIES AS INDICATED
- B. FURNISH METAL FABRICATIONS TO BE FIELD INSTALLED/ ANCHORED TO STRUCTURAL STEEL
- 1.2 DESIGN REQUIREMENTS A. SUPPORT STRUCTURE: THE SUPPORT MEMBERS SHALL BE LOCATED AS INDICATED ON THE DRAWINGS. THE SPACING SHALL BE AS SHOWN ON THE DRAWINGS.
  - SHALL BE BY MEANS OF IMBEDDED CONCRETE INSERTS, THROUGH BOLTS, OR BY DIRECT ATTACHMENT TO THE STRUCTURAL FRAMING OF THE BUILDING. WHEN POSSIBLE, FASTENERS WILL NOT BE IN DIRECT PULL-OUT. : VERTICAL SUPPORTS: VERTICAL SUPPORTS SHALL PROVIDE FOR BASIC VERTICAL ADJUSTMENTS

B. CEILING ANCHORAGE: WHENEVER POSSIBLE, ATTACHMENT TO THE CEILING STRUCTURE ABOVE

A. INDICATE PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING ANCHORAGE, SIZE AND TYPE

D. P SEISMIC BRACING: FRAMING SYSTEM SHALL BE ADEQUATELY BRACED TO MEET ALL CODE

OF FASTENERS, AND ACCESSORIES. B. INCLUDE ERECTION DRAWINGS, ELEVATIONS, AND DETAILS WHERE APPLICABLE

### PART 2 - PRODUCT

- 2.1 MATERIALS A. STEEL SECTIONS: ASTM A36
  - B. STEEL TUBING: ASTM A500, GRADE B
  - C. BOLTS, NUTS, AND WASHERS: ASTM A307
  - D. STEEL PIPE: SCHEDULE 80
  - E. CHANNEL SIZE: P1000 SERIES CHANNELS AS MANUFACTURED BY UNISTRUT
  - F. PIPE HANGER: J1210 AS MANUFACTURED BY UNISTRUT
- G. ALL MATERIALS SHALL BE STAMPED AND IDENTIFIABLE BY MANUFACTURER AND PART NUMBER APPROPRIATE). MATERIALS THAT APPEAR DAMAGED, DISTRESSED, UNIDENTIFIABLE OR RUSTED SHALL NOT BE USED AND WILL NOT BE ACCEPTED.

- A. VERIFY DIMENSIONS ON SITE PRIOR TO SHOP FABRICATION.
- B. FABRICATE ITEMS WITH JOINTS TIGHTLY FITTED AND SECURED.
- C. MAKE EXPOSED JOINTS BUTT TIGHT, FLUSH AND HAIRLINE. D. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE OF METAL FABRICATIONS. FABRICATE ANCHORAGE
- AND RELATED COMPONENTS OF SAME MATERIAL AND FINISH AS METAL FABRICATION, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE

- A. CLEAN, PREPARE, AND SHOP PRIME STRUCTURAL STEEL MEMBERS ONLY IN AREAS TO BE PERMANENTLY EXPOSED TO PUBLIC VIEW. DO NOT PRIME SURFACES TO BE GALVANIZED FIREPROOFED, FIELD WELDED OR IN CONTACT WITH CONCRETE OR NOT EXPOSED TO VIEW. VERIFY EXTENT WITH ARCHITECTURAL DOCUMENTS. PROVIDE DRY FILM THICKNESS OF 2.0 TO 3.5 MILS.
- B. SURFACE PREPARATION: AFTER INSPECTION AND BEFORE SHIPPING, CLEAN ALL STEEL WORK TO RECEIVE FINISH PAINTING IN FIELD. FINISH COATS SHALL BE SPECIFIED UNDER PROVISIONS OF SECTION 09900.

### PART 3 - EXECUTION 3.1 PRFPARATION

- A. CLEAN AND STRIP SITE PRIMED STEEL ITEMS TO BARE METAL WHERE SITE WELDING IS SCHEDULED. B. MAKE PROVISIONS FOR ERECTION LOADS WITH TEMPORARY BRACING. KEEP WORK IN ALIGNMENT.
- 3.2 INSTALLATION
- A. INSTALL ITEMS PLUMB AND LEVEL, ACCURATELY FITTED, FREE FROM DISTORTION OR DEFECTS. B. INSTALLATION SHALL BE ACCOMPLISHED BY A FULLY TRAINED INSTALLER AUTHORIZED BY THE
- C. ANCHOR MATERIAL FIRMLY IN PLACE. TIGHTEN ALL CONNECTIONS TO THEIR RECOMMENDED

### SECTION 06100 - MISCELLANEOUS CARPENTRY RT 1 - WORK

### 1.1 WORK INCLUDED

- A. MISCELLANEOUS WOOD FRAMING WITH DIMENSION LUMBER B. MISCELLANEOUS FINISHED WOOD SHELVING
- C. WOOD FURRING FOR WALL FINISHES
- D. CONCEALED WOOD BLOCKING AND ROLLERS FOR SUPPORT OF CABINETS, TOILET ACCESSORIES. LOCKERS, SHELVING

### PART 2 - PRODUCT 2.1 PRODUCT DESCRIPTION

- A. LUMBER: PS 20, ANY COMMERCIAL SOFTWOOD SPECIES GRADES IN ACCORDANCE WITH NFPA GRADING RULES: STANDARD GRADE OR BETTER, SURFACING - FOUR SIDES (S4S). B. ACCESSORIES: NAILS, BOLTS, LAGS, SCREWS AND SPIKES TO BE GALVANIZED WHERE USED FOR
- EXTERIOR, OR HIGH HUMIDITY LOCATIONS AND WITH TREATED WOOD. C. PRESERVATIVE TREATMENT: PRESSURE TREAT ALL WOOD MEMBERS THAT COME IN CONTACT WITH ROOFING, WATERPROOFING, THE GROUND, CONCRETE, OR MASONRY. COMPLY WITH REQUIREMENTS OF AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARDS C2 AND C9 FOR PRESERVATIVE
- D. FIRE RETARDANT TREATMENT: CARPENTRY SHALL MEET A MINIMUM CLASS III (C) FLAME SPREAD RATING PER THE REQUIREMENTS OF ASTM-84. WHERE FIRE-RESISTIVE CONSTRUCTION IS REQUIRED BY BUILDING CODES, PROVIDE WOOD MATERIALS IMPREGNATED WITH FIRE-RETARDANT CHEMICALS.
- IDENTIFY TREATED WOOD WITH APPROPRIATE CLASSIFICATION MARKING OF UNDERWRITERS LABORATORIES, INC.
- E. MISCELLANEOUS OAK VENEER PLYWOOD.

### **SECTION 07840 - FIRE STOPPING**

### PART 1 – WORK 1.1 WORK INCLUDED

- A. PROVIDE FIRE STOPPING SYSTEMS PRODUCED AND INSTALLED TO RESIST THE SPREAD OF FIRE,
- ACCORDING TO REQUIREMENTS INDICATED, AND THE PASSAGE OF SMOKE AND OTHER GASES. B. FIRE-RESISTIVE JOINT SEALANTS: PROVIDE JOINT SEALANTS WITH FIRE-RESISTIVE RATINGS INDICATED, AS DETERMINED PER ASTM E 119, BUT NOT LESS THAN EQALIN OR EXCEEDING THE
- FIRE-RESISTANCE RATING OF THE CONSTRUCTION IN WHICH THE JOINT OCCURS. C. FOR FIRE STOPPING EXPOSED TO VIEW, TRAFFIC, MOISTURE AND PHYSICAL DAMAGE, PROVIDE PRODUCTS THAT DO NOT DETERIORATE WHEN EXPOSED TO THESE CONDITIONS.
- D. FOR PIPING PENETRATIONS FOR PLUMBING AND WET-PIPE SPRINKLER SYSTEMS, PROVIDE MOISTURE RESISTANCE THROUGH-PENETRATION FIRE-STOP SYSTEMS. E. FOR PENETRATIONS INVOLVING INSULATED PIPING, PROVIDE THROUGH-PENETRATION FIRE-STOP
- SYSTEMS NOT REQUIRING REMOVAL OF INSULATION. F. FOR FIRE-STOPPING EXPOSED TO VIEW, PROVIDE PRODUCTS WITH FLAME-SPREAD VALUES OF LESS THAN 25 AND SMOKE DEVELOPED-VALUES OF LESS THAN 450, AS DETERMINED PER ASTM E 84.

### SECTION 08110 - HOLLOW METAL DOORS AND FRAMES

1.1 WORK INCLUDED

A. SECTION INCLUDES: STANDARD HOLLOW METAL DOORS AND FRAMES

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED B. SHOP DRAWINGS: INCLUDE ELEVATIONS, DOOR EDGE DETAILS, FRAME PROFILES, METAL THICKNESS,

### 1.3 QUALITY ASSURANCE

PREPARATIONS FOR HARDWARE, AND OTHER DETAILS

A. FIRE-RATED DOOR ASSEMBLIES: ASSEMBLIES COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED BY A QUALIFIED TESTING AGENCY, FOR FIRE-PROTECTION RATING INDICATED, BASED ON TESTING AT POSITIVE PRESSURE ACCORDING TO NFPA 252.

### PART 2 - PRODUCTS

2.1 STANDARD HOLLOW METAL DOORS

- A. GENERAL: COMPLY WITH ASNI/SDI A250.8 1. DESIGN: 18 GAUGE HOLLOW METAL DOORS FACTORY APPLIED PRIME PAINTED.
- 2. CORE CONSTRUCTION: MANUFACTURER'S STANDARD KRAFT-PAPER HONEYCOMB, POLYSTYRENE, POLYURETHANE, POLYISOCYANURATE, MINERAL-BOARD, OR VERTICAL STEEL-STIFFENER CORE a. FIRE DOOR CORE: AS REQUIRED TO PROVIDE FIRE-PROTECTION AND TEMPERATURE-RISE PART 3 - EXECUTION
- RATINGS INDICATED. b. THERMAL-RATED (INSULATED) EXTERIOR DOORS.
- B. DOORS: FACE SHEETS FABRICATED FROM METALLIC-COATED STEEL SHEET. COMPLY WITH ANSI/SDI A250.8 OR LEVEL AND MODEL AND ANSI/SDI A250.4 FOR PHYSICAL PERFORMANCE LEVEL: 1. LEVEL 1 AND PHYSICAL PERFORMANCE LEVEL C (STANDARD DUTY), MODEL 1 (FULL FLUSH)

### 2.2 STANDARD HOLLOW METAL FRAMES

A. GENERAL: COMPLY WITH ANSI/DI A250.8 B. FRAMES: FABRICATED EXTERIOR FRAMES FROM METALLIC-COATED STEEL SHEET. INTERIOR FRAMES FROM COLD-ROLLED STEEL SHEET. 1. FABRICATE FRAMES AS KNOCK DOWN 16 GAUGE FACTORY APPLIED PRIME PAINTED.

### PART 3 - EXECUTION 3.1 INSTALLATION

A. HOLLOW METAL DOORS & FRAMES: COMPLY WITH ANSI/SDI A250.11

### SECTION 08211 - FLUSH WOOD DOORS

- A. SECTION INCLUDES: 1. SOLID-CORE DOORS WITH WOOD-VENEER FACES
- 1. DIVISION 8 SECTION "GLAZING" FOR GLASS VIEW PANELS IN FLUSH WOOD DOORS

### 1.2 SUBMITTALS

1.1 SUMMARY

A. PRODUCT DATA: FOR EACH TYPE OF DOOR INDICATED B. SHOP DRAWINGS: INDICATE LOCATION, SIZE, AND HAND OF EACH DOOR; ELEVATION OF EACH KIND OF DOOR; CONSTRUCTION DETAILS NOT COVERED IN PRODUCT DATA; LOCATION AND EXTENT OF HARDWARE BLOCKING; AND OTHER PERTINENT DATA.

### PART 2 - PRODUCTS

- 2.1 VENEERED-FACED DOORS FOR TRANSPARENT FINISH
  - A. INTERIOR SOLID-CORE DOORS: 1. GRADE: PREMIUM, WITH GRADE A FACES
  - 2. SPECIES: MAPLE

SECTION 08311 - ACCESS DOORS AND FRAMES

1. GLAZING: FACTORY INSTALL GLAZING IN DOORS. COMPLY WITH APPLICABLE REQUIREMENTS IN DIVISION 8 SECTION "GLAZING"

### PART 3 - EXECUTION

B. INSTALLATION INSTRUCTIONS: INSTALL DOORS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE REFERENCED QUALITY STANDARD, AND AS INDICATED.

A. HARDWARE: FOR INSTALLATION, SEE DIVISION 8 SECTION, "DOOR HARDWARE"

### A. THIS SECTION INCLUDES ACCESS DOORS AND FRAMES FOR WALLS AND CEILINGS

PART 1 - GENERAL

A. PRODUCT DATA: FOR EACH TYPE OF ACCESS DOOR AND FRAME INDICATED

# 1.3 COORDINATION

A. VERIFICATION: DETERMINE SPECIFIC LOCATIONS AND SIZES FOR ACCESS DOORS NEEDED TO GAIN TO CONCEALED PLUMBING, MECHANICAL, OR OTHER CONCEALED WORK.

### PART 2 - PRODUCTS

2.1 ACCESS DOORS AND FRAMES FOR WALLS AND CEILINGS A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS APPROPRIATE TO EACH TYPE OF INSTALLATION.

### PART 3 - EXECUTION

MATERIAL.

- 3.1 INSTALLATION A. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ACCESS DOORS AND
- FRAMES. B. SET FRAMES ACCURATELY IN POSITION AND ATTACH SECURELY TO SUPPORTS WITH PLANE OF FACE PANELS ALIGNED WITH ADJACENT FINISH SURFACES

C. INSTALL DOORS FLUSH WITH ADJACENT FINISH SURFACES OR RECESSED TO RECEIVE FINISH

**SECTION 08710 - DOOR HARDWARE** 1 — GENERAL 1.1 SUMMARY

# A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

- PART 2 PRODUCTS 2.1 SCHEDULED DOOR HARDWARE A. GENERAL: PROVIDE DOOR HARDWARE FOR EACH DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION AND DOOR HARDWARE SETS INDICATED IN DOOR AND FRAME SCHEDULE.
  - B. BASIS FOR DESIGN PRODUCT: THE DESIGN FOR HARDWARE IS BASED ON PRODUCTS INDICATED OR A COMPARABLE PRODUCT:
    - 1. BUTT HINGES: HAGER BB1191 2. LOCK SETS: SCHLAGE AL-SERIES SATURN
    - 3. KICK DOWN HOLD-OPEN: DON-JO 1464
  - 4. WALL STOPS: DON-JO 1407 5. PUSH/PULL: DON-JO 7611
  - 6. CLOSÉR: LCN 1371 7. ROBE HOOK: DON-JO 302
  - 8. KICK PLATE: DON-JO 90
  - 9. COORDINATOR: IVES COR SERIES 10. PANIC DEVICE: VON DUPRIN SERIES 98 11. THRESHOLD: REESE S204A. HALF SADDLE: REESE S239A.
  - 13. WEATHER-STRIPPING: HOLLOW METAL DOOR REESE 815A/ ALUMINUM DOOR REESE 630 (MATCH DOOR COLOR/ FINISH) 14. DRIP: REESE R199A 15. SWEEPS: REESE 323A
  - 16. ASTRAGAL: REESE 184A C. FINISH US26D/626/US32D/630 OR COMPARABLE

### PART 3 - EXECUTION

3.1 INSTALLATION A. STEEL DOORS AND FRAMES: COMPLY WITH DHI A115 SERIES. DRILL AND TAP DOORS AND FRAMES FOR SURFACE-APPLIED DOOR HARDWARE ACCORDING TO ANSI A250.6

B. WOOD DOORS: COMPLY WITH DHI A115-W SERIES C. INSTALL EACH DOOR HARDWARE ITEM TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. WHERE CUTTING AND FITTING ARE REQUIRED TO INSTALL DOOR HARDWARE ONTO OR INTO SURFACES THAT ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, COORDINATE REMOVAL, STORAGE, AND REINSTALLATION OF SURFACE PROTECTIVE TRIM UNITS WITH FINISHING WORK SPECIFIED IN DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE-MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON SUBSTRATES INVOLVED.

A. THIS SECTION INCLUDES GLAZING FOR THE FOLLOWING PRODUCTS AND APPLICATIONS, INCLUDING THOSE SPECIFIED IN OTHER SECTIONS WHERE GLAZING REQUIREMENTS ARE SPECIFIED BY REFERENCE TO THIS

 WINDOWS 2. DOORS 3. BORROWED LITES

4. MIRRORS

A. PRODUCT DATA: FOR EACH GLASS PRODUCT AND GLAZING MATERIAL INDICATED.

2.1 GLASS PRODUCTS A. ANNEALED FLOAT GLASS: ASTM C 1036, TYPE I (TRANSPARENT FLAT GLASS), QUALITY-Q3, OF CLASS

1. ULTRA-CLEAR (LOW IRON) FLOAT GLASS: CLASS 1 (CLEAR) B. HEAT-TREATED FLOAT GLASS: ASTM C 1048; TYPE 1 (TRANSPARENT FLAT GLASS); QUALITY-Q3

LAMINATED GLASS: ASTM C 1172 D. MIRRORS: CLEAR AND TEMPERED GLASS MIRRORS: ASTM C 1503+0

3.1 GLAZING & MIRRORS A. GENERAL: COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS GASKETS, AND OTHER GLAZING MATERIALS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THOSE IN REFERENCED GLAZING PUBLICATIONS

ON DRAWINGS.

H. GYPSUM BOARD:

A. PROTECT GLASS & MIRRORS FROM DAMAGE IMMEDIATELY AFTER INSTALLATION BY ATTACHING CROSSED STREAMERS TO FRAMING HELD AWAY FROM GLASS. DO NOT APPLY MARKERS TO GLASS SURFACE. REMOVE NONPERMANENT LABELS, AND CLEAN SURFACES. PROTECT GLASS & MIRRORS FROM CONTACT WITH CONTAMINATING SUBSTANCES RESULTING FROM CONSTRUCTION OPERATIONS, INCLUDING WELD SPLATTER. IF, DESPITE SUCH PROTECTION, CONTAMINATING SUBSTANCES DO COME INTO CONTACT WITH GLASS, REMOVE SUBSTANCES IMMEDIATELY AS RECOMMENDED BY GLASS & MIRROR MANUFACTURER.

B. REMOVE AND REPLACE GLASS & MIRRORS THAT ARE BROKEN, CHIPPED, CRACKED OR ABRADED TORTHAT

IS DAMAGED FROM NATURAL CAUSES, ACCIDENTS, AND VANDALISM, DURING CONSTRUCTION PERIOD.

### SECTION 092216 - NON-STRUCTURAL METAL FRAMING PART 2.2 FRAMING SYSTEMS

A. PARTIAL WALL FRAMING CONNECTION: [1/2-INCH (12.7-MM)] ASTM A36/A36M STEEL-PLATE ST50H STUD CONNECTOR DESIGNED TO SUPPORT OUT-OF-PLANE LOADING OF CANTILEVERED PARTIAL WALL SYSTEMS THAT ARE UNSUPPORTED AT THE TOP TRACK. 1. BASIS-OF-DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE CLARKDIETRICH; PONY WALL

[PW48] OR COMPARABLE PRODUCT BY ONE OF THE FOLLOWING CURRENT MEMBERS OF THE SFIA:

3. SIZE (HEIGHT; WIDTH BY LENGTH): [47-3/4 INCHES (1213 MM) OR [60" INCHES (1524 MM)] TALL;

# 2. MINIMUM BASE-STEEL THICKNESS: [0.0966 INCH (2.45 MM)].

WITH 3-3/8-BY-8-INCH (86-BY-203-MM) LONG PLATE.

SECTION 09260 - GYPSUM BOARD SYSTEMS PART 1 — GENERAL 1.1 SUMMARY A. SCOPE: PROVIDE METAL WALL AND CEILING FRAMING, BLOCKING, GYPSUM BOARD INSTALLATION AND

FINISHING (INCLUDING SKIM COATING WHERE NOTED), AND SOUND ATTENUATION INSTALLATION AS SHOWN

B. PERFORM GYPSUM BOARD SYSTEMS WORK IN ACCORDANCE WITH RECOMMENDATIONS OF ASTM C754 AND GA 216 UNLESS OTHERWISE SPECIFIED IN THIS SECTION. C. ENVIRONMENTAL REQUIREMENTS: MAINTAIN A MINIMUM TEMPERATURE OF 55 DEGREES F DURING

APPLICATION AND CURING OF JOINT TREATMENT COMPOUNDS. D. METAL STUDS: NON-LOAD BEARING ROLLED STEEL, GALVANIZED, CHANNEL SHAPED, 25 GAUGE UNLESS OTHERWISE INDICATED, PUNCHED FOR UTILITY ACCESS. GOLD BOND BUILDING PRODUCTS — SCREW STUDS; UNITED STATES GYPSUM— STEEL STUDS; THE CELOTEX CORPORATION — STEEL STUDS; DIETRICH INDUSTRIES-STEEL STUDS. SPACE AT 24"O.C. UNLESS NOTED OTHERWISE.

E. RUNNER CHANNELS (GAUGE TO MATCH METAL STUDS) COLD ROLLED STEEL WITH FACTORY APPLIED RUST-RESISTANT FINISH, 1-1/2 INCH SIZE, UNLESS OTHERWISE INDICATED. F. FURRING AND BRACING MEMBERS: 25 GAUGE COLD FORMED GALVANIZED STEEL HAT-SHAPED OR

Z-SHAPED, PLAIN OR KNURLED FACE. G. EXPANSION/ CONTROL JOINTS: GOLD BOND BUILDING PRODUCTS - E-Z STRIP OR U.S. GYPSUM - NO. 93

1. STANDARD GYPSUM BOARD: 5/8 INCH THICK; MAXIMUM PERMISSIBLE LENGTH; SQUARE CUT ENDS, TAPERED EDGES; ASTM C36. 2. STANDARD FIRE RATED GYPSUM BOARD: UL RATED, 5/8 INCH THICK; MAXIMUM PERMISSIBLE LENGTH; SQUARE CUT ENDS, TAPERED EDGES.

I. GYPSUM BOARD ACCESSORIES: PROVIDE IN ACCORDANCE WITH GA 216 AND MANUFACTURER'S 1. CORNER BEADS: GOLD BOND BUILDING PRODUCTS - STANDARD CORNER BEADS; UNITED STATES GYPSUM - DUR-A-BEAD. 2. CASING BEADS: GOLD BOND BUILDING PRODUCTS - NO. 100; U.S. GYPSUM -NO. 200A

COMPOUND AND JOINT TAPE; U.S. GYPSUM - JOINT COMPOUNDS, TAPING AND TOPPING, AND PERF-A-TAPE. 4. BONDING ADHESIVE: H.B. FULLER CO. - MAX BOND; GOLD BOND BUILDING PRODUCTS

5. SOUND ATTENUATION BLANKETS: 2 INCH THICK BLANKETS. THERM-FIBER AS MANUFACTURED

3. JOINT TREATMENT: GOLD BOND BUILDING PRODUCTS - JOINT COMPOUNDS, TOPPING

-WALLBOARD/ PANEL ADHESIVE; UNITED STATES GYPSUM - DURABOND 200 ADHESIVE.

# SECTION 09300 - TILE

A. SETTING MATERIALS

B. ADHESIVE MATERIALS

PART 1 - GENERAL 1.1 SUMMARY

C. SOLID SURFACE SHOWER THRESHOLDS.

BY UNITED STATES GYPSUM.

A. CERAMIC OF QUARRY TILE INSTALLED USING THE THIN SET METHOD.

1.2 PRODUCT DESCRIPTION

B. SEALANT USED IN CONJUNCTION WITH CERAMIC TILE.

ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. INSTALL QUARRY TILE IN ACCORDANCE WITH ANSI A108.3

E. SEALANT: PENETRATING SEALANT BY AQUAMIX

1. PORTLAND CEMENT ASTM C150 TYPE 1, GRAY OR WHITE TO MATCH EXISTING 2. HYDRATED LINE: ASTM C-206 OR C-207 TYPE S 3. SAND: ASTM C-144 FOR MORTAR OR GROUT AS REQUIRED

4. WATER: CLEAN AND POTABLE 5. SHRINKAGE MESH: ANSI A50 3, 2"X2" MESH, 16/16 WIRE OR 3"X3" MESH, 13/13 WIRE OR 1-1/2"X2" MESH, 16/13 WIRE; GALVANIZED 6. DRY-SET MORTAR: ANSI A118.1

MODIFIED THIN SET MORTAR 2. THIN-SET ADHESIVE, WALLS: H.B. FULLER CO. - DOUBLE DUTY 'CLASSIC' ADHESIVE C. GROUT TYPE: FLOOR AND WALL TILE GROUT: CEMENTITIOUS TYPE (WITH LATEX ADDITIVE FOR FLOOR APPLICATION); COLORS TO BE SELECTED BY ARCHITECT; RESISTANT TO SHRINKING;

1. THIN-SET ADHESIVE, FLOORS: H.B. FULLER CO. - FULL FLEX - UNIVERSAL LATEX -

MANUFACTURED BY THE UPCO COMPANY, H.B. FULLER (TEC) OR HYDROMENT. REFER TO FINISH D. MORTAR MIX AND GROUT: MIX AND PROPORTION PRE-MIX SETTING BED AND GROUT MATERIALS IN

### F. EDGE AND TRANSITION STRIPS: STRIP TO BE JOHNSONITE CE-45-C COLOR SANDALWOOD 45. INSTALL WITH TRACK: MT-00-A, FASTEN WITH 5/8" CONCRETE NAILS. G. WATERPROOF SHEET MEMBRANE: MEMBRANE SHALL BE NOBLESEAL TS AS MANUFACTURED BY THE NOBLE COMPANY, OR APPROVED EQUAL. MUST BE PROVIDED BY SAME MANUFACTURER AS

### GROUT MATERIAL. PROVIDE WHERE INDICATED ON FLOOR PLAN. 1.2 INSTALLATION

H. GROUT TILE JOINTS

A. INSTALL CERAMIC AND PORCELAIN TILE IN, ACCORDANCE WITH ANSI A108.4

SIZE. JOINTS: WATERTIGHT, WITHOUT VOIDS, CRACKS, EXCESS MORTAR OR GROUT

C. LAY TILE TO PATTERN INDICATED. VERIFY PATTERN IN UNINTERRUPTED THROUGH OPENINGS. D. CUT AND FIT TILE TIGHT TO PROTRUSIONS AND VERTICAL INTERRUPTIONS. FORM CORNERS NEATLY. E. WORK TILE JOINTS UNIFORM IN WIDTH, SUBJECT TO VARIANCE IN TOLERANCE ALLOWED IN TILE

F. KEEP EXPANSION/CONTRACTION JOINTS FREE OF MORTAR OR GROUT G. ALLOW TILE TO SET FOR A MINIMUM OF 48 HOURS PRIOR TO GROUTING

I. APPLY SEALANT TO JUNCTION OF TILE AND DISSIMILAR MATERIALS AND AT A JUNCTURE OF DISSIMILAR PLANES

J. PROHIBIT TRAFFIC FROM FLOOR FINISH FOR 3 DAYS AFTER INSTALLATION K. ADEQUATELY PROTECT FLOORS SUBJECT TO FOOT AND WHEEL TRAFFIC.

ARCHITECT

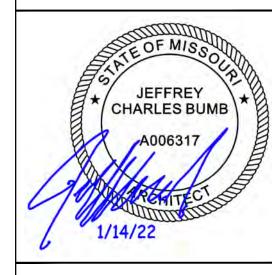
CONSTRUCTION As Noted on Plans Review

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# **REVISIONS**

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01.14.22

TG

JCB

PROJECT NUMBER: 689411

**SPECIFICATIONS** 

1.2 SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

1.3 QUALITY ASSURANCE

A. SEISMIC STANDARD: COMPLY WITH THE FOLLOWING: 1. STANDARD FOR CEILING SUSPENSION SYSTEMS REQUIRING SEISMIC RESTRAINT: COMPLY WITH ASTM E 580

2. CISCA'S RECOMMENDATIONS FOR ACOUSTICAL CEILINGS: COMPLY WITH CISCA'S "RECOMMENDATIONS FOR DIRECT-HUNG ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS -SEISMIC ZONES 0-2"

3. CISCA'S GUIDELINES FOR SYSTEMS REQUIRING SEISMIC RESTRAINT: COMPLY WITH CISCA'S "GUIDELINES FOR SEISMIC RESTRAINT OF DIRECT-HUNG SUSPENDED CEILING ASSEMBLIES -SEISMIC ZONES 3&4"

PART 2 - PRODUCTS 2.1 ACOUSTICAL TILE CEILINGS, GENERAL

A. ACOUSTICAL TILE STANDARD: COMPLY WITH ASTM E 1264

B. METAL SUSUPENSION SYSTEM STANDARD: COMPLY WITH ASTM C 635 C. ATTACHMENT DEVISES: SIZE FOR FIVE TIMES THE DESIGN LOAD INDICATED IN ASTM C 635, TABLE

"DIRECT-HUNG", UNLESS OTHERWISE INDICATED. COMPLY WITH SEISMIC DESIGN REQUIREMENTS. D. WIRE HANGERS, BRACES, AND TIES: ZINC-COATED CARBON-STEEL WIRE; ASTM A 641/A641M, CLASS 1 ZINC COATING, SOFT TEMPER

1. SIZE: SELECT WIRE DIAMETER SO ITS STRESS AT 3 TIMES HANGER DESIGN LOAD (ASTM C 635, TABLE 1 "DIRECT HUNG") WILL BE LESS THAN YIELD STRESS OF WIRE, BUT PROVIDE NOT LESS THAN 0.106-INCH-(2.69MM-) DIAMETER WIRE.

E. SEISMIC STRUTS AND SEISMIC CLIPS

F. METAL EDGE MOLDINGS AND TRIM: TYPE AND PROFILE INDICATED OR, IF NOT INDICATED, MANUFACTURER'S STANDARD MOLDINGS FOR EDGES AND PENETRATIONS THAT COMPLY WITH SEISMIC DESIGN REQUIREMENTS; FORMED FROM SHEET METAL OF SAME MATERIAL, FINISH, AND COLOR AS THAT USED FOR EXPOSED FLANGES OF SUSPENSION SYSTEM RUNNERS.

2.2 ACOUSTICAL TILE AND SUSPENSION SYSTEM

A. PRODUCTS: PER DECOR SCHEDULE

PART 3 - EXECUTION 3.1 INSTALLATION

A. COMPLY WITH ASTM C 636 AND SEISMIC DESIGN REQUIREMENTS INDICATED, PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND CISCA'S "CEILING SYSTEMS HANDBOOK"

B. SUSPEND CEILING HANGERS FROM BUILDING'S STRUCTURAL MEMBERS, PLUMB AND FREE FROM CONTRACT WITH INSULATION OR OTHER OBJECTS WITHIN CEILING PLENUM. SPLAY HANGERS ONLY WHERE REQUIRED TO MISS OBSTRUCTIONS; OFFSET RESULTING HORIZONTAL FORCES BY BRACING, COUNTER-SPLAYING, OR OTHER EQUALLY EFFECTIVE MEANS. WHERE WIDTH OF DUCTS AND OTHER CONSTRUCTION WITHIN CEILING PLENUM PRODUCES HANGER SPACING'S THAT INTERFERE WITH LOCATION OF HANGERS, USE TRAPEZES OR EQUIVALENT DEVISES. WHEN STEEL FRAMING DOES NOT PERMIT INSTALLATION OF HANGER WIRES AT SPACING REQUIRED, INSTALL CARRYING

CHANNELS OF OTHER SUPPLEMENTAL SUPPORT FOR ATTACHMENT OF HANGER WIRES. 1. DO NOT SUPPORT CEILINGS DIRECTLY FROM PERMANENT METAL FORMS OR FLOOR DECK; ANCHOR INTO CONCRETE SLABS

2. DO NOT ATTACH HANGERS TO STEEL DECK TABS OR TO STEEL ROOF DECK C. INSTALL EDGE MOLDINGS AND TRIM OF TYPE INDICATED AT PERIMETER OF ACOUSTICAL TILE CEILING AREA AND WHERE NECESSARY TO CONCEAL EDGES OF ACOUSTICAL TILES. SCREW ATTACH

MOLDINGS TO SUBSTRATE AT INTERVALS NOT MORE THAN 16 INCHES (400 MM) O.C. AND NOT MORE THAN 3 INCHES (75 MM) FROM ENDS, LEVELING WITH CEILING SUSPENSION SYSTEM TO A TOLERANCE OF 1/8 INCH IN 12 FEET (3.2 MM IN 3.6 M). MITER CORNERS ACCURATELY AND CONNECT SECURELY. D. INSTALL SUSPENSION SYSTEM RUNNERS SO THEY ARE SQUARE AND SECURELY INTERLOCKED WITH

ONE ANOTHER. REMOVE AND REPLACE DENTED, BENT, OR KINKED MEMBERS. E. INSTALL ACOUSTICAL TILES IN COORDINATION WITH SUSPENSION SYSTEM AND EXPOSED MOLDINGS AND TRIM. PLACE SPINES OR SUSPENSION SYSTEM FLANGES INTO KERFED EDGES TO TILE-TO-TILE JOINTS ARE CLOSED BY DOUBLE LAP OF MATERIAL.

SECTION 09645 - ACTIVITY FLOOR

1.1 SUMMARY

A. THIS SECTION INCLUDES THE FOLLOWING:

1. ENGINEERED-WOOD STRIP FLOORING FOR COMMERCIAL APPLICATION

1.2 SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

1.3 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: AN EXPERIENCED INSTALLER WHO HAS COMPLETED WOOD FLOORING SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT AND WHOSE WORK HAS RESULTED IN WOOD FLOORING INSTALLATIONS WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

1.4 PROJECT CONDITIONS

A. CONDITIONING: MAINTAIN RELATIVE HUMIDITY PLANNED FOR BUILDING OCCUPANTS AND AN AMBIENT TEMPERATURE BETWEEN 55 AND 85 DEGREES F OR WITHIN 15 DEGREES F OF NORMAL OPERATING TEMPERATURE AND RELATIVE HUMIDITY BETWEEN 30 AND 60 PERCENT IN SPACES TO RECEIVE WOOD FLOORING FOR AT LEAST SEVEN DAYS BEFORE INSTALLATION. DURING INSTALLATION, AND FOR AT LEAST SEVEN DAYS AFTER INSTALLATION. AFTER POST-INSTALLATION PERIOD, MAINTAIN RELATIVE HUMIDITY AND AMBIENT TEMPERATURE WITHIN THE RANGES INDICATED

ABOVE. 1. CLOSE SPACES TO TRAFFIC DURING FLOORING INSTALLATION AND FOR TIME PERIOD AFTER INSTALLATION RECOMMENDED IN WRITING BY FLOORING AND FINISH MANUFACTURERS.

B. SURFACE OF THE SUBFLOOR SHALL BE LEVEL TO 1/8 INCH (3-MM) DEVIATION IN ANY DIRECTION WHEN CHECKED WITH AN 8-FOOT (2.44-M) STRAIGHT EDGE RADIUS.

C. CONCRETE SUBFLOOR MOISTURE CONTACT FOR ENGINEERED WOOD STRIP FLOORING: 1. STANDARD INSTALLATION SHALL CONTAIN NO MORE THAN 3 LB OF WATER/ 1000 SQ. FT. (0.91 KG OF WATER/92.9 SQ. M) IN 24 HOURS

D. INSTALL FACTORY-FINISHED WOOD FLOORING AFTER OTHER FINISHING OPERATIONS, INCLUDING PAINTING, HAVE BEEN COMPLETED.

PART 2 - PRODUCTS

2.1 ENGINEERED WOOD STRIP FLOORING A. BASIS FOR DESIGN PRODUCT: IF REQUIRED THE DESIGN OF ENGINEERED WOOD STRIP FLOORING IS BASED ON PRODUCT INDICATED. SUBJECT TO COMPLIANCE WITH REQUIREMENTS. PROVIDE THE NAMED PRODUCT OR COMPARABLE PRODUCT.

> 1. KAHRS INTERNATIONAL - ORIGINAL COLLECTION 2. WOOD SPECIES FINISH OAK MOCHA

6.0 MILS(0.15 MM)THICK

2.2 UNDERLAYMENTS INSTALL

A. FOR FLOATING INSTALLATION: 1. VAPOR RETARDER COMPLYING WITH ASTM D 4397, POLYETHYLENE SHEET NOT LESS THAN

PART 3 - EXECUTION

3.1 EXAMINATION A. EXAMINE SUBSTRATES, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR MAXIMUM MOISTURE CONTENT, INSTALLATION TOLERANCES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF WORK.

3.2 PREPARATION

A. PREPARE SUBSTRATES ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATION TO ENSURE ADHESION OF WOOD FLOORING PRODUCTS.

3.3 INSTALLATION A. GENERAL: COMPLY WITH FLOORING MANUFACTURER'S WRITTEN INSTRUCTIONS, AS APPLICABLE TO

FLOORING TYPE

3.4 CLEANING AND PROTECTION

A. PERFORM THE FOLLOWING OPERATIONS IMMEDIATELY AFTER COMPLETING RESILIENT PRODUCT INSTALLATION: 1. REMOVE ADHESIVE AND OTHER BLEMISHES FROM EXPOSED SURFACES

2. SWEEP AND VACUUM SURFACES THOROUGHLY B. PROTECT WOOD FLOORING PRODUCTS FROM MARS, MARKS, INDENTATIONS, AND OTHER DAMAGE FROM CONSTRUCTION OPERATIONS AND PLACEMENT OF EQUIPMENT AND FIXTURES DURING REMAINDER OF CONSTRUCTION PERIOD. USE PROTECTION METHODS RECOMMENDED IN WRITING BY MANUFACTURER.

<u> SECTION 09651 - RESILIENT FLOOR & ACCESSORIES</u> - GENERAL 1.1 SUMMARY

A. SECTION INCLUDES:

1. VINYL PLANK FLOORING 2. RUBBER SHEET FLOORING 3. VINYL COMPOSITION FLOOR TILE 4. RESILIENT BASE

1.2 SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

1.3 PROJECT CONDITIONS A. MAINTAIN AMBIENT TEMPERATURES WITHIN RANGE RECOMMENDED BY MANUFACTURER IN SPACES

TO RECEIVE FLOOR TILE. B. UNTIL SUBSTANTIAL COMPLETION, MAINTAIN AMBIENT TEMPERATURES WITHIN RANGE RECOMMENDED

BY MANUFACTURER. C. CLOSE SPACES TO TRAFFIC DURING FLOOR INSTALLATION

D. CLOSE SPACES TO TRAFFIC FOR 48 HOURS AFTER FLOOR INSTALLATION E. INSTALL FLOOR AFTER OTHER FINISHING OPERATIONS, INCLUDING PAINTING, HAVE BEEN

PART 2 - PRODUCTS

2.1 PRODUCT DATA: A. AS INDICATED ON DECOR SCHEDULE

2.2 INSTALLATION MATERIALS

COMPLETED.

A. TROWELABLE LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, PORTLAND CEMENT BASED OR BLENDED HYDRAULIC-CEMENT-BASED FORMULATION PROVIDED OR APPROVED BY MANUFACTURER FOR APPLICATIONS INDICATED.

B. ADHESIVES: WATER-RESISTANT TYPE RECOMMENDED BY MANUFACTURER TO SUIT FLOOR AND SUBSTRATE CONDITIONS INDICATED.

PART 3 - EXECUTION 3.1 PREPARATION

A. PREPARE SUBSTRATES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE

ADHESION OF RESILIENT PRODUCTS. B. CONCRETE SUBSTRATES: PREPARE ACCORDING TO ASTM F 710 1. VERIFY THAT SUBSTRATES ARE DRY AND FREE OF CURING COMPOUNDS, SEALERS, AND

2. REMOVE SUBSTRATE COATINGS AND OTHER SUBSTANCES THAT ARE INCOMPATIBLE WITH ADHESIVES AND THAT CONTAIN SOAP, WAX, OIL, OR SILICONE, USING MECHANICAL METHODS

RECOMMENDED BY MANUFACTURER. DO NOT USE SOLVENTS. 3. ALKALINITY AND ADHESION TESTING: PERFORM TESTS RECOMMENDED BY MANUFACTURER. PROCEED WITH INSTALLATION ONLY AFTER SUBSTRATES PASS TESTING

C. FILL CRACKS, HOLES, AND DEPRESSIONS IN SUBSTRATES WITH TROWELABLE LEVELING AND PATCHING COMPOUND AND REMOVE BUMPS AND RIDGES TO PRODUCE A UNIFORM AND SMOOTH D. DO NOT INSTALL FLOOR UNTIL THEY ARE SAME TEMPERATURE AS SPACED WHERE THEY ARE TO BE

INSTALLED 1. MOVE RESILIENT PRODUCTS AND INSTALLATION MATERIALS INTO SPACES WHERE THEY WILL BE INSTALLED AT LEAST 48 HOURS IN ADVANCE OF INSTALLATION. E. SWEEP AND VACUUM CLEAN SUBSTRATES TO BE COVERED BY RESILIENT PRODUCTS IMMEDIATELY

BEFORE INSTALLATION. 3.2 CLEANING AND PROTECTION

A. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR CLEANING AND PROTECTION

B. COVER FLOOR UNTIL SUBSTANTIAL COMPLETION

SECTION 09681 - CARPET TILE PART 1 — GENERAL 1.1 SUMMARY

A. THIS SECTION INCLUDES INSTALLATION OF MODULAR CARPET TILE

A. PRODUCT DATA: FOR EACH PRODUCT INDICATED

1.3 DELIVERY, STORAGE, AND HANDLING

A. COMPLY WITH CRI 104, SECTION 5, "STORAGE AND HANDLING."

A. COMPLY WITH CRI 104, SECTION 7.2, "SITE CONDITIONS; TEMPERATURE AND HUMIDITY" AND 7.12, "VENTILATION" B. ENVIRONMENTAL LIMITATIONS: DO NOT INSTALL CARPET TILES UNTIL WET WORK IN SPACES IS

AND DRY, AND AMBIENT TEMPERATURE AND HUMIDITY CONDITIONS ARE INDICATED FOR PROJECT WHEN OCCUPIED FOR ITS INTENDED MAINTAINED AT THE LEVELS C. DO NOT INSTALL CARPET TILES OVER CONCRETE SLABS UNTIL SLABS HAVE PH RANGE

CARPET TILE MANUFACTURER.

PART 2 - PRODUCTS 2.1 CARPET TILE

RECOMMENDED BY

A. AS INDICATED ON DECOR SCHEDULE

2.2 INSTALLATION ACCESSORIFS

A. TROWELABLE LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, HYDRAULIC-CEMENT-BASED FORMULATION PROVIDED OR RECOMMENDED BY CARPET TILE MANUFACTURER. B. ADHESIVES: WATER-RESISTANT, MILDEW-RESISTANT, NON-STAINING, PRESSURE-SENSITIVE TYPE TO PRODUCTS AND SUBFLOOR CONDITIONS INDICATED, THAT COMPLIES WITH FLAMMABILITY REQUIREMENTS FOR INSTALLED CARPET TILE AND IS RECOMMENDED BY CARPET TILE MANUFACTURER FOR RELEASABLE INSTALLATION.

PART 3 - EXECUTION 3.1 INSTALLATION

A. GENERAL: COMPLY WITH CRI 104. SECTION 14. "CARPET MODULES." AND WITH CARPET TILE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.

SECTION 09720 - WALL COVERINGS/ GRAPHIC WALL

PART 1 - GENERAL 1.1 SUMMARY

A. THIS SECTION INCLUDES THE FOLLOWING: 1. VINYL WALL COVERING AND GRAPHIC WALL INSTALLATION

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

PART 2 - PRODUCTS 2.1 MANUFACTURERS

A. AS INDICATED ON DECOR SCHEDULE

A. ADHESIVE WALLCOVERING: MILDEW-RESISTANT, NONSTAINING ADHESIVE, FOR USE WITH SPECIFIC WALL COVERING AND SUBSTRATE APPLICATION, AS RECOMMENDED IN WRITING BY WALL-COVERING B. ADHESIVE GRAPHIC WALL: ROMAN PRO 555 VINYL OVER VINYL ADHESIVE. ROMAN PRO 838 HEAVY

VINYL ADHESIVE. C. PRIMER: SHERWIN WILLIAMS PRE-WALLCOVERING MILDEW-RESISTANT PRIMER.

PART 3 - EXECUTION 3.1 PREPARATION - WALLCOVERING

A. PREPARE SUBSTRATES TO ACHIEVE A SMOOTH, DRY, CLEAN, STRUCTURALLY SOUND SURFACE FREE OF FLAKING, UNSOUND COATINGS, CRACKS, AND DEFECTS. 1. MOISTURE CONTENT: MAXIMUM OF 5 PERCENT ON NEW PLASTER, CONCRETE, AND CONCRETE MASONRY UNITS WHEN TESTED WITH AN ELECTRONIC MOISTURE METER. 2. GYPSUM BOARD: PRIME WITH PRIMER RECOMMENDED BY WALL-COVERING MANUFACTURER.

3. CHECK PAINTED SURFACES FOR PIGMENT BLEEDING. SAND GLOSS, SEMI-GLOSS, AND EGGSHELL FINISHES WITH FINE SANDPAPER. B. REMOVE HARDWARE AND HARDWARE ACCESSORIES, ELECTRICAL PLATES AND COVERS, LIGHT FIXTURE TRIMS AND SIMILAR ITEMS.

C. ACCLIMATIZE WALL-COVERING MATERIALS BY REMOVING THEM FROM PACKAGING IN THE INSTALLATION AREAS NOT LESS THAN 24 HOURS BEFORE INSTALLATION.

3.2 INSTALLATION - WALLCOVERING

A. CUT WALL-COVERING STRIPS IN ROLL NUMBER SEQUENCE. CHANGE ROLL NUMBERS AT PARTITION

BREAKS AND CORNERS B. INSTALL STRIPS IN SAME ORDER AS CUT FROM ROLL

C. INSTALL WALL COVERING WITH NO GAPS OR OVERLAPS, NO LIFTED OR CURLING EDGES, AND NO

D. INSTALL SEAMS VERTICAL AND PLUMB AT LEAST 6 INCHES (150 MM) FROM OUTSIDE CORNERS AND FROM INSIDE CORNERS UNLESS A CHANGE OF PATTERN OR COLOR EXISTS AT CORNER. NO HORIZONTAL SEAMS ARE PERMITTED.

E. FULLY BOND WALL COVERING TO SUBSTRATE. REMOVE AIR BUBBLES, WRINKLES, BLISTERS, AND F. TRIM EDGES AND SEAMS FOR COLOR UNIFORMITY, PATTERN MATCH, AND TIGHT CLOSURE. BUTT

SEAMS WITHOUT ANY OVERLAY OR SPACING BETWEEN STRIPS.

3.3 PREPARATION/ INSTALLATION - GRAPHIC WALL

A. PRIME GYPSUM BOARD WITH PRE-WALL COVERING PRIMER

B. 1 COAT ROMAN PRO 555 AT EDGES, 2" MINIMUM COVERAGE, ALLOW TO DRY C. PROVIDE 2ND COAT OF ROMAN PRO 555 TO EDGES THE REMAINING PORTION OF THE WALL 1 COAT ROMAN PRO 838 AND APPLY GRAPHICS

D. AFTER 48 HOURS COVER GRAPHIC WITH SHERWIN WILLIAMS WATERBORNE POLYURETHANE

SECTION 09772 - FIBERGLASS REINFORCED WALL PANELS

1.1 SUMMARY

A. SECTION INCLUDES: PREFINISHED POLYESTER GLASS REINFORCED PLASTIC SHEETS AND ADHERED TO UNFINISHED GYPSUM WALLBOARD.

1.2 SUBMITTALS

VARNISH SATIN

A. PRODUCT DATA: SUBMIT SUFFICIENT MANUFACTURER'S DATA TO INDICATE COMPLIANCE WITH THESE SPECIFICATIONS

1.3 PROJECT CONDITIONS

A. ENVIRONMENTAL LIMITATIONS: BUILDING ARE TO BE FULLY ENCLOSED PRIOR TO INSTALLATION WITH SUFFICIENT HEAT (70 DEGREES F) AND VENTILATION CONSISTENT WITH GOOD WORKING CONDITIONS FOR FINISH WORK.

B. DURING INSTALLATION AND FOR NOT LESS THAN 48 HOURS BEFORE, MAINTAIN AN AMBIENT TEMPERATURE AND RELATIVE HUMIDITY WITHIN LIMITS REQUIRED BY TYPE OF ADHESIVE USED AND RECOMMENDATION OF ADHESIVE MANUFACTURER. 1. PROVIDE VENTILATION TO DISPERSE FUMES DURING APPLICATION OF ADHESIVE AS

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURER A. AS INDICATED ON DECOR SCHEDULE

A. ADHESIVE: CONSTRUCTION ADHESIVES AS RECOMMENDED BY MANUFACTURER COMPLYING WITH

RECOMMENDED BY THE ADHESIVE MANUFACTURER.

PART 3 - EXECUTION

3.1 PREPARATION A. EXAMINE BACKUP SURFACES TO DETERMINE THAT CORNERS ARE PLUMB AND STRAIGHT, SURFACES ARE SMOOTH, UNIFORM, CLEAN AND FREE FROM FOREIGN MATTER, NAILS COUNTERSUNK, JOINTS AND CRACKS FILLED FLUSH AND SMOOTH WITH THE ADJOURNING SURFACE.

B. REPAIR DEFECTS PRIOR TO INSTALLATION 1. LEVEL WALL SURFACES TO PANEL MANUFACTURER'S REQUIREMENTS. REMOVE PROTRUSIONS AND FILL INDENTATIONS.

A. COMPLY WITH MANUFACTURER'S RECOMMENDED PROCEDURES AND INSTALLATION SEQUENCE.

A. REMOVE EXCESS SEALANT FROM PANELS AND MOLDINGS. WIPE PANEL DOWN USING A DAMP CLOTH AND MILD SOAP SOLUTION OR CLEANER. B. REFER TO MANUFACTURER'S SPECIFIC CLEANING RECOMMENDATIONS. DO NOT USE ABRASIVE

SECTION 09900 - PAINTING

PART 1 – GENERAL

CLEANERS.

1.1 WORK INCLUDED A. SURFACE PREPARATION

B. FIELD APPLICATION OF PAINTS, STAINS, VARNISHES, AND OTHER COATINGS

PART 2 - PRODUCTS 2.1 PRODUCTS

A. AS INDICATED ON DECOR SCHEDULE

PART 3 - EXECUTION

3.1 PREPARATION A. SURFACES: CORRECT DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION.

REMOVE OR REPAIR EXISTING COATING THAT EXHIBIT SURFACE DEFECTS. B. MARKS: SEAL WITH SHELLAC THOSE WHICH MAY BLEED THROUGH SURFACE FINISHES.

C. IMPERVIOUS SURFACES: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI-SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY COMPLETELY. D. ALUMINUM SURFACES SCHEDULED FOR PAINT FINISH: REMOVE SURFACE CONTAMINATION BY STEA

OR HIGH PRESSURE WATER. REMOVE OXIDATION WITH ACID ETCH AND SOLVENT WASHING. APPLY ETCHING PRIMER IMMEDIATELY FOLLOWING CLEANING. E. GYPSUM BOARD SURFACES: FILL MINOR DEFECTS WITH FILLER COMPOUND. SPOT PRIME DEFECTS

AFTER REPAIR. F. GALVANIZED SURFACES: REMOVE SURFACE CONTAMINATION AND OILS AND WASH WITH SOLVENT.APPLY COAT OF ETCHING TYPE PRIMER.

G. CONCRETE AND UNIT MASONRY SURFACES SCHEDULED TO RECEIVE PAINT FINISH: REMOVE DIRT, LOOSE MORTAR, SCALE, POWDER, AND OTHER FOREIGN MATTER. REMOVE OIL AND GREASE WITH A SOLUTION OF TRI-SODIUM PHOSPHATE, RINSE WELL AND ALLOW TO THOROUGHLY DRY. REMOVE STAINS CAUSED BY WEATHERING OF CORRODING METALS WITH A SOLUTION OF SODIUM METASILICATE AFTER THOROUGHLY WETTING WITH WATER. ALLOW TO DRY.

H. PLASTER SURFACES: FILL HAIRLINE CRACKS, SMALL HOLES, AND IMPERFECTIONS ON PLASTER SURFACES WITH PATCHING PLASTER. MAKE SMOOTH AND FLUSH WITH ADJACENT SURFACES. WASH AND NEUTRALIZE HIGH ALKALI SURFACES. I. UNCOATED STEEL AND IRON SURFACES: REMOVE GREASE, MILL SCALE, WELD SPLATTER, DIRT, AND RUST. WHERE HEAVY COATINGS OF SCALE ARE EVIDENT, REMOVE BY 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. SPOT PRIME PAINT AFTER REPAIRS. J. UNPRIMED STEEL SURFACES: CLEAN BY WASHING WITH SOLVENT. APPLY A TREATMENT OF PHOSPHORIC ACID SOLUTION, ENSURING WELD JOINTS, BOLTS AND NUTS ARE SIMILARLY CLEANED.

PRIME SURFACES TO INDICATE DEFECTS, IF ANY. PAINT AFTER DEFECTS HAVE BEEN REMEDIED. K. SHOP PRIMED STEEL SURFACES: 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.

L. INTERIOR WOOD ITEMS SCHEDULED TO RECEIVE PAINT 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 INTERIOR WOODWORK. M. INTERIOR WOOD ITEMS SCHEDULED TO RECEIVE TRANSPARENT FINISH: WIPE OFF DUST AND GRIT PRIOR TO PRIMING. SEAL KNOTS, PITCH STREAKS, AND SAPPY SECTIONS WITH SEALER. FILL NAIL HOLES AND CRACKS AFTER SEALER HAS DRIED, SAND LIGHTLY BETWEEN COATS.

N. METAL DOORS SCHEDULED FOR PAINTING: PRIME METAL DOOR TOP AND BOTTOM EDGE SURFACES.

3.2 APPLICATION A. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AS SPECIFIED, AND AS RECOMMENDED BY THE MANUFACTURER.

3.3 SCHEDULE - INTERIOR

A. WOOD - TRANSPARENT: FILLER COAT (FOR OPEN GRAINED WOOD ONLY) WITH ONE COAT OF ALKYD-BASED STAIN, ONE COAT OF CLEAR SANDING SEALER AND TWO FINISH COATS OF ALKYD-BASED OR POLYURETHANE SATIN VARNISH.

B. STEEL - UNPRIMED: ONE COAT OF RUST-INHIBITIVE, ALKYD-BASED OR EPOXY-METAL PRIMER WITH TWO FINISH COATS OF INTERIOR ODORLESS, SEMI-GLOSS ALKYD ENAMEL. C. STEEL - PRIMED: TOUGH-UP OF SHOP PRIMER AND TWO FINISH COATS OF INTERIOR ODORLESS, SEMI-GLOSS ALKYD ENAMEL.

ODORLESS, SEMI-GLOSS ALKYD ENAMEL.

D. STEEL - GALVANIZED: ONE COAT GALVANIZED METAL PRIMER WITH TWO FINISH COATS OF INTERIOR

E. PLASTER AND GYPSUM BOARD: ONE COAT OF LATEX-BASED, INTERIOR PRIMER WITH TWO FINISH COATS OF ACRYLIC—LATEX INTERIOR PAINT; FLAT FINISH AT CEILING AND SOFFIT APPLICATIONS, AND EGGSHELL FINISH AT WALL APPLICATIONS.

3.4 OTHERS A. PAINTING OF ALL WALL SURFACES TO BE COMPLETED PRIOR TO THE INSTALLATION OF ANY WALL TRIM OR PANELING.

SECTION 09900 - FIRE EXTINGUISHERS

PART 1 — GENERAL 1.1 SUMMARY

> A. SECTION INCLUDES PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS AND MOUNTING BRACKETS FOR FIRE EXTINGUISHERS.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

A. NFPA COMPLIANCE: FABRICATE AND LABEL FIRE EXTINGUISHERS TO COMPLY WITH NFPA 10, "PORTABLE FIRE EXTINGUISHERS" B. FIRE EXTINGUISHERS: LISTED AND LABELED FOR TYPE, RATING, AND CLASSIFICATION BY AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

PART 2 - PRODUCTS

2.1 PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS A. FIRE EXTINGUISHERS: TYPE, SIZE, AND CAPACITY FOR EACH MOUNTING BRACKET INDICATED. B. MULTIPURPOSE DRY-CHEMICAL TYPE 2A-10B:C. UL-RATED NOMINAL CAPACITY, WITH PHOSPHATE-BASED DRY CHEMICAL IN MANUFACTURER'S STANDARD

2.2 MOUNTING BRACKETS

ENAMELED CONTAINER.

A. MOUNTING BRACKETS: MANUFACTURER'S STANDARD STEEL, DESIGNED TO SECURE FIRE EXTINGUISHER TO WALL OR SURFACE, OF SIZES REQUIRED FOR TYPES AND CAPACITIES OF FIRE EXTINGUISHERS INDICATED.

PART 3 - EXECUTION

3.1 INSTALLATION A. EXAMINE FIRE EXTINGUISHERS FOR PROPER CHARGING AND TAGGING

1. REMOVE AND REPLACE DAMAGED, DEFECTIVE, OR UNDERCHARGED FIRE EXTINGUISHERS. B. INSTALL FIRE EXTINGUISHERS AND MOUNTING BRACKETS IN LOCATIONS INDICATED AND IN COMPLIANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

EXTINGUISHER C. MOUNTING BRACKETS: FASTEN MOUNTING BRACKETS TO SURFACES, SQUARE AND PLUMB, AT LOCATION INDICATED

1. MOUNTING BRACKETS: 54 INCHES (1372 MM) ABOVE FINISHED FLOOR TO TOP OF FIRE

SECTION 10801 - TOILET AND BATH ACCESSORIES

3. WARM-AIR DRYERS

4. UNDER-LAVATORY GUARDS

1 - GENERAL 1.1 SUMMARY A. THIS SECTION INCLUDES THE FOLLOWING: 1. PUBLIC-USE WASHROOM ACCESSORIES 2. PUBLIC-USE SHOWER ROOM ACCESSORIES

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED

PART 2 - PRODUCTS

2.1 PUBLIC-USE WASHROOM ACCESSORIES A. BASIS FOR DESIGN PRODUCT: THE DESIGN FOR ACCESSORIES IS BASED ON PRODUCT INDICATED. SUBJECT TO COMPLIANCE WITH REQUIREMENTS. PROVIDE THE NAMED PRODUCT OR A

COMPARABLE PRODUCT. 1. BOBRICK WASHROOM EQUIPMENT, INC. 2. GAMCO COMMERCIAL RESTROOM ACCESSORIES

B. MULTI-ROLL TOILET TISSUE DISPENSER B-2888 C. HAND DRYER - DYSON AIRBLADE V D. LIQUID-SOAP DISPENSER B-2112

GRAB BAR, BREY KRAUSE D-78XX-SS MIRROR UNIT, BREY KRAUSE T-1024-36-SS

BREY KRAUSE

G. TOILETRY SHELF: MS-18 H. ROBE HOOK: B—670°

L. FOLDING SHOWER SEAT: B-5181

I. TOWEL BAR: B-530-24 J. SHOWER CURTAIN ROD: B-6107 K. SHOWER CURTAIN: 204 SERIES WITH CURTAIN HOOKS

M. TWO WALL SHOWER GRAB BAR: B-6861

2.2 SHOWER SHELF A. AVAILABLE MANUFACTURER'S: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED

1. INTERDESIGN EASY LOCK PRO L-SHAPED CORNER BASKET, STAINLESS STEEL MODEL 44220 2.3 WARM-AIR DRYERS - IF REQUIRED

OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO. THE FOLLOWING: 1. XLERATOR MODEL NO: XL-W

A. UNDER-LAVATORY GUARD: PROVIDE AT ALL LAVATORIES DRAINAGE PIPING PART 3 - EXECUTION

2.4 UNDER-LAVATORY GUARDS

3.1 INSTALLATION A. INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

A. AVAILABLE MANUFACTURER'S: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS

ARCHITECT

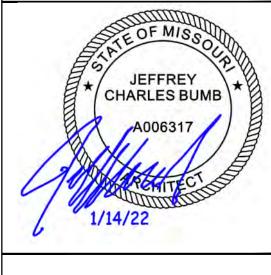
RELEASED FOR **CONSTRUCTION** As Noted on Plans Review

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**REVISIONS** REV. DATE ISSUE

01.14.22

TG

JCB

**SPECIFICATIONS** 

PROJECT NUMBER: 689411

DATE:

**DRAWN BY** 

CHECKED BY:

### SMOKE DETECTOR REQUIREMENTS

DUCT SMOKE DETECTORS INSTALLED IN DUCTS SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY PRESENT IN THE DUCT. DUCT SMOKE DETECTORS SHALL BE CONNECTED TO THE BUILDING'S FIRE ALARM CONTROL UNIT WHEN A FIRE ALARM SYSTEM IS REQUIRED BY SECTION 907.2 OF THE INTERNATIONAL FIRE CODE. ACTIVATION OF A DUCT SMOKE DETECTOR SHALL INITIATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION AND SHALL PERFORM THE INTENDED FIRE SAFETY FUNCTION IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL & FIRE CODES. DUCT SMOKE DETECTORS SHALL NOT BE USED AS A SUBSTITUTE FOR REQUIRED OPEN AREA DETECTION.

### AIR HANDLING UNIT WEIGHT INFORMATION

WEIGHT OF EXISTING AIR HANDLING UNITS BEING REMOVED IS 168 <

WEIGHT OF NEW AIR HANDLING UNITS BEING INSTALLED IN PLACE . OF THE EXISTING IS 138 LBS.

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### MECHANICAL KEYED NOTES

- FURNISH AND INSTALL GALVANIZED STEEL DUCTWORK, SIZES AS NOTED ON DRAWINGS. DUCTWORK SIZES SHOWN ARE CLEAR INTERNAL DIMENSIONS. DUCTWORK LOCATED ABOVE CEILINGS SHALL HAVE MINIMUM R-6 INSULATION.
- FURNISH AND INSTALL SEVEN-DAY PROGRAMMABLE THERMOSTATS WITH AUTO CHANGEOVER AND RELATED WIRING TO CONTROL AHU-1,2,3,4. MOUNT AT 42" A.F.F. VERIFY PROPER OPERATION IN FIELD.
- PROVIDE 120V SMOKE DETECTOR IN RETURN AIR DUCT TO MEET LOCAL CODE REQUIREMENTS. PROVIDE INTERLOCK WIRING TO DE-ENERGIZE ALL RTU'S UPON DETECTION OF SMOKE.
- (4) 12"ø EXHAUST DUCT UP THROUGH ROOF WITH ROOF VENT CAP. VERIFY EXACT LOCATION IN THE FIELD.
- 5 EXISTING AIR HANDLING UNITS (AHU-1,2,3,4) SUSPENDED FROM STRUCTURE ABOVE. VERIFY EXACT LOCATION IN THE FIELD.
- 6 MAXIMUM FIVE (5) FEET OF FLEXIBLE DUCT. ONLY ONE 90° ELBOW ALLOWED IN FLEXIBLE DUCTWORK.
- 7 FURNISH AND INSTALL REMOTE TEMPERATURE SENSOR AND CONNECT TO

THERMOSTAT FOR HVAC UNIT. MOUNT ON WALL AT 42" AFF. MULTIPLE SENSORS TO BE AVERAGED. PROVIDE INSULATED BASE FOR SENSORS ON

- EXTERIOR WALLS.  $\langle 8 \rangle$  RETURN DUCT OPEN AT END. PROVIDE WIRE MESH SCREEN AT OPENING.
- FURNISH AND INSTALL CEILING MOUNTED EXHAUST FAN. PROVIDE WITH 6" DUCT FROM FAN AND ROUTE TO COMBINED EXHAUST DUCT AS SHOWN.
- ROUTE NEW 10" OUTSIDE AIR DUCT TO EXISTING OUTSIDE AIR INTAKE. VERIFY EXACT ROUTING IN THE FIELD.
- EXISTING HEAT PUMP UNIT ON GROUND TO REMAIN. VERIFY EXACT LOCATION
- ROUTE CONDENSATE DRAIN PIPING TO DRAIN INDIRECTLY INTO MOP SINK. VERIFY EXACT LOCATION AND ROUTING IN THE FIELD.
- PROVIDE REMOTE TEST STATION/RESET SWITCHES FOR DUCT SMOKE DETECTORS AND CONNECT TO EXISTING BUILDING ALARM. COORDINATE EXACT LOCATION IN FIELD WITH OWNER REPRESENTATIVE. TEST STATIONS SHALL BE IN A VISIBLE AND AUDIBLE LOCATION.
- FURNISH AND INSTALL CEILING MOUNTED EXHAUST FAN. PROVIDE WITH 6" DUCT FROM FAN AND ROUTE TO COMBINED EXHAUST DUCT AS SHOWN.
- FURNISH AND INSTALL NEW AIR HANDLING UNIT IN PLACE OF EXISTING UNIT BEING REMOVED. VERIFY EXACT LOCATION IN FIELD.
- 16 FURNISH AND INSTALL NEW HEAT PUMP UNIT IN PLACE OF EXISTING UNIT BEING REMOVED. VERIFY EXACT LOCATION IN FIELD.

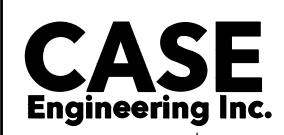
MECHANICAL SYMBOLS LEGEND – D — CONDENSATE DRAIN THERMOSTAT G — GAS PIPING TEMPERATURE SENSOR —> PIPE TURNING DOWN SD —O PIPE TURNING UP SMOKE DETECTOR → BALL VALVE GATE VALVE FLEXIBLE DUCT **VOLUME DAMPER** CHECK VALVE 7 FIRE DAMPER ——₫— GAS COCK CEILING SUPPLY AIR DIFFUSER PRESSURE GAUGE CEILING RETURN AIR GRILLE STRAINER ABOVE FINISHED FLOOR SIDEWALL AIR DIFFUSER OR GRILLE S — SUPPLY R — RETURN E — EXHAUST S1 \100/ NEW DUCTWORK CFM EXISTING DUCTWORK

ARCHITECT



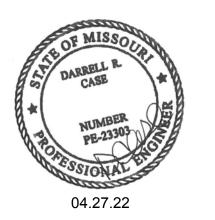
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# **REVISIONS**

REV. DATE ISSUE

1	04.13.22	PERMIT REVISION
2	04.27.22	FIELD REVISION
DATE:		01.14.22
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**DRAWN BY:** 

CHECKED BY:

PROJECT NUMBER: 689411

HVAC PLAN

															_
	AIR HANDLING UNIT SCHEDULE														
MARK	MANUFACTURER	MODEL NO.	SUPPLY CFM	O.A. CFM	EXT.	COOLING TONS	COOLIN	IG MBH	ELECTRIC HEATING KW	SUPPLY FAN HP	ELECT VOLT/PHASE	FRICAL	WEIGHT	REMARKS	$\left[ \right] /$
AHU-1	TRANE	TEM4A0C60S51SC	1750	300	0.5	5	60	45	24	3/4	73	80	138	1,2,4	$Y^2$
AHU-2	EXISTING	EXISTING	1750	380		5				$\frac{1}{\sqrt{2}}$	EXISTING	EXISTING		123	7,

45

24 3/4 73

1750 380 - 5 - - - EXISTING EXISTING - 1,2,3

1. REMOTE HEAT PUMP UNIT ON GROUND. VERIFY EXACT LOCATION IN FIELD.

TEM4A0C60S51SC

AHU-4 EXISTING EXISTING

2. PROVIDE 30% FILTERS AND INSTALL WITH EASY ACCESS TO FILTERS.

؍ ا	<b>√</b> 3.	EXISTING	~01×11MU~	REMA	NM. VERTI	YEME	CYRIC	SAE VIV	IFØRN	HATION WITH	ELECTRIC	SALVO	WTRACTOR	AN PIEMO.	\/2\
(	4.	REPLACE	<b>EXISTING</b>	AIR	HANDLING	UNIT	WITH	NEW	PER	SCHEDULE.	VERIFY	<b>EXACT</b>	LOCATION	IN FIELD.	<u> </u>
`	$\setminus$			<b>人</b>		~~	<b>✓</b>		<b>✓</b>						

1750 | 300 | 0.5 | 5 | 60

	HEAT PUMP UNIT SCHEDULE														
			COOLING	тот.	COOLING SENS.	CAPAC AMB	ITY REF.	HEATING MBH		ELEC <sup>-</sup>	TRICAL	WEIGHT	EER/SEER	REMARKS	
$\sim$	MANUFACTURER		TONS	MBH	MBH	·F	TYPE	<del>                                     </del>	<del>                                     </del>	MOCE	<del>                                     </del>	LBS		<u>~</u>	
HP-1 HP-2	TRANE	4TWRA060G EXISTING	~ <del>~</del>	60	45	95	R-410a	45 _EXISTING _	32 22.9	50 35	208/1		EXISTING EXISTING	1.2	
HP-3	TRANE	4TWRA060G	5	60	45	95	R-410a	45	32	50	208/1	<u> </u>	EXISTING	3	
HP-4	EXISTING	ÉXISTING	<u>√5</u>	$\overline{}$	$\overline{}$	<u> </u>		EXISTING	21.1	<b>)</b> 30	208/3		EXISTING	1,2	

1. EXISTING HEAT PUMP UNIT ON GROUND BEHIND SPACE TO REMAIN. VERIFY EXACT LOCATION IN FIELD.

2. VERIFY EXISTING ELECTRICAL INFORMATION WITH ELECTRICAL CONTRACTOR IN FIELD.

3. REPLACE EXISTING HEAT PUMP UNIT WITH NEW PER SCHEDULE. VERIFY EXACT LOCATION IN FIELD.

	FAN SCHEDULE													
MARK	MANUFACTURER	MODEL NO.	CFM	SP	WATTS	SONE	VOLTS/PH	WEIGHT	REMARKS					
EF-1,2	GREENHECK	SP-A200	150	.3	30	1.5	115/1	24 LBS.	1,2,3					
EF-3,4,5	GREENHECK	SP-A110	75	.3	16	0.9	115/1	17 LBS.	1,2,3					
		•	•		•			·						

VERIFY ELECTRICAL VOLTAGE/PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING UNIT.
 PROVIDE WITH BACKDRAFT DAMPER AND FAN SPEED CONTROLLER.

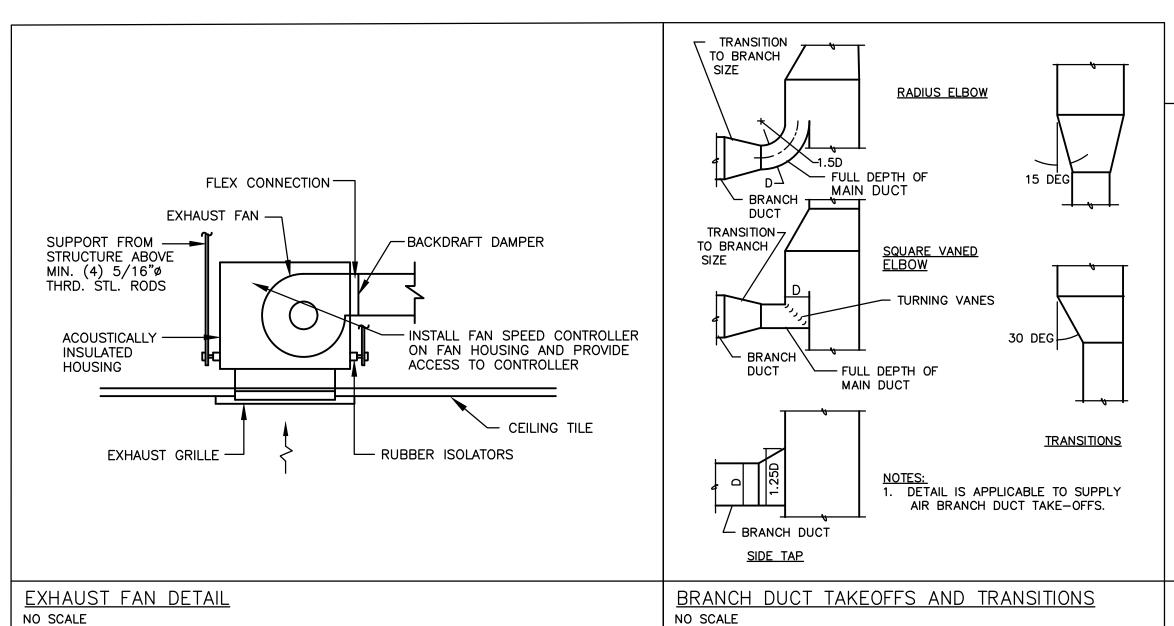
3. FAN SHALL BE CONTROLLED BY LIGHTS, COORDINATE WITH ELECTRICAL CONTRACTOR...

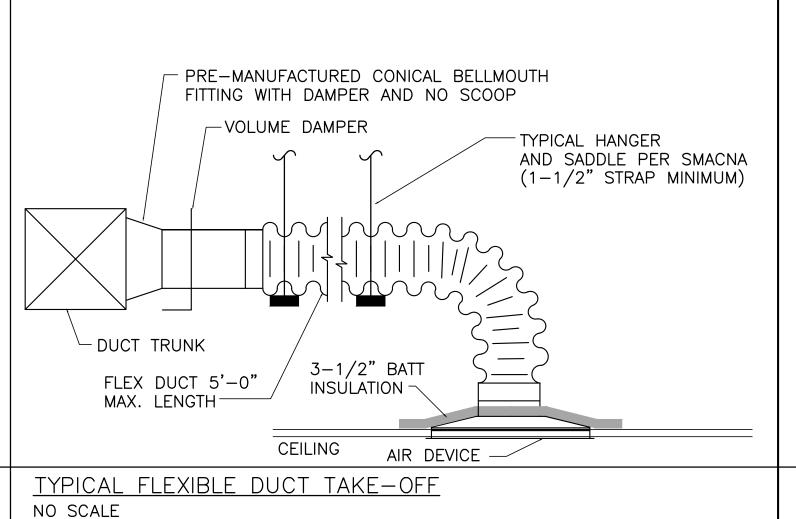
	AIR	DEVICE S	SCHED	ULE		
PLAN MARK	MANUFACTURER	MODEL	MATL.	FRAME TYPE	PANEL SIZE	NOTES
S1	TITUS	OMNI	ST	LAY-IN	24"x24"	1,2,3
S2	TITUS	300RL	ST	FLANGED	12"x12"	1,2,3
S3	TITUS	S300FL	ST	DUCT	20"x4"	1,2,4
TR1	TITUS	350RL	ST	FLANGED	12"x8"	1,3
R1	TITUS	350RL	ST	LAY-IN	24"x24"	1,2,3
R1	TITUS	350RL	ST	WALL MOUNT	24"x24"	1,2,3
E1	TITUS	350RL	ST	FLANGED	12"x12"	1,2,3

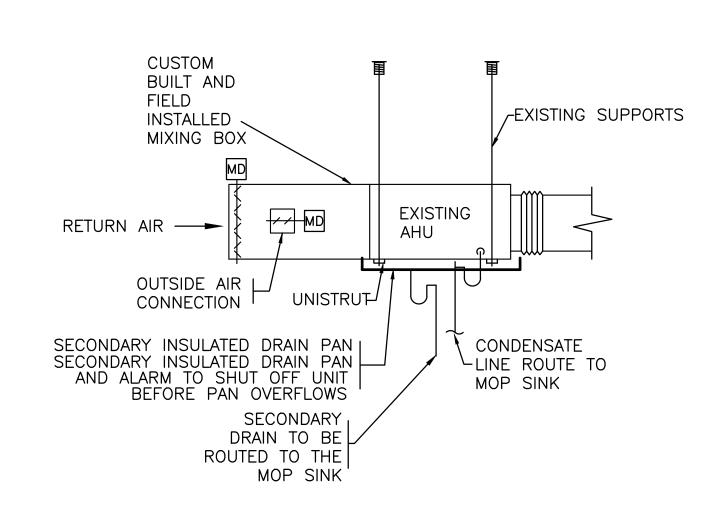
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2. REFERENCE ARCHITECTURAL DRAWINGS FOR LAY IN GRID STYLE.
3. SEE RUNOUT SCHEDULE FOR NECK SIZE.
4. PROVIDE WITH AIR SCOOP DEVICE.

	SER NECK/RUNOUT ZE SCHEDULE
NECK SIZE	СҒМ
6"ø	0 - 100
8"ø	110 – 250
10"ø	260 - 400
12 <b>"</b> ø	410 - 600
14 <b>"</b> ø	610 — 1000
16 <b>"</b> ø	1010 — 1400
18 <b>"</b> ø	1410 — 1900







# SEQUENCE OF OPERATIONS

OCCUPIED MODE:
SUPPLY FAN OPERATES CONTINUOUSLY DURING OCCUPIED PERIOD. O.A.
DAMPER OPEN TO MINIMUM POSITION, R.A. DAMPER IN FULLY OPEN
POSITION. HEATING/COOLING CYCLE ON/OFF TO SATISFY THERMOSTAT.

### UNOCCUPIED MODE:

SUPPLY FAN OPERATES AS NEEDED ON THERMOSTAT CALL FOR HEATING/COOLING AT SET BACK TEMPERATURE. O.A. DAMPER IN CLOSED POSITION, R.A. DAMPER IN FULLY OPEN POSITION.

AIR HANDLING UNIT DETAIL NO SCALE

PROJECT NUMBER: 689411

01.14.22

DRC

ISSUE

04.13.22 | PERMIT REVISION

04.27.22 | FIELD REVISION

MECHANICAL SCHEDULES AND DETAILS

REVISIONS

REV. DATE

DATE:

DRAWN BY:

CHECKED BY:

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ARCHITECT Lee's Summit, Missouri 05/05/2022

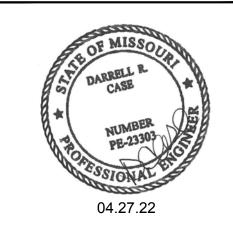
architecture | engineering 1515 DES PERES ROAD, STE 200 SAINT LOUIS, MISSOURI 63131 PHONE | 314-997-6111 FAX | 314-997-8866

CONSULTANT

# CASE Engineering Inc

796 Merus Court | 1 636.349.1600 | St. Louis, MO 63026 | F 636.349.1730 | CERTIFICATE OF AUTHORITY NO. 001498

SEAL





Lee's Summit, Miss

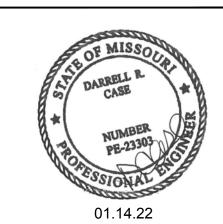
architecture | engineering 1515 DES PERES ROAD, STE 200 SAINT LOUIS, MISSOURI 63131 PHONE | 314-997-6111 FAX | 314-997-8066

CONSULTANT

# **Engineering Inc.**

St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

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MECHANICAL **SPECIFICATIONS** 

### DIVISION - 15 MECHANICAL SPECIFICATIONS

- A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.
- B. REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED UNDER THIS SECTION.

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CON-STRUCTION DETAILS, BOTH AS ON TENANT CONSTRUCTION DRAWINGS AND LANDLORD'S AS REFERRED TO, BEFORE SUBMITTING HIS BID AS NO ALLOW-ANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

ALL PROPOSALS SHALL PRECLUDE THAT CONTRACTOR IS FAMILIAR WITH JOB SITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICA-TIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

- A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS, AND UNLESS OTHER-WISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION, AND ON COM-PLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES, <u>DO NOT JUST ABANDON</u>.

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS. ORDINANCES. RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCON-TRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

### PROTECTION OF WORK AND PROPERTY

- EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PRO-TECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK. HE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND NOT TO HIS FAULT OR NEGLIGENCE. HE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.
- B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE WORK AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSUR-ANCE REQUIRED TO PROTECT HIMSELF, OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

### CHANGES IN THE WORK

THE TENANT. WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

# COOPERATION

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CON-JUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. REFER-ENCE SHALL BE MADE TO THE OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE.

### SUBSTITUTION OF MATERIALS

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE. IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED. CONTRACTOR ASSUMES ALL RESPONSIBILIES AND COST IMPACTS OF SUBSTITUTIONS.

SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS. AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

### DRAWINGS AND SPECIFICATIONS

A. THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.

B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DES-CRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

- RESPONSIBILITY

  A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PRO-VIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR
- B. CONTRACTOR SHALL SUPPLY TO LANDLORD AND TENANT A CERTIFIED BALANCE REPORT AT COMPLETION OF PROJECT. THIS IS REQUIRED FOR BOTH REMODELED AND NEW STORES.

### HEATING, VENTILATING AND AIR CONDITIONING

- THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION, OR INSTRUCTIONS TO BIDDERS, AND THE GENERAL CON-DITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, HEREWITH, OR OTHERWISE, SHALL BE COMPLIED WITH IN EVERY
- THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, OPERATION OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRARY. THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

### **FXAMINATION OF SITE** ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL CONDITIONS THEREON AND/OR THEREIN. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT.

### FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COM-PLETE FULLY OPERATIVE HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM EXCEPT AS SPECIFICALLY EXCLUDED BY THE DRAWINGS, AND/OR TENANT'S DIRECTIONS.

E. ALL HVAC UNITS WILL BE EQUIPPED WITH PROGRAMMABLE DESIGN AND STANDARD CONDITIONS FOR THERMOSTAT OPERATION WILL BE AS FOLLOWS:

75°F MAXIMUM OCCUPIED COOLING TEMPERATURE

HEATING: 70°F MAXIMUM OCCUPIED HEATING TEMPERATURE 60°F HEATING NIGHT SETBACK.

85°F COOLING NIGHT SETBACK.

FAN: CONTINUOUS IN OCCUPIED AND RECOVERY MODE AND WITH HEATING OR COOLING EQUIPMENT IN UNOCCUPIED MODE.

DEADBAND: CAPABLE OF MAINTAINING A 5°F DEADBAND. CLOCK: 7 DAY CAPABLE OF 7 DIFFERENT DAY SCHEDULES. OVERNIGHT: HAVE A 2 HOUR OVERRIDE ACCESSIBLE TO MANAGER. BACKUP: CAPABLE OF MAINTAINING PROGRAMMED SETTING FOR AT

LEAST 10 HOURS WITHOUT POWER.

F. THE HVAC SUBCONTRACTOR SHALL IDENTIFY ALL ROOF MOUNTED HVAC FQUIPMENT AND APPARATUS WITH 2" HIGH PAINTED STENCILED STORE NAME ON ALL SIDES OF EQUIPMENT.

A. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

<u>UCT SIZE</u>	<u>GAUGE</u>
2" AND LESS	NO. 26 U.S. GAUGE
3" TO 30"	NO. 24 U.S. GAUGE
1" TO 54"	NO. 22 U.S. GAUGE
5" TO 84"	NO. 20 U.S. GAUGE
5" AND OVER	NO 18 U.S. CAUGE

AND OVER NO. 18 U.S. GAUGE

SQUARE AND RECTANGULAR	DUCTWORK	SHALL	BE	CONSTR	UCTED	AS	FOLLO
SIZE		<u>ME</u>	ETHC	<u>)D</u>			
17" AND LESS		<b>"</b> S	" AN	ND DRIVE	CLEA	ΓS	
18" TO 30"		"L"	'ST	ANDING	SEAMS	ON	
			3'-	-0" CEN	TERS		
31" TO 54"		1-	-1/4	" STAND	ING SE	EAMS	3

ROUND SPIRAL DUCTWORK SHALL BE LINK FACTORY PAINTED SPIRAL DUCTWORK AND FITTINGS OR APPROVED EQUAL. INSTALLED AND SUSPENDED AS PER MANUFACTURER'S RECOMMENDATIONS. GAUGES FOR SHOP FABRICATED DUCTS SHALL BE AS FOLLOWS:

ON 3'-0" CENTERS

UP	TO	12"	IN	DIAMETER	NO.	26	GAUGE
13"	TO	30"			NO.	24	GAUGE
31"	TO	42"			NO.	22	GAUGE
43"	TO	60"			NO.	20	GAUGE

ELBOWS SHALL HAVE A CENTERLINE RADIUS OF 1-1/2 TIMES DUCT DIAMETER AND MAY BE SMOOTH ELBOWS OR 5 PIECE 90 DEGREE ELBOWS AND 3 PIECE 45 DEGREE ELBOWS. JOINTS OF ROUND DUCTS SHALL BE SLIP TYPE WITH A MINIMUM OF 3 SHEET METAL SCREWS.

### 1. NOT USED.

- 2. ALL LOW PRESSURE DUCTWORK SHALL BE EXTERNALLY SEALED USING UNITED SHEET METAL, MMM EC-800, OR HARDCAST DUCT SEALER INSTALLED IN THE JOINTS PRIOR TO CLOSURE. ADDITIONALLY SEAL ALL EXTERNAL TRANSVERSE JOINTS AND FITTING CONNECTIONS EXTERNALLY.
- C. ALL SUPPLY AIR DUCTS (HEATING AND COOLING) AND RETURN AIR DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED STEEL WITH MIN. 1-1/2" (R-6) THICK EXTERNAL THERMAL INSULATION EXCEPT DUCT LINED FOR ACOUSTICAL PURPOSES. CONTINUE INSULATION TO TOP OF ALL DIFFUSERS, GRILLES, REGISTERS, ETC. ALL EXHAUST AND RELIEF AIR DUCTS SHALL BE GALVANIZED STEEL. ALL KITCHEN HOOD EXHAUST DUCTWORK SHALL HAVE FIRE BARRIER DUCT WRAP. DUCT WRAP SHALL BE TESTED IN ACCORDANCE WITH ASTM E 2336. 2 LAYERS OF 3M FIRE BARRIER DUCT WRAP 615+ OR SIMILAR TO BE USED.

- D. CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTDOORS. INSECT SCREENS SHALL BE 10 GAUGE, ONE-HALF INCH (1/2") MESH IN REMOVABLE GALVANIZED
- E. ALL DUCTWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS GUIDE (ASHRAE) AND FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST METHODS RECOMMENDED IN THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) LOW VELOCITY DUCT MANUAL, LATEST EDITION.
- F. NOT USED.

- A. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF RIVETS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" x 1-1/4" x 1-1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.
- B. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS.

- A. CONTRACTOR WILL PROVIDE WATER TIGHT 24 GA. SHEET METAL FLASHINGS AT ALL EXTERIOR WALLS AND ROOF PENETRATIONS.
- B. ALL CUTTING OF ROOF OPENINGS, SUPPORTS FOR ROOF OPENINGS, PITCH PANS, ROOF CURBS, FLASHINGS, COUNTER FLASHINGS, REPAIR TO ROOF, ETC. ASSOCIATED WITH HVAC SUBCONTRACTOR SHALL BE THE RESPONSIBILITY AND PART OF THE CONTRACT HVAC SUB-CONTRACTOR. HE SHALL EMPLOY THE LANDLORD'S ROOFERS FOR THIS WORK SO AS TO MAINTAIN THE ROOF BOND.

SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:

YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE CONCEALED DUCTWORK - LOCKING QUADRANT EQUAL TO YOUNG REGULATOR

EXPOSED OR ACCESSIBLE DUCTWORK - LOCKING QUADRANTS EQUAL TO

- NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL
- NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE. C. FIRE DAMPERS SHALL BE SUPPLIED AND INSTALLED BY HVAC CONTRACTOR
- AT DUCT PENETRATIONS IN FIRE RATED WALLS, CEILINGS, AND ROOFS AS REQUIRED. COORDINATE WITH LANDLORD, LOCAL FIRE MARSHALL AND ALL CODES AND GOVERNING AUTHORITIES HAVING JURISDICTION.
- D. JOB FABRICATED TURNING VANES SHALL BE ACCEPTABLE IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLEMAN AIR TURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTER-LINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

### **DUCTWORK - EXCEPTIONS** DUCTWORK FOR EXHAUSTING AIR OR OUTSIDE SUPPLY AIR SHALL BE ALL

METAL AND CONSTRUCTED ACCORDING TO RECOMMENDED PRACTICES AS FOUND IN THE LATEST ISSUE OF ASHRAE.

### SUPPORT OF DUCT SYSTEM

HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE AFOREMENTIONED MANUAL ARE ADHERED TO.

DUCTS SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS AND NOT MORE THAN 8'-0" O.C. STRAIGHT DUCTS UP TO 59" MAX. DIMENSIONS SHALL BE SUPPORTED 6'-0" O.C. DUCTS OVER 60" MAX. DIMENSIONS SHALL BE SUPPORTED AT 4'-0" O.C.

ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

### **ACCESSORY ITEMS**

ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNEC-TIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL

### TESTING AND ADJUSTING

CONTRACTOR WILL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATIS-FACTION OF TENANT, WILL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND WILL RECORD VOLUME READINGS IN ACCOR-DANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. ALL PIPING SHALL WITHSTAND AIR PRESSURE TESTING PER GOVERNING PLUMBING CODE.

- A. AIR DISTRIBUTION SYSTEMS:
- 1. INSPECT INSTALLATION AND VERIFY CONFORMITY TO DESIGN. VERIFY THAT SUPPLY, RETURN, AND EXHAUST DUCTS HAVE BEEN PRESSURE-TESTED FOR LEAKAGE AS RECOMMENDED IN THE APPROPRIATE SMACNA STANDARDS.
- 2. VERIFY THAT VOLUME AND FIRE DAMPERS ARE PROPERLY LOCATED AND
- 3. VERIFY THAT SUPPLY, RETURN, EXHAUST AND TRANSFER GRILLES, REGISTERS AND DIFFUSERS ARE INSTALLED AND OPERATING PROPERLY.
- B. VERIFY THAT CONTROL COMPONENTS ARE INSTALLED IN ACCORDANCE WITH PROJECT REQUIREMENTS AND ARE FUNCTIONING AS INTENDED, INCLUDING ELECTRICAL POWER, CONTROL AND INTERLOCK WIRING, DAMPER SEQUENCES, SMOKE DETECTORS, ETC.
- C. UPON COMPLETION OF THE INSTALLATION AND START-UP OF THE MECHANICAL EQUIPMENT, TEST, ADJUST AND BALANCE SYSTEM COMPONENTS TO OBTAIN OPTIMUM CONDITIONS IN EACH CONDITIONED SPACE IN THE BUILDING.
- D. BEFORE FINAL ACCEPTANCE IS MADE, FURNISH TO THE ARCHITECT THE FOLLOWING DATA:
- 1. SUMMARY OF MAIN SUPPLY, RETURN AND EXHAUST DUCT PILOT TUBE TRANSVERSES AND FAN SETTINGS.
- 2. AIR QUANTITIES AT EACH SUPPLY, RETURN, RELIEF AND EXHAUST AIR HANDLING DEVICE. 3. AIR PRESSURE READINGS ENTERING AND LEAVING EACH SUPPLY FAN AND
- EXHAUST FAN. 4. MOTOR CURRENT AND VOLTAGE READINGS AT EACH EQUIPMENT MOTOR. 5. TEST RESULTS SHALL BE RECORDED ON STANDARD FORMS CONFORMING TO AABC AND NEBB REQUIREMENTS. THE REPORT SHALL INCLUDE AIR FLOW SCHEMATIC DIAGRAMS INDICATING AND IDENTIFYING TEST LOCATIONS SUCH AS

READINGS, AND SHALL BE REFERENCED TO THE RECORDED DATA ON THE

E. MAKE AN INSPECTION IN THE BUILDING DURING THE OPPOSITE SEASON FROM THAT IN WHICH THE INITIAL ADJUSTMENTS WERE MADE, AND AT THAT TIME MAKE ANY NECESSARY MODIFICATIONS TO THE INITIAL ADJUSTMENTS REQUIRED TO PRODUCE OPTIMUM OPERATION OF THE SYSTEM COMPONENTS, TO PRODUCE

DUCT TRANSVERSE, OUTLET READINGS, PRESSURE READINGS AND TEMPERATURE

THE PROPER CONDITIONS IN EACH SPACE. F. INSTRUCTION: THE CONTRACTOR SHALL INSTRUCT THE BUILDING OPERATING PERSONNEL IN THE CONSTRUCTION AND OPERATION OF ALL EQUIPMENT.

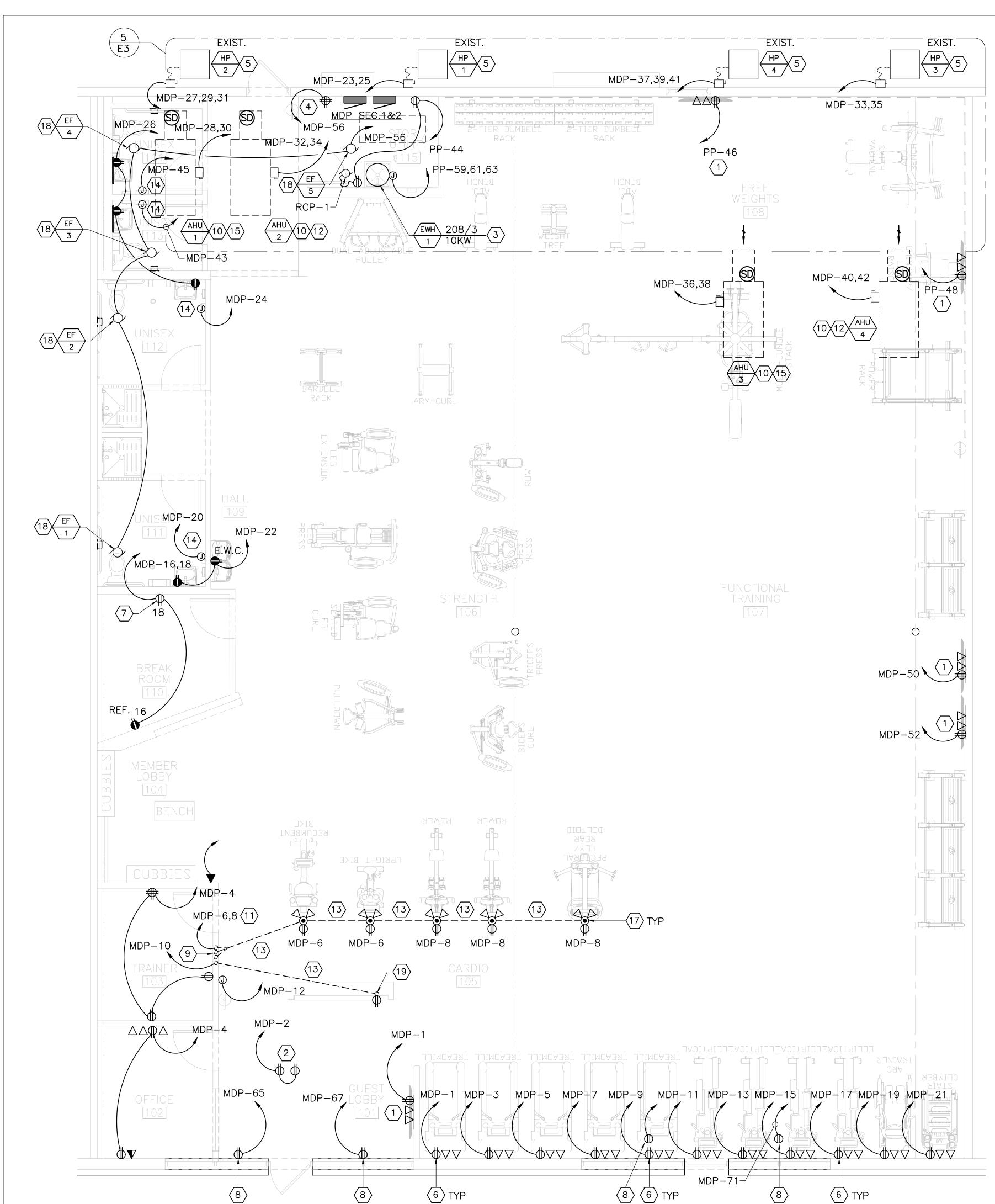
### ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

TEMPORARY SERVICES THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF

- A. TELEPHONE THE TENANT'S GENERAL CONTRACTOR SHALL INSTALL A JOB SITE TELEPHONE AND NOTIFY TENANT AS LISTED ON SHEET A-1 OF THE TELEPHONE NUMBER AND THE NAME OF THE SUPERINTENDENT.
- B. TEMPORARY WATER WATER REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR. WATER USED FOR HUMAN CONSUMPTION SHALL CONFORM TO REQUIRE-MENTS OF STATE AND LOCAL AUTHORITIES FOR POTABLE WATER.
- C. TEMPORARY ELECTRICITY TEMPORARY ELECTRIC SERVICE REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE FURNISHED AND PAID FOR BY THE CONTRACTOR WHO SHALL FURNISH, INSTALL, AND MAINTAIN ALL TEMPORARY OVERHEAD CONSTRUCTION, METERS, DROPS, AND OTHER WIRING AND FITTINGS FOR BOTH LIGHT AND POWER AT LOCATIONS REQUIRED IN THE WORK AND SHALL BEAR THE COST OF MAKING THE SERVICE CONNECTIONS. BEFORE FINAL ACCEPTANCE, TEMPORARY ELECTRICAL SERVICE FACILITIES INSTALLED BY THE CONTRACTOR SHALL BE REMOVED AND THE SERVICE CONNECTIONS SEVERED IN ACCEPTABLE MANNER.
- D. TEMPORARY HEAT WHEN REQUIRED FOR PROPER INSTALLATION OR PROTECTION OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY HEATING UNITS AS APPROVED BY THE LANDLORD OR LOCAL AUTHORITY.
- E. COST OF LANDLORD PROVIDED UTILITY SERVICES IF THE LANDLORD ELECTS TO PROVIDE TEMPORARY UTILITY SERVICES. THE CONTRACTOR WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY SERVICES.

### NOTE FOR TENANT GENERAL CONTRACTOR

T IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB.



# **KEYED NOTES:**

- PROVIDE POWER AND DATA OUTLETS IN WALL MOUNTED AT 84"A.F.F. TO TOP OF J-BOX FOR TELEVISIONS. WHERE LOCATED AT WINDOWS MOUNT DEVICES ABOVE THE WINDOW. EACH TV WILL REQUIRE 2 OUTLETS. ONE FOR THE TV AND ONE FOR THE FM TRANSCEIVER. OUTLET LOCATIONS ARE TO BE DETERMINED BASED ON THE FINAL CARDIO EQUIPMENT LOCATION.
- PROVIDE TWO (2) DUPLEX RECEPTACLES ABOVE MEMBER ENTRANCE DOOR. THIS RECEPTACLE WILL BE USED BY THE ELECTRONIC DOOR STRIKE AND THE ACCESS CONTROL SYSTEM. COORDINATE SECURITY REQUIREMENTS.
- 3. NEW WATER HEATER. PROVIDE CONDUIT AND WIRE AS REQUIRED. COORDINATE WITH THE PLUMBING CONTRACTOR.
- 4. PROVIDE DEDICATED QUADRAPLEX RECEPTACLE FOR TELECOMMUNICATIONS BOARD. VERIFY SYSTEM GROUNDING AND ALL OTHER REQUIREMENTS WITH LOCAL TELEPHONE PROVIDER. PROVIDE 1"TELEPHONE CONDUIT WITH PULLWIRE FROM SERVICE ENTRANCE AT DEMISING WALL TO TELECOMMUNICATIONS BOARD IF NOT ALL READY INSTALLED. VERIFY EXACT LOCATION IN THE FIELD.
- 5. EXISTING HP. E.C. SHALL VERIFY THE ELECTRICAL IN THE FIELD. PROVIDE EXTEND CONDUIT/WIRE AS REQUIRED TO RELOCATED PANELS AS INDICATED.
- . PROVIDE POWER, DATA, & CABLE IN STOREFRONT WALL FOR CARDIO EQUIPMENT. SEE LOW VOLTAGE WIRING PLAN FOR MORE IN FORMATION.
- 7. PROVIDE QUAD RECEPTACLE FOR TRAINERS EQUIPMENT. VERIFY EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH—IN.
- 8. PROVIDE SHOW WINDOW RECEPTACLES AS REQUIRED PER N.E.C. 210.62.
- 9. PROVIDE CHASE WITH SEPARATION FOR POWER AND DATA HOMERUN FOR FOR EXERCISE EQUIPMENT IN ACCESSIBLE CEILING SPACE. ROUTE CONDUIT DOWN WALL CHASE TO WIREMOLD.
- 10. E.C. SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT WIRING REQUIREMENTS. VERIFY FOR GFCI TYPE RECEPTACLE, SMOKE DETECTOR, AND FACTORY MOUNTED DISC. SWITCH IF PROVIDED.
- 11. WHERE NEW MULTI-WIRE BRANCH CIRCUITS ARE USED, CONTRACTOR TO FOLLOW NEC 210.4(B) AND PROVIDE HANDLE-TIES ACROSS ALL BREAKERS WHICH SHARE THE NEUTRAL.
- 12. EXISTING AHU SHALL BE REUSED. E.C. SHALL VERIFY THE ELECTRICAL IN THE FIELD. EXTEND EXISTING CONDUIT/WIRE TO RELOCATED PANEL AS INDICATED.
- 13. PROVIDE FOR SAW CUTTING OF EXISTING CONCRETE FLOOR FOR POWER, DATA, & CABLE IN FLOOR TRENCH FOR CARDIO EQUIPMENT. VERIFY EXACT LOCATION OF EQUIPMENT WITH OWNER PRIOR TO ROUGH—IN.
- 14. E.C. SHALL PROVIDE J-BOX FOR HAND DRYER AT LOCATION SPECIFIED BY OWNER'S PREVENTATIVE. MOUNT BOX AT 42-3/4"A.F.F.
- 15. SEE PANEL SCHEDULES FOR CONDUIT/WIRE SIZES.
- 16. NOT USED
- 17. PROVIDE WIREMOLD #RFB4-C1-1 FLOOR BOX WITH BLANK COVER #FPTCBK AND COMMUNICATION BRACKET (2) #CILT-2-4TKO. PROVIDE APPROPRIATE KEYSTONE CONNECTOR FOR AND DATA AS REQUIRED. SEE DETAIL #5 ON DRAWING E5 FOR MORE INFORMATION. VERIFY EXACT LOCATION OF EQUIPMENT OF EQUIPMENT WITH OWNER AND FINAL EQUIPMENT LAYOUT PRIOR TO ROUGH-IN. VERIFY DATA AND CABLE REQUIREMENTS WITH EQUIPMENT MANUFACTURERS PRIOR TO ROUGH-IN.
- 18. EXHAUST FAN 115/1ø, SEE MECHANICAL DRAWING FOR CONTROL.
- 19. CONDUIT UP TO LIGHT BOX OUTLET. SEE ARCHITECTURAL FOR MORE INFORMATION.

# **GENERAL NOTES:**

- 1. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND STATE/LOCAL CODES.
- 2. ALL CONDUIT SHALL BE GALVANIZED RIGID HEAVY WALL STEEL, EMT, OR TYPE MC-CABLE AS ALLOWED BY NEC AND LOCAL JURISDICTION. SIZES SHALL BE DETERMINED PER NEC. WATERTIGHT FITTINGS SHALL BE PROVIDED AS REQUIRED BY CODE.
- 3. EXACT LOCATION, CUT-OUTS AND MOUNTING HEIGHTS FOR WIRING DEVICES IN SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
- 4. ALL RECEPTACLES, DATA AND TELEPHONE OUTLETS ARE TO BE MOUNTED AT +18" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
- 5. THE ELECTRICAL CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BID TO FAMILIARIZE THEMSELVES AND VERIFY EXISTING CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE TENANT'S REPRESENTATIVE OF ANY DIFFERENCES PRIOR TO BIDDING. NO EXTRAS OR CHANGE ORDERS SHALL BE GIVEN FOR CONTRACTOR'S FAILURE TO VERIFY SITE CONDITIONS PRIOR TO BIDDING.
- 6. VERIFY THE VOLTAGE/PHASE/AMPERAGE NAMEPLATE INFORMATION OF ALL EQUIPMENT DELIVERED TO THE SITE. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DIFFERENCES BETWEEN THE PLANS AND EQUIPMENT DELIVERED PRIOR TO PERFORMANCE OF ANY WORK.
- 7. E.C. SHALL VERIFY EXACT LOCATION OF CARDIO EQUIPMENT PRIOR TO ANY ROUGH—INS.
- 8. SEE PANEL SCHEDULES ON SHEET E5.0 FOR ALL CONDUIT AND CONDUCTOR SIZES.

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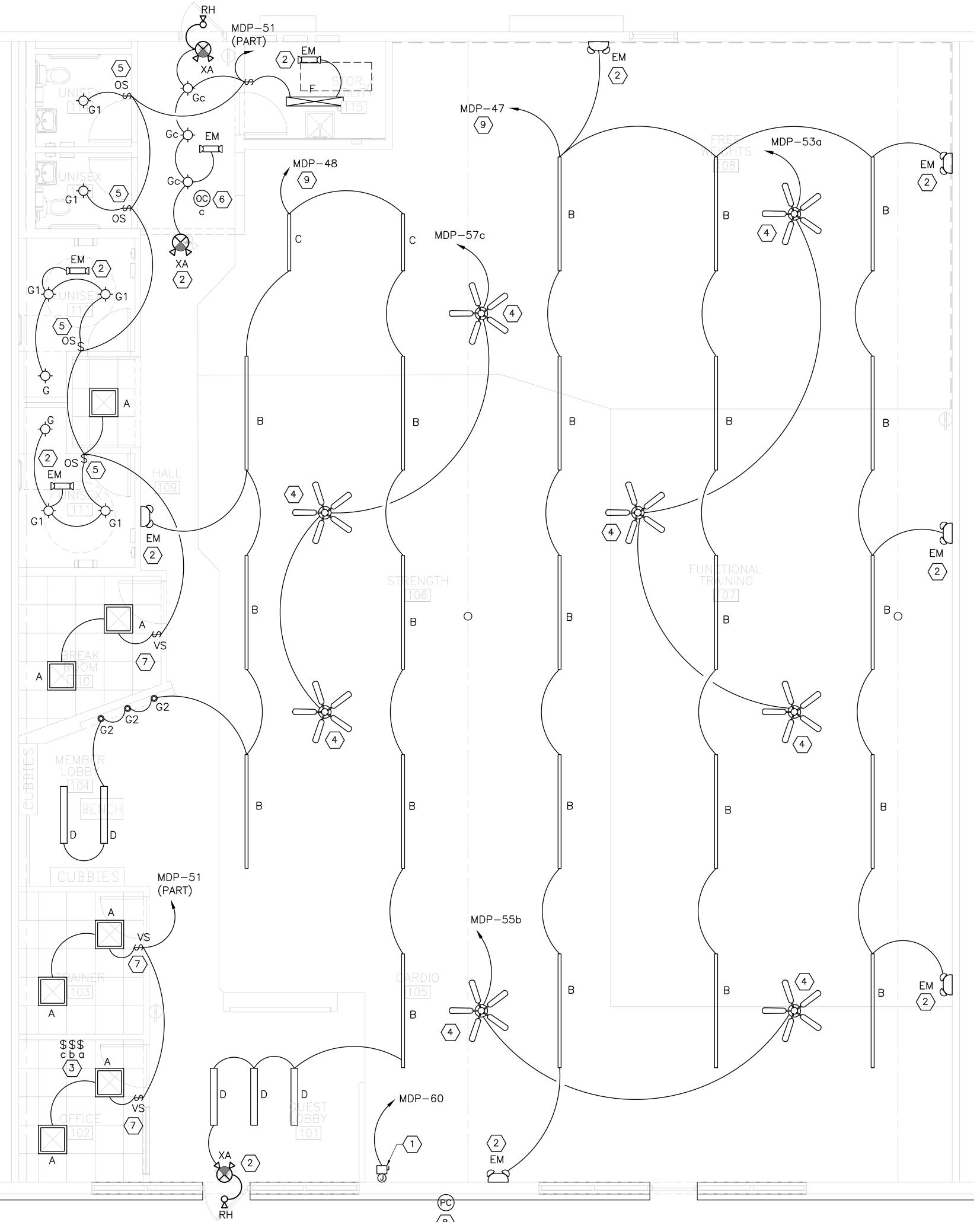
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PROJECT NUMBER: 689411

ELECTRICAL POWER PLAN

E1



**GENERAL NOTES:** 

- 1. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND STATE/LOCAL CODES.
- 2. ALL CONDUIT SHALL BE GALVANIZED RIGID HEAVY WALL STEEL, EMT, OR TYPE MC-CABLE AS ALLOWED BY NEC. AND LOCAL JURISDICTION. SIZES SHALL BE DETERMINED PER NEC . WATERTIGHT FITTINGS SHALL BE PROVIDED AS REQUIRED BY CODE.
- 3. EXACT LOCATION, CUT-OUTS AND MOUNTING HEIGHTS FOR WIRING DEVICES IN SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
- 4. ALL RECEPTACLES, DATA AND TELEPHONE OUTLETS ARE TO BE MOUNTED AT +18" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
- 5. THE ELECTRICAL CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BID TO FAMILIARIZE THEMSELVES AND VERIFY EXISTING CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE TENANT'S REPRESENTATIVE OF ANY DIFFERENCES PRIOR TO BIDDING. NO EXTRAS OR CHANGE ORDERS SHALL BE GIVEN FOR CONTRACTOR'S FAILURE TO VERIFY SITE CONDITIONS PRIOR TO BIDDING.
- 6. VERIFY THE VOLTAGE/PHASE/AMPERAGE NAMEPLATE INFORMATION OF ALL EQUIPMENT DELIVERED TO THE SITE. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DIFFERENCES BETWEEN THE PLANS AND EQUIPMENT DELIVERED PRIOR TO PERFORMANCE OF ANY WORK.

KEYED NOTES: (X)

- 1. PROVIDE JUNCTION BOX WITH DISCONNECT SWITCH IN CONCEALED LOCATION FOR CONNECTION TO STOREFRONT SIGN LIGHTING. LOCATE DISCONNECT PER NEC 600.6. E.C. SHALL PROVIDE PHOTOCELL TO CONTROL SIGN AND SHALL VERIFY LOCATION OF THE PHOTOCELL WITH LANDLORD PRIOR TO INSTALLATION. VERIFY EXACT WIRING REQUIREMENTS WITH SIGN MANUFACTURER PRIOR TO ROUGH-IN. DO NOT INSTALL ON BUILDING FACADE.
- 2. CIRCUIT EMERGENCY, AND EXIT LIGHTING AHEAD OF ANY CONTROLS OR LOCAL AREA SWITCHING.
- 3. PROVIDE APPROPRIATE VARIABLE SPEED SWITCHES AS INDICATED IN MANAGERS OFFICE FOR CONTROL OF CEILING FANS AS INDICATED. VERIFY WITH CEILING FAN MANUFACTURER FOR TYPE OF VARIABLE SPEED SWITCH AND QUANTITY REQUIRED.
- OBSTRUCTIONS. VERIFY ALL MOUNTING REQUIREMENTS WITH THE MANUFACTURER INSTALLATIONS INSTRUCTIONS.
- 5. PROVIDE FOR WALL OCCUPANCY SENSOR REQUIRED.
- 7. PROVIDE LUTRON MAESTRO WALL MOUNTED MANUFACTURER'S INSTRUCTIONS.
- 8. PHOTOCELL MOUNTED AT ROOF LINE FOR CONTROL OF STORE FRONT SIGN LIGHTING. VERIFY EXACT LOCATION IN THE FIELD.

### LIGHT FIXTURE SCHEDULE LAMP DATA MOUNT'G FINISH MARKS MANUFACTURER AND CATALOG NO. WATT DESC. VOLTS RECESSE TCP 2 X 2 LED #DTF2UZD3841K LED 65 RECESSE LED 120 WHITE TCP 8FT STRIP #TCPGPS8UZDA840K RECESSE TCP 4FT STRIP #TCPGPS4UZDA840K LED 120 WHITE LIGHTS BY OWNER - GLOBAL RETAIL ENVIROMENTS TCP 1X4 WRAP AROUND #LWR4000135 40 LED 120 RECESSE CREE 6" DOWNLIGHT #CR6T-825L-30K-12V-E26GU24 HOUSING #PF-RC6-GU24 11 LED 120 RECESSE WHITE CREE 6" DOWNLIGHT #CR6T-1100L030K-12V-E26GU24 11 LED 120 RECESSED WHITE HOUSING #PF-RC6-GU24 CREE 4" DOWNLIGHT #LR4X-10L-30K HOUSING #RC4-GU24 120 RECESSED WHITE 11 LED EMERGENCY EXIT LIGHT BEST #EZXTEU LED LED 120 SURFACE WHITE EMERGENCY LIGHT REMOTE HEAD #RHLED1-WP-CLPCXTE-HL 1.5 LED SURFACE WHITE EMERGENCY EGRESS LIGHT 1.5 SURFACE LED 120

- 4. BOTTOM OF CEILING FAN TO BE MOUNTED AT UNIFORM HEIGHT TO AVOID ANY LIGHTS AND
- COMPATIBLE WITH WITH LIGHT FIXTURE AS
- 6. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR COMPATIBLE WITH HALLWAY FIXTURES AS SHOWN.
- VACANCY SENSOR MSA102-V. INSTALL PER
- 9. ALL EXERCISE AREA LIGHTING SHALL BE SWITCH AT THE PANEL.



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**ELECTRICAL** LIGHTING PLAN



SERVICE ENTRANCE EQ. PHOTO #1



EXISTING TENANT PANELS "MDP" PHOTO #2

SCALE: NONE



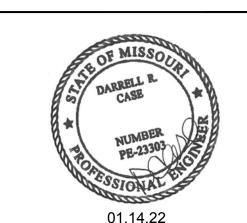
EXISTING TENANT PANELS "A" PHOTO #3
SCALE: NONE





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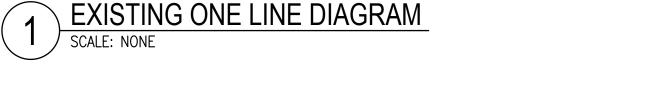
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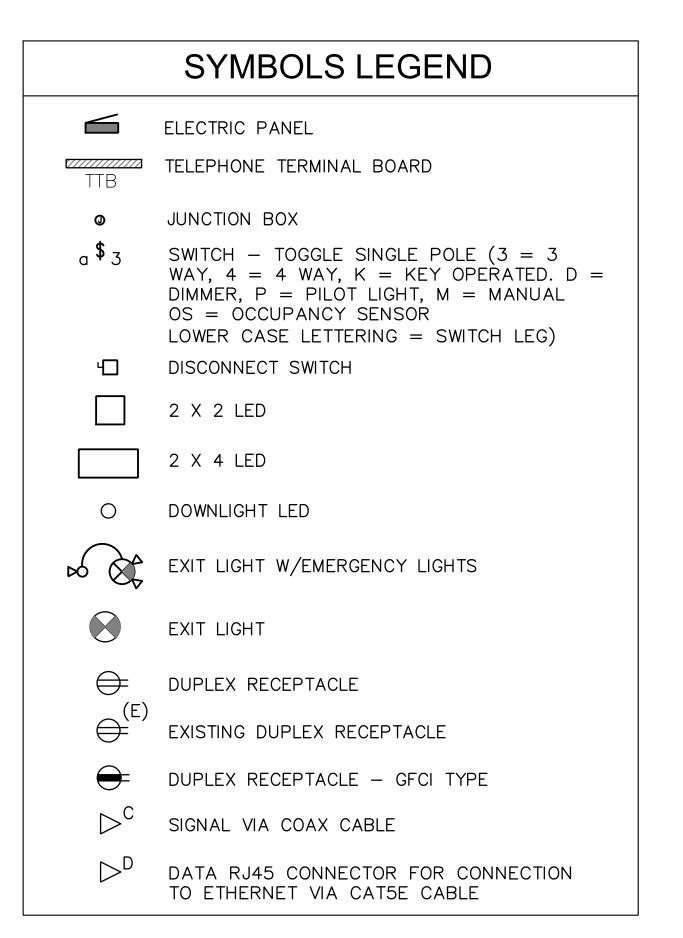
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ONE LINE DIAGRAM & PANEL **SCHEDULES** 



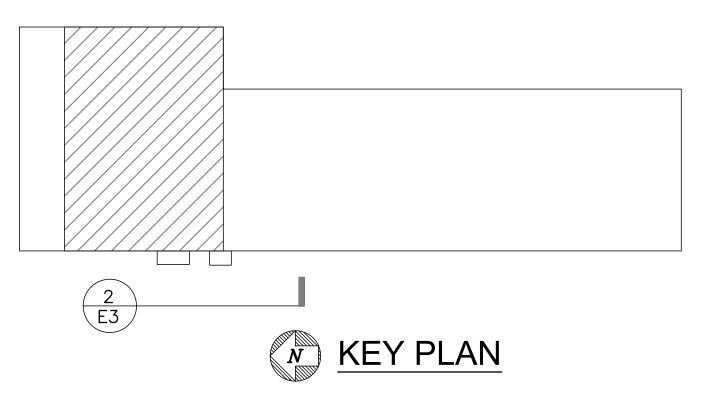


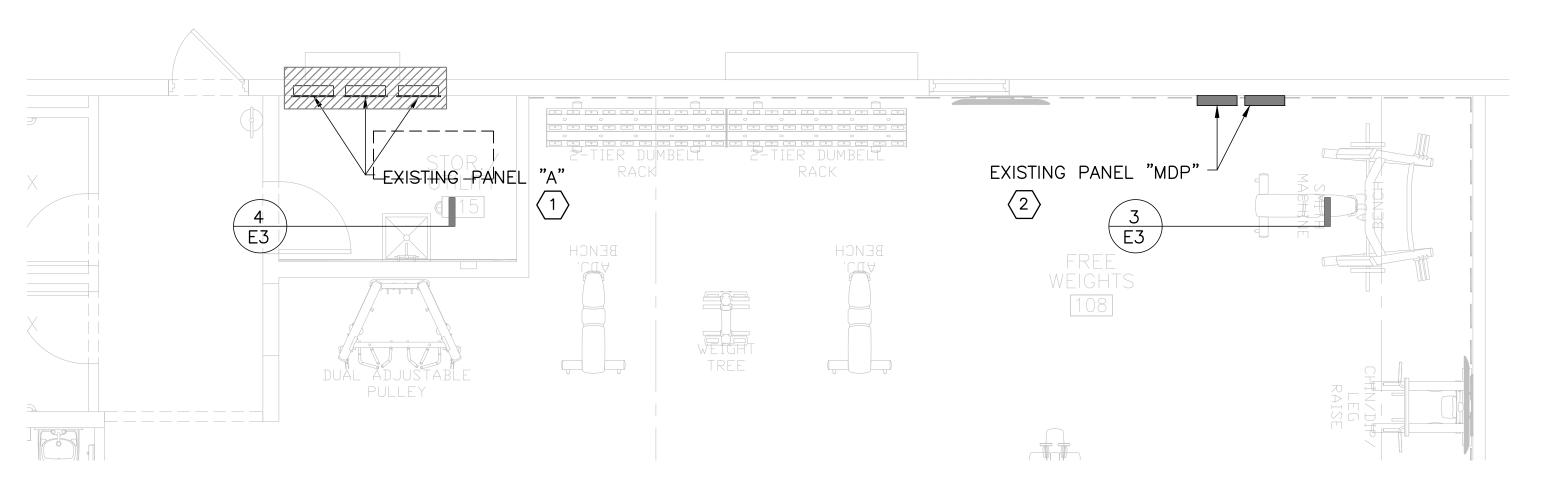
# **GENERAL NOTES:**

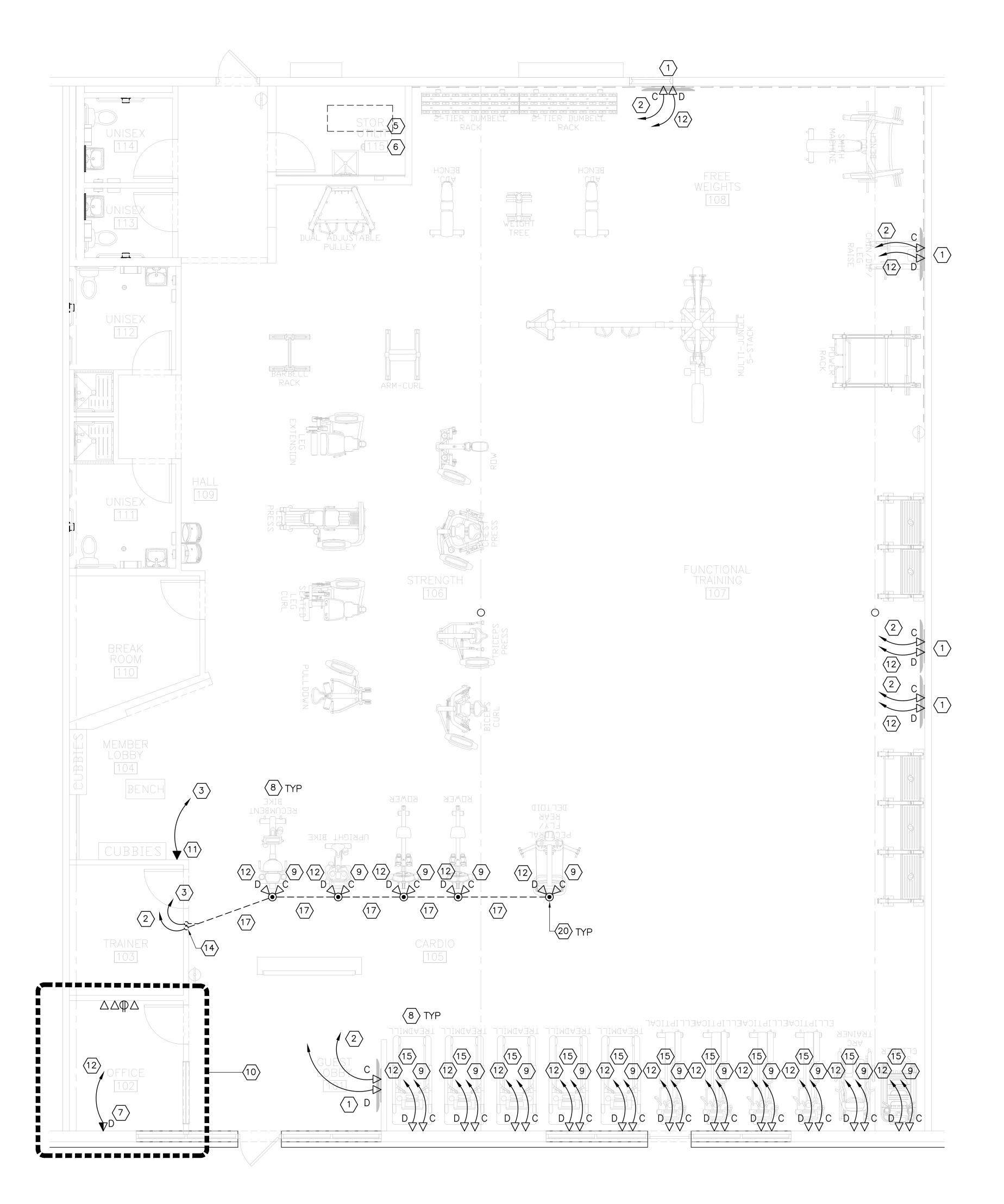
- 1. E.C. SHALL SURVEY EXISTING CONDITIONS. VERIFY EXISTING CONDUIT/CONDUCTOR SIZES/METERING AND ROUTING OF CONDUIT TO LANDLORDS SPACE. REPORT ANY DISCREPANCIES TO OWNER/ARCHITECT.
- 2. SEE PANEL SCHEDULES FOR ALL CONDUIT AND CONDUCTOR SIZES.
- 3. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES.
- 4. ALL WIRING SHALL BE COPPER, THHN/THWN OR XHHW INSULATION IN CONDUIT. MINIMUM SIZE 3/4"C. PROVIDE INSULATED COPPER GROUND WIRE IN ALL CIRCUITS.

# **KEYED NOTES:** (X)

- 1. DENOTES EXISTING RECESSED PANELS TO BE DEMOLISHED. E.C. SHALL REMOVE EXISTING CONDUCTORS BACK TO SOURCE AND MAKE FOR SAFE. COORDINATE WITH LOCAL UTILITY COMPANY FOR REMOVAL OF EXISTING METER AS REQUIRED AND MAKE BLANK. SEE ONE LINE ABOVE FOR MORE INFORMATION.
- 2. DENOTES EXISTING PANELS TO BE RELOCATED. E.C. SHALL EXTEND EXISTING CONDUIT AND WIRE AS REQUIRED. SEE ONE LINE DIAGRAM FOR MORE INFORMATION.
- 3. DENOTES DEMOLITION WORK.
- 4. PROVIDE FOR NEW PULL BOX (SIZE AS REQUIRED). EXTEND EXISTING CONDUIT/WIRE AS INDICATED.







# KEYED NOTES: #

- PROVIDE POWER AND DATA OUTLETS IN WALL MOUNTED AT 84"A.F.F. TO TOP OF J-BOX FOR TELEVISIONS. WHERE LOCATED AT WINDOWS MOUNT DEVICES ABOVE THE WINDOW. EACH TV WILL REQUIRE 2 OUTLETS. ONE FOR THE TV AND ONE FOR THE FM TRANSCEIVER. OUTLET LOCATIONS ARE TO BE DETERMINED BASED ON THE FINAL CARDIO EQUIPMENT LOCATION.
- 2. TV COAXIAL.
- 3. TELEPHONE CAT5.
- 4. NOT USED.
- 5. APPROXIMATE LOCATION OF TV DEMARK. VERIFY LOCATION PRIOR TO ROUGH-IN.
- 6. APPROXIMATE LOCATION OF TELEPHONE & INTERNET DEMARK. VERIFY LOCATION PRIOR TO ROUGH—IN.
- 7. DESK DATA POINT REFER TO DETAIL ON DRAWING E7. VERIFY EXACT LOCATION PRIOR TO ROUGH—IN.
- 8. VERIFY EXACT LOCATION OF CARDIO EQUIPMENT WITH OWNER AND EQUPMENT MANUFACTURER PRIOR TO ROUGH—IN.
- 9. TV COAXIAL TYPICALLY ONE CABLE PER TV/VIEW SCREEN.
- 10. NEVER CENTER. SEE DRAWING E5 FOR DETAIL.
- 11. EMERGENCY PHONE LOCATION. VERIFY EXACT LOCATION IN THE FIELD. 48" MAXIMUM HEIGHT A.F.F. TO OPERABLE PART.
- 12. CAT5 DATA INTERNET. TYPICALLY ONE CABLE PER TV/VIEW SCREEN.
- 13. NOT USED.
- 14. CONDUIT UP TO ACCESSIBLE CEILING SPACE. COAXIAL, AND DATA CABLE WITH CONNECTIONS TO TV AND DATA DEMARCATION POINTS. ONE CAT5E AND (1) AND (1) COAXIAL PER TV VIEW SCREEN. DO NOT DAISY CHAIN.
- 15. PROVIDE HOMERUNS AS REQUIRED FOR COAXIAL CABLE (RG6) DOE EXERCISE EQUIPMENT IN ACCESSIBLE CEILING SPACE.
- 16. NOT USED.
- 17. PROVIDE FOR SAW CUTTING OF EXISTING CONCRETE FLOOR FOR POWER, DATA, & CABLE IN FLOOR TRENCH FOR CARDIO EQUIPMENT. VERIFY EXACT LOCATION OF EQUIPMENT WITH OWNER PRIOR TO ROUGH—INS.
- 18. NOT USED.
- 19. NOT USED
- 20. PROVIDE WIREMOLD #RFB4-C1-1 FLOOR BOX WITH BLANK COVER #FPTCBK AND COMMUNICATION BRACKET (2) #CILT-2-4TKO. PROVIDE APPROPRIATE KEYSTONE CONNECTOR FOR AND DATA AS REQUIRED. SEE DETAIL #5 ON DRAWING E5 FOR MORE INFORMATION. VERIFY EXACT LOCATION OF EQUIPMENT OF EQUIPMENT WITH OWNER AND FINAL EQUIPMENT LAYOUT PRIOR TO ROUGH-IN. VERIFY DATA AND CABLE REQUIREMENTS WITH EQUIPMENT MANUFACTURERS PRIOR TO ROUGH-IN.

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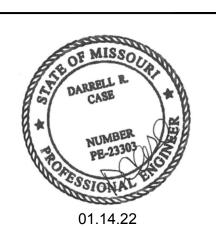
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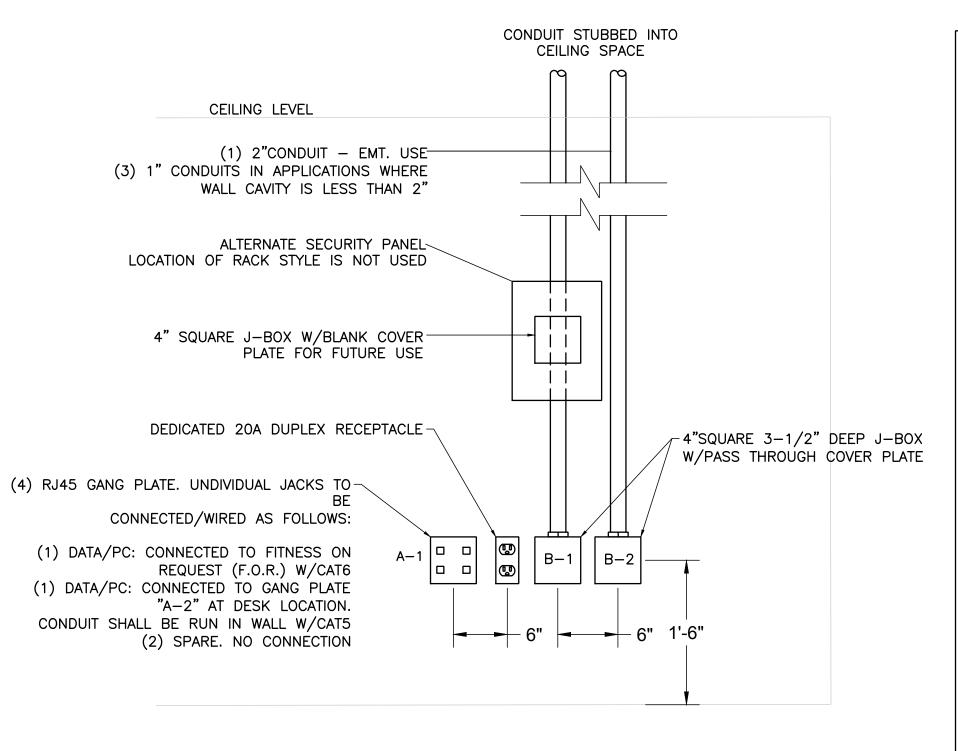
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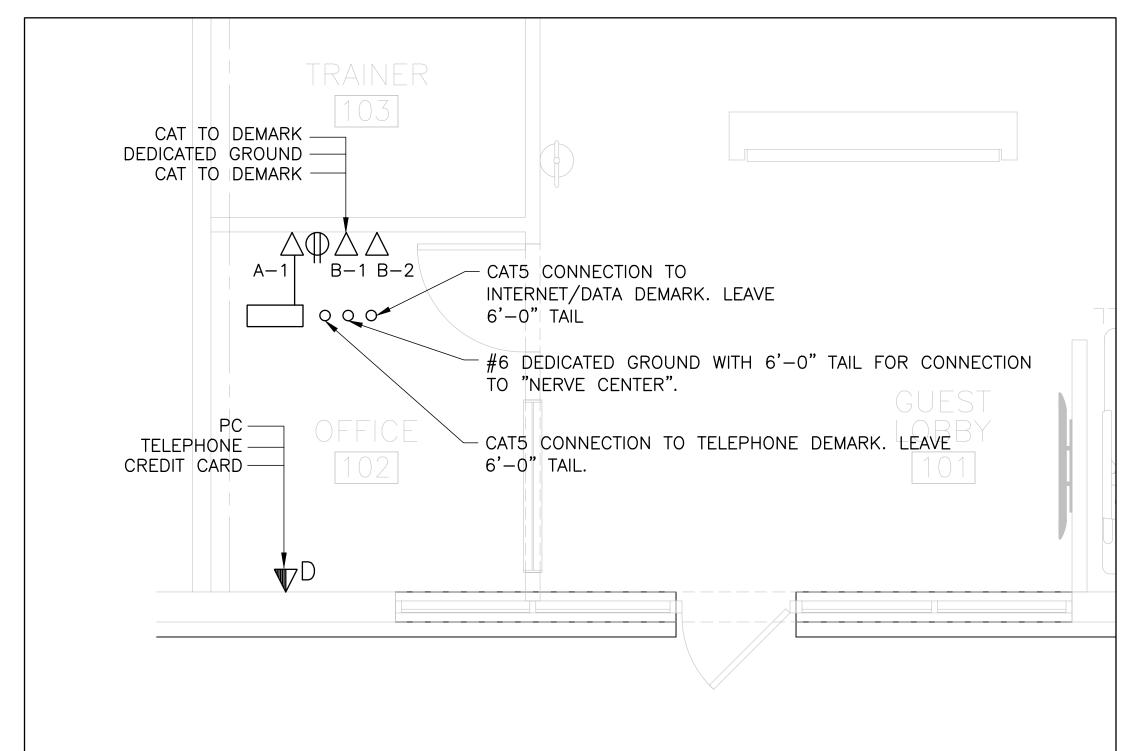
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LOW-VOLTAGE PLAN

**E4** 



DETAIL AT NERVE CENTER



SCALE: 3/8" = 1' - 0"

QUAD RECEPTACLE

(4) RJ45 GANG PLATE. UNDIVIDUAL JACKS TO BE CONNECTED/WIRED AS FOLLOWS:

(1) DATA/PC: CONNECTED TO FITNESS ON REQUEST (F.O.R.) W/CAT6 (1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION. CONDUIT SHALL BE RUN IN WALL W/CAT5 (2) SPARE. NO CONNECTION

QUAD RECEPTACLE

(4) RJ45 GANG PLATE. UNDIVIDUAL JACKS TO BE CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(2) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(3) SPARE. NO CONNECTION

(4) RJ45 GANG PLATE. UNDIVIDUAL JACKS TO BE CONNECTED TO FITNESS ON REQUEST (F.O.R.) W/CAT6 (1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(2) SPARE. NO CONNECTION

(3) SPARE. NO CONNECTION

(4) RJ45 GANG PLATE. UNDIVIDUAL JACKS TO BE CONNECTED TO FITNESS ON REQUEST (F.O.R.) W/CAT6 (1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(5) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(6) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(6) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(7) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(7) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(8) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(8) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(7) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(8) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(9) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(9) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(9) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(9) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(1) DATA/PC: CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(2) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

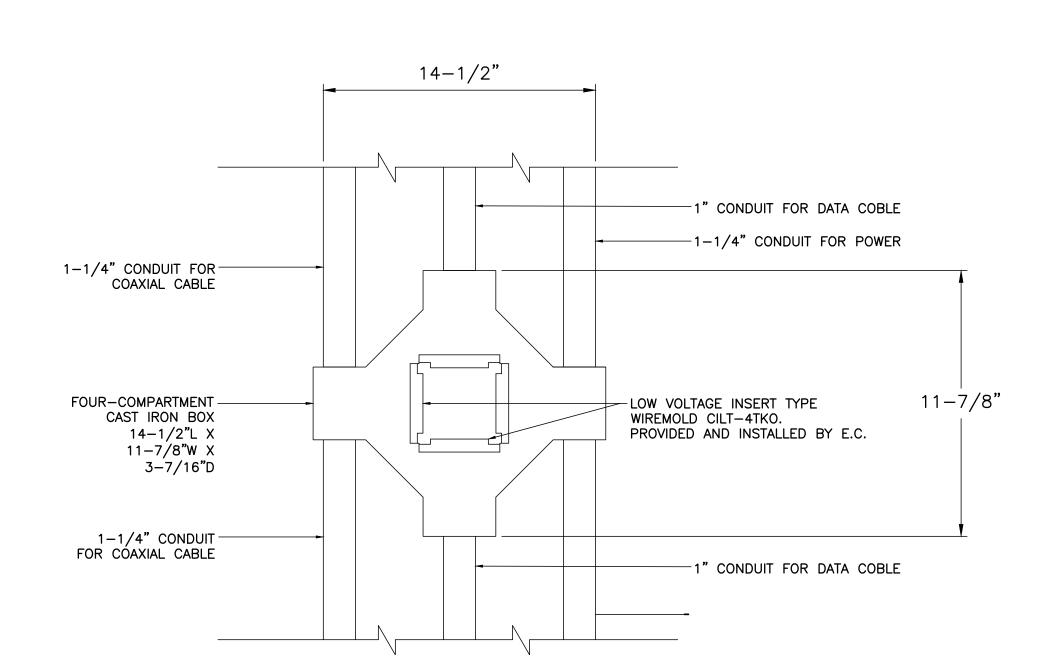
(2) SPARE. NO CONNECTED TO GANG PLATE "A—2" AT DESK LOCATION.

(2) SPARE. NO CONNECTED

NOTE:

DESK DATA POINT IS THE LOCATION ALL TELECOMMUNICATIONS & POWER OUTLETS ARE INSTALLED THAT WILL SERVICE THE ELECTRONICS THAT WILL BE LOCATED ON OR NEAR THE DESK OR CREDENZA. THIS INCLUDES THE PC, CREDIT CARD MACHINE, ETC., COORDINATED THE DESK DATA POINT WITH THE OFFICE FURNITURE LAYOUT.

3 DETAIL AT DESK DATA POINT SCALE: NONE



	FLOC	OR BOX	WIREMOLD	RFB4-CI-1	SERIES -	DETAIL
4	SCALE:	NONE				

	J	OB NAME:	ANYTIME	FITNESS	PANELBOARD: MDP EXIST	ΓING		SECT	ION: 1							
	VO	LTS (L-L):	208		MOUNTING:	SURFACE					BUS MATERIAL:	ALUM				
			120			NEMA1					TOP OR BOTTOM FEED?:					
		PHASE:	3		FEED THRU LUGS (Y/N):	Υ					GROUND BUS:	YES				
		WIRE:	4		SERIES RATED (Y/N):	N					BRANCH BKRS.:	BOLT-ON				
		MLO:	X		SHUNT TRIP MAIN (Y/N):	N					S. E. RATED (Y/N):	YES				
		MCB:			MINIMUM AIC RATING:	10,000					NEUTRAL RATING (%):	100				
		SOURCE:	UTILITY		SOURCE FEEDER AMPS:	400					LOCATION:	CLOSET				
		ССТВ	RKR				F	PHASE LOAD	)S				ССТЕ	BRKR		
DDE	CKT.#	AMP	POLES	WIRE & CONDUIT	LOAD SERVED	KVA	øΑ	øΒ	øС	KVA	LOAD SERVED	WIRE & CONDUIT	POLES	AMP	CKT.#	CODE
2	1	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TREADMILL	0.8	1.2			0.4	GUEST LOBBY 101 CEILING RECEPTS.	2#12,1#12G.,3/4"C	1	20	2	2
2	3	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TREADMILL	0.8		1.2		0.4	OFFICE 102 RECEPTACLES	2#12,1#12G.,3/4"C	1	20	4	2
2	5	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TREADMILL	0.8			1.6	0.8	CARDIO 105 EXERCISE BIKE	2#12,1#12G.,3/4"C	1	20	6	2
2	7	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TREADMILL	0.8	1.6			8.0	CARDIO 105 EXERCISE BIKE	2#12,1#12G.,3/4"C	1	20	8	2
2	9	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TREADMILL	8.0		1.3		0.5	CARDIO 105LIGHT BOX	2#12,1#12G.,3/4"C	1	20	10	1
2	11	20	1	2#12,1#12G.,3/4"C	CARDIO 105 ELLIPTICAL	0.8			0.9	0.1	CARDIO 105 AF LIT SIGN	2#12,1#12G.,3/4"C	1	20	12	1
2	13	20	1	2#12,1#12G.,3/4"C	CARDIO 105 ELLIPTICAL	0.8	1.6			0.8	TRAINER 103 RECEPTACLES	2#12,1#12G.,3/4"C	1	20	14	2
2	15	20	1	2#12,1#12G.,3/4"C	CARDIO 105 ELLIPTICAL	0.8		1.6	4.0	0.8	BREAKROOM 110 REFRIG. & RECEPT.	2#12,1#12G.,3/4"C	1	20	16	6
2	17 19	20	1	2#12,1#12G.,3/4"C	CARDIO 105 ELLIPTICAL	0.8	1.6		1.0	0.2	BREAKROOM 110 RECEPTACLE	2#12,1#12G.,3/4"C	1	20	18 20	2
2	21	20	1	2#12,1#12G.,3/4"C	CARDIO 105 TRAINER	0.8	1.0	1.6		0.8	UNISEX 111 HAND DRYER	2#12,1#12G.,3/4"C	1	20	22	2
6	23		'	2#12,1#12G.,3/4"C	CARDIO 105 STAIR CLIMBER	3.3		1.0	4.1	0.8	UNISEX 111 GFI & HALL 109 E.W.C.	2#12,1#12G.,3/4"C 2#12,1#12G.,3/4"C	1	20	24	2
6	25	50	2	3#8,1#10G.,3/4"C	EXISTING HP-1	3.3	3.9			0.6	UNISEX 112 HAND DRYER UNISEX 112,113, & 114 GFI	2#12,1#12G.,3/4°C	1	20	26	2
6	27					2.7		8.0		5.3					28	6
6	29	35	3	2: 3#8,1#10G.,3/4°C 3#8,1#10G.,3/4°C	C EXISTING HP-2	2.7			8.0	5.3	EXISTING AHU-1	2#6,1#10G.,3/4"C	2	60	30	6
6	31					2.7	8.0			5.3	EVICTING ALILLO	0#6 4#400 0/4#0		60	32	6
6	33	50	2	3#9 1#10G 3/4"C	EXISTING HP-3	3.3		8.6		5.3	EXISTING AHU-2	2#6,1#10G.,3/4"C	2	60	34	6
6	35	50		3#0,1#100.,0/4 0	EXISTING TIL-5	3.3			13.0	9.7	EXISTING AHU-3	2#3,1#8G.,1"C	2	100	36	6
6	37					2.5	12.2			9.7	2,10,111,0,111,0		_		38	6
6	39	30	3	3#10,1#10G.,3/4"C	EXISTING HP-4	2.5		7.8		5.3	EXISTING AHU-4	2#6,1#10G.,3/4"C	2	60	40	6
6	41					2.5			7.8	5.3					42	6
							øΑ	øΒ	øC							
						ECTED KVA:	38.0 105.5	37.7 104.6	45.3 125.7							
					CONNEC	CTED AMPS:	105.5	104.6	125.7							
			1						7							
					ACCUMALATIVE		DEMAND	DEMAND	-		GENERAL NOTES:					
				CODE	CONN. LOAD BREAKDOWN	KVA	FACTOR	KVA	1		-PANEL LOAD SHOULD BE BALANCED WI					
				2	LIGHTING RECEPTACLES	4.8 18.5	125% 100/50%	6.0 14.3	1		-(*) INDICATES HACR TYPE BREAKER FOR -(**) INDICATES SHUNT TRIP BREAKER	R HVAC EQUIP.				
					EQUIPMENT	3.0	100/30%	3.0	1		FURNISH SWITCH RATED BREAKER FOR	LIGHTING LOADS				
				4	HEATING	0.0	125%	0.0	1		TOTAL CONTROL OF CONTR	LIGHTING LOADS				
				5	COOLING	0.0	100%	0.0	1							
				6	MISC. MECHANICAL	90.7	100%	90.7	]							
				7	MISCELLANEOUS	4.0	100%	4.0	]							
				8		0.0	100%	0.0	]							
				9		0.0	100%	0.0	]							
				BLANK	BLANK	0.0	100%	0.0	1							
				SPARE	0.0%	0.0	100%	25.5	1							
					CONNECTED KVA:	121.0	l	143.4	=DEMAND K	\/Δ						
					OOMALOTED KVA.	121.0	l	110.1	1-DEMINITO IN							

NOTE: IF NEW CIRCUITS ARE REQUIRED. ALL NEW CIRCUIT BREAKERS SHALL BE OF SAME MANUFACTURER AND AIC RATINGS AS THE EXISTING.

	JC	B NAME:	ANYTIME	FITNESS	PANELBOARD: MDP EXIST	TING		SECT	ION: 2							
	VO	LTS (L-L):	208		MOUNTING:	SURFACE	_				BUS MATERIAL	ALUM				
	VO	_TS (L-N):	120	-	TYPE:	NEMA1	_				TOP OR BOTTOM FEED?		_			
		PHASE:	3		FEED THRU LUGS (Y/N):	Y	_				GROUND BUS	YES	_			
		WIRE:	4		SERIES RATED (Y/N):	N	_				BRANCH BKRS.	BOLT-ON	_			
		MLO:	X		SHUNT TRIP MAIN (Y/N):	N	_				S. E. RATED (Y/N)	YES	_			
		MCB:			MINIMUM AIC RATING:	10,000	_				NEUTRAL RATING (%)	100	_			
		SOURCE:	SEC.1	-	SOURCE FEEDER AMPS:	400	_				LOCATION	CLOSET				
		ССТ В	RKR				F	PHASE LOAD	os				ССТІ	BRKR		Τ
CODE	CKT. #	AMP	POLES	WIRE & CONDUIT	LOAD SERVED	KVA	øA	øB	øC	KVA	LOAD SERVED	WIRE & CONDUIT	POLES	AMP	CKT.#	# 6
2	43	20	1	2#12,1#12G.,3/4"C	UNISEX 113 HAND DRYER	0.8	1.0	90	20	0.2	SERVICE PANEL RECEPTACLE	2#12,1#12G.,3/4"C	1	20	44	Ť
2	45	20	1	2#12,1#12G.,3/4"C	UNISEX 114 HAND DRYER	0.8		1.0		0.2	FREE WEIGHTS 108 T.V.	2#12,1#12G.,3/4"C	1	20	46	†
					FREE WEIGHTS 108 & FUNCTIONAL				4.0							$^{\dagger}$
1	47	20	1	2#12,1#12G.,3/4"C	TRAINING 107 LIGHTING	1.0			1.2	0.2	FREE WEIGHTS 108 T.V.	2#12,1#12G.,3/4"C	1	20	48	+
1	48	20	1	2#12,1#12G.,3/4"C	STRENGTH 106 & CARDIO 105 LIGHTING	1.0	1.2			0.2	FUNCTIONAL TRAINING 107 T.V.	2#12,1#12G.,3/4"C	1	20	50	
1	51	20	1	2#12,1#12G.,3/4"C	OFFICE 102, 103, MEMBER LOBBY 104, STOR. 115, UNISEX 110, 111, 112, 113, 114 LIGHTING	1.0		1.2		0.2	FUNCTIONAL TRAINING 107 T.V.	2#12,1#12G.,3/4"C	1	20	52	
3	53	20	1	2#12,1#12G.,3/4"C	FREE WEIGHTS 108 & FUNCTIONAL TRAINING 107 CEILING FANS	1.0			1.2	0.2	QUEST LOBBY 101 T.V.	2#12,1#12G.,3/4"C	1	20	54	
3	55	20	1	2#12,1#12G.,3/4"C	CARDIO 105 CEILING FANS	1.0	1.4			0.4	TELECOMMUNICATIONS DED. REC.	2#12,1#12G.,3/4"C	1	20	56	T
3	57	20	1	2#12,1#12G.,3/4"C	FREE WEIGHTS 108 & FUNCTIONAL TRAINING 107 CEILING FANS	1.0		1.1		0.1	EF-1,2,3,4,&5	2#12,1#12G.,3/4"C	1	20	58	T
6	59					3.3			4.5	1.2	STORE SIGNAGE	2#12,1#12G.,3/4"C	1	20	60	1
6	61	35	3	3#8,1#10G.,3/4"C	EWH-1	3.3	3.3				SPARE		1	20	62	T
6	63					3.3		3.3			SPARE				64	T
7	65	20	1	2#12,1#12G.,3/4"C	SHOW WINDOW RECEPTACLE	1.0			1.0		SPACE				66	T
7	67	20	1	2#12,1#12G.,3/4"C	SHOW WINDOW RECEPTACLE	1.0	1.0				SPACE				68	Ť
7	69	20	1	2#12,1#12G.,3/4"C	SHOW WINDOW RECEPTACLE	1.0		1.0			SPACE				70	T
7	71	20	1	2#12,1#12G.,3/4"C	SHOW WINDOW RECEPTACLE	1.0			1.0		SPACE				72	Т
	73				SPARE		0.0				SPACE				74	T
	75				SPARE			0.0			SPACE				76	Т
	77				SPACE				0.0		SPACE				78	T
	79						0.0				SPACE				80	T
	81							0.0			SPACE				82	Т
	83								0.0		SPACE				84	Ι
							øΑ	øB	øС							
					CONNE	ECTED KVA:		7.6	8.9							
					CONNEC	CTED AMPS:	21.9	21.1	24.7							
							DELLUSE	DELCOSE	1		OFNEDAL NOTES					
				CODE	CONN. LOAD BREAKDOWN	KVA	DEMAND FACTOR	DEMAND KVA	†		GENERAL NOTES: -PANEL LOAD SHOULD BE BALANCED W	ITUINI 10%				
				1	LIGHTING	4.2	125%	5.3	1		-(*) INDICATES HACR TYPE BREAKER FO					
				2	RECEPTACLES	3.3	100/50%	3.3	1		-(**) INDICATES SHUNT TRIP BREAKER	INTIVACEQUIF.				
				3	EQUIPMENT	3.0	100/50%	3.0	1		FURNISH TYPE HACR BREAKER FOR HV	AC EOLIIDMENT				
				4	HEATING	0.0	125%	0.0	1							
				5	COOLING	0.0	100%	0.0	1		FURNISH SWITCH RATED BREAKER FOR	LIGITING LUADS				
				6	MISC. MECHANICAL	9.9	100%	9.9	1							
				7	MISCELLANEOUS	4.0	100%	4.0	1							
				8	INICOLLANDO	0.0	100%	0.0	1							
				9		0.0	100%	0.0	1							
				BLAMK	BLANK	0.0	100%	0.0	]							
									]							
					CONNECTED KVA:	24.4	J	25.5	=DEMAND KVA							
								70.6	=DEMAND AMI	PS						

NOTE: IF NEW CIRCUITS ARE REQUIRED. ALL NEW CIRCUIT BREAKERS SHALL BE OF SAME MANUFACTURER AND AIC RATINGS AS THE EXISTING.

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review

Development Services Department

ARCHITECT Lee's Summit, Missouri 05/05/2022



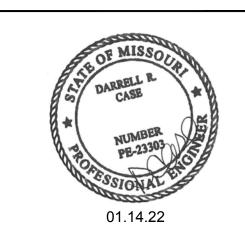
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CONSULTANT



796 Merus Court T 636.349.1600 St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

SEAL



SUMMIT CREST PLAZA 3508 SW MARKET STREET LEE'S SUMMIT, MO 64082

RE\	REVISIONS							
REV.	DATE	ISSUE						
DATE	<u>:</u>	01.14.22						

DRAWN BY:

CHECKED BY: DRC

PROJECT NUMBER: 689411

LOW-VOLTAGE DETAILS

**E**5

### DIVISION 16 - ELECTRICAL SPECIFICATIONS

### SECTION 16100 **ELECTRICAL SPECIAL CONDITIONS**

### 1. <u>GENERAL</u>

- A. APPLICABLE PROVISIONS OF AIA DOCUMENT A201, "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AND DIVISION 1 GENERAL CONDITIONS GOVERN WORK UNDER THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.
- APPLICABLE PROVISIONS OF THIS SECTION GOVERN WORK UNDER ALL OTHER SECTIONS OF DIVISION 16. WORK COVERED BY THIS SECTION SHALL CONSIST OF PROVIDING ALL MATERIAL, LABOR, EQUIPMENT AND SERVICES NECESSARY FOR A COMPLETE, TESTED AND ADJUSTABLE ELECTRICAL INSTALLATION READY FOR OPERATION AS SPECIFIED HEREIN AND AS SHOWN ON THE
- C. THE TERM CONTRACTOR AS USED IN THIS SECTION SHALL MEAN ANY CONTRACTOR OR SUBCONTRACTOR WHO HAS CONTRACTED TO PERFORM WORK INCLUDED IN AND DEFINED BY THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.

### 2. CONTRACTOR'S RESPONSIBILITY

- A. PRIOR TO SUBMITTING HIS BID, CONTRACTOR SHALL CAREFULLY EXAMINE THESE CONSTRUCTION DOCUMENTS, THE DEVELOPER'S EXHIBITS, AND THE SITE, TO INQUIRE FULLY INTO DIFFICULTIES AND COSTS OF WORK, AND TO DETERMINE THE SCOPE AND CHARACTER OF WORK TO BE DONE CONTRACTOR SHALL INCLUDE ALL NECESSARY COSTS TO LOCATE AND/OR EXTEND ALL UTILITIES INCLUDING LIGHTING PANELS, POWER PANELS, ELECTRICAL SERVICE, PHONE SERVICE AND/OR MODIFY EQUIPMENT TO MEET THE INTENT OF THE CONTRACT DOCUMENTS. THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER SHALL NOT BE RESPONSIBLE FOR FAILURE OF THE CONTRACTOR TO DETERMINE DIFFICULTIES AND COSTS IN THE PROJECT OR FOR HIS OVERLOOKING
- B. IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THE PLANS AND SPECIFICATIONS, OR IF THERE ARE ANY REQUIREMENTS WHICH ARE AMBIGUOUS IN THE CONTRACTOR'S OPINION. HE SHOULD CALL THIS TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING, SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATIONS OF THE ARCHITECT AND ENGINEER.
- C. CONTRACTOR SHALL SCHEDULE HIS WORK IN COOPERATION WITH OTHER TRADES INSTALLING INTERRELATED WORK. ALL WORK SHALL BE SCHEDULED TO MAINTAIN SERVICE TO ALL REQUIRED AREAS DURING THE COURSE OF THE CONSTRUCTION EXCEPT FOR SHORT TERM PLANNED SHUTDOWNS, ANY OF WHICH SHALL BE PRE-SCHEDULED WITH THE OWNERS AGENT AND THE LANDLORD.

### WORKMANSHIP AND GUARANTEE

A. IN ENTERING INTO A CONTRACT COVERING THIS WORK, THE CONTRACTOR ACCEPTS THE SPECIFICATIONS, AND GUARANTEES THAT THE WORK WILL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR FURTHER GUARANTEES THAT THE WORKMANSHIP AND MATERIAL WILL BE OF THE BEST PROCURABLE AND THAT NONE BUT EXPERIENCED WORKMEN EXPERIENCED IN EACH PARTICULAR CLASS OF WORK WILL BE EMPLOYED. CONTRACTOR FURTHER GUARANTEES TO REPLACE AND MAKE GOOD AT HIS OWN EXPENSE ANY DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIAL WHICH MAY DEVELOP WITHIN ONE (1) YEAR AFTER FINAL PAYMENT AND ACCEPTANCE BY THE ARCHITECT.

### 4. CODES AND STANDARDS

CONTRACTOR WILL COMPLY IN ALL RESPECTS WITH THE ADOPTED BUILDING CODES, APPLICABLE LAWS, ORDINANCES, AND REGULATIONS AS MAY APPLY ACCORDING TO THE RULING OF THE CONTROLLING PUBLIC OFFICIAL SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LAWS, ORDINANCES AND REGULATIONS, OR WHICH DOES NOT RECEIVE THE APPROVAL OF THE CONTROLLING PUBLIC OFFICIAL, HE SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES. ALL ELECTRICAL EQUIPMENT SHALL SHALL BEAR THE UNDERWRITER'S LABORATORY LABEL.

A. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAKING PAYMENT FOR ALL FEES, PERMITS AND INSPECTIONS RELATING TO HIS WORK.

- A. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND INTENT OF THE DESIGN AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONDITIONS AND THE WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE SYSTEMS OR BUILDING COMPONENTS HAVE BEEN INDICATED. THE CONTRACTOR SHALL INVESTIGATE ALL EXISTING CONDITIONS AFFECTING THE WORK AND ARRANGE HIS WORK ACCORDINGLY, PROVIDING SUCH FITTINGS, OFFSETS, ACCESSORIES AND DEVICES AS MAY BE REQUIRED. THE DRAWINGS AND SPECIFICATIONS ARE MUTUALLY COMPLEMENTARY, AND ANY WORK REQUIRED BY ONE BUT NOT BY THE OTHER SHALL BE PERFORMED BY BOTH. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND SERVICES REQUIRED FOR A COMPLETE AND WORKING PROJECT AT NO ADDITIONAL COST EVEN THOUGH EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN.
- CONTRACTOR SHALL NOT SCALE FROM THE DRAWINGS BUT SHALL FOLLOW THE ARCHITECTURAL DRAWINGS OR EXISTING BUILDING CONDITIONS WHERE APPLICABLE, IN ESTABLISHING DIMENSIONS AND LINES OF RUN, SINCE DIMENSIONS ON THE FINAL ARCHITECTURAL DRAWINGS OR AT THE SITE MAY NOT COINCIDE WITH THOSE SHOWN ON THE ELECTRICAL DRAWINGS, THE CONTRACTORS SHALL VERIFY WITH THE DIMENSIONED ARCHITECTURAL DRAWINGS OR THE SITE CONDITIONS THE EXACT MATERIAL QUANTITIES AND LENGTHS NECESSARY.
- C. SIGNIFICANT DEVIATIONS OR CHANGES FROM THE DRAWINGS WHICH ARE REQUIRED TO ACCOMPLISH THE INTENT OF THE CONTRACT DOCUMENTS MUST BE REVIEWED WITH THE ARCHITECT AND APPROVED BEFORE PROCEEDING.

### 7. SHOP DRAWINGS

- A. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, FOUR (4) COPIES MINIMUM, FOR ALL MANUFACTURED PRODUCTS. EACH SHOP DRAWING SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO ASSURE THAT ALL DIMENSIONS, QUANTITIES, CONNECTIONS, CAPACITATES AND ACCESSORIES SHOWN ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND SHALL BE MARKED OR STAMPED TO CONFIRM THAT SUCH REVIEW WAS MADE AND COMPLIANCE WAS
- APPROVAL OF SHOP DRAWINGS BY THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER, WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF COMPLYING WITH ALL TERMS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PERFORMANCE OF ALL EQUIPMENT PURCHASED, FOR PROPER FIT, AND OTHER DIMENSIONAL REQUIREMENTS.

CONTRACTOR SHALL MAINTAIN AT THE JOB SITE ONE SET OF DOCUMENTS AS "RECORD DRAWINGS" FOR THE PURPOSE OF DAILY MARKING OF ALL SUBSTANTIAL REVISIONS TO THE DOCUMENTS INCLUDING BUT NOT LIMITED TO ELECTRICAL CHANGES, AND LOCATIONS OF UTILITIES, PANELBOARDS, DISCONNECTS, STARTERS AND OTHER DEVICES REQUIRING PERIODIC OPERATIONAL ATTENTION, ADJUSTMENT, OR SERVICE INCLUDING ACCESS THERETO, AT THE COMPLETION OF THE PROJECT, THIS SET SHALL BE RETURNED TO THE ARCHITECT FOR THE PURPOSE OF MAKING FINAL "AS-BUILT DRAWINGS".

### 9. EQUIPMENT SUBSTITUTION

- A. SPECIFIC MANUFACTURERS AND MODELS OF EQUIPMENT HAVE BEEN USED IN THE DEVELOPMENT OF THE DRAWINGS AND DESIGNS. THIS CONTRACTOR MUST SUBMIT TO THE OWNER ANY CHANGES AND/OR SUBSTITUTIONS FOR APPROVAL PRIOR TO INSTALLATION OR EXECUTION. ANY CHANGES WHICH DO NOT RECEIVE THE OWNER'S APPROVAL MAY BE SUBJECT TO REMOVAL OR REPLACEMENT AS ORIGINALLY SPECIFIED, AND WILL BE AT THE CONTRACTOR'S EXPENSE.
- B. IF THIS CONTRACTOR SUBSTITUTES FOR SPECIFIED EQUIPMENT ANY OTHER EQUIPMENT WHICH REQUIRES ANY CHANGES TO THE DESIGN, ALL COST OF REDESIGN AND RECONFIGURATION RESULTING FROM SAID SUBSTITUTION SHALL BE BORNE BY THE SUBMITTING CONTRACTOR.

### 10. EQUIPMENT INSTALLATION AND SUPPORT

CONTRACTOR SHALL SUPPORT PLUMB, RIGID AND TRUE-TO-LINE ALL WORK AND EQUIPMENT INSTALLED. THIS CONTRACTOR SHALL DETERMINE HOW EQUIPMENT, FIXTURES, ETC., ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED AND SHALL PROVIDE ACCESSORIES REQUIRED FOR PROPER SUPPORT WHETHER SHOWN ON THE DRAWINGS OR NOT. IF SUPPORTS ARE REQUIRED. CONTRACTOR SHALL SUBMIT DRAWINGS TO THE ARCHITECT FOR APPROVAL

- PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS PRINTED INSTALLATION AND MAINTENANCE LITERATURE. COMPONENTS REQUIRING PERIODIC MAINTENANCE OR ADJUSTMENTS SHALL BE LOCATED OR INSTALLED AS TO PERMIT ACCESS WITHOUT DAMAGE TO STRUCTURE, FINISHES OR OTHER EQUIPMENT.
- C. ALL CONDUIT CONNECTING TO SWITCHGEAR, PANELS, MOTORS, AND OTHER EQUIPMENT SHALL BE INSTALLED WITHOUT STRAIN AT THE CONNECTIONS. THE CONTRACTOR MAY BE REQUIRED, AS DIRECTED, TO DISCONNECT CONDUITS TO DEMONSTRATE THAT THEY HAVE BEEN SO CONNECTED.

A. ALL EXISTING EQUIPMENT. NOT INDICATED TO BE INCORPORATED INTO THE NEW SYSTEM SHALL BE DISCONNECTED BY THIS CONTRACTOR FOR REMOVAL BY OTHERS FROM THE JOB SITE. CARE SHALL BE USED SO THAT NO DAMAGE IS DONE TO EXISTING BUILDING, PIPING, DUCTWORK AND/OR ELECTRICAL EQUIPMENT. ANY DAMAGE ATTRIBUTED TO THIS CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THIS CONTRACTOR.

### 12. CUTTING AND PATCHING

- A. ALL CUTTING THAT MAY BE NECESSARY FOR THE INSTALLATION OF THE WORK OR ANY REQUIRED PATCHING THAT RESULTS THEREFROM SHALL BE DONE BY THE PROPER TRADE INVOLVED AND SHALL BE INCLUDED AS PART OF THIS CONTRACT. PATCH TO DUPLICATE UNDISTURBED ADJACENT FINISHES, COLORS, TEXTURES AND PROFILES. COLUMNS, BEAMS, GIRDERS OR JOISTS SHALL NOT
- B. ALL WORK AFFECTING ROOF OR STRUCTURES SHALL BE PERFORMED BY LANDLORD'S CONTRACTOR AT TENANT'S EXPENSE.

A. COMPLETION AS IT PERTAINS TO THE CONTRACT COMPLETION DATE IS DEFINED AS THE DAY THE PROJECT IS TURNED OVER TO THE OWNER IN THOROUGHLY CLEAN CONDITION. READY FOR THE OWNER TO TAKE POSSESSION. ALL FIXTURES, MOTORS, EQUIPMENT AND ALL OTHER ELECTRICAL EQUIPMENT FURNISHED OR INSTALLED BY THE CONTRACTOR SHALL BE THOROUGHLY CLEANED.

- PROVIDE THE TESTS AS OUTLINED HEREINAFTER AND OTHER TESTS NECESSARY TO ESTABLISH THE ADEQUACY, QUALITY, SAFETY, COMPLETED STATUS AND SUITABLE OPERATION OF EACH SYSTEM. CORRECT PROMPTLY ANY FAILURE OR DEFECTS REVEALED BY THESE TESTS AND RECONDUCT TEST ON THE CORRECTED ITEMS.
- B. TEST THE GROUNDS WITH A GROUND RESISTANCE DIRECT READING SINGLE-TEST MEGGER. C. INSULATION RESISTANCE BETWEEN PHASE CONDUCTORS AND GROUND NOT LESS THAN 1,000,000
- THE PANELBOARDS SHALL HAVE PHASE CURRENTS BALANCED TO WITHIN +/- 10% VARIATION
- BETWEEN AVERAGE PHASE CURRENT AND MEASURED INDIVIDUAL PHASE.
- AN OPERATIONAL TEST OF THE EMERGENCY LIGHTS AND THE EXIT LIGHTS SHALL BE PERFORMED FOR THE OWNER TO DEMONSTRATE CONFORMANCE TO THE SPECIFICATIONS.

- A. TEMPORARY ELECTRICAL SERVICE SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. TEMPORARY LIGHTING SHALL BE PROVIDED BY A LAMP LOCATED FOR EVERY 625 SQUARE FEET OF BUILDING AREA WITH A MINIMUM OF ONE PER ROOM. THE LAMP TO BE 100 WATT AND SHALL BE MAINTAINED BY THE GENERAL CONTRACTOR.
- TEMPORARY POWER DISTRIBUTION SHALL BE SUFFICIENT TO ACCOMMODATE THE TEMPORARY LIGHTING AND CONSTRUCTION OPERATIONS, INCLUDING THE USE OF POWER TOOLS (BUT NOT INCLUDING HEAVY-DUTY ELECTRICAL WELDING UNITS), ELECTRICAL HEATING UNITS, AND START-UP OF SPECIFIED BUILDING EQUIPMENT, WHICH IS TO BE TESTED, STARTED OR PLACED INTO OUR USE PRIOR TO COMPLETION OF ITS PERMANENT POWER CONNECTIONS.

### 16. EXCAVATION AND BACKFILL

CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED AS SHOWN ON PLANS OR REQUIRED FOR PROPER OPERATION. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH EARTH AND THOROUGHLY TAMPED. UTILITY SERVICES, SHALL BE INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE BACKFILLING.

### **SECTION 16200**

# ELECTRICAL POWER AND LIGHTING

# . RELATED DOCUMENTS

- APPLICABLE PROVISIONS OF AIA DOCUMENT A201. "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION". DIVISION 1 GENERAL CONDITIONS AND SECTION 16100 ELECTRICAL SPECIAL CONDITIONS GOVERN WORK UNDER THIS SECTION.
- B. REFER TO SECTION 16100 ELECTRICAL SPECIAL CONDITIONS REGARDING REGULATIONS AND REQUIREMENTS AFFECTING ALL WORK DESCRIBED IN THIS SECTION.

POWER SERVICE FOR THIS PROJECT SHALL BE PROVIDED FROM THE LANDLORD PROVIDED METER (EXISTING OR NEW). THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY TO INSURE THAT ALL WORK AND MATERIALS, WHETHER EXISTING OR NEW, ARE IN CONFORMANCE WITH THE UTILITY COMPANY'S REQUIREMENTS.

### 3. NAMEPLATES

- A. ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, PANELBOARDS, DISCONNECTS TRANSFORMERS, CONTROLS, ETC., SHALL BE IDENTIFIED WITH THREE PLY LAMINATED PLASTIC. THE 12. DEVICE PLATES OUTSIDE LAMINATIONS SHALL BE BLACK. ENGRAVING SHALL EXTEND THROUGH THE FRONT LAMINATION SO THAT THE BLACK LETTERS APPEAR ON A WHITE BACKGROUND. NAMEPLATES SHALL BE PERMANENTLY ATTACHED WITH SCREWS.
- B. CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN (HANDWRITTEN IS NOT ACCEPTABLE) AND SHALL IDENTIFY CIRCUIT AS TO TYPE AND LOCATION AS FOLLOWS:
- FOR LIGHTING CIRCUIT FOLLOWED BY AREA IN WHICH CIRCUIT APPEARS, I.E., "STOCKROOM", "CASH WRAP", ETC. "RECEPT" - FOR RECEPTACLE CIRCUIT FOLLOWED BY AREA IN WHICH RECEPTACLE APPEARS "STOREFRONT", "CASH REGISTER", ETC. "MOTOR" - FOR MOTOR FOLLOWED BY THE EQUIPMENT IDENTIFICATION AND AREA IN WHICH MOTOR IS LOCATED. I.E. "EXH FAN TOILET", "AHU-ROOF", ETC.

### 4. CONDUIT

- ALL WIRING SHALL BE RUN IN CONDUIT. THIN WALL EMT CONDUIT SHALL BE USED SIZES 1/2" THROUGH 2-1/2". ALL CONDUITS LARGER THAN 2-1/2" SHALL BE HEAVYWALL. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SLABS SHALL BE PVC. JACKETED FLEXIBLE STEEL. CONDUIT (SEALTITE) SHALL BE USED IN WET AREAS AND ON ALL MOTORIZED EQUIPMENT. "MC" CABLE MAY BE USED AT THE CONTRACTORS DISCRETION IF ALLOWED BY LOCAL CODES. NO BX, ROMEX, ETC. SHALL BE ALLOWED.
- B. ALL OPENINGS IN FIRE AND SMOKE WALLS, PARTITIONS, FLOORS AND OTHER SIMILAR PENETRATIONS FOR ELECTRICAL CONDUITS, CABLE OR EQUIPMENT, WHETHER CUT OR IN PLACE, SHALL BE CLOSED WITH A UL APPROVED FIRE RESISTANT SILICONE FOAM SEALANT TO MAINTAIN THE FULL RATING AND INTEGRITY OF THE PARTITIONS, WALLS OR FLOOR.
- C. CONDUIT BENDS FOR POWER AND LIGHTING CIRCUITS SHALL NOT BE LESS THAN STANDARD RADIUS BENDS. CONDUIT BENDS FOR FEEDERS, TELEPHONE AND COMMUNICATION CIRCUITS SHALL NOT BE LESS THAN LONG RADIUS BENDS.
- D. O.Z. TYPE DX, TX. OR AX CONDUIT EXPANSION DEFLECTION FITTINGS ARE REQUIRED IN ALL CONDUIT RUNS WHERE MOVEMENT MAY BE ENCOUNTERED. ALL EMT COUPLINGS SHALL BE
- E. EXPOSED CONDUIT SHALL BE SECURELY SUPPORTED IN PLACE PER CODE BUT ON A MAXIMUM OF 10 FOOT INTERVALS, WITHIN THREE FEET OF EACH BEND, AT EVERY OUTLET OR JUNCTION BOX AND AT THE END OF EACH STRAIGHT RUN TERMINATING AT A BOX OR CABINET. CONDUIT SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPE WORK. CONDUITS SHALL BE RUN PARALLEL TO AND AT RIGHT ANGLES TO THE BUILDING LINES. GENERALLY, CONDUIT SHALL BE RUN IN CONTACT WITH STRUCTURAL PARTS OF THE BUILDING SO AS TO AVOID SUSPENDED LENGTHS OF CONDUIT. CONDUIT SHALL BE INSTALLED AS TO BE ACCESSIBLE FOR REPLACEMENT AND MAINTENANCE AND GENERALLY CONDUIT SHALL BE INSTALLED TO PERMIT DRAINAGE.

### WIRE AND CABLE

- A. ALL WIRE AND CABLE SHALL BE COPPER AND RUN IN CONDUIT. ALL WIRE AND CABLE FEEDERS AND BRANCH CIRCUITS SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE CURRENT EDITION OF THE N.E.C. AND SHALL MEET ALL ASTM SPECIFICATIONS. WIRE AND CABLE SHALL BE NEW, SHALL HAVE SIZE, GRADE OF INSULATION VOLTAGE AND MANUFACTURER'S NAME PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVAL AND SHALL BE DELIVERED IN COMPLETE COILS OR REELS WITH IDENTIFYING SIZE AND INSULATION TAGS.
- B. THE ELECTRICAL CONTRACTOR SHALL CALCULATE VOLTAGE DROP ON CONDUCTORS WITH LENGTHS GREATER THAN 75 FEET FROM THE PANELBOARD AND PROPERLY SIZE THE CONDUCTORS PER
- POWER CONDUCTORS: NO WIRE LESS THAN NO. 12 SHALL BE USED EXCEPT FOR CONTROL CIRCUITS OR LOW VOLTAGE WIRING. WIRE SIZES NO. 12 TO NO. 10 SHALL BE SOLID EXCEPT WHERE OTHERWISE INDICATED. WIRE SIZES NO. 8 AND LARGER SHALL BE STRANDED. ALL WIRE SIZES SHOWN ARE AMERICAN WIRE GAUGE SIZES. SIZES NO. 12 AWG THROUGH NO. 8 AWG SHALL BE "THHN." SIZE 4 AWG AND LARGER SHALL BE "THW."
- D. CONTINUITY: ALL WIRES SHALL BE CONTINUOUS FROM OUTLET TO OUTLET.
- ACCEPTABLE MANUFACTURERS: CABLE AND WIRE SHALL BE STANDARD TYPE AS MANUFACTURED BY GENERAL CABLE COMPANY, CAROL, ANACONDA, ROM OR ITT ROYAL.

- A. A COLOR CODING SYSTEM AS LISTED BELOW SHALL BE FOLLOWED THROUGHOUT FOR FEEDERS AND BRANCH CIRCUITS AND USED AS A BASIS FOR BALANCING LOAD.
  - --120/208V: PHASE A--BLACK, PHASE B--RED, PHASE C--BLUE, NEUTRAL--WHITE, GROUND--GREEN
  - --277/480V: PHASE A--BROWN, PHASE B--ORANGE, PHASE C--YELLOW, NEUTRAL--GRAY, GROUND--GREEN

### . BOXES AND FITTINGS

- ALL OUTLETS SHALL BE PROVIDED WITH GALVANIZED OR SHERARDIZED BOXES SUITABLE IN DESIGN TO THE SPACE THEY OCCUPY AND THE PURPOSE THEY SERVE. WALL MOUNTED OUTLET BOXES, EXCEPT FOR 2" PARTITIONS SHALL BE AT LEAST 1 1/2" DEEP AND/OR DEEPER IF REQUIRED BY THE DEVICE THEY HOLD OR THE CALIFORNIA ELECTRICAL CODE.
- ALL PULLBOXES SHALL BE MADE OF GALVANIZED STEEL, OF METAL GAUGE AND PHYSICAL SIZE AS REQUIRED BY THE N.E.C. FOR THE NUMBER AND SIZE OF RACEWAYS AND CONDUCTORS INVOLVED.
- C. FIXTURE OUTLET BOXES IN OR ON CEILINGS SHALL NOT BE LESS THAN 1-1/2" DEEP OR LESS THAN 4" SQUARE. ALL OUTLET BOXES INTENDED TO SUPPORT FIXTURES SHALL BE EQUIPPED WITH 3/8" FIXTURE STUDS FASTENED THROUGH THE BOTTOM OF THE BOX WITH FOUR BOLTS.

### 8. CIRCUIT BREAKER PANELBOARDS

- PANELS SHALL BE DEAD FRONT, SAFETY TYPE, FURNISHED WITH BRANCH CIRCUIT PROTECTING DEVICES, EQUIPMENT GROUNDING BOX, MAIN BUS AND CABLE LUGS FACTORY ASSEMBLED, WITH ALL COMPONENTS IN PLACE, READY FOR INSTALLATION.
- CURRENT CARRYING CONTACT SURFACES SHALL BE SILVER OR TIN PLATED. THE CIRCUIT BREAKERS SHALL BE OF THE MOLDED CASE, BOLT-ON TYPE SUITABLE FOR VOLTAGE AND AMPERE RATINGS INDICATED ON DRAWINGS AND IN SCHEDULES AND SHALL HAVE A MINIMUM INTERRUPTING CAPACITY OF 22,000 AMPERES FOR 120/208V AND 25,000 AMPERES AT 277/480V.
- MAIN BUSES AND CONNECTORS SHALL BE HARD DRAWN COPPER OF 98% CONDUCTIVITY, WITH CURRENT CARRYING CAPACITY TO MAINTAIN ESTABLISHED RISE TESTS AS DEFINED IN UL STANDARD
- CABINET SIZES ARE BASED UPON A 20" WIDE BY 6" DEEP PANEL UNLESS OTHERWISE NOTED. PANELBOARDS SHALL BE EQUIPPED WITH FLUSH TYPE LOCK AND CATCH. ALL LOCKS SHALL BE
- KEYED ALIKE, AND TWO KEYS ARE TO BE SUPPLIED WITH EACH LOCK. E. PANELBOARDS TO BE BY SQUARE D, GENERAL ELECTRIC, SIEMENS OR CUTLER HAMMER.

### 9. TRANSFORMERS

- DRY-TYPE TRANSFORMERS SHALL BE OF THE ENCLOSED VENTILATED TYPE WITH KVA AND VOLTAGE RATING AS CALLED FOR ON THE DRAWINGS AND WITH 150° CLASS H INSULATION AND MINIMUM OF SIX STANDARD FULL CAPACITY TAPS. SOUND LEVEL SHALL BE LOW AND INSTALLATION SHALL INCLUDE KORFUND OR EQUAL VIBRATION DAMPENING MOUNTS AND FLEXIBLE STEEL CONDUIT FOR PRIMARY AND SECONDARY. (MOUNT TRANSFORMER ON VIBRATION ISOLATORS). LOCATE TRANSFORMER AS NOT TO CAUSE SERVICING OR CLEARANCE DIFFICULTIES OF VIOLATIONS WITH
- B. COMPARABLE EQUIPMENT AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, SIEMENS OR CUTLER HAMMER.

- A. SWITCHES SHALL BE RATED 20 AMPERES 120/277 VOLT AC TYPE.
- B. SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR TO MOUNTING PLATE AND, AT DOORS. INSTALLED ADJACENT TO THE TRIM ON THE STRIKING SIDE OF THE DOOR, REGARDLESS OF THE LOCATION INDICATED ON THE DRAWINGS; THEREFORE, CHECK ALL DOOR SWINGS BEFORE INSTALLATION OF CONDUIT OUTLETS.

### RECEPTACLES

- RECEPTACLES SHALL BE SELECTED BY ARCHITECT AS MANUFACTURED.
- B. RECEPTACLES SHALL BE MOUNTED 18" ABOVE THE FINISHED FLOOR UNLESS OTHERWISE NOTED.

A. DEVICE PLATES SHALL BE AS SELECTED BY ARCHITECT AS MANUFACTURED BY EAGLE, BRYANT. G.E., HUBBELL, OR LEVITON. WALL PLATES SHALL BE SECURED WITH MATCHING SCREWS. ENGRAVED WALL PLATES SHALL HAVE BACK FILL.

### 13. DISCONNECT SWITCHES

- A. FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED BY CODE. DISCONNECT SWITCHES SHALL BE NEMA HEAVY DUTY TYPE AND UNDERWRITERS LABORATORIES LISTED, MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, CUTLER HAMMER OR SIEMENS.
- 14. GROUNDING
- A. CONTRACTOR SHALL INSTALL GROUNDING PER NEC. ARTICLE 250. EQUIPMENT GROUNDING SHALL USE ONLY APPROVED GROUNDING CLAMPS AND CONNECTORS AS MANUFACTURED BY PENN-UNION, BURNDY, OR O-Z MFG. COMPANY.
- GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC. ARTICLE 250 AND THE UTILITY COMPANY REGULATIONS. CONTRACTOR SHALL CONNECT THE GROUNDING ELECTRODE CONDUCTORS TO THE NEUTRAL BAR INSIDE THE MAIN PANEL.
- C. THE EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF A CONTINUOUS CONDUIT INSTALLATION AND A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR. THIS GROUNDING CONDUCTOR SHALL BE INSTALLED IN EVERY CONDUIT OR RACEWAY WITH THE FEEDER OR BRANCH CIRCUIT CONDUCTORS. THIS GROUNDING SHALL BE EXTENDED FROM THE HOUSING OF EVERY ELECTRICAL LOAD, THROUGH PANELBOARD STATIC GROUNDING BUSSES, TO THE STATIC GROUNDING BUS IN THE MAIN PANEL. THE GROUNDING BUS SHALL BE BONDED TO THE GROUNDING NEUTRAL BAR INSIDE THE MAIN PANEL.

### 15. LIGHTING FIXTURES

- A. ALL LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED BY ELECT. CONTR., UNLESS NOTED OTHERWISE, THIS CONTRACTOR SHALL INSTALL LIGHTING FIXTURES AND LAMPS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED BELOW, COMPLETE WITH HANGERS, PLASTER FRAMES AND ALL OTHER NECESSARY ACCESSORIES.
- B. LED LUMINAIRES AND DRIVERS

1. LED FIXTURES SHALL COMPLY WITH IES LM-79-08 APPROVED METHOD FOR MEASURING LUMEN MAINTENANCE OF LED LIGHT SOURCES, COMPLY WITH IES LM-80-08 APPROVED FOR ELECTRICAL AND PHOTOMETRIC MEASUREMENT OF SSL PRODUCT.

- 2. LED'S SHALL BE RESTRICTED OF HAZARDOUS SUBSTANCES DIRECTIVE (ROHS) COMPLIANT. 3. LED ARRAYS SHALL BE SEALED, HIGH PERFORMANCE, LONG LIFE TYPE; MINIMUM 70% RATED
- OUTPUT AT 50,000 HOURS.
- 4. LED LUMINAIRES SHALL DELIVER A MINIMUM OF 60 LUMENS PER WATT.
- 5. DRIVERS SHALL BE SOLID STATE AND ACCEPT 120 THROUGH 277 VAC AT 60 HZ INPUT.
- THE LED LIGHT SOURCE SHALL BE FULLY DIMMABLE WITH USE OF COMPATIBLE DIMMERS SWITCH DESIGNATED FOR LOW VOLTAGE LOADS.
- 7. LED COLOR TEMPERATURES: SHALL BE AS NOTED ON DRAWING.
- 8. LUMINAIRES SHALL HAVE INTERNAL THERMAL PROTECTION
- 9. INDOOR LUMINAIRES SHALL HAVE A MINIMUM CRI OF 85.

10. LUMINAIRES SHALL BE FULLY ACCESSIBLE FROM BELOW CEILING PLANE FOR CHANGING DRIVERS, POWER SUPPLIES AND ARRAYS.

### POWER SUPPLIES AND DRIVERS

1. SHALL HAVE A POWER FACTOR: 0.90 OR HIGHER.

CONTROLLER AND CONTROL SYSTEMS

1. THE CONTRACTOR SHALL ENSURE THAT EXTERNAL CONTROL EQUIPMENT IS COMPATIBLE WITH LED CONTROL REQUIREMENTS. PROVIDE CONNECTOR TYPES AND WIRING AS APPROPRIATE FOR UN-INTERRUPTED COMMUNICATION BETWEEN DEVICES, CONSIDERING DISTANCE MAXIMUMS, FIELD OBSTRUCTIONS, AND **ACCESSIBILITY** 3. ENSURE THAT CONNECTION POINTS ARE OPTICALLY ISOLATED FOR SYSTEM NOISE REDUCTION. FOR CONTROL COMPONENTS THAT ARE PART OF THE OVERALL AREA CONTROL SYSTEM. SEE DIMMING CONTROLS SPECIFICATIONS. COMPATIBILITY: CERTIFIED BY MANUFACTURE FOR USE WITH INDIVIDUALLY SPECIFIED LUMINAIRE AND INDIVIDUALLY SPECIFIED POWER SUPPLIES AND/OR

THIS CONTRACTOR SHALL VERIFY THE FINAL CEILING AND FINISH SCHEDULES TO INSURE THE PROPER INSTALLATION AND MOUNTING OF FIXTURES AND SHALL COORDINATE BEFORE MAKING

# SURFACE METAL RACEWAY

SURFACE METAL RACEWAY SHALL BE TWO PIECE #2100 AS MANUFACTURED BY WIREMOLD. ALL NECESSARY ACCESSORIES REQUIRED TO FIT THE CONFIGURATION SHOWN SHALL BE PROVIDED. RECEPTACLES SHALL BE 120 VAC, 23 AMPS, CATALOG NUMBER #2127GT.

- A. FLOOR BOXES SHALL BE WALKER FOUR COMPARTMENT, ADJUSTABLE COMBINATION BOX WITH TUNNEL AND 2 RECEPTACLE BRACKETS, CATALOG NUMBER RFB-4.
- B. COVERS, RECESSED ACTIVATION WITH CARPET TRIM AND WIRE MANAGEMENT BLOCKS, CATALOG

# C. TWO DUPLEX RECEPTACLES SHALL BE INSTALLED IN EACH FLOOR BOX.

FIRE ALARM SPECIAL CONDITIONS

PROVIDE ALL DEVICES REQUIRED FOR A COMPLETE SYSTEM

CIRCUITS PER C.E.C. 210.4(B).

### 1. GENERAL

A. GC TO COORDINATE ALL LOCAL FIRE ALARM REQUIREMENTS WITH LOCAL FIRE MARSHALL AND

# **GENERAL NOTES**

DIFFERENCE.

- EC TO PROVIDE HANDLE TIE ON ALL MULTIWIRE BRANCH
- 2. ALL SPARE CIRCUIT BREAKERS AND DISCONNECT SWITCHES SHALL BE LEFT IN THE OFF POSITION.
- EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OF ALL EQUIPMENT DELIVERED TO THE SITE PRIOR TO CONNECTION. EC SHALL NOTIFY OWNER OF ANY

ARCHITECT

RELEASED FOR CONSTRUCTION As Noted on Plans Review

Lee's Summit, Missour

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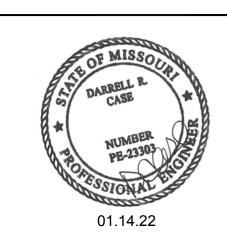
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**REVISIONS** REV. DATE ISSUE

DATE:

DRAWN BY

01.14.22

689411

**CHECKED BY:** DRC

PROJECT NUMBER:

**ELECTRICAL SPECIFICATIONS** 

# PLUMBING GENERAL NOTES

1. PLUMBING CONTRACTOR SHALL ABIDE BY THE LOCAL CODES AND ORDINANCES.

2. PLUMBING CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATIONS AND SIZES OF ALL UTILITIES, INCLUDING THE DEPTHS OF ALL BELOW GRADE SANITARY SEWERS, PRIOR TO START OF WORK. THIS DRAWING IS NOT INTENDED TO INDICATE ALL EXISTING UTILITIES.

3. CONTRACTOR SHALL BE FAMILIAR WITH LANDLORD'S STANDARDS, RULES AND REGULATIONS. OBTAIN COPY OF MALL'S CRITERIA PACKAGE AND CONFORM TO ALL REQUIREMENTS. ALL LANDLORD'S CRITERIA SHALL BE COMPILED WITH AND INCLUDED IN THIS BID.

4. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND FIELD VERIFY EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THE DRAWINGS AND IN THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. CONTRACTOR SHALL TAKE ALL INTERFERENCES INTO CONSIDERATION. PROVIDE ALL NECESSARY OFFSETS TO SUIT FIELD CONDITIONS AS REQUIRED.

5. CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTION POINTS, INCLUDING SIZES AND INVERTS WITH EXISTING FIELD CONDITIONS PRIOR TO START OF WORK.

6. MAKE ALL UTILITY CONNECTIONS AND INSTALLATIONS IN FULL ACCORDANCE WITH ALL UTILITY REGULATIONS. PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED BY UTILITY COMPANY. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS RELATED TO THE INSTALLATION OF THE

8. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS AND ALL AUTHORITIES HAVING JURISDICTION AND LANDLORD'S CRITERIA.

9. MAINTAIN ALL MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES FOR ALL FIXTURES AND EQUIPMENT. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF PLUMBING FIXTURES.

10. CUTTING OF ROOF AND FLASHING OF PIPE CURBS, SANITARY VENT THROUGH ROOF, ETC. SHALL BE COORDINATED WITH AND PERFORMED BY LANDLORD,S ROOFING CONTRACTOR, AT THIS CONTRACTOR'S EXPENSE, TO MAINTAIN ROOF WARRANT. ALL VENT OUTLETS SHALL BE A MINIMUM OF 10'-0" AWAY FROM OR 3'-0" ABOVE ANY AIR INTAKES ON HVAC

11. ALL HORIZONTAL FIRE PROTECTION SPRINKLER PIPING AND ALL ABOVE GRADE EXPOSED HORIZONTAL PIPING IS TO BE INSTALLED AS HIGH AS POSSIBLE.

12. CONTRACTOR SHALL COORDINATE TIMES TO WORK IN SPECIFIC AREA OF THE EXISTING BUILDING WITH THE BUILDING MANAGER AND WITH THE OCCUPANTS OF THE AREA AFFECTED BY THE WORK.

13. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS BEFORE COMMENCING ANY WORK.

14. SLEEVE AND SEAL ALL PIPE PENETRATIONS O WALLS AND FLOORS. APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATIONS AT FIRE RATED WALLS AND FLOORS, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE AND WATERPROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT WITH SILICONE CAULK.

15. ALL DOMESTIC COLD, HOT AND TEMPERED WATER PIPING TO BE INSULATED WITH RIGID FIBERGLASS INSULATION WITH TYPE "ASJ" JACKET. COLD WATER PIPES TO HAVE  $\frac{1}{2}$ " THICK INSULATION. DOMESTIC HOT AND TEMPERED WATER PIPES TO HAVE 1" THICK INSULATION.

16. THE P.C. IS TO INSPECT THE EXISTING SANITARY DRAIN TO VERIFY THAT IT HAS SUFFICIENT DEPTH FOR THE NEW WORK AND TO VERIFY THE DIRECTION OF FLOW. PRESSURE TEST THE EXISTING SANITARY DRAIN PRIOR TO THE START OF WORK. VERIFY THAT SEWER IS ACTIVE BY FLUSHING WITH WATER, A MINIMUM OF FIVE GALLONS PER MINUTE FOR FOUR HOURS PRIOR TO START OF WORK.

WATER HEATER SCHEDULE								
MARK	MFR	MODEL	STORAGE	RECOVERY	°F. RISE	VOLT/PHASE	HEAT INPUT	REMARKS
EWH-1	A.O. SMITH	DEL-50	50 GAL	41 GPH	100	208V/3PH	10 kW	1,2,3
SET WATER HEATER TEMPERATURE TO 140°f.     CONSULT MANUFACTURER PRIOR TO PURCHASE FOR EXACT MODEL AND ALL ACCESSORIES FOR A COMPLETE SYSTEM.								
3: CONFIRM VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE AND ROUGH IN.								

	PUMP SCHEDULE									
MARK	RK MFR MODEL GPM TDH OUTLET VOLT/PHASE REMARKS									
RP-1	RP-1 GRUNDFOS ALPHA 15-55 1 10 3/4" 120V/1PH 1,2									
	CONSULT MANUFACTURER PRIOR TO PURCHASE FOR EXACT MODEL AND ALL ACCESSORIES     FOR A COMPLETE SYSTEM.									
2. C	OORDINATE EX	(ACT VOLTAGI	E/PHASE W	ITH EC PR	IOR TO F	PURCHASE AN	ND ROUGH IN			

	WATER HAMMER ARRESTER SCHEDULE								
MFR: J.R.	SMITH	CONNECTION	_	REMARKS					
TAG	MODEL NO.	SIZE	UNIT RATING	NEW/AINO					
WHA-A	5005	3/4"	1-11	THREADED NIPPLE CONNECTION					
WHA-B	5010	1"	12-32	THREADED NIPPLE CONNECTION					
WHA-C	5020	1"	33-60	THREADED NIPPLE CONNECTION					
1. BRANCH LINE LESS THAN 20 FEET: THE PREFERRED PLACEMENT LOCATION IS AT THE END OF THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES.  UP TO 20 FT.  WHA  FIXTURE  (TYP.)									
2. BRANCH LINES GREATER THAN 20 FEET: SIZE EACH W.H.A. FOR SUM OF BRANCH W.S.FU., PLACE W.H.A. AS SHOWN.									
		— "I /2"   —							
		LIZ	WHA-\(\)	WHA					

NOMINAL PIPE DIAMETER NPS (IN)		MAXIMUM SUPPORT SPACING (FEET)						
	CAST IRON	COPPER	STEEL	SCH 40 PVC		SCH 40	) CPVC	
				60°F	73°F	100°F	120°F	140°F
1/2		8		-	5	4.5	4.5	4
3/4		9		5	5	5	4.5	4
1	5	9		5.5	5.5	5.5	5	4.5
1 1/4	5	12	7	5.5	5.5	5.5	5.5	5
1 1/2	5	12	9	6	6	5.5	5.5	5
2	5	13	10	6	6	6	5.5	5
2 1/2	5	14	11	7	7	6.5	6.5	6
3	5	15	12	7	7	7	7	6
4	5	17	12	7.5	7.5	7.5	7	6.5
6	5	21	12	8.5	8.5	8	7.5	7
8	5	24	12	9	9.5	9.5	8.5	7.5
10	5	26	12	10	10.5	10.5	9.5	8
12	5	30	12	11.5	11.5	10.5	10	8.5

TABLE TO CALCULATE SUPPLY FIXTURE UNITS						
PLUMBING FIXTURE	SUPPLY FIXTURE UNITS	NUMBER OF FIXTURES	TOTAL SUPPLY FIXTURE UNITS			
WATER CLOSET (2 NEW, 2 EXISTING)	2.5	4	10.0			
AVATORIES (2 NEW, 2 EXISTING)	1	4	4			
MOP SINK	3	1	3			
DRINKING FOUNTAIN/ WATER COOLER	0.5	1	0.5			
SHOWER	2	2	4			
		PLY FIXTURE NITS	21.5			
			WATER PIPE SIZE= 1"			

PLUMBING FIXTURE	DRAINAGE FIXTURE UNITS	NUMBER OF FIXTURES	TOTAL DRAINAGE FIXTURE UNITS
WATER CLOSET FLUSH TANK (2 NEW, 2 EXISTING)	4	4	16
LAVATORIES (2 NEW, 2 EXISTING)	1	4	4
MOP SINK	3	1	3
DRINKING FOUNTAIN/ WATER COOLER	0.5	1	0.5
SHOWER/TRENCH DRAIN	2	2	4
FLOOR DRAIN (EMERGENCY)	0	4	0
	_	DRAINAGE RE UNITS	27.5

PLUMBING SYMBOLS LEGEND

- CA — COMPRESSED AIR PIPING

— CD — CONDENSATE DRAIN PIPING

COLD WATER PIPING

SANITARY DRAIN PIPING

SANITARY VENT PIPING

PIPE TURNING DOWN

VTR VENT THROUGH ROOF

——— PIPE TURNING UP

UNION

AFF ABOVE FINISHED FLOOR

GRADE CLEAN OUT

BALANCE VALVE

POINT OF CONNECTION

— CHECK VALVE

CO CLEAN OUT

BALL VALVE

GCO

HOT WATER PIPING (140°F)

HOT WATER RETURN PIPING

UNDERGROUND SANITARY PIPING

PRESSURE REGULATING VALVE (PRV)

− G — NATURAL GAS PIPING

FOUNDRY SCHEDULE

DWGS

SHOWN

SHOWN

DWGS

5. PROVIDE CLEANOUT PLUG WITH STAINLESS STEEL ACCESS COVER

PLUMBING CONTRACTOR SHALL USE FOUNDRY FIXTURES FROM A SINGLE MANUFACTURER

FIXTURE

TD-1

FD-1

FLOOR TRENCH

FLOOR DRAIN

(LIGHT DUTY)

WCO WALL CLEANOUT

REMARKS:

CAST IRON BODY

FLOOR CLEANOUT

CAST IRON BODY
NICKEL BRONZE COVER

CAST IRON BODY

TO MAINTAIN UNIFORMITY THROUGHOUT THE SYSTEM.

1. PROVIDE WITH TRAP PRIMER CONNECTION

3. PROVIDE WITH VANDAL PROOF SCREWS

2. PROVIDE WITH SEDIMENT BUCKET

4. PROVIDE WITH FULL GRATE

7" CHROME STRAINER

STAINLESS STEEL BODY

SLOTTED STAINLESS STEEL COVER OUTLET SIZE MANUFACTURER

ZURN

ZURN

ZURN

ZURN

MODEL# REMARKS

ZS880-36 2,4

Z415-SZ1 1,2,3

Z1400-BZ1

Z1446

			, ,			PLUMBI	NG FIXTURE SCHED	DULE	
MARK	FIXTURE	SAN.	VENT	C.W.	H.W.	GPM/GPF	MANUFACTURER	MODEL#	REMARKS
MS-1	MOP SINK MOLDED STONE	2"	1-1/2"	3/4"	3/4"		SWANSTONE	MS-2424	PROVIDE CHICAGO FAUCET: 897-RCF, INTEGRAL VACUUM BREAKER - VERIFY ACCESSORIES WITH OWNER.
SH-1	SINGLE SHOWER W/ ROUGH IN	3"	2"	1/2"	1/2"		DELTA	T13H125-05/ R10000-UNWS	ADA, AND SHOWER WITH OPTIONAL 36" SLIDE BAR - 1.5 GPM WITH INTEGRAL THERMOSTATIC MIXING VALVE AND BACKFLOW PREVENTER.
WC-1	FLOOR MOUNTED WATER CLOSET FLUSH TANK PRESSURE ASSIST ADA COMPLIANT ELONGATED BOWL	3"	2"	1/2"		1.1	AM. STANDARD	2467.100	FURNISH WITH CHURCH OPEN FRONT SEAT MODEL NO. 5901, 110 A.D.A. COMPLIANT COLOR TO BE WHITE.
LAV-1	WALL HUNG LAVATORY WITH CONCEALED ARM FLOOR PEDESTAL CARRIER ADA COMPLIANT	2"	1 1/2"	1/2"	1/2"		AM. STANDARD	0355.012	ADA, PROVIDE AMERICAN STANDARD METERING FAUCET: 1340.225 WITH METAL DRAIN AND BRASS P-TRAP.
			'			ADDITION	AL REMARKS		

TRUEBRO LAVGUARDS OR EQUIVALENT. WATCO IDEALLAV LAV DRAIN GRID DRAIN WITH INTERNAL STOPPER WITH P-TRAP WRAPPED IN TRUEBRO LAV GAURD IS

	FOUN	ΓΑΙΝ SCHEI	ACCEPTABI	LE MANUFACTUREF	RS AND MODELS			
MARK	FIXTURE	SAN.	VENT	C.W.	VOLT/PHASE	MANUFACTURER	MODEL#	REMARKS
DF-1	ELECTRIC WATER COOLER ADA COMPLIANT DUAL HEIGHT WITH BOTTLE FILLER	2"	1-1/2"	1/2"	120V/1PH	ELKAY	LZSTL8WSSK	1,2
1. PR	REMARKS  1. PROVIDE WITH BOTTLE FILLER 2. PROVIDE WITH ALL ANTI-MICROBIAL COMPONENTS							

AS Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
05/05/2022

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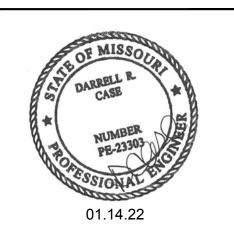
CONSULTANT



St. Louis, MO 63026 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498

SEAL



SUMMIT CREST PLAZA
3508 SW MARKET STREET

RE\	REVISIONS							
REV.	DATE	ISSUE						

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01.14.22

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COVER

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F 636.349.1730

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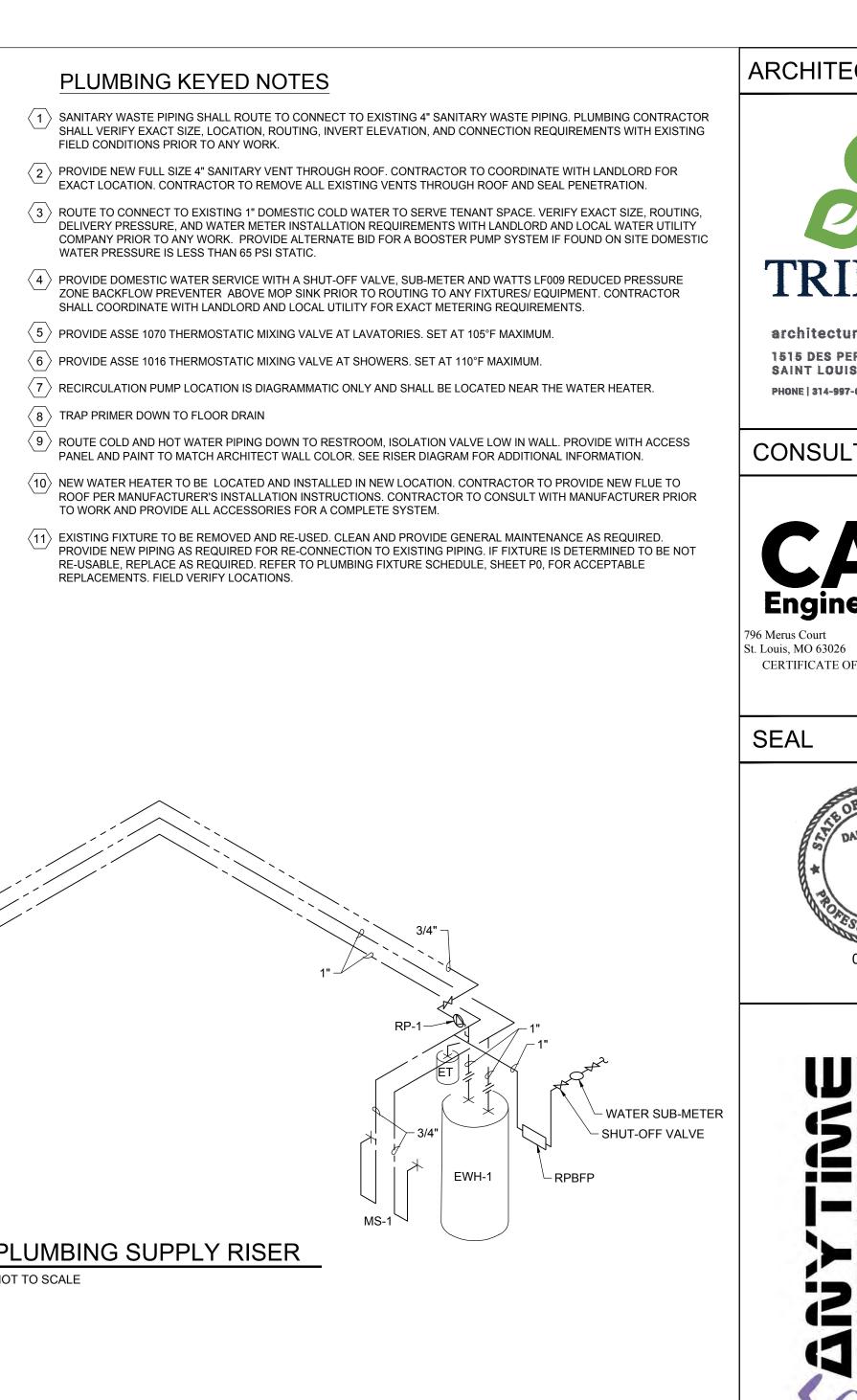
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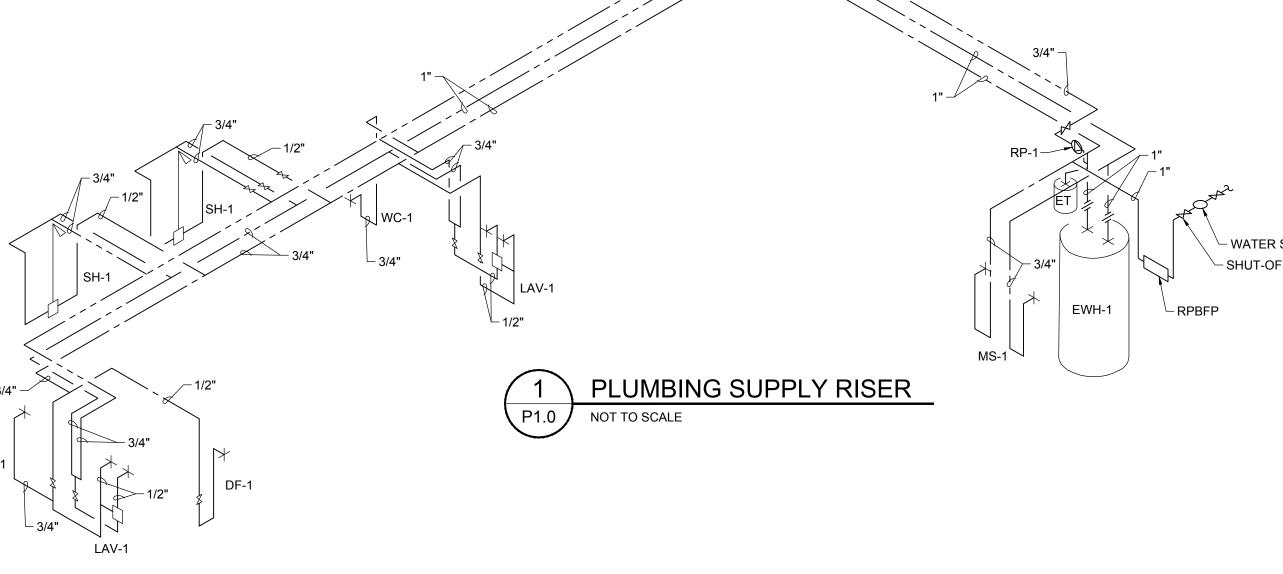
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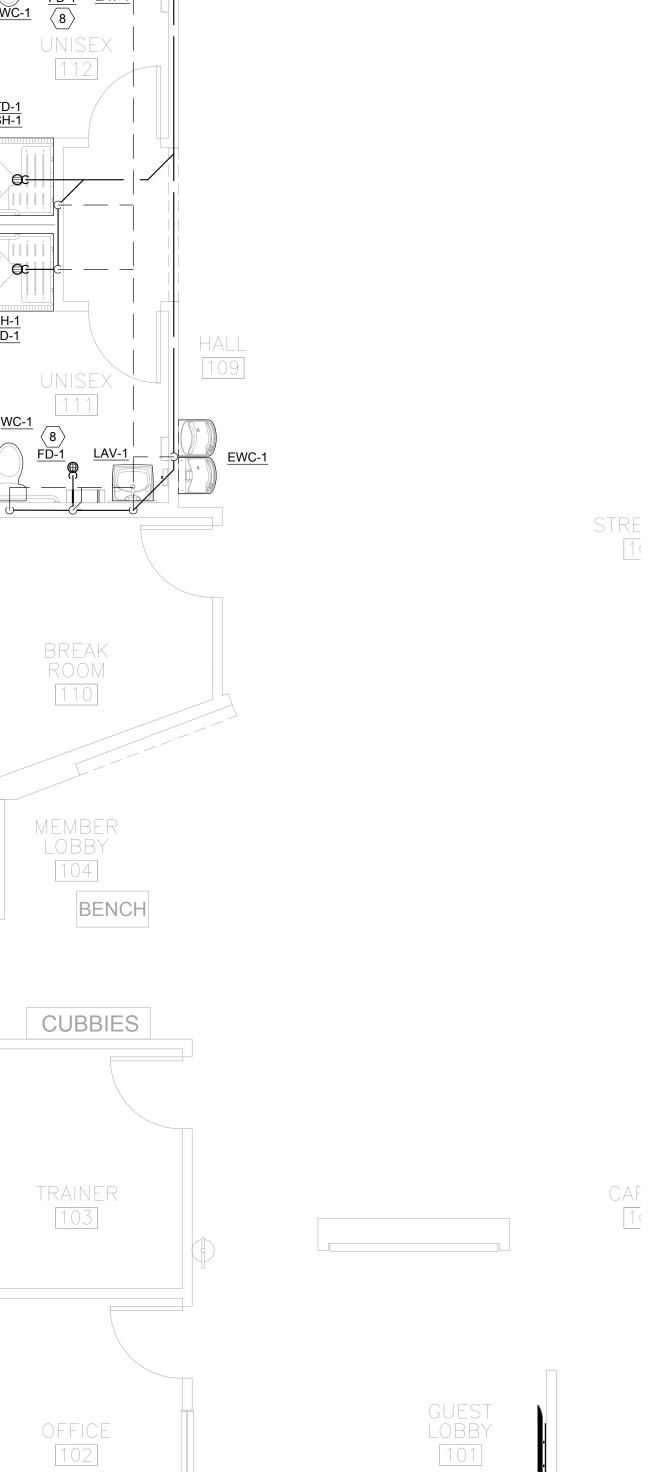
PLAN



DWV RISER

NOT TO SCALE





FLOOR PLAN SUPPLY
SCALE: 1/4" = 1'-0"

LAV-1 (EX.) (11)

MEMBER LOBBY 104

CUBBIES

TRAINER [103]

OFFICE [102]

FLOOR PLAN DWV

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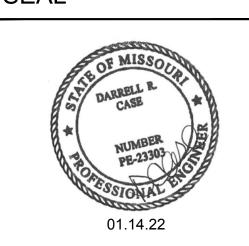
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'96 Merus Court St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

SEAL

IF HORIZONTAL BRANCH IS LESS THAN 20'

LONG, PROVIDE ONE WHA AT END OF LINE





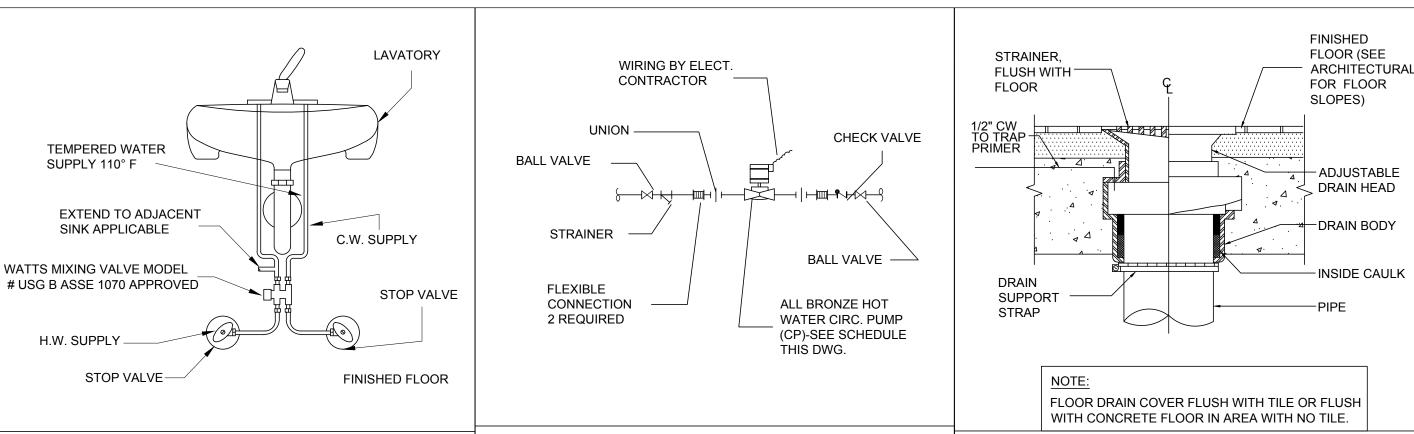
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**PLUMBING DETAILS** 



### FLOOR CLEAN-OUT DETAIL SCALE: NONE

WITH NO TILE.

NOTE: CLEANOUT COVER FLUSH WITH TILE OR

FLUSH WITH CONCRETE FLOOR IN AREA

COVER -

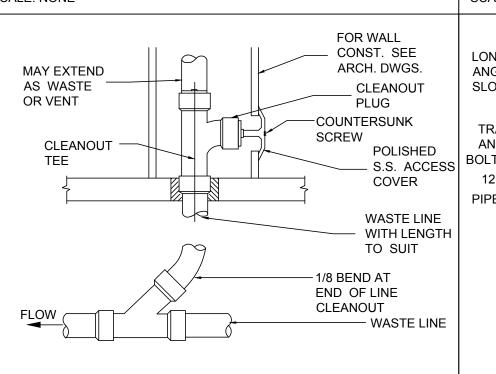
FINISHED\_

CLEANOUT PLUG

AND BODY. SEE

SPECS.

FLOOR



- ADJUSTING

-1/8 BEND FULL

SIZE, 4" MAX.

-PLUG IF END OF

COLLAR

# MIXING VALVE DETAIL

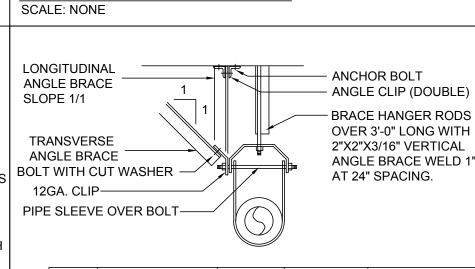
SEISMIC BRACING

SUPPLY PIPING -

INSULATED

SCALE: NONE

VENT PIPE



PIPE SIZE	* ANGLE BRACE	BOLT TO ANGLE	ANGLE CLIPS	CON. ANCHO OR INSERT		
2-1/2"	2"X2" 16GA.	3/8"	3"X3"X1/4"	3/8"		
3",4"	2-1/2"X2-1/2"16GA.	3/8"	3"X3"X1/4"	1/2"		
5",6"	2-1/2"X2-1/2"16GA.	1/2"	5"X3"X1/2"	3/4"		
8"	3"X3" 12GA.	5/8"	2-5"X3"X1/2"	2-5/8"		
10"	3"X3" 12GA.	3/4"	2-5"X3"X1/2"	2-3/4"		
* 1 "X1 "X12GA. CHANNEL MAY BE USED.						

### CIRCULATING PUMP DETAIL SCALE: NONE

VENT THROUGH ROOF DETAIL

LAVATORY

DWV TRAP ADAPTOR AS

ESCUTCHEON PLATE, (TYP.

AT WASTE AND WATER

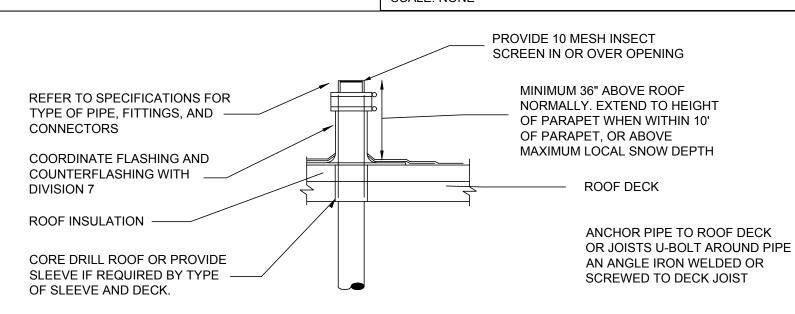
WALL PENETRATIONS).

NEEDED. PROVIDE

SUPPLY

SCALE: NONE

# FLOOR DRAIN DETAIL SCALE: NONE



REFER TO PLANS FOR VTR PIPE SIZE(S) AND LOCATIONS(S). LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. LOCATE VTR MINIMUM 18" FROM PARAPET, EXPANSION JOINT, ROOF DRAIN, ADJACENT WALL, EQUIPMENT CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF

SLIP JOINT

VENT PIPE INSIDE BUILDING PER SPECIFICATIONS

TABLES SHOWN ABOVE. PROVIDE ACCESS PANEL FOR SERVICING OR REPLACEMENT, WHERE REQUIRED. HAMMER ARRESTER DETAIL SCALE: NONE

INSTALL PER PDI

STANDARDS AND

INSTRUCTIONS

SINGLE FIXTURE

PDI PIPE FIXTURE

B 3/4" 12-32

D | 1-1/4" | 61-113

E | 1-1/2" | 114-154

| SIZE | UNIT LOAD

1/2" 1-11

1" | 33-60

MANUFACTURER'S

SIZE

/- HOT OR COLD WATER SUPPLY

IF BRANCH IS GREATER THAN 20' LONG,

SIZED FOR HALF THE FIXTURE UNITS

MULTIPLE FIXTURES

VALVE WATER CLOSET | 10 |

FIXTURE

LAVATORY/SINK

JANITOR'S SINK

SHOWER/BATHTUB

TANK WATER CLOSET

FIXTURE UNIT TABULATION

PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR

APPROVED EQUIVALENT WITH PISTON AND 0-RING CONSTRUCTION, HAVING PDI #WH- 201, ASSE #1010 AND ANSI

#A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN

LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE

COLD HOT

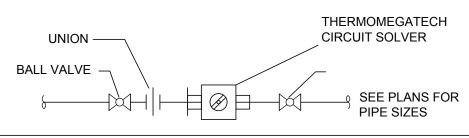
1.5 1.5

PROVIDE ANOTHER WHA IN MIDDLE, EACH

### WALL CLEAN-OUT DETAIL SCALE: NONE

- 1. FURNISH AND INSTALL AS INDICATED ON THE PLANS, CIRCUIT SOLVER IN THE DOMESTIC HOT WATER PIPING. CIRCUIT SOLVER SHALL BE SELF CONTAINED AND FULLY AUTOMATIC WITHOUT ADDITIONAL PIPING OR CONTROL MECHANISMS. VALVE SHALL BE A CIRCUIT SOLVER AS MANUFACTURED BY THERM-OMEGA-TECH. INC., OR EQUIVALENT. A. CIRCUIT SOLVER SHALL REGULATE THE FLOW OF RECIRCULATED DOMESTIC HOT WATER BASED ON WATER TEMPERATURE ENTERING CIRCUIT SOLVER REGARDLESS
- OF SYSTEM OPERATING PRESSURE. 1.1. WHEN FULLY CLOSED CIRCUIT SOLVER SHALL BYPASS A MINIMUM FLOW TO MAINTAIN DYNAMIC CONTROL OF THE RECIRCULATING LOOP AND PROVIDE A MEANS FOR SYSTEM SANITIZING.
- 1.2. CIRCUIT SOLVER SHALL BE FACTORY ADJUSTABLE FROM 105 F (40.5C) TO 140F (60C) AS REQUIRED BY PROJECT CONDITIONS (OTHER SETPOINTS AVAILABLE, CONSULT FACTORY) A. CIRCUIT SOLVER SHALL MODULATE BETWEEN OPEN AND
- CLOSED POSITION WITHIN A 10F (5.5C) RANGE. 1.3. CIRCUIT SOLVER SHALL BE AVAILABLE IN SIZES RANGING FROM 1/2 INCH NPT TO 2" NPT.
- 2. CIRCUIT SOLVER BODY AND ALL INTERNAL COMPONENTS SHALL BE CONSTRUCTED OF STAINLESS STEEL WITH MAJOR COMPONENTS CONSTRUCTED OF TYPE 303 STAINLESS STEEL
- 2.1. CIRCUIT SOLVER SIZES ½ INCH THROUGH 2 INCH SHALL BE RATED TO 200 PSIG MAXIMUM WORKING PRESSURE. I. ALL CIRCUIT SOLVERS SHALL BE STANDARD TAPERED FEMALE PIPE THREAD, NPT.
- 2.2. ALL CIRCUIT SOLVERS SHALL BE RATED TO 300F (148.9C) MAXIMUM WORKING TEMPERATURE. 2.3. CIRCUIT SOLVER SHALL BE ANSI/AWWA C800 COMPLIANT.
- 2.4. ALL CIRCUIT SOLVERS SHALL BE NSF-61 COMPLIANT WITH ZERO LEAD CONTENT FOR USE IN ALL DOMESTIC WATER SYSTEMS. 2.5. THERMAL ACTUATOR SHALL BE SPRING OPERATED AND SELF
- CLEANING, DELIVERING CLOSING THRUST SUFFICIENT TO KEEP ORIFICE OPENING FREE OF SCALE DEPOSITS. I. THERMAL ACTUATOR SHALL BE RATED FOR A MINIMUM OF 200,000 CYCLES. 3. INSTALLATION OF CIRCUIT SOLVER SHALL BE MADE BY QUALIFIED
- TRADESMEN. INSTALL CIRCUIT SOLVER IN EACH DOMESTIC HOT WATER RETURN PIPING BRANCH BEYOND LAST HOT WATER DEVICE IN THAT BRANCH. A. PROVIDE SUITABLE LINE SIZE ISOLATION VALVES, UNIONS, AND STRAINER AS INDICATED IN PIPING DETAIL SHOWN ON THE DRAWINGS.
- 3.1. PROVIDE SUITABLE ACCESS PANEL AS REQUIRED IN NON-ACCESSIBLE CEILINGS AND WALLS.

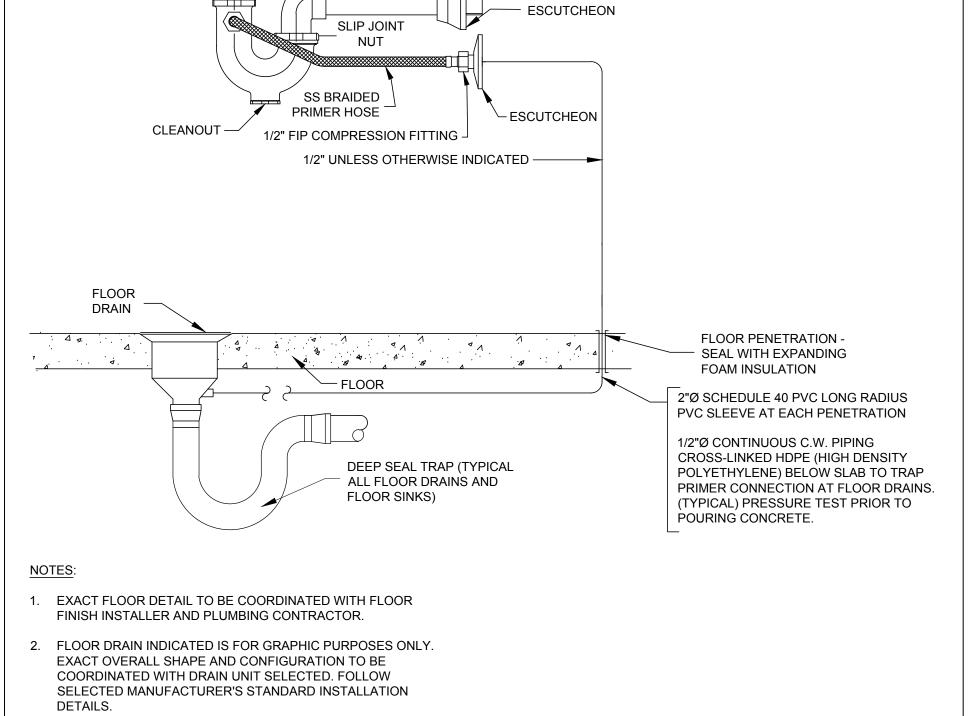
SCALE: NONE



# TYPICAL LAVATORY & SINK CONNECTION DETAIL

(REF. ARCH

DWG'S).



TRAP PRIMER DETAIL

ALL EXPOSED PIPING, VALVES, EQUIPMENT, ECT. TO BE A.D.A. COMPLIANT.

BALANCING VALVE DETAIL

A.D.A. LAVATORY 2" WASTE, (MIN.), OFFSET, USE AS FOR LOCATION REQUIRED TO AND ROUTING ACHIEVE A.D.A. OF WASTE, VENT COMPLIANCE & WATER PIPING REF. PLANS. LOCATE P-TRAP TO PROVIDE FOR MIN. KNEE CLEARANCE OF 8"(PER A.D.A.). HEAVY CHROME PLATED BRASS P-TRAP W/ CLEANOUT PLUG AND ADAPTOR 2"x1-1/2" FOR AS NEEDED (SINKS AND LAVS); SANITARY TAPPED TEE. AND A.D.A. CONSTRUCTION

ADAPTOR AND

**BRASS ESCUTCHEON** 

SUPPORT BRACKETS

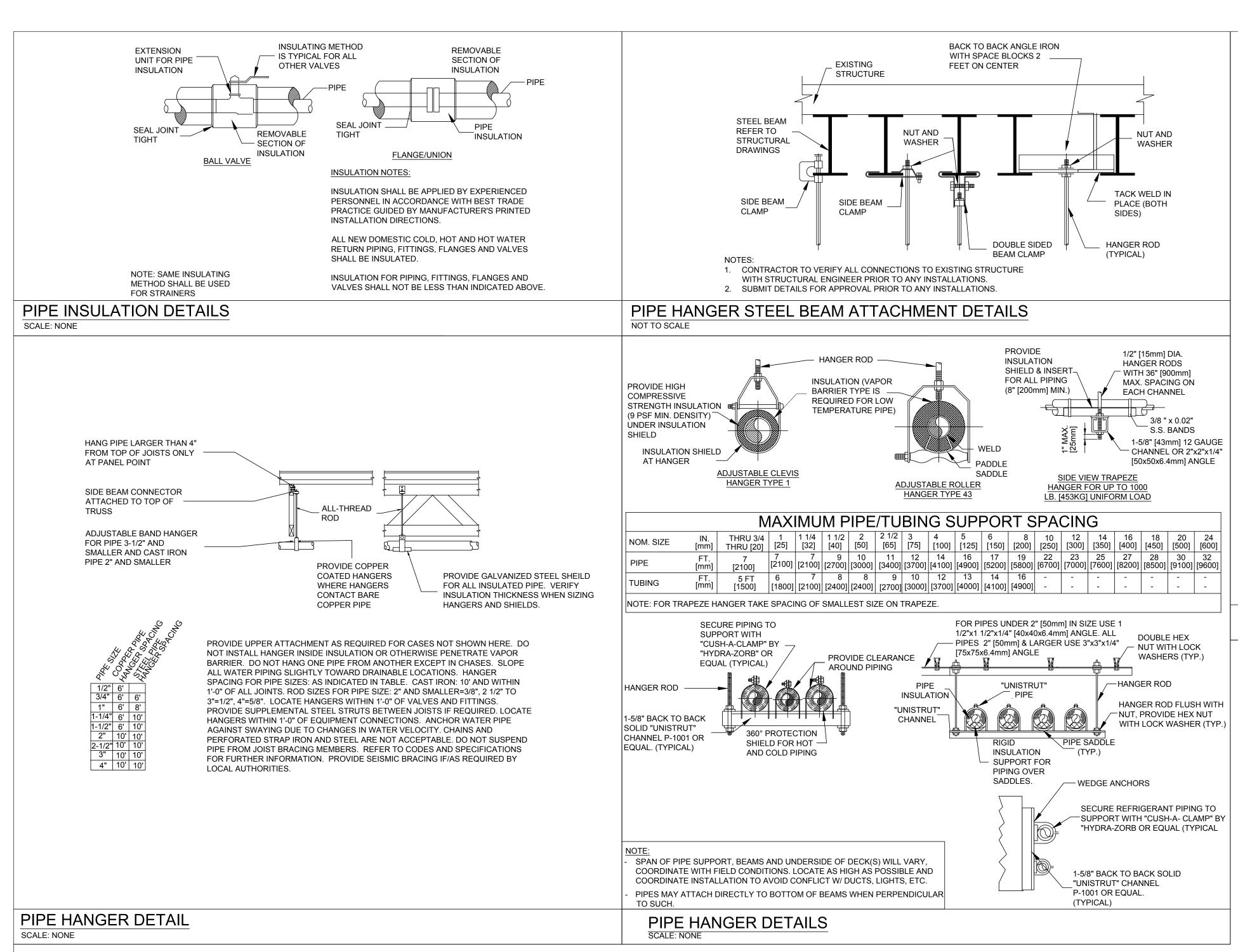
OR APPROVED EQUAL

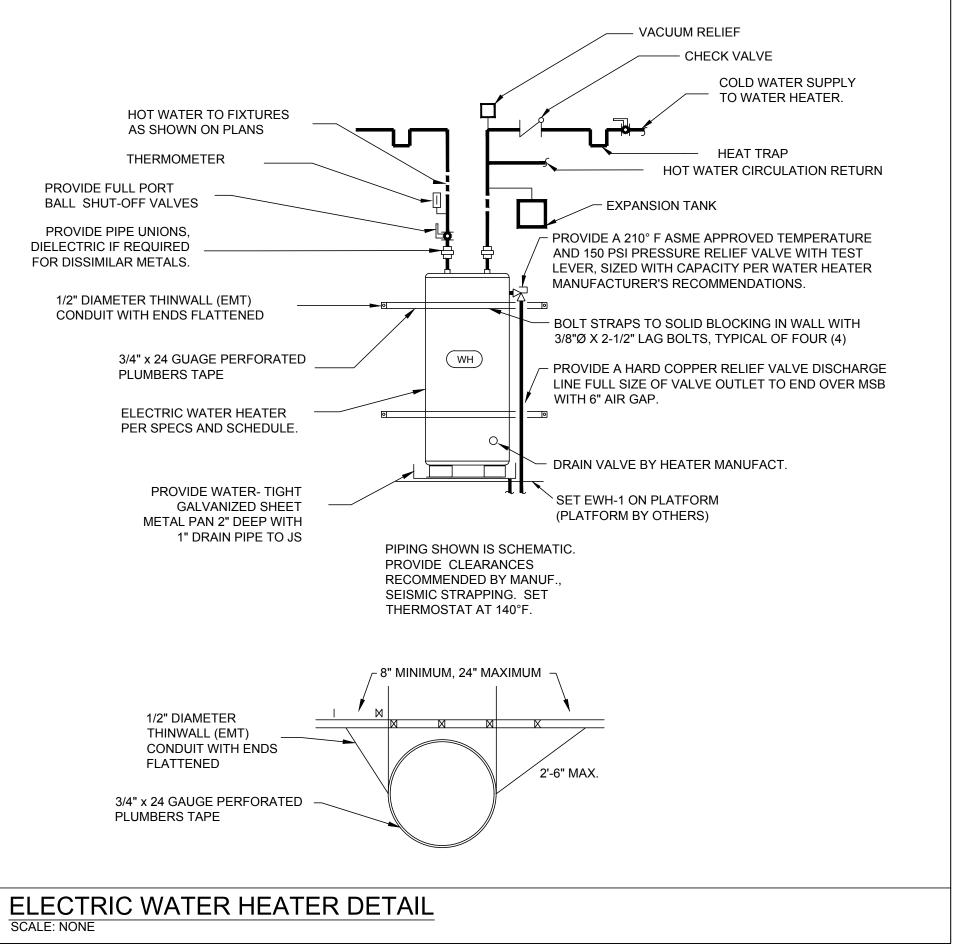
SUMMER POSIFIX

**HEAVY CHROME PLATED** BRASS ELBOW, INSULATE ALL EXPOSED SINK WASTE AND WATER OUTLET PIPING AND STOP VALVES, AS PER SPECIFICATIONS

STRAINER

3. PROVIDE TEMPORARY PROTECTION CAP AT DRAIN\PIPE UNTIL CONCRETE INFILL AROUND DRAIN IS COMPLETED.





As Noted on Plans Review

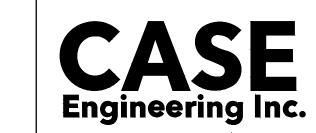
Development Services Department
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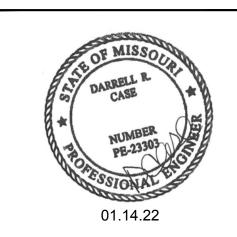
TRILEAF

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DATE: 01.14.22

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PROJECT NUMBER: 689411

PLUMBING DETAILS

P3

THE "ARCHITECTURAL GENERAL CONDITIONS" GOVERN WORK UNDER THIS

BEFORE SUBMITTING A PROPOSAL, THIS CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS. IT IS EXPRESSLY UNDERSTOOD THAT THIS PROPOSAL IS BASED ON THE ABOVE REQUIREMENTS AND THAT IT COVERS EVERYTHING NECESSARY TO DO AND COMPLETE THE WORK.

NO DEVIATION FROM THE DRAWINGS AND /OR SPECIFICATIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF ARCHITECT OR ENGINEER. THIS CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTORS TO ALLOW FOR THE INSTALLATION OF THEIR WORK AS WELL AS HIS OWN.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK FITTING IN PLACE WITHOUT CONFLICT WITH THE OTHER TRADES, WHERE PROPER PLANNING COULD  $\,\,$  SPACING AND ALLOWANCE FOR THERMAL EXPANSION. **AVOID INTERFERENCE** 

NOTHING IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE INTERPRETED TO INSTITUTE. CONFLICT WITH ANY CITY OR PROVINCIAL LAW, REGULATION, CODE, ORDINANCE, RULING, OR FIRE UNDERWRITER'S REQUIREMENT APPLICABLE TO THIS CLASS OF

SHOULD THE DRAWINGS AND/OR SPECIFICATIONS CONFLICT WITH SUCH LAWS OR ORDINANCES, THE CONFLICTING PORTION OF THE WORK SHALL BE INSTALLED FILLED WITH GRAVEL. IF TRENCHES ARE DEEPER THAN BOTTOM OF FLOORING OR WAFER W/LOCK LEVER. STRICTLY IN ACCORDANCE WITH SUCH LAWS AND ORDINANCES WITHOUT EXTRA CLOSER THAN THREE FEET (3'0") TO FOOTING THEY MUST BE FILLED WITH

THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND COMPACTED TO 95% STANDARD PROCTOR. INSPECTIONS REQUIRED FOR THIS INSTALLATION OF HIS WORK.

THE INFORMATION GIVEN HEREIN AND ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED, BUT ITS EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL EXAMINE THE LOCATIONS AND VERIFY ALL MEASUREMENTS, FREE FROM CLODS, AND STONES THOROUGHLY TAMPED TO A DEPTH OF 12" AS ALL PIPING SYSTEMS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC ONLY.

THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, RAISED AND DROPS IN PIPING AND DUCTWORK AS REQUIRED BY BUILDING CONDITIONS AT NO OR SAGS TO THE PIPING SYSTEMS THAT OCCUR FROM THE IMPROPER

MECHANICAL DRAWINGS SHALL NOT BE USED FOR GENERAL CONSTRUCTION DIMENSIONS OR FOR TYPE OF MATERIAL USED. FOR EXACT BUILDING LAYOUT THE ARCHITECTURAL DRAWINGS.

SHOP OR INSTALLATION DRAWINGS, FOUNDATION PLANS, EQUIPMENT OR APPARATUS DRAWINGS SHALL BE FURNISHED BY THIS CONTRACTOR. THESE DRAWINGS SHALL BE CLEARLY MARKED INDICATING WHICH ITEMS ARE TO BE SUPPLIED AND SHALL STATE CAPACITIES, SIZES AND GENERAL DESCRIPTION OF ALL EQUIPMENT. ANY CHANGES FROM THE SPECIFIED ITEMS SHALL BE NOTED ON THE SUBMITTALS.

SHOP DRAWINGS OF SPECIAL APPARATUS OR EQUIPMENT WHICH IS TO BE FABRICATED INDIVIDUALLY FOR THIS PROJECT AND IS NOT DESCRIBED BY STANDARD MANUFACTURER'S DRAWINGS OR BULLETINS SHALL BE SUBMITTED FOR PROCESSING BEFORE FABRICATION.

THESE DRAWINGS SHALL BE SUBMITTED IN A TIMELY MANNER.

T SHALL BE THIS CONTRACTORS RESPONSIBILITY TO MAINTAIN LIAISON WITH ALL ALL PATCHING SHALL BE NEATLY FINISHED TO THE SATISFACTION OF THE PARTIES CONCERNED WITH THE MATERIAL SUBMITTED. THIS CONTRACTOR SHALL NOT PURCHASE ANY EQUIPMENT UNTIL SHOP DRAWINGS HAVE BEEN PROCESSED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES ACCRUED FROM THE RETURN OF FIXTURES PURCHASED PRIOR TO THE REVIEW OF SHOP DRAWINGS AND THAT ARE NOT APPROVED.

THIS CONTRACTOR SHALL SUBMIT NO DRAWINGS WITHOUT NOTATION INDICATING DATE OF CONTRACTOR'S REVIEW AND SIGNATURE OF CHECK FOR CONTRACTOR TOGETHER WITH CONTRACTOR'S NAME AND PROJECT

ARCHITECT'S PROCESSING WILL NOT CONSTITUTE A COMPLETE CHECK BUT WILL INDICATE ONLY THAT GENERAL METHOD OF CONSTRUCTION AND DETAILING IS

ARCHITECT'S PROCESSING WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS SINCE THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS AND DESIGNS OF ADEQUATE CONNECTIONS, DETAILS AND SATISFACTORY CONSTRUCTION OF ALL WORK, AS WELL AS FURNISHING MATERIALS AND WORKMANSHIP REQUIRED BY DRAWINGS AND SPECIFICATIONS

WHICH MAY NOT BE INDICATED ON THE SUBMITTALS WHEN APPROVED.

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING ENGINEER 13. MOTORS, STARTERS AND DISCONNECTS REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. REVIEW OF A SPECIFIC ITEM SHALL NOT INCLUDE REVIEW OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. THE CONTRACTOR IS RESPONSIBLE FOR: FOUIPMENT VOLTAGES AND DIMENSIONS TO BE CONFIRMED AND CORRELATED WITH ALL DISCIPLINES PRIOR TO PURCHASE: INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESSES OR TO THE MEANS, METHODS, TECHNIQUES. SEQUENCES AND PROCEDURES OF CONSTRUCTION; COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES AND PERFORMING ALL WORK IN A SAFE AND SATISFACTORY MANNER.

6. SUBSTITUTIONS OF EQUIPMENT OR MATERIAL

THE BRAND NAMES OF EQUIPMENT OR MATERIALS SPECIFIED HEREIN SHALL ESTABLISH QUALITY, CAPACITY, TYPE AND DIMENSIONS TO BE INCLUDED IN THE

APPROVAL OF SUBSTITUTED ITEMS WILL BE BASED ON ABILITY AND CAPACITY TO PERFORM FUNCTION SERVED, QUALITY AND AVAILABILITY OF PARTS AND SERVICE, QUALITY OF EQUIPMENT, DELIVERY SCHEDULE, ETC. THE ARCHITECT SHALL REVIEW ALL SUCH REQUESTS BUT RESERVES THE SOLE RIGHT OF JUDGEMENT TO APPROVE OR REJECT THE PROPOSED SUBSTITUTIONS.

ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL NOT CAUSE ADDITIONAL COST. ANY CHANGES OF PIPING, DUCTWORK, ELECTRICAL CONTROLS OR INSTALLATION REQUIRED BECAUSE OF THE SUBSTITUTION OR EQUIPMENT SHALL BE PAID FOR BY THIS CONTRACTOR PROPOSING THE SUBSTITUTION.

**ERECTION OF APPARATUS** 

ALL WORK SHALL BE DONE UNDER THE PERSONAL SUPERVISION OF THIS CONTRACTOR WHO SHALL PROVIDE A COMPETENT FOREMAN TO LAY OUT ALL WORK. ALL WORK SHALL BE LAID OUT WITH DUE REGARD FOR THE SPACE REQUIREMENTS OF THE OTHER CONTRACTORS. THIS CONTRACTOR SHALL REPORT ANY CONFLICTS OR DIFFICULTIES IN REGARD TO THE INSTALLATION IMMEDIATELY.

WHERE CROWDED LOCATIONS EXIST OR WHERE THERE IS A POSSIBILITY OF CONFLICT BETWEEN TRADES, THIS CONTRACTOR SHALL MAKE COMPOSITE DRAWINGS SHOWING THE EXACT LOCATIONS OF PIPES, DUCT, CONDUIT AND EQUIPMENT. DRAWINGS SHALL BE BASED ON FIELD MEASUREMENTS AND AFTER CONSULTATION AND AGREEMENT BETWEEN THE TRADES, SHALL BE APPROVED BY ARCHITECT AND ENGINEER BEFORE INSTALLATION OF THE WORK.

EQUIPMENT OF A TYPE TO REQUIRE REPLACEMENT, SERVICING, ADJUSTING OR MAINTENANCE SHALL BE LOCATED TO ALLOW EASY ACCESS AND SPACE FOR REMOVAL OF INTERNAL ASSEMBLIES, IT REQUIRED.

### 8. <u>EXCAVATION AND BACKFILL</u>

THIS CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED TO INSTALL PIPES AND FLEXIBLE PIPE CONNECTIONS SHALL BE RESISTOFLEX #R6904 OR APPROVED EQUIPMENT SHOWN ON THE PLANS OR REQUIRED FOR PROPER OPERATION. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH EARTH AND THOROUGHLY TAMPED. UTILITIES SERVICES LINES SHALL BE INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE BACKFILLING.

INSTALL PLASTIC PIPE AND FITTINGS IN STRICT ACCORDANCE WITH THE INSTALLATION RECOMMENDATIONS OF THE PIPE AND FITTINGS MANUFACTURER, 17. VALVES APPENDIX X1 OF ASTM D2265 (STORAGE AND INSTALLATION PROCEDURES FOR PLASTIC DRAIN, WASTE, AND VENT PIPING) AND FOR BURIED PIPE ASTM D2321 (STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS). SUCH INSTRUCTIONS SHALL INCLUDE BUT ARE NOT LIMITED TO CUTTING, SOLVENT CEMENTING AND PRIMING, JOINTS, CONNECTIONS, TRANSITIONS, ALIGNMENT AND MANUFACTURERS, SUCH AS HAMMOND, NIBCO-SCOTT AND/OR JENKINS WILL BE GRADE, TRENCHING, BEDDING, BACKFILL AND COMPACTION, SUPPORTS AND

CAST IRON PIPING TRENCHING SHALL BE IN ACCORDANCE TO THE CAST IRON SOIL PIPE AND FITTINGS HANDBOOK ISSUED BY THE CAST IRON SOIL PIPE

THE BOTTOM OF TRENCHES SHALL BE TAMPED HARD AN GRADED TO SECURE THE REQUIRED FALL. ROCK, WHERE ENCOUNTERED SHALL BE EXCAVATED TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE PIPE, AND BEFORE THE PIPE IS LAID, THE SPACE BETWEEN BOTTOM PIPE AND ROCK SURFACE SHALL BE COHESIVE SOIL AND COMPACTED TO 95% OF MAXIMUM DENSITY, STANDARD PROCTOR, ASTM D- 698. ALL OTHER EXCAVATIONS UNDER FLOOR SLABS

WHEN EXCESS DIRT HAS BEEN REMOVED, THE TRENCH SHALL BE BROUGHT TO THE REQUIRED LEVEL WITH SAND AND GRAVEL FIRMLY COMPACTED.

TRENCHES AND EXCAVATION SHALL BE BACKFILLED IN 6" LAYERS OF EARTH, DISTANCES, ELEVATIONS AND EXISTING PIPE SIZES BEFORE STARTING THE WORK ABOVE THE PIPE. AFTER THAT DEPTH HAS BEEN REACHED, BACKFILLING SHALL BE DONE IN 12" LAYERS, THOROUGHLY TAMPED.

> THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO ANY DAMAGES EXCAVATION AND BACKFILL METHODS.

**EQUIPMENT SUPPORTS** 

DIMENSIONS AND BUILDING MATERIAL USED, THIS CONTRACTOR SHALL REFER TO ANY STRUCTURAL STEEL MEMBERS REQUIRED TO ADAPT THE EQUIPMENT AND PIPING AS FURNISHED BY THIS CONTRACTOR, TO THE BUILDING STEEL OR STRUCTURE, SHALL BE INCLUDED IN THE BID OF THE CONTRACTOR FURNISHING THE EQUIPMENT OR PIPING. HANGING OF ALL EQUIPMENT AND REQUIRED SUPPORTING STEEL AND BRACING SHALL BE FURNISHED BY THE CONTRACTOR WHO SUPPLIES THE EQUIPMENT.

THIS CONTRACTOR SHALL INCLUDE ALL CUTTING, PATCHING AND PAINTING OF PATCHED AREAS REQUIRED FOR AND RESULTING FROM THE INSTALLATION OF ALL OF THIS CONTRACTOR'S WORK, EXCEPT WHERE NOTED OTHERWISE.

ALL OPENINGS AROUND PIPE PENETRATIONS THROUGH SMOKE OR FIRE-RATED FLOORS, CEILINGS OR WALLS SHALL BE SEALED AIRTIGHT WITH MATERIAL HAVING A RATING EQUAL TO THE MATERIAL OF THE WALL, CEILING AND/OR FLOOR

ARCHITECT.

11. ACCESS PANELS

THIS CONTRACTOR SHALL LOCATE AND FURNISH FOR INSTALLATION BY THE GENERAL CONTRACTOR, ALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES, AND THE PROPER SERVICING OF EQUIPMENT AND LINES INSTALLED

ALL PANELS SHALL BE MILCOR, STYLE "M" FOR MASONRY, "A" FOR ACOUSTICAL TILE AND "K" FOR PLASTER; EXCEPT FOR FIRE-RATED UL 1-1/2 HOUR AND "B" LABEL ACCESS PANELS SHALL BE FURNISHED IN FIRE-RATED WALLS AND CEILINGS AS INDICATED ON THE DRAWINGS. ACCESS DOORS SHALL BE 12" X 12"

12. DIELECTRIC UNIONS

FOR THE PREVENTION OF ELECTROLYTIC CORROSION AT CONNECTIONS BETWEEN PIPE OF DISSIMILAR METALS OR BETWEEN PIPE AND EQUIPMENT CONNECTIONS OF DISSIMILAR METALS, PROVIDE DIELECTRIC UNIONS OR

UNLESS SPECIFIED TO BE FURNISHED WITH EQUIPMENT, ALL MOTOR STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

14. <u>JOINTS AND FITTINGS</u>

THREADS ON SCREWED PIPE SHALL BE STANDARD, CLEAN BUTT AND TAPERED. PIPE SHALL BE REAMED OF BURRS AND KEPT CLEAN OF SCALE, DIRT AND SHAVINGS. TREADS SHALL BE MADE WITH FLAKED GRAPHITE AND LUBRICATING OIL OR APPROVED PIPE COMPOUND ON THE MALE THREAD ONLY.

COPPER-TO-STEEL AND COPPER-TO-BRASS JOINTS SHALL BE MADE WITH SILVER SOLDER. ALL OTHER COPPER-TO-COPPER JOINTS ABOVE GROUND SHALL BE MADE WITH LEAD FREE SOLDER. COPPER PIPE SHALL BE CUT SQUARE, BURRS REMOVED AND CARE SHALL BE GIVEN TO KEEP THE LINES FREE OF DIRT AND MOISTURE. ALL TUBING AND FITTINGS SHALL BE THOROUGHLY CLEANED. DIRECTION OF FLOW.

WELDED PIPE SHALL HAVE BUTT WELDED SINGLE "V" TYPE JOINTS FOR WHICH PIPE HAS BEEN BEVELED TO 45 DEGREES. WELD SHALL BE ONE-FOURTH GREATER THICKNESS THAN THE PIPE. CONNECTIONS TO EQUIPMENT, ACCESSORIES, ETC. SHALL BE MADE BY MEANS OF FLANGES AND/OR ADAPTERS.

UNIONS SHALL BE PROVIDED AT EACH SCREWED VALVE AND UNIONS OR FLANGES AT EACH EQUIPMENT CONNECTION

15. EXPANSION JOINTS

FURNISH AND INSTALL FLEXONICS EXPANSION JOINTS IN PIPING SYSTEM WHERE SHOWN OR NECESSARY FOR EXPANSION AND CONTRACTION.

EXPANSION JOINTS IN PIPE 4" AND GREATER SHALL BE THE PACKLESS TYPE WITH AROUND PIPE IN UNFINISHED ROOMS. STAINLESS STEEL BELLOWS AND HAVE WELDED OR FLANGED END. JOINTS SHALL HAVE TRAVERSE AS INDICATED ON THE PLANS. EXPANSION JOINTS SHALL BE OF 23. FIRE STOPPING THE CONTROLLED FLEXING TYPE.

EXPANSION JOINTS IN COPPER PIPE UNDER 4" IN SIZE SHALL BE OF THE COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL BELLOWS AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

EXPANSION JOINTS IN STEEL PIPE UNDER 4" IN SIZE SHALL BE OF THE COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL ELBOWS AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

PROVIDE GUIDES ON EACH SIDE OF EXPANSION JOINT, AT 4 PIPE DIAMETERS, 14 PIPE DIAMETERS, AND A THIRD GUIDE AS RECOMMENDED BY THE MANUFACTURER.

16. PIPE FLEXIBLE CONNECTIONS

APPLICABLE CODE AUTHORITIES. EQUAL FLEXIBLE CONNECTIONS MADE FROM TEFLON.

PROVIDE FOR MOVEMENT IN PIPING BY USE OF SWING JOINTS AT CONNECTION OF ALL BRANCHES TO MAINS AND RISERS. ALL BRANCHES FROM MAINS AND RISERS SHALL HAVE 1/4" CLEARANCE BETWEEN PIPE INSULATION AND SLEEVE TO PERMIT PIPE MOVEMENT.

THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL VALVES OF ONE MANUFACTURER, FIGURE NUMBER AND TYPE THROUGHOUT THE ENTIRE INSTALLATION OF THE WORK, UNLESS OTHERWISE SPECIFIED. THE FOLLOWING NUMBERS ARE FROM THE CRANE CATALOG. EQUAL VALVES OF REPUTABLE CONSIDERED EQUIVALENT

ALL VALVES SHALL BE BUILT FOR A MINIMUM OF 125 PSIG WORKING PRESSURE. ISOLATION VALVES SHALL BE PROVIDED ON ALL INDIVIDUAL FIXTURES AND

CHECK VALVES 2-1/2" AND SMALLER SHALL BE #36 (SCREWED ENDS) OR #1342

(SOLDER-JOINT ENDS) SWING-TYPE WITH BRONZE BODY AND BRONZE TRIM. BUTTERFLY VALVES 2" AND LARGER SHALL BE #12F, IRON BODY, CAST-IRON

BALL VALVE UP TO 3" IN SIZE SHALL BE APOLLO SERIES #70 BRONZE VALVE WITH CHROME-PLATED BALL AND TEFLON SEAT.

GAS LINE COCKS UP TO 4" SHALL BE #320. 1/2 PSI FOR INDOOR APPLIANCE

SHUTOFF SHALL CONFORM TO CGA 91-002 AND ASME B16.44 HOSE END VALVES SHALL BE #438 GATE VALVES WITH HOSE END NIPPLES.

CONNECTIONS SHALL CONFORM TO ANSI Z21.15 AND CSA 9.1, 5 PSI FOR INDOOR

18. PIPE SLEEVES AND COLLARS

HIS CONTRACTOR SHALL LAY OUT ALL HIS WORK AND SET SLEEVES IN NEW CONSTRUCTION AS CONCRETE FORMS AND WALL ARE ERECTED SO AS TO BE ABLE TO INSTALL HIS WORK WITHOUT CUTTING OR BREAKING OF FLOORS OR WALLS. ALL SLEEVES FOR INSULATED PIPING SHALL BE LARGE ENOUGH TO ALLOW INSULATION TO PASS THROUGH SLEEVE.

ALL SLEEVES PASSING THROUGH FLOORS WHICH ARE WATERPROOFED SHALL BE COPPER TUBING SLEEVES EXTENDING 1" ABOVE FINISHED FLOOR. ALL OTHER SLEEVES SHALL BE 24 GAUGE GALVANIZED PIPES AND SLEEVES TO BE FILLED WITH MASTIC AND MUST BE WATERTIGHT.

ALL SLEEVES PASSING THROUGH INNER WALLS SHALL BE STANDARD PIPE THIMBLES EQUAL TO THE THICKNESS OF THE WALL.

SPACES BETWEEN PIPES AND SLEEVES THROUGH OUTSIDE WALLS, ABOVE GRADE, SHALL BE CAULKED WITH CAULKING COMPOUND; THOSE BELOW GRADE 26. TESTING AND BALANCING SHALL BE MADE WATERTIGHT

SPACE AROUND ALL PIPING THROUGH FIRE OR SMOKE RATED PARTITIONS OR FLOORS SHALL BE SEALED AIRTIGHT WITH MATERIALS OR EQUIPMENT AS SPECIFIED UNDER FIRESTOPPING.

ALL PIPE PENETRATIONS OF SLABS ON GRADE SHALL BE WRAPPED WITH #15 BUILDING FELTS OR FOAM WRAP.

A. PIPE HANGER AND SUPPORT PRODUCTS INSTALLATION

- a. VERTICAL PIPING: MSS TYPE 8 OR 42 CLAMPS. INDIVIDUAL, STRAIGHT, HORIZONTAL PIPING RUNS: 100 FEET AND LESS: MSS TYPE 1, ADJUSTABLE, STEEL CLEVIS HANGERS. LONGER THAN 100 FEET: MSS TYPE 43, ADJUSTABLE ROLLER HANGERS. LONGER THAN 100 FEET IF INDICATED: MSS TYPE 49, 28. GUARANTEE SPRING CUSHION ROLLS.
- c. MULTIPLE, STRAIGHT, HORIZONTAL PIPING RUNS 100 FEET OR LONGER:MSS TYPE 44, PIPE ROLLS. SUPPORT PIPE ROLLS ON
- d. BASE OF VERTICAL PIPING: MSS TYPE 52, SPRING HANGERS. B. SUPPORT VERTICAL PIPING AND TUBING AT BASE AND AT EACH
- C. ROD DIAMETER MAY BE REDUCED ONE SIZE FOR DOUBLE-ROD
- HANGERS, TO A MINIMUM OF 3/8 INCH D. INSTALL HANGERS FOR ALL PIPING PER MSS SP-69, MANUFACTURERS MANUALS AND AS PER HANGER SUPPORT DETAIL ON DRAWINGS
- E. INSTALL SUPPORTS FOR VERTICAL COPPER TUBING EVERY 10 FEET. F. INSTALL SUPPORTS FOR VERTICAL STEEL PIPING EVERY 15 FEET. G. SUPPORT PIPING AND TUBING NOT LISTED IN THIS ARTICLE ACCORDING TO MSS SP-69 AND MANUFACTURER'S WRITTEN

20. DAMAGE BY LEAKS

INSTRUCTIONS.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO THE GROUNDS. WALKS, ROADS, ALL BUILDING COMPONENTS AND FINISHES, PIPING SYSTEMS, ELECTRICAL SYSTEMS AND THEIR EQUIPMENT AND CONTENT, CAUSED BY LEAKS IN THE PIPING SYSTEMS BEING INSTALLED OR HAVING BEEN INSTALLED HEREIN. ALL REPAIRS WILL BE MADE AT THIS CONTRACTOR'S EXPENSE.

FURNISH AND INSTALL BRADY #B-350 THIN FILM OR APPROVED EQUAL PIPE MARKERS. MARKERS SHALL BE 1-1/8" HIGH FOR PIPES 3" AND UNDER AND 2-1/4" HIGH FOR PIPES OVER 3". MARKERS SHALL INDICATE TYPE OF SERVICE AND

PIPE MARKERS SHALL BE LOCATED:

 AT EQUIPMENT CONNECTIONS AT ACCESS DOORS

 AT BRANCH MAINS ON ALL ACCESSIBLE PIPE A MAXIMUM OF 75' BETWEEN MARKERS AT ALL PENETRATIONS ON EITHER SIDE OF PENETRATION

22. FLOOR, WALL AND CEILING PLATES

PIPES PASSING THROUGH FLOORS AND FINISHED CEILINGS, FITTED WITH CHROME- PLATED PLATES OR ESCUTCHEONS LARGE ENOUGH TO COMPLETELY CLOSE OPENING AROUND PIPE OR PIPE COVERING AND FLOOR SUPPORT IN THE CASE OF VERTICAL PIPING, SECURELY HELD IN PLACE; CAULK WATERTIGHT

THE PENETRATIONS OF FIRE AND/OR SMOKE RATED WALLS OR FLOORS SHALL BE ELEMENT AND/OR VIEGA, PROPRESS 304 OR 316 STAINLESS 1/2-INCH THROUGH PROTECTED BY A UL APPROVED MATERIAL TO RETAIN THE INTEGRITY OF THE TIME-RATED CONSTRUCTION BY MAINTAINING AS EFFECTIVE BARRIER AGAINST THE SPREAD OF FLAME. SMOKE AND GASES. IT SHALL BE USED IN ALL DUCT CABLE, CONDUIT AND PIPING PENETRATIONS THROUGH FLOOR SLABS AND TIME-RATED WALLS, AND/OR FLOORS. THE RATING OF THE FIRESTOPPING SHALL EQUAL THE RATING OF THE TIME-RATED ASSEMBLY.

FIRESTOPPING MATERIAL SHALL BE 3M FIRE BARRIER SEALING SYSTEM OF APPROVED EQUAL. FIRESTOPPING MATERIAL SHALL CONSTITUTE ONE OR MORE OF THE FOLLOWING PRODUCTS:

CAULK: CP-25

 PUTTY: #303 WRAP/STRIP: FS195

 COMPOSITE SHEET: CS195 PENETRATING SEALING SYSTEMS: 7900 SERIES

INSTALLATION OF FIRESTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH

AND IN STRICT CONFORMITY WITH MANUFACTURER'S PRINTED INSTRUCTIONS AS

TO SURFACE PREPARATION, INSTALLATION AND QUALITY CONTROL. AREAS OF WORK SHALL REMAIN ACCESSIBLE UNTIL INSPECTION AND APPROVAL BY THE

ON INSULATED PIPES, THE FIRE-RATING CLASSIFICATION SHALL NOT REQUIRE REMOVAL OF THE INSULATION.

ADJOINING PIPE AND TO PRESENT OFFSETS IN FLOW LINE. ALL PIPE SHALL BE SUBMIT MANUFACTURER'S PRODUCT DATA, LETTER OF CERTIFICATION OR LAID WITH THE BELLS UPHILL. CERTIFIED LABORATORY TEST REPORT THAT THE MATERIAL OR COMBINATION OF MATERIALS MEET THE REQUIREMENTS SPECIFIED IN ASTM E814 AND ARE SO CLASSIFIED IN UL'S BUILDING MATERIALS DIRECTORY. MATERIALS SHALL MEET AND BE ACCEPTABLE FOR USE BY ALL MODEL BUILDING CODES. MATERIALS SHALL MEET THE REQUIREMENTS OF NFPME61- LIFE SAFETY CODE AND NFPA 70 NATIONAL ELECTRICAL CODE.

SUBMIT SHOP DRAWINGS, PRODUCT DATA, CERTIFICATES AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUBMIT MANUFACTURER'S PRODUCT DATA FOR ALL MATERIALS AND PREFABRICATED DEVICES, PROVIDING DESCRIPTIONS SUFFICIENT FOR IDENTIFICATION AT THE JOB SITE. INCLUDE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.

SUBMIT SHOP DRAWINGS SHOWING PROPOSED MATERIAL. REINFORCEMENT. ANCHORAGE, FASTENINGS, AND METHOD OF INSTALLATION. CONSTRUCTION DETAILS SHALL ACCURATELY REFLECT ACTUAL JOB CONDITIONS.

24. <u>CLEANUP AND ADJUSTMENT</u>

ALL PARTS WORK LEFT CLEAN: EQUIPMENT, FIXTURES, VALVES, PIPES AND FITTINGS CLEANED OF GREASE AND METAL CUTTINGS. ANY DISCOLORATION OR OTHER DAMAGE TO PORTIONS OF BUILDING, ITS FINISH OR FURNISHING DUE TO THIS CONTRACTORS FAILURE TO PROPERLY CLEAN INTERIOR OF PIPING, REPAIRED AT THIS CONTRACTOR'S EXPENSE. ALL AUTOMATIC CONTROL DEVISES ADJUSTED FOR PROPER OPERATION. ALL SURPLUS MATERIALS AND ANY RUBBISH REMOVED AS IT ACCUMULATES. ALL EQUIPMENT LEFT IN SAFE, PROPER AND AS DIRECT AS POSSIBLE, AVOIDING ALL UNNECESSARY OFFSETS. THE OPERATING CONDITION.

DAMAGE TO ANY PORTIONS MUST BE REPAIRED OF THE PART REPLACED BY THIS CONTRACTOR AND ALL PARTS LEFT WITHOUT DENTS, SCRATCHES, THROUGH THE FINISH PAINT, LOOSE PLASTER, STAINS OR OTHER BLEMISHES.

25. PIPE TESTING AND START-UP

ALL PIPING TO BE TESTED IN ACCORDANCE WITH THE FOLLOWING: WATER - 100 PSI WATER PRESSURE

ALL TESTING MUST HOLD FOR AT LEAST 24 HOURS WITHOUT LOSS OF PRESSURE NOT ALL CLEANOUTS LOCATIONS MAY BE SHOWN ON THE DRAWING. OR VACUUM. ALL CONCEALED PIPING SHALL BE TESTED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO COVERING. BEFORE STARTING ANY SYSTEM, ALL EQUIPMENT SHALL BE LUBRICATED PER MANUFACTURERS REQUIREMENTS BY THIS CONTRACTOR. TEST ENTIRE BUILDING SYSTEMS UNDER PIPE SHALL BE MADE WITH "Y" BRANCHES TO "TY" BRANCHES WHEREVER THOROUGHLY PACKED WITH WATERPROOF SEALANT AND THE REMAINING SPACE FULL LOAD CONDITIONS FOR A PERIOD OF NOT LESS THAT ONE (1) WEEK DURING WHICH TIME THE OPERATING PERSONNEL SHALL BE FULLY INSTRUCTED IN THE OPERATION AND MAINTENANCE OF THE PLANT. AFTER THE PLANT IS IN FULL OPERATION, THIS CONTRACTOR IS TO FURNISH WHATEVER ADDITIONAL SERVICE NO CEILING. IS REQUIRED TO RECALIBRATE AND RESET CONTROLS, VALVES, BALANCING COCKS, ETC. TO ENSURE PROPER OPERATION OF THIS SYSTEM.

THIS CONTRACTOR SHALL AT THE TIME OF INSTALLATION ENSURE THAT ALL DEVICES TO COMPLETE TESTING AND BALANCING AS DIRECTED HEREIN ARE FURNISHED AND INSTALLED DURING FABRICATION AND INSTALLATION OF WORK THIS WORK SHALL BE PERFORMED PRIOR TO TURNOVER TO BUILDING OCCUPANT CLEANOUT WITH BODY TO MATCH THE PIPING MATERIAL, CAST BRASS SCORIATED AND WITH AMPLE TIME TO MAKE ANY NECESSARY REPAIRS OR CHANGES TO ACHIEVE A PROPERLY OPERATING SYSTEM.

27. <u>SEISMIC RESTRAINTS ON MECHANICAL EQUIPMENT</u>

ALL PLUMBING EQUIPMENT SHALL BE PROVIDED WITH SEISMIC RESTRAINING SERVICES AS REQUIRED BY LOCAL BUILDING CODES. CONTRACTOR SHALL HAVE LOCAL BUILDING OFFICE REVIEW EACH PIECE OF EQUIPMENT WHEN INSTALLED AND THE CONTRACTOR SHALL INSTALL ALL REQUIRED TIE DOWN, ANCHORS, STRAPS OR OTHER DEVICES REQUIRED.

THIS CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, MATERIALS, AND LABOR FURNISHED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL REPAIR OR REPLACE ANY EQUIPMENT OR MATERIAL WHICH IS DEFECTIVE OR IMPROPERLY INSTALLED. IN ADDITION, THIS CONTRACTOR SHALL ASSUME FULL ABS AND FOAM CORE PVC ARE NOT ACCEPTABLE MATERIALS. RESPONSIBILITY FOR ANY DAMAGE TO THE BUILDINGS AND ITS CONTENTS OF OTHER EQUIPMENT, CAUSED BY DEFECTS OR IMPROPER INSTALLATION OF EQUIPMENT OR MATERIALS INSTALLED UNDER THIS SECTION OF THE

29. <u>TEMPORARY WATER</u>

TEMPORARY WATER SERVICE (IF REQUIRED) TO THE BUILDING SHALL BE PROVIDED BY THIS CONTRACTOR TO THE BUILDING FOR CONSTRUCTION PURPOSES. THIS CONTRACTOR TO MAINTAIN WATER SERVICE AS REQUIRED DURING CONSTRUCTION.

30. <u>DOMESTIC WATER SERVICE</u>

THIS CONTRACTOR SHALL COORDINATE EXACT AVAILABLE DELIVERY PRESSURE AND PROVIDE ALTERNATE FEE FOR A PRESSURE BOOSTING SYSTEM IF PRESSURE IS LESS THAN 65PSI STATIC. PROVIDE PRESSURE REDUCING VALVE WITH STRAINER IN SERVICE LINE IF REQUIRED BY LOCAL CODES OR PRESSURE IS INSTALLED IN CONCEALED PLACES SUCH AS IN PARTITIONS OR WALLS ETC. ABOVE 80 PSI.

JOINTS SHALL BE CLEANED AND DEBURRED AS RECOMMENDED BY THE MANUFACTURER AND FEDERAL, STATE, AND LOCAL CODES AND PRESS FITTINGS ARE AN ACCEPTABLE IF ALLOWED BY LOCAL AHJ. WHERE PRESS FITTING S ARE NOT ALLOWED SOLDERED AS LISTED BELOW. FLUX SHALL BE NON-CORROSIVE. VICTAULIC GROUVED COUPLINGS ARE ACCEPTABLE ALTERNATE IF ALLOWED BY LOCAL AHJ.

ABOVE GRADE - WHERE FITTINGS ARE SOLDERED BOTH FITTINGS AND TUBING SHALL BE CLEANED AS DESCRIBED ABOVE. UNDER NO CIRCUMSTANCES SHALL DISSIMILAR METALS COME INTO DIRECT CONTACT WITH COPPER TUBING; E.G., GALVANIZED STRAPPING, HANGERS, OR CLAMPS TO SECURE THE TUBING.

BELOW GRADE, OR FLOOR SLAB ON EARTH OR STONE FILL - HIGH TEMPERATURE, SOLDER, 1200 DEG. F OR GREATER MELTING POINT. NOTE: WATER PIPE TO BE PROPERLY SECURED AND ALIGNED SO AS NOT TO AND WOODEN CRATES DURING CONSTRUCTION.

EXERT VERTICAL OR HORIZONTAL STRESSES ON THE SEATING OF THE MATING

(MALE AND FEMALE) SURFACES OF THE UNIONS. MATERIALS - UNDERGROUND: TYPE "K" COPPER TUBE, SOFT TEMPER MATERIALS - ABOVEGROUND: TYPE "L" COPPER TUBE, HARD DRAWN. ALTERNATE MATERIALS - PEX-A PIPING IS AN ACCEPTABLE ALTERNATE IF NOT INSTALLED IN A PLENUM AND APPROVED BY LOCAL CODE OFFICIALS. VIEGA, PROPRESS COPPER 1/2-INCH THROUGH 4-INCH WITH EPDM SEALING

4-INCH WITH EPDM OR FKM SEALING ELEMENT IS ACCEPTABLE IF ALLOWED BY

31. STERILIZATION OF DOMESTIC WATER SYSTEM

LOCAL CODE

OF ANY DEBRIS AND THOROUGHLY STERILIZED WITH A SOLUTION CONTAINING SHALL REMAIN IN THE SYSTEM FOR TWO (2) HOURS DURING WHICH TIME ALL VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER STERILIZATION, THE SOLUTION SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUE CHLORINE CONTENT IS NOT GREATER THAN THE CHLORINE LEVEL OF THE AVAILABLE WATER SUPPLY.

STERILIZATION SHALL BE PERFORMED PRIOR TO TURNOVER TO OCCUPANT AS TO FOR FITTINGS SHALL HAVE THE SAME COMPONENTS RATINGS AS LISTED ABOVE. NOT ALLOW FOR THE WATER SYSTEM TO REMAIN STAGNANT FOR LONGER THAN

THIS CONTRACTOR SHALL HAVE THE WATER TESTED AND APPROVED BY THE

32. SANITARY SEWERS

THIS CONTRACTOR SHALL CONNECT SANITARY SEWER AS INDICATED ON THE DRAWINGS. VERIFY DIRECTION OF FLOW PRIOR TO ANY ROUGH-IN WORK.

EACH PIPE SHALL BE LAID TO THE LINE AND GRADE INDICATED ON THE PLANS AND SUCH A MANNER AS TO FORM A CLOSE CONCENTRIC JOINT WITH THE

THE SUB-GRADES SHALL BE KEPT FREE FROM WATER WHILE PIPES ARE BEING LAID. ALL PIPE SHALL BE LAID WITH ENDS ABUTTING AND TRUE TO LINE AND GRADE. THEY SHALL BE FITTED AND MATCHED SO THAT THEY WILL FORM A SEWER WITH A SMOOTH AND UNIFORM INVERT.

EACH JOINT SHALL BE CLEANED AS IT IS LAID AND ALL BELLS SHALL BE CLEANED BEFORE PIPES ARE JOINED.

PVC SEWER PIPE MAY BE USED IN LIEU OF THAT SPECIFIED ABOVE IF ALLOWED BY LOCAL CODES.

ABS AND FOAM CORE PVC ARE NOT ACCEPTABLE MATERIALS.

SDR 35 IS NOT ACCEPTABLE FOR UNDER BUILDING USE.

33. WASTE, SOIL, DRAIN AND VENT PIPING

THE DRAINS, SOIL WASTE AND VENT PIPE AND FITTINGS INCLUDING EXTENSIONS TO SEWERS SHALL BE OF THE SIZES INDICATED ON THE DRAWINGS. PIPE AND FITTINGS TO BE, CYLINDRICAL AND FREE FROM CRACKS OR OTHER DEFECTS.

ALL TRENCHES TO BE DUG WITH GRADUAL FALL, THE PIPING TO BE STRAIGHT AND FREE FROM ANY SAGS.

THE ARRANGEMENT OF THE SYSTEM SHALL BE AS SHOWN ON THE DRAWINGS

STACKS SHALL BE FIRMLY SECURED IN POSITION WITH WROUGHT IRON CLAMPS

ALL CHANGES IN DIRECTION OF SOIL OR WASTE PIPE SHALL BE MADE BY MEANS OF "Y" BRANCHES AND 1/8 BENDS. NINETY DEGREE SHORT TURN FITTINGS WILL NOT BE PERMITTED EXCEPT TO INDIVIDUAL FIXTURE CONNECTIONS OR WHERE THE FLOW IS FROM THE HORIZONTAL TO THE VERTICAL

SANITARY CLEANOUTS ARE TO BE PROVIDED AT EVERY TURN GREATER THAN 45°, A.3 LISTED WITH FM (FACTORY MUTUAL) REQUIREMENTS FOR FLAMMABLE GAS AT INTERVALS OF NO GREATER THAN 50', AT ANY STACK ROUTING BELOW GRADE. PIPING SYSTEMS. FOR SEISMIC RESISTANCE.

ALL TRAP SCREWS MUST BE OF FULL SIZE OF PIPE UP TO 4" AND 4" FOR ALL OVER THIS SIZE. CONNECTIONS BETWEEN OUTLETS OF FIXTURES AND SOIL OR WASTE POSSIBLE. ALL HORIZONTAL SOIL WASTE AND VENT PIPE SHALL BE GRADED TOWARD OUTLETS AND PIPE NOT BURIED SHALL BE INSTALLED ABOVE THE CEILING OR CLOSE AS POSSIBLE TO THE CONSTRUCTION ABOVE WHERE THERE IS

THE STACKS SHALL BE EXTENDED THROUGH ROOF OF BUILDING TO POINTS NOT

LESS THAT 12" ABOVE ROOF. EXTENSIONS THROUGH ROOF SHALL BE MADE

WATER- TIGHT BY MEANS OF A LEAD FLASHING OF FOUR POINTS SHEET LEAD SPREAD OVER A DISTANCE OF NOT LESS THAN TWELVE INCHES (12") AROUND PIPE. THIMBLE TO BE SOLDERED TO BASE AND EXTENDED OVER AND TURNED DOWN INTO END OF PIPE IN AN APPROVED MANNER ALL CLEANOUTS IN FLOORS TO BE JOSAM #8360 OR EQUAL. ADJUSTABLE

COVER WITH LETTERS C.O. CAST IN TOP AND CONCEALED BRASS PLUG. CLEANOUTS SHALL BE INSTALLED IN BASE OF EACH STACK. CONCEALED CLEANOUTS SHALL HAVE JOSAM #8600 OR EQUAL. CAST BRASS CHROMIUM PLATED FLAT ACCESS COVER PLATES.

ALL JOINTS OF CAST IRON PIPE SHALL BE MADE WITH MANUFACTURERS RECOMMENDED JOINING MATERIAL. AT THE CONTRACTOR'S OPTION HE MAY USE NO-HUB PIPE, FITTINGS, COUPLING AND GASKETS IN LIEU OF CAULKED JOINTS IF APPROVED BY THE LOCAL CODES AND ORDINANCES. IF APPROVED BY THE LOCAL CODES, SCHEDULE 40 PVC PIPE WITH DWV FITTINGS

MAY BE USED FOR THE WASTE AND VENT SYSTEM. PVC PIPE AND FITTINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL CODES. ENCASEMENT OF PVC PIPES WITHIN RATED SHAFTS SHALL BE THE COST OF THIS CONTRACTOR.

SDR 35 IS NOT ACCEPTABLE FOR UNDER BUILDING USE.

VENT FLASHING

EACH VENT FLASHING SHALL BE MADE WATER-TIGHT WITH THE ROOF BY PROPER WATER PROOF FLASHING.

THE MINIMUM SIZE OF WASTE, VENT, AND WATER CONNECTION TO THE

35. WASTE, VENT AND WATER CONNECTIONS

INDIVIDUAL FIXTURES SHALL BE AS SHOWN ON DRAWINGS. WHERE FIXTURES ARE GROUPED PIPES SHALL BE INCREASED IN PROPORTION: IN ALL CASES THE SIZE ARRANGEMENTS AND CONNECTIONS OF WATER AND VENT PIPING SHALL NOT BE LESS THAN SIZE OF OPENINGS SPECIFIED FOR FIXTURES AND APPEARING IN FIXTURE LIST. NO WATER PIPE LESS THAN 1/2" SHALL BE

36. PLUMBING FIXTURES AND TRIM PLUMBING FIXTURES SHALL BE FURNISHED AND INSTALLED IN A NEAT AND WORKMANLIKE MANNER WITH PROPER CONNECTIONS TO SUPPLY AND DRAINAGE PIPING. ALL FIXTURES SHALL BE FREE OF FLAWS AND DEFECTS OF ANY SORT IN MATERIAL AND WORKMANSHIP AND SHALL OPERATE PERFECTLY WHEN

INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DIRECTION.

MANUFACTURER'S LISTED IN THE PLUMBING FIXTURE SCHEDULE, OR ANY EQUAL UNIT APPROVED BY THE ENGINEER. INSTALLATION: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE PLUMBING FIXTURES AND ACCESSORIES DURING CONSTRUCTION. HE SHALL

REPLACE AT HIS EXPENSE ANY MATERIAL THAT IS MARRED, SCRATCHED,

DEFACED AND/OR BROKEN. FIXTURES SHALL BE COVERED WITH BUILDING PAPER

MATERIALS: FIXTURES SHALL BE THE STANDARD PRODUCT OF ONE OF THE

CONTRACTOR SHALL COORDINATE EXACT AND PROVIDE ROUGH-IN LOCATIONS WITH FIELD CONDITIONS AND PLANS PRIOR TO ANY WORK. CONTRACTOR SHALL CONNECT ALL FIXTURES TO THE PLUMBING SYSTEM. ALL FIXTURES TO BE

INSTALLED TO DIMENSIONS WITH CHROME-PLATED SUPPLIES WITH STOPS.

ALL FIXTURES INSTALLED TO DIMENSIONS SHOWN ON THE DRAWINGS. ALL

WATER CLOSETS SHALL HAVE CAULKING BETWEEN THE FLOOR AND UNDERSIDE OF THE WATER CLOSET.

PLUMBING EQUIPMENT: (REFER TO SCHEDULE ON THE DRAWINGS)

37. INSULATION

THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE FLUSHED CLEAR ALL INSULATION SHALL HAVE COMPOSITE (INSULATION, JACKET OR FACINGS AND ADHESIVE USED TO ADHERE THE FACING OR JACKET TO THE INSULATION) FIRE NOT LESS THAN 100 PARTS PER MILLION OF AVAILABLE CHLORINE. THE SOLUTION AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84. NFPA 225 UL 723 NOT EXCEEDING:

> FLAME SPREAD 25 SMOKE DEVELOPED 50

ALL ACCESSORIES SUCH AS ADHESIVES, MASTICS, CEMENTS, TAPES AND CLOTH

INSULATION SHALL BE APPLIED ON CLEAN, DRY SURFACES AND AFTER INSPECTION AND RELEASE FOR INSULATION APPLICATION. ALL INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND SLEEVES. INSULATION ON ALL COLD SURFACES WHERE VAPOR BARRIER JACKETS ARE

USED, WILL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL INCLUDING ALL FITTINGS AND VALVES. ALL INSULATION TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S. FITTINGS SHALL BE FINISHED WITH 1/4" COAT OF INSULATING CEMENT AND CANVAS.

INSULATION SCHEDULE: DOMESTIC COLD WATER - 1/2" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE DEVELOPED 50)

DOMESTIC HOT WATER - 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE **DEVELOPED 50)** DOMESTIC HOT WATER RETURN- 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE DEVELOPED 50) EXPOSED STORM WASTE AND SANITARY WASTE - 1/2" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE DEVELOPED 50)

ALL MATERIALS USED SHALL COMPLY WITH SECTIONS 1712 AND 1713 OF THE UBC.

ALL PIPING FROM GAS METER TO GAS-FIRED EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR.

38. NATURAL GAS PIPING SYSTEM

THREE AND FOUR HOUR TESTS.

TO ASTM D 2321.

ALL GAS PIPING TO BE IN ACCORDANCE WITH LOCAL CODES, NFPA-54, IFGC AND UPC ALL GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-54, LOCAL CODES, AND REGULATIONS.

ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK OR GALVANIZED STEEL WITH

BLACK OR GALVANIZED WITH MALLEABLE SCREWED FITTINGS. USE TEFLON TAPE

ON ALL THREADED JOINTS. FITTINGS LARGER THAN TWO INCHES (2") SHALL BE WELDED. PROVIDE UNIONS AND GAS SHUT-OFF VALVES AT EACH PIECE OF GAS FIRED EQUIPMENT OR APPLIANCE. ANY GAS PIPING CONCEALED IN CHASES AND/OR INACCESSIBLE CEILING IS TO BE WELDED WITH WELDED FITTINGS.

FLEXIBLE CSST PIPING MATERIAL IS AN ACEPTABLE ALTERNATE ONLY IF ALLOWED BY LOCAL AHJ AND RESIZED PER MANUFACTURERS SIZING GUIDELINES.

ALL FLEXIBLE GAS PIPING SYSTEM COMPONENTS MUST BE:

(CSST) FLEXIBLE GAS PIPING WITH MECHANICAL ATTACHMENT AUTOFLARE® FITTINGS THAT CONFORM TO THE LATEST ANSI STANDARDS FOR SAFE PERFORMANCE ANSI LC-1 /CSA 6.26. A.2 UNDERWRITERS LABORATORIES CLASSIFICATION LISTED FOR THRU PENETRATION FIRE STOP REQUIREMENTS RATINGS TO INCLUDE ONE, TWO,

A.1 CSA INTERNATIONAL CERTIFIED CORRUGATED STAINLESS STEEL TUBING

A.4 TUBING SHALL BE TESTED AND LISTED IN ACCORDANCE WITH ICC LC-1024. FOR RESISTANCE TO ARCING FROM TRANSIENT ENERGY.

STORM PIPING SYSTEM

ALL STORM PIPING SHALL BE OF THE FOLLOWING MATERIALS

A. HUB-AND-SPIGOT, CAST-IRON PIPE AND FITTINGS: ASTM A 74, SERVICE GASKETS: ASTM C 564, RUBBER. B. HUBLESS CAST-IRON PIPE AND FITTINGS: ASTM A 888 OR CISPI 301.

SHIELDED COUPLINGS: ASTM C 1277 ASSEMBLY OF METAL SHIELD OR

HOUSING, CORROSION-RESISTANT FASTENERS, AND RUBBER SLEEVE WITH INTEGRAL, CENTER PIPE STOP a. STANDARD, SHIELDED, STAINLESS-STEEL COUPLINGS: CISPI 310. WITH STAINLESS-STEEL CORRUGATED SHIELD; STAINLESS-STEEL BANDS AND TIGHTENING DEVICES; AND ASTM C 564, RUBBER

b. HEAVY-DUTY, SHIELDED, STAINLESS-STEEL COUPLINGS: WITH

STAINLESS-STEEL SHIELD, STAINLESS-STEEL BANDS AND TIGHTENING DEVICES, AND ASTM C 564, RUBBER SLEEVE. SOLID-WALL PVC PIPE: ASTM D 2665, SOLID-WALL DRAIN, WASTE, AND VENT

1. PVC SOCKET FITTINGS: ASTM D 2665, MADE TO ASTM D 3311, DRAIN, WASTE, AND SOLVENT CEMENT AND ADHESIVE PRIMER: a. USE PVC SOLVENT CEMENT THAT HAS A VOC CONTENT OF 510 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA

b. USE ADHESIVE PRIMER THAT HAS A VOC CONTENT OF 550 G/L OR LESS

WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA INSTALL STORM DRAINAGE PIPING AT THE FOLLOWING MINIMUM SLOPES, UNLESS

BUILDING STORM DRAIN: 1 PERCENT DOWNWARD IN DIRECTION OF FLOW

FOR PIPING NPS 3 AND SMALLER; 1 PERCENT DOWNWARD IN DIRECTION OF FLOW FOR PIPING NPS 4 AND LARGER. HORIZONTAL STORM-DRAINAGE PIPING: 2 PERCENT DOWNWARD IN DIRECTION OF FLOW.

THROUGH CONCRETE SLABS-ON-GRADE IF SLAB IS WITHOUT MEMBRANE WATERPROOFING INSTALL PVC STORM DRAINAGE PIPING ACCORDING TO ASTM D 2665. INSTALL UNDERGROUND PVC STORM DRAINAGE PIPING ACCORDING

A. SLEEVES ARE NOT REQUIRED FOR CAST-IRON SOIL PIPING PASSING

STORM PIPING, COMPONENTS AND INSTALLATION SHALL BE CAPABLE OF WITHSTANDING THE MINIMUM WORKING PRESSURE OF 10-FOOT HEAD OF WATER. UNLESS OTHERWISE

DO NOT ENCLOSE, COVER, OR PUT PIPING INTO OPERATION UNTIL IT IS

INSPECTED AND APPROVED BY AUTHORITIES HAVING JURISDICTION.

RELEASED FOR **CONSTRUCTION** As Noted on Plans Reviev

Lee's Summit, Missouri

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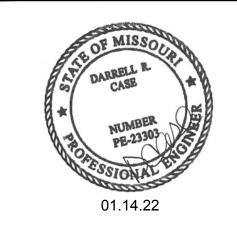
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REVISIONS

01.14.22

**PLUMBING SPECIFICATIONS** 

PROJECT NUMBER: 689411

DATE:

DRAWN BY:

CHECKED BY: