SAINT LUKE'S HOSPITAL OF LEE'S SUMMIT DIALYSIS STORAGE 100 NE SAINT LUKE'S BLVD. LEE'S SUMMIT, MO 64086



BOLAND ARCHITECTS

MEP CONSULTANT

PROJECT TEAM

ARCHITECT ACI BOLAND, INC.

1710 WYANDOTTE STREET KANSAS CITY, MO 64108 PHONE 816.763.9600 816.763.9757 FAX

MEP ENGINEER

IMEG Corp.

1600 Baltimore, Suite 300 Kansas City, MO 64108 816.842.8437 PHONE 816.842.6441 FAX

ABBREVIATIONS

FLUORESCENT ACOUSTIC/ACOUSTICAL FOOTING FOUNDATION ADD'N. ADDITION AGGREGATE BASE COURSE F.H.C. FIRE HOSE CAB. ABOVE FINISH FLOOR FIELD VERIFY AGGREGATE AIR CONDITIONING ALUMINUM ALTERNATE ANCHOR BOL GRAM GRILLE ARCH. ARCHITEC1 GND. GROUND GALVANIZED STEEL GYPSUM GWB/G.B. GYPSUM BOARD HAND RAII HDN. HARDENER HDW. HARDWARE BENCHMARK HDWD. HARDWOOD HTR. HEATER BOTTOM OF BLDG. BUILDING HEIGHT H.P. HIGH POINT H.M. HOLLOW METAI CABINET HORIZ. HORIZONTAL CAST IN PLACE H.B. HOSE BIB CATCH BASIN H.W. HOT WATER CEILING CEMENT/CEMENTITIOUS CENTIGRAM INCH / INCHES INSIDE DIAMETER CENTIMETER INSULATION CENTER LINE INT. INTERIOR INVERT CERAMIC TILE CHANNEL

JANITOR JOINT JOIST KICK PLATE LANDING LATH LAVATORY

CLEAN OUT CLOSET COLUMN CONC. CONCRETE CONST. CONSTRUCTION CONTROL JOINT CONSTRUCTION JOIN CONT. CONTINUOUS CONTR. CONTRACTOR LOCATION COR'G. CORRUGATED LIGHT CTR. COUNTER LIGHT WEIGHT CONCRETE L.W.C. CTSK. COUNTERSUNK LVR. LOUVER C.M.U. CONCRETE MASONRY UNIT LOC. LOCATION MASONRY OPENING DECIBEL MATERIAL DIAGONAL MANUFACTURER DIAMETER MARKER BOARD DIMENSION MAXIMUM DISPENSER MECHANICAL DOWEL MTL. METAL DOWN METAL LATH D.S. DOWNSPOUT METER DWG. DRAWING MINIMUM MLDG. MOLDING MULLION EACH ELEC ELECTRIC E.W.C. ELECTRIC WATER COOLER N.G. NATURAL GRADE ELEVATION NOM. NOMINAL ELEV. ELEVATOR N.I.C. NOT IN CONTRACT EQ. EQUAL N.T.S. NOT TO SCALE

SW.BD. SWITCHBOARD TOP OF CURB TEMPERED GLASS TOP OF T.S.D. TOP OF STEEL DECK T.W. TEACHERS WARDROBE TYP. TYPICAL U.O.N. UNLESS OTHERWISE NOTED VENT VERT. VERTICAL V.G. VERTICAL GRAIN VEST. VESTIBULE V.C.T. VINYL COMPOSITION TILE VCP VITREOUS CLAY PIPE NO. /# NUMBER W.W.M. WELDED WIRE MESH W.C. WATER CLOSET OBS. OBSCURE W.H. WATER HEATER ON CENTER W.F. WIDE FLANGE OPN'G. OPENING W/ WITH O.A. OVERALL W/O WITHOUT OUTSIDE DIAMETER O.F.S. OVERFLOW SCUPPER WDW. WINDOW O.F.D. OVERFLOW DRAIN O.H.D. OVERHEAD DOOR

PAGE

PENNY

PLATE

P.S.F. POUNDS PER SQ. F

P.L. PROPERTY LINE

POUNDS PER SQ. IN

RISER, RISERS RADIUS

ROOF DRAIN

REFER TO

REGISTER

REVISION

R.O. ROUGH OPENING

SELECT

SIDING

SLDG. SLIDING

STD.

SIMILAR

SMOOTH

SQUARE

STAINED

STANDARD

SPEC. SPECIFICATION

ST.STL. STAINLESS STEE

STRUC. STRUCTURE

SUSP. SUSPENDED

SHEATHING

SEALED CONCRETE

REQ'D. REQUIRED

RF'G. ROOFING

RGH. ROUGH

RND. ROUND

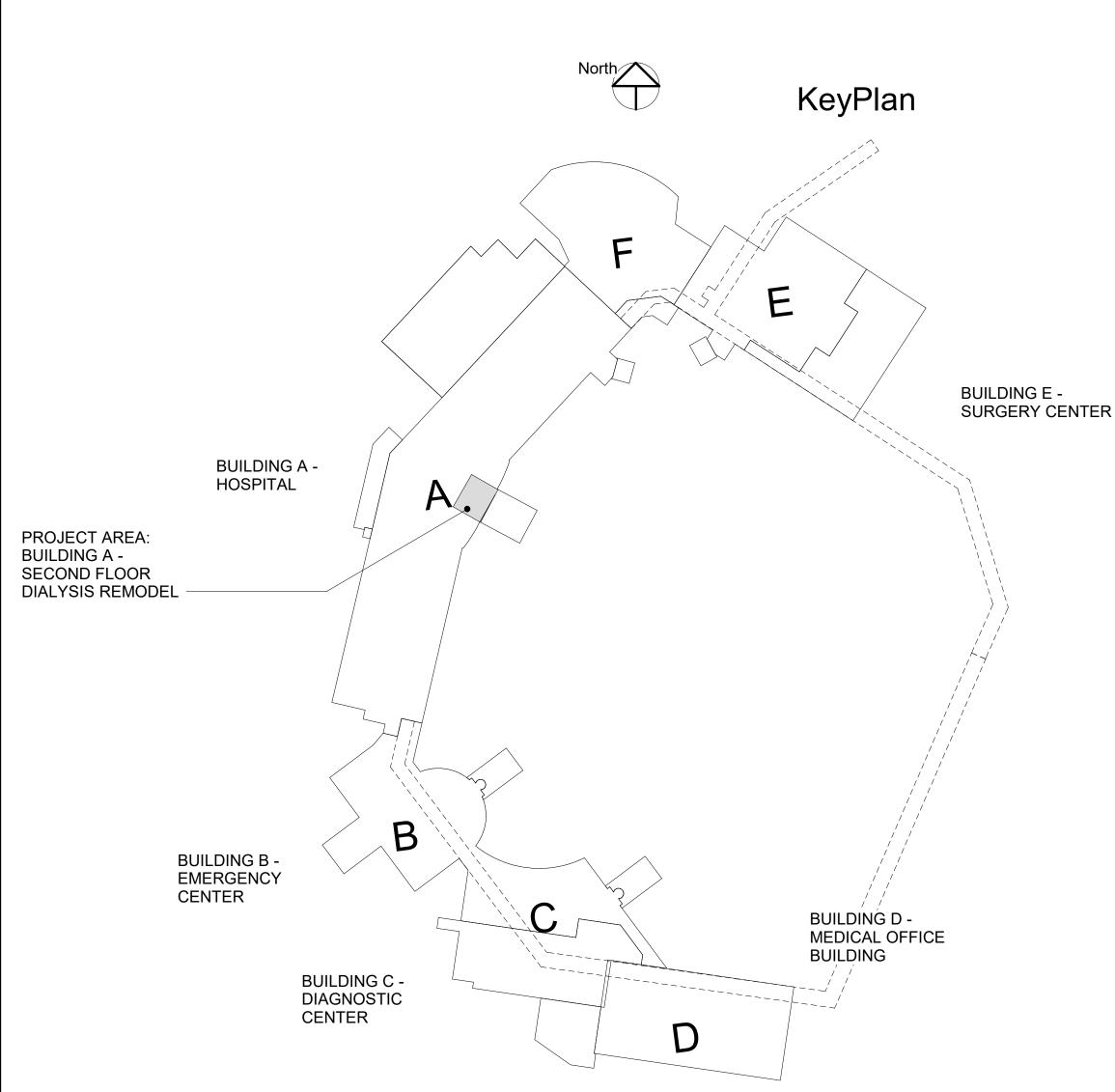
SCHED. SCHEDULE

PLBG. PLUMBING

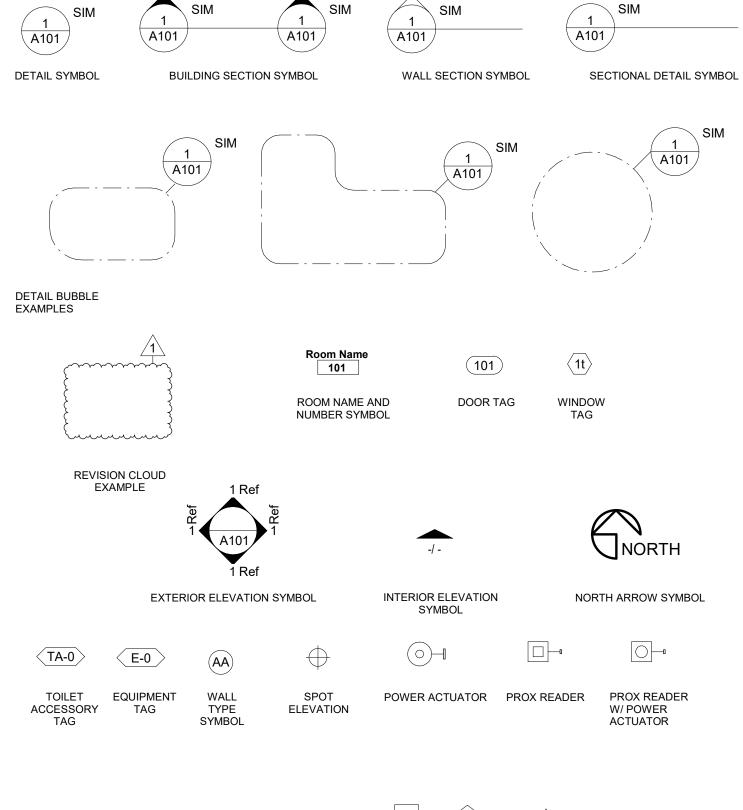
PLYWD. PLYWOOD

PLAM. PLASTIC LAMINATE

LOCATION PLAN



SYMBOLS



STANDARD VIEW TITLE KEYNOTE SYMBOLS

DOOR HOLD

SYMBOL

U.L. DESIGN ASSEMBLIES **DEMOLITION PLAN ARCHITECTURE**

FIRST FLOOR DIMENSION PLAN FIRST FLOOR PLUMBING PLANS FIRST FLOOR POWER-SYSTEMS PLAN

GENERAL NOTES

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES AND REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING PERMITS.

THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY INCONSISTENCIES OR DISCREPANCIES WTH THE PROJECT DOCUMENTS. ACCESS TO THE SITE AND/OR SPACE UNDER CONSTRUCTION DURING BIDDING AND CONSTRUCTION SHALL BE

DO NOT SCALE DRAWINGS.

THE WORD "ALIGN" AS USED IN THESE DOCUMENTS SHALL SUPERSEDE ANY DIMENSIONAL INFORMATION GIVEN.

TYPICAL DIMENSIONS ARE TO FACE OF CONCRETE, DRYWALL, CURTAIN WALL, ETC., OR TO COLUMN CENTERLINE. DIMENSIONS AT WINDOWS ARE TYPICALLY TO FACE OF FRAME. REFER TO PLAN DETAILS FOR

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. THE SUBSTRATE SHALL BE SMOOTH AND FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS

8. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP

THE GENERAL CONTRACTOR SHALL INSPECT AND CHECK THE ADEQUACY AND INSTALLATION OF THROUGH-WALL FLASHING PRIOR TO COVERING WITH FINISH MATERIALS. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO INSPECTION AGAINST HOLES OR PENETRATIONS, APPROPRIATE LAPPING AND SEALING, AND OVERALL WORKMANSHIP IN CONFORMANCE WITH THE SPECIFICATIONS.

SHEET INDEX

NUMBER SHEET NAME **COVER SHEET** LIFE SAFETY PLAN

Job Number

Checked By

Number Date

Drawn By

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COVER SHEET

C.O.

EQUIP. EQUIPMENT

EXPAN. EXPANSION

E.J. EXPANSION JOINT

FEET / FOOT

FINISH

FLASHING

EXH. EXHAUST

EXIST. EXISTING

EXT. EXTERIOR

FIXT. FIXTURE

FLR. FLOOR F.D. FLOOR DRAIN

7.10.2024

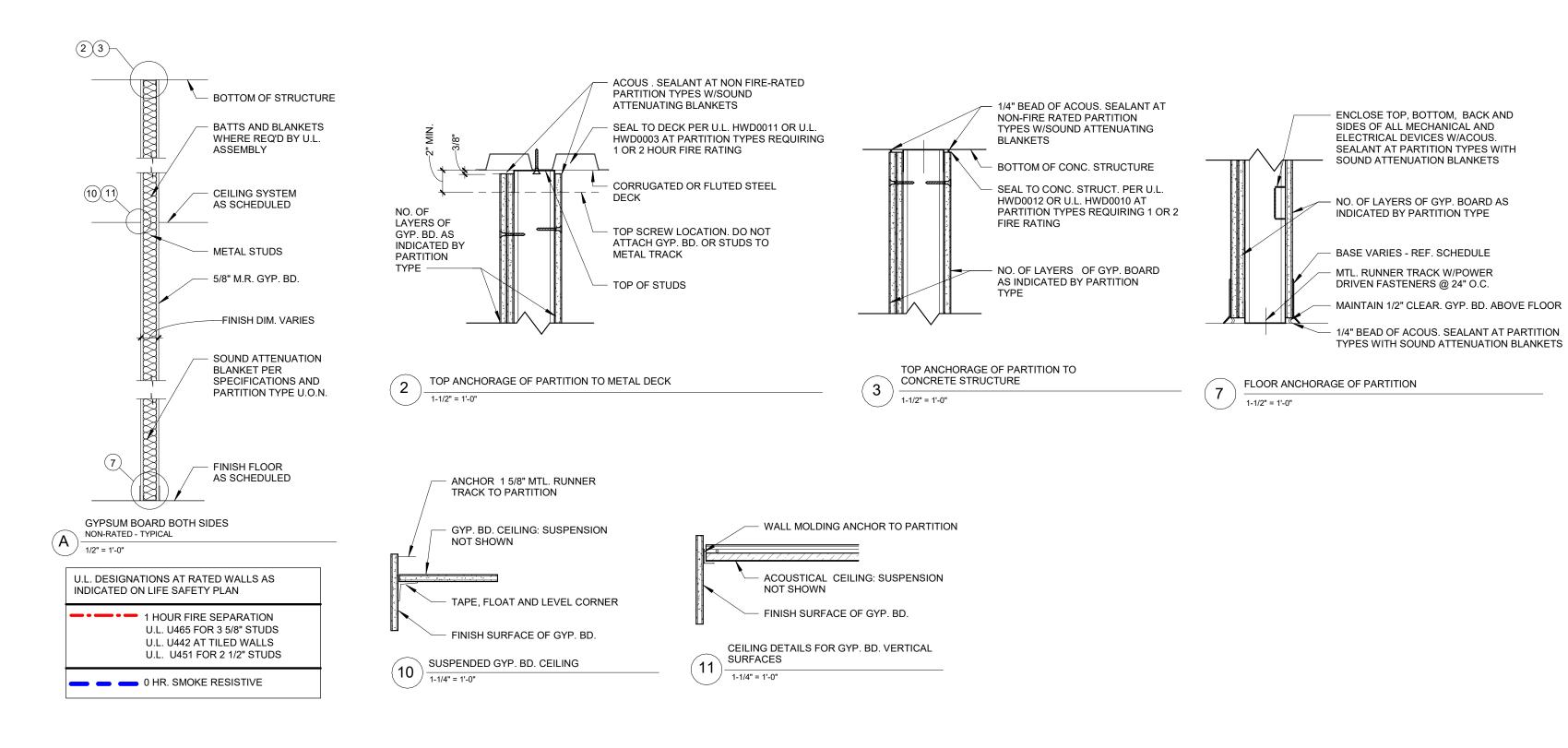
3-19043

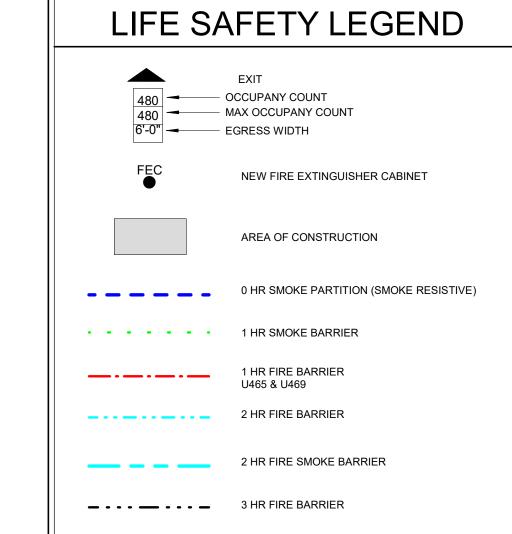
PARTITION GENERAL NOTES

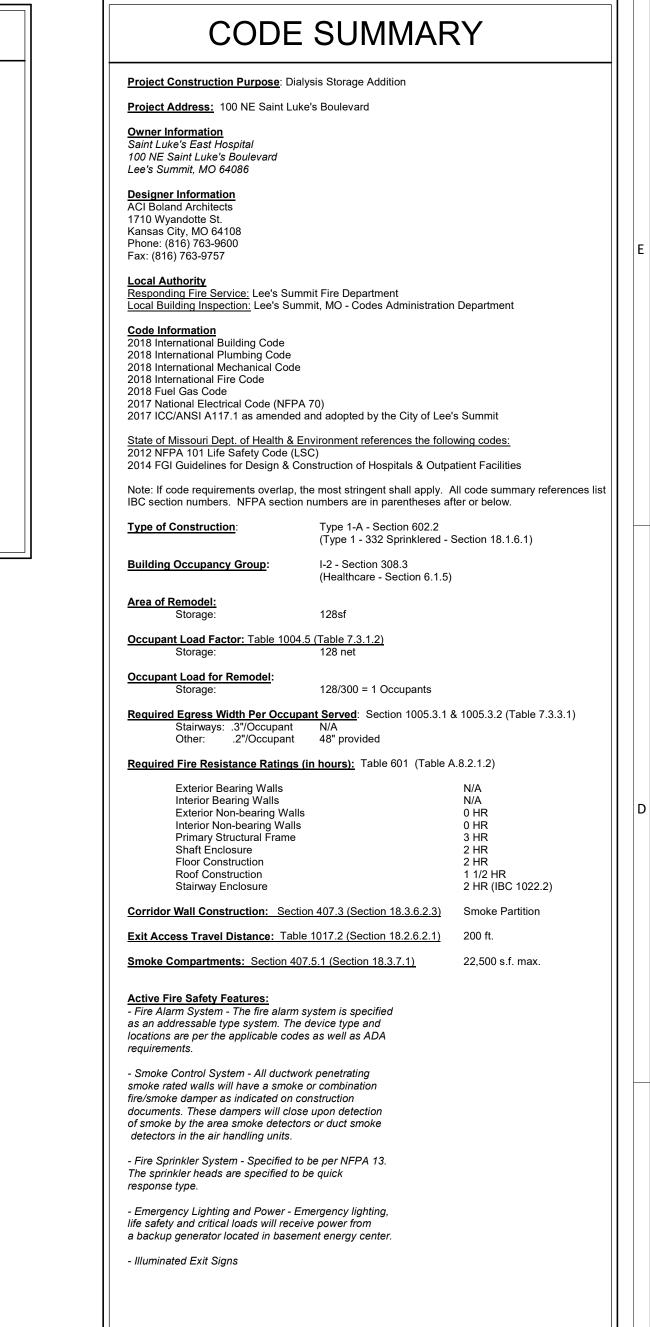
- UNLESS NOTED OTHERWISE, ALL INTERIOR METAL STUDS ARE 3 5/8" THICK. REFER TO SUFFIX SCHEDULE BELOW FOR LOCATIONS OF METAL STUDS OTHER THAN 3-5/8" THICK. NOTE: STUD THICKNESS (GAUGE) MUST CONFORM TO MANUFACTURER'S RECOMMENDATIONS FOR SPAN (HEIGHT OF STUD)
- 2. WHERE THE PARTITION TYPE INDICATION IS SHOWN WITH A NUMERICAL SUFFIX, THE METAL STUD THICKNESS SHALL BE AS SCHEDULED BELOW:

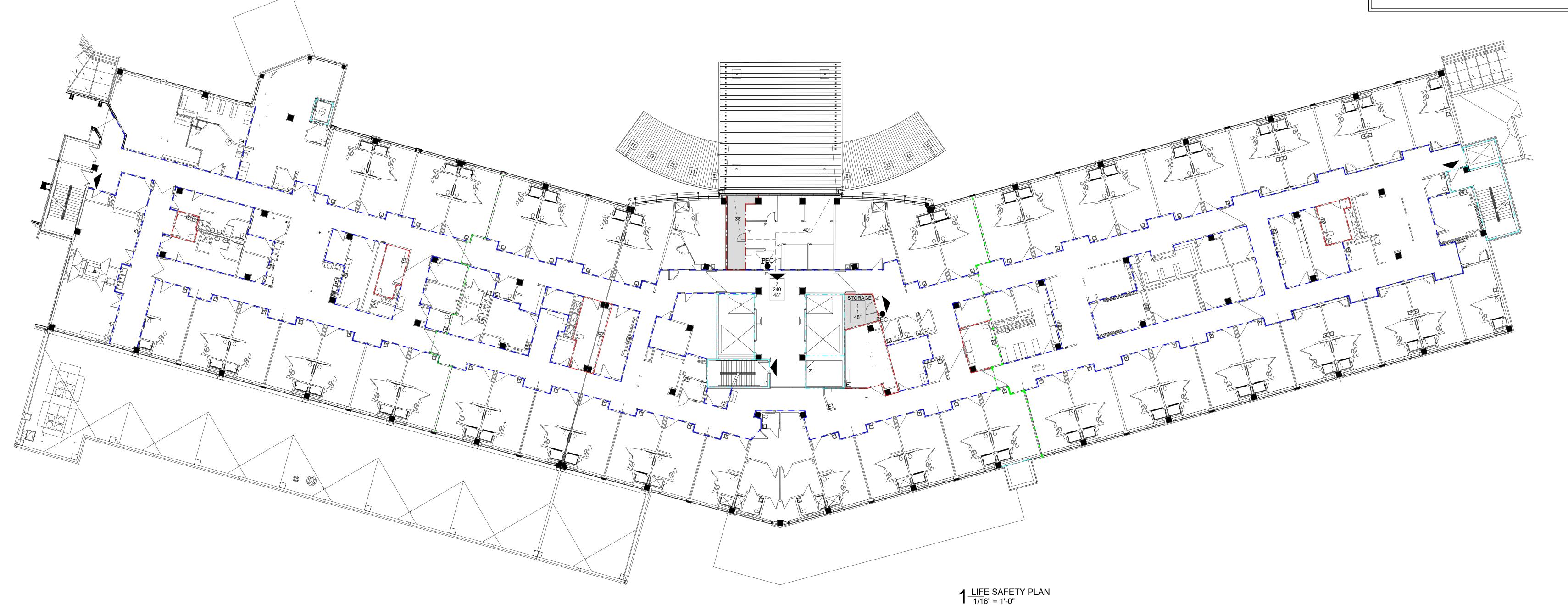
METAL STUD THICKNESS SHALL BE AS SCHEDULED BELOW:							
	SUFFIX MTL	. STUD THICKNESS					
	1	1-5/8" MTL. STUDS					
	2	2-1/2" MTL. STUDS					
	3	6" MTL. STUDS					

- 3. UNLESS NOTED OTHERWISE, ALL INTERIOR DRYWALL PARTITIONS INDICATED ON THE FLOOR PLAN DRAWING ARE TYPE 'A' PARTITIONS. WHERE OCCURS, RATINGS ARE AS INDICATED ON THE LIFE SAFETY PLANS.
- 4. UNLESS NOTED OTHERWISE, ALL CMU PARTITIONS ARE 7-5/8", 8" NOMINAL. REFER TO SUFFIX SCHEDULE BELOW FOR LOCATIONS OF CMU PARTITIONS OTHER THAN 8" NOMINAL.
- 5. ALL STUDS ARE CONTINUOUS FROM FLOOR STRUCTURE TO CEILING STRUCTURE UNLESS
- 6. METAL STUDS ARE SPACED @ 16" O.C. MAX., UNLESS NOTED OTHERWISE.
- 7. UNLESS NOTED OTHERWISE, ALL GYPSUM BOARD IS TO BE 5/8" THICK "FIRECODE".
- 8. THE LOCATION OF A CHANGE IN THE PARTITION TYPE IS INDICATED BY A WALL TAG.
- 9. THE CORRESPONDING RATED ASSEMBLIES ARE INDICATED BELOW THE PARTITION TYPES.
- 10. PARTITION TYPE DESIGNATIONS ARE INDICATED ON THE FLOOR PLAN DRAWINGS.
- PARTITION TYPES DO NOT INCLUDE APPLIED FINISHES CALLED FOR IN THE ROOM FINISH SCHEDULE.
- 12. AT PARTITION TYPES WHERE MTL. STUDS ARE EXPOSED ON ONE OR BOTH SIDES, CUT STUD 1/4" SHORT AND SCREW BOTH SIDES TO MTL. RUNNER TRACK.
- 13. MOISTURE RESISTANT GYP. BD. AT ALL WALL PARTITIONS









*THIS DRAWING IS INTENDED TO BE PRINTED IN COLOR. USE BLACK AND WHITE COPIES AT YOUR OWN RISK.

10/10/2022 10:13:34 AM
Samuel K. Beckman - Architect
License - Missouri #A-2011012130

CONSTRUCTION

ACI BOLAND ARCHITECTS

Kansas City, MO 64108 T: 816.763.9600

ACI/Boland, Inc.

Kansas City | St. Louis Licensee's Certificate of Authority Number:

MEP CONSULTANT

W.L. Cassell & Assocaites Inc. 1600 Baltimore, Suite 300 Kansas City, MO 64108 Licensee's Certificate of Authority Number: # 00127265 Phone Number: 816.842.8437

Dialysis Storage
100 NE SAINT LUKE'S BLVC
LEE'S SUMMIT, MO 64086

Revision

Revision Date Descript

Drawn By Checked By

A0.2

ONLINE CERTIFICATIONS DIRECTORY Design No. U465 BXUV.U465

Fire-resistance Ratings - ANSI/UL 263 Page Bottom

Design/System/Construction/Assembly Usage Disclaimer Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL

fied products, equipment, system, devices, and materials • Authorities Having Jurisdiction should be consulted before construction. Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
 When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.

Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. U465

August 25, 2016 Nonbearing Wall Rating — 1 HR. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (sucl as Canada), respectively

1. Floor and Ceiling Runners — (Not Shown) — Channel shaped runners, 3-5/8 in. deep (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. 1A. Framing Members* - Floor and Ceiling Runners - (Not Shown) - As an alternate to Item 1 - Channel shaped, ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - Type SUPREME Framing System

 ${\bf QUAIL\ RUN\ BUILDING\ MATERIALS\ INC}-{\bf Type\ SUPREME\ Framing\ System}$

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME Framing System STEEL CONSTRUCTION SYSTEMS INC - Type SUPREME Framing System

 ${f UNITED}$ ${f METAL}$ ${f PRODUCTS}$ ${f INC}$ — Type SUPREME Framing System

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

1B. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

CRACO MFG INC — SmartTrack20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

 $1C. \ \textbf{Floor and Ceiling Runners} - (Not \ Shown) - For \ use \ with \ Item \ 2C - Channel \ shaped, \ fabricated \ from \ min \ 20 \ MSG$ corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC. 1D. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1C — For use with Item 2D and 4G only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

RAM SALES L L C — Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C - Tri-S Protrak

1E. **Framing Members*** — **Floor and Ceiling Runners** — Not Shown — In lieu of Items 1 through 1D — For use with Item 2E and 4I only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. TELLING INDUSTRIES L L C — TRUE-TRACK™

1F. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1F — For use with in. deep by min 3-5/8 in. wide fabricated from min 25 MSG steel, attached to floor KIRII (HONG KONG) LTD - Type KIRII

1G. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1F — For use with Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide, attached to floor and ceiling with fasteners spaced STUDCO BUILDING SYSTEMS — CROCSTUD Track

1H. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100

1I. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2H, channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. TELLING INDUSTRIES L L C — Viper20™ Track

2. Steel Studs — Channel shaped, 3-5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. OC max. 2A. **Framing Members* — Steel Studs —** As an alternate to Item 2 — Channel shaped studs, min 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - Type SUPREME Framing System

 ${f QUAIL\ RUN\ BUILDING\ MATERIALS\ INC}-{f Type\ SUPREME\ Framing\ System}$

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

 ${f UNITED}$ ${f METAL}$ ${f PRODUCTS}$ ${f INC}$ — Type SUPREME Framing System

2B. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1B, proprietary channel -1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™

CRACO MFG INC — SmartStud20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

2C. **Steel Studs** — (As an alternate to Item 2, For use with Item 4E) — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. 2D. Framing Members* - Steel Studs - As an alternate to Items 2 through 2C - For use with Item 1D and 4G only annel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.

CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD DMFCWBS L L C — ProSTUD

MBA METAL FRAMING — ProSTUD

 ${f RAM}$ ${f SALES}$ ${f L}$ ${f C}$ — ${f Ram}$ ${f ProSTUD}$

STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProSTUD

2E. **Framing Members* — Steel Studs —** As an alternate to Items 2 through 2D — For use with Item 1E and 4I only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. TELLING INDUSTRIES L L C — TRUE-STUD™

2F. Framing Members* — Steel Studs — As an alternate to Items 2 through 2E — For use with Item 1F, channel shaped studs, min 3-5/8 in. wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. KIRII (HONG KONG) LTD - Type KIRII

2G. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 through 2F - For use with Item 1G. ary channel shaped studs, minimum 3-5/8 in. wide, Studs to be cut 1/2 in. less than the assembly heigh STUDCO BUILDING SYSTEMS — CROCSTUD

2H. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1I, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. **TELLING INDUSTRIES L L C** — Viper 20^{TM}

2I. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than **EB MéTAL INC** — EB Stud

J. Framing Members* - Steel Studs - In lieu of Item 2 - For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. OLMAR SUPPLY INC — PRIMESTUD

2K. Framing Members* — Steel Studs — As an alternate to Item 2 — For use with Item 1B (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. $\textbf{MARINO/WARE, DIV OF WARE INDUSTRIES INC} - \mathsf{StudRite^{tM}}$

3. Batts and Blankets* — (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. See **Batts and Blankets** (BZJZ) category for names of Classified companies. 3A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions

3B. Fiber. Sprayed* — As an alternate to Batts and Blankets (Item 3) and Item 3A — Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. **NU-WOOL CO INC** — Cellulose Insulation

U S GREENFIBER L L C — INS735& INS745 for use with wet or dry application. INS765LD and INS770LD are to be used

3C. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft³. INTERNATIONAL CELLULOSE CORP - Celbar-RL

3D. Batts and Blankets* — For use with Item 8. Nom 3 in. thick, minimum 3.4 pcf mineral wool batts, friction fit See Batts and Blankets (BZJZ) category for names of manufacturers.

3E. Batts and Blankets* — For use with Item 4P. Placed in stud cavities, any min, 3-1/2 in, thick glass fiber insulation See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies. 4. **Gypsum Board*** – 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to Items 6 (resilient channels) or 6A, 6B or 6C (furring

channels), gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. O $\!$ **ACADIA DRYWALL SUPPLIES LTD** — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing **AMERICAN GYPSUM CO** — Types AG-C, AGX-1, M-Glass

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO - Type DBX-1

for dry application only

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5,

CERTAINTEED GYPSUM INC — Types 1, EGRG, GlasRoc, Type X, Type X-1, Type C, SilentFX, 5/8" Easi-Lite Type X

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX **GEORGIA-PACIFIC GYPSUM L L C** — Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6, LS, Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TG-C, GreenGlass Type X, Type X ComfortGuard Sound Deadening Gypsum Board, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type DGLW, Water Rated-Type DGLW, Sheathing Type-DGLW, Soffit-Type DGLW, Type DGLW, Type

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSMR-C, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6,

Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W

PABCO BUILDING PRODUCTS L L C. DBA PABCO GYPSUM — Types PG-C. PG-9. PG-11. PGS-WRS

PANEL REY S A — Types GREX, PRC, PRC2, PRX, RHX, MDX, ETX

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH Line MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type X, Type C

USG BORAL ZAWAWI DRYWALL L L C SFZ — Types C, SCX

CERTAINTEED GYPSUM INC — Type X, Type X-1, Type C, Type EGRG/ GlasRoc

UNITED STATES GYPSUM CO - Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and

4A. **Gypsum Board*** — (As alternate to Item 4) — Nom 5/8 in, thick gypsum panels with beyeled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. OC when applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally.

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5,

GEORGIA-PACIFIC GYPSUM L L C - Types DAP, DAPC, DGG, DS

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C - Types LGFC2A, LGFC6A, LGFC-V/A, LGFC-WD

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air

THAI GYPSUM PRODUCTS PCL — Type X, Type C

UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint

USG BORAL ZAWAWI DRYWALL L L C SFZ — Types C, SCX

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and

4B. Gypsum Board* — (As an alternate to Items 4 or 4A) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item **CGC INC** — Types AR, IP-AR

 $\mathbf{UNITED\ STATES\ GYPSUM\ CO}-\mathsf{Types\ AR,\ IP-AR}$

USG MEXICO S A DE C V — Types AR, IP-AR

4C. **Gypsum Board*** — As an alternate to Items 4, 4A, and 4B - Nom. 5/8 in. thick gypsum panels, with square edges, applied horizontally. Gypsum panels fastened to framing with 1 in. long bugle head steel screws spaced a max 8 in. OC, with last 2 screws 3/4 in. and 4 in. from each edge of board. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs on interior walls need not be staggered or backed by steel framing. **GEORGIA-PACIFIC GYPSUM L L C** — Type DGG, GreenGlass Type X

4D. **Gypsum Board*** — As an alternate to Items 4, 4A, 4B, and 4C — Nom. 5/8 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Gypsum panels fastened to framing with 1 in. long Type S steel screws 8 in. OC along vertical edges and 12 in. OC in the field when panels are applied vertically. When gypsum panels applied horizontally, fasten to raming with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and in the field. Screws spaced a max 12 in. along the top and bottom edges of the wall for both vertical and horizontal applications. NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSL, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8,

4E. **Gypsum Board*** — (As an alternate to Items 4 through 4D) — Installed as described in Item 4. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 1 in. long, Type S steel screws spaced, 8 in, OC. Not to be used with item 6. NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

4F. **Gypsum Board*** — (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) - Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. RAY-BAR ENGINEERING CORP — Type RB-LBG

4G. **Gypsum Board*** — (As an alternate to Items 4 through 4F) — For use with Items 1D and 2D only, 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the

CONTINENTAL BUILDING PRODUCTS OPERATING CO. L. L. C. — Type I GEC6A. I GEC-C/A

NATIONAL GYPSUM CO — Types FSW

UNITED STATES GYPSUM CO - Type SCX

USG BORAL ZAWAWI DRYWALL L L C SFZ — Type SCX

4H. **Gypsum Board*** — (As an alternate to Items 4 through 4G) — Nominal 5/8 in. thick, 4 ft wide panels, applied PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES

4I. **Gypsum Board*** — (As an alternate to Items 4 through 4F) — For use with Items 1E and 2E only, 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the UNITED STATES GYPSUM CO — Type SCX

USG BORAL ZAWAWI DRYWALL L L C SFZ — Type SCX

4]. **Gypsum Board*** — (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A) MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

4K. Gypsum Board* - (As an alternate to Item 4 and 4A, not for use with Items 1D, 1E, 2D and 2E) - Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 4 and 4A.

UNITED STATES GYPSUM CO - Type ULX

USG MEXICO S A DE C V - Type ULX

4L. **Gypsum Board*** — (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of direct attachment only to steel studs Item 2C). Nom 5/8 in, thick lead backed gypsum panels with beve square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed rosum wallboard and ontional at remaining stud locations. Lead batten strips, min 2 in, wide, max 8 ft long with a max ickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. lon-pe S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3, in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

4M. **Gypsum Board*** – (For use with Item 8) – 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board tem 8) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Ty Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fibe Board (Item 8). Secured to outermost studs and floor and ceiling runners with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type FRPC, Type C

CGC INC — Types C, IP-X2, IPC-AR

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine M2TECH, Gyproc Dura

THAI GYPSUM PRODUCTS PCL — Type C

NATIONAL GYPSUM CO — Type FSW

PANEL REY S A — Types PRC, PRC2

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL ZAWAWI DRYWALL L L C SFZ — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR 4N. Wall and Partition Facings and Accessories* — (As an alternate to Item 4) — Nominal 5/8 in. thick, 4 ft wide

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

40. Gypsum Board* — As an alternate to Items 4, 4A, 4B, and 4C — Two layers Nom, 5/16 in, thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Horizontal joints on the same side need not be staggered. When applied horizontally, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC and staggered 4 in. OC between layers. When applied vertically, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the field, staggered 4 in. OC between layers. Screws spaced a max 12 in. along the top and bottom edges of the wall.

4P. **Gypsum Board*** — As an alternate to Item 4. For use with Item 3E, **Batts and Blankets*** — 5/8 in. thick, 4 ft wide attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to item 6 (resilient channels) or 6A, 6B or 6C (furring channels), gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC. UNITED STATES GYPSUM CO - Types ULIX

5. **Joint Tape and Compound** — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick rosum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced, Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. 6. **Resilient Channel** — (Optional — Not Shown) — 25 MSG galv steel resilient channels spaced vertically max 24 in. OC flange portion attached to each intersecting stud with 1/2 in. long type S-12 pan head steel screws. May not be used with Item 4F or 4J. 6A. **Steel Framing Members*** — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Member

> a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be verlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. b. Framing Members* — Used to attach furring channels (Item a) to studs (Item 2). Clips spaced 48 in. OC., and secured to studs with 1-5/8 in. wafer or hex head Type S steel screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring

6B. Framing Members* — (Not Shown) — (Optional on one or both sides) — As an alternate to Item 6, furring channel a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 4. b. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs (Item 2). Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 \times 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into **PLITEQ INC** — Type Genie Clip

PAC INTERNATIONAL L C — Types RSIC-1, RSIC-1 (2.75)

6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described

a. **Furring Channels** — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured together with four self-tapping No. 8x1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Gypsum board attached to furring channels as described in Item 4. Side joint furring channels shall be attached to study with RESILMOUNT Sound Isolation Clips - Type A237R located approximately 2 in. from each end of length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 24 in. OC., and secured to studs with No. 10×2 -1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the steel framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

8. Mineral and Fiber Board* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to studs and floor and ceiling runners with 1-5/8 in. long Type S steel screws, spaced 12 in. OC and 24 in. OC along all intermediate framing. The required UL Classified gypsum board layer (Item 4M) is to be installed over the Mineral and Fiber Boards. Batts and Blankets, Item 3D, and Adhesive, Item 11, are required. **HOMASOTE CO** — Homasote Type 440-32

9. Lead Batten Strips — (Not Shown, For Use With Item 4E) — Lead batten strips, min 1-1/2 in, wide, max 10 ft long stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips quired behind vertical joints of lead backed gypsum board (Item 4E) and optional at remaining stud locations. Required 9A. **Lead Batten Strips** — (Not Shown, for use with Item 4J) — Lead batten strips, 2 in. wide, max 10 ft long with a mathickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal cification OO-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4J) and optional at remaining stud locations. 10. **Lead Discs or Tabs** — (Not Shown, For Use With Item 4E) — Used in lieu of or in addition to the lead batten strips (Item 8) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered

over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4E) rneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C" 10A. **Lead Discs** — (Not Shown, for use with Item 4J) — Max 5/16 in. diam by max 0.140 in. thick lead discs Specification QQ-L-201f, Grades "B, C or D".

11. **Adhesive** — Not Shown — (For use with Item 8) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 8). 12. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — For use with Items 1 to 11, Items 2 to 22, Item 3, Items 4 to 41, Item 5 and Item 6. For maximum fire rating of 1 hour. On one side of the wall, over the first layer of Gypsum Board (Item 4 to Item 41), install RefleXor membrane with the gold side facing outwards. Membrane installed with T50 staples spaced 12 inches on center in both directions as per manufacturer's instructions, seams in membrane to be overlapped by 2 inches. When RefleXor membrane is used an additional layer of Gypsum Board that is identical to the one used in the first layer and as specified in Item 4 to Item 4I shall be installed over the membrane. The additional layer of Gypsum Board to be installed through the membrane to the stud as specified in Item 4 to Item 4I except the fastener length shall be increased by a minimum of 5/8 inch. Install Batts and Blankets in the stud cavity as per Item 3. On the other side of the wall, prior to the installation of the Gypsum Board, install Resilient Channels as per Item 6. Over the Resilient Channels install 3/4 inch thick SONOpan panel secured to the Resilient Channels with drywall screws and washers spaced at 16 in. OC on the perimeter of the panel and 8 in. OC in the field of the panel. Over the SONOpan panel install the same Gypsum Board as specified in Item 4 to Item 41 with the fastener length increased by minimum 3/4 inch. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Boar MSL — RefleXor membrane, SONOpan panel

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

XHBN.BW-S-0003 - Joint Systems

ONLINE CERTIFICATIONS DIRECTORY

Certified products, equipment, system, devices, and materials.

Joint Systems

System No. BW-S-0003

XHBN.BW-S-0003

Design/System/Construction/Assembly Usage Disclaimer · Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL

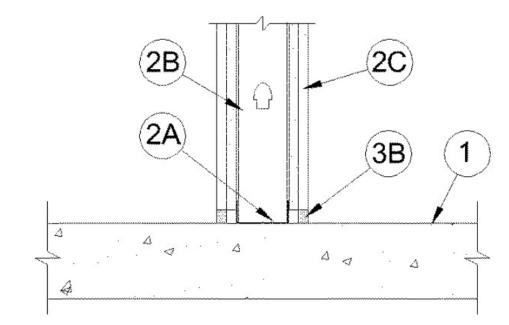
 Authorities Having Jurisdiction should be consulted before construction.
 Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the fiel When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product
manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each
product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate Only products which bear UL's Mark are considered Certified.

XHBN - Joint Systems

See General Information for Joint Systems

System No. BW-S-0003 November 18, 2008 Assembly Ratings — 1 and 2 Hr (See Item 2)

L Rating At Ambient — Less Than 1 CFM/Lin Ft (See Item 3B) L Rating At 400°F — Less Than 1 CFM/Lin Ft (See Item 3B) Joint Width - 3/4 In. Max



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1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Floor may also be constructed of any 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units*.** See Precast Concrete Units category in the Fire Resistance Directory for names of

 Wall Assembly — The 1 or 2 h fire-rated gypsum board/steel stud wall assembly shall be constructed of the materials
and in the manner specified in the individual U400 or V400 Series Wall or Partition Design in the UL Fire Resistance
Directory. In addition, the wall may incorporate a head-of-wall joint system constructed as specified in the HW Series Joint Systems in the UL Fire Resistance Directory. The wall shall include the following construction features: A. **Steel Floor Runner** — Floor runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2B). Floor runners to be provided with min 1-1/4 in. (32 mm) flanges. Runners secured with steel fasteners spaced 12 in. (305 mm) OC. B. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm) less in length than assembly height with bottom nesting in, resting on and fastened to floor runner with sheet metal screws. Stud spacing not to exceed 24 in. (610 mm) OC. C. **Gypsum Board*** — Gypsum board installed to a min total thickness of 5/8 in. (16 mm) or -1/4 in. (32 mm) on each side of wall for a 1 or 2 hr fire rated wall, respectively. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory except that a max 3/4 in. (19 mm) gap shall be maintained between the bottom of the gypsum board and the top of the concrete floor.

The hourly fire rating of the joint system is equal to the hourly fire rating of the wall. 3. Joint System — Max separation between top of floor and bottom of gypsum board is 3/4 in. (19 mm). The joint system consists of a packing material and a fill material, as follows A. Packing Material — (Optional, Not Shown) - Mineral wool batt insulation, polyethylene backer rod or glass fiber insulation firmly packed into the gap between the bottom of the gypsum board and the top of the concrete floor and recessed from each surface of the wall to accommodate the required thickness of fill material. B. Fill, Void or Cavity Material*-Sealant — Min 1/2 in. (13 mm) thickness of fill material

Note: L Ratings apply when SpecSeal ES Sealant is used.

installed on each side of the wall between the bottom of the gypsum board and the top of the concrete floor, flush with each surface of the wall. When mineral wool batt insulation is used as a packing material, min thickness of fill material on each side of the wall is 1/4 in. (6 mm).

SPECIFIED TECHNOLOGIES INC — SpecSeal ES Sealant, SpecSeal LCI Sealant, SpecSeal

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification Last Updated on 2008-11-18 Print this page Terms of Use Page Top

LC150 Sealant, Pensil 300 Sealant or SpecSeal Series SIL300.

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ONLINE CERTIFICATIONS DIRECTORY System No. HW-D-0044

Page Bottom

Page 1 of 2

XHBN.HW-D-0044 Joint Systems

Design/System/Construction/Assembly Usage Disclaimer Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.

Authorities Having Jurisdiction should be consulted before construction.

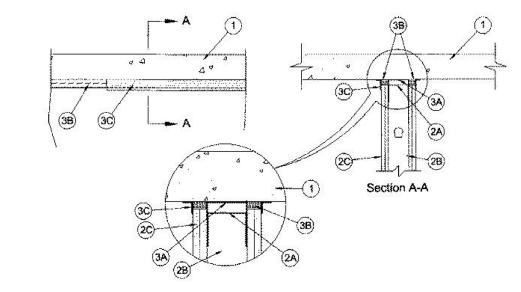
Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate Only products which bear UL's Mark are considered Certified.

> XHBN - Joint Systems **XHBN7 - Joint Systems Certified for Canada**

e General Information for Joint Systems e General Information for Joint Systems Certified for Canada

> System No. HW-D-0044 December 08, 2015

ANSI/UL2079 CAN/ULC S115 Assembly Ratings -1, 2, 3 and 4 Hr (See Item 2) Jominal Joint Widths — 1-1/2 and 2-1/2 In. (See Item 3) FT Ratings — 1, 2, 3, and 4 Hr (See Item 2) Class II Movement Capabilities - 40 or 50% Compression or Extension (See Item 3) FH Ratings - 1, 2, 3, and 4 Hr (See Item 2) Rating At Ambient — Less Than 1 CFM/Lin Ft FTH Ratings — 1, 2, 3, and 4 Hr (See Item 2) Rating At 400 F — Less Than 1 CFM/Lin Ft lominal Joint Widths -1-1/2 and 2-1/2 In. (See Item 3) L Rating At Ambient — Less Than 1 CFM/Lin Ft L Rating At 400 F — Less Than 1 CFM/Lin Ft



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick steel-reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. 2. Wall Assembly - 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor and Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2B). When deflection channel (Item 3A) is used, flange height of ceiling runner is to be equal to or greater than flange height of deflection channel and the ceiling runner is to nest within the deflection channel with a 3/4 to 1 in. (19 to 25 mm) gap maintained between the top of the ceiling runner and the top of the deflection channel. When deflection channel is not used, flange height of ceiling runner shall be min 3/4 in. (19 mm) greater than nom joint width. Ceiling runner is secured to concrete floo slab with steel masonry anchors spaced max 24 in. (610 mm) OC. A1. Light Gauge Framing* - Slotted Ceiling Runner — When nom joint width is less than or equal to 1-3/4 in. (45 mm), slotted ceiling runner may be used as an alternate to the ceiling runner in Item 2A. Slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2B). Ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC. When slotted ceiling runner is used, deflection channel (Item 3A) shall not be used.

BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK

CALIFORNIA EXPANDED METAL PRODUCTS CO — CST

SCAFCO STEEL STUD MANUFACTURING CO

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Type SLT METAL-LITE INC — The System

OLMAR SUPPLY INC — Type SCR

PAC INTERNATIONAL L L C — Type RSIC-U-HD

TELLING INDUSTRIES L L C — True-Action Deflection Track THE STEEL NETWORK INC — VertiTrack VT series, 250VT, 362VT, 400VT, 600VT and 800VT A2. Light Gauge Framing* - Vertical Deflection Ceiling Runner — When nom joint width is

deflection ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC. When vertical deflection ceiling runner is used, deflection channel (Item **THE STEEL NETWORK INC** — VertiTrack VTD362, VTD400, VTD600 and VTD800

less than or equal to 1 in. (25 mm), vertical deflection ceiling runner may be used as an alternate to the ceiling runner in Items 3A and 3A1., Vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner.

Slotted clips, provided with step bushings, for permanent fastening of steel studs. Vertical

A3. **Light Gauge Framing*- Notched Ceiling Runner —** As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC. When notched ceiling runner is used, deflection channel (Item 3A) shall not be used.

A4. Light Gauge Framing* —Vertical Deflection Clip* — (Optional) Steel clips can be used n conjunction with steel studs (Item 2B), ceiling runner (Item 2A) or deflection channel (Item 3A). Clips installed over the top of studs and inserted within the ceiling runner or deflection channel. Clip shall be secured to the ceiling runner or deflection channel with No. 8 self drilling, self tapping steel fasteners through holes provided within the clip. Clip may be secured to the stud with No. 6 pan head steel screw through holes provided within the clip. As an alternate, the legs of the clip may be installed over the top of the stud without attachment in accordance with manufacturer's installation instructions. **FLEX-ABILITY CONCEPTS L L C** — Three Legged Dog Deflection Clip

A5. Steel Framing Members* — Sound Isolation Clips — (Not Shown, For Max 2 Hr Rating) - As an alternate attachment means for the ceiling runner to the underside of the floor when no deflection channel (Item 3A) is used, sound isolation clips installed in accordance with the diam hole in ceiling runner and attached to top of ceiling runner using four min No. 8 by 1/2 in. 13 mm) long self-tapping galv steel screws. Sound isolation clips to be installed adjacent to very stud location but not more than 24 in. (610 mm) OC and attached to the underside of floor assembly using min 3/16 in. (5 mm) diam by 2-1/2 in. (64 mm) long steel masonry

B. **Studs** — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1/2 to 1 in. (13 to 25 mm) less in length than assembly height with bottom nesting in and secured to floor runner. When deflection channel (Item 3A) is used, steel studs attached to ceiling runner (Item 2A) with sheet metal screws located 1/2 in. (13 mm) below the bottom to the deflection channel. When deflection channel is not used, studs to nest in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of slot on each side of wall. When vertical deflection ceiling runner (Item 2A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at mid-height of each slot. Stud spacing not to exceed 24 in. (610 mm) OC. C. **Gypsum Board*** — Gypsum board sheets installed to a min total 5/8 in., 1-1/4 in., 1-1/2 in. or 2 in. (16, 32, 38 or 51 mm) thickness on each side of wall for 1, 2, 3 or 4 hr rated assemblies, respectively. Wall to be constructed as specified in the individual U400, V400 or W400 Series Design in the UL Fire Resistance Directory, except that a max 1 or 2-1/2 in. (25 or 64 mm) gap (See Item 3) shall be maintained between the top of the gypsum board and the lower surface of the floor. The screws attaching the gypsum board to the studs along the top of

the wall shall be located 1 in. (25 mm) below the bottom of the ceiling runner. No gypsum

for max 2-1/2 in. (64 mm) wide joints. The joint system shall consist of forming and fill materials, with or without a

board attachment screws shall be driven into the ceiling runner or into the optional deflection The hourly fire rating of the joint system is equal to the hourly fire rating of the wall. . Joint System — Max separation between bottom of floor and top of gypsum board (at time of installation of joint system) is 2-1/2 in. (64 mm) for 1 and 2 hr ratings and 1 in. (25 mm) for 3 and 4 hr ratings. The joint system is designed to accommodate a max 50 percent compression or extension from its installed width for max 1-1/2 in. (38 mm) wide joints and a max 40 percent compression or extension from its installed width

> A. **Deflection Channel** — (Optional) - Max 3 in. (76 mm) deep min 24 gauge galv steel channel sized to accommodate ceiling runner (Item 2A). Deflection channel secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC. The ceiling runner (Item 2A) is installed within the deflection channel to maintain a 1/2 to 3/4 in. (13 to 19 mm) gap between the top of the ceiling runner and the top of the deflection channel. The ceiling runner nests inside the deflection channel without attachment B. Forming Material* — Sections of min 4 pcf (64 kg/m³) density mineral wool batt compressed 50 percent in thickness and installed cut edge first to completely fill the gap between the top of the gypsum board and the bottom of the concrete floor. When sound isolation clips (Item 2A6) are used, the space between the top of the ceiling runner and the underside of the floor shall be tightly packed with mineral wool batt insulation. The forming material shall be installed flush with both surfaces of wall. INDUSTRIAL INSULATION GROUP L L C — MinWool-1200 Safing

ROCK WOOL MANUFACTURING CO — Delta Board ROCKWOOL MALAYSIA SDN BHD — Safe

ROXUL INC — Safe

deflection channel (Item 3A), as follows:

THERMAFIBER INC — SAF C. Fill, Void or Cavity Material* - Sealant - Min 1/16 in. (1.6 mm) dry thickness (1/8 in. or 3.2 mm wet thickness) of fill material spray applied on each side of the wall between the top of the wall and the bottom of the floor, and overlap a min 1/2 in. (13 mm) onto gypsum board on both sides of wall. Additional 1/16 in. (1.6 mm) dry thickness (1/8 in. or 3.2 mm wet

thickness) of fill material shall overlap a min 1/2 in. (13 mm) onto the floor on both sides of

SPECIFIED TECHNOLOGIES INC — SpecSeal AS200 Elastomeric Spray * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification Last Updated on 2015-12-08

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Phone Number: 816.842.8437

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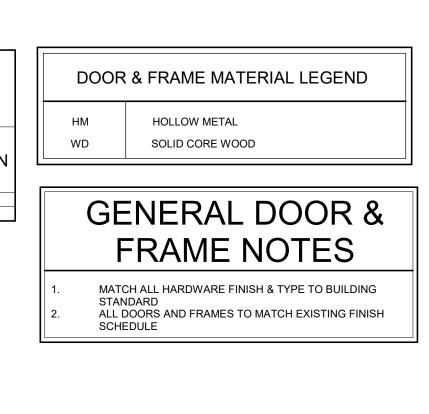
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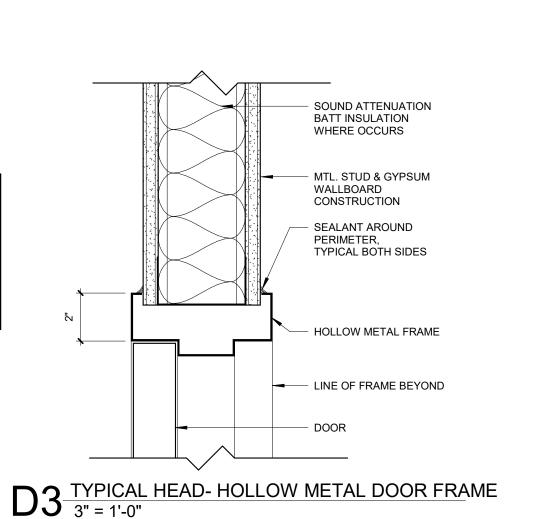
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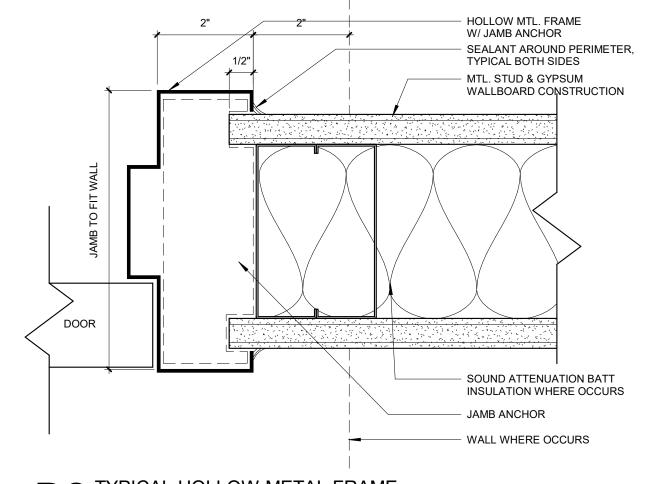
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Revision

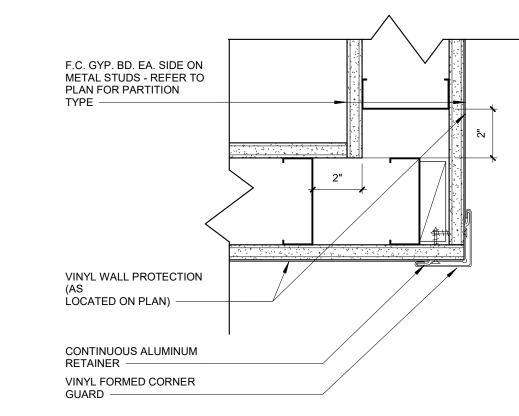




A3 FLOOR PLAN 1/4" = 1'-0"



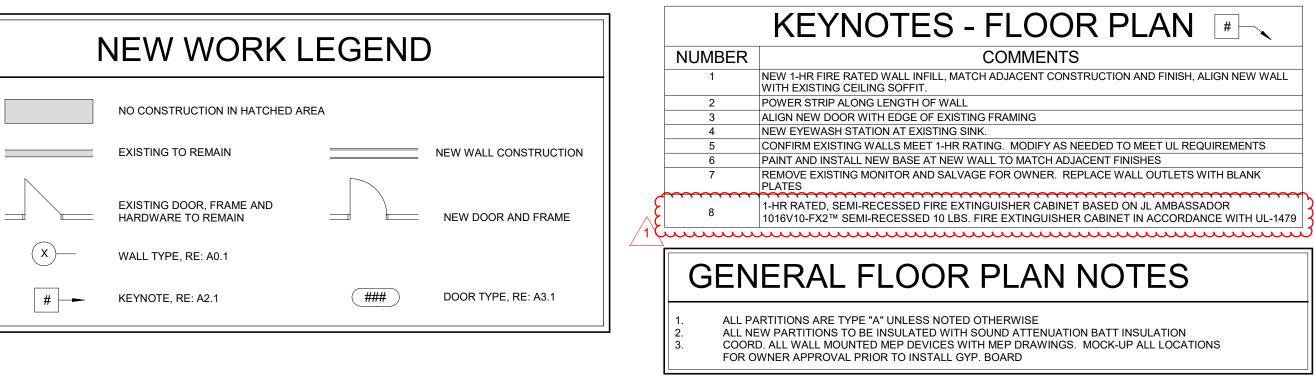
WALL WHERE OCCURS

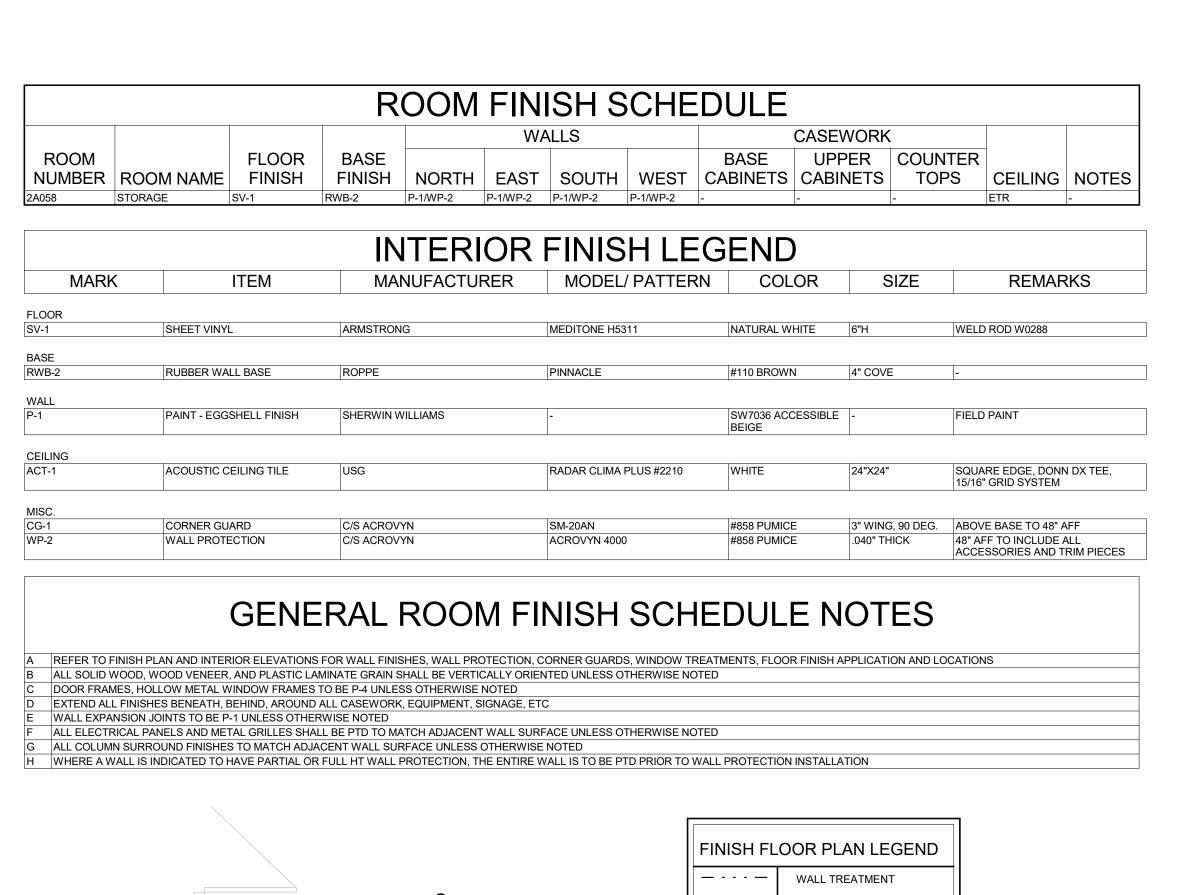


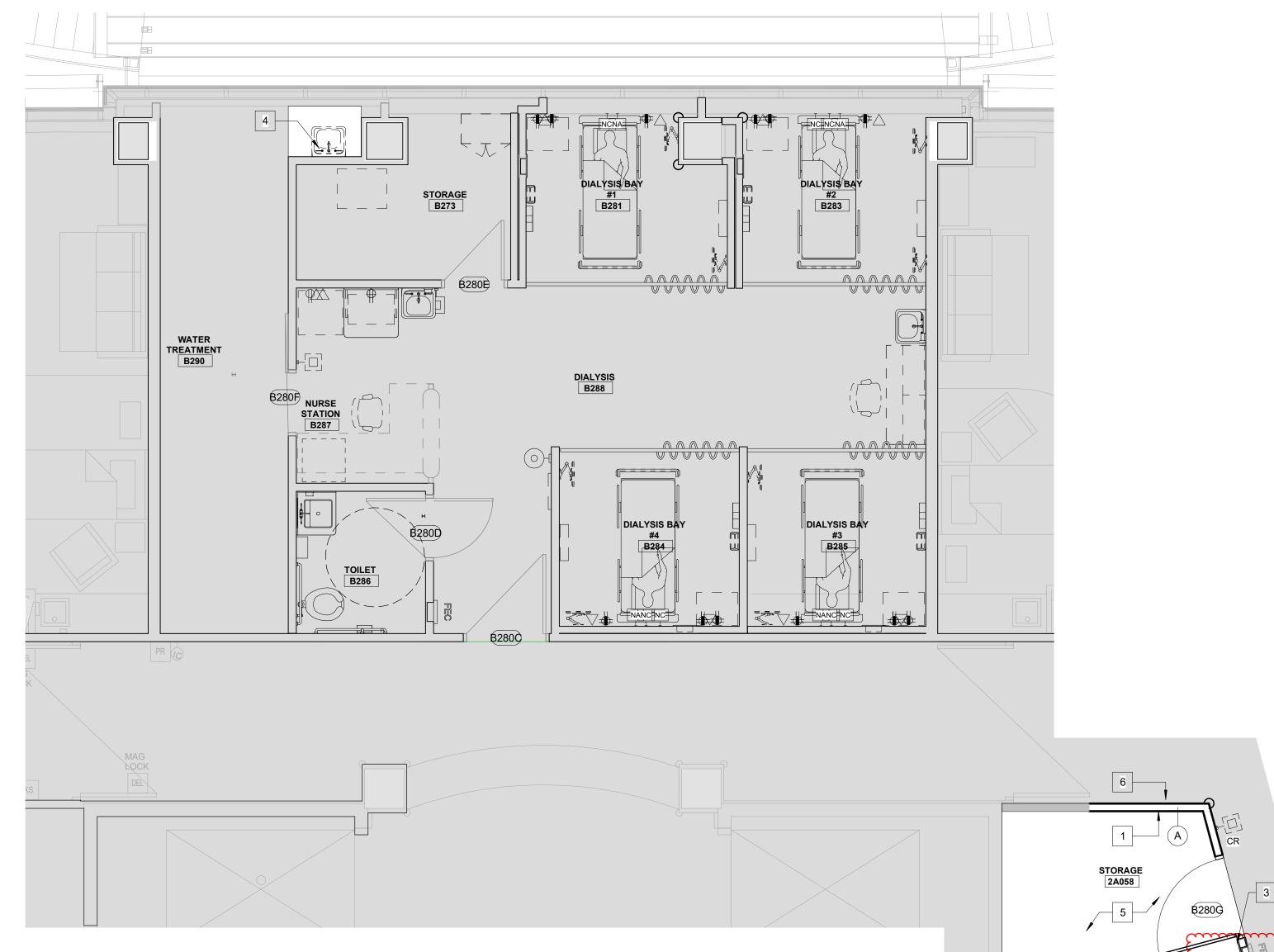
D2 TYPICAL HOLLOW METAL FRAME 6" = 1'-0"

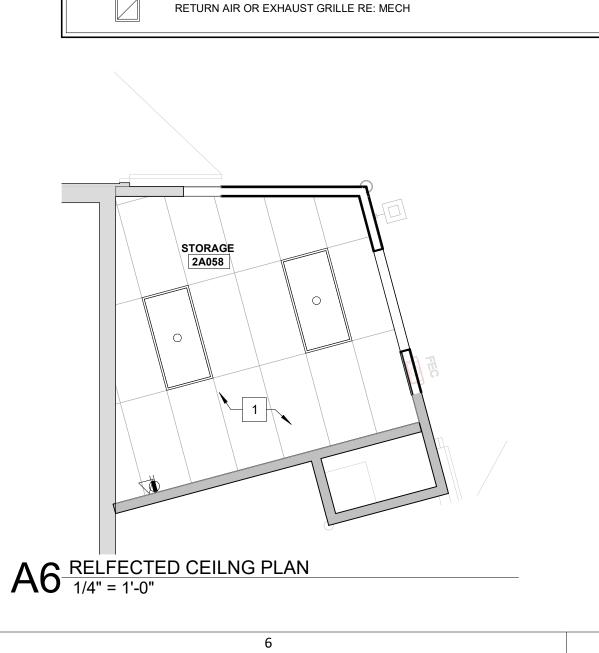
D1 TYPICAL SINGLE VINYL CORNER GUARD
3" = 1'-0"











KEYNOTES - RCP #-

THIS PLAN SHALL BE USED TO COORDINATE THE CEILING LAYOUT WITH MECHANICAL AND ELECTRICAL WORK. VERIFY THE EXACT QUANTITY REQUIRED.

CONTRACTOR TO REFER TO THE ELECTRICAL PLANS FOR ACTUAL LIGHTING SIZES AND

MEP. REPLACE ALL DAMAGED CEILING TILES WITH NEW TO MATCH

GENERAL RCP NOTES

REFER TO ARCHITECTURAL FLOOR PLANS FOR MATERIAL LEGEND OF ALL TYPES. SPRINKLER HEAD COVERS TO MATCH ADJACENT FINISH (TYP. WHITE)

CEILING LEGEND

2X4 RECESSED/SURFACE FLUORESCENT LIGHT FIXTURE RE: ELECT

RELOCATE SPRINKLER SYSTEM TO COORDINATE WITH NEW LAYOUT.

2X2/2x4 LAY-IN ACOUSTICAL CEILING

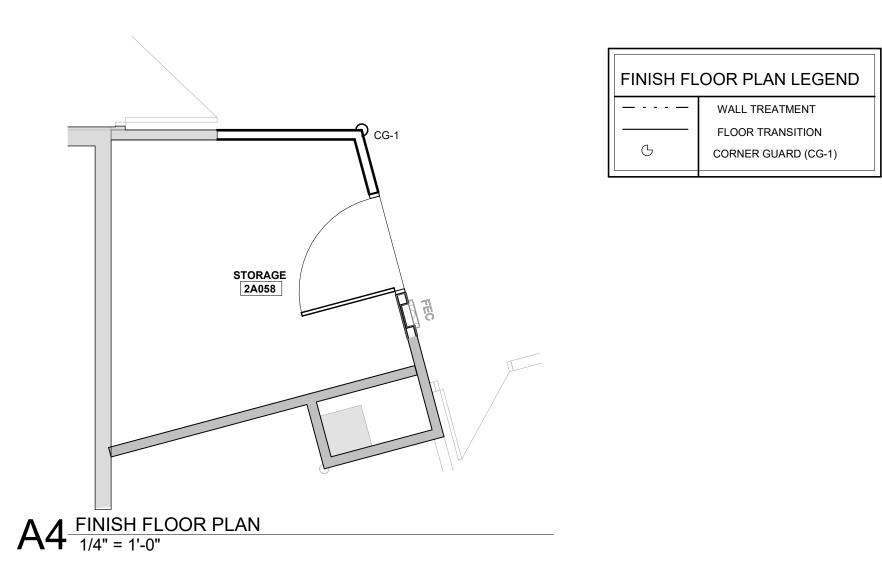
SUPPLY AIR GRILLE RE: MECH

SEE SPECIFICATIONS FOR CEILING TYPES.

Comments

EXISTING CEILING TO REMAIN, COORDINATE LIGHT AND MECHANICAL DIFFUSERS WITH

Number



Job Number Drawn By

Checked By

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FIRST FLOOR DIMENSION PLAN

.UKE'S BLVD. MO 64086

8.2.2019 3-19043

CONSTRUCTION

10/10/2022 10:13:36 AM

BOLAND

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00127265

WHERE DUST PARTITIONS ARE TO REMAIN THROUGH CONSTRUCTION, THEY SHALL BE CONSTRUCTED OF 3-5/8" METAL STUDS WITH CONTINUOUS TOP AND BOTTOM RUNNERS. PARTITIONS SHALL EXTEND TIGHT FROM FLOOR TO THE EXISTING CEILING OR STRUCTURE ABOVE, AND COPED AROUND DUCTS, PIPES, ETC., THAT PENETRATE THE PARTITION. THE ENTIRE PARTITION SHALL BE COVERED WITH 5/8" FIRE RATED GYP. BOARD SCREWED TO STUDS, ALL JOINTS BETWEEN SHEATHING, AT WALLS, AT FLOORS, CEILINGS, AROUND PIPES, ETC.. TAPED AND SEALED TIGHT TO ENSURE DUST-PROOFING.

THE CONTRACTOR SHALL COVER AND SEAL IN A DUST-TIGHT MANNER ALL EXISTING OPENINGS, GRILLES, JOINTS AROUND DOORS AND FRAMES, ETC., WITH FIRE RETARDANT SHEET AND/OR TAPE AS APPROPRIATE WHERE SUCH OPENINGS, ETC., OCCUR IN EXISTING PARTITIONS SEPARATING EXISTING AREAS FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL MAINTAIN AND REPAIR ANY DUST BARRIERS AS DETERMINED BY, AND TO THE SATISFACTION OF, THE

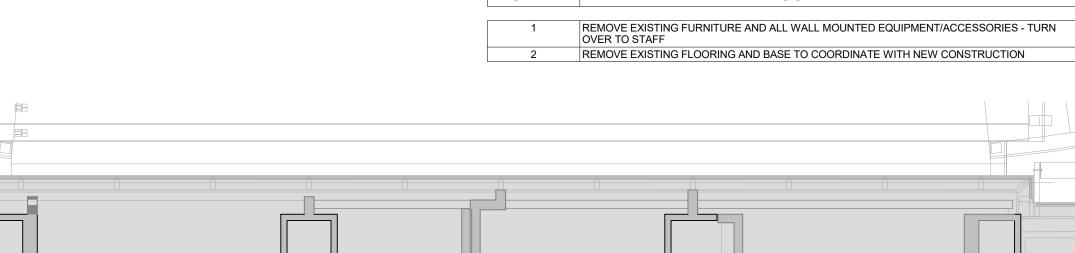
SMOKE TIGHT NON-COMBUSTIBLE CONSTRUCTION 1 1/2" = 1'-0"

DEMOLITION LEGEND

NOT IN SCOPE EXISTING TO REMAIN WALLS, DOORS, EQUIPMENT, FIXTURES, ETC. INDICATED BY DASHED LINES WITHIN THE AREA OF CONSTRUCTION SHALL BE REMOVED. REFER TO THIS SHEET FOR ARCHITECTURAL DEMOLITION NOTES.

DUST PARTITIONS - THE CONTRACTOR SHALL MAKE EVERY EFFORT TO ENSURE THE EXISTING BUILDING TO BE COMPLETELY PROTECTED AGAINST INFILTRATION OF DUST AND MOISTURE DURING THE COURSE OF DEMOLITION/ CONSTRUCTION WITH DUST PARTITIONS ACROSS CORRIDORS AND OPENINGS THRU EXISTING WALLS. ALL CONSTRUCTION WORK CREATING ANY TYPE OF DUST THROUGHOUT THE BUILDING SHALL BE SHIELDED BY DUST PROTECTION. PROVIDE DOOR OPENING AS REQUIRED FOR EMERGENCY EGRESS. DO NOT IMPEDE EXISTING CORRIDOR EGRESS.

KEYNOTES - DEMO PLAN #~



GENERAL DEMOLITION NOTES

PRIOR TO SUBMITTING BID, CONTRACTOR MUST VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW GENERAL NOTES SPECIFICATIONS AND ALL APPLICABLE DRAWINGS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER OR OWNER, AS DEFINED IN BID DOCUMENTS, OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMITTING BID. ADDITIONAL COMPENSATION WILL NOT BE PAID FOR

LACK OF SUCH DETERMINATION, FAMILIARIZATION, AND/OR ALLOWANCE. EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND SITE VISITS AND MAY NOT REFLECT ACTUAL AS-BUILT CONDITIONS. COORDINATE NEW WORK AND DEMOLITION WITH OTHER DISCIPLINES AND EXISTING

ONLY THE PORTIONS OF THE BUILDING AFFECTED BY THE SCOPE OF THE PROJECT HAVE BEEN SHOWN. INFORMATION SHOWN AS EXISTING TO REMAIN IS NOT BEING MODIFIED AS PART OF

ALL WORK SHALL BE PERFORMED SO AS TO NOT INTERRUPT SERVICE. THE CONTRACTOR SHALL PROPERLY NOTIFY THE LANDLORD, THE LEASER AND ADJACENT TENANTS A MINIMUM OF 48 HOURS IN ADVANCE BEFORE PROCEEDING WITH THIS WORK. EQUIPMENT AND CONDUIT TO BE REMOVED SHALL BE KEPT FOR REINSTALLATION DURING THE CONSTRUCTION PHASE WHEN POSSIBLE AND/OR INDICATED ON THE DRAWINGS. AVOID

DAMAGE TO SALVAGED EQUIPMENT AND CONDUIT DURING DEMOLITION PHASE. PROPERLY

DISPOSE OF WIRING AND MATERIAL THAT ARE REMOVED AND ARE NOT REQUESTED TO BE

REMOVE ALL UNUSED AND DEMOLISHED EQUIPMENT AND ASSOCIATED MATERIALS FROM AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. REPAIR DAMAGE

CAUSED DURING WORK AT NO EXTRA COST TO THE OWNER. PATCH ALL OPENINGS IN AREAS THAT REMAIN TO MATCH ADJACENT SURFACES AFTER EXISTING EQUIPMENT IS REMOVED AND VACATED. 10. FIRE ALARM SYSTEMS NOT ASSOCIATED WITH THE DEMOLITION SHALL BE LEFT IN SERVICE

AS APPLICABLE. 11. THE OWNER SHALL VACATE THE EXISTING ROOMS TO BE DEMO'D AND BE RESPONSIBLE FOR THE REMOVAL OF ANY EQUIPMENT WHICH IS TO REMAIN THE PROPERTY OF THE OWNER PRIOR TO ANY WORK DONE BY THE CONTRACTOR FOR THIS PORTION OF THE SEQUENCE.

12. GENERAL CONTRACTOR RESPONSIBLE TO ISOLATE CONSTRUCTION AREAS TO AVOID DISRUPTION TO OTHER BUILDING TENANTS AND CONTAIN DUST. DO NOT USE BUILDING LOBBY FOR ANY REASON PERTAINING TO DEMOLITION AND CONSTRUCTION. 13. INSTALL TEMPORARY DUST PROTECTION/PARTITION TO CONTAIN DEMOLITION/ CONSTRUCTION DUST AND DEBRIS WITHIN THE AREA OF CONSTRUCTION. REFER TO DUST

PARTITION "DP" ON THIS SHEET.

14. IT IS THE INTENT OF THIS DEMOLITION TO REMOVE ALL EXISTING CONSTRUCTION WHICH CONFLICTS WITH THE INTENT OF THE NEW CONSTRUCTION. EVERY DEMOLITION DETAIL MAY NOT NECESSARILY BE COVERED ON THESE DRAWING FIELD VERIFY THE EXTENT OF ALL DEMOLITION. 15. THE CONTRACTOR SHALL USE EXTREME CARE IN THE PROTECTION OF ALL ADJACENT AREAS FOR IT IS IMPERATIVE TO PROVIDE CONTINUOUS OPERATION OF ALL OCCUPIED AREAS DURING THE DEMOLITION CONSTRUCTION AND RENOVATION WITHIN THIS AND ALL SEQUENCES OF

16. ALL PARTITIONS, DOORS, EQUIPMENT, ETC., INDICATED BY DASHED LINES ON THIS PLAN

PHASING WORK REQUIRED TO COMPLETE THE WORK. 18. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK IN OCCUPIED SPACES AND SHALL NOTIFY OWNER TWO WEEKS PRIOR TO COMMENCING WORK. SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION AND ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTION TO OCCUPIED SPACES. EXISTING FLOOR, WALL, AND CEILING FINISHES TO REMAIN SHALL BE PROTECTED AND ANY DAMAGE DONE AS A RESULT OF DEMOLITION WORK SHALL

17. ALL DEMOLITION DESCRIBED IN THESE DOCUMENTS SHALL BE COORDINATED WITH

19. IN AREAS SCHEDULED FOR DEMOLITION, THE CONTRACTOR SHALL REMOVE ALL ACCESSORIES. GRAB BARS, MIRRORS, SOAP AND PAPER TOWEL DISPENSERS, SHELVES, BULLETIN BOARDS, DOOR HARDWARE, ETC., SHALL BE TURNED OVER TO THE OWNER, EXCEPT FOR RELOCATED ITEMS.

REMOVE AND DISCARD EXISTING FLOORING AND WALL COVERING THROUGH-OUT AREA DESIGNATED FOR NEW CONSTRUCTION AND PREP EXISTING FLOOR AND WALL SUBSTRATE TO RECEIVE THE INSTALLATION OF NEW FINISH AS SCHEDULED.

21. AT DISSIMILAR FLOOR ELEVATIONS, AFTER THE EXISTING CONSTRUCTION HAS BEEN REMOVED, FEATHER EPOXY GROUT TOPPING TO EACH FLOOR ELEVATION AND GRIND SMOOTH. AT DISSIMILAR FLOOR MATERIALS, AND/OR AT JUNCTIONS BETWEEN EXISTING FLOOR, PROVIDE APPROPRIATE EDGE OF TRANSITION STRIP.

22. AT VARIATIONS IN WALL SURFACES AFTER THE EXISTING CONSTRUCTION HAS BEEN REMOVED, FEATHER JOINT COMPOUND AND SAND SMOOTH. WHERE CEILING IS TO REMAIN, REMOVE ALL DAMAGED CEILING PANELS/TILES AND REPLACE WITH NEW TO MATCH EXISTING.

24. REMOVE AND RETURN TO THE OWNER ALL EXISTING PLUMBING FIXTURES. CAP ALL SUPPLY AND WASTE LINES AS REQUIRED. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL

25. THE CONTRACTOR SHALL PATCH TO MATCH ADJACENT SURFACES OF EXISTING WALLS AND FLOORS IN ALL AREAS THAT REQUIRE THE REMOVAL OF GENERAL MECHANICAL, ELECTRICAL AND PLUMBING WORK AND OF EQUIPMENT AND FIXTURES. 26. THE CONTRACTOR SHALL PROVIDE FOR ALL NECESSARY TEMPORARY RELOCATION AND

MAINTENANCE OF ALL EXISTING UTILITIES WHICH ARE CURRENTLY IN USE AND WHICH MUST BE TEMPORARILY RELOCATED DURING CONSTRUCTION OF NEW AREAS AND RENOVATION OF EXISTING AREAS THROUGH EACH SEQUENCE OF CONSTRUCTION. 27. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR WORK REQUIRED IN

THIS STEP OF THE SEQUENCE OF CONSTRUCTION 28. WHERE REMOVAL OF EXISTING PARTITIONS, EQUIPMENT, ETC. DISTURBS EXISTING MECHANICAL, PLUMBING OR ELECTRICAL SERVICES, THE CONTRACTOR SHALL MAKE PERMANENT REVISIONS AS REQUIRED AND IF NECESSARY, PROVIDE TEMPORARY SERVICES TO AREA NOT SCHEDULED FOR DEMOLITION AND RENOVATION.

29. WHERE EXISTING WALLS, CEILINGS, OR FLOORS ARE DAMAGED BY THE CONTRACTOR FOR ACCESS TO SERVICES AND NEW CONSTRUCTION WHICH MAY NOT BE SCHEDULED OR SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH TO MATCH MATERIAL AND FINISHES TO ORIGINAL CONDITIONS. IF EXISTING FINISHES CANNOT BE MATCHED, THE ENTIRE WALL, CEILING, OR FLOOR SHALL BE REFINISHED TO THE NEAREST CORNER OR POSITIVE BREAKING

30. WHEN DEMOLITION CAUSES OR EXPOSES DAMAGE TO FLOOR SLAB, WALL, OR CEILING SURFACES WHICH WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH CONDITIONS SHALL BE

REPAIRED AND LEVELED AS REQUIRED TO RECEIVE NEW FINISHES. 31. CLEAN AIR GRILLES AND LIGHT FIXTURES THROUGHOUT PROJECT AREA UPON

32. WHERE EXTERIOR WALLS, WINDOWS, AND/OR DOORS ARE BEING REMOVED, THE CONTRACTOR WILL BE RESPONSIBLE TO CONSTRUCT TEMPORARY PARTITIONS AS REQUIRED TO ENSURE THAT THE EXISTING BUILDINGS REMAIN WATERTIGHT AND WITHOUT DRAFTS DURING DEMOLITION WORK. THESE PARTITIONS SHALL REMAIN IN PLACE DURING THE NEW CONSTRUCTION WORK, OR AS REQUIRED TO MAINTAIN THIS SEPARATION.

33. REMOVE ALL EXISTING CEILINGS WITHIN THE PROJECT LIMIT UNLESS OTHERWISE NOTED ON PLANS. REMOVE COMPLETE INCLUDING SUPPORT FRAMEWORK, SUSPENSION WIRES, WALL MOLDING, ETC.

34. PROVIDE SHORING AND BRACING AS REQUIRED DURING DEMOLITION AND NEW CONSTRUCTION.

Samuel K. Beckman - Architect

CONSTRUCTION



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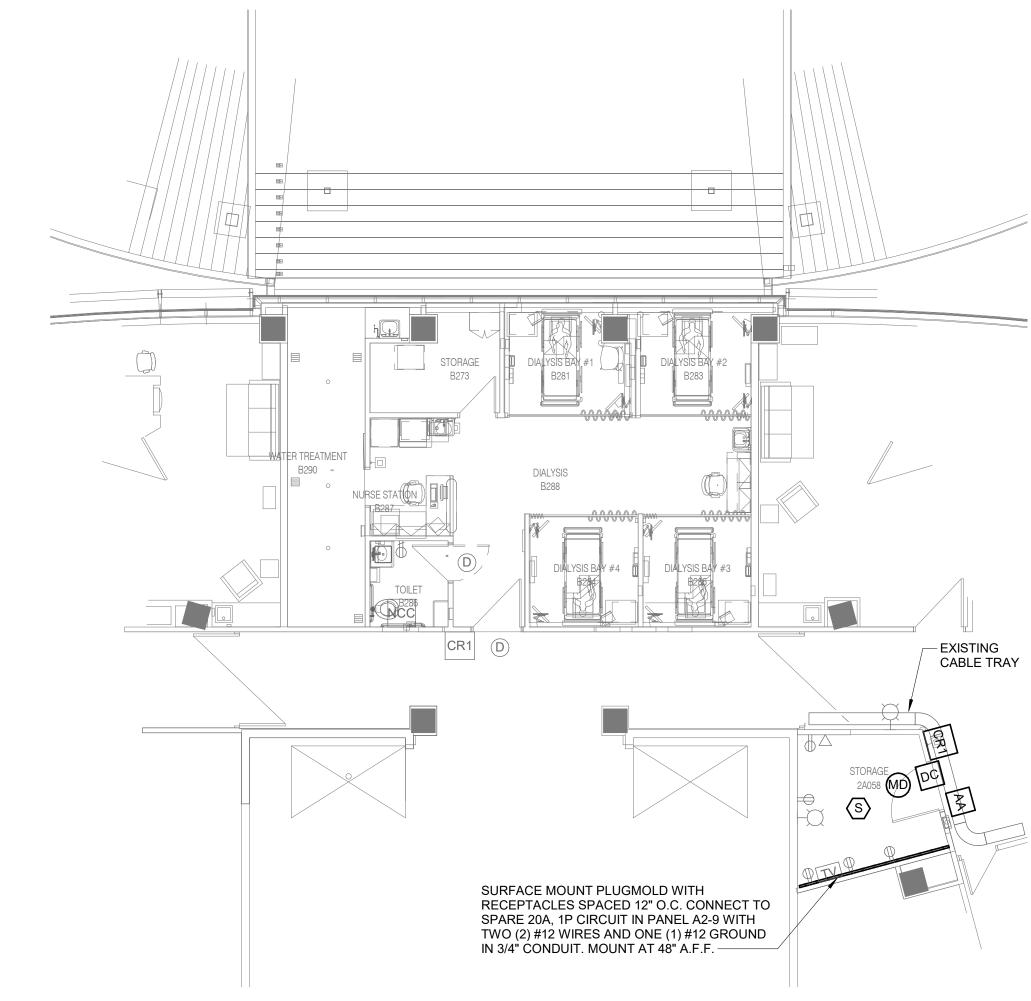
AD

DEMOLITION PLAN

A2 DEMO PLAN 1/4" = 1'-0"

DETAIL OF TYPICAL ACCESS CONTROL DOOR WITH ELECTRIC STRIKE

NO SCALE



LEVEL 01 PLAN - POWER/SYSTEMS

ELECTRICAL SYMBOL LIST SYMBOL: DESCRIPTION: FIRE ALARM SMOKE DETECTOR, CEILING OR WALL MOUNT BLANK - PHOTOELECTRIC AT = ATTIC (LOCATED IN) BR = BEAM RECEIVER BT = BEAM TRANSMITTER CO = COMBINATION SMOKE / CARBON MONOXIDE COH = COMBINATION SMOKE / CARBON MONOXIDE / HEAT COS = COMBINATION SMOKE / CARBON MONOXIDE / STROBE H = COMBINATION SMOKE / HEAT DETECTOR ION = IONIZATION TYPE ID = IN DUCT DETECTOR SA = STAND ALONE WITH SOUNDER SB = SOUNDER BASE SV = STAND ALONE WITH SOUNDER

SECURITY SYMBOLS LIST		
SYMBOL:	DESCRIPTION:	
CR	SECURITY CREDENTIAL READER (EXISTING), WALL	
CR1	SECURITY CREDENTIAL READER TYPE 1, WALL	
MD	INTRUSTION DETECTION MOTION DETECTOR, CEILING	
MD	INTRUSTION DETECTION MOTION DETECTOR, WALL	
AA	INTRUSTION DETECTION MOTION AUDIBLE ALARM, WALL	
DC	INTRUSTION DETECTION DOOR CONTACT SWITCH, WALL	

AND 177 CANDELA STROBE

ELECTRICAL INSTALLATION NOTES:

- 1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. REFER TO THE ADA GUIDELINES FOR ALL CONFIGURATION DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
- 2. CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR
- BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH 3. LIFE SAFETY, CRITICAL, EQUIPMENT BRANCH WIRING FOR FEEDERS AND BRANCH CIRCUITS SHALL BE ROUTED IN SEPARATE RACEWAY, JUNCTION BOXES, PULL BOXES, AND CABINETS.
- WIRING FOR EACH BRANCH SHALL BE INDEPENDENT FROM OTHER BRANCHES. INCLUDING THE NORMAL BRANCH. 4. FLUSH MOUNT ALL LIGHTING CONTROL DEVICES AT +42" FROM FLOOR (CENTERLINE

DIMENSION), EXCEPT WHERE OTHERWISE NOTED. DEVICES MAY BE SURFACE MOUNTED

- WHEN CONDUIT IS SPECIFIED EXPOSED. 5. FLUSH MOUNT ALL DUPLEX RECEPTACLES AND TECHNOLOGY OUTLETS AT +18" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. RECEPTACLES AND OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED. MOUNT EXTERIOR LOCATED RECEPTACLES WITH WHILE-IN-USE COVERS AT +20" FROM FINISHED GRADE (CENTER DIMENSIONS) TO MAINTAIN INSTALLATION ADA COMPLIANCE. 6. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL
- THROUGH-PENETRATION FIRESTOPS. REFER TO DIVISION 7 FOR ADDITIONAL INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING. 7. MOUNT ALL FIRE ALARM PULL STATIONS AT +42" FROM FLOOR (CENTERLINE DIMENSION)

BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF

- EXCEPT WHERE OTHERWISE NOTED. 8. INSTALL ALL WALL MOUNTED FIRE ALARM NOTIFICATION DEVICES AT 90" ABOVE FINISHED FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS LOWER, EXCEPT WHERE OTHERWISE
- NOTED. HEIGHT SHALL BE MEASURED TO THE TOP OF THE DEVICE. 9. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING MOUNTED DEVICES AND EQUIPMENT WITH LUMINAIRES, SPRINKLER, AND CEILING DIFFUSERS. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS AND OCCUPANCY/VACANCY SENSORS SHALL

BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE.

LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION, THIS CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS, OR CONNECTION LOCATIONS TO ACCOMMODATE 11. ELECTRICAL AND TECHNOLOGY EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF, OPERATION OF, AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL

10. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT

- MOUNTING OF ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT, ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE OTHER 12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL
- OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS. 13. ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS.
- CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB. 14. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO THE

WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE

- IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND 15. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY
- AUDIO/VISUAL, AND OTHER ELECTRICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS. 16. ELECTRICAL IDENTIFICATION. REFER TO SPECIFICATION SECTION 26 05 53 FOR COLOR/LABEL REQUIREMENTS FOR CONDUIT, BOX, CABLE/WIRE, AND EQUIPMENT.

ELECTRICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL ELECTRICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, LIGHTING, POWER, AND SYSTEMS.

- 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
- 2. NOT ALL EXISTING EQUIPMENT, LUMINAIRES, AND CONDUIT ARE SHOWN. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS WITH NEW WORK BEFORE STARTING WORK. 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR CABLE TRAY, BUSWAY AND CONDUITS
- BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.
- 4. EACH CONTRACTOR SHALL CUT AND PATCH ROOFS, WALLS, AND FLOORS ASSOCIATED WITH THEIR WORK.
- 5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO
- 6. WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

ELECTRICAL ABBREVIATION KEY		
ABBR:	DESCRIPTION:	
AFF	ABOVE FINISHED FLOOR	
С	CONDUIT	
GFI	GROUND FAULT INTERRUPTER	
N.C.	NORMALLY CLOSED	
NIC	NOT IN CONTRACT	
N.O.	NORMALLY OPEN	
SV	SOLENOID VALVE	
TYP	TYPICAL	

UON UNLESS OTHERWISE NOTED

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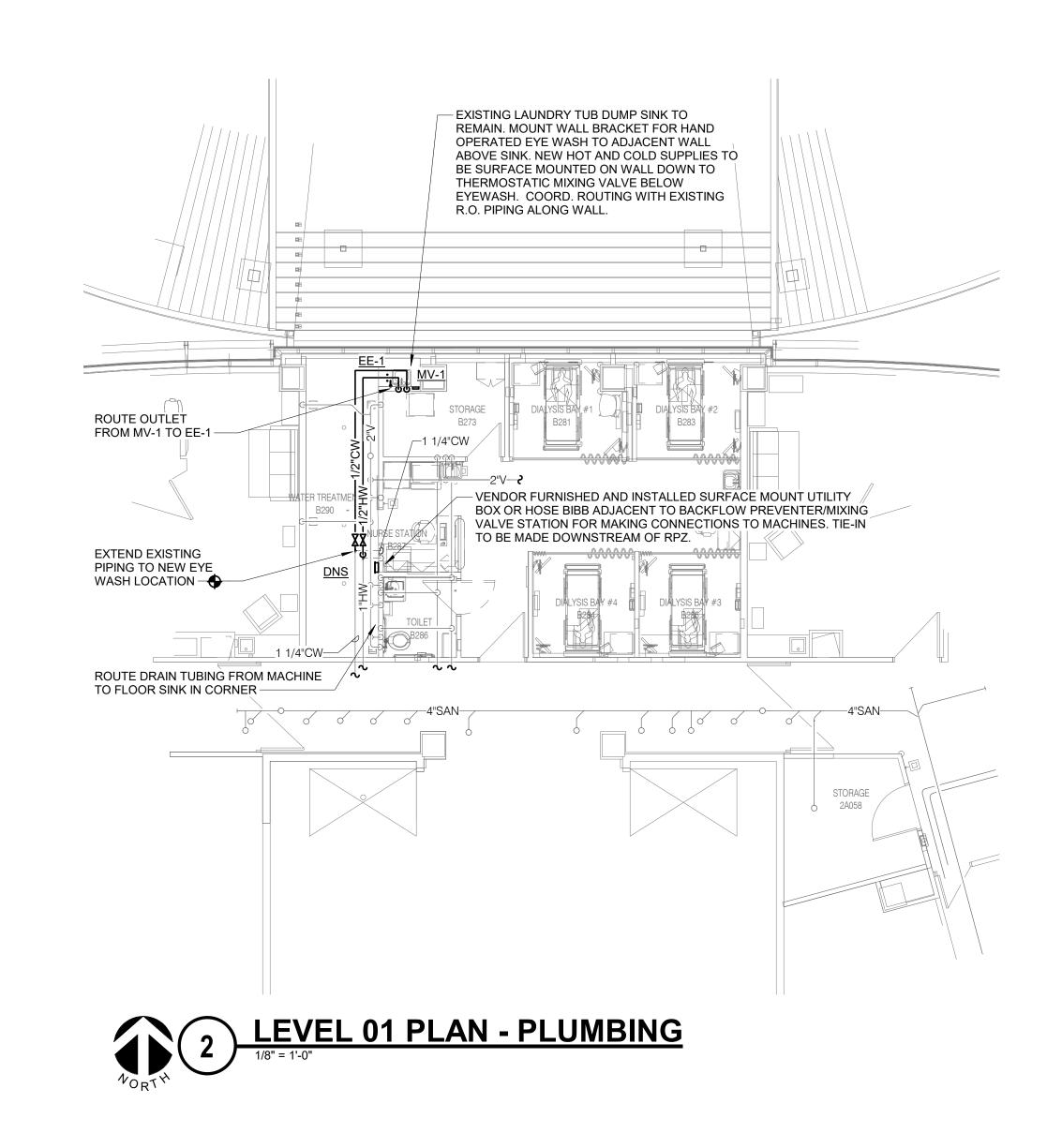
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PLUMBING SYMBOL LIST NOT ALL SYMBOLS MAY APPLY. SYMBOL: DESCRIPTION: ——AV—— ACID VENT ——AW—— ACID WASTE ——CA—— COMPRESSED AIR ——CW—— COLD WATER - POTABLE ——D—— DRAIN ——DI—— DEIONIZED WATER ——DT—— DRAIN TILE ——FOR—— FUEL OIL RETURN FOS—FUEL OIL SUPPLY ——G—— NATURAL GAS ——GRV—— GAS REGULATOR VENT —GSAN— SANITARY DRAINAGE (GREASE SANITARY DRAINAGE) ——GV—— GREASE VENT ——HW—— HOT WATER - POTABLE —HW140— HOT WATER - POTABLE NUMBER INDICATES TEMP —HWC140— HOT WATER CIRC. - POTABLE NUMBER INDICATES TEMP ——IA—— INSTRUMENT AIR ——MA—— | MEDICAL AIR ——MPG—— | MEDIUM PRESSURE GAS ——MV—— MEDICAL VACUUM ——N—— NITROGEN ——NCW—— NON-POTABLE COLD WATER —NHW— NON-POTABLE HOT WATER NO—NO—NITROUS OXIDE ──O── OXYGEN P-P-P-P-P-PROPANE GAS PD—— PUMPED DISCHARGE ——PW—— PURE WATER RO-RO-REVERSE OSMOSIS WATER ——SAN—— SANITARY DRAINAGE ——SCW—— SOFT COLD WATER ——SHW—— | SOFT HOT WATER —ST(1,000)— STORM DRAINAGE (ROOF SQUARE FOOTAGE) ——STS—— STORM DRAINAGE (SECONDARY) ——STW—— SOFT TEMPERED WATER TEMPERED WATER ——V—— ∣ VENT ——VAC—— LAB VACUUM SERVICE WATER - POTABLE PIPE CONTINUATION PIPE CAP PIPE DOWN PIPE UP OR UP/DOWN PIPE SERVING FIXTURE ON FLOOR ABOVE (EXAMPLE: FD = FLOOR DRAIN) PITCH PIPE IN DIRECTION DIRECTION OF FLOW IN PIPE **ROUTE TO DRAIN** ——∥—— UNION/FLANGE SHUTOFF VALVE NORMALLY OPEN SHUTOFF VALVE NORMALLY CLOSED

	PLUMBING ABBREVIATION KEY			
ABBR:	DESCRIPTION:			
AD	ACCESS DOOR			
AFF	ABOVE FINISHED FLOOR			
BFP	BACKFLOW PREVENTER			
ВТ	BATHTUB			
СВ	CATCH BASIN			
CI	CAST IRON			
CO	CLEANOUT			
CS	CLINICAL SINK			
DB	DIALYSIS BOX			
DF	DRINKING FOUNTAIN			
DI	DUCTILE IRON			
E	EXISTING			
EE	EMERGENCY EYEWASH			
ES	EMERGENCY SHOWER			
ESE	EMERGENCY SHOWER/EYEWASH			
EWC	ELECTRIC WATER COOLER			
FCO	FLOOR CLEANOUT			
FD	FLOOR DRAIN			
FM	FLOW METER			
FS	FLOOR SINK			
GD	GARBAGE DISPOSER			
GI	GREASE INTERCEPTOR			
НВ	HOSE BIBB			
I.E.	INVERT ELEVATION (FOR REFERENCE ONLY)			
LAV	LAVATORY			
MB	MOP BASIN			
MH	MANHOLE			
MV	MIXING VALVE			
NIC	NOT IN CONTRACT			
NT	NEUTRALIZATION TANK			
os	OIL SEPARATOR			
RD	ROOF DRAIN			
SCCR	SHORT CIRCUIT CURRENT RATING			
SH	SHOWER			
SK	SINK			
SS	SERVICE SINK			
TD	TRENCH DRAIN			
TP	TRAP PRIMER			
TYP	TYPICAL			
UR	URINAL			
VTR	VENT THROUGH ROOF			
WC	WATER CLOSET			
WCO	WALL CLEANOUT			
WF	WASH FOUNTAIN			
WH	WATER HEATER			
WMF	WASHING MACHINE FIXTURE			
WM	WATER METER			
WS	WATER SOFTENER			
UB	UTILITY BOX			
UON	UNLESS OTHERWISE NOTES			
YCO	YARD CLEANOUT			



CONTRACTOR ABBREVIATION KEY				
ABBR:	DESCRIPTION:			
A.C.	ASBESTOS ABATEMENT CONTRACTOR			
A.V.C.	AUDIO/VISUAL CONTRACTOR			
C.C.	CIVIL CONTRACTOR			
C.M.	CONSTRUCTION MANAGER			
E.C.	ELECTRICAL CONTRACTOR			
F.P.C.	FIRE PROTECTION CONTRACTOR			
F.S.C.	FOOD SERVICE CONTRACTOR			
G.C.	GENERAL CONTRACTOR			
H.C.	HEATING CONTRACTOR			
M.C.	MECHANICAL CONTRACTOR			
N.C.C.	NURSE CALL CONTRACTOR			
P.C.	PLUMBING CONTRACTOR			
S.C.	SECURITY CONTRACTOR			
T.C.	TECHNOLOGY CONTRACTOR			
T.C.C.	TEMPERATURE CONTROLS CONTRACTOR			
V.C.	VENTILATION CONTRACTOR			

BALANCING VALVE (NUMBER INDICATES GPM)

CHECK VALVE

AG NAME	DESCRIPTION	MANUFACTURER AND MODEL
EE-1	EMERGENCY EYE/FACE WASH - HOSE-CONNECTED, WALL MOUNTED ADJACENT TO SINK, TWIN SPRAY HEADS WITH CAPS AND RETAINING CHAINS/STRAPS, BRASS SUPPLY ARMS, INTEGRAL FLOW CONTROL FITTING, BRASS PIPING AND FITTINGS, BRASS/BRONZE STAY OPEN BALL VALVE, SINGLE ACTION ACTIVATION BY DEPRESSING HANDLE, UNIVERSAL IDENTIFICATION SIGN, ANSI Z358.1-2004 COMPLIANT.	GUARDIAN (G5026)
	MINIMUM FLOW RATE OF 3.0 GPM AT 30 PSI. ACTIVATION TIME SHALL BE 1 SECOND OR LESS. BRASS/BRONZE PIPING, FITTINGS, AND VALVES SHALL BE CHROME-PLATED OR CHEMICAL-RESISTANT POWDER COATED.	
	MIXING VALVE - THERMOSTATIC MIXING VALVE FOR EMERGENCY EYEWASH OR COMBINATION EYEWASH/FACEWASH FIXTURE, BRONZE BODY CONSTRUCTION, COLD WATER BYPASS, OUTLET THERMOMETER, COMBINATION CHECK STOPS OR SEPARATE SUPPLY CHECK VALVES AND SHUT OFF VALVES, MOUNTING BRACKET.	
	SUPPLY SHUT OFF VALVES SHALL BE LOCKED OPEN OR CONTRACTOR SHALL PROVIDE A LOCKING CABINET TO PREVENT UNAUTHORIZED CLOSURE. CABINET SHALL BE SURFACE-MOUNTED 18 GAUGE STAINLESS STEEL WITH 16 GAUGE LOCKING DOOR TO ENCLOSE VALVE, INLET CHECK STOPS, OUTLET THERMOMETER.	
	THERMOSTATIC MIXING AND PRESSURE REGULATING VALVES TO DELIVER 3 GPM OF TEMPERED WATER (60-100 DEGREE F) WITH 10 PSI PRESSURE DIFFERENTIAL.	
	EYEWASH SHALL COMPLY WITH ANSI Z358.1 AND ASME A112.18.1. MIXING VALVE SHALL BE ASSE 1071 LISTED AND APPROVED.	
MV-1	MIXING VALVE - THERMOSTATIC MIXING VALVE FOR EMERGENCY EYEWASH OR COMBINATION EYEWASH/FACEWASH FIXTURE, BRONZE BODY CONSTRUCTION, COLD WATER BYPASS, OUTLET THERMOMETER, COMBINATION CHECK STOPS OR SEPARATE SUPPLY CHECK VALVES AND SHUT OFF VALVES, MOUNTING BRACKET.	GUARDIAN (G6020)
	SUPPLY SHUT OFF VALVES SHALL BE LOCKED OPEN OR CONTRACTOR SHALL PROVIDE A LOCKING CABINET TO PREVENT UNAUTHORIZED CLOSURE. CABINET SHALL BE SURFANCE-MOUNTED 18 GAUGE STAINLESS STEEL WITH 16 GAUGE LOCKING DOOR TO ENCLOSE VALVE, INLET CHECK STOPS, OUTLET THERMOMETER, [AND OUTLET VALVE].	
	THERMOSTATIC MIXING AND PRESSURE REGULATING VALVES TO DELIVER 3 GPM OF TEMPERED WATER (60-100 DEGREE F) WITH 10 PSI PRESSURE DIFFERENTIAL.	
	UNIT SHALL BE ASSE 1071 LISTED AND APPROVED. VALVE SHALL COMPLY WITH FEDERAL ACT S.3874.	

PLUMBING ROUGH-IN SCHEDULE NOTES: (APPLIES TO ALL PLUMBING FIXTURES LISTED BELOW) 1) SIZES SHOWN ARE MINIMUMS. LARGER SIZES SHOWN ON THE DRAWING SHALL DICTATE THE ROUGH-IN SIZE. 2) SANITARY RISERS UP IN WALL TO FIXTURES SHALL BE A MINUMUM OF 2". 3) DOMESTIC WATER BRANCH PIPING OUTSIDE OF THE WALL/CHASE SHALL BE A MINIMUM OF 3/4" UNLESS NOTED OTHERWISE. ONLY THE FINAL RISE-DROP SHALL BE SMALLER. 4) FINAL SANITARY SIZE SHALL MATCH P-TRAP SIZE (REFER TO MATERIAL LIST). DESCRIPTION WATER WATER SANITARY VENT

1/2" 1/2"

EE-1 EMERGENCY EYE-FACE WASH

PLUMBING GENERAL NOTES:

- 1. THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY QUANTITIES AND FURNISH ALL MATERIALS REQUIRED FOR FULLY OPERATIONAL SYSTEMS, WHETHER SPECIFIED OR NOT.
- 2. CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE, BUT ARE GIVEN AS AN AID TO THE CONTRACTOR AND TO INDICATE THE QUALITY REQUIRED. CONTRACTOR IS RESPONSIBLE FOR A COMPLETE DESCRIPTION OF MATERIAL ON THESE DRAWINGS AND IN THE SPECIFICATIONS BEFORE ORDERING. THE DESCRIPTION OF THE MATERIAL TAKES PRECEDENCE OVER THE CATALOG NUMBER. THE FIRST MANUFACTURER LISTED IS THE
- BASIS OF DESIGN. 3. CONTRACTOR SHALL VERIFY THAT FIXTURES SUPPLIED ARE APPROVED PER ALL APPLICABLE STATE, LOCAL AND GOVERNING AUTHORITIES.
- 4. ALL FIXTURES SHALL CONFORM TO FEDERAL ACT S.3874
- 5. INVERT ELEVATIONS ARE FROM EXISTING DRAWINGS AND MAY NOT BE ACCURATE. VERIFY ALL ELEVATIONS BEFORE BEGINNING WORK. 6. VERIFY UNDERGROUND PIPE SIZES, INVERT ELEVATIONS, AND LOCATIONS PRIOR TO BEGINNING ANY WORK.
- 7. REFER TO THE PLUMBING ROUGH-IN SCHEDULE FOR THE SIZES OF BRANCH PIPES TO PLUMBING FIXTURES.
- 8. FOR CLARITY, NOT ALL VALVES HAVE BEEN SHOWN. PROVIDE SHUTOFF VALVES IN DOMESTIC WATER PIPING SERVING EACH ROOM WITH FIXTURES. ANGLE STOPS SHALL NOT BE CONSIDERED SHUTOFF VALVES.

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, MEDICAL GAS, VENTILATION, PIPING AND TEMPERATURE

- 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND
- REPORT ANY CONFLICTS BEFORE PROCEEDING. 2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS
- BEFORE STARTING WORK. NOTIFY ENGINEER OF ANY CONFLICTS WITH NEW WORK. 3. EACH CONTRACTOR SHALL CUT AND PATCH ROOFS, WALLS, AND FLOORS ASSOCIATED
- WITH THEIR WORK. 4. THE **GENERAL CONTRACTOR** IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE **GENERAL CONTRACTOR** OF AFFECTED AREAS PRIOR TO
- 5. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS. OR REWORK EXISTING MECHANICAL
- SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK. 6. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW
- SYSTEMS ARE INSTALLED. 7. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS. OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE.

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, MEDICAL GAS, VENTILATION, PIPING AND TEMPERATURE

1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING

- CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT. 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES
- OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT ORDERS. 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE
- REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO
- COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF
- 7. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS
- AND FLOORS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH.
- 8. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.
- 9. SEAL ALL WALL PENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS PENETRATE.
- 10. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS
- 11. MAINTAIN A MINIMUM WORKING CLEARANCE OF 3'-6" IN FRONT OF ALL ELECTRICAL EQUIPMENT REQUIRING MAINTENANCE, INSPECTION, AND TESTING INCLUDING BUT NOT LIMITED TO PANELS, DISTRIBUTION PANELS, SWITCHBOARDS, MOTOR CONTROL CENTERS,
- 12. MAINTAIN THE DEDICATED ELECTRICAL EQUIPMENT SPACE DEFINED BY THE WIDTH / DEPTH OF ELECTRICAL EQUIPMENT MEASURED FROM THE FLOOR TO A HEIGHT 6'-0" ABOVE THE EQUIPMENT OR THE STRUCTURAL CEILING, WHICHEVER IS LOWER. SYSTEMS FOREIGN TO THE ELECTRICAL DISTRIBUTION SYSTEM ARE NOT ALLOWED IN THE DEDICATED
- ELECTRICAL SPACE INCLUDING; DUCTWORK, PIPING, ETC. 13. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL

TRANSFORMERS, EQUIPMENT DISCONNECTS AND STARTERS.

EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT. 14. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.

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