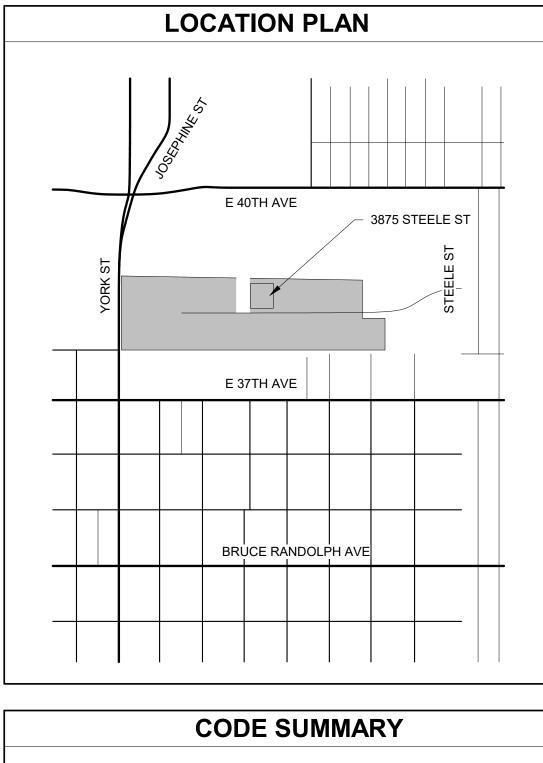
## THE DESIGNERY 3875 STEELE STREET, SUITE 1145 DENVER, CO 80205



APPLICABLE CODES International Building Code- 2021 Edition International Fire Code- 2021 Edition International Existing Building Code- 2021 Edition International Mechanical Code- 2021 Edition International Plumbing Code- 2021 Edition International Fuel & Gas Code- 2021 Edition International Energy Conservation Code- 2021 Edition National Electric Code- 2023 Edition ICC A117.1 Accessibility - 2017 Edition

#### Denver Building and Fire Code - 2022 Edition USE AND OCCUPANCY CLASSIFICATION

1,955 sf

#### FIRE PROTECTION SYSTEM

M (MERCANTILE)

FULLY-SPRINKLERED

#### TYPE OF BUILDING CONSTRUCTION

IIIB

#### OWNER/CLIENT

m: 214.789.1835

SKB 3857 Steele Street, Suite 1293 Denver, CO 80205 POC: Rebecca Arnold e: rarnold@skbcos.com p: 303.328.0016 ext. 702

#### ARCHITECT

UNUM:collaborative 1490 N Lafayette Street, Suite 408 Denver, CO 80218 www.unum-collab.com POC: Jim Pfeiffer e: jim@unum-collab.com p: 610.442.1739

#### **PROJECT TEAM**

#### STRUCTURAL ENGINEER

**Tune Structural Engineering** 8087 County Road G Verona, WI 53593 POC: Justin Tune e: jtune@tunestructural.com p: 209.404.8315

MEC, Inc. 4191 W 98th Way Westminster, CO 80031 POC: Brad Gettel e: bgettel@mecengr.com p: 720.480.7720

MECHANICAL ENGINEER

ELECTRICAL ENGINEER

D. Keller Electrical Design POC: Dawn Keller e: dawn@dkellereng.com p: 303.918.9475

CONTRACTOR

TBD

	SHEET LIST
SHEET NUMBER	SHEET NAME
GENERAL	
G-000	COVER SHEET
G-000 G-001	PROJECT INFORMATION
G-001 G-011	1ST FLOOR CODE PLANS
G-011 G-020	MOUNTING HEIGHT REQUIREMENTS
G-020	
ARCHITEC	CTURAL SITE
AS-100	SITE PLAN
AS-110	ENLARGED SITE PLAN
A-101	1ST FLOOR PLAN
A-102	MEZZANINE PLAN
A-103	
A-110	1ST FLOOR FINISH PLAN
A-111	MEZZANINE FINISH PLAN
A-200	EXTERIOR ELEVATIONS
A-300	BUILDING SECTIONS
A-401	1ST FLOOR REFLECTED CEILING AND SOFFIT PLAN
A-402	MEZZANINE REFLECTED CEILING PLAN
A-501	ENLARGED STAIR PLANS AND SECTIONS
A-800	
A-900	PARTITION SCHEDULE AND TYPES
A-910	DOOR SCHEDULE AND TYPES
A-930	SCHEDULES
STRUCTU	RAL
S-001	STRUCTURAL NOTES
S-201	FLOOR PLANS
S-601	STRUCTURAL DETAILS
MECHANI	CAL
M-001	MECHANICAL COVER SHEET
M-101	1ST FLOOR MECHANICAL PLAN
M-102	MEZZANINE MECHANICAL PLAN
M-301	MECHANICAL SCHEDULES
M-401	MECHANICAL DETAILS
PLUMBIN	
P-001	PLUMBING COVER SHEET
P-101	1ST FLOOR PLUMBING PLAN
P-102	MEZZANINE PLUMBING PLAN
P-301	PLUMBING SCHEDULES
P-401	PLUMBING DETAILS
ELECTRIC	

1490 N LAFAYETTE STREET, SUITE 408 DENVER, CO 80218 610.442.1739

1145

SUITE

STEELE STREET

3875

80205

 $\bigcirc$ 

DENVER,

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DESIGNER

HH

ARCHITECT

#### STAMP & SIGNATURE:



History

PERMIT SET

Date 04.11.2025

#### DEFERRED SUBMITTALS

THE FOLLOWING ITEMS ARE TO BE TREATED AS DEFERRED SUBMITTALS FIRE ALARM

FIRE PROTECTION

E-000 ELECTRICAL COVER SHEET

E-002 ELECTRICAL COMCHECK

E-100 POWER PLANS E-200 LIGHTING PLANS

ONE LINE DIAGRAM AND SCHEDULE

DATE: 04.11.2025 PROJECT #: 2025.013 DRAWN BY: IΡ DESIGNED BY: CHECKED BY:

COVER SHEET

G - O O O

### **GRAPHIC STANDARDS**

#### SET NAVIGA

ELEMENT

WALL TAG

DOOR TAG 3

INTERIOR F

PT-XX PLUMBING

EQUIPMEN

THE ORIGINAL OF THIS DRAWING IS 24" X 36". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED.

SET NAVIGATI	ON	PATTERN	KEY	
DETAIL CALL A-123	LOUT DETAIL NUMBER SHEET NUMBER		MASONRY	
BUILDING SE			EARTH	
A-123 WALL SECTI	ON SECTION NUMBER		CAST-IN-PLACE CONCRETE	
A-123 BUILDING EL	SHEET NUMBER		PRECAST CONCRETE	
A-123 2	ELEVATION NUMBER	$ \begin{array}{c} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^{n-1} \sum_{i=1}^{n-1} \sum_{j=1}^{n-1} \sum_{j=1}^$	GYPSUM WALL BOARD	
	EVATION		STEEL	
A-123	SHEET NUMBER		WOOD	
WALL TAG	<ul> <li>FIRE RATING (HRS)</li> <li>WALL CATEGORY</li> <li>STRUCTURE SIZE</li> <li>T.O. WALL CONDITION</li> <li>DOUBLE LINE INDICATES ACOUSTIC INSULATION</li> </ul>	CEILING TA	CEILING TYPE	
DOOR TAG		WINDOW 8	STOREFRONT TAG	
3	- DOOR NUMBER	3 SF-X	— WINDOW TYPE — STOREFRONT TYPE	
	SH TAG	LIGHT FIXTURE TAG		
PT-XX	_ MATERIAL NUMBER & TYPE	LT-XX		
PLUMBING AC	CESSORY TAG	PLUMBING	TAG	
PA-XX	- ACCESSORY NUMBER	PF-XX	FICTURE NUMBER	
EQUIPMENT T	AG	FURNITUR	E TAG	
E-XX	- EQUIPMENT TYPE	F-XX	FURNITURE TYPE	

CFCI	CONTRACTOR FURNISHED; CONTRACTOR
	INSTALLED CONTRACTOR FURNISHED; OWNER INSTALLE
OFCI	OWNER FURNISHED; CONTRACTOR INSTALLE
ofoi A/V	OWNER FURNISHED; OWNER INSTALLED
AB	ANCHOR BOLT
ABV ACOUS	ABOVE ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM ANOD	ALUMINUM ANODIZED
APPROX ARCH	APPROXIMATE ARCHITECTURAL
ASPH	ASPHALT
AUTO AVE	AUTOMATIC AVENUE
AVG	AVERAGE
AWP B.O.	ACOUSTICAL WALL PANEL BOTTOM OF
BD	BOARD
BIT BLDG	BITUMINOUS BUILDING
BLKG BM	BLOCKING BEAM/ BENCH MARK
BOT	BOTTOM
BRG BSMT	BEARING BASEMENT
C.L.	CENTERLINE
CAB CEM	CABINET CEMENTITIOUS
CG CIP	
CIP	CAST IN PLACE CIRCUMFERENCE
CJ CLG	CONTROL JOINT CEILING
CLOS	CLOSET
CLR CM	CLEAR CENTIMETERS
CMU	CONCRETE MASONRY UNIT
CO COL	CLEANOUT COLUMN
CONC	CONCRETE
CONF CONN	CONFERENCE       CONNECTION
CONT CPT	CONTINUOUS CARPET
СТ	CERAMIC TILE
CU CY	CUBIC CUBIC YARD
DAMP	DAMPROOFING
DBL DEG	DOUBLE DEGREE
DEMO DEPT	DEMOLISH or DEMOLITION DEPARTMENT
DF	DRINKING FOUNTAIN
DIA DIAG	DIAMETER DIAGONAL
DIM	DIMENSION
DISP DIV	DISPENSER DIVISION
DN	DOWN
DR DS	DOOR DOWNSPOUT
DTL DWG	DETAIL DRAWING
(E)	EXISTING
E EA	EAST EACH
EB	EXPANSION BOLT
EF EJ	EXHAUST FAN EXPANSION JOINT
EL ELEC	ELEVATION ELECTRICAL
ELEV	ELEVATOR
EMER EQ	EMERGENCY EQUAL
EQUIP	EQUIPMENT ESTIMATE
EST EW	EACH WAY
EWC EWH	ELECTRIC WATER COOLER ELECTRIC WATER HEATER
EXT	EXTERIOR
FA FAC	FIRE ALARM         FIRE ALARM CABINET
FACP FBO	FIRE ALARM CONTROL PANEL FURNISHED BY OTHER(S)
FD	FLOOR DRAIN
FDN FE	FOUNDATION FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF FFE	FINISHED FLOOR FINISHED FLOOR ELEVATION
FH FHC	FIRE HYDRANT FIRE HOSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FHV FHWS	FIRE HOSE VALVE FLAT HEAD WOOD SCREW
FIN	FINISH(ED)
FIXT FLR	FIXTURE FLOOR(ING)
FLUOR	FLUORESCENT
FOC FOF	FACE OF CONCRETE FACE OF FINISH
FOM FOS	FACE OF MASONRY FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL(ING)
FRT FT	FIRE RETARDANT TREATED FOOT (FEET)
FTG	FOOTING
FURN FURR	FURNISH(ED) FURRED
FUT FVC	FUTURE FIRE VALVE CABINET
GA	GAUGE
GALV GB	GALVANIZED GRAB BAR
GC GI	GENERAL CONTRACTOR GREASE INTERCEPTOR
GL	GLASS or GLAZING
GR GRT	GRADE GROUT
GWB	GYPSUM WALLBOARD
GYP GYP. BD.	GYPSUM GYPSUM BOARD
HAS HB	HEADED ANCHOR STUD HOSE BIB
HDAS	HEADED DEFORMED ANCHOR STUD
HDR HDWR	HEADER HARDWARE
HM	HOLLOW METAL HORIZONTAL
HT	HEIGHT
HTR HVAC	HEATER HEATING, VENTILATION and AIR CONDITIONIN
HW	HOT WATER
HWH HWY	HOT WATER HEATER HIGHWAY
ID	INSIDE DIAMETER
IN INCAND	INCH(ES) INCANDESCENT
INCL	INCLUD(ED)
INFO INSUL	INFORMATION INSULATION
INT INTMED	INTERIOR
INV	INVERT
JST JT	JOIST JOINT
KD	KNOCKDOWN
	KITCHEN KNOCKOUT
KIT KO	
KO KP	KICK PLATE
KO KP LAB	KICK PLATE LABORATORY LAMINATE
KO	LABORATORY

<b>_</b>	ABBREVIATIONS	G
LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL	
LP LTL	LIGHTING PANEL LINTEL	
LVR MACH	LOUVER MACHINERY	
MAG MAS	MAGNETIC MASONRY	
MATL MAX MB	MATERIAL MAXIMUM MOISTURE BARRIER	
MECH MED	MECHANICAL MEDIUM	
MEMB MEP	MEMBRANE MECHANICAL, ELECTRICAL and PLUMBING	
MEZZ MFR	MEZZANINE MANUFACTURER	
MH MIN MIRR	MANHOLE MINIMUM MIRROR	
MISC	MIRKOR MISCELLANEOUS MILLIMETERS	
MO MTD	MASONRY OPENING MOUNT(ED)	
MTL MUL	METAL MULLION	
N NIC	NORTH NOT IN CONTRACT	
NO NOM NRC	NUMBER NOMINAL NOISE REDUCTION COEFFICIENT	
NTS OA	NOT TO SCALE OVERALL	
OC OD	ON CENTER OUTSIDE DIAMETER or OVERFLOW DRAIN	
OF OFF	OUTSIDE FACE OFFICE	
oh Opng Opp	OPPOSITE HAND OPENING OPPOSITE	
OTO PAR	OUTSIDE-TO-OUTSIDE PARALLEL	
PC PERF	PRECAST PERFORATED	
PERIM PKG	PERIMETER PARKING	
PL PLAM PLAS	PROPERTY LINE PLASTIC LAMINATE PLASTER	
PLBG PLYWD	PLASTER PLUMBING PLYWOOD	
PNL POL	PANEL POLISHED	
PR PREFAB PREFIN	PAIR PREFABRICATED PREFINISHED	
PREFIN PRESTR PRIM	PREFINISHED PRESTRESSED PRIMARY	
PROJ PSF	PROJECT POUNDS PER SQUARE FOOT	
PSI PT	POUNDS PER SQUARE INCH POST TENSIONED	
PTD PTN	PAPER TOWEL DISPENSER PARTITION PAPER TOWEL DESERTAGES	
PTR PVC PVMT	PAPER TOWEL RECEPTACLE POLYVINYL CHLORIDE PAVEMENT	
QT QTY	QUARRY TILE QUANTITY	
(R) R	REMOVE RISER	
RAD RB RBC	RADIUS RUBBER BASE RUBBER BASE COVE	
RBT RD	RUBBER TILE ROOF DRAIN	
RE	REFER TO RECESS(ED)	
RECPT REF	RECEPTACLE REFRIGERATOR	
REINF REQD RESIL	REINFORCED REQUIRED RESILIENT	
REV	REVISE, REVISED or REVISION(S) RESILIENT FLOORING	
RFL RH	REFLECTED RIGHT HAND	
RM RO ROW	ROOM ROUGH OPENING RIGHT OF WAY	
RVS RWC	REVERSE (SIDE) RAIN WATER CONDUCTOR	
s sc	SOUTH SOLID CORE	
SCHED SEC	SCHEDULE SECTION SQUARE FEET	
SF SHT SHTG	SQUARE FEET SHEET SHEATHING	
SHWR	SHOWER SIMILAR	
SOFF SPEC(S)	SOFFIT SPECIFICATION(S)	
SPKL SPKR SQ	SPRINKLER SPEAKER SQUARE	
SS STA	STAINLESS STEEL STATION	
STD STL	STANDARD STEEL	
STOR STRUCT SUSP	STORAGE STRUCTURE or STRUCTURAL SUSPEND(ED)	
SUSP SYM SYS	SUSPEND(ED) SYMMETRICAL SYSTEM	
T T&B	TREAD TOP AND BOTTOM	
T&G T-STAT	TONGUE AND GROOVE THERMOSTAT	
TELE TEMP TG	TELEPHONE TEMPORARY or TEMPERATURE TEMPERED GLASS	
THK THLD	THICK or THICKNESS THRESHOLD	
TO TOC	TOP OF TOP OF CONCRETE	
TOS TOW	TOP OF STEEL TOP OF WALL	
TS TV TYP	TUBE STEEL TELEVISION TYPICAL	
UL UNFIN	UNDERWRITER'S LABORATORY UNFINISHED	
UON UR.	UNLESS OTHERWISE NOTED URINAL	
USGS V VAR	U.S. GEOLOGICAL SURVEY VERIFY VARIES	
VAR VB VCT	VARIES VAPOR BARRIER VINYL COMPOSITION TILE	
VENT VER	VENTILATION VERIFY	
VERT	VERTICAL VESTIBULE	
VEST	VERIFY IN FIELD	
VEST VIF VIN		
VEST VIF	VINYL VOLUME VINYL WALL COVERING WEST	
VEST VIF VIN VOL VWC W W/ W/ W/C	VOLUME VINYL WALL COVERING WEST WITH WATER CLOSET	
VEST VIF VIN VOL VWC W W/ W/C W/C W/O W/R	VOLUME VINYL WALL COVERING WEST WITH WATER CLOSET WITHOUT WATER RESISTANT	
VEST VIF VIN VOL VWC W/ W/C W/C W/O W/R W/Q W/R WC WD	VOLUME         VINYL WALL COVERING         WEST         WITH         WATER CLOSET         WITHOUT         WATER RESISTANT         WALL COVERING         WOOD	
VEST VIF VIN VOL VWC W/ W/ W/C W/C W/O W/R WC	VOLUME         VINYL WALL COVERING         WEST         WITH         WATER CLOSET         WITHOUT         WATER RESISTANT         WALL COVERING	
VEST VIF VIN VOL VWC W/ W/C W/C W/C W/C W/R W/O W/R W/ W/C W/R W/ W/ W/ W/ W/ W/ W/ W/ W/ W/ W/ W/ W/	VOLUME         VINYL WALL COVERING         WEST         WITH         WATER CLOSET         WITHOUT         WATER RESISTANT         WALL COVERING         WOOD         WIDE FLANGE         WIRE GLASS	

#### GENERAL PROJECT NOTES

1 THE WORK PERFORMED UNDER THIS CONTRACT SHALL CONSIST OF FURNISHING ALL TOOLS, EQUIPMENT MATERIALS, SUPPLIES, TRANSPORTATION, SERVICES, POWER AND WATER, ESSENTIAL COMMUNICATIONS, AND THE PERFORMANCE OF ALL LABOR, WORK, REQUIRED CALCULATIONS, TESTING, OR OPERATIONS REQUIRED FOR THE FULFILLMENT OF THE CONTRACT, IN STRICT ACCORDANCE WITH THE PLANS SPECIFICATIONS, AND SCHEDULES, ALL OF WHICH ARE MADE A PART HEREOF, INCLUDING DETAIL SKETCHES AS MAY BE FURNISHED BY ARCHITECT OR ENGINEER FROM TIME TO TIME DURING

CONSTRUCTION IN EXPLANATION OF THE PLANS. THE WORK SHALL BE COMPLETE AND ALL MATERIAL, SERVICES, INCIDENTS, QUALITY OR NOT SPECIFICALLY CALLED FOR QUALITY AND CONDITIONS NOTED, IN THE SPECIFICATIONS, OR NOT SHOWN ON THE PLANS WHICH MAY BE NECESSARY FOR THE COMPLETE AND PROPER CONSTRUCTION TO CARRY OUT THE CONTRACT IN GOOD FAITH AND IN A SATISFACTORY MANNER SHALL BE PERFORMED, FURNISHED, AND INSTALLED BY THE CONTRACTOR AT NO INCREASE IN COST TO THE OWNER.

2 THE CONTRACT DOCUMENTS ARE COMPLIMENTARY, AND WHAT IS CALLED FOR IN ONE PART SHALL BE AS BINDING AS IF CALLED FOR BY ALL. THE INTENT OF THE DOCUMENTS IS TO INCLUDE ALL WORK CONSISTENT THEREWITH AND REASONABLY INFERABLE THEREFROM AS BEING NECESSARY FOR THE COMPLETION OF THE CONTRACT. MATERIALS OR WORK DESCRIBED IN WORDS THAT INDICATE PROPER EXECUTION AND WELL KNOWN TECHNICAL OR TRADE DESIGNATION SHALL BE HELD TO REFER TO RECOGNIZED STANDARDS.

ARCHITECT DOES NOT WARRANT THE ACCURACY OF SCALED DIMENSIONS. DIMENSIONS INDICATED BY FIGURES OR NUMERALS SHALL GOVERN. LARGER SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.

4 CONTRACTOR TO ISSUE COMPLETE SET OF CONTRACT DOCUMENTS TO EACH OF THE SUB-CONTRACTORS FOR COORDINATION OF THEIR WORK AND DESCRIPTION OF SCOPE 5 ALL WORK SHALL BE PERFORMED BY THE GENERAL CONTRACTOR U.N.O. ALL REFERENCES TO THE

"CONTRACTOR" INCLUDE THE GENERAL CONTRACTOR AND THE SUB-CONTRACTORS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER ALL CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK REQUIRED BY THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACTS AND OMISSIONS OF THE CONTRACTOR'S EMPLOYEES, SUB-CONTRACTORS AND THEIR AGENTS AND

EMPLOYEES, AND ANY OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR 6 PROCURE MATERIALS SO AS NOT TO DELAY SUBSTANTIAL COMPLETION. NOTIFY ARCHITECT WITHIN 5

DAYS OF EXECUTION OF CONTRACT OF ANY MATERIAL DELIVERY THAT WOULD DELAY THE SCHEDULED COMPLETION OF THE PROJECT

7 COORDINATE SCHEDULING PROVISIONS FOR INSTALLATION AND LOCATIONS OF ITEMS FURNISHED BY OWNER OR BY OTHERS. FACILITATE WORK WITH ALL TRADES ON THE PROJECT NOT UNDER CONTRACT TO THE CONTRACTOR (I.E. TELEPHONE, COMPUTER, ETC.), ANY CHANGES OR DELAYS ARISING FROM CONFLICTS BETWEEN SUCH TRADES AND THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH THE RESOLUTION OF THOSE CONFLICTS AT NO ADDITIONAL COST TO THE OWNER 8 THOROUGHLY CLEAN ALL SURFACES OF DUST, DEBRIS, LOOSE CONSTRUCTION MATERIAL AND EQUIPMENT 24 HOURS PRIOR TO OCCUPANCY OF ANY PHASE. VACUUM OR MOP AS APPROPRIATE ALL FLOORS, CLEAN WINDOWS AND GLAZING.

9 OMISSIONS FROM THE PLANS AND SPECIFICATIONS SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF FURNISHING, MAKING, OR INSTALLING ALL ITEMS REQUIRED BY LAW OR USUALLY FURNISHED, MADE, OR INSTALLED IN ACCORDANCE WITH RECOGNIZED STANDARDS, FOR A PROJECT OF THE SCOPE AND CHARACTER INDICATED ON THE PLANS AND SPECIFICATIONS

10 THE PLANS SHOW CONDITIONS AS THEY ARE SUPPOSED OR BELIEVED TO EXIST, BUT IT IS NOT INTENDED OR INFERRED THAT THE CONDITIONS AS SHOWN CONSTITUTE A REPRESENTATION OR WARRANTY EXPRESSED OR IMPLIED, THAT SUCH CONDITIONS ACTUALLY EXIST. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS. NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES FOR CLARIFICATION PRIOR TO PROCEEEDING WITH WORK.

11 THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WORK COMPLIES WITH THE CONTRACT DOCUMENTS. UPON DISCOVERY, ALL DEFECTIVE OR NONCOMPLIANT WORK SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR. FAILURE OF THE ARCHITECT TO IDENTIFY NONCONFORMING WORK SHALL NOT CONSTITUTE ACCEPTANCE OR IMPLIED ACCEPTANCE OF SUCHWORK. NO PAYMENT, EITHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS

12 ANY DELAYS OR IMPACTS ARISING ON THE WORK AS A RESULT OF CONSTRUCTION, FABRICATIONS OR DELIVERY OF NONCONFORMING WORK OR MATERIALS SHALL BE THE CONTRACTOR'S SOLE EXPENSE, WITHOUT REIMBURSEMENT FOR EXTENDED OVERHEAD

13 THE CONTRACT DOCUMENTS INDICATE THE SCOPE OF THE PROJECT IN TERMS OF THE ARCHITECTURAL DESIGN CONCEPT, THE DIMENSIONS OF THE MAJOR ARCHITECTURAL ELEMENTS, AND THE MAJOR DESIGN OF THE STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS, BASED ON THE SCOPE DESCRIBED HEREIN. PROVIDE ALL ITEMS, SYSTEMS, PRODUCTS AND LABOR REQUIRED OR INFERRED FOR THE PROPER EXECUTION AND COMPLETE PERFORMANCE OF THE PROJECT.

14 THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS AND FEES REQUIRED AND NOT NEGOTIATED AS THE OWNER'S RESPONSIBILITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS.

15 THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND THEIR SERVICE CONNECTIONS WITH THE PROPER UTILITY COMPANIES AND AGENCIES. 16 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF THE CONSTRUCTION ON THE SITE.

17 DETAILS NOT SHOWN ARE SIMILAR IN NATURE TO THOSE DETAILED, WHERE CONDITIONS ARE SIMILAR. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CAN NOT BE DETERMINED, CONSULT ARCHITECT BEFORE PROCEEDING WITH THE WORK. TYPICAL DETAILS OCCUR AT ALL SIMILAR CONDITIONS, WHETHER REFERENCED OR NOT.

18 WHERE DISCREPANCIES EXIST BETWEEN DRAWINGS BY VARIOUS TRADES, THE CONTRACTOR SHALL CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

19 THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACINGS, BACK-UP PLATES, AND SUPPORTING BRACKETS REQUIRED FOR THE BEST POSSIBLE INSTALLATION OF ALL BUILDING COMPONENTS AND EQUIPMENT.

20 WHEN DISCREPANCIES EXIST WITHIN THE DRAWINGS, AND BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE GREATER QUANTITY AND QUALITY SHALL PREVAIL

21 THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, PRIOR TO STARTING THE WORK, A COMPREHENSIVE LAYOUT INDICATING DIMENSIONAL CRITERIA FOR ALL VISIBLE BUILDING ELECTRICAL, SECURITY, LIFE SAFETY, CONTROLS, AND OTHER EQUIPMENT.

22 PROPRIETARY PRODUCTS AND MATERIALS IDENTIFIED IN THE DRAWINGS SHALL BE INTERPRETED AS THE BASIS OF DESIGN, AND SHALL TAKE PRECEDENCE OVER OTHER PRODUCTS AND COMPONENTS INDICATED IN THE SPECIFICATIONS.ALTERNATE PRODUCTS INDICATED WITHIN THE SPECIFICATIONS MAY BE USED IF EQUAL TO THE BASIS OF DESIGN. ALTERNATE PRODUCTS SHALL MATCH THE PERFORMANCE, QUALITY. AND PROFILE OF THE "BASIS OF DESIGN" PRODUCT. CONTRACTOR SHALL CONSULT WITH ARCHITECT BEFORE PROCEEDING WITH AN TERNATE PRODUCT TO WHAT IS SPECIFICALLY IDENTIFIED IN THE DRAWINGS BASIS OF DESIGN PRODUCTS. SUBSTITUTION REQUESTS WILL ONLY BE CONSIDERED DURING THE TIME FRAME ALLOWED BY SPECIFICATIONS DIVISION 1, IF SPECIFIED

23 ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT BUILDING CODES AND ALL FEDERAL. STATE AND LOCAL CODES AND AGENCIES HAVING JURISDICTION. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND RESPECTIVE SUB-CONTRACTORS TO BUILD TO SATISFYTHESE CODES AND CALL FOR ALL NECESSARY INSPECTIONS.

24 THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL NEW AND EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE FOR COMPARISON WITH DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING AND START OF AND DURING CONSTRUCTION. IF ANY DISCREPANCIES, INCONSISTENCIES OR OMISSIONS ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED, IN WRITING FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.

25 ACCESS PANELS SHALL BE PROVIDED AND INSTALLED WHEREVER REQUIRED BY BUILDING CODE OR FOR THE PROPER OPERATION OR MAINTENANCE OF MECHANICAL OR ELECTRICAL EQUIPMENT, WHETHER OR NOT INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL COORDINATE SIZE, LOCATION, AND TYPE OF ACCESS PANEL WITH OTHER CONTRACTORS' WORK AND RECEIVE APPROVAL OF THE ARCHITECT. NO ACCESS PANEL SHALL BE LOCATED, FRAMED OR INSTALLED WITHOUT THE EXPRESSED APPROVAL OF THE ARCHITECT. PAINT PANELS TO MATCH ADJACENT FINISHED CONDITION OR AS APPROVED BY ARCHITECT. ALL PANELS ARE TO BE 'TRIM-LESS' AND MOUNTED FLUSH TO ADJACENT CEILING OR FLOOR FINISH, UNLESS OTHERWISE NOTED/APPROVED.

26 THE SPECIFICATIONS AND ALL CONSULTANT DRAWINGS ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE ARCHITECTURAL DRAWINGS BEFORTHE INSTALLATION OF ANY OF THE CONSULTANTS' WORK AND BRING ANY DISCREPANCIES OR CONFLICTS TO THE ARCHITECT'S ATTENTION, IN WRITING, FOR CLARIFICATION. IMPROPERLY INSTALLED WORK SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT HIS EXPENSE AND AT NO EXPENSE TO THE ARCHITECT, HIS CONSULTANTS, OR THE OWNER.

27 THE ARCHITECT SHALL BE CONSULTED IN ALL CASES WHERE CUTTING INTO THE EXISTING STRUCTURE OF ANY BUILDING IS EITHER EXPEDIENT OR NECESSARY. PRIOR TO PROCEEDING WITH WORK, REINFORCEMENT AND/OR SUPPORTSATISFACTORY TO THE ARCHITECT AND STRUCTURAL ENGINEER SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO CUTTING INTO STRUCTURAL PORTIONS OF ANY BUILDING.

28 IF THE CONTRACTOR ASCERTAINS AT ANY TIME THAT REQUIREMENTS OF THIS CONTRACT CONFLICT WITH, OR ARE IN VIOLATION OF, APPLICABLE LAWS, CODES, REGULATIONS AND ORDINANCES, HE/SHE SHALL NOT PROCEED WITH WORK IN QUESTION, EXCEPT AT HIS/HER OWN RISK, UNTIL THE ARCHITECT HAS BEEN NOTIFIED IN WRITING AND WRITTEN DETERMINATION IS MADE BY THE ARCHITECT. WHERE COMPLETED OR PARTIALLY COMPLETED WORK IS DISCOVERED TO BE IN VIOLATION WITH APPLICABLE LAWS, CODES, REGULATIONS AND ORDINANCES, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THAT WORK FROM THE PROJECT AND REPLACE SUCH WORK WITH ALL NEW COMPLYING WORK AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT.

29 THE CONTRACTOR SHALL PROTECT ALL FINISH WORK AND SURFACES FROM DAMAGE DURING THE COURSE OF CONSTRUCTION AND SHALL REPLACE AND/OR REPAIR ALL DAMAGED SURFACES CAUSED BY CONTRACTOR OR SUBCONTRACTOR PERSONNEL TO THE SATISFACTION OF THE OWNER AND ARCHITECT. 30 ONLY NEW MATERIALS AND EQUIPMENT OF RECENT MANUFACTURE OF QUALITY SPECIFIED, FREE FROM DEFECTS, WILL BE PERMITTED ON THE WORK, UNLESS OTHERWISE NOTED.

31 THE CONTRACTOR SHALL EXECUTE ALL CONNECTIONS FOR EQUIPMENT, TO BE PROVIDED AND SET IN PLACE BY OTHERS.

32 THE CONTRACTOR SHALL REFER TO THE OWNER'S LANDLORD CONSTRUCTION REQUIREMENTS FOR ADDITIONAL GUIDELINES AND CRITERIA.

ARCHITECT UNUM COLLABORATIVE 1490 N LAFAYETTE STREET, SUITE 408 **DENVER, CO 80218** 610.442.1739

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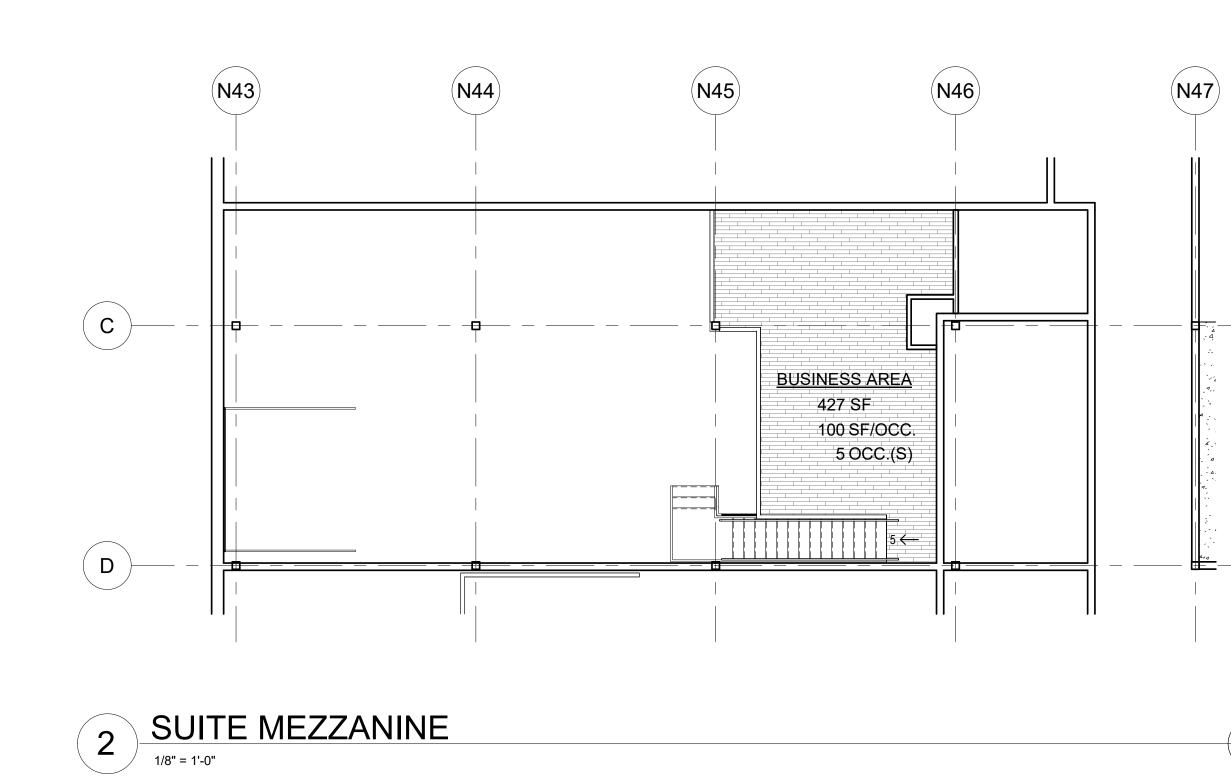
Date 04.11.2025

DATE: 04.11.2025 PROJECT #: 2025.013 DRAWN BY: **DESIGNED BY:** CHECKED BY:

PROJECT INFORMATION

PROJECT DESCRIPTION					PLUMBING SYSTEMS	280 OCCUPANTS			- PROJECT
PROJECT ADDRESS	3875 STEELE	E STREET, SUITE 1145, DENVE	R, CO 80205		1004.1.2	(140 MALE / 140 FEMALE)	TABLE		
TENANTS	THE DESIGN	IERY			REQUIRED FIXTURES	S-1 GROUP - 24 TOTAL OCCUPANTS	TABLE 2902.1	<u> </u>	- 1-HR RATE
PROJECT SUMMARY		CT IS COMPRISED OF THE COM				SUITE 1139 - 4,460 (15 OCCUPANTS) <u>SUITE 1250 - 2,686 (9 OCCUPANTS)</u>			- 2-HR RATE
	WILL ESTAB	LION TYPE IS NOT CHANGING. LISH AN M OCCUPANCY IN THI		NOT CHANGING. THE PROJECT IS FULLY SPRINKLERED		S-1 WATERCLOSETS (24 OCCUPANTS): MALES (12/100): 0.12 WC REQ'D FEMALES (12/100): 0.12 WC REQ'D		⇒ XX	EXIT ARRC
APPLICABLE CODES AND STAN	NDARDS					S-1 LAVATORIES (24 OCCUPANTS):		$\rightarrow$ xx	EXIT ACCE
JURISDICTION	CITY OF DEM	IVER				MALES (12/100): 0.12 LAVS REQ'D FEMALES (12/100): 0.12 LAVS REQ'D			
ACCESSIBILITY STANDARDS	COLORADO	STATUTES & ICC/ANSI117.1-	-2017			B GROUP - 225 TOTAL OCCUPANTS	TABLE 2902.1	→ XX	EXIT DISCH
						SUITE 1147 - 2,812 GSF (44 OCCUPANTS) SUITE 1242 - 3,873 GSF (72 OCCUPANTS)			
OCCUPANCY REQUIREMENTS						SUITE 1244 - 3,574 GSF (79 OCCUPANTS) SUITE 1252 - 2,947 GSF (30 OCCUPANTS)			
OCCUPANCY	Μ					B WATERCLOSETS (225 OCCUPANTS):			
SEPARATIONS	NON-SEPAR	ATED OCCUPANCIES		508.3		MALES: $(112.5-50)(1/50) + 2 = 3.25$ FEMALES: $(112.5-50)(1/50) + 2 = 3.25$			
CONSTRUCTION REQUIREMEN	ITS					B LAVATORIES (225 OCCUPANTS):			
CONSTRUCTION TYPE	TYPE IIIB					MALES: (112.5-80)(1/80) +2 = 2.41 FEMALES: (112.5-80)(1/80) +2 = 2.41			N43
FLOOR AREA	TOTAL: 1,954	4 SF				M GROUP - 31 TOTAL OCCUPANTS SUITE 1145 - 1,955 (31 OCCUPANTS)	TABLE 2902.1		
GENERAL BUILDING HEIGHTS	AND AREAS					M WATERCLOSETS (31 OCCUPANTS): MALES (15.5/500): 0.03 WC REQ'D		(A)	
TENANT SPACE: HEIGHT/STORIES (ALLOWABLE)	М	21'-0" / 1 STORY (75'-0" / 4 S		TABLE 504.4		FEMALES (15.5/500): 0.03 WC REQ'D			
AREA (ALLOWABLE)	М	1,954 SF (3.9% OF 50,000 SI	F)	TABLE 506.2		M LAVATORIES (31 OCCUPANTS): MALES (15.5/750): 0.02 LAVS REQ'D		( B )	
BUILDING: HEIGHT/STORIES (ALLOWABLE		21'-0" / 1 STORY (75'-0" / 3		TABLE 504.4		FEMALES (15.5/750): 0.02 LAVS REQ'D			
AREA (ALLOWABLE)	A-2*	29,166 SF (76.8% OF 38,00	,	TABLE 506.2		NEW + EXISTING USES: WATERCLOSETS:			C
* USAGE AND ASSOCIATED ALI OCCUPANCIES PER 508.3 WER	-		USE WITHIN THE BUILL	JING. NON-SEPARATED		MALES: 3.37 + 0.03 = 3.40 REQ'D, 5 WC PROVIDED FEMALES: 3.37 + 0.03 = 3.40 REQ'D, 5 WC PROVIDED	TABLE 2902.1		
FIRE PROTECTION SYSTEMS									
FULLY SPRINKLERED				903.2.7		MALES: 2.53 + 0.02 = 2.55 REQ'D, 4 LAVS PROVIDED FEMALES: 2.53 + 0.02 = 2.55 REQ'D, 4 LAVS PROVIDED			
INTERIOR FINISHES						SERVICE SINKS: 1 SINKS REQ'D, 1 SINK PROVIDED	TABLE 2902.1		-
SPRINKLERED IN	NTERIOR WALL AND	D CEILING FINISH REQUIREME	NTS BY OCCUPANCY	TABLE 803.11		DRINKING FOUNTAINS: 2 REQ'D, 2 PROVIDED	TABLE 2902.1	E	
<u>G</u>	ROUP	EXIT ENCLOSURES	<u>CORRIDORS</u>	ROOMS	GENERAL PLAN REVIEW	INFORMATION			
OCCUPANT LOAD	Μ	В	С	C	SIGNAGE	ALL EXTERIOR SIGNAGE DESIGN AND INSTALLATION SHALL BE DESIGN/BUILD BY THE ON OWNER'S CONSULTANT AND SHALL BE SUBMITTED FOR SEPARATE PERMIT TO THE CITY HAVING JURISDICTION.		(F)	
MERCANTILE: 3	1 OCCUPANTS				FIRE EXTINGUISHERS	THE GENERAL CONTRACTOR SHALL PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY TI	HE LOCAL FIRE	(G)	
MEANS OF EGRESS						PROTECTION DISTRICT.			
	1 OCCUPANTS THER@ 0.20"/OC0	CUPANT X 31 OCCUPANTS=	6.2" (36") REQ'D - 72" PRC	TABLE 1004.1.2           DVIDED         1005.3	FIRE SPRINKLERS	ALL FIRE SPRINKLER SYSTEMS DESIGN SHALL BE DESIGN/BUILD BY THE GENERAL CON SHALL BE SUBMITTED FOR SEPARATE PERMIT TO THE CITY AUTHORITIES HAVING JURIS		(H)	
EXIT ACCESS M		EQUIRED, 2 PROVIDED		TABLE 1006.2.1 TABLE 1017.2		INCLUDING THE LOCAL FIRE PROTECTION DISTRICT.			
	, , , , , , , , , , , , , , , , , , ,	,							Ĩ
ACCESSIBILITY									

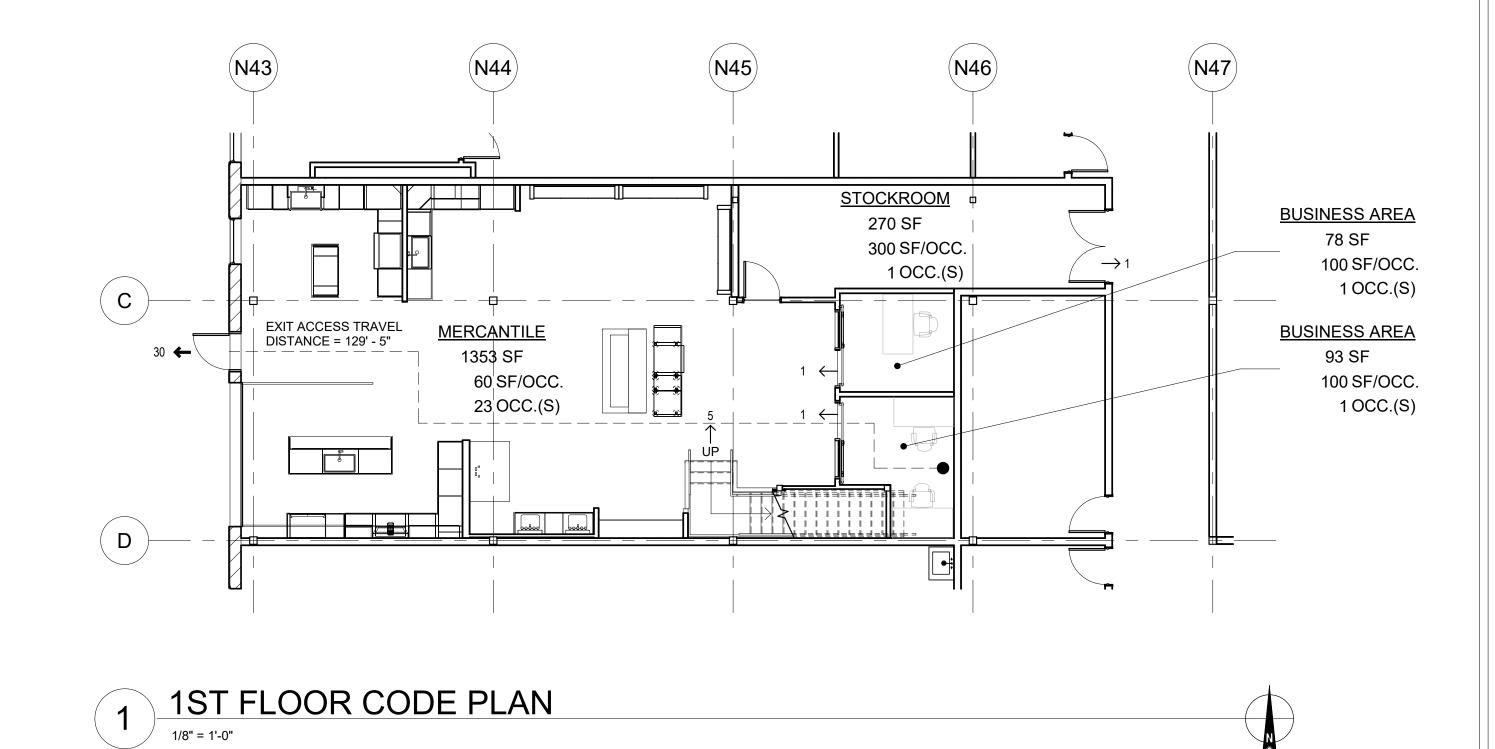
2 ACCESSIBLE EXIT REQUIRED, 2 ACCESSIBLE EXITS PROVIDED



ACCESSIBLE EXITS

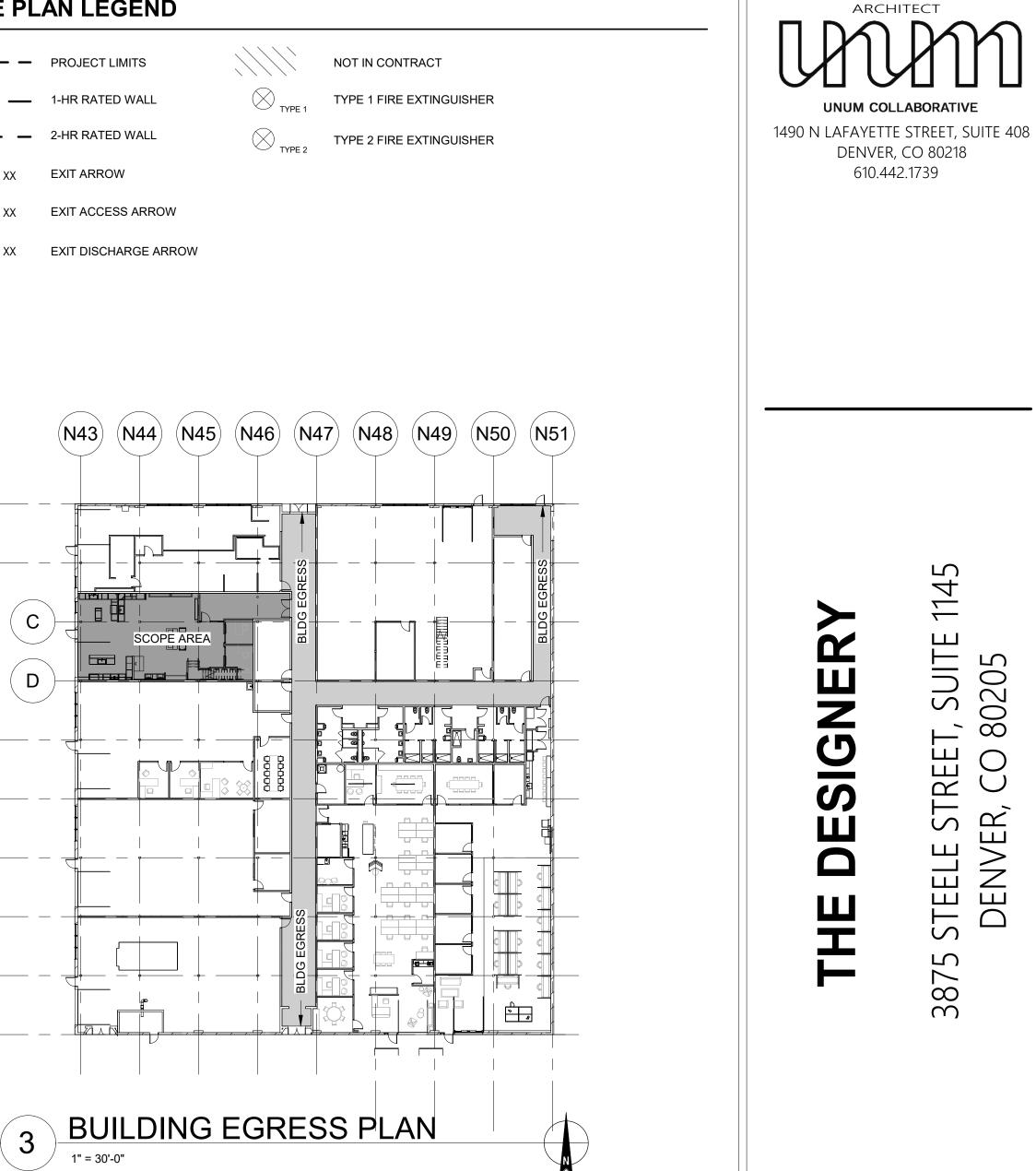
#### CODE PLAN LEGEND

1009.1



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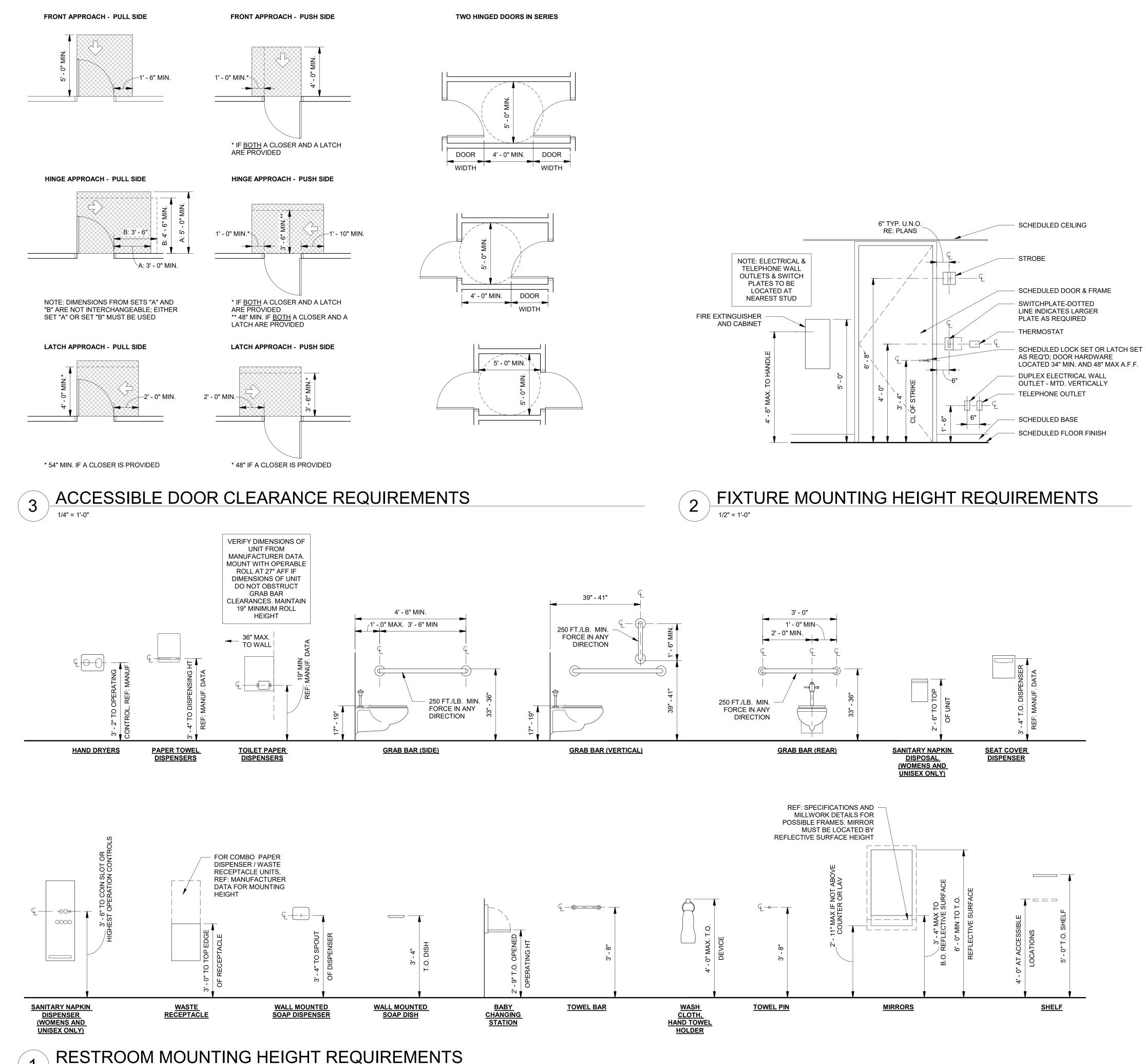
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STAMP & SIGNATURE: ARC.00404512 <u>Date</u> 04.11.2025 History PERMIT SET DATE: 04.11.2025 PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: CHECKED BY:

1ST FLOOR CODE PLANS

G-011



1/2" = 1'-0"

## **ACCESSIBILITY NOTES**

- AN EXIT IS A CONTINUOUS AND UNOBSTRUCTED MEAN OF EGRESS TO A PUBLIC WAY AND SHALL INCLUDE INTERVENING ROOMS, DOORS, AISLES, AND YARDS. A PUBLIC WAY IS ANY STREET, ALLEY OR SIMILAR PARCEL OF LAND UNOBSTRUCTED FROM GROUND TO SKY WHICH IS DEDICATED FOR PUBLIC USE AND HAVING A CLEAR WIDTH OF NOT LESS THAN 10 FEET.
- ALL ENTRANCES AND GROUND FLOOR EXIT DOORS SHALL BE MADE ACCESSIBLE.
- ALL REQUIRED EXIT DOORWAYS SHALL BE OF SIZE TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3' WIDTH AND 6'-8" IN HEIGHT.
- MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS ARE PROHIBITED. WHEN EXIT DOORS USED IN PAIRS AND APPROVED AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF HAVING THE AUTOMATIC FLUSH BOLTS SHALL HAVE NO DOOR KNOB OR SURFACE MOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
- LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARDWARE.
- HAND ACTIVATED DOOR HARDWARE SHALL BE CENTERED BETWEEN 30" AND 6. 44" ABOVE THE FLOOR.
- EXIT DOORS SHALL OPEN TO A CLEAR WIDTH OF NOT LESS THAN 32".
- WHERE A PAIR OF DOORS IS PROVIDED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 32".
- THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF THE DOOR SWING OF AT LEAST 60" AND A LENGTH OPPOSITE THE DIRECTION OF THE DOOR SWING OF 48".
- 10. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PAST THE STRIKE EDGE FOR INTERIOR DOORS.
- PROVIDE A CLEAR SPACE OF 12" PAST THE STRIKE EDGE OF THE DOOR ON THE 11. OPPOSITE SIDE TO WHICH THE DOOR SWINGS IF THE DOOR IS EQUIPPED WITH BOTH A LATCH AND CLOSER.
- 12. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/4" LOWER THAN THE THRESHOLD OF THE DOORWAY.
- THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE 13. A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARD.
- THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 15 LBS FOR 14. EXTERIOR DOORS AND 5 LBS FOR INTERIOR DOORS PER 1010.1.3 OF THE 2018
- CIRCULATION AISLES AND PEDESTRIAN WAYS SHALL BE SIZED ACCORDING TO 15. FUNCTIONAL REQUIREMENTS BUT SHALL NOT BE LESS THAN 36" IN CLEAR WIDTH
- EVERY PORTION OF EVERY BUILDING IN WHICH ARE INSTALLED SEATS, TABLES, MERCHANDISE, EQUIPMENT, OR SIMILAR MATERIALS SHALL BE PROVIDED WITH AISLES LEADING TO AN EXIT.
- 17. EVERY AISLE SHALL NOT BE LESS THAN 3' WIDTH IF SERVING ONLY ONE SIDE, AND NOT LESS THAN 3'-8" WIDTH IF SERVING BOTH SIDES.
- OBJECTS PROTRUDING FROM WALLS WITH THEIR LEADING EDGES BETWEEN 27" 18. AND 80" ABOVE THE FINISHED FLOOR SHALL PROTRUDE NO MORE THAN 4" INTO WALKS, HALLS, PASSAGEWAYS OR AISLES.
- FREE STANDING OBJECTS MOUNTED ON POSTS MAY OVERHANG 12" MAXIMUM 19. FROM 27" TO80" ABOVE THE FINISHED FLOOR.
- CLEAR FLOOR SPACE THAT ALLOWS A FORWARD OR PARALLEL APPROACH BY A 20. PERSON USING A WHEELCHAIR SHALL BE PROVIDED AT CONTROLS, RECEPTACLES, AND OTHER OPERABLE EQUIPMENT.
- THE HIGHEST AND LOWEST OPERABLE PART OF ALL CONTROLS, RECEPTACLES, 21. AND OTHER OPERABLE EQUIPMENT SHALL BE PLACED WITHIN 48" OF THE FLOOR BUT NOT LOWER THAN 15" IF FORWARD APPROACHED AND WITHIN 54" BUT NOT LOWER THAN 9" IF SIDE APPROACHED. ELECTRICAL AND COMMUNICATION SYSTEM RECEPTACLES SHALL NOT BE PLACED LESS THAN 15" ABOVE THE FLOOR.
- CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE 22. HAND AND SHALL NOT REQUIRE TIGHT GRASPING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO OPERATE CONTROLS SHALL BE NO GREATER THAN 5 LBS
- THE MINIMUM CLEAR FLOOR SPACE REQUIRED TO ACCOMMODATE A SINGLE 23. STATIONARY WHEELCHAIR IS 30" BY 48". THE MINIMUM CLEAR FLOOR SPACE MAY BE POSITIONED FOR FORWARD OR PARALLEL APPROACH.
- THE MINIMUM CLEAR WIDTH FOR A SINGLE WHEELCHAIR PASSAGE SHALL BE 32" 24. AT A POINT AND 36" CONTINUOUSLY.
- THE MINIMUM CLEAR WIDTH FOR 2 WHEELCHAIRS TO PASS SHALL BE 60". 25. THE MINIMUM CLEAR WIDTH REQUIRED FOR A WHEELCHAIR TO TURN AROUND 26.
- AN OBSTRUCTION SHALL BE 36" WHERE THE OBSTRUCTION IS 48" OR MORE IN LENGTH AND 42" WHERE THE OBSTRUCTION IS LESS THAN 48" IN LENGTH. IF SEATING FOR PEOPLE IN WHEELCHAIRS IS PROVIDED AT FIXED TABLES OR 27.
- COUNTERS, KNEE SPACES AT LEAST 27" HIGH, 30" WIDE, AND 19" DEEP SHALL BE PROVIDED. THE TOPS OF TABLES AND COUNTERS SHALL BE 28" TO 34" FROM THE FLOOR. 28.
- THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED 29. TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE AND SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD 599B.
- ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE AND AT EVERY MAJOR 30. JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE IDENTIFIED WITH A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
- WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, 31. RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCOMPANIED BY BRAILLE. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH OUTSIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FLOOR TO THE CENTERLINE OF THE SIGN. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
- WHEN RAISED CHARACTERS OR SYMBOLS ARE USED, THEY SHALL CONFORM 32. TO THEFOLLOWING: LETTERS AND NUMBERS SHALL BE RAISED OR RECESSED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY
  - GRADE 2 BRAILLE. RAISED CHARACTERS OR SYMBOLS SHALL BE A MINIMUM OF 5/8" AND A MAXIMUM OF 2" HIGH.
  - PICTORIAL SYMBOL SIGNS SHALL BE ACCOMPANIED BY THE EQUIVALENT C. VFRBAI
  - DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE A MINIMUM OF 6" IN HEIGHT.

## ARCHITECT UNUM COLLABORATIVE 1490 N LAFAYETTE STREET, SUITE 408 **DENVER, CO 80218** 610.442.1739

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History PERMIT SET

<u>Date</u> 04.11.2025

DATE:	04.11.2025
PROJECT #:	2025.013
DRAWN BY:	JP
DESIGNED BY:	JP
CHECKED BY:	JP

MOUNTING HEIGHT REQUIREMENTS

G - 020

PROJECT LEGAL DESCRIPTION:	T3 R68 S24 SW/4 BEG 1410.77FT E OF SW COR SW/4 TH N 319.45FTE 240.11FT S 319.44FT W 240.11 FT TO POB				
PROJECT SUMMARY:	THE PROJECT IS COMPRISED OF THE RENOVATION OF A TENANT SPACE FOR AN OFFICE AND INDUSTRIAL USE. THE CONSTRUCTION TYPE IS TO REMAIN UNCHANGED. THE BUILDING AREA IS NOT CHANGING. THE OCCUPANCY WILL REMAIN B (OFFICE). WHILE THE IBC WILL NOT CHANGE, THE DENVER ZONING USE WILL BE UPDATED AS SHOWN IN THIS TABLE.				
ZONE DISTRICT	LANDSCAPE AREA (GROSS AREA PROVIDED)	STANDARD PARKING SPACES			
I-MX-5	0 SF	REQUIRED	PROVIDED		
		5	5		
ZONE LOT SIZE (SQ. FT.) (GROSS AREA)	BUILDING STORIES (#) (MIN./MAX.)	COMPACT PARKING SPACES			
102,227 SF 1 (EXISTING) N/A		REQUIRED	PROVIDED		
		0*	0		
PRIMARY USE(S)	BUILDING HEIGHT (FT.) (MIN./MAX.)	ACCESSIBLE PA	RKING SPACES		
RETAIL SALES, SERVICE & REPAIR, ALL OTHERS	21'-0" (EXISTING)	REQUIRED	PROVIDED		
	N/A	0	SEE CHART		
BUILDING FORM USED	TRANSPARENCY (PRIMARY STREET)	TOTAL PARK	ING SPACES		
GENERAL	64% (IN-SCOPE TENANT ONLY)	REQUIRED	PROVIDED		
		5	5		
GROSS FLOOR AREA (SQ. FT.) BY USE	TRANSPARENCY (SIDE STREET)	BICYCLE PAR	KING SPACES		
RETAIL SALES, SERVICE & REPAIR, ALL OTHERS: 2,401 SF.	56% (IN-SCOPE TENANT ONLY)	REQUIRED	PROVIDED		
		0	SEE CHART		

#### PROJECT SPECIFIC PARKING

OVERALL STORAGE AREA (PREVIOUS CH. 59 USE; CLASS 6): 1,955 SF

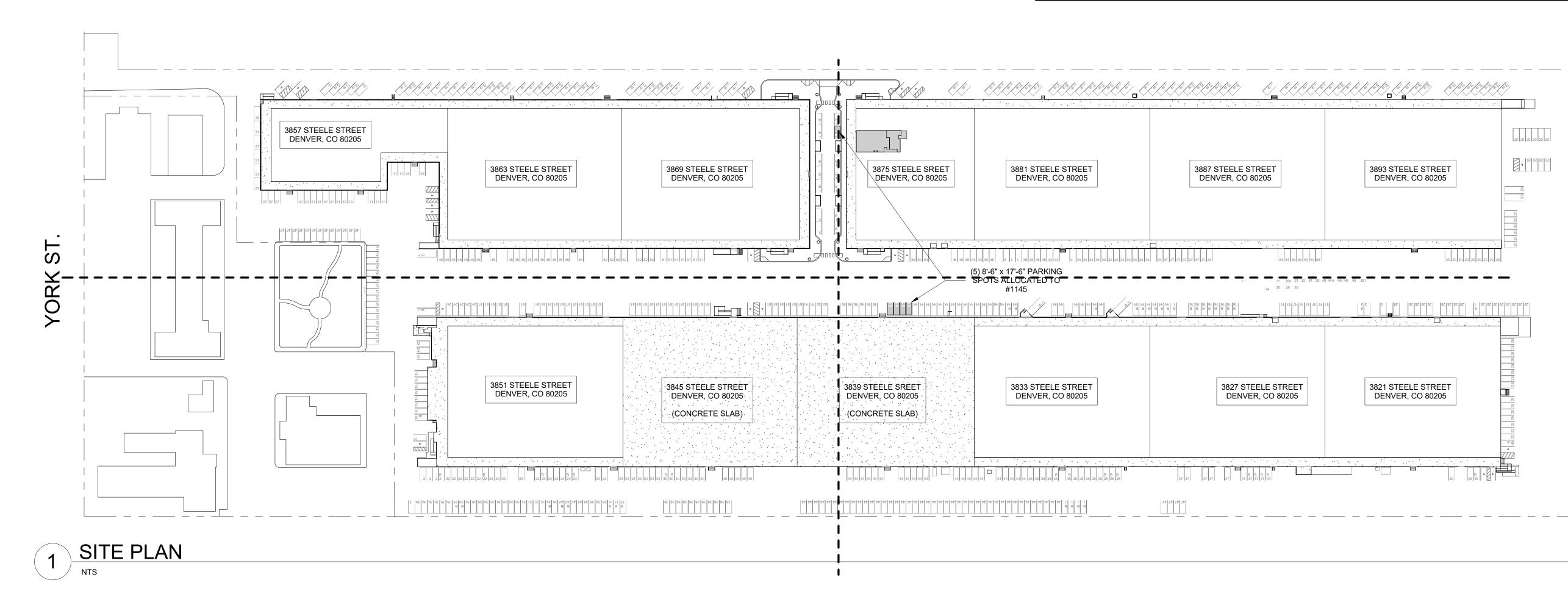
PARKING CALCULATION: (1,954 SF x 0.10\*\* SF) / 300\*\* = 0.65 SPACES OVERALL RETAIL AREA: 1,955 SF + 446 SF PARKING CALCULATION: \*(2,401 SF / 1000 SF) x 2.5 = 6.00 SPACES \*\*\*6.00 x 0.25 = 1.50 SPACES 6.00 - 1.50 - 0.65 = 3.85 4 ADDITIONAL PARKING SPACES REQUIRED

**1 EXISTING SPACE REQUIRED** 

\* PER SECTION 9.1.9.5 DISTRICT SPECIFIC STANDARDS, RETAIL SALES, SERVICE & REPAIR, ALL OTHERS REQUIRES 2.5 VEHICLE PARKING SPACES PER 1,000 SF GFA IN AN I-MX ZONE DISTRICT.

\*\* PER SECTION 59-586 (6), PARKING CLASS SIX, BEING COMPOSED OF ALL USES RIGHT WHICH ARE ENUMERATED IN THE SCHEDULE HEREINAFTER PROVIDED: THERE SHALL BE A PARKING AREA EQUAL TO ONE-TENTH THE GROSS FLOOR AREA IN ALL STRUCTURES CONTAINING THE USE BY RIGHT; PROVIDED, HOWEVER, THAT ONE (1) ADDITIONAL PARKING SPACE SHALL BE PROVIDED FOR EACH ARTIST STUDIO CONTAINING A DWELLING UNIT; THE ONLY REFERENCE TO AREA PER PARKING SPACE IS LOCATED AT 59-585(11)d.2.ii, WITHIN WHICH EACH PARKING SPACE IS CALCULATED @ 300 SF. HENCE, CLASS SIX PARKING IS CALCULATED @ 300 SF/SPACE.

\*\*\* THE SITE IS WITHIN 1/4 MILE OF A TRANSIT PRIORITY STREET AS DEFINED IN BLUEPRINT DENVER. A 25% REDUCTION IN THE TOTAL NUMBER OF REQUIRED VEHICLE PARKING SPACES IS BEING CALCULATED.



THE ORIGINAL OF THIS DRAWING IS 24" X 36". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED.

#### EXISTING SITE PARKING INFORMATION

ADDRESS SCHEDULE				
ADDRESS	AREA (GSF)			
3821 STEELE ST	40,800 SF			
3827 STEELE ST	40,800 SF			
3833 STEELE ST	43,136 SF			
3839 STEELE ST	0 SF			
3845 STEELE ST	0 SF			
3851 STEELE ST	41,950 SF			
3857 STEELE ST	20,451 SF			
3863 STEELE ST	43,103 SF			
3869 STEELE ST	54,286 SF			
3875 STEELE ST	43,086 SF			
3881 STEELE ST	43,086 SF			
3887 STEELE ST	43,086 SF			
3893 STEELE ST	42,851 SF			
TOTAL	456,635 SF			

OVERALL BUILDING AREA: 456,635 SF STANDARD SPACES REQUIRED (CLASS SIX PARKING): 152

STANDARD SPACES PROVIDED (BASELINE): 152

ACCESSIBLE SPACES REQUIRED: 152 x 2% = **4** ACCESSIBLE SPACES PROVIDED

(BASELINE): 4

LOADING SPACES REQUIRED (RETAIL, WHOLESALE, AND WAREHOUSING): 4 LOADING SPACES PROVIDED (BASELINE): 4

\*456,635 SF x 0.10 = 45,663.5 SF 45,663.5 SF / 300 SF\*\* = 152.2

Permit Issue Order	Zoning Permit Number	Project Name	Suite Number	Additional Standard Spaces	Additional Accessible Spaces		Additiona Bicycle Spaces
				450		4	0
1	2019-ZLMASTER-0001534	BASELINE		152	5	4	8
2	2018-ZONE-0003381	REALM & AMETHYST	3851 SUITE B	5	1	0	0
3	2018-ZONE-0007055 / 2019-ZONE-0003125	RIVER BEAR	3821 SUITE 1306	2	0	0	0
4	2019-ZONE-0002367	YELLOW DOG	3881 SUITE A	4	0	0	0
11	2020-ZONE-0001374	CRAFT COLLECTIVE	3857 SUITE 1290	5	0	0	1
14	2020-ZONE-0003720	COHESION BREWING	3851 SUITE 1388	8	0	0	0
15	2020-ZONE-0003845	PRIORITY ROOFING	3851 SUITE 1391	3	0	0	0
16	2020-ZONE-0004041	UNION STREET TIN	3827 SUITE 1319	0	0	0	0
17	2020-ZONE-0004436	ADULTS & CRAFTS	3857 SUITE 1289	0	0	0	0
19	2020-ZONE-0005645	SKB LEASING OFFICE	3857 SUITE 1293	2	0	0	0
20	2021-ZONE-0002637	RIVIAN	3893 SUITE 1203	67	1	2	3
21	2021-ZONE-0002453	FIT COLLECTIVE	3857 SUITE 1182	7	0	0	1
22	2020-ZONE-0006163	NEW COTTAGE ARTS	3851 SUITE 1488	6	0	0	0
23	2021-ZONE-0002036	MEDICAL TRANSPORTATION MGMT	3851 SUITE 1479	5	0	0	0
24	2021-ZONE-0005835	STICK & FEATHER	3851 SUITE 1378	21	1	0	1
25	2021-ZONE-0005836	CLOVE & TWINE	3833 SUITE 1433	5	0	0	1
27	2021-ZONE-0005075	ARTEMIS VISION	3857 SUITE 1186	4	0	0	0
28	2022-ZONE-0000683	LODO CROSSFIT	3821 SUITE 1300	20	0	0	1
29	2021-ZONE-0006165	DENVER BARBELL	3821 SUITE 1302	12	1	0	0
30	2021-ZONE-0006167	THIRTEENTH FLOOR HQ	3851 SUITE 1371	9	0	0	1
31	2021-ZONE-0006168	TEAMMATES	3857 SUITE 1186	8	0	0	0
32	2021-ZONE-0005812	VOLO SPORTS	3821 SUITE 1414	3	0	0	0
33	2022-ZONE-0001598	CRAFT COLLECTIVE 2	3857 SUITE 1296	9	0	0	1
34	2022-ZONE-0002653	AUTOSTORE PHASE 1	3881 SUITE 1235	14	0	0	1
35	2022-ZONE-0003031	CLOVE & TWINE EXPANSION	3833 SUITE 1433	4	1	0	0
36	2022-ZONE-0003046	KGA STUDIO ARCHITECTS	3881 SUITE 1132	6	0	0	0
37	2022-ZONE-0001915	AUTOSTORE PHASE 3	3881 SUITE 1127	7	0	0	0
38	2022-ZONE-0001913	RAND CONSTRUCTION	3869 SUITE 1264	15	0	0	1
39	2022-ZONE-0002082	BLIND SPOT	3851 SUITE 1389	4	0	0	0
40	2022-20NE-0004013	GRAY SOLUTIONS	3851 SUITE 1379	10		0	1
					0		1 0
41	2023-ZONE-0001850	OUT & BACK	3869 SUITE 1163	2	0	0	0
42	2024-ZONE-0000454	KARMAN+	3851 SUITE 1382	2	0	0	0
43	2023-ZONE-0004899	LIBERTY SPORTS GLASSES	3875 SUITE 1147	4		0	0
44	2023-ZONE-0003968	SKIPTOWN	3833 SUITE 1332	82	1	0	4
45	2023-ZONE-0005096	RAD BIKES	3863 SUITE 1278	37	1	0	2
46	2023-ZONE-0005227		3875 SUITE 1242	6	0	0	1
47	2024-ZONE-0001464	VALMONT	3827 SUITE 1312	18	0	0	0
48	2024-ZONE-0000357	NORTHWESTERN MUTUAL	3875 SUITE 1244	6	0	0	1
49	2024-ZONE-0000086	MAYBELL QUANTUM	3821 SUITE 1411	2	1	0	0
50	2024-ZONE-0000799	ELEMENTAL CAFE	3875 SUITE 1143	5	0	0	0
51	2024-ZONE-0001647	BEAT THE BOMB	3863 SUITE 1273	49	1	0	3
52	2024-ZONE-0003739	KOKOPELLI	3863 SUITE 1269	7	0	0	0
53	2024-ZONE-0004589	AZAK	3887 SUITE 1112	7	0	0	0
54	2025-ZONE-TBD1	DESIGNERY	3875 SUITE 1145	4	0	0	0

#### PARKING LEGEND

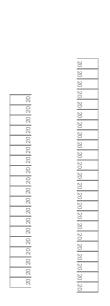
#### 90 DEGREE PARKING STALL 8'-6" x 17'-6"

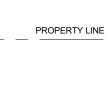
- "B" INDICATES SPACE CALCULATED AS PART OF THE SITE "BASELINE" - PERMIT ORDER NUMBER - COORDINATES W/ PROJECT NAME AND PERMIT NUMBER PROJECT ASSIGNED STALL 8'-6" x 17'-6"

ACCESSIBLE PARKING STALL 8'-6" x 17'-6" + 5'-0" ACCESS AISLE

LOADING STALL 8'-6" x 17'-6"

LOCATIONS OF SPACES ARE REPRESENTATIVE OF THE ASSIGMENTS TO SPECIFIC ADDRESSES. LOCATIONS INDICATED ARE FOR REFERENCE ONLY, NOT PRECISE LOCATIONS







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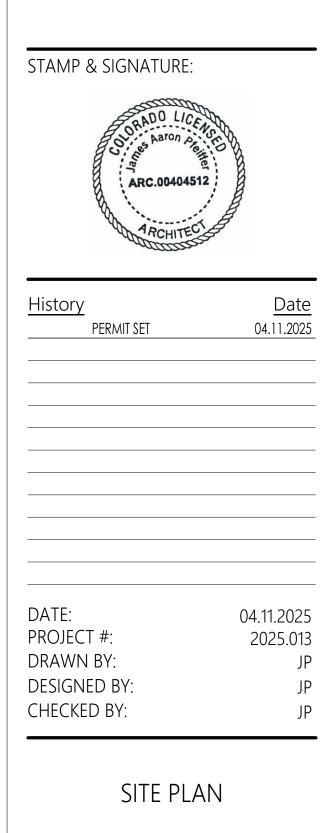
ARCHITECT

UNUM COLLABORATIVE

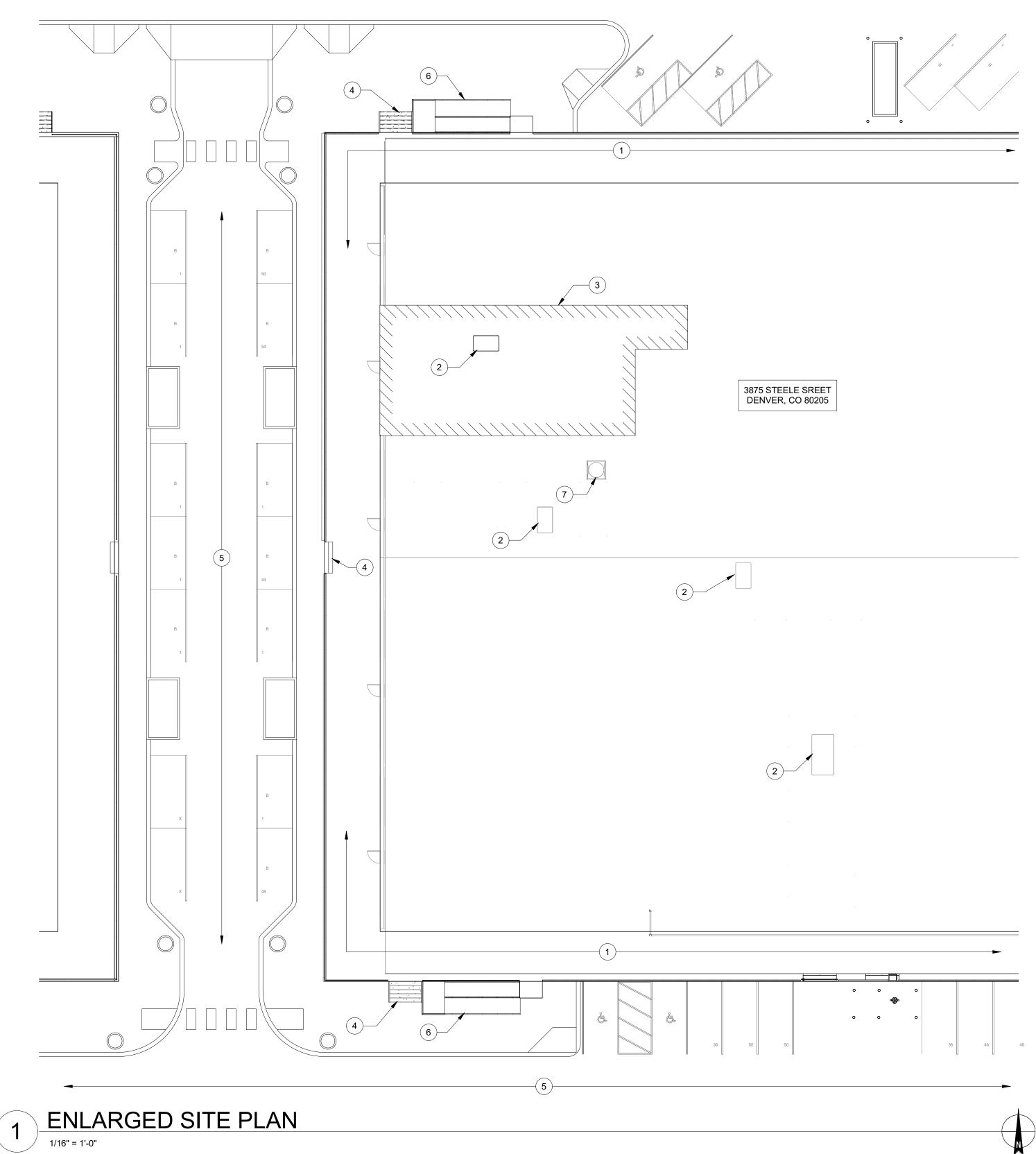
1490 N LAFAYETTE STREET, SUITE 408

DENVER, CO 80218

610.442.1739







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THE ORIGINAL OF THIS DRAWING IS 24" X 36". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED.

E 39TH AVENUE

#### **ARCHITECTURAL SITE PLAN SHEET NOTES**

- 1 (E) RAISED CONCRETE WALKWAY
- 2 (E) RTU TO REMAIN 3 PROJECT BOUNDARY
- 4 (E) STAIRS
- 5 (E) DRIVE AISLE 6 ACCESSIBLE RAMP BEYOND
- 7 (E) SKYLIGHT



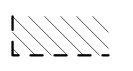
THE DESIGNERY	3875 STEELE STREET, SUITE 1145 DENVER, CO 80205
STAMP & SIGNATUR	CLASTO AREINET
History	<u>Date</u>
PERMIT SET	04.11.2025
DATE:	04.11.2025
PROJECT #:	2025.013
DRAWN BY:	JP
DESIGNED BY:	JP
CHECKED BY:	JP

ENLARGED SITE PLAN





#### FLOOR PLAN LEGEND



\_ - \_\_\_ - \_\_\_ - \_\_\_

AREA NOT IN CONTRACT (N.I.C.)

(E) COMPONENTS TO REMAIN

(N) COMPONENTS

TEMPORARY CONSTRUCTION BARRIER

### **GENERAL FLOOR PLAN NOTES**

- 1 ALL SPACES TO MAINTAIN FIRE PROTECTION REQUIREMENTS
- 2 PROVIDE AIR RETURNS AND TRANSFERS AS REQUIRED TO MAINTAIN MECHANICAL REQUIREMENTS
- 3 ALL DOORS TO BE INSTALLED 6" FROM ADJACENT PERDENDICULAR WALL U.O.N.
- 4 DIMENSIONS ARE TAKEN TO FACE OF STUDS, U.O.N.5 WINDOW AND DOOR DIMENSIONS ARE TO THE CENTERLINE

#### ARCHITECTURAL PLAN SHEET NOTES

1 ALIGN WALL W/ ADJACENT WALL



3875 STEELE STREET, SUITE 1145 DENVER, CO 80205

 $\succ$ 

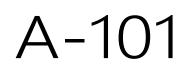
DESIGNER

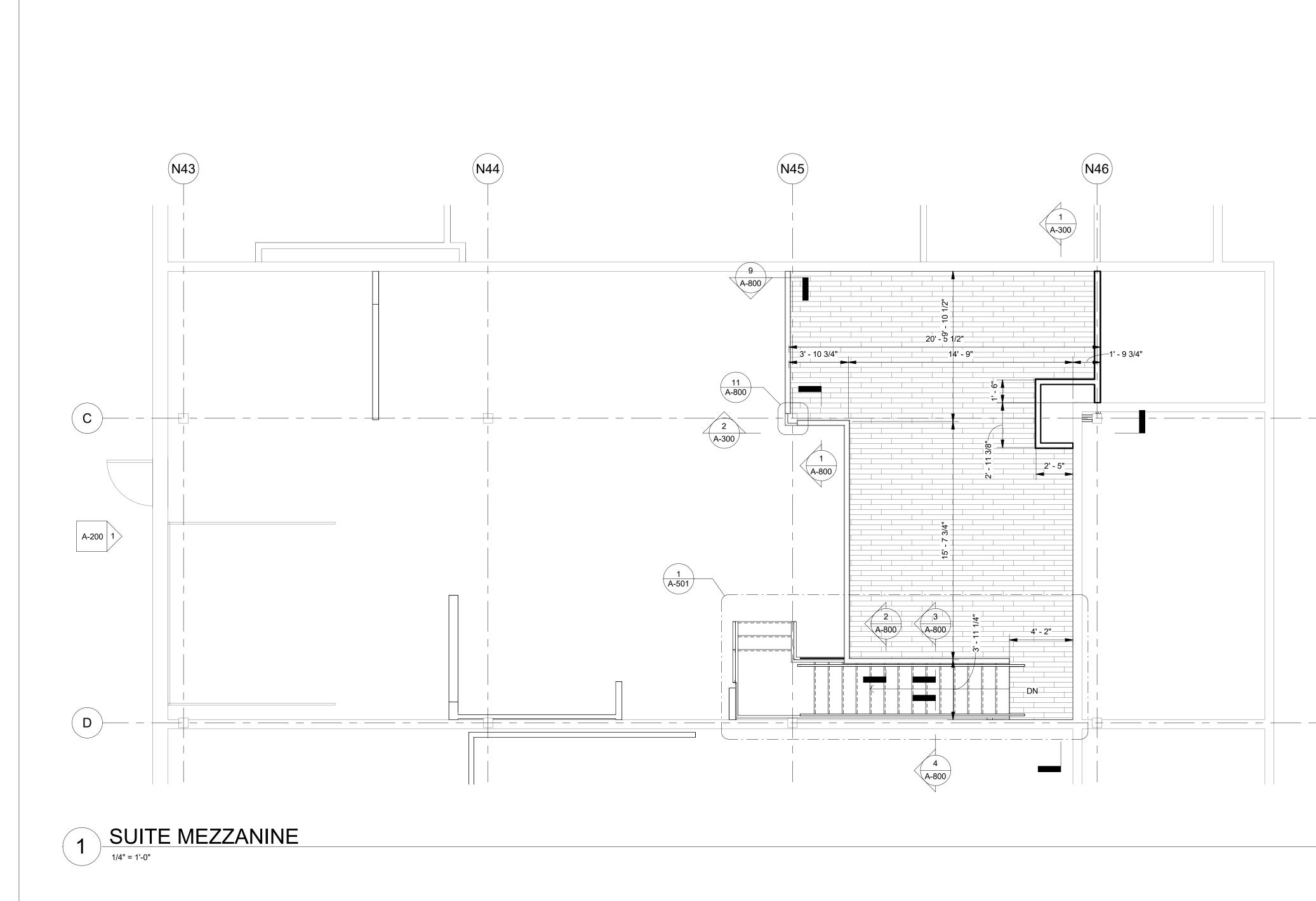
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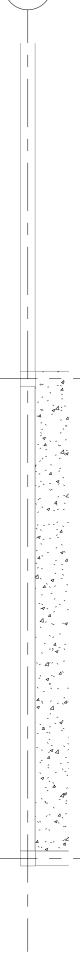
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STAMP & SIGNATURE:	
ARC.00404512	
History Permit set	<u>Date</u> 04.11.2025
DATE: PROJECT #: DRAWN BY: DESIGNED BY: CHECKED BY:	04.11.2025 2025.013 JP JP JP

1ST FLOOR PLAN

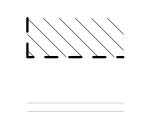






(N47)

### FLOOR PLAN LEGEND



AREA NOT IN CONTRACT (N.I.C.)

(E) COMPONENTS TO REMAIN

(N) COMPONENTS

TEMPORARY CONSTRUCTION BARRIER

## GENERAL FLOOR PLAN NOTES

- 1 ALL SPACES TO MAINTAIN FIRE PROTECTION REQUIREMENTS 2 PROVIDE AIR RETURNS AND TRANSFERS AS REQUIRED TO MAINTAIN
- MECHANICAL REQUIREMENTS
- 3 ALL DOORS TO BE INSTALLED 6" FROM ADJACENT PERDENDICULAR WALL U.O.N. 4 DIMENSIONS ARE TAKEN TO FACE OF STUDS, U.O.N.
- 5 WINDOW AND DOOR DIMENSIONS ARE TO THE CENTERLINE

## **ARCHITECTURAL PLAN SHEET NOTES**

1 ALIGN WALL W/ ADJACENT WALL

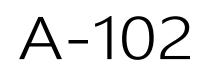


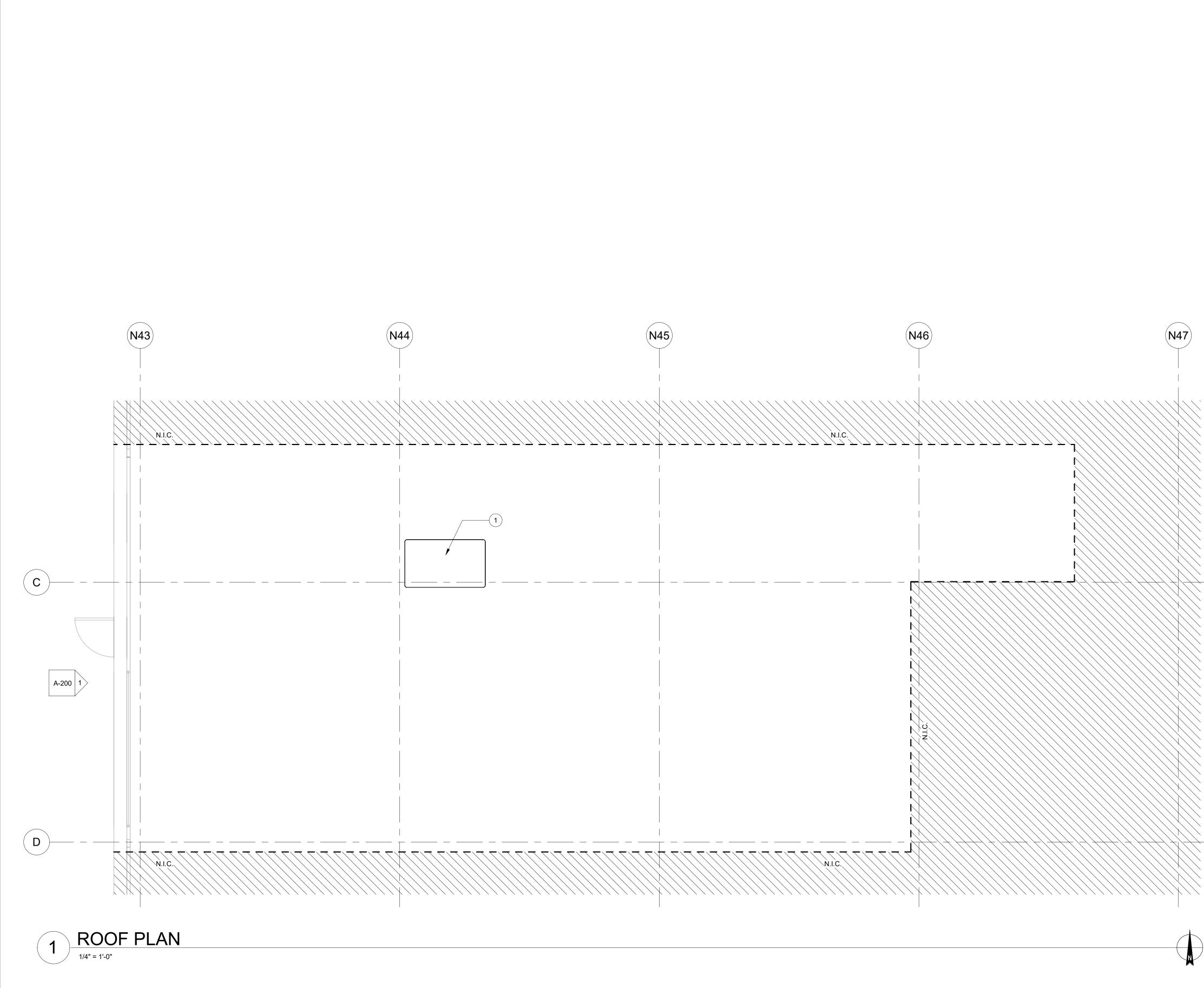
STEELE STREET, SUITE 1145 DENVER, CO 80205 DESIGNERY 3875

THE

STAMP & SIGNATURE:			
ARC.00404512         History       Date         PERMIT SET       04.11.2025         Other       04.11.2025         DATE:       04.11.2025         PROJECT #:       2025.013         DRAWN BY:       JP         DESIGNED BY:       JP	STAMP &	& SIGNATURE:	
PERMIT SET       04.11.2025		Mer	
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP		PERMIT SET	
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP			
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP			
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP			
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP			
PROJECT #: 2025.013 DRAWN BY: JP DESIGNED BY: JP			
	PROJECT DRAWN DESIGNE	BY: D BY:	2025.013 JP JP

MEZZANINE PLAN





### **ROOF PLAN LEGEND**

\_\_\_\_\_

AREA NOT IN CONTRACT (N.I.C.)

(E) WALLS TO REMAIN

(N) WALLS

TEMPORARY CONSTRUCTION BARRIER

#### **GENERAL ROOF PLAN NOTES**

1 PROVIDE AIR RETURNS AND TRANSFERS AS REQUIRED TO MAINTAIN MECHANICAL REQUIREMENTS; RE: MECH.

#### **ROOF PLAN SHEET NOTES**

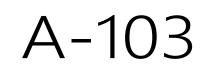
1 (E) RTU TO REMAIN; RE: MECHANICAL



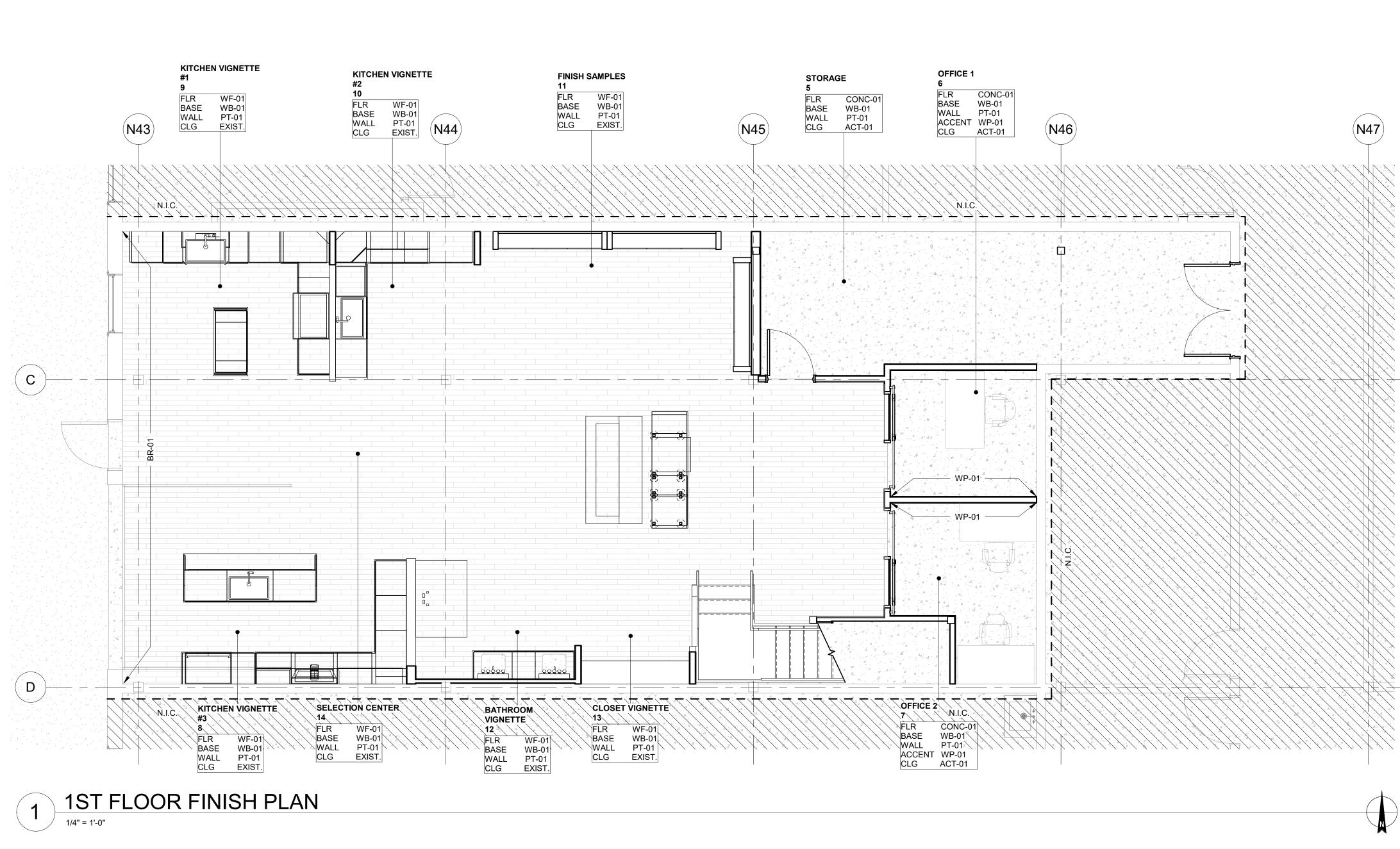
# STEELE STREET, SUITE 1145 DENVER, CO 80205 DESIGNERY THE 3875 STAMP & SIGNATURE: SADO LICE

ARC.0040451	
History	<u>Date</u>
PERMIT SET	04.11.2025
DATE:	04.11.2025
PROJECT #:	2025.013
DRAWN BY:	JP
DESIGNED BY:	JP
CHECKED BY:	JP

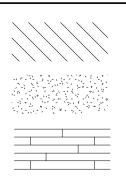
ROOF PLAN







#### FINISH PLAN LEGEND



AREA NOT IN CONTRACT (N.I.C.)

POLISHED CONCRETE FLOORING

NEW WOOD FLOORING

#### **GENERAL FINISH NOTES**

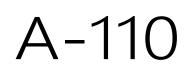
- 1 ALL GYP. BD. WALLS TO RECEIVE WOOD BASE.
- 2 ALL NEW WALLS TO RECEIVE LEVEL 4 FINISH 3 WALK OFF MATS TO BE OWNER PROVIDED & OWNER INSTALLED.
- 4 ALL MILLWORK AND DISPLAYS TO BE OWNER PROVIDED & OWNER INSTALLED. 5 EXISTING BRICK TO BE CLEANED AS REQ'D PRIOR TO PROJECT COMPLETION

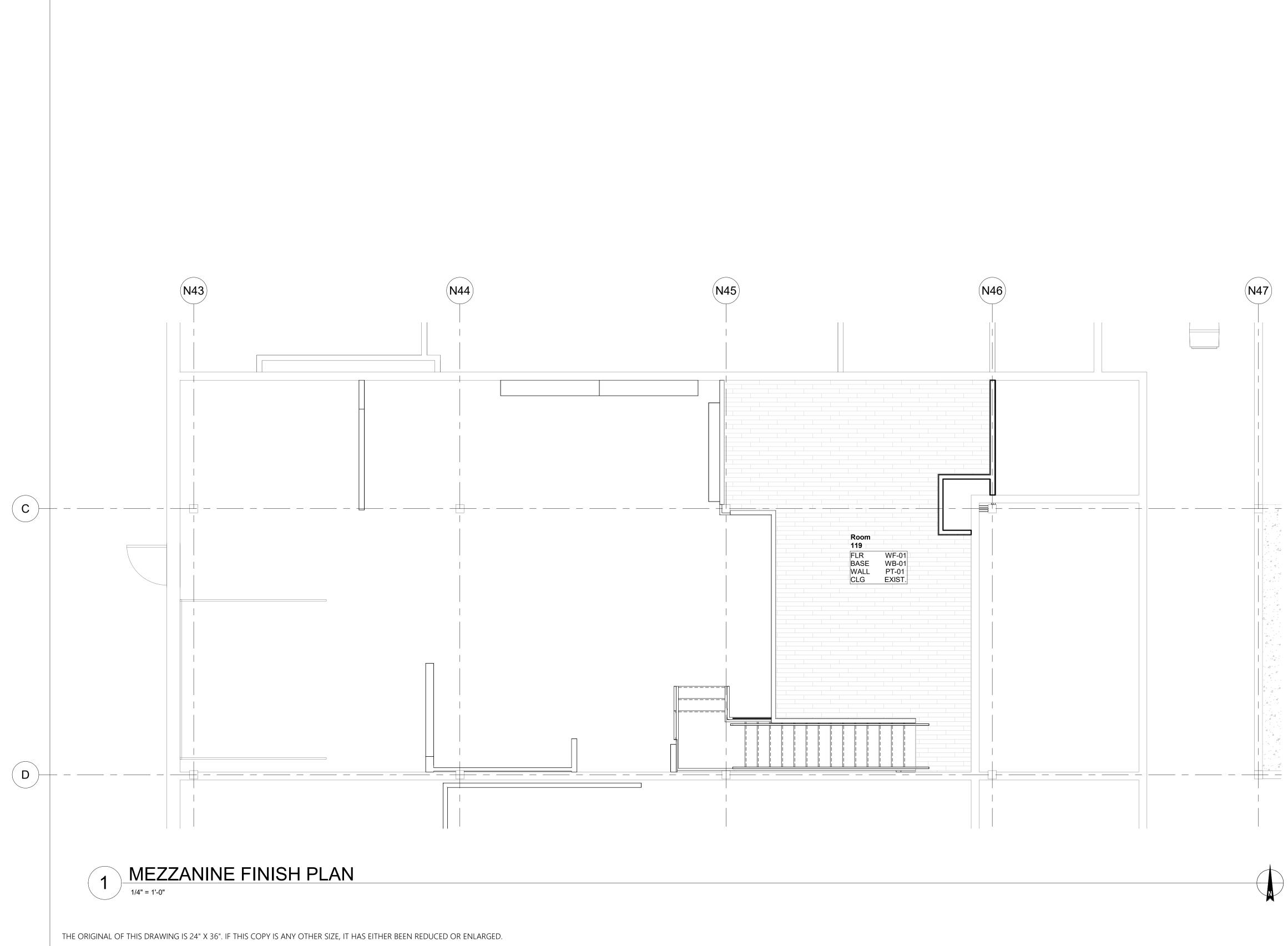
ARCHITECT UNUM COLLABORATIVE 1490 N LAFAYETTE STREET, SUITE 408 DENVER, CO 80218 610.442.1739

1145

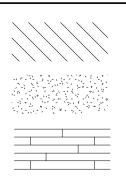
>

THE DESIGNER	3875 STEELE STREET, SUITE DENVER, CO 80205
STAMP & SIGNATU	LICENSTON PERCENT
<u>History</u>	Date
DATE: PROJECT #: DRAWN BY: DESIGNED BY: CHECKED BY:	04.11.2025 2025.013 JF JF JF
1ST FLOOR	FINISH PLAN





#### FINISH PLAN LEGEND



AREA NOT IN CONTRACT (N.I.C.)

POLISHED CONCRETE FLOORING

NEW WOOD FLOORING

#### **GENERAL FINISH NOTES**

- 1 ALL GYP. BD. WALLS TO RECEIVE WOOD BASE.
- 2 ALL NEW WALLS TO RECEIVE LEVEL 4 FINISH 3 WALK OFF MATS TO BE OWNER PROVIDED & OWNER INSTALLED.
- 4 ALL MILLWORK AND DISPLAYS TO BE OWNER PROVIDED & OWNER INSTALLED. 5 EXISTING BRICK TO BE CLEANED AS REQ'D PRIOR TO PROJECT COMPLETION

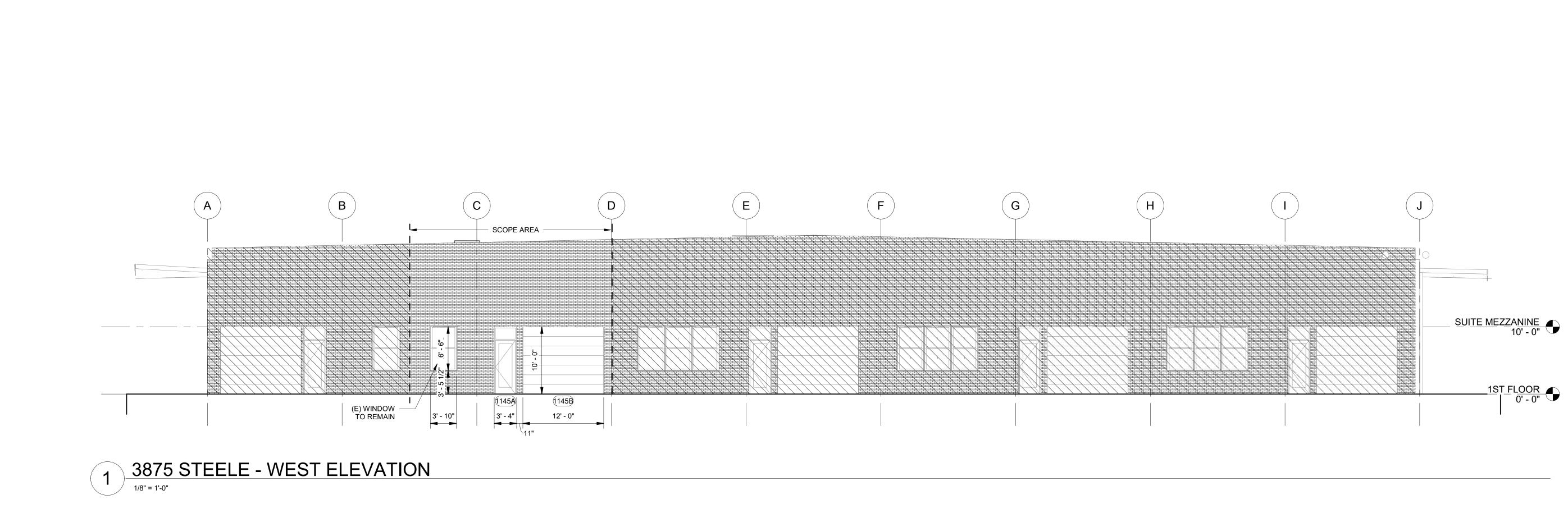
ARCHITECT UNUM COLLABORATIVE 1490 N LAFAYETTE STREET, SUITE 408 DENVER, CO 80218 610.442.1739

3875 STEELE STREET, SUITE DENVER, CO 80205
RE: 1/CFN0TD 04512 TECI
Date
04.11.2025
04.11.2025 2025.013 JF JF JF

MEZZANINE FINISH PLAN

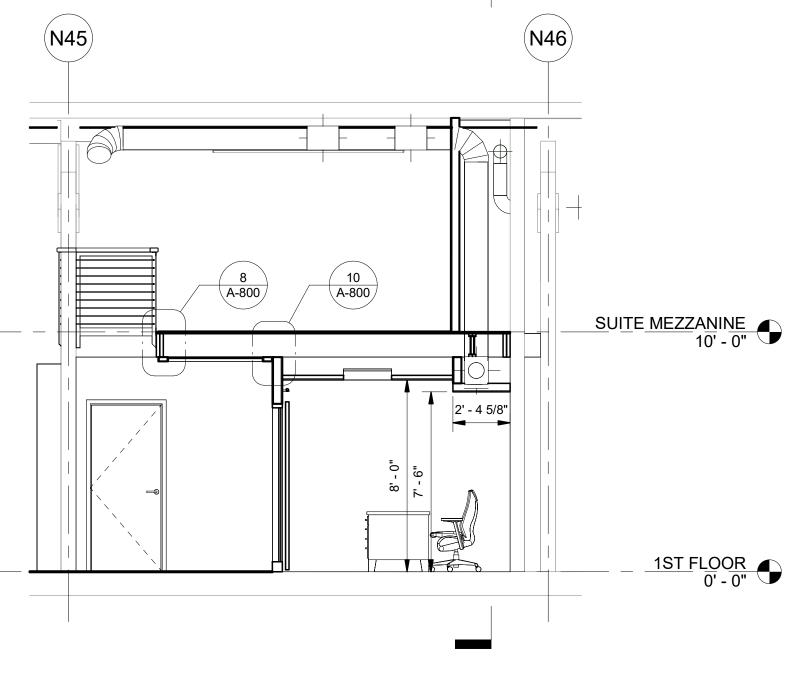
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A-200

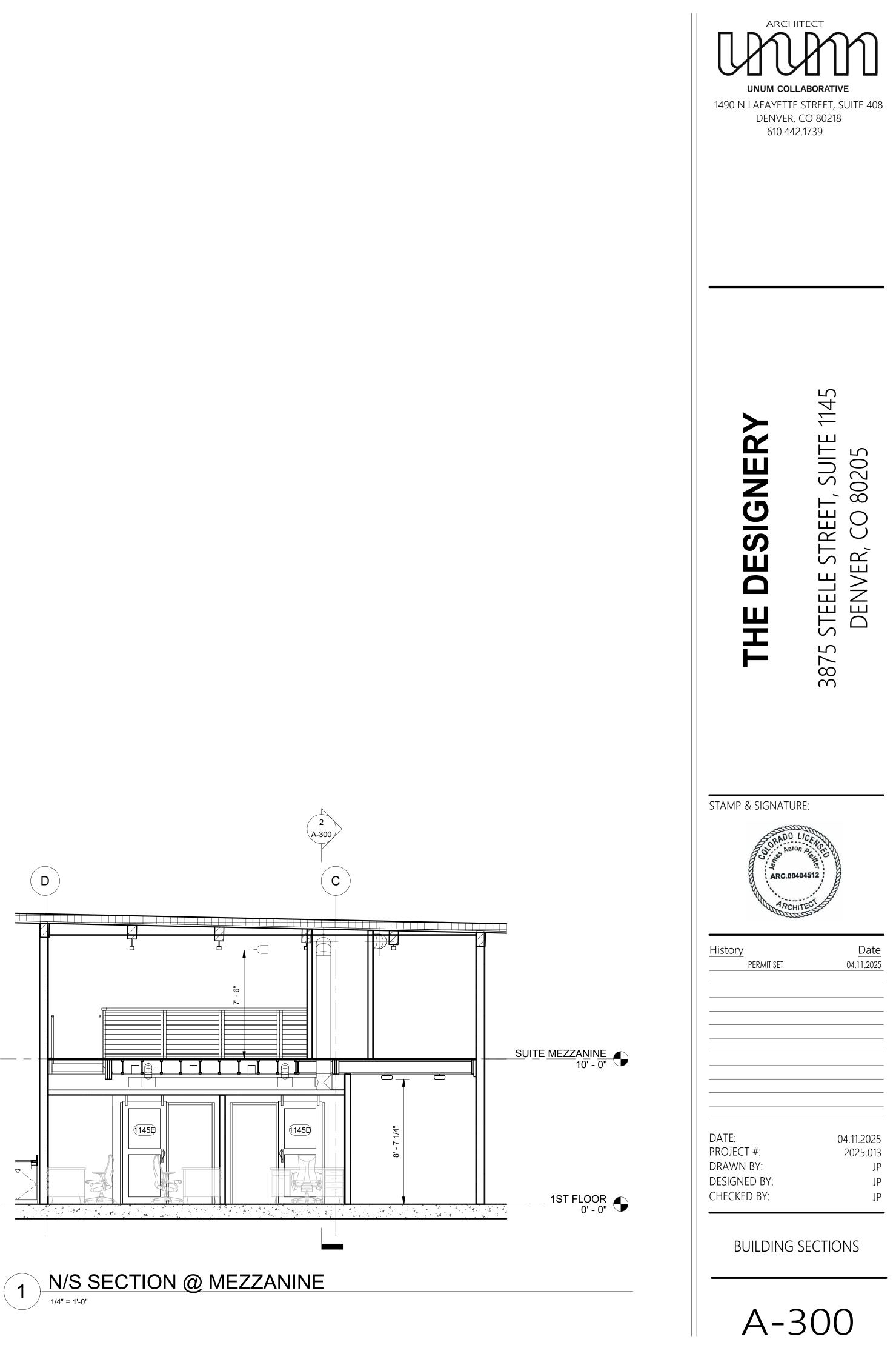


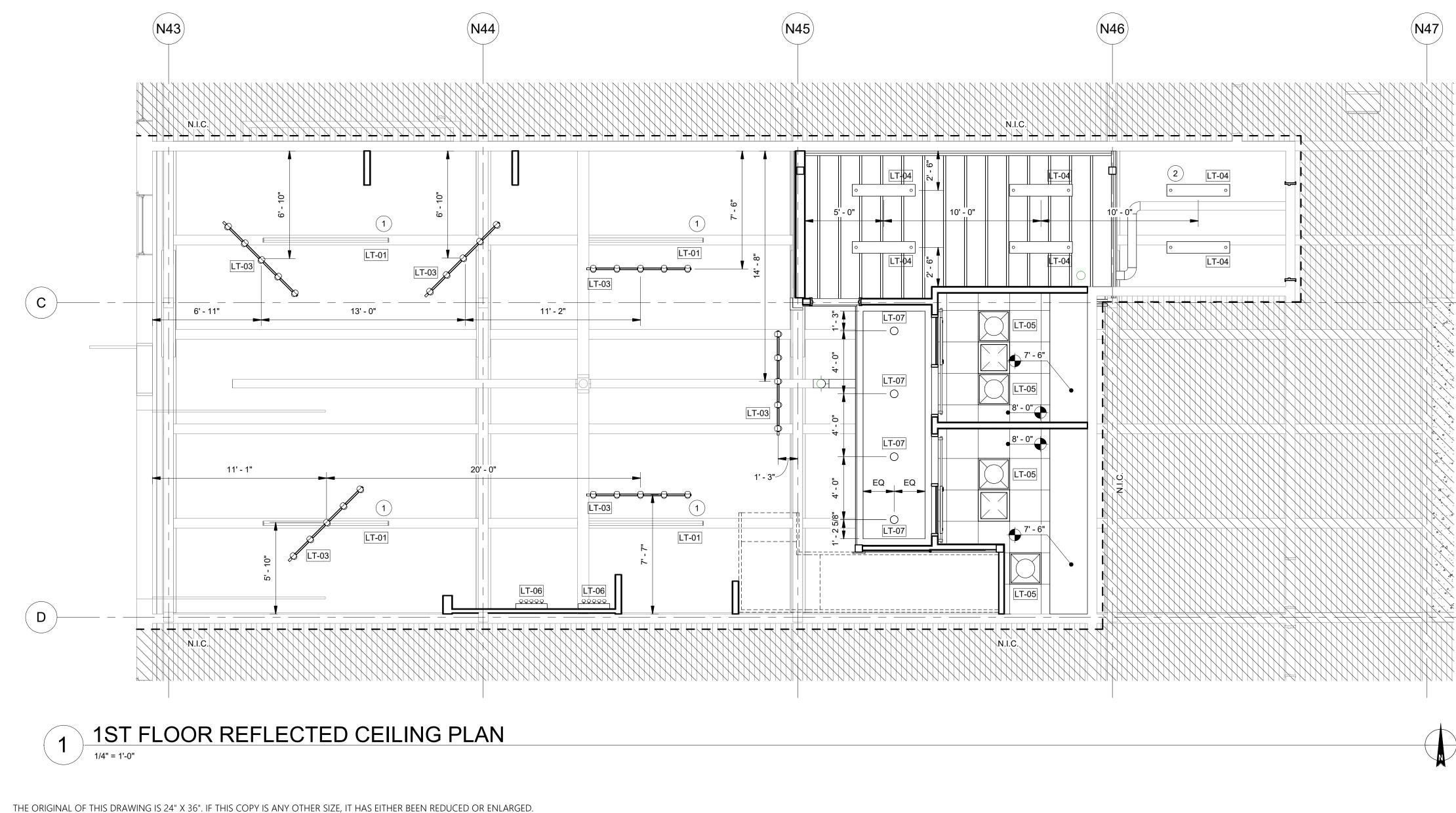
1 A-300



THE ORIGINAL OF THIS DRAWING IS 24" X 36". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED.







#### **RCP LEGEND**

	LIGHT FIXTURE, RE: ELEC.
	EXHAUST, RE: MECHANICAL
	SUPPLY, RE: MECHANICAL
	2x4 ACOUSTICAL CEILING TILE & SUSPENSION SYSTEM
	AREA NOT IN CONTRACT (N.I.C.)
	(E) WALLS TO REMAIN
OS	OCCUPANCY SENSOR
$\oplus$	SPRINKLER HEAD

#### **GENERAL RCP NOTES**

- 1 ALL CEILINGS ARE 9'-0" ABOVE FINISH FLOOR U.N.O.
- 2 ALL REFLECTED CEILING PLAN DIMENSIONS AND HEIGHTS ARE FROM FINISHED FACE TO FINISH FACE
- 3 ALL CEILING GRIDS ARE CENTERED ON ROOM OR CORRIDOR U.N.O. 4 ALL FIXTURES SHOWN AT CEILING GRID TO BE CENTERED IN BOTH DIRECTIONS WITHIN THE TILE. CENTER ALL CEILING MOUNTED ITEMS WITHIN CEILING
- ELEMENTS, IN GYPSUM BOARD SOFFITS AND BETWEEN OTHER CEILING MOUNTED FIXTURES. 5 COORDINATE ACCESS PANEL LOCATIONS WITH LOCATIONS OF OTHER CEILING
- MOUNTED ITEMS 6 ALL EXPOSED DUCTWORK, STRUCTURE, SPRINKLER PIPING AND PLUMBING
- DEVICES TO RECEIVE PAINT FINISH 7 ALL SUSPENDED ACOUSTICAL CEILING TILE TO MATCH EXISTING U.N.O.
- 8 INSTALL CEILING DEVICES AS INDICATED ON PLANS, NOTIFY ARCHITECT OF ANY DISCREPANCIES

#### **RCP SHEET NOTES**

- 1 (E) LINEAR PENDANT LIGHT TO REMAIN
- HANG LIGHT FIXTURES TO ALIGN WITH SIMILAR FIXTURES MOUNTED 2
- UNDERNEATH MEZZANINE STRUCTURE IN THE STORAGE AREA RAISE (E) LINEAR PENDANT LIGHT FIXTURE TO 7'-6" AFF 3
- REROUTE (E) FIRE SPRINKLER PIPE TO ACCOMMODATE A 7'-6" HEAD HEIGHT ON THE MEZZANINE 4



## 1145 SIGNERY SUITE 0205 ER, CO 80205 STEELE STI DENVER, Ш́О 뽀 3875

STAMP	&	SIGNATURE:



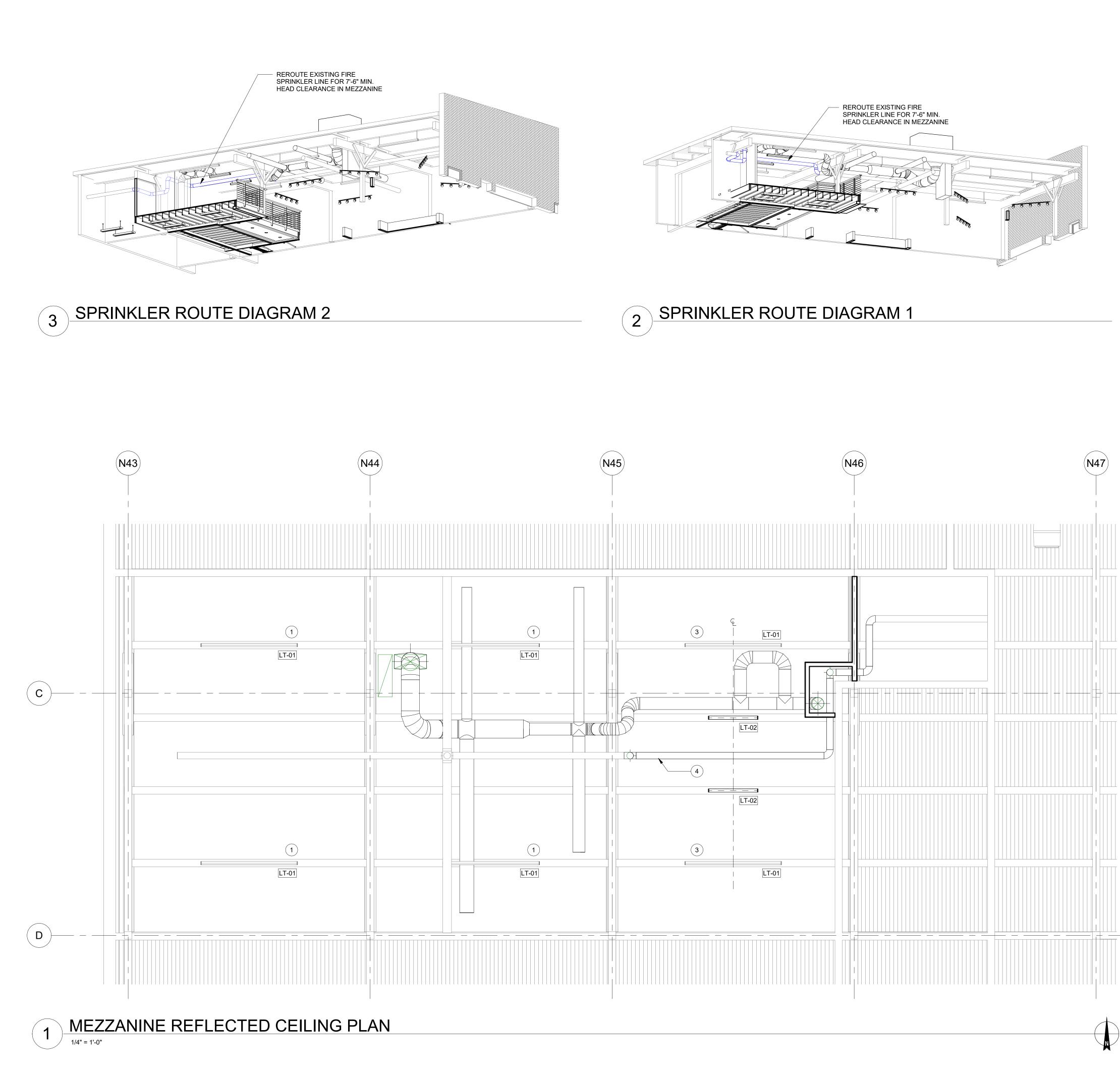
History	
	PERMIT SET

<u>Date</u> 04.11.2025

DATE:	04.11.2025
PROJECT #:	2025.013
DRAWN BY:	NH/JP
DESIGNED BY:	NH/JP
CHECKED BY:	JP

1ST FLOOR REFLECTED CEILING AND SOFFIT PLAN





THE ORIGINAL OF THIS DRAWING IS 24" X 36". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED.

#### **RCP LEGEND**

	LIGHT FIXTURE, RE: ELEC.
	EXHAUST, RE: MECHANICAL
	SUPPLY, RE: MECHANICAL
	2x4 ACOUSTICAL CEILING TILE & SUSPENSION SYSTEM
	AREA NOT IN CONTRACT (N.I.C.)
	(E) WALLS TO REMAIN
OS	OCCUPANCY SENSOR
$\oplus$	SPRINKLER HEAD

#### **GENERAL RCP NOTES**

- 1 ALL CEILINGS ARE 9'-0" ABOVE FINISH FLOOR U.N.O.
- 2 ALL REFLECTED CEILING PLAN DIMENSIONS AND HEIGHTS ARE FROM FINISHED FACE TO FINISH FACE
- 3 ALL CEILING GRIDS ARE CENTERED ON ROOM OR CORRIDOR U.N.O. 4 ALL FIXTURES SHOWN AT CEILING GRID TO BE CENTERED IN BOTH DIRECTIONS WITHIN THE TILE. CENTER ALL CEILING MOUNTED ITEMS WITHIN CEILING ELEMENTS, IN GYPSUM BOARD SOFFITS AND BETWEEN OTHER CEILING
- MOUNTED FIXTURES. 5 COORDINATE ACCESS PANEL LOCATIONS WITH LOCATIONS OF OTHER CEILING MOUNTED ITEMS
- 6 ALL EXPOSED DUCTWORK, STRUCTURE, SPRINKLER PIPING AND PLUMBING DEVICES TO RECEIVE PAINT FINISH
- 7 ALL SUSPENDED ACOUSTICAL CEILING TILE TO MATCH EXISTING U.N.O. 8 INSTALL CEILING DEVICES AS INDICATED ON PLANS, NOTIFY ARCHITECT OF ANY DISCREPANCIES

#### **RCP SHEET NOTES**

- (E) LINEAR PENDANT LIGHT TO REMAIN
- HANG LIGHT FIXTURES TO ALIGN WITH SIMILAR FIXTURES MOUNTED
- UNDERNEATH MEZZANINE STRUCTURE IN THE STORAGE AREA
- RAISE (E) LINEAR PENDANT LIGHT FIXTURE TO 7'-6" AFF 3 REROUTE (E) FIRE SPRINKLER PIPE TO ACCOMMODATE A 7'-6" HEAD HEIGHT ON THE MEZZANINE



## 1145 $\succ$ STEELE STREET, SUITE DENVER, CO 80205 SIGNER ШО Щ 3875

STAMP & SIGNATURE:



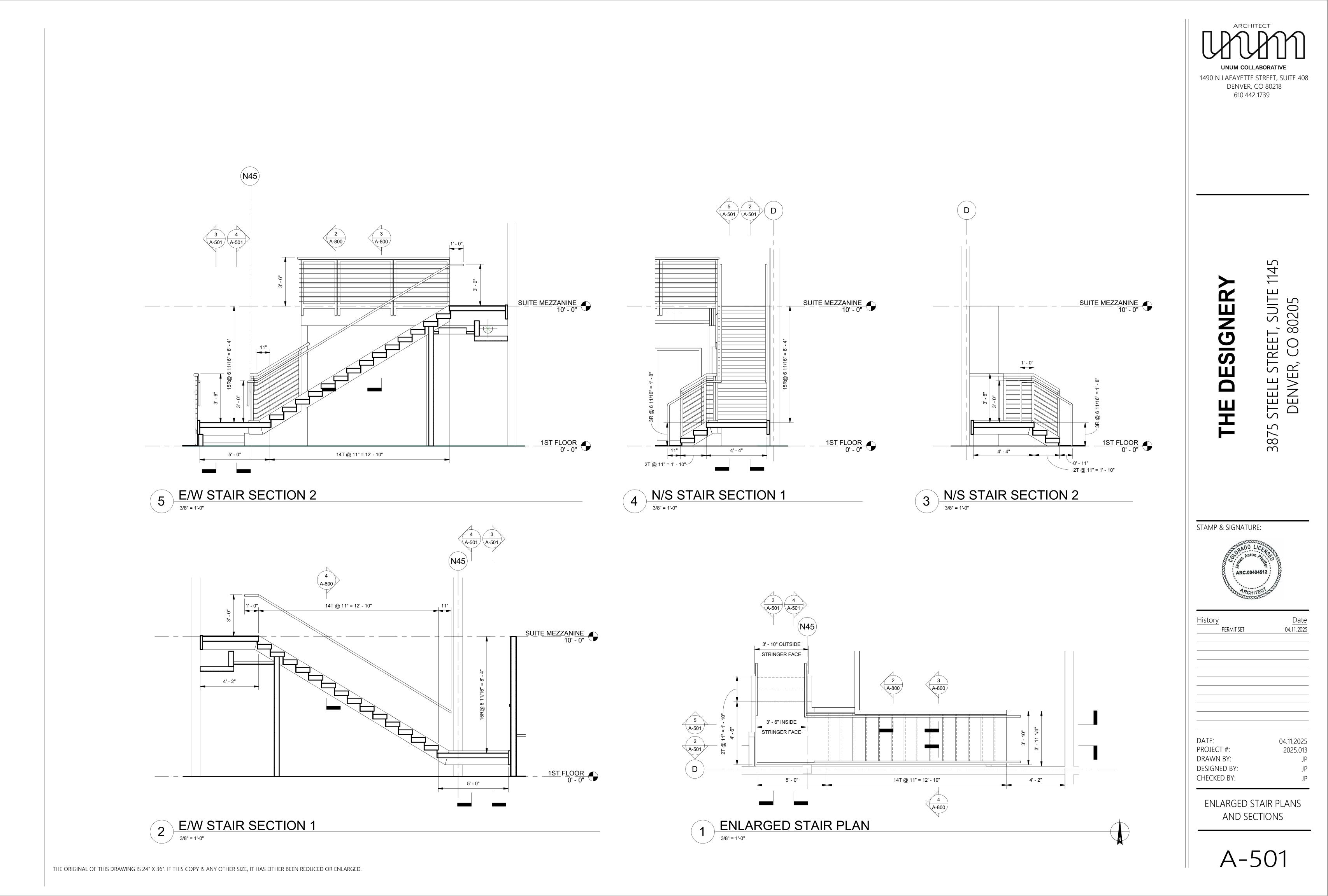
History	
	PERMIT SET

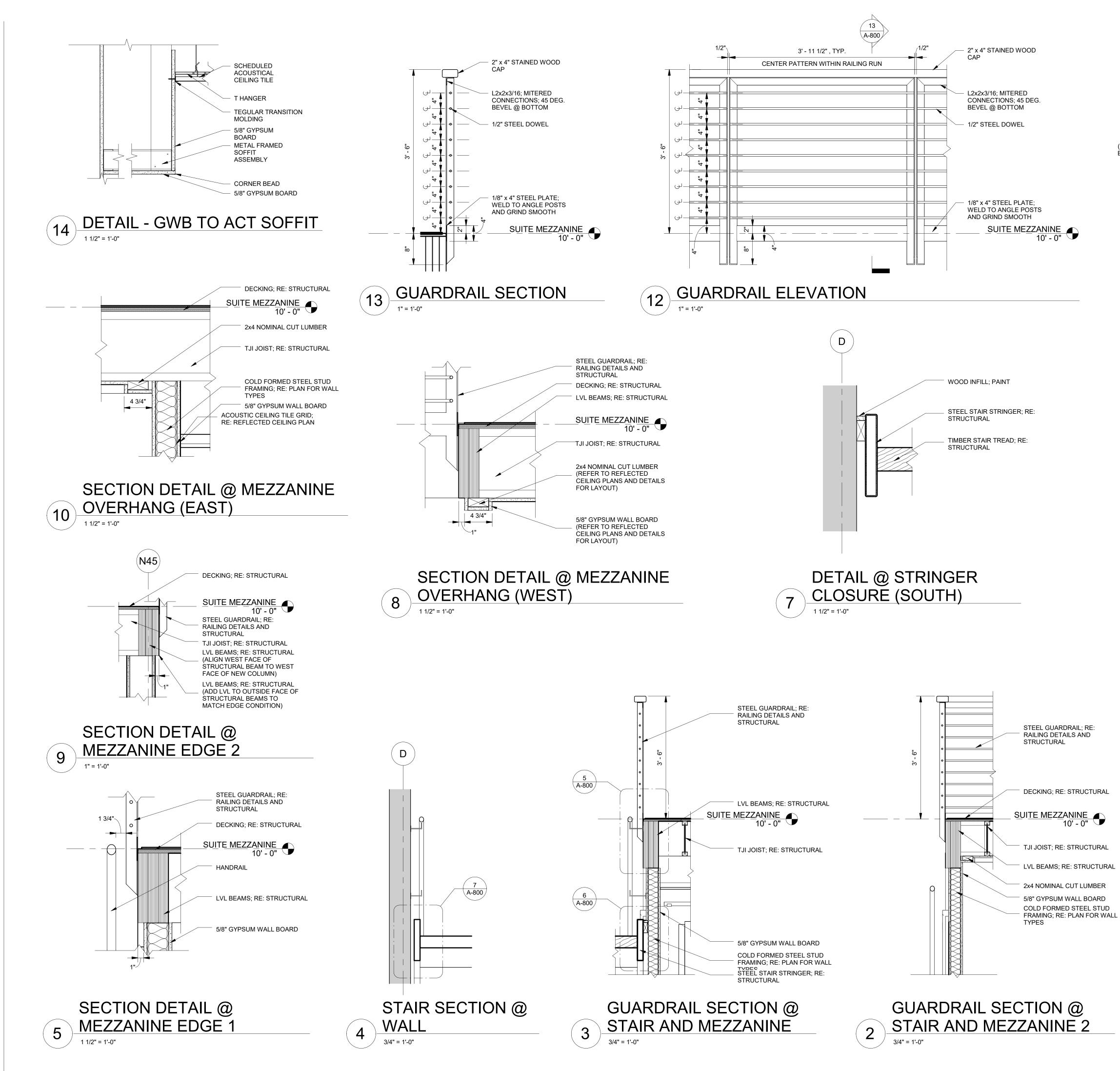
<u>Date</u> 04.11.2025

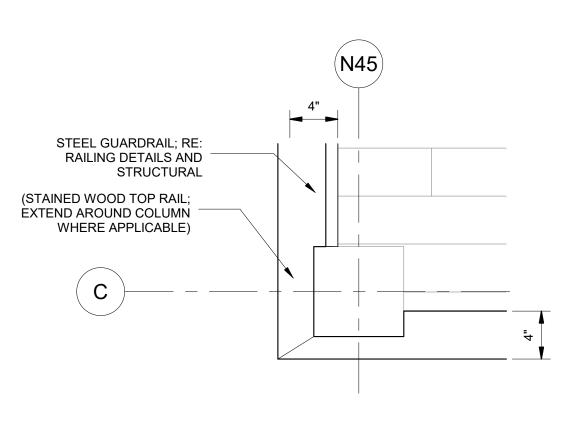
DATE: 04.11.2025 PROJECT #: 2025.013 DRAWN BY: ID DESIGNED BY: CHECKED BY:

MEZZANINE REFLECTED CEILING PLAN

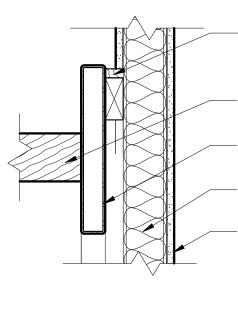








PLAN DETAIL @ GUARDRAIL COLUMN WRAP



6

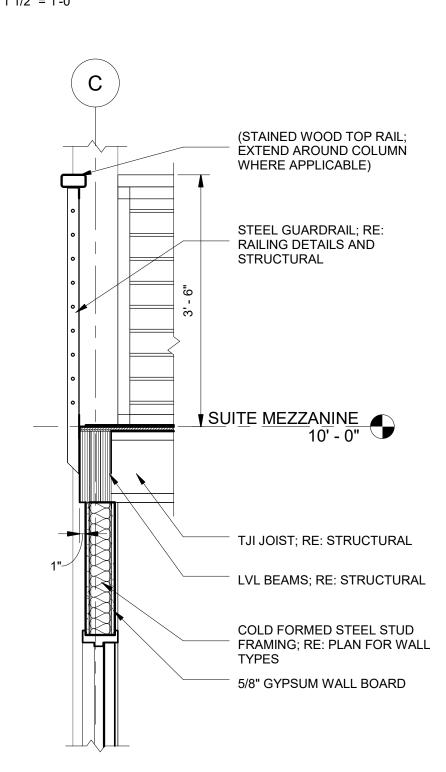
WOOD INFILL; PAINT

TIMBER STAIR TREAD; RE: STRUCTURAL

STEEL STAIR STRINGER; RE: STRUCTURAL COLD FORMED STEEL STUD FRAMING; RE: PLAN FOR WALL TYPES

5/8" GYPSUM WALL BOARD

DETAIL @ STRINGER CLOSURE (NORTH)



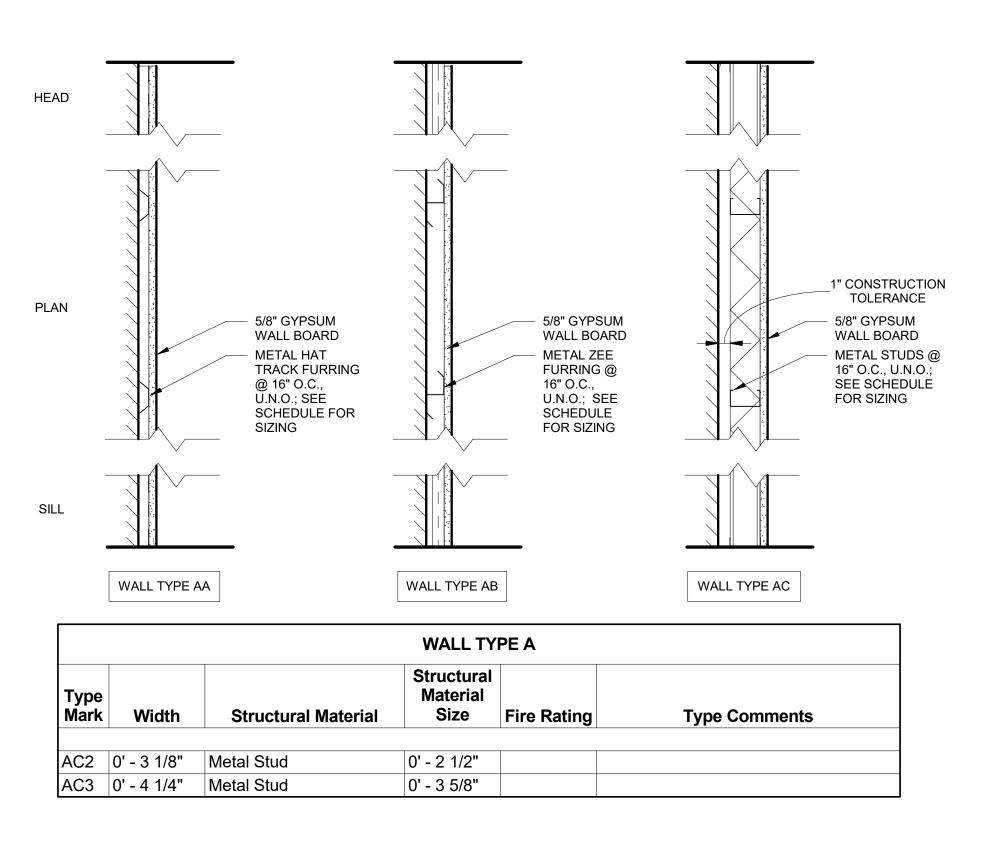


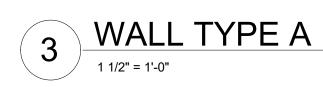
INTERIOR DETAILS

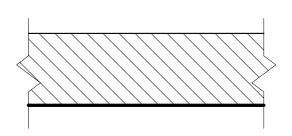
CHECKED BY:

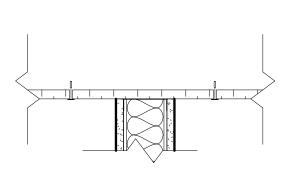
1490 N LAFAYETTE	LABORATIVE STREET, SUITE 408 CO 80218
THE DESIGNERY	3875 STEELE STREET, SUITE 1145 DENVER, CO 80205
STAMP & SIGNATU	AU44512
<u>History</u> permit set	<u>Date</u> 04.11.2025
DATE: PROJECT #: DRAWN BY: DESIGNED BY: CHECKED BY:	04.11.2025 2025.013 JP JP

A-800

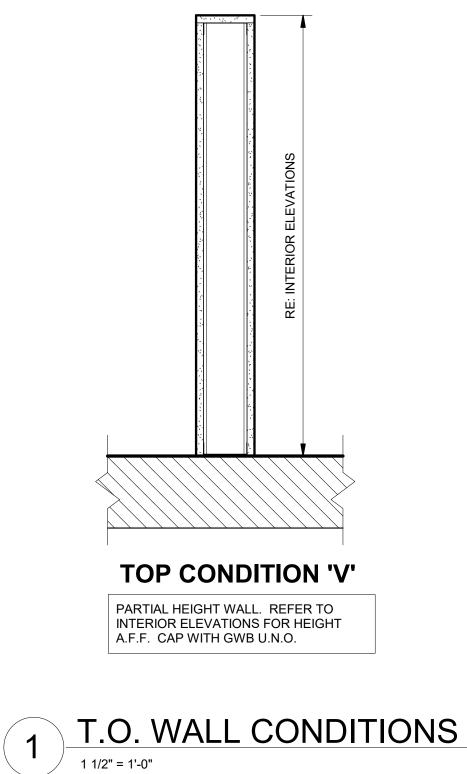


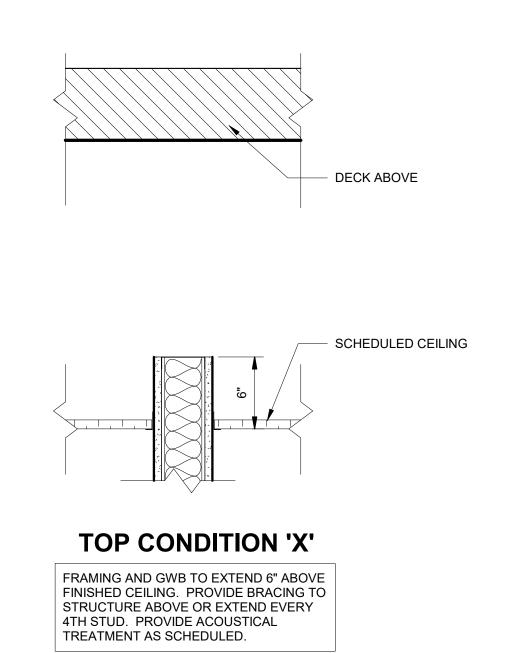


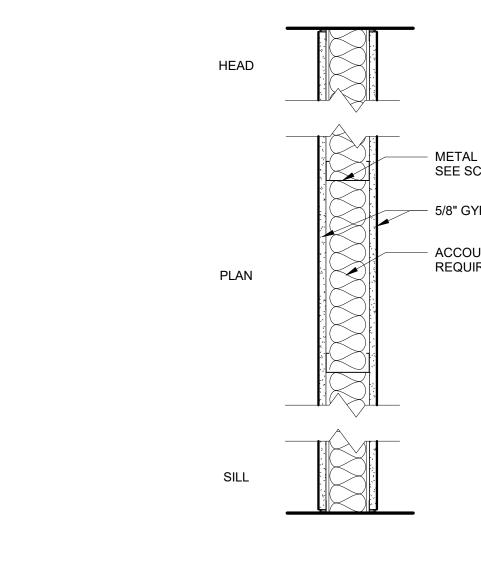




TOP CONDITION 'W' FRAMING AND GWB TO EXTEND TO UNDERSIDE OF FINISHED CEILING. PROVIDE ACOUSTICAL TREATMENT AS SCHEDULED.

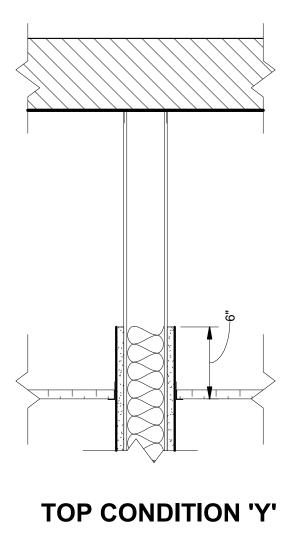






WALL TYPE B					
Type Mark		Structural Material	Structural Material Size	Fire Rating	Type Comments
B2	0' - 3 3/4"	Metal Stud	0' - 2 1/2"		
B3	0' - 4 7/8"	Metal Stud	0' - 3 5/8"		
B6	0' - 7 1/4"	Metal Stud	0' - 6"		

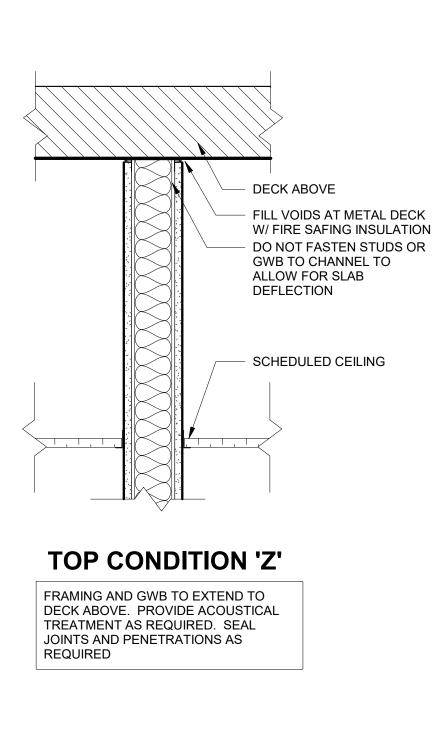




FRAMING TO EXTEND TO DECK ABOVE. GWB TO EXTEND 6" ABOVE FINISHED CEILING. PROVIDE ACOUSTICAL TREATMENT AS SCHEDULED. - METAL STUDS @ 16" O.C., U.N.O.; SEE SCHEDULE FOR SIZING

----- 5/8" GYPSUM WALL BOARD

ACCOUSTICAL BATTS WHERE REQUIRED

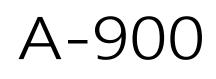


## ARCHITECT UNUM COLLABORATIVE 1490 N LAFAYETTE STREET, SUITE 408 DENVER, CO 80218 610.442.1739

1145

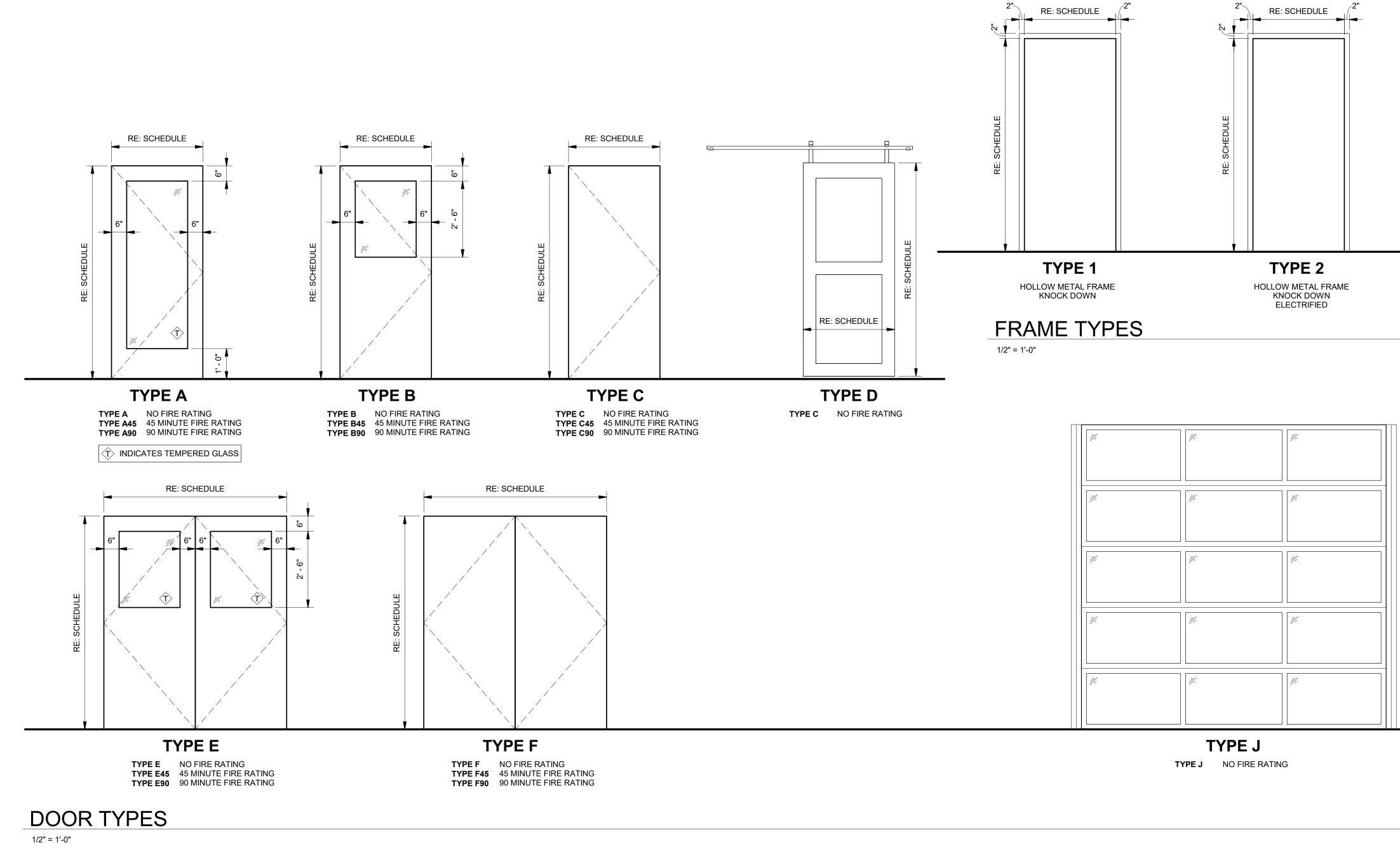
 $\succ$ 

## STEELE STREET, SUITE DENVER, CO 80205 DESIGNER Щ 3875 ┣-STAMP & SIGNATURE: ARC.00404512 Date History 04.11.2025 PERMIT SET DATE: 04.11.2025 PROJECT #: 2025.013 DRAWN BY: IP DESIGNED BY: CHECKED BY: PARTITION SCHEDULE AND TYPES



							DOOR	<b>SCHE</b>	DULE					
			C	OOR					I	FRAME				
DOOR NUMBER	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	FIRE RATING	TYPE	MATERIAL	FINISH	JAMB	HEAD	COMMENTS	HW_Set #
1										1				
1145A	A	3' - 0"	8' - 0"	0' - 1 3/4"									(E) DOOR, FRAME, AND HARDWARE TO REMAIN	(E)
1145B	J	12' - 0"	10' - 0"	0' - 1 1/2"									(E) DOOR, FRAME, AND HARDWARE TO REMAIN	(E)
1145C	С	3' - 0"	7' - 0"	0' - 1 3/4"	WD	CLR	N/A	1	HM	PT-02				1
1145D	D	3' - 0"	7' - 0"										DOOR FINISH TBD	3
1145E	D	3' - 0"	7' - 0"										DOOR FINISH TBD	3
1145F	F	6' - 0"	7' - 0"	0' - 1 3/4"	WD	CLR	N/A	1	HM	PT-02				2

SET #	LOCKSET FUNCTION	LEVER/ HANDLE STYLE	CYLINDER	HINGES
1	PASSAGE	1X SCH ALX40 ATH (626)		3X IVE 5BB1 4.5 X 4.5 (626)
2	DBL CLASSROOM	1X VON 9827-EO-LBR (626) / 1X VON 9827-L-NL-LBR-17 (626)	1X SCH 20-057 ICX (626) / 1X SCH 23-030 (626)	6X IVE 5BB1 4.5 x 4.5 NRP (626)
3	OFFICE	DOOR MANUFACTURER HARDWARE	DOOR MANUFACTURER HARDWARE	DOOR MANUFACTURER HARDWARE



#### DOOR HARDWARE SCHEDULE HARDWARE COMPONENTS WEATHER STRIP/ HINGES CLOSER SILENCER DOOR STOP THRESHOLD GASKETING 1X (IV) WS406/407 (CCV / CVX AS REQ'D) VE 5BB1 4.5 X 4.5 (626) LCN 4111-EDA (626) IVE SR64 (GRY) (630) 2X (IV) WS406/407 (CCV / CVX AS REQ'D) (630) IVE 5BB1 4.5 x 4.5 NRP LCN 4111-EDA (626) / IVE IVE SR64 (GRY) COR52 (626)

						unr
DOOR TYPE	E: SEE DOOR T	YPE SCHEDULE O	N DWG A910			УЦЦ
DOOR CON	STRUCTION:		DOOR FINISH	:		DLLABORATIVE
AL HM SS WD SC HC AC GL	STAINLESS WOOD SOLID COF HOLLOW (	/IETAL S STEEL RE WOOD CORE WOOD 1 CLAD WOOD	AF MF SS CL MP WP	ALUMINUM FACTORY FINISH METAL FACTORY FINISH STAINLESS STEEL HARDWOOD WITH TRANSPARENT FINISH METAL FIELD PAINTED WOOD PAINTED		TE STREET, SUIT R, CO 80218 142.1739
GLASS TYP	E:					
TF CW FR IG LG T	FULLY TEN 1/4" WIRE 1/4" - (FIRE	FED GLÁSS D GLASS				
FRAME CO	NSTRUCTION:		FRAME FINIS	H:		
AC AL HM SS WD PS	ALUMINUM HOLLOW M STAINLESS	/ETAL S STEEL	AF CL MF WP	ALUMINUM FACTORY FINISH HARDWOOD WITH TRANSPARENT FINISH METAL FACTORY FINISH METAL FIELD PAINTED WOOD PAINTED		
HARD	WARE S	SCHEDUL	E LEGE	ND		Ь
	KEY:					1145
QUA	ANTITY (MANUI	FACTURER) MODE	_ # FINISH #			<u> </u>
EX: 3x (/	ASSA ABLOY) E	BLBP 606			GNER	SUITE -
<b>BHMA</b> (BUIL FINISH COD		ARE MANUFACTU	RERS ASSOCIA	TION) AND <b>U.S</b> STANDARD		, Co
BHMA	<u>USXX</u>	FINISH/BASE	METAL			
600 602 603 604 <b>605</b>	USP US2C US2G <b>US3</b>	CADMIUM ON ZINC ON STE ZINC DICHRO			E S H	STR

ACCESSORIES

KICK PLATE: 2X IVE 8400 10" x 2" LDW B-CS (626)

BHMA	<u>USXX</u>	FINISH/BASE METAL
600	USP	PRIMED FOR PAINTING - STEEL
602	US2C	CADMIUM ON STEEL
603	US2G	ZINC ON STEEL
604		ZINC DICHROMATE ON STEEL
605	US3	BRIGHT BRASS ON BRASS
606	US4	SATIN BRASS ON BRASS
609	US5	SATIN BRASS BLACKENED (ANTIQUE) ON BRASS
610	US7	SATIN BRASS BLACKENED (BRIGHT) ON BRASS
611	US9	BRIGHT BRONZE ON BRONZE
612	US10	SATIN BRONZE ON BRONZE
613	US10B	OIL RUBBED BRONZE ON BRONZE
616	US11	SATIN BRONZE, BLACKENED ON BRONZE
618	US14	BRIGHT NICKEL ON BRASS OR BRONZE
619	US15	SATIN NICKEL ON BRASS OR BRONZE
620	US15A	SATIN NICKEL (ANTIQUE) ON BRASS OR BRONZE
622	US19	FLAT BLACK COATED ON BRASS OR BRONZE
623	US20	OXIDIZED BRIGHT BRONZE ON BRONZE
624	US20A	BRIGHT STAINLESS STEEL - STAINLESS STEEL
625	US26	BRIGHT CHROMIUM ON BRASS OR BRONZE
626	US26D	SATIN CHROMIUM ON BRASS OR BRONZE
627	US27	SATIN ALUMINUM - ALUMINUM
628	US28	SATIN ALUMINUM (ANODIZED) - ALUMINUM
629	US32	BRIGHT STAINLESS STEEL - STAINLESS STEEL
630	US32D	SATIN STAINLESS STEEL - STAINLESS STEEL
666	US3	BRIGHT BRASS PLATED ALUMINUM
667	US4	SATIN BRASS PLATED ALUMINUM
668	US10	SATIN BRONZE PLATED ALUMINUM
669	US14	BRIGHT NICKEL PLATED ALUMINUM

MANUFACTURER LEGEND:

#### ASSA ABLOY

MCKINNEY	MK
RIXSON	RF
YALE	YA
HES	HS
ROCKWOOD	RO
NORTON	NO
PEMKO	PE
OTHER	OT

#### DOOR ACCESSIBILITY NOTES

- 1 LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARDWARE.
- 2 HAND ACTIVATED DOOR HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR.
- 3 THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/4" LOWER THAN THE THRESHOLD OF THE DOORWAY.
- 4 THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 15 LBS FOR
- EXTERIOR DOORS AND 5 LBS FOR INTERIOR DOORS PER 1010.1.3 OF THE 2018 IBC. 5 EGRESS DOORS TO HAVE LOCK THAT CAN BE RELEASED WITH SINGLE ACTION IN COMPLIANCE WITH SECTION 1010.1.9.3

#### DOOR GENERAL NOTES

- 1 ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
- 2 PROVIDE 3/4" UNDERCUT ON THE FOLLOWING DOORS: 3 REFER TO DRAWINGS ON A101 FOR LOCATION OF DOORS
- 4 ALL GLASS TO BE TEMPERED

STEELE STREET, SUITE DENVER, CO 80205 Щ 3875

STAMP & SIGNATURE:

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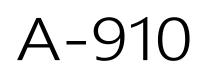
History

PERMIT SET

Date 04.11.2025

DATE: PROJECT #:	04.11.2025 2025.013
DRAWN BY:	JP
DESIGNED BY:	JP
CHECKED BY:	JP

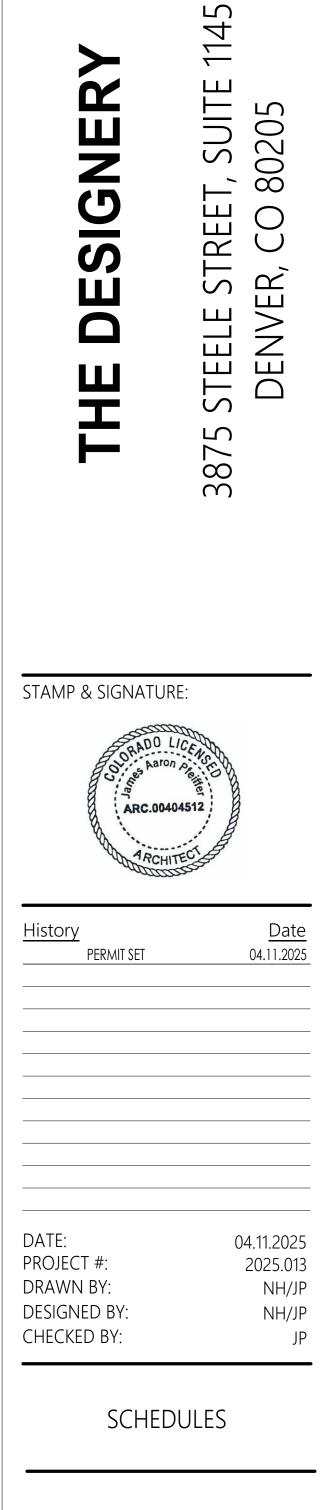
DOOR SCHEDULE AND TYPES

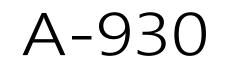


[									
	FINISH & ACCESSORY								
TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL/ STYLE #	COLOR					
06 00 00 -	WOOD, PLATIC, AND COMPOSITE	ES	-						
WB-01	WOOD BASE	4"H PAINT GRADE WOOD	-	PT-02					
WF-01	WOOD FLOORING	TDY	KINGSTON OAK & HICKORY	GRAND ISLAND					
09 51 00 -	ACOUSTICAL CEILINGS								
ACT-01	ACOUSTIC CEILING TILE	TBD	24X24	WHITE					
09 61 00 -	FLOORING TREATMENT								
CONC-01	POLISHED CONCRETE	BY G.C.	-	CLEAR					
09 91 00 -	PAINT								
PT-01	PAINT	SHERWIN WILLIAMS		SW ALABASTER WHITE - 7008 EGGSHELL					
PT-02	PAINT	SHERWIN WILLIAMS		SW ALABASTER WHITE - 7008 S GLOSS					
10 26 00 W	VALL AND DOOR PROTECTION								
BR-01	EXISTING BRICK								
WP-01	WOOD SLAT WALL PANELS	MSI - TAWNY ACOUSTIC	ID#: WPNL-ACWFLTTAWN9.5X120 ID#: WPNL - ACWFLTTAWN9.5X94.5	BROWN					

PLUMBING FIXTURE SCHEDULE								
Type Mark	Manufacturer	Model	Finish	Description	Comments			
PF-01	TBD	TBD	TBD	KITCHEN FAUCET	PROVIDED BY OWNER, NOT CONNECTED TO PLUMBING			
PF-02	TBD	TBD	TBD	KITCHEN SINK	PROVIDED BY OWNER, NOT CONNECTED TO PLUMBING			
PF-03	TBD	TBD	TBD	KITCHEN FAUCET	PROVIDED BY OWNER, CONNECTED TO PLUMBING			
PF-04	TBD	TBD	TBD	KITCHEN SINK	PROVIDED BY OWNER, CONNECTED TO PLUMBING			
PF-05	TBD	TBD	TBD	BATHROOM SINK	PROVIDED BY OWNER, NOT CONNECTED TO PLUMBING			
PF-06	TBD	TBD	TBD	BATHROOM FAUCET	PROVIDED BY OWNER, NOT CONNECTED TO PLUMBING			

SC	CHED	ULE		
	SIZE	LOCATION	COMMENTS	REP CONTACT INFO
	4"	WOOD BASE THROUGHOUT	OWNER SUPPLIED, INSTALL DIRECTION TO BE COORDINATED WITH OWNER PRIOR TO INSTALL	
	24X24			
	-			
08		THROUGHOUT		
SEMI		THROUGHOUT	WHITE	
			CLEAN EXISTING BRICK AS REQ'D. EXISTING BRICK TO REMAIN UNPAINTED.	
		OFFICE 1 & 2 ACCENT WALLS	OWNER SUPPLIED	





#### LOADING

- 1. DESIGNED IN ACCORDANCE WITH THE CURRENT COLORADO COMMERCIAL BUILDING CODE BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC).
- 2. DESIGN LOADS:
- A. DEAD LOAD: ROOF =15 PSF
- B. LIVE LOAD:
- ROOF =20 PSF REDUCIBLE
- C. DESIGN SNOW LOAD: Pg = 35 PSF
- Pf = 0.7(Ce)(Ct)(I)(Pg) = 24.5 PSFCe = 1.0
- Cs = 1.0Ct = 1.0
- l = 1.0
- D. WIND DESIGN CRITERIA WIND SPEED = 115 MPH (ULTIMATE)/89.1 PSF (NOMINAL) EXPOSURE = B| = 1.0
- Kzt = 1.0 GCpi = +/-.018
- G. SEISMIC DESIGN CRITERIA SEISMIC RISK CATEGORY = II
- SITE CLASS = B Ss = 20.70%; S1 = 5.70%
- SDS = 0.221;  $SD1 = 0.09^{\circ}$
- SEISMIC DESIGN CATEGORY = BSEISMIC RESISTING SYSTEM = TIMBER POST & BEAM SYSTEM WITH KNEE BRACING
- R = 1.5DESIGN BASE SHEAR = 0.147\*W

#### <u>GENERAL</u>

- 1. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER AND ARCHITECT OF ANY DISCREPANCY IMMEDIATELY.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON NEW OR EXISTING STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- 3. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR HAVING AN INDEPENDENT ENGINEER DESIGN AND FURNISH ALL TEMPORARY BRACING AND/ OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. THE STRUCTURAL ENGINEER SEAL ON THESE DRAWINGS ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AND ALL JOB SITE SAFETY.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL BUILDING MATERIALS AND COMPONENTS. COMPONENT LOCATIONS ARE SHOWN FOR DESIGN INTENT, NOT EXACT LOCATION, UNLESS NOTED SPECIFICALLY. INDEPENDENTLY PREPARED SHOP DRAWINGS ARE REQUIRED OF ALL TRADES FOR COORDINATION AND BEST PRACTICE. ERRORS OR OMISSIONS IN INSTALLATION DUE TO THE CONTRACTOR'S FAILURE TO COORDINATE THE WORK WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CONDITIONS PRIOR TO BIDDING. THIS INCLUDES INSURING ERECTION CAN BE PERFORMED AS DETAILED ON THE PLANS. IF MODIFICATIONS ARE NEEDED TO FACILITATE ERECTABILITY THE BIDDING CONTRACTOR SHALL NOTIFY THE OWNER, ARCHITECT AND ENGINEER AND CLEARLY COMMUNICATE ASSUMPTIONS IN BID DOCUMENTS.

#### STRUCTURAL WOOD FRAMING

- 1. TIMBER DESIGN AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
- 2. ALL WOOD FRAMING SHALL CONFORM TO THE FOLLOWING MINIMUM STRENGTH AND GRADING CRITERIA UNLESS SPECIFICALLY SHOWN DIFFERENT ON PLAN. IF SPECIFIC SPECIES AND GRADE OF LUMBER IS UNAVAILABLE CONTACT TUNE STRUCTURAL ENGINEERS FOR SUITABLE SUBSTITUTIONS.

USE	GRADE	Fb (psi)	Fc (psi)	E (psi)			
STUDS SOLID SAWN	SE	SEE BEARING WALL SCHEDULE ON SHEET S10.1					
STUDS MANUFACTURED	TIMBERSTRAND LSL	1,700	1,835	1,300,000			
BEAM 2x4 – 2x12	HEM FIR No. 2	850	1,300	1,300,000			
TIMBERS BEAMS 5x5 & LARGER	HEM FIR No. 1	1,050	750	1,300,000			
TIMBERS COL 5x5 & LARGER	HEM FIR No. 1	975	850	1,300,000			
BEAM MANUFACTURED	LVL	2,600	2,500	2,000,000			

3. ALL CALCULATIONS HAVE BEEN BASED ON NAILS WITH PROPERTIES AS SHOWN IN THE TABLE BELOW. NAIL SUBSTITUTIONS SHALL HAVE EQUAL OR GREATER DIAPHRAGM AND SHEAR CONNECTION CAPACITIES PER LATEST ICC ESR - 1539 REPORTS.

(			
NAIL TYPE	LENGTH (in)	DIAMETER (in)	HEAD (in)
6d	2	.099	.266
8d	2.5	.113	.297
10d	3	.128	.312
16d	3.5	.135	.344

8D MINIMUM REQUIRED FOR ALL ROOF CONSTRUCTION.

- 4. ALL CONNECTIONS IN CONTACT WITH PRESERVATIVE TREATED WOOD SHALL HAVE A HOT DIP GALVANIZED COATING OR THE SPECIFIC COATING SHALL BE SUBMITTED TO AND APPROVED BY THE PROJECT ARCHITECT.
- 5. ALL SIZES SHOWN FOR TIMBER MEMBERS ARE STANDARD NOMINAL DIMENSIONS.
- 6. PLYWOOD PANELS SHALL BE APA GRADED STRUCTURAL PLYWOOD OR OSB SHEATHING.
- 7. ALL EXTERIOR EXPOSED TIMBER MEMBERS, WOOD MEMBERS IN DIRECT CONTACT WITH FOUNDATIONS OR EXTERIOR MASONRY AND INTERIOR MEMBERS NOTED TO BE PRESSURE TREATED WITH A NON-ARSENATE COMPOUNDS (ACQ PREFERRED).
- 8. SHOP DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AND ENGINEER OF RECORD.
- 9. ALL BOLTS, LAG SCREWS, SCREWS AND NAILS SHALL HAVE A HOT DIP GALVANIZED FINISH.
- 10. SIMPSON STRONG-TIE CONNECTORS ARE SPECIFICALLY REQUIRED TO MEET THE STRUCTURAL CALCULATIONS OF PLAN. BEFORE SUBSTITUTING ANOTHER BRAND, CONFIRM LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OR CALCULATIONS. THE ENGINEER OF RECORD IS REQUIRED TO EVALUATE AND GIVE WRITTEN APPROVAL FOR SUBSTITUTION PRIOR TO INSTALLATION.
- 11. ALL SIMPSON CONNECTORS SHALL BE ZMAX (G185) OR HOT DIP GALVANIZED (HDG).
- 12. THE CONTRACTOR SHALL SUBMIT FOR REVIEW PRIOR TO CONSTRUCTION (1) ONE SET OF CONSTRUCTION PLANS PROVIDED BY THE ROOF TRUSS PROVIDER
- 13. THE INSTALLATION OF BOLTS IN TIMBER MEMBERS SHALL MEET THE REQUIREMENTS OF ANSI/ASME STANDARD B18.2.1
- 14. BOLT HOLES IN TIMBER MEMBERS SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. HOLES SHALL BE ACCURATELY ALIGNED IN MAIN AND SIDE MEMBERS. BOLTS SHALL NOT BE FORCIBLY DRIVEN.
- 15. A STANDARD CUT WASHER, METAL PLATE OR STEEL STRAP OR PLATE, OF SIZE NOT LESS THAN THE STANDARD CUT WASHER, SHALL BE BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT.

#### RENOVATION OF EXISTING

- 1. THE CONTRACTOR SHALL FIELD VERIFY ALL SIZES, DIMENSIONS, ELEVATIONS AND ELEMENTS OF THE EXISTING CONSTRUCTION WHICH ARE RELATIVE TO THE NEW C
- 2. EXISTING CONDITIONS INDICATED ARE OBTAINED FROM AVAILABLE SOURCES (EXISTING DRAWINGS, FIELD SURVEYS, ETC.) AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. CONTRACTOR(S) SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE EOR OF ANY DISCREPANCIES PRIOR TO PROCEEDING WIT THE AFFECTED PORTION OF THE WORK.
- 3. ALL DIMENSIONS INVOLVING NEW WORK TYING INTO OR GOVERNED BY EXISTING CONSTRUCTION SHALL BE FIELD VERIFIED BY THE CONTRACTOR WITH ALL CORRECTIONS FURNISHED TO PROJECT ARCHITECT ENGINEER AND SUBCONTRACTORS PRIOR TO THE FABRICATION OF ANY MATERIAL. THE VERIFIED DIMENSIONS SHALL APPEAR ON AND BE NOTED AS SUCH ON THE FIRST SET OF SHOP DRAWINGS.
- 4. THE ENGINEER HAS MADE ASSUMPTIONS CONCERNING THE SOUNDNESS OF THE EXISTING BUILDING, INCLUDING THAT THE EXISTING BUILDING WAS DESIGNED AND CONSTRUCTED IN CONFORMITY WITH GOOD DESIGN AND CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL TAKE EXTRAORDINARY PRECAUTIONS CONCERNING PRESERVATION OF THE BUILDING DURING DEMOLITION AND NEW CONSTRUCTION WORK. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR THE PRESERVATION OF THE EXISTING STRUCTURE.
- 5. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND THE ACTUAL FIELD CONDITIONS.
- 6. EXISTING STRUCTURE TO REMAIN IS SHOWN SCREENED (SHADED). EXISTING STRUCTURE TO BE REMOVED IS GENERALLY NOT SHOWN ON STRUCTURAL DRAWINGS.
- 7. ALL EXISTING CONSTRUCTION AFFECTED BY REMOVAL OF EXISTING CONSTRUCTION OR SUPPORTIVE MEMBERS SHALL BE SHORED AND BRACED UNTIL NEW SUPPORTIVE MEMBERS ARE IN PLACE. DESIGN OF SHORING AND BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 8. EXISTING CONSTRUCTION SHALL NOT BE USED AS THE MATERIAL STAGING AREA OR FOR TEMPORARY BRACING DURING CONSTRUCTION OF THE ADJACENT NEW STRUCTURE WITHOUT THE REVIEW AND APPROVAL OF THE ARCHITECT/ENGINEER.
- 9. THE REMOVAL, CUTTING, DRILLING, ETC. OF EXISTING CONSTRUCTION SHALL BE PERFORMED WITH GREAT CARE IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF STRUCTURAL MEMBERS OR MECHANICAL, ELECTRICAL, OR ARCHITECTURAL FEATURES NOT INDICATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE PROFESSIONAL OF RECORD SHALL BE IMMEDIATELY NOTIFIED AND PRIOR WRITTEN APPROVAL SHALL BE OBTAINED BEFORE REMOVAL OR MODIFICATION OF MEMBERS.
- 10. ALL PRIOR INSPECTIONS AND OBSERVATIONS WERE CONDUCTED BASED ON VISUAL ACCESS ONLY. NO INVASIVE TESTING OR INSPECTIONS WERE PREFORMED. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND ASSUMPTIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 11. WORK SHOWN IS NEW UNLESS INDICATED AS EXISTING.
- 12. SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF DEMOLITION OF EXISTING CONSTRUCTION.

#### EXISTING CONDITIONS

- 1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO THE ENGINEER PRIOR TO THE FABRICATION AND ERECTION OF ANY MEMBERS. EXISTING DIMENSIONS SHOWN ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY AND SHOULD NOT BE USED FOR FINAL CONSTRUCTION OR DETAILING.
- 2. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THESE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE AND SHALL BE REFERENCED FOR FAMILIARIZATION WITH EXISTING CONDITIONS. HOWEVER, THE AVAILABLE DRAWINGS OF EXISTING CONSTRUCTION ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR BEING KNOWLEDGEABLE ON INFORMATION PRESENTED IN AVAILABLE DRAWINGS AND SHALL FIELD VERIFY ALL PERTINENT INFORMATION.
- 3. DEMOLITION, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE SO AS NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING. IF ANY ARCHITECTURAL, STRUCTURAL, OR MEP MEMBERS NOT DESIGNATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE OWNER SHALL BE NOTIFIED IMMEDIATELY AND APPROVAL OBTAINED PRIOR TO REMOVAL OF THOSE MEMBERS.
- 4. THE CONTRACTOR SHALL PERFORM A SURVEY TO LOCATE ALL EXISTING UTILITIES (INCLUDING UNDERGROUND UTILITIES) PRIOR TO THE START OF CONSTRUCTION AND TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN IN SERVICE. EXISTING CIVIL, MECHANICAL, ELECTRICAL, PLUMBING, AND EMERGENCY PROTECTION SYSTEM SERVICING ANY AREAS OUTSIDE THE WORK AREA ARE TO BE MAINTAINED IN OPERABLE CONDITION THROUGHOUT THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL MAKE NECESSARY TEMPORARY CONNECTIONS TO MAINTAIN EXISTING UTILITIES IN SERVICE. DURING THE WORK. TEMPORARY, LOCALIZED INTERRUPTION OF THESE SYSTEMS SHALL REQUIRE APPROVAL BY THE OWNER.
- 5. THE CONTRACTOR SHALL PROVIDE DUST, ODOR, AND NOISE PROTECTION, AND SAFETY MEASURES AS NECESSARY FOR THE DURATION OF CONSTRUCTION. PROVIDE ALL MEASURES NECESSARY TO PROTECT THE EXISTING STRUCTURE, BUILDING INTERIOR, FACILITY PATRONS, AND OTHER PERSONS DURING CONSTRUCTION.
- 6. THE CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE OWNER.

#### **MISCELLANEOUS**

- 1. ALL DRAWINGS ARE OF EQUAL IMPORTANCE IN DEFINING THE WORK OF THE CONTRACT DOCUMENTS. CONTRACTOR SHALL CAREFULLY REVIEW AND COMPARE ALL DRAWINGS DURING THE BIDDING PERIOD AND BEFORE INSTALLATION OF THEIR WORK. ANY INCONSISTENCIES IN THE DRAWINGS SHALL BE REPORTED PROMPTLY TO THE ENGINEER AND ARCHITECT FOR CLARIFICATION.
- 2. EVERY EFFORT HAS BEEN MADE TO PROVIDE TO SCALE DRAWINGS, HOWEVER THE DRAWINGS ARE NOT NECESSARILY TO SCALE - USE GIVEN DIMENSIONS.
- 3. ALL ANCHOR BOLTS SHOULD HAVE A MIN SPACING OF 6\*BOLT DIAMETER FROM EACH OTHER AND EDGE OF PIER/BUILDING LINE.
- 4. ALL WINDOW FRAMES SHALL BE INSTALLED TO ALLOW FOR A MINIMUM OF L/600 OR 1/2 INCH VERTICAL DEFLECTION OF THE HEADER WHICHEVER IS LESS.
- 5. DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BE VERIFIED AND COORDINATED PRIOR TO FABRICATION OF STRUCTURAL COMPONENTS.

D LOCATIONS, ETC. OF	
$\mathcal{L}$	
CONSTRUCTION.	

#### STRUCTURAL STEEL FRAMING

<u>Stf</u>	RUCTURAL STEEL FRAMING
1.	STRUCTURAL STEEL DESIGN AND FABRICATION SHALL BE IN ACCORDANCE WITH THE AISC ASD 14TH EDITION STEEL CONSTRUCTION MANUAL.
2.	W– SHAPES SHALL CONFORM TO ASTM A992 (FY = 50 KSI).
3.	ALL STRUCTURAL STEEL ANGLE AND CHANNEL SHAPES SHALL CONFORM TO ASTM A36 (FY =36 KSI) UNLESS NOTED OTHERWISE.
4.	PLATE STEEL SHALL CONFORM TO ASTM A36 (FY = $36$ KSI).
5.	ALL SQUARE AND RECTANGULAR HSS SHALL CONFORM TO ASTM A500, GRADE B (FY = 46 KSI).
6.	ALL SQUARE AND ROUND BARS SHALL CONFORM TO ASTM A36 (FY = 36 KSI) UNLESS NOTED OTHERWISE.
7.	<ul> <li>THE STRUCTURAL STEEL FABRICATOR SHALL BE RESPONSIBLE FOR THE SELECTION, DESIGN, AND DETAILING OF ALL CONNECTIONS NOT FULLY DETAILED ON THE CONTRACT DRAWINGS.</li> <li>A. CONNECTION DETAILS ARE INDICATED ON THE DRAWINGS FOR DESIGN INTENT ONLY. WHEN BOLTS ARE SHOWN ON SPECIFIC DETAILS, UNLESS THE NUMBER OF BOLTS IS SHOWN NUMERICALLY, USE GRAPHICAL REPRESENTATION FOR DESIGN CONCEPT ONLY.</li> </ul>
8.	WHERE MOMENT CONNECTIONS ARE INDICATED, PROVIDE CONNECTION TO DEVELOP FULL MOMENT CAPACITY OF WEAKER SECTION TO BE CONNECTED, UNLESS A SPECIFIC VALUE IS SHOWN.
9.	ALL CONNECTION BOLTING IS TO BE WITH A 3/4" DIAMETER A-325n BOLTS UNLESS NOTED OTHERWISE. EXCEPT AT MOMENT CONNECTIONS AND SLIP CRITICAL (SC) BOLT LOCATIONS, BOLTS NEED ONLY BE TIGHTENED TO THE SNUG-TIGHT CONDITIONS. LOAD INDICATOR BOLTS SHALL BE USED AT MOMENT CONNECTIONS AND SLIP CRITICAL CONNECTIONS.
10.	ALL SHEAR CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWING SHALL BE SELECTED AND

10. ALL SHEAR CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWING SHALL BE SELECTED AND DETAILED BY THE FABRICATOR. ALL CONNECTIONS SHALL BE SELECTED FROM AISC ASD LOAD TABLES TO SUPPORT MAXIMUM LOADS SHOWN ON DRAWINGS OR FOR THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER PER AISC. DOUBLE ANGLE CONNECTIONS ARE PREFERRED WHEN POSSIBLE.

11. ALL WELDING OF NEW STEEL TO BE WITH E70XX ELECTRODES.

12. ALL WELDING SHALL COMPLY WITH THE AWS STRUCTURAL WELDING CODES. ALL WELDING TO BE PERFORMED BY AWS PRE-QUALIFIED WELDERS CERTIFIED FOR THE GIVEN APPLICATION.

13. ALL EXTERIOR EXPOSED STEEL SHALL BE HOT DIP GALVANIZED OR PRIMED WITH A ZINC RICH PRIMER AND PAINTED WITH AN APPROPRIATE EXTERIOR PAINT. ALL PAINTING AND STEEL PREP SHALL BE IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATION.

14. SUBMIT PRODUCT DATA FOR EACH TYPE OF PRODUCT SPECIFIED. SUBMIT MIL TEST REPORTS SIGNED BY MANUFACTURES CERTIFYING THAT THEIR PRODUCTS COMPLY WITH REQUIREMENTS.

15. ALL INSTALLED STEEL SHALL BE SMOOTH – HAZARD FREE.

16. SUBMIT SHOP DRAWINGS DETAILING FABRICATION OF STRUCTURAL STEEL COMPONENTS.

17. THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS FROM THE STRUCTURAL DOCUMENTS, AND MUST RECEIVE WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE ANY FIELD CORRECTIONS ARE MADE.

18. OPENINGS MAY NOT BE MADE THROUGH STRUCTURAL STEEL FRAMING TO ACCOMMODATE THE WORK OF OTHER TRADES UNLESS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS OR APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO, MODIFICATIONS SUCH AS BEAM WEB OPENINGS AND COLUMN WEB OPENINGS.

19. THE STRUCTURAL STEEL FRAMING IS CONSIDERED A NON-SELF SUPPORTING STEEL FRAME. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE TEMPORARY BRACING AND SUPPORTS UNTIL ALL PERMANENT BRACING, MOMENT FRAMES, CONNECTIONS TO SHEAR WALLS AND FLOOR/ ROOF DIAPHRAGMS ARE COMPLETELY CONSTRUCTED, TESTED AND HAVE ATTAINED FULL DESIGN STRENGTH.

20. ALL GALVANIZED MEMBERS SHALL BE GALVANIZED BY THE "DRY GALVANIZING PROCESS" AS DEFINED BY AGA (FLUX AND GALVANIZING APPLIED IN SEPARATE STEPS). PROVIDE ALTERNATE COST TO GALVANIZE PER THE "WET" METHOD (FLUX AND GALVANIZING IN ONE STEP). GALVANIZED MEMBERS SHALL NOT BE QUENCH COOLED.

21. ALL HOLLOW ENCLOSED STEEL MEMBERS SHALL HAVE WEEP HOLES AS REQUIRED. HOLES SHALL BE LOCATED IN THE CENTER OF THE LONGER WALLS OF THE RECTANGULAR TUBES AND PLACED TO FACE THE INSIDE OR AWAY FROM PUBLIC VIEW WHEN POSSIBLE. INDICATE WEEP HOLE LOCATIONS ON SHOP DRAWINGS.

22. UNLESS SPECIFIED OTHERWISE REMOVE PAINT PRIOR TO WELDING NEW TO EXISTING STEEL. PRIME PAINT MAY BE WIRE BRUSHED, HOWEVER THE PRIMER COMPOSITION AND THICKNESS MUST BE COMPATIBLE WITH WELDING. INSPECT FOR POROSITY IN WELDS. REMOVED AND RE-WELD ANY DEFECTIVE WELDS. DO NOT PAINT PRIOR TO INSPECTION.

23. ALL WELDING OF GALVANIZED MATERIAL SHALL BE PERFORMED IN SUCH A MANOR AS TO SATISFY ALL OSHA AND AWS REQUIREMENTS. ALL FIELD WELDING LOCATIONS SHALL BE PREPARED AND PRIMED WITH A ZINC RICH PRIMER PRIOR TO PAINING PER THE MANUFACTURER'S RECOMMENDATIONS. THE SPECIFIC PRIMER TO BE USED SHALL BE TNEMEC SERIES 90-97 TNEME-ZINC @ 3.0-4.0 MILS DFT OR APPROVED EQUAL.

 $\widetilde{\phantom{a}}$ CONCRETE CONSTRUCTION

<u>_</u> 1.	ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE LOCAL BUILDING CODE REQUIREMENTS AND THOSE OF THE LATEST EDITION OF THE FOLLOWING STANDARDS: ACI 318, ACI 315, ACI 301, AND ACI 305 & 306.	٩
2.	ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL ACHIEVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (fc') AS FOLLOWS: a. FOOTINGS: f'c = 3,000 PSI	
3.	ALL CONCRETE MIX DESIGNS SHALL MINIMIZE SHRINKAGE AS MUCH AS IS PRACTICAL. INCLUDING SELECTION OF AGGREGATE TYPE, SIZE, GRADATIONS W/ C RATIO AND ADD MIXTURES.	
<b>4</b> .	UNLESS THE MIX DESIGN INCLUDES THE USE OF SUPERPLASTICIZERS, CONCRETE WITH A SLUMP GREATER THAN 5" SHALL BE REFUSED.	A .
5.	ALL CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC (WWF) TO BE ASTM A - 185. ALL REINFORCING SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315 AND 315R.	
6.	ALL REINFORCING BARS SHALL BE SET ON CHAIRS AND TIED IN PLACE.	T
7.	AFTER CONCRETING HAS STARTED, IT SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL PLACING OF A PANEL OR SECTION, AS DEFINED BY ITS BOUNDARIES OR PREDETERMINED JOINTS, IS COMPLETED. CONCRETE SHALL BE DEPOSITED AS NEARLY AS PRACTICABLE TO ITS FINAL POSITION TO AVOID SEGREGATION DUE TO REHANDLING OR FLOWING.	4 F
8.	CONCRETING OPERATIONS SHALL BE CARRIED ON AT SUCH A RATE THAT THE CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY INTO SPACES BETWEEN REINFORCEMENT.	
<b>&gt;</b> 9.	CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY SUITABLE MEANS DURING PLACEMENT AND SHALL BE	

RETE SHALL BE THOROUGHLY CONSOLIDATED BY SUITABLE MEANS DURING PLACEME THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED FIXTURES AND INTO CORNERS OF THE FORMS. THE TOP SURFACES OF VERTICALLY FORMED LIFTS SHALL BE GENERALLY LEVEL.

D. CONCRETE SHALL BE CURED ABOVE 50°F (10°C) AND IN A MOIST CONDITION FOR AT LEAST THE FIRST SEVEN DAYS AFTER PLACEMENT. DO NOT PLACE CONCRETE WHEN DURING ANY POINT IN THE DAY THE MEAN DAYLIGHT TEMPERATURE IS LESS THAN 20°F.

WALL CRACKS DUE TO IMPROPER CURING METHODS, OR WEATHER PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

2. A 6-MIL. (MIN.) POLYETHYLENE VAPOR BARRIER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE BASE COURSE OR SUBGRADE AND THE CONCRETE FLOOR.

13. CALCIUM CHLORIDE AND OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.

14. NO TACK WELDING WILL BE PERMITTED ON ASTM A615 GRADE 40 OR 60 STEEL.

#### STRUCTURAL ABBREVIATIONS AT JT 0 ACCOM ACCOMMODATE ABOVE FINISH FLOOR AFF KB ALTERNATE AI T ARCH ARCHITECT / ARCHITECTURAL LGMF B–B BACK-TO- BACK LLH BLDG BUILDING LLV BLK BLOCK IP BM BEAM LVL BOT BOTTOM BEARING MAX BRG BOTH SIDES MBW MECH CHANNEL DESIGNATION MFG CATCH BASIN CB MIN CENTER-TO-CENTER C/C MISC CENTER OF GRAVITY MTL CIP CAST IN PLACE CONTRACTION OR CONSTRUCTION JOINT NOM CENTERLINE CONTROL JOINT NTS CLR N–S CLEAR CONCRETE MASONRY UNIT CMU COL COLUMN COMP COMPOSITE OD CONC CONCRETE OH CONN CONNECTION OPP CONT CONTINUOUS OS CONTR CONTRACTOR P/C DFPTH PDF DIAMETER PEMB DIAMETER DIMENSION PERM DIM PJF DOWN DETAIL DTL DWG DRAWING P/T DWL DOWEL PROJ EXISTING PVMT FA FACH ELECTRICAL CONTRACTOR EC EXPANSION JOINT R/C **FI FVATION** RD ELEV ELEVATOR REINF ENG ENGINEER REQD EQUAL EQ EACH WAY SCHED EW EAST-WEST DIRECTION SIM E—W FXP EXPANSION SHT EXT EXTERIOR SPEC SQ FD FLOOR DRAIN SSTL FDN FOUNDATION STL FF FINISH FLOOR STR F—F FACE-TO-FACE FL FRAME LINE TBE FLG FLANGE THK FTG FOOTING GAGE GA GALV GALVANIZED GENERAL CONTRACTOR TW GC TOS GL GRID LINE TYP ΗK HOOK HORIZ HORIZONTAL UNO HIGH POINT HP VERT HEIGHT HEATING, VENTILATING, & AIR HVAC VIF CONDITIONING HWS HEADED WELDED STUD W/

INSIDE DIAMETER INSULATION INTERIOR

INSUL

INT

REINFORCING REQUIRED SCHEDULE SIMILAR SHEET SPECIFICATION SQUARE STAINLESS STEEL STEEL STRUCTURAL TRUSS BEARING ELEVATION THICK TOP OF TOP OF CURB ELEVATION TOP OF LEDGE ELEVATION TOP OF PIER ELEVATION TOP OF WALL ELEVATION TOP OF STEEL ELEVATION TYPICAL UNLESS NOTED OTHERWISE VERTICAL VERIFY IN FIELD

JOINT

KNEE BRACE

I OW POINT

MAXIMUM

MINIMUM

METAL

NEW

NOMINAI

MECHANICAL

MANUFACTURE

MISCELLANEOUS

NOT IN CONTRACT

NORTH- SOUTH DIRECTION

PRECAST/ PRESTRESSED

PRE-ENGINEERED METAL

POWDER DRIVEN FASTENER

PRE- FORMED JOINT FILLER

POST TENSIONED

REINFORCED CONCRETE

NOT TO SCALE

ON CENTER

OVER HEAD

OPPOSITE

ONE SIDE

BUILDING

PI ATF

PLATE

PERIMETER

PROJECTION

PAVEMENT

ROOF DRAIN

RADIUS

OUTSIDE DIAMETER

STEEL ANGLE DESIGNATION

LIGHT GAGE METAL FRAMING

LAMINATED VENEER LUMBER

MASONRY BEARING WALL

LONG LEG HORIZONTAL

LONG LEG VERTICAL

WIDTH WITH W/0 WITHOUT WCJ WALL CONTROL JOINT WD WOOD WIDE FLANGE WORKING POINT WOOD STUD BEARING WALL **WSBW** 

WELDED WIRE FABRIC

WP

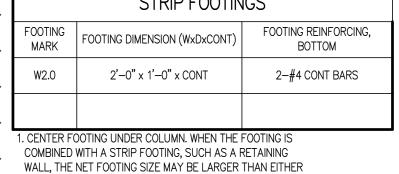
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#### PLAN NOTES

- 1. SEE SHEET S-001 FOR ADDITIONAL NOTES.
- 2. FINISHED FLOOR ELEVATION = SEE ARCH.
- 3. FLOOR SHEATHING SHALL BE 23/32" T&G OSB (TYP ALL FLOORS). GLUE & FASTEN TO FRAMING W/ 10d COMMON NAILS USING 4" NAILING PATTERN ON THE EDGES & 12" NAILING PATTERN IN THE FIELD.
- 4. TEMPORARY CONSTRUCTION BRACING TO REMAIN IN PLACE UNTIL WALL SHEATHING & FRAMING HAVE BEEN INSTALLED.
- 5. SEE ARCH FOR ALL WALL, WINDOW, & DOOR LOCATIONS.
- 6. FIELD VERIFY ALL EXISTING CONDITIONS AND ASSUMPTIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 7. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.

	KEYED NOT	TES				
MARK	DESCR	PTION				
1       HSS12x2x5/16 STAIR STRINGERS W/ FULL PEN WELDS AT E         BEND AND CORNER W/ 2x2x1/8 ANGLES ON SIDE WALLS AND         WOOD TREADS PER ARCH						
2 L4x4x1/4 AT 16"0C						
3 MECH OPENING, SEE ARCH						
$\sim$		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
$\overline{}$	FOOTING SCH	EDULE				
	FOOTING SCHI PAD FOOTIN					
FOOTING MARK						
FOOTING	PAD FOOTIN FOOTING DIMENSION	GS FOOTING REINFORCING,				
FOOTING MARK	PAD FOOTIN FOOTING DIMENSION (W × L × D)	FOOTING REINFORCING, BOTTOM				



INDIVIDUAL FOOTING. COMBINE AS SHOWN.

 $\mathcal{M}$ 

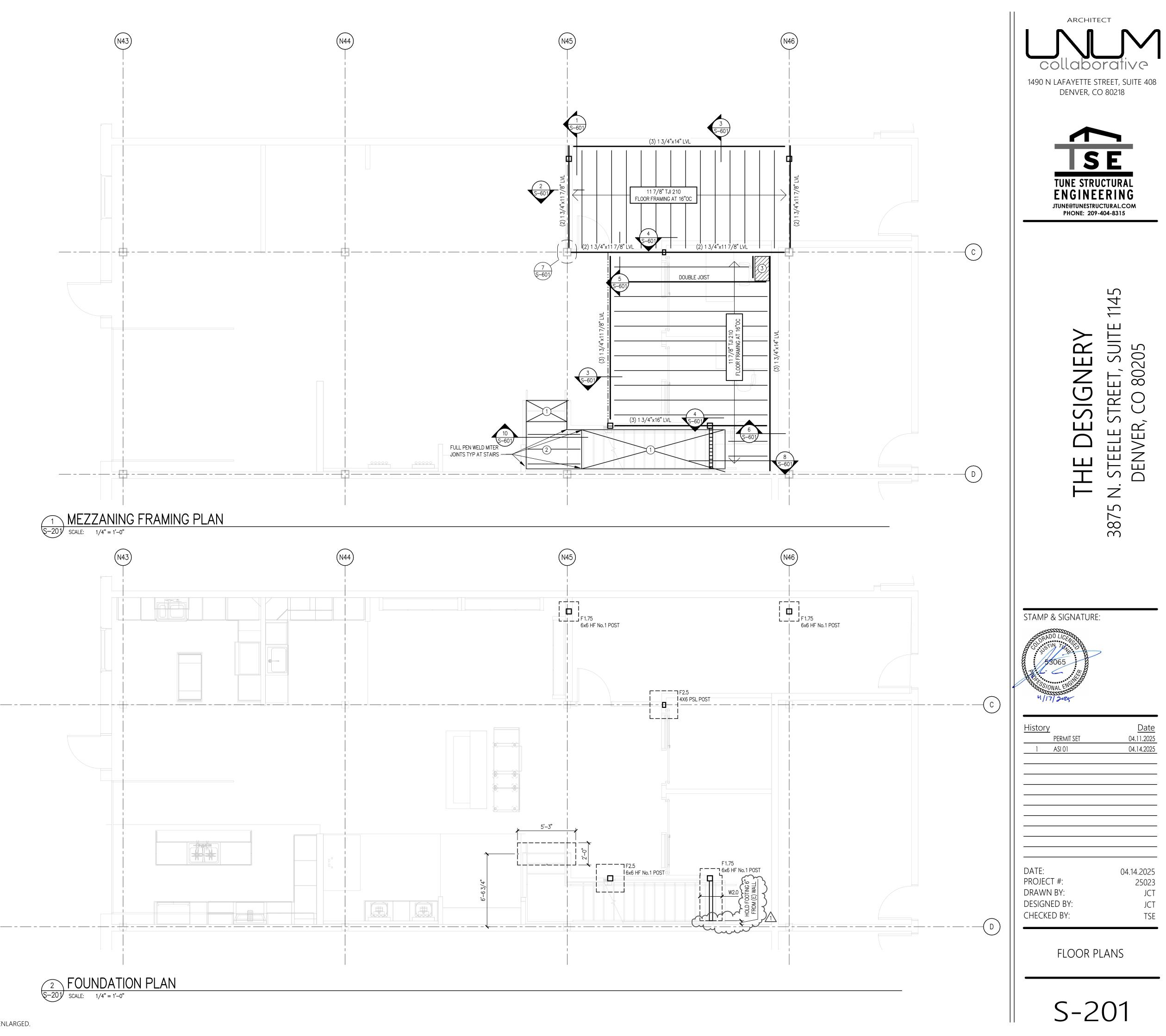


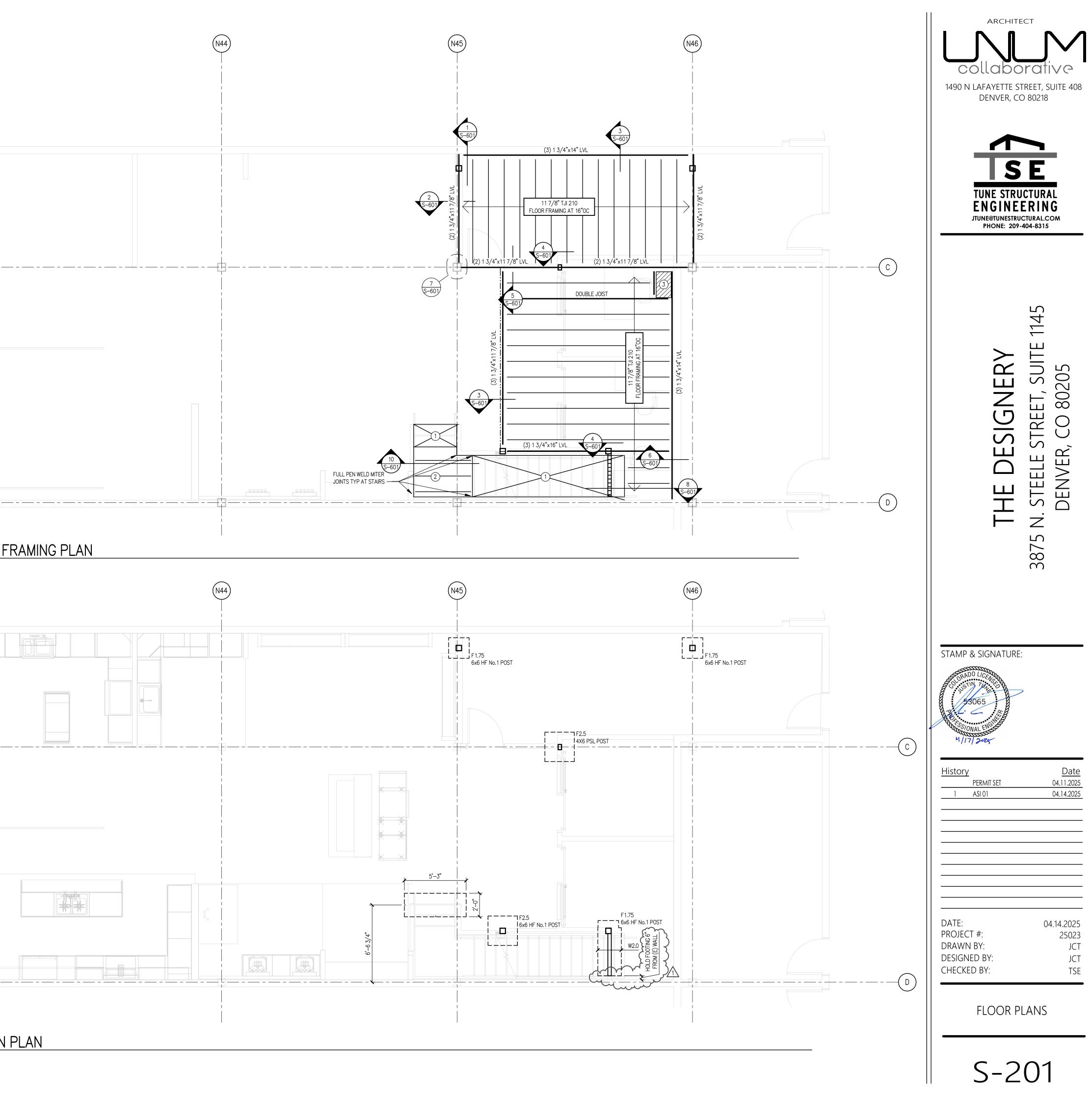
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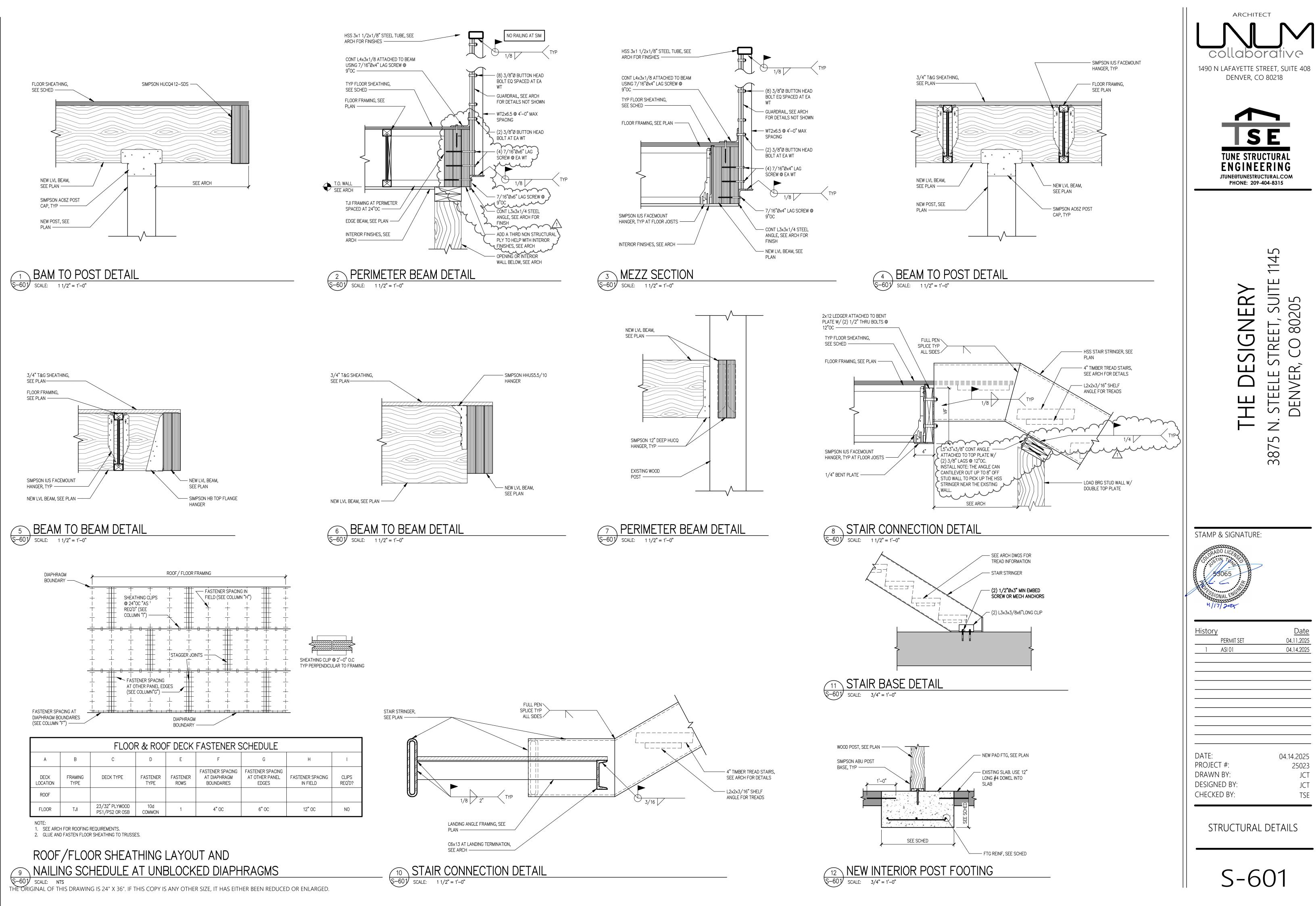
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### **GENERAL NOTES**

- 1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES, AND OWNER'S STANDARDS INDICATED BY THE CONSTRUCTION DOCUMENTS.
- 2. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK, VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
- 3. CONTRACTOR SHALL COORDINATE WORK INDICATED WITH PLUMBING, ELECTRICAL, FIRE PROTECTION, STRUCTURAL, AND ARCHITECTURAL DIVISIONS. VERIFY FIT OF MECHANICAL SYSTEMS PRIOR TO FABRICATION. COORDINATE ALL CHASE, SLEEVE, AND SLAB BLOCKOUT REQUIREMENTS BEFORE CONCRETE IS POURED OR BLOCK IS SET.
- 4. PROVIDE ALL EQUIPMENT SCHEDULED OR INDICATED ON THE DRAWINGS BUT NOT INCLUDED WITHIN THE SPECIFICATIONS INCLUDING ANY REQUIRED BUT NOT LISTED MISC ITEMS NEEDED TO PROVIDE COMPLETELY OPERATIONAL SYSTEMS AS INDICATED WHETHER SPECIFICALLY CALLED FOR OR NOT. INSTALLATION SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE SUBMITTALS FOR ALL PROPOSED EQUIPMENT AND MATERIALS TO BE UTILIZED. PROVIDE OPERATION AND MAINTENANCE MANUAL FOR ALL SYSTEMS AND EQUIPMENT AT END OF PROJECT.
- 5. ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT SHALL BE VERIFIED WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR PRIOR TO EQUIPMENT ORDER RELEASE. ADDITIONAL ELECTRICAL WORK RESULTING FROM EQUIPMENT SUBSTITUTION IS THE RESPONSIBILITY OF THIS CONTRACTOR.
- 6. DRAIN PIPING FROM EQUIPMENT SHALL BE ROUTED SO AS NOT TO CREATE A TRIPPING HAZARD. COORDINATE ACTUAL DRAIN CONNECTIONS WITH PLUMBING CONTRACTOR.
- 7. ITEM DESIGNATIONS INDICATED HEREON ARE FOR PURPOSES OF THESE DOCUMENTS ONLY. CONTRACTOR SHALL VERIFY WITH OWNERS REPRESENTATIVE ACTUAL "TAGGING" INFORMATION TO BE PROVIDED FOR EACH ITEM OF MECHANICAL EQUIPMENT PRIOR TO NAMEPLATE ORDER RELEASE.
- 8. DUCT SIZES INDICATED ARE OUTSIDE SHEEETMETAL DIMENSIONS, BRANCH RUNOUT DUCTS TO DIFFUSERS AND GRILLES TO BE SAME SIZE AS DIFFUSER OR GRILLE CONNECTION SIZE UNLESS OTHERWISE NOTED.
- 9. LENGTH OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO 5'-0" MAX. HORIZONTAL RUN WITH ONLY ONE 90" ELBOW PERMITTED. SECURE FLEXIBLE DUCTWORK WITH SCREWS & DRAWBANDS PER SMACNA STANDARDS.
- 10. DUCT MOUNTED SMOKE DETECTORS SHALL BE ZERO VELOCITY TYPE WHERE INDICATED ON DRAWINGS.
- 11. CEILING DIFFUSERS SHALL BE 36" MINIMUM FROM CEILING MOUNTED SMOKE DETECTORS, COORDINATE WITH DIVISION 26.
- 12. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ACTUAL LOCATION OF GRILLES, DIFFUSERS, AND ACCESS DOORS IN CEILING. SECURE DIFFUSERS & GRILLES TO T-BAR CEILINGS WHERE APPLICABLE. SUBMIT SHOP DWG. FOR APPROVAL PRIOR TO BEGINNING WORK.
- 13. AT THE COMPLETION OF WORK, PROVIDE TESTING AND BALANCING SERVICES FOR MECHANICAL SYSTEM. SUBMIT WRITTEN REPORT TO ARCHITECT LISTING SYSTEM AIRFLOWS, ELECTRIC DATA, TEMPERATURES, AND PRESSURE DROPS.
- 14. WHERE PIPES PASS THROUGH FIRE-RATED FLOOR OR WALLS, SEAL WITH MATERIALS EQUAL TO 3M FIRE BARRIER, MEETING TESTING PER ASTM-E-814 (UL 1479). USE CAULK OR PUTTY TYPE. ALL EXTERIOR WALL AND ROOF PENETRATIONS SHALL BE SEALED WATERPROOF.
- 15. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED.
- 16. ALL EQUIPMENT, MATERIALS, AND INSTALLATION IS TO BE WARRANTEED FOR ONE YEAR TO BE FREE FROM DEFECT. PROVIDE WRITTEN WARRANTY TO OWNER.
- 17. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK.
- 18. THIS CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, ELECTRICAL CONDUIT, STRUCTURAL MEMBERS, ETC., PRIOR TO STARTING OF CONSTRUCTION. COORDINATE CONFLICTS WITH THE GENERAL CONTRACTOR.
- 19. THIS CONTRACTOR SHALL COORDINATE ALL REQUIRED EXISTING BUILDING SERVICE SYSTEM OUTAGES WITH BUILDING MANAGEMENT.
- 20. ALL MECHANICAL SYSTEMS ARE REQUIRED TO BE INSTALLED PER BASE BUILDING REQUIREMENTS, LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- 21. PATCH AND REPAIR TO MATCH EXISTING, ANY WALL/CEILINGS TO BE ACCESSED TO ROUTE PIPING AND DUCTWORK.
- 22. EXISTING DUCTWORK, PIPING, AND EQUIPMENT TO REMAIN IS SHOWN LIGHT. NEW DUCTWORK, PIPING, AND EQUIPMENT IS SHOWN HEAVY. EXISTING DUCTWORK, PIPING, AND EQUIPMENT TO BE REMOVED IS SHOWN WITH A HATCH OVER THE ITEM.

## MECHANICAL SPECIFICATIONS

SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL PER SMACNA DUCT CONSTRUCTION STANDARDS. SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK SHALL BE CONSTRUCTED FOR 1.5" W.C. STATIC PRESSURE. SPIRAL LOCK-FORMED ROUND DUCT MAY BE UTILIZED WHERE SPACE ALLOWS. SPIRAL LOCK-FORMED ROUND DUCT SHALL BE USED IN EXPOSED CEILINGS WHERE VISIBLE TO VIEW FROM THE OCCUPANTS. DUCTWORK IN EXPOSED CEILINGS SHALL BE PAINT-LOCK BUT LEFT WITH A GALVANIZED FINISH. TRANSVERSE JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED AIR-TIGHT WITH MASTIC, MASTIC SHALL BE APPLIED ONLY TO THE INSIDE OF EXPOSED DUCTWORK. RADIUSED ELBOWS (R/D=1.5) OR MITERED ELBOWS WITH SINGLE THICKNESS TURNING VANES SHALL BE UTILIZED WHERE POSSIBLE. TURNING VANES SHALL BE SUPPORTED AT INTERVALS OF 36" MAXIMUM. TURNING VANE RUNNERS SHALL HAVE A VANE IN EVERY SLOT AND SHALL CONFORM TO SMACNA DUCT CONSTRUCTION STANDARDS FOR STANDARD SPACING.

INSULATED, FACTORY FABRICATED, FLEXIBLE DUCTWORK MAY BE UTILIZED AT RUNOUTS TO AIR DIFFUSERS WHERE DUCTWORK IS CONCEALED ABOVE CEILINGS. FLEXIBLE DUCTWORK SHALL CONSIST OF AN EXTERIOR REINFORCED LAMINATED VAPOR BARRIER, R-6.0 MINIMUM FIBERGLASS INSULATION AND INTERIOR VINYL LINER WITH SPRING STEEL WIRE HELIX. VINYL LINER SHALL NOT BE PERFORATED. FLEXIBLE DUCT ASSEMBLY SHALL HAVE A FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 OR LESS. FLEXIBLE DUCT TO FLEXIBLE DUCT CONNECTIONS SHALL BE MADE WITH FACTORY FABRICATED STEEL COLLARS. FLEXIBLE DUCT SHALL BE SECURED TO RIGID DUCTWORK AND AIR DEVICES WITH SCREWS AND DRAWBANDS. LENGTH OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO 5' AND SHALL NOT BE COMPRESSED. FLEXIBLE DUCTWORK SHALL NOT BE USED FOR ELBOWS. FLEXIBLE DUCT SHALL NOT BE USED ABOVE INACCESSIBLE CEILINGS. FLEXIBLE DUCT SHALL NOT PASS THROUGH WALLS.

ALL SUPPLY AND RETURN RECTANGULAR DUCTWORK SHALL BE PROVIDED WITH DUCT LINER (INSIDE THE DUCT): ONE INCH THICK, RESIN BONDED GLASS FIBER, IMMOBILIZED, EPA-REGISTERED ANTIMICROBIAL AGENT COATING ON AIR STREAM SURFACE, RATED BY MANUFACTURER FOR AT LEAST 4000 FPM AND MEETING THE REQUIREMENTS OF ASTM C1071 TYPE I. FIRE RESISTANCE SHALL MEET REQUIREMENTS OF NFPA 90A. FLAME SPREAD RATING NOT TO EXCEED 25. FUEL CONTRIBUTION AND SMOKE DEVELOPMENT NOT TO EXCEED 50. NOISE REDUCTION COEFFICIENT (NRC) OF NOT LESS THAN 0.60 WHEN TESTED IN ACCORDANCE WITH ASTM C423 USING AN "A" MOUNTING OR A MINIMUM OF 0.70 USING AN "F" MOUNTING. K VALUE NOT MORE THAN 0.26 BTUH PER SQUARE FOOT PER DEG. F AT 75 DEG. F OR AN "R" VALUE OF 4. MAXIMUM ABSOLUTE ROUGHNESS FACTOR PER FOOT OF .004

DUCT HANGERS SHALL BE CONSTRUCTED OF GALVANIZED STEEL. DUCTS SHALL BE SUPPORTED AND CONNECTED TO THE STRUCTURE PER SMACNA DUCT CONSTRUCTION STANDARDS. HANGERS AND SUPPORTS FOR GREASE DUCT SHALL BE OF NONCOMBUSTIBLE MATERIALS. FLEXIBLE DUCTS SHALL BE SUPPORTED WITH GALVANIZED STRAPS.

HEAVY FLEXIBLE CONNECTIONS SHALL BE FURNISHED AND INSTALLED AT DUCT CONNECTIONS TO FANS AND AIR HANDLING UNITS 1/2 HP OR LARGER EXCEPT HIGH TEMPERATURE KITCHEN HOOD EXHAUST FANS. FLEXIBLE CONNECTIONS SHALL BE 6" MINIMUM AND 10" MAXIMUM IN LENGTH. MATERIAL FOR INTERIOR INSTALLATIONS SHALL BE VENTFLEX MANUFACTURED BY VENTFABRICS, EXCELON MANUFACTURED BY DURO-DYNE OR APPROVED EQUAL. MATERIAL FOR EXTERIOR INSTALLATIONS SHALL BE VENTLON MANUFACTURED BY VENTFABRICS, DUROLON MANUFACTURED BY DURO-DYNE OR APPROVED EQUAL.

MANUAL VOLUME DAMPERS SHALL BE FURNISHED AND INSTALLED WHERE INDICATED AT SUPPLY AIR DUCT RUNOUTS TO AIR DIFFUSERS AND GRILLES AS NEAR AS POSSIBLE TO THE TRUNK DUCT. MANUAL VOLUME DAMPERS FOR RECTANGULAR DUCT SHALL BE CONSTRUCTED OF 16 GAUGE GALVANIZED STEEL AND BE THE OPPOSED BLADE TYPE. MANUAL VOLUME DAMPERS FOR ROUND DUCT SHALL BE CONSTRUCTED OF 16 GAUGE GALVANIZED STEEL AND BE THE SINGLE BLADE TYPE. DAMPER BEARINGS SHALL BE NYLON. STAND-OFFS TO OUTSIDE OF INSULATION SHALL BE PROVIDED FOR MANUAL VOLUME DAMPERS IN INSULATED DUCT. LOCKING AND INDICATING QUADRANTS SHALL BE PROVIDED WHERE DAMPER IS ACCESSIBLE. REMOTE CEILING OPERATORS SHALL BE FURNISHED AND INSTALLED FOR DAMPERS ABOVE INACCESSIBLE CEILINGS. OPERATORS SHALL BE GEAR AND LINKAGE TYPE EQUAL TO YOUNG REGULATOR WITH CHROME PLATED CEILING ESCUTCHEON AND COVER PLATE.

AIR DEVICES SHALL BE AS SCHEDULED. EXPOSED SCREWS SHALL BE THE FINISHING TYPE AND PAINTED TO MATCH THE AIR DEVICE. SQUARE TO ROUND ADAPTORS SHALL BE PROVIDED WHERE REQUIRED FOR AIR DEVICES IN CEILINGS. AIR DEVICES SHALL BE FINISHED WITH WHITE BAKED ENAMEL UNLESS NOTED OTHERWISE. AIR DEVICES SHALL BE SECURED TO T-BAR CEILINGS WHERE APPLICABLE.

EQUIPMENT AND CONDENSATE DRAINS SHALL BE TYPE M HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS. COPPER TUBING SHALL BE SOLDERED WITH 95–5 TIN–ANTIMONY SOLDER OR BRAZED WITH SILVER BASED FILLER MATERIAL. DRAINS SHALL BE ROUTED SO AS NOT TO CREATE A TRIPPING HAZARD.

MECHANICAL EQUIPMENT SHALL BE SECURED AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND APPLICABLE SECTIONS OF THE JURISDICTIONAL BUILDING AND MECHANICAL CODES.

MECHANICAL EQUIPMENT SHALL BE IDENTIFIED WITH BAKELITE NAMEPLATES. COLOR CODING OF NAMEPLATES AND IDENTIFICATION INFORMATION SHALL BE COORDINATED WITH THE OWNER.

AN INDEPENDENT TEST AND BALANCE FIRM WHICH IS AABC OR NEBB CERTIFIED SHALL BE RETAINED FOR CHECK/TEST-START-UP AND TESTING AND BALANCING OF AIR AND WATER SYSTEMS. THE TEST REPORT SHALL BE IN A FORMAT APPROVED BY AABC FOR SYSTEMS OF THIS TYPE AND COMPLEXITY. QUALIFICATIONS OF INDEPENDENT TEST AND BALANCE FIRM SHALL BE SUBMITTED FOR REVIEW.

				ISSUE				

ABBR	SYMBOL
T-STAT	0
S	<b>S</b> <b>C</b> 02
CO2	C02
AUTO D	———M
MVD	F
SA	
RA	
EA	
SW	[] →-
DIFF	
FC	
MA	
SP	
ESP	
UNO	
U.C.	
VAV	
AFF	
E	
N	
R	
D	

## SHEET INDEX

√04-11-		
$\overset{\circ}{\bigtriangledown}$	SHEET NO.	SHEET DESCRIPTION
•	M-001	MECHANICAL COVER SHEET
	M-101	1ST FLOOR MECHANICAL PLAN
	M-102	MEZZANINE MECHANICAL PLAN
•	M-301	MECHANICAL SCHEDULES
•	M-401	MECHANICAL DETAILS

## MECHANICAL LEGEND

	DESCRIPTION
	THERMOSTAT
	AVERAGING TEMPERATURE SENSOR
	CARBON DIOXIDE SENSOR
	MOTORIZED DAMPER
	MANUAL VOLUME DAMPER
	SUPPLY AIR
	RETURN AIR
	EXHAUST AIR
-	SIDEWALL DIFFUSER
	DIFFUSER
	FORWARD CURVED
	MIXED AIR
	STATIC PRESSURE
	EXTERNAL STATIC PRESSURE
	UNLESS NOTED OTHERWISE
	UNDERCUT
	VARIABLE AIR VOLUME
	ABOVE FINISHED FLOOR
	EXISTING
	NEW
	RELOCATED
	DEMOLISHED
	POINT OF CONNECTION NEW TO EXISTING









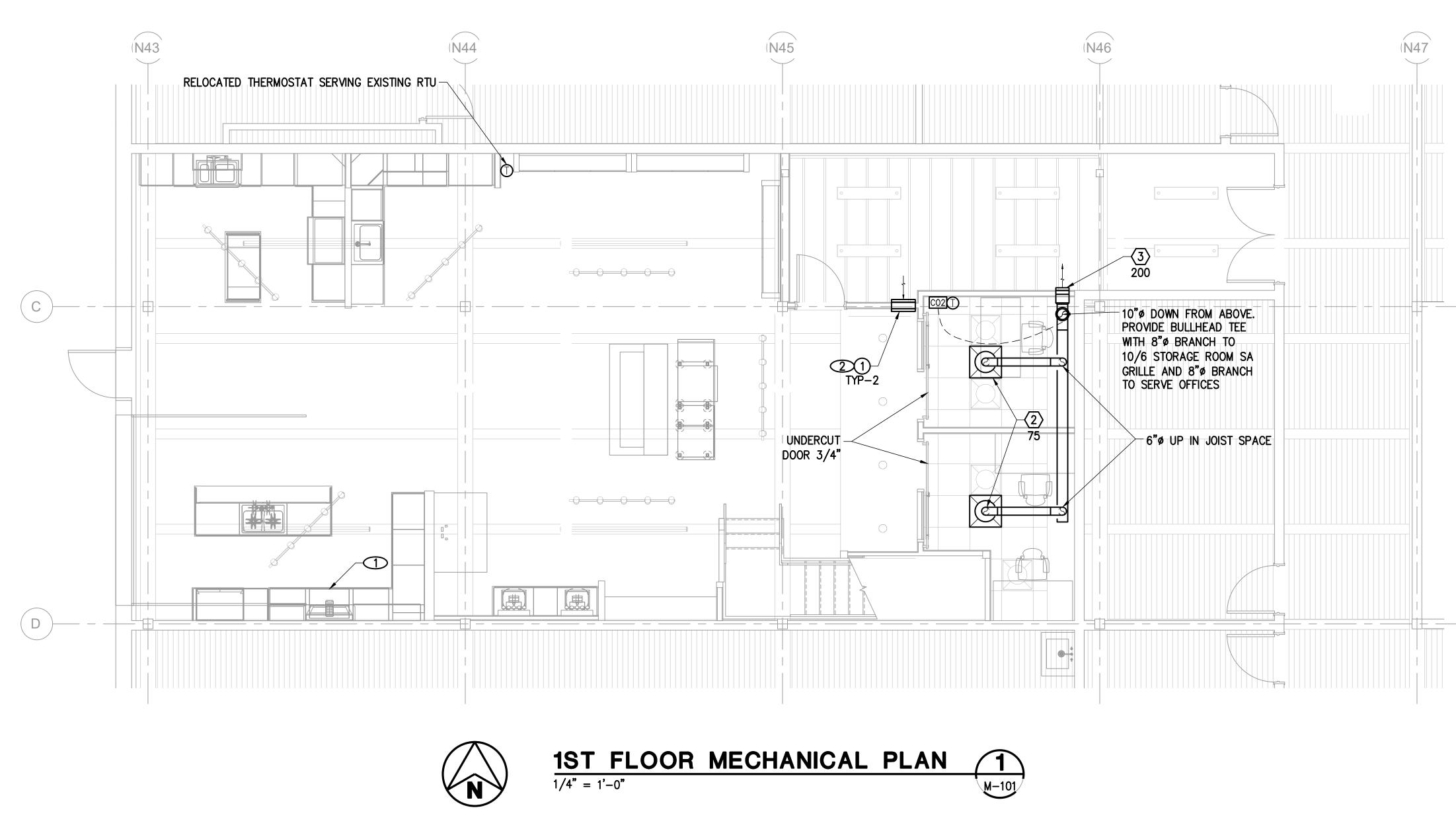
FOR PERMIT

04.11.2025

Date

ATE:	04.11.2025
Roject #:	2025-030-01
RAWN BY:	BTG
ESIGNED BY:	BTG
HECKED BY:	BEM

MECHANICAL COVER SHEET



OUTSIDE AIR VENTILATION CALCULATIONS									
PROJECT: THE DESIGNERY	CODE: 2021 IMC				SYSTEM: (E)RTU				
	AREA		OCCL	IPANCY	AREA		TOTAL REQD	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	OSA (CFM)	AIR (CFM)	% OSA
STORAGE	270	0	0	0.0	0.12	0.80	41	200	20%
RETAIL LEVEL 1	1391	15	21	7.5	0.12	0.80	406	1,925	21%
OFFICE	78	5	1	5.0	0.06	0.80	12	75	16%
OFFICE	93	5	1	5.0	0.06	0.80	13	75	18%
RETAIL LEVEL 2	528	15	8	7.5	0.12	0.80	154	725	21%
TOTALS	2,360		31				626	3,000	
SYSTEM CALCULATIONS									
SUPPLY AIR 3,000 CFM			VENTILATION SYSTEM EFFICIENCY 1009			100%			
TOTAL UNCORRECTED OSA REQD 626 CFM			SYSTEM OCCUPANT DIVERSITY			100%			
AVERAGE OUTDOOR AIR % 21%			CORRECTED SYSTEM MIN OUTDOOR AIR 628			CFM			
NOTES:									

1. BALANCE EXISTING ROOFTOP UNIT TO 630 CFM OUTSIDE AIR

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## **KEYNOTES**

1 RECIRCULATING HOOD BY OWNER. PROVIDE (1) GRILLE ON EACH SIDE OF 18X6" WALL OPENING. OPENING TO BE AS HIGH ALONG WALL AS POSSIBLE.







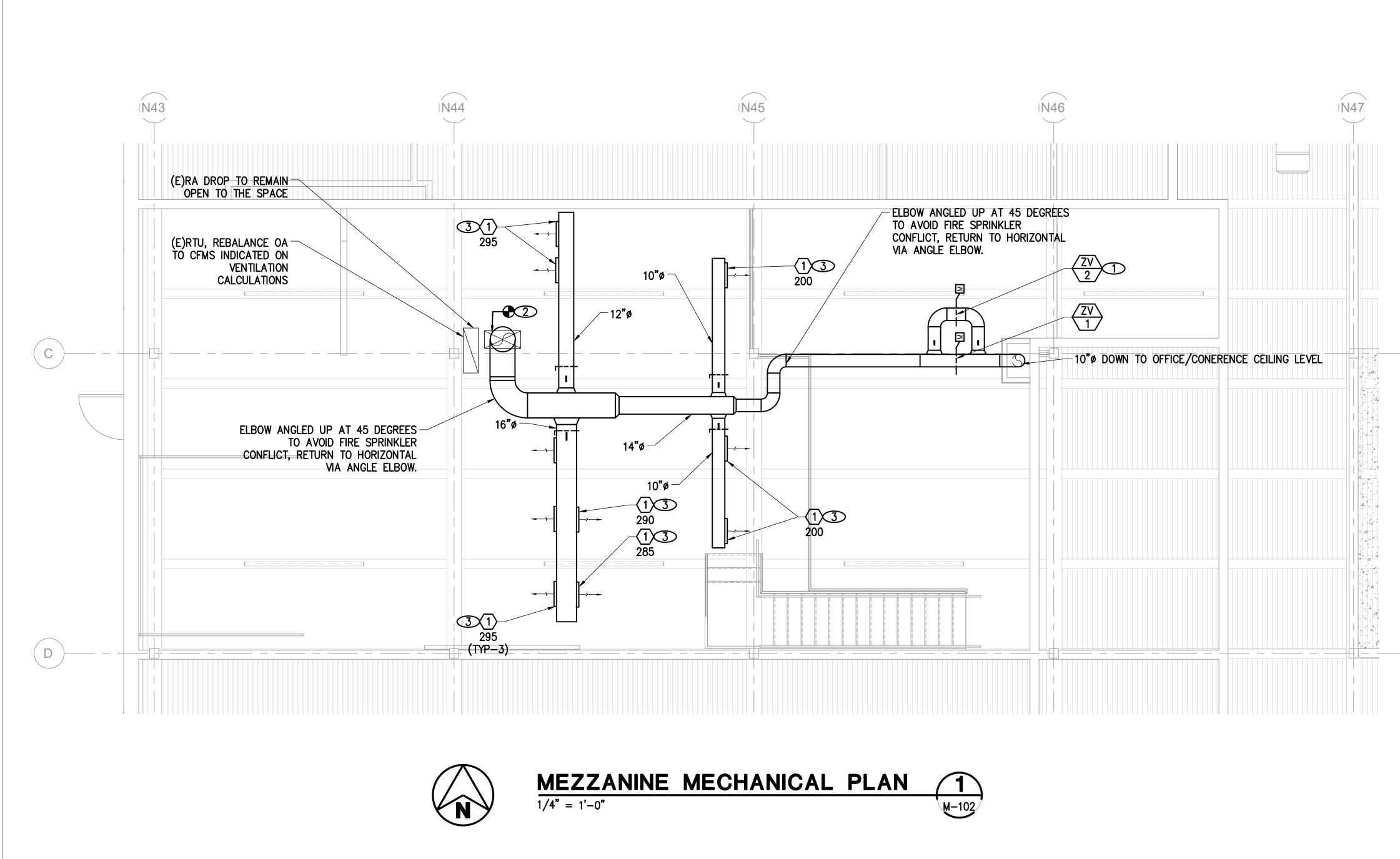


History	Date
FOR PERMIT	04.11.2025

04.11.2025

ATE:	04.11.2025
Roject #:	2025-030-01
RAWN BY:	BTG
ESIGNED BY:	BTG
HECKED BY:	BEM

1ST FLOOR MECHANICAL PLAN



## **KEYNOTES**

ROUTE 12"Ø DUCT BYPASS LOOP AROUND ZV-1. PROVIDE AND INSTALL ZV-2 ON BYPASS LOOP AND CONTROL PER SCHEDULE ON M-301. DEMO BACK DUCT AS NEED TO TRANSITION TO 18" SUPPLY DUCT MAIN. 3 PROVIDE AND INSTALLED DUCT MOUNTED DIFFUSER PER DETAIL 1/M-401.









History
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HECKED BY:	BEM

MEZZANINE MECHANICAL PLAN

## DIFFUSER & REGISTER SCHEDULE

SUPPLY AIR				F	RETURN/EXHA	AUST AIR	
ITEM	NECK SIZE	CFM RANGE	TYPE	ITEM	ITEM MODULE-NECK SIZE CFN		TYPE
$\langle 1 \rangle$	20/4 (10")	0 - 310	S1		18/6	0 - 400	R1
2	6/6 – 6 <b>"ø</b>	0 - 230	S2				
$\langle 3 \rangle$	10/6	0 - 360	S3				

## DIFFUSER & REGISTER SPECIFICATIONS

<u>SUPPLY AI</u>	<u>R</u>
<u>TYPE_S1</u> :	KRUEGER M GRILLE, 3/4 BRACKETS
<u>TYPE S2</u> :	KRUEGER M 4-WAY HOF FOR GYP. E
<u>TYPE S3</u> :	KRUEGER M OBD, WHITE

#### <u>RETURN/EXHAUST\_AIR</u>

<u>TYPE R1</u>: KRUEGER MODEL S85H, STEEL GRILLE, 1/2" BLADE SPACING, 35" BLADE ANGLE, WHITE FINISH. CONCEALED MOUNTING FOR GYP. BOARD CEILINGS.



MODEL 5DMGDU DOUBLE DEFLECTION ALUMINUM DUCT MOUNTED SUPPLY /4" BLADE SPACING, OBD, CLEAR ANODIZED FINISH. (NUMBER IN 5 IS MINIMUM DUCT SIZE REQUIRED FOR MOUNTING)

MODEL SHR 24"X24" STEEL LOUVERED PANEL DIFFUSER, NON-ADJUSTABLE ORIZONTAL THROW, WHITE FINISH. FRAME 23 FOR LAY-IN CEILINGS. FRAME 21 BOARD CEILINGS.

MODEL 880H DOUBLE DEFLECTION STEEL SUPPLY GRILLE, 3/4" BLADE SPACING, TE FINISH. USE CONCEALED MOUNTING IN PUBLIC AREAS.

	AIRFLOW ZONE VALVE						
М	MANUFACTURER/ MODEL	LOCATION/ SERVICE	NOTES				
	JACKSON SYSTEMS/	SUPPLY AIR/ TEMP CONTROL	123457				
	YOUNG REGULAR/ DA-CO2	SUPPLY AIR/ TEMP CONTROL	1356				
	NOTES:						
	MORULATING RAMPER CIZE TO MATCH RUGT CIZE ON RRAWNING						

1 MODULATING DAMPER SIZE TO MATCH DUCT SIZE ON DRAWINGS

2 PROVIDE WALL MOUNTED JACKSON SYSTEMS Z-2000-T TSTAT WITH PROPORTIONAL CONTROL AND CLEAR LOCKABLE COVER.

3 PROVIDE 40VA TRANSFORMER

(4) UNIT TO PROVIDE AUTO-CHANGEOVER FROM HEATING TO COOLING

5 UNIT TO HAVE 90 SECOND TIMING FROM FULLY OPENED TO DAMPER MINIMUM POSITION (FULLY CLOSED POSITION FOR ZV-2)

6 PROVIDE WALL MOUNTED CO2 SENSOR WITH CLEAR LOCKABLE COVER. WHEN THE SPACE CO2 SENSOR READS UNDER 800 PPM, THE DAMPER SHALL BE FULLY CLOSED. THE DAMPER SHALL MODULATE OPEN AT 800 PPM SPACE CO2 READING. DAMPER TO BE FULLY OPEN IF THE SPACE CO2 SENSOR READS 1200 PPM OR HIGHER.

T SET DAMPER MINIMUM POSITION TO 25%



Designery @ Ysy

3827 STEEL STREET, SUITE 1427 Denver, CO 80205





History

Date

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 04.11.2025

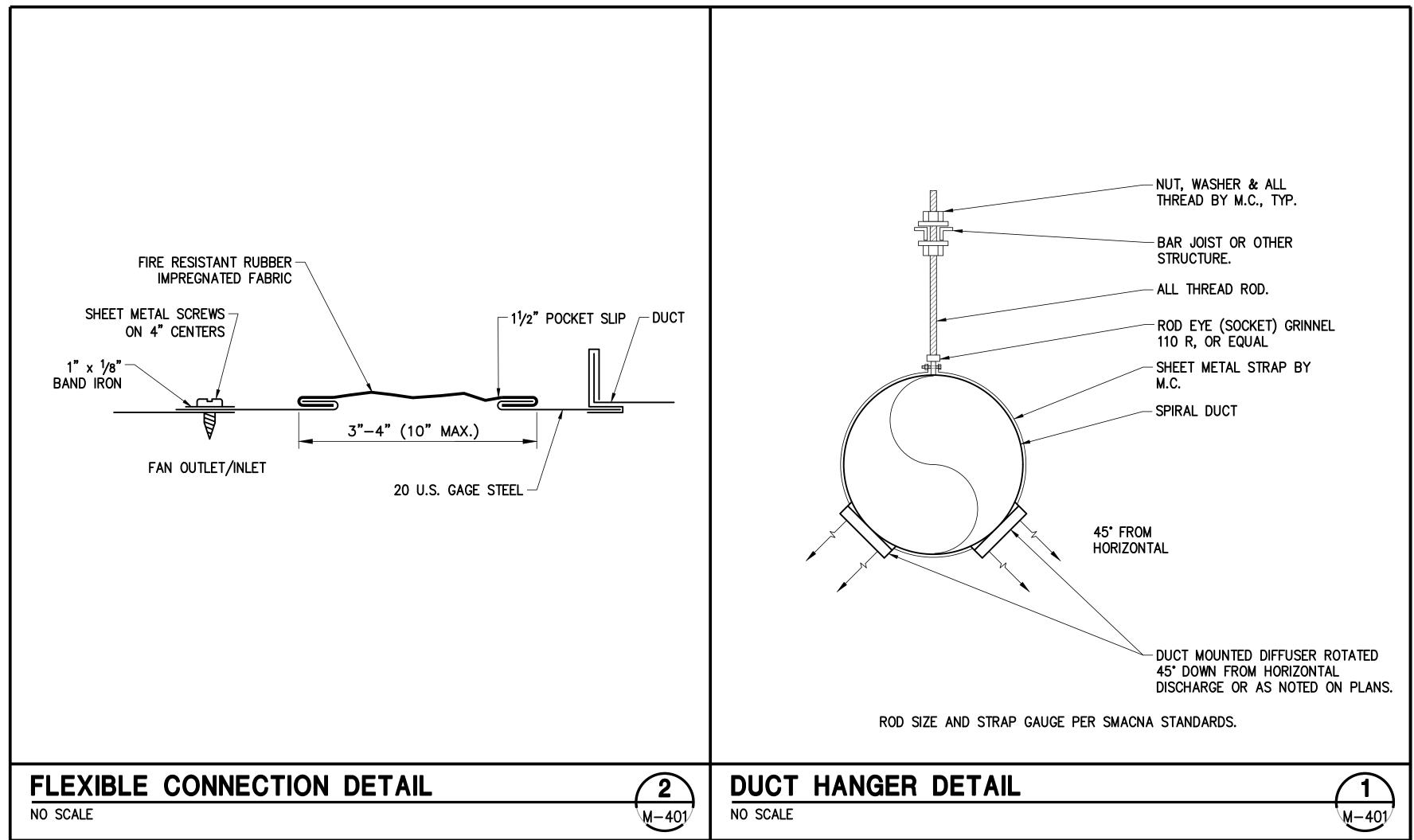
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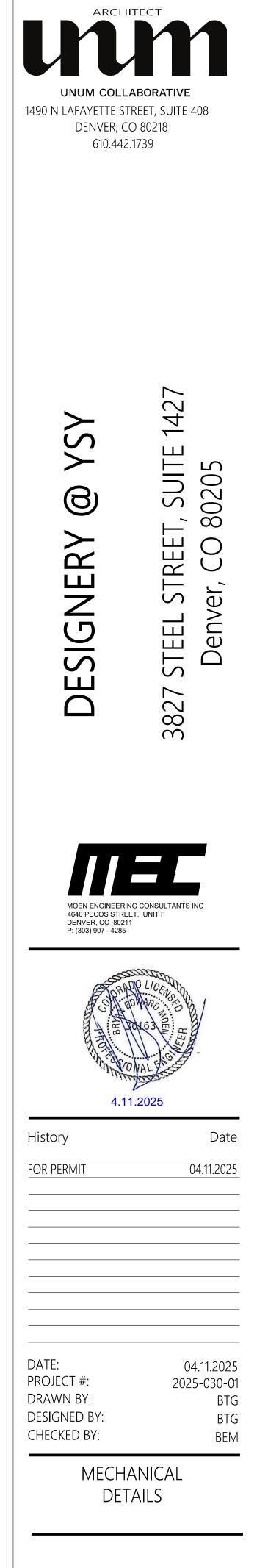
 DRAWN BY:
 BTG

 DESIGNED BY:
 BTG

 CHECKED BY:
 BEM

MECHANICAL SCHEDULES





## **GENERAL NOTES**

- 1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE CODES. LOCAL CODES. AND OWNER'S STANDARDS INDICATED BY THE CONSTRUCTION DOCUMENTS.
- 2. PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
- 3. CONTRACTOR SHALL COORDINATE WORK INDICATED WITH MECHANICAL, ELECTRICAL, FIRE PROTECTION, STRUCTURAL, CIVIL, AND ARCHITECTURAL DIVISIONS. CONTRACTOR SHALL VERIFY SIZE & LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK, COORDINATE WITH OTHER TRADES AND MAKE FINAL CONNECTION. VERIFY FIT OF PLUMBING SYSTEMS PRIOR TO FABRICATION. COORDINATE ALL CHASE, SLEEVE, AND SLAB BLOCK-OUT REQUIREMENTS BEFORE CONCRETE IS POURED OR BLOCK IS SET.
- PROVIDE ALL EQUIPMENT SCHEDULED OR INDICATED ON THE DRAWINGS BUT NOT INCLUDED WITHIN THE SPECIFICATIONS INCLUDING ANY REQUIRED BUT NOT LISTED MISC ITEMS REQUIRED TO PROVIDE COMPLETE OPERATIONAL SYSTEMS AS INDICATED WHETHER SPECIFICALLY CALLED FOR OR NOT. INSTALLATION SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE SUBMITTALS FOR ALL PROPOSED FIXTURES, EQUIPMENT AND MATERIALS TO BE UTILIZED. PROVIDE OPERATION AND MAINTENANCE MANUAL FOR ALL SYSTEMS AND EQUIPMENT AT END OF PROJECT.
- 5. ELECTRICAL CHARACTERISTICS OF PLUMBING EQUIPMENT SHALL BE VERIFIED WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR PRIOR TO EQUIPMENT ORDER RELEASE. ADDITIONAL ELECTRICAL WORK RESULTING FROM EQUIPMENT SUBSTITUTION IS THE RESPONSIBILITY OF THIS CONTRACTOR.
- 6. DRAIN PIPING FROM EQUIPMENT SHALL BE ROUTED SO AS NOT TO CREATE A TRIPPING HAZARD.
- 7. PROVIDE CLEANOUTS WHERE INDICATED ON DRAWINGS OR AS REQUIRED BY JURISDICTIONAL PLUMBING CODE.
- 8. CLEAN, TEST, AND SANITIZE ALL PLUMBING IN ACCORDANCE WITH REQUIREMENTS OF JURISDICTIONAL PLUMBING AND HEALTH CODES.
- 9. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED.
- 10. ALL EQUIPMENT, MATERIALS, AND INSTALLATION IS TO BE WARRANTEED FOR ONE YEAR TO BE FREE FROM DEFECT. PROVIDE WRITTEN WARRANTY TO OWNER.
- 11. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK.
- 12. THIS CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, DUCTWORK. PIPING. ELECTRICAL CONDUIT. STRUCTURAL MEMBERS. ETC., PRIOR TO STARTING OF CONSTRUCTION. COORDINATE CONFLICTS WITH THE GENERAL CONTRACTOR.
- 13. THIS CONTRACTOR SHALL COORDINATE ALL REQUIRED EXISTING BUILDING SERVICE SYSTEM OUTAGES WITH BUILDING MANAGEMENT.
- 14. ALL PLUMBING SYSTEMS ARE REQUIRED TO BE INSTALLED PER BASE BUILDING REQUIREMENTS. LOCAL AND STATE JURISDICTIONAL CODES. ORDINANCES. AND APPLICABLE REGULATIONS.
- 15. SAWCUT/CORE DRILL EXISTING FLOOR AS REQUIRED FOR INSTALLATION OR CAPPING OF WASTE AND VENT PIPING. PATCH AND REPAIR TO MATCH EXISTING.
- 16. PATCH AND REPAIR TO MATCH EXISTING, ANY WALL/CEILINGS TO BE ACCESSED TO ROUTE PIPING.
- 17. EXISTING PLUMBING AND EQUIPMENT TO REMAIN IS SHOWN LIGHT. NEW PLUMBING AND EQUIPMENT IS SHOWN HEAVY. EXISTING PLUMBING AND EQUIPMENT TO BE REMOVED IS SHOWN WITH A HATCH OVER THE ITEM.

	P	LUMBING LEGEND
ABBR.	SYMBOL	DESCRIPTION
S OR W	<b>—</b> — — — —	SOIL, WASTE OR SEWER BELOW GRADE OR FLOOR
S OR W		SOIL, WASTE OR SEWER ABOVE GRADE OR FLOOR
CWV	CWV	COMBINATION WASTE AND VENT
FCO/GCO	<b></b>	FLOOR OR GRADE CLEANOUT
CO	I I	CLEANOUT
V		VENT
CW		COLD WATER
HW		HOT WATER
SOV		SHUT-OFF VALVE
PC	E	PIPE CAP
AFF		ABOVE FINISHED FLOOR
UNO		UNLESS NOTED OTHERWISE
AAV		AIR ADMITTANCE VALVE
E		EXISTING
Ν		NEW
	G	POINT OF CONNECTION NEW TO EXISTING

### **PLUMBING SPECIFICATIONS**

ALL WETTED PARTS USED TO CONVEY WATER ANTICIPATED FOR HUMAN CONSUMPTION SHALL BE CERTIFIED LEAD-FREE IN COMPLIANCE WITH NSF/ANSI-372 OR NSF/ANSI 61G.

WATER PIPING ABOVE GRADE SHALL BE TYPE L, HARD DRAWN COPPER WITH WROUGHT COPPER FITTINGS SOLDERED WITH 95-5 TIN-ANTIMONY SOLDER OR BRAZED WITH SILVER BASED FILLER METAL. SDR9 CROSSLINKED POLYETHYLENE "PEX-A OR PEX-B" TUBING MANUFACTURED IN ACCORDANCE WITH ANSI/NSF 61, ANSI/NSF 372, ANSI/NSF 14, ASTM F876 AND ASTM F877 WITH COMPRESSION FITTINGS BY SAME MANUFACTURER AS TUBING MAY BE USED FOR RUN-OUTS TO INDIVIDUAL FIXTURES.

WATER PIPING BELOW GRADE SHALL BE SDR9 CROSSLINKED POLYETHYLENE "PEX-A OR PEX-B" TUBING MANUFACTURED IN ACCORDANCE WITH ANSI/NSF 61, ANSI/NSF 372, ANSI/NSF 14, ASTM F876 AND ASTM F877 WITH COMPRESSION FITTINGS BY SAME MANUFACTURER AS TUBING MAY BE USED FOR RUN-OUTS TO INDIVIDUAL FIXTURES.

SHUT-OFF VALVES ARE TO BE BRONZE BALL VALVES, TWO PIECE OR UNI-BODY FULL PORT WITH CHROME PLATED BALL, REINFORCED TFE SEATS AND STUFFING BOX, LEVER HANDLE AND SCREWED OR SOLDER ENDS. 400 PSI W.O.G., 150 PSI SATURATED STEAM.

WATER PIPING SHALL BE TESTED WITH WATER AT 125 PSIG. TEST PRESSURE SHALL BE MAINTAINED FOR A MINIMUM OF 30 MINUTES WITH NO LOSS. DOMESTIC WATER PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE JURISDICTIONAL HEALTH AND PLUMBING CODES.

SOIL, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 SOLID CORE DWV PVC OR ABS PIPE AND FITTINGS MANUFACTURED FROM VIRGIN RIGID PVC (POLYVINYL CHLORIDE) VINYL COMPOUNDS WITH A CELL CLASS OF 12454 AS IDENTIFIED IN ASTM D 1784 WITH SOLVENT WELDED JOINTS CONFORMING TO ASTM D-2665. INSTALLATION SHALL BE IN ACCORDANCE WITH THE JURISDICTIONAL PLUMBING CODE AND MANUFACTURER'S RECOMMENDATIONS.

SOIL AND WASTE PIPING 2-1/2" AND SMALLER SHALL BE SLOPED 1/4" PER FOOT AND PIPING 3" AND LARGER SHALL BE SLOPED 1/8" PER FOOT UNLESS NOTED OTHERWISE ON DRAWINGS. STORM DRAIN PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS NOTED OTHERWISE ON DRAWINGS.

WALL CLEANOUTS FOR WASTE PIPING SHALL BE FURNISHED AND INSTALLED BELOW SINKS, LAVATORIES AND URINALS IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE JURISDICTIONAL PLUMBING CODE. FLOOR/GRADE CLEANOUTS FOR WASTE PIPING SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE JURISDICTIONAL PLUMBING CODE.

SOIL, WASTE, AND VENT PIPING SHALL BE TESTED WITH WATER UNDER PRESSURE EQUIVALENT TO THE HIGHEST POINT AND 10' MINIMUM. THE SYSTEM OR PORTION THEREOF SHALL BE UNDER PRESSURE FOR A MINIMUM OF 15 MINUTES BEFORE INSPECTION.

DOMESTIC WATER SHALL BE INSULATED WITH NONCOMBUSTIBLE, PREFORMED, FIBERGLASS, PIPE INSULATION WITH A CONDUCTIVITY K-VALUE OF 0.21-0.28 AT 100°F MEAN RATING TEMP AND A FLAME SPREAD / SMOKE DEVELOPED RATING OF 25/50 OR LESS. INSULATION SHALL HAVE A KRAFT REINFORCED FOIL VAPOR BARRIER WITH SELF-SEALING ADHESIVE JOINTS. INSULATION AT HANGERS AND CLAMPS SHALL BE OF HIGH DENSITY INSULATING MATERIAL. INSULATED PIPING EXPOSED TO VIEW SHALL BE COVERED AND FINISHED WITH A 30 MIL. THICK PVC JACKET.

PIPE INSULATION SCHEDULE DOMESTIC COLD WATER COPPER PIPING =  $1/2^{"}$  THICK INSULATION DOMESTIC HOT WATER SUPPLY PIPING (SMALLER THAN 1-1/2") = 1" THICK INSULATION

\* RUN-OUTS TO INDIVIDUAL FIXTURES DO NOT NEED TO BE INSULATED UNLESS PROVIDED WITH HEAT TRACE HOT WATER TEMPERATURE MAINTENANCE SYSTEM **\*\*** INSULATE FIRST 8 FEET OF HOT AND COLD WATER PIPING BETWEEN WATER HEATER AND

HEAT TRAPS ON NON-RECIRCULATING SYSTEMS WITH 1" THICK INSULATION

WATER HAMMER ARRESTERS EQUAL TO SIOUX CHIEF HYDRA-RESTER SHALL BE FURNISHED AND INSTALLED ON HOT AND COLD WATER PIPING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. WATER HAMMER ARRESTERS SHALL BE PDI CERTIFIED AND ANSI APPROVED.

PIPING SHALL BE IDENTIFIED WITH PLASTIC PIPE MARKERS IN CLEAR VIEW AND ALIGNED WITH AXIS OF PIPING. SERVICE AND FLOW DIRECTION SHALL BE INDICATED. DISTANCE BETWEEN IDENTIFICATION LOCATIONS SHALL NOT EXCEED 20 FEET. IDENTIFICATION SHALL BE LOCATED AT EACH VALVE, RUNOUT AND ON BOTH SIDES OF AN OBSTRUCTION.

PIPE HANGERS FOR INSULATED PIPE SIZES 1/2" TO 1-1/2" SHALL BE ADJUSTABLE, STEEL, BAND TYPE. PIPE HANGERS FOR INSULATED PIPE SIZES 2" AND OVER SHALL BE ADJUSTABLE. STEEL CLEVIS TYPE. SHIELDS SHALL BE USED WHERE HANGER SUPPORTS INSULATED PIPE. SHIELDS SHALL BE 18 GAGE GALVANIZED STEEL OVER INSULATION 180 DEGREES AND A MINIMUM OF 12 INCHES LONG. PIPE HANGERS FOR BARE PIPE SHALL BE ADJUSTABLE, MALLEABLE STEEL, SPLIT RING TYPE. BARE COPPER PIPE SHALL BE PROTECTED FROM CORROSION BY TRISOLATOR OR SIMILAR PRODUCT. HANGERS SHALL BE PROVIDED AT INTERVALS IN ACCORDANCE WITH THE JURISDICTIONAL PLUMBING CODE. PIPING SHALL BE PROVIDED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH THE SMACNA SEISMIC RESTRAINT MANUAL - GUIDELINES FOR MECHANICAL SYSTEMS.

CHROME PLATED ESCUTCHEONS SHALL BE PROVIDED AT PIPE SLEEVES FOR EXPOSED BARE PIPE.

ISSUE							
							F

THE FIRE PROTECTION CONTRACTOR SHALL MODIFY THE EXISTING SYSTEM TO PROVIDE A COMPLETE FIRE PROTECTION SYSTEM OF TYPE, PRESSURE, FLOW AND DENSITIES REQUIRED BY AND IN ACCORDANCE WITH THE NFPA 13, ALL LOCAL JURISDICTIONAL AGENCIES CODES, AND EXISTING BUILDING STANDARDS. A COMPLETE SYSTEM OF FIRE SPRINKLERS COMPLYING WITH THE REFERENCED STANDARDS AND REGULATIONS AND AUTHORITIES HAVING JURISDICTION SHALL BE PROVIDED FOR COVERAGE OF TENANT SPACE INDICATED ON PLANS. INCIDENTAL ITEMS NOT INDICATED OR MENTIONED IN THESE SPECIFICATIONS THAT ARE REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM SHALL BE PROVIDED.

FIRE SPRINKLER PIPING ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL WITH APPROVED MALLEABLE IRON THREADED FITTINGS. WHERE APPROVED BY AUTHORITIES HAVING JURISDICTION THIN-WALLED STEEL PIPE MEETING THE REQUIREMENTS SET FORTH IN NFPA 13 MAY BE USED. WHERE APPROVED BY AUTHORITIES HAVING JURISDICTION WELDED FITTINGS OF THE SAME CLASS AS THE PIPE OR GROOVE JOINT COUPLINGS AND FITTINGS MAY BE USED AS DIRECTED BY THE MANUFACTURER FOR FIRE SPRINKLER SERVICE. PIPE HANGERS SHALL CONFORM TO NFPA 13.

VALVES SHALL BE UNDERWRITERS APPROVED AND FM LISTED AND SHALL BE SELECTED FOR APPROPRIATE SYSTEM OPERATING PRESSURES.

SPRINKLERS INSTALLED SHALL MEET EXISTING BUILDING STANDARD. SPRINKLER HEADS INSTALLED IN LAY-IN CEILING TILES SHALL BE INSTALLED IN A UNIFORM MANNER WITH A 2" TOLERANCE TO CENTER OF THE CEILING TILE AND ALIGNED WITH OTHER CEILING DEVICES. EXPOSED SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH ARCHITECT.

ENGINEERING DRAWINGS, CALCULATIONS, AND PRODUCT DATA PREVIOUSLY APPROVED BY AUTHORITIES HAVING JURISDICTION SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT. DESIGN SHALL BE BASED ON OCCUPANCY HAZARD CLASSIFICATION VERIFIED AND CONFIRMED WITH AUTHORITIES HAVING JURISDICTION AND THE OWNERS INSURANCE CARRIER.

EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD. WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES. MAINS AND BRANCHES SHALL BE ROUTED TO AVOID INTERFERENCES WITH DUCTWORK, PLUMBING, ELECTRICAL CONDUITS AND STRUCTURAL MEMBERS. THE ARCHITECT SHALL BE NOTIFIED IN THE EVENT OF A DISCREPANCY. THE INSTALLATION SHALL NOT PROCEED IN THE AREAS OF DISCREPANCY UNTIL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED.

CUTTING OF EXISTING CONSTRUCTION SHALL BE APPROVED BY THE ARCHITECT PRIOR TO SUCH CUTTING. STRUCTURAL MEMBERS SHALL NOT BE CUT EXCEPT UNDER THE SPECIFIC INSTRUCTION AND SUPERVISION OF THE ARCHITECT. SLEEVES, CAPS, PLATES, ESCUTCHEONS, FLASHING, ETC. SHALL BE PROVIDED TO CLOSE OPENINGS MADE FOR THE SPRINKLER SYSTEM.

EXPOSED PORTIONS OF THE FIRE SPRINKLER SYSTEM SHALL BE THOROUGHLY CLEANED, REMOVING LABELS AND TRACES OF FOREIGN SUBSTANCE. ONLY CLEANING SOLUTIONS APPROVED BY THE MANUFACTURER OF THE ITEM TO BE CLEANED SHALL BE USED. DAMAGE TO FINISHED SURFACES SHALL BE AVOIDED.

SPRINKLER SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF NFPA 13 AND ANY ADDITIONAL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. ALL TESTS AND INSPECTIONS REQUIRED BY THE REFERENCED STANDARDS AND REGULATIONS AND AUTHORITIES HAVING JURISDICTION SHALL BE PERFORMED AND SHALL BE WITNESSED AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BEAR THE COST OF ALL REQUIRED TESTING OF WORK, FURNISHING ALL LABOR, POWER AND EQUIPMENT.

CONTROL VALVES, DRAIN VALVES AND GAUGES SHALL BE INSPECTED AND CHECKED FOR CORRECT OPERATION BY THE CONTRACTOR PRIOR TO ACCEPTANCE OF WORK.

MATERIALS AND EQUIPMENT SHALL BE NEW AND GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE.

## SHEET INDEX

00-00-00 PERMIT ISSUE		
$\square$	SHEET NO.	SHEET DESCRIPTION
	P-001	PLUMBING COVER SHEET
	P-101	1ST FLOOR PLUMBING PLAN
	P-102	MEZZANINE PLUMBING PLAN
$\bullet$	P-301	PLUMBING SCHEDULES
$\bullet$	P-401	PLUMBING DETAILS

## FIRE PROTECTION SPECIFICATIONS



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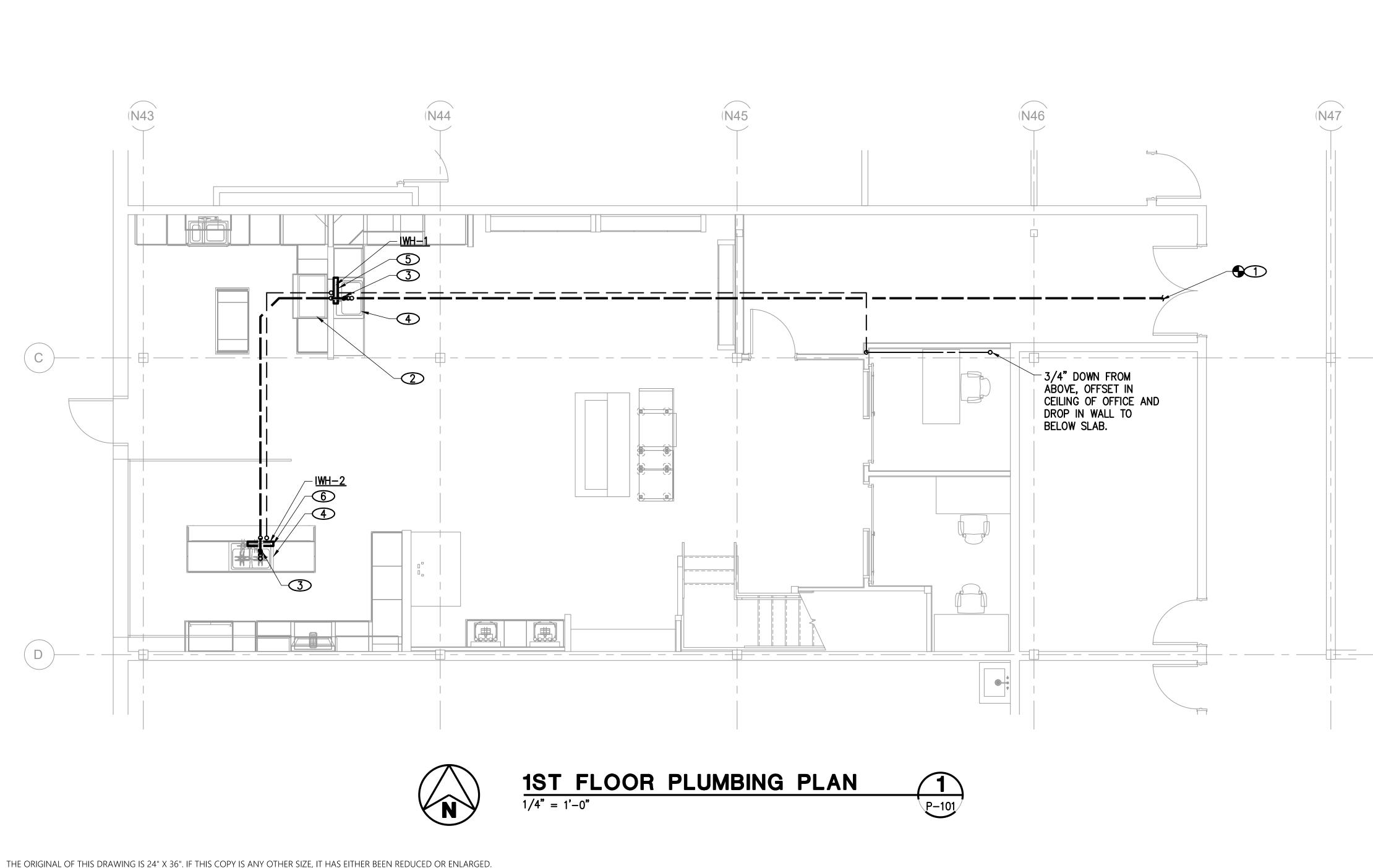
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DATE:	04.11.2025
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DESIGNED BY:	BTG
CHECKED BY:	BEM

PLUMBING COVER SHEET

P-()()1



## **KEYNOTES**

(1) CONNECT NEW 2" WASTE LINE TO EXISTING WASTE MAIN. EXACT INVERT ELEVATION AND ROUTING TO BE VERIFIED IN FIELD. IT IS RECOMMENDED THAT THE CONTRACTOR COORDINATE WITH THE BUILDING OWNER TO SCOPE THE EXISTING WASTE MAIN PRIOR TO START OF WORK TO CONFIRM MAIN LOCATION.

CONNECT 1/2"HW AND FULL SIZE DRAIN TO DISHWASHER. REFER TO DETAIL 3/P-401.

3 PROVIDE AIR ADMITTANCE VALVE ON WASTE TRAP ARM BELOW SINK. 4 SINK PROVIDED BY OWNER, INSTALLED BY PLUMBING CONTRACTOR. PROVIDE WITH 1/2" HW, 1/2" CW, AND 2" W CONNECTION. PROVIDE WITH 2" HUB DRAIN UNDER SINK TO ACT AS RECEPTOR FOR WATER HEATER T&P DISCHARGE AND/OR DISHWASHER DRAIN DISCHARGE. 5 PROVIDE AND INSTALL WATER HEATER UNDER SINK. INSTALL PER DETAIL 2/P-401. CONNECT 1/2" CW INTO WATER HEATER AND SUPPLY 1/2" HW OUT TO SERVE SINK AND DISHWASHER. WATER HEATER IS NOT SIZED TO SUPPLY ADEQUATE HW FOR FULL DISHWASHER OR SINK USE. THE FIXTURES ARE "SHOW" FIXTURES AND

ARE NOT INTENDED TO BE USED FUNCTIONALLY. 6 PROVIDE AND INSTALL WATER HEATER UNDER SINK. INSTALL PER DETAIL 2/P-401. CONNECT 1/2" CW INTO WATER HEATER AND SUPPLY 1/2" HW OUT TO SERVE SINK. WATER HEATER IS NOT SIZED

TO SUPPLY ADEQUATE HW FOR FULL SINK USE. THE FIXTURES ARE "SHOW" FIXTURES AND ARE NOT INTENDED TO BE USED FUNCTIONALLY.









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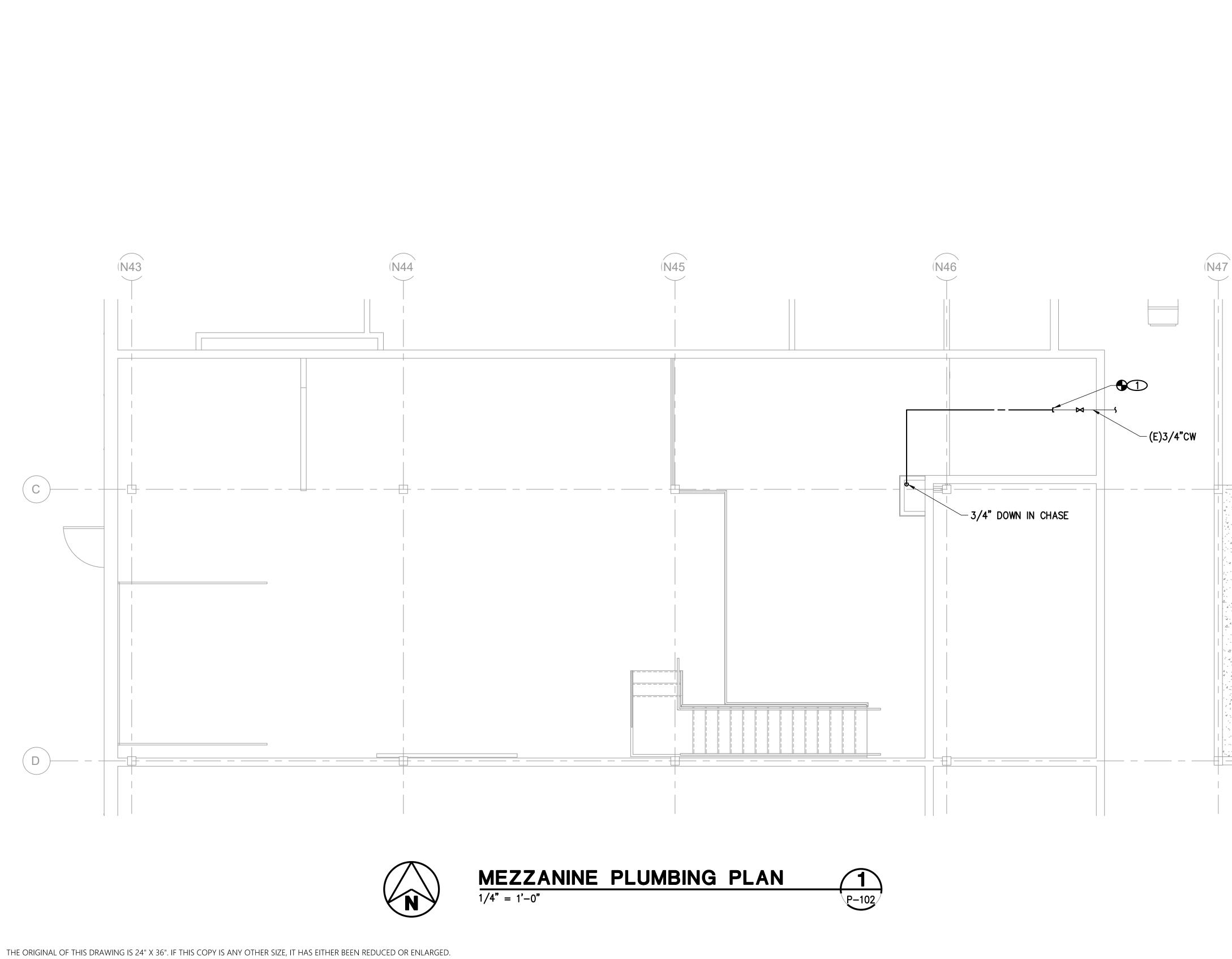
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1ST FLOOR PLUMBING PLAN

P-101



## **KEYNOTES**

CONNECT NEW 3/4"CW TO (E)CW STUB INTO SPACE. COORDINATE THE CONNECTION, SHUT-DOWN (IF NEEDED), AND PIPING SYSTEM FLUSH WITH OWNER PRIOR TO COMPLETION OF WORK. IF TENANT SUBMETER IS REQUIRED, COORDINATE REQUIREMENT WITH BUILDING OWNER. IT IS ASSUMED THAT NO TENANT WATER SUBMETER IS REQUIRED.









History	
FOR PERMIT	04.

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MEZZANINE PLUMBING PLAN

P-102

	PLUME
ITEM	
<u>IWH—1</u>	STIEBEL ELTRON # CAPACITY. DIMEN = 38.6 LB. ELEC
<u>IWH-2</u>	STIEBEL ELTRON # CAPACITY. DIMEN = 38.6 LB. ELEC

## **IBING EQUIPMENT SCHEDULE**

DESCRIPTION

#SHC 2.5 ELECTRIC WATER HEATER WITH 2.65 GALLONS OF STORAGE NSIONS: 11" WIDTH X 10-5/8" DEEP X 18-11/16" TALL. OPERATING WEIGHT CTRICAL: 1300W, 120/1.

#SHC 2.5 ELECTRIC WATER HEATER WITH 2.65 GALLONS OF STORAGE ENSIONS: 11" WIDTH X 10–5/8" DEEP X 18–11/16" TALL. OPERATING WEIGHT ECTRICAL: 1300W, 120/1.





MOEN ENGINEERING CONSULTANTS INC 4640 PECOS STREET, UNIT F DENVER, CO 80211 P: (303) 907 - 4285



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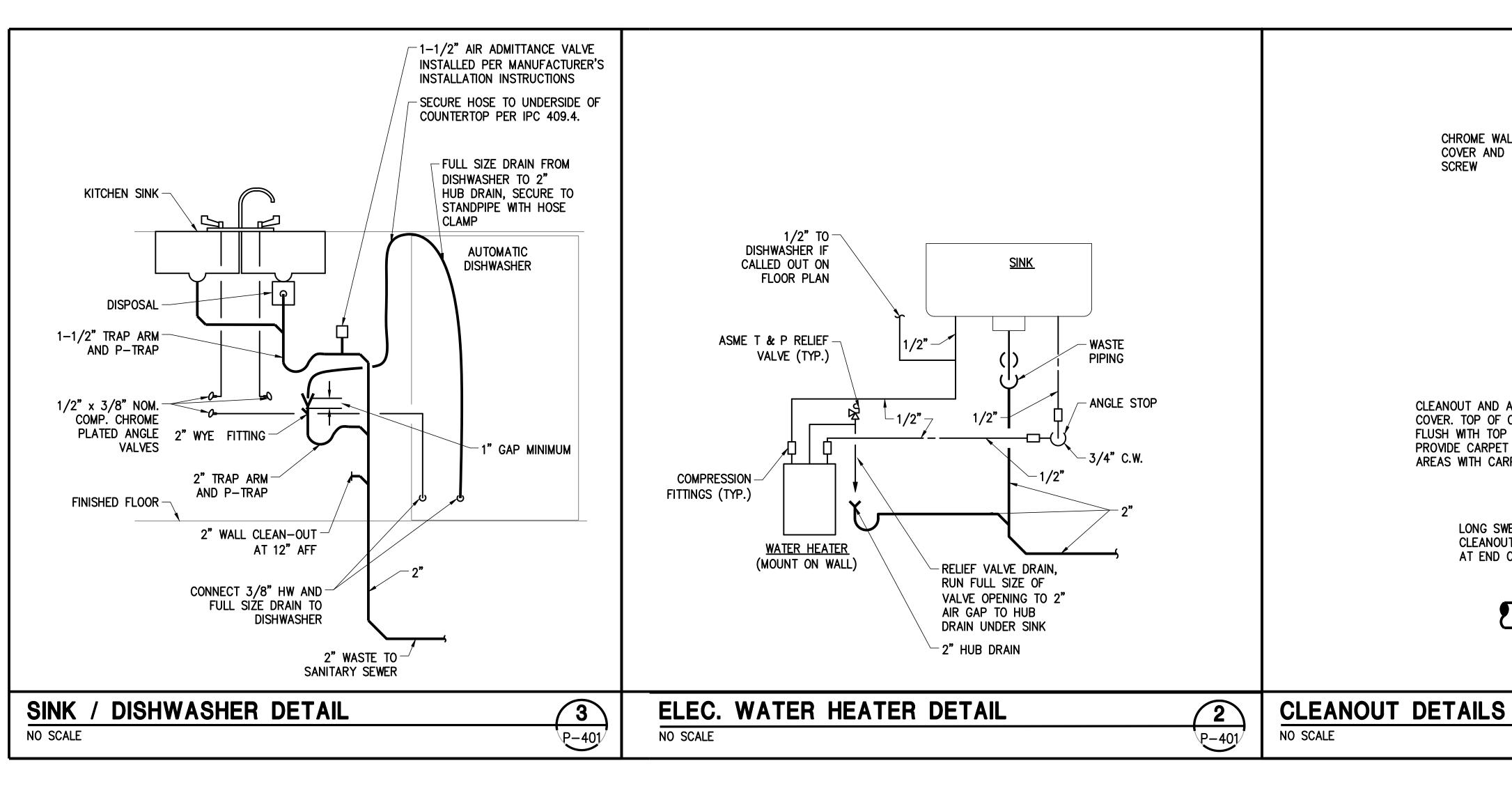
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SCHEDULES

PLUMBING

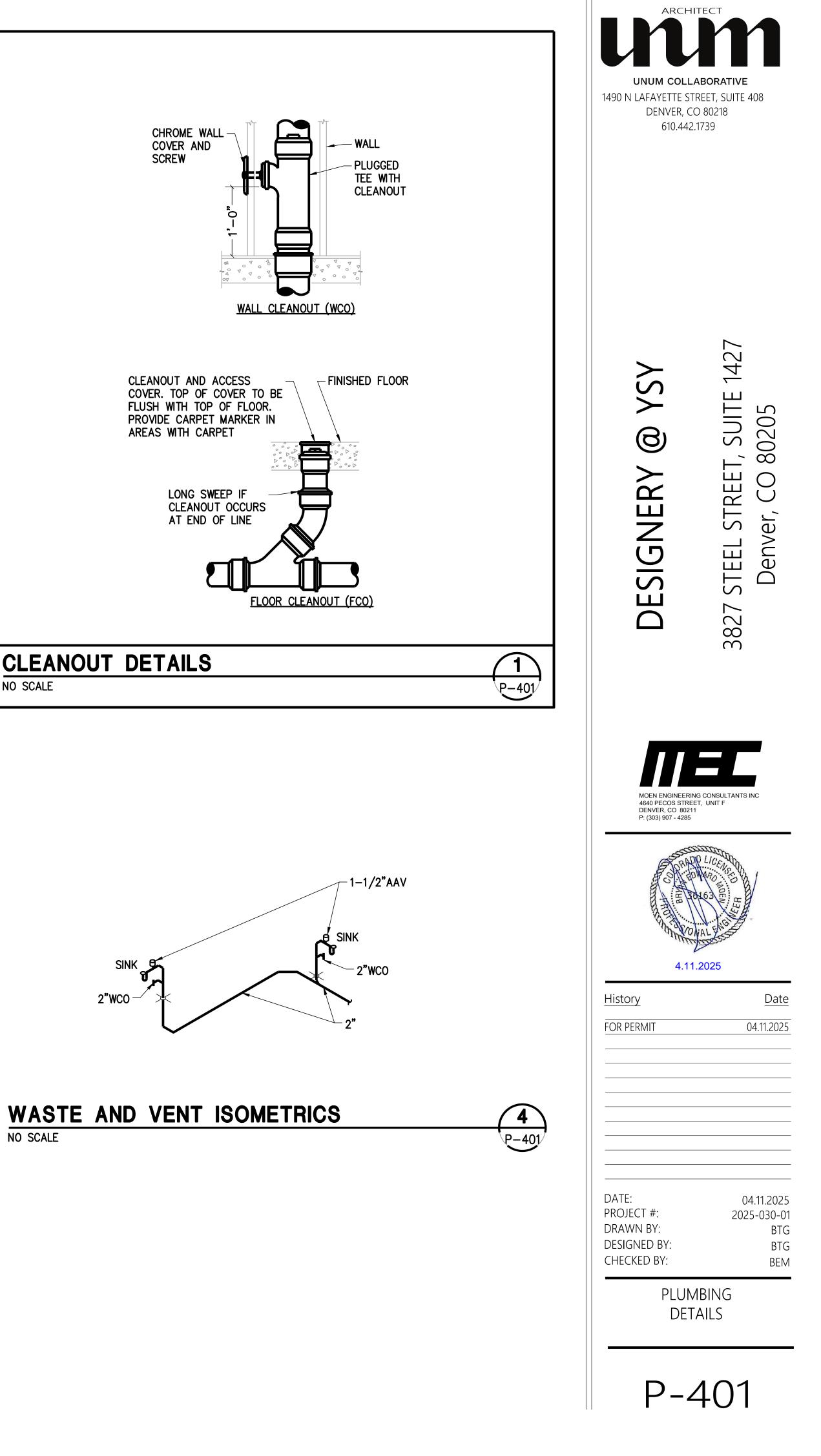
P-301

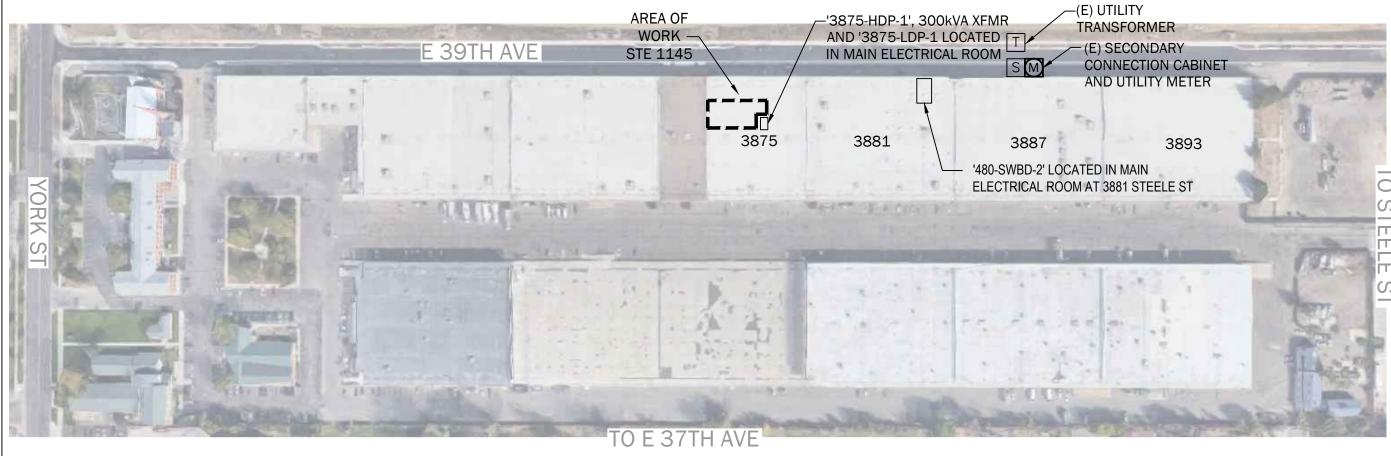


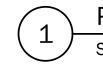
SINK

2"WCO -









PROXIMITY PLAN SCALE: NTS

GENERAL NOTES:

1. PLAN SHOWN FOR REFERENCE ONLY. E.C. SHALL FIELD VERIFY EXISTING CONDITIONS.

	NAIRE SCHEDULE				April 7, 2025	
Label	Light Fixture Description	Specification	Lamping	Voltage	Mounting	Comment
terior L	ghting					
A1	2'x2' Recessed Architectural EdgeLit Troffer	Cooper Metalux or Equal	28W LED	120/277	Recessed	1
	Wavestream technology - LED in stock 3400 lumen 0-10V	22EN-LD1-34-UNV-L840-CD1-U	4000K/85CRI			
A2	1x4 Economy LED Surface Mount Wrap	Cooper Metalux or Equal	36W LED	120/277	Surface	
	Backlit LED 4000 lumen frost acrylic lens in stock	4WNLED-LD4-40SLF-UNV-L840-CD1-U	4000K/85CRI			
D	6" Dimmable LED Downlight	Cooper Halo or Equal	13W LED	120	Recessed	1
	900 Lumen LED, White Trim, Haze Reflector	H750T with ML5609940 and 692H	4000K/90CRI			
S	4' Lensed LED strip light In Stock	Cooper Metalux	41W LED	120/277	Surface	1
	4100lumen wide distribution 0-10v dimming driver	4SNLED-LD5-41SL-LW-UNV-L840-CD1-U	4000K/82CRI			
Т	6' Track and LED Heads	Cooper Halo or Equal / L650 / L815-20-XX-940	24W LED	120	Surface	2
	provide all components to make complete system	L650/ L1	4000K/90CRI			
TP	Specification Grade Coated Tape Light 335lumen	LEDi or Equal	4.2W LED P/FT	24V	Surface	1
	provide all components to make complete system	V4-NSKN-4K-SB-BLK	4000K/94CRI			
C (TP)	Specification Grade Coated Tape Light 335lumen	LEDi or Equal	4.2W LED per foot	24V	Surface	1,2
	Under Counter with Inspire Slim Channel	V4-NSKN-4K-SB-BLK, CH1-SLM	4000K/94CRI			
V2	2' Vanity Light	Specified by Owner/Architect	25W LED Max	120	Surface	1 or 2
	Frosted Acrylic Satin Nickel	VL60224				
nergen	cy Exit Signs and Egress Lighting					
XEM	Combination Exit Sign/Emergency Egress Light	Cooper Surelites or Equal	1.33W Max. LED	120/277	Surface	
	with 90-Minute Battery Pack and dual heads	APC7RG	color per local code			
EM	Emergency Dual Head LED Frog Eye	Cooper Surelites or Equal	.33W LED	120/277	Surface	
	with 90 minute Battery	APEL				
XR	Exterior Emergency Egress Light	Cooper Surelites or Equal	(3) 6V, 6W Xenon	120/277	Surface	3,4
	with 90-Minute Battery Pack	AEL2SD	Included			
TES: A	pply to all fixtures where applicable					
1.	EMERGENCY FIXTURES - All Fixtures Indicated as Emergen	cy shall be provided with a 90-Minute Battery Pac	k with minimum 1300	Lumen output.		
2.	VERIFY VOLTAGES - The E.C. shall verify voltages on drawing	ngs prior to ordering or any work, the engineer sha	II be notified of any dis	crepancies		
	in the voltage of the circuiting on the drawings and the lun	ninaire schedule prior to any purchase or work.				
3.	VERIFY LAMPING - The E.C. shall verify lamping with the ma	anufacturer prior to ordering and notify the engine	er of any lamping disc	repancies.		
4.	PROVIDE A COMPLETE INSTALLATION - The E.C. shall provi	de all labor and material to provide a complete an	d functional system pe	er the design int	ent as dictated	
	by the switching type and location (including dimmer switc	has and compatible ballasts or transformers), coili	ing type and leastion	circuiting voltag	es, and lamping type	es.
		nes and compatible ballasts of transformers), cem	ing type and location, o	circuiting, voitag		
5.	LED LIGHTING - All light fixtures shall be LED. Non-LED fixtu	•	0 11	0. 0	,,	
	LED LIGHTING - All light fixtures shall be LED. Non-LED fixto OWNER APPROVAL - Approve all light fixture types with ten	ures shall be provided with an LED equivalent lam	p, unlesss otherwise n	0. 0	,,	
6.	-	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo	p, unlesss otherwise n prk.	oted.		on.
6. 7.	OWNER APPROVAL - Approve all light fixture types with ten	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea	p, unlesss otherwise n ork. ather drivers/ballast/b	oted. battery as requir	ed for proper operat	
6. 7.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be l	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers pa	p, unlesss otherwise n ork. ather drivers/ballast/b ired with compatible d	oted. Dattery as requir imming controls	ed for proper operat	
6. 7. 8.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be U DIMMING COMPATIBILITY - Fixtures noted as dimmable on	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers pa compatible LED Drivers and dimming control device	p, unlesss otherwise n ork. ather drivers/ballast/k ired with compatible d es rated for connected	oted. battery as requir imming controls I load.	ed for proper operat	
6. 7. 8. 9.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be U DIMMING COMPATIBILITY - Fixtures noted as dimmable on manufacturer. The E.C. shall be responsible for providing of	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers pa compatible LED Drivers and dimming control device	p, unlesss otherwise n ork. ather drivers/ballast/k ired with compatible d es rated for connected	oted. battery as requir imming controls I load.	ed for proper operat	
6. 7. 8. 9. 9.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be I DIMMING COMPATIBILITY - Fixtures noted as dimmable on manufacturer. The E.C. shall be responsible for providing of CITY OF DENVER - Exit signs shall have green lettering on a	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers pa compatible LED Drivers and dimming control device a contrasting field, or white lettering on a green field	p, unlesss otherwise n ork. ather drivers/ballast/b ired with compatible d es rated for connected Id per DBCA 1011.4.1	oted. pattery as requir imming controls I load.	ed for proper operat approved by the fixt	
6. 7. 8. 9. 9. MMEN 1.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be U DIMMING COMPATIBILITY - Fixtures noted as dimmable on manufacturer. The E.C. shall be responsible for providing of CITY OF DENVER - Exit signs shall have green lettering on a TS: Apply to specific fixture types as noted on schedule 0-10V Dimming - Provide low voltage wiring between all fix	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers pa compatible LED Drivers and dimming control device a contrasting field, or white lettering on a green fiel tures and low-voltage wallbox dimmer. Verify requi	p, unlesss otherwise n ork. ather drivers/ballast/k ired with compatible d es rated for connected Id per DBCA 1011.4.1	oted. battery as requir imming controls I load. and provide all	ed for proper operat approved by the fixt work required for a	
6. 7. 8. 9. 9. MMEN 1. 2.	OWNER APPROVAL - Approve all light fixture types with ten EXTERIOR LIGHTING - Fixtures installed outdoors shall be to DIMMING COMPATIBILITY - Fixtures noted as dimmable on manufacturer. The E.C. shall be responsible for providing of CITY OF DENVER - Exit signs shall have green lettering on a TS: Apply to specific fixture types as noted on schedule 0-10V Dimming - Provide low voltage wiring between all fix complete installation.	ures shall be provided with an LED equivalent lamp ant/owner before ordering any materials or any wo J.L. listed Wet Location and provided with cold wea plans shall be provided with dimmable drivers par compatible LED Drivers and dimming control device a contrasting field, or white lettering on a green fiel tures and low-voltage wallbox dimmer. Verify requirer. Verify requirements with provider and provide a	p, unlesss otherwise n ork. ather drivers/ballast/k ired with compatible d es rated for connected Id per DBCA 1011.4.1	oted. battery as requir imming controls I load. and provide all	ed for proper operat approved by the fixt work required for a	

ELECTRICAL LEGEND		SCOPE OF WORK SUMMARY:		m
POWER AND LIGHTING	LOW VOLTAGE SYSTEMS	NEW KITCHEN/BATH SHOWROOM TENANT IMPROVEMENT IN AN EXISTING		
$\Phi$ wall mounted duplex receptacle	TELEPHONE TERMINAL BOARD	BUILDING. EXISTING ELECTRICAL SERVICE TO REMAIN. PROVIDE NEW POWER AND	UNUM COL	LABORATIVE
WALL MOUNTED QUADRUPLEX RECEPTACLE	▼ DATA OUTLET	LIGHTING THROUGHOUT.	1490 N LAFAYETTE S	TREET, SUITE 408
WALL MOUNTED DEDICATED DUPLEX RECEPTACLE		CODE COMPLIANCE STATEMENT:	DENVER, C	
WALL MOUNTED SPECIAL PURPOSE RECEPTACLE		THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES:	610.442.	.1739
FLOOR/CEILING MOUNTED RECEPTACLE	FLOOR/CEILING MOUNTED TELEPHONE/DATA OUTLET $\mathbf{\nabla}$ CATY/MONITOR A/V OUTLET	2023 National Electric Code (NEC)		
		• 2022 Denver Energy Code - 2021 International Energy Conservation Code (IECC)		
Q wall mounted junction box		COMCheck Code Compliance Documents are in this E Sheet Set		
				D.Keller Electrical D
FUSED DISCONNECT SWITCH	●s ●T S-SMOKE, T-HEAT DETECTOR	SHEET LOG	d.keller	7498 West Layton P
	• <sub>S/C0</sub> COMBO SMOKE, CO DETECTOR	E000 COVER SHEET	u.Kellel	Littleton, Colorado & 303.918.9475
TRANSFORMER RECESSED LIGHT FIXTURE		E001 ELECTRICAL ONE LINE DIAGRAM AND SCHEDULES		Dawn@dkellereng.c
		E002 ELECTRICAL COMCHECK		Same
SURFACE MOUNTED LIGHT FIXTURE SINGLE POLE SWITCH		E100 POWER PLANS		
\$3 #-POLE SWITCH	(400/4)  EQUIPMENT - SEE SCHEDULES $(400/4)  FEEDER - SEE SCHEDULE$	E200 LIGHTING PLANS		
SD DIMMER SWITCH	TRANSFORMER - SEE SCHEDULE			
\$05 WALL SWITCH OCCUPANCY SENSOR				
© CEILING MOUNTED SENSOR O-OCCUPANCY, D-DAYLIGHT	REMODEL WORK			
EXIT SIGN	(EX) = DEMOLITION, TO BE REMOVED			
	$(ER) \rightarrow = = = = = = = = = = = = = = = = = = $			$\sim$
COMBO EXIT SIGN, EMERGENCY LIGHT	$(E) \longrightarrow EXISTING TO REMAIN$			0
				)2
EMERGENCY LIGHT FIXTURE - SHADED				80
O' MOTOR				$\sim$
ABBREVIATIONS				$\bigcirc$
AC ABOVE COUNTER - VERIFY HEIGHT	EWC ELECTRIC WATER COOLER			U N
AFF ABOVE FINISHED FLOOR	GD GARBAGE DISPOSAL			
AFI ARC FAULT INTERRUPTING	GFI GROUND FAULT INTERRUPTING			)E
ATS AUTOMATIC TRANSFER SWITCH	IT INFORMATION TECHNOLOGY			$\leq$
CLG CEILING	MW MICROWAVE			
CM COFFEE MAKER	MTS MANUAL TRANSFER SWITCH			$\Box$
D DRYER	REF REFRIGERATOR			
DW DISHWASHER	TTB TELEPHONE TERMINAL BOARD			⊢ i
EC ELECTRICAL CONTRACTOR	W WASHER			
EF EXHAUST FAN	WP WEATHER PROOF			7

#### GENERAL PROJECT NOTES

NOTE	E: REFER TO ARCHITEC	TURAL D	DRAWINGS	FOR ADD	ITIONAL C	CONSTRU	CTION REQUIR	REMEN	ITS	
4										

- A COMPLETE, OPERATIONAL AND PROPERL FUNCTIONING ELECTRICAL SYSTEM. . MATERIALS AND INSTALLATION SHALL COMPLY WITH CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING
- BODIES HAVING JURISDICTION. MATERIALS AND EQUIPMENT SHALL BE LISTED AND/OR LABELED BY UL, ETL, CSA OR ANOTHER RECOGNIZED TESTING LAB. ALL MATERIAL, EQUIPMENT, WIRING DEVICES, ETC. SHALL BE NEW, UNLESS SPECIFICALLY INDICATED AS EXISTING TO BE REUSED.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT TO GOVERNMENTAL AGENCIES AND UTILITY COMPANIES SHOP DRAWINGS REQUIRED BY THESE AGENCIES FOR APPROVAL. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, TAXES AND LICENSES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE ELECTRICAL WORK. THIS 23. PROVIDE MINIMUM #10 FOR BRANCH CIRCUITS OVER 75' AT 120V AND OVER 150' AT 277V. EC TO FIELD VERIFY BRANCH CIRCUIT CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THIS CONTRACT, SHALL BE RESPONSIBLE FOR WORKER'S IDENTIFICATION AND BADGING, SAFETY, AND LIABILITY INSURANCE. PROVIDE BARRICADES, WARNING SIGNS, AND 24. EACH SWITCH, LIGHT, RECEPTACLE AND ALL OTHER DEVICES SHALL BE PROVIDED AND INSTALLED WITH A GALVANIZED OR TRASH REMOVAL FOR THE SAFETY OF THE WORKERS UNDER THIS CONTRACTOR'S EMPLOY.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER/OWNER OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PREPARE THE DOCUMENTS, INCLUDING DRAWINGS, REOUIRED TO OBTAIN APPROVAL OF THE
- EQUIPMENT AND LOCATIONS OF THE DEVICES THAT COMPRISE THE BUILDING FIRE ALARM LIFE SAFETY SYSTEM. THE DRAWINGS AND CUT SHEETS SHALL BE PROVIDED TO A PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL. THE APPROVED DRAWINGS WILL BE STAMPED, SIGNED AND RETURNED TO EC TO SUBMIT TO THE BUILDING DEPARTMENT.
- WITH THE BUILDING STANDARDS, LOCAL JURISDICTIONAL CODES AND REQUIREMENTS, AND LOCAL CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT. SUBMISSION OF PROPOSAL IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE. NO EXTRA CHARGE 27. PROVIDE LOCAL DISCONNECT SWITCHES FOR ALL MOTORS (PLENUM APPROVED WHERE REQUIRED). WILL BE ALLOWED FOR CHANGES AS A RESULT FROM FAILURE TO EXAMINE THE JOB SITE.
- PERIOD OF CONSTRUCTION AND SHALL REMOVE ALL TEMPORARY WIRING AT THE COMPLETION OF CONSTRUCTION. 9. THE EXISTING POWER, SIGNAL AND COMMUNICATION SYSTEMS ARE TO REMAIN IN SERVICE TO PROVIDE FOR THE OWNER'S
- FUNCTION. SHOULD IT BECOME NECESSARY TO SHUT-DOWN ANY SYSTEM OR PORTION OF A SYSTEM, APPROVAL IN WRITING MUST BE OBTAINED FROM THE OWNER AND SHALL ONLY APPLY FOR THE PERIOD AND TIME AGREED UPON. THE BID IS TO INCLUDE THE COST OF ANY TEMPORARY WIRING AND PREMIUM TIME REQUIRED FOR THE SHUTDOWN. 10. ALL MATERIALS AND EQUIPMENT SHALL BE ERECTED, INSTALLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND
- PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS. 11. ALL CUTTING, DRILLING AND PATCHING OF MASONRY, STEEL OR IRON WORK BELONGING TO THE BUILDING MUST BE DONE BY THIS CONTRACTOR IN ORDER THAT HIS WORK MAY BE PROPERLY INSTALLED, BUT UNDER NO CONDITIONS MAY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT DESIGNER OR THEIR REPRESENTATIVE.
- 12. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL FIXTURES AND ELECTRICAL DEVICES. DEVICE LOCATIONS SHALL CONFORM TO ADA/ICC/ANSI STANDARDS.
- 13. ALL WORK REQUIRED FOR THE INSTALLATION AS SHOWN ON DRAWINGS INCLUDING LABOR, EQUIPMENT AND MATERIALS SHALL 32. SUBMIT AN ELECTRONIC COPY OF SHOP DRAWINGS, CONTROL DIAGRAMS, AND EQUIPMENT CUTS TO THE ENGINEER FOR BE IN STRICT COMPLIANCE WITH THE BUILDING STANDARDS.
- 14. PROVIDE COMPLETE METAL RACEWAY SYSTEMS AND ENCLOSURES FOR ALL WIRING THROUGHOUT THE EXTENT OF THE REQUIRED SYSTEM UNLESS OTHERWISE PERMITTED BY THE NEC:
- TYPE III, IV OR V CONSTRUCTION WHERE PERMITTED PER NEC ARTICLE 334 NONMETALLIC SHEATHED CABLE AND 14.a. NONMETALLIC BOXES MAY BE USED. 14.b. TYPE MC AND AC CABLE MAY BE USED WHERE PERMITTED BY THE NEC (ARTICLE 330)
- 15. ALL TELE/ DATA BOXES SHALL BE PROVIDED WITH A 1/2" CONDUIT AND BUSHING WITH PULL STRING RUN 6" ABOVE FINISHED 34. THIS CONTRACTOR SHALL ASSUME ALL ADDED EXPENSES TO ALL TRADES ASSOCIATED WITH THE INSTALLATION OF SUBMITTED CEILING OR CEILING GRID. ELECTRICAL METALLIC TUBING (EMT) SHALL BE USED FOR ALL WALL OUTLETS & TELEPHONE WIRING RUNNING BELOW RAISED FLOOR OR ABOVE HARD CEILINGS.
- 16. ALL RECEPTACLES NOTED AS ISOLATED GROUND (IG) OR DEDICATED OR CIRCUITED AS DEDICATED SHALL BE PROVIDED WITH A DEDICATED GROUND AND NEUTRAL. 17. PROVIDE TAMPER-RESISTANT RECEPTACLES AS REQUIRED PER NEC 406.12.
- 18. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE INDICATED. CONDUITS LARGER THAN 2" DIAMETER OR CONDUITS OF 37. LOCATE ALL ELECTRICAL SWITCHBOARDS, PANELBOARDS AND ELECTRICAL DISTRIBUTION EQUIPMENT IN DEDICATED SPACES AND ANY SIZE ROUTED OUTDOORS SHALL BE INTERMEDIATE METAL CONDUIT (IMC).
- 19. FLEXIBLE CONDUIT CONNECTIONS TO RECESSED LIGHTING FIXTURES SHALL BE MADE WITH FLEXIBLE STEEL CONDUIT, 3/8 INCH MINIMUM. 20. FINAL CONNECTIONS TO MOTORS SHALL BE MADE WITH LIQUID TIGHT FLEXIBLE STEEL CONDUIT, 1/2 INCH MINIMUM.

21. WIRE NO. 8 AND SMALLER INSTALLED IN DRY LOCATIONS SHALL BE TYPE THWN OR THHN THERMOPLASTIC 600V INSULATED COPPER CONDUCTORS. NO WIRE SMALLER THAN NO.12 SHALL BE USED FOR LIGHTING OR POWER WIRING. WIRE NO. 8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS INSTALLED IN EXTERIOR OR WET LOCATIONS SHALL BE TYPE THWN 600V INSULATED COPPER CONDUCTORS.

22. ALL NEW CIRCUIT BREAKERS FOR NEW OR EXISTING PANELBOARDS SHALL MATCH EXISTING OR NEW BUILDING STANDARD PANELBOARD MANUFACTURER AND BREAKER TYPE. THE CONTRACTOR SHALL PROVIDE NEW ACCURATE AND DETAILED TYPE WRITTEN PANEL DIRECTORIES PER NEC 408.4 FOR ALL NEW OR MODIFIED PANELS. NUMBERED CIRCUITS ARE FOR CONVENIENCE OF DESIGN ONLY. EC TO FIELD VERIFY ACTUAL CIRCUIT NUMBERS USED AND CORRECTLY INDICATE ON "AS-BUILT" DRAWINGS. THE EC SHALL REMOVE ALL ABANDONED CIRCUITS.

LENGTHS AND INCREASE CONDUCTOR SIZES AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP.

SHERARDIZED PRESSED STEEL JUNCTION BOX OF NOT LESS THAN NO. 14 US GAUGE STEEL. CONDUITS SHALL BE FASTENED WITH LOCKNUTS AND BUSHINGS AND ALL UNUSED KNOCKOUTS MUST BE LEFT SEALED. THERE MUST BE SUFFICIENT ROOM FOR WIRES AND BUSHINGS AND DEEP BOXES SHALL BE INSTALLED WHERE REQUIRED. BOXES SHALL BE SECURELY AND ADEQUATELY SUPPORTED. PROVIDE CIRCUIT NUMBERS PRINTED ON FACEPLATE OF EACH DEVICE.

24.a. EXCEPTION: TYPE III, IV OR V CONSTRUCTION - WHERE PERMITTED PER NEC ARTICLE 334 NONMETALLIC BOXES MAY BE USED.

25. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SPECIAL OUTLET BOXES THAT MAY BE REQUIRED TO ENCLOSE RECEPTACLES. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR 26. IN SUSPENDED CEILINGS SUPPORT CONDUIT AND JUNCTION BOXES DIRECT FROM THE STRUCTURAL SLAB, DECK, OR FRAMING PROVIDED FOR THAT PURPOSE. LIGHTING BRANCH CIRCUIT CONDUITS SHALL NOT BE CLIPPED TO THE CEILING SUPPORT WIRES OR SPLINE UNLESS THE CEILING SYSTEM HAS BEEN SPECIFICALLY DESIGNED FOR THAT PURPOSE.

8. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND WIRING FOR THE PERFORMANCE OF ALL TRADES, FOR THE ENTIRE 28. THE EC SHALL INCLUDE IN HIS COST THE REMOVAL OF ALL EXISTING ELECTRICAL DEVICES, CONDUITS, FIXTURES AND EQUIPMENT THAT IS NOT TO BE REUSED. DISCARD ALL EQUIPMENT AS REQUIRED. EC SHALL BE RESPONSIBLE FOR DISCONNECTING PRIMARY SERVICE AND TEMPORARY POWER.

29. PROVIDE WARRANTY GUARANTEED FOR A PERIOD OF ONE YEAR AFTER COMPLETION AND ACCEPTANCE. REPLACE ALL DEFECTIVE WORKMANSHIP, EQUIPMENT AND MATERIALS WITHOUT ADDITIONAL CHARGES.

30. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFEKEEPING OF HIS/HER OWN PROPERTY ON THE JOB SITE. THE OWNER OR TENANT ASSUMES NO RESPONSIBILITY FOR PROTECTION OF THIS CONTRACTOR'S PROPERTY AGAINST FIRE, THEFT, OR ENVIRONMENTAL CONDITIONS.

SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS UL LISTED (EQUAL TO DOW CORNING) AND ACCEPTED BY THE BUILDING DEPARTMENT AND FIRE DEPARTMENT AS BEING SUITABLE FOR THE SERVICE. THIS MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS IN ORDER TO MAINTAIN THE FIRE RATING OF THE PENETRATED WALL, FLOOR, OR PARTITION. INSTALLATION SHALL BE A THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM AND UL. THE FIRE RATING SHALL MATCH THE RATING OF THE BARRIER BEING PENETRATED.

APPROVAL PRIOR TO STARTING RELATED WORK. SHOP DRAWINGS SHALL INCLUDE MANUFACTURER'S NAMES, CATALOG NUMBERS, CUTS, DIAGRAMS AND OTHER SUCH DESCRIPTIVE DATA AS MAY BE REQUIRED TO IDENTIFY AND REVIEW THE EQUIPMENT. SUBMITTALS SHALL BE IN LOGICAL GROUPS, PARTIAL SUBMITTALS WILL NOT BE REVIEWED.

33. UPON COMPLETION OF CONSTRUCTION, SUPPLY THE ENGINEER WITH ONE COMPLETE SET OF FULL SIZE AS-BUILT DRAWINGS. PROVIDE THE OWNER WITH THREE (3) SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH TYPE OF EQUIPMENT INSTALLED.

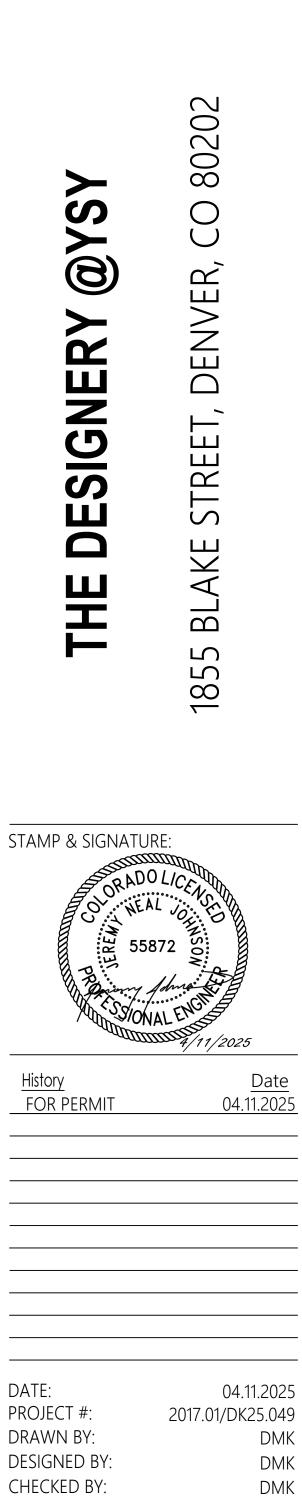
AND APPROVED ALTERNATE EQUIPMENT. 35. THE CONTRACTOR SHALL COORDINATE THE LAYOUT OF THE FIRE ROOM WITH ALL OTHER DISCIPLINES, ESPECIALLY THE FIRE

ALARM AND FIRE PROTECTION DESIGN-BUILD CONTRACTORS PRIOR TO ANY WORK. 36. IF ANY CHANGES ARE MADE TO ACCOMMODATE FIELD CONDITIONS NOTIFY THE ENGINEER IMMEDIATELY OF WHAT THE CHANGES WERE, THE REASON FOR THE CHANGES, AND THE COST IMPACTS.

PROTECTED FROM DAMAGE WITH ADEQUATE WORKING CLEARANCE ACCORDANCE WITH NEC 110 REQUIREMENTS. PROVIDE PROTECTION FROM ANY FOREIGN SYSTEM INSTALLED ABOVE THE DEDICATED EQUIPMENT SPACE PER NEC 110.26(E).

38. SERVICE EQUIPMENT SHALL BE MARKED TO IDENTIFY IT AS BEING SUITABLE FOR USE AS SERVICE EQUIPMENT PER NEC 230.66. 39. ELECTRICAL ROOM DOORS SHALL BE EQUIPPED WITH PANIC BARS, PRESSURE PLATES, OR OTHER DEVICES THAT ARE NORMALLY LATCHED BUT OPEN UNDER SIMPLE PRESSURE IN ACCORDANCE WITH NEC 110.26(C)(3).

> FIRE ALARM SYSTEM NOTES FIRE ALARM SYSTEM IS TO BE DESIGN/BUILD BY THE CONTRACTOR.



ARCHITEC

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Dawn@dkellereng.com

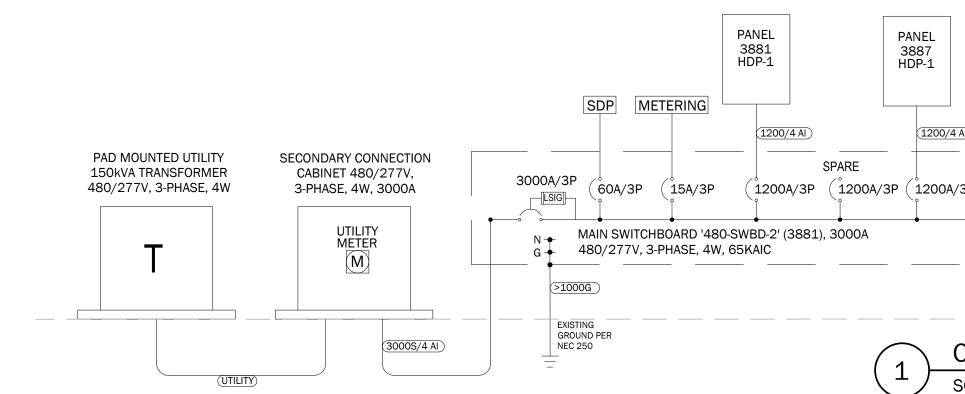
#### COVER SHEET



PANEL SCHEDULE: 1145		April 11, 2025	TRANSFORMER SCHEDULE	FEEDER SCHEDULE - ALUMINUM
BUS RATING: 225 Amperes 3Ø, 4-WIRE MAIN C.B.: or M.L.O: 200A	VOLTAGE L-L: VOLTAGE L-G:	208 120	PRIMARY OCP SIZE GROUND SECONDARY OCP 480V, 3Ø KVA CU 208V, 3Ø	AMPACITY (#)FEEDERCONDUIT (W)-not all sizes used# Sets3Ø & NG4W3W
MOUNTING: Surface COMMENTS: Existing Panelboard	S.C.RMS RATING (AIC):		30A         15         #8         50A           50A         30         #6         100A	20 (60°)         1         #10         #10         3/4"         3/4"           20 (75°)         1         #12         #10         3/4"         3/4"
NO. AMPS POLE LOAD (VA) NEC Deman	LOAD DESCRIPTION Phase LOAD DESCRIPTION	NEC Demand LOAD (VA) POLE AMPS NO.	TOA         45         #6         150A           125A         75         #2         250A	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
12012501.0032012501.00	Existing Load A Spare Existing Load B Spare	2 30 <b>2</b> 2 30 <b>4</b>	120/1         10         12         200/1           175A         112.5         1/0         350A           225A         150         2/0         500A	40 (60°)         1         #6         #8         1"         1"           40 (75°)         1         #8         #8         1"         1"
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Existing Load C Storage Receptacles Track Lighting A Storage Receptacles	1.00 540 1 20 <u>6</u> 1.00 900 1 20 8	350A 225 3/0 750A	50 (60°) 1 #4 #8 1-1/4" 1-1/4"
9 20 1 735 1.25 11 20 1 1200 1.00	Lighting B Show Window Exterior Signage C Range Display	1.00         180         1         20         10           1.00         180         1         20         12	800A 500 3/0 1600A	50 (75°)         1         #6         #8         1"         1"           60 (60°)         1         #3         #8         1-1/4"         1-1/4"
13         20         1         1128         0.65           15         20         1         360         1.00	Display Kitchen DW A Convenience Recepts Wifi Router B Grill Receptacle	1.00         360         1         20         14           1.00         1800         1         20         16	Overcurrent protection in accordance with NEC 450.3(B). Secondary OCP shall be rated at not more than 125% of the rated secondary current of the	60 (75°)         1         #4         #8         1-1/4"         1-1/4"           70 (60°)         1         #2         #6         1-1/4"         1-1/4"
172012021.251920115000.65	UC and Toe Kick Ltg C Convenience Recepts Display Kitchen MW A Storage Room	1.00360120181.0072012020	transformer. Primary OCP shall be rated at not more than 250% of the rated primary current of the transformer.	70 (75°)         1         #3         #6         1-1/4"         1-1/4"           80 (60°)         1         #1         #6         1-1/2"         1-1/2"
21         20         1         750         0.65           23         20         1         360         0.65	Display Kitchen Ref B Spare Display Kitchen Hood C RTU-1	120221.00407035024	Primary shall be 3-Wire and Secondary shall be 4-Wire unless noted otherwise. All transformers 45kVA and smaller and Seperately Derived Grounded System	80 (75°)         1         #2         #6         1-1/4"         1-1/4"           90 (60°)         1         1/0         #6         2"         2"
25         20         1         720         1.00           27         15         1         540         1.00	Convenience Recepts A RTU-1 Convenience Recepts B RTU-1	1.004070350261.00407035028	at the Transformer Secondary in accordance with NEC 250.30(A). Provide Grounding Electrode connection to Structural Metal or Metal Water Pipe in	90 (75°)         1         #2         #6         1-1/4"         1-1/4"           100 (60°)         1         1/0         #6         2"         2"
292013600.65312013601.00	Display Kitchen Hood C Office 1 Receptacles TTB A Office 2 Receptacles	1.00720120301.0054012032	accordance with 250.104(D) and sized in accordance with with NEC Table 250.66	100 (75°)         1         #1         #6         1-1/2"         1-1/2"           110         1         1/0         #4         2"         2"
33         20         1         360         1.00           35         30         2         5050         0.65	IT B IWH-1 Electric Range C IWH-2	1.00         1300         1         20         34           1.00         1300         1         20         36         38	The installation shall meet all NEC 250 grounding and bonding requirements. Provide Equipment Ground on Primary Feeder and Seperately Derived	125         1         2/0         #4         2"         2"           150         1         3/0         #4         2"         2"
37         30         2         5050         0.65           39         30         2         5050         0.65           41         20         2         5050         0.65	Electric Range A Bussed Space Electric Range B Bussed Space	40	Grounded System at the Transformer Secondary in accordance with NEC 250.30(A). Provide Grounding Electrode connection to Structural Metal	175         1         4/0         #4         2"         2"           200         1         250         #4         2-1/2"         2-1/2"
<u>41</u> 30 2 5050 0.65	Electric Range C Bussed Space	<u>42</u>	or Metal Water Pipe in accordance with 250.104(D) and sized in accordance with NEC Table 250.66	225         1         300         #2         3"         3"           250         1         350         #2         3"         3"
CONNECTED LOAD: PHASE A (VA): 15,934	CALCULATED DEMAND LOAD: PHASE A (VA):	13,331	Transformers shall meet minimum efficiency requirements for DOE 10 CFR 431 in accordance with IECC C405.7	300         1         500         #2         3-1/2"         3-1/2"           350         2         4/0         #1         2-1/2"         2-1/2"
PHASE B (VA): 15,395 <u>PHASE C (VA): 19,642</u>	PHASE B (VA): PHASE C (VA):	<u>15,905</u>		400         2         250         #1         3"         3"           500         2         350         1/0         3"         3"
TOTAL LOAD (VA): 50,971	CALCULATED DEMAND LOAD (VA):	42,784 <b>118.76 A</b>		600         2         500         2/0         3-1/2"         3-1/2"           750         3         350         3/0         3"         3"
NOTES: 1. New work shown in BOLD 2. F.C. sholl remove all unused sizewith head		and two brackers to "OFF"		NOC         S         SOC         S         S           800         3         400         3/0         3"         3"           1000         4         350         4/0         3"         3"
∠. E.C. Snall remove all unused circuitry back	to panels and label (type written) panel schedules "SPARE" a	and turn preaker to "UFF" position.		1000         4         330         4/0         3         3           1200         4         500         250         3-1/2"         3-1/2"           1600         8         250         350         3"         3"
				1600         8         250         350         3         3           2000         7         500         400         3-1/2"         3-1/2"           2500         8         500         600         3-1/2"         3-1/2"
ENT SCHEDULE		April 11, 2025		2500         8         500         600         3-1/2"         3-1/2"           3000         10         500         600         3"         3"           3500         11         600         500 Cu         3-1/2"         3-1/2"
Equipment         Equipment Load           kW         HP         Amps	Volt         Ø         Branch Circuit         Conduit         Disconnect           Conductors         Switch	t Panel-Circuit Comment		3500         11         600         500 cu         3-1/2"         3-1/2"           4000         11         750         500 cu         3-1/2"         3-1/2"           This table indicates minimum conductor size for feeders of the ampacity         3-1/2"         3-1/2"         3-1/2"
6 Heater 1.3 10.8 A	120 1 2#10,#10G 3/4" 30A/1P	- 1145 - 34		Inis table indicates minimum conductor size for feeders of the ampacity indicated where #/W indicates the #-Ampacity and W-number of wires, #S/W indicates no ground. All conductors shall be Alumimum unless otherwise noted.
Heater 1.3 10.8 A	120 1 2#10,#10G 3/4" 30A/1P	- 1145 - 36		Conductor Ampacities shall be based on Table 310.16 60° column up to 100A
/ALVE				and 75° column above 100A unless otherwise permited by NEC. Ampacity rating shall be selected in accordance with NEC 110.14 (C).
Zone Valve 20A CKT	120         1         2#12,#12G         3/4"         Sto           120         1         2#12,#12G         2/4"         Sto	- SEE COMMENTS 1		The master electrician shall be responsible for ensuring that no feeders or branch circuits are installed in a manner or sized in such a way as to violate the NEC.
Zone Valve 20A CKT	120 1 2#12,#12G 3/4" Sto	- SEE COMMENTS 1		Service Ground TableEquipment Ground Table150G#420EG#10
-	ments of all equipment with provider prior to any work. Confi			200G         #2         60EG         #8           300G         1/0         100EG         #8
e line voltage controls and wiring as required fo	vide all work necessary for a complete and code compliant ir r proper operation of equipment. Field verify control requirem			500G         3/0         200-1200A per Above           1000G         4/0         1600EG         350
-	ontrols shall be installed in an accessible location. g equipment and provide local disconnecting means in acco	ordance with NEC 430 Part IX.		>1000G2502000EG400Service Ground Conductor sized Per NEC Table 250.66 Equipment Ground Conductors
integral thermal/overload protection for fractior I-30 Part III.	al horsepower motors. Provide separate overload device whe	ere required in accordance with		sized per NEC Table 250.122 All conductors shall be Aluminum unless otherwise noted. The service ground chart indicates the minimum Service Ground Conductor based on #G
ic motors shall meet minimum efficiency require	ments in accordance with IECC Tables C405.8(1-4).			where # is the ampacity from the chart above, and the equipment ground chart indicates
				the minimum equipment grounding conductor size #EG where # is the rating/setting of
le 120V junction box and 40VA Transformer and	connection for airflow zone valve as required. Connect to ne	earest 120V circuit.		the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables,
e 120V junction box and 40VA Transformer and	connection for airflow zone valve as required. Connect to ne	earest 120V circuit.		the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including
	connection for airflow zone valve as required. Connect to nea	earest 120V circuit. April 9, 2025	OF	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC.
FAULT CURRENT	CALCULATION TABLE	April 9, 2025 AVAILABLE FAULT CURRENT (F)	PANEL PANEL PANEL PANEL PANEL PANEL PANEL PANEL PANEL	<ul> <li>the overcurrent device protecting the conductors and equipment.</li> <li>Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC.</li> <li>The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined,</li> </ul>
FAULT CURRENT	CALCULATION TABLE         kVA Utility Transformer       VOLTAGE 480	April 9, 2025 AVAILABLE FAULT CURRENT (F) 11,200	OFWORKPANEL C-3875PANEL 1139PANEL 1242PANEL 1145PANEL 1145PANEL 1147PANEL 1244PANEL 1252	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT 150 LOCATION (n) 3000A SCC	VOLTAGE         VOLTAGE         kVA Utility Transformer       VOLTAGE       L(ft)       O         # of RUNS       CONDUCTOR       VOLTAGE       L(ft)       O         8       750       480       75       25,	April 9, 2025 <u>AVAILABLE FAULT CURRENT (F)</u> 11,200 <u>C</u> Total C <u>f</u> <u>M</u> <u>F</u> ,976 207,808 0.01 0.99 <b>11,039</b>	PANEL C-3875 PANEL USUB METER SUB METER METER METER METER METER METER METER METER METER METER	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
EXAMPLE         FAULT CURRENT           150           LOCATION (n)           3000A SCC           480-SWBD-2           3875-HDP-1	Example         VOLTAGE 480           kVA Utility Transformer         VOLTAGE 480           # of RUNS 8         CONDUCTOR 750         VOLTAGE 480         L(ft) 75         0 25, 4           4         500         480         15         21, 3         21, 350         18,	April 9, 2025           AVAILABLE FAULT CURRENT (F)           11,200           C         Total C         f         M         F           ,976         207,808         0.01         0.99         11,039           ,391         85,564         0.01         0.99         10,963           ,506         55,518         0.25         0.80         8,777	PANEL C-3875 PANEL SUB METER METER METE	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT 150 LOCATION (n) 3000A SCC 480-SWBD-2	Example         VOLTAGE 480           kVA Utility Transformer         VOLTAGE 480           # of RUNS         CONDUCTOR 750         VOLTAGE 480         L(ft) 75         0 25, 480           3         400         480         350         18, Secondary of a 300kVA Transformer	April 9, 2025 <u>AVAILABLE FAULT CURRENT (F)</u> 11,200 <u>C</u> Total C <u>f</u> <u>M</u> <u>F</u> ,976 207,808 0.01 0.99 11,039 ,391 85,564 0.01 0.99 10,963	PANEL C-3875 PANEL USUB METER SUB METER METER METER METER METER METER METER METER METER METER	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT           150           LOCATION (n)           3000A SCC           480-SWBD-2           3875-HDP-1           3875-LDP-1           Panel 1145           NOTES:	Example         VOLTAGE 480           kVA Utility Transformer         VOLTAGE 480           # of RUNS         CONDUCTOR 750         VOLTAGE 480         L(ft) 75         0 25, 480           3         400         480         350         18, Secondary of a 300kVA Transformer	April 9, 2025           AVAILABLE FAULT CURRENT (F)           11,200           C         Total C         f         M         F           ,976         207,808         0.01         0.99         11,039           ,391         85,564         0.01         0.99         10,963           ,506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667	PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANE	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:	CALCULATION TABLEVOLTAGEkVA Utility TransformerVOLTAGE $\frac{\# \text{ of RUNS}}{8}$ CONDUCTORVOLTAGEL(ft)(ft) $\frac{4}{80}$ 7504807525, $4$ 5004801521, $3$ 40048035018,Secondary of a 300kVA Tr13/02081512,sman "Point-To-Point" Method.L=Feeder Length (LF)C=Conductor "C" Valuef(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ Total C       f       M       F         ,976       207,808       0.01       0.99       11,039       ,391       85,564       0.01       0.99       10,963       ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667       ,844       12,844       0.16       0.86       14,344         M(n) =1 ÷ (1+f(n))       M(n) =1 ÷ (1+f(n))       M(n)       M(n) <td>PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 SUB SUB METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER MET</td> <td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td>	PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 SUB SUB METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER MET	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall	CALCULATION TABLEVOLTAGEkVA Utility TransformerVOLTAGE $\frac{\# \text{ of RUNS}}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 750 $\frac{4}{3}$ 5004801521, $3$ 40048035018, Secondary of a 300kVA Tr 13/02081512,sman "Point-To-Point" Method. L=Feeder Length (LF)C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer. not be less than the values listed. The E.C. shall field verify calculate	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ Total C       f       M       F         976       207,808       0.01       0.99       11,039       39         ,391       85,564       0.01       0.99       10,963       30         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667       344       12,844       0.16       0.86       14,344         s       M(n) =1 ÷ (1+f(n))       F(n)=F(n-1) x M(n)       F(n)=F(n-1) x M(n)       F(n)=F(n-1) x M(n)	PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANE	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 75O 25, 480 $\frac{4}{3}$ 5004801521, 3 $3$ 40048035018, Secondary of a 300kVA Tr 1 $1$ $3/0$ 2081512,sman "Point-To-Point" Method. L=Feeder Length (LF)C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer. not be less than the values listed. The E.C. shall field verify comediately if conductor lengths are less than the values show t in this table are for fault study purposes only and shall not be	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ Total C       f       M       F         ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667       ,844       12,844       0.16       0.86       14,344         s       M(n) =1 ÷ (1+f(n))       F(n)=F(n-1) x M(n)       Sconductor lengths wn.       be used for bidding or other calculations.	PANEL C-3875 PANEL 1139 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1252 SUB METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER ME	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters s requirements.	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# \text{ of RUNS}}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 75O 25, 480 $\frac{4}{3}$ 5004801521, 3 $3$ 40048035018, Secondary of a 300kVA Tra 1 $1$ $3/0$ 2081512,sman "Point-To-Point" Method.L=Feeder Length (LF)C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer. not be less than the values listed. The E.C. shall field verify comediately if conductor lengths are less than the values show d in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ s $M(n) = F(n-1) \times M(n)$ conductor lengths       wn.         be used for bidding or other calculations.       10kA at the Meter per the Utility Company	PANEL C-3875 PANEL 1139 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1252 SUB METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER ME	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL C-3875 PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1252 PANEL 1252 PANEL 1244 PANEL 1252 PA	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL C-3875 PANEL 1139 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 PANEL 1252 SUB METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER ME	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL 1244 PANEL 1252 SUB SUB SUB SUB SUB SUB SUB METER MET	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL PANEL C-3875 PANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL DANEL D	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL C-3875 PANEL C-3875 PANEL C-3875 PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1242 PANEL 1244 PANEL 1244 PANEL 1244 PANEL 1244 PANEL 1252 METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLEVOLTAGE 480kVA Utility TransformerVOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 750VOLTAGE 480L(ft) 7525, 480 $\frac{4}{3}$ GONDUCTOR 480VOLTAGE 480L(ft) 7525, 480 $3$ 400480350 $3$ 400480350 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ 20815 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ 15 $1$ $3/0$ $208$ $15$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $1$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL PANEL C3875 PANEL C3875 PANEL C3875 PANEL PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METE	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	VOLTAGE         VOLTAGE         kVA Utility Transformer       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{4}{3}$ $\frac{750}{480}$ $\frac{480}{75}$ $25$ , $\frac{4}{3}$ $\frac{400}{480}$ $480$ $15$ $21$ , $\frac{3}{400}$ $\frac{480}{480}$ $350$ $18$ ,         Secondary of a 300kVA Transformer $1$ $3/0$ $208$ $15$ $12$ ,         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value $f(n) = (1.73 \times L \times F(n-1))/(C \times \#$ of runs x Voltage) in Amperes       discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify commediately if conductor lengths are less than the values show $1$ in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1 $4$ fault current value at the main service disconnect per NEC 1 $4$ study and labeling for personnel and protective equipment	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667         ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ F(n)=F(n-1) x M(n)         sonductor lengths vn.       be used for bidding or other calculations.       10kA at the Meter per the Utility Company         110.24(A)       10.24(A)       10.24(A)       10.24(A)	PANEL PANEL C3875 PANEL C3875 PANEL C3875 PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	VOLTAGE         VOLTAGE         kVA Utility Transformer       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{4}{3}$ $\frac{750}{480}$ $\frac{480}{75}$ $25$ , $\frac{4}{3}$ $\frac{400}{480}$ $480$ $15$ $21$ , $\frac{3}{400}$ $\frac{480}{480}$ $350$ $18$ ,         Secondary of a 300kVA Transformer $1$ $3/0$ $208$ $15$ $12$ ,         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value $f(n) = (1.73 \times L \times F(n-1))/(C \times \#$ of runs x Voltage) in Amperes       discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify commediately if conductor lengths are less than the values show $1$ in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1 $4$ fault current value at the main service disconnect per NEC 1 $4$ study and labeling for personnel and protective equipment	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808 $0.01$ $0.99$ $11,039$ ,391       85,564 $0.01$ $0.99$ $10,963$ ,506       55,518 $0.25$ $0.80$ $8,777$ ransformer with Minimum %Z=5.0% $16,667$ ,844 $12,844$ $0.16$ $0.86$ $14,344$ s $M(n) = 1 + (1+f(n))$ $F(n)=F(n-1) \times M(n)$ so $M(n) = F(n-1) \times M(n)$ so $E(n) = F(n-1) \times M(n)$ so $M(n) = 0$ $M(n) = 1 + (1+f(n))$ $F(n) = F(n-1) \times M(n)$ so $M(n) = 1 + (1+f(n)) \times M(n)$ $F(n) = F(n-1) \times M(n)$ so $M(n) = 1 + (1+f(n)) \times M(n)$ $M(n) = 1 + (1-f(n)) \times M(n)$ so $M(n) = 1 + (1-f(n)) \times M(n)$ $M(n) = 1 + (1-f(n)) \times M(n)$ so $M(n) = 1 + (1-f(n)) \times M(n)$ $M(n) = 1 + (1-f(n)) \times M(n)$ so $M(n) = 1 + (1-f(n)) \times M(n)$ $M(n) = 1 + (1-f(n)) \times M(n)$ so $M(n) = 1 + (1-f(n)) \times M(n)$ $M(n) = 1 + (1-f(n)) \times M(n)$ so	PANEL PANEL C3875 PANEL C3875 PANEL C3875 PANEL PANEL 1139 PANEL 1242 PANEL 1242 PANEL 1145 PANEL 1147 PANEL 1244 PANEL 1252 PANEL 1244 PANEL 1252 METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METE	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	VOLTAGE         VOLTAGE         kVA Utility Transformer       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{4}{3}$ $\frac{750}{480}$ $\frac{480}{75}$ $25$ , $\frac{4}{3}$ $\frac{400}{480}$ $480$ $15$ $21$ , $\frac{3}{400}$ $\frac{480}{480}$ $350$ $18$ ,         Secondary of a 300kVA Transformer $1$ $3/0$ $208$ $15$ $12$ ,         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value $f(n) = (1.73 \times L \times F(n-1))/(C \times \#$ of runs x Voltage) in Amperes       discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify commediately if conductor lengths are less than the values show $1$ in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1 $4$ fault current value at the main service disconnect per NEC 1 $4$ study and labeling for personnel and protective equipment	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976       207,808       0.01       0.99       11,039         ,391       85,564       0.01       0.99       10,963         ,506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667       ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 + f(n))$ $F(n) = F(n-1) \times M(n)$ sonductor lengths       wn.       be used for bidding or other calculations.         10kA at the Meter per the Utility Company       110.24(A)       110.24(A)	PANEL       1147       PANEL       1242       PANEL       1147       PANEL       1242       PANEL       1147       PANEL       1242       PANEL       1147       PANEL       1252         SUB       SUB       SUB       SUB       SUB       SUB       METER	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	CALCULATION TABLE         KVA Utility Transformer       VOLTAGE 480 $\frac{\# of RUNS}{8}$ CONDUCTOR 75       VOLTAGE 480       L(ft) 0       0 $\frac{\# of RUNS}{8}$ CONDUCTOR 75       VOLTAGE 480       L(ft) 0       205 $\frac{\# of RUNS}{3}$ CONDUCTOR 480       480       350       15       21, 0 $\frac{\# of RUNS}{3}$ 400       480       350       15       21, 0 $\frac{\# of RUNS}{3}$ 400       480       350       15       12, 0         stead       To-Point" Method.       E       E       12, 0       12, 0         L=Feeder Length (LF)       C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       14       <	April 9, 2025         AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ .976       207,808       0.01       0.99       11,039         .391       85,564       0.01       0.99       10,963         .506       55,518       0.25       0.80       8,777         ransformer with Minimum %Z=5.0%       16,667       ,844       12,844       0.16       0.86       14,344         s $M(n) = 1 \div (1 \div f(n))$ $F(n) = F(n-1) \times M(n)$ sonductor lengths       N.         s       bused for bidding or other calculations.       10kA at the Meter per the Utility Company       110.24(A)         prior to energizing equipment per       prior to energizing equipment per       PANEL         3881       PANEL       3887	PANEL PANEL C-3875 PANEL C-3875 PANEL PANEL C-3875 PANEL PANEL 1139 PANEL 1145 PANEL 1145 PANEL 1145 PANEL 1147 PANEL 1147 PANEL 1244 PANEL 1244 PANEL 1252 METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER METER M	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister         6. All in-line Utility Meters so requirements.         7. Label and date available         8. Provide Arc-Flash Hazard	VOLTAGE         VOLTAGE         kVA Utility Transformer       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{\# of RUNS}{8}$ CONDUCTOR       VOLTAGE       L(ft)       Q $\frac{4}{3}$ $\frac{750}{480}$ $\frac{480}{75}$ $25$ , $\frac{4}{3}$ $\frac{400}{480}$ $480$ $15$ $21$ , $\frac{3}{400}$ $\frac{480}{480}$ $350$ $18$ ,         Secondary of a 300kVA Transformer $1$ $3/0$ $208$ $15$ $12$ ,         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value $f(n) = (1.73 \times L \times F(n-1))/(C \times \#$ of runs x Voltage) in Amperes       discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify commediately if conductor lengths are less than the values show $1$ in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1 $4$ fault current value at the main service disconnect per NEC 1 $4$ study and labeling for personnel and protective equipment	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ Total C         f         M         F           .976         207,808         0.01         0.99         11,039           .391         85,564         0.01         0.99         10,963           .506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667           .844         12,844         0.16         0.86         14,344           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         Sonductor lengths         Minimum %Z=5.0%         16,667           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         Sonductor lengths         Minimum %Z=5.0%         16,067           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         Sonductor lengths         Minimum %Z=5.0%         16,067           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         Sonductor lengths         Minimum %Z=5.0%         16,067           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         Sonductor lengths         Minimum %Z=5.0%         10,000           110.24(A)         Interval (A)         Interval (A)         Interval (A)         10,000         10,000         10,000 <td< td=""><td>PANEL         PANEL         <th< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></th<></td></td<>	PANEL         PANEL <th< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></th<>	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1       All Calculations use Bus         2       Variables:         3       The E.C. shall report any         4       Conductor lengths shall and contact engineer im         5       Conductor Lengths liste         6       All in-line Utility Meters strequirements.         7       Label and date available         8       Provide Arc-Flash Hazarn NEC 110.16 and NFPA 1	Subscription       Contraction       Voltage / 480         # of RUNS       CONDUCTOR       Voltage       L(ft)       0         # of RUNS       CONDUCTOR       Voltage       L(ft)       0         3       400       480       350       18,         Secondary of a 300kVA Tr.       1       3/0       208       15       12,         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify c mediately if conductor lengths are less than the values show in this table are for fault study purposes only and shall not thall be protected to limit the Fault Current to no more than 1         fault current value at the main service disconnect per NEC 3 distudy and labeling for personnel and protective equipment '0E.         SDP       METERING	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ .976         207,808 $0.01$ $0.99$ $11,039$ .391         85,564 $0.01$ $0.99$ $10,963$ .506         55,518 $0.25$ $0.80$ $8,777$ ransformer with Minimum %Z=5.0% $16,667$ .844 $12,844$ $0.16$ $0.86$ $14,344$ s $M(n) = 1 + (1+f(n))$ $F(n)=F(n-1) \times M(n)$ conductor lengths         N.         be used for bidding or other calculations.           10kA at the Meter per the Utility Company $110.24(A)$ .           prior to energizing equipment per         PANEL $3881$ HDP-1         PANEL $3887$ HDP-1         1200/4 AI         1200/4 AI	PANEL       1147       PANEL       1244       PANEL         SUB       SUB       SUB       SUB       SUB       METER       2004/3P       2004/3P<	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths lister strenguirements.         7. Label and date available         8. Provide Arc-Flash Hazar         NEC 110.16 and NFPA         OUTILITY         SECONDARY CONNECTION	SALCULATION TABLE         VOLTAGE 480         # of RUNS       CONDUCTOR 750       VOLTAGE 480       L(ft) 75       O 25, 24         4       500       480       15       21, 3         3       400       480       15       21, 3         3       400       480       15       12, 3         sman "Point-To-Point" Method.       L=Feeder Length (LF)       C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.         not be less than the values listed. The E.C. shall field verify con mediately if conductor lengths are less than the values show d in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1         4 fault current value at the main service disconnect per NEC 1 4 study and labeling for personnel and protective equipment OE.         SDP       METERING         0       SDP       METERING	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200 $\underline{C}$ $\underline{Total C}$ $\underline{f}$ $\underline{M}$ $\underline{F}$ ,976         207,808         0.01         0.99         11,039           ,391         85,564         0.01         0.99         10,963           ,506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667           ,844         12,844         0.16         0.86         14,344           s $M(n) = 1 + (1+f(n))$ F(n)=F(n-1) x M(n)         F(n)=F(n-1) x M(n)           conductor lengths vn.         be used for bidding or other calculations.         10kA at the Meter per the Utility Company           110.24(A)         .prior to energizing equipment per         PANEL           3881 HDP-1         PANEL         3887 HDP-1           .1200/4 AI	PANEL         PANEL <th< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></th<>	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT (         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer in         5. Conductor Lengths liste         6. All in-line Utility Meters strequirements.         7. Label and date available         8. Provide Arc-Flash Hazarn NEC 110.16 and NFPA TO         YEC 110.16 and NFPA TO         SECONDARY CONNECTION         CABINET 480/277V, 3-PHASE, 4W, 3000A	SALCULATION TABLE         VOLTAGE 480         # of RUNS       CONDUCTOR 750       VOLTAGE 480       L(ft)       O 250         4       500       480       15       21, 3         3       400       480       350       18, 5         1       3/0       208       15       12, 12, 3         secondary of a 300kVA Tr 1         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         secondary of a 300kVA Tr 1         10, 208       15       12, 12, 13         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 13         secondary of a 300kVA Tr 1         C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.         N         fault current value at the main service disconnect per NEC 14         SDP         METERING	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200           C         Total C         f           976         207,808         0.01         0.99         11,039           ,391         85,564         0.01         0.99         10,963           ,506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667           ,844         12,844         0.16         0.86         14,344           M(n) =1 + (1+f(n)) F(n)=F(n-1) x M(n)           sonductor lengths vn.           be used for bidding or other calculations.           10.24(A)           PANEL 3881 HDP-1           110.24(A)         PANEL 3881 HDP-1           1200/4 AI         IZ00/4 AI           IZ00/4 AI           IZ00/4 AI	PANEL       PANEL <td< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></td<>	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1. All Calculations use Bus         2. Variables:         3. The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths listee         6. All in-line Utility Meters or requirements.         7. Label and date available         8. Provide Arc-Flash Hazarn NEC 110.16 and NFPA         YEC 110.16 and NFPA         SECONDARY CONNECTION CABINET 480/277V, 3-PHASE, 4W, 3000A	SALCULATION TABLE         VOLTAGE 480         # of RUNS       CONDUCTOR 750       VOLTAGE 480       L(ft)       O 250         4       500       480       15       21, 3         3       400       480       350       18, 5         1       3/0       208       15       12, 12, 3         secondary of a 300kVA Tr 1         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 3         secondary of a 300kVA Tr 1         10, 208       15       12, 12, 13         Secondary of a 300kVA Tr 1         10, 208       15       12, 12, 13         secondary of a 300kVA Tr 1         C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.         N         fault current value at the main service disconnect per NEC 14         SDP         METERING	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200           C           AVAILABLE FAULT CURRENT (F) 11,039           391         85,564         0.01         0.99         11,039           ,506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667           ,844         12,844         0.16         0.86         14,344           S           M(n) =1 + (1+f(n)) F(n)=F(n-1) × M(n)           sonductor lengths vn.           be used for bidding or other calculations.           10.24(A)           PANEL 3881 HDP-1           IMAREL 3881 HDP-1           QUID A AI           QUID A AI           QUID A AI           1200/4 AI           QUID A AI           QUI	PANEL       PANEL <td< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></td<>	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.
FAULT CURRENT         150         LOCATION (n)         3000A SCC         480-SWBD-2         3875-HDP-1         3875-HDP-1         3875-LDP-1         Panel 1145         NOTES:         1         1         All Calculations use Bus         2. Variables:         3         3         The E.C. shall report any         4. Conductor lengths shall and contact engineer im         5. Conductor Lengths liste         6. All in-line Utility Meters strequirements.         7. Label and date available         8. Provide Arc-Flash Hazarn NEC 110.16 and NFPA         NEC 110.16 and NFPA         SECONDARY CONNECTICABINET 480/277V, 3-PHASE, 4W, 3000A	SALCULATION TABLE         VOLTAGE 480         # of RUNS       CONDUCTOR       VOLTAGE 480         # of RUNS       CONDUCTOR       VOLTAGE       L(ft)       0         3       400       480       15       21, 3         3       400       480       350       18, Secondary of a 300kVA Tr 1       3/0       208       15       12,         sman "Point-To-Point" Method.         L=Feeder Length (LF)       C=Conductor "C" Value f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes discrepancies to the Engineer.         mot be less than the values listed. The E.C shall field verify comediately if conductor lengths are less than the values show d in this table are for fault study purposes only and shall not the hall be protected to limit the Fault Current to no more than 1         SDP METERING         METERING         SDP METERING         ON         SDP METERING         METERING         METERING         N         SDP METERING         ON	April 9, 2025           AVAILABLE FAULT CURRENT (F) 11,200           C           AVAILABLE FAULT CURRENT (F) 11,039           391         85,564         0.01         0.99         11,039           ,506         55,518         0.25         0.80         8,777           ransformer with Minimum %Z=5.0%         16,667           ,844         12,844         0.16         0.86         14,344           S           M(n) =1 + (1+f(n)) F(n)=F(n-1) × M(n)           sonductor lengths vn.           be used for bidding or other calculations.           10.24(A)           PANEL 3881 HDP-1           IMAREL 3881 HDP-1           QUID A AI           QUID A AI           QUID A AI           1200/4 AI           QUID A AI           QUI	PANEL       PANEL <td< td=""><td>the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.</td></td<>	the overcurrent device protecting the conductors and equipment. Where discrepancies occur between the Feeder Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC. The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10.

RUG DATING ODE Amorros OM A MUDE	April 11, 2025	TRANSFORMER SCHEDULE	FEEDER SCHEDULE - ALUMINUM
BUS RATING: 225 Amperes 3Ø, 4-WIRE MAIN C.B.: or M.L.O: 200A	VOLTAGE L-L: 208 VOLTAGE L-G: 120	PRIMARY OCPSIZEGROUNDSECONDARY OCP480V, 3ØKVACU208V, 3Ø	AMPACITY (#)     FEEDER     COND       -not all sizes used     # Sets     3Ø & N     G     4
MOUNTING: Surface COMMENTS: Existing Panelboard	S.C.RMS RATING (AIC): 22,000	30A         15         #8         50A           50A         30         #6         100A	20 (60°)         1         #10         #10         3/           20 (75°)         1         #12         #10         3/
	DESCRIPTION Phase LOAD DESCRIPTION NEC Demand LOAD (VA) POLE AMPS	125A 75 #2 250A	30 (60°)         1         #8         #8         3/           30 (75°)         1         #10         #8         3/
1       20       1       250       1.00         3       20       1       250       1.00         5       20       1       250       1.00	Existing LoadASpare230Existing LoadBSpare230Existing LoadCStorage Receptacles1.00540120	2 175A 112.5 1/0 350A 4 225A 150 2/0 500A	40 (60°)       1       #6       #8       1         40 (75°)       1       #8       #8       1
	Existing LoadCStorage Receptacles1.00540120Track LightingAStorage Receptacles1.00900120LightingBShow Window1.00180120	6         350A         225         3/0         750A           8         500A         300         3/0         1000A           10         800A         500         3/0         1000A	50 (60°)         1         #4         #8         1-1           50 (75°)         1         #6         #8         1
20 1 1200 1.00 E	IghtingBShow Window1.00180120Ixterior SignageCRange Display1.00180120Iay Kitchen DWAConvenience Recepts1.00360120	12     300A     500     3/0     1600A       Overcurrent protection in accordance with NEC 450.3(B). Secondary OCP	60 (60°)         1         #3         #8         1-1           60 (75°)         1         #4         #8         1-1
20 1 360 1.00	Wifi RouterBGrill Receptacle1.001800120nd Toe Kick LtgCConvenience Recepts1.00360120	shall be rated at not more than 125% of the rated secondary current of the transformer. Primary OCP shall be rated at not more than 250% of the rated	70 (60°)         1         #2         #6         1-1           70 (75°)         1         #3         #6         1-1
20 1 1500 0.65 Displa	ay Kitchen MWAStorage Room1.00720120lay Kitchen RefBSpare120	primary current of the transformer. Primary shall be 3-Wire and Secondary shall be 4-Wire unless noted otherwise.	80 (60°)         1         #1         #6         1-1           80 (75°)         1         #2         #6         1-1
20 1 360 0.65 Display	y Kitchen Hood         C         RTU-1         1.00         4070         3         50           nience Recepts         A         RTU-1         1.00         4070         3         50	All transformers 45kVA and smaller and Seperately Derived Grounded System at the Transformer Secondary in accordance with NEC 250.30(A). Provide	90 (60°)         1         1/0         #6         1           90 (75°)         1         #2         #6         1-1
15 1 540 1.00 Conver	nience ReceptsBRTU-11.004070350y Kitchen HoodCOffice 1 Receptacles1.00720120	Grounding Electrode connection to Structural Metal or Metal Water Pipe in accordance with 250.104(D) and sized in accordance with with	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
2         20         1         360         0.65         Display           1         20         1         360         1.00           3         20         1         360         1.00		NEC Table 250.66 The installation shall meet all NEC 250 grounding and bonding requirements.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
<u>35</u> <b>30 2 5050 0.65</b>		Provide Equipment Ground on Primary Feeder and Seperately Derived Grounded System at the Transformer Secondary in accordance with	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	Electric Range       B       Bussed Space         Electric Range       C       Bussed Space	NEC 250.30(A). Provide Grounding Electrode connection to Structural Metal	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
CONNECTED LOAD:	CALCULATED DEMAND LOAD:	with NEC Table 250.66	223         1         300         #2         300           250         1         350         #2         300           300         1         500         #2         3-2
PHASE A (VA): 15,934 PHASE B (VA): 15,395	PHASE A (VA): 13,331 PHASE B (VA): 13,549	Transformers shall meet minimum efficiency requirements for DOE 10 CFR 431 in accordance with IECC C405.7	350 2 4/0 #1 2-2
PHASE C (VA): <u>19,642</u> TOTAL LOAD (VA): 50,971	PHASE C (VA): <u>15,905</u> CALCULATED DEMAND LOAD (VA): 42,784 <b>118.76 A</b>		400         2         250         #1         3           500         2         350         1/0         3
NOTES:		—	600         2         500         2/0         3-1           750         3         350         3/0         3
1. New work shown in BOLD	nd label (type written) panel schedules "SPARE" and turn breaker to "OFF" position.		800         3         400         3/0         3           1000         4         350         4/0         3
			1200         4         500         250         3-1           1600         8         250         350         3
			2000         7         500         400         3-1           2500         8         500         600         3-1
NT SCHEDULE uipment Equipment Load Volt Ø	April 11, 2025 Branch Circuit Conduit Disconnect Panel-Circuit Comm	nt	3000         10         500         600         3300           3500         11         600         500 Cu         3400
kW HP Amps	Conductors     Switch     Fuse		400011750500 Cu3-1This table indicates minimum conductor size for feeders of the ampair
Heater         1.3         10.8         A         120         1	2#10,#10G 3/4" 30A/1P - 1145 - 34		indicated where #/W indicates the #-Ampacity and W-number of wires #S/W indicates no ground. All conductors shall be Alumimum unless
Heater         1.3         10.8 A         120         1	2#10,#10G 3/4" 30A/1P - 1145 - 36		Conductor Ampacities shall be based on Table 310.16 60° column u and 75° column above 100A unless otherwise permited by NEC. Amp
LVE         20A CKT         120         1	2#12,#12G 3/4" Sto - SEE COMMENTS 1		rating shall be selected in accordance with NEC 110.14 (C). The master electrician shall be responsible for ensuring that no feede
ne Valve 20A CKT 120 1	2#12,#12G         3/4"         Sto         -         SEE         COMMENTS         1		circuits are installed in a manner or sized in such a way as to violate t Service Ground Table Equipment Grou
Il equipment where applicable)			150G         #4         20EG           200G         #2         60EG
rify final location and confirm electrical requirements of all ate data before ordering any materials and provide all work	equipment with provider prior to any work. Confirm all breaker sizes with necessary for a complete and code compliant installation.		300G         1/0         100EG           500G         3/0         200-1200A per Abo
	ation of equipment. Field verify control requirements with equipment provider		1000G         4/0         1600EG           >1000G         250         2000EG
e HACR breakers for all dedicated circuits serving equipment	t and provide local disconnecting means in accordance with NEC 430 Part IX. er motors. Provide separate overload device where required in accordance with		Service Ground Conductor sized Per NEC Table 250.66 Equipment Gr sized per NEC Table 250.122 All conductors shall be Aluminum unles
30 Part III. c motors shall meet minimum efficiency requirements in acco			The service ground chart indicates the minimum Service Ground Cond where # is the ampacity from the chart above, and the equipment gro
		AREA	the minimum equipment grounding conductor size #EG where # is the the overcurrent device protecting the conductors and equipment.
3 120V junction box and 40VA Transformer and connection f	for airflow zone valve as required. Connect to nearest 120V circuit.		Where discrepancies occur between the Feeder Schedule and the Gro the larger conductor shall be used unless otherwise permitted by the
		HOUR CONTRACT OF A DECEMBER OF A	
		PANEL PANEL PANEL PANEL PANEL PANEL PANEL PANEL PANEL	The installation shall meet all NEC 250 grounding and bonding requir 250.4 Path for Fault Current. Provide complete raceway systems met
FAULT CURRENT CALCULA		PANEL C-3875PANEL 1139PANEL 1242PANEL 1145PANEL 1145PANEL 1147PANEL 1244PANEL 1252	
FAULT CURRENT CALCULA 150 kVA Utility Tr	VOLTAGE AVAILABLE FAULT CURRENT (F)		250.4 Path for Fault Current. Provide complete raceway systems met
150 kVA Utility Tr LOCATION (n) # of RUNS	ransformer $\frac{VOLTAGE}{480}$ $\frac{AVAILABLE FAULT CURRENT (F)}{11,200}$	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems metric connected, and fittings as required for electrical continuity per NEC 3
150 kVA Utility Tr <u>LOCATION (n)</u> <u># of RUNS</u> 3000A SCC 8 480-SWBD-2 4	VOLTAGE ransformer         VOLTAGE 480         AVAILABLE FAULT CURRENT (F) 11,200           CONDUCTOR         VOLTAGE 480         L(ft)         C         Total C         f         M         F           750         480         75         25,976         207,808         0.01         0.99         11,039           500         480         15         21,391         85,564         0.01         0.99         10,963		250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3 R
150 kVA Utility Tr. <u>LOCATION (n)</u> <u># of RUNS</u> 3000A SCC 8 480-SWBD-2 4 3875-HDP-1 3 3875-LDP-1	VOLTAGE 480         AVAILABLE FAULT CURRENT (F) 11,200           CONDUCTOR 750         VOLTAGE 480         L(ft) 75         C 480         Total C 207,808         f 0.01         M 0.99         F 11,039           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667	C-3875 1139 1242 1145 1147 1244 1252 SUB SUB SUB SUB SUB SUB SUB SUB SUB METER METER METER METER METER METER METER METER	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 3 R
LOCATION (n)         # of RUNS           3000A SCC         8           480-SWBD-2         4           3875-HDP-1         3           3875-LDP-1         7           Panel 1145         1	VOLTAGE ransformer         VOLTAGE 480         AVAILABLE FAULT CURRENT (F) 11,200           CONDUCTOR         VOLTAGE 480         L(ft)         C         Total C         f         M         F           750         480         75         25,976         207,808         0.01         0.99         11,039           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         18,506         55,518         0.25         0.80         8,777	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 3 R
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-11Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le	VOLTAGE 480         AVAILABLE FAULT CURRENT (F) 11,200           CONDUCTOR 750         VOLTAGE 480         L(ft) 75         C 25,976         Total C 207,808         f 0.01         M 0.99         F 11,039           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667           3/0         208         15         12,844         12,844         0.16         0.86         14,344	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3 R METERING
$\begin{array}{c c} 150 \ \text{kVA Utility Tr}\\ \hline \\ \underline{\text{LOCATION (n)}} & \# \ \text{of RUNS}\\ \hline 3000A \ \text{SCC} & 8\\ \hline 480 \ \text{SWBD-2} & 4\\ \hline 3875 \ \text{HDP-1} & 3\\ \hline 3875 \ \text{-LDP-1} & \\ \hline \text{Panel 1145} & 1\\ \hline \\ $	VOLTAGE ransformer         L(ft)         C         Total C         f         M         F $\frac{CONDUCTOR}{750}$ VOLTAGE         L(ft)         C         Total C         f         M         F $500$ 480         75         25,976         207,808         0.01         0.99         11,039 $500$ 480         15         21,391         85,564         0.01         0.99         10,963 $400$ 480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667 $3/0$ 208         15         12,844         12,844         0.16         0.86         14,344	C-3875       1139       1242       1145       1147       1244       1252         SUB       SUB       SUB       SUB       SUB       SUB       SUB       METER       METER <td< td=""><td>250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3</td></td<>	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-1Panel 1145Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less thand contact engineer immediately if one	VOLTAGE ransformer         L(ft)         C         Total C         f         M         F $\frac{CONDUCTOR}{750}$ VOLTAGE         L(ft)         C         Total C         f         M         F $500$ 480         75         25,976         207,808         0.01         0.99         11,039 $500$ 480         15         21,391         85,564         0.01         0.99         10,963 $400$ 480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667 $3/0$ 208         15         12,844         12,844         0.16         0.86         14,344	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-19Panel 11451NOTES:1. All Calculations use Bussman "Point-1"2. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be proteined	VOLTAGE ransformer         VOLTAGE 480         AVAILABLE FAULT CURRENT (F) 11,200           CONDUCTOR         VOLTAGE 480         L(ft)         C         Total C         f         M         F           750         480         75         25,976         207,808         0.01         0.99         11,039           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667           3/0         208         15         12,844         12,844         0.16         0.86         14,344	C-3875       1139       1242       1145       1147       1244       1252         SUB       SUB       SUB       SUB       SUB       SUB       SUB       METER       METER <td< td=""><td>250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3 R METERING</td></td<>	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3 R METERING
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875       1139       1242       1145       1147       1244       1252         SUB       SUB       SUB       SUB       SUB       SUB       SUB       METER       METER <td< td=""><td>250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3</td></td<>	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current	VOLTAGE ransformerVOLTAGE 480L(ft)C Total C 207,808Total C 0.01M 0.99F 11,039 $\frac{CONDUCTOR}{750}$ VOLTAGE 480L(ft) 75C 25,976Total C 207,808f 0.01M 0.99F 11,039 $500$ 48015 21,39121,39185,5640.010.9910,963 $400$ 48035018,50655,5180.250.808,777Secondary of a 300kVA Transformer with Minimum %Z=5.0%16,667 $3/0$ 2081512,84412,8440.160.8614,344To-Point" Method. ength (LF)C=Conductor "C" Value N t x k F(n-1))/(C x # of runs x Voltage) in Amperes es to the Engineer. han the values listed. The E.C. shall field verify conductor lengths conductor lengths are less than the values shown. e are for fault study purposes only and shall not be used for bidding or other calculations. beted to limit the Fault Current to no more than 10kA at the Meter per the Utility Company	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875 1139 1242 1145 1147 1244 1252 SUB SUB SUB SUB SUB SUB SUB METER	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875 1139 1242 1145 1147 1244 1252 SUB SUB SUB SUB METER	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and label	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-1"2. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875       1139       1242       1145       1147       1244       1252         SUB       SUB       SUB       SUB       SUB       METER	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F) 11,200 $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $L(ft)$ $C$ $Total C$ $f$ $M$ $F$ $750$ $480$ $75$ $25,976$ $207,808$ $0.01$ $0.99$ $11,039$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method. ength (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x L x F(n-1))/(C x # of runs x Voltage) in AmperesF(n)=F(n-1) \times M(n)es to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.e are for fault study purposes only and shall not be used for bidding or other calculations.extend to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)$	C-3875       1139       1242       1145       1147       1244       1252         SUB	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-13Panel 11451NOTES:1. All Calculations use Bussman "Point-1"2. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F ransformer $\frac{CONDUCTOR}{750}$ VOLTAGE 480 $L(ft)$ 75 $C$ 25,976 $\overline{Total C}$ 207,808 $f$ 0.01 $M$ 0.99 $F$ 11,039 $500$ 4801521,39185,5640.010.9919,663 $400$ 48035018,50655,5180.250.808,777 Secondary of a 300kVA Transformer with Minimum %Z=5.0%16,667 $3/0$ 2081512,84412,8440.160.8614,344To-Point" Method. ength (LF)C=Conductor "C" Value x L x F(n-1)//(C x # of runs x Voltage) in Amperes set to the Engineer. han the values listed. The E.C. shall field verify conductor lengths conductor lengths are less than the values shown. a ere for fault study purposes only and shall not be used for bidding or other calculations. beted to limit the Fault Current to no more than 10kA at the Meter per the Utility Company t value at the main service disconnect per NEC 110.24(A) abeling for personnel and protective equipment prior to energizing equipment per	C-3875 1139 1242 1145 1147 1244 1252 SUB SUB SUB SUB SUB SUB SUB METER LIGHTS METER METER LIGHTS METER METR	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-13Panel 11451NOTES:1. All Calculations use Bussman "Point-1"2. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F ransformer $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $\frac{L(ft)}{75}$ $\frac{C}{2}$ $\frac{f}{207,808}$ $\frac{M}{0.01}$ $\frac{F}{0.99}$ $500$ 4801521,39185,5640.010.9911,039 $500$ 48035018,50655,5180.250.808,777Secondary of a 300kVA Transformer with Minimum %Z=5.0%16,667 $3/0$ 2081512,84412,8440.160.8614,344To-Point" Method. ength (LF)C=Conductor "C" ValueM(n) =1 + (1+f(n)) x L x F(n-1)//(C x # of runs x Voltage) in AmperesF(n)=F(n-1) x M(n)as to the Engineer. han the values listed. The E.C. shall field verify conductor lengths 	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F 11,200 $\frac{\text{CONDUCTOR}}{750}$ VOLTAGE 480 $L(ft)$ 75C 25,976Total C 207,808f 0.01M 0.999F 	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LOCATION (n)# of RUNS3000A SCC8480-SWBD-243875-HDP-133875-LDP-17Panel 11451NOTES:1. All Calculations use Bussman "Point-12. Variables:L=Feeder Le $f(n) = (1.73)$ 3. The E.C. shall report any discrepancie4. Conductor lengths shall not be less the and contact engineer immediately if of5. Conductor Lengths listed in this table6. All in-line Utility Meters shall be protein requirements.7. Label and date available fault current8. Provide Arc-Flash Hazard study and labor	VOLTAGE ransformerVOLTAGE 480AVAILABLE FAULT CURRENT (F ransformer $\frac{CONDUCTOR}{750}$ $\frac{VOLTAGE}{480}$ $\frac{L(ft)}{75}$ $\frac{C}{2}$ $\frac{T}{207,808}$ $\frac{1}{0.10}$ $\frac{M}{9}$ $\frac{F}{750}$ $\frac{480}{480}$ $\frac{15}{25,976}$ $\frac{207,808}{207,808}$ $\frac{10,963}{0.01}$ $\frac{10,993}{0.999}$ $\frac{10,963}{10,999}$ $500$ $480$ $15$ $21,391$ $85,564$ $0.01$ $0.99$ $10,963$ $400$ $480$ $350$ $18,506$ $55,518$ $0.25$ $0.80$ $8,777$ Secondary of a 300kVA Transformer with Minimum %Z=5.0% $16,667$ $3/0$ $208$ $15$ $12,844$ $12,844$ $0.16$ $0.86$ $14,344$ To-Point" Method.angth (LF)C=Conductor "C" Value $M(n) = 1 + (1+f(n))$ $x \ x \ F(n-1))/(C \ x \ w \ order max \ voltage)$ in Amperes $F(n)=F(n-1) \ x \ M(n)$ as to the Engineer.han the values listed. The E.C. shall field verify conductor lengthsconductor lengths are less than the values shown.a are for fault study purposes only and shall not be used for bidding or other calculations.cted to limit the Fault Current to no more than 10kA at the Meter per the Utility Companyt value at the main service disconnect per NEC 110.24(A)abeling for personnel and protective equipment prior to energizing equipment per $3881$ HDP-1 $3887$ HDP-1	C.3875 1139 1242 1145 1147 1244 1252 SUB SUB METER LIGHTS METER LIGHTS METER LIGHTS METER	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LITY SECONDARY CONNECTION	VOLTAGE ransformer         AVAILABLE FAULT CURRENT (F 480           CONDUCTOR 750         VOLTAGE 480         L(ft) 75         C 25,976         Total C 207,808         f 0.01         M 9         F 10,99           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=5.0%         16,667           3/0         208         15         12,844         12,844         0.16         0.86         14,344           To-Point* Method.         Imagin (LF)         C =Conductor *C* Value         M(n) =1 + (1+f(n))         x L × (n-1) × M(n)           as to the Engineer.         Nan the values listed. The E.C. shall field verify conductor lengths         F(n=F(n-1) × M(n)           eare for fault study purposes only and shall not be used for bidding or other calculations.         conductor lengths are less than the values shown.         eare for fault study purposes only and shall not be used for bidding or other calculations.           toted to limit the Fault Current to no more than 10kA at the Meter per the Utility Company         t value at the main service disconnect per NEC 110.24(A)         B881           Bubling for personnel and protective equipment prior to energizing equipment per<	C.3875 1139 1242 1145 1147 1244 1252 SUB SUB METER LIGHTS METER LIGHTS METER LIGHTS METER	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
150 kVA Utility Tr.         LOCATION (n)       # of RUNS         3000A SCC       8         480-SWBD-2       4         3875-HDP-1       3         3875-LDP-1       1         Panel 1145       1         NOTES:         1       All Calculations use Bussman "Point-1         2. Variables:       L=Feeder Le f(n) = (1.73)         3. The E.C. shall report any discrepancie       4. Conductor lengths shall not be less the and contact engineer immediately if 0         5. Conductor Lengths listed in this table       6. All in-line Utility Meters shall be protein requirements.         7. Label and date available fault current       8. Provide Arc-Flash Hazard study and le NEC 110.16 and NFPA 70E.         TUITY         SECONDARY CONNECTION CABINET 480/277V,	VOLTAGE ransformer       VOLTAGE 480       AVAILABLE FAULT CURRENT (F) 11,200 <sup>CONDUCTOR</sup> 750       VOLTAGE 480       L(ft) 75       C 25,976       Total C 207,808       f       M       F         750       480       15       21,391       85,564       0.01       0.99       11,039         500       480       350       18,506       55,518       0.25       0.80       8,777         Secondary of a 300kVA Transformer with Minimum %25.50%       16,667       3/0       208       15       12,844       12,844       0.16       0.86       14,344         To-Point" Method.       M(n) =1 + (1+f(n))       X L F(n-1)/(C x # of runs x Voltage) in Amperes       F(n)=F(n-1) x M(n)       st to the Engineer.         han the values listed. The E.C. shall field verify conductor lengths conductor lengths are less than the values shown.       M(n) =1 + (1+f(n))       x L F(n-1)/(C x # of runs x Voltage) in Amperes       F(n)=F(n-1) x M(n)         are for fault study purposes only and shall not be used for bidding or other calculations.       eted to limit the Fault Current to no more than 10kA at the Meter per the Utility Company         t value at the main service disconnect per NEC 110.24(A) abeling for personnel and protective equipment prior to energizing equipment per       MEL 3887 HDP-1       1200/4 A)         20000/2B       METERING       1200/4 A)       12	C.3875 1139 1242 1145 1147 1244 1252 SUB SUB METER LIGHTS METER LIGHTS METER LIGHTS METER	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
LOCATION (n)       # of RUNS         3000A SCC       8         480-SWBD-2       4         3875-HDP-1       3         3875-LDP-1       Panel 1145         Panel 1145       1         NOTES:         1. All Calculations use Bussman "Point-1         2. Variables:       L=Feeder Lef(n) = (1.73.2)         3. The E.C. shall report any discrepancie         4. Conductor lengths shall not be less that and contact engineer immediately if 0         5. Conductor Lengths listed in this table         6. All in-line Utility Meters shall be proterequirements.         7. Label and date available fault current         8. Provide Arc-Flash Hazard study and la NEC 110.16 and NFPA 70E.         LITY         SECONDARY CONNECTION CABINET 480/277V, 3-PHASE, 4W, 3000A	VOLTAGE ransformer         VOLTAGE 480         AVAILABLE FAULT CURRENT (F 11,200           CONDUCTOR 750         VOLTAGE 480         L(ft) 75         C 25,976         Total C 207,808         f 0.01         M 0.99         11,039           500         480         15         21,391         85,564         0.01         0.99         11,039           400         480         350         18,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %2=5.0%         16,667         3/0         208         15         12,844         12,844         0.16         0.86         14,344           To-Point* Method. ength (LF)         C=Conductor *C* Value         M(n) =1 + (1+f(n))         x L x F(n-1)/(C x # of runs x Voltage) in Amperes         F(n)=F(n-1) x M(n)         set to the Engineer.           han the values listed. The E.C. shall field verify conductor lengths conductor lengths are less than the values shown.         e         e         e         f(n)=f(n-1) x M(n)         set to the Engineer.           e are for fault study purposes only and shall not be used for bidding or other calculations.         e         e         f(n)=f(n-1) x M(n)         set to the Max and the Meter per the Utility Company           t value at the main service disconnect per NEC 110.24(A)         gamma and portective equipment prior to energizing	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
150 kVA Utility Tr         LOCATION (n)       # of RUNS         3000A SCC       8         480-SWBD-2       4         3875-HDP-1       3         3875-LDP-1       7         Panel 1145       1         NOTES:         1. All Calculations use Bussman "Point-T         2. Variables:       L=Feeder Le         f(n) = (1.73)         3. The E.C. shall report any discrepancie         4. Conductor lengths shall not be less th         and contact engineer immediately if of         5. Conductor Lengths listed in this table         6. All in-line Utility Meters shall be prote         requirements.         7. Label and date available fault current         8. Provide Arc-Flash Hazard study and la         NEC 110.16 and NFPA 70E.         TILITY         SECONDARY CONNECTION         CABINET 480/277V,         3.PHASE, 4W, 3000A         UTILITY         METER	VOLTAGE ransformer         AVAILABLE FAULT CURRENT (F) 480           2000000000000000000000000000000000000	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems meta connected, and fittings as required for electrical continuity per NEC 30 R METERING
150 KVA Utility Tr.         LOCATION (n) # of RUNS 3000A SCC 8 480-SWBD-2 4 3875-HDP-1 3 3875-LDP-1 Panel 1145 1         NOTES:         1. All Calculations use Bussman "Point-1 2. Variables:         L=Feeder Le f(n) = (1.73)         3. The E.C. shall report any discrepancie 4. Conductor lengths shall not be less th and contact engineer immediately if of 5. Conductor Lengths listed in this table 6. All in-line Utility Meters shall be protered requirements.         7. Label and date available fault current 8. Provide Arc-Flash Hazard study and la NEC 110.16 and NFPA 70E.         UTILITY         SECONDARY CONNECTION CABINET 480/277V, ASE, 4W         SECONDARY CONNECTION CABINET 480/277V, 3-PHASE, 4W, 3000A	VOLTAGE ransformer         AVAILABLE FAULT CURRENT (F) 480           CONDUCTOR 75         VOLTAGE 480         L(ft) 75         C 25,976         Total C 207,808         f 0.01         0.99         11,039           500         480         15         21,391         85,564         0.01         0.99         10,963           400         480         350         15,506         55,518         0.25         0.80         8,777           Secondary of a 300kVA Transformer with Minimum %Z=57.0%         16,667         3/0         208         15         12,844         12,844         0.16         0.86         14,344           To-Point* Method.         mgth (LF)         C=Conductor *C* Value         M(n) =1 + (1+f(n))         x 1 x F(n-1)/(C x # of runs x Voltage) in Amperes         F(n)=F(n-1) x M(n)           set to the Engineer.         han the values listed. The E.C. shall field verify conductor lengths         Conductor lengths are less than the values shown.         are for fault study purposes only and shall not be used for bidding or other calculations.           cted to limit the Fault Current to no more than 10kA at the Meter per the Utility Company         tvalue at the main service disconnect per NEC 110.24(A)         Baling for personnel and protective equipment prior to energizing equipment per           SDP         METERING         1200/4 A)         1200/4 A)         1200/4 A)         <	C-3875 1139 1242 1145 1147 1244 1252	250.4 Path for Fault Current. Provide complete raceway systems met connected, and fittings as required for electrical continuity per NEC 3

SCHEDULE:	1145				April 11, 2025	TRANSFORMER SCHEDULE FEEDER SCHEDULE - ALUMINUM	
: 225 Amperes 3Ø	, 4-WIRE		VOLTAGE L-L:	208	April 11, 2025	PRIMARY OCP     SIZE     GROUND     SECONDARY OCP     AMPACITY (#)     FEEDER     C	CONDI
or M.L.O: Surface	200A		VOLTAGE L-G: S.C.RMS RATING (AIC):	120 22,000		480V, 3Ø         KVA         CU         208V, 3Ø         -not all sizes used         # Sets         3Ø & N         G           30A         15         #8         50A         20 (60°)         1         #10         #10           50A         20         -00 (75°)         1         #10         #10	4\ 3/-
Existing Panelboard POLE LOAD (VA)	NEC Demand LOA	D DESCRIPTION Phas	SE LOAD DESCRIPTION	NEC Demand LOAD (VA	) POLE AMPS NO.	50A         30         #6         100A         20 (75°)         1         #12         #10           70A         45         #6         150A         30 (60°)         1         #8         #8           125A         75         #2         250A         30 (75°)         1         #10         #8	3/- 3/- 3/-
1 250	1.00 1.00	Existing Load A	Spare		2 30 <b>2</b> 2 30 <b>4</b>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3/-
1 250 1 250 <b>1 336</b>	1.00 1.00 <b>1.25</b>	Existing Load B Existing Load C Track Lighting A	Spare Storage Receptacles Storage Receptacles	1.00 540 1.00 900	<b>1 20</b> <u>6</u> <b>1 20</b> <u>8</u>		1 1-1,
1 336 1 735 1 1200	1.25	Lighting B Exterior Signage C	Storage Receptacies Show Window Range Display	1.00 900 1.00 180 1.00 180	<b>1 20</b> 10	SOUA         SOUA <th< td=""><td>1 1-1,</td></th<>	1 1-1,
1 1200 1 1128 1 360		play Kitchen DW A Wifi Router B	Convenience Recepts Grill Receptacle	1.00 180 1.00 360 1.00 1800	<b>1 20</b> <u>12</u> <b>1 20</b> 14 <b>1 20</b> 16	$\frac{1}{6}$ shall be rated at not more than 125% of the rated secondary current of the $70 (60^{\circ})$ $1 \#2 \#6$	1-1, 1-1,
1 300 1 202 1 1500	1.25 UC	and Toe Kick Ltg C	Convenience Recepts Storage Room	1.00 1800 1.00 360 1.00 720	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	transformer. Primary OCP shall be rated at not more than 250% of the rated $70(75^{\circ})$ 1 #3 #6	1-1, 1-1,
1 750 1 360	0.65 Dis	play Kitchen Ref B ay Kitchen Hood C	Spare RTU-1	1.00 4070	<b>1 20</b> 22	Primary shall be 3-Wire and Secondary shall be 4-Wire unless noted otherwise. 80 (75°) 1 #2 #6	1-1, 2
1 720 1 540	1.00 Conv	enience Recepts A enience Recepts B	RTU-1 RTU-1	1.00 4070 1.00 4070	3	at the Transformer Secondary in accordance with NEC 250.30(A). Provide 90 (75°) 1 #2 #6	1-1, 2
1 360 1 360		ay Kitchen Hood C TTB A	Office 1 Receptacles Office 2 Receptacles	1.007201.00540	<b>1 20</b> <u>30</u> <b>1 20</b> 32	accordance with 250.104(D) and sized in accordance with with 100 (75°) 1 #1 #6	1-1, 2
1 360 2 5050	1.00 0.65	IT B Electric Range C	IWH-1 IWH-2	1.0013001.001300	<b>1 20</b> 34 <b>1 20</b> <u>36</u> 38	The installation shall meet all NEC 250 grounding and bonding requirements.	2
2 5050 2 5050	0.65 0.65	Electric Range A Electric Range B	Bussed Space Bussed Space		40	173 $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$ $173$	2 2-1,
2 5050	0.65	Electric Range C			42	2or Metal Water Pipe in accordance with 250.104(D) and sized in accordance2251300#2with NEC Table 250.662501350#2	3
CTED LOAD: E A (VA): 15,934		CA	ALCULATED DEMAND LOAD: PHASE A (VA):			Transformers shall meet minimum efficiency requirements for3001500#2DOE 10 CFR 431 in accordance with IECC C405.735024/0#1	3-1, 2-1,
E B (VA): 15,395 E C (VA): 19,642			PHASE B (VA): PHASE C (VA):	15,905		Bool         Constraint         Constraint <td>3</td>	3
AD (VA): 50,971		CALCU	LATED DEMAND LOAD (VA):	42,784 <b>118</b> .	76 A		3-1,
rk shown in BOLD						800         3         400         3/0           1000         4         350         4/0	3
il remove all unused c	ircultry back to panels	and label (type writter	n) panel schedules "SPARE" :	and turn breaker to "UF	-" position.	1200         4         500         250           1600         8         250         350	3-1,
						1000         7         500         400           2500         8         500         600	3-1, 3-1,
	-1 · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	il 11, 2025	3000 10 500 600 3500 11 600 500 CH	3-1/
Equipment Loa kW HP	d Volt ( Amps	Branch Circuit     Conductors	Conduit Disconnect	E Panel-Circu Fuse	it Comment	t     4000     11     750     500 Cu       This table indicates minimum conductor size for feeders of the a	3-1,
1.3 10	D.8 A 120	L 2#10,#10G	3/4" 30A/1P	1145 - 34		indicated where #/W indicates the #-Ampacity and W-number of #S/W indicates no ground. All conductors shall be Alumimum un	' wires
1.3 10	0.8 A 120 :	L 2#10,#10G	3/4" 30A/1P	1145 - 36		Conductor Ampacities shall be based on Table 310.16 60° columnation and 75° column above 100A unless otherwise permited by NEC.	mn up
	OA CKT   120   1	L 2#12,#12G	3/4" Sto	- SEE COI	MMENTS 1	rating shall be selected in accordance with NEC 110.14 (C). The master electrician shall be responsible for ensuring that no f	-
	20A CKT 120 2		3/4" Sto	- SEE COI		circuits are installed in a manner or sized in such a way as to vio Service Ground Table	olate th
ent where applicable)						150G #4 20EG	arour
ation and confirm elect			vider prior to any work. Conf nplete and code compliant i		h	200G         #2         60EG           300G         1/0         100EG           5000         2/0         2000 10000 mg	
controls and wiring as	required for proper op	eration of equipment.	Field verify control requirem		ovider	500G         3/0         200-1200A pe           1000G         4/0         1600EG           10002         200-2000         200-2000	er Adov
ers for all dedicated c		nt and provide local d	lisconnecting means in acco			>1000G     250     2000EG       Service Ground Conductor sized Per NEC Table 250.66 Equipment	
			eparate overload device whe	ere required in accordar	ice with	sized per NEC Table 250.122 All conductors shall be Aluminum of The service ground chart indicates the minimum Service Ground	l Cond
l meet minimum efficio	ency requirements in a	cordance with IECC I	ables C405.8(1-4).			where # is the ampacity from the chart above, and the equipment the minimum equipment grounding conductor size #EG where #	is the
on box and 40VA Tran	sformer and connectior	n for airflow zone valve	e as required. Connect to ne	arest 120V circuit.		AREA OF OF Where discrepancies occur between the Feeder Schedule and the OF	ne Gro
						WORK       the larger conductor shall be used unless otherwise permitted by         PANEL       PANEL<	equire
FAULT CU	RRENT CALCUL	ATION TABLE		April 9, 20	)25	PANEL C-3875PANEL 1139PANEL 1242PANEL 1145PANEL 1145PANEL 1147PANEL 1244PANEL 1252PANEL 250.4 Path for Fault Current. Provide complete raceway systems connected, and fittings as required for electrical continuity per N	
	150 kVA Utility	Transformer	VOLTAGE 480	AVAILABL	<u>E FAULT CURRENT (F)</u> 11,200		
				o <b>T</b> 1 1 0 (		SUB SUB SUB SUB SUB SUB SUB	
LOCATI 30004 480-SV	SCC 8	<u>S CONDUCTOR</u> 750 500		<u>C Total C f</u> .976 207,808 0.0 .391 85,564 0.0		METER METER METER METER METER METER	
3875-l 3875-l	IDP-1 3	400		506 55,518 0.2	5 0.80 <b>8,777</b>	(M) = (M)	
Panel		3/0		,844 12,844 0.1			
	ons use Bussman "Poin					1000A/3P (200A/3P (200A/2P))))))))))))))))))))))))))))))))))))	
2. Variables:		3 x L x F(n-1))/(C x # o	C=Conductor "C" Value of runs x Voltage) in Amperes		$=1 \div (1+f(n))$ F(n-1) x M(n)		
4. Conductor le		than the values listed	d. The E.C. shall field verify c re less than the values show			MAIN DISTRIBUTION PANEL '3875-LDP-1', 1000A 208/120V, 3-PHASE, 4W, 22KAIC	
5. Conductor L	engths listed in this tab	le are for fault study p	purposes only and shall not ult Current to no more than 1	be used for bidding or o			
requirement	S.		service disconnect per NEC :		e ounty company		
	Flash Hazard study and and NFPA 70E.	labeling for personne	el and protective equipment	prior to energizing equi	oment per	PANEL PANEL	
						1143 1250	
						1000/4 SUB SUB OUTSIDE METER METER LIGHTS	
						XFMR 300 kVA     METER     METER     LIGHTS       M     M     M     METERING	
						600/3 100/4 125/4	
				PANEL	PANEL	(600A/3P (100A/3P (125A/3P (20A/3P SPACE	
				3881 HDP-1	3887 HDP-1		
						MAIN DISTRIBUTION PANEL '3875-HDP-1', 800A 480/277V, 3-PHASE, 4W, 65KAIC	
			SDP METERING	(1200/4 AI)	(1200/4 AI	N) (800/4 AI)	
SECONDARY							
CABINET 4 3-PHASE, 4	·80/277V,	3000A/3P	(60A/3P (15A/3P	SP/ ( 1200A/3P ( 1200A/3P))))))))))))))))))))))))))))))))))))	ARE 1200A/3P ( 1200A/3F	3P (800A/3P SPACE	
UTI ME	LITY TER		MAIN SWITCHBOARD '480 480/277V, 3-PHASE, 4W		A000		
	M)	>1000	 0G)				
		- 1000					



#### ONE LINE DIAGRAM

SCALE: NTS

ONE LINE DIAGRAM GENERAL NOTES: 1. E.C. TO FIELD VERIFY EXISTING CONDITIONS

2. ALL EQUIPMENT IS EXISTING. NO NEW WORK.

CONDUIT (W)				
4W	ЗW			
3/4" 3/4" 3/4" 3/4"	3/4"			
3/4"	3/4"			
3/4"	3/4" 3/4" 3/4"			
3/4"	3/4"			
1"	I			
1"	1"			
1-1/4"	1-1/4"			
1"	1"			
1-1/4"	1-1/4"			
1-1/4"	1-1/4"			
1-1/4"	1-1/4"			
1-1/4"	1-1/4"			
1-1/2"	1-1/2"			
1-1/4"	1-1/4"			
2"	2"			
2 1-1/4"	<u> </u>			
2"	1-1/4" 2"			
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2"	1-1/2			
	2"			
2"	2"			
2"	2"			
2"	2" 2" 2"			
2-1/2"	Z-1/ Z			
3"	3"			
3"	3"			
3-1/2"	3-1/2"			
2-1/2"	2-1/2"			
3"	3"			
3"	3"			
3-1/2"	3-1/2"			
3"	3"			
3"	3"			
3"	3"			
3-1/2"	3-1/2"			
3"	3"			
3-1/2"	3-1/2"			
3-1/2"	3-1/2"			
3"	3"			
3-1/2"	3-1/2"			
3-1/2"	3-1/2"			
,	J-T\			
mpacity wires,				
less otherwi				
nn up to 10	UA			
Ampacity				

GRADE LEVEL

AMPACITY (#)	FEEDER			CONDUIT (W	)
-not all sizes used	# Sets	3Ø & N	G	4W	 
20 (60°)	1	#12	#12	3/4"	3/4
20 (75°)	1	#12	#12	3/4"	3/4
30 (60°)	1	#10	#10	3/4"	3/4
30 (75°)	1	#10	#10	3/4"	3/4
40 (60°)	1	#8	#10	1"	1"
40 (75°)	1	#8	#10	1"	1"
50 (60°)	1	#6	#10	1"	1"
50 (75°)	1	#8	#10	1"	1"
60 (60°)	1	#4	#10	1-1/4"	1-1/
<u>60 (75°)</u>	1	#6	#10	1"	1"
70 (60°)	1	#4	#8	1-1/4"	1-1/
70 (75°)	1	#4	#8	1-1/4"	1-1/
80 (60°)	1	#3	#8	1-1/4"	1-1/
80 (75°)	1	#4	#8	1-1/4"	1-1/
90 (60°)	1	#2	#8	1-1/4"	1-1/
90 (75°)	1	#3	#8	1-1/4"	1-1/
100 (60°)	1	#1	#8	1-1/2"	1-1/
100 (75°)	1	#3	#8	1-1/4"	1-1/
110	1	#2	#6	1-1/4"	1-1/
125	1	#2	#6	1-1/2"	1-1/
150	1	1/0	#6	2"	2"
175	1	2/0	#6	2"	2"
200	1	3/0	#6	2"	2"
225	1	4/0	#0	2-1/2"	2-1/
250	1	250	#4	3"	3"
300	1	350	#4	3"	3"
380	1	500	#4	3-1/2"	3-1/
400	2	3/0	#3	2"	2"
500	2	250	#3	3"	3"
600	2	350	#2	3"	3"
760	2	500	1/0	3-1/2"	3-1/
800	3	300	1/0	3"	3"
1000	3	400	2/0	3"	3"
1200	4	350	3/0	3"	3"
1200	5	400	4/0	3"	3"
2000	6	400	250	3"	3"
2500	7	500	350	3-1/2"	3-1/
3000	8	500	400	3"	3"
3500	10	500	500	4"	4"
					-
4000 This table indicates	11	500	500	4"	4"
ndicated where #/\ #S/W indicates no { Conductor Ampaciti and 75° column ab	ground. All conc es shall be bas ove 100A unles	ductors shall I ed on Table 3 ss otherwise p	be Copper un 10.16 60° co permited by N	less otherwise olumn up to 10	
rating shall be seled The master electrici				no foodore or b	ranch
circuits are installed					
Service Ground				nt Ground Ta	
150G	#6		20EG		#12
200G	#4		60EG		#10
300G	#2		100EG		#8
500G	1/0		200-1200A	per Above	4 / 2
1000G	2/0		1600EG		4/0
>1000G	3/0		2000EG	-	250
Service Ground Con					
sized per NEC Table The service ground where # is the amp the minimum equip	chart indicates acity from the c ment grounding	the minimum hart above, a g conductor s	Nervice Ground the equiprize #EG where	ind Conductor nent ground ch e # is the rating	based or nart indic
the overcurrent dev Where discrepancie the larger conducto	s occur betwee r shall be used	en the Feeder unless otherv	Schedule and vise permitted	d the Groundin d by the NEC.	
	u moot all NEC	250 groundir	ig and bondir	ig requirement	s includir

d.keller	D.Keller Electrical Desig 7498 West Layton Place Littleton, Colorado 801 303.918.9475 Dawn@dkellereng.com
THE DESIGNERY @YSY	1855 BLAKE STREET, DENVER, CO 80202
STAMP & SIGNATI	JRE: 50 L/CS V STATE 5872 S 5872 S MAL FNO S NAL FNO S NAL FNO S Date 04.11.2025
DATE: PROJECT #:	04.11.2025 2017.01/DK25.049

E001

## **COM***check* Software Version COMcheckWeb Interior Lighting Compliance Certificat

В

Project Information Energy Code: Project Title: Project Type:

2021 IECC The Designery @ YSY New Construction

Owner/Agent: Construction Site: 1855 Blake Street Denver, Colorado 8020

Additional Efficiency Package(s)

Credits: 10.0 Required 0.0 Proposed **Allowed Interior Lighting Power** 

Area Category	Floor Area (ft2)	Allowed Watts / ft2	
1-Kitchen/Bath Design Studio (Retail)	2400	0.84	
	Tota	al Allowed Watts	s
Proposed Interior Lighting Power A Fixture ID : Description / Lamp / Wattage Per Lamp / Ball	B ast Lamps Fixture		
1-Kitchen/Bath Design Studio (Retail) LED: A1: 2'x2' Troffer: Other: LED: A2: 1'x4' Surface Mount: Other: LED: D: Downlight: Other: LED: (E) S: 8' Strip: Other: LED: S: 4' Strip Light: Other: Track Lighting: T: Track Lighting: Wattage based on 42 feet of track LED: TP: Tape Light: Other: LED: UC: Undercounter: Other: LED: V: Vanity: Other:	1 1 1 1 1 0 1 1 1	4 4 7 2 0 80 27 2	
Interior Lighting PASSES: Design 16% better than code Interior Lighting Compliance Statement	Т	Fotal Proposed V	N

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the l specifications, and other calculations submitted with this permit application. The proposed interior lighting systems designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any application mandatory requirements listed in the Inspection Checklist.

awn Keller	Dame	04.07.2025
lame - Title	Signature	Date



Requirements: 100.0% were addressed directly in the COM*check* software Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C406 [PR9] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

	1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tie	er 3)	
ject Title:	1High Impact (Tier 1)The Designery @ YSY	2 Medium Impact (Tier 2)	3 Low Impact (Tie	er 3) Report date:	04/02/2

**Comments/Assumptions** 

ice C				
Dawn Ke D.Keller 7498 W Littleton 303.918	Electrical De Layton Place , Colorado 8	9 0123		
3 Area :2)	C Allowed Watts / ft		D llowed Watts	
400	0.84		2016	-
Tota	l Allowed Wa	itts =	2016	
B Lamps/ Fixture			E (C X D)	_
1	4	28	112	
1	4	36	144	
1	4	13	52	
1	7	61	427	
1	2	41	82	
0	0	336	336	
1	80	4	360	
1	27	4	122	
1	2	25	50	_
Τc	otal Propose	d Watts =	1684	
posed inter	onsistent wil ior lighting s ply with any	ystems ha	ive been	

#	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
& Req.ID			
C405.2.3. 1 [EL22] <sup>1</sup>	Spaces required to have light- reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.1, C405.2.1. 1 [EL18] <sup>1</sup>	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.1. 2 [EL19] <sup>1</sup>	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time- switch.	□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement does not apply.
C405.2.1. 3 [EL20] <sup>1</sup>	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.2, C405.2.2. 1 [EL21] <sup>2</sup>	Each area not served by occupancy sensors (per C405.2.1.1) have time-	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

 1
 High Impact (Tier 1)
 2
 Medium Impact (Tier 2)
 3
 Low Impact (Tier 3)

Section	
# & Req.ID	Rou
C405.2.4, C405.2.4. 1, C405.2.4. 2 [EL23] <sup>2</sup>	Dayligh individu lights in lighting Dayligh applica respon section
C405.2.5 [EL27] <sup>1</sup>	Additio allowed approv automa separa
C405.7 [EL26] <sup>2</sup>	Low-vo electric minimu Table (
C405.8 [EL27] <sup>2</sup>	Electric efficier C405.7 Efficier under a prograf ratings manufa prograf
C405.9.1, C405.9.2 [EL28] <sup>2</sup>	Escalat with AS automa reduce permiti ASME A local co passen
C405.10 [EL29] <sup>2</sup>	Total v combir circuits
C405.1.1 [EL30] <sup>2</sup>	At leas permai have la lumina or com
C405.11, C405.11.1 [EL31] <sup>2</sup>	50% of installe confere rooms, and > for mod automa accord
Additiona	al Com

Data filename:



Project Title:	The De
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Report date: 04/02/25

Page 3 of 5

Project Title: The Designery @ YSY Data filename:

Section

# Rough-In Electrical Inspection Complies?

ugh-In Electrical Inspection	Complies?	Comments/Assumptions
ght zones provided with dual controls that control the independent of general area ng. See code section C405.2.3 ght-responsive controls for cable spaces, C405.2.3.1 Daylight nsive control function and n C405.2.3.2 Sidelit zone.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
onal interior lighting power ed for special functions per the ved lighting plans and is natically controlled and ated from general lighting.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
oltage dry-type distribution ic transformers meet the num efficiency requirements of C405.6.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
ic motors meet the minimum ency requirements of Tables 7(1) through C405.7(4). ency verified through certification an approved certification am or the equipment efficiency is shall be provided by motor facturer (where certification ams do not exist).	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
ators and moving walks comply SME A17.1/CSA B44 and have natic controls configured to e speed to the minimum tted speed in accordance with A17.1/CSA B44 or applicable code when not conveying ngers.	□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement does not apply.
voltage drop across the ination of feeders and branch ts <= 5%.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
st 90% of dwelling unit anently installed lighting shall lamp efficacy >= 65 lm/W or aires with efficacy >= 45 lm/W nply with C405.2.4 or C405.3.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
of 15/20 amp receptacles ed in enclosed offices, rence rooms, copy rooms, break s, classrooms and workstations 25% of branch circuit feeders odular furniture will have natic receptacle control in dance with C405.11.1.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
nments/Assumptions:		

 
 1 High Impact (Tier 1)
 2 Medium Impact (Tier 2)
 3 Low Impact (Tier 3)
 Project Title: The Designery @ YSY

Page 4 of 5

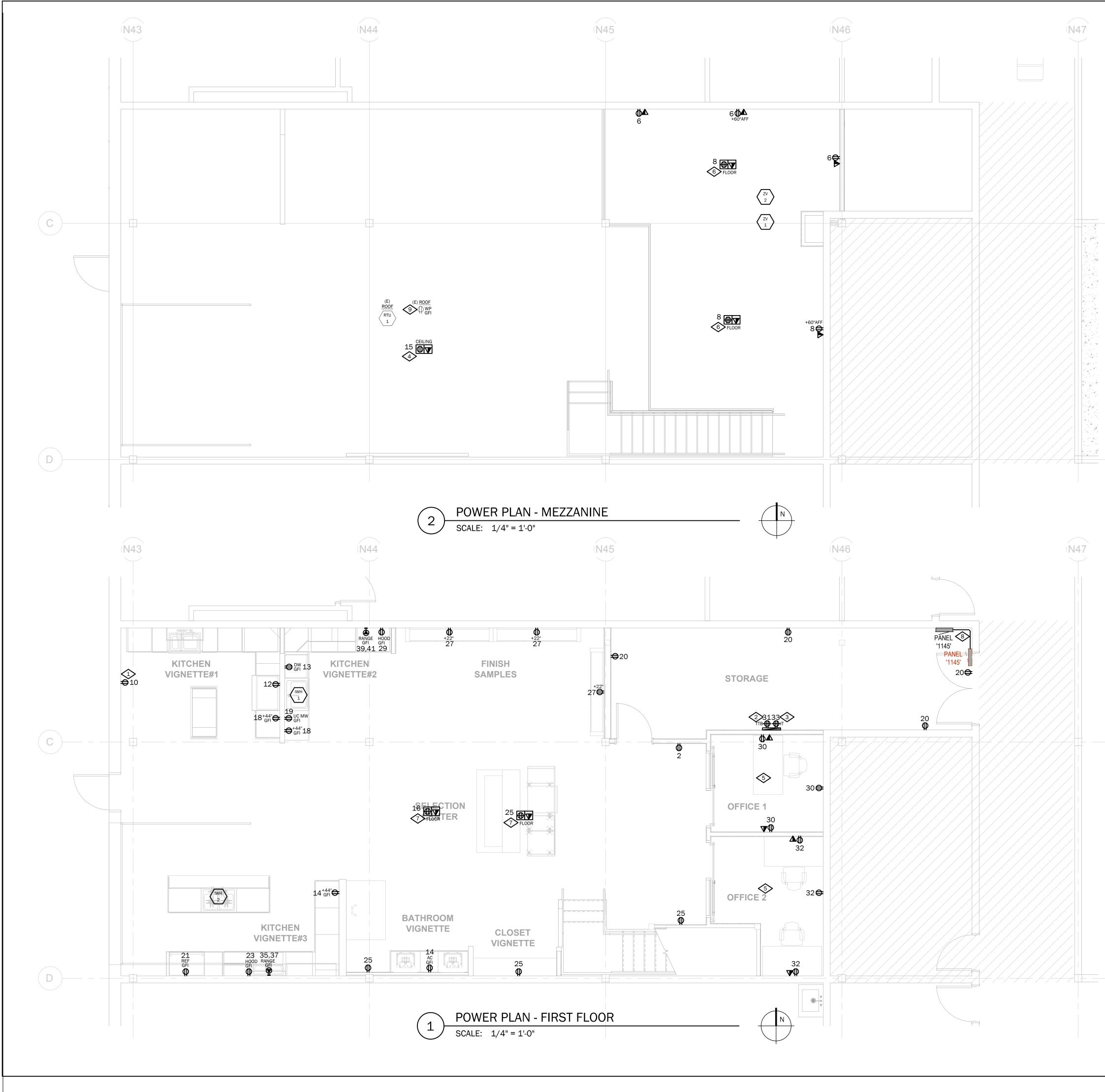
Report date: 04/02/25

Final Inspection	Complies?	Comments/Assumptions	
shed O&M instructions for ms and equipment to the ng owner or designated sentative.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.	
ng operations and maintenance nents will be provided to the r. Documents will cover facturers' information, fications, programming dures and means of illustrating ner how building, equipment and ms are intended to be installed, ained, and operated.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.	
hed as-built drawings for ic power systems within 90 days tem acceptance.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.	
ng systems have been tested to e proper calibration, adjustment, amming, and operation.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.	
mmonts/Assumptions:			

Additional Comments/Assumptions:

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
		Report date: 04/02/2





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POWER PLAN GENERAL NOTES:

- 1. THIS DESIGN IS DIAGRAMMATICAL. REFER TO MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION MANUALS FOR SPECIFIC LOCATIONS AND INSTALLATION DETAILS. REFER TO ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS.
- 2. ALL REUSED MATERIALS OR EQUIPMENT SHALL BE IN GOOD CONDITION AND THE SYSTEM SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND IN GOOD WORKING ORDER AT THE COMPLETION OF THE PROJECT.
- 3. PROVIDE GFI OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
- 4. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
- 5. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
- 6. ALL RECEPTACLES IN BATHROOMS, KITCHENS, ROOFTOPS, EXTERIOR, AND WITHIN 6FT. OF A SINK, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GFI CIRCUIT BREAKER) PER NEC 210.8(B) AND 422.5. THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC.
- 7. PROVIDE CONNECTION TO TENANT SIGN. FIELD VERIFY ELECTRICAL REQUIREMENTS AND FINAL LOCATION WITH PROVIDER, TENANT AND LANDLORD. PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.
- 8. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN PANEL 'A' UNLESS NOTED.
- 9. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS.
- 10. PROVIDE ALL DEMOLITION WORK AS REQUIRED TO ACCOMMODATE THE NEW WORK AS INDICATED ON THE ELECTRICAL PLANS. FIELD VERIFY EXISTING CONDITIONS. PROVIDE ANY ADDITIONAL WORK NECESSARY AS REQUIRED TO PRESERVE EXISTING DEVICES AND BRANCH CIRCUIT COMPONENTS TO REMAIN. REFER TO THE ARCHITECTURAL PLANS FOR DEMOLITION SCOPE OF WORK AND VISIT THE SITE PRIOR TO BID TO DETERMINE THE ELECTRICAL SCOPE OF WORK REQUIRED.
- POWER PLAN KEYED NOTES:
- 1. SHOW WINDOW PROVIDE FLUSH MOUNTED DUPLEX OUTLET IN CEILING OR WALL WITHIN 18" MAXIMUM ABOVE STOREFRONT FOR SHOW WINDOW LIGHTING IN ACCORDANCE WITH NEC 210.62.
- 2. TELEPHONE BOARD LOCATION (TTB) THE EC SHALL PROVIDE AND INSTALL <sup>3</sup>/<sub>4</sub>"x24"x48" PLYWOOD BACKBOARD, INSTALL TIGHT TO CEILING AND PAINT TO MATCH WALL. PROVIDE 1"C WITH PULL STRING BACK TO THE BUILDING TELEPHONE/ DATA SERVICE ENTRANCE. PROVIDE DEDICATED NEMA 5-20R RECEPTACLE +84"AFF ON TTB AND CIRCUIT AS SHOWN. FIELD VERIFY LOCATION, MOUNTING HEIGHT AND ORIENTATION AND ADDITIONAL REQUIREMENTS WITH TENANT.
- 3. IT EQUIPMENT PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS WITH EQUIPMENT PROVIDER PRIOR TO ROUGH-IN.
- 4. WIRELESS ACCESS POINT PROVIDE OUTLET IN ACCESSIBLE CEILING FOR EACH WI-FI ROUTER. CONNECT TO SEPARATE CIRCUIT.
- 5. RECEPTACLE CONTROL ZONE RECEPTACLES IN THIS AREA REQUIRE AUTOMATIC CONTROL PER IECC 405.11(1). VERIFY FINAL LOCATION AND CONTROL METHOD WITH ARCHITECT AND TENANT.
- 5.1. CONTROL AT LEAST 50% OF THE RECEPTACLES IN EACH AREA IN ITS ENTIRETY IF LOCATED NO FURTHER AWAY FROM AN UNCONTROLLED RECEPTACLE. A CONTROLLED RECEPTACLE SHALL BE LOCATED WITHIN 12 INCHES OF EACH UNCONTROLLED RECEPTACLE. OR
- 5.2. PROVIDE AND INSTALL LEGRAND PASS AND SEYMOUR 5262CHW OR EQUAL HALF-CONTROLLED PLUG LOAD CONTROLLABLE RECEPTACLES.
- 6. POKE-THROUGH FLUSH MOUNTED FLOOR BOX PROVIDE DEVICE WITH QUADRAPLEX RECEPTACLE AND 4 DATA PORTS, WIREMOLD RC4 SERIES: RC4ATCBK WITH A COM75 ADAPTER. PROVIDE X-RAY AND CORE DRILLING AS REQUIRED. COORDINATE ALL WORK WITH LANDLORD.
- 7. CONCRETE FLUSH MOUNTED FLOOR BOX PROVIDE SAW CUT, REMOVE AND REPLACE EXISTING CONCRETE SLAB TO ACCOMMODATE POWER AND DATA CONDUITS, HUBBEL SYSTEMONE WITH SCUBSHIELD OR WIREMOLD 880 OMNIBOX WITH TOPGUARD WITH QUAD OUTLET AND 2 TELE/DATA PORTS. FIELD VERIFY FINAL LOCATION OF DEVICES AND WIRING REQUIREMENTS.
- 8. RELOCATE PANELBOARD REMOVE AND RELOCATE EXISTING PANELBOARD TO NEW LOCATION. MAINTAIN EXISTING BRANCH CIRCUIT CONNECTIONS. PROVIDE NEW CONDUIT, JUNCTION BOXES, WIRING AND BRANCH CIRCUIT COMPONENTS AS WORK AS REQUIRED FOR A COMPLETE INSTALLATION.
- 9. FIELD VERIFY EXISTING OR PROVIDE NEW ROOFTOP GFI OUTLET WITHIN 25' OF EQUIPMENT, CONNECT NEW OUTLET, IF REQUIRED, TO EXISTING 20A CIRCUIT FEEDING OTHER RECEPTACLES IN THIS AREA.
- AUTOMATIC RECEPTACLE CONTROLS WILL BE REQUIRED PER IECC 405.11(1) VERIFY FINAL LOCATION AND CONTROL METHOD WITH ARCHITECT AND TENANT.
- a. AT LEAST 50% OF ALL 125V 15 AND 20AMP PERMANENTLY INSTALLED RECEPTACLES IN ENCLOSED OFFICES, CONFERENCE ROOMS, COPY/PRINT ROOMS, BREAKROOMS, AND INDIVIDUAL WORKSTATIONS MUST BE SWITCHED OFF VIA ONE OF THREE METHODS LISTED BELOW.
   i.a. SCHEDULE BASED CONTROL.
- ii.b. OCCUPANCY SENSOR CONTROLS.
- iii.c. A SEPARATE SYSTEM SUCH AS SECURITY SYSTEM.

iij.EXCEPTIONS INCLUDE SAFETY AND SECURITY AND RECEPTACLES THAT CONTROL EQUIPMENT THAT IS REQUIRED TO RUN 24/7 365.

iik. 25% OF MODULAR FURNITURE RECEPTACLES MUST BE CONTROLLED AUTOMATICALLY.

iii.RECEPTACLES CAN BE SPLIT CONTROLLED OR CONTROLLED IN ENTIRETY IF LOCATED NO FURTHER THAN 12" AWAY FROM UNCONTROLLED RECEPTACLE.iim. SCHEDULE BASED CONTROLS REQUIRED:

- i.a. ABILITY TO USE TIME OF DAY SCHEDULING.
- ii.b. EACH DAY OF WEEK MUST BE ABLE TO BE PROGRAMMED SEPARATELY.
- iii.c. ZONES OF RECEPTACLES CONTROLLED TOGETHER MUST NOT EXCEED 5,000SF.
- iv.d. OCCUPANTS MUST BE PROVIDED WITH MANUAL OVERRIDE SWITCH FOR EACH ZONE OF NO MORE THAN 2 HOURS OVERRIDE OUTSIDE OF SCHEDULED HOURS.
- iw. OCCUPANCY SENSOR CONTROLS.
- i.a. USE THE SAME SENSOR(S) THAT CONTROL THE LIGHTING LOADS IN THE SPACE WITH ADDITIONAL POWER PACKS OR ROOM CONTROLLERS FOR THE PLUG LOAD CIRCUITS, 20-MINUTE MAX TIME-OUT.
- j. SEPARATE SYSTEM CONTROLS
- i.a. USING SOMETHING LIKE A SECURITY SYSTEM THAT CAN TURN PLUG LOADS OFF AFTER A SPACE IS VACANT FOR 20 MINUTES.



610.442.1739

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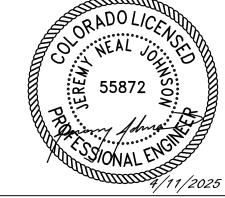
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D.Keller Electrical Design 7498 West Layton Place Littleton, Colorado 80123 303.918.9475 Dawn@dkellereng.com

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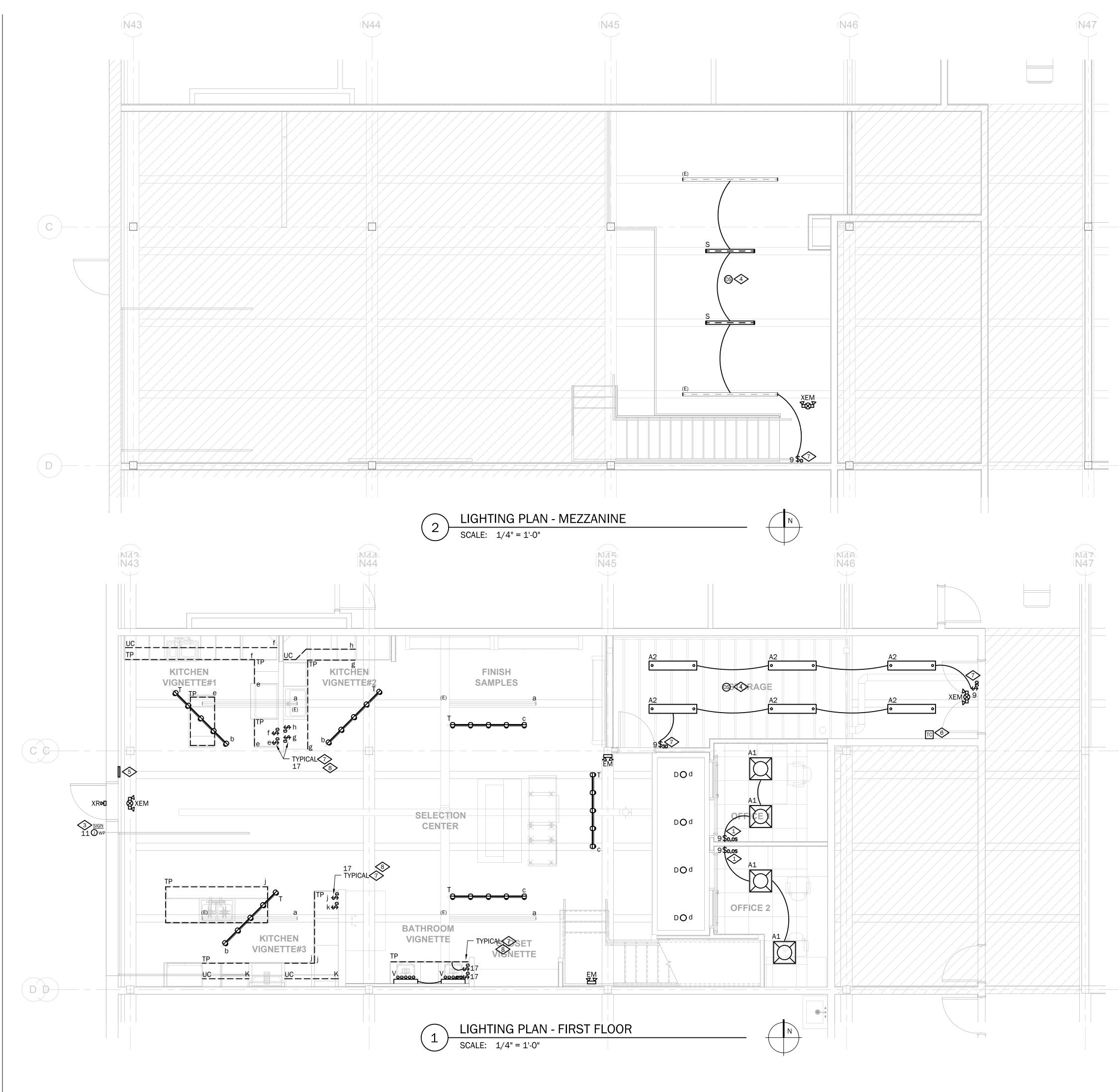


History FOR PERMIT <u>Date</u> 04.11.2025

DATE:	04.11.2025
PROJECT #:	2017.01/DK25.049
DRAWN BY:	DMK
DESIGNED BY:	DMK
CHECKED BY:	DMK

#### POWER PLANS





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LIGHTING PLAN GENERAL NOTES:

- 1. THIS DESIGN IS DIAGRAMMATICAL. REFER TO MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION MANUALS FOR SPECIFIC LOCATIONS AND INSTALLATION DETAILS. REFER TO ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS.
- 2. ALL REUSED MATERIALS OR EQUIPMENT SHALL BE IN GOOD CONDITION AND THE SYSTEM SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND IN GOOD WORKING ORDER AT THE COMPLETION OF THE PROJECT.
- 3. CONNECT EGRESS LIGHTING FIXTURES AND EXIT SIGNS TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700.12(I) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EM/NL).
- 4. PROVIDE OUTLET IN ACCESSIBLE LOCATION AT TENANT ENTRANCE FOR SIGN PER NEC 600.5.
- 5. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN PANEL 'A' UNLESS NOTED.
- 6. EXIT SIGNS TYPE 'X' AND/OR 'XEM' AND EGRESS LIGHTS TYPE 'EM' SHALL BE NEW WITH EMERGENCY BATTERY PACK, MATCH EXISTING BUILDING STANDARD FIXTURES.
- 7. PROVIDE NEUTRAL AND GROUND CONDUCTORS THROUGHOUT ALL LIGHTING BRANCH CIRCUITS INCLUDING ALL SWITCH OR LIGHTING CONTROL DEVICE LOCATIONS IN ACCORDANCE WITH NEC.

#### LIGHTING CONTROL NOTES:

- 1. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM IN ACCORDANCE WITH ENERGY CODE AND IECC REQUIREMENTS AND COMPATIBLE WITH INSTALLED LIGHT FIXTURE TYPES. PROVIDE ANY ADDITIONAL POWER/SWITCH PACKS, SENSORS, DIMMING MODULES, POWER AND CONTROL WIRING, OR OTHER SENSOR/POWER/CONTROL INTERFACE DEVICE THAT IS NECESSARY FOR A COMPLETE INSTALLATION.
- 2. ONE POWER PACK (SWITCH PACK) IS NEEDED PER CIRCUIT/ZONE TO BE CONTROLLED BY LOW VOLTAGE SENSORS. NOT ALL REQUIRED COMPONENTS ARE SHOWN ON DRAWINGS. LOCATE POWER PACKS IN AN ACCESSIBLE, INCONSPICUOUS LOCATION. POWER PACK LOCATIONS SHALL BE CONSISTENT THROUGHOUT PROJECT AND CLEARLY NOTED ON AS-BUILT DRAWINGS.
- 3. ADDITIONAL SENSORS AND TYPES OF SENSORS MAY BE REQUIRED TO PROVIDE COMPLETE COVERAGE DEPENDING ON FINAL PARTITION HEIGHT/PLACEMENT, FURNITURE PLACEMENT, EQUIPMENT HEIGHT/PLACEMENT, AND SHELVING HEIGHT/PLACEMENT. CONTRACTOR TO COORDINATE WITH MANUFACTURER/SUPPLY SHOP DRAWINGS ACCORDINGLY.
- 4. PLACE AND ORIENT CEILING SENSORS PER MANUFACTURER SUPPLIED SHOP DRAWINGS FOR MAXIMUM COVERAGE/SENSITIVITY.
- 5. PROVIDE LOW VOLTAGE OR LINE VOLTAGE, PASSIVE INFRARED (PIR), ULTRASONIC, OR DUAL TECHNOLOGY, DAYLIGHT/HARVESTING, PHOTOSENSOR, AND VACANCY SENSORS AS REQUIRED IN EACH ILLUMINATED AREA FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- 6. WHERE LIGHT SWITCHES ARE USED IN ADDITION TO OCCUPANCY SENSORS, LIGHT SWITCH SHALL OVERRIDE OCCUPANCY SENSOR (SWITCH CAN TURN LIGHTS OFF WHEN OCCUPANCY SENSOR CALLS FOR THEM TO BE ON; SWITCH CANNOT TURN LIGHTS ON WHEN OCCUPANCY SENSOR TURNS THEM OFF, SWITCH AND OCCUPANCY SENSOR ARE WIRED IN SERIES).
- 7. PROVIDE 10 MINUTE TIME (OFF) DELAYS IN STORAGE ROOMS AND SMALL RESTROOM'S, ALL OTHERS SHALL HAVE 20 MINUTE DELAYS.
- PROVIDE WIRE GUARDS IN ANY AREA WHERE SENSORS ARE SUBJECT TO DAMAGE.
   PROVIDE SENSORS SUITABLE FOR COLD WEATHER APPLICATIONS WHERE LOCATED IN ANY UNHEATED AREA.
- 10. PROVIDE ADDITIONAL POLES (OR AUX RELAY) FOR CONTROL OF EXHAUST FANS, OR SIMILAR DEVICES, WHERE SHOWN ON DRAWINGS AND/OR NOTED IN MECHANICAL SCHEDULES AND AS REQUIRED FOR IECC COMPLIANCE.
- 11. LOW VOLTAGE WIRING ABOVE ACCESSIBLE CEILINGS PERMITTED WHERE PLENUM RATED AND INSTALLED PER CODE REQUIREMENTS.
- 12. FIXTURES CONTROLLED BY DIMMERS SHALL BE PROVIDED WITH ALL REQUIRED DIMMING EQUIPMENT AND CONNECTIONS MADE (AND DAYLIGHT CONTROL WHERE APPLICABLE) WITH COMPATIBLE DIMMER AND DRIVER TYPES FOR PROPER DIMMING OPERATION.
- 13. FIELD VERIFY ALL CONTROL DEVICE TYPES, LOCATIONS, SCENE SELECTIONS, NUMBER OF SWITCHING ZONES, DIMMING CAPABILITIES, WITH BUILDING OWNER AND TENANT/OCCUPANTS PRIOR TO ORDERING MATERIALS OR ANY ROUGH-IN.
- 14. PROVIDE AUTOMATIC LIGHTING CONTROLS FOR ALL INTERIOR LIGHTS TO BE TURNED OFF WHEN SPACE IS SCHEDULED TO BE UNOCCUPIED IN ACCORDANCE WITH IECC REQUIREMENTS. PROVIDE MULTI-POLE LIGHTING CONTACTOR WITH NUMBER OF POLES SUFFICIENT FOR ALL INTERIOR LIGHTING CIRCUITS. PROVIDE 7-DAY PROGRAMMABLE TIME CLOCK ON/OFF CONTROLS WITH MANUAL OVERRIDE SWITCH THAT WILL ALLOW LIGHTING TO REMAIN ON NO LONGER THAN 2 HOURS AND AUTOMATIC HOLIDAY SCHEDULING FEATURE THAT WILL TURN LIGHTS OFF FOR A 24 HOUR PERIOD. FIELD VERIFY LOCATION OF OVERRIDE SWITCH LOCATION WITH OWNER. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.

#### LIGHTING PLAN KEYED NOTES:

- \*NOTE: PROVIDE ALTERNATE QUOTE FOR WIRELESS CONTROLS.
- 1. DIMMING WALLSWITCH OCCUPANCY SENSOR PROVIDE DUAL TECHNOLOGY INTELLIGENT LIGHTING CONTROLS ILC-SWX-1\*\*-D OR EQUAL RATED FOR CONNECTED LOAD TYPE AND WATTAGE COMPATIBLE WITH ALL CONNECTED LIGHT FIXTURES. PROVIDE LOW VOLTAGE WIRING FOR ANY 0-10V DIMMING AS REQUIRED.
- 2. WALLSWITCH OCCUPANCY SENSOR PROVIDE DUAL TECHNOLOGY INTELLIGENT LIGHTING CONTROLS ILC-SWX-1\*\* OR EQUAL.
- 3. TENANT SIGN PROVIDE DEDICATED CIRCUIT AND FINAL CONNECTIONS AS REQUIRED. FIELD VERIFY ELECTRICAL REQUIREMENTS AND FINAL LOCATION WITH PROVIDER, TENANT AND LANDLORD. PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS.
- 4. CEILING OCCUPANCY SENSOR PROVIDE DUAL TECHNOLOGY AND SWITCH PACK INTELLIGENT LIGHTING CONTROLS ILC-SWX-2\*\* OR EQUAL. VERIFY AND PROVIDE AS REQUIRED FOR MAXIMUM ROOM SIZE AND FIELD OF VIEW REQUIREMENTS. PROVIDE DAYLIGHT SENSING OPTION AS REQUIRED IN DAYLIGHT ZONES.
- 5. WALLBOX LIGHTING CONTROLLER PROVIDE DIMMING CONTROL DEVICE, ALL SWITCH PACKS, DIMMING MODULES, POWER AND CONTROL WIRING AND ALL OTHER COMPONENTS AS REQUIRED FOR A COMPLETE INSTALLATION. SEE LIGHTING CONTROL DRAWINGS FOR ADDITIONAL INFORMATION.

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- 6. TIME CLOCK PROVIDE WALL SWITCH TIME CLOCK, INTERMATIC SS7C OR ST01C, TO MEET THE REQUIREMENTS OF IECC C405.2.2. THE E.C. SHALL VERIFY THAT THE RATINGS ARE NOT EXCEEDED ON THE PLANS AND REQUEST CLARIFICATION FROM THE ENGINEER IF LOAD IS EXCEEDED. VERIFY RATINGS WITH LABELING IN PACKAGE PRIOR TO INSTALLATION.
- 7. WALLSTATION DIMMER SWITCH PROVIDE INTELLIGENT LIGHTING CONTROLS ILC-SWX-8\*\* (OR LSG3\* FOR MULTI-ZONE DIMMER SWITCH) OR EQUAL RATED FOR CONNECTED LOAD TYPE AND WATTAGE COMPATIBLE WITH ALL CONNECTED LIGHT FIXTURES. PROVIDE LOW VOLTAGE WIRING FOR ANY 0-10V DIMMING AS REQUIRED.
- 8. TAPE LIGHT LOCATED UNDERCOUNTER AND AT TOE KICK OF MILLWORK. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. FIELD VERIFY FINAL LOCATION AND LENGTH OF RUN AND PROVIDE DRIVER SIZED TO FEED FULL RUN OF TAPE LIGHT.



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History FOR PERMIT <u>Date</u> 04.11.2025

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 PROJECT #:
 2017.01/DK25.049

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LIGHTING PLANS

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