#### **GENERAL NOTES**

#### GENERAL CONDITIONS

- 1.1 ALL WORK SHALL COMPLY WITH THE REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION. THE DRAWINGS SHALL BE SUPPLEMENTAL TO ALL LAWS AND CODES OF THE REGULATING BODIES RELATED TO THE BUILDING, AND ALL REGULATIONS SPECIFIED IN THESE REGULATIONS SHALL BE FOLLOWED AS THOUGH SPECIFICALLY NOTED IN THESE DRAWINGS.
- 1.2 CONTRACTOR SHALL NOTIFY DESIGNER OF ANY DISCREPANCY BETWEEN THE DRAWINGS. THESE NOTES, AND FIELD CONDITIONS BEFORE SUBMITTING A BID OR COMMENCING
- ANY WORK AND REQUEST CLARIFICATION 1.3 BEFORE SUBMITTING A BID, ALL CONTRACTORS SHALL VISIT THE PREMISES AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND THE SCOPE OF THE WORK AND THE DIFFICULTIES THAT ATTEND ITS
- 1.4 THE SUBMISSION OF A BID SHALL BE CONSTRUCTED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIAL, OR FOR DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN
- HAD SUCH AN EXAMINATION BEEN MADE, WILL NOT BE RECOGNIZED. 1.5 CONTRACTOR SHALL INCLUDE IN HIS ESTIMATE ALL COSTS (INCLUDING OVERTIME WORK) FOR REMOVAL, NEW INSTALLATION AND REINSTALLATION WORK FOR ANY PLUMBING, CEILING (TAKE DOWN AND REINSTALLATION), ELECTRICAL TELEPHONE COMMUNICATION EQUIPMENT OR HVAC WORK ON FLOOR, ABOVE OR BELOW TENANT SPACE TO COMPLETE WORK ON FLOOR BEING RENOVATED.
- 1.6 CONTRACTOR AGREES TO PAY ALL VERTICAL AND HORIZONTAL TRANSPORTATION CHARGES ON ALL HIS MATERIAL OR EQUIPMENT TO THE POINT OF USE, AND SHALL BE RESPONSIBLE FOR ALL UNLOADING, CHECKING AND STORING OF SAME IN CONNECTION WITH THIS CONTRACT.
- 1.7 CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF THE TENANT'S SUB-CONTRACTOR(S).

#### DRAWINGS AND SPECIFICATIONS

- 2.1 CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES. 2.2 THE CONTRACTOR UPON ACCEPTANCE AND APPROVAL OF THESE DRAWINGS ASSUMES FULL RESPONSIBILITY FOR THE CONSTRUCTION, MATERIALS AND WORKMANSHIP OF THE
- WORK DESCRIBED IN THESE NOTES AND DRAWINGS, AND HE WILL BE EXPECTED TO COMPLY WITH THE SPIRIT AS WELL AS THE LETTER IN WHICH THEY WERE WRITTEN. 2.3 LEGENDS AND NOTES APPEAR ON DRAWINGS TO WHICH THEY RELATE, BUT THEY ARE
- NOT LIMITED TO THE DRAWING AND ARE APPLICABLE TO ALL CONSTRUCTION DOCUMENTS. 2.4 IF DOCUMENTS SHOW A DISCREPANCY WITH ONE ANOTHER ON ANY ITEM OR ITEMS, THE CONTRACTOR IS TO BASE HIS BID ON THE MORE COSTLY OF THE CONDITIONS.

#### . USE OF PREMISES

- 3.1 LANDLORD/OWNER RULES AND REGULATIONS FOR CONSTRUCTION SHALL APPLY TO ALL WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF
- WITH THEM. 3.2 CONTRACTOR SHALL CONTACT BUILDING MANAGEMENT TO DETERMINE THE RULES FOR CONSTRUCTION. TO DETERMINE WHEN AND HOW DELIVERIES CAN BE MADE, WHAT PHASES OF CONSTRUCTION CAN BE DONE ON REGULAR OR OVERTIME, AND IN GENERAL, ANY SPECIAL BUILDING REQUIREMENTS WHICH WILL AFFECT HIS WORK. (IF OVERTIME WORK IS REQUIRED BY ANY TRADE, APPROVAL MUST BE OBTAINED PRIOR TO THE
- EXECUTION OF ANY WORK, INCLUDING COST) 3.3 CONTRACTOR SHALL MAKE ALL REQUIRED ARRANGEMENTS FOR DELIVERY OF EQUIPMENT AND/OR MATERIALS. DATE AND TIME OF DELIVERY SHALL BE ESTABLISHED. BUILDING CONDITIONS INCLUDING SIZE AND LOADING CAPACITY OF ELEVATORS, SIZE OF DOORWAYS, CORRIDORS, WINDOW OPENINGS, ETC. SHALL BE CHECKED FOR ITEMS BEING DELIVERED BY THE CONTRACTOR.
- 3.4 ALL SPECIAL"BUILDING STANDARD" METHODS OF CONSTRUCTION SHALL BE CONFIRMED
- BY THE CONTRACTOR. 3.5 CONTRACTOR TO PROVIDE ALL NECESSARY PROTECTION FOR FLOORS, WALLS ETC., AND FOR EXISTING ITEMS TO REMAIN. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE INCURRED TO THE SAME BY THE TRADES AND WILL BE HELD RESPONSIBLE FOR ANY DAMAGE INCURRED AND WILL BE OBLIGATED TO REPLACE OR RESTORE TO ITS
- ORIGINAL CONDITION AS DETERMINED BY THE DESIGNER. 3.6 WORK REQUIRING ACCESS TO AREAS OF THE BUILDING NOT DIRECTLY PART OF THE LIMITS OF THE CONSTRUCTION SHALL BE SCHEDULED THROUGH AND COORDINATED WITH BUILDING MANAGEMENT.

#### . LABOR AND MATERIALS

- 4.1 UNLESS OTHERWISE NOTED, ALL MATERIAL, EQUIPMENT, ETC. SHALL BE FURNISHED AND
- INSTALLED BY THE CONTRACTOR. 4.2 THE USE OF THE TERM "APPROVED EQUAL" IN CONNECTION WITH ANY ITEM SPECIFIED, IS INTENDED TO MEAN. THAT SUCH WILL BE OF EQUAL QUALITY. FINISH AND MATERIAL. THE SUBSTITUTIONS SHALL BE SUBMITTED, IN WRITTEN FORM, TO DESIGNER FOR
- 4.3 THE TERMS "PROVIDE", OR "PROVIDED" IN CONNECTION WITH ANY ITEM SPECIFIED, IS INTENDED TO MEAN, THAT SUCH SHALL BE FURNISHED, INSTALLED, AND CONNECTED
- WHERE SO REQUIRED. 4.4 ALL APPROVALS SHALL BE FOR DESIGN APPEARANCE ONLY, CONTRACTOR SHALL BE RESPONSIBLE FOR QUANTITIES, DIMENSIONS AND COMPLIANCE WITH CONTRACT DOCUMENTS, AND FOR INFORMATION PERTAINING TO THE FABRICATION PROCESS OR
- TECHNIQUES OF FIRST CLASS CONSTRUCTION AND FOR COORDINATION WITH OTHER TRADES. 4.5 INSTALL ALL MANUFACTURED ITEMS, MATERIALS, AND EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS. SUBMIT MANUFACTURER'S LITERATURE FOR OPERATIONAL, MAINTENANCE AND WARRANTY TO BUILDING MANAGEMENT UPON COMPLETION.
- 4.6 CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY ARRIVAL OF ALL SPECIFIED FINISH MATERIALS, EQUIPMENT AND FIXTURES TO BE UTILIZED ON THIS PROJECT. CONTRACTOR SHALL NOTIFY DESIGNER IN WRITING WITHIN 3 DAYS OF AWARD OF CONTRACT OF ANY SPECIFIED ITEMS THAT MAY NOT BE READILY AVAILABLE. IF NOTIFICATION IS NOT RECEIVED THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR PROPER ORDERING AND FOLLOW-UP OF SPECIFIED ITEMS AND WILL PURSUE WHATEVER MEANS NECESSARY. AT NO ADDITIONAL COST TO THE TENANT OR LANDLORD TO ENSURE AVAILABILITY OF ALL SPECIFIED ITEMS.

#### APPLICABLE CODES

- 5.1 CONTRACTOR SHALL SECURE AND PAY FOR THE BUILDING PERMIT AND ALL OTHER PERMITS AND FEES, CONTROLLED INSPECTIONS, SIGNOFFS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK WHICH ARE CUSTOMARILY SECURED AFTER
- EXECUTION OF THE CONTRACT AND WHICH ARE LEGALLY REQUIRED. 5.2 CONTRACTOR SHALL NOTIFY DESIGNER IN WRITING IF ANY PART OF THE CONTRACT DOCUMENTS IS OBSERVED TO BE AT VARIANCE WITH CODES.
- 5.3 ALL WORK SHALL COMPLY WITH ADA AND TDLR TEXAS ACCESSIBILITY STANDARDS.

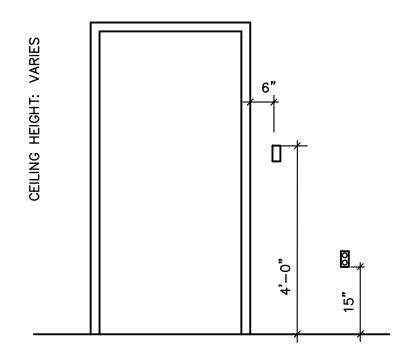
#### . CUTTING AND PATCHING

- 6.1 DO NOT CUT AND PATCH STRUCTURAL ELEMENTS IN A MANNER THAT WOULD CHANGE
- THEIR LOAD-CARRYING CAPACITY OR LOAD-DEFLECTION RATIO. 6.2 DO NOT CUT OR PATCH OPERATING ELEMENTS OR RELATED COMPONENTS IN A MANNER THAT WOULD RESULT IN REDUCING THEIR CAPACITY TO PERFORM AS INTENDED. DO NOT CUT AND PATCH OPERATING ELEMENTS OR RELATED COMPONENTS IN A MANNER THAT WOULD RESULT IN INCREASES IN MAINTENANCE OR DECREASED OPERATIONAL LIFE OR

# **ABBREVIATIONS**

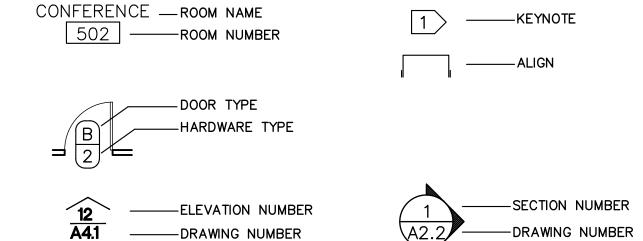
A		ADJUSTABLE ABOVE FINISHED FLOOR ALTERNATE APPROVATION	G	GALV	FURRING FUTURE GALVANIZED		PLMG PLY PR PTR	PLUMBING PLYWOOD PAIR PRINTER
В	AUTO BD	AUTOMATIC BOARD	н	GC GYP	GENERAL CONTRACTOR GYPSUM BOARD	•	QT	QUARRY TILE
c	BLDG BLKG BLW	BUILDING BLOCKING BELOW		HM HDWR HT HVAC	HOLLOW METAL HARDWARE HEIGHT HEATING, VENTILATION AIR CONDITIONING	R	REF REFR REQD RM	REFERENCE REFRIGERATOR REQUIRED ROOM
•	CAB CL CLG CLR CO COL CONC CONF CORR CPT	CABINET CENTERLINE CEILING CLEAR CASED OPENING COLUMN CONCRETE CONFERENCE CORRIDOR CARPET	I J	H/C HW HDW INSUL INT ISO JAN JB	HOT/COLD HOT WATER HARDWOOD  INSULATION INTERIOR ISOLATION  JANITOR JUNCTION BOX	8	SCHED SECY SF SIM SQ	ROUGH OPENING  SCHEDULED SECRETARY SQAURE FOOT SIMILAR SQUARE SQUARE SQUARE YARD STAINLESS STEEL STANDARD
_	CT CTR CW	CERAMIC TILE CENTER COLD WATER	L	LAV LIN	LAVATORY LINEAR	Т	STG	STORAGE TEXAS
D	DEMO DF DIA DIM DISP	DEMOLITION DRINKING FOUNTAIN DIAMETER DIMENSION DISPENSER	M	MFGR MIN MIR MISC MTD	MANUFACTURER MINIMUM MIRROR MISCELLANEOUS MOUNTED	U	TELE TV TYP	ACCESSIBILITY STANDARDS TELEPHONE TELEVISION TYPICAL
E	DN DWG E EXIST	DOWN DRAWING EXISTING EXISTING	N	NA NIC NRC	NOT APPLICABLE NOT IN CONTRACT NOISE REDUCTION		UNO U/L	UNLESS NOTED OTHERWISE UPPER/LOWER CABINETS
	EF ELEC ELEV	EXHAUST FAN ELECTRICAL ELEVATOR	0		COEFFICIENT NOT TO SCALE	٧	VWC	VINYL WALLCOVERING
	EMERG ENCL ENTR EQ EQUIP	EMERGENCY ENCLOSURE ENTRANCE EQUAL EQUIPMENT	P	OC OFF OH OPNG	ON CENTER OFFICE OPPOSITE HAND OPENING	W	W W/ W/O WC	WIDTH WITH WITHOUT WATER CLOSET
F	EWC FE FLR	ELEC. WATER COOLER FIRE EXTINGUISHER FLOOR	r	PB PED PLAM	PUSHBUTTON PEDESTAL PLASTIC LAMINATE		WC WD WH WP	WALLCOVERING WOOD WATER HEATER WATERPROOF

# TYPICAL MOUNTING HEIGHTS



ALL COVER PLATES AND DEVICES SHALL BE WHITE

### **DRAWING SYMBOLS**



## **SHEET INDEX**

# **ARCHITECTURAL**

- AI1.1 GENERAL INFORMATION
- Al1.2 LIFE SAFETY PLAN
- AI2.1 DEMOLITION PLAN
- AI2.2 CONSTRUCTION PLAN
- AI2.3 HARDWARE PLAN
- AI2.4 POWER PLAN AI2.5 CEILING PLAN
- AI2.6 FINISH PLAN & SCHEDULES AI4.1 ELEVATIONS & MILLWORK SPECIFICATIONS
- AI4.2 ELEVATIONS & EXAM ROOM LAYOUTS

E3.1 POWER PLAN E3.2 ELECTRICAL ROOF PLAN E5.1 ELECTRICAL RISER & SCHEDULES E5.2 ELECTRICAL SCHEDULES

E2.1 LIGHTING PLAN

PO.0 PLUMBING COVER SHEET P2.0 PLUMBING UNDERFLOOR PLAN

E8.1 NURSE CALL SYSTEM PLAN

MO.O MECHANICAL COVER SHEET

M2.1 MECHANICAL FLOOR PLAN

M2.2 MECHANICAL ROOF PLAN

M3.1 MECHANICAL SCHEDULES

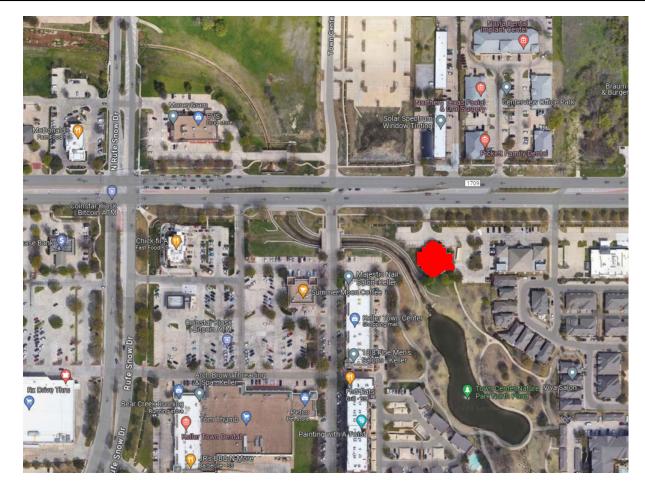
E0.0 ELECTRICAL COVER SHEET

M4.1 MECHANICAL DETAILS

M4.2 MECHANICAL DETAILS

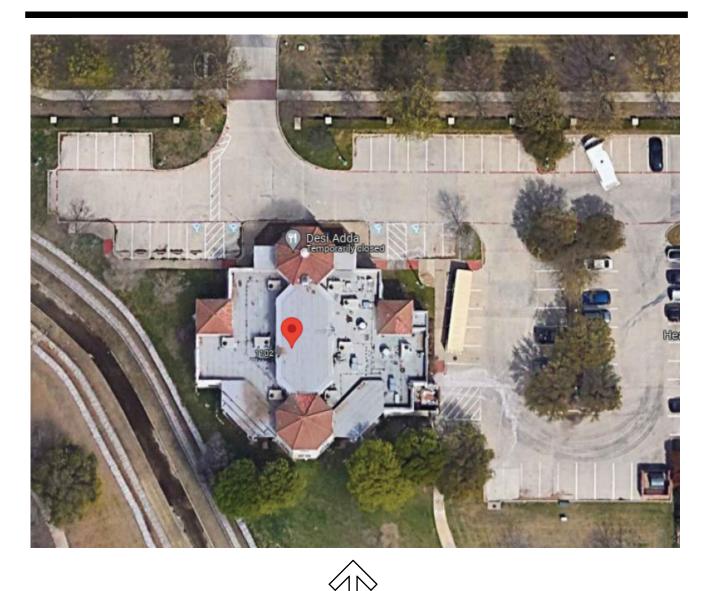
- P2.1 PLUMBING PLAN
- P2.2 PLUMBING ROOF PLAN P3.1 PLUMBING SCHEDULES
- P4.1 PLUMBING DETAILS P5.1 PLUMBING RISER DIAGRAMS—WATER P5.2 PLUMBING RISER DIAGRAMS—SANITARY P5.3 PLUMBING RISER DIAGRAM-NATURAL GAS

## **VICINITY PLAN**



1110 KELLER PARKWAY **KELLER, TX. 76248** 

# SITE PLAN



## PROJECT SCOPE

INTERIOR RENOVATIONS TO A ~7,200 SF BUILDING TO MODIFY IT FOR AN OUT PATIENT PHYSICIAN OFFICES. ADDITIONAL INFORMATION ON SHEET AI1.2

THIS IS AN OUT PATIENT CARE FACILTIY WHERE PATIENTS WILL NOT BE RENDERED INCAPABLE OF SELF-PRESERVATION. FACILITY WILL NOT PROVIDE SERVICES FOR PATIENTS WHO REQUIRE ANESTHESIA SERVICES. THERE ARE NO MORE THAN 3 E-CLASS COMPRESSED GAS CYLINDERS STORED FOR MEDICAL USE AT ANY GIVEN TIME.

#### **CODE INFORMATION**

REFERENCE SHEET AI1.2

## **PROJECT TEAM**

## **DESIGNER:**

THE DAWLEY GROUP 280 E. OAKVIEW PLACE SAN ANTONIO, TEXAS 78209

CONTACT: GINGER DAWLEY PHONE: 210.241.9392

# **BUILDING MANAGER**

FAX:

**EMAIL:** 

#### CONTACT: -PHONE: FAX: EMAIL: -

WYLIE CONSULTING ENGINEERS 9050 N. CAPITAL OF TEXAS HWY STE 365 AUSTIN, TX. 78759

MEP ENGINEER

**TENANT** 

19500 IH-10 WEST

SAN ANTONIO, TX. 78257

CONTACT: JESSICA VILLARREAL

210.774.3783

210.860.0348

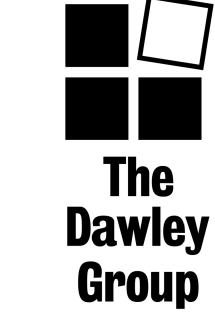
WELLMED

PHONE:

CELL:

EMAIL:

CONTACT: CRAIG LUSINGER PHONE: 512.888.9945 FAX: 713.781.2536 EMAIL:



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209

210-241-9392



PROJECT

# **WELLMED CLINIC**

**KELLER** 1110 KELLER PARKWAY KELLER, TX. 76248

## **GENERAL INFORMATION**

PROJECT NO: WTX07J 6.3.24 **REVISION DATES:** 



#### **GENERAL INFORMATION**

APPLICABLE CODES WITH KELLER LOCAL AMENDMENTS 2021 INTERNATIONAL BUILDING CODE 2021 INTERNATIONAL FIRE CODE 2021 INTERNATIONAL MECHANICAL CODE

2020 NATIONAL ELECTRIC CODE

2021 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL ENERGY CONSERVATION CODE

EXISTING BASE BUILDING INFORMATION BUILDING USAGE: BUILDING FLOOR AREA: 7,182 SF 1 STORY

BUILDING CONSTRUCTION TYPE: V-B

BUILDING IS FULLY SPRINKLERED WITH A MONITOR ONLY FIRE ALARM SYSTEM

EXIT AND EMERGENCY LIGHTING TO BE PROVIDED PER CODE.

BUILDING CLASSIFICATION

TENANT OCCUPANCY GROUP FOR THIS LEASE AREA:

OCCUPANCY LOAD: 150 SF PER OCCUPANT AT CLINIC AREAS 15 SF PER OCCUPANT AT ADULT ED ROOM

## SPRINKLER SYSTEM

BUILDING HEIGHT:

SPRINKLER PLAN FOR TENANT PORTION SHALL BE SUBMITTED BY CONTRACTOR'S LICENSED DESIGN COMPANY UNDER A SEPARATE PERMIT AS REQUIRED BY FIRE DEPARTMENT. FIRE SPRINKLED MONITORING SYSTEM IS REQUIRED AND SHALL BE SUBMITTED BY CONTRACTOR UNDER A SEPARATE PERMIT.

#### FACILITIES USE

THIS LEASE AREA IS A CLINIC-OUTPAITIENT, NOT AN AMBULATORY HEALTH CARE FACILITY. PATIENTS ARE NOT RENDERED INCAPABLE OF SELF PRESERVATION. THERE WILL BE NO MEDICAL GASES IN THIS LEASE AREA.

FLAME SPREAD INDEX FOR ALL WALL AND CEILING MATERIALS ARE COMPLIANT WIITH 2018 IBC TABLE 803.11

#### OCCUPANT LOAD CALCULATIONS:

GROSS LEASE AREA S.F.: 6,850 USF (INSIDE FACE)

ADULT EDUCATION 109: BUSINESS USE:

465 SF/15 = 31 OCC.6,385 SF/150 = 43 OCC

74 OCCUPANTS: TOTAL OCCUPANT LOAD

#### EXIT REQUIREMENTS

NUMBER OF EXITS: 2 REQUIRED - 3 PROVIDED

DISTANCE BETWEEN EXITS: 1/3 LONGEST DIAGONAL

115'-6"/3 = 38'-6" FEET MIN. REQUIRED : 87'-0" PROVIDED

MAX. DEAD END CORRIDOR ALLOWED: 50 FT - 40'-6" PROVIDED MAX. COMMON PATH OF TRAVEL ALLOWED: 100 FT - 86'-9" PROVIDED

MAX. TRAVEL DISTANCE ALLOWED: 300 FT

74 occupants X . 2 = 14.8" Minimun

EXIT WIDTH REQUIRED: EXIT WIDTH PROVIDED: 5 Exits X 32" = 160"

# PLUMBING FIXTURE CALCULATIONS

74 TOTAL OCCUPANTS - 37 MEN 37 WOMEN

TOILETS: (PER SEX)

2 REQUIRED FOR FIRST 50, 1 PER 50 FOR THE REMAINER EXCEEDING 50 4 TOILETS REQUIRED - 5 TOILETS PROVIDED

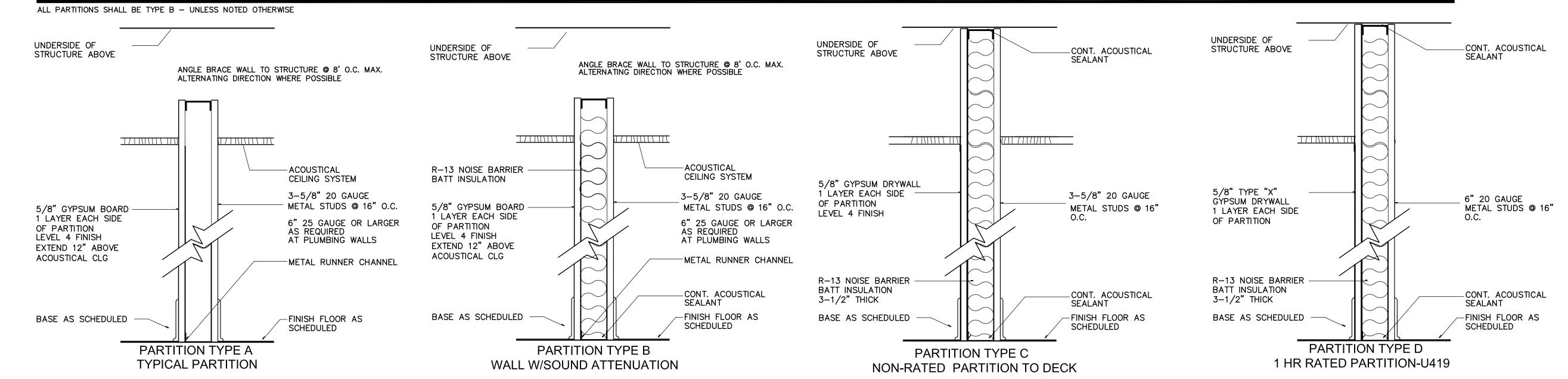
LAVATORIES: (PER SEX) 2 REQUIRED FOR FIRST 80, 1 PER 80 FOR THE REMAINER EXCEEDING 80 4 LAVATORIES REQUIRED - 5 LAVATORIES PROVIDED

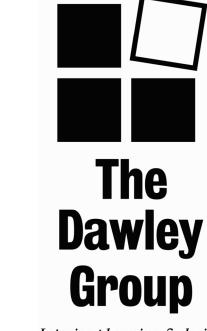
MOP SINK PROVIDED IN JANITOR CLOSET RM 106 - 1 TOTAL

DRINKING FOUNTAIN PROVIDED IN CORRIDOR 118

COLD WATER LINES FOR WATER DISPENSERS ARE SPECIFIED FOR WAITING ROOM AND EMPLOYEE BREAK ROOM

PARTITION TYPES NOT ALL TYPES USED





Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS





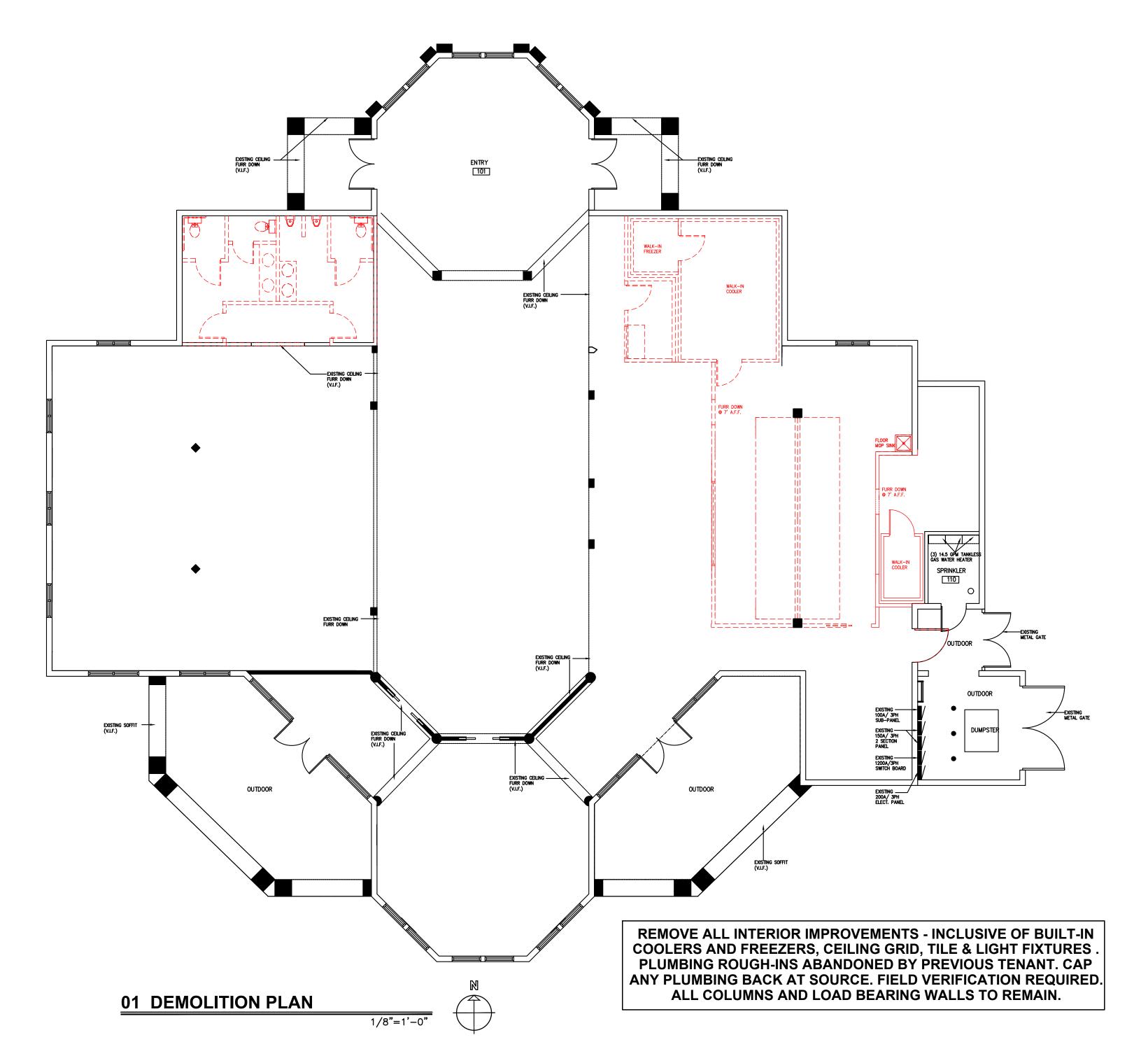
PROJECT

# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

LIFE SAFETY PLAN

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 



#### **GENERAL NOTES - DEMOLITION**

- 1. CONTRACTOR SHALL SUBMIT HIS PROPOSAL BASED ON EXECUTING ALL
- WORK WITHIN THE REGULATIONS OF THE BUILDING FOR DEMOLITION. 2. CONTRACTOR SHALL REMOVE ALL EXISTING WALLCOVERING, BASE AND FLOORING. PREPARATION FOR NEW FINISHES IS NOT IN SCOPE.
- 3. DURING ANY REQUIRED DEMOLITION OF DESIGNATED AREAS, CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY PROTECTION AND SHALL SECURE ADJACENT AREAS FROM DUST AND DEBRIS.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING PLUMBING AND ELECTRICAL WORK WHERE ITEMS ARE REMOVED, BY DEAD-ENDING PIPING
- AND WIRES IN A SAFE, CODE COMPLIANT AND PERMANENT MANNER. 5. ALL EXISTING WORK DESIGNATED FOR REMOVAL SHALL BE LEGALLY DISPOSED OF, OFF SITE, BY THE CONTRACTOR. "REMOVE" SHALL MEAN COMPLETELY AND ENTIRELY FROM THE BUILDING. WHERE APPLICABLE, MILLWORK, APPLIANCES AND EQUIPMENT SHALL REMAIN THE PROPERTY
- OF THE LANDLORD.

  6. CONTRACTOR SHALL CAREFULLY REMOVE ALL ITEMS WHICH CAN
  BE REUSED IN THE NEW CONSTRUCTION OF THIS PROJECT. THE MATERIALS SHALL BE STORED IN A SAFE LOCATION. ALL BLDG STD ITEMS NOT SCHEDULED FOR REUSE SHALL BE RETURNED IN GOOD CONDITION TO THE
- BUILDING'S STOCKPILE. 7. BAG AND PROTECT ALL EXISTING WINDOW COVERINGS.
- 8. IF ANY MATERIALS SUSPECTED OF CONTAINING ASBESTOS ARE UNCOVERED DURING REMOVAL OR CONSTRUCTION WORK, NOTIFY THE LANDLORD IN WRITING.THE OWNER IS RESPONSIBLE TO DETERMINE THE EXTENT OF THE AFFECTED AREA, AND ARRANGE FOR IT TO BE SEALED OFF UNTIL INVESTIGATION, AND ASBESTOS REMOVAL IF NECESSARY, HAS BEEN COMPLETED IN ACCORDANCE WITH EPA REQUIREMENTS. WORK IN OTHER AREAS, DETERMINED BY THE OWNER TO BE ASBESTOS-FREE, SHALL CONTINUE WHILE THIS IS BEING DONE. INVESTIGATION AND ABATEMENT OF ASBESTOS WILL BE DONE UNDER A SEPARATE CONTRACT BY THE
- OWNER AND IS NOT INCLUDED IN WORK OF THIS CONTRACT. 9. REMOVE UNUSED OUTLETS AND THEIR ASSOCIATED WIRING LOCATED IN WALLS SCHEDULED TO BE REMOVED. REMOVE CONDUIT AND WIRING BACK TO NEAREST JUNCTION BOX OR TO NEAREST HOT OUTLET WHICH REMAINS.
- 10. ALL EXCESSIVE CABLING, WIRING AND DEAD POWER OUTLETS TO BE REMOVED.

### **SYMBOL LEGEND**

EXISTING DOOR TO BE REMOVED

= = = EXISTING PARTITION TO BE REMOVED

EXISTING PARTITION TO REMAIN



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24

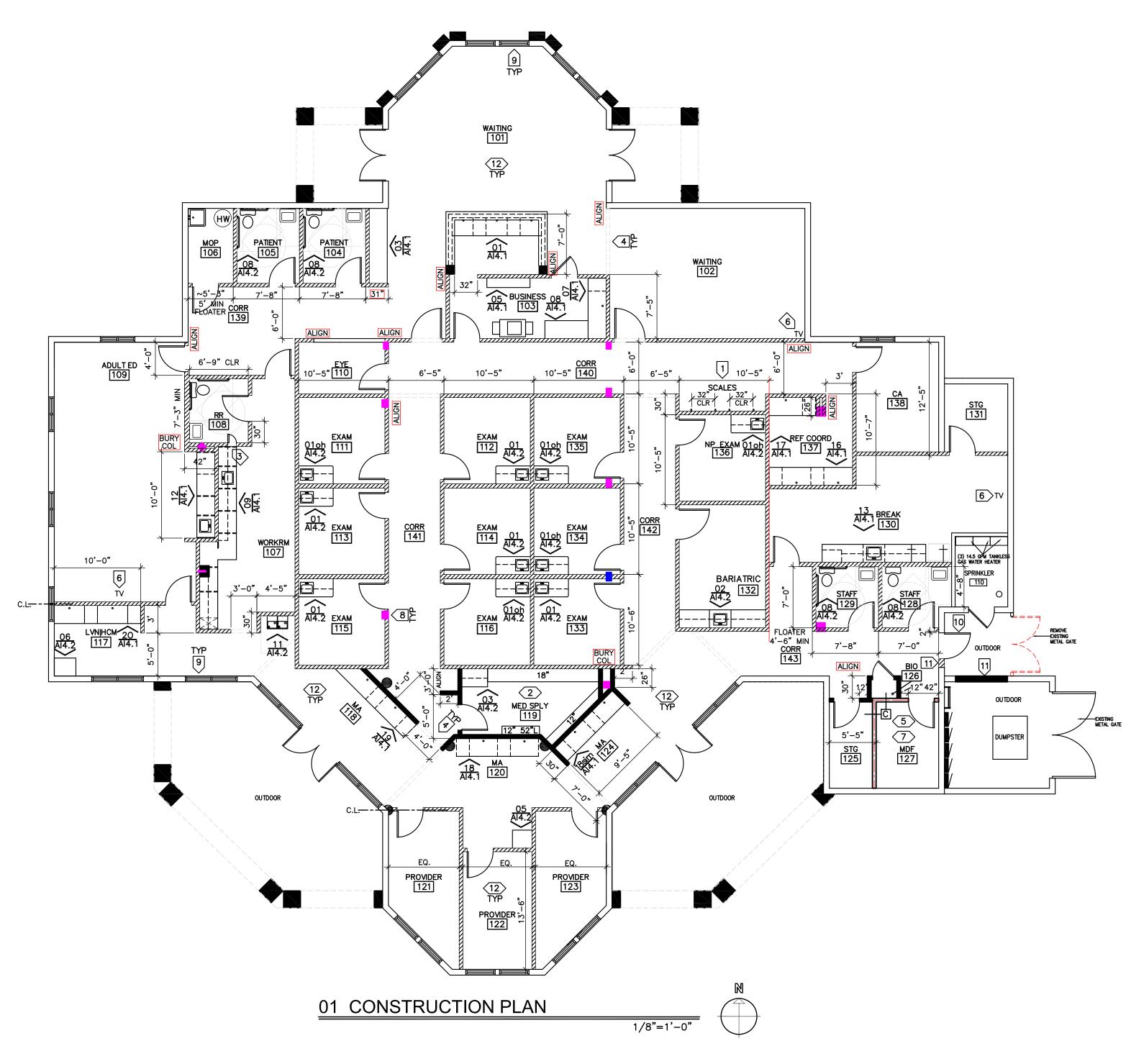


# WELLMED CLINIC

**KELLER** 1110 KELLER PKWY KELLER, TX 76248

### **DEMOLITION PLAN**

WTX07J 6.3.24 PROJECT NO: DATE: **REVISION DATES:** 



### **CEILING HEIGHTS**

ALL CLINIC AREAS SHALL BE 9'-0" U.N.O. WAITING ROOM ROTUNDA SHALL BE 16'-0" AFF DUE TO WINDOW HEIGHT . PROVIDER OFFICES IN REAR ROTUNDA SHALL BE 9'AFF. PROVIDE BLACK OUT FILM ON WINDOWS ABOVE THAT HEIGHT. RESTROOM CEILING HT SHALL BE 8'-5".

## CONCRETE POUR BACKS

- 1. LEAVE OUT POUR BACKS AND SAW CUT POUR BACKS SHALL BE LEVEL WITH EXISTING SLAB.
- 2. CONCRETE SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, LATEST EDITION, DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL COMPLY WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
- STRUCTURAL CONCRETE FOR BUILDING SLAB-ON-GRADE SHALL BE NORMAL WEIGHT AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI. USE GRAY PORTLAND CEMENT CONFORMING TO ASTM C 150 TYPE I. MINIMUM CEMENT CONTENT SHALL BE 4 SACKS PER CUBIC YARD. MAXIMUM WATER CEMENT RATIO SHALL BE 0.50. MAXIMUM SLUMP SHALL BE 5 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2". PROVIDE 4 TO 6 PERCENT AIR-ENTRAINMENT CONFORMING TO ASTM C 260. CHEMICAL ADMIXTURES SHALL CONFIRM TO ASTM C 494, TYPE A,D OR E. IF FLYASH IS TO BE USED IN THE CONCRETE MIX, IT SHALL BE INCLUDED IN THE MIX DESIGN SUBMITTAL THE AMOUNT OF FLASH USED SHALL BE NO GREATER THAN 15 TO 20 PERCENT BY WEIGHT OF THE SPECIFIED CEMENT. IN NO CASE SHALL THE PORTLAND CEMENT CONTENT OF THE MIX BE LESS THAN 4 SACKS PER YARD. CONCRETE SHALL NOT BE PLACED PRIOR TO APPROVAL OF THE CONCRETE MIX DESIGN BY THE ENGINEER
- 4 CURING MAY BE ACCOMPLISHED WITH A LIQUID CURING COMPOUND CONFORMING TO ASTM C309. LIQUID CURING COMPOUNDS SHALL BE APPLIED INVERVITE ROAT WARD CHESSMANNOTH ATHECETIC ON ADULTON APPLIED AT RIGHT ANGLES TO THE FIRST APPLICATION. LIQUID CURING COMPOUND SHALL CONTAIN A FUGITIVE DYE THAT WILL CHANGE TO A CLEAR FINISH AT THE END OF THE CURING PERIOD. TO CONTROL SLAB TEMPERATURE DRYING THE INITIAL 7 DAYS OF CURING, APPLICATION OF WATER BY SPRINKLER AND MOISTURE RETAINING COVERS WILL BE REQUIRED AS DIRECTED BY ENGINEER.

- PROVIDE A 10 MIL VAPOR BARRIER BENEATH THE BUILDING SLAB CONFORMING TO ASTM E-1745, CLASS C. LAP ALL JOINTS A MINIMUM OF 6 INCHES AND SEAL PER MANUFACTURERS RECOMMENDATIONS. USE PREFABRICATED PIPE BOOTS AND SUITABLE SEALING TAPE TO SEAL ALL PENETRATIONS THROUGH THE VAPOR BARRIER. VAPOR BARRIER SHALL BE AS MANUFACTURED BY STEGO INDUSTRIES, VAPOR BLOCK OR APPROVED SUBSTITUTE.
- SELECT NON-EXPANSIVE FILL MATERIAL SHALL CONFIRM TO ANY OF THE FOLLOWING SPECIFICATIONS:
- A. A SELECT NON-EXPANSIVE FILL MATERIAL SHALL BE SOIL CLASSIFIED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) IN ACCORDANCE WITH ASTM D2487 AS A SC, GC OR CL SOIL (OR A COMBINATION OF THESE MATERIALS). SELECT NON-EXPANSIVE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX BETWEEN 7 AND 18, AND A MAXIMUM LIQUID LIMIT OF 40 AND SHALL HAVE A MAXIMUM PARTIAL SIZE OF 2".
- B. SELECT NON-EXPANSIVE FILL SHALL CONFORM TO TXDOT ITEM 247, FLEXIBLE BASE, TYPE A, GRADES 1 OR 2.
- SELECT NON-EXPANSIVE FILL SHALL BE USED FOR ALL FILL BENEATH THE EXPOSED SURFACE SHALL BE PROOF-ROLLED WITH A HEAVY RUBBER TIED ROLLER WEIGHING AT LEAST 25 TONS. ANY SOFT OR WEAK AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT NON-EXPANSIVE FILL COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.THE BUILDING

SUPERINTENDENT RESPONSIBLE FOR CHALKING WALL LOCATIONS SHALL CONTACT DESIGNER AT 210.241.9392 PRIOR TO CHALKING. PLEASE HAVE THIS SHEET IN FRONT OF YOU WHEN YOU CALL.

MDF ROOM SHALL BE COMPLETED PRIOR TO THE BALANCE OF THE LEASE AREA. COORDINATE WITH TENANT DURING PROJECT SCHEDULING. OUTLETS INSTALLED - BUT NOT HOT -FINISHES COMPLETE.

#### PROVIDE BLOCKING FOR ALL WALL MOUNTED CABINETS.

PROVIDE & INSTALL MANUAL ROLLER SHADES AT ALL **EXTERIOR WINDOWS** 

PROVIDE R-25 BLOWN IN FOAM INSULATION AT ROOF DECK

### **GENERAL NOTES - CONSTRUCTION**

- 1. CORNER BEADS SHALL BE INSTALLED ON ALL CORNERS AND SHALL BE SPACKLED SMOOTH WITH ADJACENT AREA.
- 2. STUD SIZE SHALL BE PER MANUFACTURER'S SPECIFICATION FOR HEIGHT, GAUGE AND SPACING UNLESS NOTED OTHERWISE.
- 3. PARTITIONS SHALL NOT BE FASTENED OR BRACED TO DUCTWORK, CONDUIT
- 4. WHERE SLAB TO SLAB PARTITIONS CONFLICT WITH BUILDING DUCTWORK, CONTRACTOR SHALL BOX AROUND DUCTS WITH SAME WALL
- TYPE AND PROVIDE ACCESS PANELS WHERE REQUIRED. 5. CONTRACTOR SHALL PATCH ALL HOLES IN EXISTING WALLS TO REMAIN.
- 6. PROVIDE SEMI-RECESSED PORTABLE 2A 10B:C FIRE EXTINGUISHERS. COORDINATE EXACT LOCATIONS WITH TENANT AND FIRE DEPARTMENT.
- CONTRACTOR SHALL LAY OUT ENTIRE SPACE BY MEANS OF CHALK LINES ON THE FLOOR TO VERIFY DIMENSIONS PRIOR TO CONSTRUCTION OF PARTITIONS. NOTIFY DESIGNER OF ANY DISCREPANCIES PRIOR TO
- CONSTRUCTION OF PARTITIONS FOR RESOLUTION OF ANY PROBLEM AREAS. 8. PARTITIONS SHALL BE PLUMB, LEVEL, TRUE AND STRAIGHT. SURFACES SHALL BE SMOOTH AND FREE OF FLAWS & DEFECTS. ALL TAPING AND SPACKLING SHALL BE SANDED DOWN AND PREPARED SO THAT LOCATION OF JOINT AND BLEMISHES CAN NOT BE DETECTED AFTER WALL FINISH IS APPLIED.
- 9. EXISTING WALLS SHOWN TO REMAIN SHALL BE PREPARED TO ACCEPT SCHEDULED FINISH. ANY DAMAGED SURFACES SHALL BE REPAIRED WITHIN BASE CONTRACT.
- 10. ALL PARTITIONS ABUTTING THE EXTERIOR CURTAIN WALL SHALL BE LOCATED ON COLUMNS OR MULLION CENTERLINES, U.N.O.
- 11. "ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISHED FACES IN THE SAME PLANE. INSTALL NEW CONSTRUCTION REQUIRED TO ALIGN WITH EXISTING CONSTRUCTION WITHOUT ANY VISIBLE JOINTS OR SURFACE IRREGULARITIES. 12. PROVIDE FULL HT. NON-COMBUSTIBLE WOOD STUD BLOCKING AT ALL
- ADJ. SHELF LOCATIONS, AND OTHER LOCATIONS AS NOTED ON PLANS. 13. WHERE A PARTITION IS SHOWN IN ALIGNMENT WITH MORE THAN ONE COLUMN OR ELEMENT WHICH ARE NOT ALIGNED, CONTRACTOR SHALL CONSULT WITH DESIGNER FOR CLARIFICATION.

14. PARTITIONS CENTERED ON GLASS MULLIONS SHALL HAVE A NEOPRENE

- GASKET BETWEEN WALL AND WINDOW MULLION, SEALED WITH ACOUSTICAL 15. ALL DOOR RETURNS FOR NEW DOORS TO BE 6" FROM FACE OF
- PERPENDICULAR OR ADJACENT WALL CORNER. 16. ALL NEW DOORS SHALL BE INSTALLED TO MEET TAS MANEUVERING CLEARANCES. PROVIDE A MIN. CLEARANCE OF 18" AT PULL SIDE OF DOOR, FROM THE STRIKE SIDE OF THE JAMB TO THE ADJACENT PERPENDICULAR PARTITION. IF DOOR HAS BOTH A LATCH AND A CLOSER - PROVIDE 12" AT PUSH SIDE OF DOOR.

### SYMBOL LEGEND

\_\_\_

ALL WALLS ARE PARTITION TYPE A OR B UNLESS OTHERWISE NOTED EXISTING PARTITION TO REMAIN

PARTITION TYPE A - STANDARD PARTITION REF. SHEET AI1.2 FOR SECTION

PARTITION TYPE B - PARTITION W/SOUND ATTENUATION REF. SHEET AI1.2 FOR SECTION PARTITION TYPE C - NON-RATED PARTITION TO DECK

REF. SHEET AI1.2 FOR SECTION PARTITION TYPE D - 1 HR RATED PARTITION TO DECK REF. SHEET AI1.2 FOR SECTION

# IMPORTANT WALL LAYOUT INFORMATION

- SPECIFIED CABINETS ARE PRE-MANUFACTURERED. IT IS CRITICAL THAT MINIMUN DIMENSIONS SHOWN AT MILLWORK ARE HELD.
- ~ DIMENSIONS SHOWN ARE THE FLOATER DIMENSIONS. IF THE FIELD DIMENSION IS NOT WITHIN 2" OF THE (~) WIDTH SHOWN, NOTIFY DESIGNER PRIOR TO LAYING WALL TRACK.
- INCREASE WALL WIDTHS TO 6" IF REQUIRED WHERE SINKS ARE
- BACK TO BACK. DIMENSIONS IN BOXES ARE 'START HERE' DIMENSIONS FOR CRITICAL DIMENSIONAL STRINGS. EX: 6'-0"

# **KEYNOTES**

- PROVIDE AND INSTALL BLOCKING AND GARB BARS FOR WELLMED SUPPLIED SCALE. INSTALL BLOCKING FROM 24" AFF TO 72" AFF - 4'WIDE. PROVIDE (2) 24" LONG GRAB BARS, 32" APART, WITH BOTTOM OF BARS AT 36"AFF.
- ADJUSTABLE MELAMINE SHELVING ON HEAVY DUTY BRACKETS & STDS
- ′ 30" O.C. MAX. 6 SHELVES TOTAL AT DEPTHS SHOWN. EDGE BAND ALL. PROVIDE SPECIMAN PASS THRU BOX. MOUNT HANDLE 48" AFF MAX. ASI 8156 OR EQUAL ADJUSTABLE CABINETS FOR THICK WALLS OR
- EQUAL. COORD. WITH CABINETS/SINK. REF. CEILING PLAN. PROVIDE A 1"H X 5"W SHEETROCK FURR DOWN TO
- ALLOW RECENTERING OF CEILING GRID AT CORRIDOR TRANSITIONS. PROVIDE SUPPLEMENTAL AC IN SERVER ROOM. REF MEP DWGS.
- PROVIDE AND INSTALL BLOCKING FOR TENANT SUPPLIED WALL MOUNTED
- T.V. 36" AFF TO 84" AFF 4' WIDE REF. A2.4 PROVIDE ALL WALLS OF 3/4" FIRE-RETARDANT PLYWOOD FOR TENANT SUPPLIED EQUIPMENT. SAND FACE. EASE EDGES & PAINT TO MATCH
- WALL TO 8'AFF COLUMNS TO BE MINIMALLY FURRED OUT AS INDICATED WHERE THEY

REQUIRED BIDDER IS SIERRA WINDOW FASHIONS. CONTACT WALLY OR

YOLANDA AT SIERRAWINDOWFASHIONS@GMAIL.COM 210.696.0622

- CAN'T BE BURIED COMPLETELY. APPLY SHEETROCK TIGHTLY TO FACE. EXTERIOR WINDOW COVERINGS SHALL BE IN CONTRACTOR'S SCOPE. PROVIDE MANUAL ROLLER SHADES WITH FASCIA, 3% SCREEN. SHADE COLOR: LINEN FOG. FASCIA FINISH: MATCH EXTERIOR MULLIONS.
- EXISTING DOOR IS HEAVILY DAMAGED AND OVERSIZED. REPLACE AS SPECIFIED.
- 11 NEW EXTERIOR WALL TO MATCH ADJACENT WALLS.
- INSTALL BLACK OUT FILM AT ALL CLERESTORY WINDOWS THAT FALL 12 ABOVE THE CEILING GRID THROUGHOUT CLINIC AS NEEDED.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24



**PROJECT** 

# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

## **CONSTRUCTION PLAN**

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 



### **DOOR TYPES**

NOT ALL TYPES USED

A VARIES	EXISTING DOOR AND FRAME ASSEMBLY TO REMAIN
B	NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART—PINNACLE WALNUT 7992—12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE.
C 3 X 7 PAIR	NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART-PINNACLE WALNUT 7992-12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE.
© 2'6 X 7	NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART-PINNACLE WALNUT 7992-12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE.

E 3'6 X 7 NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART-PINNACLE WALNUT 7992-12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE. PAINT WINDOW FRAME TO MATCH DOOR FRAME. BOTTOM EDGE OF GLASS - 43" AFF MAX.

EXISTING STOREFRONT DOORS.

G 3'W VERIFY HT EXISTING STOREFRONT DOOR

NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART-PINNACLE WALNUT 7992-12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE. PAINT WINDOW FRAME TO MATCH DOOR FRAME. BOTTOM EDGE OF GLASS - 43" AFF MAX.

☐ 3'6 X 7 NEW SOLID CORE PLASTIC LAMINATE DOOR IN A H.M. FRAME ASSEMBLY. DOOR LAMINATE: WILSONART-PINNACLE WALNUT 7992-12 SOFT GRAIN FINISH. PAINT FRAME TO MATCH BASE.

J 3'W VERIFY HT NEW INSULATED HOLLOW METAL DOOR & FRAME ASSEMBLY MATCH EXISTING

NEW HOLLOW METAL FRAME CASED OPENING - NO STOPS. PAINT TO MATCH BASE.

#### HARDWARE TYPES

**円 3 X 7** 

ALL INTERIOR HARDWARE SHALL BE TAS COMPLIANT LEVER SETS LOCKNET IS THE REQUIRED SUPPLIER AND INSTALLER OF ALL LEVERSETS, PUSHBUTTON LEVER SETS, STRIKES, ELECTRIC STRIKES AND DOOR CLOSERS. LOCKSET SHALL BE ENGAGED UNDER THE GC'S SCOPE OF WORK. LOCKSET SHALL PREP FRAMES FOR ALL ELECTRIC STRIKES. CONTACT FREDDIE PROFITT-FreddieP@locknet.com 859.354.4411

GENERAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL REQUIRED SILENCERS, HINGES, AND DOORSTOPS. CARD READER LOCATIONS DO NOT REQUIRE BACK BOX AT INTERIOR DOORS. HINGES: 4 1/2" X 4-1/2" HAGER BB-1279 3 PER DOOR

DOOR STOPS: HAGER 236w WALL STOPS. WELLMED'S SECURITY VENDOR-PHOENIX INTEGRATED-SHALL INSTALL CARD READER SYSTEM AND SECURITY SYSTEM UNDER GC'S SCOPE OF WORK. CONTACT MANNY SOLIZ-msoliz1@phoenixintegratedinc.com 210.325.7990 ACCESS CONTROL SHALL BE COMPLIANT WITH IBC SECTION 1010

EXISTING HARDWARE AND CLOSER TO REMAIN

CLEAN/REPAIR AS REQUIRED

INTERIOR LEVER PASSAGE SET PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

O INTERIOR LEVER LOCKSET (STOREROOM) 3 PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

INTERIOR LEVER LOCKSET (OFFICE-ENTRY)
4 PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

INTERIOR LEVER PRIVACY SET
5 PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

CARDREADER, LOCKSET (ASYLUM FUNCTION), 8"H KICK PLATES 6 AND CLOSER. AND ELECTRIC STRIKE. WELLMED WILL PROVIDE AND INSTALL CARD READER SYSTEM PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS. COOR. WITH WELLMED'S SECURITY SYSTEM VENDOR REQUIRED.

CARDREADER, LOCKSET (STOREROOM FUNCTION), 8"H KICK 7 PLATES AND CLOSER. AND ELECTRIC STRIKE. WELLMED WILL PROVIDE AND INSTALL CARD READER SYSTEM PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS. COOR. WITH WELLMED'S SECURITY SYSTEM VENDOR REQUIRED.

MANUAL PANIC STOREFRONT PUSH-PULL HARDWARE WITH POWER B DOOR ASSIST (BOTH DOORS) PROVIDE-INSTALL DORMAKABA-ED900 SWING DOOR OPERATOR WITH SWING-GUARD SAFETY SYSTEM-MATCH EXTERIOR MULLION FINISH WITH TWO TOUCHLESS ACTUATORS AND RECEIVER (OR APPROVED EQUAL) POST MOUNT OPERATOR WITH HORIZONTAL RAILING BACK TO BUILDING IF SHOWN.

MODIFY EXISTING DOOR HARDWARE WHERE REQUIRED. FIELD VERIFY MANUAL PANIC HARDWARE (CLASSROOM LEVER OUTSIDE) CARD READER AND CLOSER WITH METAL THRESHOLD PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS. PROVIDE AND INSTALL ELECTRIC STRIKE. PROVIDE AND INSTALL 8"H KICK PLATES. COOR WITH WELLMED'S SECURITY SYSTEM VENDOR AS REQUIRED.

LEVER PUSHBUTTON LOCKSET (SCHLAGE), 8"H KICK PLATE AND CLOSER PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

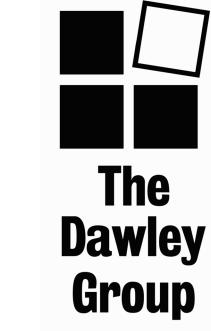
LEVER PUSHBITTON LOCKSET (SCHLAGE), RECESSED FLUSH 1 BOLTS & OVERHEAD STOPS PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS.

STOREFRONT ELECTRIFIED PANIC HARDWARE, CARD READER, CLOSER AND THRESHOLD

INTERIOR LEVER PASSAGE SET, 8"H KICK PLATES AND CLOSER PROVIDE ALL REQUIRED SILENCERS, HINGES AND DOORSTOPS. SUPPLEMENT-MODIFY EXISTING AS NEEDED: STOREFRONT EXIT ONLY PANIC PUSH BAR/HARDWARE INSIDE. REMOVE EXTERIOR

PULL-ADD FILLER PLATÉ. THE SWEEP PERIOD OF ALL CLOSERS SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 90 DEGREES, THE DOOR WILL TAKE AT LEAST 5 SECONDS (MINIMUM) TO MOVE TO A POINT OF 12 DEGREES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.

Access control must be in accordance with IBC Section 1010. Installation plans, details and hardware specifications must be submitted by security system vendor for review and approval as shop drawings from the installing contractor prior to installation of any time delayed egress locks, electromagnetic doorlocks ("mag-locks") or any other access controlled egress devices that impact occupant exiting.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS





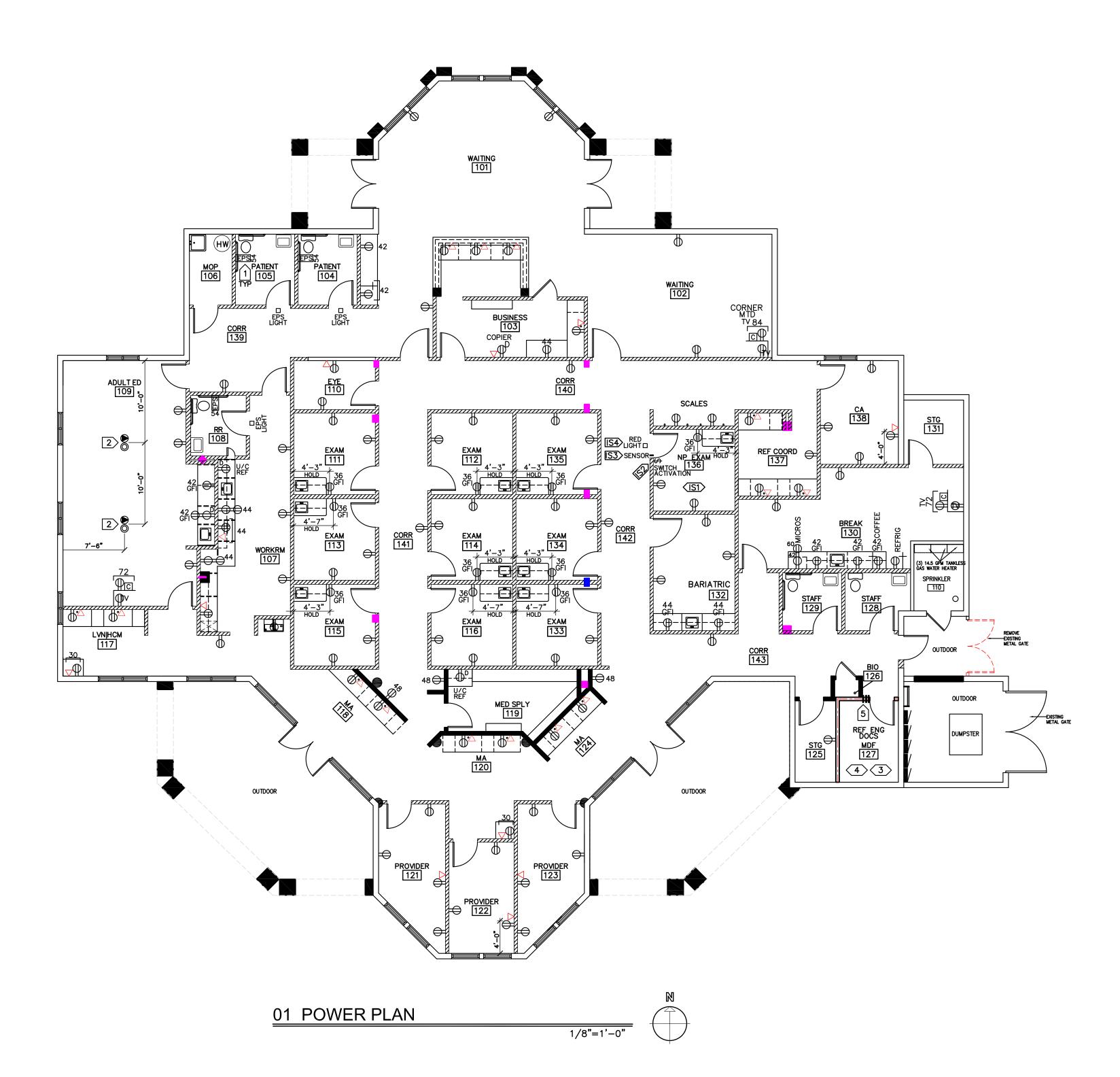
# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

## HARDWARE PLAN

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 



#### **NEGATIVE PRESSURE ROOM**

- AT ROOF PROVIDE A SWITCH FOR CONNECTION TO EXHAUST FAN. PROVIDE A EXHAUST DUCT UP TO EXHAUST FAN. REFERENCE FNGINFER'S PLANS.
- 120V/1P/20A SWITCH CLEAR WITH ILLUMINATED ON-FOR CONNECTION TO EXHAUST FAN AND RED LIGHT.
- PROVIDE/INSTALL RM PRESSURE MONITOR 'BALL—N—WALL' REF MECH DOCS. IT SHALL MEASURE THE PRESSURE DIFFERENCE BETWEEN THE HALLWAY & THE ISOLATION RM. MONITOR SHALL BE FOR 'NEGATIVE ISOLATION' WITH THE ISOLATION RM. NEGATIVE TO THE HALLWAY. MOUNT MONITOR ABOVE DOOR. INSTALL PER MANUFACTURER'S REQUIREMENTS. NO ELECTRICAL REQUIREMENTS. SHOWN FOR REFERENCE ONLY.
- "RED LIGHT" SHALL BE EDWARDS SIGNALING #7641R-1N5
  120V RED DOME STATION. MTD AT 96"AFF.

#### **KEYNOTES**

- 1 EMERGENY PULL STRING. REFERENCE ELEVATIONS FOR EXACT LOCATION
- FLOOR RECESSED POWER AND COMMUNICATIONS OUTLET. ROUTE (1)
  CONDUIT FROM FLOOR BOX FOR TELE/DATA AND (1) CONDUIT FOR
  POWER BELOW FLOOR TO WALL AND EXTEND TO CEILING SPACE AS
  SHOWN. REF ENGINEER'S DOCUMENTS
- PROVIDE POWER AS REQUIRED FOR SUPPLEMENTAL A/C UNIT FOR M.D.F. ROOM. REF. MEP DOCUMENTS
- PROVIDE ALL WALLS WITH 3/4" FIRE—RETARDANT PLYWOOD FOR TENANT SUPPLIED EQUIPMENT. PROVIDE AND INSTALL A #6 EQUIPMENT GROUND FROM BOARD TO STRUCTURAL STEEL AT 7'-6"AFF. HARGER BICSI PATTERN GBI14412TMGB 1/4" X 4" 12"
- PROVIDE (3) 4" SLEEVES THROUGH THIS WALL OF THE MDF ROOM ABOVE THE CEILING GRID FOR CABLE ACCESS INTO THE ROOM.

### GENERAL NOTES - POWER PLAN

- 1. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ALL LABOR, INSURANCE, TAXES, PERMITS, ENGINEERING, SUPERVISION, MATERIAL, EQUIPMENT AND SERVICE NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM. THIS INCLUDES ALL MINOR ITEMS WHICH MAY NOT BE MENTIONED OR SHOWN BUT NECESSARY FOR COMPLETE AND OPERATIONAL SYSTEMS.
- ALL COVER PLATES SHALL BE WHITE
   ALL FLOOR OUTLETS SHALL BE MARKED ON FLOOR FOR DESIGNER TO REVIEW FOR FINAL VERIFICATION AND APPROVAL PRIOR TO CORING AND
- INSTALLATION.
  4. CONTRACTOR SHALL COORDINATE CLEARANCES AND LOCATIONS WITH
- MILLWORK SUBCONTRACTOR FOR ALL POWER AND DATA OUTLETS.

  5. CONTRACTOR SHALL VERIFY EXISTING ELECTRICAL CAPACITY PRIOR TO SUBMITTING A BID. INCLUDE ANY NECESSARY COSTS TO INCREASE SERVICE
- 6. EQUIPMENT AND APPLIANCE OUTLET MOUNTING HEIGHTS SHALL BE
- COORDINATED WITH THE DESIGNATED FUNCTION AND LOCATION REQUIRED.

  7. CONTRACTOR SHALL PROVIDE SPECIAL OUTLETS, AMPERAGE AND CIRCUITING AS REQUIRED FOR EQUIPMENT NOTED.
- 8. PRIOR TO DRILLING THE SLAB FOR FLOOR OUTLETS, THE CONTRACTOR SHALL COORDINATE WITH THE BUILDING MANAGER AND STRUCTURAL ENGINEER. CONTRACTOR SHALL USE PILOT HOLES PRIOR TO ALL DRILLING. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE THAT OCCURS.
- 9. ARCHITECTURAL DOCUMENTS SHALL DICTATE THE LOCATION OF ALL TELEPHONE AND ELECTRICAL OUTLETS. ENGINEERED POWER PLANS ARE FOR DESIGNATED POWER AND CIRCUITRY ONLY. ANY DISCREPANCY SHALL BE BROUGHT TO THE DESIGNER'S ATTENTION FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
- 10. ALL DATA AND TELEPHONE CABLING IS PROVIDED AND INSTALLED BY TENANT'S VENDOR U.N.O.
- 11. PROVIDE SMOKE DETECTION, VISUAL AND ANNUNCIATION AS REQUIRED BY LOCAL GOVERNING CODES. CONNECT TO BUILDING FIRE ALARM SYSTEM.
  12. WHERE TELEPHONE AND ELECTRICAL OUTLETS APPEAR TO BE BACK TO BACK. THE BOXES ARE TO BE STAGGERED TO REDUCE NOISE
- TRANSMISSION THROUGH PARTITION.

  13. CONTRACTOR SHALL MAKE FINAL CONNECTIONS FOR FLOOR OR WALL
  OUTLETS FEEDING FURNITURE SYSTEM DOWER BANELS
- OUTLETS FEEDING FURNITURE SYSTEM POWER PANELS.

  14. ALL DEDICATED OUTLETS SHALL BE CLEARLY DESIGNATED.

  15. ALL WIRING WITHIN RETURN AIR PLENUM SHALL BE TEFLON COATED OR
- CONTAINED WITHIN CONDUIT IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS

  16. CONTRACTOR TO PROVIDE JUNCTION BOX AND PULL STRING FOR ALL
- TELEPHONE AND DATE OUTLETS TO ASSIST TENANT'S CABLE VENDORS.

  17. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR SUBMITTING FIRE ALARM DEVICE PLAN TO THE CITY FOR APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR INSURING THAT DESIGN MEETS BUILDING AND CITY
- CODE AS WELL AS TEXAS ACCESSIBILITY STANDARDS AND ADA.

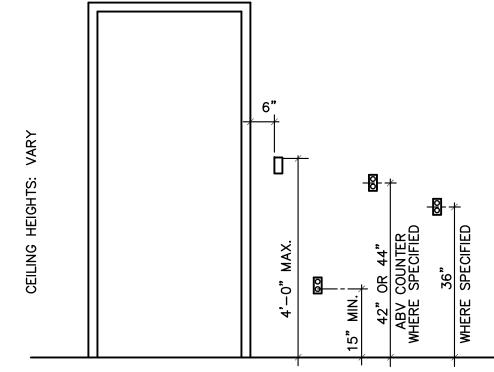
  18. CONTRACTOR SHALL PROVIDE CUT SHEETS ON ALL NEW ELECTRICAL PANELS AND METERS.

### SYMBOL LEGEND - POWER PLAN NOT AI

NOT ALL USED

- ▶ WALL MOUNTED TELEPHONE OUTLET
- > WALL MOUNTED DATA OUTLET
- WALL MOUNTED TELEPHONE/DATA OUTLET
- ⇒ DUPLEX ELECTRICAL OUTLET
- QUADRAPLEX ELECTRICAL OUTLET
- € ELECTRICAL OUTLET ON DEDICATED CIRCUIT
- ⇒ DUPLEX OUTLET WITH GROUND FAULT INTERRUPT
- RECESSED FLOOR POWER OUTLET
- RECESSED FLOOR TELEPHONE OUTLET
- (SI) SMOKE DETECTOR
- PP POWER POLE NUMBER INDICATES STATIONS SERVED VERIFY EXACT LOCATION IN FIELD WITH W.S.
- J-BOX IN CEILING
- FIRE ALARM VISUAL DEVICE. MOUNT AT 80" AFF OR 6" BELOW CEILING. (WHICHEVER IS LOWER) TAS COMPLIANT
- FIRE ALARM AUDIO/VISUAL DEVICE. MOUNT AT 80" AFF OR 6" BELOW CEILING. (WHICHEVER IS LOWER) TAS COMPLIANT
- COLD WATER ROUGH IN W/CUT OFF VALVE
- PA POWER DOOR ASSIST WALL SWITCH
- EPS EMERGENCY PULL STRING
- EMERGENCY PULL STRING ANNUNCIATOR STATION
- CR CARD READER BY WELLMED VENDOR NO ROUGH-IN REQUIRED.

# TYPICAL MOUNTING HEIGHTS



ALL COVER PLATES AND DEVICES SHALL BE WHITE

ALL WALL MOUNTED DEVICES & COVER PLATES SHALL BE WHITE

MDF ROOM SHALL BE COMPLETED PRIOR TO THE BALANCE OF THE LEASE AREA. COORDINATE WITH TENANT DURING PROJECT SCHEDULING. OUTLETS INSTALLED - BUT NOT HOT - FINISHES COMPLETE.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24



PROJECT

ΑT

WELLMED CLINIC

KELLER 1110 KELLER PARKWAY

KELLER, TX 76248

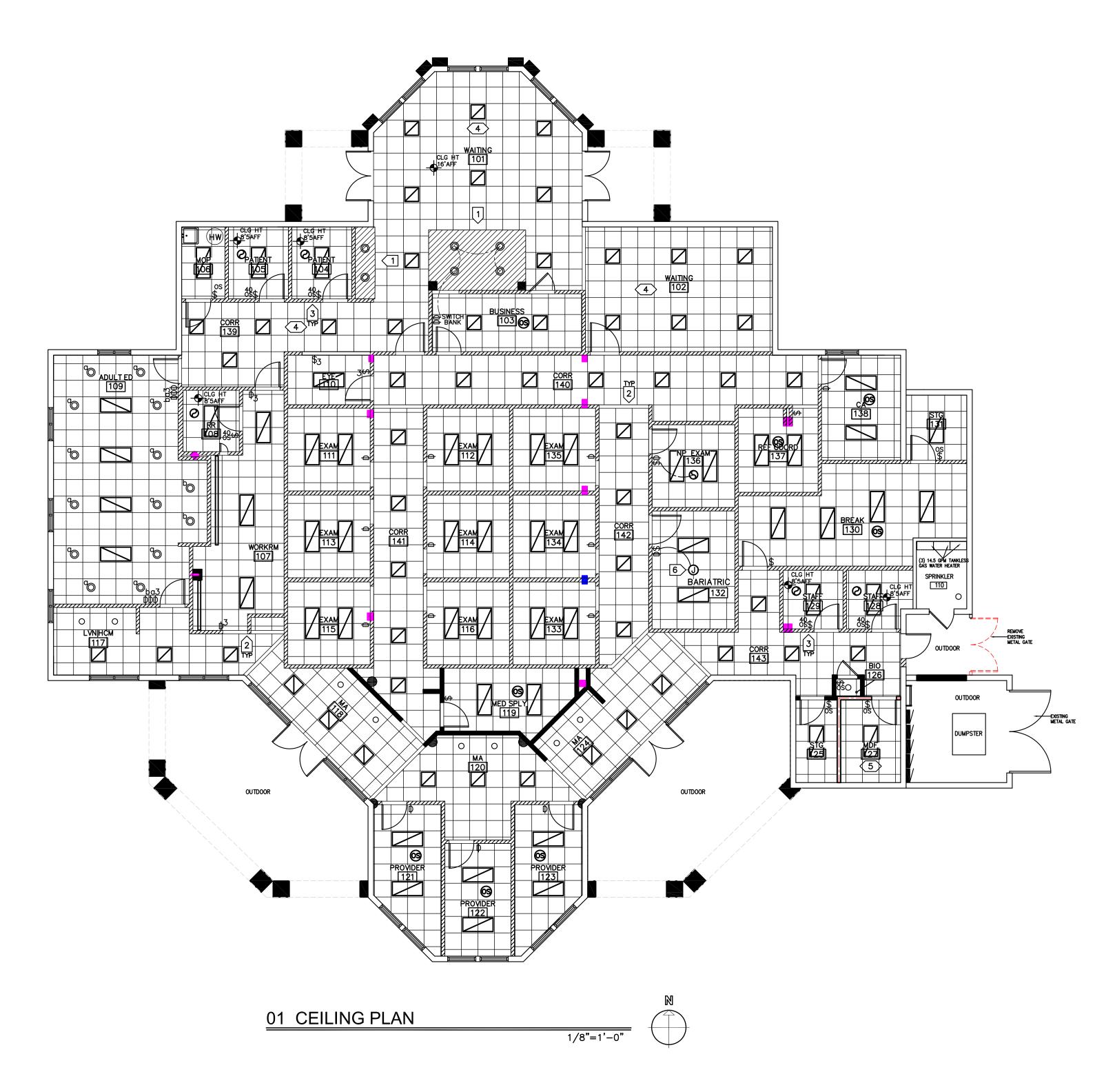
SHEET TITLE

**POWER PLAN** 

PROJECT NO: WTX07J
DATE: 06.03.24
REVISION DATES:

SHEET NUMBER

AI2 4



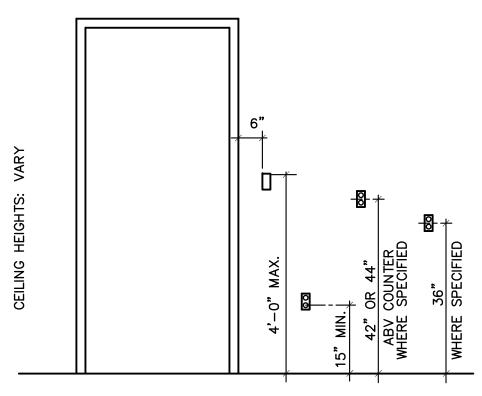
## **CEILING HEIGHTS**

ALL CLINIC AREAS SHALL BE 9'-0" U.N.O. WAITING ROOM ROTUNDA SHALL BE 16'-0" AFF DUE TO WINDOW HEIGHT. PROVIDER OFFICES IN REAR ROTUNDA SHALL BE 9'AFF. PROVIDE BLACK OUT FILM ON WINDOWS ABOVE THAT HEIGHT. RESTROOM CEILING HT SHALL BE 8'-5".

#### EXIT SIGNS AND EMERGENCY LIGHTING

REFERENCE MEP ENGINEER'S DOCUMENTS FOR EMERGENCY LIGHTING AND EXIT SIGNS.

#### TYPICAL MOUNTING HEIGHTS



ALL COVER PLATES AND DEVICES SHALL BE WHITE

M.D.F. ROOM SHALL BE COMPLETED PRIOR TO THE BALANCE OF THE LEASE AREA. COORDINATE WITH TENANT DURING PROJECT SCHEDULING. OUTLETS INSTALLED-BUT NOT HOT-FINISHES COMPLETE

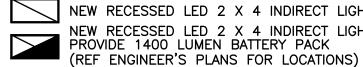
ALL WALL MOUNTED DEVICES AND COVER PLATES SHALL BE WHITE

GRID SHALL BE CENTERED IN HALLWAYS AND ROOMS AS SHOWN.

#### **GENERAL NOTES - CEILING PLAN**

- 1. WHEN ENGINEERED DOCUMENTS ARE PROVIDED, CONTRACTOR SHALL REFER TO DESIGNER'S DRAWINGS FOR SWITCH LOCATIONS ONLY. REFER TO ENGINEER'S DRAWINGS FOR NUMBER OF SWITCHES AND CIRCUITING.
- 2. CEILING TILE SHALL BE HUNG TO PROVIDE AN EVEN-PLANE SURFACE OF UNIFORM APPEARANCE.
- 3. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED FIRE PROTECTION DEVICES FOR CODE AND TAS COMPLIANCE. SUBMIT ALL DEVICE LOCATIONS TO DESIGNER FOR REVIEW AND APPROVAL.
- 4. WHERE MORE THAN ONE STANDARD SWITCH OCCURS IN THE SAME LOCATION, THEY SHALL BE INSTALLED IN GANG TYPE CONTROLS UNDER ONE COVER PLATE. DIMMER SWITCHES, THERMOSTATS, FAN CONTROLS OR OTHER DEVICES WHICH CAN NOT BE INSTALLED UNDER SAME GANG-TYPE COVER PLATE SHALL BE CLOSELY SPACED AND ALIGNED HORIZONTALLY WITH LIGHT SWITCHES.
- 5. ALL PLUMBING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES. VENTILATION SYSTEMS SHALL BE TESTED WITH PROPER INSTRUMENTS TO ENSURE PROPER AIR QUANTITIES ARE DELIVERED. THE BALANCING OF VENTILATION SYSTEMS SHALL BE PERFORMED BY A QUALIFIED AGENCY RETAINED BY CONTRACTOR. SUBMIT DATA SHEETS TO LANDLORD INDICATING THE EXHAUST AND SUPPLY OUTLET
- CFM'S, FAN RMP'S, S.P. MOTOR CURRENTS AND VOLTAGE READINGS. EXHAUST FANS SHALL BE OF THE TYPE, CAPACITY, ARRANGEMENT AND MOTOR REQUIREMENTS FOR THE INTENDED SERVICE OF EXHAUSTING AIR
- FROM SPECIFIED ROOM IN TO CEILING PLENUM. AIR BALANCE REPORT REQUIRED TO BE COMPLETED PRIOR TO SUBSTANTIAL COMPLETION OF PROJECT.

#### SYMBOL LEGEND - CEILING PLAN NOT ALL USED



NEW RECESSED LED 2 X 4 INDIRECT LIGHT FIXTURE NEW RECESSED LED 2 X 4 INDIRECT LIGHT FIXTURE PROVIDE 1400 LUMEN BATTERY PACK



NEW RECESSED LED 2 X 2 INDIRECT LIGHT FIXTURE EMERGENCY LIGHT (CIRCUIT HALLWAY AND WAITING AS NIGHT LIGHT) NEW RECESSED LED 2 X 2 INDIRECT LIGHT FIXTURE PROVIDE 1400



LUMEN BATTERY PACK (REF ENGINEER'S PLANS FOR LOCATIONS) EMERGENCY BACK-UP LIGHT PACK LED UNDERCABINET FIXTURE ORDER LENGTH AS NEEDED -

- AVAILABLE: 6", 12". 48"
- O RECESSED LED DOWNLIGHT RECESSED DECORATIVE LED DOWNLIGHT
- RECESSED DIRECTIONAL EYEBALL WALLWASHER
- RECESSED WALLWASHER
- PENDANT MOUNTED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- LIGHT SWITCH SUBSCRIPT INDICATES ASSOCIATED CIRCUITRY DUAL LEVEL LIGHT SWITCH
- 3-WAY LIGHT SWITCH
- DIMMER SWITCH nLIGHT ENABLED, DIGITAL ON/OFF WITH RAISE/LOWER CONTROL
- OCCUPANCY SENSOR SWITCH WITH DIMMING AND ON/OFF OCCUPANCY SENSOR SWITCH-SINGLE RELAY. MANUAL ON-OFF
- OCCUPANCY SENSOR, CEILING MOUNTED, EXTENDED ZONE WHEN PLACED IN CORRIDORS, MOVEMENT IN ANY CORRIDOR SHALL KEEP ALL CORRIDOR LIGHTS ON.

- S EXHAUST FAN E EXISTING TO REMAIN
- R EXISTING TO BE REMOVED

### **KEYNOTES**

- PAINTED SHEETROCK CEILING AT 8'-0". FRONT EDGE OF SHEETROCK FURRING PAINTED SHELLROCK CEILING A. S SHALL PROTRUDE FROM ADJACENT WALL 2".
- PROVIDE A 1"H X 5"W SHEETROCK FURRDOWN TO ALLOW RECENTERING OF CEILING GRID AT CORRIDOR TRANSITIONS.
- MOUNT LIGHT SWITCHES IN RESTROOM LOWER THAN 48" AS SPECIFIED
- SO THAT THEY DON'T CONFLICT WITH 48"H CHAIR RAIL.
- OCCUPANCY SENSOR LIGHT FIXTURES IN WAITING AND HALLWAYS SHALL BE CIRCUITED SUCH THAT MOVEMENT IN ANY HALLWAY OR THE WAITING RM KEEPS ALL HALLWAY AND RECEPTION LIGHT FIXTURES ON.
- PROVIDE POWER AS REQURED FOR SUPPLEMENTAL A/C UNIT FOR 5 M.D.F. ROOM. COORDINATE REQUIREMENTS WITH MECHANICAL SUBCONTRACTOR.
- PROVIDE POWER ABOVE CEILING FOR PROCEDURE LIGHT PROVIDED & INSTALLED BY TENANT. PROVIDE CONDUIT, CONTROL WIRING, & CONNECTION TO CONTROL SWITCH AS REQUIRED.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24



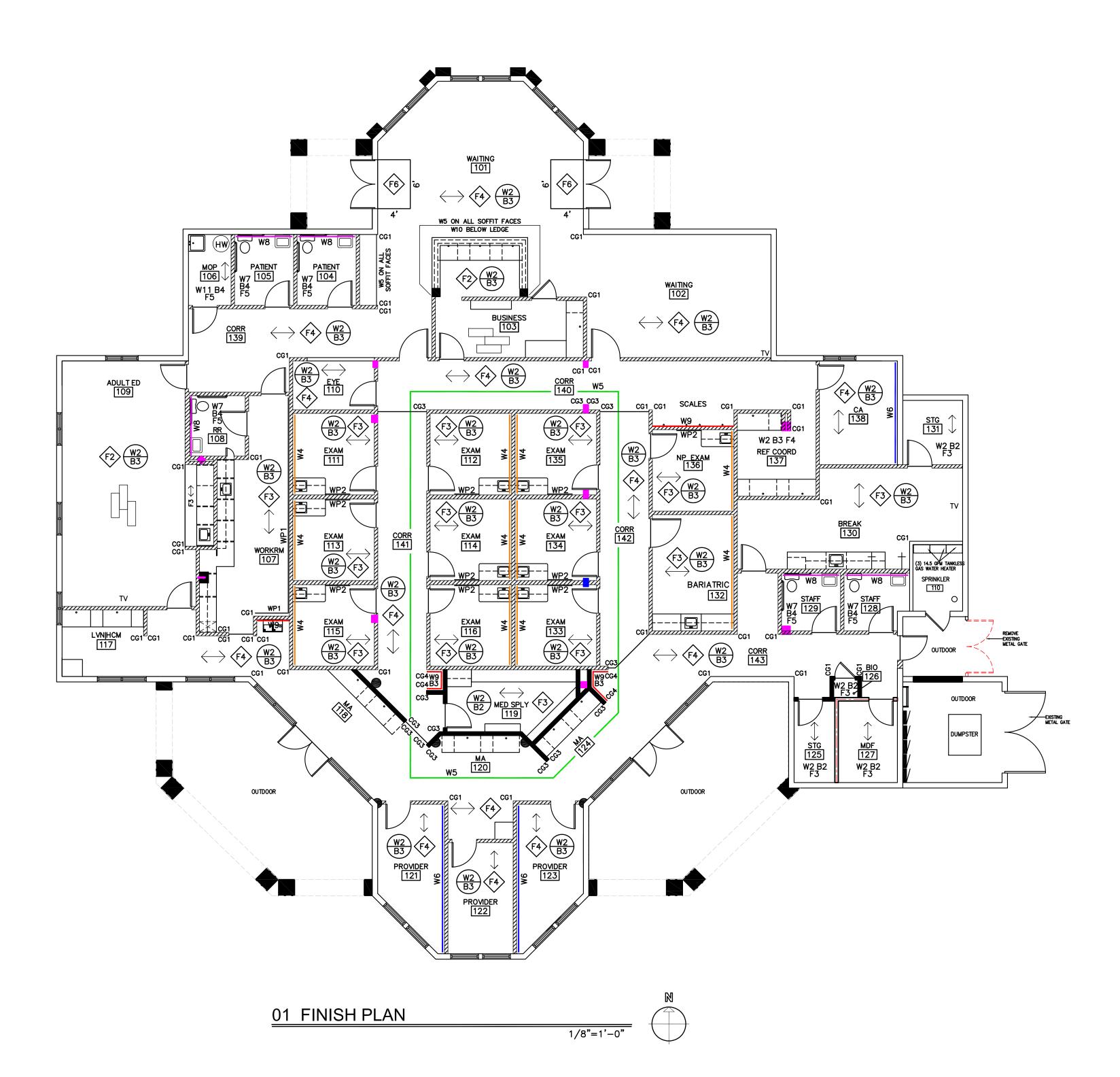
# WELLMED **CLINIC**

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

## **CEILING PLAN**

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 



#### WALL PROTECTION

INPRO PRODUCTS: CONTACT TINA MARTI TMARTI@INPROCORP.COM CORNER GUARDS CORNER GUARD @ W2

MFGR: 1608N BLUNOSE HIGH IMPACT-2" WING PEBBLE GRAY 0387 COLOR:

INSTALL: TO 4' ABV RUBBER BASE CORNER GUARD @ W2

MFGR:

1608N BLUNOSE HIGH IMPACT-2" WING PEBBLE GRAY 0387 STYLE: COLOR: INSTALL: TO 8' ABV RUBBER BASE

CORNER GUARD @ W5

STYLE: 1608N BLUNOSE HIGH IMPACT-2" WING DOVE GRAY 0106 COLOR: **INSTALL:** TO 4' ABV RUBBER BASE

CORNER GUARD @ W5 MFGR:

1608N BLUNOSE HIGH IMPACT-2" WING STYLE: DOVE GRAY 0106 COLOR: TO 8' ABV RUBBER BASE INSTALL:

CORNER GUARD @ W4 CG5 MFGR:

STYLE: 1608N BLUNOSE HIGH IMPACT-2" WING COLOR: GRAYSTONE 0151 TO 8' ABV RUBBER BASE **INSTALL:** 

CG6 CORNER GUARD @ W9

1608N BLUNOSE HIGH IMPACT-2" WING STORM CLOUD 0372 STYLE: COLOR: INSTALL: TO 8' ABV RUBBER BASE

WALL PROTECTION

WP1 WALL PROTECTION MFGR:

STYLE: PALLADIUM RUB RAILS 8"H .04" THICK PEBBLE GRAY 0387 COLOR: INSTALL: INSTALL BOTTOM OF RAIL AT 32"AFF

WP2 WALL PROTECTION

MFGR: STYLE: PALLADIUM RUB RAILS 3'L x 4"H .04" THICK

COLOR: PEBBLE GRAY 0387 INSTALL: INSTALL BOTTOM OF RAIL AT 16" AFF FURR DOWNS

WAITING ROOM FURR DOWNS SHALL BE ACCENT PAINT AS SPECIFIED

COMPUTER COLOR MATCH TO RUBBER BASE & CHAIRRAIL

INDEX PER 2021 IBC TABLE 803.13 FOR SPRINKLERED BUILDINGS.

ALL FINISHES SHALL BE COMPLIANT FOR IFC SECTIONS 803 & 804.

COLORWAYS ARE SHOWN IN SHERWIN WILLIAMS, BUT BENJAMIN MOORE AND PPG ARE APPROVED ALTERNATES. AS LONG AS FINISH AND QUALITY ARE MAINTAINED. SHERWIN WILLIAMSPROMAR200HP OR PPG SPEEDHIDE ZERO VOC — FINISHES AS SPECIFIED ALL WALL AND CEILING FINISHES SHALL BE COMPLIANT FOR FLAME SPREAD

#### FINISH SPECIFICATIONS

FLOORING

EXISTING TO REMAIN - BROOM CLEAN

CARPET TILE

MOHAWK GROUP VISUAL CONNECTIONS 12X36

FLAX 839 INSTALLATION: RANDOM STAGGER. ARROWS SHOW INSTALL DIRECTION. CONTACT WAYLON KOCH FOR WELLMED PRICING waylon koch@mohawkind.com 210.724.7722

VINYL FOORING - STONE EFFECT

MOHAWK GROUP CHROMASCOPE CO159 12X24 20MIL

DUSTY TRAIL 250 COLOR: INSTALLATION: RANDOM STAGGER-PROVIDE POWERHOLD 127 OR EQ TRANSITION STRIP AT CARPET TO LVT TRANSITIONS. ARROWS ON FINISH PLAN SHOW INSTALLATION DIRECTION.

VINYL FOORING - WOOD EFFECT MOHAWK GROUP

LIVING LOCAL PREMIUM WOOD 7.75" X 52" 20MIL STYLE: BEAGLE 838 INSTALLATION: RANDOM STAGGER-PROVIDE POWERHOLD 127 OR EQ TRANSITION STRIP AT CARPET TO LVT TRANSITIONS.

SHEET FLOORING F5

FORBO MARMOLEUM STYLE:

COLOR: 2629 EIGER INSTALLATION: DIRECT GLUE WITH 6" FLASH COVE SYSTEM ARMOR COVE CONTACT ALEX STINNETTE ALEXA.STINNETTE@FORBO.COM

ARROWS ON FINISH PLAN SHOW INSTALLATION DIRECTION.

WALK OFF CARPET TILE MOHAWK GROUP STYLE: STEP UP II COLOR: COBALT 955

24 X 24 INSTALLATION: MONOLITHIC.

BASE EXISTING TO REMAIN

RUBBER BASE

TARKETT STYLE: 4" COVE - ROLL GOODS COLOR: PEBBLE 32

B3 PREMIUM RUBBER BASE

**TARKETT** MILLWORK - REVEAL PROFILE STYLE: PEBBLE 32

INSTALL ON FRONT & SIDES OF TOE KICKS @ MILLWORK & PEDESTALS FLASH COVE BASE

FORBO MARMOLEUM REAL COLOR

INSTALLATION: 6" FLASH COVE SYSTEM ARMOR COVE SEE DETAIL PROVIDE MOISTURE AND MILDEW RESISTANT SILICONE SEAL TO WALL REF: 09/AI4.2

ALL WALL AND CEILING FINISHES SHALL BE COMPLIANT FOR FLAME SPREAD INDEX PER 2021 IBC TABLE 803.13 FOR SPRINKLERED BUILDINGS. ALL FINISHES SHALL BE COMPLIANT FOR IFC SECTIONS 803 & 804.

EXISTING TO REMAIN

MFGR: SHERWIN WILLIAMS PROMAR 200 HP EG-SHEL STYLE: SW7035 AESTHETIC WHITE COLOR:

RESTROOM PAINT W3

SHERWIN WILLIAMS PROMAR 200 HP SEMI-GLOSS STYLE: SW7035 AESTHETIC WHITE COLOR:

ACCENT AT WAITING RM EXAM ROOMS SHERWIN WILLIAMS PROMAR 200 HP EG-SHEL STYLE:

COLOR: SW9130 EVERGREEN FOG ACCENT PAINT AT HALLWAYS AND WAITING ROOM SOFFITS

SHERWIN WILLIAMS

STYLE: PROMAR 200 HP EG-SHEL SW7660 EARL GREY COLOR: ACCENT PAINT AT OFFICES

SHERWIN WILLIAMS PROMAR 200 HP EG-SHEL SW7624 SLATE TILE

IMPACT NONPOROUS WALLCOVERING WAINSCOT AT RESTROOMS -TO ~3'-10' AFF BELOW 4'AFF (INPRO 3D 2" TOP CAP)

STYLE: PALLADIUM RIGID SHEET .04" ELM GRAY 0388 COLOR: INSTALLATION: RAILROAD TO MINIMIZE SEAMS WITH INSIDE

CORNER TRIM & TOP CAP ELM GRAY 0388

PAINT W3 ABOVE TOP CAP @ RESTROOMS

IMPACT NONPOROUS WALLCOVERING FULL HEIGHT AT RESTROOMS

STYLE: PALLADIUM RIGID SHEET-INTEGRATED SUBWAY EN40610SBY1/2-103 INTERLOCKING 4x10 SHEETS WHITE SAND (INCLUDING TOP & CORNER TRIM CAPS) INSTALLATION: ABOVE 6" FLASH COVE BASE AT RESTROOM WET WALL

IMPACT NONPOROUS RIGID PANELS AT ALCOVES TO 8'AFF

MFGR: STYLE: PALLADIUM RIGID SHEET .04"

COLOR: ELM GRAY 0388 INSTALLATION: INSTALL VERTICALLY WITH VERTICAL SEAM TRIM PIECES & METAL TOP CAP TRIM: MOUNT SHEET ABOVE RUBBER BASE.

PAINT ABOVE TOP CAP W2 OR W5 TO MATCH ADJACENT CORR. WALLS

W10 IMPACT NONPOROUS WALLCOVERING BELOW TRANSACTION LEDGE PALLADIUM RIGID SHEET .04" ANTIQUE BRONZE 5M002 COLOR:

INSTALLATION: RAILROAD TO MINIMIZE SEAMS. MOUNT BOTTOM OF SHEET ABOVE RUBBER BASE. PROVIDE INTERSECTION & CORNER TRIM CAPS IN COLOR TO MATCH SHEET.

FRP WALL PANELS TO 4' AFF - WHITE. MARLITE OR EQUAL. PAINT W3 ABOVE TO CEILING.

COMPUTER COLOR MATCH TO RUBBER BASE

CEILING - ALL CEILINGS ARE C2 UNLESS OTHERWISE NOTED C1 EXISTING TO REMAIN

NEW 2 X 2 TEGULAR CEILING GRID AND TILE INSTALLED AT VARIOUS HTS. REF CEILING PLAN. ARMSTRONG-1732-FINE FISSURED REVEAL EDGE-WHITE

#### FINISH NOTES

1. CONTRACTOR SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF ALL MATERIALS.

2. DELIVER ALL EXTRA MATERIALS TO THE TENANT. FURNISH EXTRA MATERIALS MATCHING PRODUCTS INSTALLED, PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFICATION WITH LABEL DESCRIBING THE CONTENTS.

PRIOR TO PURCHASE OF FINISHES. ALLOW TIME FOR SUBMITTAL REVIEW & RESUBMITTAL AS REQUIRED. 4. EXTEND/REPAIR BLDG STD COMMON AREA CORRIDOR FINISHES AS REQUIRED DUE TO CONSTRUCTION/DEMOLITION. VERIFY WITH BLDG MGMT IF ANY

MATERIALS ARE STOCK PILED. PROVIDE NEW MATERIAL WHEN NECESSARY.

3. SUBMIT SAMPLES OF ALL SPECIFIED FINISHES TO DESIGNER FOR APPROVAL

5. TRANSITION OF FLOOR FINISHES IS TO OCCUR AT THE CENTERLINE OF

DOOR OR CASED OPENING U.N.O. CARPET SHALL LAY IN THE SAME DIRECTION UNLESS OTHERWISE SHOWN. CARPET TO RECEIVE A MINIMUM OF SEAMS, NO CROSS JOINTS ARE

PERMITTED. AVOID SEAMING NEAR DOORS AND CORNERS. CARPET SHALL BE TRIMMED EVENLY @ NEATLY FOR A TIGHT FIT @ WALLS, PROJECTIONS, TRIM STRIPS OR REVEALS. TERMINATE CARPET AT FRAMES. FINAL INSTALLATION SHALL BE FREE FROM RIPPLES AND PUNCTURES. 8. LAY ALL RESILIENT FLOORING FROM CENTER MARKS ESTABLISHED WITH

EDGES OF ROOM ARE AT EQUAL WIDTH. ADJUST AS NECESSARY TO AVOID USE OF CUT WIDTHS LESS THAN 1/2 TILE AT ROOM PERIMETERS. LAY TILE SQUARE TO ROOM AXIS. U.N.O. MATCH TILES FOR COLOR AND PATTERN BY USING TILE FROM CARTONS IN

PRINCIPAL WALLS DISCOUNTING MINOR OFFSETS, SO THAT TILE @ OPPOSITE

SAME SEQUENCE AS MANUFACTURED AND PACKAGED IF SO NUMBERED. 10. SEAL & CLEAN FLOOR AS RECOMMENDED BY FLOORING MANUFACTURER OR

11. APPLY WALL BASE TO WALLS, COLUMNS, PILASTERS, AND OTHER PERMANENT FIXTURES IN ROOMS OR AREAS WHERE BASE IS REQUIRED. INSTALL BASE IN LENGTHS AS LONG AS PRACTICAL, WITH PREFORMED CORNER UNITS, OR FABRICATED FROM BASE MATERIALS WITH MITERED OR COPED INSIDE CORNERS. ALL LENGTHS OF BASE SHALL BE A MIN. OF 12"

12. WHERE PATCHING OCCURS IN A SMOOTH PAINTED SURFACE. EXTEND FINAL

PAINT COAT OVER ENTIRE UNBROKEN SURFACE CONTAINING THE PATCH AFTER THE AREA HAS RECEIVED PRIMER AND SECOND COAT. 13. REFER TO MANUFACTURER'S WRITTEN SPECIFICATIONS FOR TEMPERATURE SURFACE TO BE PAINTED & SURROUNDING AIR. DO NOT APPLY WHEN

RELATIVE HUMIDITY EXCEEDS 85% AND DO NOT APPLY TO DAMP OR WET SURFACES. 14. ELECTROSTATIC SPRAY PAINT TO METAL FINISHES U.N.O.
15. PAINT SURFACES BEHIND REMOVABLE EQUIPMENT & FURNITURE. PAINT

BEHIND NON-REMOVABLE ITEMS WITH PRIMER ONLY. 16. PROVIDE THE MANUFACTURER'S BEST QUALITY TRADE SALE PAINT MATERIAL OF THE VARIOUS COATING TYPES SPECIFIED. PAINT MATERIAL CONTAINERS NOT LABELED WITH MANUFACTURER'S PRODUCT WILL NOT BE ACCEPTED.

### FINISH LEGEND

**PARTITIONS:** 

FINISH EXTENT W1\ — INDICATES WALL FINISH B1/= INDICATES BASE

WHEN THIS SYMBOL IS LOCATED IN THE CENTER OF A ROOM OR SPACE, THEN ALL PARTITIONS IN THAT ROOM OR SPACE RECEIVE SPECIFIED FINISH.

FLOORS:

———INDICATES FLOOR FINISH - INDICATES FLOORING TRANSITION

# TARKETT ONLINE CUSTOMER PORTAL REGISTRATION INSTRUCTIONS FOR JOHNSONITE PRODUCTS:

ENTER THE FOLLOWING WEB ADDRESS INTO WEB BROWSER: http://mobile2b.tarkettna.com/DistributorPortal/externalredirect/cep AFTER CONNECTING TO THE TARKETT PORTAL REGISTRATION PAGE: CLICK THE REGISTER BUTTON

COMPLETE REGISTRATION INFORMATION 3) YOU WILL BE SENT AN EMAIL TO SETUP YOUR OWN PERSONAL PASSWORD TO THE TARKETT PORTAL NOTE: THE FOLLOWING INFORMATION WILL BE REQUIRED TO REGISTER

FOR THIS STRATEGIC PROGRAM NUMBER (SPN)
PROGRAM CODE: 601761
PROGRAM ACCESS CODE: 752194

THE FOLLOWING INFORMATION WILL BE REQUIRED TO PLACE AN ORDER: PURCHASE ORDER NUMBER: SPECIFIC ORDER REFERENCE

REQUESTED SHIP DATE: REQUESTED DATE OF SHIPMENT TO MEET THE NEEDS OF THE CUSTOMER

3) LOCATION/PROPERTY CODE: PROJECT NAME 4) AUTHORIZATION CODE: LOCATION 5) SPECIAL INSTRUCTIONS: DISTRIBUTOR SERVICING ORDER ALL ORDERS SHOULD BE PLACED DIRECTLY WITH TARKETT VIA THE

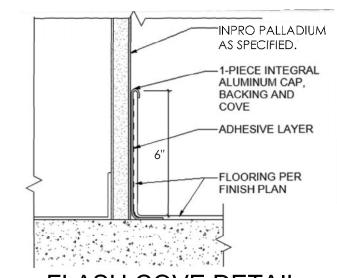
\*PLEASE ENSURE THAT ONLY AUTHORIZED PERSONNEL HAVE ACCESS TO THE PORTAL

PORTAL AND WILL BE SERVICED WITH TARKETT'S AUTHORIZED SERVICE

CONTACT: STACEY MIELNIK 440.903.4032 STACEY.MIELNIK@TARKETT.COM \*FOR WELLMED PRICING ON ALL JOHNSONITE PRODUCTS, REFER TO TARKETT ONLINE CUSTOMER PORTAL REGISTRATION INSTRUCTIONS PROVIDED ON FINISH SHEET/AI-2.5

MDF ROOM SHALL BE COMPLETED PRIOR TO THE BALANCE OF THE LEASE AREA. COORDINATE WITH TENANT DURING PROJECT SCHEDULING. OUTLETS INSTALLED - BUT NOT HOT - FINISHES COMPLETE.

ALL CLINIC AREAS SHALL BE 9'-0" U.N.O. RESTROOMS SHALL BE 8'-5". A PORTION OF THE WAITING ROOM SHALL BE 16' AFF. REF. CEILING PLAN



FLASH COVE DETAIL



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24



PROJECT

# **WELLMED CLINIC**

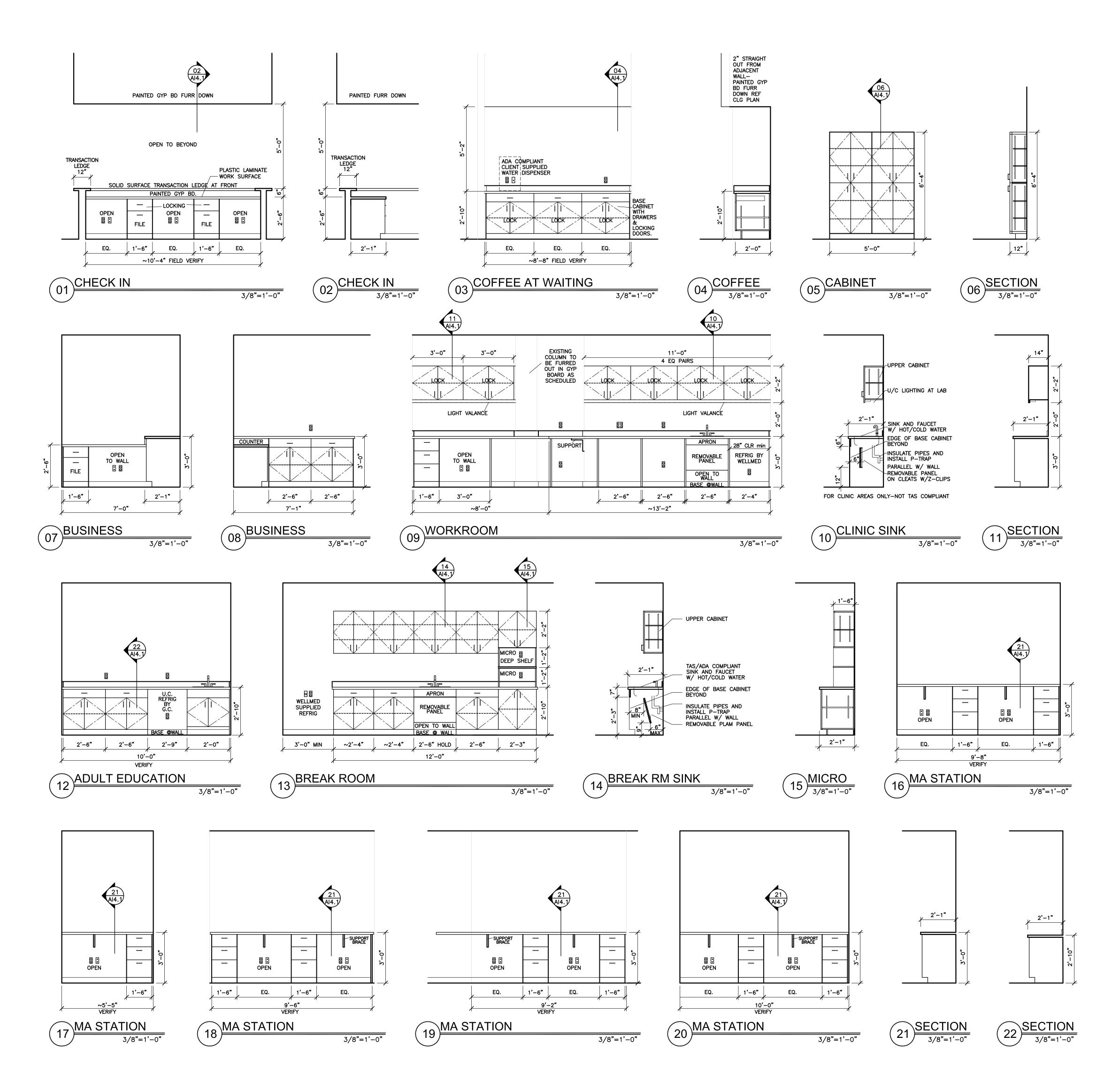
ΑT

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

### FINISH PLAN FINISH SCHEDULE

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 



#### **GENERAL NOTES - MILLWORK**

- 1. ALL MILLWORK SHALL COMPLY WITH "PREMIUM GRADE" REQUIREMENTS AS SPECIFIED IN THE LATEST EDITION OF "ARCHITECTURAL WOODWORKING QUALITY STANDARDS AND GUIDE SPECIFICATIONS" AS PREPARED BY THE ARCHITECTURAL WOODWORK INSTITUTE.

  2. MATERIALS NOT COVERED BY SPECIFICATIONS SHALL BE THE BEST
- OBTAINABLE FOR THE PURPOSE INTENDED.
- WHERE COMPONENTS ARE MITERED OR BUTTED, THEY SHALL BE JOINED AND SECURED IN A MANNER TO INSURE AGAINST THE JOINT OPENING. 4. ALL MILLWORK SHALL BE FABRICATED, ASSEMBLED, FINISHED & INSTALLED IN THE BEST METHOD KNOWN TO THE CABINET TRADE. SURFACES AND RADIUSES SHALL BE TRUE, STRAIGHT AND FREE FROM ALL MACHINE AND TOOLS MARKINGS, BRUISES, INDENTATIONS, CHIPS OR ABRASIONS. DESIGNER
- RESERVES THE RIGHT TO REJECT WORK IT DEEMS UNACCEPTABLE. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS— IF APPLICABLE —TO DESIGNER SHOWING LOCATION OF EACH ITEM, DIMENSIONED PLANS AND ELEVATIONS, LARGE SCALE DETAILS, ATTACHMENT DEVICES, & OTHER
- COMPONENTS. 6. CONTRACTOR SHALL SUBMIT FINISH SAMPLES TO DESIGNER FOR REVIEW
- AND APPROVAL. 7. SHOW VENEER LEAVES WITH DIMENSIONS, GRAIN DIRECTION, EXPOSED FACE, AND AN IDENTIFICATION NUMBER INDICATED FOR EACH LEAF. IDENTIFICATION NUMBER SHALL INDICATED THE FLITCH AND SEQUENCE WITHIN THE FLITCH
- FOR EACH LEAF- AS APPLICABLE 8. WHERE WOODWORK IS INDICATED TO BE FITTED TO OTHER CONSTRUCTION CHECK ACTUAL DIMENSIONS OF OTHER CONSTRUCTION BY ACCURATE FIELD MEASUREMENTS BEFORE FABRICATION, AND SHOW RECORDED MEASUREMENTS ON FINAL SHOP DRAWINGS. COORDINATE FABRICATION SCHEDULE WITH
- CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK. 9. WHERE FIELD MEASUREMENTS CAN NOT BE MADE WITHOUT DELAYING THE WORK, GUARANTEE DIMENSIONS AND PROCEED WITH FABRICATING WOOD WORK WITHOUT FIELD MEASUREMENTS. PROVIDE ALLOWANCE FOR TRIMMING
- AT SITE AND COORDINATE CONSTRUCTION TO ENSURE THAT ACTUAL DIMENSIONS CORRESPOND TO GUARANTEED DIMENSIONS. 10. MACHINE AND SAND WOODWORK TO COMPLY WITH REQUIREMENTS FOR SPECIFIED GRADE. WOODWORK TO BE PAINTED SHALL BE PRIMED AND
- 11. ALL SHELVES SHALL BE 3/4" BIRCH PLYWOOD, WITH EDGES BANDED WITH HARDWOOD TO MATCH THE VENEERS USED UNO.
- 12. ALL BLOCKING REQUIRED SHALL BE SCRIBED TO WALL OR CEILING, CONTRACTOR TO CHECK JOB PROGRESS AND COORDINATE WITH OTHER TRADES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BLOCKING REQUIRED, UNDER NO CIRCUMSTANCES WILL "EXTRA" WORK BE AUTHORIZED
- 13. INSTALL WOODWORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED WITH CONCEALED SHIMS. INSTALL TO A TOLERANCE OF 1/8 INCH IN 96 INCHES.
- 14. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS IN A MANNER ACCEPTABLE TO FABRICATOR AND INSTALLER THAT ENSURES THAT WOODWORK IS WITHOUT DAMAGE OR DETERIORATION AT THE TIME OF SUBSTANTIAL COMPLETION.
- 15. ADJUST CABINET WORK AND HARDWARE SO THAT DOORS AND DRAWERS OPERATE SMOOTHLY WITHOUT WARP OR BIND.
- 16. JOINTS BETWEEN CABINET DOORS, DRAWERS ETC. SHALL BE OF UNIFORM WIDTH NOT TO EXCEED 1/8" UNLESS NOTED OTHERWISE.

  17. SEAL WOOD SURFACES NOT RECEIVING PLASTIC LAMINATE OR PAINT TO
- PREVENT MOISTURE PENETRATION. 18. GROMMETS ARE TO BE FIELD-CUT FOR COORDINATION WITH ELECTRICAL DEVICES. GROMMETS SHALL BE 3" DIA PLASTIC TO MATCH FINISH COLOR OF MILLWORK UNLESS OTHERWISE NOTED. PROVIDE A GROMMET ABOVE ALL UNDER COUNTER OUTLETS THAT ARE NOT ASSOCIATED WITH UNDER
- COUNTER EQUIPMENT. 19. WHERE CABINET DOORS EXCEED 32" IN HEIGHT, PROVIDE 1-1/2 PAIRS OF HINGES AT EACH LEAF. VERIFY ADEQUACY TO SUPPORT CABINET DOORS.

# CABINET SPECIFICATIONS

- ALL BASE & UPPER CABINETS SHALL BE PREMIUM GRADE PLASTIC LAMINATE
- FLUSH OVERLAY ALL CABINETS SHALL BE BUTT - TO ALLOW FOR CONTRACTOR INSTALLED LOCKS WHERE SPECIFIED. (THE CENTER STILE MAKES THIS DIFFICULT)

ALL UPPER AND LOWER CABINETS SHALL HAVE FILLERS AT WALLS. COUNTERTOPS AND SPLASHES SHALL BE PLASTIC LAMINATE AS SPECIFIED. PROVIDE A SMALL RADIUS ON THE OUTSIDE CORNER OF ALL COUNTERTOPS

TRANSACTION LEDGES AT RECEPTION AND UNIT CLERKS SHALL BE SOLID SURFACE WIRE PULLS SHALL BE 4" - BRUSHED ALUMINUM

PROVIDE SOFT CLOSE GLIDES AND HINGES BY ACCURIDE

## MILLWORK SPECIFICATIONS

PLASTIC LAMINATE COUNTERTOPS

WILSONART LAMINATE STYLE: 4878-38 FINE VELVET FINISH COLOR: PEWTER MESH

\*PROVIDE A 2" RADIUS ON OUTSIDE CORNERS THROUGHOUT CLINIC PLASTIC LAMINATE CABINETS

WILSONART LAMINATE 7992-38 FINE VELVET FINISH STYLE: COLOR: PINNACLE WALNUT

SOLID SURFACE LEDGES

MFGR: **WILSONART THINSCAPE** STYLE: COLOR: SOLUNA TS511-LR EASED EDGE PROFILE

## **CONTRACTOR SUPPLIED APPLIANCES**

APPLIANCES U/C REFRIGERATOR AT ADULT EDUCATION ROOM: MARVEL - MODEL MARE224-SS41A

# CONTRACTOR SUPPLIED DISPENSERS

DISPENSERS AT RESTROOMS:

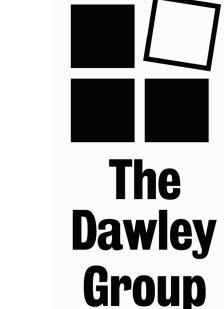
- SANITARY NAPKIN RECEPTACLE: BOBRICK B-270
- PAPER TOWEL DISPENSERS:
- TORK XPRESS FULL SIZE WALL MOUNT DISPENSER H-1596 BLACK
- SOAP DISPENSERS: INSTALL SOAP DISPENSERS PROVIDED BY WELLMED'S VENDOR - CINTAS
- TOILET PAPER DISPENSERS TORK OPTICORE - DOUBLE ROLL BLACK

AT EXAM ROOMS:

- PAPER TOWEL DISPENSERS:
- TORK XPRESS FMINI WALL MOUNT DISPENSER H-1595 BLACK AT BREAK ROOM, LAB, CONFERENCE ROOM & WAITING ROOM COFFEE BAR:
- PAPER TOWEL DISPENSERS: TORK XPRESS FULL SIZE WALL MOUNT DISPENSER H-1596 BLACK CONFIRM LOCATION WITH WELLMED COORDINATOR

AT EXAM ROOMS:

CONTRACTOR SHALL INSTALL ALL WALL MOUNTED EQUIPMENT AND DISPENSERS PROVIDED BY WELLMED. REF SET UP PROCEDURES



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392





PROJECT

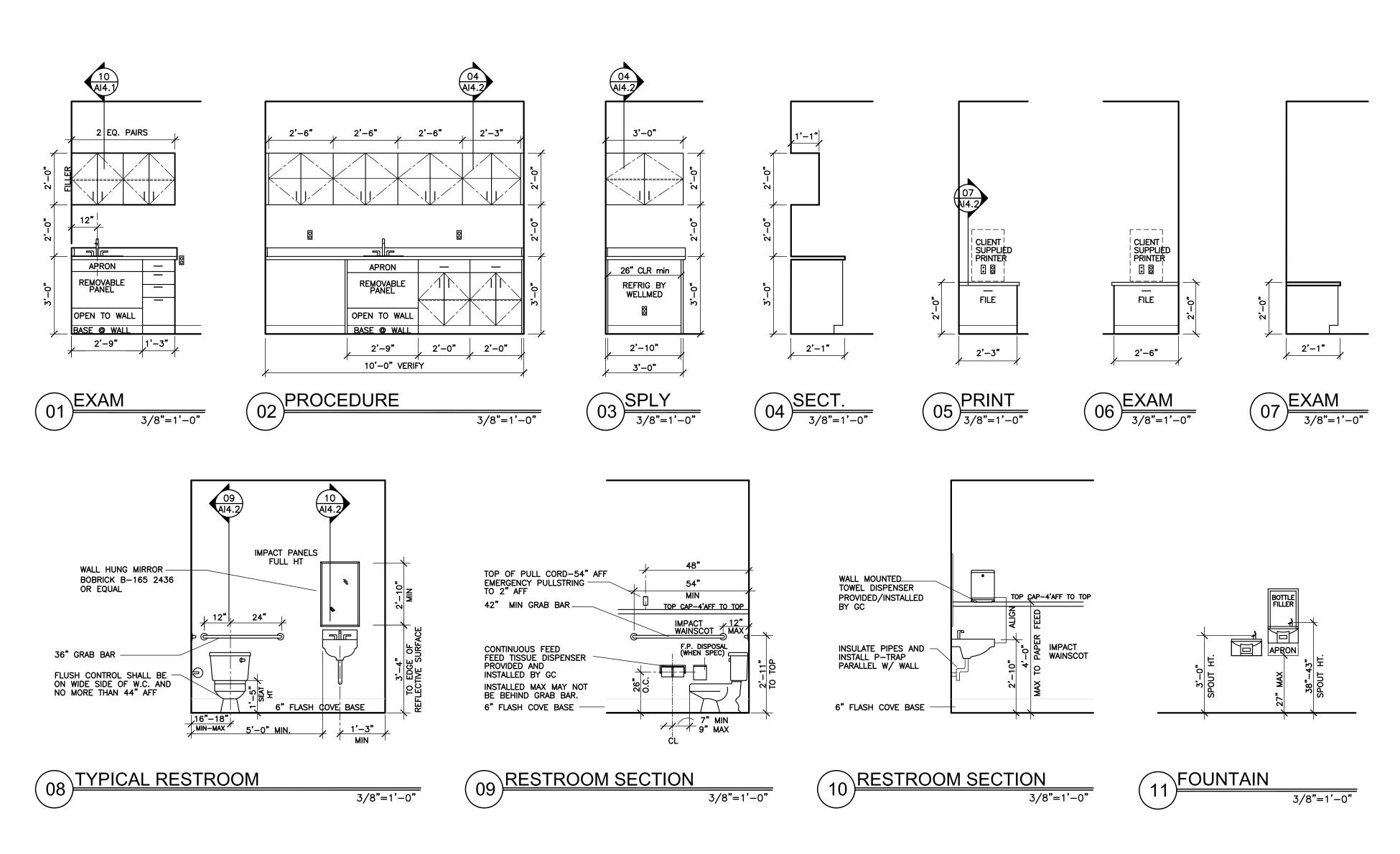
# WELLMED **CLINIC**

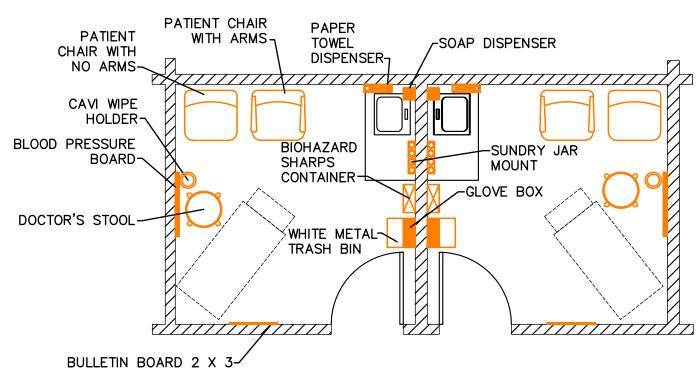
KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

#### **ELEVATIONS**

PROJECT NO: WTX07J 06.3.24 **REVISION DATES:** 







#### **EXAM ROOM SET-UP PROCEDURES**

#### **BLOOD PRESSURE BOARD**

OTOSCOPE, OPTHALMOSCOPE AND MANUAL BLOOD PRESSURE WITH ADULT 11 AND ADULT 13 CUFF

- BOARD TO BE MOUNTED USING 50 POUND ANCHORS,
- MINIMUM OF 4 ANCHORS, WITH #8 WASHERS
- PLACE THE BRACKET 63" (160 CM) FROM THE FLOOR. REFER TO WELCH ALLYN DOCUMENTS FOR INSTALL RECOMMENDATIONS
- BOARD TO BE CENTERED ON WALL OPPOSITE SINK ELECTRICAL CORD TO BE ZIP TIED OR VELCRO WRAPPED

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 50 LBS E\*Z ANCOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL HARDWARE STORE

#### SHARPS CONTAINER MOUNT

CDC REQUIRES OPENING OF SHARPS CONTAINER TO BE BETWEEN 52" AND 56" AFF (SEE ATTACHMENT OF REGULATION REQUIREMENTS PER OSHA)

- BRACKET TO BE MOUNTED BETWEEN SINK AND DOOR CLOSEST TO CABINET.
- BOTTOM OF BRACKET TO BE AT 42" AFF INSTALLATION IS ACHIEVED BY FOUR, 40 POUND ANCHORS WITH #8 ANCHORS

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 40 LBS E\*Z ANCOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL

#### **GLOVE BOX**

- BRACKET TO BE MOUNTED BETWEEN SINK AND DOOR, ADJACENT TO SHARPS CONTAINER
- BOTTOM OF BRACKET TO BE AT 42" AFF

• INSTALLATION IS ACHIEVED BY THREE, 40 POUND ANCHORS WITH #8 ANCHORS

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 40 LBS E\*Z ANCOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL HARDWARE STORE

#### TRASH CAN

WHITE TO BE PLACED UNDER GLOVE BOX

#### SUNDRY CONTAINERS MOUNT

TO BE DETERMINED, PER SITE, IF MOUNT IS NEEDED. IF MOUNT IS NEEDED, IT IS TO BE MOUNTED UNDERNEATH THE CABINET, 3" ABOVE THE COUNTERTOP, AND FLUSH WITH THE END OF COUNTERTOP SURFACE.

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 40 LBS E\*Z ANCOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL HARDWARE STORE

#### **BULLETIN BOARD**

BULLETIN BOARD TO BE INSTALLED AS LISTED ON DIAGRAM PER ROOM SET-UP. BOTTOM OF FRAME 52" AFF

#### **CAVI WIPE MOUNT**

MOUNT ON THE BLOOD PRESSURE BOARD WITH ANCHORS THAT COME WITH THE

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 50 LBS E\*Z ANCHOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL HARDWARE STORE

#### SOAP DISPENSERS

HARDWARE STORE

TO BE INSTALLED BETWEEN SINK AND WALL (USE RECOMMENDED HARDWARE, DO NOT USE DOUBLE SIDED TAPE)

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 50 LBS E\*Z ANCHOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL HARDWARE STORE

# PAPER TOWEL DISPENSERS

TO BE INSTALLED ON WALL NEXT TO CABINET. PER ADA, BOTTOM OF PAPER TOWEL DISPENSER SHOULD NOT EXCEED 48" FROM FINISHED FLOOR

NOTE: EXAMPLES OF PURCHASED ITEMS (HOLLOW DOOR AND DRYWALL ANCHOR 50 LBS E\*Z ANCHOR BRAND. WASHERS SAE FLAT WASHERS SAE #8 HILLMAN BRAND) CAN BE PURCHASED AT YOUR LOCAL



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392

SEALS



6.3.24



PROJECT

# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

## **ELEVATIONS & EXAM RM NOTES**

PROJECT NO: WTX07J 06.03.24 **REVISION DATES:** 

SYMBOL	DESCRIPTION			/E`		/IATION	5				
	NEW DUCTWORK INDICAT	TED BOLD		(E) (N)	EXISTING TO REMAIN  NEW  ITEM NOTED TO BE RELOCATE	D					
	EVICTING DUCTAGEICING	NOATED LIQUE		(R) (D) A, CA	ITEM NOTED TO BE DEMOLISHI COMPRESSED AIR						
	EXISTING DUCTWORK IND	JICATED LIGHT		ABV AD	ABOVE AUTOMATIC DAMPER						
	DEMOLISH DUCTWORK IN	IDICATED LIGHT	& DASHED	AFF AHU	ABOVE FINISHED FLOOR AIR HANDLING UNIT						
	RELOCATE DUCTWORK IN CROSS-HATCHED	IDICATED LIGHT,	DASHED, &	APD AUX	AIR PRESSURE DROP AUXILIARY						
	CONCENTRIC TRANSITION	N		BFF BHP	BELOW FINISHED FLOOR BRAKE HORSE POWER			_			
Щ	ECCENTRIC TRANSITION			BLDG. B.O.D.	BUILDING BOTTOM OF DUCT			_			
	RECTANGULAR ELBOW W	ITHOUT TURNIN	G VANES	B.O.P. BTU	BOTTOM OF PIPE BRITISH THERMAL UNIT						
, <u>L</u> '				BTUH CD	BRITISH THERMAL UNIT PER HO CONDENSATE DRAIN	OUR					
(G)	RECTANGULAR ELBOW W	ITH TURNING VA	NES	CFH CFM	CUBIC FEET PER HOUR CUBIC FEET PER MINUTE						
7	RADIUS ELBOW WITHOUT	TURNING (90° R	ADIUS ELBOW R=1.0xW)	CHWS CHWR	CHILLED WATER SUPPLY CHILLED WATER RETURN						
<u></u>				CIRC.	CIRCULATING CENTERLINE						
	ROUND SPIN-IN WITHOUT	DAMPER		CLG. CONN.	CEILING CONNECTION	TONES.					
	ROUND SPIN-IN WITH DAM	MPER		CRAC CRAHU	COMPUTER ROOM AIR CONDIT						
	DOUND COIN IN WITH DEA	AOTE DAMPER C	DEDATOR	C.W.	COLD WATER CONDENSER WATER SUPPLY						
~ <del>_</del>	ROUND SPIN-IN WITH REN	NOTE DAMPER C	PERATOR	DB DIA.	CONDENSER WATER RETURN DRY BULB DIAMETER						
	STANDARD SMACNA PRES	SSURE TAP		DISC.	DISCONNECT DOWN						
poore	ROUND SPIN-IN DAMPER \	WITH FLEXIBLE I	RUN-OUT	DWG.	DRAWING EACH						
				EAT EDH	ENTERING AIR TEMPERATURE ELECTRIC DUCT HEATER			=			
	FLEXIBLE CONNECTION			EL. ELEC.	ELECTRICAL  ELECTRICAL			7			
M	POSITIVE PRESSURE DUC	OT UP		E.S.P.	EXTERNAL STATIC PRESSURE ELECTRIC UNIT HEATER			7			
<b>X</b>	POSITIVE PRESSURE DUC	CT DN		EVAP.	EVAPORATOR  ENTERING WATER TEMPERATURE	JRE		7			
	NEGATIVE PRESSURE DU	CT UP		EXH. EXIST.	EXHAUST EXISTING						
D				FCO FCU.	FLOOR CLEAN OUT FAN COIL UNIT			1			
D	NEGATIVE PRESSURE DU	CT DN		FD F.F.	FLOOR DRAIN FINISHED FLOOR			_			
MVD	MANUAL VOLUME DAMPE	R		FLA FLEX.	FULL LOAD AMPS FLEXIBLE						
- - -	AUTOMATIC / MOTORIZED	DAMPER		FLR. F.O.	FLOOR FLAT OVAL			_			
AD	AUTOMATIC/ MOTORIZED	DAMPER		F.O.B. F.O.T.	FLAT ON BOTTOM TRANSITION FLAT ON TOP TRANSITION			-			
BDD	BACK DRAFT DAMPER			FPM FPTU	FEET PER MINUTE FAN POWERED TERMINAL UNIT	Г					
FSD)	COMBINATION FIRE-SMOK	(E DAMPER (VEF	RTICAL POSITION)	FT. G.C.	FEET / FOOT GENERAL CONTRACTOR						
-				GPM GPH	GALLONS PER MINUTE GALLONS PER HOUR						
FSD	COMBINATION FIRE-SMOK	KE DAMPER (HOI	RIZONTAL POSITION)	HR. HP	HOUR HORSE POWER						
FD)	FIRE DAMPER (VERTICAL	POSITION)		H.W. HD	HOT WATER HUB DRAIN						
				HORIZ. HD.	HORIZONTAL HEAD (IN FEET)						
(FD)	FIRE DAMPER (HORIZONT.	AL POSITION)		HT.	HEIGHT INVERT ELEVATION						
	SQUARE CEILING SUPPLY	DIFFUSER		IN. INSUL.	INCHES INSULATION						
	SQUARE CEILING EXHAUS	ST DIFFUSER		I.W.	INDIRECT WASTE  LEAVING AIR TEMPERATURE						
	SQUARE CEILING RETURN	N DIFFUSER		MAX. MBH	MAXIMUM TUOLISAND BTU/UB	KE					
				MECH.	THOUSAND BTU/HR MECHANICAL MANHOLE						
<u></u> →	SUPPLY SIDEWALL REGIS	TER		MIN. MVD	MINIMUM  MANUAL VOLUME DAMPER						
	RETURN / EXHAUST SIDEV	WALL REGISTER		N.C.	NORMALLY CLOSED  NOT IN CONTRACT			1			
	LINEAR SLOT DIFFUSER W	VITH RETURN AU	R PLENUM	N.O.	NORMALLY OPEN NUMBER			7			
				NPW NTS	NON POTABLE WATER  NOT TO SCALE			7			
	LINEAR SLOT DIFFUSER W	VIIA SUPPLY Alf	A F LEINUIVI	OA OAHU	OUTSIDE AIR OUTSIDE AIR HANDLING UNIT						
TAG AIRFLOW	AIR DEVICE TAG (REFER T	TO SCHEDULE F	OR CONNECTION SIZE)	OBD OD	OPPOSED BLADE DAMPER OVERFLOW (ROOF) DRAIN			1			
<u> </u>	SLIP-IN ELECTRIC DUCT H	IFATER		OS&Y P.D.	OUTSIDE STEM AND YOKE PRESSURE DROP						
				PH PPM	PHASE PARTS PER MILLION						
(D)	SMOKE DETECTOR FOR R CONTRACTOR)	REFERENCE (PRO	OVIDED BY ELECTRICAL	P.R.V. PSI	PRESSURE REDUCING VALVE POUNDS PER SQUARE INCH						
T	NEW THERMOSTAT			QTY. R.A.	QUANTITY RETURN AIR						
(T) <sub>D</sub> (T) <sub>E</sub>	RELOCATED, DEMOLISH, {	& EXISTING THE	RMOSTAT	RE: REQ'D.	REFER OR REFERENCE REQUIRED						
TS	TEMPERATURE SENSOR	(TE)	TOILET EXHAUST RISER	RD REV.	(PRIMARY) ROOF DRAIN REVISED OR REVISIONS			$\exists$			
© ©	CARBON DIOXIDE	KE	KITCHEN EXHAUST	RLA RPM	RATED LOAD AMPS REVOLUTIONS PER MINUTE						
	SENSOR	1 SE	RISER  SMOKE EXHAUST	S.A.	ROOFTOP UNIT SUPPLY AIR	U.G.	UNDERGROUND				
(H)	HUMIDITY SENSOR	1	RISER	SAN. S.H.	SANITARY SENSIBLE HEAT	U.N.O. VAV	VARIABLE AIR VOLUME				
PS	PRESSURE SENSOR	SA 1	SUPPLY AIR RISER	S.P. SQ.	STATIC PRESSURE  SQUARE  STANDARD	VEL. VERT.	VELOCITY  VERTICAL  VARIABLE EDECLIENCY DRIVE				
CHW 1	CHILLED WATER RISER	RA 1	RETURN AIR RISER	STD. SURF.	STANDARD  SURFACE  SURFAND OR SUSPENDED	VFD VOL. VSD	VARIABLE FREQUENCY DRIVE  VOLUME  VARIABLE SPEED DRIVE	1			
CW 1	CONDENSER WATER RISER	OA 1	OUTSIDE AIR RISER	SUSP. SW	SUSPEND OR SUSPENDED SWITCH SYSTEM	W/ W.B.	WITH WET BULB	-			
HHW 1	HEATING HOT WATER	$\overline{}$		SYS. TEMP.	SYSTEM TEMPERATURE TOTAL PRESSURE	W.B. WCO W.F.U.	WET BULB  WALL CLEAN OUT  WATER FIXTURE UNITS	$\exists$			
<u>1</u> 7	RISER	APU	IONIZATION	T.P. T.S.P. T'STAT.	TOTAL PRESSURE  TOTAL STATIC PRESSURE  THERMOSTAT	W.F.U. W.G.	WATER FIXTURE UNITS  WATER GAUGE  WITHOUT				
CR	CONDENSATE RETURN			. ~		VV/U					

- BUILDING CODE 2021 IBC WITH CITY OF KELLER AMENDMENTS FIRE CODE - 2021 IFC WITH CITY OF KELLER AMENDMENTS
- ELECTRICAL CODE 2020 NEC WITH CITY OF KELLER AMENDMENTS MECHANICAL CODE - 2021 IMC WITH CITY OF KELLER AMENDMENTS
- PLUMBING CODE 2021 IPC WITH CITY OF KELLER AMENDMENTS OTHER - 2018 INTERNATIONAL ENERGY CONSERVATION CODE WITH CITY OF KELLER
- **AMENDMENTS** OTHER - LIFE SAFETY CODE (NFPA 101)
- OTHER FEDERAL DEPARTMENT OF JUSTICE AMERICANS WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARDS.

**GENERAL NOTES** 

FURNISH AND INSTALL ALL ITEMS, INCLUDING EVERY ARTICLE, DEVICE, OR ACCESSORY REASONABLY VECESSARY TO FACILITATE FACH SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED. ELEMENTS OF THE WORK SHALL INCLUDE. BUT ARE NOT LIMITED TO. MATERIALS ABOR, SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PERMITS AND LICENSES.

DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPLETE PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT WITHIN DESIGN INTENT AT NO ADDITIONAL COST TO OWNER/TENANT OR TENANT. CONTRACTOR SHALL REQUEST ADDITIONAL INFORMATION IN CASES OF DOUBT.

WORK SHALL COMPLY WITH THE MOST RECENT VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATION RESULTING THEREFROM SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE PROCEEDING. SHOULD THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE CODES. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES

BEFORE SUBMITTING A BID. IT WILL BE NECESSARY FOR EACH CONTRACTOR WHOSE WORK IS INVOLVED. TO VISIT THE SITE AND ASCERTAIN FOR HIMSELF THE CONDITIONS TO BE MET IN INSTALLING THE WORK AND MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL PRICE. FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

CONSIDERATION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS. AND CONDITIONS SPECIFIED AND/OR INDICATED. SCHEDULED. OR IMPLIED ON THE CONTRACT DOCUMENTS. AND/OR REQUIRED BY THE NATURE OF THIS WORK.

ALL WORK SHALL BE ARRANGED IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL OPERATING AND CONTROL EQUIPMENT PROPERLY TO PROVIDE EASY ACCESS AND ARRANGE ENTIRE WORK WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE, AND FOR PROPER CODE AND/OR

MANUFACTURERS CLEARANCES ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL ISTED, IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED

THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED. SUBMIT MINIMUM FOUR (4) COPIES FOR APPROVAL.

THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:

9.1. EQUIPMENT AND MATERIALS SHOP DRAWINGS

9.2. COORDINATION DRAWINGS

9.3. RECORD DRAWINGS 9.4. OPERATING AND MAINTENANCE MANUALS

9.5. FIRE STOP MATERIALS AND DETAILS

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, PIPING, CONDUIT, CABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION. AIR DISTRIBUTION EQUIPMENT, AND THE STRUCTURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF. AFTER INSTALLED. NEW DUCTWORK. PIPING. CONDUIT. CABLE. ETC.. IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE WORK, WHICH IS EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE, ETC., SHALL BE RELOCATED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT. COORDINATE ALL WORK COMPLETELY WITH ALL OTHER TRADES PRIOR TO INSTALLATION.

MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEMS OF FOUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF DUALITY AND PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT. WHICH ARE FOUND TO HAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE OWNER/TENANT AND ENGINEER AT NO ADDITIONAL COST TO THE

DAMAGE CAUSED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS BEING REMOVED.

AREAS OF THE EXISTING BUILDING WILL BE OCCUPIED DURING CONSTRUCTION OF THIS PROJECT. NOISY, DUSTY, AND/OR OTHER CONSTRUCTION OPERATIONS REQUIRED FOR WORK WHICH DISTURB OR CAUSE COMPLAINTS BY THE EXISTING BUILDING OCCUPANTS SHALL NOT BE ACCEPTABLE. ALL AFTER-HOUR OR VERTIME WORK REQUIRED BY THE CONTRACTOR TO AVOID DISRUPTION OF EXISTING OCCUPANTS WILL BE PROVIDED AT NO COST TO THE OWNER/TENANT. THE CONTRACTOR SHALL USE CONSTRUCTION METHODS AND MATERIALS WHICH SHALL NOT ADVERSELY AFFECT THE INDOOR AIR QUALITY OF THE

THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SHALL INCLUDE AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRANTY PERIOD THE CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO

14.1. ALL WORK INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR

14.2. ALL APPARATUS WILL DEVELOP CAPACITIES AND PERFORMANCE CHARACTERISTICS SPECIFIED. 14.3. THE SYSTEMS SHALL OPERATE WITHOUT MALFUNCTION.

THE START OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL

COMPLETION" AS AGREED TO BY THE OWNER/TENANT. PORTIONS OF THE BUILDING WILL BE IN USE AND OCCUPIED DURING THE CONSTRUCTION PERIOD OF THIS PROJECT. ALL BUILDING SERVICES, UTILITIES, POWER, CHILLED WATER, FIRE PROTECTION, AND DOMESTIC COLD AND HOT WATER WHICH WILL BE REQUIRED FOR THIS PROJECT MAY NOT BE DISRUPTED FOR ANY REASON WITHOUT PRIOR COORDINATION WITH A REPRESENTATIVE OF BUILDING MANAGEMENT AND THE OWNER AND A WRITTEN AUTHORIZATION FROM THE BUILDING MANAGER AND OWNER DESIGNATING A DATE, TIME, AND DURATION THAT ARE APPROVED BY THE BUILDING MANAGER AND OWNER FOR SUCH DISRUPTION. AN ADDITIONAL ADVANCE NOTIFICATION OF SEVEN (7) DAYS SHALL BE GIVEN TO THE

BUILDING MANAGER AND OWNER PRIOR TO EACH DISRUPTION THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE

CONTRACTOR SHALL X-RAY ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB. THIS CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK,

AND SHALL PAY ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS. IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS. THE GREATER AMOUNT OF TOTAL COST SHALL BE PRICED. BRING THE CONFLICT TO THE ATTENTION OF THE ENGINEER AND REQUEST

PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRESAFED TO COMPLY WITH ASTM E-814 (UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.

UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, A COMPLETE SET OF "AS BUILT" DRAWINGS PORTRAYING ACTUAL SITE CONDITIONS OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK. SUBMISSION SHALL CONSIST OF ONE SET OF PAPER COPIES AND ONE SET OF CAD FILES IN AUTOCAD V. 2013 (OR NEWER) FORMAT WITH THE OWNER'S STANDARD LAYERING

NO PRODUCTS ON THIS PROJECT SHALL CONTAIN UREA-FORMALDEHYDE.

ALL COATINGS, ADHESIVES, AND SEALANTS APPLIED ON-SITE TO THE BUILDING EXTERIOR MUST NOT EXCEED THE CURRENT VOC LIMIT OF SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULE

REFER TO COMMISSIONING SUMMARY TEMPLATE FOR MECHANICAL EQUIPMENT TO BE COMMISSIONED AND TO BASE BUILDING SPECIFICATIONS FOR ALL COMMISSIONING REQUIREMENTS RELATED TO AUSTIN ENERGY GREEN BUILDING (AEGB).

#### MECHANICAL GENERAL NOTES

ALL EXISTING DUCTWORK AND PIPING SIZES AND LOCATIONS ARE TAKEN FROM BEST AVAILABLE RECORDS. OCCUMENTS AND SITE OBSERVATIONS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING. CONDITIONS AND SHALL INCLUDE IN HIS BID THE COST OF REPLACEMENT. REPAIR. RELOCATION OR REMOVAL OF EXISTING MEP ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS PRIOR TO SUBMITTING A BID.

THE CONTRACTOR SHALL VERIFY THAT ALL NEW EXISTING AND RELOCATED TERMINAL UNITS ARE MOUNTED SO THAT ALL REQUIRED CLEARANCES ARE MAINTAINED AT THE BOTTOM AND SIDES OF EACH JNIT (FOR PROPER SERVICING AND MAINTENANCE). COORDINATE COMPLETELY WITH ALL NEW WALLS TO STRUCTURE, AND RELOCATE TERMINAL UNITS AS REQUIRED TO MAINTAIN PROPER CLEARANCES. NOTIFY ENGINEER AND ARCHITECT IMMEDIATELY

EXISTING AIR DEVICES SHALL BE REUSED IF THEY MATCH MANUFACTURER AND MODEL NUMBER, NECK SIZE AND PERFORMANCE OF AIR DEVICES AS LISTED IN THE AIR DEVICE SCHEDULE IN THIS DRAWING. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND TAKE INVENTORY OF EXISTING AIR DEVICES WITHIN THE SPACE PRIOR TO SUBMITTING A BID. ALL REUSED AIR DEVICES SHALL BE CLEANED AND REPAINTED AS REQUIRED TO RETURN TO "LIKE-NEW" CONDITIONS

EXISTING SPIN-IN CONNECTIONS MAY BE REUSED IF LOCATED WITHIN 3'-0" OF NEW CONNECTION SHOWN. ON DRAWING. ALL SPIN-IN CONNECTION NOT USED SHALL BE REMOVED AND DUCTWORK SHALL BE PATCH WITH SHEET METAL, SEALED AND RE-INSULATED TO MATCH EXISTING NO MECHANICAL EQUIPMENT SHALL HAVE SPRINKLER PIPING BLOCKING BOTTOM-MOUNTED ACCESS

PANELS. OFFSET NEW AND EXISTING SPRINKLER PIPING AS REQUIRED. EXISTING FAN POWERED TERMINAL BOXES MOUNTED ABOVE OR ADJACENT TO WALLS WHERE ACCESS IS OBSTRUCTED SHALL BE

DIVISION 21 THRU 26 SUBCONTRACTORS SHALL COORDINATE THEIR WORK TO MAINTAIN A MINIMUM OF 9" TENANT FI EXIBII ITY ZONE

PROVIDE REMOTE DAMPER OPERATORS FOR ALL SPIN-IN DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS. OPERATORS SHALL BE ROTO-TWIST (OR APPROVED EQUAL) CABLE-TYPE OPERATORS, CONCEALED WITHIN DUCT RUN-OUT TO DEVICE, AND ACCESSIBLE FOR BALANCING FROM FACE OF AIR DEVICE. PROVIDE REQUIRED CABLE LENGTHS, MOUNTING CLIPS, AND ALL OTHER REQUIRED COMPONENTS FOR PROPER INSTALLATION AND OPERATION.

MECHANICAL GENERAL NOTES (CONTINUED)

PRIMARY AND SECONDARY DUCTWORK SHALL HAVE EXTERNAL INSULATION INSTALLED ON TOP SIDE OF DUCTWORK PRIOR TO HANGING DUCTWORK TO ALLOW DUCT TO BE SUSPENDED WITH INSULATION TIGHT TO STRUCTURE. DO NOT COMPRESS INSULATION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING TO THE ENGINEER'S ATTENTION ANY WALLS THAT EXTEND FROM THE FINISHED FLOOR TO STRUCTURE AND REQUIRE RETURN AIR PATHWAYS. RETURN AIR BOOTS SHALL BE INSTALLED TO PROVIDE CROSS SECTIONAL AREA EQUIVALENT TO 500 FPM OF AIRFLOW BASED ONT THE SUPPLY CFM TO THE ROOM ENCLOSED BY THE FULL HEIGHT WALLS.

FINAL LOCATION OF ALL NEW EQUIPMENT PRIOR TO EQUIPMENT INSTALLATION SHALL BE APPROVED BY BUILDING OWNER OR PROJECT MECHANICAL ENGINEER.

DURING CONSTRUCTION, SEAL ALL OPEN DUCTS WITH PLASTIC TO PREVENT DUST/DIRT, CLEAN ALL INTERIOR DUCT SURFACES PRIOR TO DUCT INSTALLATION. ALL VAV TERMINAL UNIT FILTERS SHALL BE MAINTAINED DURING CONSTRUCTION AND REPLACED AT THE END OF CONSTRUCTION. PROVIDE CONSTRUCTION FILTERS OVER AIR HANDSLING UNIT INTAKES AND MAINTAIN FILTER MEDIA DURING CONSTRUCTION. REPLACE ALL FILTERS AT END OF CONSTRUCTION. ALL RETURN AIR INTAKES TO MECHANICAL ROOM SHALL BE COVERED WITH FILTER MEDIA DURING CONSTRUCTION. REMOVE UPON

SEAL ALL NEW AND EXISTING PIPE, CONDUIT, AND DUCT PENETRATIONS THRU FIRE RATED WALLS WITH FIRE CAULKING. FIRE CAULKING SHALL BE EQUAL TO 3M BRAND CP25WB FIRE CAULK. INSTALL CAULKING IN STRICT ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS AND WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE UL DETAILS

MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY MEANS OF NAMEPLATES PERMANENTLY ATTACHED TO THE EQUIPMENT, NAMEPLATES SHALL BE BLACK SURFACE, WHITE CORE, LAMINATED BAKELITE WITH ENGRAVED LETTERS. PLATES SHALL BE A MINIMUM OF 3-IN LONG BY 1-IN WIDE WITH WHITE LETTERS 1-IN

WHERE THERMOSTATS ARE LOCATED ADJACENT TO LIGHTING FIXTURE SWITCHES. THE THERMOSTAT SHALL BE ALIGNED WITH THE SWITCH. DO NOT MOUNT THERMOSTAT ABOVE DIMMING LIGHT SWITCHES.

5. CONTRACTOR SHALL PROVIDE TAG (BLACK LETTERS ON CLEAR TAPE) ON CEILING GRID, WITH UNIT NUMBER. AT FILTER ACCESS POINTS FOR ALL VAV AND FPTU'S

WHERE DUCTWORK IS INDICATED TO BE EXPOSED TO VIEW IN OCCUPIED SPACES, PROVIDE MATERIALS WHICH ARE FREE FROM VISIBLE IMPERFECTIONS INCLUDING PITTING. DENTS. AND OTHER IMPERFECTIONS THAT WOULD IMPAIR PAINTING. WHERE PAINTING IS INDICATED ON DRAWINGS, MATERIAL SHALL BE MILL PHOSPHATIZED (ASTM A591) SHEETMETAL SUITABLE FOR IMMEDIATE PAINTING WITHOUT FURTHER TREATMENT OTHER THAN NORMAL CLEANING.

#### MECHANICAL SPECIFICATIONS

DUCTWORK AND SHEETMETAL

1. DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CONSTRUCTION REQUIREMENTS SPECIFIED IN THE 2005 SMACNA EDITION OF "HVAC DUCT CONSTRUCTION STANDARDS", EXCEPT WHERE SMACNA REQUIREMENTS ARE EXCEEDED IN THESE SPECIFICATIONS

2. MAXIMUM ALLOWABLE DUCTWORK LEAKAGE, AS A PERCENTAGE OF AIR SYSTEM VOLUME, SHALL BE 2%. 3. THE INTERIOR SURFACE OF ALL DUCTWORK SHALL BE SMOOTH WITH NO SHEET METAL OR OTHER PARTS PROJECTING INTO THE AIR STREAM. ALL SEAMS AND JOINTS SHALL BE EXTERNAL. THE INSIDE OF ALL DUCTWORK SHALL BE THOROUGHLY CLEANED AND ALL FANS OPERATED TO REMOVE ANY DEBRIS PRIOR TO CONNECTION OF AIR DISTRIBUTION DEVICES.

4. ALL DUCTWORK DIMENSIONS ON THE DRAWINGS ARE CLEAR INSIDE DIMENSIONS.

i. INSTALL ALL DUCTWORK TIGHT TO STRUCTURE UNLESS OTHERWISE NOTED. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO THE CONSTRUCTION OR INSTALLATION OF DUCTWORK

6. ALL TRANSVERSE DUCT JOINTS, LONGITUDINAL SEAMS AND DUCT WALL PENETRATIONS SHALL BE SEALED REGARDLESS OF DUCT PRESSURE CLASSIFICATION. SEALER SHALL BE RATED BY MANUFACTURER AND SHALL BE SUITABLE FOR USE AT THE SYSTEM STATIC PRESSURE CLASSIFICATION OF THE DUCTWORK APPLIED. DUCTWORK SEALANT SHALL BE HARDCAST "VERSA-GRIP 181" OR APPROVED EQUAL. SEALANT SHALL BE SUITABLE FOR USE INDOORS AND OUTDOORS. SEALANT SHALL BE WATER BASED. SEALANT SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS. SEALANT SHALL BE LISTED IN ACCORDANCE WITH UL 181A OR UL 181B, AS REQUIRED IN THE INTERNATIONAL ENERGY CONSERVATION CODE. DUCT SEALANT SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS. MINIMUM DRYING TIME SHALL BE ALLOWED PER MANUFACTURER'S INSTRUCTIONS. ADDITIONAL TIME FOR DRYING SHALL BE ALLOWED IN CLIMATES WHERE TEMPERATURE AND HUMIDITY MAY AFFECT THE CURING OF THE SEALANT. SEALANT SHALL BE ALLOWED TO COMPLETELY DRY AND HARDEN. BEFORE AIR IS CIRCULATED THROUGH THE DUCTWORK. THE USE OF DUCT TAPE FOR SEALING OF METAL DUCTS IS PROHIBITED UNLESS THE TAPE IS PART OF AND USED, IN CONJUNCTION WITH A MULTI-PART SEALING SYSTEM (I.E., ADHESIVE, TAPE, COATING, ETC.).

ALL ROUND TAKE-OFFS IN LOW PRESSURE DUCTWORK SHALL BE MADE WITH A DAMPER EXTRACTOR SPIN-IN COLLAR WITH A 2" STAND-OFF LOCKING QUADRANT. SPIN-INS SHALL BE INSTALLED WITH THEIR DAMPER AXIS PARALLEL TO AIR FLOW.

3. ALL LONGITUDINAL SEAMS SHALL BE "PITTSBURGH LOCK" OR BUTTON PUNCH SNAP LOCK AT CORNER SEAMS AND GROOVED (ACME) SEAM OR SEAM WELDED IN SIDES BETWEEN CORNERS.

9. FLEXIBLE DUCT FABRIC CONNECTIONS SHALL BE INSTALLED ON THE INLET AND OUTLET CONNECTIONS TO ALL POWERED AIR MOVING FOLIPMENT NOT CONNECTED WITH FLEXIBLE DUCT ATTACHED DIRECTLY TO INLET OR DISCHARGE PLENUM A MINIMUM OF 1" OF SLACK SHALL BE ALLOWED IN ALL FLEXIBLE CONNECTIONS TO INSURE VIBRATION ISOLATION. FLEXIBLE FABRIC SHALL BE A MINIMUM OF 3 INCHES WIDE WITH "GRIP-LOC" SEAM TO 24 GAUGE GALVANIZED METAL SIDE CONNECTORS A MINIMUM OF 3 INCHES WIDE EACH. FLEXIBLE CONNECTIONS ARE TO BE FABRICATED WITH DURO DYNE EXCELON "METAL-FAB" VINYL COATED 22 OZ. NYLON WITH 24 GAUGE GALVANIZED IRON SIDE CONNECTORS OR "APPROVED EQUAL".

10. ALL DUCTWORK SUPPORTS SHALL BE PER TABLE 4-1 OF THE SMACNA MANUAL WITH ALL SUPPORTS DIRECTLY ANCHORED TO THE BUILDING STRUCTURE. SUPPORTS SHALL BE ON MAXIMUM 8'-0" CENTERS WITH ADDITIONAL SUPPORTS AS REQUIRED TO PREVENT SAGGING.

DUCTWORK INSULATION ALL DUCTWORK INSULATION SHALL HAVE A COMPOSITE (INSULATION, JACKET, OR FACING, AND ADHESIVE USED TO ADHERE THE FACING OR JACKET TO THE INSULATION) FIRE AND SMOKE HAZARD RATING AS TESTED BY PROCEDURE ASTM, E84, NFPA 225 AND UL 723, NOT EXCEEDING:

> FLAME SPREAD 25 SMOKE DEVELOPED 50

ALL DUCTWORK AND SHEET METAL DESIGNED TO SERVE THE FOLLOWING AREAS SHALL BE EXTERNALLY

2.1. CONCEALED INTERIOR AND PERIMETER SUPPLY & RETURN DUCTWORK.

2.2. UNTREATED OUTSIDE AIR SYSTEMS EXCEPT WHERE DUCT WILL BE EXPOSED. SHALL BE

DOUBLE-WALL DUCT WHERE EXPOSED, DUCT SHALL BE DOUBLE-WALL CONSTRUCTION. 2.3. ALL RIGID ROUND AND FLEXIBLE SUPPLY & RETURN DUCTWORK NOT FACTORY INSULATED.

2.4. ALL OTHER SYSTEMS SPECIFICALLY INDICATED ON THE DRAWINGS. 8. ALL DUCTWORK AND SHEET METAL DESIGNED TO SERVE THE FOLLOWING AREAS SHALL BE INTERNALLY

3.1. PRE-TREATED OUTSIDE AIR DUCTWORK.

3.2. ALL SUPPLY OR RETURN DUCTWORK NOT REQUIRED TO BE EXTERNALLY INSULATED.

FREATED AND FIRE RESISTANT WHITE KRAFT PAPER.

3.3. EXPOSED TO VIEW SUPPLY / RETURN DUCTWORK. I. DUCT INSULATION THICKNESS AND APPLICATION SCHEDULE: INSULATE DUCTS AND BACKSIDES OF SUPPLY & DUCTED RETURN AIR DEVICES WITH THE FOLLOWING MATERIALS AND THICKNESS:

4.1. CONCEALED APPLICATIONS (INSULATED PLENUM): FIBERGLASS BLANKET, WITH A MINIMUM OF 1-INCH THICKNESS AND AN INSTALLED R-VALUE OF R-6 OR GREATER. 4.2. CONCEALED APPLICATIONS (UN-INSULATED PLENUM): FIBERGLASS BLANKER, WITH A MINIMUM OF

1-1/2-INCH THICKNESS AND AN INSTALLED R-VALUE OF R-8 OR GREATER. 4.3. EXPOSED APPLICATIONS: FIBERGLASS BOARD, WITH A MINIMUM OF 1-INCH THICKNESS AND AN

INSTALLED R-VALUE OF R-6 OR GREATER.

4.4. OUTDOOR APPLICATIONS: DOUBLE WALL DUCT CONSTRUCTION WITH FIBERGLASS BOARD INSULATION BETWEEN INNER AND OUTER JACKET, MINIMUM OF R-8.

EXTERNAL DUCTWRAP INSULATION

1. INSULATION SHALL BE SCHULLER R-SERIES MICROLITE FSK, OWENS-CORNING TYPE ED100, OR CERTAINTEED TYPE 100 DUCT WRAP 1 POUND FSK FLEXIBLE GLASS FIBER BLANKET.

INSULATION SHALL HAVE AN AVERAGE THERMAL CONDUCTIVITY (K-VALUE) OF NO MORE THAN 0.27

BTU/IN/HR/SF/°F AT 75°F MEAN TEMPERATURE AND A 250°F TEMPERATURE LIMIT.

INSULATION SHALL BE FURNISHED WITH A FACTORY APPLIED FOIL-SCRIM-KRAFT FACING CONSISTING OF 0.35 MIL ALUMINUM FOIL REINFORCED WITH GLASS YARN MESH AND LAMINATED TO 40 POUND CHEMICALLY

INTERNAL DUCT LINER INSULATION

1. INTERNAL DUCT LINER INSULATION SHALL BE 2 POUND DENSITY MANVILLE LINA-COUSTIC OR DWENS-CORNING AEROFLEX FIBERGLASS OR CERTAINTEED ULTRALITE. THE LINER SHALL MEET THE LIFE SAFETY STANDARDS AS ESTABLISHED BY NEPA 90A THE DUCT LINER SHALL HAVE A CONDUCTANCE FACTOR NOT EXCEEDING 0.26 BTU/IN/HR/SF/°F AT 75°F

INSTALLATION OF DUCTWORK INSULATION ALL INSULATION SHALL BE APPLIED WITH EDGES TIGHTLY STITCHED WITH STAPLES ON 3" CENTERS. THE INSULATION SHALL BE ADDITIONALLY SECURED TO THE BOTTOM OF ALL SQUARE DUCTS 24" OR WIDER BY MEANS OF WELDED PINS AND SPEED CLIPS ON 12" CENTERS. DUCTWORK INTERNAL LINER SHALL BE APPLIED WITH 100% COVERAGE OF CHILDERS CP-88, FOSTER 81-10, OR MEI 22-22 (SHOP APPLICATION), CHILDERS CP-80, FOSTER 85-20, OR MEI 22-25 (FIELD

THE LINER SHALL BE ADDITIONALLY SECURED WITH MECHANICAL FASTENERS ON MAXIMUM 15" CENTERS ON DUCTS 20" OR MORE WIDE OR DEEP. FASTENERS SHALL START WITHIN 2" OF THE LEADING EDGE OF EACH SECTION AND WITHIN 3" OF THE LEADING EDGE OF ALL TRANSVERSE JOINTS WITHIN THE DUCT

THE VAPOR BARRIER FACING SHALL BE THOROUGHLY SEALED AT JOINTS, CUTS, TEARS AND WHERE THE PINS HAVE PIERCED THROUGH THE VAPOR BARRIER WITH 3" PRESSURE SENSITIVE ALUMINUM FOIL VAPOR ALL LINER INSTALLATION SHALL BE IN ACCORDANCE WITH SMACNA "DUCT LINER APPLICATION STANDARD 2ND EDITION" AND NAIMA "FIBROUS GLASS DUCT LINER STANDARD (FGDLS

MECHANICAL SPECIFICATIONS (CON'T)

FLEXIBLE DUCTWORK

FLEXIBLE DUCT SHALL BE USED FOR CONNECTIONS TO AIR DISTRIBUTION DEVICES WHERE SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN. MAXIMUM LENGTH SHALL BE 5'-0" FOR AIR DISTRIBUTION DEVICE CONNECTIONS. WHERE LONGER RUNS ARE REQUIRED. PROVIDE RIGID DUCTWORK

INSULATED FLEXIBLE DUCT SHALL BE A FACTORY FABRICATED ASSEMBLY CONSISTING OF A SPRING STEEL OR SPIRAL ALUMINUM HELIX. INNER LINER SHALL BE A SMOOTH, AIRTIGHT CPE FILM MECHANICALLY LOCKED TO HELIX WITHOUT ADHESIVES. INSULATION SHALL BE FACTORY WRAPPED FIBERGLASS BLANKET WITH A MAXIMUM THERMAL CONDUCTANCE OF 0.167 BTU/HR/SF/OF AT 750F MEAN TEMPERATURE (R VALUE = 6) THE ASSEMBLY SHALL BE SHEATHED IN A REINFORCED METALIZED MYLAR VAPOR BARRIER OLITER JACKET WITH PERMEANCE NOT EXCEEDING 0.17 PERMS/SF AT 1" PRESSURE.

. VAPOR BARRIER SHALL BE FIRE RETARDANT REINFORCED ALUMINUM MATERIAL.

. ALL FLEXIBLE DUCT USED WITHIN INSULATED CEILING PLENUMS SHALL BE MINIMUM OF R-6 INSULATION VALUE. ALL FLEXIBLE DUCT USED WITHIN UN-INSULATED PLENUMS OR IN ATTIC SPACES SHALL BE MINIMUM OF R-8 INSULATION VALUE.

. THE FLEXIBLE DUCT ASSEMBLY SHALL BE RATED FOR 4,000 FPM VELOCITY, A MINIMUM OF +6" W.G. AND -4" W.G. WORKING PRESSURE AND SHALL BE LISTED CLASS LBY THE UNDERWRITERS LABORATORY (UL-181) AT A FLAME SPREAD OF NOT OVER 25 AND A SMOKE DEVELOPED RATE OF NOT OVER 50. DUCTS SHALL ALSO COMPLY WITH NFPA STANDARD 90A.

ALL JOINTS AND CONNECTIONS OF FLEXIBLE DUCT SHALL BE MADE BY INSTALLING "PANDUIT" STRAPS ON INNER JACKET, SEALING OUTER JACKET WITH 2-WRAPS OF SMACNA APPROVED DUCT TAPE, AND INSTALLING AN ADDITIONAL "PANDUIT" STRAP OVER DUCT TAPE.

. FLEXIBLE DUCTS SHALL BE SUPPORTED IN SUCH A MANNER TO PREVENT SAGS AND KINKS. BENDS IN ANY LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 90°

8. IF IT COMPLIES WITH THESE SPECIFICATIONS, FLEXIBLE DUCTWORK OF THE FOLLOWING TYPES WILL BE ACCEPTABLE: FLEXMASTER TYPE 8M, THERMAFLEX M-KE OR APPROVED EQUAL.

HVAC TESTING AND BALANCING

LIPON COMPLETION OF HVAC WORK, AND PRIOR TO TENANT OCCUPANCY, ALL AIR AND WATER SYSTEMS SHALL BE ADJUSTED AND BALANCED TO WITHIN 10%% OF INDICATED DESIGN AIR QUANTITIES AND IN ACCORDANCE WITH ALL NEBB OR AABC RECOMMENDATIONS AND PROCEDURES. THE HVAC TEST-ADJUST-BALANCE CONTRACTOR SHALL HAVE CURRENT NEBB OR AABC CERTIFICATION. ALL INSTRUMENTS USED SHALL BE PROPERLY CALIBRATED. TABULATE ALL TEST DATA ON NEBB OR AABC FORMS. IF PROBLEMS ARE ENCOUNTERED DURING BALANCING, THE HVAC TEST-ADJUST-BALANCE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND IF NECESSARY. THE ARCHITECT/ENGINEER FOR INSTRUCTIONS BEFORE COMPLETION OF TESTING AND BALANCING, COORDINATE WITH TEMPERATURE CONTROLS CONTRACTOR OR OWNER'S BUILDING ENGINEER AS NECESSARY TO LIPDATE/PROGRAM ALL REQUIRED SYSTEM STATIC PRESSURE SETPOINTS AND OTHER BASE BUILDING TEMPERATURE CONTROLS SYSTEM CONTROL POINTS AS DETERMINED THROUGH THE TEST-ADJUST-BALANCE. THE CONTRACTOR SHALL ADJUST ALL VAV TERMINAL UNIT MINIMUM AND MAXIMUM SETPOINTS.

2. ALL TEST & BALANCE WORK SHALL BE PERFORMED BY INDEPENDENT TEST AND BALANCING CONTRACTOR. (NOT THE MECHANICAL CONTRACTOR)

CONTROLS

A. PROVIDE ALL TEMPERATURE CONTROLS MODIFICATIONS REQUIRED FOR A COMPLETE AND FUNCTIONING

CONTROLS SYSTEM. ALL CONTROLS SHALL MATCH BUILDING STANDARDS B. COORDINATE WITH THE TENANT'S OPERATION ENGINEER FOR ALL COOLING AND HEATING THERMOSTAT SETPOINTS, PROVIDE OPERATOR TRAINING FOR ALL NEW CONTROLS AND SYSTEMS PROVIDED. PROVIDE CONTROLS O&M MANUALS TO THE OPERATIONS ENGINEER UPON COMPLETION OF THE CONTROLS SYSTEM.

VOLTAGE WIRING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR AND CONTROLS CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO SUBMITTING A BID. ). SEQUENCE OF OPERATIONS:

C. LOW VOLTAGE WIRING SHALL BE PROVIDED AND INSTALLED BY THE CONTROLS CONTRACTOR. LINE

TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE COMPONENTS NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

PROVIDE ALL RTU'S WITH A 7-DAY NETWORKABLE THERMOSTAT WITH AUTOMATIC CHANGE-OVER. THERMOSTAT SHALL HAVE BATTERY BACKUP TO RETAIN PROGRAMMING DURING POWER OUTAGE THERMOSTAT SHALL AUTOMATICALLY RESET TIME SCHEDULES FOR DAYLIGHT SAVINGS TIME. THERMOSTAT SHALL HAVE A "TIME OF DAY" RELAY TO CONTROL AUXILIARY EQUIPMENT DURING OCCUPIED MODE OF OPERATION. THERMOSTAT SHALL HAVE A MINIMUM OF 4-PROGRAMMABLE SCHEDULE PERIODS, PROGRAMMABLE DEADBAND ADJUSTMENT, ADJUSTABLE TEMPORARY OCCUPIED OVERRIDE DURATION FROM 1 TO 4-HOURS, MINIMUM COMPRESSOR OFF TIME ADJUSTABLE FROM 0 TO 5-MINUTES, KEYPAD LOCKOUT TO PREVENT UNAUTHORIZED ADJUSTMENT, ADAPTIVE CONTROL AND RECOVERY, AND TEMPERATURE DISPLAY OFFSET ADJUSTABLE IN 1/2-DEGREE INCREMENTS BETWEEN -3 AND +3-DEGREES F CONTRACTOR SHALL FULLY PROGRAM ALL FUNCTIONS TO OWNER'S SETPOINTS. OPERATING SCHEDULES, AND LEVEL OF SECURITY. ADJUST DEADBAND COMPRESSOR OFF-TIME, AND ADAPTIVE CONTROL TO PROVIDE OPTIMUM TEMPERATURE CONTROL WITH THE MINIMUM OF DEVIATION FROM SETPOINT. PROVIDE OWNER TRAINING FOR THERMOSTAT PROGRAMMING AND OPERATION.

EF-1, 2, 3, 4, 5, 6 SHALL BE CONTROLLED VIA LIGHT SWITCHES. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. FAN SHALL BE OFF WHEN UNOCCUPIED OR IN NIGHT-SETBACK

EF-7 SHALL BE CONTROLLED BY SWITCH ON WALL. REFER TO ELECTRICAL.

EF-8 SHALL BE CONTROLLED VIA LINE-VOLTAGE THERMOSTAT SET TO 78°F (ADJUSTABLE). **VOLUME DAMPERS** MANUAL VOLLIME CONTROL DAMPERS - FURNISH AND INSTALL FACTORY-FABRICATED VOLLIME CONTROL DAMPERS, COMPLETE WITH STAND-OFFS (APPROPRIATE TO ACCOMMODATE INSULATION), ALL REQUIRED

DAMPERS, COMPLETE WITH STAND-OFFS (APPROPRIATE TO ACCOMMODATE INSULATION), ALL REQUIRED HARDWARE AND ACCESSORIES. LOCKING QUADRANT SHALL BE PROVIDED FOR ALL DAMPERS, STIFFEN THE DAMPER BLADES TO PROVIDE STABILITY UNDER OPERATING CONDITIONS. PROVIDE LOCKING DEVICE TO HOLD SINGLE-BLADE DAMPERS IN A FIXED POSITION WITHOUT VIBRATION. PROVIDE WITH 2" INSULATION BUILD-OUT. CLOSE DUCT PENETRATIONS FOR DAMPER COMPONENTS TO SEAL DUCT CONSISTENT WITH PRESSURE CLASS.

STANDARD VOLUME DAMPER - SINGLE-BLADE, OPPOSED-BLADE DESIGN AS INDICATED, LOW-LEAKAGE RATING, WITH LINKAGE OUTSIDE OF AIRSTREAM. PROVIDE WITH 2" INSULATION BUILD-OUT. SPIN-IN DAMPERS - ROUND SPIN-IN TAPS IN LOW PRESSURE DUCTWORK SHALL BE MADE WITH A SPIN-IN COLLAR WITH A LOCKING QUADRANT WITH A 2" STAND-OFF. SPIN-IN DAMPERS SHALL BE INSTALLED WITH THE DAMPER AXIS PARALLEL TO THE DIRECTION OF AIRFLOW.

**OUTSIDE AIR CALCULATIONS** 

DRAWING INDEX

REFER TO M3.1 MECHANICAL SCHEDULES.

SHEET NUMBER SHEET NAME

MECHANICAL COVER SHEET MECHANICAL PLAN

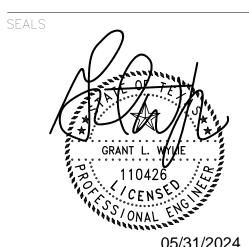
MECHANICAL ROOF PLAN MECHANICAL SCHEDULES

MECHANICAL DETAILS

MECHANICAL DETAILS

Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608







KELLER 1110 KELLER PARKWAY

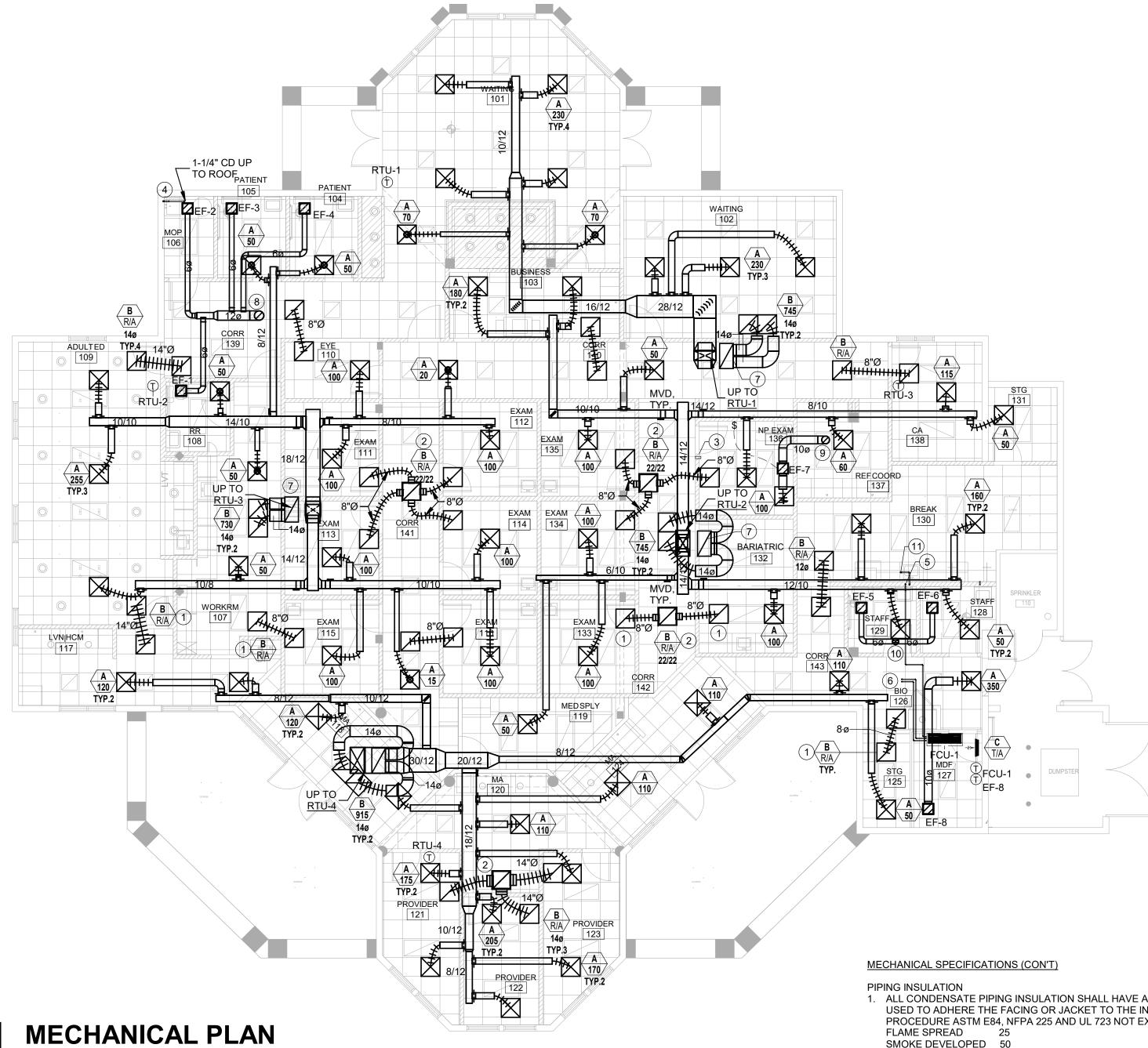
KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J 05.31.24

**REVISION DATES:** 

**MECHANICAL** 



#### GENERAL NOTES:

- REFER TO MECHANICAL SCHEDULES AND DETAIL DRAWINGS FOR ADDITIONAL INFORMATION.
- 2. CONTRACTOR SHALL FIELD VERIFY ACTUAL LOCATIONS OF ALL EQUIPMENT, DUCTWORK, & PIPING PRIOR TO SUBMITTING A BID. COORDINATE COMPLETELY WITH ALL OTHER TRADES.
- 3. COORDINATE ALL MECHANICAL WORK COMPLETELY WITH ALL OTHER TRADES, PRIOR TO PURCHASING, MANUFACTURING, AND INSTALLING DUCTWORK, PIPING, EQUIPMENT, ETC. THESE DRAWINGS ARE SCHEMATIC IN NATURE, PROVIDE ADDITIONAL DUCTWORK, PIPING, OFFSETS, AND FITTINGS AS REQUIRED.
- 4. THE CONTRACTOR SHALL VERIFY THAT ALL MECHANICAL EQUIPMENT ARE MOUNTED SO THAT ALL REQUIRED CLEARANCES ARE MAINTAINED AT THE BOTTOM AND SIDES OF EACH UNIT FOR PROPER SERVICING AND MAINTENANCE. COORDINATE COMPLETELY WITH ALL NEW WALLS TO STRUCTURE, AND RELOCATE AS REQUIRED TO MAINTAIN PROPER CLEARANCES.
- 5. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED CLEARANCES FOR ALL EXISTING AND NEW EQUIPMENT.
- 6. CONTRACTOR SHALL VERIFY THAT EQUIPMENT PURCHASED WILL FIT IN THE SPACE INCLUDING ANY CLEARANCES REQUIRED FOR MAINTENANCE, ACCESS OR OPERATION. REFER TO MANUFACTURER'S INSTALLATION MANUALS FOR ADDITIONAL INFORMATION.
- 7. DURING CONSTRUCTION, SEAL ALL OPEN DUCTS WITH PLASTIC TO PREVENT DUST/DIRT. CLEAN ALL INTERIOR DUCT SURFACES PRIOR TO DUCT INSTALLATION. PROVIDE CONSTRUCTION FILTERS OVER AIR HANDLING UNIT INTAKES AND MAINTAIN FILTER MEDIA DURING CONSTRUCTION. REPLACE ALL FILTERS AT END OF CONSTRUCTION. ALL RETURN AIR INTAKES TO MECHANICAL ROOM SHALL BE COVERED WITH FILTER MEDIA DURING CONSTRUCTION. REMOVE UPON COMPLETION.
- 8. EQUIPMENT SHALL BE LABELED WITH IT'S APPROPRIATE TAG. REFER TO MECHANICAL COVER SHEET FOR ADDITIONAL INFORMATION.

## X MECHANICAL KEYED NOTES:

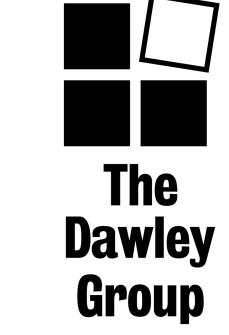
- 1. RETURN AIR DEVICE IN ENCLOSED OFFICE MAY BE PROVIDED WITH NECK SIZES EQUAL TO THE FLEX DUCT SHOWN ON PLANS. RETURN AIR DEVICES WHERE MULTIPLE FLEXIBLE JUMPER DUCTS (OR AS OTHERWISE NOTED) ARE CONNECTING SHALL HAVE 22"X22" NECKS, FULL SIZE PLENUMS, AND CONNECTIONS TO MULTIPLE FLEX DUCTS OF INDICATED SIZES AND QUANTITIES
- 2. PROVIDE 22"x22" PLENUM ON AIR DEVICE NECK. CONNECT FLEXIBLE DUCT, SIZED AS INDICATED, TO FULL SIZE PLENUM.
- 3. PROVIDE BALL-IN-THE-WALL, EQUAL TO ADI-69-V-N. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 4. 1-1/4" CONDENSATE DRAIN PIPING FROM ROOF DOWN TO INDIRECT WASTE RECEPTOR. REFER TO PLUMBING PLANS FOR EXACT LOCATION.
- 5. ROUTE PUMPED 3/4" CONDENSATE TO LAVATORY TAILPIECE. PROVIDE Y-FITTING AND INSULATE HORIZONTAL WASTE PIPING BELOW LAVATORY.
- 6. REFRIGERANT PIPING UP TO ROOF. COORDINATE EXACT ROUTING WITH EXISTING CONDITIONS
- 7. ROUTE PROVIDE FULL SIZED RETURN DUCT DOWN FROM ROOFTOP UNIT. TAP WITH SPIN-IN DAMPERS WITH LOCKING QUADRANTS AS INDICATED FOR RETURN AIR.
- 8. 12"Ø EXHAUST DUCT UP TO RH-1 ON THE ROOF.
- 9. 10"Ø EXHAUST DUCT UP TO RH-2 ON THE ROOF.
- 10. 8"Ø EXHAUST DUCT UP TO RH-3 ON THE ROOF.
- 11. ROUTE 1-1/4" CONDENSATE DRAIN TO HUB DRAIN BELOW SINK. SLOPE DOWN AT 1/8"/FT. AND PROVIDE 1" AIR GAP AT TERMINATION.

- ALL CONDENSATE PIPING INSULATION SHALL HAVE A COMPOSITE (INSULATION JACKET OR FACING, AND ADHESIVE USED TO ADHERE THE FACING OR JACKET TO THE INSULATION) FIRE AND SMOKE HAZARD RATING AS TESTED BY PROCEDURE ASTM E84, NFPA 225 AND UL 723 NOT EXCEEDING: FLAME SPREAD 25 SMOKE DEVELOPED 50
- 2. INSULATE ALL INTERIOR CONDENSATE DRAIN PIPING WITH 1/2" THICKNESS "AP ARMAFLEX" OR RUBATEX R-180-FS FLEXIBLE ELASTOMER PIPE INSULATION. PROVIDE PROTECTION AND BLOCKING AND SHIELDS AT EACH HANGER. FOR EXTERIOR EXPOSED INSULATED PIPING, PROVIDE OUTER JACKET AND WRAP COMPLETELY AROUND. OUTER JACKET SHALL BE 1577CW-E (NATURAL ALUMINUM EMBOSSED) VENTURE CLAD JACKETING SYSTEM.
- 3. REFRIGERANT PIPING SHALL BE INSULATED WITH "AP ARMAFLEX", "RUBATEX" R-180-FS FLEXIBLE ELASTOMERIC PIPE INSULATION, OR FIBERGLASS INSULATION WITH ALL-SERVICE-JACKET AS INDICATED. WHERE FIBERGLASS INSULATION IS USED, ELBOWS AND FITTINGS SHALL BE INSULATED AND COVERED WITH ZESTON 2000 25/50 FIRE/SMOKE RATED PVC JACKET. PROVIDE 2-COATS OF ARMAFLEX FINISH WHEN ELASTOMERIC INSULATION IS SUBJECT TO DAYLIGHT. FOR EXTERIOR EXPOSED INSULATED PIPING PROVIDE OUTER JACKET AND WRAP COMPLETELY AROUND. OUTER JACKET SHALL BE 1577CW-E (NATURAL ALUMINUM EMBOSSED) VENTURE CLAD JACKETING SYSTEM.
- INSULATION THICKNESS:
  PIPING 1-1/4" AND SMALLER 1-INCH THICKNESS ELASTOMERIC INSULATION
  PIPING 1-1/2" AND LARGER 1-1/2" THICKNESS FIBERGLASS INSULATION

#### PIPING MATERIALS

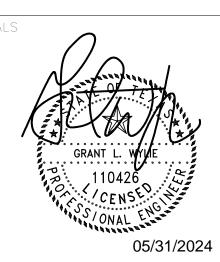
1. CONDENSATE AND AUXILIARY DRAIN PIPING SHALL BE ASTM B88-72 TYPE "L" HARD DRAWN COPPER WITH ASTM B32-76 GRADE 95TA TIN-ANTIMONY SOLDERED JOINTS.

- 2. REFRIGERANT PIPING SHALL BE TYPE L HARD DRAWN "ACR" TUBING THAT HAS BEEN CLEANED AND CAPPED FOR REFRIGERATION SERVICE. FITTINGS TO BE WROUGHT COPPER INSTALLED WITH HARRIS 15% SILPHOS SILVER SOLDER JOINTS. PIPE ENDS AND FITTINGS SHALL BE CAREFULLY CLEANED PRIOR TO JOINING. ACID SHALL NOT BE USED IN CLEANING OR AS A FLUX. BLEED NITROGEN THROUGH ALL PIPING WHILE SOLDERING. PIPE SIZES TO BE AS RECOMMENDED BY THE CONDENSING UNIT MANUFACTURER. SHOP DRAWINGS SHOWING ALL TRAPS, PIPE SIZES, LINE SIZING CALCULATIONS, AND ACCESSORIES SHALL BE SIGNED BY A REPRESENTATIVE OF THE CONDENSING UNIT MANUFACTURER, INDICATING THEIR APPROVAL. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING EQUIPMENT. PROVIDE REPLACEABLE CORE TYPE LIQUID LINE FILTER DRYER SIZED FOR SYSTEM CAPACITY (2 PSI DROP PER ARI 710), SIGHT GLASS MOISTURE INDICATOR, THERMAL EXPANSION VALVE WITH ADJUSTABLE SUPERHEAT, REFRIGERANT SHUT-OFF, RELIEF AND SOLENOID VALVES AS REQUIRED. SLOPE ALL SUCTION LINES AND PROVIDE SUCTION LINE TRAPS TO FACILITATE OIL RETURN TO COMPRESSOR. ALL PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 3. REFRIGERANT PIPING SHALL BE TESTED WITH DRY NITROGEN AT 250 PSI FOR 24 HOURS. ISOLATE EXPANSION VALVES AND OTHER DEVICES THAT WOULD BE DAMAGED BY THIS HIGH PRESSURE. TEST ALL JOINTS WITH A SOAP SOLUTION. AFTER THE INITIAL PRESSURE TEST HAS BEEN COMPLETED, INTRODUCE A MIXTURE OF REFRIGERANT AND NITROGEN AT 150 PSI AND TEST ALL JOINTS USING A HFC DETECTOR. FOLLOWING THE SATISFACTORY COMPLETION OF ALL TESTS, EVACUATE THE SYSTEM WITH A VACUUM PUMP CONNECTED TO THE LIQUID LINE. AFTER 20-INCHES OF VACUUM IS OBTAINED, CLOSE SUCTION AND DISCHARGE VALVES AT THE COMPRESSOR AND CONTINUE EVACUATION FOR 24 HOURS. AFTER DEHYDRATION IS COMPLETE, INTRODUCE PROPER REFRIGERANT INTO SYSTEM THROUGH A FILTER/DRYER.



Interior planning & design

280 E. Oakview Pl. San Antonio
Texas 78209
210-241-9392
Fax: 210-822-0608





TX Firm No. 1869 Project No.



PROJE

# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY

KELLER, TX 76248

SHEET TITLE

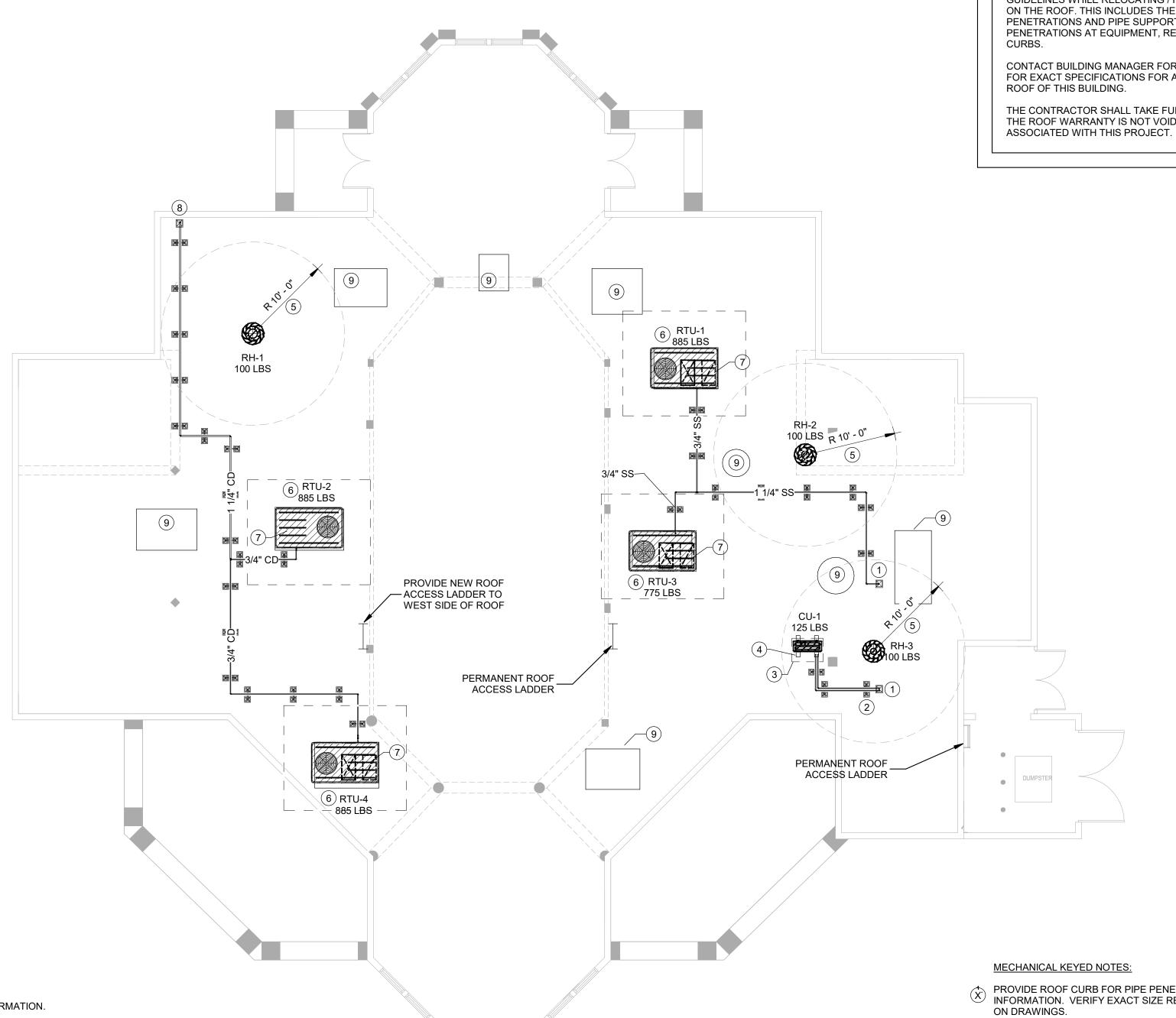
PROJECT NO: WTX07J DATE: 05.31.24

MECHANICAL PLAN

SHEET NUMBER

**REVISION DATES:** 

M2.1



#### **GENERAL NOTES:**

- 1. REFER TO MECHANICAL SCHEDULES AND DETAIL DRAWINGS FOR ADDITIONAL INFORMATION.
- COORDINATE ALL MECHANICAL WORK COMPLETELY WITH ALL OTHER TRADES, PRIOR TO PURCHASING, MANUFACTURING, AND INSTALLING DUCTWORK, PIPING, EQUIPMENT, ETC. THESE DRAWINGS ARE SCHEMATIC IN NATURE, PROVIDE ADDITIONAL DUCTWORK, PIPING, OFFSETS, AND FITTINGS AS REQUIRED.
- 3. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED CLEARANCES FOR ALL EXISTING AND NEW EQUIPMENT.
- 4. CONTRACTOR SHALL VERIFY THAT EQUIPMENT PURCHASED WILL FIT IN THE SPACE INCLUDING ANY CLEARANCES REQUIRED FOR MAINTENANCE, ACCESS OR OPERATION. REFER TO MANUFACTURER'S INSTALLATION MANUALS FOR ADDITIONAL INFORMATION.
- 5. DURING CONSTRUCTION, SEAL ALL OPEN DUCTS WITH PLASTIC TO PREVENT DUST/DIRT. CLEAN ALL INTERIOR DUCT SURFACES PRIOR TO DUCT INSTALLATION. ALL VAV TERMINAL UNIT FILTERS SHALL BE MAINTAINED DURING CONSTRUCTION AND REPLACED AT THE END OF CONSTRUCTION. PROVIDE CONSTRUCTION FILTERS OVER AIR HANDLING UNIT INTAKES AND MAINTAIN FILTER MEDIA DURING CONSTRUCTION. REPLACE ALL FILTERS AT THE END OF CONSTRUCTION. ALL RETURN AIR INTAKES TO MECHANICAL ROOM SHALL BE COVERED WITH FILTER MEDIA DURING CONSTUCTION. REMOVE UPON COMPLETION.
- 6. ALL NEW EQUIPMENT ON ROOF, PRIOR TO EQUIPMENT INSTALLATION FINAL LOCATION SHALL BE APPROVED BY OWNER OR PROJECT MECHANICAL ENGINEER.
- 7. MINIMUM CLEAR DISTANCE BETWEEN ALL FRESH AIR OPENINGS AND PLUMBING VENT STACKS OR EXHAUST FANS SHALL BE 10'-0". COORDINATE WITH PLUMBING CONTRACTOR.
- 8. EQUIPMENT SHALL BE LABELED WITH IT'S APPROPRIATE TAG. REFER TO MECHANICAL COVER SHEET FOR ADDITIONAL INFORMATION. ALL EQUIPMENT TO BE A MINIMUM OF 10'-0" FROM ROOF EDGE UNLESS PARAPET IS GREATER THAN 42".

MECHANICAL ROOF

GUIDELINES WHILE RELOCATING / REMOVING VTR'S AND / OR EQUIPMENT ON THE ROOF. THIS INCLUDES THE INSTALLATION OF ROOF PENETRATIONS AND PIPE SUPPORTS AS WELL AS PATCHING OLD ROOF PENETRATIONS AT EQUIPMENT, REFRIGERANT, AND/OR ELECTRICAL ROOF CURBS.

CONTACT BUILDING MANAGER FOR ROOF WARRANTY INFORMATION AND

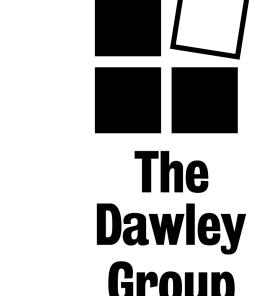
WARRANTY, THEN THE CONTRACTOR SHALL COMPLY WITH ALL WARRANTY

CONTACT BUILDING MANAGER FOR ROOF WARRANTY INFORMATION AND FOR EXACT SPECIFICATIONS FOR ANY WORK TO BE PERFORMED ON THE ROOF OF THIS BUILDING

IF THE EXISTING ROOF SYSTEM INSTALLED IN THIS BUILDING HAS A

THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY TO ENSURE THAT THE ROOF WARRANTY IS NOT VOIDED DUE TO CONSTRUCTION ASSOCIATED WITH THIS PROJECT.

- PROVIDE ROOF CURB FOR PIPE PENETRATION. REFER TO DETAILS FOR ADDITIONAL INFORMATION. VERIFY EXACT SIZE REQUIRED FOR ALL PIPING AND INSULATION AS SHOWN ON DRAWINGS.
- ROOF PIPING SUPPORT, SPACED PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- OPERATING CLEARANCES SHOWN DASHED FOR COORDINATION. CONTRACTOR SHALL MAINTAIN ALL REQUIRED CLEARANCES, REFER TO MANUFACTURER FOR EXACT CLEARANCE REQUIREMENTS.
- 4. EQUIPMENT SUPPORTS RE: DETAIL FOR ADDITIONAL INFORMATION.
- 5. MAINTAIN 10'-0"(MIN) TO OUTSIDE AIR INTAKES.
- PROVIDE ADAPTER CURB AS REQUIRED TO UTILIZE EXISTING ROOFTOP UNIT LOCATION FOR NEW RTU. FIELD VERIFY EXISTING CONDITIONS AND PHYSICAL DIMENSIONS PRIOR TO SUBMITTING BID.
- 7. DUCT MOUNTED SMOKE DETECTOR.
- FIRE ALARM CONTRACTOR SHALL PROVDE DUCT MOUNTED SMOKE DETECTORS AND AIR SAMPLING TUBES AS REQUIRED PER CODE. DUCT DETECTORS AND SAMPLING TUBES INSTALLED BY MECHANICAL CONTRACTOR.
- 8. 1-1/2" CONDENSATE PIPING DOWN TO MOP SINK. SLOPE DOWN AT 1/8" PER FT. (MIN) TOWARDS INDIRECT WASTE RECEPTOR.
- 9. CONTRACTOR SHALL VERIFY EXISTING MECHANICAL EQUIPMENT ROOF CURBS HAVE BEEN PROPERLY INSULATED AND SEALED.



Interior planning & design

280 E. Oakview Pl. San Antonio
Texas 78209
210-241-9392
Fax: 210-822-0608





512-888-9945

TX Firm No. 1869 Project No.



PROJE

# WELLMED CLINIC

KELLER 1110 keller parkway

KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

MECHANICAL ROOF PLAN

SHEET NUMBER

M2.2

	SCHEDULE OF DUCTLESS AIR COOLED DX AIR CONDITIONING UNITS																								
			ROOM DESIGN			EVAPORATOR	R COIL DAT	A			С	ONDENSING UN	IT DATA			EL	ECTRIC	AL DATA			MISC	ELLANEOUS			
UNIT DESIGNATION	SERVICE	LOCATION	TEMPERATURE °F D.B.	AIR VOLUME\ CFM	MAX. COIL FACE VELOCITY FT. PER MIN.	ENTERING AIR TEMPERATURE °F-D. B. / W.B.	LEAVING AIR TEMPERATURE °F-D. B.	TOTAL SENSIBLE HEAT BTU\HR. **	GRAND TOTAL HEAT BTU\HR.	AIR VOLUME\ CFM	EXT. STATIC PRESSURE IN W.G.	MAX. ENTERING AIR TEMPERATURE °F	MIN. ENTERING AIR TEMPERATURE °F	FAN MOTOR H.P.	WEIGHT (LBS)	ELECTRIC HEATER KW	STEPS	INDOOR UNIT MCA/ VOLT./PH. MOCP	OUTDOOR UNIT VOLT./PH.	MCA/ IOCP *	UNIT TYPE	FILTER TYPE CONTROL SEQUENCE TYPE	SEER	MANUFACTURER /SERIES BASIS FOR DESIGN	REMARKS / NOTES
(N) FCU-1 (N) ACCU-1	MDF ROOM	LEVEL 1	74		500	77/64	56	15,080	20,420	-	-	105	0	-	125	N/A	N/A	FED FROM OUTDOOF	R 208/1	15/20	ACSS	- NOTE 1	19	LG MODEL LSN240HLV2   LSU240HLV2	1-4

\* DIVISION 23 CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CIRCUIT BREAKER SIZE WITH DIVISION 28 CONTRACTOR AND SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED

\*\* SCHEDULED SENSIBLE HEAT DOES NOT INCLUDE MOTOR HEAT.

\*\*\* EXTERNAL STATIC PRESSURE INCLUDES FILTER RESISTANCE.

NOTES:

1. FACTORY FURNISHED WIRED PROGRAMMABLE THERMOSTAT.

2. FACTORY FURNISHED DISPOSABLE FILTER.

3. REFRIGERANT PIPING SHALL BE SIZED AND PIPED AS PER UNIT MANUFACTURER'S RECOMMENDATIONS.

4. PROVIDE UNIT WITH HAIL GUARDS.

5. PROVIDE EXTERNAL CONDENSATE PUMP EQUAL TO LITTLE GIANT MODEL VCC-20ULS. 120 VOLT 1 PH MODEL.

6. 14 SEER MINIMUM EFFICIENCY.

	Evaporator Fan					E	vaporato	r Coil Da	ta				Gas Heati	ng Data			Condensin	g Unit D	ata	Ele	Electrical Data			Misc.										
Mark	Service	Loc	catio .	om Desig Femp °F DB/WB)	\ \ \ \ \ \	otal Air /olume (CFM)	Design Outside Air Volume (CFM)	Fan Type	Ext. Static Pressure (in. W.G.)	Motor HP	EDB	EWB	LAT (° DB)	LAT (° WB)	TSC (MBH)	GTC (MBH)	EDB	Minimum LAT (°F, DB)	Output	Actual Input / Output MBH	Stages	Max Entering Air Temp. °F		1	Comp. Qty. / Type	Voltage / Phase	MCA*	МОСР*	Unit Type	Minimum Efficiency (S)EER/IEER	(IRS)	Refrigerant	Manufacturer / Model	Noted
RTU-1	Break	Ro	Roof 75	0 / 62	.5	1750	270	Centrif.	1.0	1	78.5	64.3	55	54	44.5	54.0	63.1	85	45.0	60 / 49.2	1	105	45	1	1 / Scroll	208/3	28.2	40	Packaged DX CAV Rooftop Unit	14	825	R-410a	Trane Model YHC060E	1, 2, 3, 4
RTU-2	See Plans	Ro	Roof 75	0 / 62	.5	1750	270	Centrif.	1.0	1	78.5	64.3	55	54	44.5	54.0	63.1	85	45.0	60 / 49.2	1	105	45	1	1 / Scroll	208/3	28.2	40	Packaged DX CAV Rooftop Unit	14	825	R-410a	Trane Model YHC060E	1, 2, 3, 4
RTU-3	See Plans	Ro	Roof 75	0 / 62	.5	1605	150	Centrif.	1.0	1	77.1	63.6	55	54	38.4	45.7	65.8	85	35.0	60 / 49.2	1	105	45	1	1 / Scroll	208/3	25.4	35	Packaged DX CAV Rooftop Unit	14	775	R-410a	Trane Model YHC048E	1, 3, 4
RTU-4	See Plans	Rc	Roof 75	0 / 62	.5	2000	185	Centrif.	1.0	1	77.1	63.6	55	54	47.8	56.8	65.8	85	45.0	60 / 49.2	1	105	45	1	1 / Scroll	208/3	28.2	40	Packaged DX CAV Rooftop Unit	14	825	R-410a	Trane Model YHC060E	1, 2, 3, 4

\*\*EXTERNAL STATIC PRESSURE DOES NOT INCLUDE ALLOWANCE FOR INTERNAL LOSSES DUE TO SOILED FILTERS.
NOTES

- 1. PROVIDE RTU WITH 14" HIGH INSULATED ROOF CURB, SINGLE POINT ELECTRICAL POWER WITH UNIT MOUNTED DISCONNECT SWITCH AND NON-POWERED RECEPTACLE, HAIL GUARDS, AND HINGED ACCESS PANELS.
- 2. PROVIDE RTU WITH 100% ECONOMIZER WITH POWERED EXHAUST AND COMPARATIVE ENTHALPY CONTROLS.

3. RTU SHALL HAVE 3/4" FIBER FREE INSULATION

4. EACH RTU SHALL BE PROVIDED WITH A FLOAT SWITCH IN THE MAIN DRAIN PAN OF THE UNIT. THE FLOAT SWITCH SHALL DE-ENERGIZE THE UNIT WHEN A RISE IN WATER LEVEL IN THE DRAIN PAN OCCURS. THE FLOAT SWITCH DEPTH SHALL BE SET TO PREVENT OVERFLOW OF THE MAIN CONDENSATE DRAIN PAN.

Ol	UTSIDE	AIR C	ALCUI	LATIO	N	
Room Waiting Room Storage Conference Offices Break Room Janitor's Restrooms Exam Rm (11) WorkRM / Lab Corridors (4) Med Supply	Rp 5 - 5 5 - - 5 10 5	Pz 49 - 11 8 - - 22 2 8	Ra 0.06 0.06 0.06 0.06 - - 0.06 0.18 0.06 0.06	Az 900 50 753 330 1100 275 1676 110	Vbz 299.0 3.0 0.0 100.2 59.8 - - 176.0 69.5 140.56 6.6	Voz 299.0 3.0 0.0 100.2 59.8 - - 176.0 69.5 140.6 6.6
	8	75 CFM IS	S PROVID	ED VIA R	TU-1, 2, 3,	854.6 4

	RELIEF AIR / INTAKE HOOD SCHEDULE													
MARK	SERVICE	LOCATION	TOTAL CFM	TOTAL S.P. (IN W.G.)	TOTAL THROAT AREA (S.F.)	MANUFACTURER AND MODEL NUMBER	WEIGHT (LBS)							
RH-1	EXHAUST AIR	ROOF	400	0.08		GREENHECK MODEL GRSR-12	30							
RH-2	EXHAUST AIR	ROOF	350	0.08		GREENHECK MODEL GRSR-10	30							
RH-3	EXHAUST AIR	ROOF	200	0.08		GREENHECK MODEL GRSR-8	30							

#### NOTES:

- 1. ALL HOODS SHALL BE PROVIDED WITH FACTORY FABRICATED 12" ROOF CURB AND ALUMINUM BIRDSCREEN IN LOUVER PERIMETER.
- 2. WHERE SPECIFICATIONS ARE MET, THE ALTERNATE MANUFACTURERS FOR GRAVITY AIR HOODS ARE COOK & ACME.

DIFFUSER SIZING SCHEDULE / LEGEND											
DIFFUSER	DESCRIPTION	NECK SIZE (INCHES) CFM RANGE									
ESIGNATION		6"□	8"□	10"□	12"□	14"□	16"□				
A	CEILING LOUVERED FACE SUPPLY AIR DEVICE: TITUS MODEL OMNI (OR EQUAL BY LISTED MANUFACTURER). 24"x24" FACE AREA. AIR PATTERN SHALL BE 4-WAY THROW UNLESS OTHERWISE NOTED ON DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPE & CONSTRUCTION DETAILS. FLEX SUPPLYING DIFFUSER TO BE SAME AS NECK SIZE.	0-75	80-230	235-345	350-500	505-750	(15"□) 755-850				
В	CEILING PERFORATED FACE RETURN/EXHAUST AIR DEVICE: TITUS MODEL PAR (OR EQUAL BY LISTED MANUFACTURER). 24"x24" FACE AREA, UTILIZE 22"X22" NECK FOR OPEN RETURN AIR PLENUM. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPE & CONSTRUCTION DETAILS. NECK SIZE TO BE SAME AS FLEX SERVING GRILLE, REFER TO PLANS FOR FLEX/NECK SIZES.	0-75	80-230	235-350	355-500	480-700	(22"X22") 705-1,500				
C	TRANSFER AIR DOOR GRILLE: TITUS MODEL CT-700L (OR EQUAL BY LISTED MANUFACTURER). ALUMINUM CONSTRUCTION, SIGHT-PROOF V-BLADES, BLADES PARALLEL TO THE LONG DIMENSION. PROVIDE WITH OPTIONAL AUXILIARY FRAME. SHALL BE 20"X20" UNLESS OTHERWISE NOTED.	0	0	0	0	0	0				

REFER TO MECHANICAL FLOOR PLANS FOR SIZES AND AIR QUANTITY.

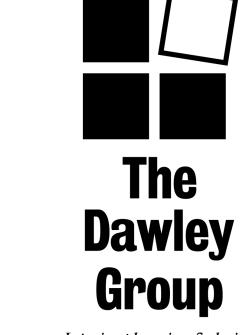
- NOTES:
  1. AIR DEVICES SHALL BE 4-WAY THROW UNLESS NOTED OTHERWISE. FOR 3-WAY, 2-WAY AND 1-WAY THROW PROVIDE OPTIONAL BLOW CLIPS.
  2. PROVIDE AIR DEVICES WITH FRAMES COMPATIBLE WITH CEILING TYPES. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND CONSTRUCTION DETAILS FOR PROPER
  - CEILING MOUNTING.

    3. PROVIDE SUBMITTALS ON ALL AIR DISTRIBUTION DEVICES TO BE FURNISHED.
  - 4. ALL DUCT RUN-OUTS SHALL BE EQUAL TO AIR DEVICE NECK SIZE (PER THIS SCHEDULE) UNLESS OTHERWISE NOTED.
  - 5. IF IT MEETS THE ABOVE LISTED PERFORMANCE AND SPECIFICATIONS, ACCEPTABLE ALTERNATE MANUFACTURERS ARE: PRICE, METAL-AIRE.

		FAN SCI	HEDULE			
UNIT D	ESIGNATION	EF-1,2,3,4,5,6	EF- 7	EF- 8		
SERVI	CE	SEE PLANS	SEE PLANS	SEE PLANS		
LOCAT	TION	CEILING	SEE PLANS	SEE PLANS		
FAN TY	YPE	CEILING CENTRIFUGAL	INLINE- CENTRIFUGAL	CEILING CENTRIFUGAL		
DRIVE	TYPE	DIRECT	DIRECT	DIRECT		
AIR VO	DLUME CFM	100	350	350		
EXT. S	TATIC PRESSURE- G.	0.375	0.40	0.25		
FAN R.P.M.		-	-	-		
МОТО	R HP	80W	1/10	1/10		
BRAKE	HP					
E	VOLTS	120	120	120		
L E C T R	PHASE	1	1	1		
R C A	HZ	60	60	60		
FLA		-	-	-		
	FACTURER FOR DESIGN	GREENHECK MODEL SP-B110	GREENHECK MODEL SQ-85-VG	GREENHECK MODEL SP-A410		
NOTES	S	1, 2	2, 3	1,2		

#### NOTES:

- PROVIDE FAN DELUXE ALUMINUM GRILLE, FLEXIBLE DISCHARGE CONNECTION, INTEGRAL BACKDRAFT DAMPER, FAN-SPEED CONTROLLER (MOUNT ABOVE CEILING FOR BALANCING), AND INTERNAL THERMAL OVERLOAD PROTECTION.
- 2. WHERE SPECIFICATION AND PERFORMANCE ARE MET, ALTERNATIVE MANUFACTURERS (BY SUBMITTAL ONLY) ARE: ACME, COOK.
- 3. PROVIDE EXHAUST FAN WITH SPRING VIBRATION ISOLATOR KIT, FLEXIBLE DISCHARGE CONNECTION, INTEGRAL BACKDRAFT DAMPER, FAN-SPEED CONTROLLER (MOUNT ABOVE CEILING FOR BALANCING), AND INTERNAL THERMAL OVERLOAD PROTECTION.



Interior planning & design

280 E. Oakview Pl. San Antonio
Texas 78209
210-241-9392
Fax: 210-822-0608







PROJECT

WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

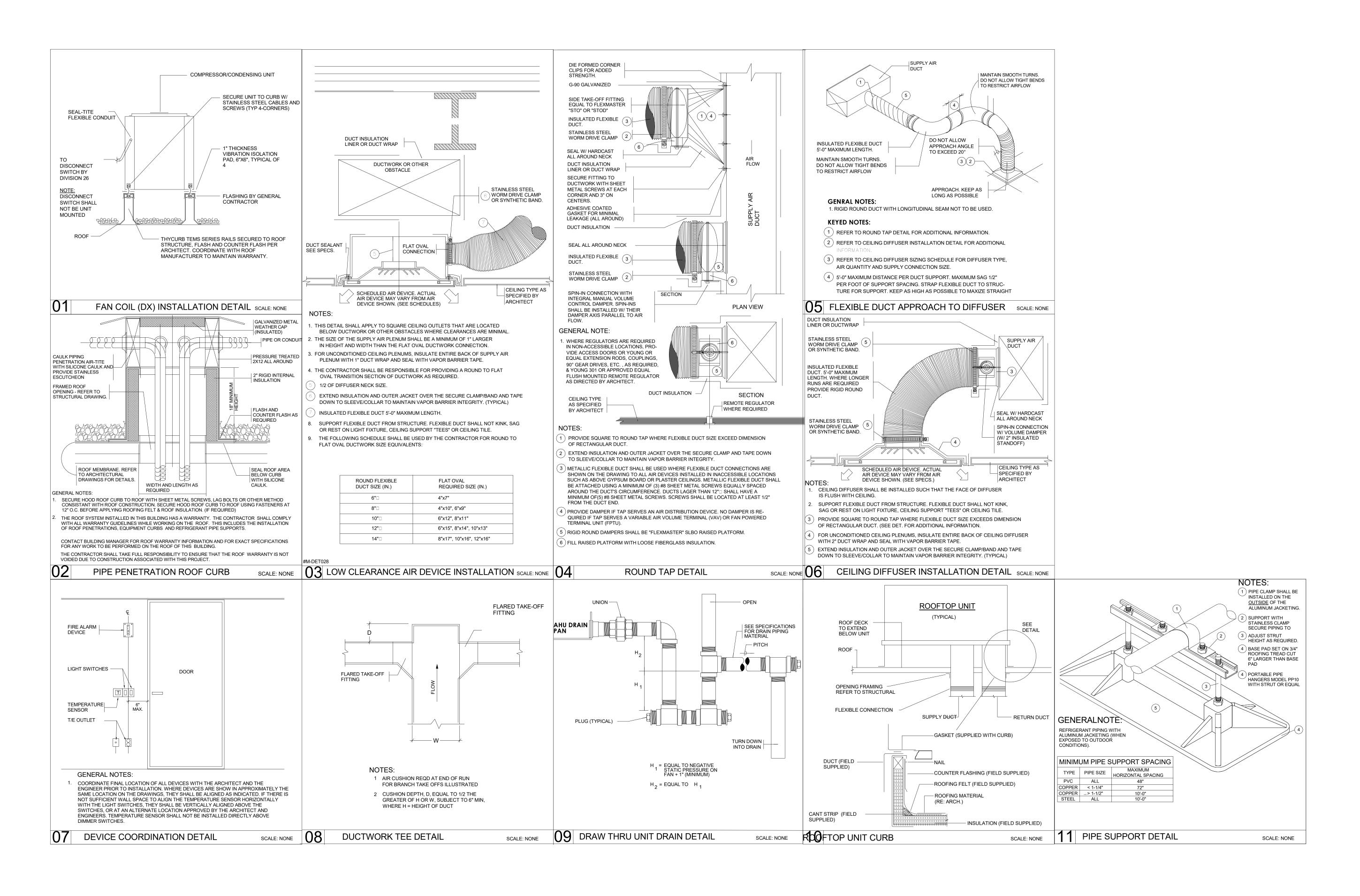
SHEET TITLE

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

MECHANICAL SCHEDULES

SHEET NUMBER

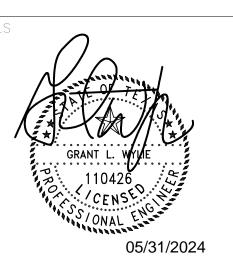
M3.1





Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





512-888-9945

www.wylieeng.com

TX Firm No. 1869 Project No.

PROJE

# WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

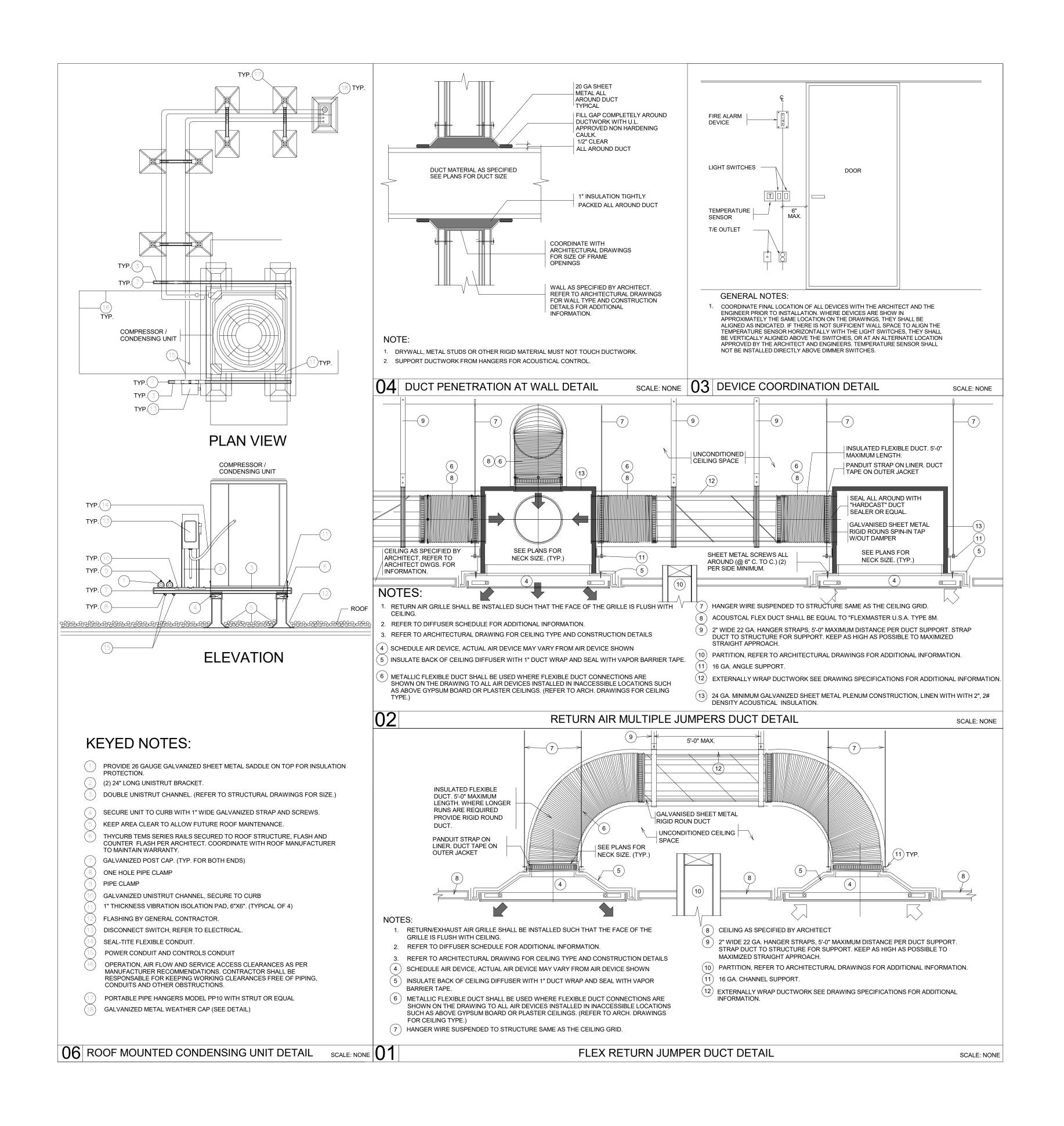
SHEET TITLE

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

MECHANICAL DETAILS

SHEET NUMBER

M4.1





Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





www.wylieeng.com

TX Firm No. 1869 Project No.



# WELLMED CLINIC

**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J 05.31.24 **REVISION DATES:** 

**MECHANICAL DETAILS** 

<u> </u>	LEGEND OF ELECTRICAL SYMBOLS	ELECTRICAL GENERAL NOTES
SYMBOL	DESCRIPTION	GENERAL PROVISIONS  1. FURNISH AND INSTALL ALL ITEMS, INCLUDING EVERY ARTICLE, DEVICE, OR ACCESSORY REASONABLY NECE  TO FACILITATE FACILISTS FUNCTIONING AS INDICATED BY THE DESIGN AND THE FOUNDMENT SPECIFIE
<b>.</b>	CONDUIT RUN CONCEALED IN WALLS OR ABOVE CEILING. ARROW INDICATES HOMERUN TO PANEL. CONDUCTOR DESIGNATIONS ARE AS FOLLOWS: LONG HATCH INDICATES NEUTRAL. SHORT HATCH INDICATES PHASE. "DOT" INDI-	TO FACILITATE EACH SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFI ELEMENTS OF THE WORK SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PI
1	CATES INSULATED OR ISOLATED GROUND, AND NO HATCHES INDICATES TWO CONDUCTORS.	AND LICENSES.  2. WORK SHALL COMPLY WITH THE MOST RECENT VERSION OF ALL APPLICABLE LAWS. RULES. REGULATIONS
~	CONDUIT RUN CONCEALED IN FLOOR SLAB, BELOW FLOOR SLAB OR BELOW GRADE. WIRING SAME AS ABOVE.	ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IN THE EVENT OF CONFLICT BETWEEN TH CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICA
	SCREENING SHADE INDICATES FIXTURE CONNECTION ON EMERGENCY / NIGHT LIGHT CIRCUIT.	RESULTING THEREFROM SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGII THE CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT/ENGINEER AND SECURE APPROVAL BEFORE PROCEEDING. SHOULD THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED
<b>X</b>	EXIT LIGHT. PROVIDE ARROWS AND NUMBER OF FACES AS INDICATED ON DRAWINGS.	REQUIREMENTS OF THE CODES, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY A NOT IN CONFLICT WITH THOSE CODES.
ф	SIMPLEX RECEPTACLE OUTLET; 20 AMP, 125V., 3 WIRE, GROUNDED TYPE.	3. DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS. LABOR AND EQUIPMENT AS REQUIRED TO COMPL
ф	DUPLEX RECEPTACLE OUTLET; 20 AMP, 125V., 3 WIRE, GROUNDED TYPE.  QUADRUPLEX RECEPTACLE OUTLET GANGED WITH A COMMON WALL	PROJECT WITHIN DESIGN INTENT AT NO ADDITIONAL COST TO OWNER/TENANT OR TENANT. CONTRACTOR S REQUEST ADDITIONAL INFORMATION IN CASES OF DOUBT.
#	PLATE; (2)-20 AMP, 125V, 3 WIRE, GROUNDED TYPE.  DUPLEX RECEPTACLE OUTLET LOCATED ABOVE SPLASH ABOVE COUNTER:	4. IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE GREATER AMOUNT OF TO COST SHALL BE PRICED. BRING THE CONFLICT TO THE ATTENTION OF THE ENGINEER AND REQUEST DIRECT
<b>4</b>	20 AMP, 125V, 3 WIRE GROUNDED TYPE. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT HEIGHT.	PRE-CONSTRUCTION  1. BEFORE SUBMITTING A BID, CONTRACTOR SHALL VISIT THE SITE AND ASCERTAIN FOR HIMSELF THE CONDIT
GFЊ	DUPLEX RECEPTACLE OUTLET WITH GROUND FAULT INTERRUPTER; 20 AMP, 125V., 3 WIRE GROUNDED TYPE.	TO BE MET IN INSTALLING THE WORK AND MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL PRICE. FA ON THE PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED
WP/GFI	DUPLEX RECEPTACLE OUTLET W/ WEATHERPROOF WHILE IN USE COVER; GROUND FAULT INTERRUPTER, 20 AMP, 125V., 3 WIRE, GROUNDED TYPE.	JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.
ф	SPECIAL RECEPTACLE OUTLET: SEE DRAWIINGS FOR NEMA CONFIGURATION AND VOLTAGE.	2. CONSIDERATION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND
<b>®</b>	FLUSH MOUNTED FIRE RATED POKE THRU DEVICE W/ RECEPTACLE(S) AND/OR DATA AND/OR TELEPHONE. SEE DRAWINGS FOR SPECIFICATIONS.	CONDITIONS SPECIFIED AND/OR INDICATED, SCHEDULED, OR IMPLIED ON THE CONTRACT DOCUMENTS, AND REQUIRED BY THE NATURE OF THIS WORK.
<u>o</u>	FLUSH MOUNTED FLOOR BOX W/ RECEPTACLE (S) AND/OR DATA AND/ OR TELEPHONE. SEE DRAWINGS FOR SPECIFICATIONS.	3. CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND S PAY ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.
PP	POWER POLE. RE: DRAWINGS FOR MORE INFORMATION.	DEMOLITION
<u> </u>	TELEPHONE OUTLET.	1. ALL EXISTING CONDUIT AND CONDUCTORS SERVING THE AREA UNDER CONTRACT NOT TO BE RE-USED SHATER TERMINATED AT LAST PORTION OF CIRCUIT REQUIRING ENERGIZATION BEFORE THE DEMOLITION AREA. IF A CIRCUIT SERVICES ONLY THE DEMOLITION AREA, REMOVE ALL CONDUITS AND CONDUCTORS BACK TO THE
TV	CABLE T.V. OUTLET	PANELBOARD OR BASE BUILDING GRID BOX AND DE-ENERGIZE THE CIRCUIT BREAKER, MAKING IT A SPARE.  "SPARE" OR "GRID-SPARE" ACCORDINGLY ON PANELBOARD DIRECTORY.
4	COMBINATION TELEPHONE / DATA OUTLET.	2. REMOVE ALL ABANDONED "LOW VOLTAGE" CABLING INCLUDING FIRE ALARM CABLING, TELEPHONE/DATA CA AND SECURITY CABLING. REMOVE ALL EXISTING CONDUIT AND WIRING THAT IS SUPPORTED FROM THE CEIL
∇ TTB	DATA OUTLET	GRID. REMOVE ALL EXISTING UNUSED ELECTRICAL EQUIPMENT, CONTROLS, CONDUIT, HANGERS, WIRING, E  3. RELOCATE AND RECONNECT ACTIVE PORTIONS OF THE ELECTRICAL SYSTEM OUTSIDE OF THE SCOPE OF
<u>TTB</u>	TELEPHONE TERMINAL BOARD, 4'x8'x3/4" FIRE RATED PLYWOOD.	3. RELOCATE AND RECONNECT ACTIVE PORTIONS OF THE ELECTRICAL SYSTEM OUTSIDE OF THE SCOPE OF DEMOLITION, AS REQUIRED TO MAINTAIN A COMPLETE AND OPERATING SYSTEM THAT IS FUNCTIONALLY EQUIVALENT TO THE PRE-EXISTING SYSTEM PRIOR TO DEMOLITION.
•	SINGLE POLE, SINGLE-THROW SWITCH; 20 AMP, 120/277V.	ELECTRICAL PLANS INDICATE FINAL WIRING DEVICE, DATA/COMMUNICATIONS OUTLET AND SWITCH LOCATIC ALL OTHER EXISTING WIRING DEVICES, DATA/COMMUNICATIONS OUTLETS AND SWITCHES SHALL BE REMOVED.
\$3 \$4 h	3-WAY,4-WAY SWITCH: 20 AMP, 120/277V.  DIMMER SWITCH. SEE DRAWINGS FOR SPECIFICATIONS.	AND WALLS SHALL BE PATCHED.
\$oc os	DIMMER SWITCH. SEE DRAWINGS FOR SPECIFICATIONS.  WALL/CEILING MOUNTED OCCUPANCY SENSOR AS SPECIFIED	<ol> <li>ALL EXISTING JUNCTION BOXES, OUTLETS, PULL BOXES, ETC., LOCATED ABOVE NON-ACCESSIBLE CEILINGS     INSTALLED UNDER THIS TENANT IMPROVEMENT PROJECT SHALL BE RELOCATED AS NECESSARY TO A LOCA     ABOVE AN ACCESSIBLE CEILING. WHERE EXISTING JUNCTION BOXES ARE NOT PRACTICAL TO RE-LOCATE,</li> </ol>
	EMERGENCY POWER OFF SWITCH (E.P.O.)	ELECTRICAL CONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER PRIOR TO SUBSTANTIAL START OF CONSTRUCTION.
<u> </u>	JUNCTION BOX MOUNTED ABOVE ACCESSIBLE CEILING.	6. REMOVE ALL EXISTING UNUSED ELECTRICAL EQUIPMENT, CONTROLS, CONDUIT, HANGERS, WIRING, ETC FF ABOVE CEILINGS.
J	JUNCTION BOX - WALL MOUNTED	7. REFER TO ARCHITECTURAL PLANS FOR WALL AND PARTITIONS AND WIRING DEVICES TO BE REMOVED. CONTRACTOR SHALL PROVIDE ELECTRICAL DEMOLITION AS PREVIOUSLY DESCRIBED.
ㅁ	DISCONNECT IN A NEMA 1 ENCLOSURE, UNLESS OTHERWISE SPECIFIED. REFER TO DRAWINGS FOR AMPERAGE, PHASES, & FUSE SIZE.	REMOVE ALL EXISTING CONDUIT AND WIRING THAT IS SUPPORTED FROM THE CEILING GRID VIA CADDY CLIP     ETC. AND REPLACE EXISTING CONDUIT THAT IS TO BE REUTILIZED WITH MATCHING CONDUIT AND WIRING
<i>\( \text{\rm }\)</i>	(IF REQUIRED) 30 AMP, 3 POLE, NON-FUSED - U.O.N. MOTOR	PROPERLY SUPPORTED FROM STRUCTURE ABOVE.
	MOTOR STARTER / DISCONNECT IN A NEMA 1 ENCLOSURE, UNLESS OTHER- WISE SPECIFIED. REFER TO DRAWINGS FOR AMPERAGE, PHASES, FUSE SIZE	9. RE-SUPPORT AND/ RE-ROUTE ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY DEMOLISHED WALLS.
	(IF REQUIRED), AND SIZE. 30 AMP, 3 POLE, NON-FUSED, SIZE "0"-U.O.N.  MOTOR STARTER/VFD IN A NEMA 1 ENCLOSURE, UNLESS OTHERWISE	-
	SPECIFIED. REFER TO DRAWINGS FOR AMPERAGE ,PHASES,AND SIZE.  CONTACTOR IN A NEMA 1 ENCLOSURE, UNLESS OTHERWISE SPECIFIED. RE-	SUBMITTALS  1. ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL L
C PC	FER TO DRAWINGS FOR AMPERAGE AND NUMBER OF POLES.  PHOTO-ELECTRIC CELL	IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THE PROJECT.
TC	TIMECLOCK IN NEMA 1 ENCLOSURE, OTHERWISE SPECIFIED. REFER TO	2. MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEM EQUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND
CR	DRAWINGS FOR AMPERAGE AND NUMBER OF POLES.  CARD READER JUNCTION BOX WITH 3/4"C TO ACCESSIBLE CEILING U.N.O.	PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT, WARRE FOUND TO HAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO COMMENTE AND AND ENCOUNTED AT NO ADDITIONAL COOT TO THE COMMENTED AND TO THE COMMENTED AND THE COMMENTE
Ť	GROUND	OWNER/TENANT AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER/TENANT.  3. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO B
GB GB	GROUND BAR	PROVIDED. SUBMIT .PDF FORMAT FILE FOR APPROVAL.  4. THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:
	FIRE ALARM SYMBOLS	A. ALL NEW EQUIPMENT, CONTROLS, SPECIALTY WIRING DEVICES, AND LIGHT FIXTURES B. LIGHTING CONTROL SHOP DRAWINGS - WHERE DIMMING CONTROL PANELS OR ILIGHT CONTROLS ARE
D	DUCT DETECTOR WITH SAMPLING TUBE.	UTILIZED C. COORDINATION DRAWINGS
(DH)	MAGNETIC DOOR HOLD OPEN.	D. FIRE ALARM MATERIAL AND SHOP DRAWINGS  E. FIRE STOP MATERIALS AND INSTALLATION DETAILS
(SFD)	SMOKE FIRE DAMPER	PRE-CONSTRUCTION FUNCTIONAL TEST  1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL FUNCTIONALLY TEST ALL ELECTRICAL AND FIRE A
FACP	FIRE ALARM CONTROL PANEL.	1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL FUNCTIONALLY TEST ALL ELECTRICAL AND FIRE A EQUIPMENT THAT IS EXISTING TO REMAIN OR RELOCATED IN THIS PROJECT. THE CONTRACTOR SHALL PROV WRITTEN DESCRIPTION OF ANY AND ALL DEFICIENCIES TO THE OWNER/TENANT. ANY DEFICIENCIES FOUND A
RACP	FIRE ALARM REMOTE ANNUNCIATOR.	THE START OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER/TENANT. TH EQUIPMENT TO BE TESTED INCLUDES, BUT IS NOT LIMITED TO: RECEPTACLES, LIGHT FIXTURES, EXIT SIGNS,
	LS MAY NOT BE USED ON THESE DRAWINGS. ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS	OCCUPANCY SENSORS, PANEL BOARDS, TRANSFORMERS, EMERGENCY LIGHTING BATTERY UNITS, AND SWITCHES.
	ABBREVIATIONS	2. FOR EXISTING LIGHT FIXTURES AND EXIT SIGNS WITH BATTERY PACKS, ELECTRICAL CONTRACTOR SHALL ASSUME NEW BATTERY PACKS WILL BE REQUIRED UNLESS FUNCTIONAL TEST PROVES OTHERWISE.
(E) (N)	EXISTING TO REMAIN NEW	CONSTRUCTION  1. ALL WORK SHALL BE ARRANGED IN A NEAT, WELL ORGANIZED MANNER, ALL SERVICES SHALL BE ROUTED
(R) (ER)	ITEM NOTED TO BE RELOCATED  EXISTING ITEM TO BE RE-CIRCUITED	PARALLEL AND PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL OPERATING AND CONTROL EQUIPMENT PROPERLY TO PROVIDE EASY ACCESS AND ARRANGE ENTIRE WORK WITH ADEQUATE
(D) AFF/AFG	ITEM NOTED TO BE DEMOLISHED  ABOVE FINISHED FLOOR/GRADE	ACCESS FOR OPERATION AND MAINTENANCE, AND FOR PROPER CODE AND/OR MANUFACTURERS CLEARAN  2. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCT
AD AIC	AUTOMATIC DAMPER  AMPERE INTERRUPTING CAPACITY	PIPING, CONDUIT, CABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTI EQUIPMENT, AND THE STRUCTURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF, AFTER
AL AMP	ALUMINUM  AMPERAGE	INSTALLED, NEW DUCTWORK, PIPING, CONDUIT, CABLE, ETC., IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE WORK, WHICH IS EITHER EXISTING OR SHOWN ON THE CONDOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE, ETC., SHALL BE RELOCATED WITHOUT ADDITIONAL
ATS	AUTOMATIC TRANSFER SWITCH	TO THE OWNER/TENANT. COORDINATE ALL WORK COMPLETELY WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
AWG BKR	AMERICAN WIRE GAUGE BREAKER CONDUIT	3. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIALS FROM DAMAGE BY HIS WORK ( PERSONNEL, AND SHALL CORRECT ALL DAMAGE THUS CAUSED WITHOUT ADDITIONAL COST TO THE OWNER
C CKT.	CONDUIT  CIRCUIT  CURRENT TRANSFORMED	CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINAL ACCEPTAL BY THE OWNER. PROTECT ALL WORK AGAINST THEFT, INJURY, OR DAMAGE AND CAREFULLY STORE MATERIA
CT CU	CURRENT TRANSFORMER  COPPER  DISCONNECT	AND EQUIPMENT RECEIVED ON SITE WHICH IS NOT IMMEDIATELY INSTALLED. THE CONTRACTOR SHALL CLO OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT THE ENT
DISC.	DISCONNECT  ELECTRICAL CONTRACTOR	DUST, DIRT, AND OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL PROTECT ALL EQUIPMENT AND MATER FROM DAMAGE DUE TO WATER, SPRAY-ON FIREPROOFING, CONSTRUCTION DEBRIS, ETC. IN A MANNER ACCEPTABLE TO THE ENGINEER AND/OR OWNER.
EMT EPO	ELECTRICAL METALLIC TUBING  EMERGENCY POWER OFF	4. AREAS OF THE EXISTING BUILDING WILL BE OCCUPIED DURING CONSTRUCTION OF THIS PROJECT. NOISY, D
FA FACP	FIRE ALARM FIRE ALARM CONTROL PANEL	AND/OR OTHER CONSTRUCTION OPERATIONS REQUIRED FOR WORK WHICH DISTURB OR CAUSE COMPLAINT THE EXISTING BUILDING OCCUPANTS SHALL NOT BE ACCEPTABLE. ALL AFTER-HOUR OR OVERTIME WORK REQUIRED BY THE CONTRACTOR TO AVOID DISRUPTION OF EXISTING OCCUPANTS WILL BE PROVIDED AT NO
FC FLA	FOOT CANDLE FULL LOAD AMPS	COST TO THE OWNER/TENANT. THE CONTRACTOR SHALL USE CONSTRUCTION METHODS AND MATERIALS W SHALL NOT ADVERSELY AFFECT THE INDOOR AIR QUALITY OF THE EXISTING OCCUPIED AREAS.
GFI GND.	GROUND FAULT INTERRUPTER GROUND	5. ALL BUILDING SERVICES, UTILITIES, POWER, FIRE PROTECTION, AND DOMESTIC COLD AND HOT WATER MAY BE DISRUPTED FOR ANY REASON WITHOUT PRIOR COORDINATION WITH A REPRESENTATIVE OF BUILDING
HD HOA	HEAVY DUTY HAND-OFF-AUTO	OPERATIONS.  6. THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR S
HP IG	HORSEPOWER ISOLATED GROUND	DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACT SHALL SCAN ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.
KCM KW	THOUSAND CIRCULAR MILS KILOWATT	7. PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRESAFED TO COMPLY WITH E-814 (UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.
MCB MSB	MAIN CIRCUIT BREAKER MAIN SWITCHBOARD	PROJECT CLOSE-OUT
MLO NEMA	MAIN LUG ONLY  NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION	THE ELECTRICAL CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS UPON PROJECT COMPLETION. ALL REQUIRED REPORTS AND AS-BUILTS SHALL BE SUBMITTED WITHIN TWO (2) WEEKS OF DATE OF SUBSTANTIAL COMPLETION OR OWNER OCCUPANCY.
NIC NF	NOT IN CONTRACT  NON-FUSED	A. SUBMIT "AS-BUILT" RECORD DRAWINGS INDICATING ACTUAL AS-BUILT CONDITIONS TO THE ARCHITECT/
NF NL NTS	NIGHT LIGHT  NOT TO SCALE	ENGINEER FOR REVIEW. RECORD DRAWINGS SHALL BE STAMPED "AS-BUILT" AND SHALL HAVE THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CONTRACTOR. ALL ENGINEERS' SEALS SHALL BE REMOVED F
PH	PHASE	THE DRAWINGS. PROVIDE ONE (1) ELECTRONIC FILE.  B. EXISTING CIRCUITRY SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT CIRCUIT
PNL PVC	PANEL OR PANELBOARD POLYVINYL CHLORIDE	AND INDICATE ANY DEVIATIONS ON THE "AS BUILT" DRAWINGS. "AS BUILT" DRAWINGS SHALL ACCURATELY INDICATE THE LOCATION OF ALL NEW AND EXISTING JUNCTION BOXES WITH THE RESPECTIVE PANEL AND
RE:	REFERENCE SMOKE/FIRE DAMPER TIME SWITCH	CIRCUIT NUMBERS.  C. SUBMIT COPY OF OPERATION AND MAINTENANCE MANUALS. THE MANUALS SHALL INCLUDE RATINGS,  CARACITIES DARTS LISTS WIRING DIAGRAMS SERVICE MAINTENANCE RECOMMENDATIONS AND WARRAN
SFD	TIME SWITCH TELEPHONE TERMINAL BOARD	CAPACITIES, PARTS LISTS, WIRING DIAGRAMS, SERVICE/MAINTENANCE RECOMMENDATIONS, AND WARRAN  D. SUBMIT WRITTEN RESPONSE TO ALL FIELD REPORTS INDICATING CORRECTIVE ACTIONS TAKEN AND DATE
TS TTB		
TS TTB TYP UG	TYPICAL UNDERGROUND	CORRECTIVE ACTION WAS TAKEN TO THE ARCHITECT/ENGINEER FOR REVIEW.  WARRANTY
TS TTB TYP UG U.N.O. UPS	TYPICAL UNDERGROUND UNLESS NOTED OTHERWISE UNINTERRUPTIBLE POWER SUPPLY	CORRECTIVE ACTION WAS TAKEN TO THE ARCHITECT/ENGINEER FOR REVIEW.  WARRANTY  1. THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SECURITY.
TS TTB TYP UG U.N.O.	TYPICAL UNDERGROUND UNLESS NOTED OTHERWISE	CORRECTIVE ACTION WAS TAKEN TO THE ARCHITECT/ENGINEER FOR REVIEW.
TS TTB TYP UG U.N.O. UPS V VFD WP	TYPICAL UNDERGROUND UNLESS NOTED OTHERWISE UNINTERRUPTIBLE POWER SUPPLY VOLTAGE VARIABLE FREQUENCY DRIVE WEATHER PROOF	CORRECTIVE ACTION WAS TAKEN TO THE ARCHITECT/ENGINEER FOR REVIEW.  WARRANTY  1. THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SINCLUDE AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRA PERIOD THE CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT:  A. ALL WORK INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR MATERIALS
TS TTB TYP UG U.N.O. UPS V VFD	TYPICAL UNDERGROUND UNLESS NOTED OTHERWISE UNINTERRUPTIBLE POWER SUPPLY VOLTAGE VARIABLE FREQUENCY DRIVE	CORRECTIVE ACTION WAS TAKEN TO THE ARCHITECT/ENGINEER FOR REVIEW.  WARRANTY  1. THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND INCLUDE AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARR PERIOD THE CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT:

XFMR TRANSFORMER

#### ELECTRICAL SPECIFICATIONS

#### CONDUIT CLUDING EVERY ARTICLE, DEVICE, OR ACCESSORY REASONABLY NECESSARY ALL CONDUITS SHALL BE CONCEALED IN PIPE CHASES, WALLS, FURRED SPACED, OR ABOVE THE CEILING OF THE CTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED. UDE. BUT ARE NOT LIMITED TO. MATERIALS. LABOR. SUPERVISION.

COMPLETION" AS AGREED TO BY THE OWNER/TENANT.

THE START OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL

BUILDING UNLESS OTHERWISE INDICATED. CONDUIT SHALL NOT BE EMBEDDED IN ANY STRUCTURAL SLAB OR STRUCTURAL MEMBER UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. TION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PERMIT CONDUIT MAY BE RUN EXPOSED IN MECHANICAL ROOMS, DUCT AND PIPING CHASES, BUT ONLY WHERE

ST RECENT VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ALL CONDUITS THROUGHOUT THE BUILDING SHALL BE SUPPORTED AT MINIMUM 10 FEET ON CENTERS E AND LOCAL AUTHORITIES. IN THE EVENT OF CONFLICT BETWEEN THE HORIZONTALLY AND SUPPORTED 6 FEET ON CENTERS VERTICALLY. SUPPORT CONDUIT WITHIN 3' OF ALL CAL ENFORCING AUTHORITY. THE LATTER SHALL RULE. ANY MODIFICATION CONNECTIONS TO BOXES. MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER NY SUCH MODIFICATIONS TO THE ARCHITECT/ENGINEER AND SECURE HIS

CONNECTORS ARE NOT ACCEPTABLE.

CONDUIT SHALL NOT BE SUPPORTED FROM DUCTWORK, PIPING, OR EQUIPMENT. THE LOAD AND SPACING ON EACH HANGER AND/OR INSERT SHALL NOT EXCEED THE SAFE ALLOWABLE LOAD FOR CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE ANY COMPONENT OF THE SUPPORT SYSTEM, INCLUDING THE CONCRETE WHICH HOLDS THE INSERTS. CONFIRM WITH STRUCTURAL ENGINEER WHERE REQUIRED.

RE AND DO NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPLETE ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN CONDUIT, OR SURFACE METAL RACEWAYS. IN ADDITION VIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE EMPTY CONDUIT OR SURFACE METAL RACEWAYS SHALL BE INSTALLED FOR THE VOICE/DATA SYSTEM, AND FOR NO ADDITIONAL COST TO OWNER/TENANT OR TENANT CONTRACTOR SHALL OTHER SYSTEMS AS INDICATED ON THE DRAWINGS. EEN DRAWINGS AND/OR SPECIFICATIONS, THE GREATER AMOUNT OF TOTAL

RMC CONDUIT SHALL BE JOINED WITH THREADED COUPLINGS AND SHALL BE SECURED IN CABINETS, OUTLETS, ETC., WITH DOUBLE LOCK NUTS AND SHALL BE PROVIDED WITH INSULATED THROAT BUSHINGS AS MANUFACTURED BY STEEL CITY OR EQUAL. COUPLINGS, ETC., SHALL BE THREADED.

RIGID STEEL CONDUIT SHALL BE HOT-DIPPED GALVANIZED INSIDE AND OUT. FULL LENGTHS OF PIPE SHALL HAV GALVANIZED OR ZINC-COATED THREADS ON BOTH ENDS. EMT SHALL BE USED INDOORS WHERE CONCEALED OR EXPOSED ABOVE GRADE

0. EMT SHALL BE JOINED WITH STEEL SET SCREW TYPE COUPLINGS AND CONDUITS SHALL BE SECURED WITH STEEL SET SCREW TYPE CONNECTORS AT PANELS, JUNCTION BOXES, OUTLETS, ETC. DIE-CAST TYPE

FLEXIBLE METAL CONDUIT FLEXIBLE METAL CONDUIT SHALL BE HOT-DIPPED GALVANIZED STEEL STRIP, SPIRAL WOUND AND INTERLOCKED, AND SHALL BE PROVIDED WITH INSULATED ANTI-SHORT BUSHINGS AT ALL TERMINATIONS.

FLEXIBLE METAL CONDUIT SHALL BE SECURED WITH GALVANIZED OR SHERADIZED CONNECTORS SUITABLE FOR CONNECTION TO THE ASSOCIATED BOXES AND CONDUITS. DIE CAST CONNECTORS ARE NOT FLEXIBLE METAL CONDUIT SHALL BE USED INDOORS AT ANY HEIGHT. IN LENGTHS NOT TO EXCEED 48 INCHES TO EXTEND CONDUIT CONNECTIONS TO MOTORS TRANSFORMERS BUSWAY SWITCHES AIR

DISTRIBUTION TERMINAL UNITS, LIGHTING FIXTURES NOT CONNECTED BY RIGID CONDUIT, CONTROL

EQUIPMENT AND DEVICES, PERMANENTLY CONNECTED EQUIPMENT OR APPLIANCES, OR FOR EQUIPMENT AND DEVICES REQUIRING ADJUSTMENT AND/OR REMOVAL FOR MAINTENANCE. FLEXIBLE METAL CONDUIT SHALL NOT BE USED FOR CONNECTIONS IN ELEVATOR MACHINE ROOMS. LIQUID-TIGHT FLEXIBLE CONDUIT SHALL BE USED IN ALL OF THE ABOVE AREAS WHERE FLEXIBLE METAL CONDUIT IS NOT PERMITTED. LEXISTING CONDUIT AND WIRING THAT IS SUPPORTED FROM THE CEILING FLEXIBLE METAL CONDUIT (MINIMUM 3/8" DIAMETER) MAY BE USED FOR FIXTURE-TAILS FOR CONNECTION OF INDIVIDUAL LIGHTING FIXTURES TO THEIR ASSOCIATED LIGHTING SYSTEM JUNCTION BOXES LENGTHS. NOT TO EXCEED 6 FEET, AND PROVIDED THE CIRCUIT CONDUCTORS CONTAINED THEREIN ARE PROTECTED. BY OVER CURRENT DEVICES RATED AT 20 AMPERES OR LESS.

> A "GREEN" INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED WITH THE CIRCUIT CONDUCTORS AND SIZED IN ACCORDANCE WITH TABLE 250-122 OF THE LATEST EDITION OF THE NATION ELECTRICAL CODE.

#### TYPE "MC" METAL CLAD CABLE

WHERE PERMITTED BY THE LOCAL AUTHORITY HAVING JURISDICTION AND APPROVED BY OWNER/CLIENT TYPE MC CABLE MAY BE UTILIZED INDOORS IN FINISHED AREAS FOR THE CONNECTION OF LIGHT FIXTURES AND WIRING DEVICES PROVIDED THE FOLLOWING CONDITIONS ARE MET: FOR CONNECTION TO LIGHT FIXTURES:

A. FROM JUNCTION BOX TO FIRST FIXTURE - NOT TO EXCEED 5'-0" HORIZONTALLY FROM JUNCTION BOX TO FIXTURE FEED.

B. FROM LIGHT FIXTURE TO ADJACENT LIGHT FIXTURE - NOT TO EXCEED 12'-0". FOR INDIVIDUAL CONNECTION TO OUTLETS AND SWITCHES CONCEALED IN WALL AND PARTITIONS: A. THE BRANCH CIRCUIT HOMERUN WIRING SERVING LOAD IS INSTALLED IN ACCESSIBLE CEILING SPACE USING METAL CONDUIT

B. BRANCH CIRCUIT JUNCTION BOX IS LOCATED IN ACCESSIBLE CEILING SPACE ADJACENT TO THE ASSOCIATED WALLS OR PARTITIONS IN WHICH OUTLETS OR SWITCH LEGS ARE INSTALLED - NOT TO EXCEED 5'-0" HORIZONTALLY FROM THE JUNCTION TO THE ASSOCIATED WALL. C. FOR CONNECTION OF MULTIPLE WIRING DEVICES WITHIN THE SAME WALL.

TYPE MC CABLE SHALL NOT BE USED FOR HOMERUN WIRING OR HORIZONTAL BRANCH CIRCUIT RUNS OVER 12'-0". HOMERUNS AND HORIZONTAL RUNS SHALL BE HARD PIPED WITH METAL CONDUIT.

TYPE MC CABLE SHALL BE PROVIDED WITH INSULATED ANTI-SHORT BUSHINGS AT ALL TERMINATIONS. TYPE MC CABLE CONNECTORS SHALL BE STEEL GALVANIZED OR SHERADIZED, SUITABLE FOR CONNECTION TO ASSOCIATED BOXES. DIE CAST CONNECTORS ARE NOT ACCEPTABLE.

#### CONDUIT INSTALLATION ALL HORIZONTAL RUNS OF BRANCH CIRCUITS ABOVE CEILING LINE SHALL BE EMT CONDUIT. RE: MC CABLE

SECTION FOR EXCEPTIONS CONDUIT SHALL BE OF AMPLE SIZE TO PERMIT THE EASY INSERTION OR WITHDRAWAL OF CONDUCTORS WITHOUT ABRASION.

CONDUIT SHALL BE SIZED IN ACCORDANCE WITH THE PERCENT FILL REQUIREMENTS OF THE NEC AND AS INDICATED ON THE DRAWINGS

GROUPING OF "HOME RUNS" IS ACCEPTABLE ONLY WHERE THE NUMBER OF CONDUCTORS INDICATED ON THE DRAWINGS IS MAINTAINED. NEC DE-RATING FACTORS ARE APPLIED BASED ON FULL RATING OF THE BRANCH CIRCUIT OVERCURRENT

PROTECTION DEVICES. FOR 20 AMP CIRCUITS. NOT MORE THAN NINE(9) - #12 THHN OR #10 THHN CURRENT CARRYING (PHASE & NEUTRAL) CONDUCTORS SHALL BE INSTALLED IN EACH RACEWAY. EMT CONDUIT SHALL NOT BE SMALLER THAN 1/2".

WHERE CONDUIT OPENINGS ARE EXPOSED TO CONSTRUCTION DEBRIS. CONDUIT SHALL BE CAPPED OR

PLUGGED WITH STANDARD ACCESSORIES AS SOON AS INSTALLATION IS COMPLETE MAIN OR RELOCATED IN THIS PROJECT. THE CONTRACTOR SHALL PROVIDE A 10. METAL CONDUIT FOR SIGNAL, COMMUNICATION, AND TEMPERATURE CONTROL SYSTEMS SHALL BE ALL DEFICIENCIES TO THE OWNER/TENANT. ANY DEFICIENCIES FOUND AFTER PROVIDED WITH PULL BOXES OF APPROVED SIZES AT INTERVALS NOT EXCEEDING 100 FEET IN LENGTH OR AFTER THREE (3) 90° BENDS. JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE PERCENT FILL

> REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE. AND AS INDICATED ON THE DRAWINGS. ALL EMPTY CONDUIT SYSTEM SHALL HAVE A 1/8" BRAIDED POLYPROPYLENE ROPE OR #14 GALVANIZED STEEL PULL WIRE INSTALLED. AT LEAST 12" OF PROPERLY SECURED ROPE OR WIRE SHALL BE FOLDED BACK INTO EACH END OF THE EMPTY CONDUITS.

2. CONDUIT SYSTEMS SHALL BE PROPERLY SUPPORTED PER RESPECTIVE NEC REQUIREMENTS 3. ALL HOMERUNS SHALL BE INSTALLED IN EMT CONDUIT. TYPE MC CABLE IS NOT ACCEPTABLE.

EMERGENCY SYSTEM CIRCUITS SUCH AS LIGHTING INVERTER OR GENERATOR SHALL NOT SHARE RACEWAYS WITH NORMAL SOURCE CIRCUITS PER NEC 700.

OUTLET BOXES . SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, 1. IN STANDARD PARTITIONS, WHERE 1-1/4" CONDUITS ARE EMPLOYED: 4-11/16" SQUARE BY 2-1/8" DEEP BOXES WITH 1-GANG OR 2-GANG PLASTER COVERS SHALL BE USED UNLESS NOTED OTHERWISE OUTLET BOXES SHALL BE SECURELY ATTACHED TO THE PARTITION STUDS, WITH AT LEAST ONE (1) PARTITION STUD SEPARATING THE OUTLET BOXES. IT IS NOT ACCEPTABLE TO SECURE OUTLET BOXES ONLY TO DRYWALL

> PROVIDE EXTRA DUTY COVERS FOR ALL 15 AND 20 AMP. 125 AND 250 VOLT RECEPTACLES IN ALL WET LOCATIONS PER NEC 406.9(B)(1).

Y SENSORS/LIGHT SWITCHES ARE INSTALLED AT END OF DOOR SWING, GEN STALL STUD AT 42" FROM HINGE WALL. INSTALL SWITCHES ON EITHER SIDE WHERE MULTI-GANG BACK BOXES ARE REQUIRED, THE BACK BOX SHALL CONSIST OF A SINGLE UNIT - SINGLE BACK BOX WITH MUDRING OR MASONRY STYLE JUNCTION BOX. GANGABLE STYLE BACK BOXES ARE NOT

THE ELECTRICAL DISTRIBUTION SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC), AS SHOWN AND SPECIFIED, AND RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS SERVE THE INTENDED FUNCTIONS

ALL POWER CONDUITS SHALL HAVE AN EQUIPMENT GROUND. USE OF CONDUIT FOR GROUND PATH IS NOT ACCEPTABLE. VIRING DEVICES

PROVIDE BUILDING STANDARD WIRING DEVICES. WHERE A BUILDING STANDARD IS NOT ESTABLISHED. ELECTRICAL RECEPTACLES SHALL BE LEVITON 120 VOLT. 20 AMP. #16362-W SERIES. DECORATOR STYLE. BACK/SIDE WIRED WITH MATCHING COVER PLATE UNLESS OTHERWISE INDICATED. LIGHTING SWITCHES SHALL BE LEVITON #5621-2W OR #5623-2W WITH MATCHING COVER PLATES. DEVICES SHALL BE WHITE UNLESS OTHERWISE INDICATED. COVER PLATES SHALL BE NYLON UNLESS OTHERWISE NOTED. EQUAL DEVICES BY HUBBELL, LEGRAND, OR COOPER ARE ACCEPTABLE.

ALL WIRING DEVICES SHALL BE RATED 20-AMP MINIMUM. EXISTING 15-AMP DEVICES SHALL BE REPLACED WITH 20-AMP WHERE NEW CIRCUITING IS INDICATED/REQUIRED.

ALL NEW AND EXISTING GFI RECEPTACLES INDICATED ON THE PLANS SHALL MEET THE REVISED LATEST U.L. #943 REQUIREMENTS. WEATHERPROOF RECEPTACLES SHALL BE LISTED WEATHER RESISTANT TYPE. REPLACE

CONTRACTOR SHALL PROVIDE ACCURATE TYPE WRITTEN PANEL SCHEDULES. SCHEDULES SHALL INDICATE DEVICES AND/OR EQUIPMENT SERVED, LOCATION AND/OR ROOM NUMBERS FOR NEW AND EXISTING CIRCUITS PROVIDE NEW SCHEDULES FOR ALL NEW AND EXISTING PANELS

WHERE PANELBOARDS HAVE MULTIPLE PANEL SECTIONS, A BONDING JUMPER SIZED PER NEC, SHALL BE USED TO BOND EACH PANEL ENCLOSURE. USE OF CONDUIT AS ONLY MEANS FOR CONTINUITY IS UNACCEPTABLE. ALL CIRCUIT BREAKER NOT UTILIZED SHALL BE TURNED "OFF" AND LABELED "SPARE" ON UPDATED PANEL

IS COMPLETED PER NEC 110.14(D) AND ALL BOLTS ARE TORQUED PER MANUFACTURER REQUIREMENTS.

ELECTRICAL CONTRACTOR SHALL PROVIDE A LETTER TO THE INSPECTOR INDICATING THE PANEL INSTALLATION

#### **ELECTRICAL SPECIFICATIONS ELECTRICAL SPECIFICATIONS**

#### ALL CONDUCTORS FURNISHED AND INSTALLED SHALL COMPLY WITH THE REQUIREMENTS AND LATEST REVISIONS OF THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE (NESC). STANDARDS OF THE UNDERWRITER'S LABORATORIES (UL). NATIONAL ELECTRICAL MANUFACTURER'S

ASSOCIATION (NEMA), INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE). UNLESS OTHERWISE SPECIFIED OR NOTED, ALL CONDUCTORS NO. 10 AND SMALLER SHALL BE SOLID COPPER THHN WITH AN INSULATING OUTER JACKET SUITABLE FOR CONDUCTOR TEMPERATURES OF 90°C, EXCEPT FOR NEC CLASS 1, 2, 3, CONDUCTORS WHICH MAYBE STRANDED IF TERMINATED AS REQUIRED HEREIN.

UNLESS OTHERWISE SPECIFIED OR NOTED. ALL CONDUCTORS NO. 8 AND LARGER SHALL BE THWN-2/THHN. 600 VOLT, STRANDED WITH A THERMOPLASTIC INSULATING COMPOUND AND AN OUTER JACKET (THWN-2/THHN ONLY) SUITABLE FOR CONDUCTOR TEMPERATURES OF 90°C. STRANDED WIRE SHALL BE TERMINATED AS

NO SPLICES OR TAPS SHALL BE MADE IN ANY CONDUCTOR EXCEPT IN OUTLET BOXES. JUNCTION BOXES. SPLICE BOXES, OR OTHER DEVICES AND FOLIPMENT IN EXPOSED AND ACCESSIBLE LOCATIONS APPROVED FOR THE PURPOSE BY THE LATEST EDITION OF THE NEC.

ALL NO. 10 AWG AND SMALLER SOLID CONDUCTORS SHALL BE SPLICED WITH PRE-INSULATED SPRING CONNECTORS ALL NO. 10 AWG AND SMALLER STRANDED CONDUCTORS FOR NEC CLASS 1, 2, 3 WIRING SHALL BE TERMINATED WITH AMP 'PIDG' UILLISTED PREMIUM GRADE INSULATED FORK CONNECTORS OR APPROVED. EQUAL. AND SHALL BE SPLICES IN A JUNCTION BOX WITH AMP "PLASTIC-GRIP" UL LISTED STANDARD GRADE

INSULATED BUTT SPLICES. OR APPROVED EQUAL. ALL 120 VOLT, 20 AMP HOME RUNS LONGER THAN 50 FEET AND ALL 277 VOLT, 20 AMP HOME RUNS LONGER THAN 100 FEET SHALL BE #10 MINIMUM.

INDICATED ON THE DRAWINGS AND SHALL BE OF AMPLE SIZE TO PERMIT THE READY INSERTION AND WITHDRAWAL OF CONDUCTORS WITHOUT ABRASION. GROUPING OF "HOME RUNS" IS ACCEPTABLE ONLY WHERE THE NUMBER OF CONDUCTORS INDICATED ON THE DRAWINGS IS MAINTAINED AND THE PROPER NEC DE-RATING FACTORS ARE APPLIED BASED ON FULL RATING OF THE BRANCH CIRCUIT OVERCURRENT PROTECTION DEVICES. FOR 20 AMP CIRCUITS. NOT MORE THAN NINE(9) - #12 THHN OR #10 THHN CURRENT CARRYING (PHASE & NEUTRAL) CONDUCTORS SHALL BE INSTALLED IN EACH RACEWAY.

EMT CONDUIT SHALL BE SIZED IN ACCORDANCE WITH THE PERCENT FILL REQUIREMENTS OF THE NEC AND AS

THE USE OF "PUSH-IN" STYLE WIRE CONNECTORS (WAGO OR SIMILAR) ARE STRICTLY PROHIBITED FOR TERMINATIONS OF BRANCH CONDUCTORS. CONDUCTORS SHALL BE TWISTED AND TERMINATED WITH APPROVED WIRE NUT CONNECTION. THE USE OF "PUSH-IN" WIRE CONNECTORS ARE ACCEPTABLE ONLY WHEN PROVIDED BY MANUFACTURER AND PRE-TERMINATED WITHIN A LIGHT FIXTURE.

#### IDENTIFICATION/LABELING

EXISTING CIRCUITRY IS SHOWN FOR INFORMATION ONLY. EXISTING CIRCUITRY INFORMATION TAKEN FROM COMBINATION OF FIFLD SURVEY AND PREVIOUS TENANT DRAWINGS. CONTRACTOR SHALL FIFLD VERIEV EXACT CIRCUITRY AND INDICATE ANY DEVIATIONS ON THE "AS BUILT" DRAWINGS. "AS BUILT" DRAWINGS SHALL ACCURATELY INDICATE THE LOCATION OF ALL NEW AND EXISTING JUNCTION BOXES WITH THE RESPECTIVE

ALL PANELBOARDS, MOTOR STARTERS, CONTROL PANELS, CONTROL REMOTE STATIONS, DISCONNECT SWITCHES, CIRCUIT BREAKERS OR OTHER EQUIPMENT IN SEPARATE ENCLOSURES SHALL BE EQUIPPED WITH NAMEPLATES. THE NAMEPLATES SHALL BE ENGRAVED RIGID PLASTIC LAMINATE OR APPROVED EQUAL, WHITE LETTERING ON BLACK BACKGROUND FOR EQUIPMENT 208/120 VOLT AND BLACK LETTERING ON WHITE BACKGROUND FOR EQUIPMENT 480/277 VOLT, AND BE ATTACHED TO THE EQUIPMENT SECURELY WITH SCREWS. EACH NAMEPLATE SHALL GIVE THE NUMBER DESIGNATION OF THE EQUIPMENT AS SHOWN ON THE ONE LINE DIAGRAM AND ALSO THE SOURCE. UTILIZE SIMILAR RED AND WHITE NAMEPLATES FOR ALL **EMERGENCY POWERED EQUIPMENT** 

ALL WIRING DEVICES (EXCLUDING LIGHT SWITCHES) SHALL BE LABELED WITH SELF-ADHESIVE, LAMINATED TAPE INDICATING THE CIRCUIT NUMBER AND PANEL DESIGNATIONS. UTILIZE CLEAR TAPE WITH BLACK LETTERS UNLESS NOTED OTHERWISE. PROVIDE SAMPLE OF LABELS TO ARCHITECT AND LANDLORD FOR APPROVAL PRIOR TO INSTALLATION.

NEW AND EXISTING CIRCUITRY SHALL BE ACCURATELY IDENTIFIED AT THE RESPECTIVE ABOVE CEILING JUNCTION BOXES. THE ASSOCIATED PANEL, CIRCUITS, AND VOLTAGE SHALL BE IDENTIFIED ON ALL JUNCTION

ALL CONDUITS LEAVING A PANELBOARD, DISTRIBUTION PANEL, OR MSB SHALL BE PROVIDED WITH PRINTED LABEL INDICATING THE CIRCUITS CONTAINED IN THE CONDUIT WITHIN 3 FT OF THE PANEL CONNECTION

#### LIGHTING AND LIGHTING CONTROLS

FURNISH AND INSTALL LIGHTING FIXTURES OF THE TYPES SCHEDULED ON THE DRAWINGS. FIXTURE MANUFACTURES SHALL BE AS SCHEDULED ON THE DRAWINGS ALTERNATE MANUFACTURERS WILL BE CONSIDERED IF SUBMITTED 7 DAYS PRIOR TO BID. FIXTURES SHALL BE FURNISHED WITH ALL REQUIRED. ACCESSORIES AND TRIM AS REQUIRED FOR A COMPLETE INSTALLATION IN THE CEILING TYPE SHOWN ON THE ARCHITECTURAL DRAWINGS.

A SEPARATE NEUTRAL SHALL BE PULLED FOR EACH DIMMED CIRCUIT.

PROVIDE HANDLE-TIES IN LIEU OF MULTI-POLE BREAKERS

FOR LED FIXTURES, LAMPS, DRIVERS, AND COMPONENTS, PROVIDE A COMPLETE WARRANTY FOR PARTS AND LABOR FOR A MINIMUM OF FIVE (5) YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

COORDINATE THE INSTALLATION OF ELECTRICAL AND COMMUNICATION CONDUIT TO FURNITURE SYSTEMS WITH THE ARCHITECT PRIOR TO THE INSTALL ATION OF ELECTRICAL ITEMS VERIEY IN WRITING WITH THE ARCHITECT THAT THE QUANTITY OF WIRES AND CIRCUITS CORRESPONDS TO THE FURNITURE SYSTEMS THAT WILL BE SUPPLIED TO THIS PROJECT.

PROVIDE HEAVY DUTY DISCONNECTS AS REQUIRED FOR THE PLUMBING AND MECHANICAL EQUIPMENT COORDINATE WITH ALL TRADES.

WHERE SEPARATE HOME RUNS ARE INDICATED ON THE PLANS, DO NOT UTILIZE THE NEUTRAL OR GROUND CONDUCTOR FOR ANY OTHER CIRCUITS. TERMINATE ONLY AT DEVICES AND PANELBOARD AS INDICATED.

ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH DEDICATED NEUTRALS PER NEC 210.4(B) UNLESS NOTED OTHERWISE. MULTIWIRE BRANCH CIRCUITS MAY BE UTILIZED FOR BREAK ROOM APPLIANCE LOADS. EXISTING MULTIWIRE BRANCH CIRCUITS TO BE RE-UTILIZED, AND FOR LOADS WHERE DEDICATED NEUTRALS ARE NOT POSSIBLE (I.E. FURNITURE SYSTEMS). WHERE MULTIWIRE BRANCH CIRCUITS ARE UTILIZED

ALL EXISTING JUNCTION BOXES, OUTLETS, PULL BOXES, ETC., LOCATED ABOVE NON-ACCESSIBLE CEILINGS INSTALLED UNDER THIS TENANT IMPROVEMENT PROJECT SHALL BE RELOCATED AS NECESSARY TO A CATION ABOVE AN ACCESSIBLE CEILING. WHERE EXISTING JUNCTION BOXES ARE NOT FEASIBLE TO E-LOCATE, ELECTRICAL CONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER.

AT ALL EXPOSED CEILING AREAS, UTILIZE 3/4" MINIMUM EMT CONDUIT FOR ALL BRANCH CIRCUITING, FIRE ALARM, AND CONTROLS CABLING. COORDINATE ALL CONDUIT ROUTING WITH THE ARCHITECT PRIOR TO INSTALLATION AND PROVIDE A SHOP DRAWING FOR REVIEW THAT INDICATES ALL PROPOSED CONDUIT ROUTING AT EXPOSED CEILING AREAS. ALL CONDUIT SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO THE LINES OF THE BUILDING AND SHALL BE PAINTED TO MATCH THE FINISH OF THE STRUCTURE. NEUTRAL CONDUCTORS SHALL BE PROPERLY GROUPED IN AT LEAST ONE(1) LOCATION WITHIN ANY ENCLOSURE PER NEC 200,4(B).

PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRESAFED TO COMPLY WITH ASTM E-814 (UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.

#### LOW VOLTAGE PROVISIONS

TELECOMMUNICATION, FIRE ALARM, AUDIO/VISUAL, AND OTHER LOW VOLTAGE OUTLETS SHALL BE PROVIDED WITH A 4" SQUARE BACK BOX. 1 GANG MUD RING. AND RING AND STRING TO ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE. ALL LOW VOLTAGE OUTLETS ON INSULATED WALLS OR WALLS TO DECK SHALL BE PROVIDED WITH A 3/4"C AND PULLSTRING TO ACCESSIBLE CEILING.

FIRE ALARM CONTRACTOR SHALL PROVIDE A NEW ADDRESSABLE, FIRE ALARM PANEL WITH BUILT-IN "DACT" (DIGITAL ALARM COMMUNICATOR TRANSMITTER). FIRE ALARM CONTRACTOR TO PROVIDE HONEYWELL #IGSMV4 OR EQUAL) GSM COMMUNICATOR. PROVIDE CONTROL CONDUIT, CABLING, ALARM NOTIFICATION AND DETECTION DEVICES AS REQUIRED TO MONITOR THE FOLLOWING: DUCT MOUNTED SMOKE DETECTORS

SMOKE/HEAT DETECTOR AT FIRE RISER ROOM

TAMPER SWITCH

PROVIDE COMPLETE SUBMITTAL DATA AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL FIRE DEPARTMENT FOR APPROVAL. SUBMITTAL DATA AND SHOP DRAWINGS SUBMITTED SHALL BEAR THE APPROVAL STAMP OF ALL AUTHORITIES HAVING JURISDICTION.

COORDINATION IT SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR:

TO COORDINATE ALL REQUIREMENTS SURROUNDING INSTALLATION OF THE FIRE ALARM SYSTEM WITH ALL OTHER TRADES AFTER NOTICE TO PROCEED BY THE OWNER OR THE OWNER'S REPRESENTATIVE.

TO COORDINATE OFF-SITE MONITORING SERVICE INCLUDING GSM SERVICE CONTRACT.

THE FIRE ALARM SYSTEM CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING AS REQUIRED FOR A COMPLETE AND FUNCTIONING FIRE ALARM SYSTEM, AND AS REQUIRED TO CONNECT OTHER DEVICES FURNISHED UNDER DIVISIONS 15 AND 16. ALL PLENUM RATED WIRING SHALL BE "RED" IN COLOR.

2. THE FIRE ALARM SYSTEM CONTRACTOR SHALL FURNISH AND INSTALL SIGNAL WIRING IN EACH MECHANICAL UNIT, OR AS REQUIRED, TO PROVIDE THE SIGNALS NECESSARY TO THE OPERATION OF THE EQUIPMENT SPECIFIED.

#### 1. A STATE LICENSED AND FACTORY TRAINED TECHNICAL REPRESENTATIVE OF THE MANUFACTURER SHALL SUPERVISE THE FINAL CONTROL PANEL CONNECTIONS AND TESTING OF THE SYSTEM. UPON

COMPLETION OF THE ACCEPTANCE TESTS, THE OWNER AND/OR HIS REPRESENTATIVES SHALL BE INSTRUCTED IN THE PROPER OPERATION OF THE SYSTEM THE INSTALLING SUBCONTRACTOR SHALL FUNCTIONALLY TEST EACH AND EVERY DEVICE IN THE ENTIRE

SYSTEM FOR PROPER OPERATION AND RESPONSE. IN ADDITION, EACH CIRCUIT IN THE SYSTEM SHALL BE FULLY TESTED FOR WIRING SUPERVISION. ANY ITEMS FOUND NOT PROPERLY INSTALLED OR NON-FUNCTIONING SHALL BE REPLACED OR REPAIRED AND RE-TESTED.

3 THE INSTALLING SUBCONTRACTOR SHALL PROVIDE A COMPLETE WRITTEN REPORT ON THE FUNCTIONAL TEST OF THE ENTIRE SYSTEM. A COPY OF THE TEST REPORT SHALL BE PROVIDED WITH MAINTENANCE MANUALS. THE TEST REPORT SHALL BE SIGNED AND DATED BY THE LICENSED FIRE ALARM TECHNICIAN. RESPONSIBLE FOR SUPERVISING THE FINAL SYSTEM TEST AND CHECKOUT

4. A COMPLETE DEMONSTRATION OF THE OPERATION OF THE ENTIRE SYSTEM SHALL BE CONDUCTED BY THE CONTRACTOR, THE DIVISION 15 SUBCONTRACTOR, THE DIVISION 16 SUBCONTRACTOR, AND THE FIRE ALARM SYSTEM MANUFACTURER IN THE PRESENCE OF THE OWNER, ARCHITECT, ENGINEER, AND THE UTHORITY HAVING JURISDICTION

5. ANY REQUIRED RE-TESTS SHALL BE MADE BY THE FIRE ALARM SYSTEM CONTRACTOR, AND THE DIVISION 16 SUBCONTRACTOR AT NO EXPENSE TO THE OWNER. THE CONTRACTOR SHALL PRE-TEST THE SYSTEM FOR CONTRACT DOCUMENT AND CITY BUILDING AND FIRE DEPARTMENT REQUIREMENTS AND SHALL CERTIFY TO THE PRE-TESTING IS COMPLETE PRIOR TO ANY ADDITIONAL TESTING.

#### FIRE ALARM - PROJECT SPECIFIC SCOPE

REFERENCE SHEET E8.

CODED, SUPPORTED AS REQUIRED PER THE NEC.

KELLER AMENDMENTS

<u>DRAWING</u>

E0.0

E2.1

E3.1

E3.2

E5.1

E5.2

OTHER - LIFE SAFETY CODE (NFPA 101)

AND TEXAS ACCESSIBILITY STANDARDS.

SHEET TITLE

LIGHTING PLAN

POWER PLAN

**ELECTRICAL COVER SHEET** 

**ELECTRICAL ROOF PLAN** 

ELECTRICAL SCHEDULES

NURSE CALL SYSTEM - PLAN

ELECTRICAL RISER AND SCHEDULES

NOTE: THE LIST BELOW IS FOR REFERENCE ONLY TO AID THE CONTRACTORS IN DETERMINING SCOPE OF FIRE ALARM WORK. CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE A CODE COMPLIANT SYSTEM. THE BUILDING IS CURRENTLY EQUIPPED WITH FIRE ALARM SYSTEM.

<u>FIRE ALARM - FIRE ALARM CONTRACTOR SCOPE OF WORK</u> EXISTING FIRE ALARM SYSTEM SHALL BE DEMOLISHED.

OCCUPANT EVACUATION NOTIFICATION COVERAGE PER NFPA 72 NOT REQUIRED - LESS THAN 500

FOR COMPLIANCE WITH IMC SECTION 606, PROVIDE DUCT MOUNTED SMOKE DETECTORS.

#### EMERGENCY RESPONDER RADIO COVERAGE - WHERE REQUIRED

FIRE ALARM CONTRACTOR SHALL PERFORM AN EMERGENCY RESPONDER TWO-WAY RADIO SURVEY WHERE REQUIRED BY THE AHJ IN ACCORDANCE WITH IFC, §510 AND NFPA 72, §24.5.2.2. CRITICAL AREAS, SUCH AS THE FIRE COMMAND CENTER, THE FIRE PUMP ROOM, EXIT STAIRS, EXIT

PASSAGEWAYS, ELEVATOR LOBBIES, STANDPIPE OUTLET LOCATIONS, SPRINKLER CONTROL VALVE LOCATIONS, AND OTHER AREAS DEEMED CRITICAL BY THE AHJ, SHALL BE PROVIDED WITH 99% FLOOR AREA GENERAL BUILDING AND TENANT AREAS SHALL BE PROVIDED WITH 95% FLOOR AREA RADIO COVERAGE.

ACCEPTABLE COVERAGE SHALL BE DETERMINED BY SIGNAL STRENGTH. A MINIMUM INBOUND SIGNAL

STRENGTH OF -95 DBM AND A MINIMUM OUTBOUND SIGNAL STRENGTH OF -95 DBM AT THE DONOR SITE SHALL

BE CONSIDERED ACCEPTABLE. OTHER MEANS OF DETERMINING ACCEPTABLE COVERAGE THAT IS APPROVED

NURSE CALL SYSTEM - SPECIFICATIONS

SPECIAL PROVISIONS

IN EXAM ROOMS AND PATIENT CARE AREAS, ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH NEC

(HEALTHCARE FACILITIES CABLE) IS ACCEPTABLE WHERE CONCEALED WITHIN WALLS AND TO A MAXIMUM

48" TO CONNECTING JUNCTION BOX ABOVE CEILING. TYPE MC-HCF CABLE SHALL BE PROPERLY COLOR

PROVIDE TAMPER RESISTANT RECEPTACLES FOR ALL WIRING DEVICES AS REQUIRED PER NEC 406.12 FOR

APPLICABLE CODES AND STANDARDS

DRAWING INDEX

BUILDING CODE - 2021 IBC WITH CITY OF KELLER AMENDMENTS

ELECTRICAL CODE - 2020 NEC WITH CITY OF KELLER AMENDMENTS.

MECHANICAL CODE - 2021 IMC WITH CITY OF KELLER AMENDMENTS

OTHER - FIRE ALARM - NFPA 72 WITH CITY OF KELLER AMENDMENTS. 10. OTHER - FEDERAL DEPARTMENT OF JUSTICE AMERICANS WITH DISABILITIES ACT

OTHER - 2018 INTERNATIONAL ENERGY CONSERVATION CODE WITH CITY OF

PLUMBING CODE - 2021 IPC WITH CITY OF KELLER AMENDMENTS

FIRE CODE - 2021 IFC WITH CITY OF KELLER AMENDMENTS

ARTICLE 517. IN LIEU OF INSTALLING BRANCH CIRCUITS IN METAL RACEWAYS. TYPE MC-HCF CABLE.

BY THE AHJ, IN WRITING, SHALL BE CONSIDERED ACCEPTABLE. CONTRACTOR SHALL COORDINATE WITH AHJ TO ESTABLISH THE PROPER TESTING FREQUENCIES AND TEST

PROVIDE PROFESSIONAL TEST REPORT WITH MEASUREMENTS AND LOCATIONS DOCUMENTED TO DESIGN

SHOULD THE RADIO SURVEY PRODUCE UNACCEPTABLE RESULTS, CONTRACTOR SHALL PROVIDE A PROPOSAL TO DESIGN, INSTALL, AND TEST AN EMERGENCY RESPONDER TWO-WAY RADIO ENHANCEMENT SYSTEM IN ACCORDANCE WITH NFPA 72 AND THE IFC.

TX Firm No. 1869

Project No.

Interior planning & design

280 E. Oakview Pl. San Antonio

Texas 78209

210-241-9392

Fax: 210-822-0608

Austin, Texas 78759

www.wylieeng.com

512-888-9945

ZLAY B. MENZEL

# WELLMED

**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

**ELECTRICAL COVER SHEET** 

PROJECT NO: 05.31.24 **REVISION DATES:** 

	LIGHTING CONTROLS LEGEND									
	DEVICE	NOTES								
ф	SENSORSWITCH #sPODMRA-*	WALLBOX DIMMER (0-10V)								
\$os	SENSORSWITCH #WSX-PDT-*	SINGLE RELAY, LINE VOLTAGE, WALL MOUNTED. FACTORY SET TO "AUTO ON".								
\$osm	SENSORSWITCH #WSX-PDT-SA-*	SINGLE RELAY, LINE VOLTAGE, WALL MOUNTED. FACTORY SET TO "MANUAL ON".								
<b>\$</b> *	nLIGHT #nPODM	nLIGHT ENABLED, DIGITAL SWITCH WITH "OFF/ON".								
ф∗	nLIGHT #nPODM-DX	nLIGHT ENABLED, DIGITAL ON/OFF WITH RAISE/LOWER CONTROL.								
OSn CM9	nLIGHT #nCM-PDT-9	nLIGHT ENABLED, SINGLE CIRCUIT, CEILING MOUNTED, STANDARD ZONE								
OSn CM10	nLIGHT #nCM-PDT-10	nLIGHT ENABLED, SINGLE CIRCUIT, CEILING MOUNTED, EXTENDED ZONE								
PPA nPP	nLIGHT #nPP16	nLIGHT ENABLED, AUTO ON, POWER PACK.								
PPM	nLIGHT #nPP16-SA	nLIGHT ENABLED, MANUAL ON, POWER PACK.								
PPA n010V	nLIGHT #nPP16-D	nLIGHT ENABLED, AUTO ON, POWER PACK WITH 0-10V OUTPUT.								
PPM n010V	nLIGHT #nPP16-D-SA	nLIGHT ENABLED, MANUAL ON, POWER PACK WITH 0-10V OUTPUT.								
PPE n010V	nLIGHT #nPP16-D-ER	nLIGHT ENABLED, AUTO ON, POWER PACK WITH 0-10V OUTPUT AND EMERGENCY OPERATION.								

-DISABLE PHOTO SENSOR OPTION ON ALL OCCUPANCY SENSORS.

-DISABLE "SELF-ADAPTIVE MODE" ON ALL OCCUPANCY SENSORS

-SET "DELAYED OFF" SETTING TO 20 MINUTES.

-FOR ALL nLIGHT ENABLED DEVICES, ROUTE CAT-5E CABLE AS REQUIRED BETWEEN DEVICES. REFERENCE

SENSORSWITCH SHOP DRAWINGS FOR WIRING REQUIREMENTS.

-POWER PACKS INDICATED WITH SAME NUMBER, BUT DIFFERENT LETTER SUFFIX SHALL ALL BE CONTROLLED VIA SAME

-WHERE MULTIPLE OCCUPANCY SENSORS ARE INDICATED WITH "LIKE" SWITCH LEG/ZONE DESIGNATIONS, CONNECT ALL OCCUPANCY SENSORS IN PARALLEL SO THAT ANY OF THE OCCUPANCY SENSORS WILL ACTIVATE THE "OCCUPIED" MODE FOR THAT AREA.

LIGHTING CONTROL SYSTEM SHALL BE COMMISSIONED BY nLIGHT.

		LIGHT FIXT	UKE	: 5CH	EDU	LE	
MARK	MANUFACTURER	MODEL	VOLTS	MOUNT	LAMPS	WATTS	REMARKS
A50	LITHONIA	#STAKS-2X4-AL06-SWW7	120	RECESSED	LED	48	SET TO 4000K AND 5000 (MED) LUMEN OUTPUT
A60	LITHONIA	#STAKS-2X4-AL06-SWW7	120	RECESSED	LED	48	SET TO 4000K AND 6000 (HIGH) LUMEN OUTPUT
B40	LITHONIA	#STAKS-2X2-AL03-SWW7	120	RECESSED	LED	40	SET TO 4000K AND 4000 (MED) LUMEN OUTPUT
B50	LITHONIA	#STAKS-2X2-AL03-SWW7	120	RECESSED	LED	40	SET TO 4000K AND 5000 (HIGH) LUMEN OUTPUT
C1	LITHONIA	#CLX-L48-5000LM-SEF-FDL-MVOLT-GZ10-40K	120	SURFACE	LED	35	
D10	LITHONIA	#LDN6-AL02-SWW1-LO6-AR-LSS-MVOLT	120	RECESSED	LED	22	SET TO 4000K AND 1000 (LOW) LUMEN OUTPUT
D20	LITHONIA	#LDN6-AL02-SWW1-LO6-AR-LSS-MVOLT	120	RECESSED	LED	22	SET TO 4000K AND 2000 (HIGH) LUMEN OUTPUT
EM	LITHONIA	#CLX-L24-3500LM-SEF-FDL-MVOLT-GZ10-40K	120	SURFACE	LED	26	
G5	JUNO	(2) #UPLD-30-SWW4-90CRI-WH W/ #UCD-JB-M12 SPLICE BOX	120	SURFACE	LED	30	SET TO 4000K
G10	JUNO	(4) #UPLD-30-SWW4-90CRI-WH W/ #UCD-JB-M12 SPLICE BOX	120	SURFACE	LED	60	SET TO 4000K
XE	LITHONIA	#AFB-OEL-DDBTXD-UVOLT-N-WT-CW	120	SURFACE	LED	26	
4	LITHONIA	#EU2-LED-M12	120	UNIVERSAL	INCLUDED	3	
Ø	LITHONIA	#EDG-*-R-120 (NO BATTERY PACK)	120	UNIVERSAL	INCLUDED	3	PROVIDE DIRECTIONAL ARROWS AND NUMBER (FACES AS INDICATED ON PLANS.

INVERTER "INV-1"

EXIT SIGNS 10

FIXTURE QUANT WATTS

12

TOTAL

INV SIZE 750 VA

480 VA

22 VA

40

TOTAL LOAD

PERCENT LOAD 84%

1. CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL FOR REVIEW BY ARCHITECT AND ENGINEER FOR ALL NEW LIGHT

FIXTURES. ALL FINISHES SHALL BE REVIEWED BY ARCHITECT.

2. 5-YEAR MANUFACTURER WARRANTY IS REQUIRED FOR ALL NEW LED DRIVERS.

# EXIT SIGN -NIGHT LTS COMMUNITY INVERTER FEED ----TYPE EM INVERTER FEED -NEUTRAL

#### **INVERTER INV-1 WIRING DETAIL**

INVERTER SCHEDULE												
MARK	MANUFACTURER	MODEL NUMBER	LOAD	DESCRIPTION								
INV-1	MYERS	#LV-5-R-1	632W	1100VA, NO OUTPUT BREAKERS								

# LIGHTING KEYED NOTES

- EXIT SIGNS AND LIGHT FIXTURES INDICATED AS EMERGENCY AND/OR NIGHT LIGHTS SHALL BE CONNECTED TO THE NON-SWITCHED EMERGENCY INVERTER CIRCUIT AS INDICATED.
- EMERGENCY LIGHTING INVERTER. REFERENCE INVERTER DETAIL FOR ADDITIONAL INFORMATION.
- POWER PACK UTILIZE FOR SWITCH/DIM CONTROL ONLY. NO OCCUPANCY SENSOR CONTROL. TYPICAL AT PATIENT CARE ROOMS AND PERSONNEL SAFETY.
- EMERGENCY POWER PACK. FIXTURES SHALL SWITCHED/DIMMED AS INDICATED AND SHALL BYPASS LOCAL SWITCH CONTROL UPON LOSS OF NORMAL BUILDING POWER. TO THE "PPE" TRANSFER DEVICE, INSTALL THE UN-SWITCHED NORMAL SOURCE CIRCUIT (FOR VOLTAGE SENSING) AND THE "NORMALLY ON" EMERGENCY CIRCUIT AS INDICATED
- TYPE EM FIXTURES SHALL BE CONNECT TO THE "NORMALLY OFF" TERMINALS OF THE INVERTER AS INDICATED. UNDER NORMAL CONDITIONS, FIXTURES SHALL BE "OFF". UPON LOSS OF NORMAL BUILDING POWER, LIGHT FIXTURES WILL ENERGIZE TO 100% VIA BATTERY POWER.
- JUNCTION BOX FOR CONNECTION TO PROCEDURE LIGHT.
- TYPE EX FIXTURES PROVIDED WITH INTEGRAL BATTERY AND SHALL BE CONNECTED TO THE UN-SWITCHED LIGHTING CIRCUIT SERVING THIS AREA.
- LIGHTING THIS AREA EXISTING TO REMAIN. REFERENCE GENERAL LIGHTING NOTE

#### LIGHTING GENERAL NOTES

1. ALL LIGHT FIXTURES ARE NEW UNLESS NOTED OTHERWISE.

01 LIGHTING PLAN
Scale: 1/8"=1'-0"

- 2. ALL EXIT SIGNS ARE NEW UNLESS NOTED OTHERWISE.
- 3. REFERENCE ELECTRICAL COVER SHEET FOR ADDITIONAL INFORMATION. 4. NUMBER ADJACENT TO FIXTURE INDICATES CIRCUITRY TO "PANEL M" UNLESS NOTED OTHERWISE.
- 5. FOR ALL TYPE A1 AND B1 LIGHT FIXTURES UTILIZED FOR EMERGENCY, PROVIDE RED LABEL WITH WHITE LETTERS ADJACENT TO LUMEN SELECTOR SWITCH "EMERGENCY FIXTURE CONNECTED TO INVERTER - SET TO MEDIUM OUTPUT - DO NOT CHANGE"
- 6. WHERE WALL MOUNTED OCCUPANCY SENSORS/LIGHT SWITCHES ARE INSTALLED AT END OF DOOR SWING, GENERAL CONTRACTOR TO INSTALL STUD AT 42" FROM HINGE WALL. INSTALL SWITCH(ES) ON EITHER SIDE OF STUD.
- 7. LOCATE WALL MOUNTED OCCUPANCY SENSORS/LIGHT SWITCHES ADJACENT TO DOOR JAMBS. 8. CEILING MOUNT OCCUPANCY SENSORS SHALL BE LOCATED AT CENTER OF TILE. REFERENCE ARCHITECTURAL DRAWINGS.
- 9. EXTERIOR LIGHTING, INCLUDING POLE LIGHTS, LANDSCAPE LIGHTING, WALL PACKS, CANOPY LIGHTING, ARE EXISTING TO REMAIN. FIELD VERIFY FIXTURES ARE FUNCTIONAL. PROVIDE NEW CIRCUITRY AND/OR CONTROLS AS REQUIRED.

Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





TX Firm No. 1869 512-888-9945 Project No. www.wylieeng.com



WELLMED CLINIC

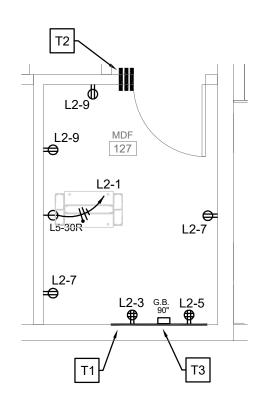
**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

LIGHTING PLAN

PROJECT NO: WTX07J 05.31.24 **REVISION DATES:** 



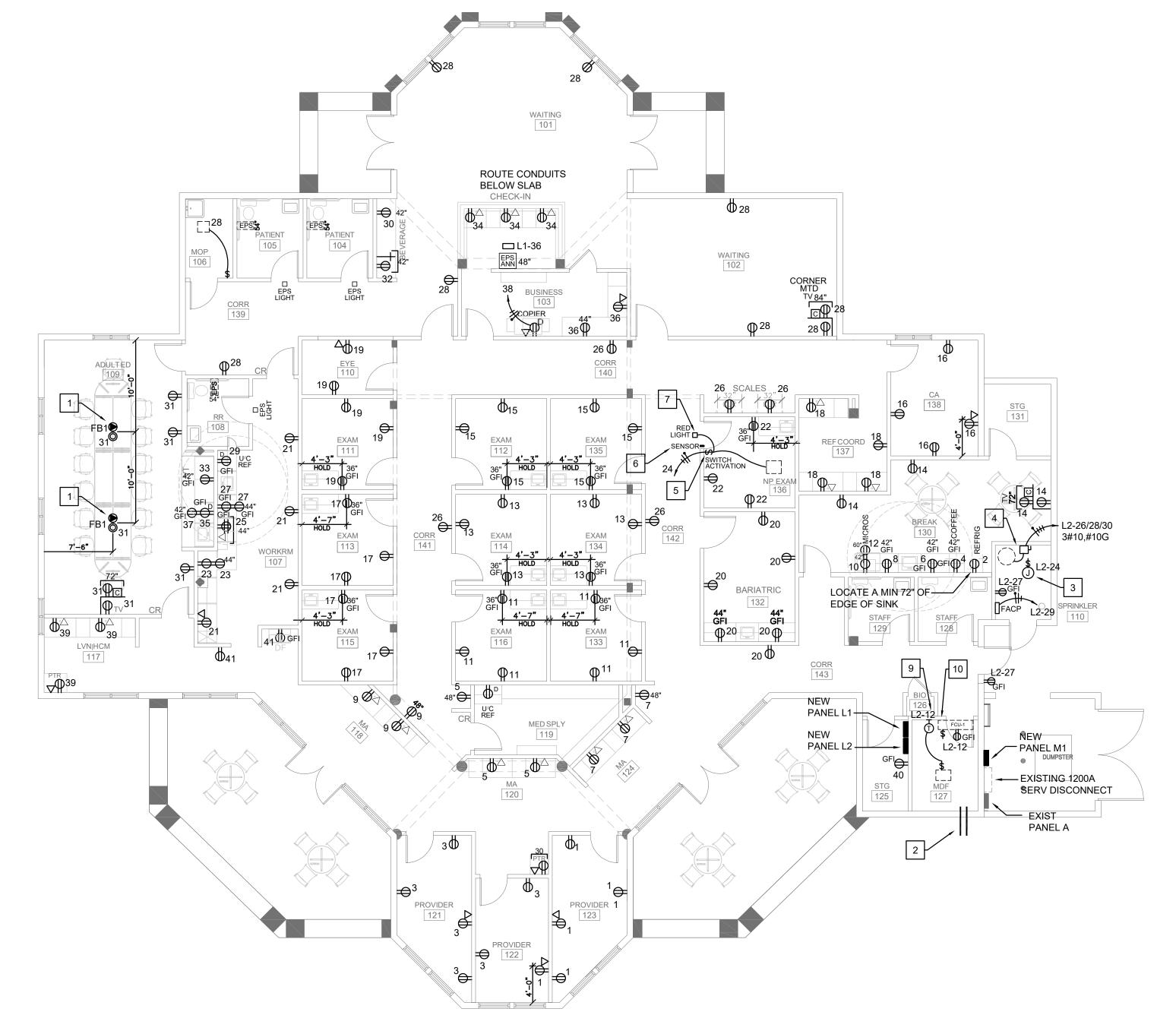
# **02** MDF ROOM Scale: 1/4"=1'-0"

#### TELECOM - GENERAL NOTES

- 1. COORDINATE EXACT LOCATION AND NEMA CONFIGURATION OF ALL WIRING DEVICES THIS ROOM WITH OWNER PRIOR TO INSTALLATION.
- 2. PROVIDE SEPARATE HOT, NEUTRAL, AND GROUND FOR EACH CIRCUIT INDICATED.
- 3. UTILIZE #10 THHN MININUM FOR ALL WIRING DEVICES THIS ROOM.
- 4. NUMBER ADJACENT TO WIRING DEVICE THIS ROOM INDICATES CIRCUITRY TO "PANEL L2" UNLESS NOTED OTHERWISE.
- 5. CABLETRAY AND RACKS PROVIDED AND INSTALLED BY DATA CABLING CONTRACTOR.
- 6. ELECTRICAL CONTRACTOR SHALL BOND CABLE TRAY TO GROUND BAR THIS ROOM. UTILIZE #6 THHN. BOND CABLETRAY ACROSS CABLETRAY JOINTS WITH #6 THHN.
- 7. SURFACE MOUNT CONDUITS THIS ROOM NOT ACCEPTABLE.

#### TELECOM - DRAWING NOTES

- INSTALL A 4'X8'X3/4" FIRE-RETARDANT PLYWOOD AS INDICATED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- ROUTE (3) 4" EMT SLEEVES THROUGH WALL FOR DATA CABLING. PROVIDE PLASTIC BUSHINGS AT EACH END. COORDINATE EXACT LOCATION WITH DATA
- HARGER BICSI PATTERN #GBI14412TMGB (OR EQUAL) 1/4" x 4" x 12" COPPER GROUND BAR WITH PRE-DRILLED HOLES, INSULATORS AND MOUNTING KIT. GROUND BAR SHALL BE MOUNTED AT 7'-6" AFF. ROUTE #4 INSULATED CU GROUND WIRE FROM GROUND BAR TO BUILDING GROUNDING ELECTRODE SYSTEM.



# **O1 POWER PLAN** Scale: 1/8"=1'-0"

#### POWER DRAWING NOTES

- FB1. WIREMOLD #RPNFB, ROUND DUAL SERVICE NON-METALLIC FLOOR BOX WITH #RP4CTCAL COVER KIT WITH (2) NEMA 5-20R RECEPTACLES AND (4) DATA DATA OPENINGS. ROUTE (1) 3/4" CONDUIT FROM POWER COMPARTMENT FOR POWER. ROUTE (1) 1-1/4" CONDUIT FROM COMMUNICATION COMPARTMENT TO ACCESSIBLE CEILING FOR COMMUNICATION. REFER TO ARCHITECTURALS FOR EXACT LOCATION DIMENSIONS.
- ROUTE (2) 2" CONDUITS AS INDICATED FROM BUILDING DEMARC LOCATION TO IT ROOM. COORDINATE IT ROOM STUB-IN LOCATION WITH DATA CABLING CONTRACTOR. FIELD VERIFY DEMARC LOCATION. NOTIFY ENGINEER WITH ANY DISCREPANCIES.
- JUNCTION BOX FOR CONNECTION TO CIRCULATION PUMP/TIMER. COORDINATE EXACT LOCATION AND WIRING REQUIREMENTS WITH PLUMBING CONTRACTOR.
- 250V/3P/60A/NF DISCONNECT FOR CONNECTION TO WATER HEATER. COORDINATE EXACT LOCATION AND WIRING REQUIREMENTS WITH PLUMBING CONTRACTOR.
- 120V/1P/20A SWITCH CLEAR WITH ILLUMINATED ON FOR CONNECTION TO EXHAUST FAN AND RED LIGHT. PROVIDE CLEAR LEXAN TAPE WITH BLUE LETTERS "EXAM ROOM FAN SWITCH". VERIFY EXACT LOCATION WITH TENANT. REFERENCE WIRING DIAGRAM AND
- WALL DETAIL THIS SHEET. PRESSURE INDICATOR PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR - SHOWN FOR REFERENCE ONLY. NO POWER REQUIREMENTS.
- PROVIDE EDWARDS SIGNALING #7641R-1N5 (OR APPROVED EQUAL), 120V, RED DOME STATION. REFERENCE WIRING DIAGRAM AND WALL DETAIL THIS SHEET.
- 120V NURSE CALL WALL MOUNTED CABINET PROVIDED AND INSTALLED BY NURSE CALL INSTALLER. ELECTRICAL CONTRACTOR TO PROVIDE DEDICATED 120V CONNECTION AS INDICATED.
- 120V/1P/20A DISCONNECT SWITCH AND JUNCTION BOX FOR CONNECTION TO EXHAUST FAN. ROUTE CONDUIT AND WIRING AS REQUIRED TO LINE VOLTAGE THERMOSTAT. THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR.
- REFERENCE ELECTRICAL ROOF PLAN FOR ELECTRICAL REQUIREMENTS.

#### POWER GENERAL NOTES

- 1. ALL WIRING DEVICES ARE NEW UNLESS NOTED OTHERWISE.
- 2. REFER TO SHEET ELECTRICAL COVER SHEET FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
- 3. NUMBER ADJACENT TO WIRING DEVICE INDICATES CIRCUITRY TO PANEL L1 UNLESS NOTED OTHERWISE.
- 4. IN EXAM ROOMS AND PATIENT CARE AREAS, ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 517. IN LIEU OF INSTALLING BRANCH CIRCUITS IN METAL RACEWAYS, TYPE MC-HCF CABLE, (HEALTHCARE FACILITIES CABLE) IS ACCEPTABLE WHERE CONCEALED WITHIN WALLS AND TO A MAXIMUM 48" TO CONNECTING JUNCTION BOX ABOVE CEILING. TYPE MC-HCF CABLE SHALL BE PROPERLY COLOR CODED, SUPPORTED AS REQUIRED PER THE NEC.
- 5. PROVIDE TAMPER RESISTANT RECEPTACLES FOR ALL WIRING DEVICES AS REQUIRED PER NEC 406.12 FOR CLINICS BUSINESS OFFICES, CORRIDORS, WAITING ROOMS, AND THE LIKE
- 6. CARD READERS SHOWN FOR REFERENCE ONLY. NO ELECTRICAL SCOPE.
- 7. DEMOLISH BRANCH CONDUCTORS TO EXISTING FLOOR BOXES/JUNCTION BOXES. REMOVED COVER PLATES AND FILL IN WITH CONCRETE/FLOOR LEVELER AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR. REFER TO "DEMOLITION NOTES" ON ELECTRICAL COVER SHEET FOR ADDITIONAL REQUIREMENTS.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608







WELLMED CLINIC

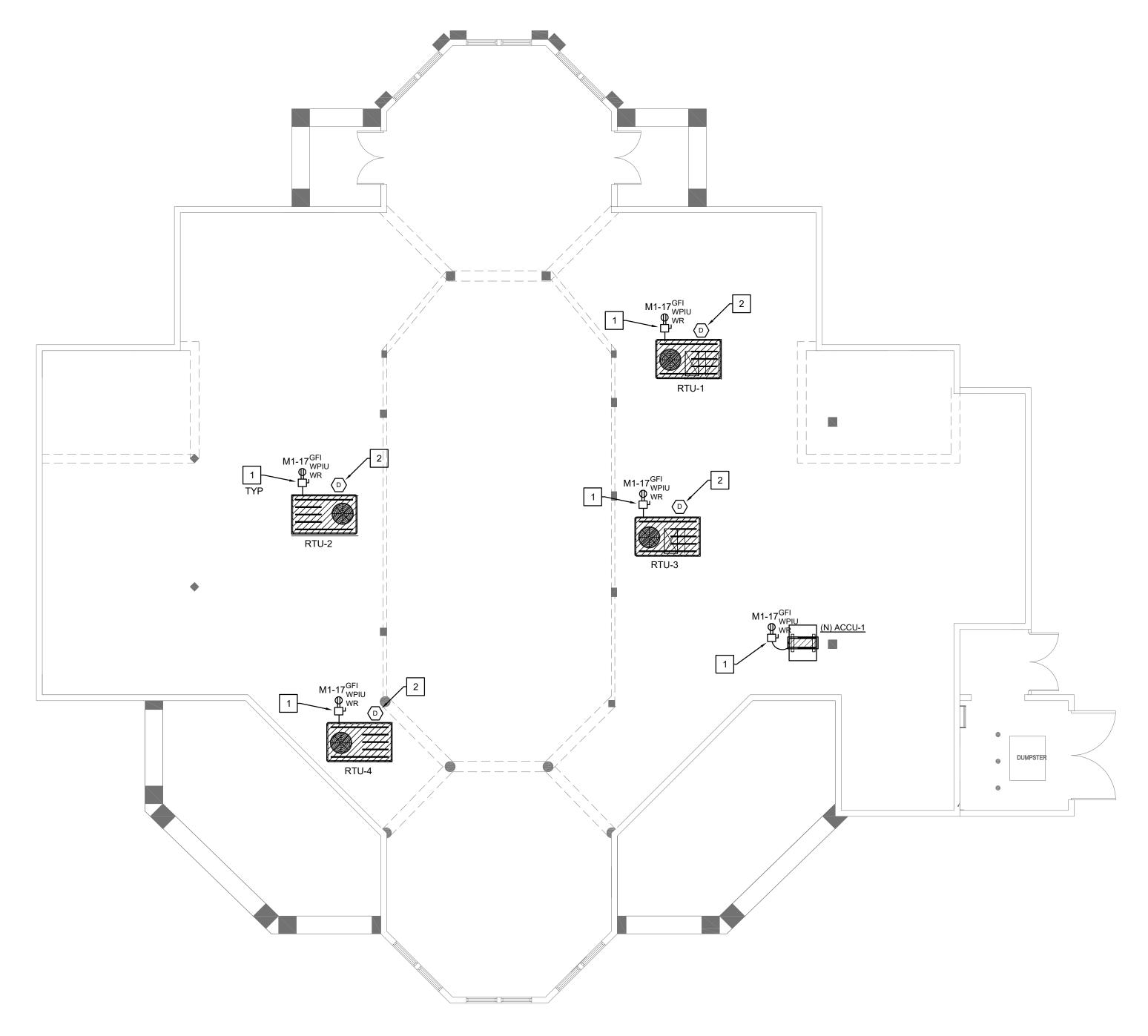
**KELLER** 1110 KELLER PARKWAY

SHEET TITLE

POWER PLAN

KELLER, TX 76248

PROJECT NO: WTX07J 05.31.24 **REVISION DATES:** 



# 01 ELECTRICAL ROOF PLAN Scale: 1/8"=1'-0"

MECH	ANIC	CAI	_ EQI	JIPMENT CI	RCUITI	NG SCHEDULE				
	EQUIP EL	ECTRIC	CAL DATA							
MECHANICAL EQUIPMENT MARK	VOLTS	PH	MAX HACR CIRCUIT BREAKER	CONDUCTORS / CONDUIT	CIRCUIT DESIGNATION	DISCONNECT				
RTU-1	208	3	40/3	3#8,#10G	M1-1/3/5	208V/3P/60A/NF/NEMA 3R				
RTU-2	208	3	40/3	3#8,#10G	M1-7/9/11	208V/3P/60A/NF/NEMA 3R				
RTU-3	208	3	35/3	3#8,#10G	M1-2/4/6	208V/3P/60A/NF/NEMA 3R				
RTU-4	208	3	40/3	3#8,#10G	M1-8/10/12	208V/3P/60A/NF/NEMA 3R				
FCU-1/ACCU-1	208	1	20/2	2#10,#10G 2#10,#10G	M1-13/15 -	208V/2P/30A/NF/NEMA 3R (ACCU-1) 208V/2P/20A SWITCH (FCU-1)				

#### MECHANICAL EQUIPMENT CIRCUITING SCHEDULE NOTES:

- 1. FOR RTU'S, ALL DISCONNECTS SHALL BE SURFACE MOUNTED ON UNIT. UTILIZE MECHANICAL ROOF CURB FOR CONDUIT PENETRATION. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.
- 2. FOR FCU-1/ACCU-1, ELECTRICAL CONTRACTOR SHALL INSTALL WIRING FROM OUTDOOR UNIT TO INDOOR UNIT AS REQUIRED. COORDINATE EXACT WIRING REQUIREMENTS WITH MANUFACTURER AND MECHANICAL CONTRACTOR. REMOTE MOUNT DISCONNECT ON UNI-STRUT.

# DRAWING NOTES

- REFERENCE "MECHANICAL CIRCUITING SCHEDULE" FOR DISCONNECT AND CIRCUIT REQUIREMENTS.
- FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND AIR SAMPLING TUBES AS REQUIRED PER CODE. DUCT DETECTORS AND SAMPLING TUBES INSTALLED BY MECHANICAL CONTRACTOR. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.

## **ROOF - GENERAL NOTES**

- PROVIDE B-LINE 'C' SERIES SUPPORTS FOR CONDUIT RUNS ON ROOFTOP. EXTERIOR CONDUIT SHALL BE EMT. UTILIZE LFMC 'SEALTIGHT' FOR VIBRATION ISOLATION.
- 2. COORDINATE INSTALLATION OF DISCONNECTS AT MECHANICAL EQUIPMENT WITH MECHANICAL
- CONTRACTOR AND ROOFING CONTRACTOR.
- 3. PROVIDE UNISTRUT SUPPORT RACKS AS REQUIRED. SUPPORT RACKS SHALL BE PERMANANT FIXED TO ROOF STRUCTURE.
- REFER TO ELECTRICAL POWER PLANS FOR THE REFERENCED PANEL LOCATION AND REFER TO THE PANEL SCHEDULE FOR CIRCUIT BREAKER REQUIREMENTS.
- 5. ALL ROOF PENETRATIONS AND REQUIREMENTS SHALL BE COORDINATED WITH THE ROOF SYSTEM CONTRACTOR.
- 6. ALL ROOF RECEPTACLES SHALL BE GFCI TYPE AND PROVIDED WITH WEATHERPROOF WHILE IN USE COVER AND SHALL BE WEATHER RESISTANT TYPE.
- 7. REFER TO THE ROOF MECHANICAL PLAN FOR THE EXACT LOCATION OF EQUIPMENT.

THE ROOF SYSTEM INSTALLED IN THIS BUILDING MAY HAVE A WARRANTY. THE CONTRACTOR SHALL COMPLY WITH ALL WARRANTY GUIDELINES WHILE INSTALLING EQUIPMENT ON THE ROOF. THIS INCLUDES THE INSTALLATION OF ROOF PENETRATIONS, EQUIPMENT CURBS AND REFRIGERANT PIPE SUPPORTS.

THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY TO ENSURE THAT THE ROOF WARRANTY IS NOT VOIDED DUE TO CONSTRUCTION ASSOCIATED WITH THIS PROJECT.

The Dawley Group

Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608

SEALS







PROJE

WELLMED CLINIC

KELLER 1110 keller parkway

KELLER, TX 76248

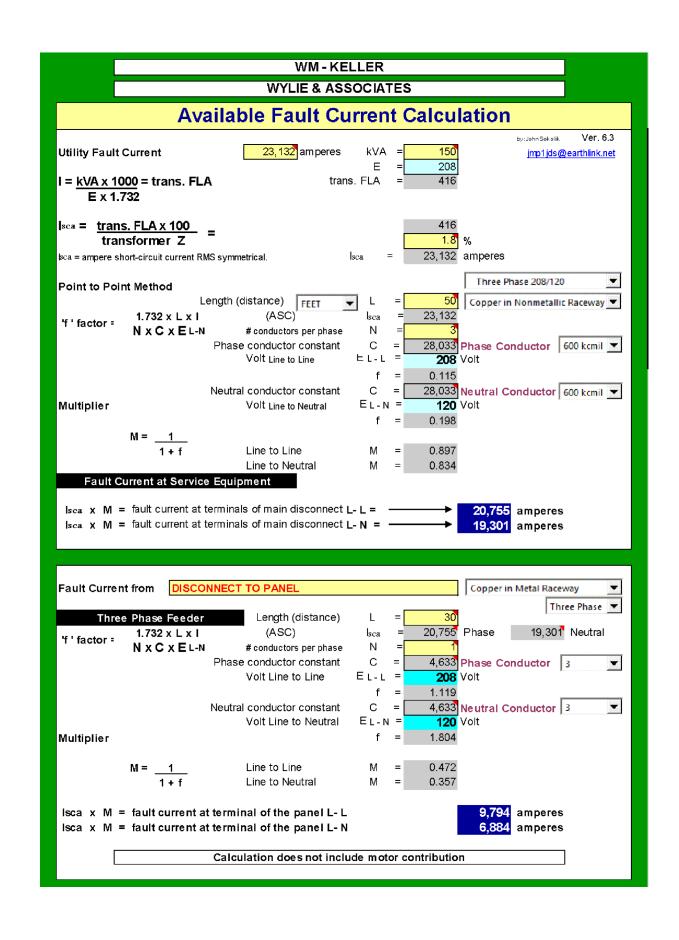
SHEET TITLE

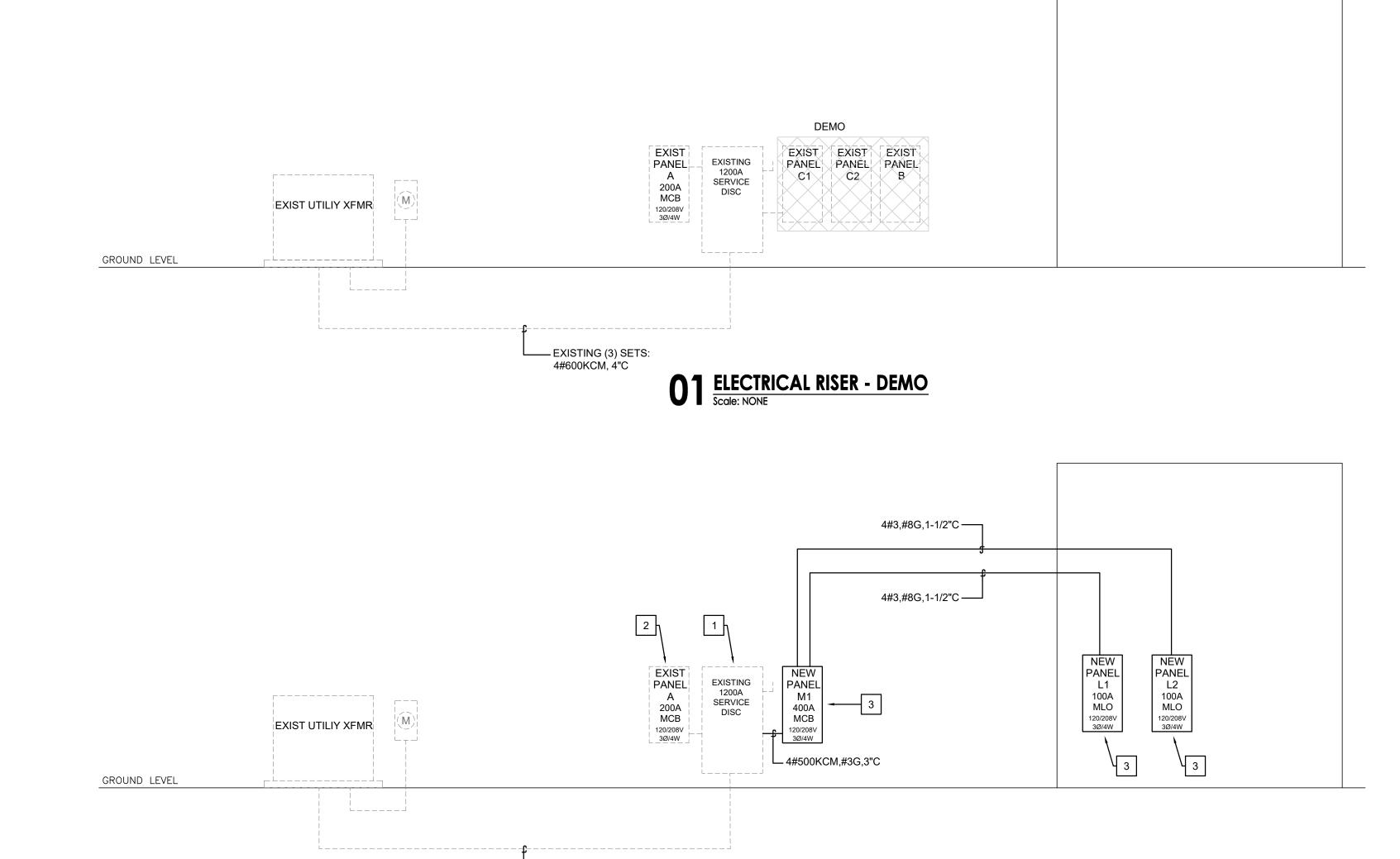
ELECTRICAL ROOF PLAN

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

SHEET NUMBER

E3.2





# 02 ELECTRICAL RISER Scale: NONE

EXISTING (3) SETS: 4#600KCM, 4"C

## GENERAL NOTES:

- 1. PROVIDE ARC FLASH LABELING FOR ALL NEW EQUIPMENT AS REQUIRED PER NEC ARTICLE 110.16 AND NFPA-70E.
- 2. UTILIZE COMPRESSION TYPE TERMINATIONS FOR ALL ALUMINUM CONDUCTOR TERMINATIONS. PROVIDE COMPLETE SUBMITTAL INFO FOR THE TERMINATIONS FOR APPROVAL PRIOR TO PURCHASE.

#### ELECTRICAL RISER - DRAWING NOTES

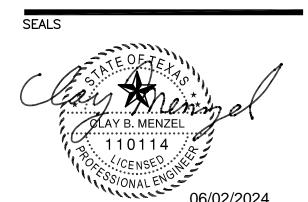
- 1 EXISTING SERVICE DISCONNECT TO REMAIN.
- 2 EXISTING PANELBOARD TO REMAIN. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EQUIPMENT DOES NOT HAVE ANY INTERNAL DAMAGE. NOTIFY ENGINEER WITH ANY DISCREPANCIES.
- NEW 120/208V, 3Ø, 4W PANELBOARD. PROVIDE NAMEPLATE AND TYPED PANELBOARD INDEX. RE: PANEL SCHEDULE FOR ADDITIONAL REQUIREMENTS.

		DISC (EXIST)	_						
LO	CATION:						MC	SURFACE	
208	120	VOLT (L-L / L-N)	_ 3	_ PH <u>4</u> W	100% NEUTRAL	_	ENCI	OSURE:	NEMA 3R
	1200	AMP							
LIGHTING	RCPT	MOTORS	FIXED ELEC	KITCHEN	OTHER			DESIGN	LOAD
(KVA)	(KVA)	(KVA)	HTG (KVA)	EQUIP(KVA)	EQUIP (KVA)	PHASE	CONNECTED LOAD (KVA)	KVA	AMPS
IMMEDIATELY D	OWNS:	TREAM ELECTRICAL EQUIPMENT C	ONNECTED LO	ADS (KVA):			LOAD DESCRIPTION:	DESIGN	LOAD:
5.20	0.00	0.00	0.00	0.00	1.20	-	PANEL A	7.70	21
6.13	13.20	0.20	23.44	0.00	43.69	-	PANEL M1	86.60	241
11.33	13.20	0.20	23.44	0.00	44.89	-	TOTAL DESIGN LOAD	94.30	262



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608







PROJE

WELLMED CLINIC

KELLER 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

ELECTRICAL RISER & SCHEDULS

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

SHEET NUMBER

E5.1

LOC	ATION:										MC	DUNTING:	SURFACE
208	120	VOLT (L-L / L-N)		3	PH	4 W	100	)% NEU	JTRAL		ENC	LOSURE:	NEMA 3R
	200	AMP PANEL		WITH	COPPE	REQU	JIPN	IENT G	ROUNE	BAR	AIC	& SCCR:	
	200	AMP MAIN BREAKER											
						PHA:	SE						
NOTES	KVA	LOAD DESCRIPTION	AMP /	PH	СКТ	АВ	С	СКТ	AMP	/ PH	LOAD DESCRIPTION	KVA	NOTES
	0.00	SPARE	20 /	1	1	Х		2	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	3	Х		4	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	5	STOREST CONTRACTOR	Х	6	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	7	Х	The second secon	8	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	9	Х		10	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	11	And Charles and Annual Polymer	Х	12	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	13	Х		14	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	15	Х		16	100	/ 2	SPARE	0.00	
	0.00	SPARE	20 /	1	17	Constitution of the same	Х	18		1	1	0.00	
	0.00	SPARE	20 /	1	19	Х		20	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	21	Х		22	20	/ 1	SPARE	0.00	
EXISTING	0.00	OUTSIDE LIGHTS	20 /	1	23	Constitution of Constitution o	Х	24	20	/ 1	PORCH LIGHTS	1.00	EXISTI
	0.00	SPARE	20 /	1	25	Х		26	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	27	Х		28	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	29	The state of the s	Х	30	20	/ 1	SIGN	0.50	EXISTI
	0.00	SPARE	20 /	1	31	Х		32	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	33	Х		34	20	/ 1	PAKRING LIGHTS (FRONT)	1.50	EXISTI
EXISTING	0.70	SIGN	20 /	1	35	The state of the s	Х	36	20	/ 1	PARKING LIGHTS	1.50	EXISTI
	0.00	SPARE	20 /	1	37	Х		38	20	/ 1	SPARE	0.00	
EXISTING	0.60	SIGN	30 /	2	39	Х		40	20	/ 1	SPARE	0.00	
	0.60		1	Production of the Control of the Con	41	Primary Committee	Χ	42	20	/ 1	SPARE	0.00	
IGHTING	RCPT	MOTORS	FIXED EI	FC	кітсні	ΕN		OTHER				DESIGN	LOAD
(KVA)	(KVA)		HTG (KV)		EQUIP		1	QUIP (K		PHASE	CONNECTED LOAD (KVA)	KVA	AMP
0.00	0.00	0.00	0.0		0.0			0.00		Α	0.00	0.00	0
2.10	0.00	0.00	0.00		0.0			0.00		В	2.10	2.63	22
3.10	0.00	0.00	0.0		0.0			1.20		C	4.30	5.08	42
5.20	0.00	0.00	0.0		0.0			1.20		TOTAL	6.40	7.70	21
125%	+	100% (125%OF LARGEST MOTOR)	100		100			100%			, NFACTORS (+ = FIRST 10KVA @ 10		
ES:		a. energende Andreas en er stelle men retret til finkt 1954 til 1955 til 19											
		TREAM ELECTRICAL EQUIPMENT CO		NACAMINA AND STATE OF THE STATE		TO A STATE OF THE					LOAD DESCRIPTION:		I LOAD:

		M1 (NEW)											
	CATION										MO	UNTING:	SURFACE
208	120	VOLT (L-L / L-N)		3	PH	4	W 1	00% NE	UTRAL		ENCL	OSURE:	NEMA 3R
	400	AMP PANEL		WITH	COPPE	RE	QUIP	MENTG	ROUN	D BAR	AIC 8	& SCCR:	25K RMS SYN
	400	AMP MAIN BREAKER						THE PROPERTY OF THE PROPERTY O					SERIES
ACT TO ACT OF THE PARTY OF THE						PH	IASE	-					
NOTES	KVA	LOAD DESCRIPTION	AMP	/ PH	CKT	Α	ВС	с скт	AMP	/ PH	LOAD DESCRIPTION	KVA	NOTES
	3.38	RTU-1	40	/ 3	1	Х		2	35	/ 3	RTU-3	3.05	
	3.38	I		1	3	711117711117711177	Х	4		1	I	3.05	
	3.38			1	5		)	X 6		1		3.05	
	3.38	RTU-2	40	/ 3	7	Х	and the same of the same	8	40	/ 3	RTU-4	3.38	
	3.38			1	9		Χ	10		1		3.38	
	3.38			/	11		)	X 12		1		3.38	
	1.58	ACCU/FCU-1	20	/ 2	13	Х		14	20	/ 1	SPARE	0.00	
	1.58	ı		/	15		Х	16	20	/ 1	SPARE	0.00	
	0.72	ROOF RECEPTACLES	20	/ 1 GFI	17	The state of the s	)	X 18	20	/ 1	SPARE	0.00	
	0.00	SPARE	20	/ 1	19	Х		20	100	/ 3	PANEL L1		
	0.00	SPARE	20	/ 1	21		Х	22		ſ			
	0.00	SPARE	20	/ 1	23		)	X 24		1			
	0.00	SPARE	20	/ 1	25	Х		26	100	/ 3	PANEL L2		
	0.00	SPARE	20	/ 1	27		Х	28		ſ			
	0.00	SPARE	20	/ 1	29		)	х 30		1			
LIGHTING	RCPT	MOTORS	FIXEDE	LEC	KITCH	ΞN		OTHE	2			DESIGN	LOAD
(KVA)	(KVA)	(KVA)	HTG (KV	'A)	EQUIP	(KV/	۹) ا	EQUIP (I	KVA)	PHASE	CONNECTED LOAD (KVA)	KVA	AMPS
0.00	0.00	0.00	8.3	 34	0.0	00		6.43	3	Α	14.77	14.77	123
0.00	0.00	0.00	8.3	34	0.0	00		6.43	3	В	14.77	14.77	123
0.00	0.72	0.00	6.7	'6	0.0	00		6.43	3	С	13.91	13.82	115
0.00	0.72	0.00	23.	44	0.0	00		19.2	9	TOTAL	43.45	43.36	120
125%	+	100% (125%OF LARGEST MOTOR)	100	)%	10	0%		1009	%	DESIG	N FACTORS (+ = FIRST 10KVA @ 100	)%, BAL	@ 50% PROP.
IOTES:				and the second of the second o				COLUMN TO THE PARTY OF THE PART					The state of the s
The second secon													
MMEDIATELYD	OWNS	TREAM ELECTRICAL EQUIPMENT CO	ONNECTE	ED LOAI	DS (KV	A):		and the state of t			LOAD DESCRIPTION:	DESIGN	I LOAD:
0.00	11.92	0.00	0.0			00		15.7	6	_	PANEL L1	26.24	73
6.13	0.56	0.20	0.0			00	$\top$	8.64		_	PANEL L2	17.00	47
6.13	13.20	0.20	23.		0.0		+	43.6			TOTAL DESIGN LOAD:	<del>                                     </del>	241

PANELE	SUARD:	LI (IVEVV)											
LOC	CATION:				A 100						MO	UNTING:	SURFACE
208	120	VOLT (L-L / L-N)		3	PH	4	W 10	0% NEU	UTRAL		ENCL	OSURE:	NEMA 1
WhatTeacThatThatThatThatThatThatThatThatThatThat	100	AMP MAIN LUGS ONLY		WITH	COPPE	RE	QUIPI	/ENT G	ROUND I	BAR	AIC 8	& SCCR:	10K RMS SY
	0	NO MAIN BREAKER											
						PH	IASE	No. of Control of Cont					
NOTES	KVA	LOAD DESCRIPTION	AMP	/ PH	СКТ	Α	ВС	СКТ	AMP /	PH	LOAD DESCRIPTION	KVA	NOTES
	0.90	PROVIDER	20	/ 1	1	Х	TENATEDAN'THAN	2	20 /	1	REFRIGERATOR	0.80	
	1.08	PROVIDER	20	/ 1	3		Х	4	20 /	1	COFFEE	1.20	
	0.36	NURSE STATION	20	/ 1	5		Х	6	20 /	1	BREAK COUNTER	0.18	
	0.54	NURSE STATION	20	/ 1	7	Х	000000000000000000000000000000000000000	8	20 /	1	BREAK COUNTER	0.18	
	0.54	NURSE STATION	20	/ 1	9		Х	10	20 /	1 GFI	MICROWAVE	1.20	
	108	EXAM ROOM	20	/ 1	11		Х	12	20 /	1 GFI	MICROWAVE	1.20	
	1.08	EXAM ROOM	20	/ 1	13	Х	7000	14	20 /	1	BREAK ROOM	0.72	
	1.08	EXAM ROOM	20	/ 1	15		Х	16	20 /	1	OFFICE	0.72	
	1.08	EXAM ROOM	20	/ 1	17		Х	18	20 /	1	REF COORD	0.54	
	1.08	EXAM ROOM	20	/ 1	19	Х	770007700770	20	20 /	1	EXAM ROOM	0.90	
	0.72	WORKROOM	20	/ 1	21		Х	22	20 /	1	NP EXAM ROOM	0.54	
	0.36	WORKROOM COUNTER	20	/ 1	23		Х	24	20 /	1	NP EXAM ROOM FAN	0.20	
	0.36	WORKROOM COUNTER	20	/ 1	25	Х	*HART THAN TO AN EVEN	26	20 /	1	GP RECEPTACLES	0.90	
	0.36	WORKROOM COUNTER	20	/ 1	27		Х	28	20 /	1	WAITING ROOM	1.44	
	0.18	WORKROOM REF	20	/ 1 GFI	29		Х	30	20 /	1	WAITING BEVERAGE	0.18	
	1.44	ADULTED	20	/ 1	31	Х	ACTIVIDACTIVAC	32	20 /	1	WAITING BEVERAGE	1.20	
	1.20	ADULT ED COUNTER	20	/ 1	33		Х	34	20 /	1	CHECK-IN	0.54	
	0.40	ADULT ED REF	20	/ 1 GFI	35		Х	36	20 /	1	BUSINESS COUNTER	0.36	
	0.18	ADULT ED COUNTER	20	/ 1	37	Х	ATT AACTT AACTT AACTT	38	20 /	1	COPIER	0.80	
	0.54	NURSE STATION	20	/ 1	39		Х	40	20 /	1	SPARE	0.00	
	0.40	EWC	20	/ 1 GFI	41		Х	42	20 /	1	SPARE	0.00	
LIGHTING (KVA)	RCPT (KVA)	MOTORS (KVA)	FIXED E		KITCH		4)   F	OTHER		HASE	CONNECTED LOAD (KVA)	DESIGN KVA	I LOAD AMPS
0.00	6.12	0.00	0.0			00	· / 1 : 5	4.96		A	11.08	10.59	88
0.00	3.96	0.00	0.0			00	$\dashv$	7.20		В	11.16	10.84	90
0.00	1.84	0.00	0.0				-	3.60		c	5.44	5.29	44
0.00	44.00	0.00	0.4		0.00		+	45.7	<del> </del>	OTAL	07.00	00.20	74

 0.00
 11.92
 0.00
 0.00
 15.76
 TOTAL
 27.68
 26.72
 74

 125%
 +
 100% (125%OF LARGEST MOTOR)
 100%
 100%
 100%
 DESIGN FACTORS (+ = FIRST 10KVA @ 100%, BAL @ 50% PROP.)

PANELBOARD: L1 (NEW)

PANELE	BOARD:	L2 (NEW)											
LOC	CATION:										М	OUNTING:	SURFACE
208	120	VOLT (L-L / L-N)		3	PH	4 V	V 10	0% NEU	JTRAL		ENC	LOSURE:	NEMA 1
	100	AMP MAIN LUGS ONLY		WITH	COPPE	REQ	UIPN	ΛENT G	ROUNI	D BAR	AIC	& SCCR:	10K RMS SYN
	0	NO MAIN BREAKER											
						PH/	∖SE						
NOTES	KVA	LOAD DESCRIPTION	AMP /	PH	СКТ	A E	3 C	СКТ	AMP	/ PH	LOAD DESCRIPTION	KVA	NOTES
	1.06	LIGHTING	20 /	1	1	Х		2	30	/ 1	MDF - L5-30R	1.00	
	0.98	LIGHTING	20 /	1	3	>	(	4	20	/ 1	MDF FOURPLEX	0.36	
	0.73	LIGHTING	20 /	1	5	and the entitlement of the control o	Х	6	20	/ 1	MDF FOURPLEX	0.36	
	1.48	LIGHTING	20 /	1	7	Х		8	20	/ 1	MDF ROOM	0.36	
	0.95	LIGHTING	20 /	1	9	)	(	10	20	/ 1	MDF ROOM	0.36	
	0.30	LIGHTING	20 /	1	11	STRATTRACTION TO	Х	12	20	/ 1	MDF HVAC COND PUMP	0.20	
	0.63	INV-1	20 /	1	13	Х	AND PROCESSORY PROCESS	14	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	15	)	(	16	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	17	Tabelli Adilli balli i ba	Х	18	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	19	Х	PP MAN PP MAN P MAN P PA	20	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	21	>	(	22	20	/ 1	SPARE	0.00	
	0.00	SPARE	20 /	1	23	NOTTONOTONOTONO	Х	24	20	/ 1	HW CIRC PUMP	0.20	
	0.00	SPARE	20 /	1	25	Х		26	30	/ 3	WATER HEATER	2.00	
	0.36	FIRE RISER GP RECEPT	20 /	1	27	>	(	28		1		2.00	
	0.20	FIRE ALARM PANEL	20 /	1	29	ettaetttaetttaett	Х	30		1		2.00	
			_										
LIGHTING	RCPT	MOTORS	FIXED EL	.EC	KITCHE	ΞN		OTHER	₹			DESIGN	LOAD
(KVA)	(KVA)	(KVA)	HTG (KV	۹)	EQUIP	(KVA)	) E	QUIP (K	(VA)	PHASE	CONNECTED LOAD (KVA)	KVA	AMPS
3.17	0.00	0.00	0.0	0	0.0	00		3.36	;	Α	6.53	7.33	61
1.93	0.36	0.00	0.0	0	0.0	00		2.72		В	5.01	5.50	46
1.03	0.20	0.20	0.0	0	0.0	00		2.56		С	3.99	4.25	35
6.13	0.56	0.20	0.0	0	0.0	00		8.64		TOTAL	15.53	17.07	47
125%	+	100% (125%OF LARGEST MOTOR)	100	%	100	)%		100%	6	DESIGN	NFACTORS (+ = FIRST 10KVA @ 10	00%, BAL	@ 50% PROP



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





TX Firm No. 1869 Project No. www.wylieeng.com



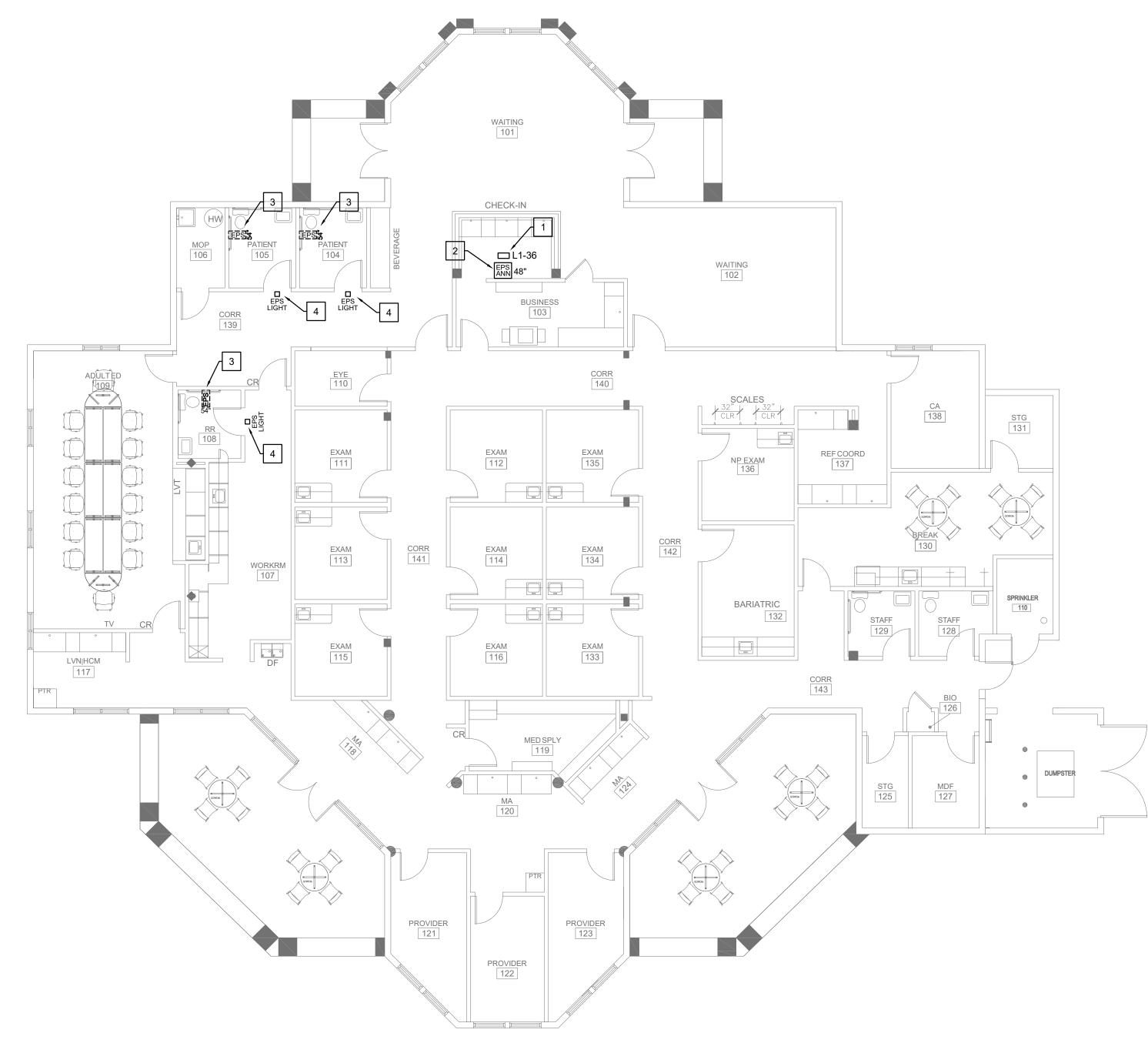
WELLMED CLINIC

**KELLER** 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

ELECTRICAL SCHEDULES

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:



# 01 NURSE CALL SYSTEM - PLAN Scale: 1/8"=1'-0"

# NURSE CALL - GENERAL NOTES:

- 1. NURSE CALL SYSTEM SHALL BE CORNELL 4000 SERIES.
- 2. REFERENCE MANUFACTURER INSTALLATION CRITERIA FOR ADDITIONAL REQUIREMENTS.
- 3. NURSE CALL SYSTEM SHALL BE PROVIDED WITH ALL ACCESSORIES AND COMPONENTS AS REQUIRED FOR A FUNCTIONAL SYSTEM.
- 4. PROVIDE AND INSTALL ALL WIRING AS REQUIRED FOR A FUNCTIONAL SYSTEM.
- 5. NURSE CALL SYSTEM CORNELL 4000 SERIES SHALL INCLUDE, BUT NOT LIMITED TO:
  - CORNELL

#P-512241A 24VDC POWER SUPPLY (OR EQUAL)

#A-4003A OR A-4006A THREE OR SIX ZONE ANNUNCIATOR STATION AS REQUIRED CORNELL CORNELL CORNELL

#E-114-3 EMERGENCY PULL CORD STATION #L-101 SINGLE STATUS CORRIDOR LIGHT

#### NURSE CALL - DRAWING NOTES:

- CORNELL #P-512241A 24VDC POWER SUPPLY (OR EQUAL) 24VDC POWER SUPPLY MOUNTED IN ACCESSIBLE CEILING ABOVE ANNUNCIATOR PANEL.
- PROVIDE AND INSTALL CORNELL #A-4003A THREE ZONE ANNUNCIATOR STATION. PROVIDE MULTI-GANG MASONRY STYLE BACK-BOX GANGIBLE BACK BOXES NOT ACCEPTABLE.
- PROVIDE AND INSTALL CORNELL #E-114-3 EMERGENCY PULL CORD STATION. STATION

SHALL BE MOUNTED ON STANDARD OUTLET BOX WITH SINGLE-GANG MUD RING.

PROVIDE AND INSTALL CORNELL #L-101 SINGLE STATUS CORRIDOR LIGHT. CORRIDOR LIGHT SHALL BE MOUNTED ON STANDARD OUTLET BOX WITH SINGLE-GANG MUD RING.

The **Dawley** 

Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





9050 N. Capital of Texas Hwy., Suite 365 Austin, Texas 78759 No. 1869 512-888-9945 TX Firm No. 1869 Project No. www.wylieeng.com



WELLMED CLINIC

**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

NURSE CALL SYSTEM PLAN

PROJECT NO: WTX07J 05.31.24 **REVISION DATES:** 

NOTES: 1. ALL SYMBOL	S / ARPPC	LEGEND OF PLUMBING S			GENERAL NOTES
SYMBOL	ABV.	DESCRIPTION			1. FURNISH AND INSTALL ALL ITEMS, INCLUDING EVERY ARTICLE, DEVICE, OR ACCESSORY REASONABLY NECESSARY TO FACILITATE EACH SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED. ELEMENTS OF THE WORK SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT,
В——	7.57.	BUTANE	AAP	AREA ALARM PANEL	TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PERMITS AND LICENSES.
——CDWR——		CHILLED DRINKING WATER SURPLY	AAV	AUTOMATIC AIR VENT	2. DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPLETE PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT WITHIN DESIGN INTENT AT NO ADDITIONAL COST TO OWNER/TENANT OR TENANT, CONTRACTOR SHALL REQUEST
CDWS		CHILLED DRINKING WATER SUPPLY DRAIN PIPING	A.F.F.	ABOVE FINISHED FLOOR ACCESS PANEL	ADDITIONAL INFORMATION IN CASES OF DOUBT.
DSP		DRY SPRINKLER PIPE	B.F.F.	BELOW FINISHED FLOOR	3. WORK SHALL COMPLY WITH THE MOST RECENT VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT
F	F G	FIRE LINE  NATURAL GAS PIPING	BFP	BACKFLOW PREVENTER	DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATION RESULTING THEREFROM SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE CONTRACTOR
GW	GW	GREASE WASTE ABOVE SLAB	BOB BOP	BOTTOM OF BEAM  BOTTOM OF PIPE	SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE PROCEEDING. SHOULD THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE
GW	GW	GREASE WASTE BELOW SLAB	BTUH	BRITISH THERMAL UNITS PER HOUR	CODES, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES.
——————————————————————————————————————	HPR	STEAM (LOW PRESSURE RETURN)	C/C	CUT AND CAP	4. BEFORE SUBMITTING A BID, IT WILL BE NECESSARY FOR EACH CONTRACTOR WHOSE WORK IS INVOLVED TO VISIT THE SITE
——————————————————————————————————————	HPS OFD	STEAM (LOW PRESSURE SUPPLY) STORM OVER FLOW DRAIN	CFH CFS	CUBIC FEET PER HOUR  CUBIC FEET PER SECOND	AND ASCERTAIN FOR HIMSELF THE CONDITIONS TO BE MET IN INSTALLING THE WORK AND MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL PRICE. FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE
P	Р	PROPANE GAS PIPING	CI	CAST IRON	CONTRACT DOCUMENTS.
PSS	PSS	PUMPED SANITARY SEWER	CLG	CEILING	5. CONSIDERATION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS
PSD	PSD SD	PUMPED STORM SEWER  STORM DRAIN ABOVE SLAB	CO	CLEANOUT CONNECTION	SPECIFIED AND/OR INDICATED, SCHEDULED, OR IMPLIED ON THE CONTRACT DOCUMENTS, AND/OR REQUIRED BY THE NATURE OF THIS WORK.
SD	SD	STORM DRAIN BELOW SLAB	CONT.	CONTINUATION	6. ALL WORK SHALL BE ARRANGED IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND
S	SP	SPRINKLER LINE	DF	DRINKING FOUNTAIN	PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL OPERATING AND CONTROL EQUIPMENT PROPERLY TO PROVIDE EASY ACCESS AND ARRANGE ENTIRE WORK WITH ADEQUATE ACCESS FOR OPERATION AND
	SS	SANITARY SEWER ABOVE SLAB  SANITARY SEWER BELOW SLAB	DPV DWG.	DRY PIPE VALVE DRAWING	MAINTENANCE, AND FOR PROPER CODE AND/OR MANUFACTURERS CLEARANCES.
SV	SV	SANITARY VENT	EA	EACH	7. ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL LISTED, IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THIS PROJECT.
CW	CW	COLD WATER	EDF	ELECTRIC DRINKING FOUNTAIN	8. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED. SUBMIT MINIMUM FOUR (4) COPIES FOR APPROVAL.
SW	SW	SOFT WATER  HOT WATER	FCO FD	FLOOR CLEANOUT  FLOOR DRAIN	9. THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:
	HWR	HOT WATER RETURN	FDV	FIRE DEPARTMENT VALVE	A. EQUIPMENT AND MATERIALS SHOP DRAWINGS  B. COORDINATION DRAWINGS
		DIRECTION OF FLOW	F.F.	FINISHED FLOOR	C. RECORD DRAWINGS  D. OPERATING AND MAINTENANCE MANUALS
		DIRECTION OF SLOPE DOWN  DROP IN PIPE	FHC F.L.	FIRE HOSE CABINET FLOW LINE	E. FIRE STOP MATERIALS AND DETAILS
		RISE IN PIPE	FS	FLOOR SINK	— 10. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, PIPING, CONDUIT, CABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTION EQUIPMENT, AND
—————————————————————————————————————		GATE VALVE	FT	FEET	THE STRUCTURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF, AFTER INSTALLED, NEW DUCTWORK, PIPING, CONDUIT, CABLE, ETC., IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE
— ₩ — — — — — — — — — — — — — — — — — —		BALL VALVE	FU	FIXTURE UNITS	WORK, WHICH IS EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE, ETC., SHALL BE RELOCATED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT. COORDINATE ALL WORK COMPLETELY
		CHECK VALVE SUPERVISED VALVE WITH FLOW SWITCH	GC GPH	GENERAL CONTRACTOR  GALLONS PER HOUR	WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
<del>→</del>		SUPERVISED VALVE IN VERTICAL	GPM	GALLONS PER MINUTE	11. MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND
——————————————————————————————————————		PLUG VALVE / GAS COCK	НВ	HOSE BIBB	PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT, WHICH ARE FOUND TO HAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE
——————————————————————————————————————		BUTTERFLY VALVE  BALANCING VALVE	HP I.E.	HORSEPOWER INVERT ELEVATION	OWNER/TENANT AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER/TENANT.  12. DAMAGE CAUSED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO
		PIPE UNION	ĸw	KILOWATTS	ADDITIONAL COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS BEING REMOVED.
A		PRESSURE CONTROL VALVE	LAV	LAVATORY	13. THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SHALL INCLUDE
		3-WAY VALVE SOLENOID VALVE	MAP MECH	MASTER ALARM PANEL MECHANICAL	AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRANTY PERIOD THE CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT:
FS		FLOW SWITCH	MH	MANHOLE	A. ALL WORK INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR MATERIALS.
		PRESSURE GAUGE WITH GAUGE COCK	MS	MOP SINK	B. ALL APPARATUS WILL DEVELOP CAPACITIES AND PERFORMANCE CHARACTERISTICS SPECIFIED. C. THE SYSTEMS SHALL OPERATE WITHOUT MALFUNCTION.
		THERMOMETER  ROOF DRAIN / OVERFLOW DRAIN	N.C.	NORMALLY CLOSED  NOT IN CONTRACT	15. THE START OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL COMPLETION"
—————————————————————————————————————		FLOOR DRAIN	N.O.	NORMALLY OPEN	AS AGREED TO BY THE OWNER/TENANT.
		FLOOR SINK	O.F./C.I.	OWNER FURNISHED/CONTRACTOR INSTALLED	16. THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACTOR SHALL X-RAY ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.
<del>-</del> \\		T & P RELIEF VALVE STRAINER	O.F./O.I.	OWNER FURNISHED/OWNER INSTALLED OVERFLOW DRAIN	17. THIS CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND SHALL PAY
CO	СО	END OF LINE CLEANOUT	PH	PHASE	ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.
FCO ©+	FCO	FLOOR CLEANOUT	PIV	POST INDICATOR VALVE	18. IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE GREATER AMOUNT OF TOTAL COST SHALL BE PRICED. BRING THE CONFLICT TO THE ATTENTION OF THE ENGINEER AND REQUEST DIRECTION.
WCO	WCO	WALL CLEANOUT  CAP	PRV RD	PRESSURE REDUCING VALVE ROOF DRAIN	19. PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRESAFED TO COMPLY WITH ASTM E-814
		FLEXIBLE CONNECTION	RE:	REFER TO	(UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.
(E)			R.I.C.	ROUGH-IN AND CONNECT	20. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, A COMPLETE SET OF "AS BUILT" DRAWINGS PORTRAYING ACTUAL SITE CONDITIONS OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE
		NEW CONNECTION TO EXISTING	RO RPBFP	REVERSE OSMOSIS  REDUCED PRESSURE BACKFLOW PREVENTER	PROTECTION WORK. SUBMISSION SHALL CONSIST OF ONE SET OF PAPER COPIES AND ONE SET OF CAD FILES IN AUTOCAD V. 2004 FORMAT WITH THE OWNER'S STANDARD LAYERING SCHEME.
<b>(E)</b>		DEMOLISH TO THIS POINT	RPM	REVOLUTIONS PER MINUTE	21. IN THE EVENT THAT MATERIALS, PRODUCTS, AND/OR PROCESSES BEING PROPOSED FOR THIS PROJECT CONTAIN, OR MAY EMIT, ANY VOLATILE ORGANIC COMPOUNDS (VOC), FORMALDEHYDE FORMULATIONS, OR HAZARDOUS OUT-GASSING, AS
E		EXISTING RISER	RVB	REFRIGERATOR VALVE BOX	DETERMINED BY THE MANUFACTURER, A MATERIALS SAFETY DATA SHEET SHALL BE SUBMITTED AS PART OF THE SHOP DRAWING PROCESS FOR REVIEW BY THE ARCHITECT/ENGINEER/ OWNER.
APPLICABL	E COL	DES AND STANDARDS	SD	STORM DRAIN	22. VERIFY LOCATIONS OF EXISTING VALVES LOCATED WITHIN SCOPE OF WORK. MODIFY EXISTING OR PROVIDE NEW MEANS
		TH CITY OF KELLER AMENDMENTS Y OF KELLER AMENDMENTS	S.F. SIA.	SQUARE FEET SIAMESE	OF ACCESS WHERE REQUIRED BECAUSE OF NEW CONSTRUCTION.  PLUMBING GENERAL NOTES
3. ELECTRICAL CODE -	2020 NEC	WITH CITY OF KELLER AMENDMENTS WITH CITY OF KELLER AMENDMENTS WITH CITY OF KELLER AMENDMENTS	SK	SINK	REFER TO THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING
5. PLUMBING CODE - 2	021 IPC WI	TH CITY OF KELLER AMENDMENTS ENERGY CONSERVATION CODE WITH CITY	T.O.P.	TOP OF PIPE	FIXTURES.
OF KELLER AMENDA	MENTS	NT OF JUSTICE AMERICANS WITH DISABILITIES	TP TYP	TRAP PRIMER  TYPICAL	2. REFER TO THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS OF ALL FLOOR DRAINS.
ACT AND TEXAS ACC			U	URINAL	3. ALL SANITARY AND VENT PIPING SHALL BE ROUTED AT A SLOPE OF NOT LESS THAN 1/4" PER FOOT, UNLESS OTHERWISE NOTED.
	TION!		U/F	UNDERFLOOR	4. THE PLUMBING CONTRACTOR SHALL COORDINATE EXACT ROUTING OF ALL PIPING WITH THE WORK OF ALL OTHER TRADES.
PRE-CONSTRUC	JION	PLUMBING SYSTEM CHECK	U/S VAC. BRKR.	UNDERSLAB  VACUUM BREAKER	PROVIDE OFFSETS IN PIPING WHERE REQUIRED BY COORDINATION OF TRADES.
		HE OWNER <u>IN WRITING</u> , OF <u>ANY</u> AND <u>ALL</u> FOUND DURING THIS PRE-CONSTRUCTION	VAC. BRRR.	VITRIFIED CLAY TILE	5. INSTALL ALL FLOOR DRAINS AND FLOOR SINKS SUCH THAT GRATING IS FLUSH WITH ADJACENT FLOORING SURFACE. FLOOR SHALL SLOPE TO DRAIN. COORDINATE ALL REQUIREMENTS WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO
•		ECTIVE ACTIONS REQUIRED, AND ASSOCIATED  T. THE CONTRACTOR SHALL OBTAIN WRITTEN	VTR	VENT THRU ROOF	INSTALLATION.
		PRIOR TO BEGINNING DEMOLITION OR NEW CTIONS TO BE TAKEN. ALL DISCREPANCIES	WCO	WATER CLOSET WALL CLEANOUT	6. THE PLUMBING CONTRACTOR SHALL CLEAN, FLUSH, AND DISINFECT ALL COLD WATER AND HOT WATER PIPING AND ALL FIXTURES PRIOR TO COMPLETION OF WORK.
SHALL BECOME THE RES	PONSIBILIT	D IN THE PRE-CONSTRUCTION SERVICE CHECK  Y OF THE CONTRACTOR TO CORRECT OR	WH	WALL HYDRANT	7. VENTS THROUGH ROOF TO BE LOCATED A MINIMUM OF 30'-0" HORIZONTALLY AWAY FROM OUTSIDE AIR INTAKES.
REPLACE AT NO ADDITIO	NAL COST	TO THE OWNER.	WMB	WASHING MACHINE BOX	8. FLOOR DRAINS NOT RECEIVING REGULAR-USE DRAINAGE ARE TO BE TRAP PRIMED.
			YH	YARD HYDRANT	9. PROVIDE BACKFLOW PREVENTION AS REQUIRED BY THE LOCAL CROSS CONNECTION CONTROL DEPT. STANDARDS WHERE NOT PROVIDED OR INADEQUATELY PROVIDED, BY EQUIPMENT MANUFACTURER.
			ZV (A)	ZONE VALVE ITEM NOTED TO BE ABANDONED	10. INSTALL PIPING AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.
			(D)	ITEM NOTED TO BE DEMOLISHED	11. VERIFY DIMENSIONS FROM ARCHITECTURAL DRAWINGS AND FROM ACTUAL MEASUREMENTS AT JOBSITE.
PLUMBING PIPING			(E)	EXISTING ITEM	12. PROVIDE SADDLES AND SHIELDS FOR SUPPORT OF INSULATED PIPING TO PREVENT CRUSHING.
MAXIMUM SPACING BE BE IN ACCORDANCE W		_	(N) (R)	NEW ITEM  ITEM NOTED TO RELOCATED	13. PIPING PENETRATIONS THROUGH PERIMETER BEAMS, FOUNDATION ON GRADE, AND STRUCTURAL FLOORS SHALL BE
SIZE OF PIPING DISTAN		EN SUPPORTS: COPPER CAST IRON	PVC (DWV)		SLEEVED. COORDINATE SLEEVE LOCATIONS AND SIZES WITH STRUCTURAL PRIOR TO POUR.
	1/2" 3/4"	5' - 6' -	- 4'		14. PROVIDE DIELECTRIC UNIONS AT DISSIMILAR MATERIALS.      15. PROVIDE ESCUTCHEONS AT ALL FINISHED WALL AND CEILING PIPING PENETRATIONS.
	1" 1-1/-	•	4' 4'		16. ALL PIPING SHALL BE IDENTIFIED AS TO TYPE OF USE, SERVICE, AND DIRECTION OF FLOW. LOCATE MARKERS AT EACH
	1-1/: 2"	2" 9' 5' 10' 5'	4' 4'		VALVE, AT ENTRIES TO WALLS, AND ON 20-FOOT CENTERS ON STRAIGHT RUNS OF PIPE. PROVIDE A FLOW ARROW AT EACH IDENTIFICATION MARKER. PIPE MARKERS SHALL BE SETON "SETMARK" OR EQUAL.
SUPPORTS SHALL BE A	RRANGED	SO AS TO BE NEAR THE WEAKEST POINT OF THE SPA	AN SUCH AS JOINTS	TURNS AND AT THE BASE OF ALL VERTICAL TO	17. COORDINATE WORK COMPLETELY WITH ALL OTHER TRADES.
HORIZONTAL OFFSETS		L WASTE TRAPS.	S OR TIE WIRES FOR	ITS EINAL SLIDDODT	18. INSTALL PIPING FREE OF SAGS AND BENDS. PROVIDE NON-METALLIC COATED HANGERS WHERE IN DIRECT CONTACT WITH COPPER PIPING.

IN NO CASE SHALL ANY PIPING DEPEND ON BLOCKS, BRICKS, STONE, WOOD SLEEPERS OR TIE WIRES FOR ITS FINAL SUPPORT.

#### **GENERAL NOTES**

- ID INSTALL ALL ITEMS, INCLUDING EVERY ARTICLE, DEVICE, OR ACCESSORY REASONABLY NECESSARY TO EACH SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED. ELEMENTS OF SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT. TATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED PERMITS AND LICENSES.
- ARE SCHEMATIC IN NATURE AND DO NOT NECESSARILY REFLECT ALL WORK REQUIRED TO COMPLETE ONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT GN INTENT AT NO ADDITIONAL COST TO OWNER/TENANT OR TENANT. CONTRACTOR SHALL REQUEST INFORMATION IN CASES OF DOUBT.
- COMPLY WITH THE MOST RECENT VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATION RESULTING I SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE CONTRACTOR ORT ANY SUCH MODIFICATIONS TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE IG. SHOULD THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE
- BMITTING A BID. IT WILL BE NECESSARY FOR EACH CONTRACTOR WHOSE WORK IS INVOLVED TO VISIT THE SITE AIN FOR HIMSELF THE CONDITIONS TO BE MET IN INSTALLING THE WORK AND MAKE PROVISIONS FOR THE IN HIS FINAL PRICE. FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE
- TION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE . TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS ND/OR INDICATED, SCHEDULED, OR IMPLIED ON THE CONTRACT DOCUMENTS, AND/OR REQUIRED BY THE
- HALL BE ARRANGED IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND ULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL OPERATING AND CONTROL EQUIPMENT TO PROVIDE EASY ACCESS AND ARRANGE ENTIRE WORK WITH ADEQUATE ACCESS FOR OPERATION AND CE, AND FOR PROPER CODE AND/OR MANUFACTURERS CLEARANCES.
- ENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL LISTED, IN CE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THIS PROJECT.
- ACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED. IIMUM FOUR (4) COPIES FOR APPROVAL
- /ING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:
- PMENT AND MATERIALS SHOP DRAWINGS
- RDINATION DRAWINGS
- ORD DRAWINGS RATING AND MAINTENANCE MANUALS
- STOP MATERIALS AND DETAILS
- AL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, PIPING, ABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTION EQUIPMENT, AND TURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF, AFTER INSTALLED, NEW DUCTWORK, IDUIT, CABLE, ETC., IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE CH IS EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE BE RELOCATED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT. COORDINATE ALL WORK COMPLETELY
- AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEMS OF AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND NCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT, WHICH ARE IAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE IANT AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER/TENANT.
- USED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS
- NTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SHALL INCLUDE NE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRANTY PERIOD THE OR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT:
- INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR MATERIALS. APPARATUS WILL DEVELOP CAPACITIES AND PERFORMANCE CHARACTERISTICS SPECIFIED. SYSTEMS SHALL OPERATE WITHOUT MALFUNCTION.
- OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL COMPLETION" TO BY THE OWNER/TENANT.
- NG MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACTOR SHALL ENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.
- ACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND SHALL PAY CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.
- NT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE GREATER AMOUNT OF TOTAL COST RICED. BRING THE CONFLICT TO THE ATTENTION OF THE ENGINEER AND REQUEST DIRECTION.
- DNS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRESAFED TO COMPLY WITH ASTM E-814
- LETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, A COMPLETE SET OF "AS INGS PORTRAYING ACTUAL SITE CONDITIONS OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE WORK. SUBMISSION SHALL CONSIST OF ONE SET OF PAPER COPIES AND ONE SET OF CAD FILES IN AUTOCAD MAT WITH THE OWNER'S STANDARD LAYERING SCHEME.
- NT THAT MATERIALS, PRODUCTS, AND/OR PROCESSES BEING PROPOSED FOR THIS PROJECT CONTAIN, OR MAY OLATILE ORGANIC COMPOUNDS (VOC), FORMALDEHYDE FORMULATIONS, OR HAZARDOUS OUT-GASSING, AS D BY THE MANUFACTURER, A MATERIALS SAFETY DATA SHEET SHALL BE SUBMITTED AS PART OF THE SHOP ROCESS FOR REVIEW BY THE ARCHITECT/ENGINEER/ OWNER.
- ATIONS OF EXISTING VALVES LOCATED WITHIN SCOPE OF WORK. MODIFY EXISTING OR PROVIDE NEW MEANS WHERE REQUIRED BECAUSE OF NEW CONSTRUCTION

### PLUMBING GENERAL NOTES

- HE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING
- THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS OF ALL FLOOR DRAINS.
- RY AND VENT PIPING SHALL BE ROUTED AT A SLOPE OF NOT LESS THAN 1/4" PER FOOT, UNLESS OTHERWISE
- FSETS IN PIPING WHERE REQUIRED BY COORDINATION OF TRADES. FLOOR DRAINS AND FLOOR SINKS SUCH THAT GRATING IS FLUSH WITH ADJACENT FLOORING SURFACE.
- LL SLOPE TO DRAIN. COORDINATE ALL REQUIREMENTS WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO
- ING CONTRACTOR SHALL CLEAN, FLUSH, AND DISINFECT ALL COLD WATER AND HOT WATER PIPING AND ALL RIOR TO COMPLETION OF WORK.
- OUGH ROOF TO BE LOCATED A MINIMUM OF 30'-0" HORIZONTALLY AWAY FROM OUTSIDE AIR INTAKES.
- AINS NOT RECEIVING REGULAR-USE DRAINAGE ARE TO BE TRAP PRIMED.
- ACKFLOW PREVENTION AS REQUIRED BY THE LOCAL CROSS CONNECTION CONTROL DEPT. STANDARDS WHERE DED OR INADEQUATELY PROVIDED, BY EQUIPMENT MANUFACTURER.
- PING AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.
- ENSIONS FROM ARCHITECTURAL DRAWINGS AND FROM ACTUAL MEASUREMENTS AT JOBSITE.
- ADDLES AND SHIELDS FOR SUPPORT OF INSULATED PIPING TO PREVENT CRUSHING.
- ETRATIONS THROUGH PERIMETER BEAMS, FOUNDATION ON GRADE, AND STRUCTURAL FLOORS SHALL BE COORDINATE SLEEVE LOCATIONS AND SIZES WITH STRUCTURAL PRIOR TO POUR.
- IELECTRIC UNIONS AT DISSIMILAR MATERIALS.
- SCUTCHEONS AT ALL FINISHED WALL AND CEILING PIPING PENETRATIONS.
- SHALL BE IDENTIFIED AS TO TYPE OF USE, SERVICE, AND DIRECTION OF FLOW. LOCATE MARKERS AT EACH NTRIES TO WALLS, AND ON 20-FOOT CENTERS ON STRAIGHT RUNS OF PIPE. PROVIDE A FLOW ARROW AT EACH TION MARKER. PIPE MARKERS SHALL BE SETON "SETMARK" OR EQUAL.
- E WORK COMPLETELY WITH ALL OTHER TRADES.
- 8. INSTALL PIPING FREE OF SAGS AND BENDS. PROVIDE NON-METALLIC COATED HANGERS WHERE IN DIRECT CONTACT WITH COPPER PIPING.

#### PLUMBING GENERAL NOTES (CON'T)

- 19. PROVIDE ENGINEERED WATER HAMMER ARRESTERS SIZED AND PLACED IN ACCORDANCE WITH STANDARD PDI-WH 201. AIR CHAMBERS SHALL NOT BE ALLOWED.
- 20. PROVIDE FLEXIBLE EXPANSION FITTINGS SUITABLE FOR SANITARY (DWV) AND RAINWATER PIPING WHERE PIPING ENTERS EXPANSIVE SOILS TO ALLOW FOR 4-IN OF DIFFERENTIAL MOVEMENT.
- 21. ALL FLOOR PENETRATIONS MUST BE SEALED WITH FIRE CAULK.
- 22. MAKE ALL NECESSARY EXCAVATIONS, CUTTING OF PAVING, CONCRETE, ETC., REMOVAL OF UNUSABLE SPOIL MATERIAL, DO ALL BACKFILLING WITH STABILIZED FILL, AND DO TEMPORARY PATCH PAVING REPAIRS NECESSARY FOR PROPER EXECUTION OF THE WORK. BACKFILL SHALL BE MECHANICALLY COMPACTED TO A DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST.
- 23. PROVIDE MINIMUM 1" AIR GAP AT DRAIN DISCHARGE FOR ALL INDIRECT WASTE PIPING.
- 24. DISCHARGE PIPING FROM A DISHWASHER SHALL BE LOOPED UP AND SECURELY FASTENED TO THE UNDERSIDE OF THE COUNTER OR AN APPROVED DISHWASHER AIR-GAP FITTING IS REQUIRED.
- 25. COMPRESSION TANKS SUPPLIED AT EACH WATER HEATER SHALL BE SECURED TO A WALL WITH (2) 1" X 14 GA. GALVANIZED STRAPS. PROVIDE LAG BOLTS AND BLOCKING AS REQUIRED.
- 26. AN ATMOSPHERIC VACUUM BREAKER OR OTHER APPROVED BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON ALL THREADED HOSE BIBB, WALL HYDRANT OR FAUCET CONNECTIONS LOCATED INSIDE OR OUTSIDE THE BUILDING.

### PLUMBING SPECIFICATIONS

#### DOMESTIC WATER PIPING

- 1. ALL BRANCH WATER PIPING INSIDE THE BUILDING SHALL BE TYPE "L" COPPER TUBING (ASTM B-88) WITH WROUGHT COPPER FITTINGS (ANSI B16.22). CLEAN AND DEBURR THE INSIDE OF ALL FITTINGS CAREFULLY BEFORE JOINING WITH 95/5 TIN/ANTIMONY SOLDER. NO ACIDS SHALL BE USED TO CLEAN EITHER PIPE OR FITTINGS OR AS A FLUX IN SWEATING JOINTS. THE USE OF DRILLED-T CONNECTIONS IS NOT PERMITTED.
- EACH FIXTURE, DEVICE OR CONNECTION TO EQUIPMENT SHALL HAVE A STOP VALVE TO ISOLATE THAT FIXTURE WITHOUT SHUTTING DOWN ANY OTHER PORTION OF THE SYSTEM.
- ALL COPPER WATER PIPING SHALL BE COMPLETELY ISOLATED FROM METAL HANGERS, METAL STUDS OR ANY OTHER ELECTRICALLY CONDUCTIVE BUILDING COMPONENTS. PROVIDE DIELECTRIC UNION AT ALL CONNECTIONS BETWEEN COPPER AND GALVANIZED PIPE.
- 4. TRAP PRIMER PIPING SHALL BE ASTM B88, TYPE K COPPER, SEAMLESS TUBING, BRAZED JOINTS 1/2".

#### THERMAL INSULATION FOR DOMESTIC WATER PIPING

- 1. ALL DOMESTIC WATER PIPING SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH AN ALL-SERVICE JACKET OR "AP" ARMAFLEX FLEXIBLE ELASTOMERIC PIPE INSULATION WITH AN ALL-SERVICE JACKET. ELBOWS AND FITTINGS SHALL BE INSULATED AND COVERED WITH ZESTON 2000 25/50 FIRE/SMOKE RATED PVC JACKETS.
- 2. DOMESTIC COLD WATER PIPING:
- ALL SIZES 1-INCH THICKNESS \*IF EXPOSED TO OUTDOOR CONDITIONS, INCREASE BY 1/2"
- 3. DOMESTIC HOT WATER PIPING:
- 1-1/4" AND SMALLER 1-INCH THICKNESS 1-1/2" AND LARGER - 2-INCH THICKNESS
- \*IF EXPOSED TO OUTDOOR CONDITIONS, INCREASE BY 1/2"
- 4. DOMESTIC HOT WATER RECIRCULATION PIPING: 1-1/4" AND SMALLER - 1-INCH THICKNESS 1-1/2" AND LARGER - 2-INCH THICKNESS
- \*IF EXPOSED TO OUTDOOR CONDITIONS, INCREASE BY 1/2"
- 5. CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1/2-INCH THICKNESS FIBERGLASS INSULATION WITH ALL SERVICE JACKET (ASJ) VAPOR BARRIER.
- ALL DRAIN HORIZONTAL STORM DRAINAGE PIPING AND PIPING RECEIVING CHILLED DRAINAGE OR SHALL BE INSULATED WITH 1" THICKNESS FIBERGLASS INSULATION IF ABOVE GRADE.
- 7. AT ALL CLEVIS HANGERS, INSTALL INSULATION OVER HANGER AND PROVIDE A VAPOR BARRIER COVER.

#### BALL VALVES

- 1. ALL VALVES SHALL BE BALL VALVES, NO GATE VALVES SHALL BE USED.
- 2. BALL VALVES SHALL BE WATTS MODEL B-6000 BRONZE, SHALL HAVE BOTTOM LOADED PRESSURE RETAINING BLOW-OUT PROOF STEMS, ADJUSTABLE PACKING NUT, GLASS REINFORCED DURAFILL OR VIRGIN PTFE SEATS AND BALL. VALVES SHALL BE PRESSURE RATED AT 600 PSI WOG 1/4" UP TO 2" AND 400 PSI WOG 2-1/2" AND 3". VALVES SHALL BE MANUFACTURED AND ASSEMBLED IN THE U.S.A.

#### SANITARY SOIL WASTE AND VENT PIPING

- BELOW GROUND INSIDE BUILDING VERTICAL AND HORIZONTAL WASTE AND VENT PIPING AND FITTINGS SHALL BE ASTM D2665, SCHEDULE 40 PVC JOINED WITH SOLVENT WELDS.
- ABOVE GROUND INSIDE BUILDING VERTICAL AND HORIZONTAL WASTE AND VENT STACKS, FIXTURE AND VENT MANIFOLDS SHALL BE "NO-HUB" CAST IRON SOIL PIPE AND FITTINGS (CISPI301) ASSEMBLED WITH 304 STAINLESS STEEL NO-HUB COUPLINGS ASSEMBLIES, WITH NEOPRENE GASKET MEETING ASTM C-564.
- PROVIDE AND INSTALL ALL CLEANOUTS INDICATED AND AS REQUIRED BY LOCAL CODES.
- 4. THE WASTE AND VENT SYSTEM SHALL BE TESTED AS REQUIRED BY THE PLUMBING CODES HAVING JURISDICTION.
- INDIRECT DRAINS SHALL BE TYPE "L" COPPER TUBING (ASTM B-88) WITH WROUGHT COPPER FITTINGS (ANSI B16.22). CLEAN AND DEBURR THE INSIDE OF ALL FITTINGS CAREFULLY BEFORE JOINING WITH 95/5 TIN/ANTIMONY SOLDER. NO ACIDS SHALL BE USED TO CLEAN EITHER PIPE OR FITTINGS OR AS A FLUX IN SWEATING JOINTS.

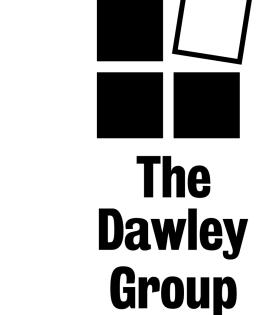
#### DRAWING INDEX

#### SHEET NUMBER SHEET NAME

PLUMBING UNDERFLOOR PLAN

PLUMBING COVER SHEET

- PLUMBING PLAN
- PLUMBING ROOF PLAN
- PLUMBING SCHEDULES
- PLUMBING DETAILS
- PLUMBING RISER DIAGRAMS WATER
- PLUMBING RISER DIAGRANS SANITARY
- PLUMBING RISER DIAGRAM NATURAL GAS



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





TX Firm No. 1869 512-888-9945 Project No. www.wylieeng.com



WELLMED **CLINIC** 

**KELLER** 

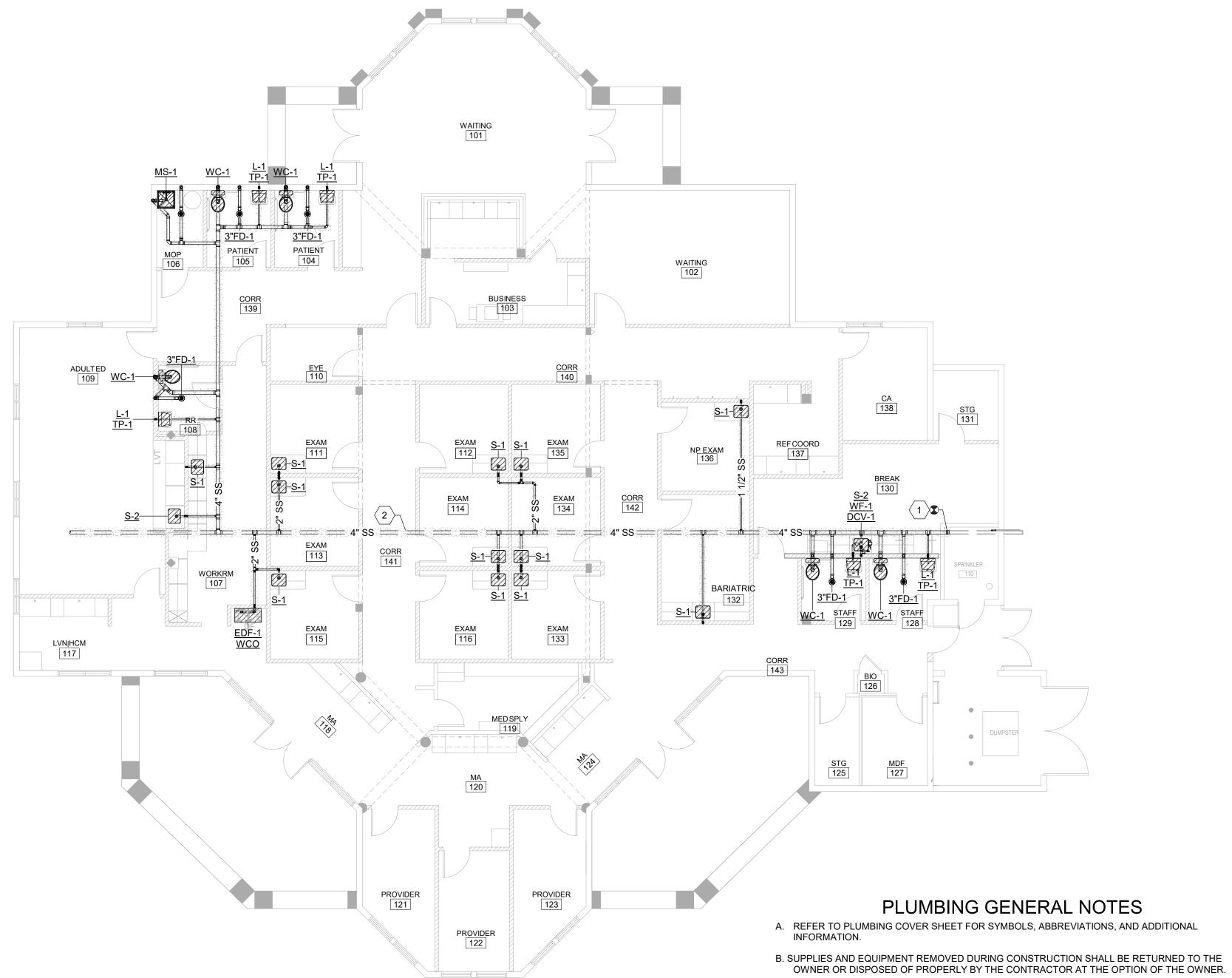
1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J 05.31.24

**REVISION DATES:** 

**PLUMBING** COVER SHEET



# ◆ PLUMBING UNDERFLOOR PLAN

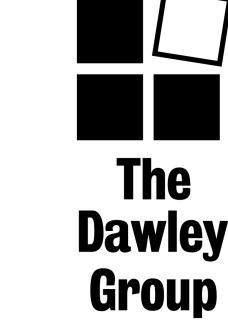
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SEWER TIE-IN FLOW LINE ELEVATION. CONTRACTOR MUST VERIFY IF GRAVITY FLOW SANITARY SEWER LINES AS SHOWN WILL PROPERLY DRAIN TO THE TIE-IN POINT SHOWN ON PLUMBING PLAN. IF ANY ISSUES ARE ENCOUNTERED, CONTACT THE ARCHITECT OR ENGINEER IMMEDIATELY.

ALL PLUMBING PIPING ROUTED ABOVE GRADE THAT WILL BE DEEMED ABANDONED AFTER THE SCOPE OF THIS PROJECT IS COMPLETED AS INDICATED SHALL BE DEMOLISHED IN ITS ENTIRETY. ALL ABANDONED PLUMBING PIPING PENETRATING THE FLOOR SHALL BE DEMOLISHED, CAPPED BELOW FLOOR AND THE FLOOR PATCHED TO MATCH EXISTING MATERIALS AND METHODS. EXISTING PIPING SHOWN FOR COORDINATION ONLY. CONTRACTOR TO FIELD VERIFY ALL EXISTING PIPING. IF ANY ISSUES ARE ENCOUNTERED, CONTACT THE ARCHITECT OR ENGINEER IMMEDIATELY.

- A. REFER TO PLUMBING COVER SHEET FOR SYMBOLS, ABBREVIATIONS, AND ADDITIONAL
- B. SUPPLIES AND EQUIPMENT REMOVED DURING CONSTRUCTION SHALL BE RETURNED TO THE
- C. REFER TO RISER AND EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL SIZES AND ROUTING NOT INDICATED ON PLANS

#### PLUMBING KEYED NOTES

- NEW SANITARY PIPING SHALL BE CONNECTED TO EXISTING SANITARY PIPING BELOW SLAB. SAW-CUT FLOOR AND PAVEMENT AS REQUIRED. FIELD VERIFY LOCATION OF EXISTING UNDERFLOOR SANITARY PIPING PRIOR TO SAW-CUTTING. PATCH FLOOR TO MATCH EXISTING MATERIALS AND METHODS.
- 2. SHADED AREAS INDICATE PORTIONS OF EXISTING INTERIOR SLAB THAT WILL REQUIRE SAW-CUTTING FOR THE PROPOSED ADDITIONS. (TYP.)



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





TX Firm No. 1869 Project No.

Austin, Texas 78759 512-888-9945 www.wylieeng.com



WELLMED CLINIC

**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J DATE: REVISION DATES: 05.31.24

PLUMBING UNDERFLOOR PLAN

#### TRENCHING AND BACKFILLING

ALL UNDERGROUND PIPES SHALL BE LAID OPEN IN TRENCH. ALL FIELD MEASUREMENTS, LAYOUTS, GRADE ESTABLISHMENTS, ETC., SHALL BE DONE BY REGISTERED PUBLIC SURVEYOR IN THE EMPLOY OF THE CONTRACTOR. THE CONTRACTOR'S SURVEYOR SHALL BE ON-THE-JOB DURING ALL UNDERGROUND WORK. THE ARCHITECT WILL PROVIDE A "BENCH MARK" REFERENCE FOR USE BY THE CONTRACTOR.

PIPES SHALL BE LAID AND MAINTAINED AT REQUIRED LINES AND GRADES DURING THE COURSE OF THE WORK. ALL JOINTS SHALL BE ALIGNED AND COMPLETE.

THE TRENCH SHALL BE EXCAVATED TO ALIGNMENT AND DEPTH AS REQUIRED. TRENCH SHALL BE PROPERLY BRACED AND DEWATERED. THE TRENCHES SHALL BE KEPT FREE OF WATER AT ALL TIMES DURING INSTALLATION, TESTING OF PIPE, AND BACK FILLING. THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR DISCHARGING WATER INTO NATURAL DRAINAGE CHANNELS. NO WATER SHALL BE DISCHARGED ONTO A STREET WITHOUT APPROVAL BY THE ARCHITECT.

ALL EXTERIOR UNDERGROUND PIPING SHALL BE INSTALLED WITH A MINIMUM OF 18" OF EARTH OR EQUIVALENT COVER, EXCEPT WHERE SPECIFICALLY SHOWN OTHERWISE OR REQUIRED BY THE ARCHITECT/ENGINEER.

THE TRENCH SHALL BE AT LEAST 18" WIDER THAN THE DIAMETER OF THE LARGEST BELL ON THE PIPE. IF THE PIPE HAS NO BELLS, THE TRENCH SHALL BE AT LEAST 18" WIDER THAN THE MAXIMUM DIAMETER OF THE PIPE. PIPE SHALL BE LAID IN THE CENTER OF THE TRENCH. THE TRENCH SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PROVIDE FOR PIPE CUSHIONS AS SPECIFIED HEREIN.

SHEET PILE AND BRACE EXCAVATIONS WHEREVER NECESSARY TO PREVENT CAVE-IN. TRENCH WIDTH MAY BE INCREASED AS REQUIRED AND PILING LEFT IN PLACE UNTIL SUFFICIENT COMPACTED BACKFILL IS IN PLACE. THE CONTRACTOR SHALL PROPERLY SHEET AND BRACE ALL OPEN TRENCHES TO RENDER THEM SECURE AND SHALL REMOVE ALL SUCH SHEETING AND BRACING BEFORE COMPLETING THE BACKFILL. THE QUANTITY OF THE EXCAVATION REQUIRED TO INSTALL SHEETING AND THE INSTALLATION AND REMOVAL OF SHEETINGS AND BRACINGS WILL NOT BE REGARDED AS EXTRA WORK AND ALL COSTS INCURRED FOR THIS EXCAVATION AND THE INSTALLATION OF SHEETING SHALL BE INCLUDED IN THE CONTRACT PRICE.

TRENCHING MAY BE DONE WITH TRENCH DIGGING MACHINERY UNLESS HAND DIGGING IS REQUIRED TO AVOID DAMAGE TO EXISTING STRUCTURES OR APPARATUS BOTH ABOVE OR BELOW GRADE.

UPON COMPLETION OF EXCAVATION AND PRIOR TO THE LAYING OF THE PIPE, THE TRENCH BOTTOM SHALL BE BROUGHT UP TO THE REQUIRED ELEVATION WITH A PIPE CUSHION, EXCEPT WHERE THE CUSHION HAS BEEN ELIMINATED BY THE ARCHITECT. PIPE CUSHIONS SHALL BE SELECTED MATERIAL DEPOSITED IN THE TRENCH AND SHALL BE COMPACTED, LEVELED OFF, AND SHAPED TO OBTAIN A SMOOTH COMPACTED BED ALONG THE LAYING LENGTH OF THE PIPE. PIPE CUSHION MATERIAL SHALL BE AS FOLLOWS:

1. SANITARY AND DOMESTIC WATER: MATERIAL FOR PIPE CUSHION SHALL COMPLY WITH LOCAL CODES AND SHALL BE PLACED IN ACCORDANCE WITH THE EARTHWORK SECTION OF THE SPECIFICATIONS. IN ABSENCE OF LOCAL CODE REQUIREMENTS THE CUSHION SHALL BE SILICA SAND WITH NO MORE THAN 20% PASSING A #200 SIEVE AND WITH NO CLAY INCLUSION OR SELECT BACKFILL MATERIAL APPROVED BY THE EARTHWORK SECTION OF THE SPECIFICATIONS. ANY SELECT FILL USED SHALL PASS A ONE INCH

PIPES SHALL NOT BE LAID IN WATER OR WHEN TRENCH CONDITION IS UNSUITABLE.

AS SECTIONS OF PIPE ARE INSTALLED, THEY SHALL BE TEMPORARILY SEALED UNTIL REMAINING SECTIONS OF THE PIPING HAVE BEEN INSTALLED TO COMPLETE THE SYSTEM.

CAST IRON PIPES SUBJECT TO POTENTIAL HEADS OF 15 FEET OF WATER OR MORE SHALL HAVE CONCRETE ANCHORS AT EACH CHANGE IN DIRECTION AND/OR AS DIRECTED. ANY CHANGE IN DIRECTION EXCEEDING 15 DEGREES SHALL BE ANCHORED. CONCRETE ANCHORS SHALL REST AGAINST SOLID (VIRGIN) GROUND WITH THE REQUIRED AREA OF BEARING ON PIPE AND GROUND TO PROVIDE SUITABLE ANCHORING.

TRENCHES SHALL BE BACKFILLED ONLY AFTER PIPING HAS BEEN INSPECTED, TESTED, AND APPROVED BY THE ARCHITECT/ENGINEER. ALL BACKFILL MATERIAL SHALL BE PLACED IN THE TRENCH EITHER BY HAND OR BY APPROVED MECHANICAL METHODS. THE COMPACTION OF BACKFILL MATERIAL SHALL BE ACCOMPANIED BY TAMPING WITH HAND TOOLS OR APPROVED PNEUMATIC TAMPERS, BY USING VIBRATORY COMPACTORS, OR BY ANY COMBINATION OF THESE. THE METHOD OF COMPACTION SHALL BE APPROVED AND ALL COMPACTION SHALL BE DONE IN ACCORDANCE WITH REQUIREMENTS OF THE EARTHWORK SECTION OF THE SPECIFICATIONS. BACKFILL COMPLETELY AROUND PIPE, INCLUDING 18" ABOVE THE PIPE, WITH SUITABLE SILICA SAND, TAMPED IN 6" LAYERS UNDER, AROUND, AND OVER PIPE. THE REMAINDER OF THE BACKFILL FOR ALL PIPES SHALL BE SELECT BACKFILL MATERIAL TAMPED AT INTERVALS OF NO MORE THAN 12" DEPTHS. TO ATTAIN PROCTOR COMPACTION DENSITY REQUIRED. ALL MATERIALS TO BE USED AS SELECTED MATERIAL BACKFILL SHALL BE APPROVED BY THE ARCHITECT. IF IN THE OPINION OF THE ARCHITECT OR THE GEOTECHNICAL CONSULTANT, THE EXCAVATED MATERIAL DOES NOT MEET THE REQUIREMENTS OF SELECTED MATERIAL, THE CONTRACTOR SHALL BE REQUIRED TO SCREEN THE MATERIAL PRIOR TO ITS USE AS SELECTED MATERIAL BACKFILL. MATERIAL USED IN THE UPPER PORTION OF THE BACKFILL OR SUBGRADE SHALL NOT CONTAIN STONE, ROCK, OR OTHER MATERIAL LARGER THAN SIX INCHES IN ITS LONGEST DIMENSION. NO WOOD, VEGETABLE MATTER, OR OTHER MATERIAL, WHICH IN THE OPINION OF THE ARCHITECT OR GEOTECHNICAL CONSULTANT, IS UNSUITABLE SHALL BE INCLUDED IN THE BACKFILL. BACKFILL SHALL BE BROUGHT UP TO FINISH GRADE IDENTIFIED ON THE ARCHITECTURAL DRAWINGS, INCLUDE ADDITIONAL BACKFILL REQUIRED TO OFFSET SETTLEMENT DURING CONSOLIDATION.

WHEN REMOVAL OF UNSUITABLE EXCAVATED MATERIAL CREATES A SHORTAGE OF BACKFILL MATERIAL, THE CONTRACTOR SHALL, AT NO COST TO THE OWNER, FURNISH MATERIAL AS SPECIFIED IN THIS SECTION IN THE AMOUNT REQUIRED TO COMPLETE THE BACKFILL.

EXISTING STREET, DRIVEWAYS, AND SIDEWALKS DAMAGED DURING THE EXCAVATION WORK SHALL BE RESTORED TO ACCEPTABLE CONDITION, SUBJECT TO APPROVAL BY THE ARCHITECT.

PROVIDE DRIVEWAY AND SIDEWALK EXCAVATIONS WITH APPROVED BARRICADES, WARNING LIGHTS, AND COVERPLATES AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.

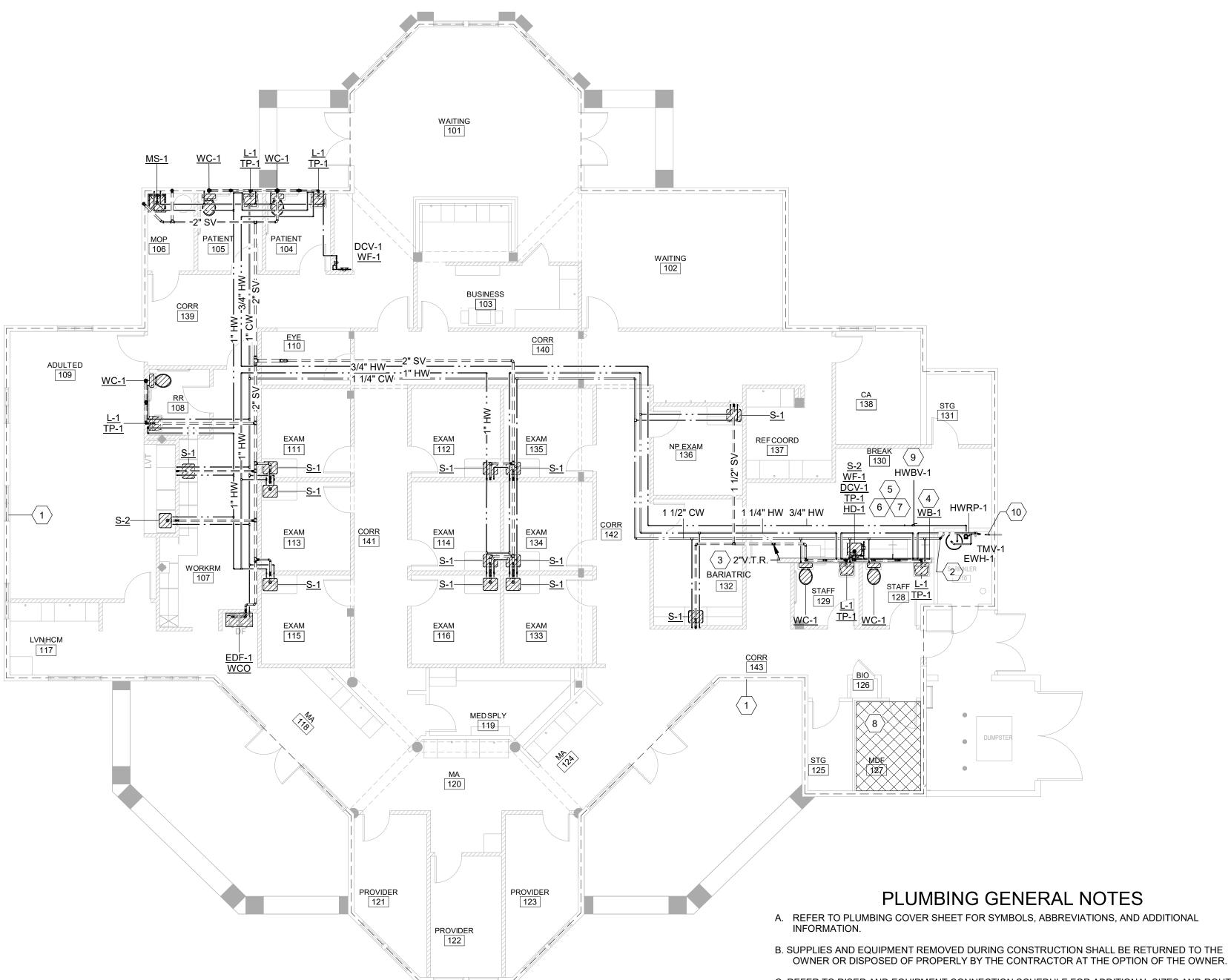
SUBMIT COMPLETE INSTALLATION AND TEST PROCEDURES OF THE EXCAVATION AND BACKFILL WORK FOR APPROVAL BY ARCHITECT PRIOR TO COMMENCING ANY WORK.

#### FIRE SPRINKLER SYSTEM NOTES

- THE SPRINKLER CONTRACTOR SHALL RELOCATE EXISTING SPRINKLER HEADS AND PIPING, AND SHALL PROVIDE NEW SPRINKLER HEADS AND PIPING AS REQUIRED TO PROVIDE FULL COVERAGE OF THIS LEASE SPACE IN STRICT ACCORDANCE WITH NFPA-13, AND ALL CITY, STATE, AND NATIONAL CODES AND STANDARDS. NEW SPRINKLER HEADS SHALL MATCH EXISTING BUILDING STANDARD HEADS. COVERAGE AND DENSITY SHALL MATCH EXISTING BUILDING.
- THE SPRINKLER CONTRACTOR SHALL REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE EXACT LOCATIONS OF ALL SPRINKLER HEADS. RELOCATE EXISTING SPRINKLER HEADS AND PIPING WHERE DUCTWORK AND/OR LIGHTING FIXTURE CONFLICTS OCCUR.
- 3. SPRINKLERS LOCATED IN ACOUSTIC TILE CEILINGS SHALL BE ON CENTER.
- SPRINKLER BRANCH PIPING SHALL NOT BE LOCATED DIRECTLY BELOW TERMINAL UNITS OR OTHER MECHANICAL EQUIPMENT. RELOCATE BRANCH PIPING AND SPRINKLER HEADS AS REQUIRED TO PROVIDE CLEAR SERVICE BELOW.
- 5. COORDINATE SPRINKLER LOCATIONS WITH ARCHITECT IN HIGH-FINISH AREAS AND IN HARD CEILINGS.
- INSTALL EXPOSED PIPING IN FINISHED AREAS WITH NO CEILINGS AS HIGH AND INCONSPICUOUS AS POSSIBLE. COORDINATE PAINTING REQUIREMENTS WITH ARCHITECT.
- COORDINATE SPRINKLER AND PIPING DEMOLITION AND RELOCATION REQUIRED TO OCCUR DURING DEMOLITION PACKAGE DUE TO ARCHITECTURAL CEILING, DUCTWORK AND EQUIPMENT MODIFICATIONS, ETC.
- A LICENSED CONTRACTOR SHALL FURNISH, ACCORDING TO THE CONDITIONS OF THE CONSTRUCTION CONTRACT, SHOP DRAWINGS INCLUDING THE COMPLETE LAYOUT OF FIRE PROTECTION SYSTEMS TO THE AUTHORITIES HAVING JURISDICTION, LOCAL FIRE DEPARTMENT, THE OWNER'S INSURANCE CARRIER, AND LANDLORD FOR APPROVAL. SHOP DRAWINGS MUST BE APPROVED BY THE AUSTIN FIRE DEPARTMENT PRIOR TO BEGINNING WORK ON ANY PART OF THE FIRE PROTECTION SYSTEMS.
- 10. A CONTRACTOR PROPERLY LICENSED BY THE STATE FIRE MARSHAL MUST DO THE FIRE PROTECTION SCOPE OF WORK.
- 11. PROTECTION CRITERIA FOR SPRINKLERS SHALL BE BASED ON THE FOLLOWING AREA/DENSITY REQUIREMENTS: A. EXAM ROOMS AND PUBLIC AREAS - LIGHT HAZARD (DROP CEILINGS/HARD CEILINGS)
  - a) 0.10 GPM OVER MOST REMOTE 1,500 SQUARE FEET WITH THE PROTECTION AREA PER SPRINKLER NOT EXCEEDING 225 SQUARE FEET.
  - b) CEILING SPRINKLERS SHALL BE ORDINARY TEMPERATURE RATED, BASE BUILDING TYPE. COORDINATE FINISH WITH ARCHITECT.

B. MECHANICAL AND EQUIPMENT ROOMS - ORDINARY HAZARD. a) 0.15 GPM OVER MOST REMOTE 2,000 SQUARE FEET WITH THE PROTECTION AREA PER SPRINKLER NOT

EXCEEDING 130 SQUARE FEET. b) CEILING SPRINKLERS SHALL BE INTERMEDIATE TEMPERATURE RATED, PENDANT TYPE.

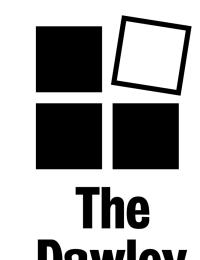


PLUMBING PLAN

- A. REFER TO PLUMBING COVER SHEET FOR SYMBOLS, ABBREVIATIONS, AND ADDITIONAL
- B. SUPPLIES AND EQUIPMENT REMOVED DURING CONSTRUCTION SHALL BE RETURNED TO THE
- C. REFER TO RISER AND EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL SIZES AND ROUTING NOT INDICATED ON PLANS

# PLUMBING KEYED NOTES

- 1. LIMIT OF FIRE SPRINKLER SCOPE (REFER TO "FIRE SPRINKLER SYSTEM NOTES" ON PLUMBING COVER SHEET).
- 2. CONNECT NEW COLD WATER PIPING TO EXISTING COLD WATER PIPING. FIELD VERIFY EXACT LOCATION. PROVIDE ISOLATION VALVE AT POINT OF CONNECTION.
- 3. NEW VENT ROOF THROUGH ROOF. ENSURE VENT IS MINIMUM 10-FT FROM ANY INTAKE. FIELD VERIFY EXACT LOCATION.
- 4. 1/2" CW WITH ANGLE STOP IN RECESSED WALL BOX. MAKE FINAL CONNECTION TO REFRIGERATOR/ICE MAKER. COORDINATE EXACT MOUNTING LOCATION OF WALL BOX WITH ARCHITECT AND MILLWORK.
- 5. INSTALL ONE DOUBLE CHECK VALVE ON WALL WITHIN MILLWORK (BELOW COUNTER) IN AN ACCESSIBLE LOCATION IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS. COORDINATE EXACT MOUNTING REQUIREMENTS WITH ARCHITECT.
- 6. BACKFLOW PREVENTION ASSEMBLY SHALL BE ACCURATELY TESTED ACCORDING TO INDUSTRY-ACCEPTED STANDARDS BY LICENSED AND REGISTERED BACKFLOW PREVENTION ASSEMBLY TESTER. SUBMIT COMPLETED CITY OF AUSTIN TEST FORM FOR EACH ASSEMBLY UPON COMPLETION OF INSTALLATION AND TESTING.
- 7. PROVIDE ISOLATION VALVE ON COLD WATER SERVICE DOWNSTREAM OF BACKFLOW DEVICE BELOW COUNTERTOP FOR ONE (1) COUNTERTOP COFFEE MAKER CONNECTION. COORDINATE EXACT LOCATION OF EQUIPMENT WITH ARCHITECT. LOCATION OF SHUT-OFF VALVE SHALL ALLOW ACCESS WITHIN MILLWORK. PROVIDE NEW PIPING AND FITTINGS AS REQUIRED TO MAKE FINAL CONNECTION TO EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS.
- 8. NO NEW PIPING EXCEPT SPRINKLER PIPING SHALL BE INSTALL ABOVE THIS AREA. REFER TO "FIRE SPRINKLER SYSTEM NOTES" ON PLUMBING COVER SHEET FOR NOTES ON SPRINKLER SYSTEM REQUIREMENTS IN THIS ROOM.
- 9. PROVIDE BALANCING VALVE, WITH MEMORY STOP, FOR BALANCE OF HOT WATER RECIRCULATION LINE. INSTALL VALVE IN AN ACCESSIBLE LOCATION. VERIFY EXACT LOCATION WITH ARCHITECT. PROVIDE ACCESS PANEL AS REQUIRED.
- 10. CONNECT NEW 1-1/4" GAS PIPING TO EXISTING GAS PIPING AT THIS APPROXIMATE LOCATION. ROUTE GAS PIPING VERTICALLY THROUGH ROOF. REFER TO P2.2 AND P5.3 FOR ADDITIONAL INFORMATION.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





TX Firm No. 1869 Project No.

Austin, Texas 78759 512-888-9945 www.wylieeng.com



# WELLMED **CLINIC**

**KELLER** 

1110 KELLER PARKWAY KELLER, TX 76248

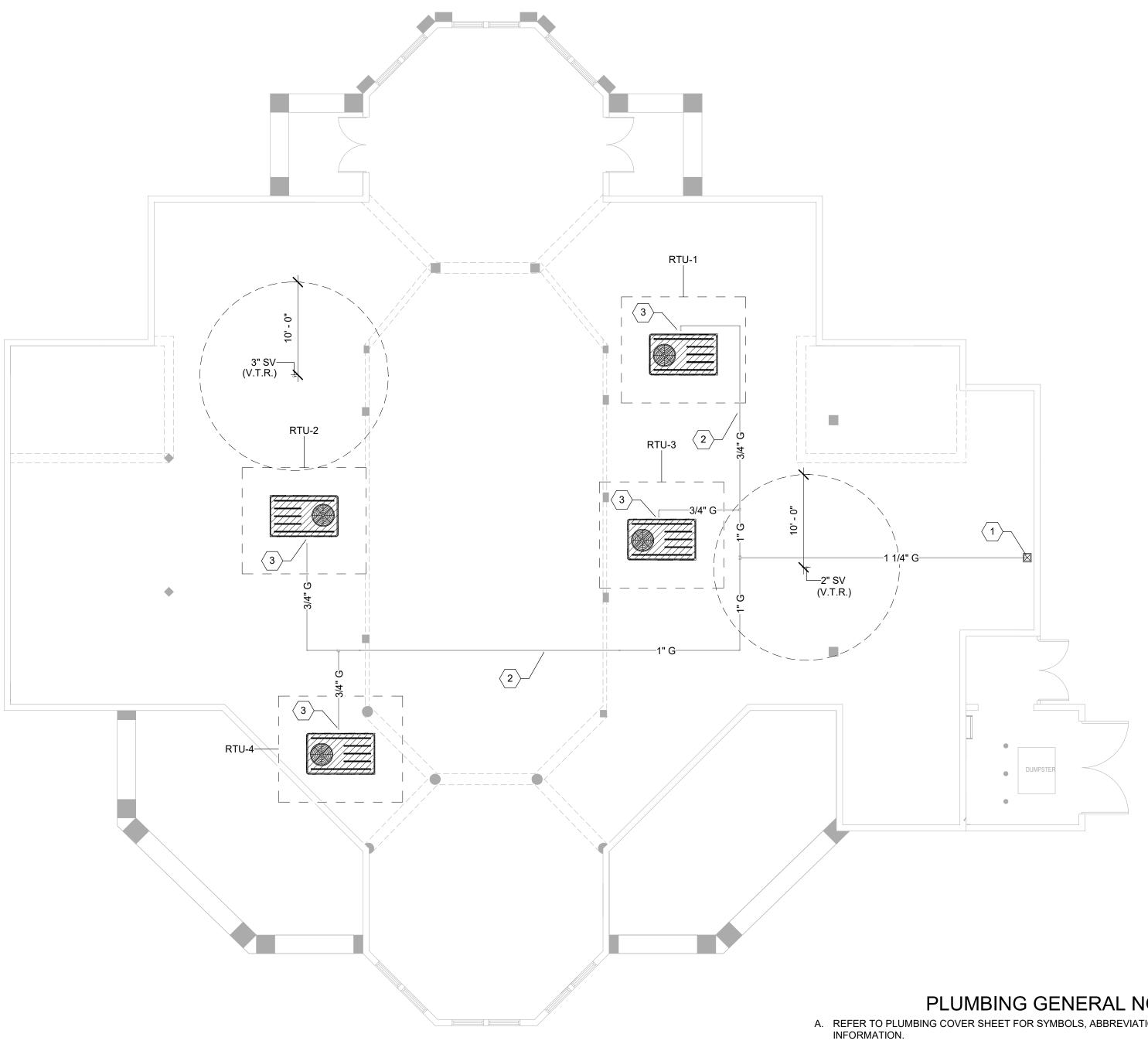
SHEET TITLE

PROJECT NO: WTX07J 05.31.24

PLUMBING PLAN

SHEET NUMBER

**REVISION DATES:** 



# ◀ PLUMBING ROOF ROOF

THE EXISTING ROOF SYSTEM INSTALLED IN THIS BUILDING HAS A WARRANTY. THE CONTRACTOR SHALL COMPLY WITH ALL WARRANTY GUIDELINES WHILE INSTALLING EQUIPMENT ON THE ROOF. THIS INCLUDES THE INSTALLATION OF ROOF PENETRATIONS, EQUIPMENT CURBS AND REFRIGERANT PIPE

CONTACT BUILDING MANAGER FOR ROOF WARRANTY INFORMATION AND FOR EXACT SPECIFICATIONS FOR ANY WORK TO BE PERFORMED ON THE ROOF OF THIS BUILDING. ALL ROOF PENETRATIONS MUST BE COORDINATED WITH BUILDING MANAGEMENT AND ROOF CONTRACTOR MUST BE APPROVED BY MANAGEMENT PRIOR TO ANY ROOF WORK.

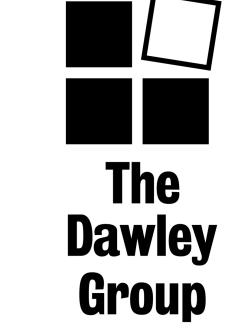
THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY TO ENSURE THAT THE ROOF WARRANTY IS NOT VOIDED DUE TO CONSTRUCTION ASSOCIATED WITH THIS PROJECT.

## PLUMBING GENERAL NOTES

- A. REFER TO PLUMBING COVER SHEET FOR SYMBOLS, ABBREVIATIONS, AND ADDITIONAL
- B. VENTS THROUGH ROOF TO BE LOCATED A MINIMUM OF 10'-0" HORIZONTALLY AWAY FROM OUTSIDE AIR INTAKES.
- C. REFER TO RISER AND EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL SIZES AND ROUTING NOT INDICATED ON PLANS.
- D. PAINT ALL EXTERIOR GAS PIPING WITH ONE COAT OF RUST-INHIBITIVE PRIMER AND TWO COATS
- OF EPOXY PAINT. COORDINATE COLOR WITH ARCHITECT. E. LABEL ALL MEDIUM PRESSURE PIPING WITH "ELEVATED PRESSURE" MARKING.
- F. TEST MEDIUM PRESSURE SYSTEM PIPING TO A MINIMUM OF 15-PSI

### PLUMBING KEYED NOTES

- 1. GAS PIPING DOWN TO NEW METER. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- 2. GAS PIPING IN THIS AREA SHALL BE INSTALLED ON ROOF AS SHOWN. REFER TO DETAIL 11 ON SHEET P4.1 FOR INSTALLATION REQUIREMENTS.
- 3. CONTRACTOR SHALL MAKE FINAL GAS CONNECTION TO MECHANICAL EQUIPMENT AS REQUIRED. CONNECT TO EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS. REFER TO DETAIL 12 ON SHEET P4.1 FOR INSTALLATION REQUIREMENTS.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608





www.wylieeng.com

TX Firm No. 1869 Project No.



# WELLMED CLINIC

**KELLER** 1110 KELLER PARKWAY KELLER, TX 76248

SHEET TITLE

PROJECT NO: WTX07J 05.31.24 **REVISION DATES:** 

PLUMBING ROOF PLAN

# ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	STORAGE	RECOVERY GPH AT		ELECTRI	CAL		MANUFACTURER	NOTES
		GALLONS	60° F. RISE	KW	VOLTS	Hz.	PH	AND MODEL	
EWH-1	CLOSET	40	41 @ 60 F.	6	208	60	3	AO SMITH DEN-40 (OR EQUAL)	1,2,3,4,5

#### **ELECTRIC WATER HEATER NOTES:**

- 1. PROVIDE AMTROL-THERM X-TROL ST-5-C SERIES PRE-CHARGED THERMAL EXPANSION ABSORBER.
- 2. REFER TO DETAIL FOR WATER HEATER SETPOINT.
- 3. COORDINATE POWER DISCONNECT LOCATION WITH ELECTRICAL AND ARCHITECTURAL. 4. HEATER INSTALLATIONS SHALL MEET OR EXCEED ALL CODE REQUIREMENTS, LOCAL AMENDMENTS AND MANUFACTURERS
- RECOMMENDATIONS AND REQUIREMENTS. 5. ALL PLUMBING SUPPLIES, VALVES AND ASSOCIATED APPURTENANCES SHALL BE INSTALLED.

	CIRCULATION PUMP SCHEDULE											
MADIC	OFD) (IOF	FLOW	DESIGN	E	ELECTRIC	CAL DATA		MANUFACTURER				
MARK	SERVICE	SERVICE GPM HEAD FT. WG		HP	RPM	VOLTS	PH	AND MODEL				
HWRP-1	HOT WATER CIRC.	5	25	1/4	3300	120	1	ITT NBF-36 (SPEED 1)				

1. PROVIDE WITH 24-HR, 7-DAY TIMER CONTROLLER. 2. INSTALL AQUASTAT ON RETURN ADJACENT TO PUMP.

SEQUENCE OF EVENTS - HOT WATER RECIRCULATION PUMP (HWRP-1)

- I. OCCUPANCY START-UP SETTING:
- A. TIMER FOR <u>HWRP-1</u> SET TO POWER-ON 60-MINUTES BEFORE AND POWER-OFF 60-MINUTES AFTER NORMAL BUSINESS HOURS. <u>HWRP-1</u> CIRCULATES HOT WATER FROM <u>EWH-1</u> THROUGH THE HOT WATER DISTRIBUTION PIPING BACK TO THE <u>EWH-1</u> BY MEANS OF DEDICATED HOT WATER RETURN PIPING. II. CYCLE CONTROLS:
- A. DURING OPERATION OF <u>HWRP-1</u> THE TEMPERATURE SENSOR (AQUASTAT) ON THE HOT WATER RETURN
  - PIPING SHALL MONITOR THE TEMPERATURE. a. AQUASTAT SHALL SEND A SIGNAL TO ENERGIZE THE <u>HWRP-1</u> WHEN READING A TEMPERATURE
  - MORE THAN 5°F BELOW THE WATER HEATER THERMOSTAT SET-POINT. b. AQUASTAT SHALL SEND A SIGNAL TO DE-ENERGIZE THE HWRP-1 UPON REACHING THE
  - TEMPERATURE OF 5°F BELOW THE WATER HEATER THERMOSTAT SET-POINT.
- B. THE OFF-ON CYCLE OUTLINED IN EVENTS 'a' AND 'b' ABOVE ARE REPEATED DURING THE OPERATIONAL TIMEFRAME SET BY THE TIMER LISTED PREVIOUSLY.

		PLI	JME	BING	FIX	TURE	SCHEDULE
SYMBOL	DESCRIPTION	ADA	W	V	CW	HW	SPECIFICATION
DCV-1	BACK FLOW PREVENTER	-			1/2"		WATTS LF007-QT SERIES. 1/2" DOUBLE CHECK BACKFLOW PREVENTER, STRAINER, REPLACEABLE SEATS AND DISCS, ISOLATION BALL VALVES. PROVIDE STRAINER UPSTREAM OF VALVE.
EDF-1	ELECTRIC DRINKING FOUNTAIN	ADA	2"	2"	1/2"	-	ELKAY LVRCGRNTL8WSCX SERIES . WALL HUNG, LIGHT GRAY, REFRIGERATED, 8.0 GPH, TOUCHLESS SENSORS, INTEGRAL BOTTLE FILLER (LZWSR). SUPPLY: MCGUIRE 2165 SERIES. TRAP: MCGUIRE 8902 SERIES. CAST BODY WITH CLEAN-OUT. PROVIDE COMPATIBLE MATCHING APRON CANE ELKAY LKAPREZL (OR EQUAL). CONCEALED CARRIER: SMITH, FLOOR MOUNTED. REFER TO ARCHITECTS PLAN FOR EXACT LOCATION.
FD-1	FLOOR DRAIN	-	2"	2"			JR SMITH MODEL 2005-A SERIES , CAST IRON BODY, 6-INCH ROUND ADJUSTABLE CHROME PLATED STRAINER, FLASHING COLLAR WITH SEEPAGE OPENINGS, TAPPED FOR STRAINER HEAD, 1/2-INCH TRAP PRIMER CONNECTION.
L-1	WALL LAVATORY (ADA COMPLIANT)	ADA	1-1/2"	1-1/2"	1/2"	1/2"	KOHLER "CHESAPEAKE" K-1722. 20"X18", VITREOUS CHINA, INTEGRAL OVERFLOW, CLAMP ASSEMBLY, ADA. FAUCET: TOTO T28S51. ECOPOWER SENSOR FAUCET, ADA COMPLIANT, INTEGRAL SPOUT, 0.5-GPM LOW FLOW AERATOR. SUPPLY: MCGUIRE 2167 SERIES. TRAP: MCGUIRE 8902 SERIES. STRAINER AND TAILPIECE: MCGUIRE 155WC. PROTECTIVE PIPE COVERS: TRUEBRO 102W SERIES. CARRIER: CONCEALED FLOOR MOUNTED JAY R. SMITH (OR EQUAL) MIXING VALVE: LEONARD LF170 ASSE 1070 LISTED THERMOSTATIC TYPE MIXING VALVE, INLET CHECKSTOPS, PROVIDE MOUNTING BRACKET (-BRT), SET TO 105°.
MS-1	MOP SINK	-	3"	2"	1/2"	1/2"	FIAT MSB-2424. 24 X 24-IN, 10-IN HIGH WALLS WITH 1-IN WIDE SHOULDERS, STAINLESS STEEL DRAIN BODY (3-IN DRAIN PIPE CONNECTION), COMBINATION DOME STRAINER AND STAINLESS STEEL LINT BASKET. FAUCET: 830AA WALL MOUNTED FAUCET WITH VACUUM BREAKER, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT. STAINLESS STEEL WALL GUARDS, BUMPER GUARDS, MOP BRACKET, AND HOSE AND BRACKET.
RPZ-1	BACK FLOW PREVENTER	-			1/2"		WATTS NO. LF009M1QT-S REDUCED PRESSURE ZONE BACKFLOW PREVENTER WITH QUARTER-TURN, FULL PORT RESILIENT SEATED BRONZE BALL VALVE SHUTOFFS, CHECK MODULES, BRONZE STRAINER AND AIR GAP FITTING. SEE PLANS FOR SIZE.
S-1	SINK (ADA COMPLIANT) @ EXAM ROOMS	ADA	1-1/2"	1-1/2"	1/2"	1/2"	ELKAY LRAD1720-55-3. 18-GAUGE, FULLY UNDERCOATED, STAINLESS STEEL, SINGLE-BOWL, 5-1/2-IN DEEP, OFF-CENTER DRAIN, ADA COMPLIANT, 3-1/2-INCH OUTLET. FAUCET: ELKAY LKD-2442-BH, SWING GOOSENECK SPOUT, BLADE HANDLES. ADA COMPLIANT. SUPPLY: MCGUIRE LF2167 SERIES. LOOSE KEY WITH RISER, INLET SHALL BE IPS OR SWEAT. TRAP: MCGUIRE 8912 SERIES. 17 GAUGE CAST BODY P-TRAP WITH CLEANOUT. STRAINER AND TAILPIECE: ELKAY LK18. PROVIDE P-TRAP AND WATER SUPPLY KIT.
S-2	SINK (ADA COMPLIANT) @ BREAK ROOM	ADA	1-1/2"	1-1/2"	1/2"	1/2"	ELKAY LRAD2219-55-3. 18-GAUGE, FULLY UNDERCOATED, STAINLESS STEEL, SINGLE-BOWL, 5-1/2-IN DEEP, OFF-CENTER DRAIN, ADA COMPLIANT, 3-1/2-INCH OUTLET. FAUCET: ZURN Z831B4, SWING GOOSENECK SPOUT, DOUBLE BLADE HANDLES. ADA COMPLIANT. SUPPLY: MCGUIRE LF2167 SERIES. LOOSE KEY WITH RISER, INLET SHALL BE IPS OR SWEAT. TRAP: MCGUIRE 8912 SERIES. 17 GAUGE CAST BODY P-TRAP WITH CLEANOUT. STRAINER AND TAILPIECE: ELKAY LK18. PROVIDE P-TRAP AND WATER SUPPLY INSULATION KIT.
S-3	SINK (ADA COMPLIANT) @ LAB	ADA	1-1/2"	1-1/2"	1/2"	1/2"	ELKAY LRAD2219-55-3. 18-GAUGE, FULLY UNDERCOATED, STAINLESS STEEL, SINGLE-BOWL, 5-1/2-IN DEEP, OFF-CENTER DRAIN, ADA COMPLIANT, 3-1/2-INCH OUTLET. FAUCET: ZURN Z831B4, SWING GOOSENECK SPOUT, DOUBLE BLADE HANDLES. ADA COMPLIANT. SUPPLY: MCGUIRE LF2167 SERIES. LOOSE KEY WITH RISER, INLET SHALL BE IPS OR SWEAT. TRAP: MCGUIRE 8912 SERIES. 17 GAUGE CAST BODY P-TRAP WITH CLEANOUT. STRAINER AND TAILPIECE: ELKAY LK18. PROVIDE P-TRAP AND WATER SUPPLY INSULATION KIT.
TMV-1	THERMOSTATIC MIXING VALVE	-			3/4"	3/4"	LEONARD LFTM-26-E THERMOSTATIC TYPE, EXPOSED WITHOUT CABINET, WALL MOUNTED, THREADED, 3/4-IN INLETS, 3/4-IN OUTLET, PROVIDE INLET/OUTLET TEMPERATURE GAUGE, ADJUSTABLE HIGH TEMPERATURE STOP, INLET CHECKSTOPS, SUPPORT. OUTLET TEMPERATURE SHALL BE SET TO 120°.
TP-1	TRAP PRIMER / SEAL	-					JAY R SMITH 2698 SERIES. CHROME PLATED CAST BRASS P-TRAP, TAILPIECE TYPE TRAP PRIMER, 1/2-IN PRIMER TUBE WITH COMPRESSION FITTING, THREADED JOINT ELBOW CONNECTOR, AND ESCUTCHEONS.
WB-1	WALL BOX	-			1/2"		IPS WATER-TITE SERIES, ANGLE STOP WALL BOX WITH 1/4 TURN ANGLE STOP, FRONT FLANGES, AND INTEGRAL WATER HAMMER ARRESTER.
WC-1	WATER CLOSET	ADA	4"	2"	1/2"		AMERICAN STANDARD 2467 SERIES. VITREOUS CHINA, ELONGATED RIM, PRESSURE ASSIST, 1.1 GAL FLUSH, BOLT CAPS, INTEGRAL TRAP, ADA. SEAT: ZURN 5955SS-EL SERIES. OPEN-FRONT SEAT WITHOUT COVER. SUPPLIES: MCGUIRE 2167 SERIES. MOUNTING HEIGHT OF WATER CLOSET AND FLUSH VALVE SHALL BE ADA COMPLIANT. MOUNT FLUSH VALVE HANDLE TOWARD "WIDE" SIDE IN ADA COMPLIANT SPACES.
wco	WALL CLEANOUT	-					TAPPED CLEANOUT TEE, EXTRA-HEAVY, THREADED, SOLID HEXAGONAL NUT. CLEANOUTS IN HUBS OF COMBINATION WYE AND 1/8-BENDS OR WYES: TAPPED SPIGOT. CLEANOUTS AT ENDS OF HUBLESS COMBINATION WYE AND 1/8-BENDS OR WYES: BLIND PLUG. COVERS OVER CLEANOUTS IN CONCEALED VERTICAL PIPING (ALL AREAS, FINISHED AND UNFINISHED): SQUARE FRAME WITH SECURED, SMOOTH, SATIN NICKEL BRONZE ACCESS COVER. OPENING SIZES: 4-IN AND SMALLER PIPING: 6 X 6-IN. LARGER THAN 4-IN PIPING: 8 X 8-IN. CERAMIC TILE, QUARRY TILE, STONE, RESILIENT TILE, AND SHEET: FACE FLANGE TO HIDE ROUGH WALL OPENING. SMITH 4430 SERIES.
WF-1	WATER FILTER	-			1/2"		AQUA-PURE SST1HA WITH AP-AP117S SERIES FILTER CARTRIDGE TRIPLE ACTION FILTER, TASTE/ODOR/SCALE/SEDIMENT FILTER, 3.0-GPM FLOW RATE, INSTALL WITH SHUT-OFF VALVE AND FULL SIZE BY-PASS.
HWBV-1	HOT WATER BALANCING VALVE	-			SEE PLANS		THERMOMEGATECH "CIRCUITSOLVER" CS-X-130 STAINLESS STEEL AUTOMATIC HOT WATER RETURN BALANCING VALVE. PROVIDE ISOLATION VALVE UPSTREAM (WITH DIELECTRIC UNION) AND DOWNSTREAM (WITH DIELECTRIC UNION) OR CIRCUITSOLVER TO ALLOW SERVICING. "X" DESIGNATION EQUALS PIPE SIZE, MATCH CIRCUITSOLVER SIZE TO SIZE OF CONNECTION PIPING.

NOTES:
1. ALL PLUMBING FIXTURES, FITTINGS AND PIPES SHALL BE CERTIFIED "LEAD FREE" AS PER THE FEDERAL DRINKING WATER ACT STANDARDS: NSF 372 OR NSF 61-G.



Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608



TX Firm No. 1869 Project No. www.wylieeng.com



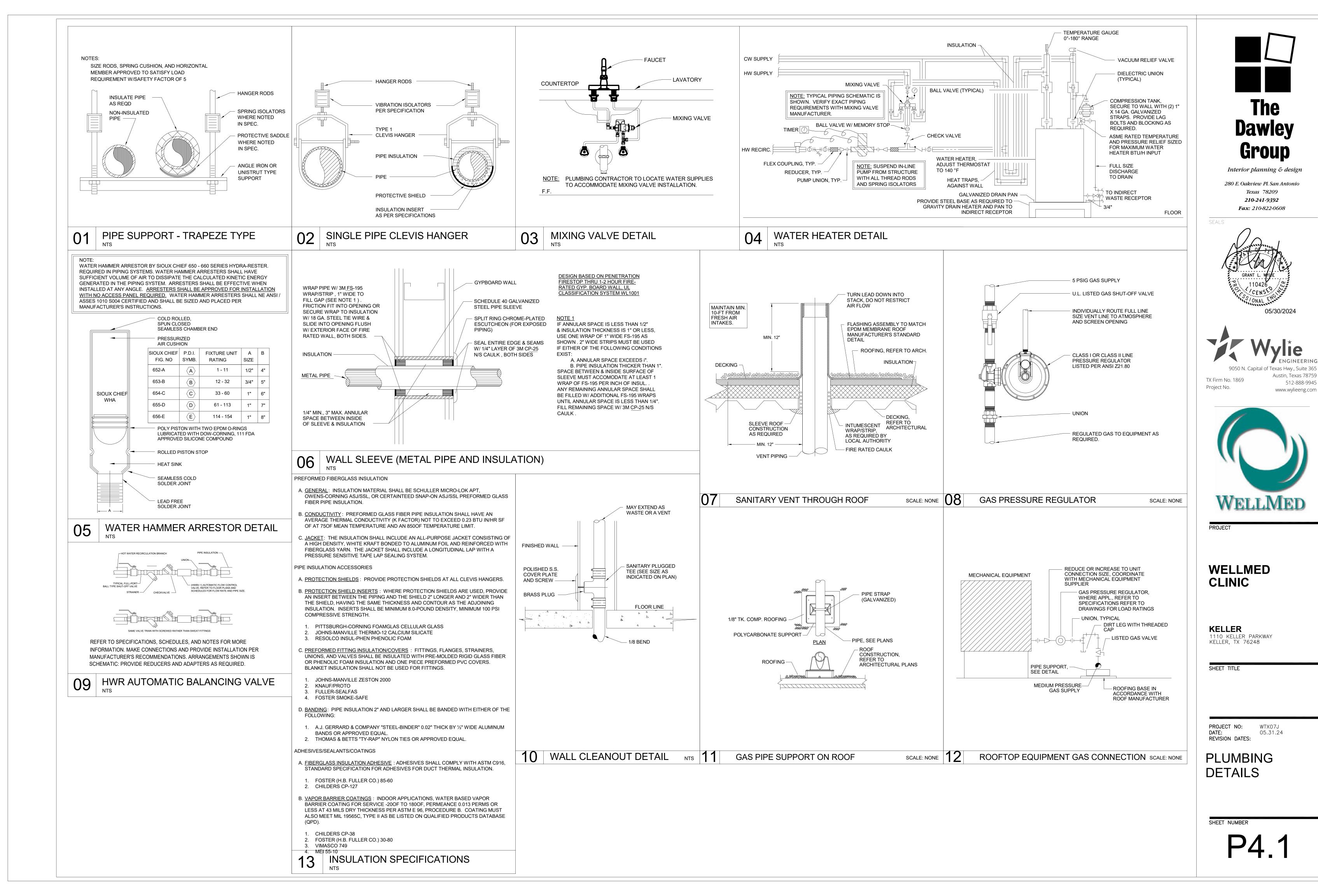
WELLMED CLINIC

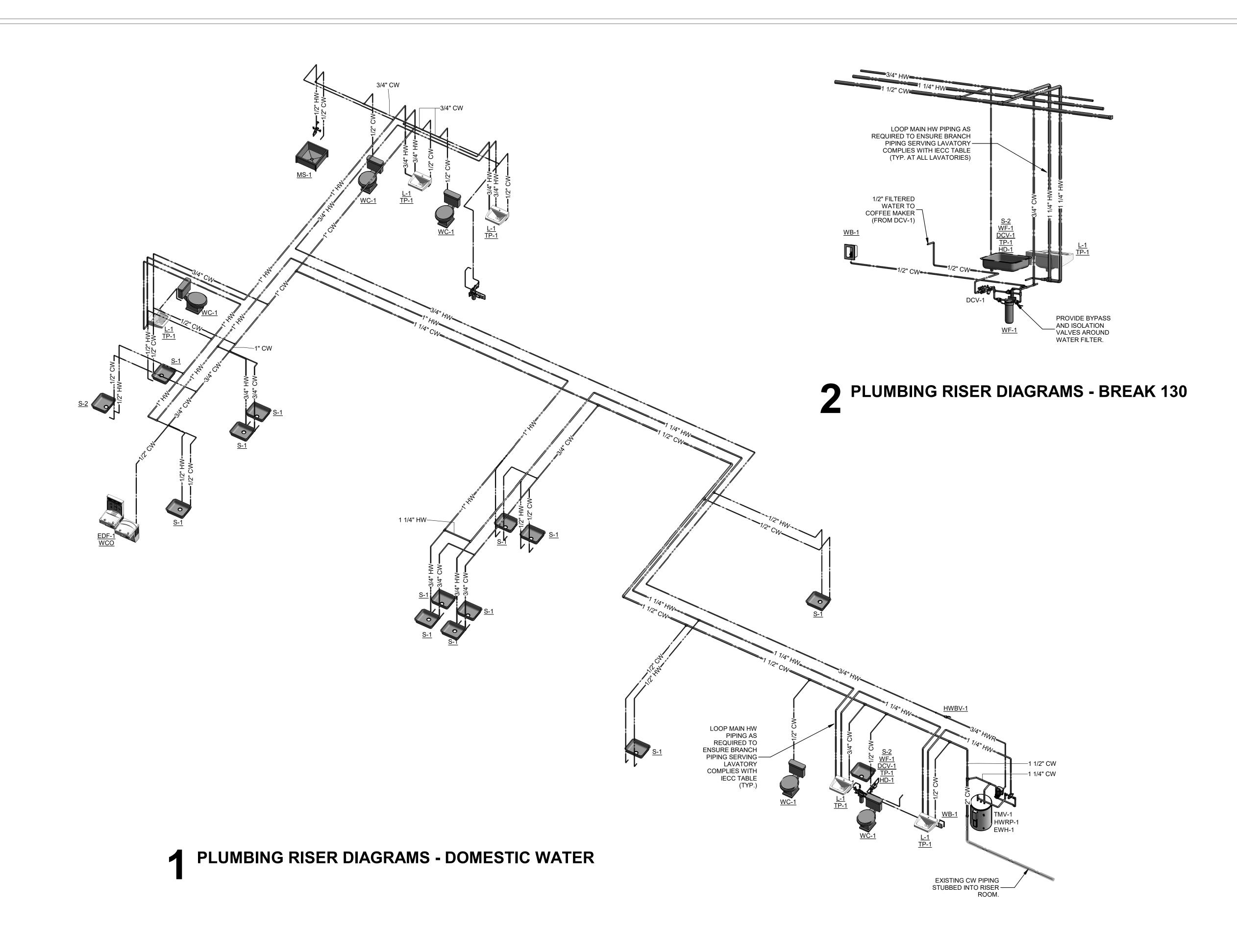
KELLER 1110 keller parkway keller, TX 76248

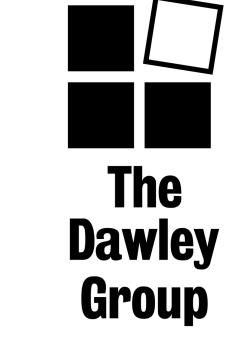
SHEET TITLE

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

PLUMBING SCHEDULES







Interior planning & design
280 E. Oakview Pl. San Antonio

Texas 78209 **210-241-9392 Fax:** 210-822-0608



9050 N. Capital of Texas Hwy., Suite 365
Austin, Texas 78759
TX Firm No. 1869
Project No.

512-888-9945
www.wylieeng.com



PROJEC

WELLMED CLINIC

**KELLER** 1110 KELLER PARKWAY KELLER, TX 76248

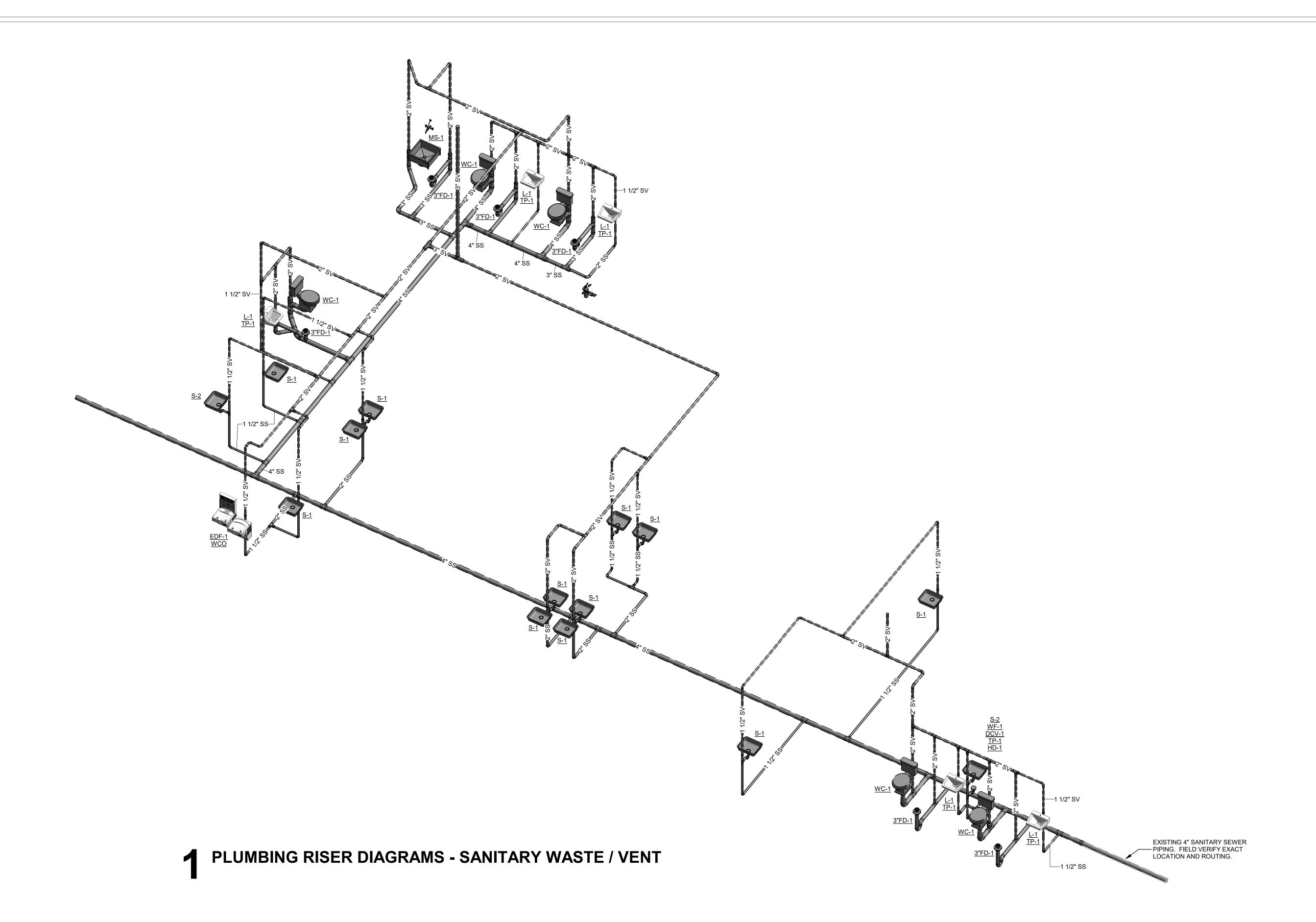
SHEET TITLE

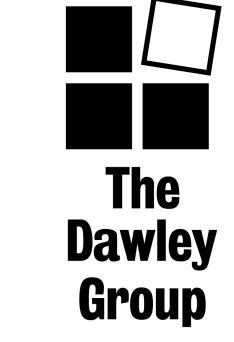
PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

PLUMBING RISER DIAGRAMS -WATER

SHEET NUMBER

P5.1





Interior planning & design

280 E. Oakview Pl. San Antonio Texas 78209 210-241-9392 Fax: 210-822-0608







PROJEC

WELLMED CLINIC

KELLER 1110 keller parkway keller, TX 76248

SHEET TITLE

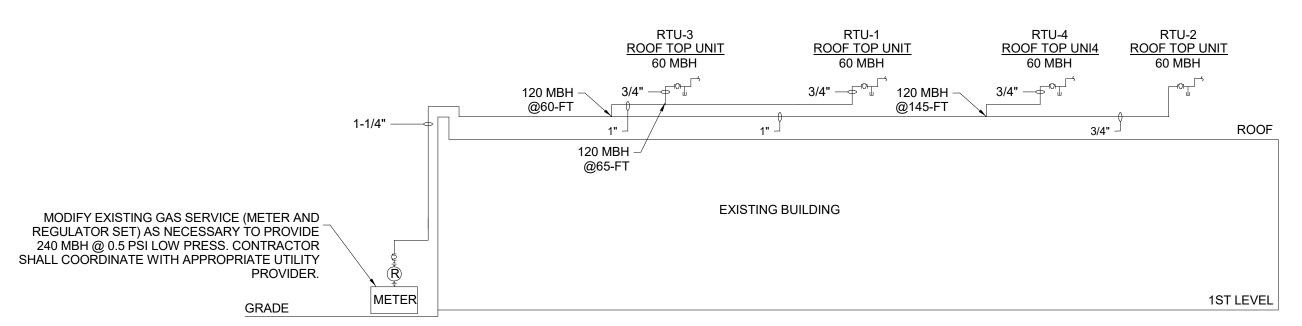
PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

PLUMBING RISER DIAGRANS -SANITARY

SHEET NUMBER

P5.2

MOST REMOTE FIXTURE ON LOW (0.5) PRESSURE SYSTEM @ 160'



# PLUMBING GAS RISER

N.T.S.

#### **GENERAL NOTES:**

- REFER TO PLANS FOR EXACT LOCATION OF CONNECTED EQUIPMENT. CONFIGURATION MAY VARY FROM THIS SCHEMATIC DIAGRAM.
- NOT ALL FIXTURES ARE NECESSARILY SHOWN ON RISER DIAGRAMS. COORDINATE WITH PLANS TO OBTAIN FIXTURE COUNTS.
- 3. REFER TO PLANS AND PLUMBING FIXTURE SCHEDULE FOR ADDITIONAL SIZES AND ROUTING NOT INDICATED ON RISER DIAGRAMS.
- PAINT <u>ALL</u> GAS PIPING WITH ONE COAT OF RUST-INHIBITIVE PRIMER AND TWO COATS OF EPOXY PAINT. COORDINATE COLOR WITH ARCHITECT.



Interior planning & design

280 E. Oakview Pl. San Antonio
Texas 78209
210-241-9392
Fax: 210-822-0608







PROJE

# WELLMED CLINIC

KELLER 1110 keller parkway keller, TX 76248

SHEET TITLE

PROJECT NO: WTX07J
DATE: 05.31.24
REVISION DATES:

PLUMBING RISER DIAGRAM - NATURAL GAS

SHEET NUMBER

P5.3