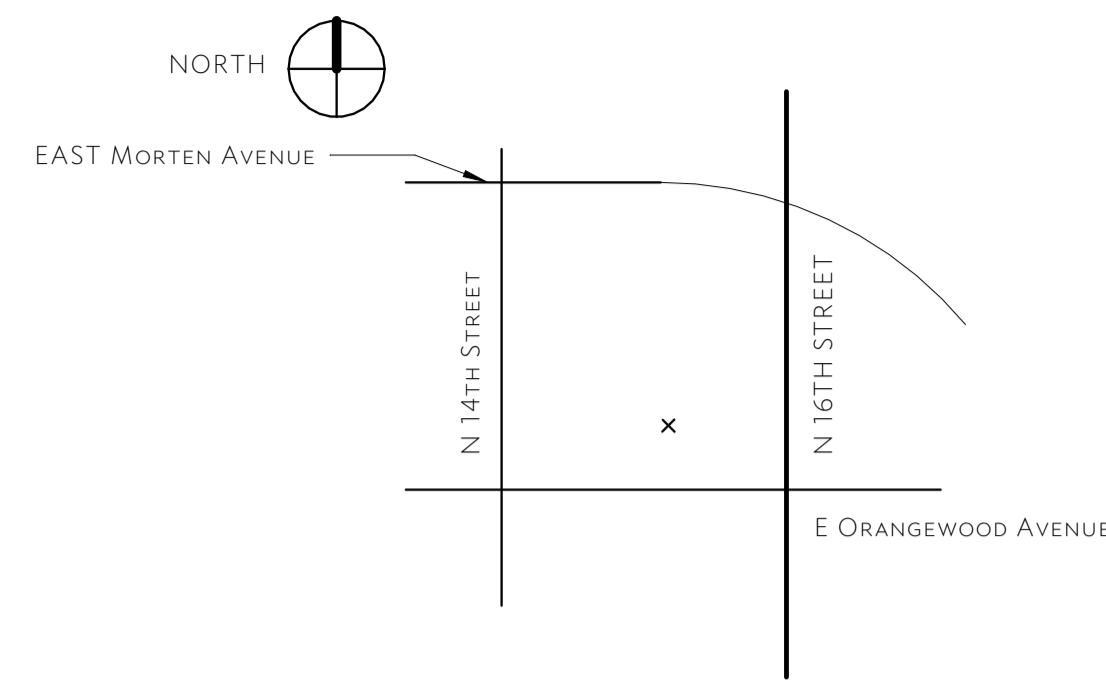


GENERAL NOTES

- Execution of the contract by the contractor is a representation the contractor has visited the site and become familiar with local conditions under which the work is to be performed and correlated personal observations with requirements of the contract documents.
- Inspect portions of work already performed under this contract to determine that such portions are in proper condition to receive subsequent work. Where assembly involving several trades is called for on drawings, submit shop drawings showing the proposed interaction of related elements for architect's review. Contractor responsible for proper operation of all systems.
- Do not scale the printed version of drawings. Calculate dimensions from the dimension strings indicated; use in conjunction with the details. Notify architect immediately in the event the drawings do not contain sufficient information to calculate necessary dimensions. Carefully review site conditions as well as dimensions indicated on drawings prior to constructing the work.
- Prior to ordering materials for of each portion of the work, investigate and verify site conditions and dimensions to ascertain that work is feasible as shown. Immediately notify architect and owner of problems with site conditions.
- Horizontal dimensions are to building grid lines or face of concrete/cmu or face of gypsum board unless noted otherwise.
- Heights are dimensioned from top of slab in concrete unless noted otherwise. Verify slab conditions.
- "Align" means to accurately locate finished faces in same plane.
- The contract documents are complementary documents used by the architect to describe the building project and by the contractor to develop an understanding of the architect's intent and what is required by one shall be as binding as if required by all. The contract documents include, but are not limited to these drawings. Before starting each portion of the work, carefully study and compare various drawings and other contract documents relative to that portion of the work, as well as information furnished by the owner. Take site measurements of existing conditions related to that portion of the work and observe conditions at the site affecting it. These obligations are for the purpose of facilitating construction by contractor and not for the purpose of discovering discrepancies, errors, omissions, or inconsistencies in the contract documents. However, report discrepancies, errors, omissions, or inconsistencies discovered by the contractor promptly to architect as a request for interpretation (rfi). During bidding phase, contractor's failure to report discrepancies or omissions in contract documents, or contractor- or subcontractor-generated assumptions, in absence of architect-issued interpretations or clarifications regarding intent of the contract documents, shall not be used a basis for future claims once the apparent discrepancies or omissions have been reconciled by appropriate interpretation issued by the architect in accordance with contract documents.
- In case of conflict, the contract documents shall be governed by the following hierarchy of authority, from highest to lowest:
 - the agreement between the owner and the contractor.
 - drawings
 - the definitions
 - the supplemental conditions
 - the general conditions
 - division 01 of the specifications
 - divisions 02 through 48 of the specifications
 - materials and finish schedules
- Drawings of larger scale shall govern over those of smaller scale of the same date.
- Dimensions shown in drawings shall govern over dimensions scaled from drawings.
- Later dated documents shall govern over earlier documents of the same type.
- Structural drawings govern over architectural in matters of structural design.
- Manufacturer's specifications and installation requirements govern over the specifications.
- Coordinate sizes and locations of floor and wall openings, penetrations and sleeve locations for work prior to construction, including but not limited to plumbing, mechanical and electrical work.
- Provide a weather-tight and waterproofed building envelope complete with required water-resistive barriers, flashings, sealants, waterproof membranes, roofing membrane and exterior cladding in accordance with building code, industry standards, manufacturer specifications and the requirements of the owner's building envelope consultant. Install sealants, materials and systems in strict conformance with manufacturer's printed specifications and installation requirements. Install sheet metal flashings and trims in strict conformance with national roofing contractor's association (nrca), smacna, or as directed by the architect's drawings.
- Install fire extinguishers at locations indicated unless otherwise required by local building inspection jurisdiction or fire department. Promptly notify the architect and owner in writing in the event indicated locations are unacceptable to the local building inspection jurisdiction or fire department.
- The architect will not have control over or charge of, and will not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the work. These duties belong exclusively to the contractor.
- When construction details are not shown or noted for parts of the work, details shall be the same as for other similar work. If questions cannot be resolved in this manner, contact the architect prior to proceeding.
- Repetitive features not shown in drawings shall be completely resolved as if drawn in full.
- Trade contractors and delegated design-build contractors are responsible for the layout their own work, and to see that it's work comes together with that of others. Report discrepancies on drawings to the architect for decisions.
- Trade contractors and delegated design-build contractors must assure themselves that they have the latest drawings issued for construction in the contractor's site offices.
- Employ original journeyman tradesmen or installers of new work to perform cutting and patching in new work.
- Take precautions to maintain and protect new work as well as existing systems and elements which are to remain. Any damage to such systems and elements are to be immediately repaired in a manner acceptable to the architect. If satisfactory repairs cannot be made replace systems and elements with "like new" quality acceptable to architect. All repair and replacement costs are the financial responsibility of the contractor, coordinate previously issued permit submittals with additional information issued in this submittal. The multiple permit packages constitute a complete project.
- Coordinate and provide all block-outs, sleeves, inserts, bolts, plates, etc. for all trades prior to placing concrete or masonry.

VICINITY MAP



PROJECT DESCRIPTION:

DESCRIPTION: PT LOT 6 S2 SE4 NE4 EX W 30F & EX E 40F & EX S 30 & EX N 25F RDS & EX RD P/D 85-213302 & TH PT ABAND RD P/D 86-405887

LOT SIZE (ACRE): 19.72

ZONING: R-4

An assisted living and retirement home.

SCOPE OF WORK:

Remodel a private dining space. Remove walls that enter into the large dining space and dance floor. Add a low bartop and seating to the space.

AUTHORITY HAVING JURISDICTION:

CITY OF PHOENIX - PLANNING AND DEVELOPMENT DEPARTMENT
602-262-7811
2ND FLOOR, PHOENIX CITY HALL
200 W WASHINGTON STREET
PHOENIX, AZ 85003

ADOPTED CODES:

- INTERNATIONAL RESIDENTIAL CODE (IRC) - 2018
- INTERNATIONAL BUILDING CODE (IBC) - 2018 *FOR USE AS REFERENCED IN THE IRC*
- NATIONAL ELECTRIC CODE (NEC) - 2017
- INTERNATIONAL PLUMBING CODE (IPC) - 2018
- INTERNATIONAL FUEL GAS CODE (IFGC) - 2018
- INTERNATIONAL MECHANICAL CODE (IMC) - 2018
- INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPS) - 2018
- INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - 2018
- INTERNATIONAL FIRE CODE (IFC) - 2012
- INTERNATIONAL EXISTING BUILDING CODE (IEBC) - 2018
- INTERNATIONAL GREEN CONSTRUCTION CODE (IGCC) - 2018 *FOR VOLUNTARY USE ONLY*
- PHOENIX ZONING ORDINANCE - CURRENT

PROJECT TEAM:

OWNER:
American Baptist St Est Inc
(925) 924-7141
Contact: Russell Mauk
Rmauk@abhow.com
6120 Stoneridge Mall Rd Ste 100
Pleasanton Ca USA 94588

ARCHITECT:
Trevor Pan Architects, PLLC
AZ Architect #60475
(480) 277-3499
projects@trevorpan.com
Trevor Pan, Principal
4310 N 75th St, Ste 145
Scottsdale, Arizona 85251

TREVOR PAN ARCHITECTS

(480) 277-3499
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4310 N 75th St, Ste 145
Scottsdale, Arizona 85251

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SHEET LIST

SHEET NUMBER	SHEET NAME
A900	PERSPECTIVE - OPTION 1
A901	PERSPECTIVE 2 - OPTION 1
A902	PERSPECTIVE - OPTION 2
A903	PERSPECTIVE 2 - OPTION 2
CS	COVER SHEET
G100	SPECIFICATIONS
G101	SPECIFICATIONS
A110	EXISTING FLOOR PLAN
A111	EXISTING DIMENSION PLAN
A112	NEW FLOOR PLAN
A113	NEW DIMENSION PLAN
A121	NEW REFLECTED CEILING PLAN
A201	NEW ELEVATIONS
A202	NEW ELEVATIONS
A203	NEW ELEVATIONS
A204	NEW ELEVATIONS
A206	NEW ELEVATIONS
A500	DETAILS
G110	PERSPECTIVE VIEWS
G111	PERSPECTIVE VIEW

DEFERRED SUBMITTALS:

- NONE

SPECIAL INSPECTIONS:

- NONE

STRUCTURAL DESIGN CRITERIA:

- BASIC WIND SPEED: 90 MPH (3 SECOND GUST)
- SEISMIC DESIGN CATEGORY: B
- ROOF LIVE LOAD: 20 LB

CONSTRUCTION TYPE:

VB

PERSPECTIVE VIEW OF EXISTING HOME:

ABS	acrylonitrile butadiene styrene (plumbing pipe)	S	south
AFF	above finish floor	SC	solid core
ACI	american concrete institute	SCHED	schedule
AHJ	authority having jurisdiction	SIM	similar
AWG	american wire gauge standard	SHT	sheet
		SPEC	specifications
BFF	below finish floor	SQ	square
		SF	square foot/feet
CMU	concrete masonry unit	STOR	storage
CO	carbon monoxide	STRUCT	structure(ural)
CONC	concrete	STL	steel
		SV	sheet vinyl
		SYM	symbol
		T.O.B.	top of beam
		T&B	top and bottom
		TG	tempered glass
		T&G	tongue and groove
		THK	thickness
		T.O.	top of
		T.O.C.	top of concrete or curb
		T.O.P.	top of parapet
		T.O.STL.	top of steel
		TOW	top of wall
		TPTN	toilet partition
		TEL	telephone
		TYP	typical
		UL	underwriters laboratories
		UNO	unless noted otherwise
		VAR	varies
		VEN	veneer
		VERT	vertical
		VEST	vestibule
		VIF	verify in field
		VR	vapor retarder
		W	west or wide or width
		W/	with
		W/O	without
		WIN	window
		WC	water closet
		WD	wood
		WP	waterproof(ing)
		WRB	water resistive barrier
		WWF	welded wire fabric
		WT	weight
		YD	yard
		XPS	extruded polystyrene (insulation)
		"brand"	any brand or manufacturer of a product will be surrounded by quotes

2 GENERAL NOTES
12" = 1'-0"

1 ABBREVIATIONS
1 1/2" = 1'-0"

Bar at Terraces
Tenant Improvement Plans
7550 N 16th St
Phoenix, AZ 85020

REVISION SCHEDULE

#	Description	Date
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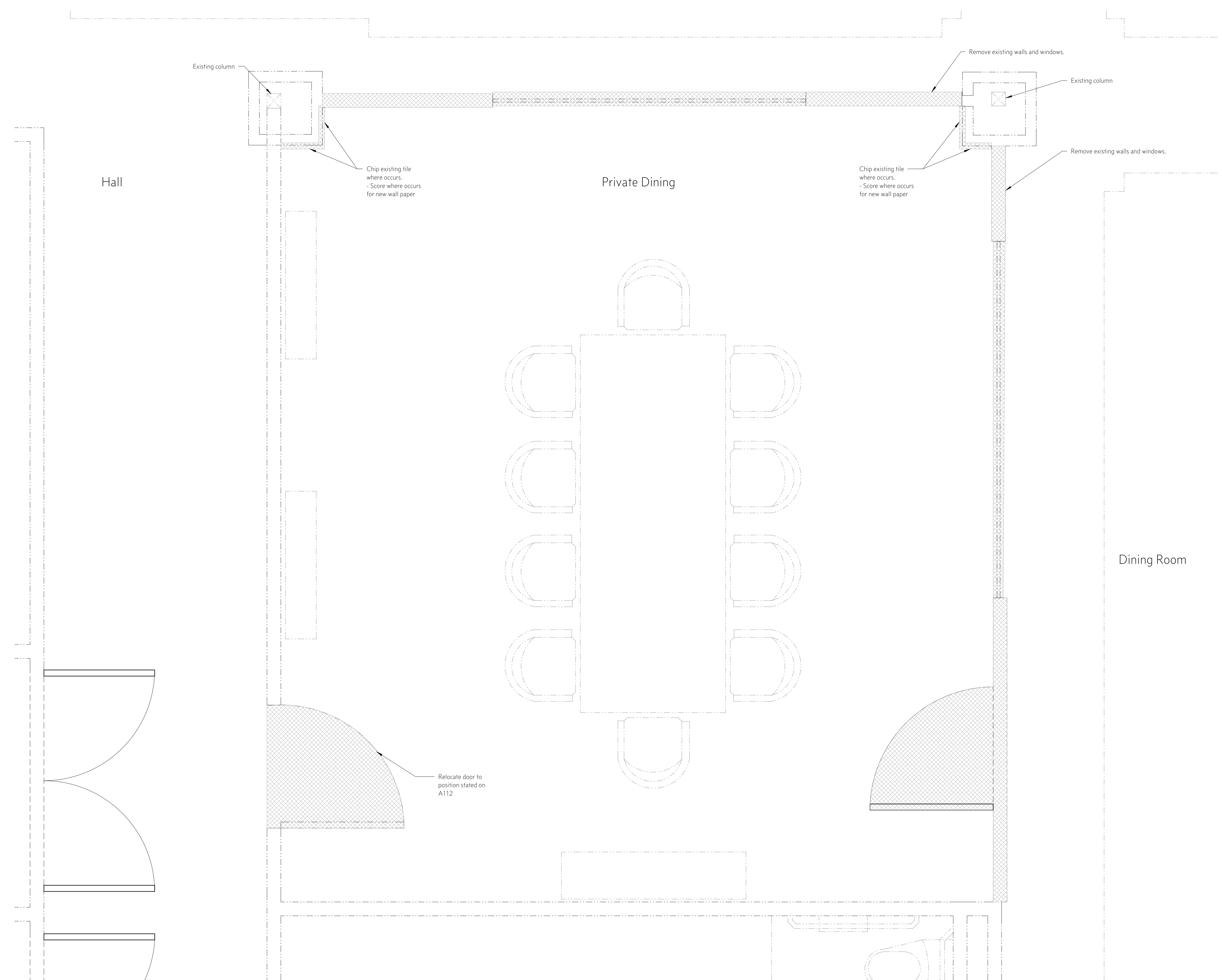


Expires: 9/30/2024

JOB #	22019
DATE	3-16-2023
SCALE	AS INDICATED
DRAWN BY	JD
CHECKED BY	TP

COVER SHEET

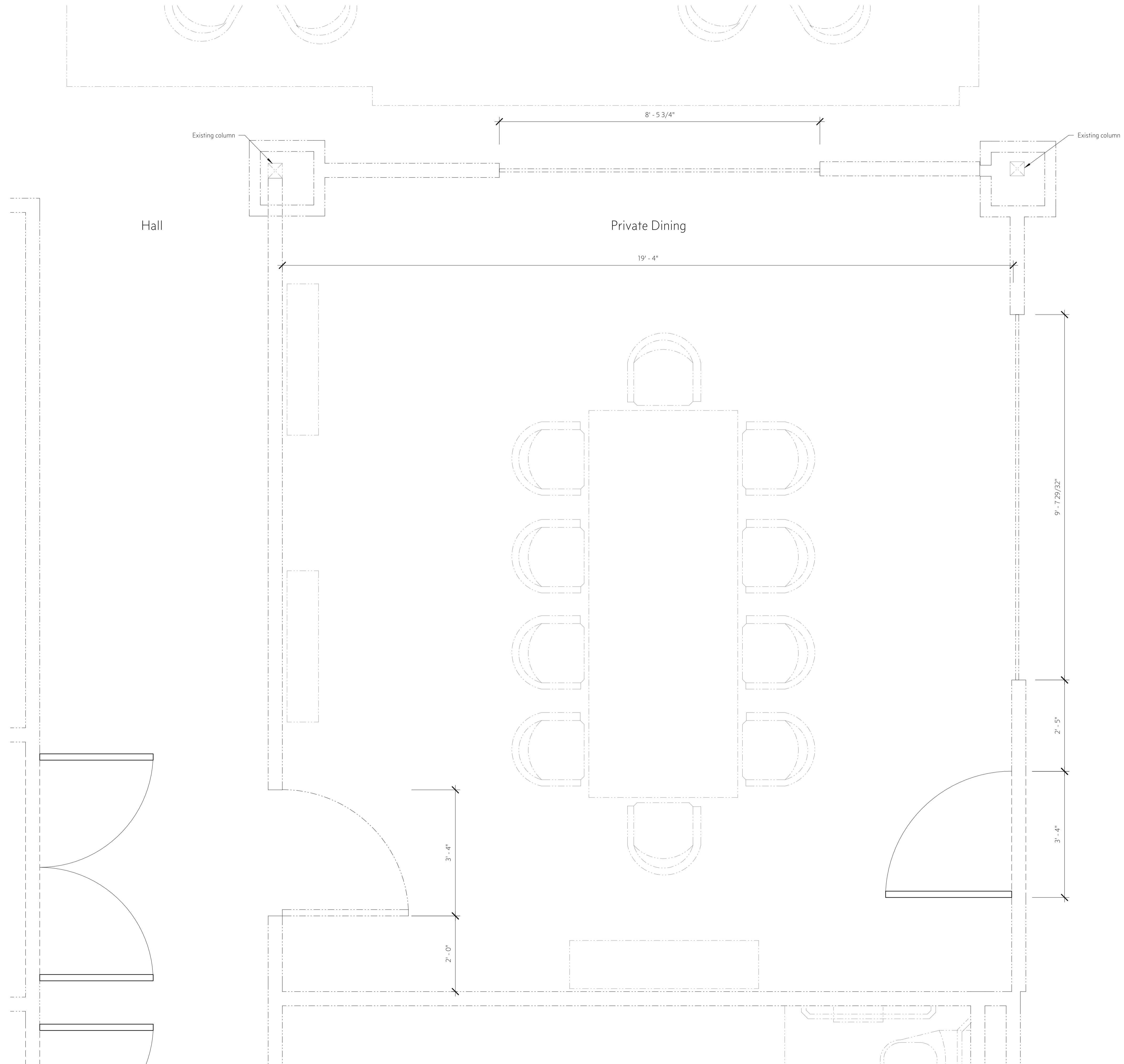
SHEET **CS**



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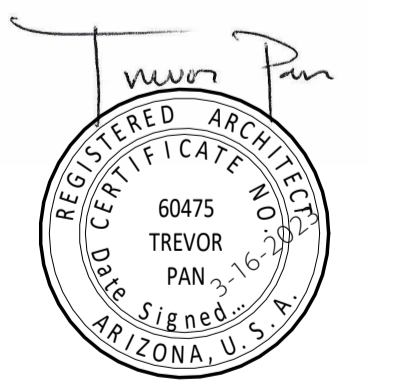
JOB #	22019
DATE	3-16-2023
SCALE	3/4" = 1'-0"
DRAWN BY	JD
CHECKED BY	TP

EXISTING DIMENSION PLAN

1 EXISTING DIMENSION PLAN
 3/4" = 1'-0"

REVISION SCHEDULE

#	Description	Date



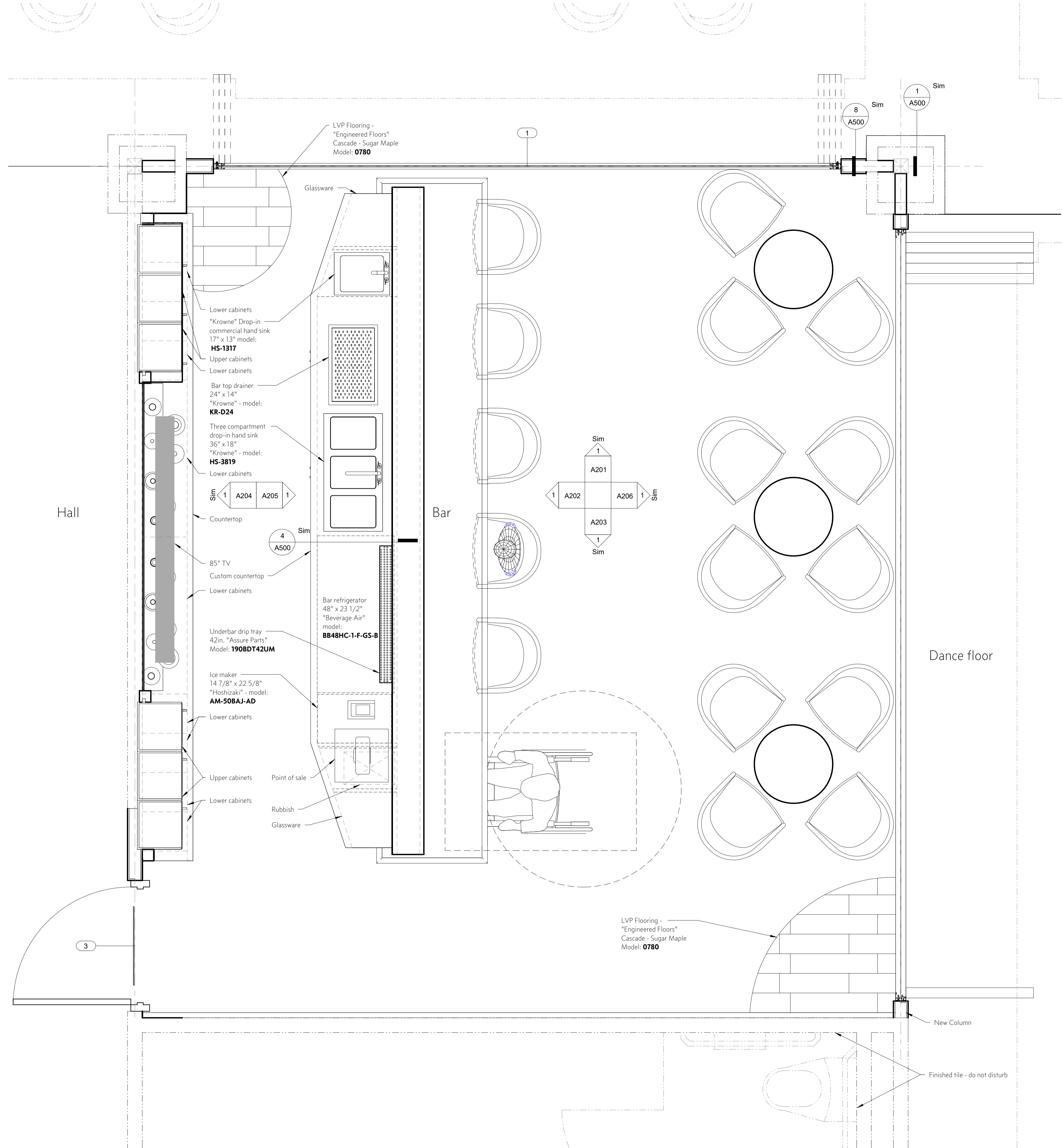
JOB #	22019
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SCALE	3/4" = 1'-0"
DRAWN BY	JD
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NEW FLOOR PLAN	

Door Schedule

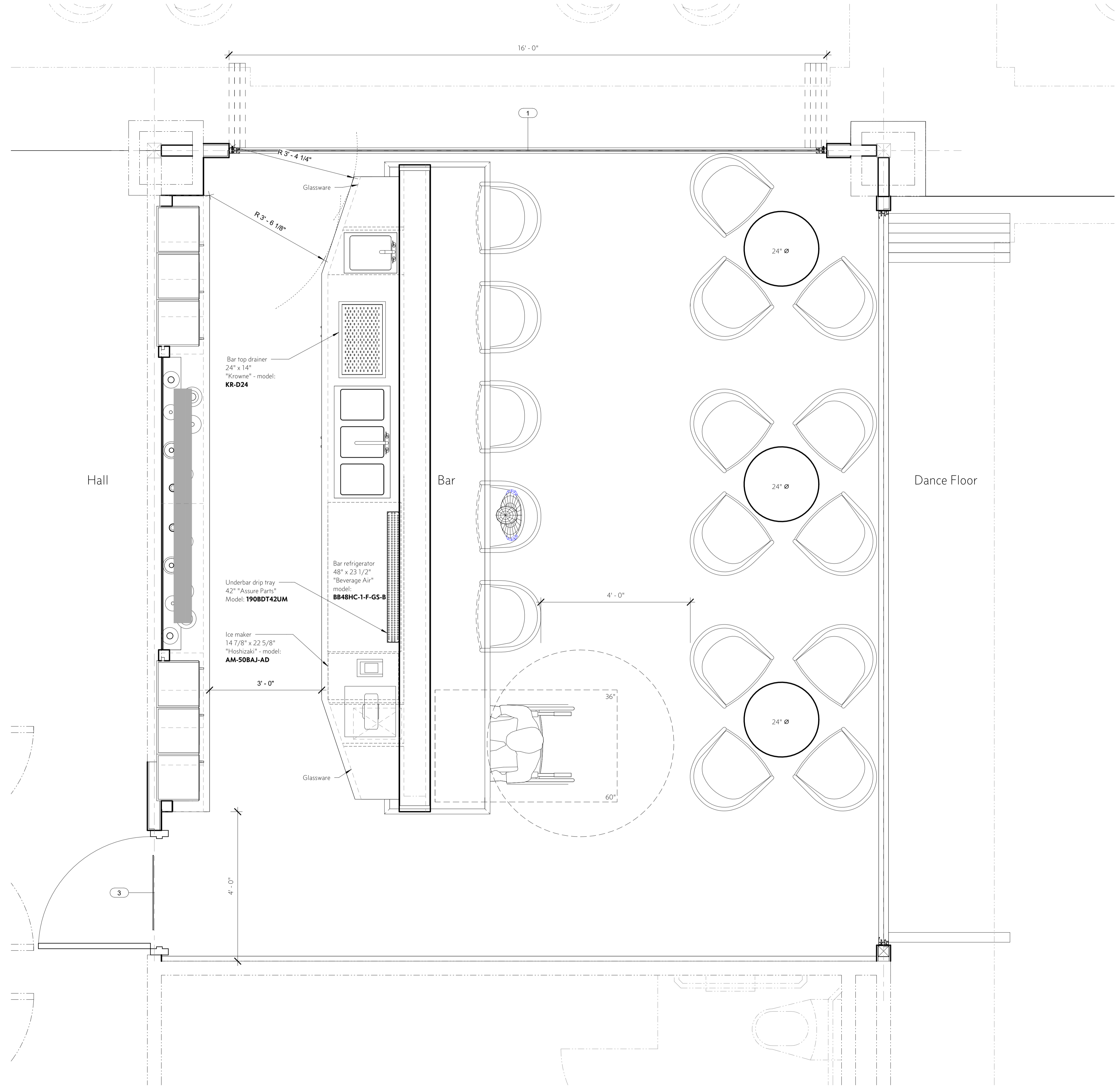
Mark	Model	Frame Finish	Frame Material	Glass Material	Description	Width	Height	Thickness	Comments
1	SL-45	Graphite Black-RAL 9011	Aluminum	Glass - NanaWall - Generic	Monumental Aluminum Framed Folding System	16' - 0"	9' - 6"	0' - 1 3/4"	Ball Bearing Hinge, Lever Type, - Graphite Black-RAL 9011 Finish
3		Primed & Painted - Daltille - Black - K111	Steel		Single Lite Glass Door	3' - 0"	9' - 4"	0' - 1 3/4"	Keyed Lockset, Lever Type, Aluminum Finish
2	SL-70	Graphite Black-RAL 9011	Aluminum	Glass - NanaWall - Generic	Monumental Thermally Broken Folding System	19' - 8"	9' - 6"	0' - 3 5/32"	Ball Bearing Hinge, Lever Type, - Graphite Black-RAL 9011 Finish

Bar Equipment

Equipment	Description	Model	Manufacturer	Size
Ice Machine	ADA compliant air cooled undercounter top hat cube ice machine	AM-50BAJ-AD	Hoshizaki	Width: 14 7/8"
				Depth: 22 5/8"
				Height: 31 1/2"
Bar Refrigerator	Stainless steel underbar height glass door back bar refrigerator	BB48HC-1-G-S	Beverage-Air	Width: 48"
				Depth: 24 1/2"
Handwash Sink	Drop-in commercial hand sink	HS-1317	Krowne	Width: 17"
				Depth: 13"
Three Compartment Drop-In Sink	Commercial three compartment drop-in hand sink	HS-3819	Krowne	Width: 36"
				Depth: 18"
Bar Top Drainer	Bar top drainer with drip tray trough	KR-D24	Krowne	Width: 24"
				Depth: 14"
Stainless Steel Underbar Mount Beer Drip Tray	Stainless steel under bar mount, beer drip tray. Removable drip tray with pre-drilled mounting holes	190BDT42UM	Assure Parts	Width: 42"
				Depth: 8"



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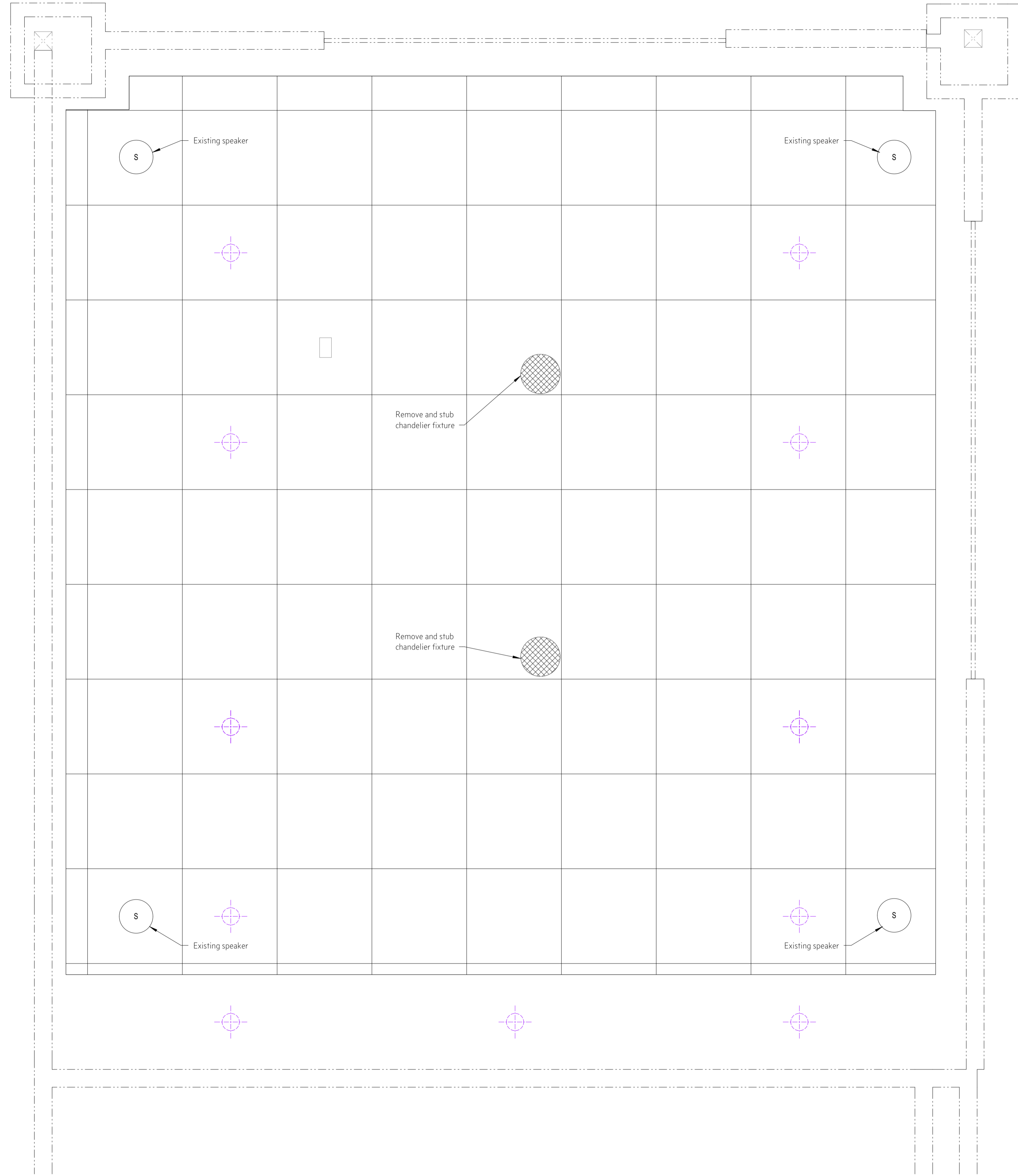


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NEW DIMENSION PLAN

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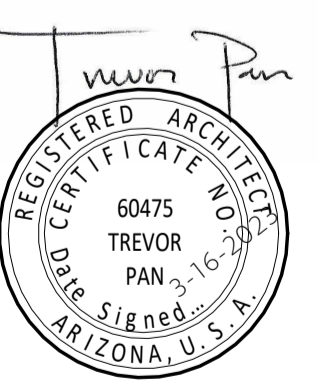


1 EXISTING REFLECTED CEILING PLAN
 3/4" = 1'-0"

Bar at Terraces
 Tenant Improvement Plans
 7550 N 16th St
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REVISION SCHEDULE

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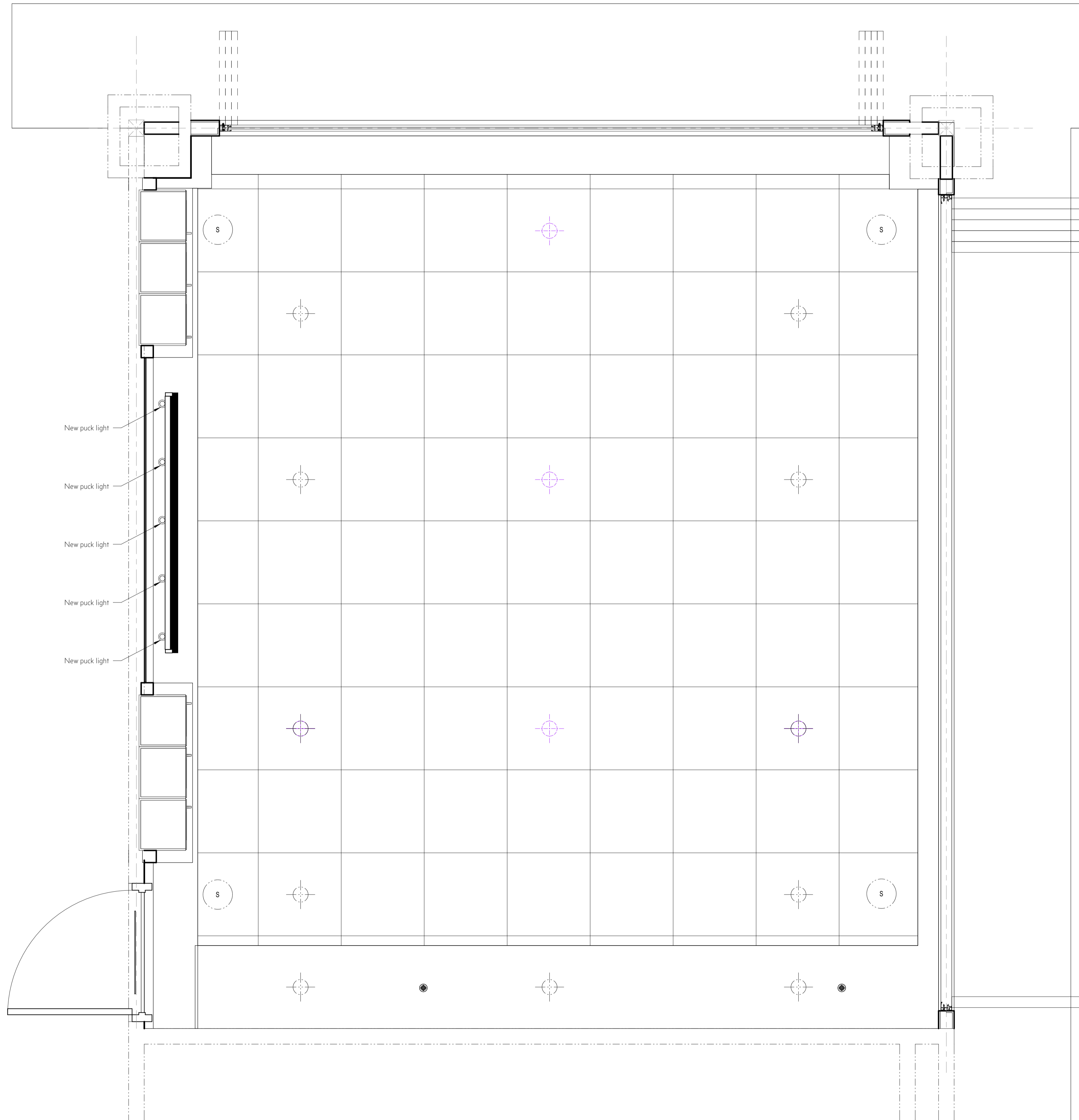


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EXISTING REFLECTED CEILING PLAN

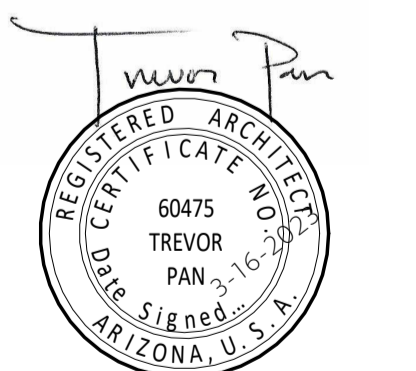
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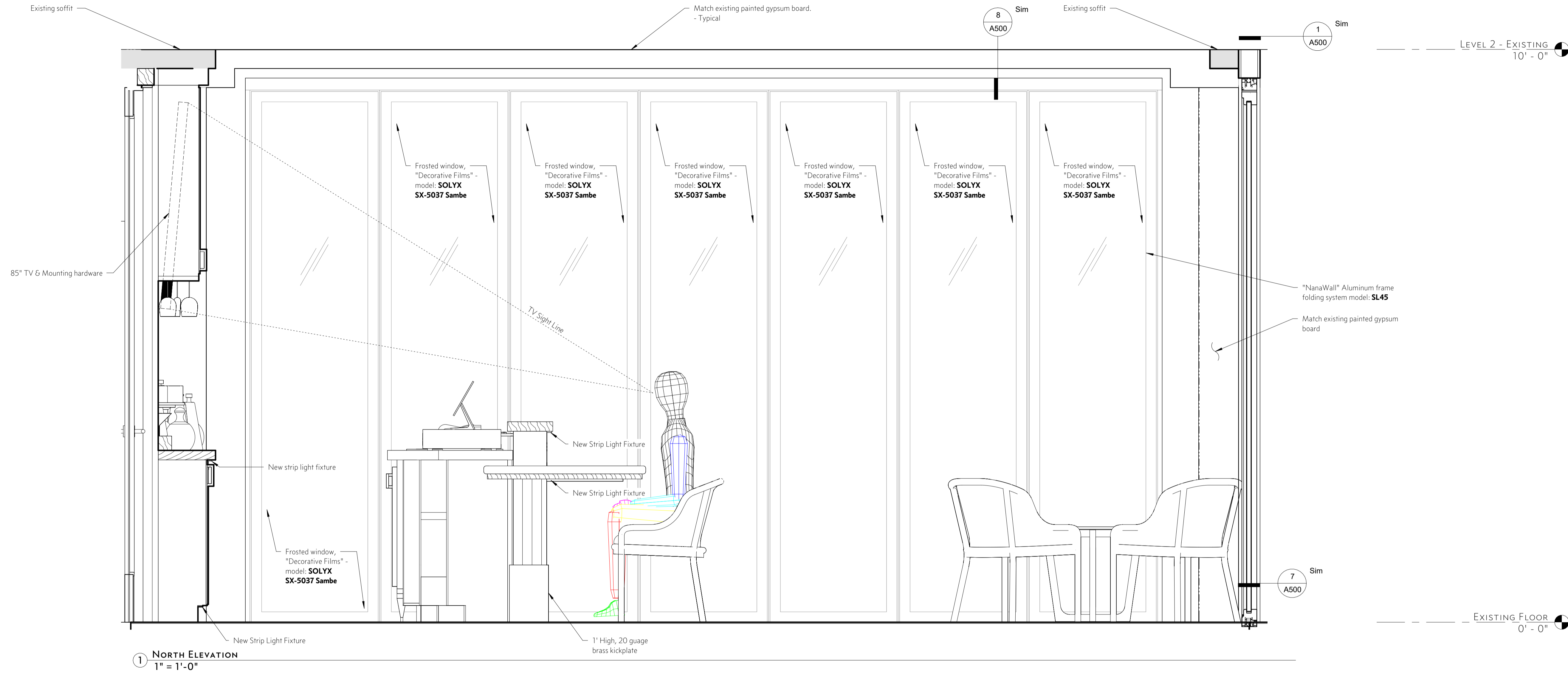


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① NEW REFLECTED CEILING PLAN
 3/4" = 1'-0"

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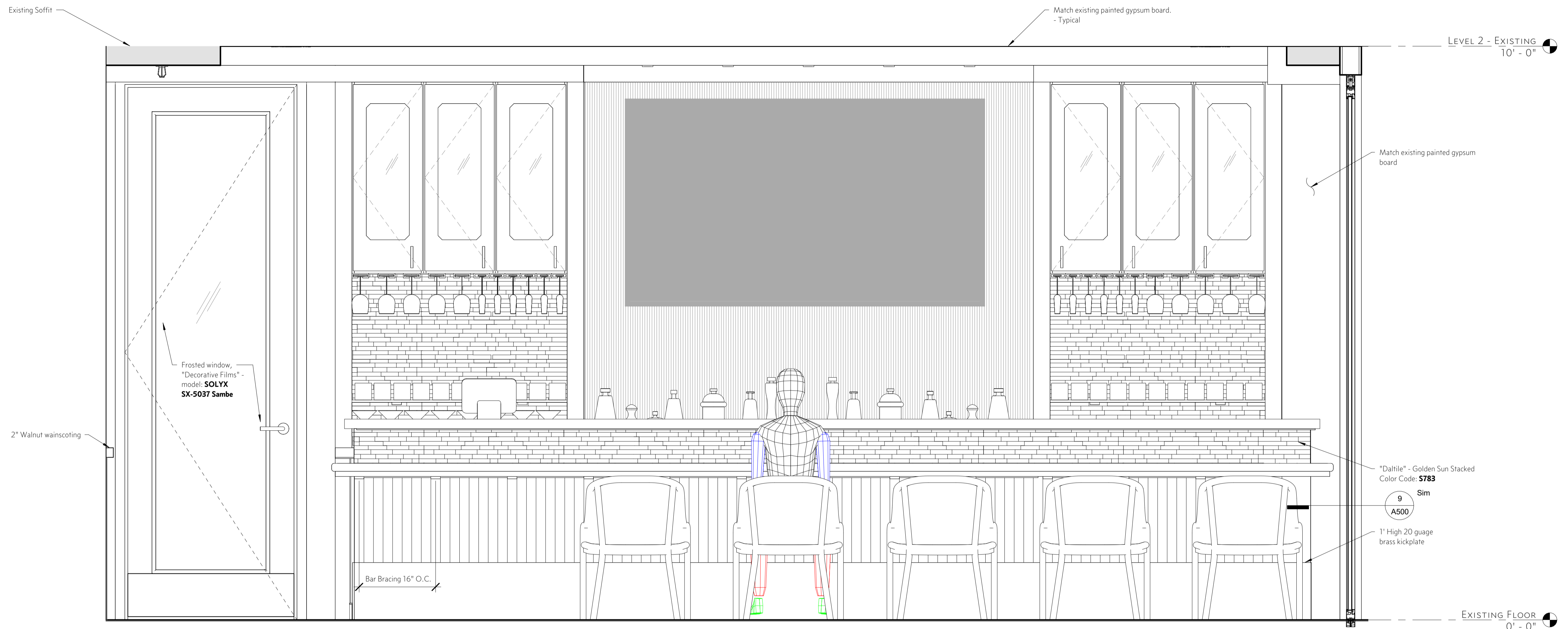
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REVISION SCHEDULE

#	Description	Date



JOB #	22019
DATE	3-16-2023
SCALE	1" = 1'-0"
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NEW ELEVATIONS	



1 WEST ELEVATION - CUSTOMER SIDE
1" = 1'-0"

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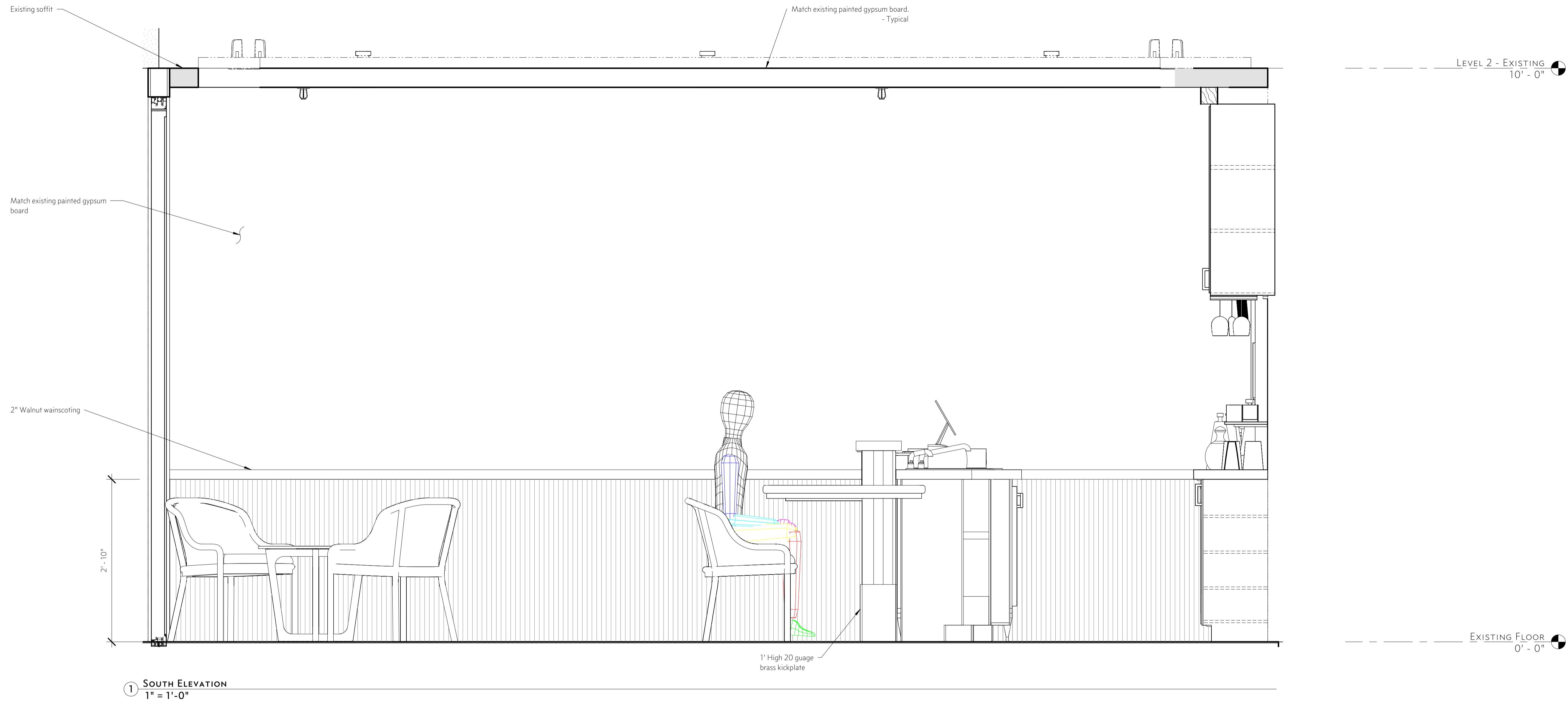
REVISION SCHEDULE

#	Description	Date



JOB #	22019
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SCALE	1" = 1'-0"
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NEW ELEVATIONS



1 SOUTH ELEVATION
 1" = 1'-0"

Bar at Terraces
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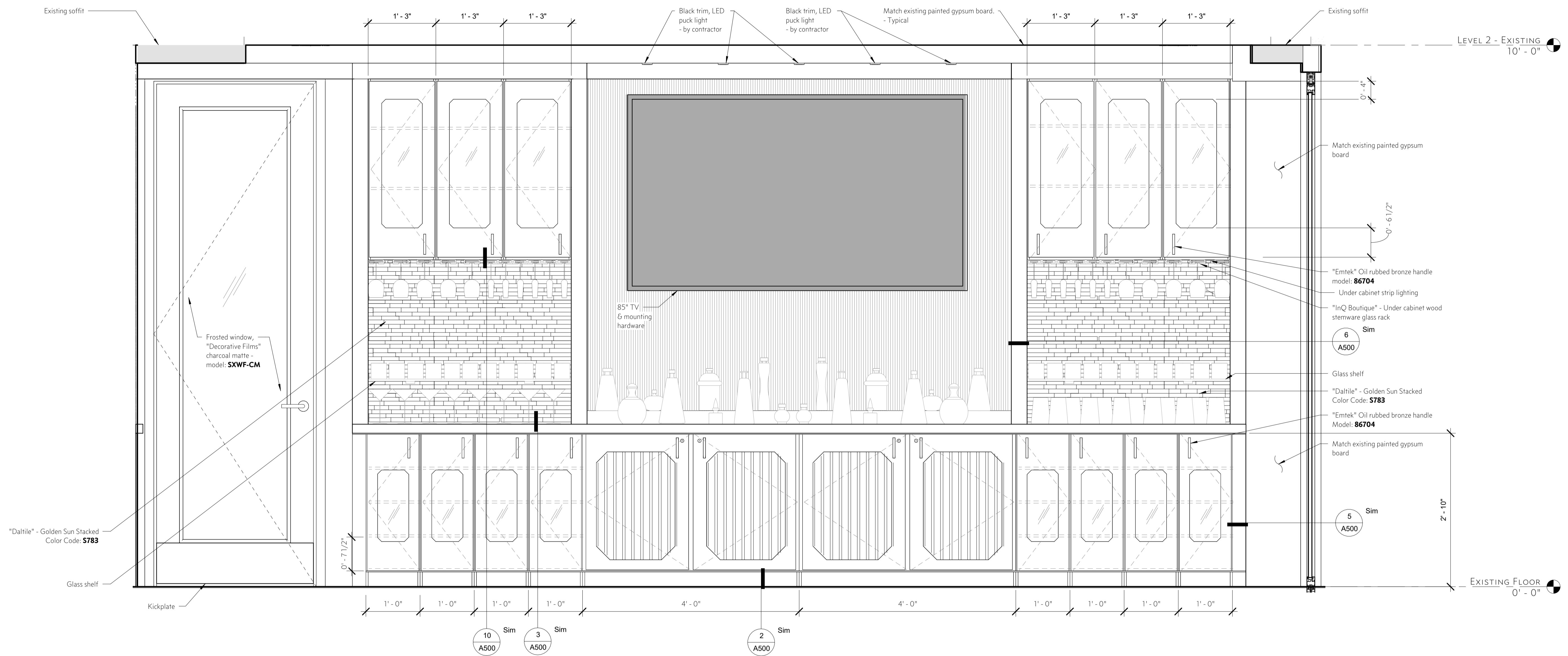
REVISION SCHEDULE

#	Description	Date



JOB #	22019
DATE	3-16-2023
SCALE	1" = 1'-0"
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NEW ELEVATIONS



1 WEST ELEVATION - BEHIND BAR
 1" = 1'-0"

NOTE

Provide adjustable shelving casework as shown.

Bar at Terraces
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REVISION SCHEDULE		
#	Description	Date
5	Sim A500	
6	Sim A500	



JOB #	22019
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SCALE	1" = 1'-0"
DRAWN BY	JD
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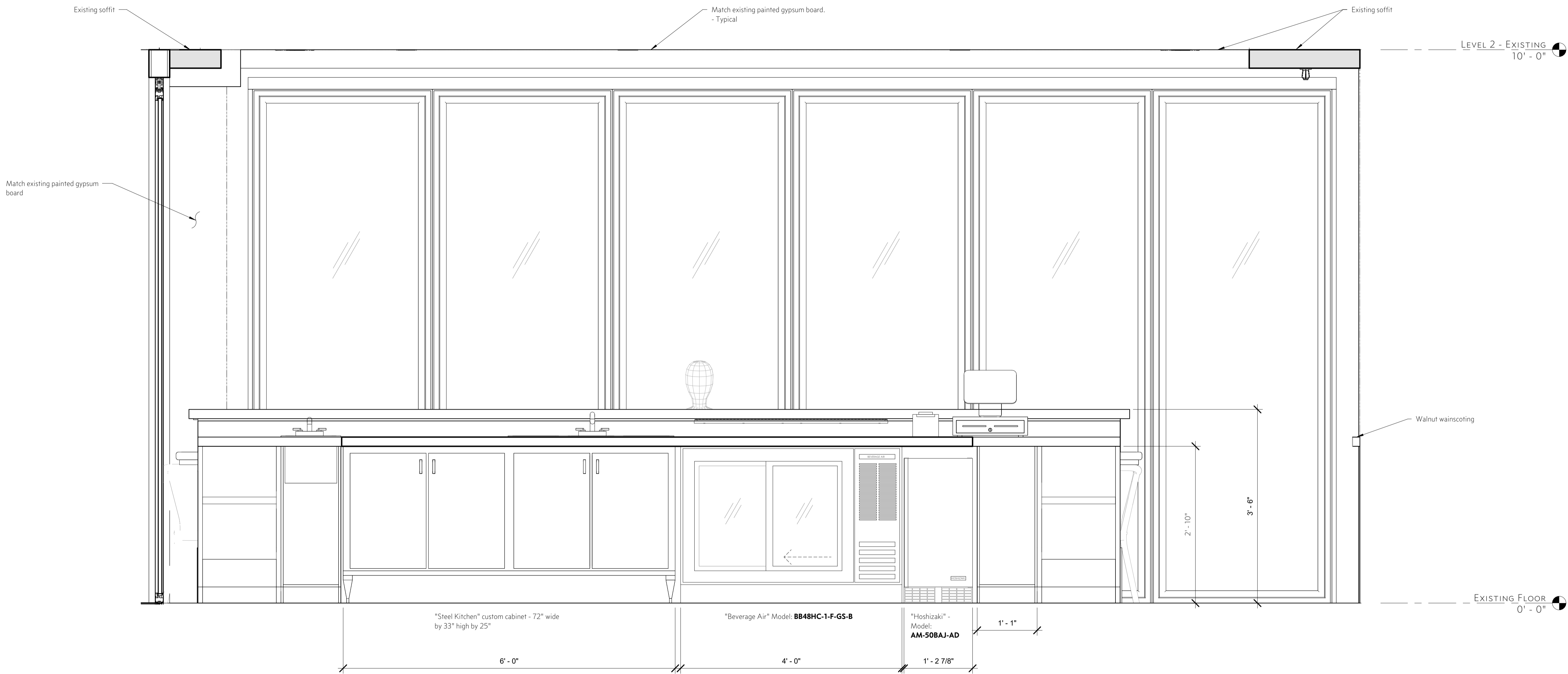
NEW ELEVATIONS

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REVISION SCHEDULE

#	Description	Date



1 EAST ELEVATION - BEHIND BAR
 1" = 1'-0"



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NEW ELEVATIONS

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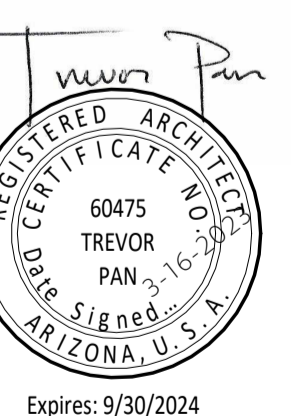


1 EAST ELEVATION
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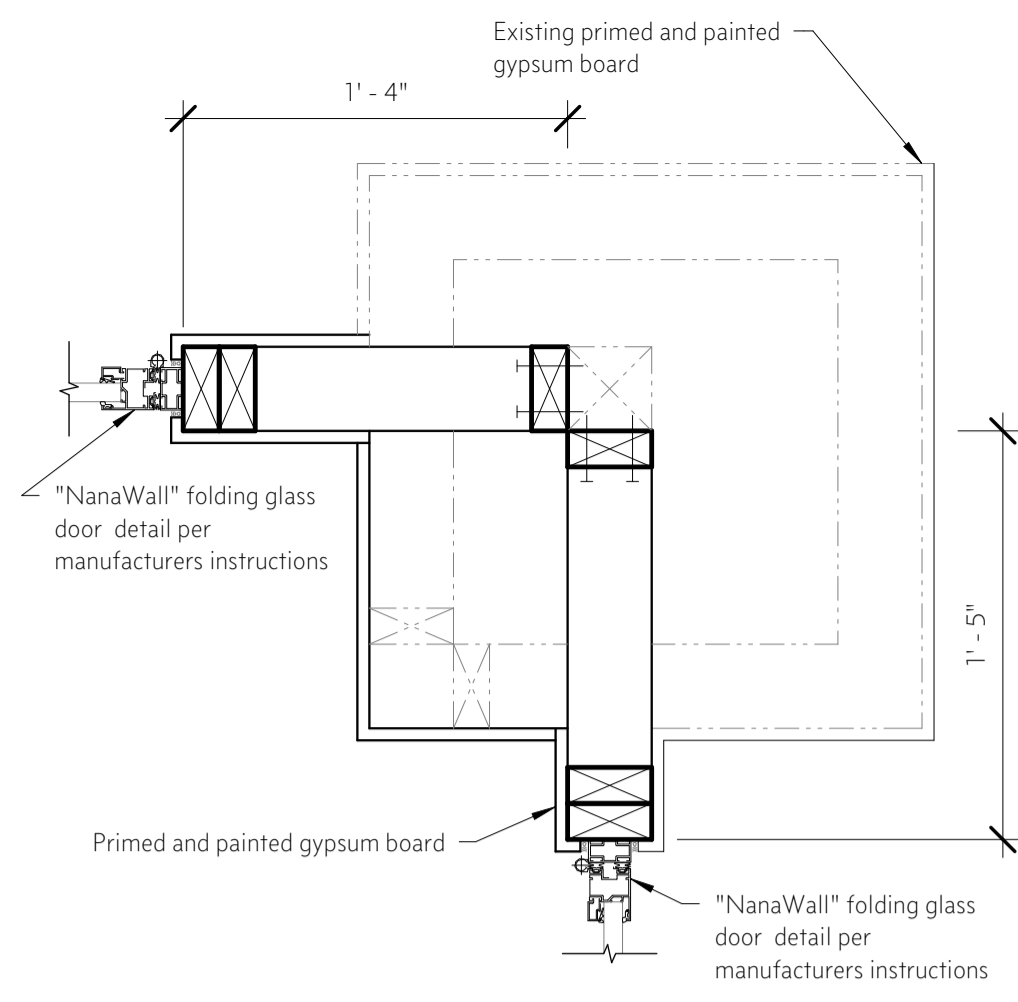
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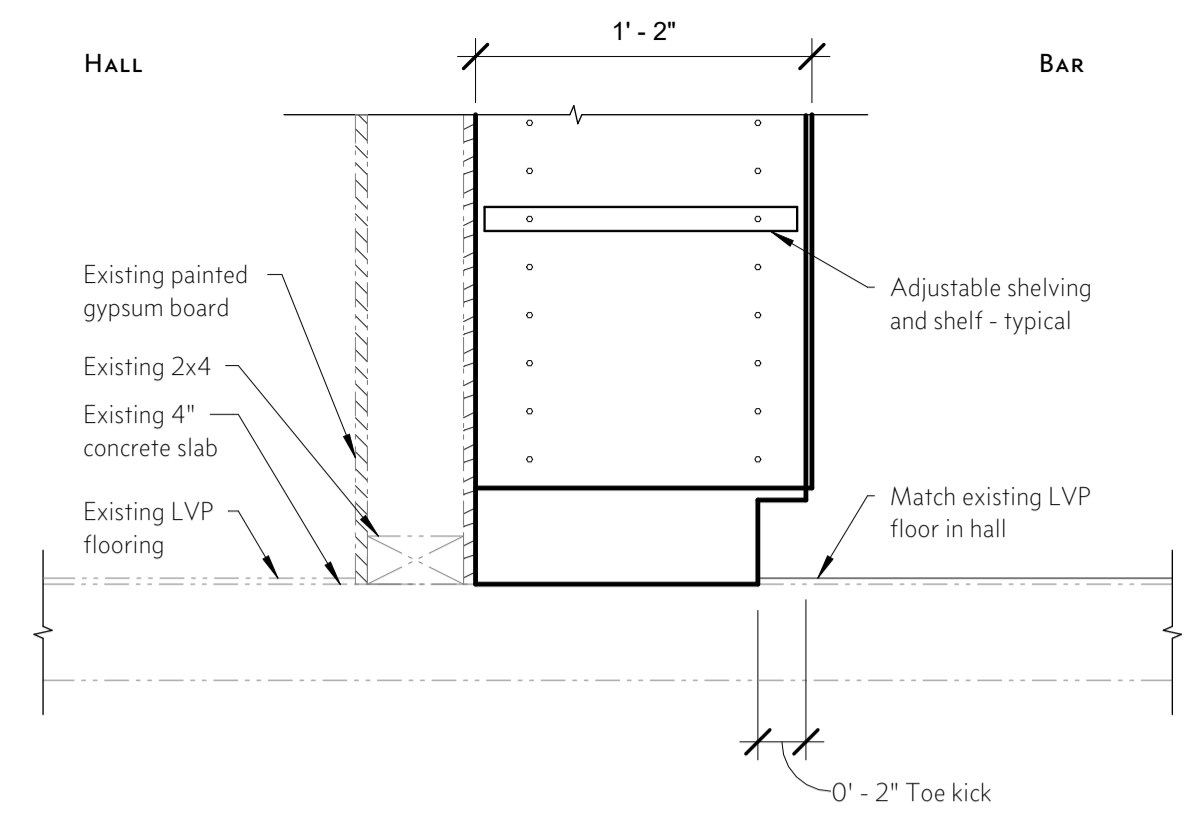


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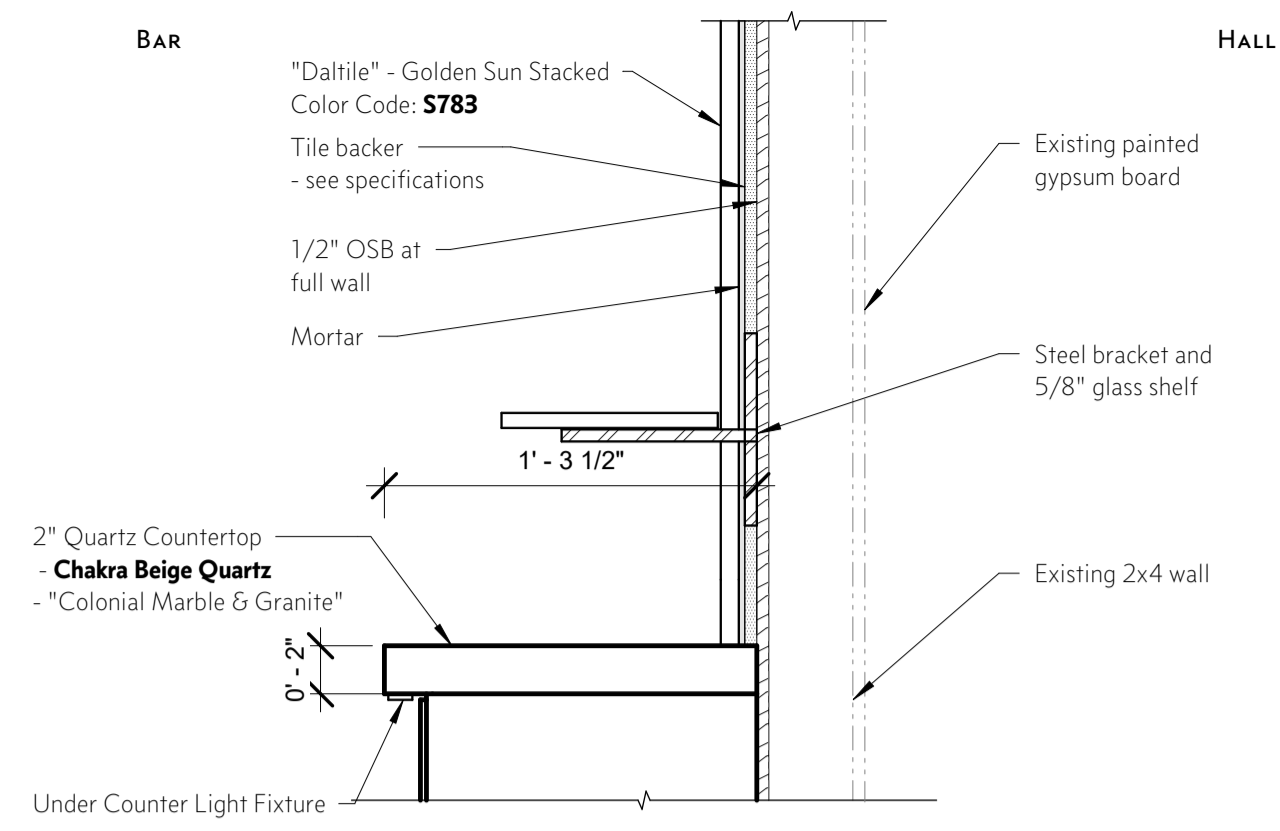
NEW ELEVATIONS



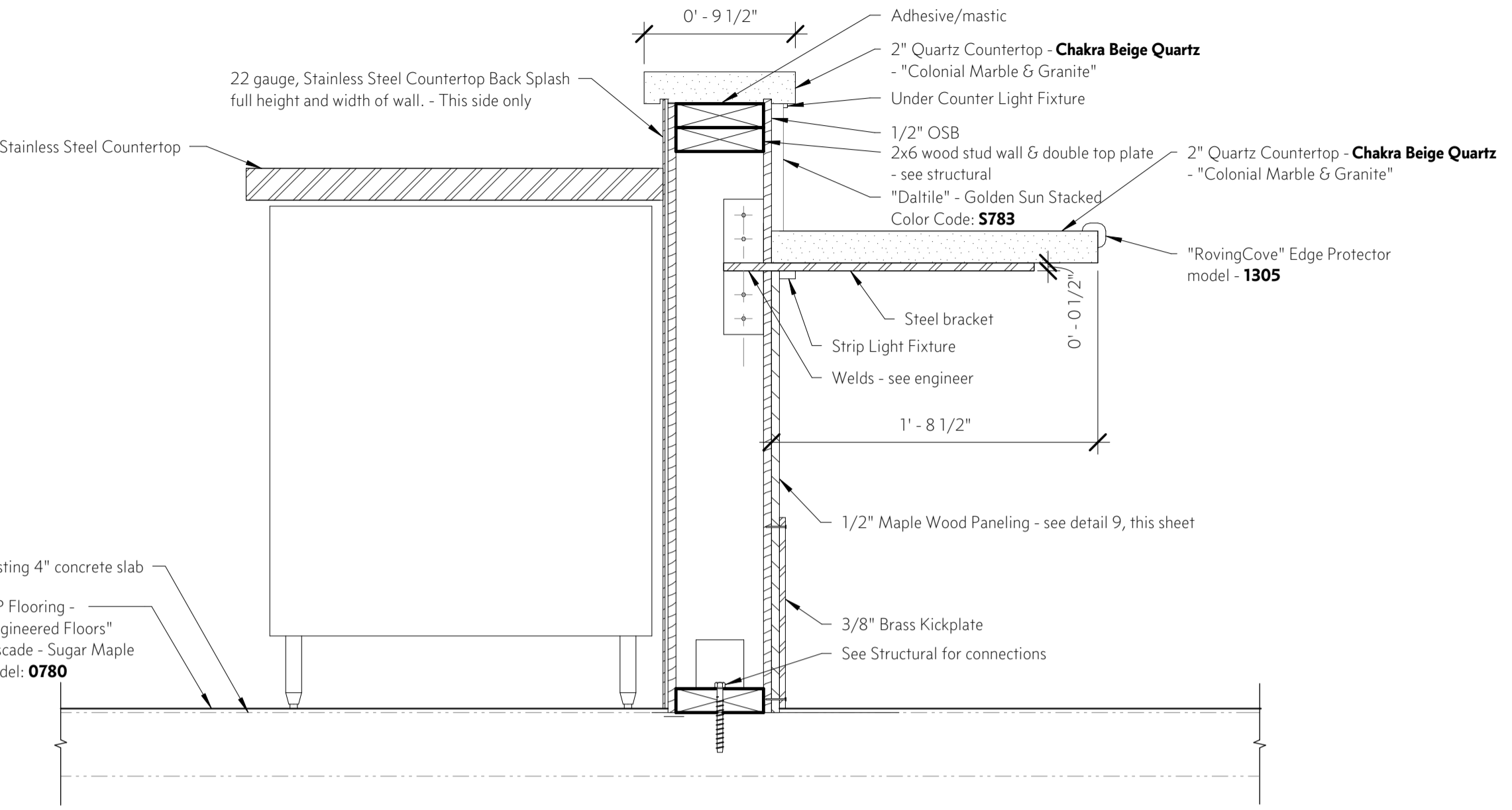
1 PLAN VIEW AT FOLDING GLASS DOOR JAMBS
1 1/2" = 1'-0"



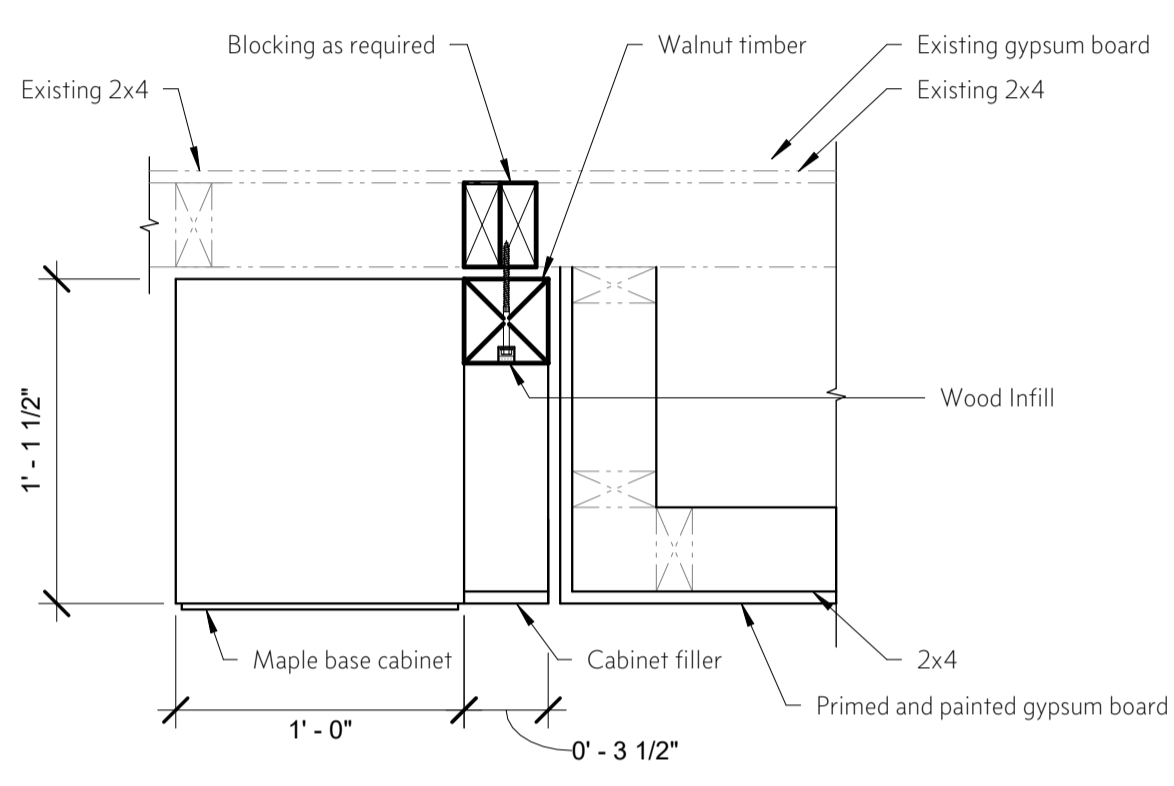
2 SECTION AT BAR THROUGH CABINETS
1 1/2" = 1'-0"



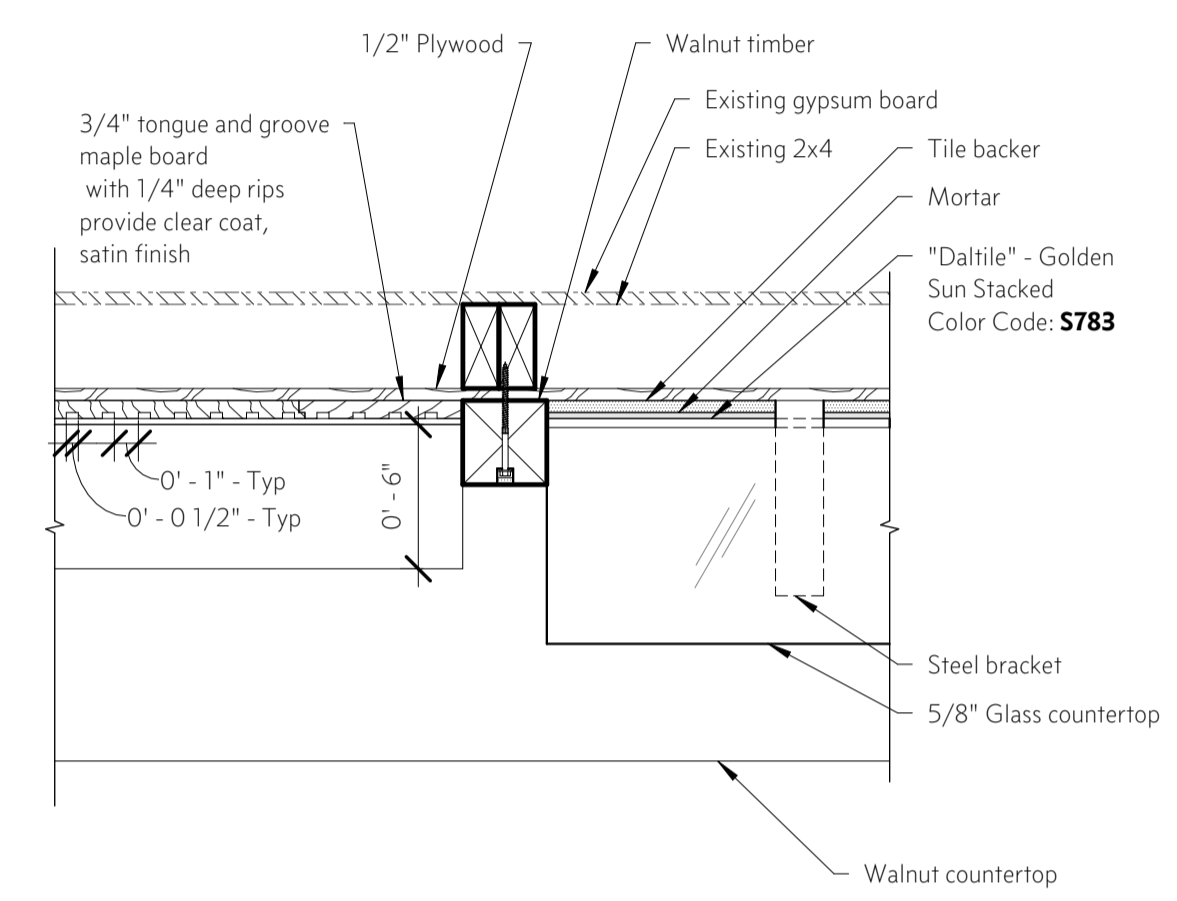
3 SECTION THROUGH COUNTERTOP AT STACKED STONE
1 1/2" = 1'-0"



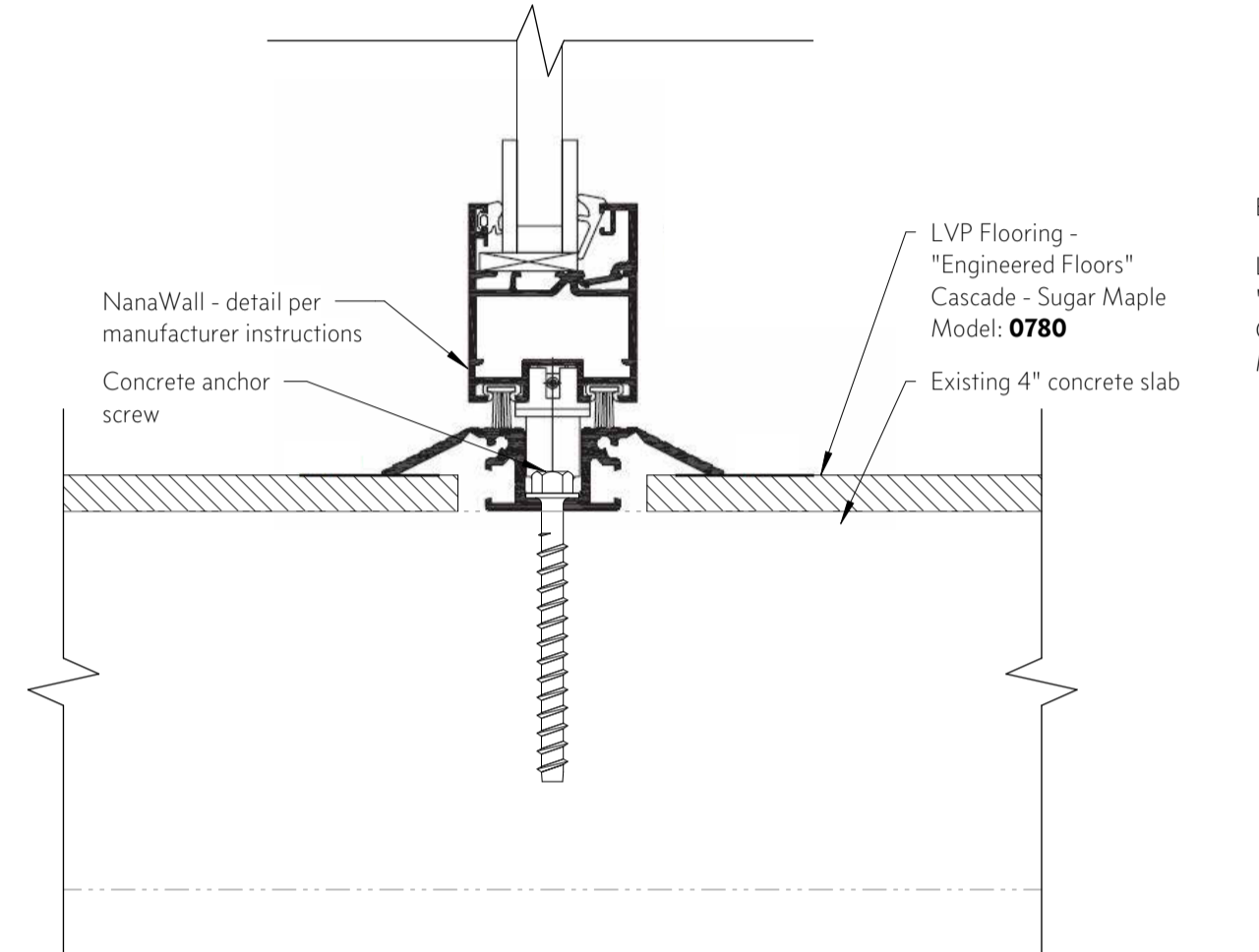
4 SECTION THROUGH BAR TOP
1 1/2" = 1'-0"



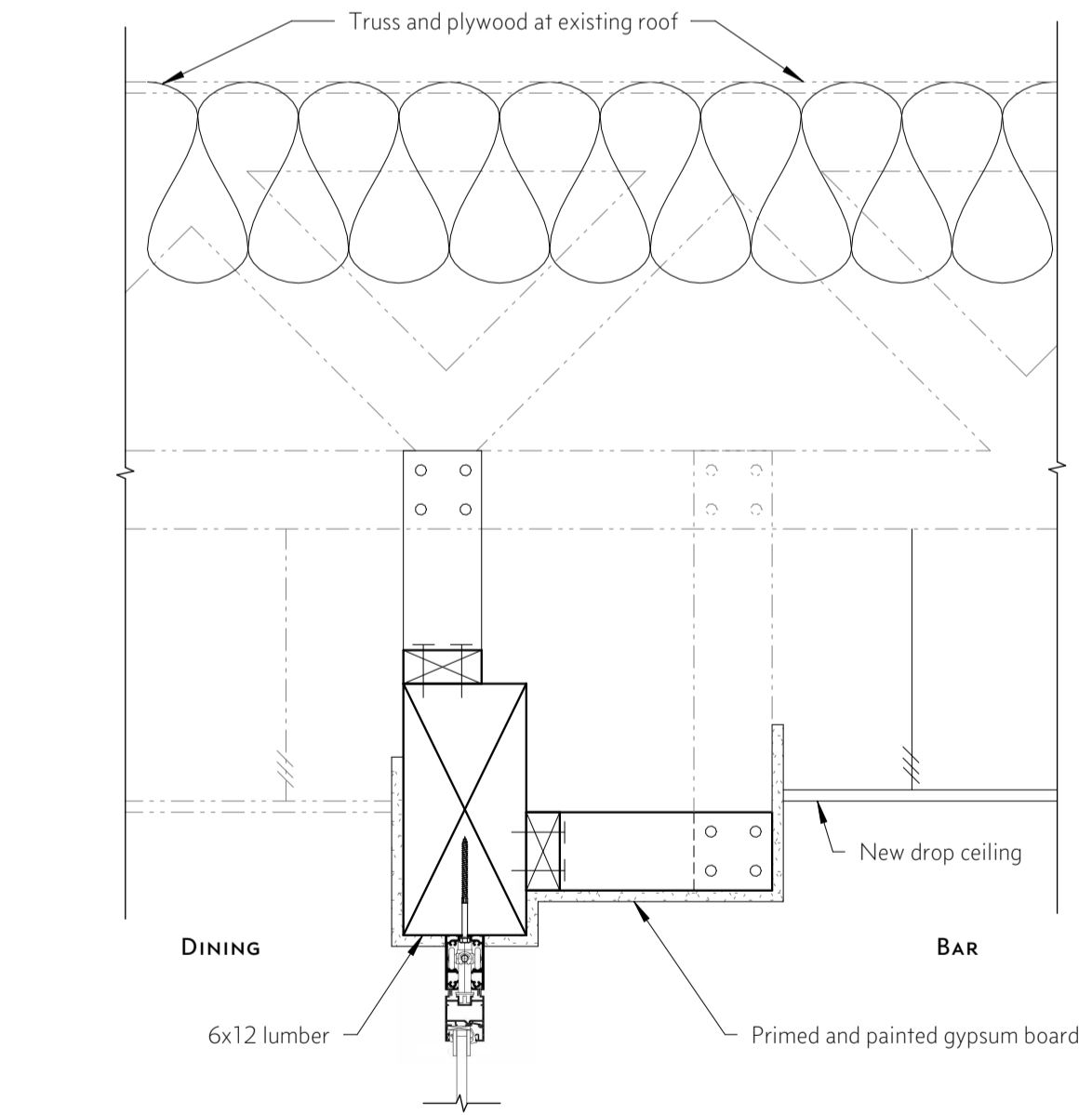
5 PLAN VIEW AT BASE CABINETS
1 1/2" = 1'-0"



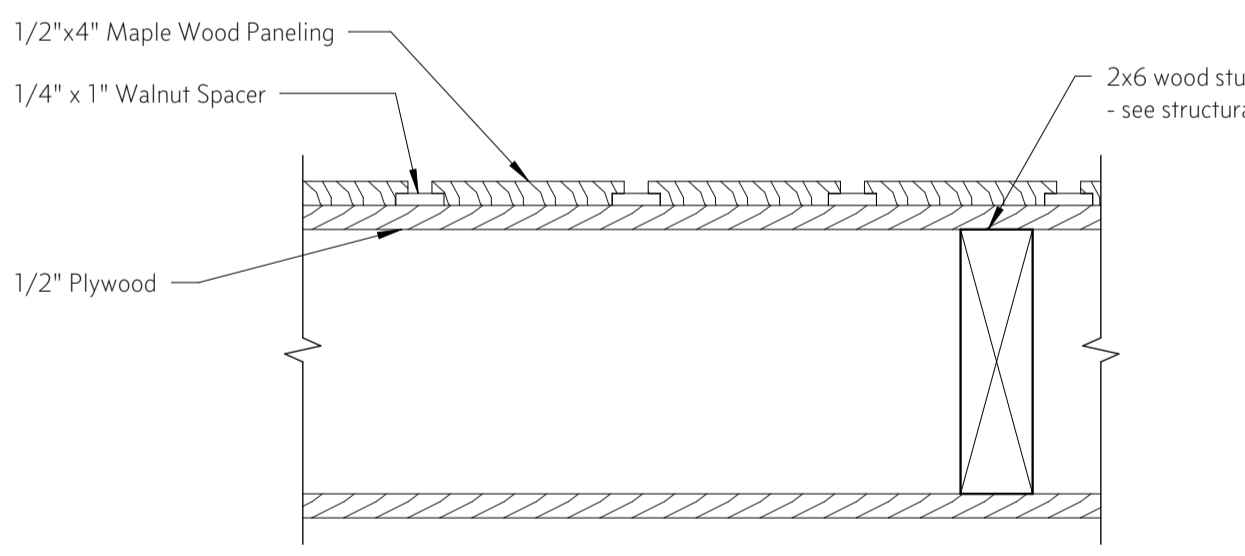
6 PLAN VIEW AT TV OF BAR
1 1/2" = 1'-0"



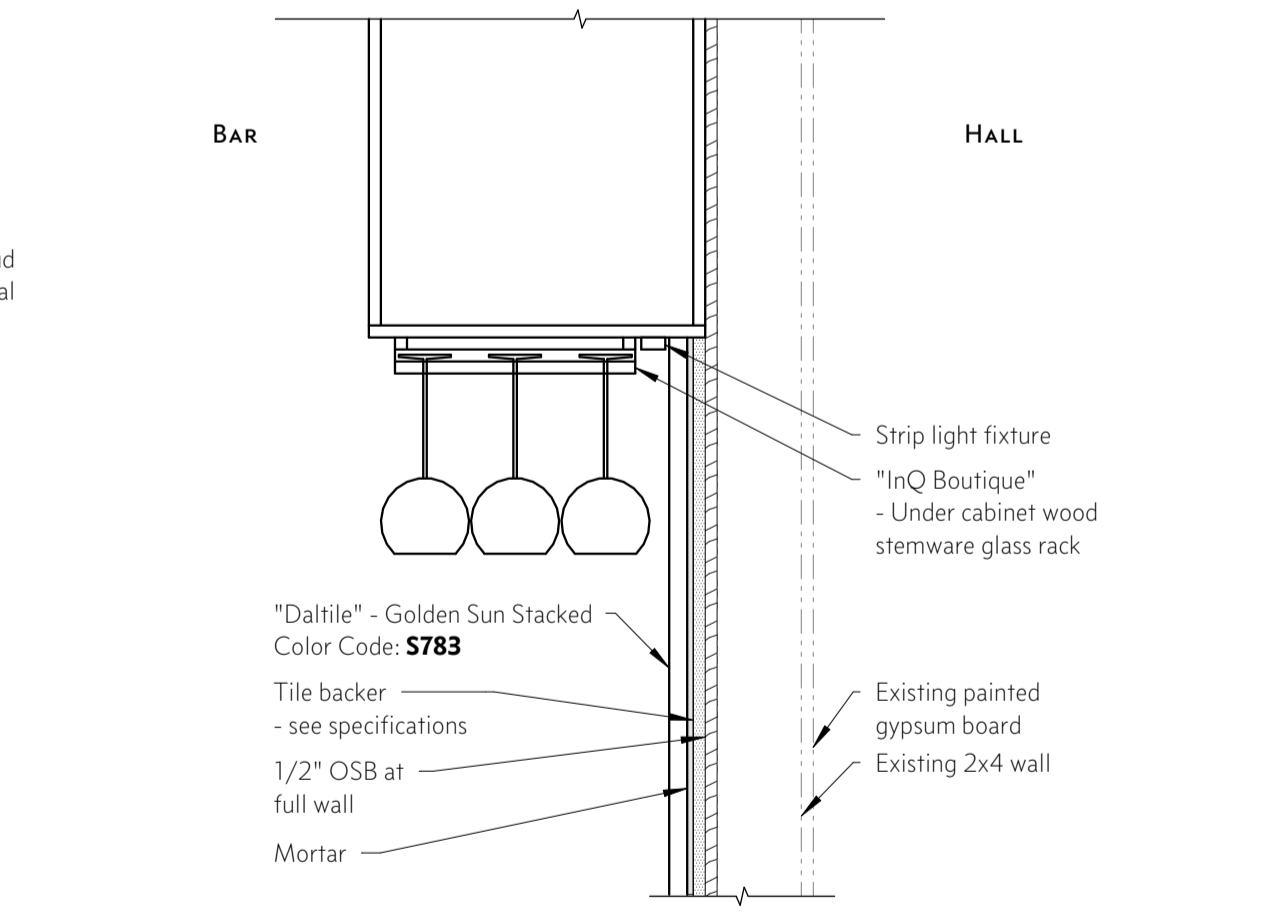
7 DOOR CONNECTION AT 4" SLAB
6" = 1'-0"



8 DETAIL AT SLIDING GLASS DOOR HEAD
1 1/2" = 1'-0"



9 PANELING AT BAR TOP PONY WALL
3" = 1'-0"



10 DETAIL THROUGH UPPER CABINETS AT STACKED STONE
1 1/2" = 1'-0"

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DETAILS	

GENERAL STRUCTURAL NOTES

APPLY UNLESS NOTED OTHERWISE

BUILDING CODE:

2012 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE AND STANDARDS REFERENCED THEREIN, WITH CITY OF PHOENIX AMENDMENTS.

LOADS:

ROOFS: EXISTING

ROOF LIVE LOAD = 20 PSF (REDUCIBLE).
ROOF DEAD LOAD = 20 PSF.

LATERAL WIND:

ULTIMATE DESIGN WIND SPEED (3-SECOND GUST), V_{ult} = 105MPH
EXPOSURE 'C'
RISK CATEGORY, II

SEISMIC:

SEISMIC IMPORTANCE FACTOR, $I = 1.0$
RISK CATEGORY II
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, $S_s = 0.196$
MAPPED ONE SECOND SPECTRAL ACCELERATION, $S_1 = 0.062$
SOIL SITE CLASS, D
DESIGN SHORT PERIOD SPECTRAL ACCELERATION, $S_{ds} = 0.209$
DESIGN ONE SECOND SPECTRAL ACCELERATION, $S_{d1} = 0.100$
SEISMIC DESIGN CATEGORY, B
BASIC SEISMIC-FORCE-RESISTING SYSTEM = PLYWOOD SHEAR WALLS.

WOOD GENERAL:

WOOD FRAMING MEMBERS SHALL NOT BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. ALL NAILING NOT NOTED SHALL BE PER TYPICAL DETAIL AND COMMON NAIL DIAMETER TABLE BELOW. ALL BOLTING SHALL BE PER STRUCTURAL STEEL SECTION ABOVE. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT ICC APPROVAL. WHERE "TYPE" OF CONNECTOR IS INDICATED ON THE DRAWINGS, THE CONNECTOR AND ATTACHMENT SHALL BE PER THE MAXIMUM MODEL NUMBER BASED ON THE SIZE OF THE MEMBERS CONNECTED.

NAIL TYPE	REQ'D DIA	REQ'D GA	LENGTH	NAIL TYPE	REQ'D DIA	REQ'D GA	LENGTH
6d	0.113"	11	1/2"	12d	0.148"	9	3 1/4"
8d	0.131"	10	1/4"	16d	0.162"	8	3 1/2"
10d	0.148"	9	3"	20d	0.192"	6	4"

IN STUD WALLS, UNLESS NOTED OTHERWISE, INSTALL DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS AND AT ISOLATED BEARING POINTS OF FRAMING MEMBERS ABOVE. WOOD FRAME BEARING WALLS SHALL HAVE A SIMPSON RSP ANCHOR TOP AND BOTTOM OF STUDS AT 32" O.C. MAXIMUM, EXCEPT AT THOSE WALLS WHERE PLYWOOD SHEATHING IS NAILED DIRECTLY TO THE TOP AND BOTTOM PLATES. PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS.

PROVIDE A MINIMUM OF 0.229" X 3" X 3" GALVANIZED STEEL PLATE WASHER UNDER EACH NUT AT FOUNDATION ANCHOR BOLTS OF SHEAR WALLS. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4". PROVIDE A STANDARD CUT WASHER BETWEEN THE PLATE WASHER AND THE NUT.

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE REFERENCED EDITION OF THE GRADING RULES OF THE WMPA OR THE WOLB. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE MINIMUM PROPERTIES WHICH MEET OR EXCEED THE FOLLOWING WOOD TYPES:

	WOOD TYPE
JOISTS	
2 X 6 OR LARGER	H.F. #2
BEAMS	
WIDTH 4" OR LESS	D.F.L. #1
WIDTH GREATER THAN 4"	D.F.L. #1
LEDGERS AND TOP PLATES	D.F.L. #2
STUDS	
2 X 4	H.F. #2
2 X 6 OR LARGER	H.F. #2
POSTS	
4 X 4	H.F. #2
4 X 6 OR LARGER	H.F. #2
6 X 6 OR LARGER	H.F. #1

PLYWOOD:

ALL PLYWOOD SHALL BE APA "CDX" RATED SHEATHING OR BETTER AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY UP PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD). STAGGER JOINTS. ALL NAILING, COMMON NAILS. WHERE SCREWS ARE INDICATED FOR WOOD TO WOOD ATTACHMENTS, USE WOOD SCREWS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATIO AND SHALL BE ATTACHED AS FOLLOWS UNLESS NOTED OTHERWISE:

USE	THICKNESS NOTED ON DRAWINGS	SPAN/INDEX RATIO	EDGE ATTACHMENT	INTERMEDIATE ATTACHMENT
ROOF	1/2"	(15/32" MIN)	32/16	8d AT 6" O.C. --- 8d AT 12" O.C.

GENERAL NOTES:

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERE TO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE REFERENCED EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

SPECIAL INSPECTION - STRUCTURAL ONLY: FOR SPECIAL STRUCTURAL INSPECTIONS: CONTACT JTA Engineering, AT 480-442-2179 PRIOR TO CONSTRUCTION.

SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE REGISTERED STRUCTURAL ENGINEER WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE SUPERVISING STRUCTURAL ENGINEER SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE.

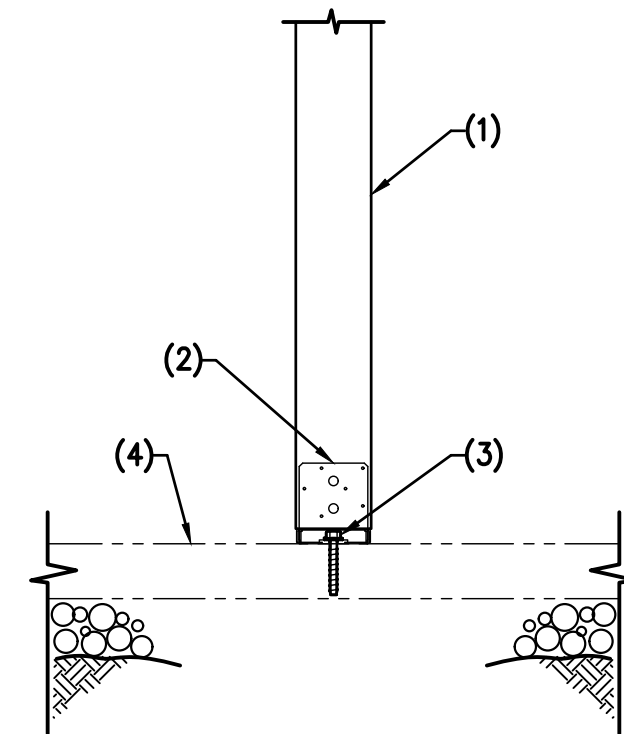
SPECIAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. "SPECIAL STRUCTURAL INSPECTION" SHALL NOT RELIEVE THE OWNER OR THEIR AGENT FROM REQUESTING THE BUILDING JURISDICTION INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 FOR THE FOLLOWING:

SPECIAL CASES:

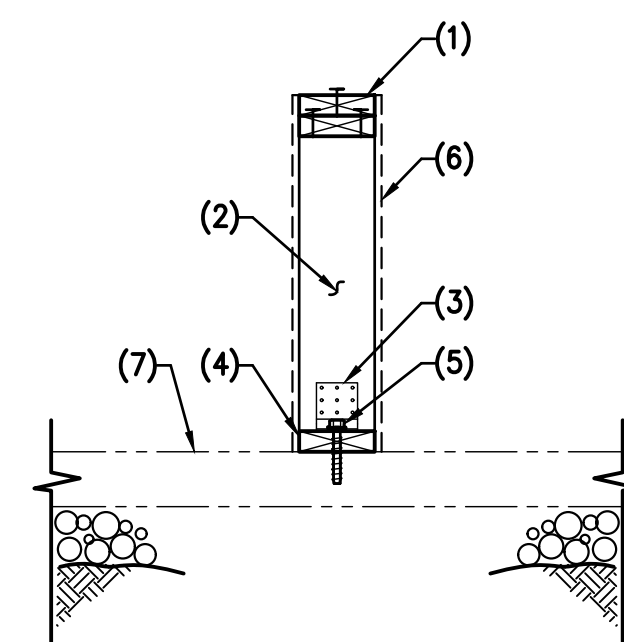
- EXPANSION, EPOXY, ADHESIVE, AND SCREW ANCHORS: DURING THE PLACEMENT OF ALL ANCHORS SHOWN ON STRUCTURAL DRAWINGS, ADDITIONAL INSPECTIONS REQUIRED FOR REPAIR DETAILS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
 - INSPECTION OF HOLE DIAMETER, HOLE DEPTH AND DRILL BIT CONFORMANCE.
 - INSPECTION OF HOLE CLEANING WITH WIRE BRUSH AND COMPRESSED AIR.
 - INSPECTION OF ANCHOR INSTALLATION USING SPECIFIED PRODUCT AND MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
 - INSPECTION OF EXPANSION ANCHORS SHALL INCLUDE THE VERIFICATION OF THE TIGHTENING TORQUE THAT IS SPECIFIED BY THE ANCHOR MANUFACTURER.

NOTES:

- 6x6 WOOD POST.
- SIMPSON "ABU66Z" POST BASE.
- 1/2" x 4" LONG SIMPSON TITEN HD SCREW ANCHOR.
- EXISTING CONCRETE SLAB.



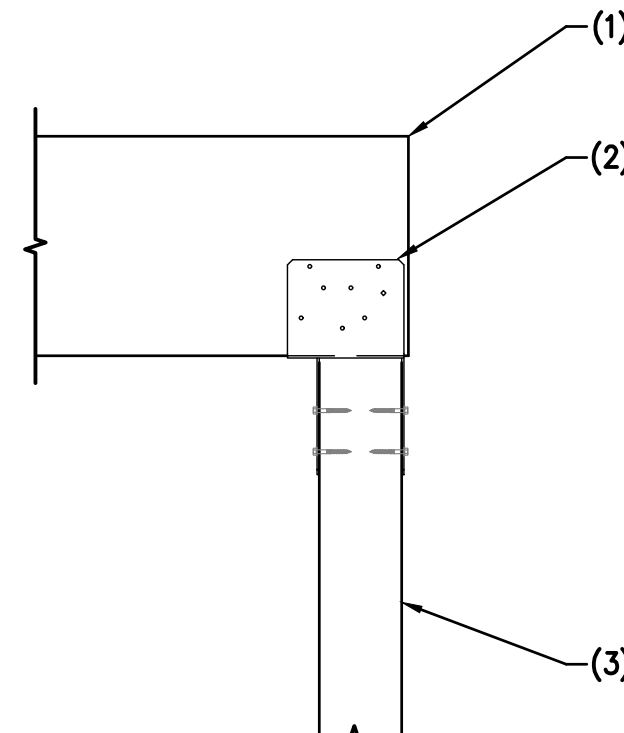
101 NEW WOOD POST AT EXISTING CONCRETE SLAB NO SCALE



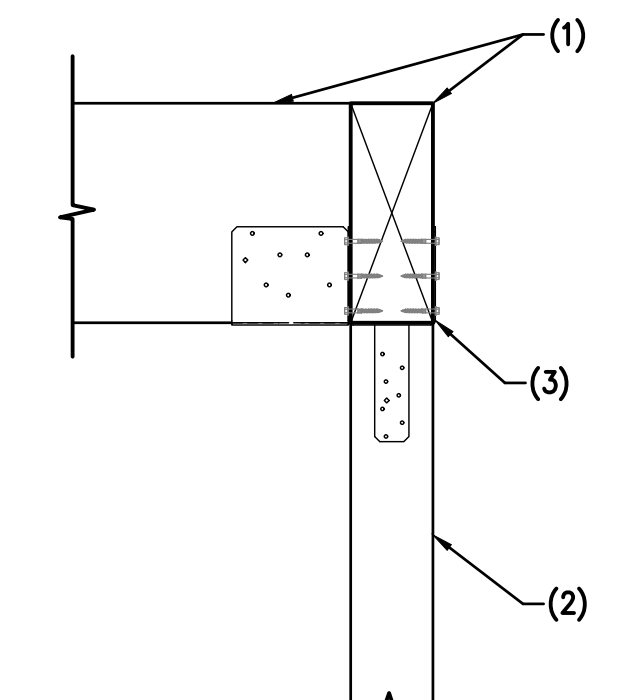
102 NEW WALL AT EXISTING CONCRETE SLAB NO SCALE

NOTES:

- WOOD BEAM.
- SIMPSON ECC06SDS2.5 TYPE COLUMN CAP.
- WOOD COLUMN.



201 WOOD BEAM AT WOOD COLUMN NO SCALE



202 WOOD BEAM AT WOOD COLUMN NO SCALE

NOTES:

- CONT. DOUBLE TOP PLATE W/ 16d NAILS AT 8" O.C.
- 2x6's AT 16" O.C.
- SIMPSON "TICKERS" AT EACH END AND AT 32" O.C.
- CONT. 2x SILL PLATE.
- 1/2" x 4" LONG SIMPSON TITEN HD SCREW ANCHOR.
- 1/2" PLYWOOD W/ SCREWS AT 6" O.C.
- EXISTING CONCRETE SLAB.

NOTES:

- WOOD BEAM.
- WOOD COLUMN.
- SIMPSON ECC06SDS2.5.



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PROJECT NUMBER: 2023013 PROJECT MANAGER: SJ/JS

drawings that are not signed, sealed and dated by the engineer of record are considered preliminary and are not for construction. any requested changes after bid documents are issued will be considered a change order and will be billed hourly to the requesting party.

JOB # []

DATE []

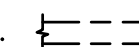
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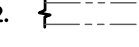
CHECKED BY [] SJ

G.S.N. [] DETAILS

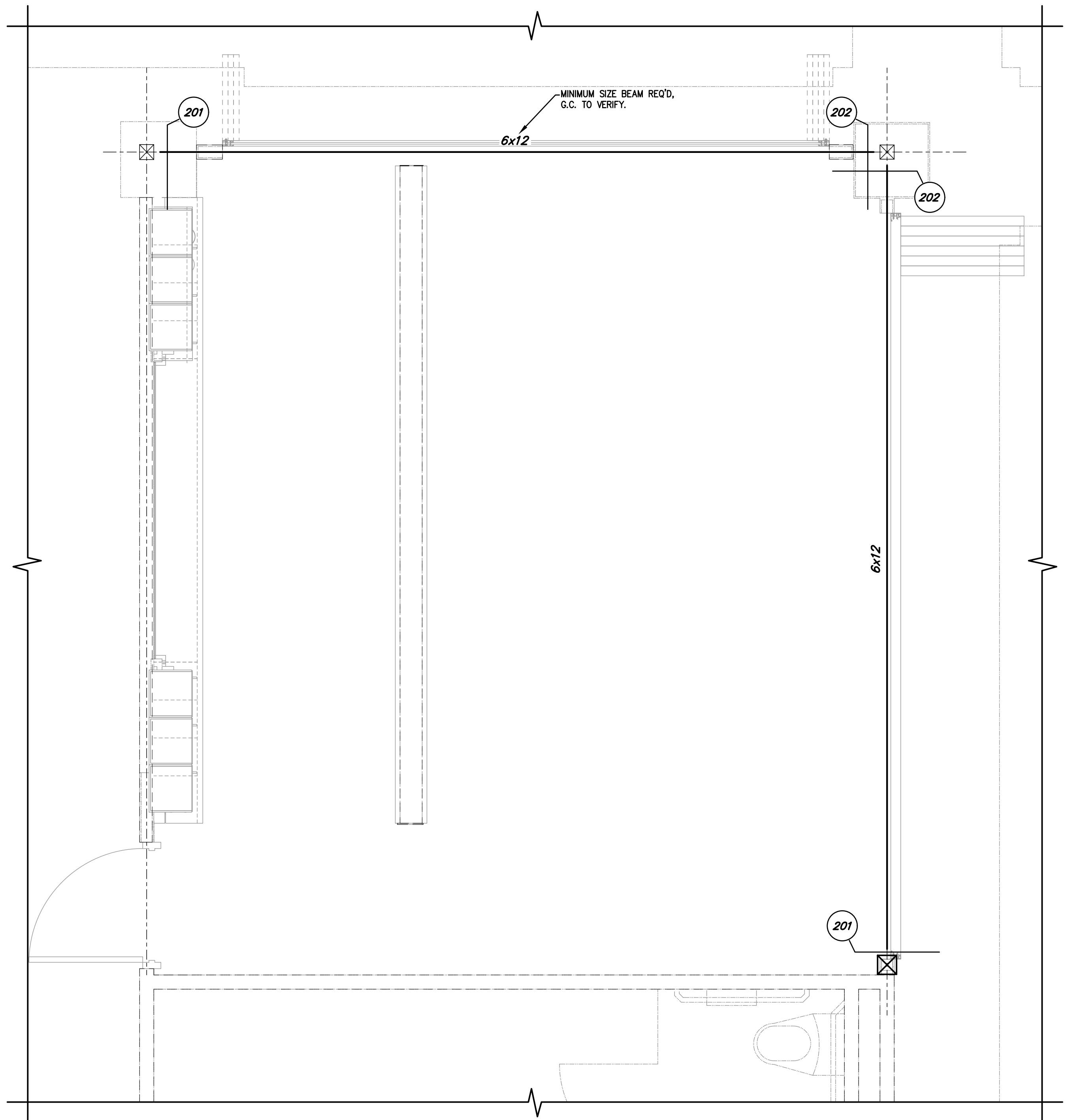
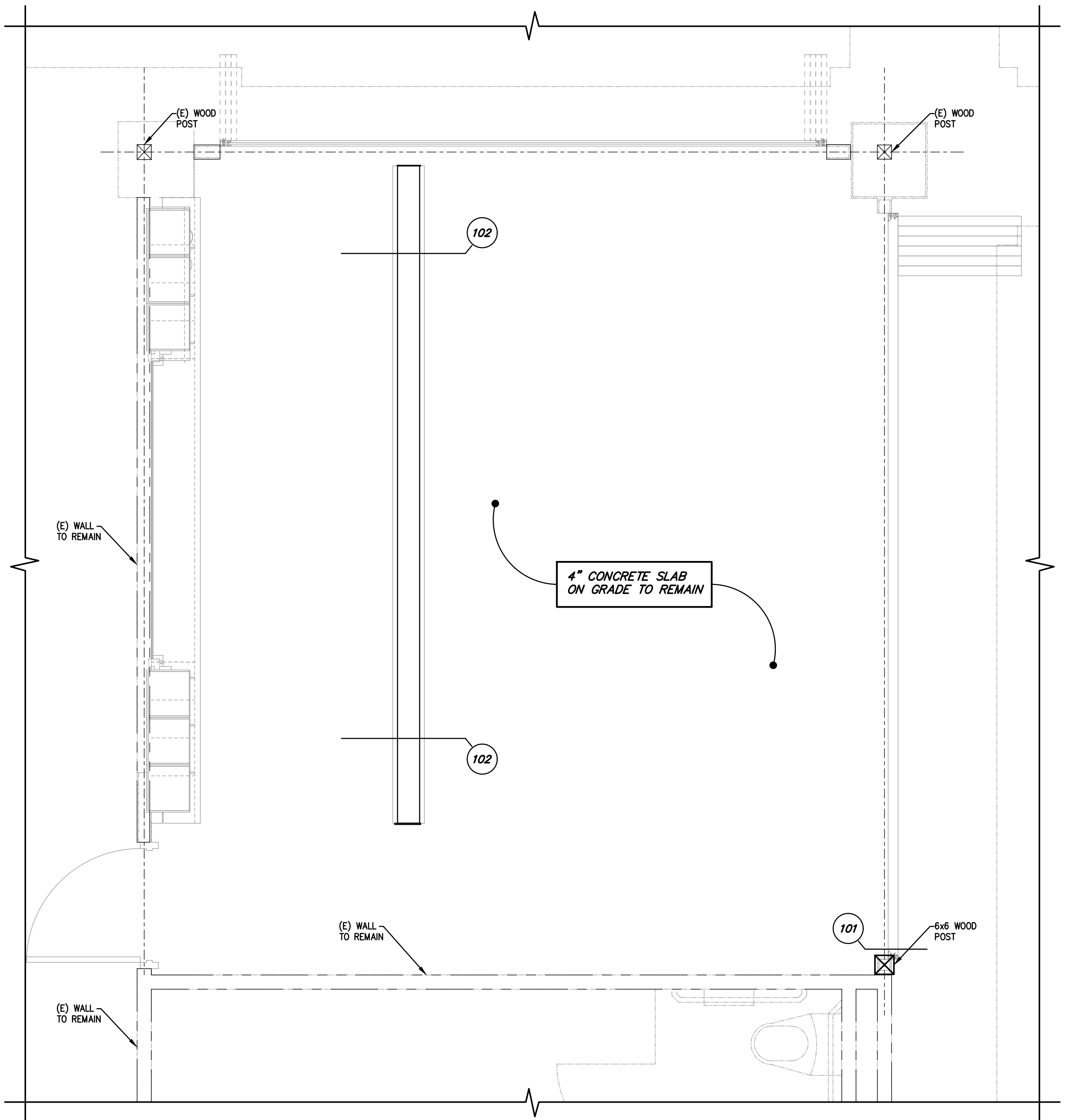
FOUNDATION NOTES -- TYP U.N.O.:

1. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. BUILDING DIMENSIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND SHALL BE VERIFIED WITH SAME PRIOR TO PROCEEDING WITH THE WORK. DO NOT USE CONC. C.I. FOR LOCATING BUILDING ELEMENTS.
2.  -- AS SHOWN ON PLAN INDICATES EXISTING WALLS.
3. UNLESS NOTED OTHERWISE ON PLANS AND/OR DETAILS, DEPTH OF FOOTING DIMENSIONS INDICATED IN THE PLANS. FOUNDATION CONTRACTOR SHALL COORDINATE WITH ALL TRADES TO INSURE THAT THESE MINIMUMS ARE EXISTING FOR THE NEW WORK.

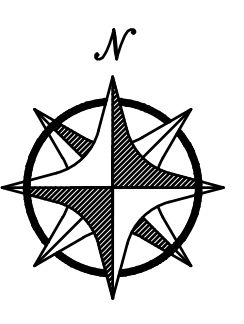
ROOF FRAMING NOTES -- TYP U.N.O.:

1. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. BUILDING DIMENSIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND SHALL BE VERIFIED WITH SAME PRIOR TO PROCEEDING WITH THE WORK.
2.  -- AS SHOWN ON PLAN INDICATES EXISTING WALLS.
3. UNLESS NOTED OTHERWISE ON PLANS AND/OR DETAILS, DEPTH OF FOOTING DIMENSIONS INDICATED IN THE PLANS. FOUNDATION CONTRACTOR SHALL COORDINATE WITH ALL TRADES TO INSURE THAT THESE MINIMUMS ARE EXISTING FOR THE NEW WORK.

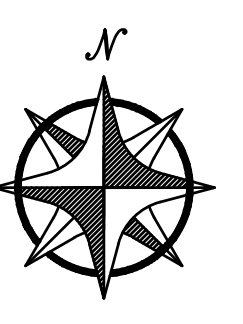
TREVOR PAN ARCHITECTS
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 TEL: 602.492.6426
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 WWW: TREVORPANARCHITECTS.COM
 T P A PLLC



PARTIAL EXISTING FOUNDATION PLAN
 SCALE: 1/2" = 1'-0"



PARTIAL EXISTING ROOF FRAMING PLAN
 SCALE: 1/2" = 1'-0"



Barrett P
 T...
 N... S.
 P... A...
 R... S...
 D... D...



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JOB #
 DATE
 SCALE
 DRAWING NO. JS
 CHECKED BY SJ
 PARTIAL EXISTING FOUNDATION
 ROOF FRAMING PLANS

PM: C.D. DATE: 01/11/2023 11:00 AM PROJECT: 2023013 - STRUCTURAL WALLS

MECHANICAL SPECIFICATIONS

GENERAL

1. THE MECHANICAL CONTRACTOR SHALL COORDINATE T--STAT (SENSOR) LOCATIONS WITH THE ARCHITECT & OWNER.
2. PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT, FEES, PERMITS ETC. NEEDED FOR A COMPLETE INSTALLATION.
3. THIS CONTRACT SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS BY WHICH IT HAS BEEN PERMITTED.
4. COORDINATE ALL MECHANICAL WORK WITH ARCHITECT AND OTHER TRADES PRIOR TO ANY CONSTRUCTION.
5. TERMINATE EXHAUST DUCTS AND PLUMBING VENTS MINIMUM 10 FEET HORIZONTALLY FROM OR 3 FEET ABOVE ALL AIR INTAKES. COORDINATE WITH PLUMBING CONTRACTOR.
6. EQUIPMENT AND APPLIANCES SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL, IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, THE MANUFACTURER'S INSTALLATION INSTRUCTION AND THE IMC MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION.
7. MECHANICAL CONTRACTOR SHALL VERIFY AND COORDINATE SIZE AND LOCATION OF ALL EXISTING HVAC EQUIPMENT. EXISTING EQUIPMENT AND DUCTWORK SHALL BE CLEANED AND SERVICED. CONTRACTOR SHALL REPLACE ALL WORN OR DEFECTIVE PARTS AND RETURN ALL EXISTING EQUIPMENT AND REUSED DUCTS TO GOOD WORKING CONDITION. INFORM OWNER/LANDLORD OF MAJOR REPAIRS REQUIRED TO MAKE EXITING UNITS OPERATIONAL. EXISTING CONDITIONS SHALL BE VERIFIED PRIOR TO SUBMITTING BID.

EQUIPMENT

1. LOCATE ALL MECHANICAL EQUIPMENT IN COMPLIANCE WITH THE IMC.
2. ALL NEW HVAC EQUIPMENT SHALL BE U.L., E.T.L., AND /OR AGA LISTED.
3. PROVIDE FARR 24X24 DISPOSABLE FILTERS, FRAMES, HARDWARE AND ACCESSORIES FOR USE DURING CONSTRUCTION. PROVIDE NEW DISPOSABLE FILTERS PRIOR TO BALANCING THE SYSTEM.
4. MECHANICAL CONTRACTOR TO VERIFY AND COORDINATE AVAILABLE VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

DUCTWORK

1. PROVIDE MANUAL SPIN-IN DAMPER AT EACH NEW BRANCH CONNECTION FOR DIFFUSERS IN LAY-IN CEILINGS AND OPPOSED BLADE DAMPER IN HARD LID MOUNTED DIFFUSERS.
2. BRANCH DUCTS SHALL BE RIGID ROUND. THE FINAL CONNECTION TO THE DIFFUSER MAY BE MADE WITH FLEX DUCT. FLEX DUCT LENGTH SHALL NOT EXCEED 8'0".
3. USE GALVANIZED SHEET METAL FOR ALL NEW DUCTWORK. CONSTRUCT AND INSTALL IN ACCORDANCE WITH ASHRAE GUIDELINES, CHAPTER 6 OF THE IMC AND THE LATEST SMACNA STANDARDS FOR LOW PRESSURE DESIGN.
4. USE THERMAFLEX TYPE KM OR APPROVED EQUAL FLEX DUCT CONFORMING TO UL 181, NFBA 90A AND 90B.
5. MECHANICAL CONTRACTOR TO VERIFY THAT ALL DUCTWORK WILL FIT AS DESIGNED.
6. DUCTS SHALL BE OF SIZES SHOWN ON THE DRAWINGS UNLESS LOCATION OF STRUCTURAL MEMBERS PROHIBIT. THE AREA OF THE DUCT SHALL BE MAINTAINED IF A CHANGE IS NEEDED. THE DUCT SIZES SHOWN ARE CLEAR INSIDE INCLUDING ANY DUCT LINERS.
7. SUPPORT ALL NEW & EXISTING DUCTS WITH HANGERS TO THE STRUCTURE. PLACE SUPPORTS NOT OVER 8 FEET APART ALONG THE LENGTH OF THE DUCT. SHEET METAL SHALL BE:

UP TO 12" WIDTH	26 GAUGE STEEL
13" TO 30" WIDTH	24 GAUGE STEEL
31" TO 60" WIDTH	22 GAUGE STEEL
8. FLEX DUCT SHALL BE SUPPORTED BY 1 1/2" 26 GAUGE STEEL STRAP NOT MORE THAN FOUR FEET ON CENTER.
9. EXHAUST DUCTS SHALL BE 26 GAUGE GALVANIZED STEEL.
10. USE CLASS "0" OR CLASS "1" FOR ALL "FACTORY MADE" DUCT.
11. INSTALL RADIUS ELBOWS, TURNING VANES, EXTRACTORS AND SPLITTER DAMPERS IN DUCTWORK WHERE APPLICABLE.
12. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, MASTIC+EMBEDDED-FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND SHALL BE MARKED 181A-P FOR PRESSURE-SENSITIVE TAPE. TAPES AND MASTICS USED TO SEAL FLEXIBLE AIR DUCT AND FLEXIBLE CONNECTORS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED 181B-FX FOR PRESSURE-SENSITIVE TAPE OR 181M FOR MASTIC. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.
13. FOR UNCONDITIONED SPACE DUCT PROVIDE MINIMUM R=8 INSULATION.

OUTLETS

1. THE MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL AIR DISTRIBUTION DEVICES WITH ALL TRADES PRIOR TO ANY CONSTRUCTION.
2. THE MECHANICAL CONTRACTOR SHALL COORDINATE SPACE AVAILABILITY FOR DUCTWORK WITH STRUCTURAL AND ELECTRICAL CONTRACTORS PRIOR TO ANY CONSTRUCTION TO AVOID RELOCATING DUCTWORK AT THE MECHANICAL CONTRACTOR'S EXPENSE.
3. DIFFUSERS SHALL MATCH EXISTING OR APPROVED EQUAL, NECK SIZE AS INDICATED.
4. RETURN AIR GRILLES SHALL MATCH EXISTING OR APPROVED EQUAL.

DRAINS

1. EXTEND SCHEDULE TYPE "M" COPPER CONDENSATE DRAIN AS SHOWN. MIN 2% SLOPE. ROUTE UNDER ROOF.

INSULATION

1. PROVIDE 1" ACOUSTIC INTERNAL LINER IN SUPPLY AND RETURN DUCTWORK FROM THE DUCT CONNECTION TO THE UNIT AND LINE THE FIRST 10 FEET.
2. ALL INSULATION, MATERIAL, COVERINGS, ADHESIVES, VAPOR-BARRIERS AND TAPES SHALL CONFORM TO NFPA 90A, FLAME SPREAD CLASSIFICATION NOT TO EXCEED 25 AND SMOKE DEVELOPMENT NOT TO EXCEED 50.
3. SHEET METAL DUCTWORK FOR A/C SUPPLY AND RETURN SHALL BE WRAPPED WITH 1-1/2", 3/4 LB. EXTERIOR INSULATION, WITH FSK JACKET AND VAPOR BARRIER.

TESTING

1. TEST AND BALANCE SYSTEM TO APPROXIMATE CFM INDICATED ON MECHANICAL FLOOR PLAN AND ADJUST TO THE TENANT'S SATISFACTION. MARK ALL FINAL DAMPER SETTINGS WITH A PAINT DOT. THE BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AABC CERTIFIED BALANCE CONTRACTOR. PROVIDE A COPY OF AIR BALANCE REPORT TO THE CITY BUILDING INSPECTOR PRIOR TO OR BEFORE FINAL MECHANICAL INSPECTION.

TEMPERATURE CONTROLS

1. PROVIDE A SYSTEM OF TEMPERATURE CONTROLS INCLUDING THERMOSTATS, TIME SWITCHES, OVERRIDE TIMERS, DAMPER MOTORS, AND RELAYS REQUIRED TO PROVIDE THE DESIRED SEQUENCE OF OPERATION. PROVIDE INTEGRATED WIRING DIAGRAMS SHOWING INTERCONNECTIONS BETWEEN FIELD INSTALLED EQUIPMENT AND PACKAGE WIRING FURNISHED WITH THE HVAC EQUIPMENT. CONTROL WIRING SHALL BE SIZED TO ACCOMMODATE THE VOLTAGE DROP ASSOCIATED WITH THE DISTANCE BETWEEN THE CONTROL DEVICE AND THE CONTROLLER.

EQUIPMENT

1. SEVEN DAY PROGRAMMABLE, OCCUPIED/UNOCCUPIED THERMOSTATS FOR HEATING, COOLING AND FOR CONTROL OF ECONOMIZER SHALL BE HONEYWELL SERIES T7351 OR EQUAL WITH INTEGRAL SUBBASE W7459A ECONOMIZER MODULE. INSTALL THERMOSTATS AT 48" AFF TO MEET ADA REQUIREMENTS UNLESS OTHERWISE NOTED ON THE PLANS.

INVESTIGATION OF CONDITIONS

2. EXAMINE THE CONTRACT DRAWINGS AND ALL AVAILABLE INFORMATION CONCERNING EXISTING INSTALLATION, STRUCTURE, AND LOCAL CONDITIONS. VISIT THE SITE TO UNDERSTAND THE NATURE AND SCOPE OF ALL WORK TO BE PERFORMED AND VERIFY EXISTING CONDITIONS. THE SUBMISSION OF A BID WILL BE TAKEN AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND THAT ALL EXISTING CONDITIONS HAVE BEEN CONSIDERED. NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THESE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES

- PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITION REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS.
- COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHERS TRADES TO ENSURE A NEAR AND ORDERLY INSTALLATIONS. INSTALL DUCTWORKS AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE WITH OTHERS TRADES TO AVOID CONFLICTS. COORDINATE INSTALLATION OF DUCTWORK TO AVOID CONFLICTS WITH ELECTRICAL PLANES, LIGHTING FIXTURES, ETC. ANY MODIFICATIONS REQUIRED DUE TO LACK OF COORDINATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.
- NEW MECHANICAL EQUIPMENT AND DUCTWORK ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THE FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
- REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTIONS DETAILS AS APPLICABLE TO THE HVAC SYSTEM. VERIFY CHASES AND PENETRATIONS SHOWN ON ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR DUCTWORK AND PIPING MEET REQUIREMENTS.
- COORDINATE LOCATION ON ROOF MOUNTED HVAC EQUIPMENT AND ROOF PENETRATIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- INDOOR AIR QUALITY MEASURES:
 - PROTECT INSIDE OF (INSTALLED AND DELIVERED) DUCTWORK AND HVAC UNITS FROM EXPOSURE TO DUST, DIRT, PAINT AND MOISTURE.
 - REPLACE INSULATION THAT HAS GOTTEN WE AT ANY TIME DURING CONSTRUCTION; DRYING THE INSULATION IS NOT ACCEPTABLE.
 - SEAL ANY OF JOINTS OF INTERNAL FIBERGLASS INSULATION.
 - REMOVE DEBRIS FROM CEILING / RETURN AIR PLENUM INCLUDING DUST.
 - AN INDEPENDENT, PROFESSIONAL DUCT CLEANING COMPANY SHALL VACUUM CLEAN ANY DUCTWORK CONNECTED TO HVAC UNITS THAT WERE OPERATED DURING THE CONSTRUCTION PERIOD AFTER NEW FILTERS (MINIMUM MERV=8) ARE INSTALLED AND PRIOR TO TURNING SYSTEM SYSTEM OVER TO OWNER.
- INSTALL DUCTWORK PARALLEL TO BUILDING COLUMN LINES UNLESS OTHERWISE SHOWN OR NOTED.
- OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGER AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF EXCEPT WHERE CONCRETE INSERTS IN CONCRETE SLABS ARE ALLOWED BY THE SPECIFICATIONS.
- COORDINATE LOCATION OF EQUIPMENT SUPPORT WITH LOCATION OF EQUIPMENT ACCESS PANELS / DOORS TO ENABLE SERVICE OF EQUIPMENT AND / OR FILTER REPLACEMENT.
- SEAL PENETRATIONS THROUGH THE BUILDING COMPONENT IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH THE U.L. REQUIREMENTS.
- COORDINATE THE EXACT MOUNTING SIZE AND FRAME TYPE OF DIFFUSERS, REGISTERS AND GRILLES WITH THE SUPPLIER TO MEET THE CEILING, WALL AND DUCT INSTALLATION REQUIREMENTS.
- ADJUST LOCATION OF CEILING GRID AND LIGHTING LOCATIONS.
- LOCATE AND SET THERMOSTATS SENSORS AT LOCATIONS SHOWN ON PLANS. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR INSTALLATION. INSTALL THERMOSTATS WITH TOP OF DEVICE AT MAXIMUM 48" A.F.F. TO MEET ADA REQUIREMENT UNLESS NOTED OTHERWISE ON PLANS. INSTALL WIRING IN CONDUIT BY DIVISION 16.
- PROVIDE A MANUAL BALANCING DAMPER IN EACH BRANCH DUCT TAKE-OFF FROM MAIN SUPPLY, RETURN, OUTDOOR AND EXHAUST AIR DUCT
- PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR / ROUND BRANCH DUCT TAKE-OFF WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FRO BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS, REGISTERS AND GRILLES.
- BRANCH DUCTWORK TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE UNLESS OTHERWISE NOTED.
- RIGID DUCTWORK INSULATION: PROVIDE 3/4 LB DENSITY, 2" (R-6), INSULATION WRAP OR RIGID ROUND, CONCEALED, SUPPLY AND RETURN AIR DUCTS. PROVIDE 1-1/2" (R-6) THICK 1-1/2 LB DENSITY INTERNAL DUCT LINER ON RECTANGULAR SUPPLY AND RETURN AIR DUCTS. DUCT SIZES ON MECHANICAL PLANS INDICATE CLEAR INSIDE AIRFLOW DIMENSIONS, INCREASE SHEET METAL SIZES ACCORDINGLY.
- PROVIDE THERMANFLEX TYPE M-FE, FLEXMASTER TYPE 8, OR APPROVED EQUAL FLEXIBLE DUCTWORK. FLEXIBLE DUCTWORK SHALL BE LISTED UNDER UL 181 AS CLASS 1 AIR DUCT AND BE PROVIDED WITH INTEGRAL R-6, 3/4" LB DENSITY FIBERGLASS INSULATION. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH AND SHALL BE INSTALLED AND SUPPORTED TO AVOID SHARP BENDS AND SAGGING
- THE HVAC, REFRIGERATION, AND FIRE SUPPRESSION SYSTEM SHALL NOT CONTAIN CFC OR HALONS.
- ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENTS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET UNIT FINAL START-UP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT.
- IF THE NEW HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MERV OF 8. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY.
- AN OPERATION AND SYSTEM MANUAL SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF FINAL INSPECTIONS.
- REFER TO THE MECHANICAL SPECIFICATIONS FOR HVAC SYSTEM CONTROLS, SPECIFICATIONS AND TEST & BALANCE REQUIREMENTS. FINAL SYSTEM TESTING, BALANCING AND ADJUSTMENTS SHALL BE PERFORMED BY A CONTRACTOR CERTIFIED BY THE NATION ENVIRONMENTAL BALANCING BUREAU (NEBB) OR ASSOCIATED AIR BALANCE COUNCIL (AABC).
- A FINAL REPORT FOR TESTING AND ADJUSTING OR ALL NEW SYSTEMS SHALL BE COMPLETED AND PROVIDED TO THE FIELD INSPECTOR PRIOR TO FINAL APPROVAL. THIS REPORT SHALL BE SIGNED BY THE INDIVIDUAL RESPONSIBLE OR PERFORMING THESE SERVICES.
- REFER TO MECHANICAL DETAILS FOR ROUND AND RECTANGULAR DUCT SUPPORT DETAILS AND CEILING DIFFUSER SUPPORT DETAILS.
- ALL MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW.

IECC COMPLIANCE NOTES

- DESIGN HEATING AND COOLING LOADS HAVE BEEN CALCULATED FOR THE BUILDING USING CARRIER HOURLY ANALYSIS PROGRAM THAT USES PROCEDURES RECOMMENDED BY ASHRAE.
- ALL EQUIPMENT AND SYSTEMS HAVE BEEN SIZED TO BE NO GREATER THAN NEEDED TO MEET CALCULATED LOADS.
- HUMIDIFICATION SYSTEMS HAVE NOT BEEN PROVIDED ON THIS PROJECT.
- EACH HEATING OR COOLING SYSTEM ZONE HAS BEEN PROVIDED WITH ITS OWN TEMPERATURE CONTROL DEVICE.
- OUTSIDE AIR SUPPLY SYSTEMS WITH DESIGN AIRFLOW RATES GREATER THAN 3000CFM AND ALL EXHAUST SYSTEMS HAVE DAMPERS THAT ARE AUTOMATICALLY CLOSED WHILE EQUIPMENT IS NOT OPERATING IF APPLICABLE
- OUTSIDE VENTILATION HAS BEEN DESIGNED PER 2018 IMC CHAPTER 4.
- ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, MASTIC+EMBEDDED-FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND SHALL BE MARKED 181A-P FOR PRESSURE-SENSITIVE TAPE. TAPES AND MASTICS USED TO SEAL FLEXIBLE AIR DUCT AND FLEXIBLE CONNECTORS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED 181B-FX FOR PRESSURE-SENSITIVE TAPE OR 181M FOR MASTIC. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED.
- OPERATOR AND MAINTENANCE DOCUMENTATION MUST BE PROVIDED TO THE OWNER THAT INCLUDES EQUIPMENT INPUT AND OUTPUT CAPACITY AND REQUIRED MAINTENANCE ACTIONS, EQUIPMENT OPERATION AND MAINTENANCE MANUALS, HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD DETERMINED SET POINTS MUST BE PERMANENTLY RECORDED ON THE CONTROL DRAWINGS, AT CONTROL DEVICES, OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS. A COMPLETE NARRATIVE OR HOW EACH SYSTEM IS INTENDED TO OPERATE IS REQUIRED.
- EACH SUPPLY AIR OUTLET OR DIFFUSER MUST HAVE ITS OWN BALANCING DEVICE. ACCEPTABLE BALANCE DEVICES INCLUDE ADJUSTABLE DAMPERS LOCATED WITHIN THE DUCTWORK AND SUPPLY AIR DIFFUSERS.

OUTSIDE AIR CALCULATION FOR EXISTING HP-1																		
2018 IMC TABLE 403.3																		
ZONE	AZ	Occ. Density	Pz	Rp	Rp/Pz	Ra	Ra/Az	EXHAUST	Vbz	Ez	Voz	Vpz	Zp	Ev	Pz	D	Vou	Vot
	SF	Tab. 403.3	PEOPLE	CFM/PERSON tab	CFM	CFM/SF Tab	CFM	CFM/SF Tab	Eq 4-1	Tab	Eq 4-2 CFM	CFM	Eq 4-5	403.3.2.3.2	Max. Occupants	Eq 4-7	Eq 4-6	Eq 4-8
BAR AREA	416	100	42	7.5	312	0.18	75	0	387	0.8	484	1300	0.37	0.8	18	0.43	210	262
TOTAL	416											1300			18			262

OSA NOTES:

ADJUST OSA AIR-FLOW TO 270 CFM

MECHANICAL SYMBOLS (NOT ALL USED)

- ☒ SUPPLY AIR DIFFUSER / REGISTER
- ⊗ SUPPLY AIR DIFFUSER / REGISTER
- ☒ RETURN AIR GRILLE
- ☒ EXHAUST AIR
- ☒ RELIEF VENT
- Ⓣ THERMOSTAT
- 8" - INDICATES SIZE OF DUCT
- Ⓐ INDICATED REGISTER, DIFFUSER OR GRILLE TYPE
- METAL ROUND DUCT
- ▣ METAL RECTANGULAR DUCT
- ⌌ ADJUSTABLE VOLUME DAMPER
- 〰 FLEXIBLE ROUND DUCT
- Ⓢ DUCT SMOKE DETECTOR
- Ⓢ VENT THROUGH ROOF
- ⓧ-X EQUIPMENT IDENTIFICATION TAG, SEE SCHEDULE AND KEYNOTES
- Ⓜ MOTORIZED DAMPER
- Ⓢ CO2 SENSOR

PROJECT NO.: TP2301
DESIGNED BY: DG
DRAWN BY: GB
CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 03/31/25



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BAR AT TERRACES
7550 N 16TH ST
PHOENIX, AZ 85020

PROJECT:

SHEET #:

M1

SHEET TITLE:

MECHANICAL SPECIFICATIONS

PLAN INDEX

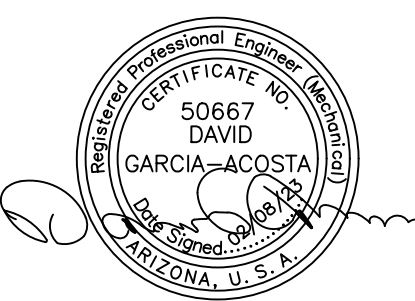
M1 MECHANICAL SPECIFICATIONS
M2 MECHANICAL DEMOLITION PLAN
M3 MECHANICAL PLAN

ROOF AND VENT NOTES

1. ALL VENTS MUST BE EXTENDED THRU ROOF ABOVE THE ROOF LINE.
2. TENANT IS RESPONSIBLE FOR REMOVAL OF ANY UNUSED EQUIPMENT AND TO SEAL ANY UNUSED PENETRATIONS, PATCH ROOF ACCORDINGLY USING LANDLORD REQUIRED ROOF CONTRACTOR.
3. ALL MECHANICAL EQUIPMENT MUST BE 3' AWAY FROM PARAPET.
4. ALL MECHANICAL EQUIPMENT MUST BE FULLY-SCREEN BY THE PARAPET OR A SECONDARY MECHANICAL SCREEN WALL EQUAL TO, OR GREATER THAN THE HIGHEST POINT ON MECHANICAL EQUIPMENT.
5. THERE IS AN EXISTING 48" PARAPET AND ALL EXISTING AND NEW MECHANICAL EQUIPMENT WILL BE FULLY SCREENED.

NO.	REVISION	DATE

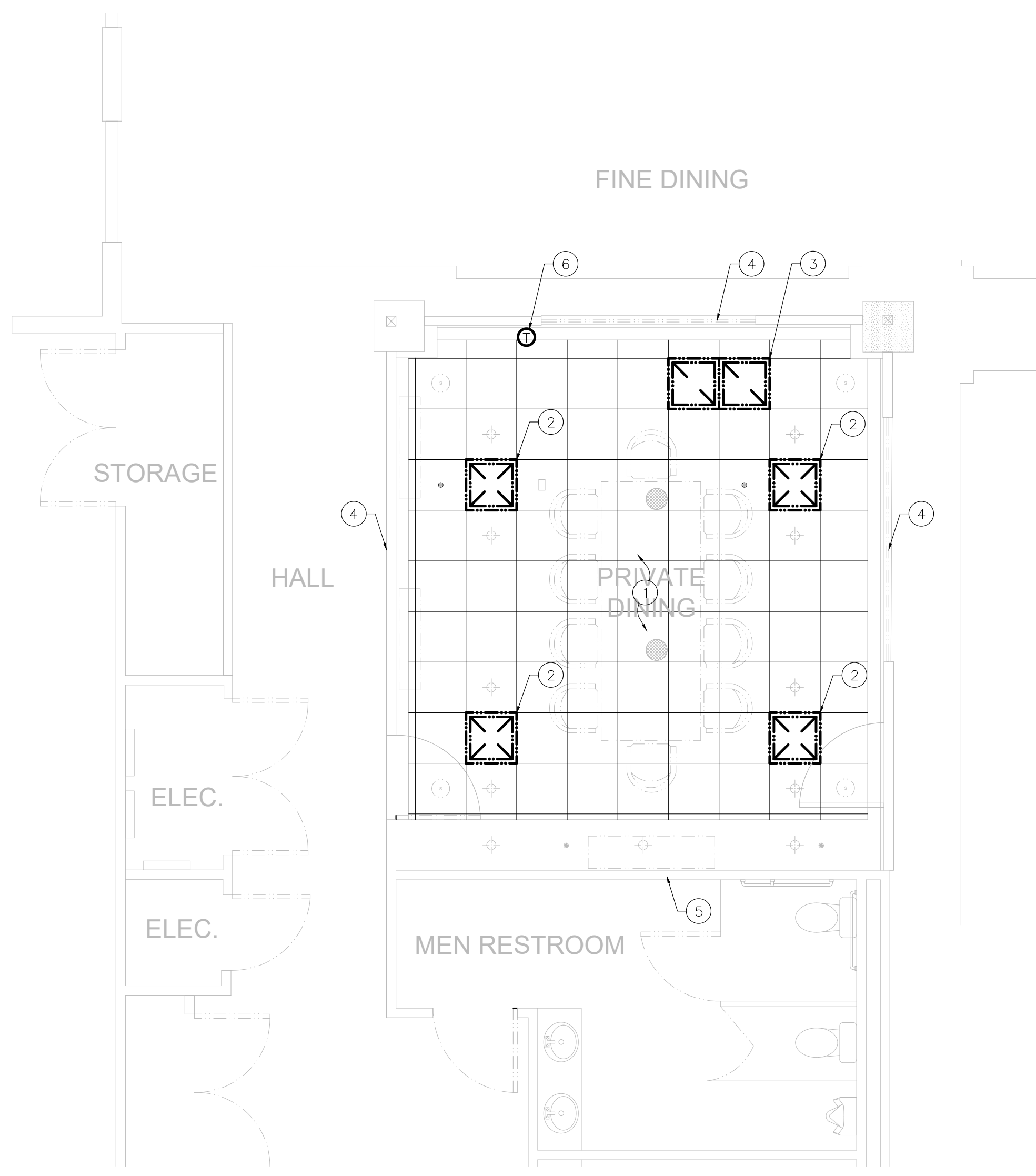
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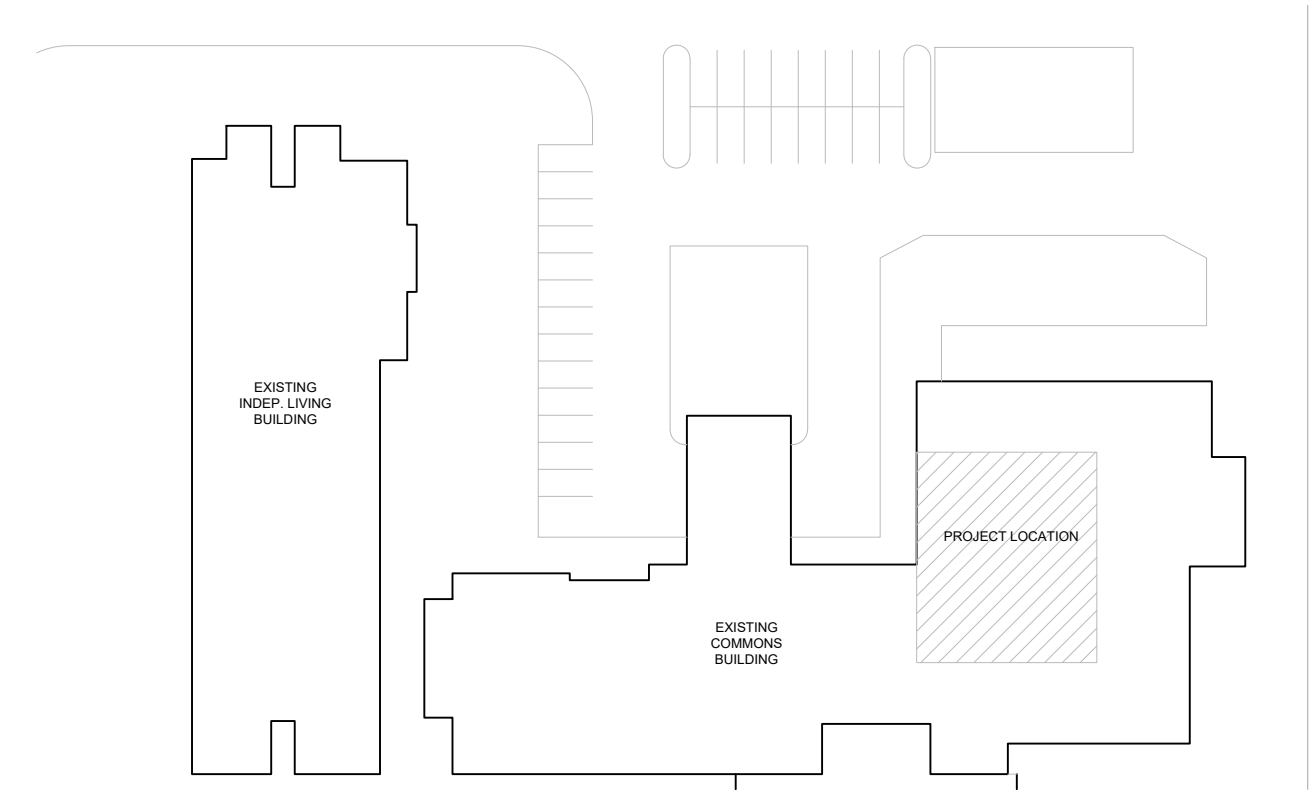
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KEYNOTES

- ① EXISTING PIPE CEILING REMAINS.
- ② EXISTING SUPPLY AIR CEILING DIFFUSER REMAINS.
- ③ EXISTING RETURN AIR CEILING GRID REMAINS.
- ④ WALL / PARTITIONS TO BE REMOVED BY OTHERS.
- ⑤ EXISTING WALL REMAINS.
- ⑥ EXISTING THERMOSTAT TO REMOVE AND RELOCATE.



MECHANICAL DEMOLITION PLAN
 SCALE: 1/2" = 1'-0"



KEY PLAN - COMMONS BUILDING
 SCALE: 1/64" = 1'-0"

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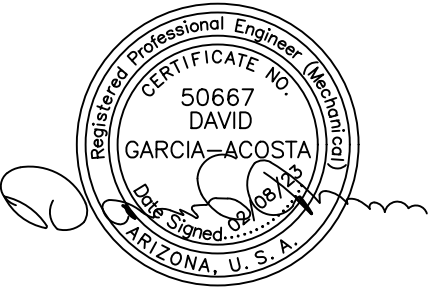
PROJECT:
BAR AT TERRACES
 7550 N 16TH ST
 PHOENIX, AZ 85020

SHEET #:
M2

SHEET TITLE:
 MECHANICAL DEMOLITION
 PLAN

NO.	REVISION	DATE

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PROJECT:
 BAR AT TERRACES
 7550 N 16TH ST
 PHOENIX, AZ 85020

SHEET #:

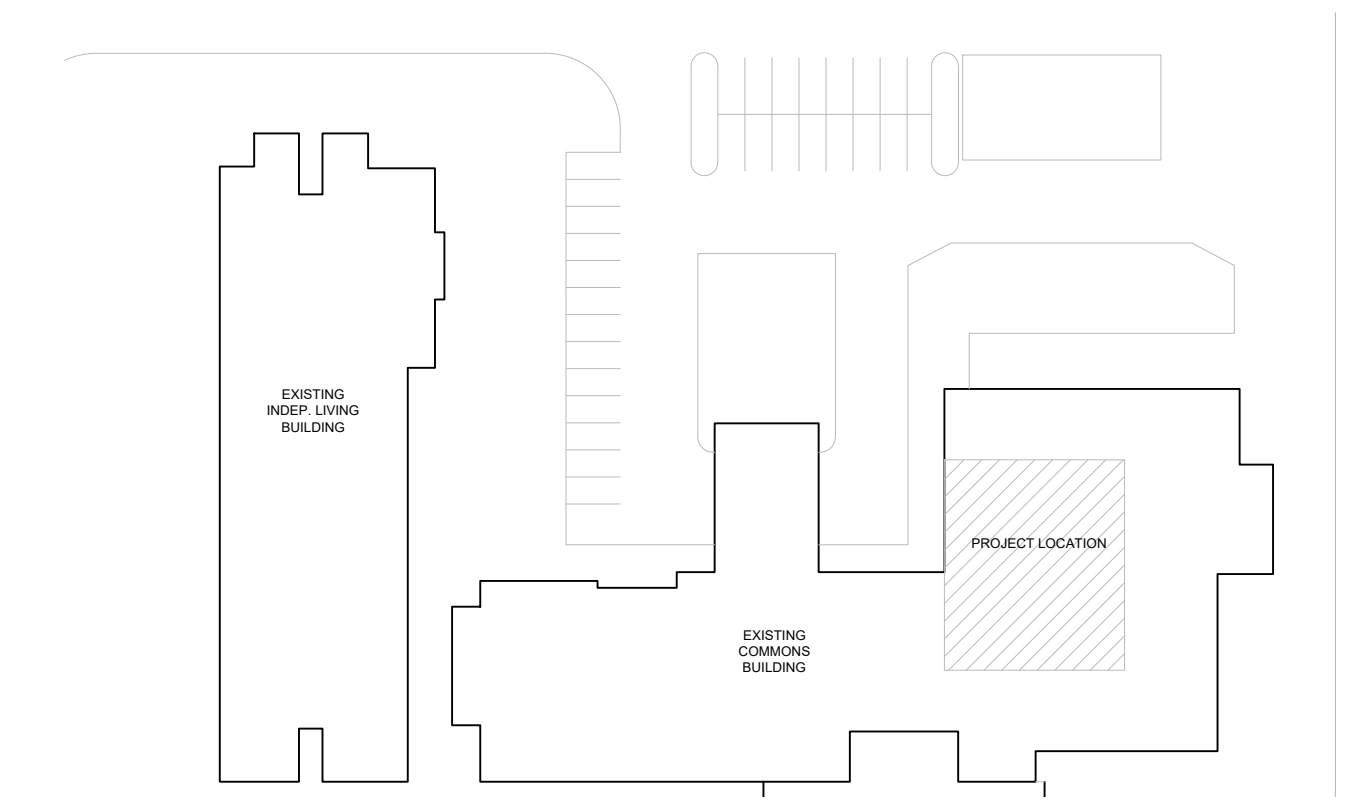
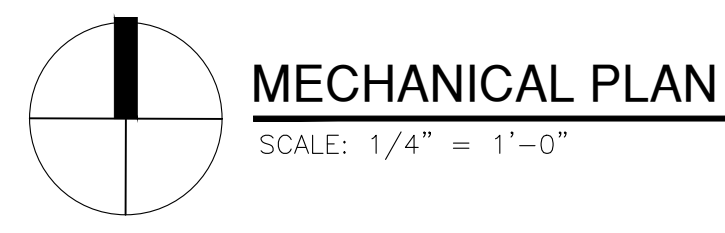
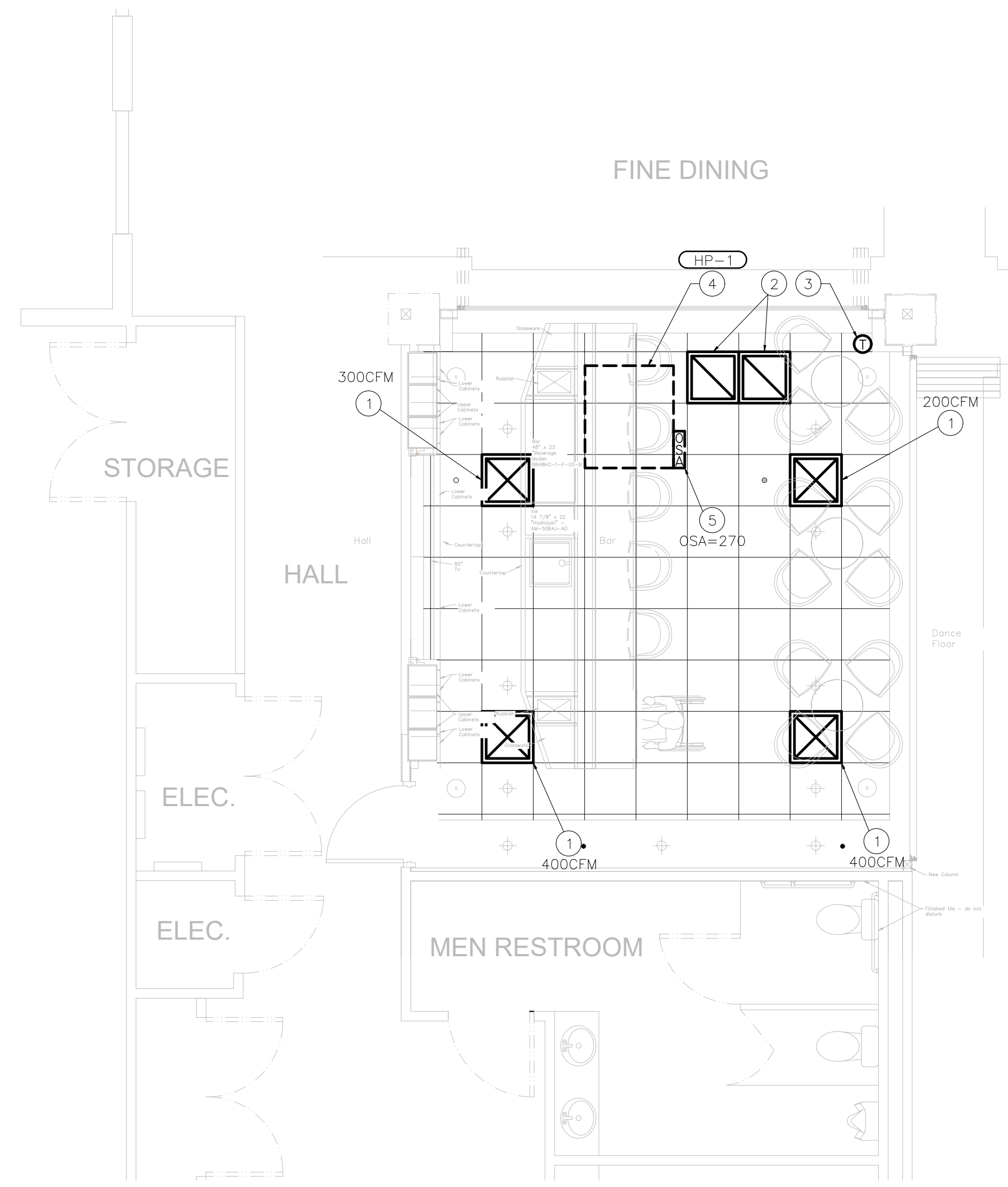
M3

SHEET TITLE:

MECHANICAL PLAN

KEYNOTES

- ① EXISTING SUPPLY AIR CEILING DIFFUSER REMAINS, ADJUST AIR FLOE AS NOTED.
- ② EXISTING RETURN AIR FILTER GRILLE REMAINS ON CEILING.
- ③ RELOCATED THERMOSTAT AS NOTED
- ④ EXISTING 4-TON HEAT PUMP PACKAGE UNIT TO REMAIN ON ROOFTOP.
- ⑤ PROVIDE NEW OUTSIDE AIR (OSA) INTAKE AT RETURN PLENUM OF A/C UNIT. INTAKE HOOD SHALL BE PROVIDED WITH SCREEN AND MANUAL DAMPER, ADJUST AIRFLOW AS NOTED.



KEY PLAN - COMMONS BUILDING

SCALE: 1/64" = 1'-0"

NEW PLUMBING FIXTURE SCHEDULE										
ID	DESCRIPTION	MANUFACTURER/ MODEL	FITTINGS ACCESSORIES	ROUGH-IN				TRAP SIZE	MAX. FLOW	REMARKS
				VENT	CW	HW	WASTE			
BS-1	BAR SINK	BY OWNER	BY OWNER	1-1/2"	1/2"	1/2"	1-1/2"	INDIRECT TO FLOORSINK	0.25	Lm
REMARKS: 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS										

WATER DEMAND SUMMARY

- MINIMAL WATER DEMAND ADDED (ONE BAR SINK)

PLUMBING FIXTURE SCHEDULE

FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWING ON EACH OF THESE ITEMS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS

- TMV** THERMOSTATIC MIXING VALVE: POWERS #6480, SOLID BRASS BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 2.2 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM. SET TEMPERATURE TO 110F FOR DUEL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS, MOUNTED BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S)

NEW PLUMBING SEWER AND WATER FIXTURE SCHEDULE											
FIXTURE NUMBER	DESCRIPTION	MANUFACTURER/ MODEL	FITTINGS ACCESSORIES	ROUGH-IN				SIZE TRAP	MAXIMUM FLOW	REMARKS	
				WASTE	VENT	CW	HW				
BS-1	BAR SINK	BY OWNER	BY OWNER	1-1/4"	1"	1/2"	1/2"	INDIRECT TO FLOORSINK	0.25 GPM	1	
FS-1	FLOOR SINK	BY CONTRACTOR	BY CONTRACTOR	2"	1.5"	N/A	N/A	INDIRECT TO FLOORSINK	0.25 GPM	1	

- INSTALL PER MANUFACTURER'S RECOMMENDATIONS

PLUMBING SPECIFICATIONS (NOT ALL USED)

GENERAL

- SCOPE: WORK UNDER THIS SECTION INCLUDES COORDINATING AND FURNISHING ALL LABOR AND MATERIAL NECESSARY TO INSTALL A COMPLETE PLUMBING SYSTEM AS SHOWN AND SPECIFIED AND IN ACCORDANCE WITH THE CODES. CONTRACTOR SHALL PAY FOR ALL PERMITS, METERS, FEES, CITY INSPECTIONS, LEGAL NOTICES, ETC., AS REQUIRED.
- SUBMITTALS: WITHIN 15 DAYS AFTER AWARD OF CONTRACT, SUBMIT 8 COPIES OF ALL ITEMS.
- RECORD DRAWINGS: PROVIDE A SET TO THE ARCHITECT AT COMPLETION OF PROJECT.
- INSTRUCTIONS: PROVIDE MAINTENANCE MANUAL AND INSTRUCT OWNER IN THE PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT.
- GUARANTEE: ONE YEAR ON LABOR, MATERIAL AND EQUIPMENT.

PRODUCTS

- WATER PIPING:
 - COPPER: TYPE M FOR WATER PIPE SET IN OR UNDER CONCRETE OR IN THE GROUND. PROVIDE PLASTIC SLEEVE FOR EACH PIPING PENETRATION THROUGH CONCRETE SLAB.
 - INSULATION: FOR AUTOMATIC CIRCULATING HOT WATER AND HEAT-TRACED SYSTEMS, HOT WATER PIPING SHALL BE INSULATED WITH NO LESS THAN 1 INCH OF INSULATION HAVING A CONDUCTIVITY NOT LESS THAN 0.27 BTU / HR X SF X °F. THE FIRST 8FT OF PIPING OF A NON-HOT-WATER SUPPLY TEMPERATURE MAINTENANCE SYSTEMS SERVED BY EQUIPMENT WITHOUT INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 0.5 OF MATERIAL HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU / HR X SF X °F
 - FITTINGS: WROUGHT COPPER CONFORMING TO ANSI B16.22.
 - TUBING: ABOVE AND BELOW GRADE, TYPE- WIRSBO AQUAPEX, CROSS-LINKED POLYETHYLENE (PEX) MANUFACTURED BY PEX-A OR ENGEL METHOD. MANUFACTURED IN ACCORDANCE WITH ASTM F876 AND ASTM F877 AND TESTED FOR COMPLIANCE BY AN INDEPENDENT THIRD PARTY AGENCY. STANDARD GRADE HYDROSTATIC DESIGN AND PRESSURE RATINGS FROM PPI. VERIFY PROPOSED INSTALLATION IS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION PRIOR TO CONSTRUCTION.
- SANITARY WASTE AND VENT PIPING:
 - PLASTIC: SUBJECT TO OWNER APPROVAL, ABS PLASTIC PIPING CONFORMING TO ASTM D-2751-88, SCHEDULE 40, OR PVC PIPING CONFORMING TO ASTM D2665-88, ARE ACCEPTABLE FOR SANITARY WASTE AND VENT PIPING. FITTINGS: DRAINAGE FITTINGS TO MATCH PIPE.
 - SLOPE ALL SANITARY DRAIN AND SEWER PIPES PER 2018 IPC TABLE 704.1
- CLEANOUTS:
 - CONCRETE AND TILE FLOORS: J.R. SMITH 4023, WITH SCORIATED NICKEL-BRONZE TOP.
 - CLEANOUTS (EXPOSED VERTICAL PIPING): J.R. SMITH 4512 CAST IRON BRANCH CLEANOUT TEE WITH INTERIOR FINISHED WALLS: J.R. SMITH 4532.
 - EXTERIOR SURFACE CLEANOUTS: J.R. SMITH 4253, PROVIDE 18" X 18" X 6" CONCRETE PAD AT LANDSCAPE AREAS; PROVIDE CONCRETE RING BELOW CONCRETE RING GRADE AT ASPHALT AREAS.
 - PROVIDE ALL CLEANOUTS WITH HEAVY THREADED BRONZE PLUGS.
 - CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH ARCHITECT AND LOCATE IN NON VISIBLE LOCATIONS.
- FLOOR DRAINS, FLOOR SINKS:
 - FD FLOOR DRAINS: EQUAL TO J.R. SMITH 2005-A DUCO CAST IRON DRAIN BODY WITH 5" DIAMETER ADJUSTABLE NICKEL BRONZE STRAINER TRAP PRIMER CONNECTION AND NO-HUB OUTLET CONNECTION.
 - FS FLOOR SINKS - EQUAL TO J.R. SMITH 3190-Y, 8-1/2" TOP, CAST IRON FLANGED RECEPTOR, WITH ACID RESISTANT COATED INTERIOR, ALUMINUM DOME BOTTOM STRAINER, SQUARE NICKEL BRONZE TOP WITH HALF GRATE; TRAP PRIMER CONNECTION WHERE INDICATED ON DRAWINGS.
- PLUMBING FIXTURES:
 - USE POLISHED CHROME-PLATED, ADJUSTABLE BRASS P-TRAPS WITH WALL ESCUTCHEONS AT ALL EXPOSED LOCATIONS.
 - USE POLISHED CHROME-PLATED FAUCETS WITH REMOVABLE TRIM, BRASS BODY AND BRASS HANDLES. FIXTURES AND SUPPLY FITTING SHALL BE OF ONE MANUFACTURER.
 - PROVIDE DIAPHRAGM TYPE, POLISHED CHROME- PLATED FLUSH VALVES WITH INTEGRAL VACUUM BREAKERS AND SCREWDRIVER STOPS.
 - PROVIDE FIXTURE STOPS OR VALVES AHEAD OF ALL EQUIPMENT OR FIXTURES.
 - AFTER FIXTURES ARE SET IN PLACE AND SECURED TO WALLS, CAULK ALL AROUND BETWEEN FIXTURES AND WALL WITH EITHER DOW CORNING #780 OR G.E. CONSTRUCTION SEALANT WHITE SILICONE CAULKING COMPOUND. FIXTURES TO BE SELECTED BY ARCHITECT / OWNER.

PIPE IDENTIFICATION

- MARK SOFT WATER PIPING SYSTEMS WITH BRADY, SETON, BRIMAR OR SET MARK IDENTIFICATION MARKERS OF SNAP-ON TYPE AFTER PIPE HAS BEEN PAINTED OR INSULATED WHERE EXPOSED.
- INSTALL STENCILS AT ALL MAJOR BRANCH TAKEOFFS, RISERS AND AT 10-FOOT INTERVALS ON STRAIGHT RUNS AND AT EACH ENTRANCE OR EXIT FROM PIPE SHAFTS. MARKERS SHALL BE LOCATED FOR MAXIMUM VISIBILITY FROM EXPECTED APPROACH.
- IDENTIFICATION MATERIAL SIZES SHALL BE AS FOLLOWS:

2" AND UNDER	1/2" HIGH LETTERS
OVER 2"	1" HIGH LETTERS
- ACCEPTABLE MANUFACTURERS: THE FOLLOWING IS A LIST OF MANUFACTURERS WHOSE EQUIPMENT IS ACCEPTABLE AS TO MANUFACTURER, SUBJECT TO CONFORMANCE WITH ALL DRAWINGS, SPECIFICATIONS AND ADDENDA ITEMS:
 - WATER HEATERS: RHEEM, AMERICAN, A. O. SMITH, STATE, EEMAX, HOT AQUA, RINNAI.
 - VALVES: CRANE, KENNEDY, STOCKHAM, GRINNELL, MILWAUKEE, WOLVERINE.
 - HOSE BIBBS: ACORN, CHICAGO, WOODFORD.
 - SUPPLIES, STOPS: EASTMAN, KOHLER, ELJER, BRASSCRAFT, MCGUIRE.
 - P-TRAPS: CRANE, KOHLER, ELJER, FROST, MCGUIRE.
 - DRAINS AND CLEANOUTS: J. R. SMITH, ZURN, JOSAM, WADE, WESTERN.
 - HANGERS: GRINNELL, FEE & MASON, ELCEN, KIN-LINE, F & S, B-LINE, MICHIGAN.

EXECUTION

- TESTS AND INSPECTIONS:
 - ALL WORK TO BE TESTED AND APPROVED BEFORE COVERING AS DIRECTED BY ARCHITECT. REMAKE ALL LEAKING JOINTS AND RETEST.
 - POTABLE WATER SYSTEMS: 150 PSI HYDROSTATIC PRESSURE HELD WITHOUT LOSS FOR FOUR HOURS.
 - SANITARY WASTE AND VENT SYSTEM: FILL WITH WATER TO HIGHEST POINT IN THE SYSTEM AND LET STAND WITHOUT LOSS FOR TWO HOURS.
 - STERILIZATION (DOMESTIC WATER SYSTEM): AFTER TESTS HAVE BEEN COMPLETED, THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE THOROUGHLY FLUSHED WITH WATER UNTIL ALL ENTRAINED DIRT AND MUD HAVE BEEN REMOVED, AND SHALL BE STERILIZED WITH SOLUTIONS OF EITHER LIQUID CHLORINE CONFORMING TO FEDERAL SPECIFICATION BB-B-120 OR HYPOCHLORITE CONFORMING TO FED. SPEC. O-C-114, TYPE II, GRADE G, OR FED. SPEC. O-S-602, GRADE A OR B. THE CHLORINATING MATERIAL SHALL PROVIDE A DOSAGE OF NOT LESS THAN 50 PARTS PER MILLION AND SHALL BE INTRODUCED INTO THE SYSTEM IN AN APPROVED MANNER, AND RETAINED IN THE SYSTEM FOR 8 HOURS BEFORE FLUSHING.
- FLASHING, SLEEVES AND ESCUTCHEON PLATES:
 - FLASHING: SUPPLY FLASHING FOR ALL VENT PIPE AND OTHER TYPES OF PIPING THROUGH ROOF TO BE INSTALLED WITH ROOFING. FLASH VENTS WITH STONEMAN S1300-4 OR WITH SHEET LEAD WEIGHING NOT LESS THAN 4 POUNDS PER SQUARE FOOT OR EQUAL. EXTEND FLASHING INTO ROOFING AT LEAST 10" FROM VENT AND TURN FLASHING OVER AND DOWN INTO VENT OPENINGS.
 - SLEEVES: USE 20 GAUGE GALVANIZED STEEL SLEEVES AROUND PIPES PASSING THROUGH MASONRY WALLS AND CONCRETE SLABS.
 - ESCUTCHEON PLATES: INSTALL CAST BRASS SPLIT RING WITH SETSCREW AT ALL LOCATIONS WHERE EXPOSED PIPES PASS THROUGH WALLS, FLOORS AND/OR CEILINGS. PROVIDE POLISHED CHROME-PLATED ESCUTCHEONS IN FINISHED ROOMS, ALL OTHERS POLISHED BRASS.
- UNDERGROUND WATER PIPING:
 - BURY ALL UNDERGROUND WATER PIPING A MINIMUM OF 24" BELOW FINISHED GRADE. INSTALL COPPER LINES BELOW CONCRETE FLOORS SO THAT NO JOINTS OCCUR BELOW FLOOR AND WRAP WITH 20 MILS OF POLYETHYLENE TAPE WITH A MINIMUM OF 50% OVERLAP.

GENERAL NOTES

- ALL DESIGN AND CONSTRUCTION FOR SANITARY AND WATER SYSTEMS SHALL BE IN COMPLIANCE WITH 2018 INTERNATIONAL PLUMBING CODE, 2018 INTERNATIONAL RESIDENTIAL CODE AND ALL CITY AMENDMENTS AND REGULATIONS
- FURNISH ALL REQUIRED LABOR, MATERIALS, TOOLS, EQUIPMENT, FEES, PERMITS, CERTIFICATE OF INSPECTION, ETC. REQUIRED FOR THE COMPLETE INSTALLATION OF ALL PLUMBING WORK
- WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES, LAWS, ACTS, ORDINANCES, REGULATIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION
- THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL THE APPLICABLE INDUSTRY STANDARD OF GOOD PRACTICE, SAFETY, AND THE MANUFACTURERS STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION
- THESE DRAWINGS ARE DIAGRAMMATIC AND THE CONTRACTOR SHALL MAKE MODIFICATIONS INCLUDING OFFSETS, TURNS, AND RE-ROUTING REQUIRED TO COMPLETE THE INSTALLATION. DO NOT SCALE LOCATION OF EQUIPMENT OR PIPING
- EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS
- VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM
- VERIFY AND COORDINATE LOCATION OF ALL PLUMBING LINES WITH HVAC AND ELECTRICAL SERVICES
- THE INSTALLATION OF ALL VALVES, UNIONS, THERMOMETERS, GAUGERS, OR OTHER INDICATING OR RECORDING EQUIPMENT, OR SPECIALTIES REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING
- ALL VENTS THRU ROOF SHALL BE 10" REMOVED FROM ALL AIR INTAKES
- ROUGH-IN ALL WASTES AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURERS SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED
- NO PIPING OR EQUIPMENT SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT OR INSTALLED IN ELECTRICAL ROOMS
- ALL FIXTURES FURNISHED AND INSTALLED SHALL MEET THE REQUIREMENTS FOR AMERICANS WITH DISABILITIES ACT
- ALL WASTE AND SOIL PIPING 4" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT UNLESS OTHERWISE NOTES ON PLANS
- ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE L SEAMLESS HARD-DRAWN COPPER TUBING. FITTINGS SHALL BE BRONZE OR COPPER. ALL VALVES SHALL BE BUTTERFLY TYPE. ALL WATER PIPING SHALL BE LOCATED ABOVE CEILING, EXCEPT AS NOTED OTHERWISE
- PROVIDE 1-INCH THICK FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON ALL HOT WATER PIPING AND RECIRCULATED HOT WATER PIPING
- PROVIDE DIELECTRIC UNIONS ON ALL CONNECTIONS BETWEEN DISSIMILAR METALS
- PROVIDE PIPE HANGERS AND SUPPORTS PER 2018 IPC SECTION 314. SLOPE DRAIN PIPING 1/4" PER FOOT

PLUMBING LEGEND (NOT ALL USED)

A.C.	ABOVE CEILING
U.S.	UNDER SLAB
POC	POINT OF CONNECTION
BFP	BACKFLOW PREVENTER
WC	TOILET
L	LAVATORY
KS	KITCHEN SINK
FS	FLOOR SINK
FD	FLOOR DRAIN
HB	HOSE BIBB
MS	MOP SINK
FCO	FLOOR CLEANOUT
G	NATURAL GAS LINE
CW	COLD WATER
HW	HOT WATER
RHW	RECIRCULATING HOT WATER
TB	TRAP PRIMER
VTR	VENT THRU ROOF
VL	OR V VENT LINE
V	SEWER VENT
RD	ROOF DRAIN
SD	SEWER DRAIN
SH	SHOWER
SOV	SHUT-OFF VALVE
WCO	WALL CLEAN OUT
DW	DISH WASHER
WH	WATER HEATER
CWM	CLOTHES WASHING MACHINE
GR-1	GLASS RINSER
BEER	BEER TAP
BS	BAR SINK

PLUMBING PLANS INDEX

P1	PLUMBING SPECIFICATIONS
P2	SEWER PLUMBING PLAN
P3	WATER PLUMBING PLAN

PROJECT NO.: TP2301
DESIGNED BY: DG
DRAWN BY: GB
CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 03/31/25



Mechanical & Electrical Engineering

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BAR AT TERRACES
7550 N 16TH ST
PHOENIX, AZ 85020

PROJECT:

SHEET #:

P1

SHEET TITLE:

PLUMBING SPECIFICATIONS

PROJECT NO.: TP2301
 DESIGNED BY: DG
 DRAWN BY: GB
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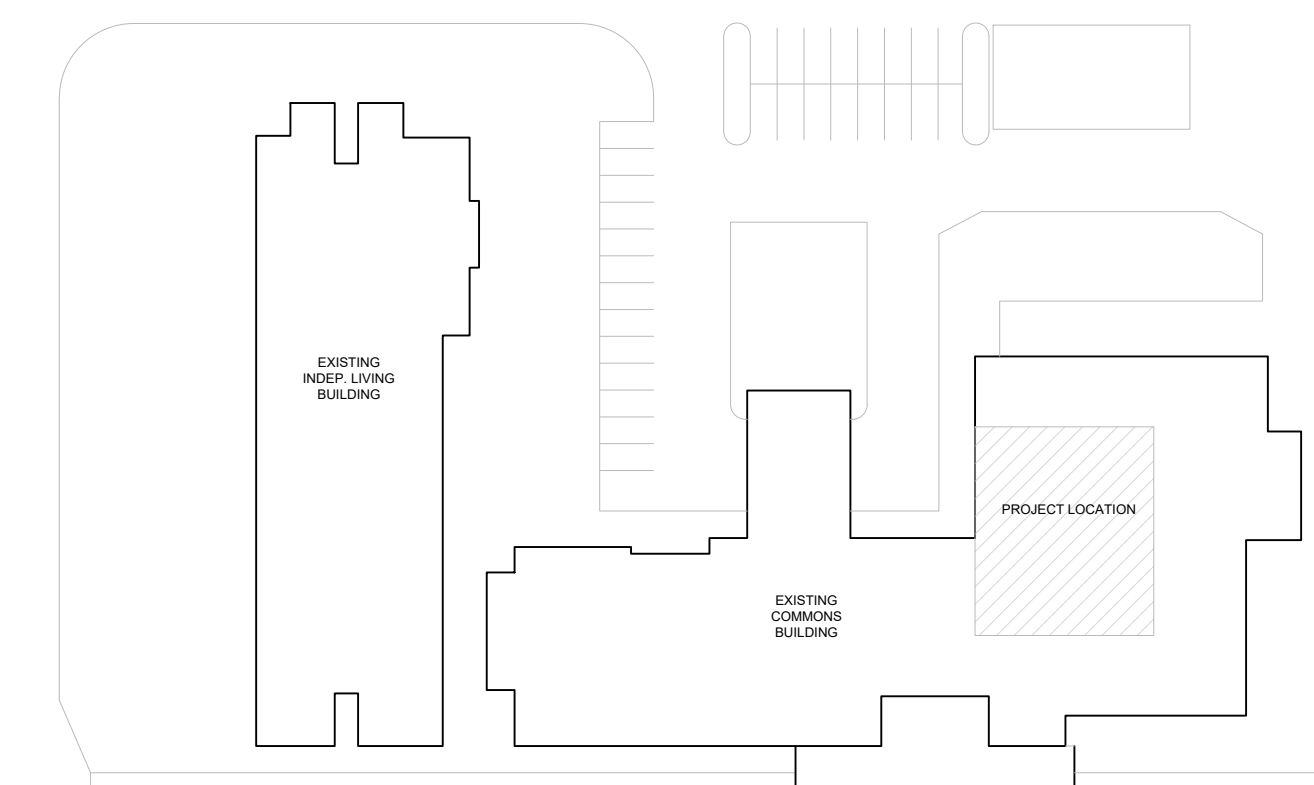
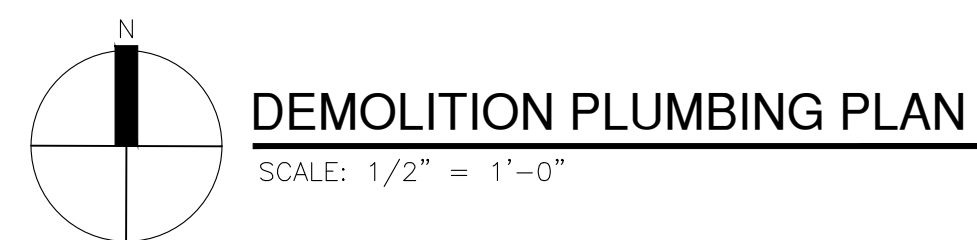
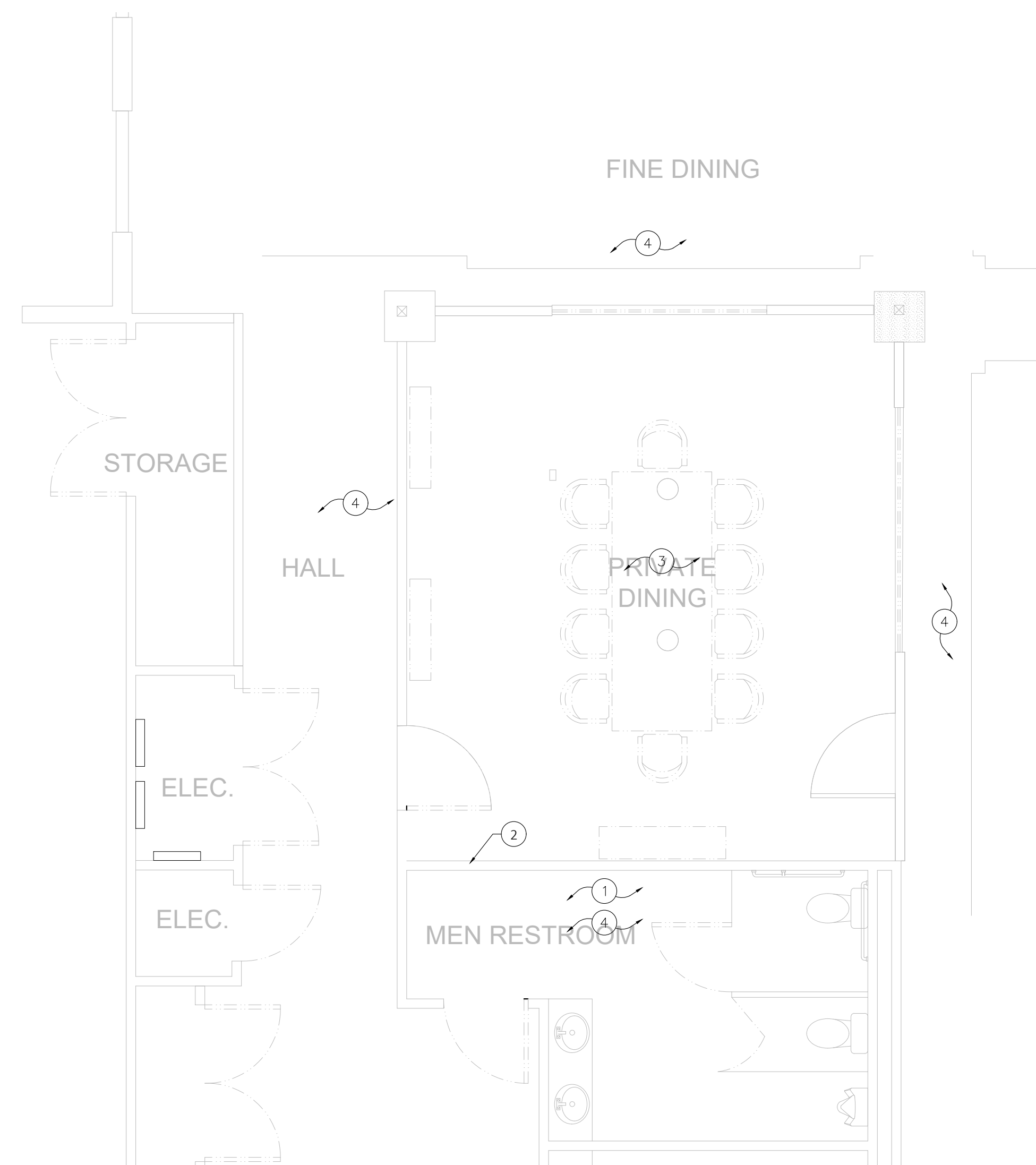
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KEYNOTES

- ① EXISTING BATHROOM REMAINS
- ② EXISTING WALL REMAINS
- ③ REMOVAL OF FURNITURE, DOORS, AND PARTITIONS BY OTHERS
- ④ AREA REMAINS, NO CHANGES U.N.O.



KEY PLAN - COMMONS BUILDING

SCALE: 1/64" = 1'-0"

PROJECT:
 BAR AT TERRACES
 7550 N 16TH ST
 PHOENIX, AZ 85020

PROJECT:

SHEET #:

P2

SHEET TITLE:

DEMOLITION PLUMBING PLAN

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 PHOENIX, AZ 85020

PROJECT:

SHEET #:

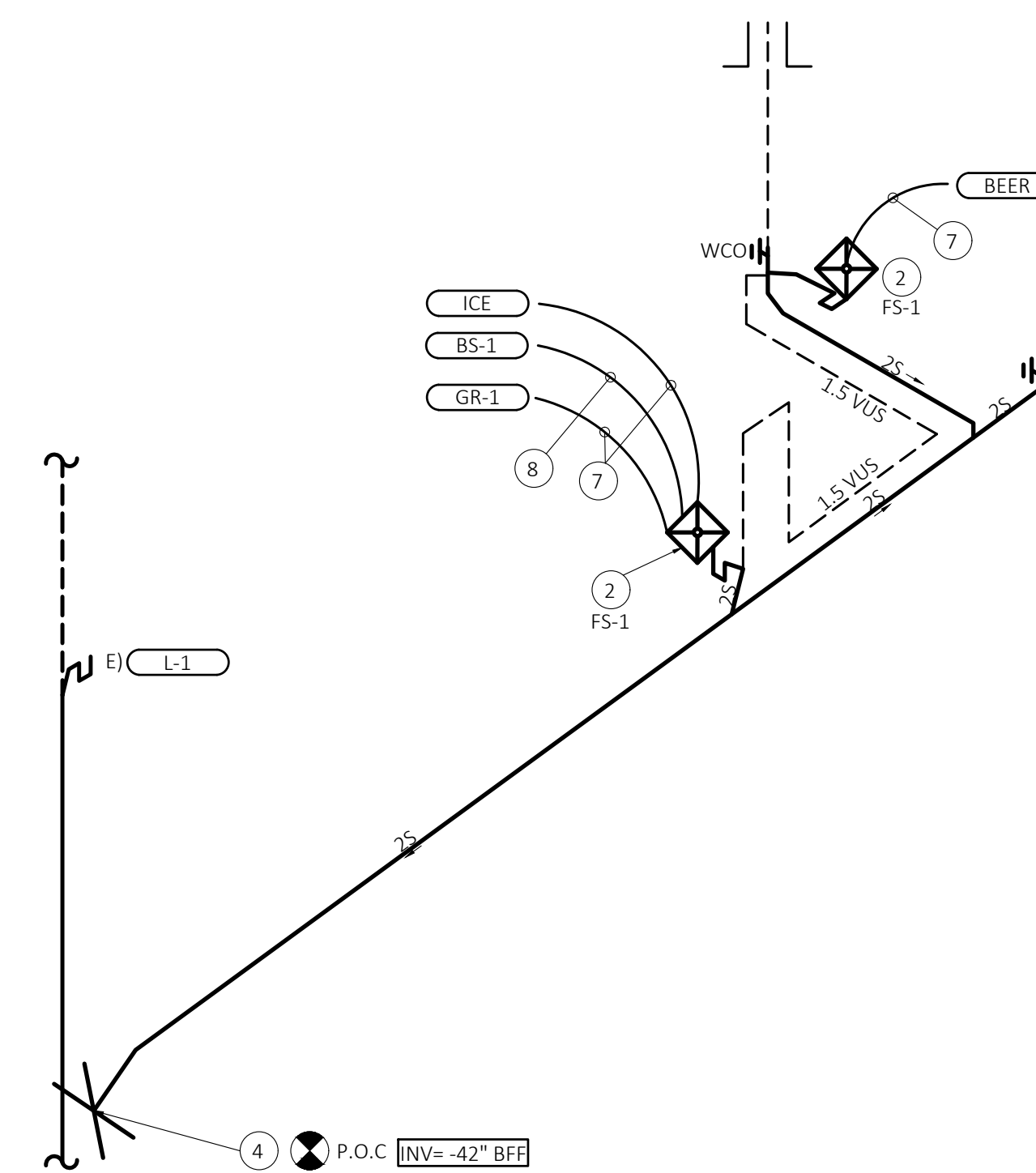
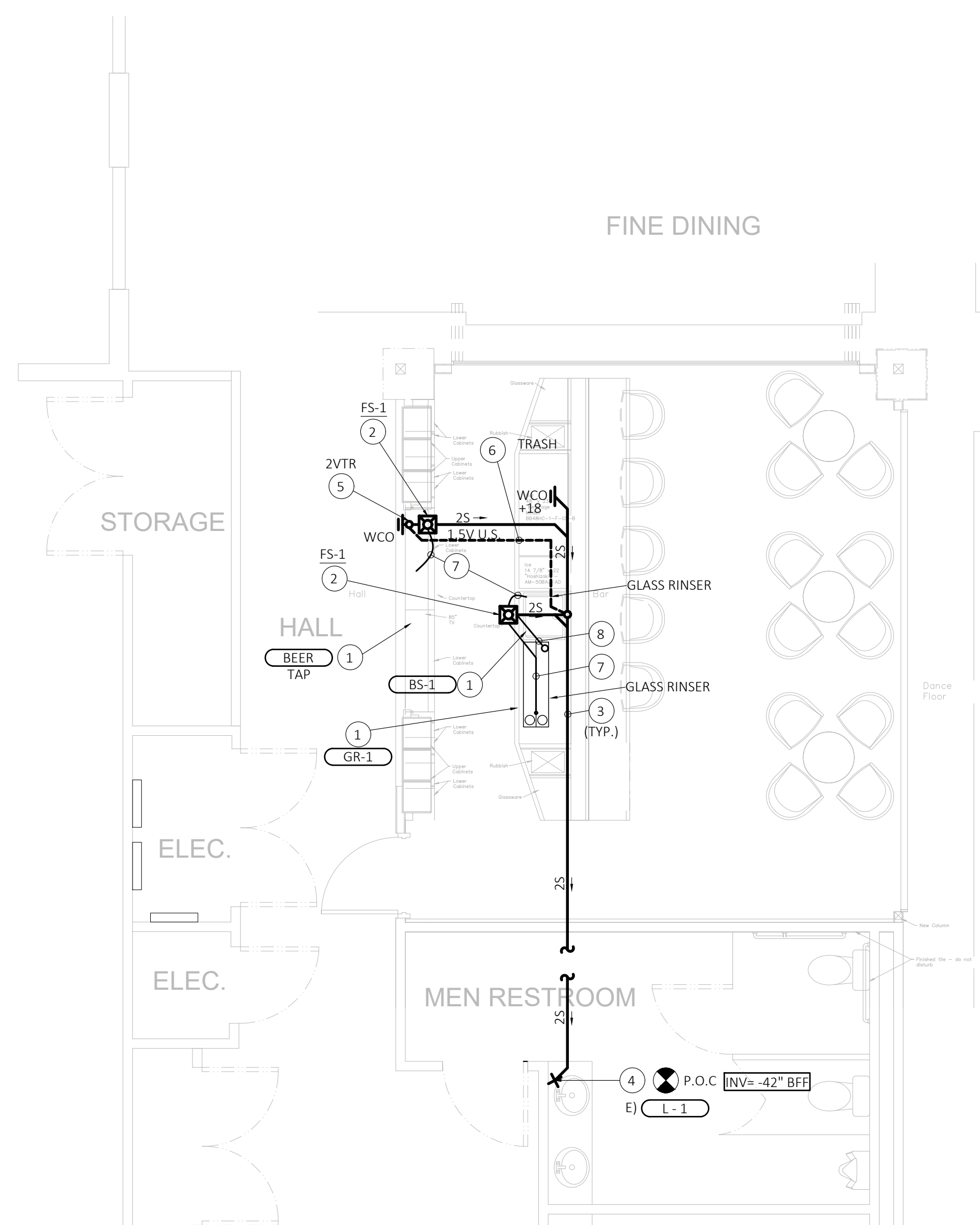
P3

SHEET TITLE:

SEWER PLUMBING PLAN

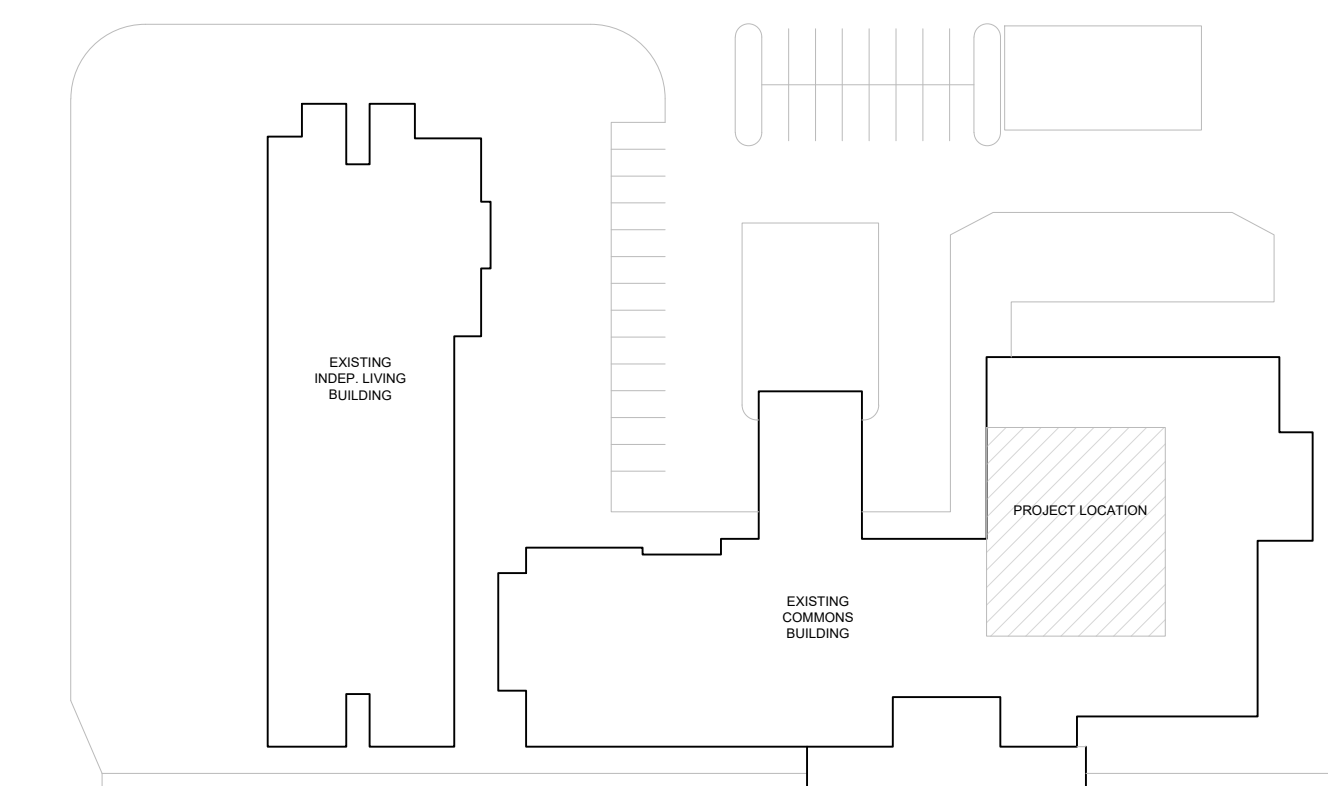
KEYNOTES

- 1 NEW PLUMBING FIXTURE / EQUIPMENT
- 2 NEW FLOOR SINK
- 3 NEW SCH 40 ABS SEWER LINE
- 4 POINT OF CONNECTION OF NEW TO EXISTING SEWER PIPING. EXISTING INVERT IS
- 5 NEW 2" VENT THROUGH ROOF
- 6 NEW 1/2" VENT UNDER SLAB
- 7 PROVIDE 3/4" SCH 40 PVC DRAIN TO DISCHARGE INDIRECTLY TO FLOOR SINK WITH 1-1/2" AIRGAP (TYP.)
- 8 PROVIDE 1-1/2" SCH 40 PVC DRAIN TO DISCHARGE INDIRECTLY TO FLOOR SINK WITH 3" AIRGAP (TYP.)



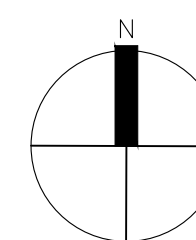
SEWER ISOMETRIC DIAGRAM

SCALE: N.T.S.



KEY PLAN - COMMONS BUILDING

SCALE: 1/64" = 1'-0"



SEWER PLUMBING PLAN

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

PROJECT NO.: TP2301
 DESIGNED BY: DG
 DRAWN BY: GB
 CHECKED BY: DG

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PROJECT:

SHEET #:

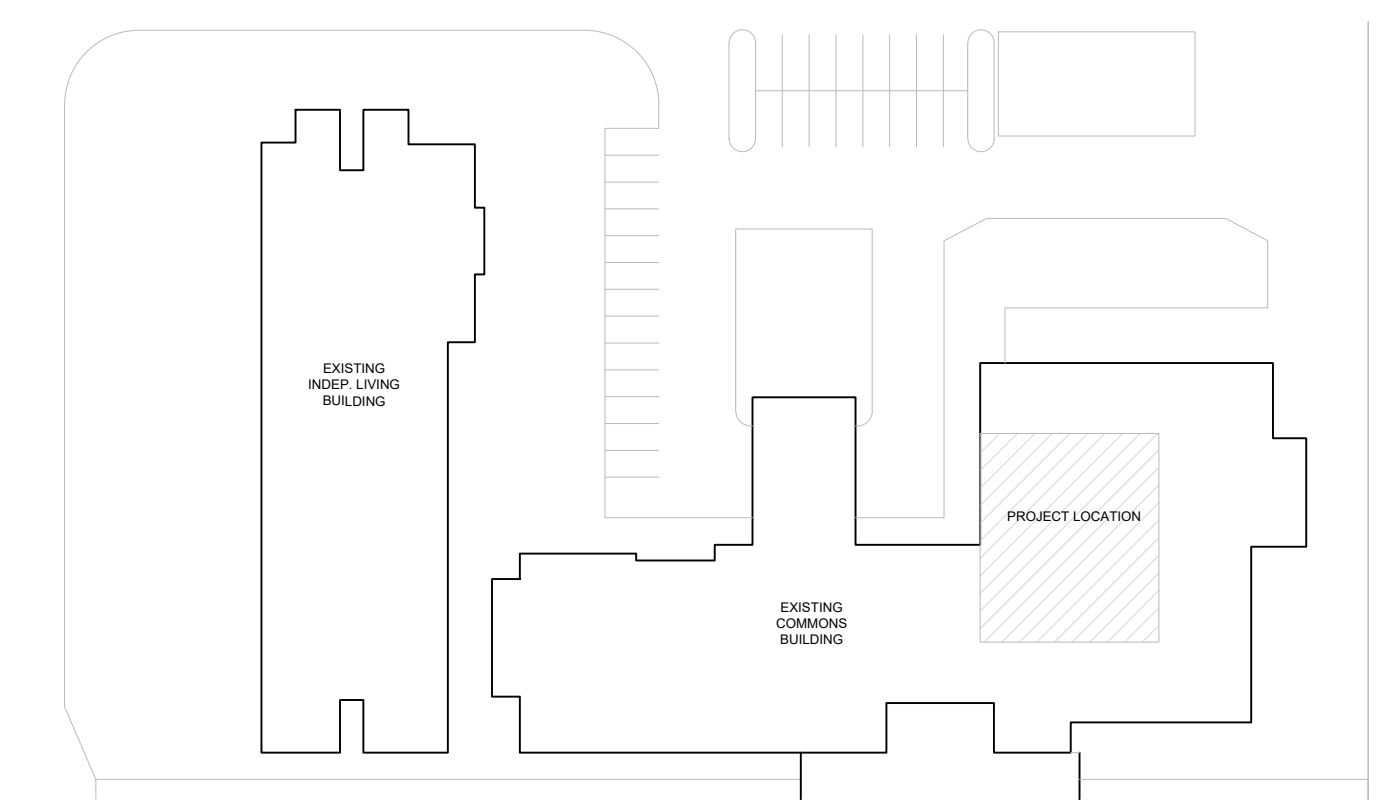
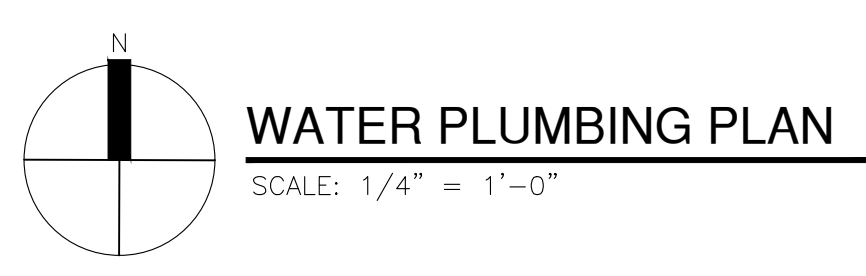
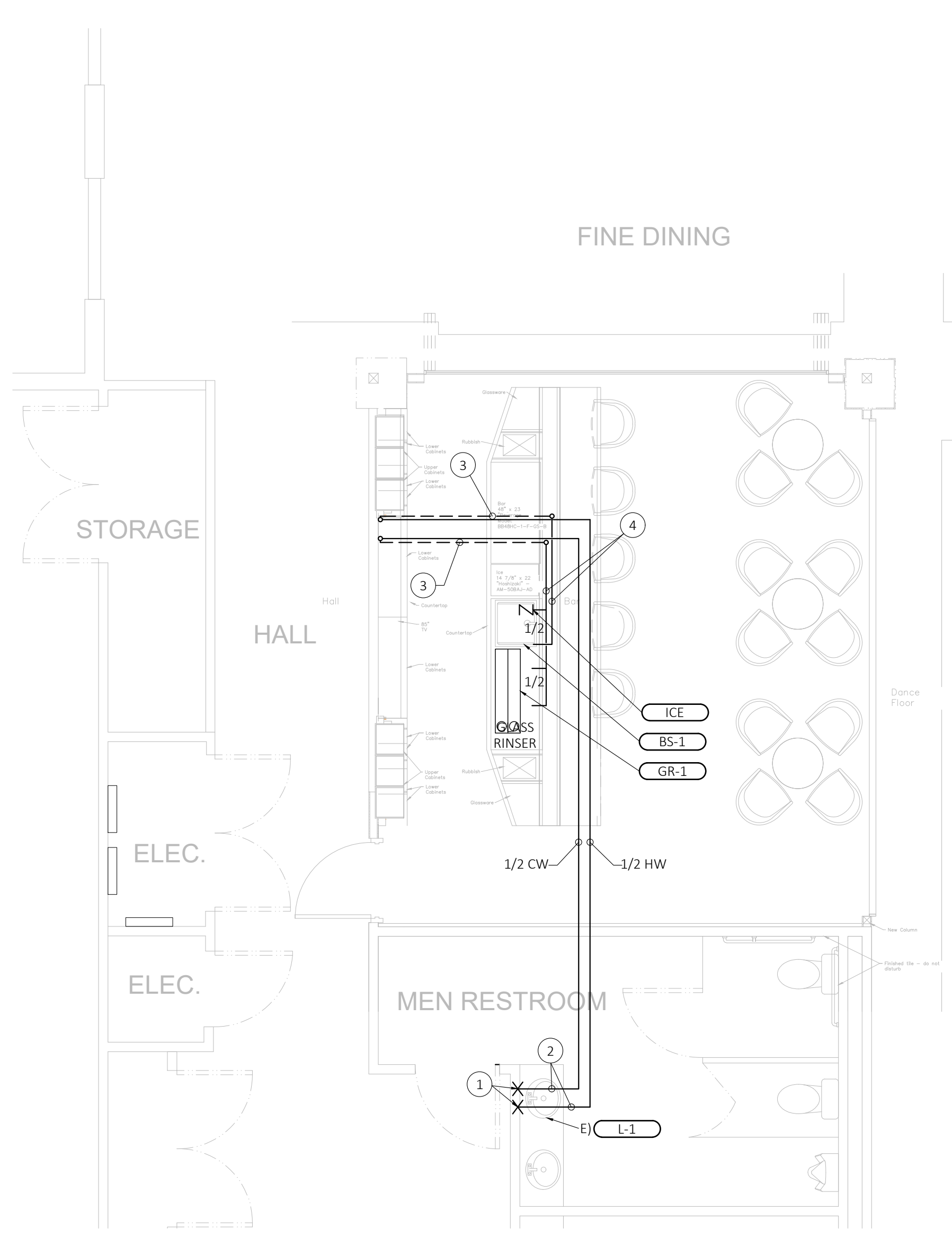
P4

SHEET TITLE:

WATER PLUMBING PLAN

KEYNOTES

- ① TAP NEW HOT AND COLD WATER LINES O EXISTING WATER PIPE ABOVE CEILING. FIELD VERIFY EXACT LOCATION
- ② NEW PEX HOT AND COLD WATER LINES ROUTED ABOVE CEILING
- ③ NEW TYPE "K" COPPER HOT AND OLD WATER LINES ROUTED UNDER SLAB
- ④ NEW PEX HOT AND COLD WATER LINES ROUTED IN BAR'S FRAME
- ⑤ PROVIDE 1/2" DOUBLE CHECK VALVE. VALVE SHALL BE NSF APPROVED AND MARICOPA COUNTY APPROVED



KEY PLAN - COMMONS BUILDING

SCALE: 1/64" = 1'-0"

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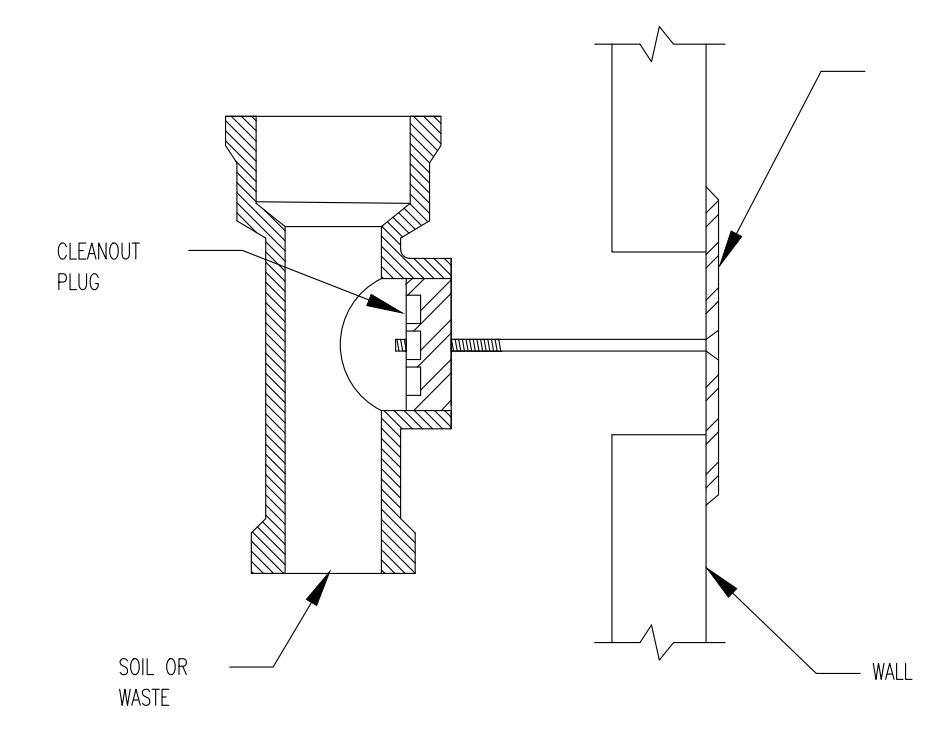
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SHEET #:

P5

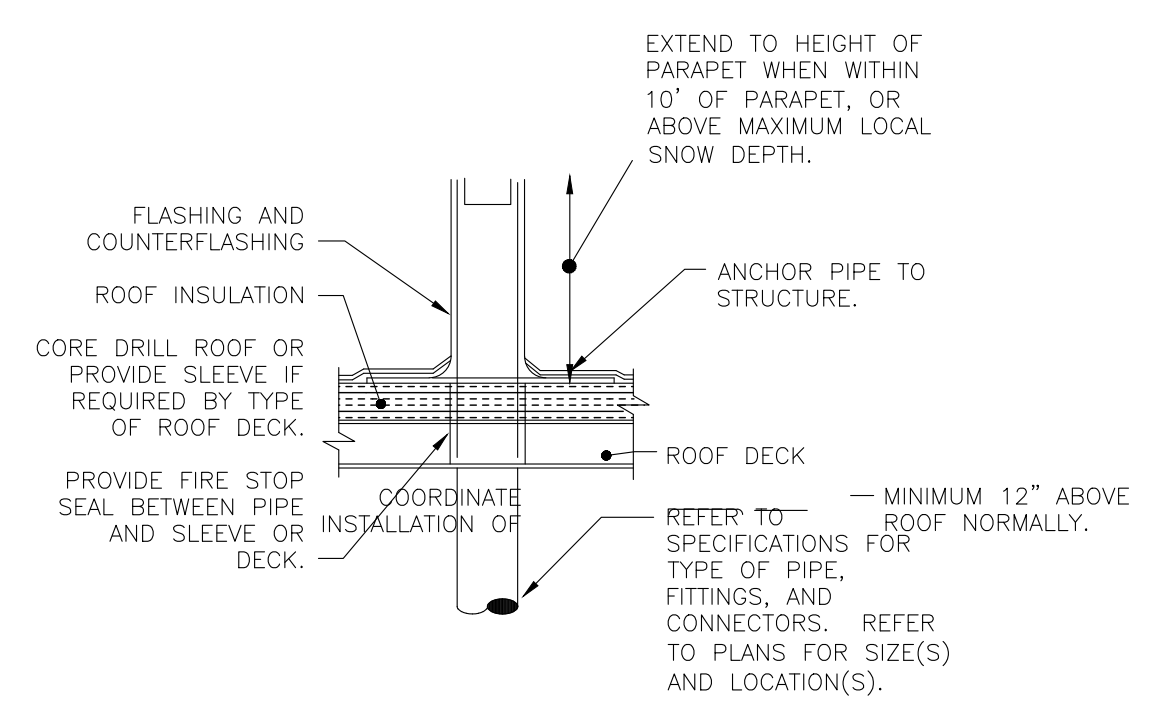
SHEET TITLE:

PLUMBING DETAILS



WALL CLEAN OUT

SCALE: N.T.S.



VENT THRU ROOF DETAIL

SCALE: N.T.S.

LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18" FROM ADJACENT WALL, PARAPET, EXPANSION JOINT, ROOF DRAIN, EQUIPMENT CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF VENT PIPE INSIDE BUILDING PER SPECIFICATIONS.

ELECTRICAL SPECIFICATIONS

GENERAL

- THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TRANSPORTATION, TOOLS, PERMITS, FEES AND INCIDENTALS NECESSARY FOR THE INSTALLATION OF A COMPLETE ELECTRICAL SYSTEMS IN CLASS 'A' WORKING ORDER.
- ALL WORK SHALL BE IN COMPLIANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES AND ORDINANCES.
- THESE DRAWINGS ARE SCHEMATIC IN NATURE. CONTRACTOR SHALL PROVIDE ALL BOXES, FITTINGS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION EVEN IF THOSE ITEMS ARE NOT CALLED OUT ON THE CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL FURNISH SIX COPIES OF THE MANUFACTURER'S LITERATURE AND DRAWINGS DESCRIBING ALL PROPOSED EQUIPMENT AND MATERIALS INDICATED IN THE DRAWINGS AND SPECIFICATIONS. SUBMITTALS SHALL INCLUDE DETAILED SPECIFICATIONS AND CONSTRUCTION DATA.
- EQUIPMENT MANUFACTURER'S AND CATALOGUE NUMBERS CALLED OUT ON THESE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. EQUAL PRODUCTS BY OTHER MANUFACTURER'S ARE ACCEPTABLE.
- ALL MATERIAL FURNISHED BY THE CONTRACTOR SHALL BE NEW UNLESS OTHERWISE NOTED.
- PROVIDE ENGRAVED PHENOLIC NAMEPLATES ON ALL PANELBOARDS, DISCONNECTS, ETC. NAMEPLATES SHALL BE 1/4" HIGH AND SHALL BE FASTENED TO THE EQUIPMENT WITH RIVETS OR SCREWS.
- CONTRACTOR SHALL FURNISH A CLEAN SET OF DRAWINGS ON WHICH VARIATIONS TO THE ORIGINAL CONSTRUCTION DOCUMENTS ARE LEGIBLY RECORDED AND DESIGNATED AS "AS-BUILT" UPON COMPLETION AND ACCEPTANCE OF WORK.
- CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ALL WORK / MATERIALS FOUND TO BE DEFECTIVE WITHIN THIS PERIOD SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTRACTOR

BASIC MATERIALS

- CONDUIT
 - ELECTRICAL METALLIC CONDUIT (EMT) CONDUIT WITH COMPRESSION COUPLINGS AND FITTINGS MAY BE USED INDOORS OR OUTDOORS IN NON-HAZARDOUS AREAS AND IN AREAS NOT SUBJECT TO PHYSICAL DAMAGE. SET SCREW TYPE CONNECTORS ARE NOT ACCEPTABLE.
 - RIGID GALVANIZED STEEL (RGS) CONDUIT WITH THREADED COUPLINGS AND FITTINGS SHALL BE USED INDOORS OR OUTDOORS IN HAZARDOUS AREAS AND IN LOCATIONS SUBJECT TO PHYSICAL DAMAGE.
 - LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED IN OUTDOOR OR WET LOCATIONS, AND FLEXIBLE METAL CONDUIT SHALL BE USED INDOORS IN DRY LOCATIONS TO EXTEND CONDUIT CONNECTIONS TO MOTORS, LIGHT FIXTURES, ETC. MAXIMUM LENGTH SHALL NOT EXCEED 72" FOR RECESSED LIGHT FIXTURES OR 24" FOR ALL OTHER APPLICATIONS.
 - MINIMUM SIZE CONDUIT SHALL BE 1/2" UNLESS OTHERWISE NOTED.
 - CONDUITS SHALL BE CONCEALED IN ALL FINISHED PARTS OF THE BUILDING. CONDUITS SHALL BE ROUTED PARALLEL TO THE BUILDING LINES - DIAGONAL RUNS ARE NOT ACCEPTABLE. SECURE CONDUITS TO BUILDING STRUCTURES AT INTERVALS OF NOT MORE THAN 8 FEET.
- CONDUCTORS
 - CONDUCTORS LOCATED INDOORS IN DRY LOCATIONS SHALL BE COPPER TYPE THHN / THWN.
 - CONDUCTORS LOCATED OUTDOORS OR IN WET LOCATIONS SHALL BE COPPER TYPE XHHW.
 - CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED.
 - MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING CIRCUITS SHALL BE #12 AWG. MINIMUM CONDUCTOR SIZE FOR CONTROL AND SIGNALING CIRCUITS SHALL BE #14 AWG.
 - CONDUCTORS FOR USE ON 120/208V SYSTEMS SHALL BE COLOR CODED BLACK, RED, BLUE AND WHITE FOR PHASES A, B, C, AND NEUTRAL RESPECTIVELY.
 - IN LIEU OF CONDUCTORS IN CONDUIT, CONTRACTOR MAY USE TYPE 'MC' CABLE IN LOCATIONS APPROVED BY THE NEC AND AS APPROVED BY THE OWNER / ARCHITECT. TYPE 'MC' CABLE SHALL BE USED FOR BRANCH CIRCUIT, CONCEALED RUNS ONLY, HOMERUNS AND EXPOSED INSTALLATIONS SHALL BE CONDUCTORS IN CONDUIT.
- DISCONNECT SWITCHES
 - DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE 'HD'.
 - FUSIBLE DISCONNECTS SHALL HAVE PROVISIONS FOR CLASS 'R' FUSES. LOCATE / MOUNT DISCONNECTS TO PROVIDE PROPER WORKING CLEARANCE AS REQUIRED BY THE NEC. DISCONNECTS FOR USE WITH HVAC EQUIPMENT SHALL NOT BE SUPPORTED BY OR MOUNTED TO THE EQUIPMENT. PROVIDE UNISTRUT BRACKETS, SHEET METAL STANDS, OR OTHER MOUNTING MEANS FOR MOUNTING DISCONNECT SWITCHES AS REQUIRED.
- FUSES
 - FUSES SHALL BE 'BUSSMAN LOW PEAK' OR EQUAL.
 - FUSES RATE 1/10 AMP TO 600 AMPS SHALL BE UL CLASS R DUAL ELEMENT, CURRENT LIMITING, EQUAL TO BUSSMAN LPS-RK (600V) OR LPN-RK (250V).
 - FURNISH OWNER WITH ONE SPARE SET OF THREE OF EACH SIZE AND TYPE OF FUSE USED ON THIS PROJECT.
- CIRCUIT BREAKERS
 - BREAKERS SHALL BE BOLT ON, THERMAL MAGNETIC, MOLDED CASE
 - BREAKERS SHALL BE QUICK MAKE QUICK BREAK.
 - BREAKERS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT (SERIES RATINGS ARE UNACCEPTABLE).
 - BREAKERS SHALL BE COMMON TRIP TYPE FOR ALL MULTI-POLE APPLICATIONS.
 - BREAKERS SHALL BE MARKED 'HACR' WHEN USED TO FEED AIR CONDITIONING EQUIPMENT
- WIRING DEVICES
 - RECEPTACLES SHALL BE 20 AMP, 125 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 5362 OR EQUAL. TAMPERPROOF RECEPTACLES SHALL BE 20 AMP, 125 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 5362TR OR EQUAL.
 - LIGHT SWITCHES SHALL BE 20 AMP, 120/277 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 1221 (SINGLE POLE) OR 1223 (THREE WAY) OR EQUAL.
 - MANUAL MOTOR STARTERS SHALL HAVE "QUICK MAKE - QUICK BREAK" TOGGLE MECHANISM, OVERLOAD HEATER(S) SIZED PER MOTOR NAMEPLATE AND/OR MANUFACTURER'S RECOMMENDATION, AND SUITABLE FOR THE VOLTAGE, HP AND NUMBER OF PHASES SHOWN ON THE DRAWINGS.
 - COLOR OF RECEPTACLES, SWITCHES, AND MANUAL MOTOR STARTERS SHALL BE PER THE ARCHITECT'S DIRECTION.
 - COVER PLATES IN FINISHED AREAS SHALL BE STAINLESS STEEL UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. COVER PLATE IN UNFINISHED AREAS, OR FOR EXPOSED INSTALLATIONS SHALL BE RAISE STAMPED STEEL.
 - FLUSH MOUNT RECEPTACLES 18" TO BOTTOM OF BOX ABOVE FINISHED FLOOR WITH GROUND PIN AT TOP UNLESS OTHERWISE NOTED.
 - RECEPTACLES ABOVE COUNTERS SHALL BE HORIZONTALLY FLUSH MOUNTED AT 6" ABOVE COUNTER UNLESS OTHERWISE NOTED
 - SWITCHES SHALL BE FLUSH MOUNTED AT 42" TO BOTTOM OF BOX ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. TOGGLE HANDLE SHALL BE UP IN THE 'ON' POSITION AND DOWN IN THE 'OFF' POSITION
- JUNCTION, PULL AND DEVICE BOXES
 - JUNCTION AND PULL BOXES SHALL BE OF CODE GALVANIZED STEEL.
 - JUNCTION AND PULL BOXES MOUNTED VERTICALLY SHALL HAVE HINGED COVER AND CATCH LOCKS, BOXES MOUNTED HORIZONTALLY OR IN THE CEILING SHALL BE FURNISHED WITH SCREW COVERS
 - DEVICE BOXES AND GENERAL PURPOSE JUNCTION BOXES SHALL BE ONE PIECE GALVANIZED PRESSED STEEL KNOCK-OUT TYPE WITH SIMILAR COVER. MINIMUM SIZE SHALL BE 4" SQUARE.
 - DEVICE BOXES IN EXTERIOR LOCATIONS SHALL BE CASE IRON WITH GASKETED COVER, CROUSE HINDS FD OR EQUAL.
- GROUNDING
 - 8.1. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL RACEWAYS. GROUND CONDUCTOR SHALL BE SIZED PER NEC 250-122.

ELECTRICAL SPECIFICATIONS

LIGHTING FIXTURES

- LED LAMPS SHALL HAVE THE LUMEN AND DEGREE KELVIN RATINGS AS CALLED OUT ON THE DRAWINGS. LED LAMPS SHALL BE ENERGY STAR RATED WITH A MINIMUM CRI OF 80. LED LAMPS WITH REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF THREE YEARS, WHILE LED LAMPS WITH NON-REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF FIVE YEARS. LED LAMPS SHALL DELIVER A MINIMUM OF 70% OF INITIAL LUMENS AFTER 50,000 HOURS.
- LED DRIVERS SHALL BE ENERGY STAR RATED WITH A CLASS 'A' SOUND RATING, A MINIMUM OPERATING TEMPERATURE OF 20°C, AND AN OUTPUT OPERATING FREQUENCY OF 120HZ OR GREATER. LED DRIVERS SHALL PROVIDE A MINIMUM POWER FACTOR OF 0.7 FOR LAMPS WITH INPUT POWER GREATER THAN 5 WATTS OF LESS. WHERE DIMMING IS CALLED OUT ON THE DRAWINGS, LED DRIVERS SHALL ALLOW CONTINUOUS DIMMING FROM 100% TO 10% WITHOUT FLICKER OR NOISE. NON-REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF THREE YEARS.
- TIME CLOCKS, CONTACTORS AND PHOTOCELLS SHALL BE AS SHOWN ON THE DRAWINGS. PHOTOCELLS SHALL BE FAIR IN THE 'ON' POSITION AND SHALL BE LOCATED ON ROOF FACING NORTH
- DIMMERS SHALL BE SOLID STATE, SLIDE TYPE, FLUSH MOUNTED WITH POSITIVE 'ON-OFF' INDICATION. DIMMERS AT GANGED LOCATIONS SHALL BE DERATED PER MANUFACTURER'S INSTRUCTIONS. DIMMERS FOR LED FIXTURES SHALL BE COORDINATED WITH THE TYPE OF DRIVER TO BE USED TO ENSURE COMPATIBILITY. MOUNT DIMMERS AT WALL SWITCH HEIGHT. DIMMERS SHALL BE LUTRON OR EQUAL.
- RECESSED FIXTURES SHALL BE FURNISHED WITH ALL ACCESSORIES REQUIRED TO FIT THE FIXTURE TO THE CEILING CONSTRUCTION
- ALL LIGHT FIXTURES SHALL BE SECURELY SUPPORTED FROM BUILDING STRUCTURE. TROFFER STYLE FIXTURES IN EXPOSED T-BAR GRID CEILINGS SHALL BE SUPPORTED FROM THE STRUCTURE WITH #12 WIRE AT OPPOSITE CORNERS OF THE FIXTURE, AND SHALL BE SECURELY FASTENED TO THE GRID.
- EXTERIOR LIGHTING FIXTURES SHALL BE 'FULL CUT OFF' WHERE REQUIRED BY LOCATED ORDINANCES
- EXTERIOR LIGHTING FIXTURES SHALL BE FURNISHED COMPLETE WITH GASKETS AND SHALL BE RATED FOR DAMP OR WET LOCATIONS.

GENERAL NOTES

- CONTRACTOR TO PROVIDE AND INSTALL ELECTRICAL WORK, ACCORDING TO PLANS.
- CONTRACTOR TO COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL AND PLUMBING WORK, PER 2017 N.E.C. AND APPLICABLE RULES, REGULATIONS, AND ORDINANCES.
- GENERAL NOTE: CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY DIMENSIONS OF SPACE AND QUANTITIES, SIZES, ETC. PRIOR TO CONSTRUCTION.
- PROVIDE COPPER WIRE THHN/ THHN #12 MINIMUM. CONDUITS SHALL BE EITHER RIGID OR EMT AS ALLOWED BY CODE. CONDUIT EXPOSED TO THE ELEMENTS OR BURIED UNDERGROUND SHALL BE WRAPPED WITH SCOTCH 51 TAPE OR EQUAL.
- MC CABLE IS ACCEPTABLE
- ROMEX CABLE IS NOT ACCEPTABLE
- ALUMINUM CONDUCTORS ARE NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER IN WRITING BEFORE BIDDING THE JOB.
- FOR RECEPTACLE HOMERUNS OVER 65 LINEAL FEET, USE #10 AWG FOR RECEPTACLE HOMERUNS OVER 115 FEET IN LINEAL FEET USE #8 AWG WIRE.
- EQUIPMENT, RACEWAYS, ETC, SHALL HAVE PROPER GROUNDING PER NATIONAL ELECTRICAL CODE.

ELECTRICAL SYMBOLS (NOT ALL USED)

	SERVICE ENTRANCE SECTION
	PANEL BOARD
	CEILING MOUNTED LIGHT FIXTURE.
	WALL MOUNTED LIGHT FIXTURE.
	JUNCTION BOX IN ACCESSIBLE LOCATION ABOVE REMOVABLE CEILING WITH FLEXIBLE CONDUIT CONNECTION TO LIGHT FIXTURE.
	FLUORESCENT LIGHT FIXTURE.
	FLUORESCENT LIGHT FIXTURE. CONNECT TO NON-SWITCHED LTG. CIRCUIT SERVING SAME AREA. SEE LIGHT FICTURE SCHEDULE.
	FLUORESCENT STRIP FIXTURE.
	FLEX CONNECTION TO EQUIPMENT. LIQUID TIGHT FLEX WHERE EXPOSED TO WEATHER.
	JUNCTION BOX IN ACCESSIBLE LOCATION. NEMA 3R WHERE EXPOSED TO WEATHER.
	DUPLEX CONVENIENCE RECEPTABLE AT +18" OR AS NOTED.
	RECEPTACLE AT FLOOR.
	FOUR-PLEX CONVENIENCE RECEPTACLE AT 18"OR AS NOTED.
	SPLIT WIRED DUPLEX CONVENIENCE RECEPTACLE AT +18" OR AS NOTED.
	TOGGLE SWITCH -SINGLE POLE, THREE WAY, KEYED, FOUR WAY ('P' INDICATES ILLUMINATED)
	MOTOR CONTROLLER , FURNISHED WITH EQUIPMENT.
	DISCONNECT SWITCH H.P. RATED, WITH DUAL ELEMENT TIME-DELAY FUSED (CLASS RK1), NEMA 3R ENCLOSURE WHERE EXPOSED TO WEATHER. FUSE PER EQUIPMENT MANUFACTURE'S RECOMMENDATIONS, N.F. INDICATES NON-FUSED.
	MOTOR, SIZE AND RATING AS NOTED.
	TELE/DATA OUTLET @ +18" WITH 3/4" STUD ABOVE CEILING.
	TELE/DATA OUTLET @ 44" WITH 3/4" STUD ABOVE CEILING.
	CIRCUIT IN CONDUIT, CONCEALED IN OR UNDER FLOOR. HASH MARKS INDICATES QUANTITY OF CONDUCTORS. NO MARKS INDICATE TWO CONDUCTORS, PLUS EQUIPMENT AND IG GROUNDS. (NOTE: WIRE AND OR CONDUIT SIZE SHOWN AT HOMERUN IS MINIMUM SIZE FOR ENTIRE CIRCUIT: 12# MINIMUM). LONG STROKE(S) INDICATES NEUTRAL CONDUCTOR(S), SHORT STROKES INDICATES PHASE OR SWITCHED CONDUCTORS. (TYPICAL). EACH ISOLATED GROUND CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AND IG GROUND WIRE. GROUND WIRE(S) ARE NOT SHOWN ON DRAWINGS. GROUND WIRES SHALL BE INSULATED COPPER.

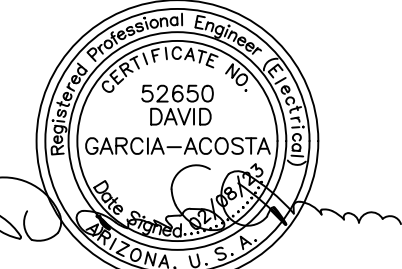
ELECTRIC EQUIPMENT SCHEDULE										
ID	QTY	DESCRIPTION	MODEL	V/Ø	KW	HP	FLA	Δ 125%	CONNECTION	REMARKS
HP-1	1	4-TON PACKAGED HEAT PUMP	CARRIER / HCQ05	208-3Ø	-	-	24.0	30.0	DIRECT	EXISTING
BREF	1	BAR REFRIGERATOR	BY OWNER	120/1Ø	-	-	13.0	16.3	PLUG	NEW
ICE	1	ICE MAKER	BY OWNER	120/1Ø	-	-	10.0	12.5	PLUG	NEW

LIGHTING FIXTURE SCHEDULE										
SYMBOL	DESCRIPTION	MAKE & MODEL	EXISTING OR NEW	V	QTY.	LAMP TYPE	WATTAGE PER FIXTURE	MOUNTING	REMARKS	
	4" LOW VOLTAGE DOWNLIGHT	LITON/LHS1499/LR1421	E	120	8	LED	37	RECESSED	MR16 LED BAFLE WITH INTEGRAL TRANSFORMER	
	6"Ø DOWNLIGHT	LITON/LH7-LLF-120V-GU24-LBLJ2	E	120	3	LED	12	RECESSED	LED DOWNLIGHT, BAFLE	
	PUCK LIGHT	BY CONTRACTOR	N	120	3	LED	7	RECESSED	NEW	
	EMERGENCY LIGHT / EXIT SIGN COMBO	BY CONTRACTOR	N	120	4	LED	5	SURFACE	WITH 90 MIN. BATTERY BACKUP	
	EMERGENCY LIGHT	BY CONTRACTOR	N	120	2	LED	5	SURFACE	WITH 90 MIN. BATTERY BACKUP	

PROJECT NO.: TP2301
DESIGNED BY: DG
DRAWN BY: GB
CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 09/30/23



MECHANICAL & ELECTRICAL
ENGINEERING

441 S. 48TH ST. SUITE 101
TEMPE, AZ 85281
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BAR AT TERRACES
7550 N 16TH ST
PHOENIX, AZ 85020

PROJECT:

SHEET #:

E1

SHEET TITLE:
ELECTRICAL
SPECIFICATIONS

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 09/30/23



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PROJECT:
 BAR AT TERRACES
 7550 N 16TH ST
 PHOENIX, AZ 85020

SHEET #:

E2

SHEET TITLE:
 ELECTRICAL DEMOLITION PLAN

DEMOLITION NOTES (WHERE APPLICABLE)

- COMPLETE DEMOLITION SCOPE SHALL BE UNDERSTOOD BY REVIEWING THE COMPLETE PROJECT DRAWINGS (ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, ETC.) PRIOR TO DEMOLITION OF ANY EQUIPMENT OR SYSTEMS.
- DISPOSE OF ALL REMOVE SYSTEMS AND EQUIPMENT IN A LEGAL AND OWNER APPROVED MANNER.
- COORDINATE WITH OWNER EQUIPMENT THAT IS TO BE RETURNED TO OWNER'S STOCK, SALVAGED, OR DISPOSED OF ITEMS LISTED TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED INCLUDING ALL ACCESSORIES INCLUDING BUT NOT LIMITED TO: INSULATION, HANGERS, CONTROLS WIRING, FITTINGS, PIPES VALVES, DUCTWORK, ETC.
- NOTHING SHALL BE ABANDONED IN PLACE UNLESS SPECIFICALLY NOTED ON PLANS OR APPROVED BY OWNER.

GENERAL NOTES

- ALL LIGHTING FIXTURES ARE EXISTING U.N.O.
- ALL NEW ELECTRICAL SYSTEM SHALL COMPLY WITH 2017 NEC AND 2018 IECC.

ELECTRICAL NOTES

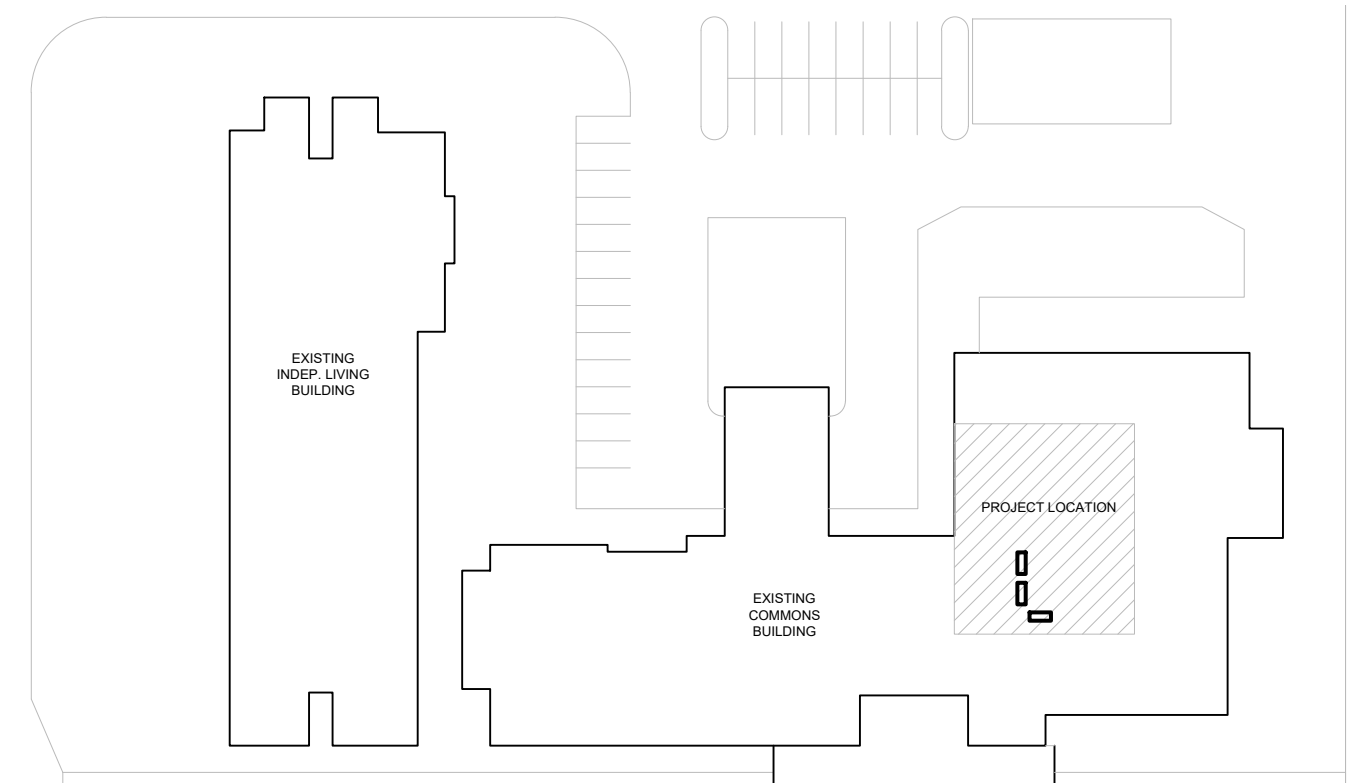
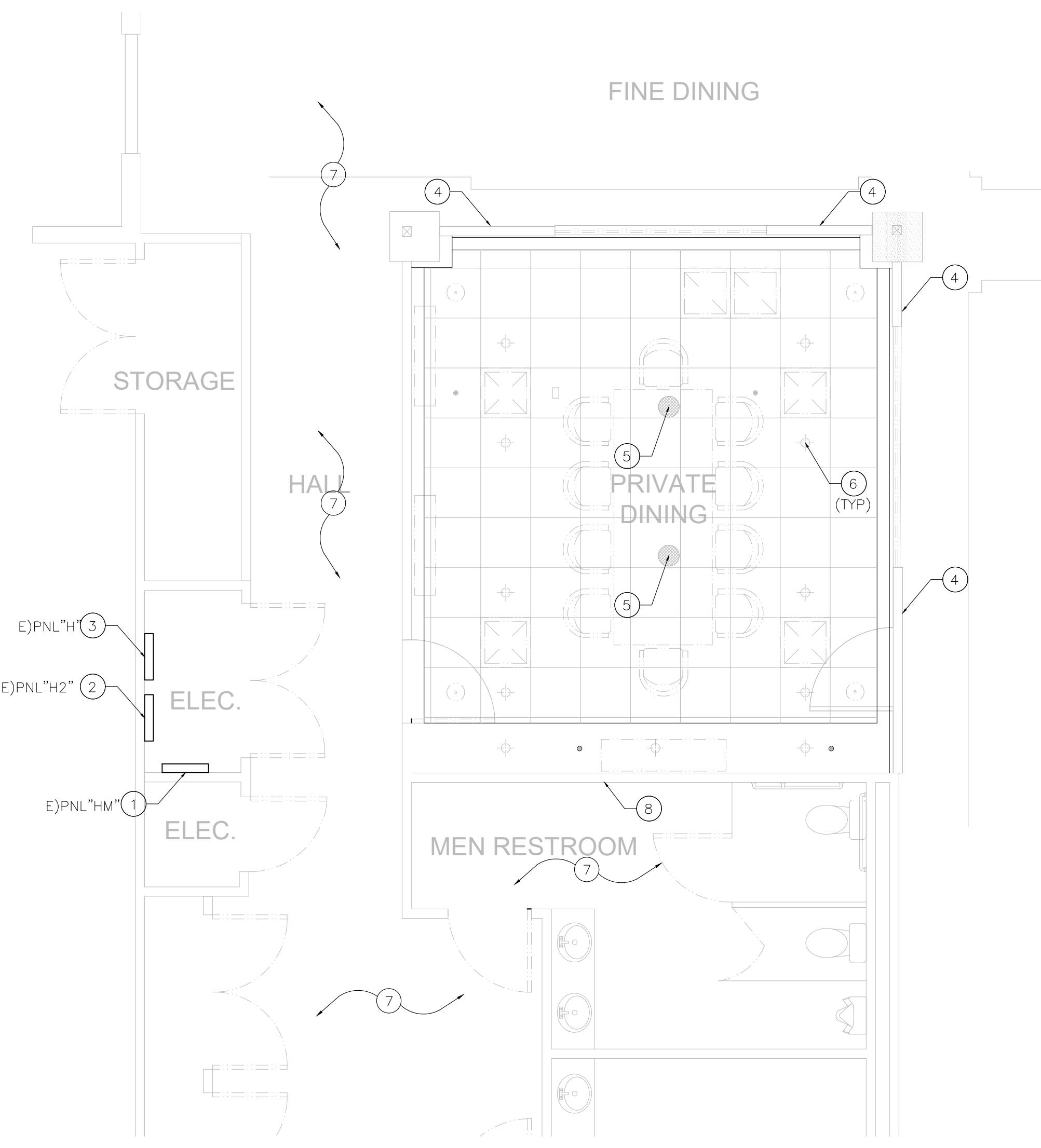
- EVERY CIRCUIT AND MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. NEC 408.4(A)

IECC NOTES

- PROVIDE EMERGENCY LIGHT WITH BATTERIES. LOWER CONSUMPTION.
- PROVIDE AUTOMATIC LIGHTING CONTROL FOR ENTIRE BUILDING.

KEYNOTES

- EXITING PANEL "HM" TO REMAIN
- EXITING PANEL "H#2" TO REMAIN
- EXITING PANEL "H" TO REMAIN
- EXISTING PART OF WALL TO BE DEMOLISH BY OTHER, REMOVE ALL SWITCH, RECEPTACLES, AND ASSOCIATED WIRING AND BOXES PRIOR DEMOLITION.
- EXISTING LIGHTING FIXTURE TO REMOVE
- EXISTING LIGHTING FIXTURE TO REMAIN, RE ARRANGE LOADS PER PANEL SCHEDULE, SEE PANEL SCHEDULE.
- NO WORK/CHANGES ON THIS AREA
- EXISTING WALL REMAINS.



KEY PLAN - COMMONS BUILDING

SCALE: 1/64" = 1'-0"

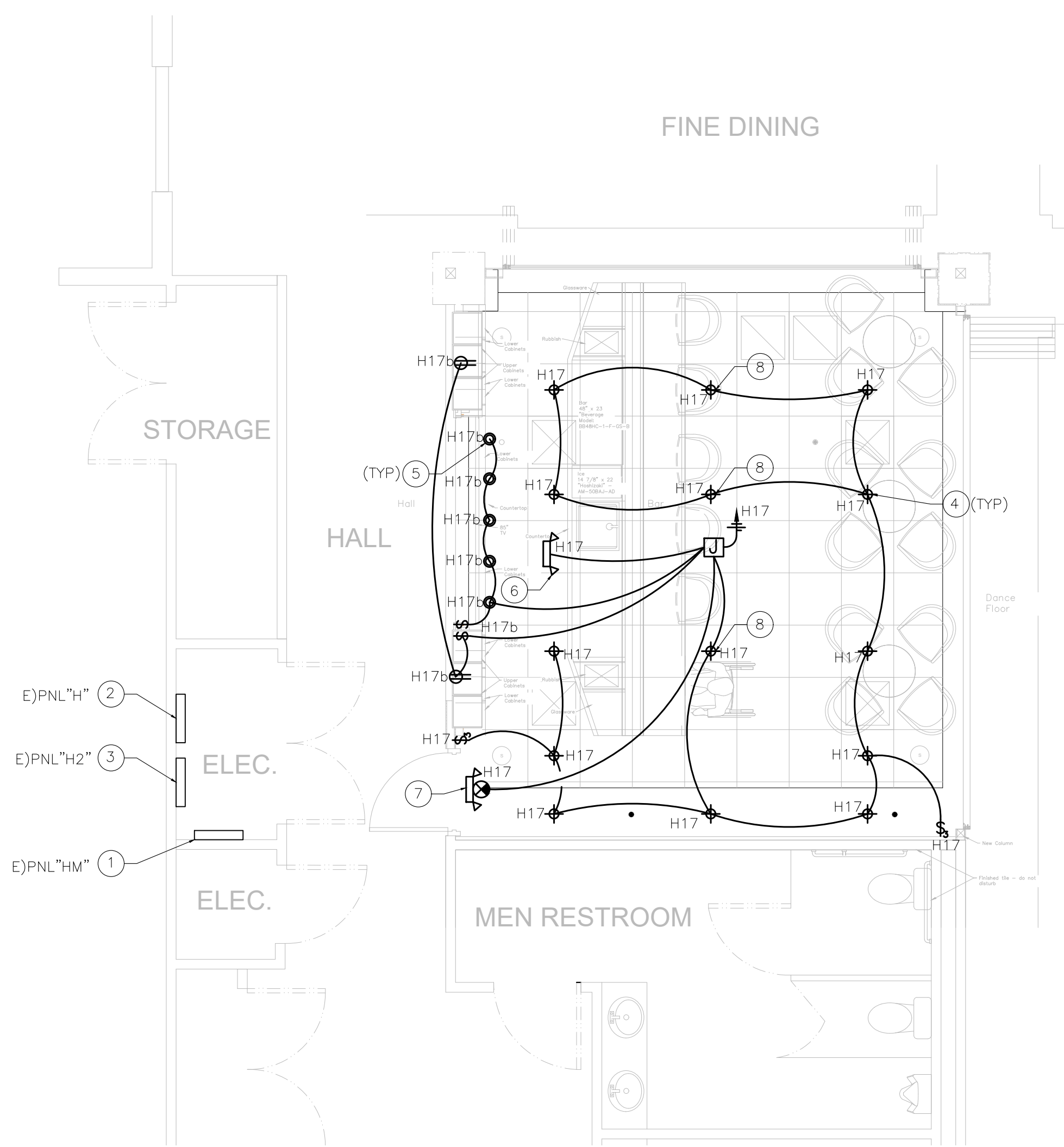
ELECTRICAL DEMOLITION PLAN
 SCALE: 1/2" = 1'-0"

ELECTRICAL NOTES

A. EVERY CIRCUIT AND MODIFICATION SHALL BE LEGIBLE IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. NEC 408.4(A)

KEYNOTES POWER PLAN

- ① EXISTING PANEL "HM" RATED AT 225A 480/277, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ② EXISTING PANEL "H" RATED AT 400A 208/120, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ③ EXISTING PANEL "H2" RATED AT 400A 208/120, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ④ EXISTING LIGHTING FIXTURE (TYP.)
- ⑤ NEW LIGHTING FIXTURE CONNECTED TO BRANCH BISCUITS AS NOTED (TYP)
- ⑥ NEW EMERGENCY LIGHT CONNECTED TO BRANCH CIRCUIT THAT SERVER
- ⑦ NEW EMERGENCY LIGHT WITH EXIT SING COMBO CONNECTED TO BRANCH CIRCUIT THAT SERVER
- ⑧ NEW LIGHTING FIXTURE.



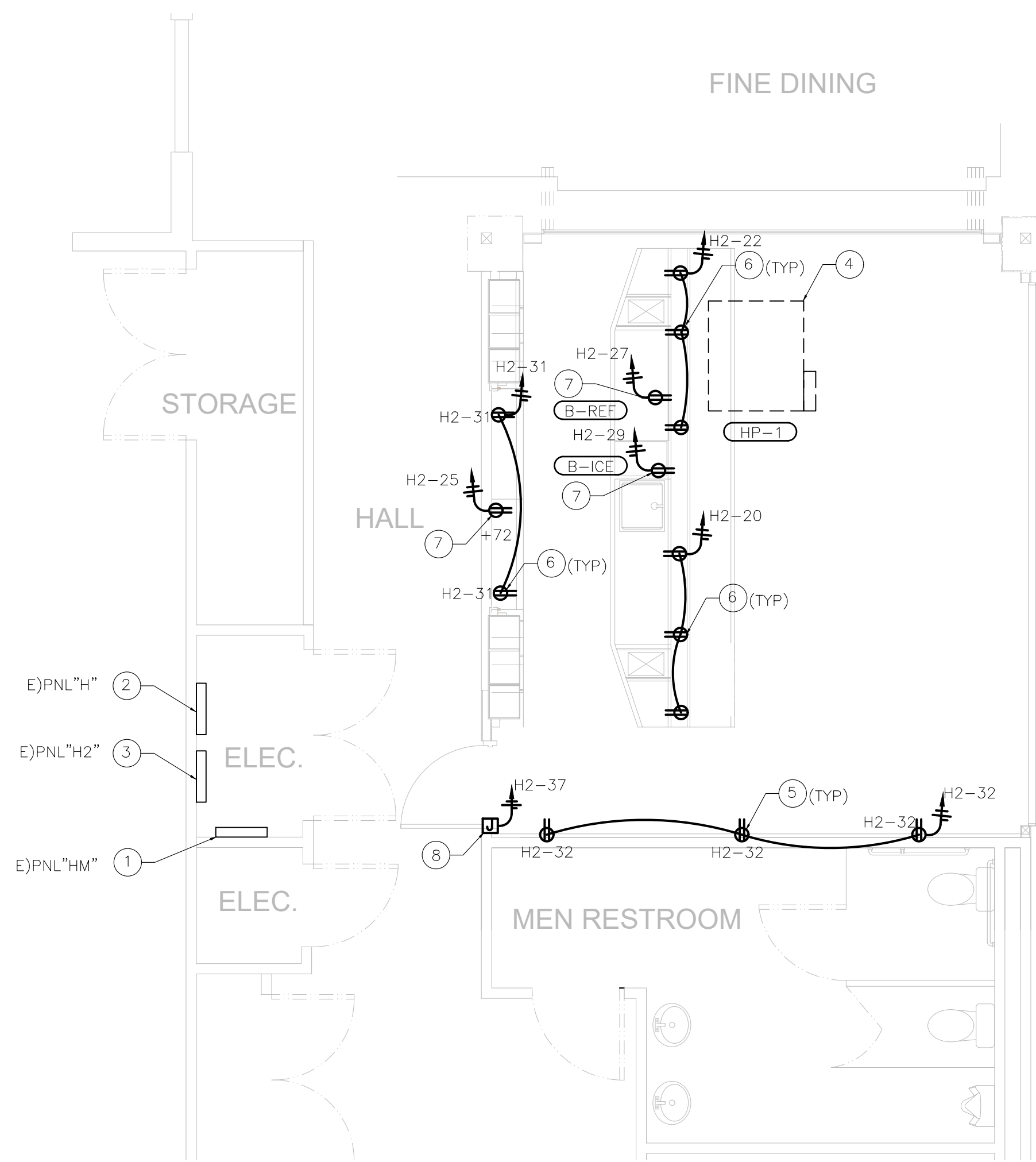
ELECTRICAL LIGHTING PLAN
SCALE: 1/2" = 1'-0"

ELECTRICAL NOTES

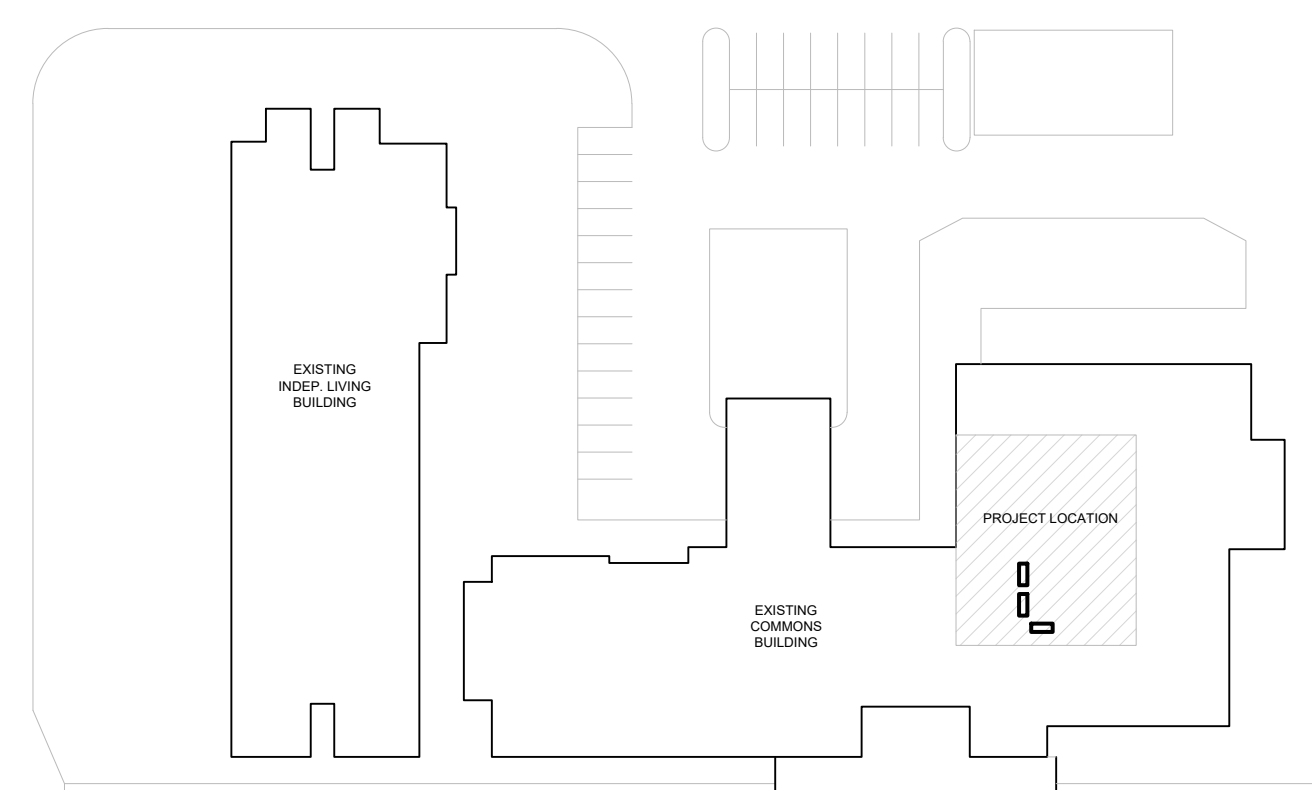
A. EVERY CIRCUIT AND MODIFICATION SHALL BE LEGIBLE IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. NEC 408.4(A)

KEYNOTES ROOFTOP

- ① EXISTING PANEL "HM" RATED AT 400A 480/277, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ② EXISTING PANEL "H" RATED AT 400A 208/120, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ③ EXISTING PANEL "H2" RATED AT 400A 208/120, 3Ø, 4W NEMA1 SEE PANEL SCHEDULE
- ④ EXISTING 4-TON HEAT PUMP PACKAGE UNIT TO REMAIN ON ROOFTOP. NO WORK REQUIRED.
- ⑤ EXISTING 20A, 120V GENERAL USE RECEPTACLE +18" AFF, CONNECTED AS BRANCH CIRCUIT AS NOTED.
- ⑥ NEW 120V, 20A, GFCI RECEPTACLE +42" AFF (TYP.) CONNECTED AS BRANCH CIRCUIT AS NOTED.
- ⑦ NEW 120V, 20A, GFCI RECEPTACLE CONNECTED AS BRANCH CIRCUIT AS NOTED.
- ⑧ NEW JUNCTION BOX AT CEILING AND BRANCH CIRCUIT CONNECTED AS SHOW



ELECTRICAL POWER PLAN
SCALE: 1/2" = 1'-0"



KEY PLAN - COMMONS BUILDING
SCALE: 1/64" = 1'-0"

PROJECT NO.: TP2301
DESIGNED BY: DG
DRAWN BY: GB
CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 09/30/23



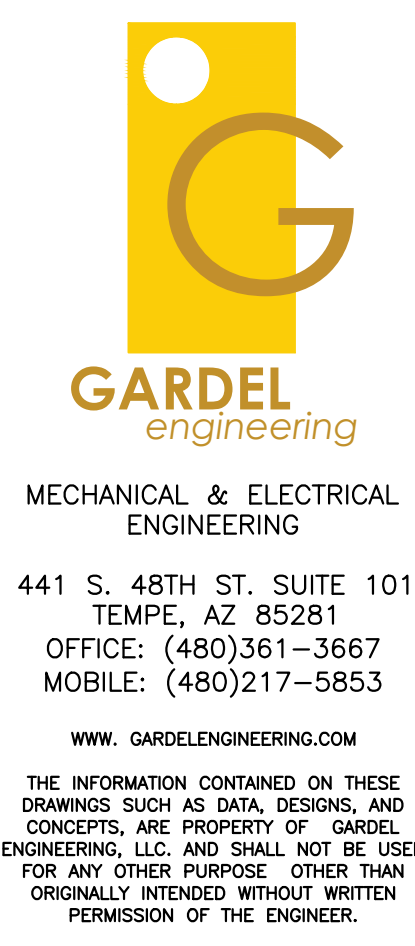
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PROJECT:
BAR AT TERRACES
7550 N 16TH ST
PHOENIX, AZ 85020

SHEET #:
E3
SHEET TITLE:
ELECTRICAL LIGHTING AND POWER PLAN

NO.	REVISION	DATE

ENGINEERING SEAL



COMcheck Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC	Project Title: BAR AT TERRACES	Alteration
Construction Site: 7550 N 16TH ST, PHOENIX, AZ 85020	Owner/Agent:	Designer/Contractor: DAVID GARCIA ACOSTA, GARDEL ENGINEERING LLC, 4415 48TH ST SUITE 101, TEMPE, AZ, 85281, 480-361-3667, David@gardelenengineering.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
1-Dining: Cafeteria/Fast Food	467	0.79	369
Total Allowed Watts =		369	

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Watt.	E (C X D)
Dining: Cafeteria/Fast Food (467 sq.ft.)				
LED 1: LED Linear 33W:	1	8	37	296
LED 2: LED A Lamp 13W:	4	3	13	39
LED 3: LED A Lamp 7W:	1	4	7	28
Total Proposed Watts =		363		

Interior Lighting PASSES

Interior Lighting Compliance Statement
 Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

David Garcia-Acosta - PE [Signature] 02/08/23
 Name - Title Date

PANEL "H2" SCHEDULE

TYPE: BOLT-ON
 MAIN CB: M.L.O
 LOCATION: INTERIOR
 FED FROM: PANEL H FEED THROUGH

CODITION: EXISTING
 VOLTAGE: 208/120
 PHASES/WIRES: 3Ø, 4W
 LUG AMPS: 400

BREAKERS SCC: 10 KA
 RATED: FULLY
 NEMA: 1
 MOUNTING: SURFACE

- * EXISTING LOAD ON EXISTING BREAKER
- NEW LOAD
- △ CONTINUOUS LOAD (125%)
- LOAD CONTROLLED VIA TIMER/PHOTOCELL

USE/AREA SERVED	C/B	WIRING	CIR#	AMPS			CIR#	WIRING	C/B	USE/AREA SERVED	
				AØ	BØ	CØ					
* MECH EXISTING ROOFTOP A/C	35/2	EXISTING	1	18.2	8.7		2	EXISTING	20/2	* MECH EXISTING ROOFTOP A/C	
* RCEPT ROOF GFCI	20/1	EXITING	3	18.2	8.7		4	EXISTING			
* RCPT	20/1	EXITING	5			3.0	6	EXISTING	25/3	* MECH EXISTING ROOFTOP A/C	
* MISC SALAD BAR	20/1	EXITING	7	3.0	17.4		8	EXISTING			
* MISC SALAD BAR	20/1	EXITING	9	7.0	17.4		10	EXISTING			
* MISC SALAD BAR	20/1	EXITING	11			8.0	12	EXISTING	20/1	* RCPT ROOF	
* MISC SALAD BAR	20/1	EXITING	13	9.0	4.5		14	EXISTING	20/1	* RCPT ROOF	
* MISC SALAD BAR	20/1	EXITING	15	6.3	4.2		16	EXISTING	20/1	* MECH FAN	
* RCPT CLOSET	20/1	EXITING	17			3.0	18	EXISTING	20/1	*MECH FAN	
* RCPT	20/1	EXITING	19	4.5	4.5		20	2#12 1#12G	20/1	△● RCPT GFCI BAR AREA 1	
* RCPT	20/1	EXITING	21	4.5	4.5		22	2#12 1#12G	20/1	△● RCPT GFCI BAR AREA 2	
* RCPT	20/1	EXITING	23			4.5	24	EXISTING			
△● RCPT GFCI BAR AREA	20/1	2#12 1#12G	25	3.5	9.1		26	EXISTING	15/2	* MISC BUN WARMER	
△● RCPT GFCI BAR AREA (B-REF)	20/1	2#12 1#12G	27			11.9	28	EXISTING	20/1	* MISC SHADES MECO	
△● RCPT GFCI BAR AREA (B-ICE)	20/1	2#12 1#12G	29			12.5	30	EXISTING	20/1	* RCPT AREA CLUBROOM	
△● RCPT GFCI BAR AREA 3	20/1	2#12 1#12G	31	3.5	10.5		32	EXISTING	20/1	* RCPT PRIVATE DINING /HALL WAY	
SPACE			33				34	EXISTING	20/1	* RCPT PRIVATE DINING /HALL WAY	
SPACE			35			12.0	36	EXISTING	20/1	* RCPT KITCHEN EQUIPMENT	
△● HANDICAP DOOR JUCTION BOX	20/1	2#12 1#12G	37	3.5	10		38	EXISTING	20/1	* RCPT KITCHEN EQUIPMENT	
SPACE			38				40	EXISTING	20/1	* RCPT KITCHEN EQUIPMENT	
* MISC DUCT DETECT	20/1	EXITING	41			2.91	42	EXISTING	20/1	* RCPT MUSIC SPEAKER SYSTEM	
EXISTING LOAD PER PHASE				94.8	105.0	82.3					
ADD LOAD PER PHASE				15.0	16.3	12.4	MAX CONNECTED LOAD = 121 A				
NEW LOAD PER PHASE (TOTAL)				109.8	121.3	94.7					

PANEL "H" SCHEDULE

TYPE: BOLT-ON
 MAIN CB: 400/3 35KA
 LOCATION: INTERIOR
 FED FROM: E) XFMR

CODITION: EXISTING
 VOLTAGE: 208/120
 PHASES/WIRES: 3Ø, 4W
 LUG AMPS: 400

BREAKERS SCC: 10KA
 RATED: FULLY
 NEMA: 1
 MOUNTING: SURFACE

- * EXISTING LOAD ON EXISTING BREAKER
- NEW LOAD
- △ CONTINUOUS LOAD (125%)
- LOAD CONTROLLED VIA TIMER/PHOTOCELL

USE/AREA SERVED	C/B	WIRING	CIR#	AMPS			CIR#	WIRING	C/B	USE/AREA SERVED	
				AØ	BØ	CØ					
* RCPT ADMIN AREA	20/1	EXISTING	1	6.0	10.0		2	EXISTING	20/1	* LIGTHING SITE	
* LIGTHING IN DINING AREA	20/1	EXISTING	3		2.5		4	EXISTING	20/1	* LIGTHING SITE	
* LIGTHING FINE DINING	20/1	EXISTING	5			11.0	6	EXISTING	20/1	* RCPT GENERAL	
* RCPT ADMIN AREA	20/1	EXISTING	7	7.5	3.0		8	EXISTING	20/1	* RCPT GENERAL	
* RCPT ADMIN AREA	20/1	EXISTING	9	7.5	10.6		10	EXISTING	20/1	* LIGTHING ENTRY/CLUBROOM	
* RCPT ADMIN AREA	20/1	EXISTING	11			7.5	12	EXISTING	20/1	* LIGTHING DINING ROOM	
* RCPT WATHER FOUNTAIN	20/1	EXISTING	13	5.8	10.4		14	EXISTING	20/1	* LIGTHING SITE	
* LIGTHING FINE DINING	20/1	EXISTING	15		13.3	7.6	16	EXISTING	20/1	* MECH EXHUST FAN	
* LIGTHING BAR AREA	20/1	EXISTING	17			8.2	18	EXISTING	20/1	* LIGTHING LOW VOLTAGE XFMR	
* RCPT FLOOR 1	20/1	EXISTING	19	7.5	3.0		20	EXISTING	20/1	* RCPT GENERAL	
* RCPT FLOOR 2	20/1	EXISTING	21		7.5	32.0	22	EXISTING			
* RCPT FLOOR 3	20/1	EXISTING	23			7.5	24	EXISTING	50/3	* MECH AIR MAKE UP UNIT	
* RCPT GENERAL	20/1	EXISTING	25	4.5	32.0		26	EXISTING			
* RCPT GENERAL	20/1	EXISTING	27		6.0	8.2	28	EXISTING	20/1	* LIGTHING CANOPY	
* LIGTHING ADMIN BLDG 1	20/1	EXISTING	29			8.7	30	EXISTING	20/1	* LIGTHING SOFFIT EXTERIOR	
* LIGTHING ADMIN BLDG 2	20/1	EXISTING	31	9.6	6.0		32	EXISTING	20/1	* RCPT GENERAL	
SPARE	30/1		33			4.3	34	EXISTING	20/1	* RCPT GENERAL	
* RCPT GFCI NEXT TO FOUNTAIN	20/1	EXISTING	35			1.5	36	EXISTING	20/1	* RCPT GENERAL	
* LIGTHING ADMIN BLDG 3	20/1	EXISTING	37	8.7	4		38	EXISTING	20/1	* LIGTHING AT RESTROOMS	
* LIGTHING ADMIN BLDG 4	20/1	EXISTING	39		10	3	40	EXISTING	20/1	* RCPT GENERAL	
* LIGTHING ADMIN BLDG 5	20/1	EXISTING	41			8	42	EXISTING	20/1	* LIGTHING BUFFET AREA	
LOAD PER PHASE (TOTAL)				118.0	122.3	139.1	MAX CONNECTED LOAD = 139 A				

PROJECT:
 BAR AT TERRACES
 7550 N 16TH ST
 PHOENIX, AZ 85020

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 09/30/23



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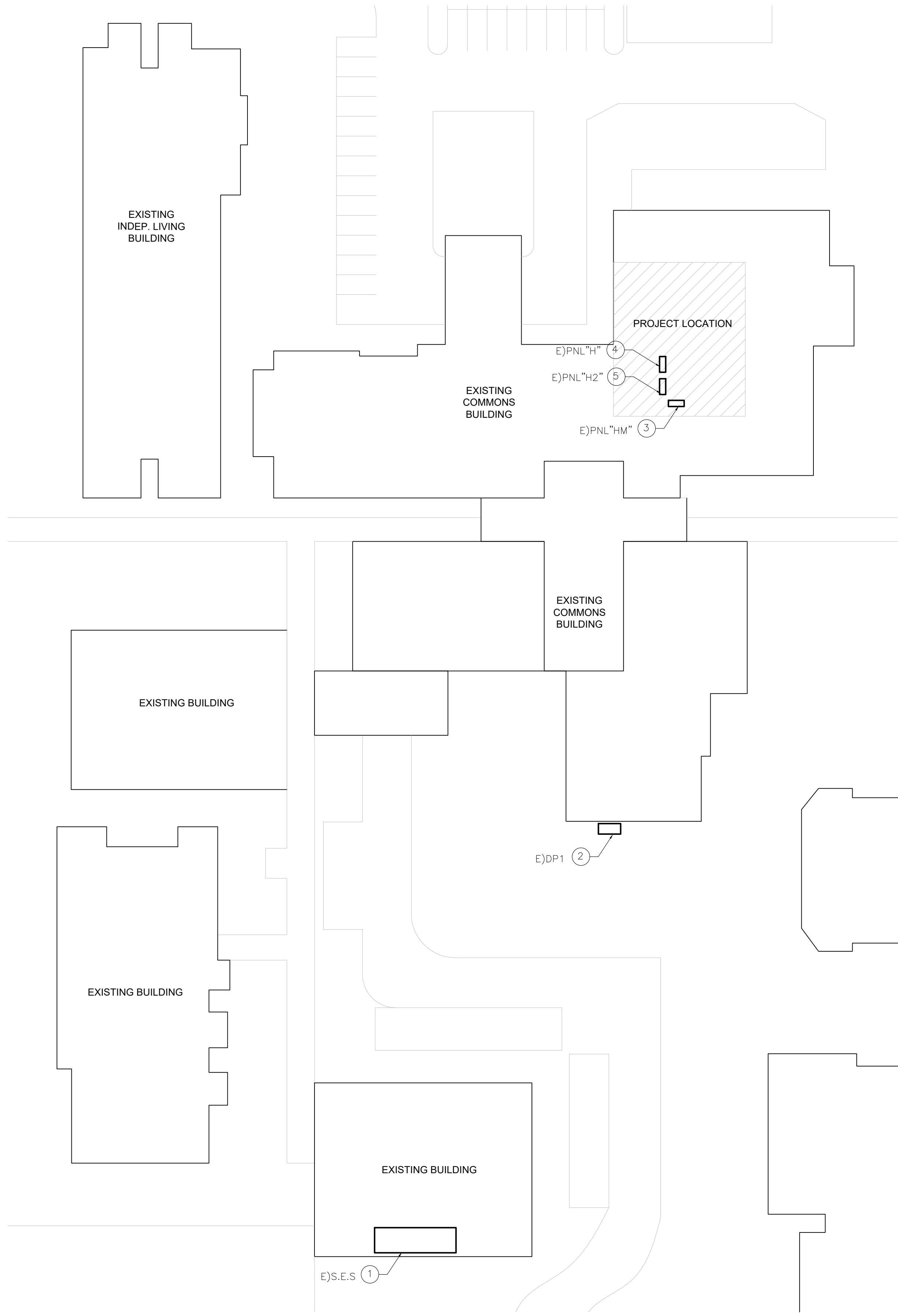
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PROJECT:

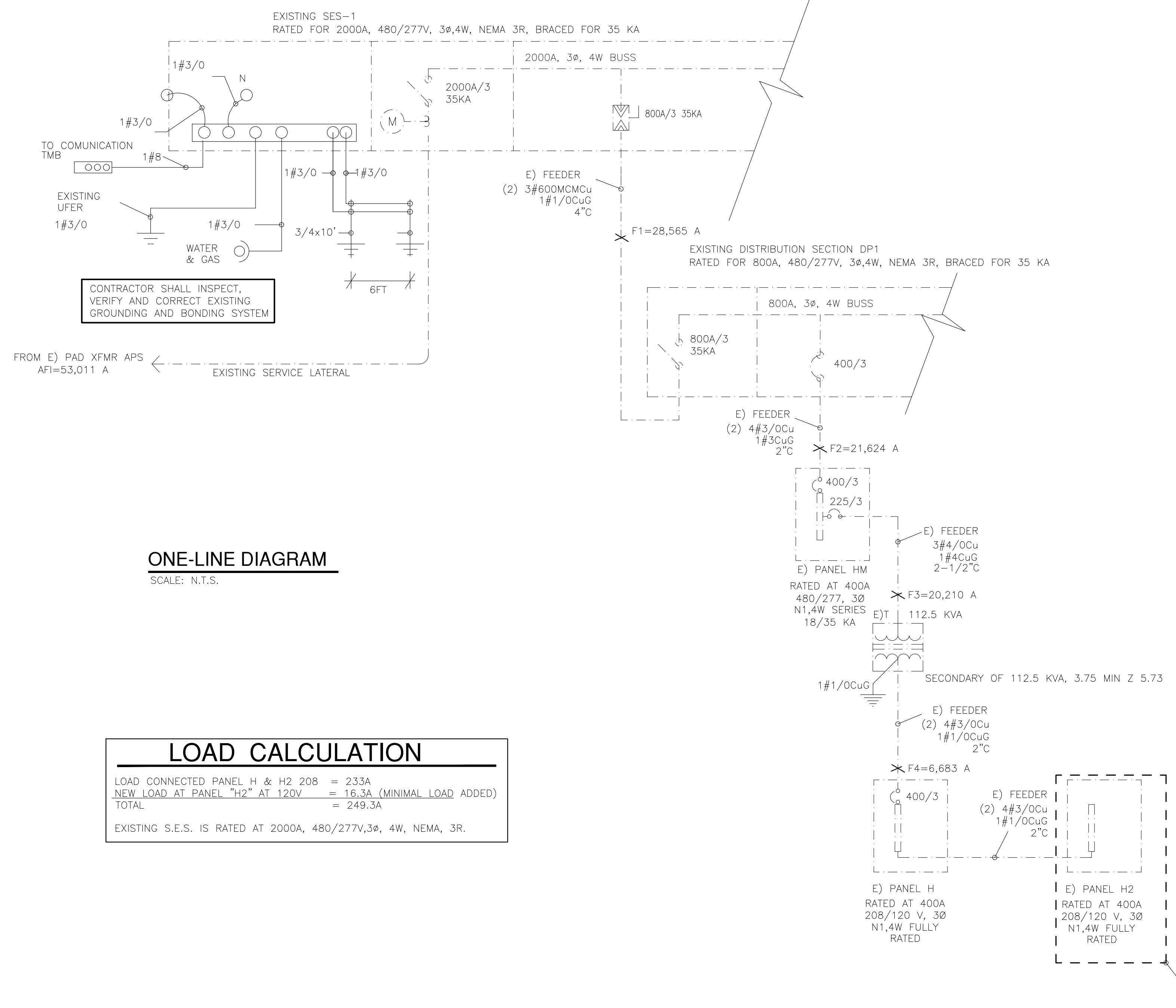
SHEET #:

E5

SHEET TITLE:
 ELECTRICAL
 SITE PLAN & ONE LINE
 DIAGRAM



KEY PLAN - COMMONS BUILDING
 SCALE: 1/32" = 1'-0"



ONE-LINE DIAGRAM
 SCALE: N.T.S.

LOAD CALCULATION	
LOAD CONNECTED PANEL H & H2 208	= 233A
NEW LOAD AT PANEL "H2" AT 120V	= 16.3A (MINIMAL LOAD ADDED)
TOTAL	= 249.3A
EXISTING S.E.S. IS RATED AT 2000A, 480/277V, 3Ø, 4W, NEMA, 3R.	

FAULT CURRENT CALCULATIONS

FAULT POINT	EQUIPMENT	SHORT CIRCUIT AT BEGINNING OF RUN	LINE VOLTAGE	LENGTH OF RUN	Remarks	CONDUCTORS				SHORT CIRCUIT CURRENT		
						NUM OF CONDUCTORS	SIZE	C	f		m	
F1	PANEL "DP1"	35000	480	100		2	#600	28033	0.225	0.816	28565	A
F2	PANEL "HM"	28565	480	80		2	3/0 Cu	12843	0.321	0.757	21624	A
F3	XFMR "T"	21624	480	8		1	4/0 Cu	8924	0.070	0.935	20210	A
F4	PANEL "H"	20210	480	3.75		2	3/0 Cu	12843	5.730	0.149	6683	A