









**Sheet Keyed Notes**

- CONTRACTOR shall remove and dispose of all existing floorcoverings in this area and scrape floors smooth from old adhesives and floor patch.
- DEMO EXISTING items shown dashed and/or shaded. Partitions, door and/or glazing assemblies, electrical devices, and/or millwork to be demolished/ removed (typ.). Return all millwork, fixtures and door glazing assemblies, not re-used in this Limit of Construction, to Building Management. Cap and seal all unused plumbing (where applicable). Patch/ repair partitions as necessary.
- CUT OPENING in EXISTING PARTITION as required for installation of new interior door and frame assembly.
- CHAIR RAIL, TO REMAIN in existing locations, patch and paint as necessary for like new conditions.
- REMOVE glass panels from transaction top to ceiling
- REMOVE ALL LIGHTING fixtures throughout Limit of Construction (UNO).
- EXISTING PARTIAL HEIGHT PARTITION to remain. REMOVE EXISTING TILED TOP.
- RELOCATE ENTRY/ EXIT DOOR. Remove existing door assembly as shown. Match original construction method and materials. Replace any components which cannot be salvaged. Field verify existing conditions for extent of work.
- RELOCATE INTERIOR DOOR. Remove existing door assembly and reuse in new construction. Match original construction method and materials. Replace any components which cannot be salvaged. Field verify existing conditions for extent of work.
- RELOCATE PASS-THRU SPECIMEN assembly. Remove existing pass-thru specimen assembly and reuse in new construction. Match original construction method and materials. Replace any components which cannot be salvaged. Field verify existing conditions for extent of work.
- RELOCATE Stainless Steel Sink. Remove existing plumbing fixture at location for re-install. Match original construction method and materials. Replace any components which cannot be salvaged. Field verify existing conditions for extent of work.
- EXISTING MILLWORK & PLUMBING fixtures to remain. Clean and/or repair to like new conditions as possible. The General Contractor shall field verify all existing plumbing fixtures (sink, water heater, etc.) and ensure proper working condition. Provide new fixture(s) only as necessary.
- REMOVE TRANSACTION TOP & WORKSURFACE at existing Reception Area. Cabinet Bases to remain
- EXISTING CEILING to remain. The suspended grid and acoustical ceiling tile system shall remain throughout (UNO). Restore existing ceiling grid to like new conditions as possible. Repair, replace and/or provide new grid and/or tiles as necessary. Match existing specifications.

**Demolition Legend**

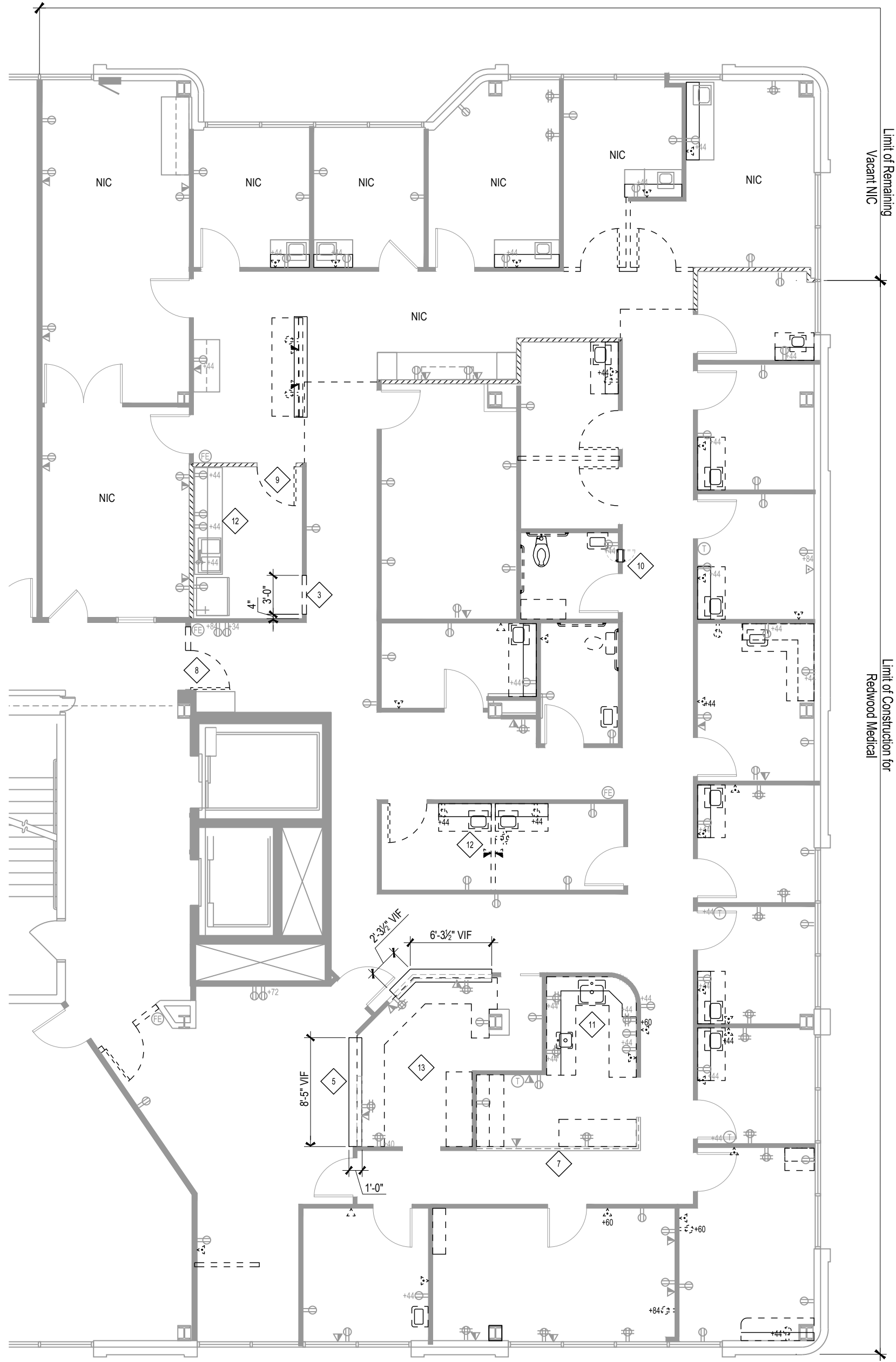
- DEMO EXISTING.** Partitions, door assemblies, electrical devices and/or millwork to be demolished/ removed (typ.). Verify with Building Management if fixtures and/or door assemblies shall be return to building's attic stock. Patch partitions and prepare to receive the scheduled finish treatments.
- NOTE:** At exterior curtain wall sill partitions (only), where power/ phone/ data devices are designated to be removed/ demolished, all conduit and J-boxes shall remain. Provide building standard blank face plates. All demolition of power/ phone/ data devices at interior partitions shall include removal of all associated conduit and J-boxes and patching/ painting of partitions.
- EXISTING PARTITION TO REMAIN.**
- EXISTING PARTIAL HEIGHT PARTITION** to remain.
- EXISTING PARTITIONS TO BE REWORKED.** Refer to Construction Plan

**Symbol Legend**

- Ceiling Mounted Fixtures/ Devices**
- Existing 2x4 Parabolic light fixture
  - Existing 2x2 Parabolic light fixture
  - Recessed LED downlight fixture
- NOTE:** all fixtures shown half shaded shall have night light egress function.
- Building Standard Exit Sign. Green letters on white face. Battery backup. Shade indicated face(s) and arrows (if any) indicate direction.
- Wall Mounted Fixtures/ Devices**
- Building Standard single pole switch
  - Special function switches:
    - "2" = dimmable switch and ballast
    - "3" = Three-way operation(lower case letters) indicate circuiting when necessary for clarification
  - Existing wall sconce light fixture
  - Duplex electrical receptacle & face plate
  - Quadplex electrical receptacle & face plate
  - Single gang J-box w/ data outlet & face plate
  - Existing Junction box with blank face plate
  - Combination telephony/ data outlet rough-in (VVO conduit) w/ double gang J-box and single gang plaster ring with pull string to above finished ceiling.
  - Water supply line
  - Relocated fixture/ device to be installed in this location.
- Refer to Engineering Drawings for complete specifications

**Demolition Plan Notes**

- Refer to General Notes for additional requirements.
- GENERAL DEMOLITION:** Demolish and remove all partitions, materials, and debris as shown on the drawings or specified otherwise herein. Removal as described shall be accomplished without storing excessive quantities of any material, rubbish, dirt, debris or waste of any kind within this demised area of construction or adjacent areas.
- FINISH TREATMENTS** scheduled to be removed are as follows: carpet, resilient flooring, base trim, wall treatments. UNO
- DISPOSAL:** All existing equipment, materials and fixtures not scheduled for re-use shall remain the property of the Owner. Coordinate with the Building Representative and comply with all regulations and/or requirements pertaining to removal, salvage and storage of materials demolished as scheduled.
- RE-USE:** Investigate condition of all materials scheduled for demolition and not re-used on this project. Document characteristics of each material or component and submit inventory statement to Building Representative. Include characteristics such as type, color, size, quantity, physical condition and make/model number, if possible.
- CLEAN AND REPAIR:** Verify condition of all materials scheduled for demolition and re-use where possible. Clean and/or repair materials as needed.
- PREPARATION:** Unless otherwise specified, remove all existing wall coverings, floor coverings and baseboard throughout and prepare existing surfaces for new finish treatments as scheduled. The Demolition Contractor shall scrape existing adhesives to a smooth condition. Refer to finish plans and/or schedules.
- PATCHING:** Remove all unused sleeves through the floor slab and fill/patch all penetrations.
- ELECTRICAL DEMOLITION:** Existing electrical and communications/ data wiring within partitions, raceways or above the ceiling and not scheduled for re-use shall be removed entirely, including hangers, supports, terminals, conduit and junctions from source to point of termination. Maintain circuit and/or transmission continuity to remaining devices, where necessary.
- PIPES AND CONDUITS:** All pipes and conduit in partitions scheduled for demolition shall be removed entirely when not scheduled for re-use.
- ABANDONED APPARATUS:** Abandoned electrical circuits, fixtures and devices discovered by the contractor and not scheduled for re-use shall be reported to the Building Representative for further direction.
- TELEPHONE/DATA REMOVAL:** Unless otherwise indicated on the drawings, remove all existing telephone equipment and/or components not currently in use.



**1 Demolition Plan**  
Suite 300

Scale: 1/8" = 1'-0"



This sheet of drawings has not been reviewed for code compliance.



**2 Demolition Ceiling Plan**  
Suite 300

Scale: 1/8" = 1'-0"

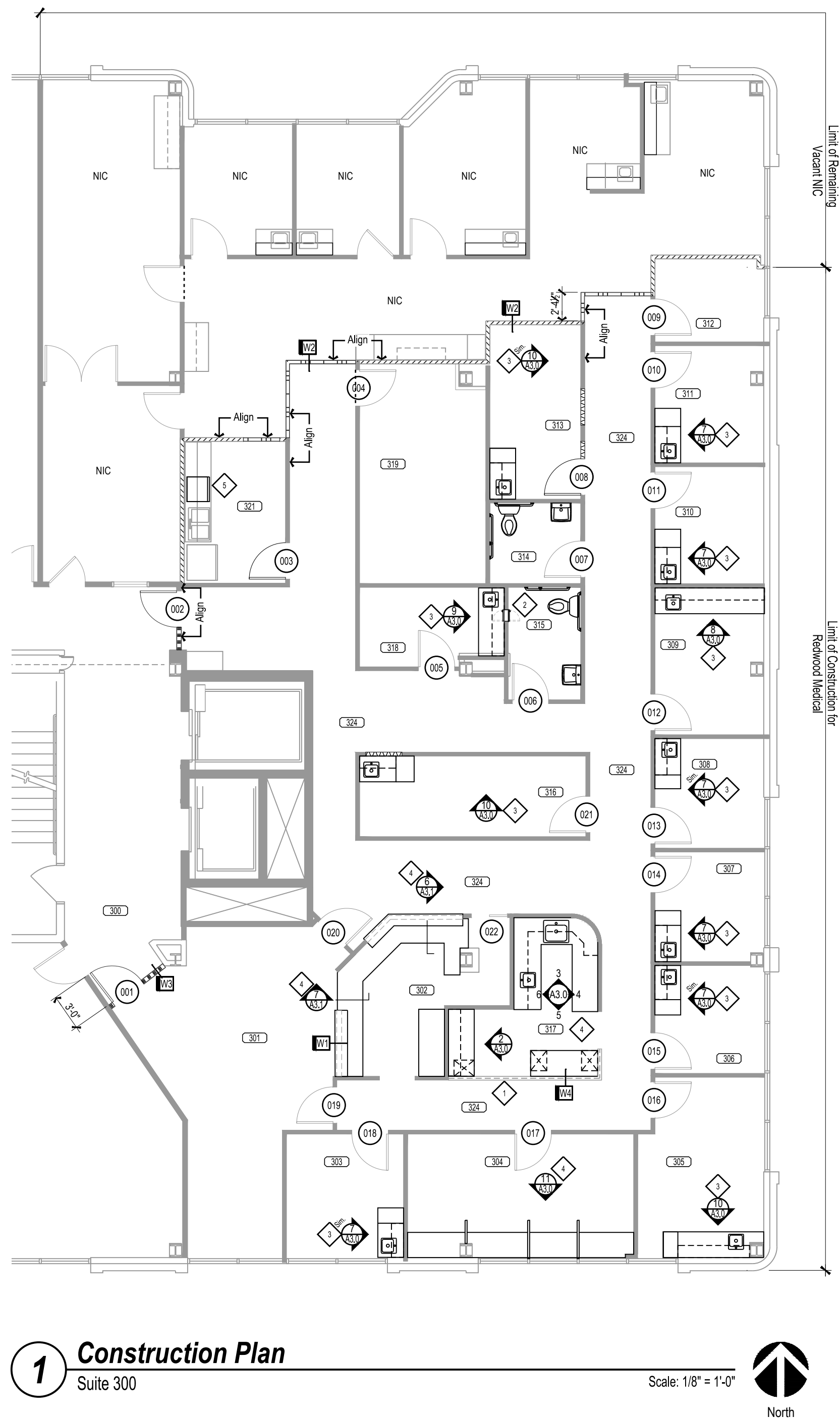




Room Schedule			
300	Public Corridor	312	Office
301	Waiting	313	Procedure
302	Reception	314	ADA Restroom
303	Exam	315	Exam
304	Provider Office	316	Lab
305	Procedure	317	Lab
306	Exam	318	Lab
307	Exam	319	Consult
308	Procedure	320	Break
309	Exam	321	Break
310	Exam		
311	Exam		

### Sheet Keyed Notes

- 1. REWORK PARTITION: Existing partition to be reworked to 42" high and new stained wood transaction top added at 6" wide. Refer to Legend & detail. Field verify existing conditions for extent of work.
- 2. RELOCATED PASS-THRU SPECIMEN assembly: Provide existing pass-thru specimen assembly for reuse in new location. Match original construction method and materials. Replace any components which cannot be salvaged. Field verify existing conditions for extent of work.
- 3. NEW MILLWORK AND PLUMBING: Refer to elevations, details and plumbing drawings.
- 4. NEW MILLWORK: Refer to elevations and details.
- 5. EXISTING MILLWORK & PLUMBING fixtures to remain. Clean and/or repair to like new conditions as possible. The General Contractor shall field verify all existing plumbing fixtures (sink, water heater, etc.) and ensure proper working condition. Provide new fixture(s) only as necessary. Provide NEW dishwasher.



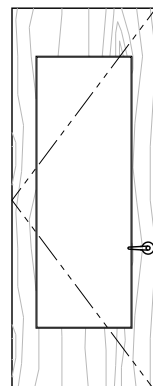
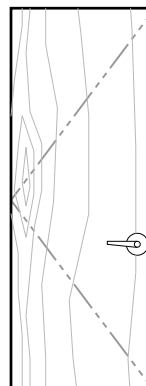
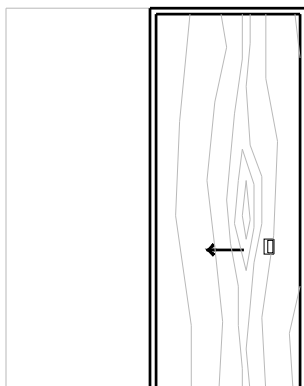
**1 Construction Plan**  
 Suite 300

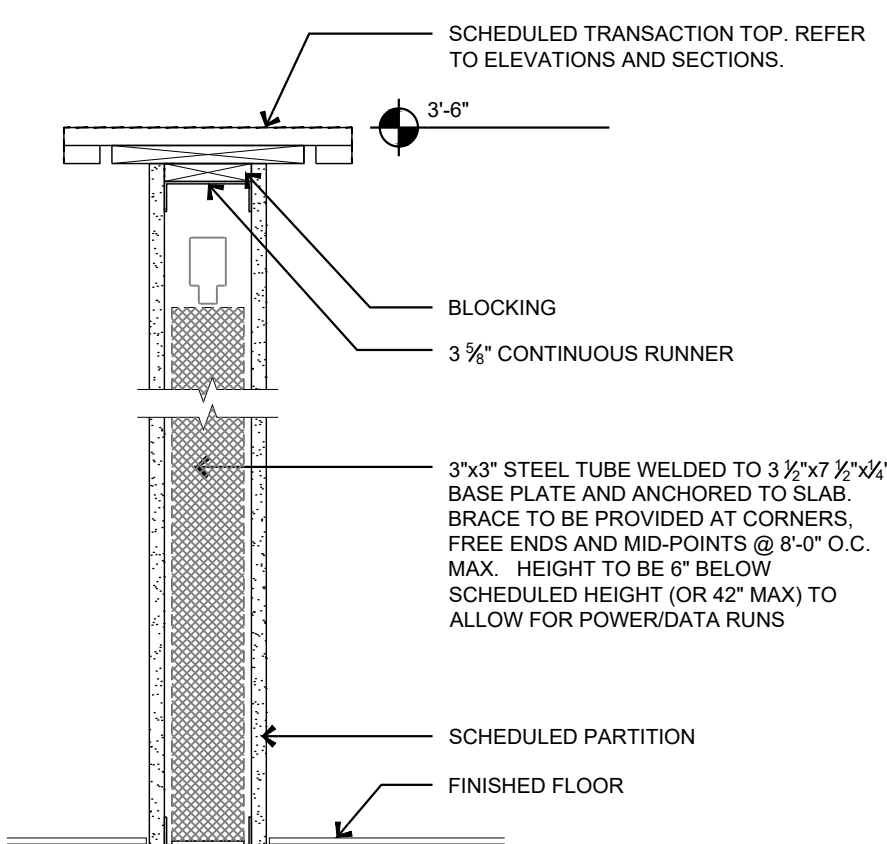
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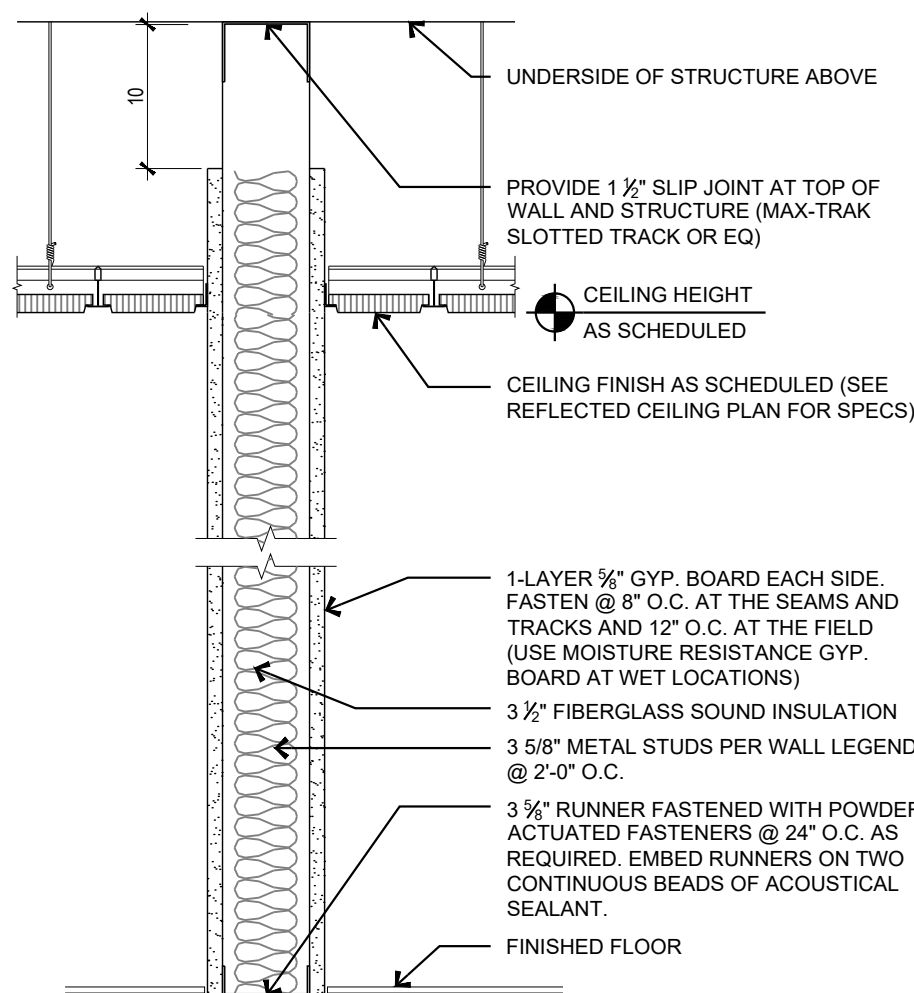
Construction Plan Notes	
1. Refer to General Notes for additional requirements.	
2. DOOR ASSEMBLIES:	
2.1. All assemblies shown on the drawings and not referenced to the Door Schedule are existing to remain (unless noted otherwise).	
2.2. Inspect, make repairs to, and clean ALL existing assemblies and components to like new conditions. Re-use existing door assemblies and/or components where possible.	
2.3. Provide new door assemblies and/or components as specified on the drawings. Door frames shall be securely fastened in place and the entire assembly shall be installed plumb and square with maximum diagonal distortion of 1/8". Undercut doors as needed for specified floor coverings.	
3. INSULATION and ATTENUATION: Provide insulation or sound attenuation in walls and above suspended ceiling if indicated on the drawings. Specifications shall conform to the following:	
3.1. Sound attenuation in walls shall be unfaced fiberglass, 16" to 24" wide to correspond with stud width.	
3.2. Thermal insulation in walls shall be Kraft faced fiberglass, 16" to 24" wide, with R-13 thermal value.	
3.3. Sound attenuation in ceilings shall be foil faced fiberglass, 24" wide, acceptable for use in return air plenums.	
4. BACKING/BLOCKING: Provide solid wood blocking in partitions for plumbing fixtures, door stops, wall mounted equipment (including televisions), millwork, etc., and as indicated on the drawings. Plywood backing may be used for shelving. Framing material for blocking, nailers, etc. shall be Western Douglas Fir or Hemlock.	
5. PARTITIONS: Conform to the following:	
5.1. Partitions shall be erected plumb and true.	
5.2. Drywall partitions and joints shall be taped and finished smooth and prepared for specified finish treatment. Coat vertical joints from floor to ceiling for additional substrate to the base trim.	
5.3. Skim coat existing partitions as needed.	
5.4. All exposed corners shall be fitted with metal corner bead and top of walls at underside of suspended ceilings shall be straight and true.	
5.5. Provide "kickers" or metal stud support from the top of the partition to the underside of structure above for long runs and at all jambs of openings for door assemblies and at any glazed opening within 36" of the strike side of swinging doors.	
6. EXISTING LIFE SAFETY SYSTEMS: Modify (fire alarm/smoke detection) on a DESIGN-BUILD basis. Conform to these drawings and documents and as required for obtaining a building permit. Refer to General Notes.	

Wall Legend	
EXISTING PARTITION to remain.	
NEW PARTIAL HEIGHT PARTITION (Shown underneath a millwork surface). 5/8" gypsum board each side, 20 Ga. 3/8" metal studs at 24" o.c. Refer to Millwork Section Detail.	
Re: W1	5/8" Gypsum Board each side Metal studs at 24" o.c. Typ.
EXISTING PARTITION TO BE REWORKED as a Sound Attenuated Partition (See below)	
Re: W2	5/8" Gypsum Board each side Metal studs at 24" o.c. floor to structure above with 5/8" fiberglass sound attenuation batts floor to finished ceiling height. Match Building Standard.
NEW DEMISING PARTITION. Non-rated assembly. 20 gauge 3-5/8" metal studs at 24" o.c. floor to structure above with 5/8" fiberglass sound attenuation batts floor to finished ceiling height. Match Building Standard.	
Re: W3	5/8" Gypsum Board each side Metal studs at 24" o.c. floor to 10" below structure above and 3-5/8" fiberglass sound attenuation batts floor to deck above. Match Building Standard.
NEW PARTIAL HEIGHT PARTITION. 5/8" gypsum board each side of 20 Gauge, 3/8" metal studs at 24" o.c. with wood top at 42" AFF and 1/2" painted reveal.	
Re: W4	5/8" Gypsum Board each side Metal studs at 24" o.c. Typ.
Match existing construction. Field verify existing construction for extent of work and verify match to these partition types.	

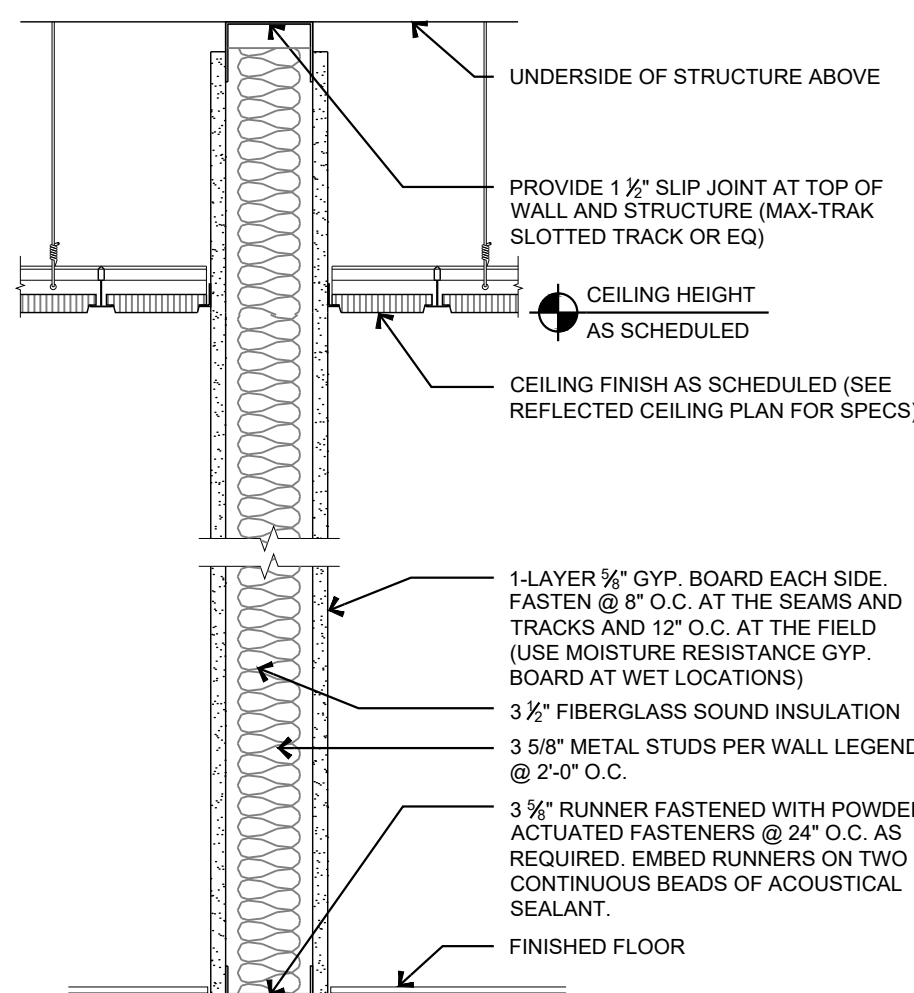
Door Schedule'													
Mark	State <sup>1</sup>	DOOR				FRAME			HARDWARE		Remarks	Mark	
		Type	Leaf Size	Material	Finish	FRR <sup>2</sup>	Material	Finish	FRR <sup>2</sup>	Latch Func.			Additional Components
001	N	Fre	3'-0" x 7'-0" x 1 3/4"	Glass Insert	Stained	None	Hm	Painted	None	2	Cl	--	001
002	R	FI	3'-0" x 7'-0" x 1 3/4"	S.C.Wood	Stained	None	Hm	Painted	None	2	Cl	--	002
003	N/R	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	--	003
004	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	004
005	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	005
006	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	3	--	ETR	006
007	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	3	--	Provide Cypher Lock	007
008	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	008
009	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	009
010	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	010
011	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	011
012	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	012
013	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	013
014	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	014
015	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	015
016	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	016
017	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	2	--	ETR	017
018	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	018
019	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	019
020	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	020
021	E	FI	3'-0" x 6'-8" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	021
022	E	Pk	3'-0" x 7'-0" x 1 3/4"	S.C.Wood	Stained	None	Timely	Prefinished	None	1	--	ETR	022
The General Contractor shall field verify that all door and hardware specifications match Building Standards (unless noted otherwise) and coordinate ANY AND ALL discrepancies directly with the TPS representative (as indicated on the cover sheet Project Team list) prior to proceeding. This includes, but is not limited to, species, stain, finish, style, function, part/ product numbers, and design specifications as well as extent of inclusions / exclusions to component lists and the like.													
Footnotes: 1 State: E = Existing to remain. Assure proper working condition. N = Provide New Door, Frame or Hardware in its entirety. N/R = Provide New OR Relocate salvaged Door, Frame or Hardware if available. Determine available components in field. 2 Rating: Minimum Fire-resistive Rating (per UL) required in minutes 3 Code: Force: Opening force for all doors shall comply with IBC. Threshold: Maximum heights for thresholds shall comply with IBC. Glass: All full height glass doors and glass inserts shall comply with ANSI 404.2.9 and IBC.													
Remarks: 1. Provide sign posted on the egress side or on adjacent to the door stating: THIS DOOR MUST REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1" (25 mm) high on a contrasting background													
Door, Frame, and Hardware Specifications				Latch Function Legend				Additional Hardware Components Legend					
Wood Doors: Wood veneer interior doors shall be 1 1/2" thick, 5-ply particle board core complying with CS 236, Type I, Density C, Class 1, and with AWI standard PC-5 construction, NWWDA I.S. 1.6 Type II adhesive, solid core, flush slab style. (The General Contractor shall confirm the Building Standard specifications and match accordingly.)				1 Passage 2 Keyed Lockset 3 Privacy				Cl Closer, Automatic Door (1 per leaf)					
Door Frames: Entry/Exit: Building Standard Interior: Building Standard (The General Contractor shall confirm the Building Standard specifications and match accordingly.)				Door Types									
Hardware: Hardware shall meet Building Standard specifications, with Building Standard finish.													
Standard hardware to be included with every door in the Door Schedule shall include: - Latchset: Lever Handle at interior and exterior (UNO), with 1" minimum throws. - Hinges - Dust Proof Strike Plate - Silencers - Wall or Door Stop				Type "Fre" French Swinging Door				Type "FI" Standard Flush Swinging Door				Type "Pk" Pocket Door Assembly	
The General Contractor shall provide separate cost to label all keys (locks). Coordinate with Tenant and Building Management on labeling numbers.													



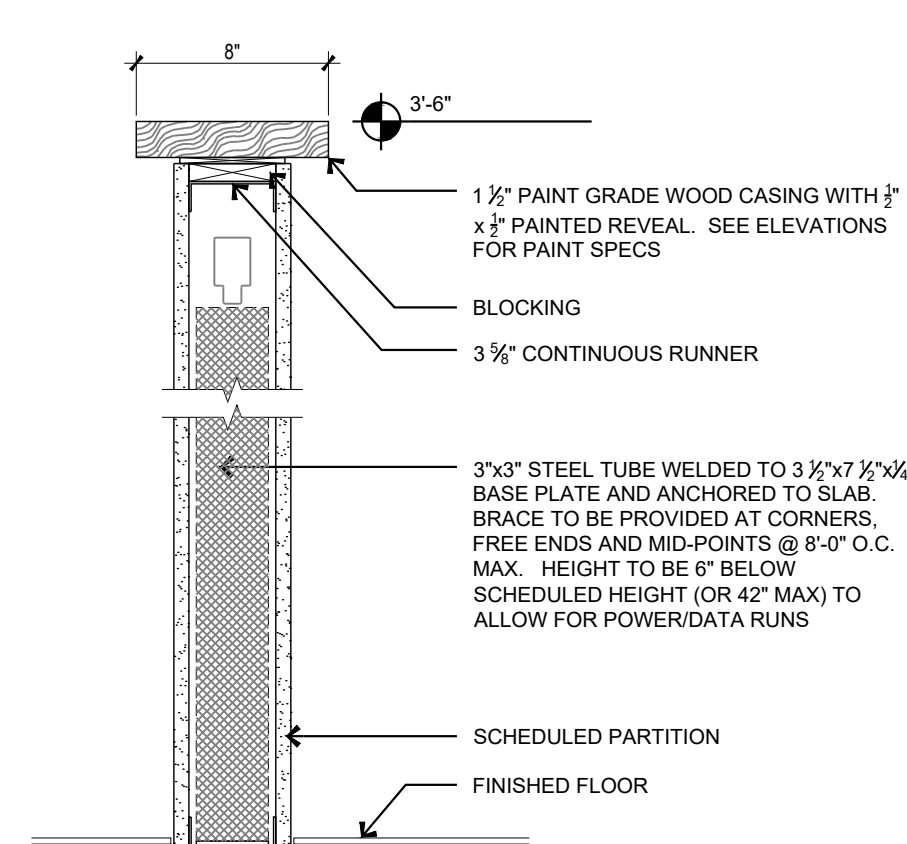
**W1 Partition: Partial Height**  
 Transaction Top  
 Scale: 1 1/2" = 1'-0"



**W2 Partition: Interior**  
 Below Deck - Sound  
 Scale: 1 1/2" = 1'-0"



**W3 Partition: Interior**  
 Full Height - Sound  
 Scale: 1 1/2" = 1'-0"



**W4 Partition: Partial Height**  
 Wood Cap  
 Scale: 1 1/2" = 1'-0"



City of Aurora Building Division  
 Reviewed for Code Compliance  
 Approved as Noted: **locks**  
 Date: **Jun 11, 2024**  
 2021 INTERNATIONAL CODES & 2023 NEC

### Dates of Record

Project Start Date: 06 Dec 2023

Issued On Issued For

10 May 2024 Tenant Review & Approval; and Construction

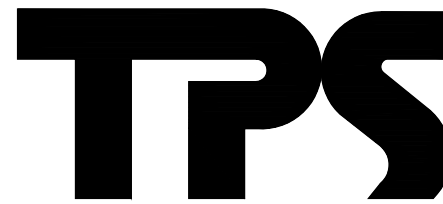
22 May 2024 Tenant Review & Approval; (Revised) Pricing and Construction

Sheet Contents	Construction Plan Door Schedule Partition Details
Project # 426023	Proj Mgr GBS
Designed by AE	Drafted by JC
Checked by	GBS









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1411 South Potomac

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Aurora Co

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Redwood Medical

## Dates of Record

Project Start Date: 06 Dec 2022

Issued On Issued For

10 May 2024 Tenant Review & Approval; and Construction

22 May 2024 Tenant Review & Approval; (Revised) Pricing and Construction

Sheet	Contents	Finish Treatment Plan
Project #	426023	426023
Proj Mgr	GBS	AE
Designed by	AE	JC
Drafted by	JC	GBS
Checked by	GBS	

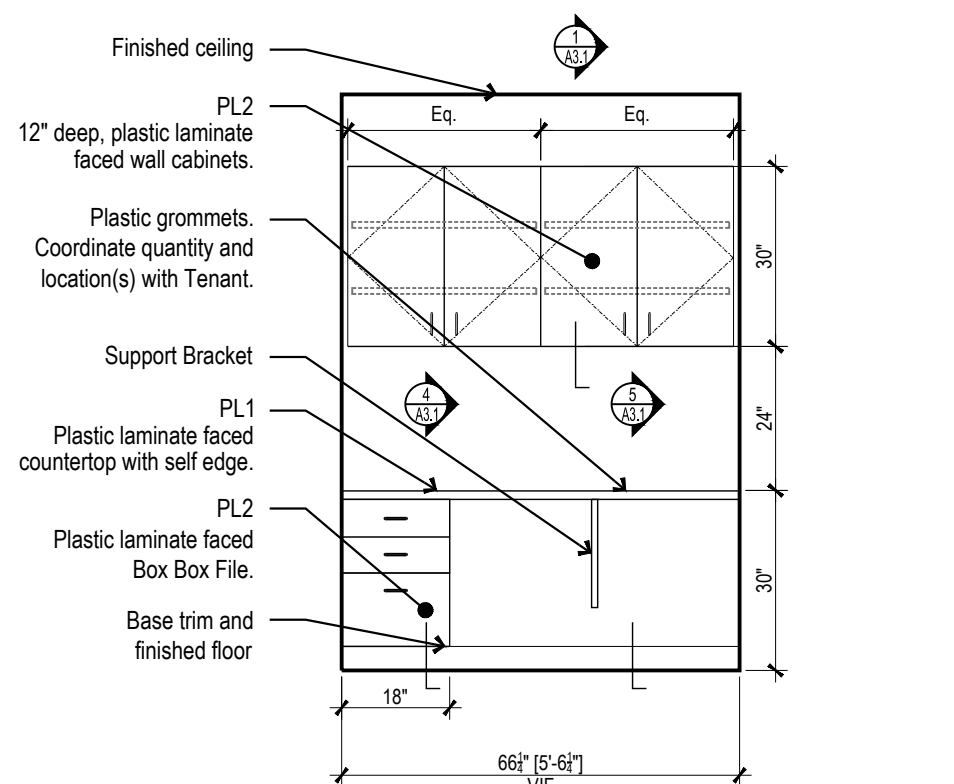
RSN: 1809706  
Permit#: 24-2442307-LT

## Room Schedule

300	Public Corridor	312	Office
301	Waiting	313	Procedure
302	Reception	314	ADA Restroom
303	Exam	315	ADA Restroom
304	Provider Office	316	Exam
305	Procedure	317	Lab
306	Exam	318	Lab
307	Exam	319	Consult
308	Procedure	320	Break
309	Exam		
310	Exam		
311	Exam		

## Sheet Keyed Notes

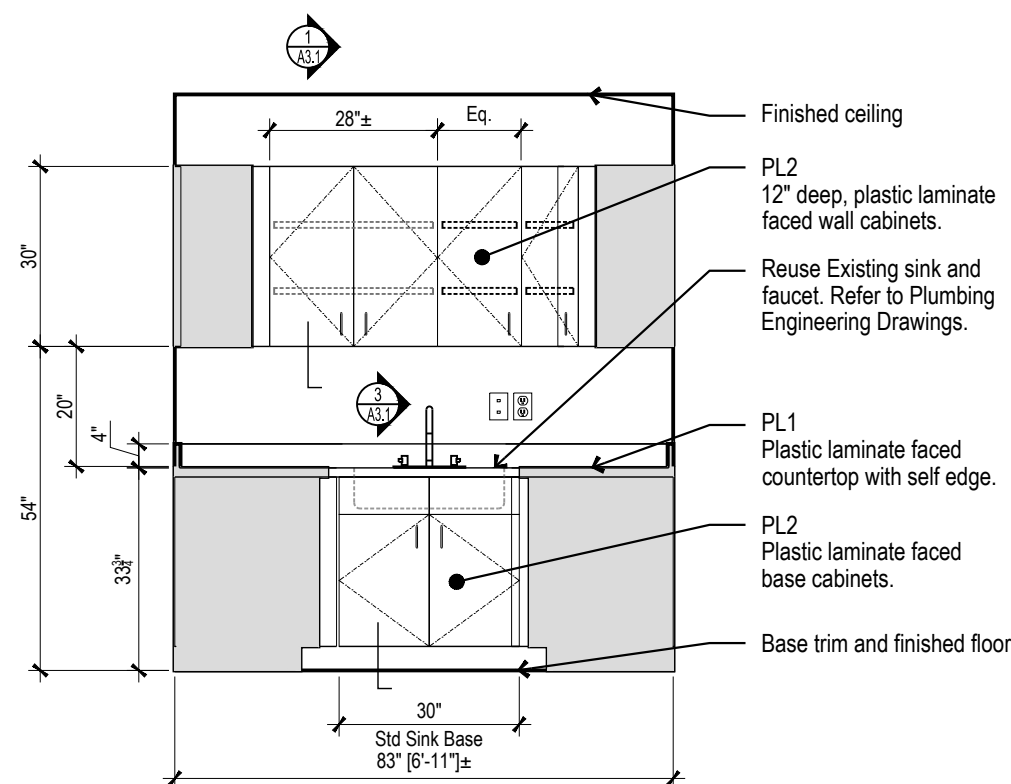
- NEW TRANSACTION TOP & NEW WORKSURFACE with plastic laminate worksurface front and 4" toskick. Provide 12" solid surface transaction top at 42" AFF & 30" PLAM worksurface at 30" AFF with wire management access holes, plastic grommets and zero clearance metal support brackets. Include in partition support.
- NEW WAINSCOT TILE. Provide New Wall Tile on same walls that previously had them. Tile from floor to 60" AFF.
- EXISTING EXTERIOR WINDOW TREATMENTS to remain. Clean and repair or replace as necessary.



## Elevation: Millwork

Lab 318

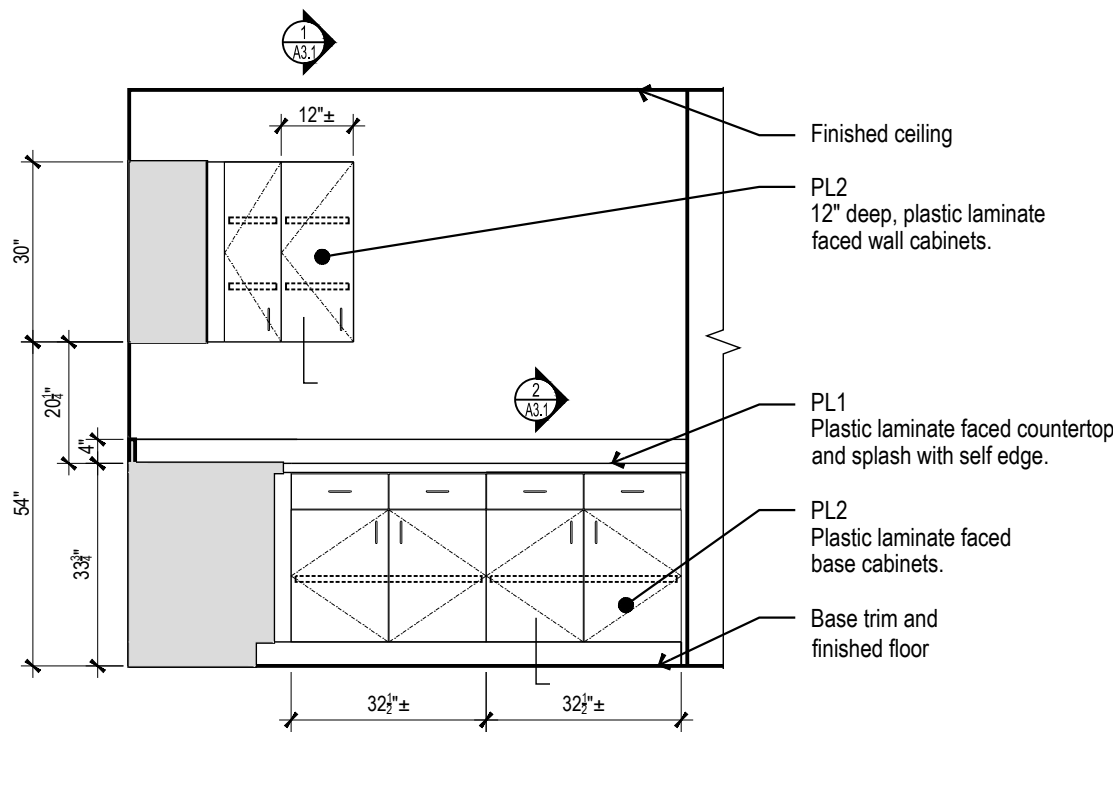
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## Elevation: Millwork

Lab 318

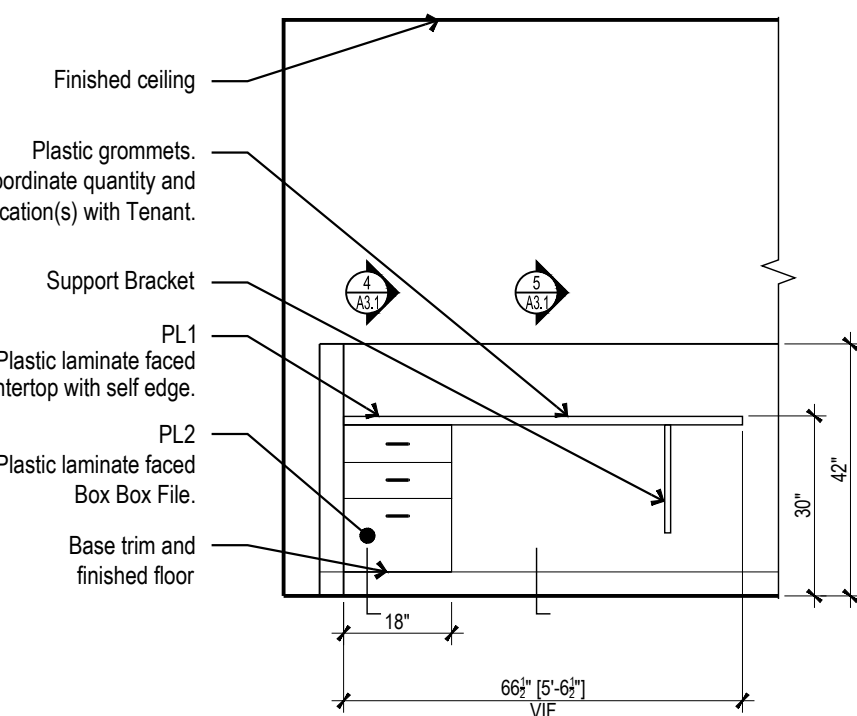
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## Elevation: Millwork

Lab 318

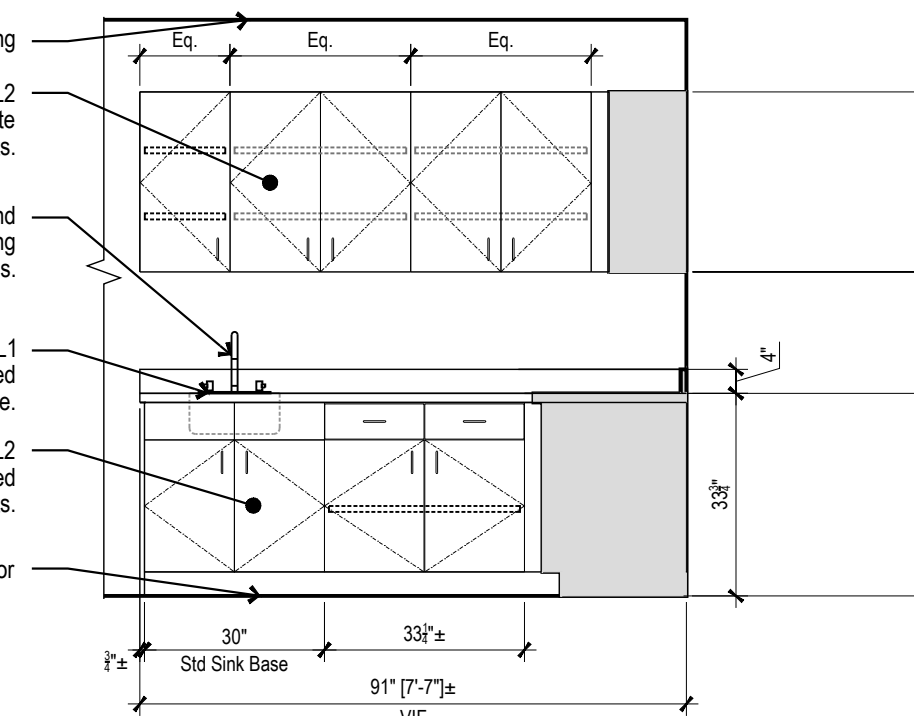
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## Elevation: Millwork

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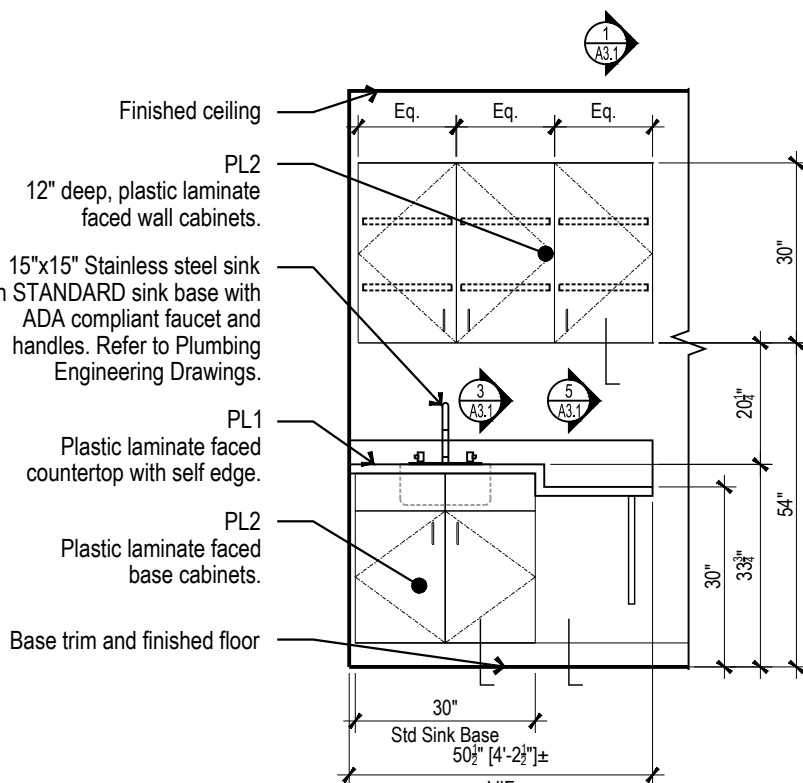
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## Elevation: Millwork

Lab 318

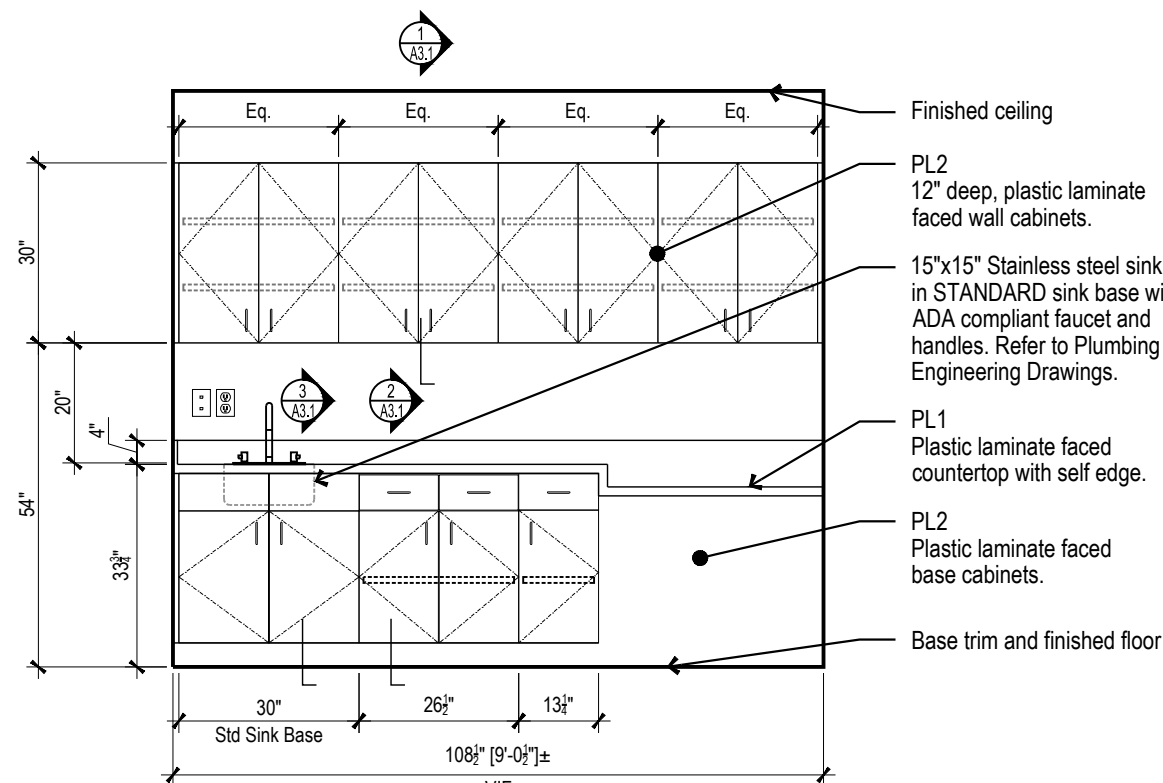
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## Elevation: Millwork

Exam TYP

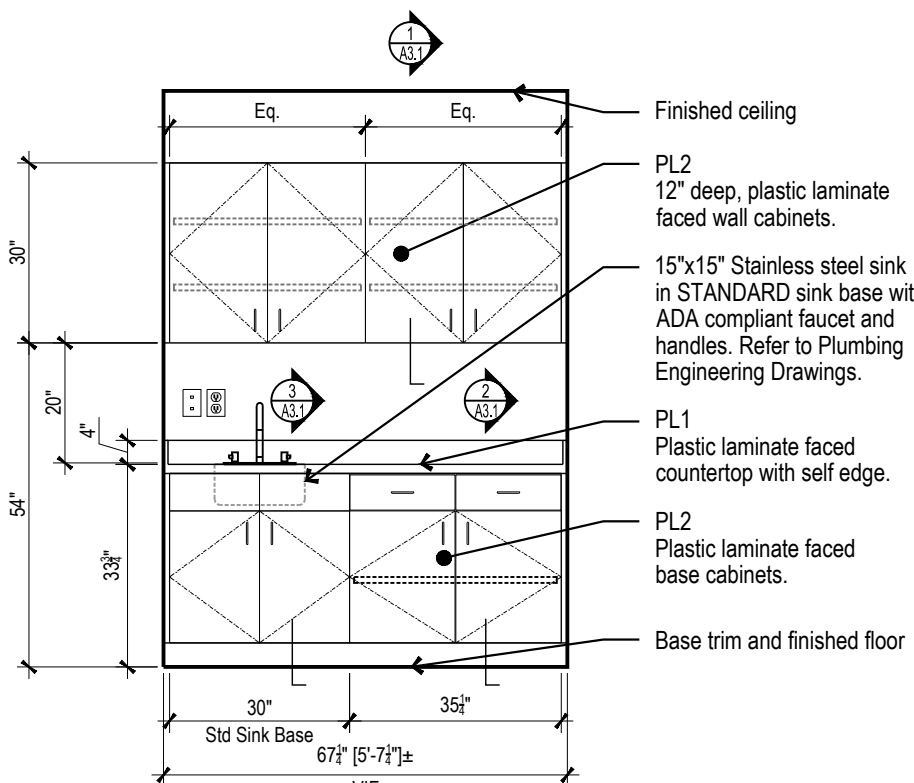
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## Elevation: Millwork

Procedure 309

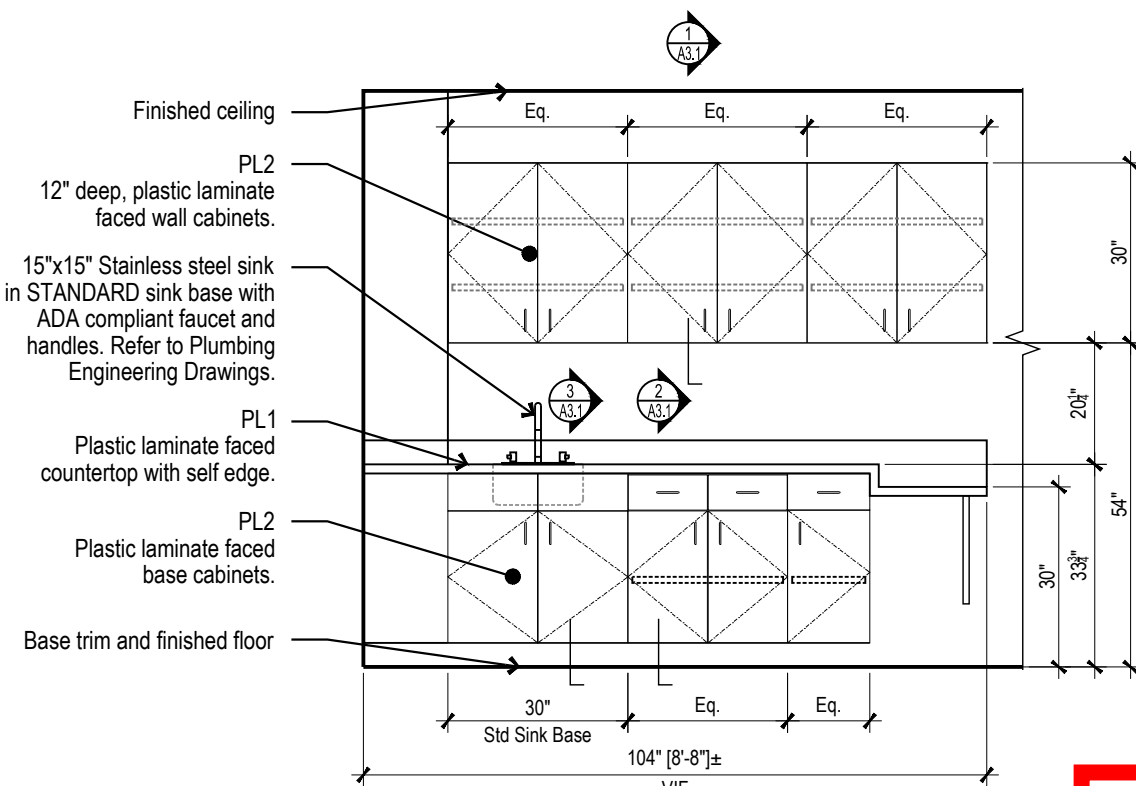
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## Elevation: Millwork

Exam 321

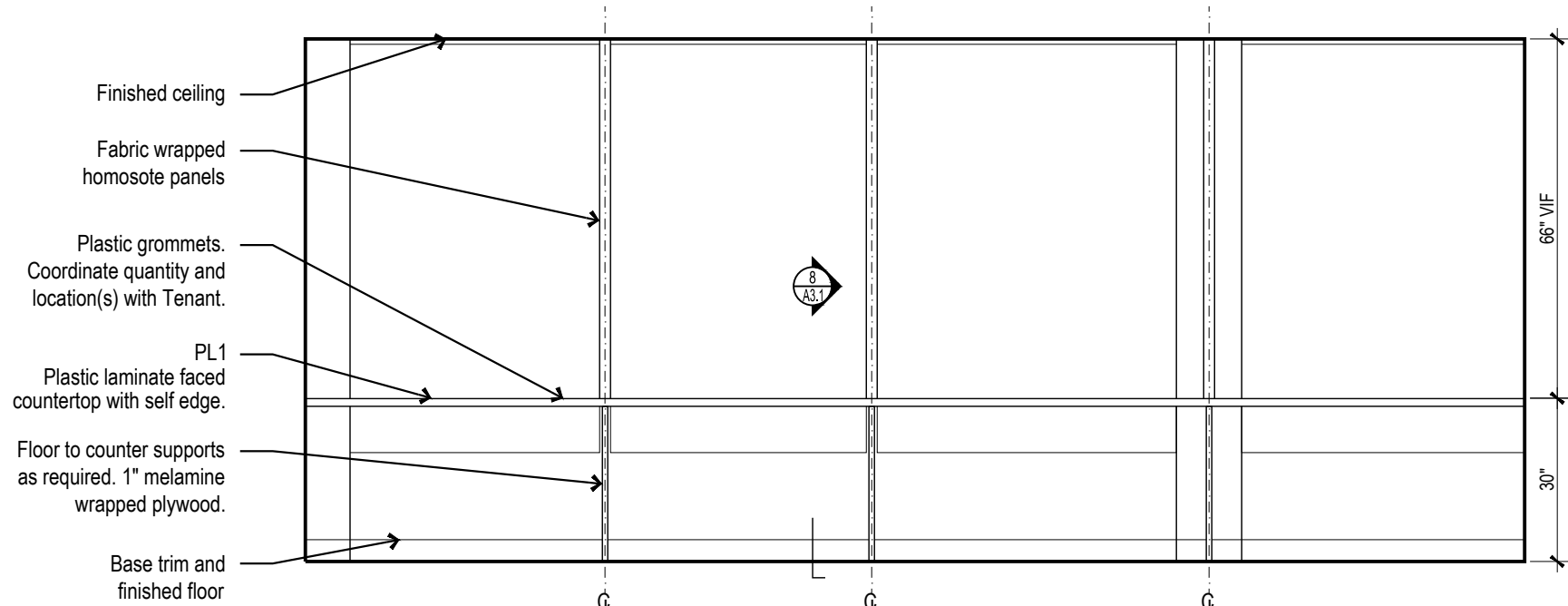
Scale: 3/8" = 1'-0"



## Elevation: Millwork

Procedure 305

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



## Elevation: Millwork

Provider Office 304

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

## Finish Plan Notes

- Refer to General Notes** for additional requirements.
  - The General Contractor shall provide RH MOISTURE TESTING for any concrete locations less than one year old and for all slab on grade locations (regardless of age)
- REMOVE ALL EXISTING FINISH TREATMENTS** including carpet, VCT, baseboard, and wall treatment and provide new finish treatments as specified throughout lease space (unless noted otherwise).
- COMMON AREA FINISH TREATMENTS:** Rework and/or add new finish treatments as necessary at all common areas of the building where construction occurs. All materials and workmanship shall match existing conditions (unless noted otherwise).
- GENERAL FINISH TREATMENT NOTES:**
  - All Surfaces must be clean, dull, and dry before coatings are applied.
  - All product is assumed to be NEW, unless noted otherwise.
  - Coordination: finish treatment subcontractors and installers shall coordinate with other trades for applications affecting other trades, especially millwork, etc.
  - Unless noted otherwise, all floor coverings, baseboard, and floor preparation shall be the responsibility of the General Contractor, including removal of existing materials.
  - Installation: all finish treatments shall be installed or applied in strict accordance with the manufacturer's written specifications and the drawings.
  - Protection: protect all surfaces, doors, hardware, outlet plates, etc. From spills, splatters and overspray of paint, drywall compound, adhesive and other materials.
  - Preparation: field measure each space to receive finish treatment as a basis of supplying, cutting and seaming material. Do not scale the drawings or calculate sizes from dimensions shown.
  - Surfaces: all surfaces shall be properly prepared prior to installation of material including but not limited to priming of walls to receive paint, sizing of walls to receive wall covering, patching/filling holes and depressions, etc.
  - Surface texture: unless noted otherwise, all drywall finish shall be smooth.
- CARPET INSTALLATION:** carpet installation shall comply with the workmanship guidelines as published by the American Carpet Institute (latest edition), and in strict accordance with the manufacturer's written specifications, and shall also conform to the following:
  - Where carpet seams occur in doorways, locate seam beneath center of door slab.
  - Furnish and install resilient type reducer strip (saddle) where resilient floor coverings abut carpet. See drawing for color.
  - Coordinate installation for uniformity where dye-to variations may occur in material.
- WALLCOVERING INSTALLATION:** wall covering shall be installed or applied in complete accordance with the manufacturer's written specifications and shall also conform to the following:
  - Wrap all device cover plates with wall covering only on walls scheduled to receive wall covering (match wall finish).
  - Furnish and install "J" metal polished aluminum edge cap (mudded in) at corners where wall coverings laminate and ends are exposed.
- PAINT:** paint shall be installed or applied in strict accordance with the manufacturer's written specifications and as recommended by "Master Painter's Institute (MPI) Interior and Exterior Painting Guide Specifications (latest edition) and shall also conform to the following:
  - Surfaces scheduled for painting shall receive no less than two coats of paint (3.0 mil, min. Thickness).
  - All materials shall be evenly applied avoiding runs, sags, flashing or splitching. All coats shall be allowed to dry thoroughly prior to application of succeeding coats. Where necessary, provide masking to avoid inadvertent applications.
  - Unpainted gypsum board and drywall shall be primed prior to painting. The primer may be tinted with the paint color only as recommended by the paint manufacturer.
  - At the completion of the job and after installation of the floor covering, touch-up paint all areas as required. Blend paint touch-up in with existing for a consistent and uniform appearance.
- WINDOW COVERINGS:** unless noted otherwise, window coverings shall be the responsibility of the General Contractor and shall conform to the following:
  - RE-USE EXISTING WINDOW COVERINGS** at exterior glazing throughout. Wrap and bag all window coverings during construction. The General Contractor shall inspect existing conditions of material and operation and make necessary repairs or replace to match existing. Replace window coverings if missing. Upon completion of job, clean material, hardware and housings thoroughly, including both sides of window covering material.
- General Contractor is responsible to verify all specified finishes match existing at prior to order/ installation.

## Architectural Casework Specifications

Construction: AWS 2nd Edition - Custom Grade

- Cabinet Casework:** All cabinet casework shall be 3/4" melamine covered particle board. All cabinet pieces shall be multiple doweled, using aliphatic resin glue and machine clamped under pressure for a square secure fit.
- Toeboard Assemblies:** Toe-board assemblies shall be assembled loose for base and tall units for field installation. Rubber base shall be furnished and installed by others. Toe-board material to be fabricated from mill option material.
- Cabinet Top and Bottom:** Cabinet top and bottom shall be 3/4" melamine covered particle board. Bottoms of upper cabinets to be melamine to match cabinets interior. Base cabinets shall have a 4 5/8" wide stretcher on top for fastening counter top. Edge banding to match cabinet ends.
- Cabinet Ends:** Ends shall be 3/4" thick melamine covered particle board interior. Exterior finished ends are to be high pressure laminate. Holes for adjustable shelf clips shall be 1 1/4" on center. Front edges to be banded with PVC. Color to match plastic laminate used on door faces.
- Adjustable Shelves:** Shelving shall be 3/4" thick melamine covered particle board both sides. Front edges shall be banded with matching color PVC material.
- Cabinet Back:** Backs shall be 1/4" thick melamine covered particle board, one face. Backs shall be rabbeted and securely glued into sides and bottom. A 1/2" hanger cleat is securely glued and nailed through cabinet back into top of wall cabinets and into back stretcher of base cabinets.
- Cabinet Doors and Drawer Fronts:** Doors and drawer fronts shall be 3/4" thick particle board laminated on both faces with high pressure laminate. All edges shall be banded as noted below under Edging category. Maximum door width to be 24".
- Drawers:** Sides, back and subfront shall be 5/8" melamine covered particle board. Bottom shall be 1/4" melamine covered particle board to match cabinet interiors. Drawer sides are machined with a lock joint and glued and stapled together for secure fit. Bottom to be rabbeted into sides and subfront.
- Counter Top:** Cabinets shall have continuous one piece counter tops up to 12'-0" length constructed of 3/4" particle board with 1 1/2" edge as noted under Edging category. Tops over 12'-0" long shall be spined and joined together with metal fasteners.
- Fillers:** All fillers shall be 3/4" particle board material covered on one face with high pressure laminate to match door and drawer fronts.

### Materials:

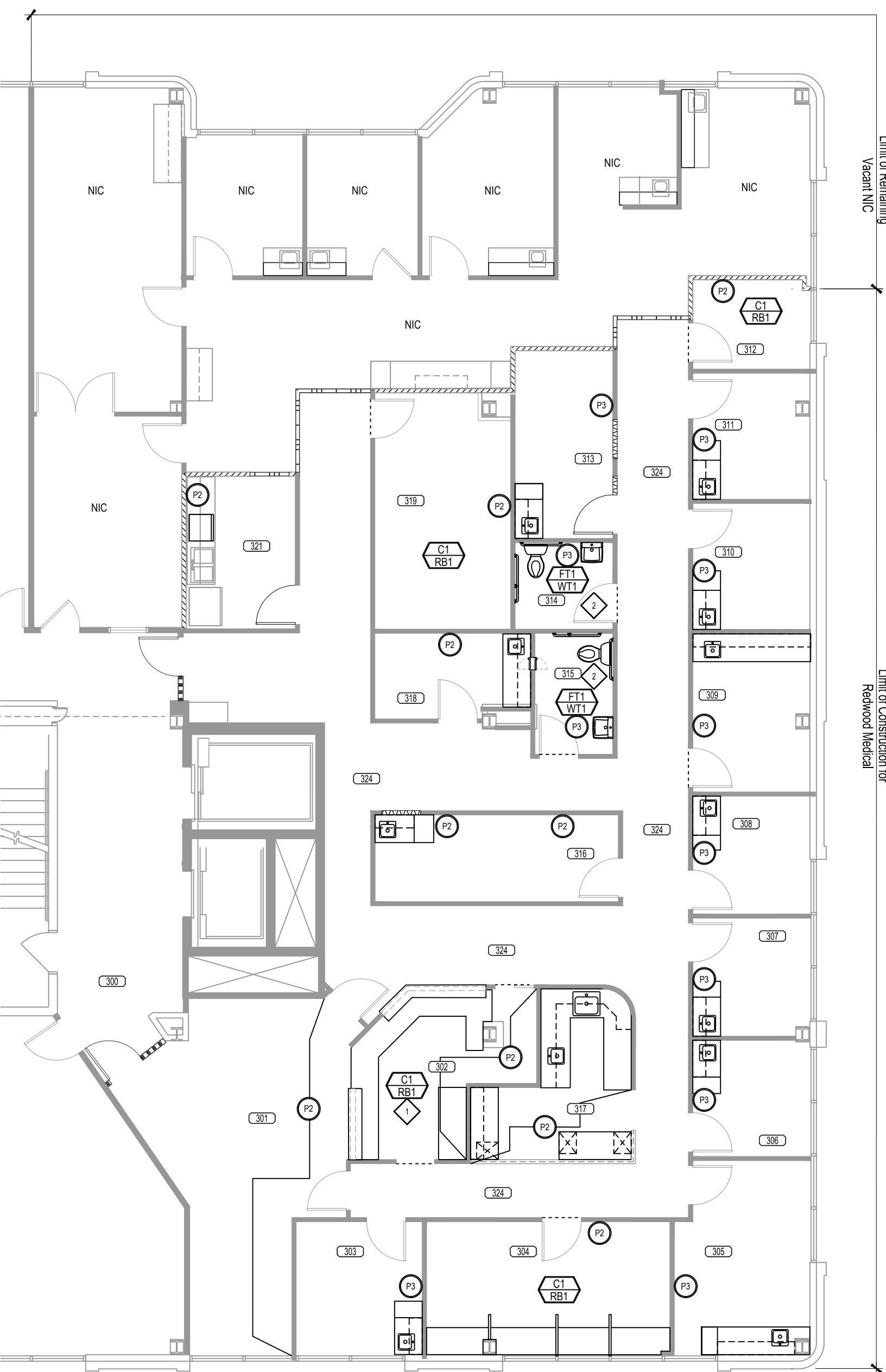
- Plastic Laminate:** Shall be used on all door and drawer faces. All laminate shall meet all NEMA standards. Colors to be selected from full range of colored laminates by Wilsonart, Formica or Nevamar. Refer to Finish Schedule.
- Counter Tops:** Counter tops shall be horizontal grade high pressure laminate with a suitable backing sheet on a 45 pound industrial particle board.
- Casework Interiors:** Covered 45 pound industrial particle board. Color of interiors shall be white, unless noted otherwise.
- Plastic Edging:** Edge banding on all casework to be PVC to match plastic laminate on door and drawer faces. Edge banding on doors and drawer fronts to be PVC material coordination
  - Doors and Drawers: Self Edge
  - Counter Top: Self Edge

### Hardware:

- Hinges:** Hinges shall be concealed steel type, chrome finish, 110", with automatic spring (heavy duty).
- Pulls:** Pulls for doors and drawers shall be a metal wire pull in satin aluminum, anodized
- Drawer Slides:** Drawer suspension shall be of a side-bottom mounted white epoxy type with 3/4" extension. Load rating of 100 pounds. Files drawers shall be full extension
- Door Catches:** Door catches shall be European style, self-closing concealed hinge with adjustment.
- Shelf Supports:** Adjustable shelf supports shall be a nylon covered 5mm diameter steel pin for predrilled holes in cabinet ends.

CONTRACTOR TO PROVIDE SHOP DRAWINGS TO TPS  
FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

Material	Manufacturer	Style/ Line	Color	Mark	Class	Remarks/Comments
<b>Wallcovering</b>						
Primer	Sherwin-Williams	ProMar 200	White	Not Shown	A	Primer for all new exposed gypsum board surfaces.
Interior Paint	Sherwin-Williams	ProMar 200 Zero VOC- Eg-Shel	Gossamer Veil SW 9165	P1	A	Provide two (2) coats (minimum) at all new surfaces.
Interior Paint	Sherwin-Williams	ProMar 200 Zero VOC- Eg-Shel	Mountain Road SW 7743	P2	A	• P1: Paint all exposed gypsum board surfaces throughout Limit of Construction (UNO). • P2 & P3: Accent paints where indicated.
Interior Paint	Sherwin-Williams	ProMar 200 Zero VOC- Eg-Shel	Escape Gray SW 6185	P3	A	
Door Frame	Sherwin-Williams	Direct-to-Metal Semi-Gloss	Gossamer Veil SW 9165	P4	A	
Ceiling Paint	Sherwin-Williams	ProMar 200 Zero VOC- Flat	Mountain Road SW 7743	P5	A	At Soffit at Reception area
Wall Tile	Concept Surface	Coretta	Off White	W7		Include Schluter Dilex trim at floor/wall transition Include Schluter Jolly trim at top tile row Include Schluter Quadec trim at outside corners
<b>Millwork</b>						
Plastic Laminate	Existing to Remain			PL0		Existing countertops, splashes and vertical surfaces to remain. Repair / provide new as necessary due to construction.
Plastic Laminate	Formica	Pure Grain	Grayed Oak	PL1		Countertops and Splashes, UNO.
Plastic Laminate	Formica	Matte	Paloma Polar	PL2		Vertical Surfaces, UNO. Plastic laminate pattern shall run vertically on all surfaces, UNO. Confirm with Tenant Planning Services.
Solid Surface	Wilsonart		Grey Beola 9218CM	SS1		Countertops with eased edge.
<b>Floorcovering</b>						
Carpet Tile	EF Contracts	Signet	Slate SIG50	CT		Include Futura (or eq.) transition square trim Pattern: TBD Orientation: TBD
Luxury Vinyl Tile	Provide an allowance of \$6/sq.ft. for materials			LVT		Include Futura (or eq.) transition square trim from LVT to Carpet
Porcelain Floor Tile	Concept Surface	Coretta	Off White	TF		Pattern: TBD Include Schluter Reno-TK transition trim. Grout Lines: 1/8"; Grout Color: TBD
<b>Base Trim</b>						
Rubber Base	Tarkett	Johnsonite	Grey Haze	RB1		Only coiled base trim approved. Straight at carpet, coved at hard surfaces.



## Finish Treatment Plan

Suite 300

Scale: 1/8" = 1'-0"



This sheet of drawings has not been reviewed for code compliance.

## Elevation: Millwork

Procedure 305

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

## Elevation: Millwork

Provider Office 304

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



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# 1411 South Potomac

1411 South Potomac  
Aurora Co

## Suite 300



# Redwood Medical

**Project Start Date:** 06 Dec 2023

Issued On Issued For

May 2024 Tenant

10 May 2024 Tenant Review & Approval; and  
Construction

22 May 2024 Tenant Review & Approval;  
(Revised) Pricing and Construction

Sheet Contents				Details
Project #	Proj Mgr	Designed by	Drafted by	Checked by
426023	GBS	AE	JC	GBS

### A3.1

RSN: 1809706  
24-2442307-LT

Permit#: 24-2442307-LT

**1 Section: Millwork**  
Wall Cabinet Scale: 3/4" = 1'-0"

**2 Section: Millwork**  
Base Cabinet Scale: 3/4" = 1'-0"

### 3 Section: Millwork

## 4 Section: Millwork

**5 Section: Millwork**

This sheet of drawings has not been reviewed for code compliance.

**6 Section: Millwork**

**7 Section: Millwork**

## 8 Section: Millwork

project start date: 06 Dec 2023  
 .cwg create date: 5/29/2024 10:20:05 AM  
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 by john to P1426\_1411 South Potomac#429023\_Redwood Medical #300Drawings\04- CDS#429023.cwg

**1411 South Potomac • Redwood Medical**





1411 South Potomac  
1411 South Potomac  
Aurora Co  
Suite 300



RSN: 1809706  
Permit#: 24-2442307-LT

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

RSN: 1809706  
Permit #: 24-2442307 LT



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Suite 300



Redwood Medical

Dates of Record

Project Start Date: #####  
Issued On Issued For  
13 May 2024 Tenant's Review & Approval;  
and Construction  
22 May 2024 Tenant Review & Approval;  
(Revised) Pricing and Construction

Sheet  
Contents  
Project Team  
Project Number  
Sheet Mark

PLUMBING PLAN

BM/LC

24201

P1.1

RSN: 1809706  
Permit#: 24-2442307-LT

PLUMBING FIXTURE SCHEDULE								
MARK	DESCRIPTION	MANUFACTURER	MODEL	CW	HW	TW	W	REMARKS
P100	WATER CLOSET	TOTO	CST454CEFG	1/2"			3"	COLOR WHITE, W OPEN SEAT, 17" FLOOD RIM
P103	LAVATORY	KOHLER	K-2005				1 1/4"	COLOR WHITE
P104	LAVATORY FAUCET	DELTA	501-DST	1/2"		1/2"		
P114	BELOW SINK TEMPERING VALVE	WATTS	LFUSG-B	1/2"	1/2"	1/2"		
P144	EXAM ROOM SINK	ELKAY	BLR1560				2"	
P145	FAUCET	DELTA	27C4944	1/2"	1/2"			



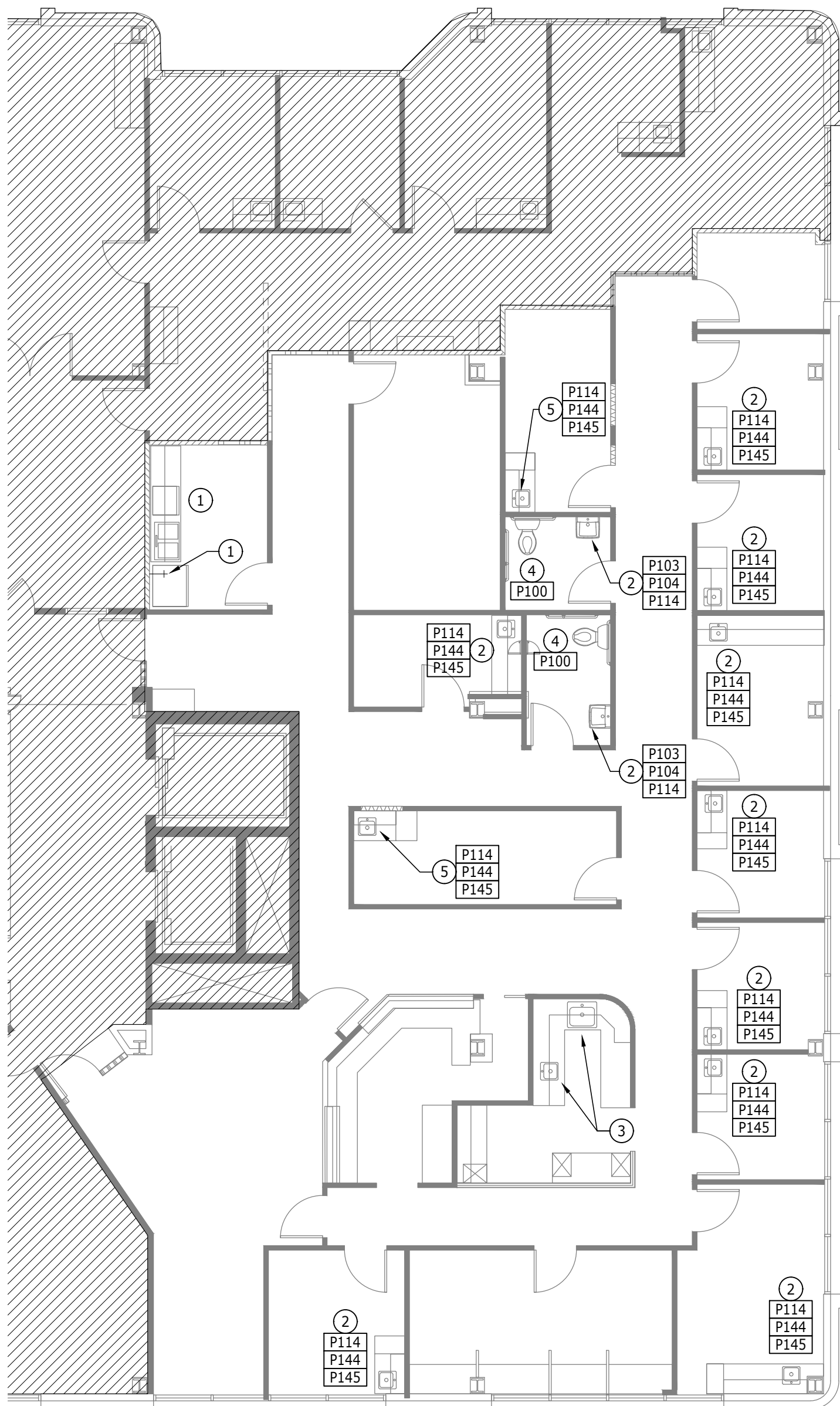
City of Aurora Building Division  
Reviewed for Code Compliance  
Approved as Noted: Jlockie  
Date: Jun 11, 2024  
2021 INTERNATIONAL CODES & 2023 NEC

PLUMBING PLAN NOTES

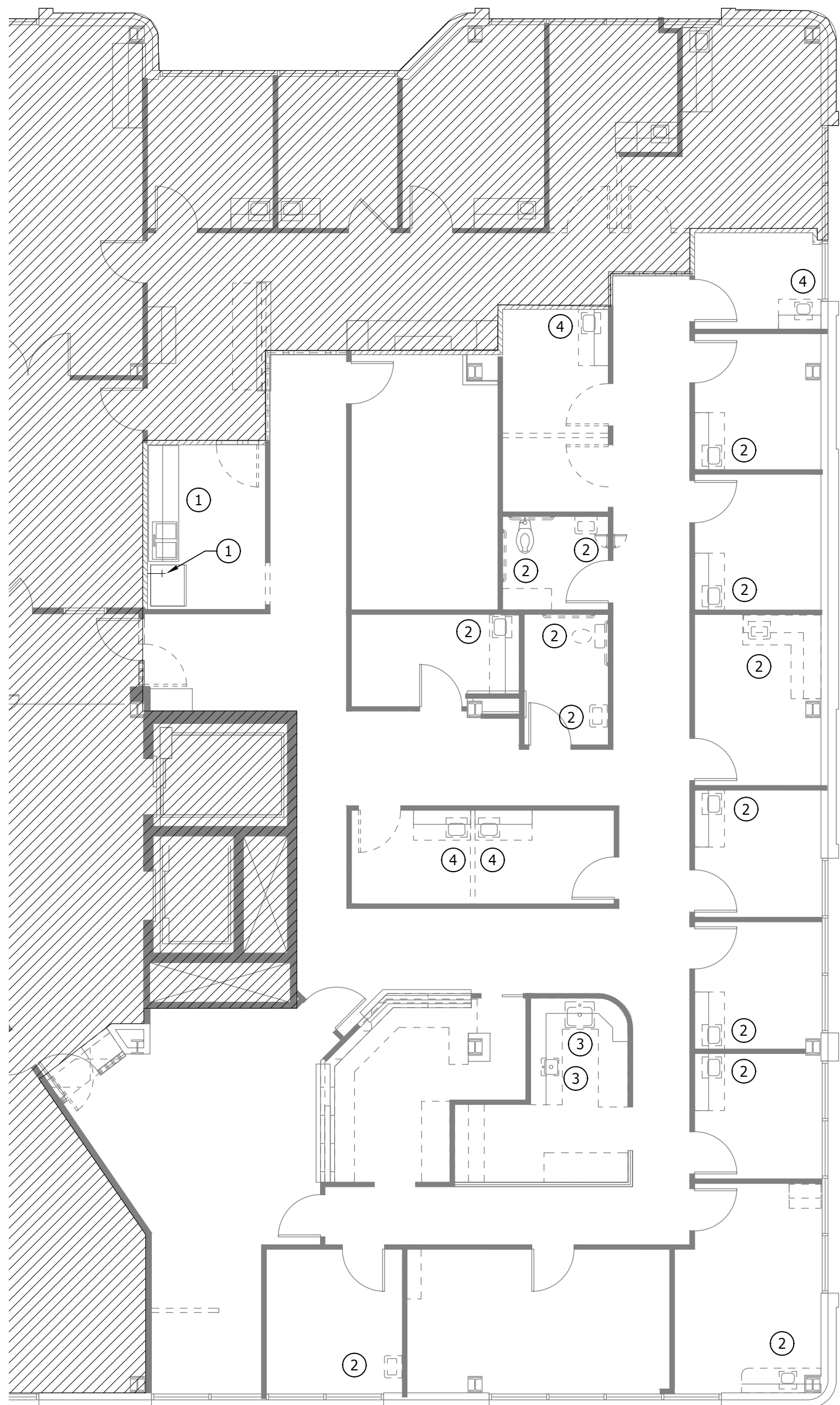
- EXISTING PLUMBING FIXTURE.
- CONNECT NEW SINK TO EXISTING CW, HW, VENT, AND WASTE PIPING. EXTEND AS REQUIRED.
- CONNECT RELOCATED SINK AND FAUCET TO EXISTING CW, HW, VENT, AND WASTE PIPING. EXTEND AS REQUIRED.
- CONNECT NEW TOILET TO EXISTING CW, VENT, AND WASTE PIPING. EXTEND AS REQUIRED.
- CONNECT NEW SINK TO NEW 1/2"CW, 1/2"HW, 2"VENT, AND 2" WASTE CONNECTED TO EXISTING PLUMBING LOCATED ABOVE THE CEILING AND BELOW THE FLOOR.

PLUMBING DEMOLITION PLAN NOTES

- EXISTING PLUMBING FIXTURE TO REMAIN.
- EXISTING PLUMBING FIXTURE TO BE REMOVED FOR REPLACEMENT.
- EXISTING PLUMBING FIXTURE TO BE REMOVED FOR RELOCATION TO NEW MILLWORK.
- EXISTING PLUMBING FIXTURE TO BE REMOVED. CAP PIPING WITHIN WALL.



2  
P1.1  
PLUMBING PLAN  
SCALE: 1/8" = 1'-0"



1  
P1.1  
PLUMBING DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"

PLUMBING GENERAL NOTES

GENERAL

SCOPE  
THE INTENT OF THE SPECIFICATION AND THE DRAWINGS IS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL PLUMBING SYSTEM. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO COMPLETE THE PLUMBING WORK.

SITE EXAMINATION  
THE PLUMBING CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE FIXTURES, EQUIPMENT, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.

STANDARDS  
EQUIPMENT AND MATERIALS SHALL CONFORM WITH APPROPRIATE PROVISIONS OF ASME, ASTM, UL, NEMA, ANSI, ASHRAE, NFPA, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

CODES  
ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS/SPECIFICATIONS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. THE PLUMBING CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST.

PERMITS AND FEES  
THE PLUMBING CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK.

WARRANTY  
THE PLUMBING CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

PIPING

SOIL, WASTE AND VENT PIPING  
SOIL, WASTE AND VENT PIPING 10" AND SMALLER SHALL BE SERVICE WEIGHT, HUBLESS, CAST IRON PIPE AND FITTINGS CONFORMING WITH THE REQUIREMENTS OF CISPI STD 301, ASTM A888 OR ASTM A74, WITH NEOPRENE GASKET AND STAINLESS STEEL SHIELD AND CLAMP. PROVIDE HUB-TYPE PIPE AND FITTINGS BELOW GRADE WHERE REQUIRED BY LOCAL CODES. PIPE AND FITTINGS SHALL BE MARKED WITH THE CISPI TRADEMARK. SCHEDULE 40 ABS OR PVC PIPE AND FITTINGS WITH SOLVENT WELD MAY BE SUBSTITUTED FOR SOIL, WASTE AND VENT PIPING ABOVE AND BELOW GRADE IF ALLOWED BY LOCAL AUTHORITY, EXCEPT WHEN USED IN RETURN AIR PLENUMS OR WHEN PENETRATING RATED ASSEMBLIES. HORIZONTAL RUNS SHALL DRAIN AT A GRADE OF 1/4 INCH PER FOOT WHERE POSSIBLE BUT IN NO CASE LESS THAN 1/8" PER FOOT. COORDINATE WITH LOCAL AUTHORITIES FOR DRAINAGE REQUIREMENTS FOR EQUIPMENT DESIGNATED WITH INDIRECT WASTE TO FLOOR DRAINS. PROVIDE PIPED DRAIN TO SANITARY IF REQUIRED BY LOCAL JURISDICTION.

DOMESTIC WATER PIPING  
DOMESTIC WATER PIPING 2" AND SMALLER SHALL BE COPPER TUBE WITH WROUGHT COPPER SWEAT FITTINGS JOINED WITH LEAD FREE SOLDER. PROVIDE TYPE "L" COPPER TUBE ABOVE GRADE AND TYPE "K" BELOW GRADE. PRESS-FIT FITTINGS ARE NOT PERMITTED.

HANGERS & SUPPORTS  
THE PLUMBING CONTRACTOR SHALL FURNISH ALL PIPE SUPPORTS REQUIRED FOR HIS EQUIPMENT AND MATERIAL. HANGERS AND PIPE ATTACHMENTS TO BE FACTORY FABRICATED WITH GALVANIZED COATINGS; NONMETALLIC COATED FOR HANGERS IN DIRECT CONTACT WITH COPPER TUBING.

CONNECTIONS  
INSTALL UNIONS ADJACENT TO EACH VALVE AND AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC COUPLINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS. SCREW JOINT STEEL PIPING UP TO AND INCLUDING 1-1/2". WELD PIPING USE LEAD FREE SOLDER FOR SOLDERING DOMESTIC WATER COPPER PIPE.

CLEANOUTS  
PROVIDE J. R. SMITH OR EQUIVALENT FLOOR AND WALL CLEANOUTS AS INDICATED ON THE DRAWINGS OR WHERE REQUIRED IN ALL SOIL, WASTE, AND DRAIN LINES. IN AREAS WITH CERAMIC TILE OR CARPETED FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP. IN AREAS WITH RESILIENT FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH TILE RECESS. CLEANOUTS SHALL BE SAME SIZE AS PIPE EXCEPT THAT CLEANOUTS LARGER THAN 4" WILL NOT BE REQUIRED. WHERE CLEANOUTS OCCUR IN WALLS OF FINISHED AREAS, THEY SHALL BE CONCEALED BEHIND CHROME PLATED ACCESS COVERS.

INSTALLATION  
PROVIDE SEWER SCOPE PRIOR TO FINAL PRICING.  
INSTALL PIPING FREE OF SAGS AND BENDS. INSTALL FITTINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS. INSTALL SLEEVES FOR PIPES PASSING THROUGH CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, CONCRETE FLOOR, AND ROOF SLABS. SEAL PIPE PENETRATIONS THROUGH RATED CONSTRUCTION WITH FIRESTOPPING SEALANT MATERIAL. UNDERGROUND WATER AND SEWER LINES SHALL BE LAID IN SEPARATE TRENCHES WITH A MINIMUM HORIZONTAL SPACING AS REQUIRED BY CODE, EXCAVATED TO THE PROPER DEPTH AND GRADED TO PRODUCE THE REQUIRED FALL.

TESTING  
ALL PIPES SHALL BE TESTED BY AN APPROVED METHOD BEFORE THEY ARE BACKFILLED OR CONCEALED.

VALVES

GENERAL  
PLUMBING CONTRACTOR TO PROVIDE VALVES WHERE INDICATED ON PLANS AND AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. INSTALL VALVES FOR EACH FIXTURE AND ITEM OF EQUIPMENT. PROVIDE BRAIDED STAINLESS STEEL HOSE (UNLESS OTHERWISE NOTED) BETWEEN VALVE AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. LOCATE SHUT-OFF VALVES ADJACENT TO EQUIPMENT FOR EASY ACCESS SUCH THAT VALVES CAN BE REACHED WITHOUT MOVING EQUIPMENT.

VALVES  
PROVIDE VALVES FOR WORKING PRESSURE IN WATER PIPING OF 125 PSI OR GREATER.

INSULATION

WATER PIPING  
PROVIDE THERMAL INSULATION ON ALL HOT & COLD WATER PIPING. USE SELF-SEALING CLOSED CELL FOAM OR JACKETED FIBERGLASS INSULATION WITH MANUFACTURER APPROVED ADHESIVES, SEALERS, AND COATINGS. ALL MATERIALS USED SHALL NOT EXCEED 25 FOR FLAME SPREAD, 50 FOR FUEL CONTRIBUTED, OR 50 FOR SMOKE DEVELOPED.

SAFETY COVERS  
INSTALL NO-SCALD SAFETY COVERS WITH INSULATED FOAM LINER AND TAMPER PROOF STRAP AT ALL EXPOSED HOT WATER & WASTE PIPING.

MISC PLUMBING FIXTURES

OWNER FURNISHED CONTRACTOR INSTALLED  
PLUMBING FIXTURES/EQUIPMENT (E.G., ICE MAKER, ETC.)

THE PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT INCLUDING REQUIRED MATERIAL SUCH AS PIPING, VALVES, FILTERS, TRAPS, CHECKS VALVES, VACUUM BREAKERS, AND FLEXIBLE AND RIGID TUBING.

ALL FLEXIBLE SUPPLY LINES TO BE BRAIDED STAINLESS STEEL WITH METAL COUPLINGS.

MINIMUM HYDRONIC & DOMESTIC HOT WATER  
PIPE INSULATION THICKNESS (IN INCHES)

FLUID OPERATING TEMPERATURE RANGE AND USAGE (°F)	INSULATION CONDUCTIVITY		NOMINAL PIPE OR TUBE SIZE (INCHES)				
	CONDUCTIVITY BTU - IN./ (H - FT <sup>2</sup> - °F) <sup>B</sup>	MEAN RATING TEMPERATURE, °F	LESS THAN 1	1 TO < 1-1/2	1-1/2 TO < 4	4 TO < 8	≥ 8
201 - 250	0.27 - 0.30	150	2.5	2.5	2.5	3.0	3.0
141 - 200	0.25 - 0.29	125	1.5	1.5	2.0	2.0	2.0
105 - 140	0.21 - 0.28	100	1.0	1.0	1.5	1.5	1.5
40 - 60	0.21 - 0.27	75	0.5	0.5	1.0	1.0	1.0

PIPE HANGER SPACING REQUIREMENTS

MATERIAL	SIZE	MAX HORIZONTAL SPACING	MAX VERTICAL SPACING
ABS	ALL	4'	10'
CAST IRON < 10'	ALL	5'	15'
CAST IRON - 10'	ALL	10'	15'
COPPER	< 1-1/2	6'	10'
COPPER	≥ 1-1/2	10'	10'
PEX	ALL	32"	10'
PVC	ALL	4'	10'

PIPE SIZE EQUIVALENTS

DESIGN SIZE	NOMINAL COPPER TUBE	NOMINAL PEX	NOMINAL BLACK IRON	CSST EHD
1/2"	1/2"	1/2"	1/2"	18
3/4"	3/4"	1"	3/4"	23
1"	1"	1 1/4"	1"	31
1 1/4"	1 1/4"	1 1/2"	1 1/4"	37
1 1/2"	1 1/2"	2"	1 1/2"	47
2"	2"	-	2"	60

PLUMBING SYMBOLS LEGEND

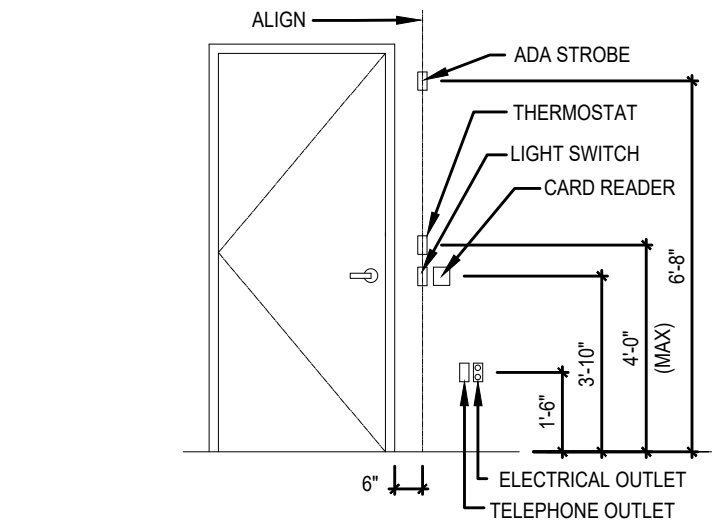
- WASTE PIPING
- VENT PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- GAS PIPING
- BALL VALVE
- HOSE BIBB
- WCO
- WALL CLEANOUT
- FLOOR CLEANOUT
- FLOOR DRAIN
- CONNECT TO EXISTING



ELECTRICAL GENERAL NOTES - APPLICABLE TO ALL ELECTRICAL SHEETS

1. PRIOR TO SUBMITTING BIDS THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING ELECTRICAL EQUIPMENT CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK. FIELD VERIFY QUANTITIES OF EXISTING LIGHT FIXTURES, ELECTRICAL DEVICES, COMMUNICATION DEVICES, FIRE ALARM DEVICES, AND ELECTRICAL EQUIPMENT. NOTIFY THE ARCHITECT AND ENGINEER OF ANY EXISTING CONDITIONS WHICH MODIFY THE SCOPE OF WORK AS SHOWN ON THE CONSTRUCTION DOCUMENTS. SUBMISSION OF A BID PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR MOBILIZATION, LABOR, EQUIPMENT, AND/OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.
2. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND WORK RELATES TO IT IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE IT WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.
3. IT IS THE INTENTION OF THESE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL COMPLETE AND READY FOR USE." "REPLACE" SHALL MEAN TO PUT NEW IN PLACE OF EXISTING. THE ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS FOR THE WORK OF THIS PROJECT AND BASE BUILDING SPECIFICATIONS SHALL BE PART OF THE ELECTRICAL SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE GENERAL AND SPECIAL CONDITIONS BEFORE SUBMITTING A BID.
4. ALONGSIDE SUBMISSION OF THE BID, THE ELECTRICAL CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT/ENGINEER OF ANY NECESSARY ITEMS OR WORK THAT HAVE BEEN OMITTED FROM THE DRAWINGS OR SPECIFICATIONS. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUAL AGREEMENT BETWEEN THE ELECTRICAL CONTRACTOR HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS BID, AND THAT THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF THE ENTIRE SYSTEM WITHOUT EXTRA COMPENSATION.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE AND SATISFACTORY ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS. HE SHALL PROVIDE WITHOUT EXTRA CHARGE, ALL INCIDENTAL ITEMS REQUIRED, AS A PART OF THE ELECTRICAL INSTALLATION. THE INSTALLATION SHALL BE SO MADE THAT ITS SEVERAL COMPONENT PARTS WILL FUNCTION TOGETHER AS A WORKABLE SYSTEM AND SHALL BE LEFT WITH ALL PARTS ADJUSTED AND IN WORKING ORDER.
6. ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LOCAL FEES, PERMITS, AND SERVICE INSPECTIONS REQUIRED BY ELECTRICAL WORK. THE BID FOR THIS ELECTRICAL CONSTRUCTION, FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS, AND OBTAIN ALL NECESSARY APPROVALS REQUIRED BY ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL REMAIN EXPOSED TO VIEW UNTIL APPROVED BY THE INSPECTION AUTHORITY.
7. ELECTRICAL CONTRACTOR SHALL FULLY COORDINATE WITH OWNER REPRESENTATIVES. THE ELECTRICAL CONTRACTOR SHALL ADVISE THE CONTRACT SHALL CONFORM WITH LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, LOCAL BUILDING AND FIRE DEPARTMENT REQUIREMENTS. PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF OWNER REPRESENTATIVE.
8. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY CHANGES REQUIRED BY THE BUILDING MANAGEMENT AND TENANT REPRESENTATIVES.
9. BEFORE STARTING WORK, ELECTRICAL CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ARCHITECT/ENGINEER SHOP DRAWINGS, BROCHURES, INSTALLATION INSTRUCTIONS, AND DESCRIPTIVE EQUIPMENT DATA RELATED TO SPECIFIED EQUIPMENT, WIRING DEVICES, AND ACCESSORIES FOR APPROVAL. ELECTRONIC SUBMITTALS (PDF OR SIMILAR) ARE ACCEPTABLE. THE CONTRACTOR SHALL IDENTIFY ANY "LONG LEAD TIME" ITEMS WHICH MAY IMPACT THE OVERALL PROJECT SCHEDULE. BIDS SHALL INCLUDE ITEMS ASSOCIATED WITH THE PROJECT AND DELIVERY OF EQUIPMENT TO MEET THE PROJECT SCHEDULE. NO EQUIPMENT SHALL BE ORDERED, PURCHASED, OR INSTALLED PRIOR TO THE APPROVAL OF SHOP DRAWINGS, BROCHURES, INSTALLATION INSTRUCTIONS, AND SCHEDULES. APPROVAL BY THE ARCHITECT/ENGINEER IS INTENDED TO ESTABLISH CONFORMANCE WITH THE PROJECT DESIGN CONCEPT AND THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS.
10. THE NAMING OF THE MANUFACTURER OR BRAND WITH CATALOG NUMBER OR OTHER PRODUCT IDENTIFICATION WITHOUT THE WORDS "OR EQUAL" IN THE SPECIFICATIONS OR NOTES SHALL INDICATE THAT IT IS THE ONLY PRODUCT APPROVED FOR PURCHASE. IF THE WORDS "OR EQUAL" ARE USED THEY SHALL BE INTERPRETED AS ESTABLISHING A QUALITY OR PERFORMANCE STANDARD FOR THE MATERIAL OR PRODUCT TO BE PURCHASED. THIS SHALL BE DONE THAT THE ELECTRICAL CONTRACTOR IS NOT RESTRICTED TO THE USE OF THE NAMED AND IDENTIFIED PRODUCT IF A SUBSTITUTE APPROVED BY THE ARCHITECT/ENGINEER IS AVAILABLE. HOWEVER, WHERE A SUBSTITUTION IS REQUESTED, IT WILL BE DENIED UNLESS WITH THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER. NO SUBSTITUTE MATERIAL OR PRODUCT SHALL BE ORDERED, FABRICATED, SHIPPED OR PROCESSED IN ANY MATTER PRIOR TO THE APPROVAL OF THE ARCHITECT/ENGINEER. THE ELECTRICAL CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ADDITIONAL EXPENSES AS REQUIRED MAKING CHANGES FROM THE ORIGINAL MATERIAL OR PRODUCT SPECIFIED.
11. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL WORK. LOCATIONS, QUANTITIES, AND SHALL BE SUBJECT TO MINOR MODIFICATIONS AS DIRECTED BY THE GENERAL CONTRACTOR AND OWNER REPRESENTATIVES. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT FITTING OF ALL MATERIALS, EQUIPMENT, ETC., IN THE BUILDING AND TENANT SPACE. ALL DIMENSIONS SHALL BE VERIFIED ON THE JOB.
12. DRAWINGS SHALL NOT BE SCALED FOR ROUGH-IN MEASUREMENTS OR USED AS SHOP DRAWINGS. WHERE DIMENSIONS ARE SHOWN ON PLANS OR DETAILS, THOSE DIMENSIONS ARE TO BE FIELD-VERIFIED BY THE ELECTRICAL CONTRACTOR AGAINST EXISTING FIELD CONDITIONS, INSTALLATION REQUIREMENTS OF OTHER TRADES, AND THE MANUFACTURER'S SUBMITTALS FOR EQUIPMENT TO BE INSTALLED. SHOULD ANY CONFLICTS ARISE, WHICH CANNOT BE EASILY RESOLVED IN THE FIELD WITHOUT CHANGING THE DESIGN INTENT, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
13. WHILE ALL WORK IS IN PROGRESS, EXCEPT FOR SHORT DESIGNATED INTERVALS DURING WHICH CONNECTIONS ARE TO BE MADE, CONTINUITY OF SERVICE TO ALL EXISTING SYSTEMS SERVING OCCUPIED SPACES SHALL BE MAINTAINED. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH OWNER AT ALL TIMES FOR ALL NEW-TO-EXISTING CONNECTIONS, SYSTEM SHUTDOWNS, AND RESTART-UP.
14. ANY WORK WHICH WILL AFFECT THE BUILDING OCCUPANTS, INCLUDING, BUT NOT LIMITED TO WORK WHICH GENERATES EXCESSIVE NOISE, DUST, SMOKE, OR INCONVENIENCE TO BUILDING OCCUPANTS, SHALL BE PERFORMED AFTER BUSINESS HOURS. UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE BUILDING MANAGER OR OWNER.
15. ELECTRICAL ITEMS AFFECTED BY REMODEL WORK ARE SHOWN ON DRAWINGS ALONG WITH EXISTING ELECTRICAL INSTALLATION SHOWN WITH LIGHT LINE WEIGHT. EXISTING ELECTRICAL INSTALLATION SHOWN IS NOT NECESSARILY ALL-INCLUSIVE. RETAIN CIRCUIT CONTINUITY FOR EXISTING ELECTRICAL EQUIPMENT, FIXTURES, AND DEVICES THAT ARE TO REMAIN. SUCH EQUIPMENT SHALL BE RECONNECTED TO EXISTING CIRCUITS OR CONNECTED TO NEW CIRCUITS(S) AS INDICATED ON DRAWINGS. ENSURE ALL ELECTRICAL DEVICES IN WORK AREA ARE FULLY FUNCTIONAL. FOR DEVICES OR JUNCTION BOXES LOCATED IN WALLS, THAT MUST REMAIN IN PLACE FOR CIRCUIT CONTINUITY, PROVIDE BLANK COVER PLATES TO MATCH WALL PLATES STYLE IN THE AREA OF WORK. FOR ALL OTHER UNUSED JUNCTION BOXES, REMOVE WIRING AND PROVIDE BLANK COVER PLATE, OR COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING OF WALL TO MATCH ADJACENT SURFACE AS DIRECTED BY ARCHITECT. WHERE EXISTING DEVICES CONFLICT WITH NEW WALL CONSTRUCTION, RELOCATE EXISTING DEVICE AND REWORK CIRCUITRY AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY. DEVICES MAY ONLY BE REMOVED WITH PRIOR APPROVAL FROM THE DESIGN TEAM AND BUILDING MANAGEMENT. COORDINATE FINAL DIRECTIONS WITH ARCHITECT PRIOR TO DEMOLITION.
16. REPORT ANY EXISTING DAMAGED EQUIPMENT OR SYSTEMS TO THE OWNER PRIOR TO BEGINNING THE PROJECT.
17. BEFORE ANY EQUIPMENT IS INSTALLED, DETERMINE THAT SAID EQUIPMENT WILL PROPERLY FIT WITHIN THE SPACE ALLOCATED. INSTALL ALL EQUIPMENT AND MATERIALS IN SUCH A MANNER AS TO PROVIDE REQUIRED ACCESS FOR SERVICING AND MAINTENANCE. ALLOW AMPLE SPACE FOR REMOVAL OF ALL PARTS THAT REQUIRE REPLACEMENT OR SERVICING.
18. MINIMUM WORKING CLEARANCES PER THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE SHALL BE PROVIDED AROUND AND IN FRONT OF ALL ELECTRICAL EQUIPMENT, INCLUDING EQUIPMENT DOORS, PER THE NEC.
19. ALL CIRCUIT BREAKER LUGS SHALL BE RATED FOR A MINIMUM OF 75 DEGREES CELSIUS.
20. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UNMOUNTED, BEAR THE UL LABEL WHERE APPLICABLE, AND BE AS SPECIFIED FOR USE IN EACH SPECIFIC LOCATION. ANY INCIDENTAL ACCESSORIES NECESSARY TO COMPLETE THE WORK IN ALL RESPECTS AND MAKE IT READY FOR OPERATION, EVEN IF NOT SPECIFICALLY SPECIFIED, SHALL BE FURNISHED, DELIVERED, AND INSTALLED BY THE ELECTRICAL

- CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE CLIENT.
21. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF A SYSTEM OR EQUIPMENT, SHALL BE INCLUDED IN THE ELECTRICAL CONTRACTOR'S ESTIMATE, AS IF SPECIFIED HEREIN OR SHOWN.
22. ALL NEW, RELOCATED AND EXISTING MATERIALS, IN CEILING PLENUMS NOT ENCLOSED IN CONDUIT SHALL HAVE CLASS, FLAME SPREAD AND SMOKE DEVELOPMENT RATING AS REQUIRED FOR USE IN OPEN PLENUMS. REMOVE AND REPLACE ALL EXISTING MATERIALS IN WORK AREA NOT IN COMPLIANCE.
23. COORDINATE THE INSTALLATION OF ELECTRICAL MATERIALS AND EQUIPMENT ABOVE AND BELOW CEILINGS WITH SUSPENSION SYSTEM, MECHANICAL EQUIPMENT, AND OTHER BUILDING COMPONENTS. ALL COMPONENTS SHALL BE LOCATED AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE CEILING CAVITY SPACE CAREFULLY WITH ALL TRADES.
24. NEUTRALS, RACEWAYS, AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN FULL ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE NUMBER OF BENDS PER RUN GROUND CONNECTIONS TO ALL DEVICES AND SEPARATE, CONTINUOUS, INSULATED GROUND WIRE IN EACH CIRCUIT (#12 CU MINIMUM "GREEN" TRACER GROUND). COORDINATE EQUIPMENT GROUNDING CONDUCTOR WIRE SIZE WITH MANUFACTURER REQUIREMENTS.
25. CONDUIT JOINTS SHALL BE CUT SQUARE, THREADED, REAMED SMOOTH, AND DRAWN UP TIGHT. BENDS OR OFFSETS SHALL BE MADE WITH AN APPROVED BENDER OR WIRE, OR HUB-TYPE OF AND SCALING TOOLS. THE NUMBER OF BENDS PER RUN SHALL CONFORM TO THOSE STATED IN CURRENT NEC.
26. WHERE POSSIBLE ALL WIRING SHALL BE RUN CONCEALED: ALL HOME RUNS SHALL BE RUN IN WALLS, ABOVE OR NEAR MILLWORK IN A NEAT AND WORKMANLIKE MANNER (GROUPED CABLES ROUTED WITH SQUARE CORNERS AND PARALLEL TO BUILDING LINES). CABLES SHALL BE INSTALLED PER NEC REQUIRED SEPARATIONS AND SUPPORTED FROM THE BUILDING STRUCTURE. CABLE TIES USED IN DUCTS, PLENUMS, AND OTHER HANDLING SPACES ARE REQUIRED TO BE LISTED FOR USE IN THESE LOCATIONS.
46. COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED WITHIN, ABOVE, OR NEAR MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED "SHOP DRAWINGS", AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS PRIOR TO ROUGH IN.
47. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF LIGHTING FIXTURES IN ROOMS/SPACES WITH MECHANICAL DUCT WORK INSTALLER PRIOR TO ROUGH IN. LOCATE BELOW DUCT WORK (8"-0" A.F.F. MIN.) CENTERED IN ROOM AS MUCH AS POSSIBLE.
48. ELECTRICAL CONTRACTOR SHALL COMPLY WITH NEC AND LOCAL CODES FOR CONDUIT FILL REQUIREMENTS DEPENDING ON WIRE SIZES, QUANTITY, AND CORRECTION FACTORS. COORDINATE WITH LOCAL AUTHORITY HAVING JURISDICTION FOR SHOP DRAWINGS, PERMITS, AND INSPECTIONS. THE BUILDING AND FIRE PREVENTION BUREAU FOR THEIR APPROVAL AND TO ENGINEER FOR HIS REVIEW.
49. PROVIDE NEW BUILDING STANDARD FIRE ALARM STROBES, ADA HIGH INTENSITY, COMPATIBLE WITH EXISTING FIRE ALARM SYSTEMS. PROVIDE AND MODIFY EXISTING FIRE ALARM CIRCUIT CONDUCTORS AND FIRE ALARM PANELS PER
49. ELECTRICAL CABINETS, DISCONNECTS AND ENCLOSURES LOCATED IN PUBLIC AREAS (ACCESSIBLE TO UN-QUALIFIED PERSONNEL) SHALL BE LOCKABLE TYPE.
50. PENETRATIONS THROUGH STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT SPECIFIC WRITTEN PERMISSION FROM STRUCTURAL ENGINEER AND ARCHITECT. SUBMIT REQUESTS FOR APPROVAL TO ARCHITECT FOR REVIEW AND APPROVAL. PRIOR TO CONCRETE DRILLING THROUGH FLOORS, VERIFY CLEARANCE OF BEAMS, DUCTWORK, ETC. IN CEILING SPACE BELOW, AND X-RAY FOR CONDUIT AND/OR REBAR IN SLAB. COORDINATE WITH BUILDING MANAGEMENT/OWNER TO INFORM TENANT BELOW FOR SCHEDULING OF CORE DRILLING AND ADVISE BUILDING MANAGEMENT/OWNER FOR ANY SENSITIVE EQUIPMENT PRIOR TO COMMENCEMENT OF WORK. ALL X-RAYS AND CORE DRILLS MUST BE SCHEDULED FOR AFTER HOURS UNLESS BUILDING MANAGEMENT/OWNER AUTHORIZES OTHERWISE.
51. RACEWAYS SHALL BE PROVIDED WITH EXPANSION FITTINGS WHERE NECESSARY TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION, FROST HEAVE/SETTLING, AND TO ALLOW FOR MINOR MOVEMENT OF THE STRUCTURAL ELEMENTS OF THE SPACE. POINT, AT EACH OUTLET, SWITCH POINT, OR JUNCTION POINT, AND AT EACH PULL POINT FOR THE CONNECTION OF CONDUIT AND OTHER RACEWAYS. OUTLET BOXES FOR CONCEALED WIRING SHALL BE MADE FROM GALVANIZED OR CADMIUM-PLATED STEEL, AND THEY SHALL HAVE A DEPTH OF AT LEAST 1.5 INCHES, WHETHER SINGLE OR GANGED. THE BOXES SHALL BE LARGE ENOUGH SIZE TO ACCOMMODATE THE NUMBER OF WIRING DEVICES AND CONDUCTORS AS SPECIFIED IN THE FILL SCHEDULE OF THE CURRENT NEC. SECURE BOXES WITH MOUNTING BRACKET, BRACES, HANGER OR BOX MOUNTING SUPPORT.
30. ALL NEW SWITCHES, POWER OUTLETS, TELEPHONE OUTLETS, FIRE ALARM DEVICES, AND COMMUNICATIONS OUTLETS SHALL MEET THE REQUIREMENTS FOR AMERICANS WITH DISABILITIES (A.D.A.) MOUNTING HEIGHTS AND ORIENTATIONS, TYPICAL UNLESS OTHERWISE NOTED. RECEPTABLES SHALL BE A MINIMUM OF 15" A.F.F. AND SWITCHES A MAXIMUM OF 48" A.F.F. TO CENTERLINE, TYPICAL UNLESS OTHERWISE NOTED.
31. ALL WALL MOUNTED OUTLETS SHALL BE OFFSET SO THEY ARE NOT BACK TO BACK FOR SOUND TRANSMISSION PURPOSES. A HORIZONTAL DISTANCE OF AT LEAST 6 INCHES SHALL SEPARATE OUTLET BOXES ON OPPOSITE SIDES OF WALLS AND PARTITIONS. MOUNT ELECTRICAL AND COMMUNICATIONS OUTLETS ON WALLS AS CLOSE TOGETHER AS POSSIBLE.
32. WIRING DEVICES SHALL BE SPECIFICATION GRADE. MINIMUM DEVICE RATING SHALL BE 20 AMPS FOR ALL WIRING DEVICES UNLESS SPECIFICALLY NOTED OTHERWISE. DEVICES WITH DESIGNATED CIRCUITS SHALL BE RATED AS REQUIRED BY CIRCUIT LOAD. ISOLATED GROUND RECEPTABLES SHALL BE ORANGE. MATCH COLOR AND TYPE TO EXISTING BUILDING STANDARD. PROVIDE MATCHING NYLON COVER PLATES FOR ALL OUTLETS. ELECTRICAL CONTRACTOR SHALL VERIFY ALL OUTLETS WITH ARCHITECTURAL PLANS AND TENANT BEFORE ORDERING AND PURCHASING OF MATERIALS.
33. FIRE RESISTIVE WALLS AND PARTITIONS MAY HAVE OPENINGS FOR STEEL, SEMI-INDICATED OUTLET BOXES, OR EXCEEDING 16 SQUARE INCHES. PROVIDED THE AGGREGATE AREA OF SUCH OPENINGS IS NOT MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL. A HORIZONTAL DISTANCE OF AT LEAST 24 INCHES SHALL SEPARATE OUTLET BOXES ON OPPOSITE SIDES OF FIRE RESISTIVE WALLS AND PARTITIONS.
34. ALL JUNCTION BOX COVERS SHALL BE INDELIBLY LABELED WITH PANEL DESIGNATION AND BRANCH CIRCUIT NUMBER OF EACH WIRE WITHIN THE JUNCTION BOX. PANELS/DISCONNECTS/TRANSFORMERS AND SIMILAR MUST BE LABELED WITH THEIR SOURCE AND WITH CALCULATED AIC VALUE/DATE.
35. ALL WIRING SHALL BE COPPER, TYPE THIN OR THIN INSULATION, UNLESS SPECIFICALLY NOTED OTHERWISE. MINIMUM SIZE SHALL BE #12 AWG. CONDUCTORS SHALL BE FACTORY COLOR-CODED WITH WIRE COLOR CODING AS REQUIRED BY THE NATIONAL ELECTRICAL CODE AND USING STANDARD CONDUCTOR COLOR CODES:
- 120/208 VOLTS: A: BLACK B: RED C: BLUE NEU: WHITE GND: GREEN ISO. G: GREEN W/YELLOW STRIPE
- 277/480 VOLTS: A: BLACK B: ORANGE C: YELLOW NEU: GRAY GND: GREEN
36. RECEPTABLES FOR COMPUTERS, COPIERS, AND PRINTERS, WHICH ARE SEMI-INDICATED, DEVICES, SHALL BE ORANGE. MATCH COLOR AND TYPE, AND DEDICATED GROUND CONDUCTOR RUN FROM THE BRANCH CIRCUIT NEURAL BOARD.
37. ALL JOINTS OR SPLICES FOR 10 AWG. CONDUCTORS OR SMALLER SHALL BE MADE WITH UL-APPROVED WIRE NUTS, OR COMPRESSION-TYPE CONNECTORS.
38. ALL JOINTS OR SPLICES FOR CONDUCTORS 8 AWG AND LARGER SHALL BE MADE WITH A MECHANICAL COMPRESSION OR BOLTED CONNECTOR. AFTER THE CONDUCTORS HAVE BEEN MADE MECHANICALLY AND ELECTRICALLY SECURE, THE ENTIRE JOINT OR SPLICE SHALL BE COVERED WITH 3M SCOTCH BRAND NO. 33 TAPE OR APPROVED EQUAL, TO MAKE THE INSULATION VALUE AT THE JOINT OR SPLICE EQUAL TO THE WALL TO THE WALL OF THE CONDUCTOR INSULATION. ALL CONNECTORS SHALL BE UL APPROVED.
39. ALL NEW MULTI-WIRE BRANCH CIRCUITS SHALL INCLUDE SEPARATE NEUTRAL CONDUCTORS OR BREAKER TIES AS REQUIRED BY CURRENT NEC SECTION 210.
40. VOLTAGE DROP: THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT VOLTAGE DROP FOR FEEDERS TO DISTRIBUTION EQUIPMENT SHALL NOT EXCEED 2% AND VOLTAGE DROP IN BRANCH CIRCUITS DOES NOT EXCEED 3% FOR OVERALL VOLTAGE DROP OF 5% (MAXIMUM). FEEDERS LISTED ON SCHEDULES AND THE ELECTRICAL ONE-LINE DIAGRAM ARE A BASE FEEDER/BRANCH CIRCUIT SIZE AND SHALL BE ADJUSTED AS NEEDED BASED ON ACTUAL LENGTHS OF CONDUCTORS.
41. ELECTRICAL CONTRACTOR SHALL USE SIZE SHARED NEUTRAL CONDUCTOR WITHIN FURNITURE SYSTEMS TO A #10 AWG CU CONDUCTOR. ELECTRICAL CONTRACTOR TO CONSIDER THE NEUTRAL CONDUCTOR AS A CURRENT CARRYING CONDUCTOR WHEN FEEDING ELECTRONIC LOADS.
42. ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY FROM STRUCTURE. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF LIGHT FIXTURES AND ELECTRICAL DEVICES.
43. FOR ALUMINUM CONDUCTOR TERMINATIONS, ALUMINUM BI-METALLIC PIN CONNECTORS ARE REQUIRED UNLESS COMPACT CONDUCTORS ARE USED. THESE CONNECTORS SHALL BE UL LISTED PER UL 486B AND RATED FOR USE UP TO 600V AND TEMPERATURE UP TO 90°C. CONNECTORS SHALL BE INSTALLED WITH MANUFACTURER'S SPECIFIED CRIMPING TOOLS AND DIES.
44. INSTALLATION IN AREAS OF DRYWALL CEILING SHALL BE COORDINATED SUCH THAT ACCESS PANELS ARE NOT REQUIRED. ELEMENTS REQUIRING ACCESS SHALL BE LOCATED IN THE AREAS OF ACCESSIBLE CEILING OR IN THE LOCATIONS COORDINATED WITH ARCHITECT. ACCESS PANELS REQUIRED WITHIN DRYWALL SHALL BE INSTALLED TO MATCH EXISTING WALLS WITH OTHER PANELS, OR FINES AND SHALL BE MINIMUM SIZE REQUIRED. "MUD-IN" TYPE, AND FIRE RATED, IF REQUIRED. ACCESS PANELS IN FIRE-RATED WALLS AND CEILINGS SHALL HAVE PROPER UL LABEL AND FIRE RATING LISTING.



DEVICE AT DOOR LOCATION (TYP)

SCAF: NONF

FIRE ALARM SYSTEM

1. GENERAL CONTRACTOR SHALL SOLICIT BIDS FROM BUILDING OWNER'S DESIGNATED FIRE ALARM CONTRACTOR FOR DESIGN AND INSTALLATION OF AN APPROVED FIRE ALARM SYSTEM AND DEVICES WHICH SHALL COMPLY WITH ALL APPLICABLE CODES AND ALL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. THE FIRE ALARM CONTRACTOR SHALL VERIFY WITH BUILDING MANAGEMENT/OWNER CONCERNING DESIGNATED FIRE ALARM CONTRACTOR.)
2. REQUIRED MODIFICATIONS TO EXISTING FIRE ALARM SYSTEM SHALL BE PROVIDED ON A DESIGN-BUILD BASIS BY FIRE ALARM CONTRACTOR. PRIOR TO BIDDING, THE FIRE ALARM CONTRACTOR SHALL FIELD VERIFY EXISTING FIRE ALARM SYSTEM CAPABILITY AND FIRE ALARM DEVICE LOCATIONS IN THIS SCOPE OF WORK. IF REQUIRED BY LOCAL JURISDICTION, FIRE ALARM SYSTEM SHALL BE UPGRADED TO MEET CURRENT CODES. FIRE ALARM CONTRACTOR SHALL PREPARE AND SUBMIT ALL SHOP DRAWINGS AND EQUIPMENT BROCHURES TO AUTHORITIES HAVING JURISDICTION, SUCH AS FIRE DEPARTMENT, BUILDING DEPARTMENT, ETC., AS REQUIRED, FOR REVIEW AND APPROVAL. CONTRACTOR SHALL ALSO PROVIDE THE ENGINEER WITH ONE (1) SET OF DRAWINGS, CALCULATIONS AND EQUIPMENT SUBMITTALS FOR HIS REVIEW AND RECORD.
3. IF REQUIRED, RELOCATE EXISTING SMOKE DETECTORS, REMOTE INDICATOR LIGHTS, FIRE ALARM HORNS, STROBES, SPEAKERS, ETC., BASED ON REMODELED AREA MODIFICATION, AND RECONNECT TO EXISTING SYSTEM AS REQUIRED. NEW FIRE ALARM DEVICES SHALL BE OF THE SAME MANUFACTURER AS THE EXISTING DEVICES AND SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM. PROVIDE ADDITIONAL CONDUCTORS, ZAM'S WAM'S AND OTHER EQUIPMENT NECESSARY IN ORDER TO EXPAND SYSTEM AS REQUIRED. PROVIDE SYNCHRONIZING MODULES FOR STROBES. IF REQUIRED, REPLACE EXISTING FIRE ALARM DEVICES THAT ARE NOT CURRENTLY BUILDING STANDARD OR COMPATIBLE WITH NEW BUILDING STANDARD FIRE ALARM DEVICES. PRIOR TO PURCHASING FIRE ALARM DEVICES, PROVIDE CUT SHEETS, SHOP DRAWINGS, AND EQUIPMENT BROCHURES TO BUILDING MANAGEMENT AND FIRE PREVENTION BUREAU FOR THEIR APPROVAL AND TO ENGINEER FOR HIS REVIEW.
4. PROVIDE NEW BUILDING STANDARD FIRE ALARM STROBES, ADA HIGH INTENSITY, COMPATIBLE WITH EXISTING FIRE ALARM SYSTEMS. PROVIDE AND MODIFY EXISTING FIRE ALARM CIRCUIT CONDUCTORS AND FIRE ALARM PANELS PER

COMMUNICATIONS SYSTEMS

1. ELECTRICAL CONTRACTOR SHALL FULLY FIELD VERIFY COMMUNICATIONS SYSTEM INSTALLATION (DEVICES AND CABLEING) WITH TENANT REPRESENTATIVE PRIOR TO ROUGH IN AND PURCHASING OF MATERIALS.
2. AT TELEPHONE AND DATA SERVICE POINT FOR EACH MODULAR FURNITURE GROUPING, THE ELECTRICAL CONTRACTOR SHALL PROVIDE 4" SQUARE DEEP STEEL JUNCTION BOX WITH TWO 1" CONDUITS (OR AS OTHERWISE SPECIFIED ON PLAN, OR BY DATA/TELECOMMUNICATIONS CONTRACTOR WITH PULL WIRE. STUD CONDUITS ABOVE CEILING LINE AND PROVIDE PLASTIC BUSHINGS ON CONDUIT ENDS. CABLEING SHALL BE PULLED AND WIRED BY OTHERS. COORDINATE ALL WORK WITH DATA/TELECOMMUNICATIONS CONTRACTOR PRIOR TO ROUGH-IN.
3. ALL DATA AND TELECOMMUNICATIONS CABLEING SHALL BE INSTALLED BY TENANT'S VENDOR.
4. FOR EACH NEW SINGLE TELEPHONE/DATA OR TV CABLE OUTLET SHOWN MOUNTED IN WALL, ELECTRICAL CONTRACTOR SHALL PROVIDE 4" SQUARE DEEP STEEL JUNCTION BOX WITH SINGLE-GANG PLASTER RING AND A 3/4" CONDUIT (OR AS OTHERWISE SPECIFIED BY SYSTEM INSTALLER) WITH PULL WIRE. STUD CONDUIT 6" INTO CEILING SPACE AND PROVIDE PLASTIC BUSHINGS. CABLEING SHALL BE PULLED BY OTHERS. COORDINATE ALL WORK WITH DATA/TELECOMMUNICATIONS CONTRACTOR PRIOR TO ROUGH-IN.
5. IF REQUESTED, ELECTRICAL CONTRACTOR SHALL REMOVE ALL ABANDONED AND UNUSED DATA/TELECOMMUNICATIONS CABLEING, CONDUIT, JUNCTION BOXES, AND

RECORD DOCUMENTS

1. RECORD DOCUMENTS: THE ELECTRICAL CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL DEVIATIONS IN WORK AS INSTALLED FROM WORK SPECIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS AND IDENTIFY ORIGIN OF CHANGE.
2. KEEP A COMPLETE SET OF RECORD DOCUMENT PRINTS IN CUSTODY DURING ENTIRE PERIOD OF CONSTRUCTION AT THE CONSTRUCTION SITE. ON COMPLETION OF THE PROJECT, TWO COMPLETE SETS OF MARKED-UP PRINTS SHOWING THESE DEVIATIONS SHALL BE DELIVERED TO GENERAL CONTRACTOR AND ARCHITECT/ENGINEER. THIS CONTRACT WILL NOT BE CONSIDERED CLOSED UNTIL THESE RECORD DRAWINGS HAVE BEEN RECEIVED AND REVIEWED BY THE ENGINEER. DOCUMENTS TO INCLUDE ALL O & M MANUALS AND INSTRUCTIONS.

ELECTRICAL SYMBOLS LEGEND

LIGHTING		POWER	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SURFACE		WALL, CEILING, FLOOR
	RECESSED		JUNCTION BOX
	SHADING INDICATES CONNECTION TO EMERGENCY CIRCUIT OR 90-MINUTE BATTERY BACKUP		DUPLEX RECEPTACLE
	2x4 LIGHT FIXTURE		DEDICATED DUPLEX RECEPTACLE
	2x2 LIGHT FIXTURE		DOUBLE DUPLEX RECEPTACLE
	1x4 LIGHT FIXTURE		DEDICATED DOUBLE RECEPTACLE
	NARROW 4' FIXTURE		SPECIAL PURPOSE RECEPTACLE
	EXIT SIGN		CONTACTOR
	EMERGENCY BATTERY PACK FIXTURE		SIMPLEX RECEPTACLE
	NARROW PENDANT FIXTURE		PUSH BUTTON
	PENDANT FIXTURE		NEW ELECTRICAL PANEL
	WALL BRACKET		EXISTING ELECTRICAL PANEL
	DOWNLIGHT FIXTURE		DEMO ELECTRICAL PANEL
	WALL MOUNTED FIXTURE		DISCONNECT, NON-FUSED
	TRACK LIGHTING		GROUND BAR
	COMBINATION LIGHT AND EXHAUST FAN		MOTOR
	PHOTOCCELL		TIMECLOCK
			WATER HEATER
			POWER POLE
			PLUGMOLD
			WIREMOLD

SWITCHING	
SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH
	DOUBLE POLE SWITCH
	THREE WAY SWITCH
	FOUR WAY SWITCH
	DIMMER SWITCH
	KEYED SWITCH
	THERMAL OVERLOAD SWITCH
	GANGED SWITCHES

61. CODE REQUIRED MAINTENANCE RECEPTABLES FOR MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE GFI.
62. E.C. TO PROVIDE FOR ARC-FLASH HAZARD AND FAULT CURRENT LABELING PER THE NEC (NFPA 70E FOR EQUIPMENT 1000V OR HIGHER), AND TO PROVIDE FOR ARC-ENERGY REDUCTION IN ANY OCPD THAT CAN BE SET FOR 1200A OR HIGHER.
63. ALL RECEPTABLES REQUIRING GFCI PER THE NEC SHALL HAVE READILY ACCESSIBLE GFCI OR GFCI BREAKERS.
64. E.C. TO PROVIDE FOR ANY CODE REQUIRED COMMISSIONING OF LIGHTING/CONTROLS/ENERGY STORAGE OR GENERATOR SYSTEMS, INCLUDING AHJ WITNESSING FOR EMERGENCY OR LEGALLY REQUIRED STANDBY SYSTEMS.

ABBREVIATIONS

ABBR.	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AC	ABOVE COUNTER
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
IG	ISOLATED GROUND
NL	NIGHT LIGHT
RL	RELOCATED DEVICE OR EQUIPMENT
WP	WEATHER PROOF
EM	EMERGENCY
HD	HEAVY DUTY
TR	TAMPER RESISTANT
EG	EGRESS LIGHTING
X	AUTOMATICALLY CONTROLLED DEVICE

CIRCUITING

SYMBOL	DESCRIPTION
	HOLLOW LINE: SOLID 120/208 V, OPEN 277/480V
	CIRCUIT: RUN CONCEALED IN WALL OR CEILING
	CIRCUIT: RUN CONCEALED IN FLOOR OR GRADE
	CONDUIT RISER: TURNED UP, TURNED DOWN
	UNDERGROUND ELECTRICAL

MANUFACTURER'S REQUIREMENTS. MOUNT STROBES +80" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. REPLACE EXISTING STROBE LIGHTS WITH NEW BUILDING STANDARD STROBE LIGHTS, AND ENSURE ALL STROBE LIGHTS ARE SYNCHRONIZED.

5. FIRE ALARM CONTRACTOR SHALL FURNISH DUCT DETECTORS (120V OR 24V), WITH REMOTE INDICATING LIGHT AND TEST SWITCH, FOR ALL MECHANICAL AIR-MOVING SYSTEMS. DETECTORS SHALL BE INSTALLED AT EACH FAN MOTOR. DETECTORS SHALL BE OF THE SAME MANUFACTURER AS EXISTING OR NEW FIRE ALARM SYSTEM. MECHANICAL CONTRACTOR SHALL INSTALL DETECTORS IN THE MECHANICAL DUCTWORK, AS REQUIRED BY CODE, TO FACILITATE, MOTOR SHUTDOWN UPON DETECTION OF SMOKE. ELECTRICAL CONTRACTOR SHALL HANG DETECTOR TO THE FAN MOTOR (THROUGH A POWER-INTERRUPTING RELAY) FOR SHUTDOWN UPON DETECTION OF SMOKE; AND IF REQUIRED BY CODE, THE FIRE ALARM CONTRACTOR SHALL CONNECT TO FIRE ALARM SYSTEM AS TROUBLE ALARM. COORDINATE ALL REQUIREMENTS AND SPECIFICATIONS WITH BUILDING ENGINEER OR FOLDING FIRE ALARM REPRESENTATIVE. SUBMIT DRAWINGS AND EQUIPMENT CUT SHEETS FOR ENGINEERS' REVIEW AND FIRE DEPARTMENT APPROVAL.
6. IF A PRE-ACTION DRY PIPE SPRINKLER SYSTEM IS REQUIRED FOR THIS PROJECT, THE PRE-ACTION FIRE ALARM SYSTEM CONTROL PANEL SHALL BE ANNUNCIATED ON THE BUILDING MAIN FIRE ALARM CONTROL PANEL (FACP) IN THE FIRE COMMAND CENTER (FCC).
7. IF THE PROJECT REQUIRES A UPS SYSTEM AND COMPUTER ROOM AIR CONDITIONING (CRAC) UNITS, THE UPS SYSTEM AND CRAC UNITS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM AND TO THE PRE-ACTION FIRE ALARM CONTROL PANEL. THE UPS SYSTEM, CRAC UNITS, AND FIRE/SMOKE DAMPERS SERVING THE COMPUTER ROOM SHALL BE SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM. PROVIDE INTERFERENCE WIRING AS REQUIRED. PROVIDE WIRING FROM CRAC UNIT TO MOISTURE SENSORS OR SITE MONITORING SYSTEM IF IT IS PROVIDED UNDER MECHANICAL CONTROL AND ALARM SECTION. THE CRAC UNITS SHALL SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM. COORDINATE ALL REQUIREMENTS AND SPECIFICATIONS WITH BUILDING ENGINEER OR FOLDING FIRE ALARM REPRESENTATIVE. COORDINATE ALL OF THE ABOVE WITH APPROPRIATE UPS, PDU AND CRAC UNIT MANUFACTURERS.

ASSOCIATED WIRING LOCATED IN THE CEILING SPACE BACK TO POINT OF ORIGIN, UNLESS THE TENANT DATA/TELECOMMUNICATIONS CONTRACTOR IS CONTRACTED TO REMOVE THE DATA/TELECOMMUNICATIONS CABLEING UNDER A SEPARATE CONTRACT. THE PRE-ACTION FIRE ALARM SYSTEM CONTROL PANEL SHALL BE ANNUNCIATED ON THE BUILDING MAIN FIRE ALARM CONTROL PANEL (FACP) IN THE FIRE COMMAND CENTER (FCC).

6. ELECTRICAL CONTRACTOR SHALL VERIFY QUANTITY AND TYPE OF DATA/PHONE/AUDIO/VIDEO PORTS TO BE INCLUDED IN FLOOR POKE-THRU DEVICES WITH DATA/TELECOMMUNICATIONS CONTRACTOR PRIOR TO ORDERING.

7. VERIFY ALL SPECIFIC COMPUTER AND COMMUNICATIONS EQUIPMENT REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH IN. COORDINATION SHALL INCLUDE MOUNTING HEIGHTS, CABLEING, AND POWER REQUIREMENTS. ALL CONNECTIONS FOR COMPUTER AND COMMUNICATIONS EQUIPMENT SHALL BE IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S AND SUPPLIER'S RECOMMENDATIONS

MECHANICAL SYSTEM

1. ELECTRICAL CONTRACTOR SHALL REVIEW MECHANICAL AND PLUMBING DRAWINGS AND SCHEDULES FOR VERIFICATION OF THE EQUIPMENT USED, WIRING AND ADDITIONAL INSTALLATION REQUIREMENTS PRIOR TO PROVIDING REQUIRED ROUGH-IN STARTERS/DISCONNECT SWITCHES, WHEN EQUIPMENT DELIVERED TO JOB SITE. ELECTRICAL CONTRACTOR SHALL VERIFY THIS DATA WITH EQUIPMENT MANUFACTURER'S OR MANUALS IF SIGNIFICANT DISCREPANCIES OCCUR CONTACT ELECTRICAL ENGINEER FOR REVISION OF THE CONSTRUCTION DOCUMENTS.
2. PROVIDE ALL REQUIRED OUTLETS; HEAVY-DUTY SAFETY DISCONNECT SWITCHES, FUSES AND CONNECTIONS FOR ALL MECHANICAL EQUIPMENT UNLESS PROVIDED BY MECHANICAL CONTRACTOR AS SPECIFICALLY DIRECTED ON MECHANICAL DRAWING OR SPECIFICATION REQUIREMENTS.
3. ELECTRICAL POWER WIRING IN CONNECTION WITH THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, WHERE SHOWN ON THE ELECTRICAL DIVISION DRAWINGS SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. ALL OTHER WIRING, INCLUDING LOW VOLTAGE REQUIRED FOR PROPER OPERATION OF THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR.

DEMOLITION

1. DURING THE DEMOLITION PHASE OF THIS CONTRACT, IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO VERIFY DEMOLITION SCOPE AND ITEMS WITH ARCHITECTURAL AND ELECTRICAL DRAWINGS. EXISTING LIGHT FIXTURES, ELECTRICAL DEVICES, EQUIPMENT AND RELATED ITEMS SHALL BE CAREFULLY REMOVED. ITEMS TO BE REMOVED ON DEMOLITION DRAWINGS AS BEING REMOVED, OR AS REQUIRED FOR THE WORK UNDER THIS CONTRACT. THESE ITEMS SHALL BE TAGGED, PROTECTED/FROM DAMAGE, AND STORED AS DIRECTED BY THE BUILDING MANAGEMENT/OWNER, ARCHITECT OR ENGINEER.
2. DEMOLITION OR ABANDONING ANY ELECTRICAL AND COMMUNICATIONS CONDUIT, WIRING, CABLEING, OR DEVICE MEANS TO REMOVE IN ITS ENTIRETY. REMOVE UNUSED CONDUITS FROM CEILING SPACES IN AREAS OF WORK. REMOVED ITEMS FROM ABANDONED POKE THRU OUTLETS SHALL HAVE COVER PLATES AND BE FILLED WITH FIRE RATED FOAM SEALANT TO MAINTAIN FIRE RATING OF FLOOR.
3. EXISTING LIGHT FIXTURES IN WORK AREA, NOTED ON DRAWINGS TO BE RE-USED SHALL BE THOROUGHLY CLEANED AND/OR REFINISHED TO MATCH NEW.
4. CONTRACTOR SHALL REMOVE SWITCHES, DATA/TELEPHONE OUTLETS, AND ELECTRICAL OUTLETS SCHEDULED FOR DEMOLITION. ALL UNUSED POWER WIRING SHALL BE REMOVED BACK TO JUNCTION BOX IN CEILING SPACE OR TO THE ELECTRICAL PANEL FEEDING THE CIRCUIT. THE SPARE CIRCUIT BREAKER SHALL BE SWITCHED TO THE "OFF" POSITION AND NOTED ON PANEL DIRECTORY AS SPARE WITH THE JUNCTION BOX LOCATION IF APPLICABLE.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RINGING OUT ALL CIRCUITS WHICH ARE AFFECTED BY THIS PROJECT TO ENSURE CIRCUIT CONTINUITY AND TO PREVENT OVERLOADING OF ANY SINGLE CIRCUIT. CONTRACTOR SHALL ENSURE THAT CIRCUITS SHARED BETWEEN PROJECT AREA AND EXISTING TENANT SPACES REMAIN INTACT PER ORIGINAL DESIGN INTENT. CORRECT ANY MISLABELED J-BOX COVER. PROVIDE ACCURATE BRANCH CIRCUIT IDENTIFICATION. REFER TO PANEL NOTES ON PANELS THAT APPLY TO WORK TO BE PERFORMED UNDER THIS CONTRACT. CIRCUIT BREAKERS FOR ALL UNUSED CIRCUITS SHALL BE TURNED TO THE "OFF" POSITION AND LABELED AS SPARE ON REVISED PANEL DIRECTORIES.
6. PROVIDE NEW JUNCTION BOXES, NEW CONDUIT AND WIRING AS REQUIRED TO REPAIR, REROUTE AND RECONNECT CONDUCTORS THAT ARE DAMAGED, DISTURBED OR OTHERWISE ADVERSELY AFFECTED BY THE DEMOLITION AND REMODEL WORK.
7. THE LOCATIONS OF EXISTING LIGHTING FIXTURES, POWER DEVICES AND WIRING, ETC., SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM EXISTING DRAWINGS AND ARE, THEREFORE, ONLY AS ACCURATE AS THAT INFORMATION. ALL EXISTING CONDITIONS SHALL BE IDENTIFIED AT THE FIELD WITH NECESSARY ADJUSTMENT BEING MADE TO THE DRAWING INFORMATION.
8. ALL FLOOR AND WALL PENETRATIONS WHERE ELECTRICAL DEVICES AND RACEWAY HAVE BEEN REMOVED AND SEALED TO MAINTAIN THE REQUIRED FIRE RATING. ALL LUMINAIRES PENETRATING A ONE HOUR FIRE RESISTIVE ENCLOSURE SHALL BE PROPERLY TENDED TO MAINTAIN FIRE RATING OF THE ENCLOSURE. ALL CONDUITS PENETRATING A ONE HOUR FIRE RATED WALL OR CEILING SHALL BE FIRE STOPPED WITH A UL LISTED FIRE STOPPING COMPOUND SEALANT.
9. MAINTAIN RECEIPTABLE CIRCUIT CONTINUITY THROUGH WALLS WHICH ARE TO BE DEMOLISHED AND THROUGH RECEIPTABLES WHICH ARE TO BE REMOVED.
10. MAINTAIN RECEIPTABLE CIRCUIT CONTINUITY THROUGH WALLS WHICH ARE TO BE DEMOLISHED AND THROUGH RECEIPTABLES WHICH ARE TO BE REMOVED.
11. OWNER HAS RIGHT OF FIRST REFUSAL FOR ALL REMOVED EQUIPMENT, FIXTURES, DEVICES, AND CONDUCTORS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE STORAGE AND/OR DISPOSAL OF ALL SUCH ITEMS WITH OWNER/PROPERTY MANAGEMENT PRIOR TO REMOVAL FROM SITE.

WARRANTY

1. PROVIDE COMPLETE WARRANTY INFORMATION FOR EACH ITEM, WHICH SHALL INCLUDE NAME OF PRODUCT OR EQUIPMENT; DATE OF BEGINNING OF WARRANTY OR BOND; DURATION OF WARRANTY OR BOND; ADDRESS, AND TELEPHONE NUMBER OF MANUFACTURING/SERVICING PERSONNEL AS WELL AS PROCEDURES FOR FILING A CLAIM AND OBTAINING WARRANTY SERVICES.
2. THE CONTRACTOR SHALL WARRANT ALL MATERIALS, WORKMANSHIP AND THE SUCCESSFUL OPERATION OF ALL EQUIPMENT AND APPARATUS INSTALLED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE ENTIRE WORK AS IDENTIFIED IN THE GENERAL CONDITIONS.



Redwood Medical

Code violations that are found during inspection are required to be corrected. Permit issuance does not grant approval of a code violation.

Dates of Record

Project Start Date: 06 Dec 2023

Issued On Issued For

05/08/2024 REVIEW SET  
05/22/2024 TENANT REVIEW & APPROVAL:  
(REVISED) PRICING AND CONSTRUCTION  
05/29/2024 PERMIT SET

Sheet Contents GENERAL NOTES & LEGEND

Project Team AH/AW  
Project Number 23324  
Sheet Mark

E0.0



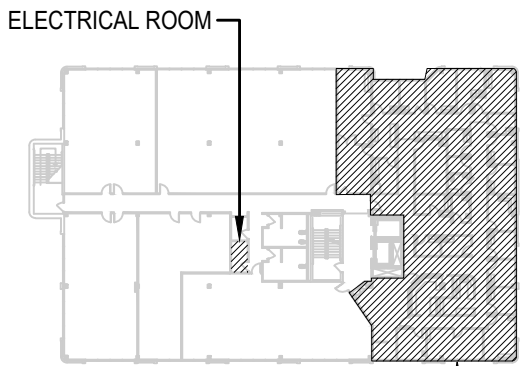
This sheet of drawings has not been reviewed for code compliance.



DEMOLITION PLAN

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

- GENERAL NOTES:
- A. REMOVED ITEMS SHOWN AS DASHED AND LIGHT.
  - B. E.C. TO REMOVE ALL ABANDONED CONDUIT/CABLING/WIRING FROM SPACE INCLUDING ABOVE THE CEILING BACK TO SOURCE. ANY CIRCUITS MADE SPARE TO BE TURNED OFF AND LABELED AS SUCH WITH NEW TYPED PANEL SCHEDULES.
  - C. RETURN LIGHTING FIXTURES NOT REUSED TO PROPERTY MANAGEMENT STOOK.
  - D. PROTECT CIRCUITS AFFECTED BY DEMOLITION THAT HAVE DEVICES REMAINING AFTER DEMOLITION.
  - E. PROTECT ANY DEMOLISHED FIRE ALARM DEVICES AND EXIT SIGNS FOR RELOCATION. RETURN ANY UNUSED DEVICES TO BUILDING MANAGEMENT.



KEY PLAN

RSN: 1809706  
Permit #: 24-2442307 LT

Dates of Record

Project Start Date: 06 Dec 2023

Issued On	Issued For
05/08/2024	REVIEW SET
05/22/2024	TENANT REVIEW & APPROVAL: (REVISED)
05/29/2024	PRICING AND CONSTRUCTION PERMIT SET

Sheet Contents	DEMOLITION PLAN
Project Team	AH/AW
Project Number	23324
Sheet Mark	E1.0



Redwood Medical

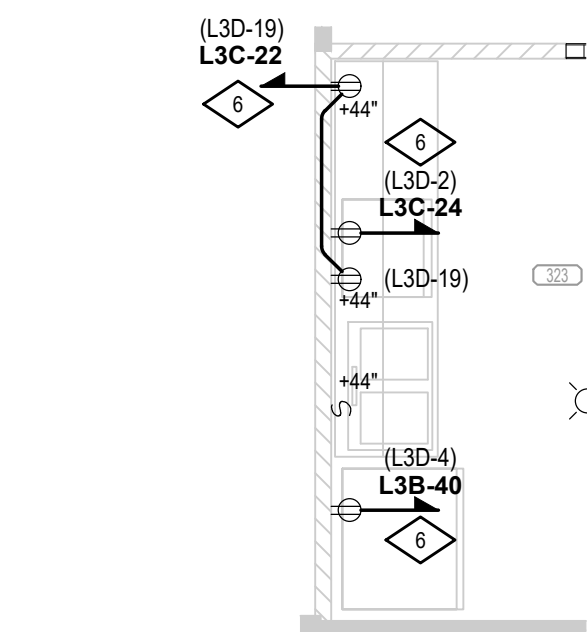
1411 South Potomac  
1411 South Potomac  
Aurora Co  
Suite 300



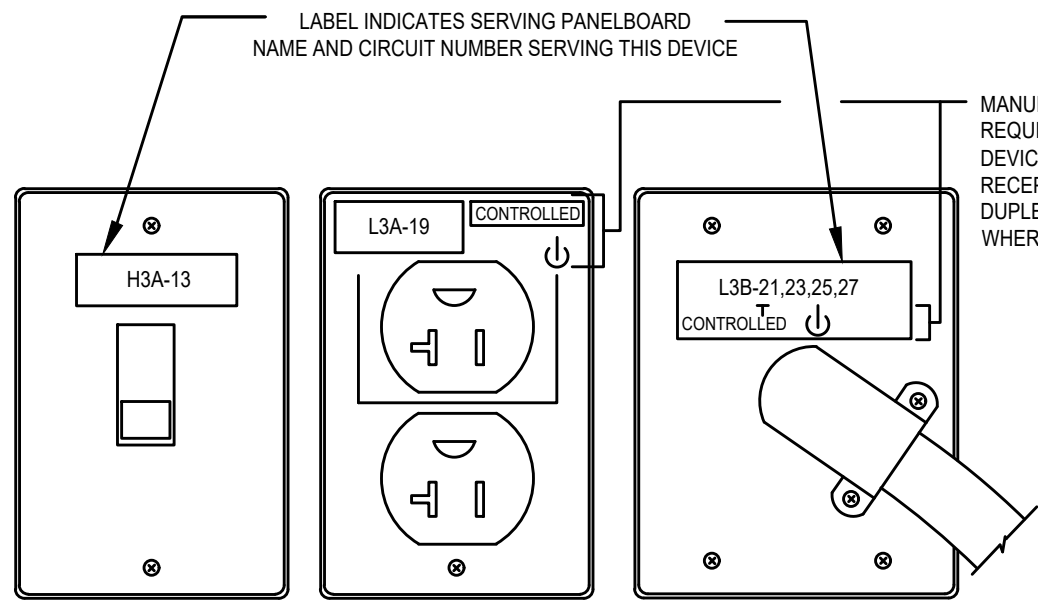


Locate the required overcurrent  
Protection per 2023 NEC 240.21

110.14. Identify disconnects per 2023 NEC  
110.22 and provide working space and  
egress to and around electrical equipment  
per 2023 NEC 110.26



**ENLARGED BREAK AREA 323**  
SCALE: 1/4"=1'-0"



**TYPICAL DEVICE LABELING DETAIL**  
SCALE: NONE

GENERAL NOTES:  
A. E.C. TO PROVIDE DESCRIPTION OF USE/FUNCTION  
OF ANY/ALL CONTROLLED RECEPTACLES TO TENANT.

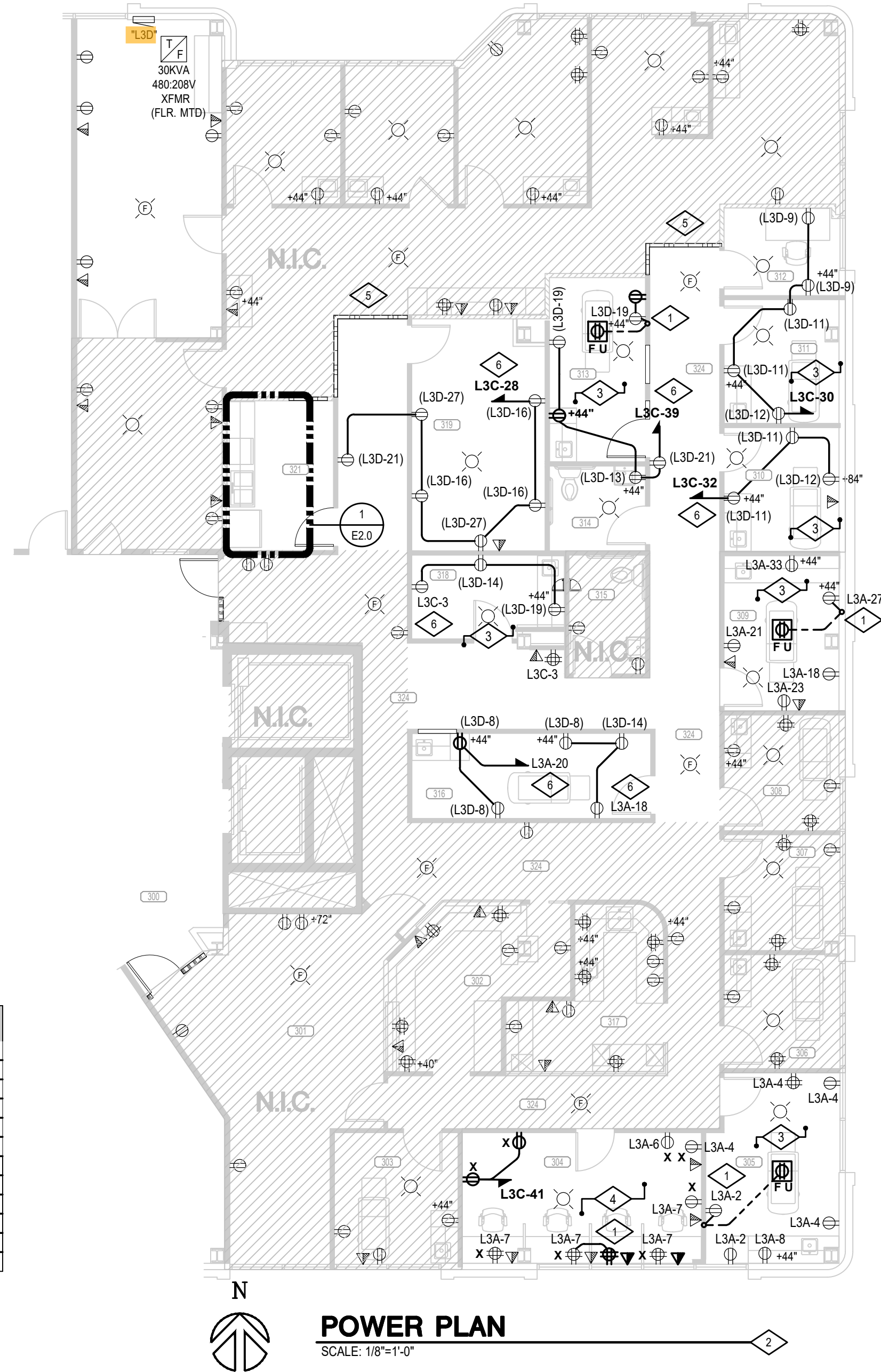
#### SYSTEM FURNITURE SCHEDULE & CONNECTION NOTES

- ELECTRICAL CONTRACTOR SHALL FULLY FIELD COORDINATE FURNITURE SYSTEM WORK STATION REQUIREMENTS WITH TENANT REPRESENTATIVES AND ACTUAL FURNITURE SYSTEM SUPPLIED. PROVIDE CIRCUITS, TELEPHONE/DATA OUTLETS, AND CONDUIT PER CODES BELOW. MULTIWIRED NEUTRALS SHALL BE MIN #10AWG. STUB TELEPHONE/DATA CONDUIT UP 6" INTO ACCESSIBLE CEILING SPACE. PROVIDE PULL WIRE IN CONDUIT AND PLASTIC BUSHINGS ON CONDUIT ENDS. TELEPHONE/DATA CABLES AND DEVICES SHALL BE PROVIDED BY TENANT COMMUNICATIONS SYSTEM VENDOR UNDER SEPARATE CONTRACT. ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO FURNITURE SYSTEM WITH "SEALTIGHT" FLEXIBLE CONDUIT WHIPS. COORDINATE EXACT LOCATIONS, CONDUIT ROUTING, AND REQUIREMENTS WITH ARCHITECTURAL PLANS, PROPERTY MANAGEMENT, AND FURNITURE SYSTEM SUPPLIER PRIOR TO ROUGH IN, CORE DRILLING AND ORDERING OF EQUIPMENT, (TYPICAL).
- WALL: PROVIDE TWO FOUR INCH SQUARE (DOUBLE GANG) WALL MOUNTED JUNCTION BOXES FOR POWER AND DATA. MOUNT OUTLETS AT +15" A.F.F.
- FLOOR: PROVIDE FULLY ASSEMBLED FIRE-RATED POKE-THRU PER CODE BELOW, OR EQUAL. COORDINATE COVER COLOR WITH ARCHITECT. ELECTRICAL CONTRACTOR SHALL PROVIDE X-RAYING OF FLOOR PRIOR TO CORE DRILL. ROUTE COMM CONDUIT TO NEAREST FULL HEIGHT ACCESSIBLE WALL. CORES TO BE 2" APART ON CENTER MINIMUM, AND MAXIMUM 1' FOR EVERY 65SF OF OVERALL FLOOR AREA.
- POWER POLE: WIREMOLD #30TP-2V OR EQUAL. PROVIDE TWO FOUR INCH SQUARE (DOUBLE GANG) JUNCTION BOXES ABOVE CEILING FOR POWER AND DATA. PROVIDE DATA GROMMET SIZED PER COMM CONDUIT CODE.
- SWITCHED RECEPTACLE: WHERE DESIGNATED, PROVIDE A HALF SWITCHED RECEPTACLE FOR DUPLEX DEVICES, AND ONE REGULAR/ONE FULLY SWITCHED RECEPTACLE FOR QUADRUPLUX DEVICES. TO BE CONTROLLED BY OCCUPANCY/VACANCY SENSORS IN THE ROOM (AS OCCUPANCY). USE A RATED REMOTE PLUG LOAD CONTROLLER UPSTREAM OR INTEGRAL RECEPTACLE MATCHING/COMPATIBLE WITH LIGHTING CONTROLS PROVIDED. RECEPTACLE TO EITHER COME OR BE FIELD LABELED PER NEC REQUIREMENTS FOR CONTROLLED RECEPTACLES.
- SWITCHED BRANCH: WHERE DESIGNATED, 25% ROUNDED UP OF BRANCH CIRCUITS IN MULTIWIRED FURNITURE FEED TO BE INTERCEPTED WITH A RATED PLUG LOAD CONTROLLER, CONTROLLED BY OCCUPANCY/VACANCY SENSORS IN THE ROOM (AS OCCUPANCY). DEVICE TO MATCH/BE COMPATIBLE WITH LIGHTING CONTROLS PROVIDED. EXCEPT IN LOCATIONS WITH A SINGLE CIRCUIT, CONTROL TO BE PLACED ON A NON-DEDICATED BRANCH, VERIFIED WITH FURNITURE MANUFACTURER PRIOR TO INSTALLATION. PROVIDE ANY APPLICABLE LABELING PER THE NEC FOR CONTROLLED DEVICES.

PROVIDE ALL ACCESSORIES, PARTS, AND PIECES NECESSARY FOR A COMPLETE INSTALLATION

CODE	CIRCUIT TYPE	CODE	COMM SIZE	CODE	POWER POLE & FLOOR BOX IDENT	CODE	SWITCHING
A	4 CIRCUIT 8 WIRE	1	1/2" C	P	OWNER SUPPLIED POWER POLE	X	SWITCHED RECEPTACLE
B	3 CIRCUIT 7 WIRE	2	3/4" C	Q	NEW POWER POLE. SEE ABOVE	Y	SWITCHED BRANCH
C	3 CIRCUIT 5 WIRE	3	1" C	S	WIREMOLD 4FFATC SERIES (3/4" PWR, 1-1/4" COMM) (SINGLE CORE/DEVICE FURNITURE FEED)		
D	2 CIRCUIT 6 WIRE	4	1-1/4" C	T	WIREMOLD RC7AFTC + RC7AMZTC (3/4" PWR, 2" COMM) (2 CORES/DEVICES FURNITURE FEED)		
E	2 CIRCUIT 4 WIRE	5	1-1/2" C	U	HUBBELL S1PTFIT (1" PWR, 1" COMM) + S1SP (DUPLEX + DATA OR 2ND DUPLEX IF NO COMM)		
F	1 CIRCUIT 3 WIRE	6	2" C	V	HUBBELL PT71SD + PT2FIT (3/4" PWR, 2" COMM) (2 CORES/DEVICES FURNITURE FEED)		
G	SEE DETAIL NOTES	7	SEE DETAIL NOTES	W	SEE DETAIL NOTES		

<b>Room Schedule</b>			
300	Public Corridor	312	Office
301	Waiting	313	Procedure
302	Reception	314	ADA Restroom
303	Exam	315	ADA Restroom
304	Provider Office	316	Exam
305	Procedure	317	Lab
306	Exam	318	Lab
307	Exam	319	Consult
308	Exam	320	--
309	Procedure	321	Break
310	Exam		
311	Exam		



#### POWER PLAN

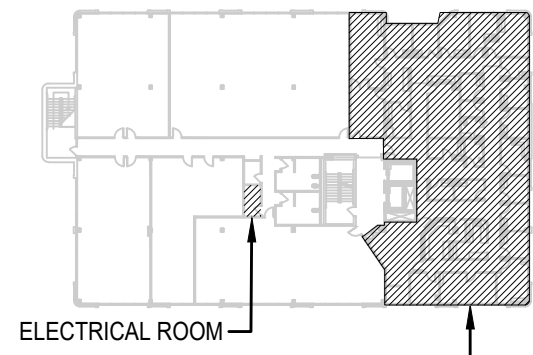
SCALE: 1/8"=1'-0"

GENERAL NOTES:

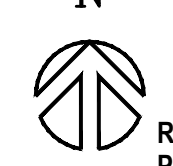
- NEW AND RELOCATED ITEMS SHOWN AS BOLD  
EXISTING ITEMS SHOWN AS LIGHT
- FOR AREAS WITH RECEPTACLES REQUIRING GFCI: GFCI BREAKERS  
TO MATCH THE PANEL MANUFACTURER AND AIC RATING (UNLESS NOTED FOR DEADFRONT GFI), SHALL BE UTILIZED ON EQUIPMENT WHERE GFCI RECEPTACLES ARE NOT READILY ACCESSIBLE, INCLUDING UNDER COUNTER AND BEHIND ANY APPLIANCES. ALSO, FOR ANY CONTROLLED OUTLETS, WHERE INDICATED, PER 2021 IECC, GFI RECEPTACLES (OR BREAKERS WHERE NOT READILY ACCESSIBLE) REQUIRED FOR ON-GRADE FLOORBOXES PER CODE. PROVIDE DEDICATED NEUTRAL WIRE FOR ALL THESE CIRCUITS. FOR EXISTING RECEPTACLES ALSO PROVIDE A GFCI BREAKER WHERE NOT READILY ACCESSIBLE. E.C. TO VERIFY CIRCUITS/ACCESSIBILITY FOR WHERE NEW BREAKERS ARE REQUIRED, AND NOT SHOWN IN SCHEDULES. FOR ANY PANELS WITH AIC VALUE EXCEEDING ITS RATING, PROVIDE A DEADFRONT GFCI INSTEAD OF A BREAKER (10K SCCR RATING, READILY ACCESSIBLE AND GREATER THAN 7' CONDUCTOR LENGTH FROM PANEL ASSUMING WORST CASE 20A/1PH FAULT DISTANCE).

#### DETAIL NOTES

- CONNECT TO EXISTING CIRCUIT SHOWN.
- E.C. TO PROVIDE ADHESIVE LABEL WITH CIRCUIT NUMBER ON RECEPTACLES. COORDINATE STYLE OF LABEL WITH PROPERTY MANAGEMENT PRIOR TO INSTALLING. SEE TYPICAL DEVICE LABELING DETAIL.
- E.C. TO COMPLY WITH NEC 517 IN PATIENT CARE AREAS INDICATED ESPECIALLY 517.13 AND 517.61(C), INCLUDING: PROVIDE HOSPITAL-GRADE RECEPTACLES FOR ALL DEVICES IN THIS ROOM. ALL BRANCH CIRCUITS (INCLUDING LIGHTING) IN THIS AREA SHALL BE RUN ENTIRELY IN EMT CONDUIT IN ORDER TO UTILIZE CONDUIT AS REDUNDANT GROUND PER CODE REQUIREMENTS OR PROVIDE GREEN HOSPITAL-GRADE AC/MC CABLE FOR REDUNDANT GROUND. PROVIDE EQUIPMENT GROUNDING CONDUCTOR THROUGHOUT. PROVIDE GFCI DEVICES THROUGHOUT. GFCI BREAKERS TO MATCH THE PANEL MANUFACTURER AND AIC RATING (UNLESS NOTED FOR DEADFRONT GFI), SHALL BE UTILIZED ON EQUIPMENT WHERE GFCI RECEPTACLES ARE NOT READILY ACCESSIBLE, INCLUDING UNDER COUNTER AND BEHIND ANY APPLIANCES. REQUIRED FOR FLOORBOXES PER CODE. PROVIDE DEDICATED NEUTRAL WIRE FOR ALL THESE CIRCUITS. FOR EXISTING RECEPTACLES ALSO PROVIDE A GFCI BREAKER WHERE NOT READILY ACCESSIBLE. E.C. TO VERIFY CIRCUITS/ACCESSIBILITY FOR WHERE NEW BREAKERS ARE REQUIRED, AND NOT SHOWN IN SCHEDULES. FOR ANY PANELS WITH AIC VALUE EXCEEDING ITS RATING, PROVIDE A DEADFRONT GFI INSTEAD OF A BREAKER (10K SCCR RATING, READILY ACCESSIBLE AND GREATER THAN 7' CONDUCTOR LENGTH FROM PANEL ASSUMING WORST CASE 20A/1PH FAULT DISTANCE).
- NEW/EXISTING RECEPTACLES AND/OR FURNITURE CIRCUITS TO BE CONTROLLED BY SENSORS IN THIS ROOM/AREA PER 2021 IECC/SENSOR SCHEDULE/FURNITURE SCHEDULE WHERE INDICATED. PER SENSOR/FURNITURE SCHEDULE: FURNITURE BRANCH CIRCUITS TO BE 25% ROUNDED UP (ONE CIRCUIT OF 2 TO 4 CIRCUIT FEED), AND DUPLEX/QUAD RECEPTACLES TO BE HALF CONTROLLED (TOP VS BOTTOM RECEPTACLE IN A DUPLEX), UNLESS OTHERWISE NOTED. REFER TO SCHEDULES FOR FULL DETAILS.
- E.C. TO ENSURE THE ELECTRICAL SEPARATION OF CIRCUITING BETWEEN ADJACENT SUITES, INCLUDING THE CONSTRUCTION OF NEW DEMISING WALL.
- RE-CIRCUIT EXISTING RECEPTACLE AS SHOWN. OLD CIRCUIT NUMBER SHOWN IN PARENTHESES.



City of Aurora Building Division  
Reviewed for Code Compliance  
Approved as Noted: William Griffin  
Date: Jun 10, 2024  
2021 INTERNATIONAL CODES & 2023 NEC



#### KEY PLAN

RSN: 1809706  
Permit #: 24-2442307 LT

#### Dates of Record

Project Start Date: 06 Dec 2023

Issued On Issued For

05/08/2024 REVIEW SET

05/22/2024 TENANT REVIEW & APPROVAL:

(REVISED) PRICING AND CONSTRUCTION

05/29/2024 PERMIT SET

Sheet  
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Sheet  
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POWER  
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23324

**E2.0**



Locate the required overcurrent Protection per 2023 NEC 240.21

110.14. Identify disconnects per 2023 NEC 110.22 and provide working space and egress to and around electrical equipment per 2023 NEC 110.26

An after-hours inspection to verify required egress illumination may be required during field inspection.  
2015 IBC 1008

Provide Emergency Illumination that complies with 2023 NEC 700.16

Suspended Ceiling Systems and the Luminaires They support shall meet the requirements of 410.36(B) 2023 NEC

Wiring in air handling space must comply with 2023 NEC 300.22. Firestop penetrations per 2023 NEC 300.21. Secure and support equipment per 2023 NEC 300.11.

LIGHTING FIXTURE SCHEDULE															
ID	TYPE	SIZE	DESCRIPTION	MANUFACTURER	MODEL	CATALOG NUMBER	MOUNTING	DIMMING	LUMEN S (LM)	TEMP (K)	CRI	VOLTS (V)	WATTS (W)	NOTES	#
A	LED	2' X 4'	RECESSED TROFFER	LITHONIA	2FSL4	2FSL4-40L-GZ10-LP835	RECESSED	10% (0-10V)	4000	3500	80+	277	31.7		
AE	LED	2' X 4'	RECESSED TROFFER W/BATTERY	LITHONIA	2FSL4	2FSL4-40L-GZ10-LP835-EL14L FORGO EL14L F ON GENERATOR	RECESSED	10% (0-10V)	4000	3500	80+	277	31.7		
B	LED	2' X 2'	RECESSED TROFFER	LITHONIA	2FSL2	2FSL2-33L-GZ10-LP835	RECESSED	10% (0-10V)	3300	3500	80+	277	27.1		
C	LED	d = 4"	DOWNLIGHT	SYLVANIA	LEDRT4	LEDRT4/R4AS900UD/935S	RECESSED	10% (0-10V)	900	3500	90	277	10.5		
D	LED	24"	24" LED VANITY	MODERN FORMS	POLAR	WS-3226F	WALL	10% (0-10V)	2617	3000	80	277	45		
X	LED	-	EDGE LIT GREEN BLADE TYPE EXIT SIGN W/BATTERY	ISOLITE	UNIVERSAL MOUNT EXIT SIGN	UEL-EM-G-1C2M-MTEBR	UNIVERSAL	-	-	-	-	277	-	[EX]	

PROVIDE ALL PARTS AND PIECES AS NEEDED FOR COMPLETE INSTALLATION. COORDINATE FINAL LOCATIONS, MOUNTING HEIGHTS, AND FIXTURE OPTIONS WITH ARCHITECT AND/OR TENANT. FIXTURES ON SCHEDULE MAY BE SHOWN FOR REFERENCE ONLY. VERIFY FIXTURE QUANTITIES WITH DRAWINGS PRIOR TO ORDERING.

\* COORDINATE OPTION WITH ARCHITECT/TENANT.

\*\* LIGHTING PACKAGE SUPPLIER SHALL BE ESAM JONES.

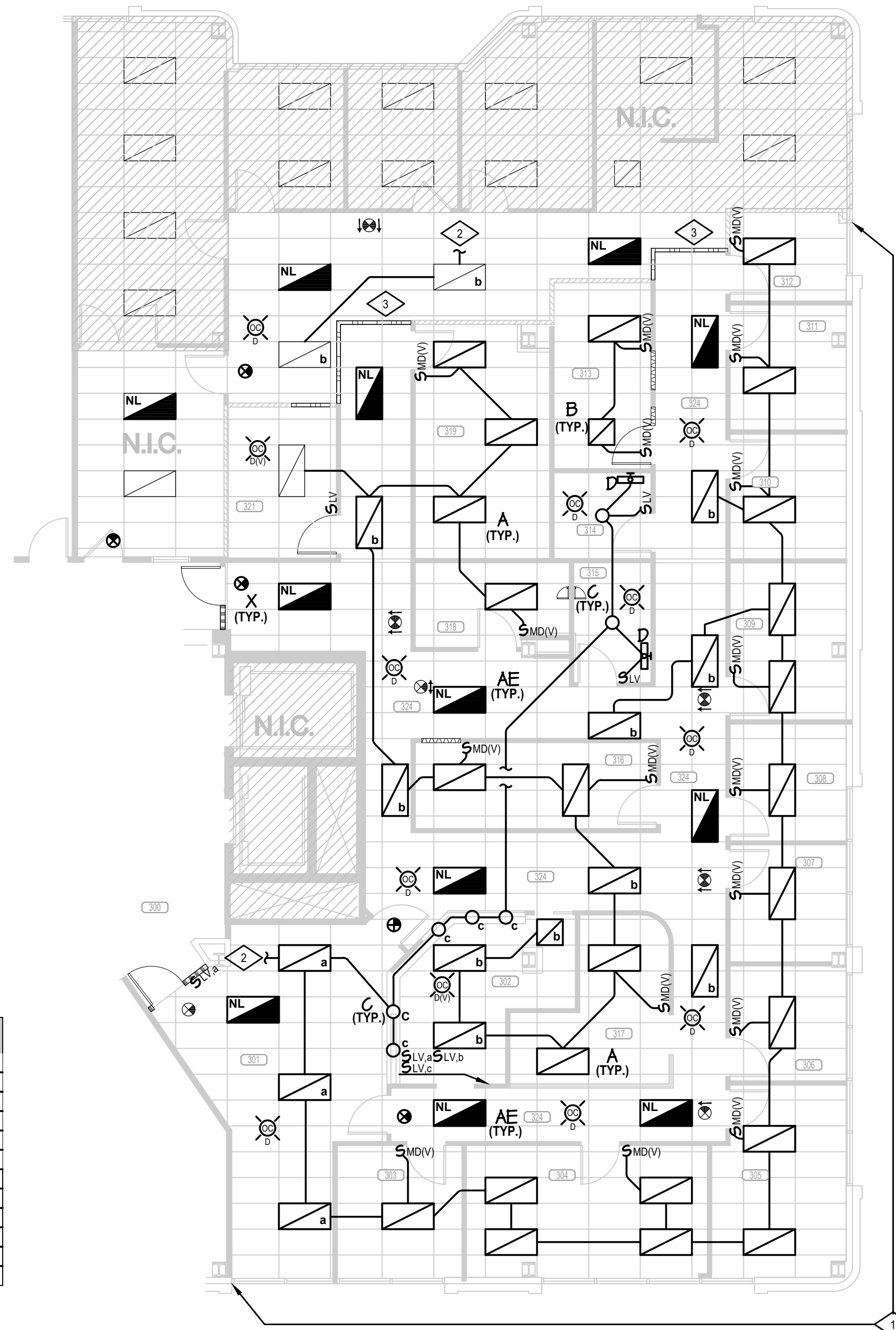
JOE LEHMBERG  
NATIONAL ACCOUNT SALES GROUP  
ESAM JONES DISTRIBUTOR, INC.  
PHONE: 615-668-0633 EMAIL: JLEHMBERG@ESAMJONES.COM

PROVIDE NL FIXTURES WITH 90-MIN BATTERY BACKUP AND TEST SWITCH AND CIRCUIT TO LOCAL LIGHTING CIRCUIT AHEAD OF CONTROL. EXEMPTED FROM AUTOMATIC CONTROL PER IECC

NL SAFETY/SECURITY EXEMPTION.

[EX] PROVIDE EXIT SIGNS WITH 90-MIN BATTERY BACKUP AND CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF CONTROL.

Room Schedule		
300	Public Corridor	312 Office
301	Waiting	313 Procedure
302	Reception	314 ADA Restroom
303	Exam	315 ADA Restroom
304	Provider Office	316 Exam
305	Procedure	317 Lab
306	Exam	318 Lab
307	Exam	319 Consult
308	Exam	320 -
309	Procedure	321 Break
310	Exam	
311	Exam	



## LIGHTING PLAN

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

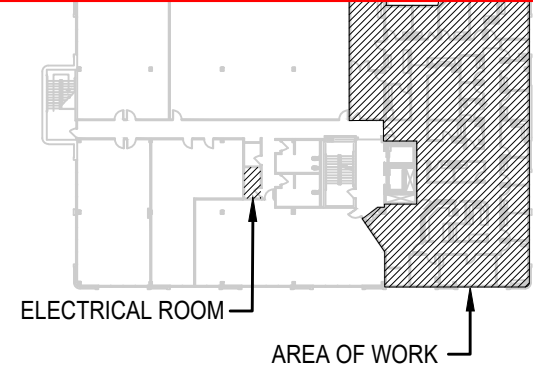
GENERAL NOTES:

- NEW AND RELOCATED ITEMS SHOWN AS BOLD
- EXISTING ITEMS SHOWN AS LIGHT
- LOWER CASE LETTERING INDICATED ON SWITCHES AND FIXTURES IF SHOWN, WHICH SWITCHES CONTROL WHICH FIXTURES
- LOW VOLTAGE WIRING, ACCESSORIES, POWER PACKS, AND/OR DATA CABLING FOR ALL LIGHTING CONTROLS ARE NOT SHOWN GRAPHICALLY. THESE MUST BE PROVIDED FOR ALL CONTROL CHANGES/MODIFICATIONS AS REQUIRED BY THE MANUFACTURER SHOP DRAWINGS, AND SHALL NOT BE CONSIDERED AS EXISTING TO BE RE-USED UNLESS APPROVED IN WRITING BY THE ARCHITECT/ENGINEER.

## DETAIL NOTES

- DAYLIGHT DIMMING NOT APPLIED. FIXTURES IN DAYLIGHT ZONE ARE LESS THAN OR EQUAL TO 150W IN FIRST ZONE AND 300W TOTAL IN FIRST PLUS SECOND ZONE PER SPACE.
- CONNECT TO NEAREST AVAILABLE LIGHTING CIRCUIT. E.C. TO VERIFY NO MORE THAN 70% LOAD ON A SINGLE 277V LIGHTING CIRCUIT.
- E.C. TO ENSURE THE ELECTRICAL SEPARATION OF CIRCUITING BETWEEN ADJACENT SUITES, CONCLUDING THE CONSTRUCTION OF NEW DEMISING WALL.
- WALL SENSORS IN AREAS WITH RECEPTACLE CONTROL TO BE LOW VOLTAGE SENSORS/SWITCHES OF THE TYPE INDICATED (IN LIEU OF LINE VOLTAGE), WITH A LIGHT/RECEPTACLE CONTROL METHOD OF EITHER REMOTE POWER PACKS OR DIRECTLY INTERFACED DEVICES (DEPENDING ON SYSTEM CHOSEN). IN THE CASE OF MANUFACTURERS WITHOUT THE LOW VOLTAGE SENSORS REQUIRED, IT IS ACCEPTABLE TO UTILIZE LOW VOLTAGE WALL SWITCHES WITH CEILING MOUNTED SENSORS OF THE TYPE INDICATED INSTEAD, WITH THE SAME LIGHT/RECEPTACLE CONTROL METHOD.

5. E.C. TO COMPLY WITH NEC §17 IN PATIENT CARE AREAS INDICATED (ESPECIALLY §17.13 AND §17.81(1)). INCLUDING: PROVIDE HOSPITAL-GRADE RECEPTACLES FOR ALL DEVICES IN THIS ROOM. ALL BRANCH CIRCUITS (INCLUDING LIGHTING) IN THIS AREA SHALL BE RUN ENTIRELY IN EMT CONDUIT IN ORDER TO UTILIZE CONDUIT AS REDUNDANT GROUND PER CODE REQUIREMENTS OR PROVIDE GREEN HOSPITAL-GRADE AC/MC CABLE FOR REDUNDANT GROUND. PROVIDE EQUIPMENT GROUNDING CONDUCTOR THROUGHOUT. PROVIDE GFCI DEVICES THROUGHOUT. GFCI BREAKERS TO MATCH THE PANEL MANUFACTURER AND AIC RATING (UNLESS NOTED FOR DEADFRONT GFI). SHALL BE UTILIZED ON EQUIPMENT WHERE GFCI RECEPTACLES ARE NOT READILY ACCESSIBLE, INCLUDING UNDER COUNTER AND BEHIND ANY APPLIANCES. REQUIRED FOR FLOORBOXES PER CODE. PROVIDE DEDICATED NEUTRAL WIRE FOR ALL THESE CIRCUITS. FOR EXISTING RECEPTACLES ALSO PROVIDE A GFCI BREAKER WHERE NOT READILY ACCESSIBLE. E.C. TO VERIFY CIRCUITS/ACCESSIBILITY FOR WHERE NEW BREAKERS ARE REQUIRED, AND NOT SHOWN IN SCHEDULES. FOR ANY PANELS WITH AIC VALUE EXCEEDING ITS RATING, PROVIDE A DEADFRONT GFI INSTEAD OF A BREAKER (10K SCOR RATING, READILY ACCESSIBLE AND GREATER THAN 7' CONDUCTOR LENGTH FROM PANEL ASSUMING WORST CASE 20A/1PH FAULT DISTANCE).



City of Aurora Building Division  
Reviewed for Code Compliance  
Approved as Noted: William Griffin  
Date: Jun 10, 2024  
2021 INTERNATIONAL CODES & 2023 NEC



## KEY PLAN

RSN: 1809706  
Permit #: 24-2442307 LT

Sheet Contents LIGHTING PLAN  
Project Team AH/AW  
Project Number 23324  
Sheet Mark

## Dates of Record

Project Start Date: 06 Dec 2023

Issued On Issued For

05/08/2024 REVIEW SET

05/22/2024 TENANT REVIEW & APPROVAL:

(REVISED) PRICING AND CONSTRUCTION

05/29/2024 PERMIT SET

Redwood Medical



1411 South Potomac  
1411 South Potomac  
Aurora Co  
Suite 300



IECC: 2021

NEC: 2023



Every circuit and circuit modification shall be provided with a legible and permanent description that complies with all of the following conditions as applicable (see 1-6). 2023 NEC 408.4

SUPPLIED FROM: FED FROM 75 KVA XFMR LOCATED ADJACENT WITHIN SAME ELECTRICAL ROOM										
PANEL "L3A" (EXISTING)		M.C.B. 200/3 A		VOLTAGE 120 / 208 V		3 Ø		4 W		
FLUSH SURFACE X		BUS 225 A CU		MLO L3B		I.G. BAR A.I.C. 10 K		MANF. SQUARE D		C.B. BOLT ON
TYPE	DESCRIPTION	BKR	CIR	LOAD (VOLT AMPS) / PHASE			CIR	BKR	DESCRIPTION	TYPE
R	CORE RECS	20	1	720	A	540	2	20	STE 300 EXAM RECS	R
R	TELE BOARD REC	20	3			720 720	4	20	STE 300 EXAM RECS	R
M	EWC	20	5			1680 720	6	20	STE 300 EXAM RECS	R
R	STE 300 RECS	20	7	720		540	8	20	STE 300 EXAM RECS	R
L	STE 300 WALL SCONE	20	9			500 720	10	20	STE 300 TEST RECS	R
K	EWH 208V	20	11			1500 540	12	20	STE 300 TEST RECS	R
K	-	2P	13	1500		720	14	20	STE 300 TEST RECS	R
K	EWH 208V	20	15			1500 720	16	20	STE 300 RECS	R
K	-	2P	17			1500 1080	18	20	STE 300 RECS	R
G	FA BOOSTER PANEL	20	19	1000		1080	20	20	STE 300 RECS	R
L	STE 300 DOWNLIGHTS	20	21			500 720	22	20	STE 320 EXAM RECS	R
L	STE 300 DOWNLIGHTS	20	23			500 720	24	20	STE 320 EXAM RECS	R
R	STE 300 NURSE LAB	20	25	1080		720	26	20	STE 320 EXAM RECS	R
R	STE 300 NURSE LAB	20	27			360 720	28	20	STE 320 EXAM RECS	R
R	STE 300 RECS	20	29			720 500	30	20	STE 320 TELE BOARD	G
K	STE 300 MICROWAVE	20	31	1000		750	32	20	STE 320 REFRIGERATOR	K
K	STE 300 DISHWASHER	20	33			1200 1176	34	20	STE 320 DISPOSAL	K
R	STE 300 KITCHEN	20	35			540 360	36	20	STE 320 DED REC	R
K	STE 300 DISPOSAL	20	37	1176		360	38	20	STE 320 DED REC	R
K	STE 300 REFRIGERATOR	20	39			750 720	40	20	STE 320 RECS	R
R	STE 300 WIREMOLD	20	41			720 720	42	20	EXISTING LOAD	R
				L3A	11906	11026	11800			
				L3B	21826	23280	19750			
TOTAL				33732	34306	31550				
LOAD TYPE		CONNECTED KVA			TOTAL ALL PHASES		FACTOR		DEMAND KVA	
		A	B	C					A	B C
LIGHTING / EV CHARGERS		1.0	1.0	1.5	3.5		125%		1.3	1.3 1.9
RECEPTACLE (10KVA OR LESS)		3.3	3.3	3.3	10.0		100%		3.3	3.3 3.3
RECEPTACLE (OVER 10KVA)		14.7	16.0	14.8	45.4		50%		7.3	8.0 7.4
HVAC/MOTOR		0.0	0.0	0.1	0.1		100%		0.0	0.0 0.1
MOTOR (LARGEST)		0.0	0.0	1.7	1.7		125%		0.0	0.0 2.1
KITCHEN EQUIPMENT		7.5	9.3	8.2	25.0		65%		4.9	6.0 5.3
MISCELLANEOUS		7.2	4.7	2.0	13.9		100%		7.2	4.7 2.0
TOTAL KVA		33.7	34.3	31.6	99.6		TOTAL KVA		24.0	23.3 22.1
TOTAL AMPS		200.0	194.2	184.2	193					
WITH GROUND BUS										
LEGEND		L = LTG / EV		R = RECEPTACLE		M = HVAC / MOTOR		K = KITCHEN		G = MISCELLANEOUS
MAX PERCENT DIFFERENCE BETWEEN PHASES (A.B.C.): 8%										





City of Aurora Building Division  
Reviewed for Code Compliance  
Approved as Noted: William Griffin  
Date: Jun 10, 2024  
2021 INTERNATIONAL CODES & 2023 NEC

Sheet Contents  
Project Team AH/AW  
Project Number 23324  
Sheet  
Mark

E5.0

RSN: 1809706  
Permit #: 24-2442307 LT

COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2021 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

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

Section # & Req-ID	Plan Review	Complies?	Comments/Assumptions
C103.2 (P101)	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1)

2 Medium Impact (Tier 2)

3 Low Impact (Tier 3)

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 4 of 7

COMcheck Software Version COMcheckWeb

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 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Alexander Hoover - Project Manager  
Signature: Alexander Hoover  
Date: 05/08/2024

Total Proposed Watts = 1644

Interior Lighting PASSES

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 3 of 7

Proposed Interior Lighting Power

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
301 - Lobby (Common Space Types: Lobby - General, 330 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	4	32	127
302 - Waiting (Common Space Types: Office - Enclosed, 129 sq.ft.) LED: B: 2X2 TROFFER: Other:	1	1	27	27
LED: A: 2X4 TROFFER: Other:	1	4	32	127
LED: C: LED DOWNLIGHT: Other:	1	5	10	52
303 - Exam (Healthcare Facility: Exam/Treatment, 100 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
304 - Provider Office (Common Space Types: Office - Enclosed, 190 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	4	32	127
305 - Procedure (Healthcare Facility: Exam/Treatment, 100 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	2	32	63
306 - Exam (Healthcare Facility: Exam/Treatment, 80 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
307 - Exam (Healthcare Facility: Exam/Treatment, 80 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
308 - Exam (Healthcare Facility: Exam/Treatment, 80 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
309 - Procedure (Healthcare Facility: Exam/Treatment, 110 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	2	32	63
310 - Exam (Healthcare Facility: Exam/Treatment, 87 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
311 - Exam (Healthcare Facility: Exam/Treatment, 87 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
312 - Office (Common Space Types: Office - Enclosed, 62 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
313 - Exam (Healthcare Facility: Exam/Treatment, 66 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
314 - Storage (Common Space Types: Storage <50 sq.ft., 40 sq.ft.) LED: B: 2X2 TROFFER: Other:	1	1	27	27
315 - Restroom (Common Space Types: Restrooms, 50 sq.ft.) LED: C: LED DOWNLIGHT: Other:	1	1	10	10
LED: D: LED VANTY: Other:	1	1	45	45
316 - Restroom (Common Space Types: Restrooms, 55 sq.ft.) LED: C: LED DOWNLIGHT: Other:	1	1	10	10
LED: D: LED VANTY: Other:	1	1	45	45
317 - Lab (Common Space Types: Laboratory For Medical/Industrial/Research, 66 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
318 - Lab (Common Space Types: Laboratory For Medical/Industrial/Research, 120 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	2	32	63
319 - PCR (Common Space Types: Office - Enclosed, 56 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
321 - Exam (Healthcare Facility: Exam/Treatment, 75 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	1	32	32
322 - Consult (Common Space Types: Office - Enclosed, 185 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	3	32	95
323 - Break (Common Space Types: Lounge/Breakroom, 98 sq.ft.): Exempt LED: A: 2X4 TROFFER: Other:	1	13	32	412
324 - Corridor (Common Space Types: Corridor/Transition <8 ft wide, 940 sq.ft.) LED: A: 2X4 TROFFER: Other:	1	13	32	412

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 2 of 7

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC  
Project Title: Redwood Medical  
Project Type: Alteration

Construction Site: 1411 South Potomac, Aurora, Colorado 80012  
Owner/Agent: John Cinceros TPS, 1660 Lincoln Street, Denver, Colorado 80264, 303-861-4800, john@jcs-design.com  
Designer/Contractor: Alexander Hoover, Corey Electrical Engineering, 7822 South Wheeling Court Suite B, Englewood, Colorado 80112, 303-309-4954, ahoover@coreyeng.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts
1-301 - Lobby (Common Space Types:Lobby - General)	330	0.84	277
2-302 - Waiting (Common Space Types:Office - Enclosed)	129	0.74	95
3-303 - Exam (Healthcare Facility:Exam/Treatment)	100	1.40	140
4-304 - Provider Office (Common Space Types:Office - Enclosed)	190	0.74	141
5-305 - Procedure (Healthcare Facility:Exam/Treatment)	100	1.40	140
6-306 - Exam (Healthcare Facility:Exam/Treatment)	80	1.40	112
7-307 - Exam (Healthcare Facility:Exam/Treatment)	80	1.40	112
8-308 - Exam (Healthcare Facility:Exam/Treatment)	80	1.40	112
9-309 - Procedure (Healthcare Facility:Exam/Treatment)	110	1.40	154
10-310 - Exam (Healthcare Facility:Exam/Treatment)	87	1.40	122
11-311 - Exam (Healthcare Facility:Exam/Treatment)	87	1.40	122
12-312 - Office (Common Space Types:Office - Enclosed)	62	0.74	46
13-313 - Exam (Healthcare Facility:Exam/Treatment)	66	1.40	92
14-314 - Storage (Common Space Types:Storage <50 sq.ft.)	40	0.38	15
15-315 - Restroom (Common Space Types:Restrooms)	50	0.63	32
16-316 - Restroom (Common Space Types:Restrooms)	55	0.63	35
17-317 - Lab (Common Space Types:Laboratory For Medical/Industrial/Research)	66	1.33	88
18-318 - Lab (Common Space Types:Laboratory For Medical/Industrial/Research)	120	1.33	160
19-319 - PCR (Common Space Types:Office - Enclosed)	56	0.74	41
20-321 - Exam (Healthcare Facility:Exam/Treatment)	75	1.40	105
21-322 - Consult (Common Space Types:Office - Enclosed)	185	0.74	137
22-323 - Break (Common Space Types:Lounge/Breakroom): Exempt			
23-324 - Corridor (Common Space Types:Corridor/Transition <8 ft wide)	940	0.71	667
Total Allowed Watts = 2945			

Area Category Exemption Qualifications

Activity Area	# Fixtures	Total # Watts	
Pre-Alt.	Repl./Added	Pre-Alt.	Post-Alt.
323 - Break (Common Space Types: Lounge/Breakroom, 98 sq.ft.) Exemption: Replacement of bulbs and ballasts only.		31.700	31.700

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 1 of 7

COMcheck Software Version COMcheckWeb

Final Inspection

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 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Alexander Hoover - Project Manager  
Signature: Alexander Hoover  
Date: 05/08/2024

Final Inspection PASSES

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 7 of 7

COMcheck Software Version COMcheckWeb

Rough-In Electrical Inspection

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Alexander Hoover - Project Manager  
Signature: Alexander Hoover  
Date: 05/08/2024

Rough-In Electrical Inspection PASSES

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
Page 6 of 7

COMcheck Software Version COMcheckWeb

Rough-In Electrical Inspection

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Alexander Hoover - Project Manager  
Signature: Alexander Hoover  
Date: 05/08/2024

Rough-In Electrical Inspection PASSES

Project Title: Redwood Medical  
Data Filename: Report date: 05/08/24  
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