BEAR LAKE COMMUNITY MEDICAL CLINIC

NEW PROVIDENCE CLINIC INTERIOR REMODEL

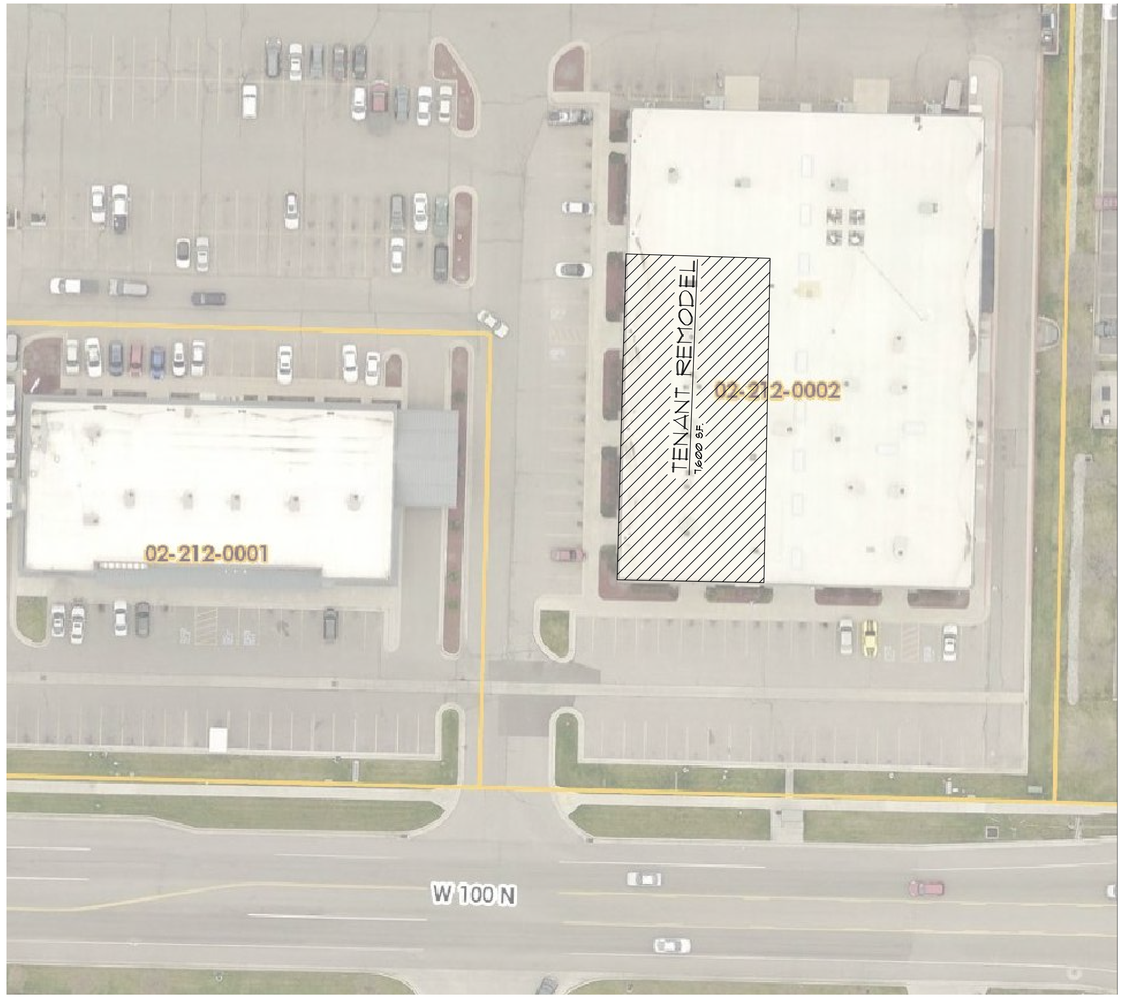
100 WEST 100 NORTH, SUITE 101

PROVIDENCE , UTAH

IBC 2015

DESCRIPTION	IBC REFERENCE	REMARKS
OCCUPANCY BUSINESS B PROFESSIONAL SERVICES - OUTPATIENT CLINIC	Chapter 3 SECT NO. 304	
BASIC ALLOWABLE BUILDING HEIGHT, FLOOR AREA AND STORY IN HEIGHT MAX HEIGHT IN FEET (ALLOWED XFI/IIB/SM)75' MAX ALLOWED MAXIMUM # OF FLOORS (FI/IIB) 4 STORIES ALLOWED B OCCUPANCIES FLOOR AREA (ALLOWED - B/IIB) 69,000 ALLOWABLE AREA 69,000	Chapter 5 Table No. 504.3 Table No. 504.4 Table No. 506.3.3	Provided: PROVIDED HEIGHT = 40' PROVIDED STORIES = 2 B- 2,481 S.F. TOTAL (NON-SEPARATED USE) 7,425 S.F. PROVIDED
TYPE OF CONSTRUCTION TYPE IIB Fire Resistive Requirements Fire Resistive Building Element Rating (In Hours) 1. Structural Frame 0 2. Exterior Bearing Walls 0 Interior Bearing Walls 0 3. Non-Bearing Walls - Exterior 0 4. Non-Bearing Walls - Interior 0 5. Floor Construction - Beams and Joists 0 6. Roof Construction - Beams and Joists 0	Chapter 6 Table No. 601	Comply
INTERIOR FINISHES SPRINKLERED EXIT ENCLOSURES AND PASSAGEWAYS B CORRIDORS C ROOMS AND ENCLOSED SPACES C	Chapter 8 TABLE 803.11	WILL COMPLY WILL COMPLY WILL COMPLY
FIRE PROTECTION AUTOMATIC SPRINKLER SYSTEM - REQUIRED MANUAL FIRE ALARM SYSTEM - REQUIRED MEANS OF EGRESS ILLUMINATION - REQUIRED	Chapter 9 SECTION 903.2.1.3 SECTION 907.2.10 SECTION 1008	MORE THAN 12,000 S.F. (TOTAL BUILDING) PROVIDED
OCCUPANT LOAD OFFICE / CLINIC 7445 S.F. / 100 S.F./OCC - 75 OCCS.	Chapter 10 Table No. 1004.1.2	 TOTAL OCCS - 75
EXITING TWO EXITS REQD PER FLOOR MORE THAN 50 OCCS ACCESSIBLE MEANS OF EGRESS	Chapter 10 TABLE 1006.3.1 SECTION 1007.1	 COMPLY 3 PROVIDED
ACCESSIBILITY GROUP B OCCUPANCIES WILL BE ACCESSIBLE TO PERSONS WITH DISABILITIES AS REQUIRED BY USER. **FURNITURE / RESTROOM LAYOUT SHALL BE ARRANGED TO PROVIDE ACCESSIBILITY THROUGHOUT THE SPACE.	Chapter 11	WILL COMPLY

PLUMBING SYSTEMS					
B OCCUPANCY - PROF. SERVICES MEN = 37 OCCS WOMEN = 38 OCCS TOTAL = 75 OCCS	Chapter 29 TABLE 2902.1				
TOTAL FIXTURES REQUIRED	TOILET = 2	LAV = 2	SHWR = 0	DRINKING FOUNTAIN = 1	SERVICE SINK = 1
TOTAL FIXTURES PROVIDED	TOILET = 2	LAV = 2	SHWR = 0	DRINKING FOUNTAIN = 2	SERVICE SINK = 1
	TOILETS = 4	LAV = 4	SHWR = 0		



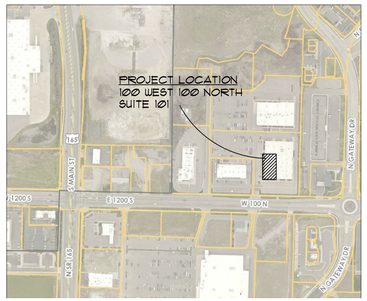
NORTH

REFERENCE SITE PLAN

SCALE: 1" = 30' - 0"

PLAT I.D. # - 19-125-0003

NOTE: THIS PLAN FOR SITE REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ACTUAL SITE CONDITIONS AND DIMENSIONS.



NORTH

REF. PLAN

N.T.S.SCALE

SHEET INDEX

ARCHITECT

JOSEPH T. BECK ARCHITECT, INC.
497 EAST 520 SOUTH
SMITHFIELD , UTAH 84335
435-764-6742
JTBARCHITECT@GMAIL.COM

A0.0	COVER SHEET/REF. SITE PLAN/CODE REVIEW
A0.1	EXISTING FLOOR PLAN
A1.0	FLOOR PLAN / WALL TYPES
A1.1	CEILING PLAN / CEILING TYPES
A1.2	ENLARGED PLANS / ADA KEYNOTES
A2.0	INTERIOR ELEVATIONS
A3.0	DOOR AND ROOM FINISH SCHEDULES

MECHANICAL ENGINEERING

MORTENSEN ENGINEERING, INC.
251 SOUTH 830 EAST
SMITHFIELD, UTAH 84335
435-770-5534
LORINMORTENSEN@COMCAST.NET

M0.1	MECH NOTES, SYM LEGEND, SPECS
M1.0	MECH PLAN
M2.0	MECH DETAILS AND CHEDULES
P0.1	PLUMB NOTES, SYM LEGEND, SPECS
P1.0	PLUMBING PLAN
P2.0	PLUMB DETAILS AND SCHEDULES

ELECTRICAL ENGINEERING

DIXON THOMSON ENGINEERING
127 SOUTH MAIN STREET
LOGAN, UTAH 84321
800.757.2252
THOMSON-DIXON@YAHOO.COM

E1	POWER DISTRIBUTION PLAN
E2	LIGHTING PLAN / FIXTURES
E3	FIRE ALARM PLAN
E4	SCHEDULES

FIRE SPRINKLER COMPANY

DESIGN / BUILD F.S. CONTRACTOR — FIRE SPRINKLING DESIGN UNDER SEPARATE COVER

JOSEPH T. BECK ARCHITECT, INC.
497 EAST 520 SOUTH
SMITHFIELD, UTAH
(435) 764-6742

STATE OF UTAH
JOSEPH T. BECK
137544
11-7-18

DATE
NOV 7, 2018

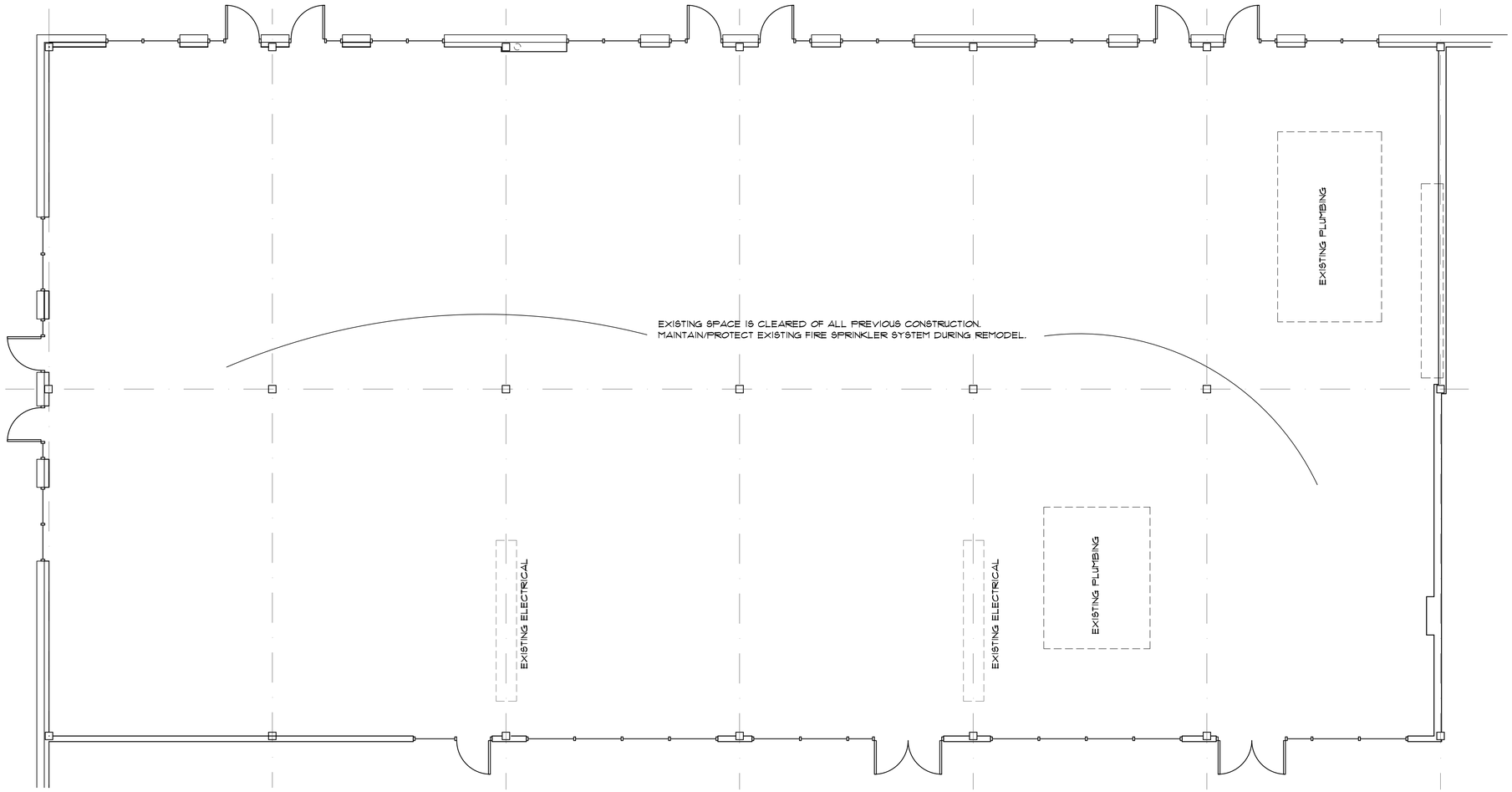
PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
SITE PLAN
PLAN LEGEND
REFERENCE MAP

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
A0.0



EXISTING FLOOR PLAN
SCALE: 3/16"=1'-0"

JOSEPH T. BECK ARCHITECT, INC.
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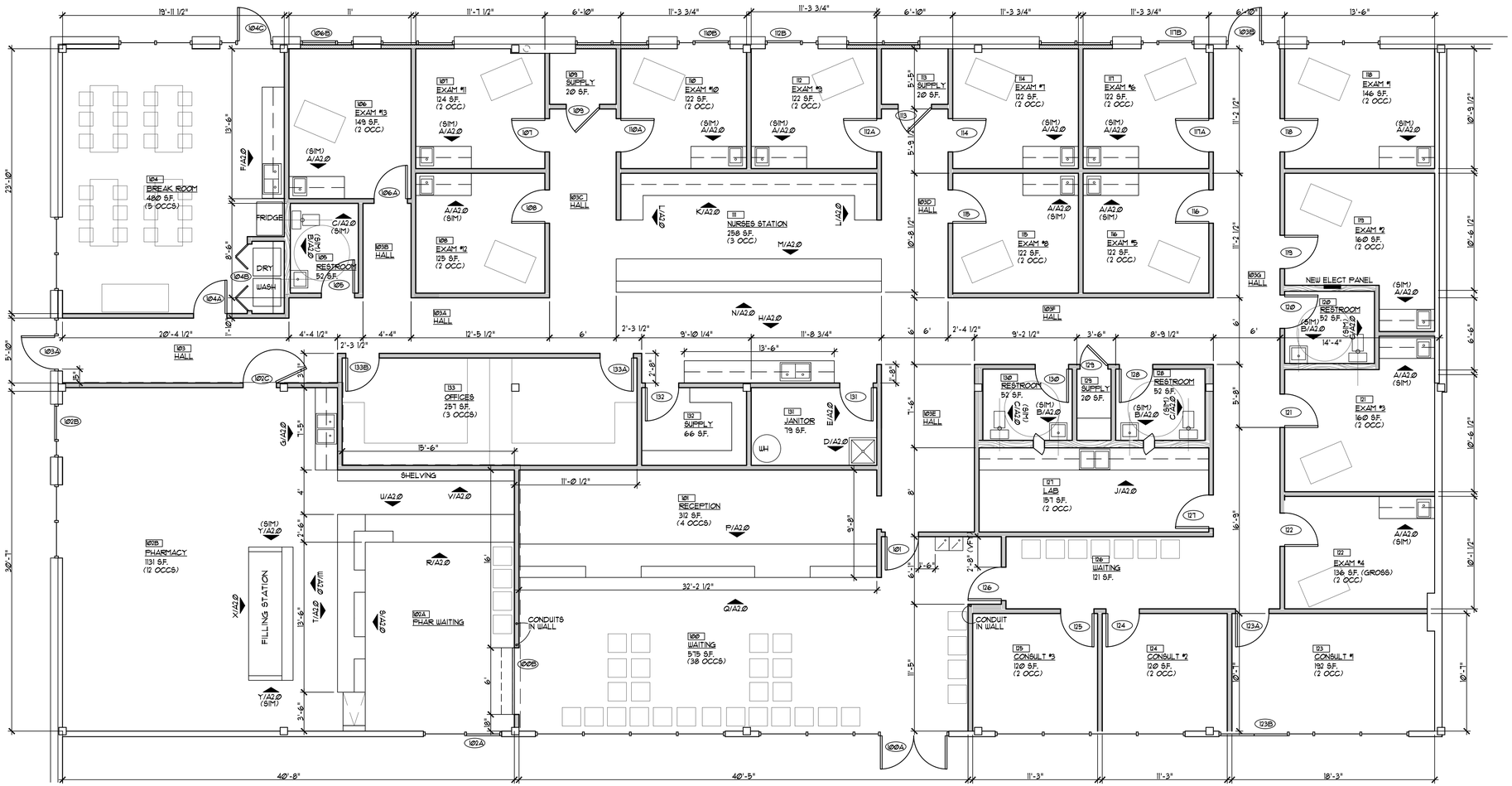
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
EXISTING/DEMO PLAN

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
A1.0



FLOOR PLAN

SCALE: 3/16"=1'-0"

WALL TYPES

INTERIOR NON-BEARING WALL
3 5/8" 20GA. MTL STUDS AT 16" O.C. W/5/8" GYP. BD. EACH SIDE (UR GYP. BD. AT WET WALL LOCATIONS)
(10' HIGH WALL FRAMING TYP.)
(PROVIDE FULL HT. SOUND BATTS - TYP)

INTERIOR WET WALL
6" 20 GA. MTL STUDS AT 16" O.C. W/5/8" GYP. BD. EACH SIDE (UR GYP. BD. AT WET WALL LOCATIONS)
(10' HIGH WALL FRAMING TYP.)
(PROVIDE FULL HT. SOUND BATTS - TYP)

INTERIOR FURRED EXISTING OPENINGS
3 5/8" 20GA. MTL STUDS AT 16" O.C. W/5/8" GYP. BD. INTERIOR SIDE. PROVIDE R-13 BATT INSULATION IN CAVITY. PROVIDE "BLACK-OUT" FILM TO BACK SIDE OF EXISTING GLASS PRIOR TO WALL CONSTRUCTION. REMOVE ALL DOOR/ WINDOW DECLAS PRIOR TO FILM INSTALLATION.

INTERIOR NON-BEARING "SECURITY" WALLS
3 5/8" 20GA. MTL STUDS AT 16" O.C. W/5/8" GYP. BD. EACH SIDE
(WALL FRAMING TO EXTEND TO FLOOR DECKING ABOVE-TYP.)
(PROVIDE FULL HT. SOUND BATTS - TYP)

EXISTING WALLS W/ FURRING
EXISTING MASONRY WALLS WITH METAL STUD FURRING, INSULATION, AND FINISHED GYP BD. AT INTERIOR
(FINISH EXISTING WALLS PER FINISH SCHEDULE)

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SHEET TITLE
FLOOR PLAN
WALL TYPES

PROJECT NUMBER
-

REVISIONS

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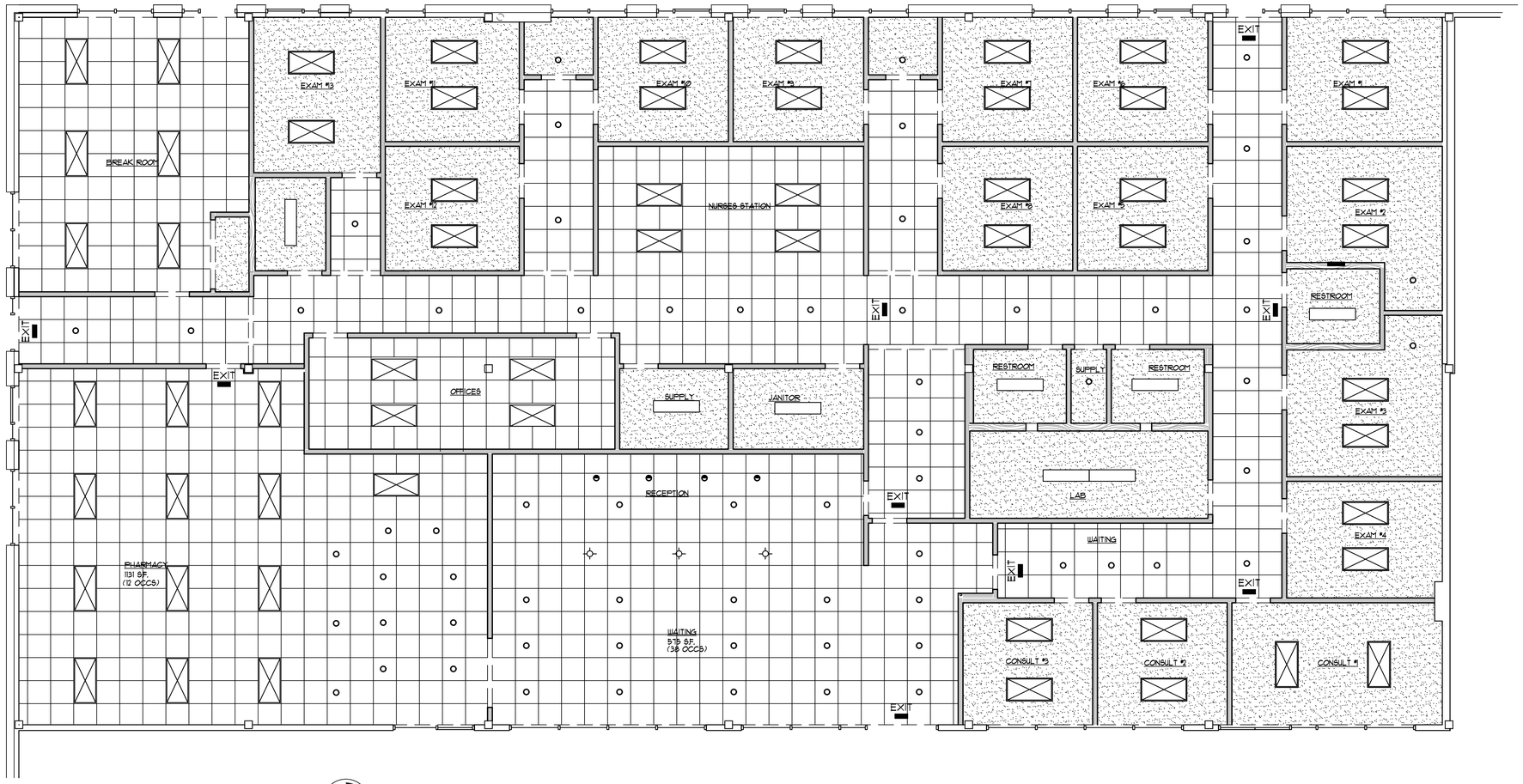
A1.1



PROPOSED CEILING PLAN

SCALE: 3/16"=1'-0"

CEILING LEGEND

NEW 2'X2' CEILING TILES W/ TEGULAR EDGE THROUGHOUT. PROVIDE 1" USG WHITE DONN DX GRID SYSTEM. 9'-0" HIGH - TYP (PROVIDE SEISMIC RESTRAINT ON ROOMS LARGER THAN 1500 S.F.)

PROVIDE FINISHED 5/8" TYPE "X" GYP BD W/ KNOCK DOWN FINISH THROUGHOUT. PROVIDE SUSPENDED MTL STUD JOIST FRAMING AS NEEDED CEILINGS TO BE +9'-0" HIGH.

NEW 2X4 (LED W/ ELECTRONIC BALLAST) FIXTURES AS SHOWN. PROVIDE FIXTURES PER "E" SHEETS

EXIT — NEW CEILING MOUNTED EMERGENCY EXIT LIGHTING W/ CONNECTION TO BUILDING "E" CIRCUIT

NEW (LED CANS) FIXTURES AT LOCATIONS SHOWN. PROVIDE FIXTURES PER "E" SHEETS.

DECORATIVE PENDANT FIXTURES AT LOCATIONS SHOWN. PROVIDE FIXTURES PER "E" SHEETS.

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NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
CEILING PLAN
CEILING LEGEND

PROJECT NUMBER
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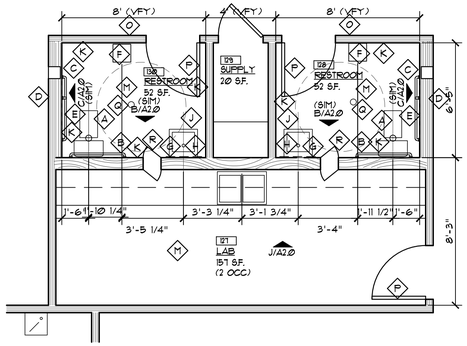
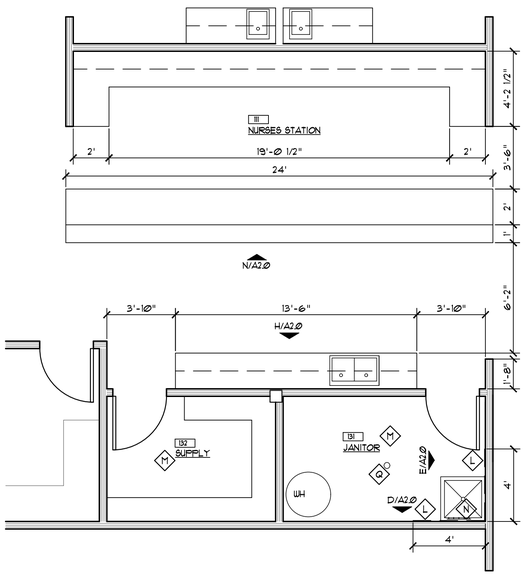
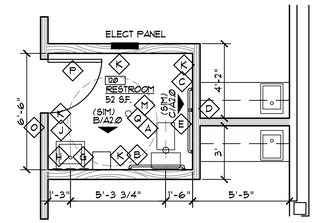
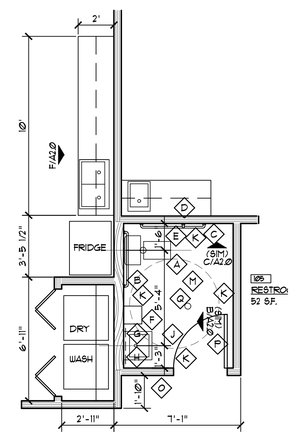


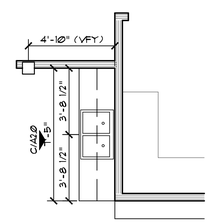


BATHROOM KEYNOTE SCHEDULE

- A. 18" "HI-BOY" TANK TYPE TOILET
- B. 36" GRABBAR (+2'-10" AFF)
- C. 42" GRABBAR (+2'-10" AFF)
- D. 18" GRABBAR (VERT 36" FROM BACK WALL)
- E. TOILET PAPER HOLDER (COORD. LOCATION WITH GRABBERS
- F. PAPER TOWEL DISPENSER (+48" AFF)
- G. SOAP DISPENSER TO MIRROR (+48" AFF)
- H. 24" X 42" MIRROR (+38" AFF)
- J. ADA WALL MOUNTED LAVATORY W/ PIPING COVERS UNDERNEATH. (SEE ELEV.)
- K. CERAMIC TILE WALL COVERING (SEE FINISH SCHEDULE)
- L. 4' X 4' WHITE FRP ADJACENT TO MOP SINK AS SHOWN.
- M. PROVIDE PAINTED FINISH AT ALL FRAMED WALLS AND CEILINGS UNLESS NOTED OTHERWISE.
- N. PROVIDE & PLACE MOP RACK TO WALL ABOVE MOP SINK WHERE SHOWN. INSTALL AT 46" FROM FLOOR.
- O. PROVIDE "ADA" RESTROOM SIGNAGE AT +60" AFF TO CENTER
- P. PROVIDE COAT HOOK ON BACK OF DOOR AT +50 AFF
- Q. FLOOR DRAIN, SEE "P" SHEETS FOR INSTALLATION.
- R. BOBRICK B-505 SPECIMEN PASS THROUGH WINDOW. INSTALL AT + 40" TO BOTTOM OF OPENING.







ENLARGED FLOOR PLANS
SCALE: 1/4"=1'-0"

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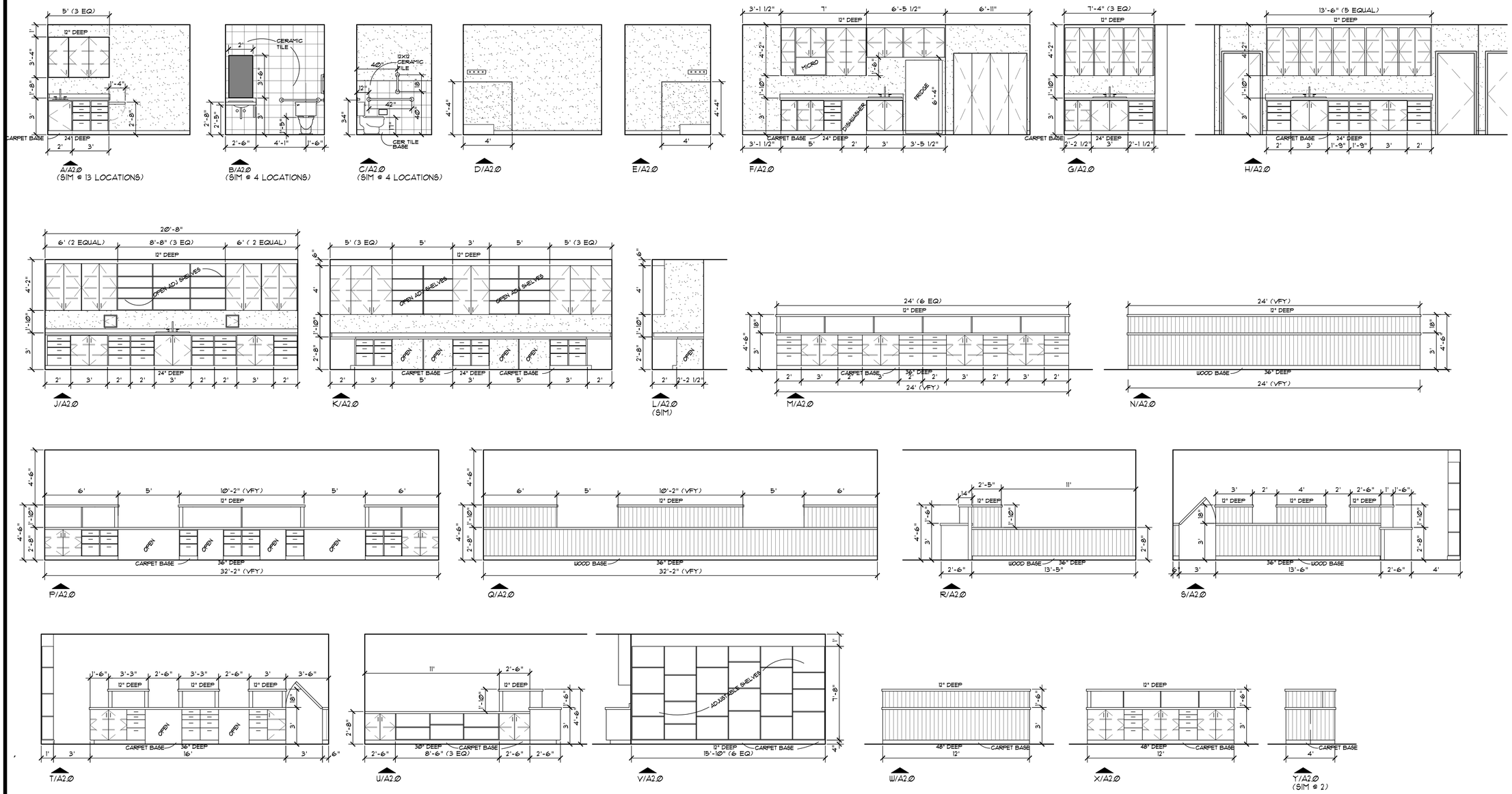
PROVIDENCE , UTAH

SHEET TITLE
ENLARGED PLANS

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
A1.2



INTERIOR ELEVATIONS

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

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NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
INT ELEVATIONS

PROJECT NUMBER
-

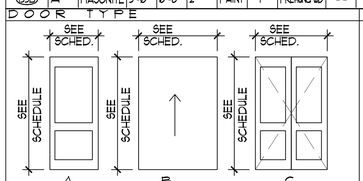
REVISIONS

SHEET NUMBER
A2.0

DOOR SCHEDULE

DOOR #	DOOR TYPE	MATERIAL	WIDTH	HEIGHT	THICK	FINISH	FRAME TYPE	FRAME MAT	HEAD	JAMB	SILL	HARDWARE GROUP	LABEL	GLAZING	NOTES
020A	--	EXISTING	6'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	EXISTING	--	--	A
020B	B	OH DOOR	6'-0"	7'-0"	--	ALUM	2	ALUMINUM	--	--	N/A	BY MANUF	--	--	--
100	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
022A	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
023A	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	E	--	--	A
023B	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	E	--	--	A
024A	A	MASONITE	3'-0"	6'-8"	1 1/2"	PAINT	1	PREHUNG WD	--	--	N/A	D	--	--	--
024B	C	MASONITE	6'-0"	6'-8"	1 1/2"	PAINT	1	PREHUNG WD	--	--	N/A	BI-FOLD	--	--	--
024C	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	E	--	--	A
105	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
026A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
026B	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
107	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
108	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
109	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	C	--	--	--
110A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
110B	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
112A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
112B	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
113	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	C	--	--	--
114	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
115	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
116	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
117A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
117B	--	EXISTING	3'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
118	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
119	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
120	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
121	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
122	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
123A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
123B	--	EXISTING	6'-0"	7'-0"	2"	--	--	ALUMINUM	--	--	N/A	--	--	--	B
124	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
125	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
126	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
127	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
128	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
129	A	MASONITE	2'-6"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	C	--	--	--
130	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	B	--	--	--
131	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	C	--	--	--
132	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	C	--	--	--
133A	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	A	--	--	--
133B	A	MASONITE	3'-0"	6'-8"	2"	PAINT	1	PREHUNG WD	--	--	N/A	A	--	--	--

DOOR TYPE

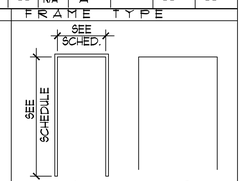


A — SOLID CORE MASONITE

B — OH SECURITY GATE (MANUAL)

C — HOLLOW CORE BI-FOLD PAIR

FRAME TYPE



1 — PRE-HUNG WOOD JAMB W/ PAINTED WD TRIM.

2 — NO JAMB FINISHED GYP BD.

HARDWARE SCHEDULE NOTES

ALL PREHUNG DOORS TO HAVE PRIMED WOOD JAMBS FOR FIELD PAINTING WITH BRUSHED S.S. HINGES THROUGHOUT. ALL LOCKSETS TO BE COMMERCIAL LEVER TYPE (BRUSHED S.S.). (LEVERS TO BE 42" AFF)
PROVIDE PERIMETER SOUND GASKETING AT ALL INTERIOR SWING DOORS.
PROVIDE WALL MOUNTED DOOR STOP WITH SOLID BLOCKING IN WALL (TYP.)

A - BRUSHED S.S. - OFFICE LOCKSET (LEVER STYLE)
B - BRUSHED S.S. - PRIVACY LOCKSET (LEVER STYLE)
C - BRUSHED S.S. - STORAGE LOCKSET (LEVER STYLE)
D - BRUSHED S.S. - PASSAGE LOCKSET (LEVER STYLE)
E - PROVIDE PANIC DEVICE ON EXISTING DOOR. PROVIDE BLANK OFF PLATES ON THE EXTERIOR FACE. "THIS DOOR WILL BE EXIT ONLY"

** VERIFY ALL KEYING WITH OWNER PRIOR TO FINAL INSTALLTION OF LOCKSETS.

NOTES

A - EXISTING DOOR/FRAME TO REMAIN. PROVIDE NEW HARDWARE PER SCHEDULE.
B - EXISTING DOOR/FRAME TO REMAIN. DOOR TO BE LOCKED SHUT. PROVIDE BLACK OR FROSTED TINTING TO INSIDE FACE OF DOOR AND SIDELIGHT AT EACH LOCATION

ROOM FINISH SCHEDULE

RM #	ROOM NAME	FLOORING	BASE	WALLS N	WALLS S	WALLS W	WALLS E	CEILING	CEILING HT.	NOTES
100	WAITING	C	3	A	A	A	--	2	9'-0"	
101	RECEPTION	C	3	A	A	--	B	2	9'-0"	
102A	PHARMACY WAIT	C	3	A	--	B	A	2	9'-0"	
102B	PHARMACY	C	3	A	A	A	A	2	9'-0"	
103	HALL	D	3	A	A	A	A	2	9'-0"	
103A	HALL	D	3	A	A	A	A	2	9'-0"	
103B	HALL	D	3	A	A	A	A	2	9'-0"	
103C	HALL	D	3	A	A	A	A	2	9'-0"	
103D	HALL	D	3	A	A	A	A	2	9'-0"	
103E	HALL	D	3	A	A	A	A	2	9'-0"	
103F	HALL	D	3	A	A	A	A	2	9'-0"	
103G	HALL	D	3	A	A	A	A	2	9'-0"	
104	BREAK ROOM	D	3	A	A	A	A	2	9'-0"	
105	RESTROOM	B	2	A	D	C	C	1	9'-0"	
106	EXAM #3	C	3	A	A	A	A	1	9'-0"	
107	EXAM #1	C	3	A	A	A	A	1	9'-0"	
108	EXAM #2	C	3	A	A	A	A	1	9'-0"	
109	SUPPLY	C	3	A	A	A	A	1	9'-0"	
110	EXAM #10	C	3	A	A	A	A	1	9'-0"	
111	NURSE'S STATION	D	3	B	B	B	--	2	9'-0"	
112	EXAM #3	C	3	A	A	A	A	1	9'-0"	
113	SUPPLY	C	3	A	A	A	A	1	9'-0"	
114	EXAM #1	C	3	A	A	A	A	1	9'-0"	
115	EXAM #8	C	3	A	A	A	A	1	9'-0"	
116	EXAM #5	C	3	A	A	A	A	1	9'-0"	
117	EXAM #6	C	3	A	A	A	A	1	9'-0"	
118	EXAM #1	C	3	A	A	A	A	1	9'-0"	
119	EXAM #2	C	3	A	A	A	A	1	9'-0"	
120	RESTROOM	B	2	C	C	D	A	1	9'-0"	
121	EXAM #3	C	3	A	A	A	A	1	9'-0"	
122	EXAM #4	C	3	A	A	A	A	1	9'-0"	
123	CONSULT #1	C	3	B	A	A	A	1	9'-0"	
124	CONSULT #2	C	3	B	A	A	A	1	9'-0"	
125	CONSULT #3	C	3	A	B	A	A	1	9'-0"	
126	WAITING	D	3	A	A	A	A	2	9'-0"	
127	LAB	A	1	A	A	A	A	1	9'-0"	
128	RESTROOM	B	2	C	C	A	D	1	9'-0"	
129	SUPPLY	C	3	A	A	A	A	1	9'-0"	
130	RESTROOM	B	2	C	C	A	D	1	9'-0"	
131	JANITOR	E	4	A	A	A	A	1	9'-0"	
132	SUPPLY	C	3	A	A	A	A	1	9'-0"	
133	OFFICE	C	3	A	A	A	A	2	9'-0"	

FINISH SCHEDULE LEGEND (VFY ALL FINAL FINISHES WITH OWNER)

FLOORING

A. SHEET VINYL FLOORING
B. 12X12 CERAMIC TILE (THIN SET)
C. BROAD LOOM CARPETING - SELECTED BY OWNER
D. 2X2 CARPET TILES - SELECTED BY OWNER
E. NO FLOORING - EXPOSED CONCRETE

BASE

1. COVED SHEET VINYL (6")
2. CERAMIC WALL TILE (6" MIN) (SEE WALL FINISHES)
3. 4" CARPET BASE - COMPLIMENT FLOOR CARPET
4. 4" RUBBER BASE - COMPLIMENT FLOOR CARPET

WALLS

A. FINISHED PAINTED GYP BOARD - COLOR #1 (SELECTED BY OWNER)
B. FINISHED PAINTED GYP BOARD - COLOR #2 (SELECTED BY OWNER)
C. 12X12 CERAMIC TILE (48" HIGH)
D. 12X12 CERAMIC TILE (FULL HEIGHT 9')
E. 48" HIGH FRP PANELING AND TRIM (WHITE)

CEILING

1. SKIP TROWEL TEXTURED GYP BD. (PAINTED TO MATCH ADJACENT WALLS)
2. 2X2 TEGULAR ACOUSTIC CEILING SYSTEM ON 1" USG DONN DX WHITE GRID

JOSEPH T. BECK ARCHITECT, INC.
497 EAST 520 SOUTH
SMITHFIELD, UTAH
(435) 764-6742

STATE OF UTAH
JOSEPH T. BECK
137544
11-7-18

DATE
NOV 7, 2018

PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

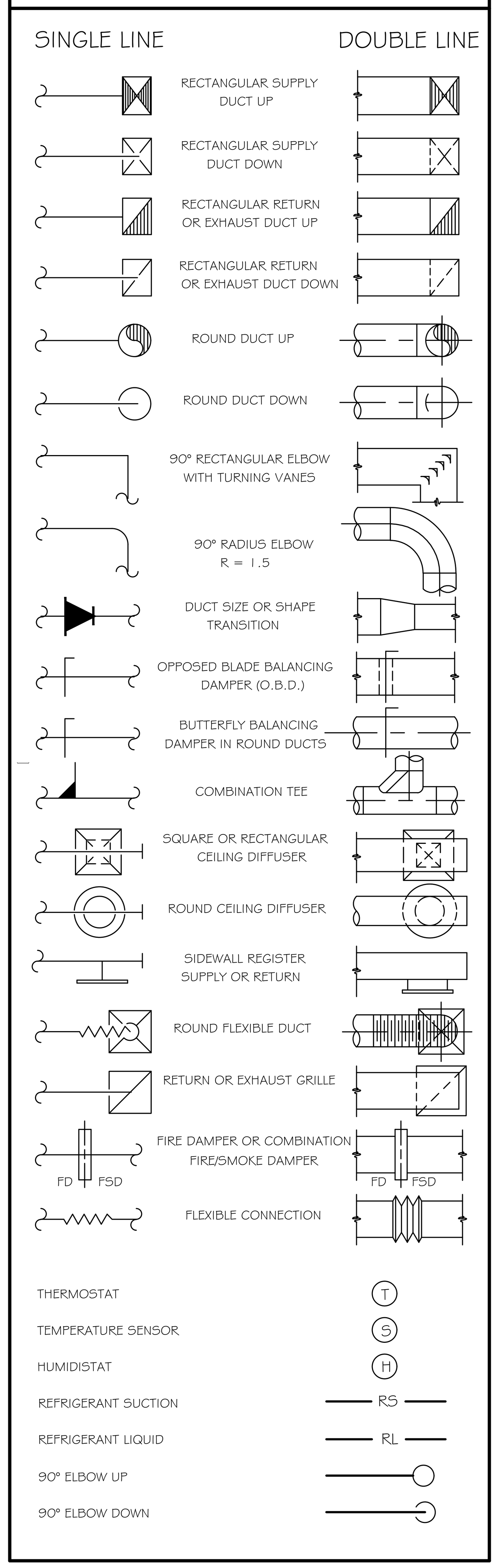
SHEET TITLE
SCHEDULES

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
A4.0

MECHANICAL SYMBOL LEGEND



MECHANICAL ABREVIATIONS

AD	ACCESS DOOR	N/A	NOT APPLICABLE
AHU	AIR HANDLING UNIT	NIC	NOT IN CONTRACT
BD	BALANCING DAMPER	NTS	NOT TO SCALE
BHP	BRAKE HORSE POWER	NO	NUMBER
BTU	BRITISH THERMAL UNIT	OZ	OUNCE
CFM	CUBIC FEET PER MINUTE	OA	OUTSIDE AIR
COND	CONDENS(-ER,-ING,-ATION)	PSF	POUNDS PER SQAURE FT.
CLG	COOLING	PSI	POUNDS PER SQUARE IN.
CW	COLD WATER	PSIA	PSI ABSOLUTE
DP	DEPTH OR DEEP	PSIG	PSI GAUGE
ID	INSIDE DIAMTER	PRESS	PRESSURE
OD	OUTSIDE DIAMTER	PD	PRESSURE DIFFERENCE
DB	DRY BULB TEMPERATURE	SP	STATIC PRESSURE
(E)	EXISTING	RA	RETURN AIR
EFF	EFFICIENCY	RPM	REVOLUTIONS PER MIN.
ELEV	ELEVATION	SF	SAFETY FACTOR
EWT	ENTERING WATER TEMP.	SL	SEA LEVEL
EVAP	EVAPORAT(-E,-ING,-ED,-OR)	SH	SENSIBLE HEAT
(F)	FUTURE	SC	SHADING COEFFICIENT
F	FARENHEIT	SPEC	SPECIFICATION
FC	FLEXIBLE CONNECT(-OR,-ION)	SQ	SQUARE
FD	FIRE DAMPER	STD	STANDARD
FPS	FEET PER SECOND	SP	STATIC PRESSURE
FSD	FIRE SMOKE DAMPER	SPLY	SUPPLY
FT	FEET	SA	SUPPLY AIR
GAL	GALLON(S)	TEMP	TEMPERATURE
GPH	GALLONS PER HOUR	TD	TEMP. DROP OR DIFF.
GPM	GALLONS PER MINUTE	R	THERMAL RESITANCE
HD	HEAD	TSTAT	THERMOSTAT
HT	HEIGHT	T	TIME
HTG	HEATING	VAC	VACUUM
HP	HORSE POWER	VAV	VARIBLE AIR VOLUME
HW	HOT WATER	VENT	VENT, VENTILATION
LH	LATENT HEAT	VERT	VERTICAL
LAT	LEAVING AIR TEMPERATURE	VOL	VOLUME
LWT	LEAVING WATER TEMP.	WTR	WATER
LG	LENGTH	WT	WEIGHT
MAX	MAXIMUM	WB	WET BULB TEMP.
MIN	MINIMUM	YR	YEAR
NO	NORMALLY OPEN		
NC	NORMALLY CLOSED		

MECHANICAL SPECIFICATIONS ③

FURNACES

A. PROVIDE AND INSTALL FURNACES WITH CAPACITIES, FEATURES, AND ACCESSORIES AS SHOWN ON THE EQUIPMENT SCHEDULE. PROVIDE EQUIPMENT FROM THE FOLLOWING APPROVED MANUFACTURERS: BRYANT, CARRIER, LENNOX, TRANE, YORK.

B. PROVIDE 10 YEAR MINIMUM WARRANTY FOR THE HEAT EXCHANGER.

C. PROVIDE AN EXTRA SET OF FAN BELTS FOR EACH FAN AND AN EXTRA SET OF FILTERS FOR EACH UNIT.

D. FURNACE SHALL BE FACTORY ASSEMBLED AND TESTED. UNIT SHALL BE CONSTRUCTED WITH MANUFACTURER'S STANDARD CONSTRUCTION WITH ALL COMPONENTS, EQUIPMENT, AND ACCESSORIES. THE ENCLOSURE SHALL HAVE A CORROSION-PROTECTION COATING AND EXTERIOR FINISH.

E. PROVIDE THE FOLLOWING FEATURES WITH THE FURNACE UNLESS NOTED OHERWISE ON THE EQUIPMENT SCHEDULE: 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTOMATIC HEATING AND COOLING CHANGEOVER, AND SERVICE DISCONNECT.

F. PROVIDE COMPLETE FURNACE STARTUP AND COMMISSIONING INCLUDING CONTROLS CHECKOUT, LUBRICATION, FAN ROTATION, VIBRATION, REFRIGERATION SYSTEM, CLEANING, TESTING, AND BALANCING.

G. PROVIDE A FACTORY AUTHORIZED SERVICE REPRESENTATIVE TO COMPLETE THE UNIT STARTUP AND OWNER TRAINING.

AIR COOLED CONDENSING UNITS

A. PROVIDE AND INSTALL AIR-COOLED CONDENSING UNITS WITH CAPACITIES, FEATURES, AND ACCESSORIES AS SHOWN ON THE EQUIPMENT SCHEDULE. PROVIDE EQUIPMENT FROM THE FOLLOWING APPROVED MANUFACTURERS: BRYANT, CARRIER, LENNOX, TRANE, YORK.

B. CONDENSING UNIT SHALL BE FACTORY ASSEMBLED AND TESTED. UNIT SHALL BE CONSTRUCTED WITH MANUFACTURER'S STANDARD CONSTRUCTION WITH ALL COMPONENTS, EQUIPMENT, AND ACCESSORIES. THE ENCLOSURE SHALL HAVE A CORROSION-PROTECTION COATING AND EXTERIOR FINISH.

C. PROVIDE THE FOLLOWING FEATURES WITH THE CONDENSING UNIT UNLESS NOTED OHERWISE ON THE EQUIPMENT SCHEDULE: LOW AMBIENT HEAD-PRESSURE CONTROL TO OPERATE AT 0 DEG. F., VIBRATION ISOLATION PADS, MOTOR STARTER, AND SERVICE DISCONNECT.

D. PROVIDE COMPLETE UNIT STARTUP AND COMMISSIONING INCLUDING CONTROLS CHECKOUT, LUBRICATION, FAN ROTATION, VIBRATION, REFRIGERATION SYSTEM, CLEANING, TESTING, AND BALANCING.

E. PROVIDE A FACTORY AUTHORIZED SERVICE REPRESENTATIVE TO COMPLETE THE UNIT STARTUP AND OWNER TRAINING.

COMMISSIONING

A. PROVIDE SYSTEM COMMISSIONING OF ALL MECHANICAL SYSTEMS CONSISTING OF FIELD VERIFICATION AND CERTIFYING THAT THE MECHANICAL SYSTEM IS PROPERLY INSTALLED AND IS FULLY OPERATIONAL.

B. PROVIDE A SYSTEM COMMISSIONING REPORT TO BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL THAT INCLUDES A CHECKLIST OF ALL EQUIPMENT AND SYSTEMS.

ELECTRIC AND ELECTRONIC CONTROLS

A. PROVIDE AND INSTALL A COMPLETE AUTOMATIC CONTROL SYSTEM AS DESCRIBED IN THE DRAWINGS. ALL SYSTEM CONTROLS SHALL BE PROVIDED BY A SINGLE MANUFACTURER'S PRODUCTS. APPROVED MANUFACTURERS ARE: BRYANT, CARRIER, HONEYWELL, TRANE

TEST AND BALANCE

A. PROVIDE A COMPLETE AIR SYSTEM BALANCE, TEST, AND REPORT BY A NEBB, OR AABC CERTIFIED TEST AND BALANCE SUPERVISER WITH EXPERIENCE IN BALANCING SYSTEMS OF SIMILAR TYPES AND SIZE.

B. PROVIDE ALL NECESSARY TOOLS, EQUIPMENT, SHEAVE CHANGES, BELTS, AND ACCESSORIES TO COMPLETE WORK.

C. PROVIDE A REPORT SHOWING THE REQUIRED AND THE ACTUAL FLOWS. INCLUDE IN THE REPORT A DRAWING SHEMATIC OF THE SYSTEMS BALANCED, AND SYSTEMS CHECK REPORT. SUBMIT THE BALANCING REPORT FOR REVIEW PRIOR TO THE FINAL INSPECTION. ALL REPORTS SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

MECHANICAL SPECIFICATIONS ②

METAL DUCTS

A. PROVIDE AND INSTALL SHEETMETAL DUCTS CONFORMING TO SMACNA, ASHRAE, AND AND NFPA 90A STANDARDS AS SHOWN ON THE MECHANICAL PLANS.

B. SHOP FABRICATE SQUARE, RECTANGULAR, ROUND, AND OVAL DUCTS, FITTINGS, HANGERS AND SUPPORTS ACCORDING TO SMACNA HVAC DUCT CONTRUCTION STANDARDS.

C. FACTORY APPLY DUCT LINER USING APPROVED SMACNA METHODS TO ALL REQUIRED DUCTS AS INDICATED IN THE INSULATION SECTION OF THIS SPECIFICATION.

D. PROVIDE TURNING VANES IN ALL RECTANGULAR DUCT FITTINGS OVER 45° ANGLES. PROVIDE 1.5 RADIUS ELBOWS ON ALL ROUND DUCTS.

E. SEAL ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS, AND CONNECTIONS WITH AN APPROVED SEALANT OR SEALING METHOD.

F. DUCT DIMENSIONS SHOWN ARE SHOWN ARE SHEETMETAL SIZES. NO INCREASE FOR DUCT LINER IS REQUIRED.

G. INSTALL DUCTWORK IN THE MOST EFFICIENT MANNER POSSIBLE, MINIMIZING JOINTS AND CHANGES IN DIRECTION.

H. PROTECT STORED AND INSTALLED DUCTWORK FROM DUST, DIRT, MOISTURE, AND CONSTRUCTION DEBRIS. CLEAN ALL DUCTWORK PRIOR TO OPERATION.

I. ALL ROUND DUCTS SHALL BE CONSTRUCTED OF SPIRAL WOUND SHEET METAL.

DUCT ACCESSORIES

A. PROVIDE AND INSTALL THE FOLLOWING DUCT ACCESSORIES WHERE INDICATED ON THE DRAWINGS: BACKDRAFT DAMPERS, BALANCING DAMPERS, FIRE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS, ACTUATORS, TURNING VANES, ACCESS DOORS, FLEXIBLE DUCTS, AND ACCESSORIES HARDWARE.

B. PROVIDE CONCEALED DAMPER REGULATORS WITH REQUIRED LINKAGES AND COVER PLATES FOR EACH DAMPER LOCATED ABOVE A NON-ACCESSIBLE CEILING.

C. FIRE DAMPERS SHALL BE UL LISTED AND LABELED. FIRE DAMPERS SHALL BE RATED FOR 1-1/2 HOURS FOR FIRE RESISTIVE ASSEMBLIES RATED FOR 2 HOURS OR LESS AND RATED FOR 3 HOURS FOR FIRE RESISTIVIE ASSEMBLIES RATED 3 HOURS OR MORE. REPLACEABLE FUSIBLE LINKS RATED FOR 165° F SHALL BE USED. USE TYPE A, B, OR C AS INDICATED ON THE DRAWINGS.

E. PROVIDE TURNING VANES WHERE NOTED IN THE METAL DUCTS SPECIFICATION.

F. PROVIDE DUCT MOUNTED ACCESS DOORS AT ALL FIRE DAMPERS, FIRE/SMOKE DAMPERS, AND MOTORIZED CONTROL DAMPERS. ACCESS DOORS SHALL BE FACTORY CONSTRUCTED OF GALVANIZED SHEET METAL AND HAVE HINGES, GASKETS, SEALS, AND LATCHES.

G. FLEXIBLE DUCTS SHALL BE ROUND INSULATED, FACTORY-FABRICATED OR CORRUGATED ALUMINUM WITH AN OUTER JACKET, AND A SPIN COLLAR. THE MAXIMUM ALLOWABLE LENGTH OF FLEX DUCT SHALL BE 5'-0" AT ALL DIFFUSER TERMINATIONS.

H. PROVIDE INSTRUMENT TEST HOLES AT THE INLET AND OUTLET OF ALL FAN SYSTEMS.

I. INSTALL ALL DUCT ACCESSORIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND SMACNA STANDARDS.

EXHAUST FANS

A. PROVIDE AND INSTALL EXHAUST FANS WITH TYPE, CAPACITIES, FEATURES, AND ACCESSORIES AS SHOWN ON THE EQUIPMENT SCHEDULE. PROVIDE EQUIPMENT FROM THE FOLLOWING APPROVED MANUFACTURERS: ACME, BROAN, CARNES, COOK. GREENHECK, PENN

B. ALL EXHAUST FANS SHALL DESIGNED, MANUFACTURED, TESTED, AND LABELED IN ACCORDANCE WITH UL REQUIREMENTS AND AMCA STANDARDS.

C. PROVIDE FACTORY FABRICATED AND ASSEMBLED EXHAUST FANS COMPLETE WITH ALUMINUM HOUSING, ALUMINUM FAN WHEEL, SHAFT, BEARINGS, DIRECT OR BELT DRIVE ASSEMBLY, PAINTED STEEL OR ALUMINUM GRILL, BACKDRAFT DAMPER, MOTOR, DISCONNECT SWITCH, MOUNTING BRACKETS, AND ACCESSORIES AS NOTED.

D. PROVIDE AND INSTALL REMOTE FAN SPEED CONTROL, PROGRAMMABLE TIMER, MANUAL TIMER, ON-OFF SWITCH AS INDICATED IN THE EQUIPMENT SCHEDULE.

E. PROVIDE COMPLETE FAN UNIT STARTUP AND COMMISSIONING INCLUDING CONTROLS CHECKOUT, LUBRICATION, FAN ROTATION, VIBRATION, CLEANING, TESTING, AND BALANCING.

AIR OUTLETS AND INLETS

A. PROVIDE FACTORY FABRICATED AND ASSEMBLED CEILING AIR DIFFUSERS AND GRILLES, WALL REGISTERS AND GRILLES, AND LOUVERS COMPLETE WITH ALL FEATURES AND ACCESSORIES AS NOTED IN THE SCHEDULE. PROVIDE EQUIPMENT FROM THE FOLLOWING APPROVED MANUFACTURERS: AIROLITE, ANEMOSTAT, CARNES, COOLEY & HART, E.H. PRICE, J & J REGISTER, KRUEGER, LOUVERS AND DAMPERS, NAILOR, RUSKIN, TITUS, AND TUTTLE & BAILEY.

B. ALL AIR OUTLETS AND INLETS SHALL BE DESIGN, MANUFACTURERED, AND TESTED TO CONFORM TO ARI, ASHRAE, ADC, AND AMCA STANDARDS.

C. CEILING DIFFUSERS AND REGISTERS AND WALL REGISTERS AND GRILLES SHALL BE CONSTRUCTED OF GALVANIZED STEEL OR ALUMINUM AND SHALL HAVE A BAKED ENAMEL FINISH. COLOR SELECTION BY THE ARCHITECT OR OWNER.

D. LOUVERS SHALL BE CONSTRUCTED OF ALUMINUM EXTRUSIONS WITH WELDED CONNECTIONS OR STAINLESS STEEL FASTENERS. PROVIDE 1/2" ANODIZED ALUMINUM WIRE BIRD SCREEN. LOUVER FINISH SHALL BE ANODIZED ALUMINUM IN COLOR AS SELECTED BY THE ARCHITECT OR OWNER.

MECHANICAL SPECIFICATIONS ①

BASIC MECHANICAL REQUIREMENTS

A. COMPLY WITH THE REQUIREMENTS OF THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), UNIFORM PLUMBING CODE (UPC), INTERNATIONAL FUEL GAS CODE (IFGC), AND INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND THE CURRENT NATIONAL ELECTRIC CODE (NEC) INCLUDING ALL STATE AMENDMENTS. COMPLY WITH THE AUTHORITY HAVING JURISDICTION AND ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL CODES AND REGULATIONS IN EFFECT AT THE BID DATE.

B. PREPARE AND SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT, VALVES, AND ACCESSORIES INCLUDING MANUFACTURER'S NAME, CATALOG NUMBER, DESCRIPTION, SIZE, CAPACITY, ELECTRICAL REQUIREMENTS, OPERATION, AND MAINTENANCE INFORMATION. SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE MECHANICAL AND GENERAL CONTRACTOR PRIOR TO ENGINEER'S REVIEW. EQUIPMENT SHALL NOT BE ORDERED UNTIL APPROVED SHOP DRAWINGS HAVE BEEN RECEIVED.

C. PREPARE COORDINATION DRAWINGS DETAILING ALL MAJOR EQUIPMENT AND SYSTEMS. INCLUDE EQUIPMENT CONNECTIONS, CLEARANCES, FIRE-RATED WALL OR FLOOR PENETRATIONS, CONCRETE PADS, AND SUPPORT DETAILS IN COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE IN CONJUNCTION WITH THE MECHANICAL, FIRE SPRINKLER (WHERE REQUIRED), ELECTRICAL, REFLECTED CEILINGS, AND ALL OTHER APPLICABLE TRADES.

D. PREPARE RECORD "AS BUILT" DOCUMENTS INCLUDING ALL CHANGES FROM THE ORIGINAL BID DOCUMENTS. SUBMIT COMPLETE "AS BUILT" DOCUMENTS AT THE COMPLETION OF THE PROJECT.

E. PROVIDE 2 SETS OF OPERATION AND MAINTENANCE (O & M) MANUALS CONTAINING INFORMATION FOR ALL MECHANICAL AND PLUMBING SYSTEMS. THE MANUALS SHALL CONTAIN A LIST OF ALL SUB-CONTRACTORS AND SUPPLIERS, EQUIPMENT CUT SHEETS, START-UP INFORMATION, BALANCING REPORTS, AND MAINTENANCE REQUIREMENTS. THE MANUALS SHALL BE HARD BACKED 3-RING BINDERS WITH THE PROJECT LABELED ON THE COVER AND SPLINE.

F. INSTALL ALL MECHANICAL EQUIPMENT AND MATERIALS IN COORDINATION WITH ALL OTHER TRADES. VERIFY ALL ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.

G. PROVIDE AND INSTALL ACCESS DOORS WHERE EQUIPMENT, VALVES OR DAMPERS ARE CONCEALED BEHIND FINISHED SURFACES.

H. PROVIDE FACTORY-AUTHORIZED EQUIPMENT START-UP, COMMISSIONING, AND TRAINING OF ALL MECHANICAL EQUIPMENT.

I. INSTALL ALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS. INSTALL ALL PIPING FREE FROM SAGS AND BENDS AND AT THE SLOPE INDICATED (WHERE REQUIRED). INSTALL DUCTWORK, PIPING, AND EQUIPMENT TO PROVIDE THE MAXIMUM POSSIBLE HEADROOM.

J. ALL WORK SHALL BE PERFORMED BY CERTIFIED AND SKILLED WORKERS WITH PRIOR EXPERIENCE IN THEIR PARTICULAR TRADE.

K. THE MECHANICAL SUB-CONTRACTOR SHALL PROVIDE WARRANTY THE ENTIRE MECHANICAL SYSTEM FOR A PERIOD OF ONE YEAR. INCLUDE THE WARRANTY AND ALL OTHER GUARANTEES AND WARRANTIES IN THE OPERATION AND MAINTENANCE MANUAL.

L. THE CONTRACTOR SHALL STORE AND PROTECT ALL EQUIPMENT AND MATERIALS DURING CONSTRUCTION AS REQUIRED AND SHALL REPAIR OR REPLACE ALL DAMAGED PIPING, EQUIPMENT, OR OTHER DAMAGE DURING CONSTRUCTION.

M. PROVIDE AND INSTALL ALL MECHANICAL EQUIPMENT, PIPING, FIXTURE, AND ACCESSORIES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ALL FITTINGS, VALVES, TRANSITIONS, AND OTHER DEVICES AS REQUIRED FOR A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM.

N. SUBMIT FOR PRIOR APPROVAL FOR EQUIPMENT MANUFACTURERS NOT LISTED IN THE SPECIFICATIONS A MINIMUM OF FIVE PRIOR TO BID.

BASIC MECHANICAL MATERIALS AND METHODS

A. ALL PIPE AND PIPE FITTINGS SHALL BE NEW AND SHALL BE AMERICAN MADE WITH APPROVED LABELS. DELIVER, STORE, AND PROTECT DUCTWORK AND PIPING DURING CONSTRUCTION FROM DAMAGE, DIRT, AND MOISTURE.

B. SEAL ALL DUCT AND PIPE PENETRATIONS THROUGH WALLS AND FLOORS AIR TIGHT. CAULK ALL FIRE RATED PIPE PENETRATIONS WITH APPROVED FIRE-STOPPING MATERIAL.

C. CUT, CHANNEL, CHASE, AND DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, AND OTHER SURFACES NECESSARY FOR PROPER INSTALLATION. REPAIR AS REQUIRED TO MATCH ADJACENT SURFACES.

HANGERS AND SUPPORTS

A. PROVIDE AND INSTALL DUCT SUPPORTS AND HANGERS AS REQUIRED FOR ALL DUCTWORK AND EQUIPMENT ACCORDING TO MANUFACTURERS STANDARDIZATION SOCIETY (MSS) AND SMACA STANDARDS.

VIBRATION ISOLATION AND SEISMIC CONTROLS

A. PROVIDE AND INSTALL VIBRATION ISOLATORS, FLEXIBLE CONNECTIONS, ISOLATION PADS, AND OTHER EQUIPMENT TO PREVENT NOISE AND VIBRATION TRANSMISSION.

DUCTWORK AND EQUIPMENT IDENTIFICATION

A. PROVIDE DUCT AND EQUIPMENT TAGS, LABELS, AND IDENTIFICATION INDICATING FLOW DIRECTION, AREA SERVED, SYSTEM TYPE AND OTHER IDENDIFYING INFORMATION. COMPLY WITH ASME PIPING EQUIPMENT IDENTIFICATION STANDARDS.

INSULATION

A. PROVIDE AND INSTALL GLASS FIBER DUCT INSULATION ACCORDING TO THE FOLLOWING SCHEDULE:
   RECTANGULAR SUPPLY AND RETURN DUCTS:
      1" DUCT LINER
   ROUND SUPPLY AND RETURN DUCTS:
      1-1/2" BLANKET WRAP WITH VAPOR BARRIER.
   ROUND AND RECTANGULAR EXHAUST DUCTS:
      NO INSULATION UNLESS OTHERWISE NOTED.
   UNLINED SUPPLY, COMBUSTION, AND OUTSIDE AIR DUCTS:
      1-1/2" BLANKET WRAP WITH VAPOR BARRIER.
   EXTERIOR INSTALLED SUPPLY AND RETURN DUCTS:
      2" BLANKET WRAP WITH VAPOR BARRIER.

B. DUCT LINER SHALL BE 1" THICK, 2 LBS. DENSITY, WITH ASTM C 1071, TYPE II COATED ACRYLIC SURFACE AND PRE-TEATED FOR ANTI-MICROBIAL AGENT TO PREVENT MICROBIAL GROWTH.

C. GLASS FIBER INSULATION SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS.

D. SEAL ALL ENDS AND JOINTS TO PROVIDE A COMPLETELY SEALED INSULATION SYSTEM.

E. SEAL JOINTS, BREAKS AND PUNCTURES WITH VAPOR BARRIER COMPOUND.

MECHANICAL GENERAL NOTES

1. PROVIDE ALL EQUIPMENT, PIPING, MATERIALS, LABOR, PERMITS, AND FEES TO CONSTUCT A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM FOR THE ENTIRE PROJECT AS SHOWN ON THE DRAWINGS.
2. COORDINATE THE EXACT LOCATION OF ALL CEILING DIFFUSERS AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN.
3. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR, PLUMBING SUB-CONTRACTOR, ELECTRICAL SUB-CONTRACTOR, AND ALL OTHER TRADES IN THE PROJECT.
4. ALL MECHANICAL INFORMATION IS NOT SHOWN ON THE MECHANICAL DRAWINGS. COORDINATE ALL WORK WITH THE ARCHITECTURAL, STRUCTURAL, PLUMBING, CIVIL, AND ELECTRICAL DRAWINGS.
5. MECHANICAL PLANS ARE SCHEMATIC IN NATURE AND THEREFORE DO NOT SHOW ALL DROPS, RISERS, AND OFFSETS. THE CONTRACTOR SHALL MAKE ALL REQUIRED MODIFICATIONS TO PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM. MAJOR MODIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.
6. DO NOT RUN DUCTWORK ABOVE ELECTRICAL PANELS. PROVIDE 4-0" DEEP X 6'-6" HIGH CLEAR ACCESS SPACE IN FRONT OF PANELS. DO NOT RUN DUCTWORK IN ELECTRICAL ROOMS.
7. INSTALLATION OF ALL DUCTWORK SHALL BE COORDINATED WITH STRUCTURAL GIRDERS AND JOIST. DUCTWORK SHALL BE RUN WITHIN STRUCTURE SPACE WHERE SHOWN ON THE PLANS.
8. COORDINATE ALL FLOOR, CEILING, AND ROOF PENETRATIONS WITH THE STRUCTURAL PLANS. MAINTAIN DUCTWORK TIGHT TO THE STRUCTURE. OFFSET INTO THE JOIST SPACE WHERE SHOWN ON THE PLANS.
9. REFER TO CEILING SUPPLY DIFFUSER DETAIL 1/M2.0.

Mortensen Engineering, Inc.
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Smithfield, Utah 84335
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LICENSED PROFESSIONAL ENGINEER
No. 179919
LORIN R. MORTENSEN
STATE OF UTAH

DATE
November 7, 2018

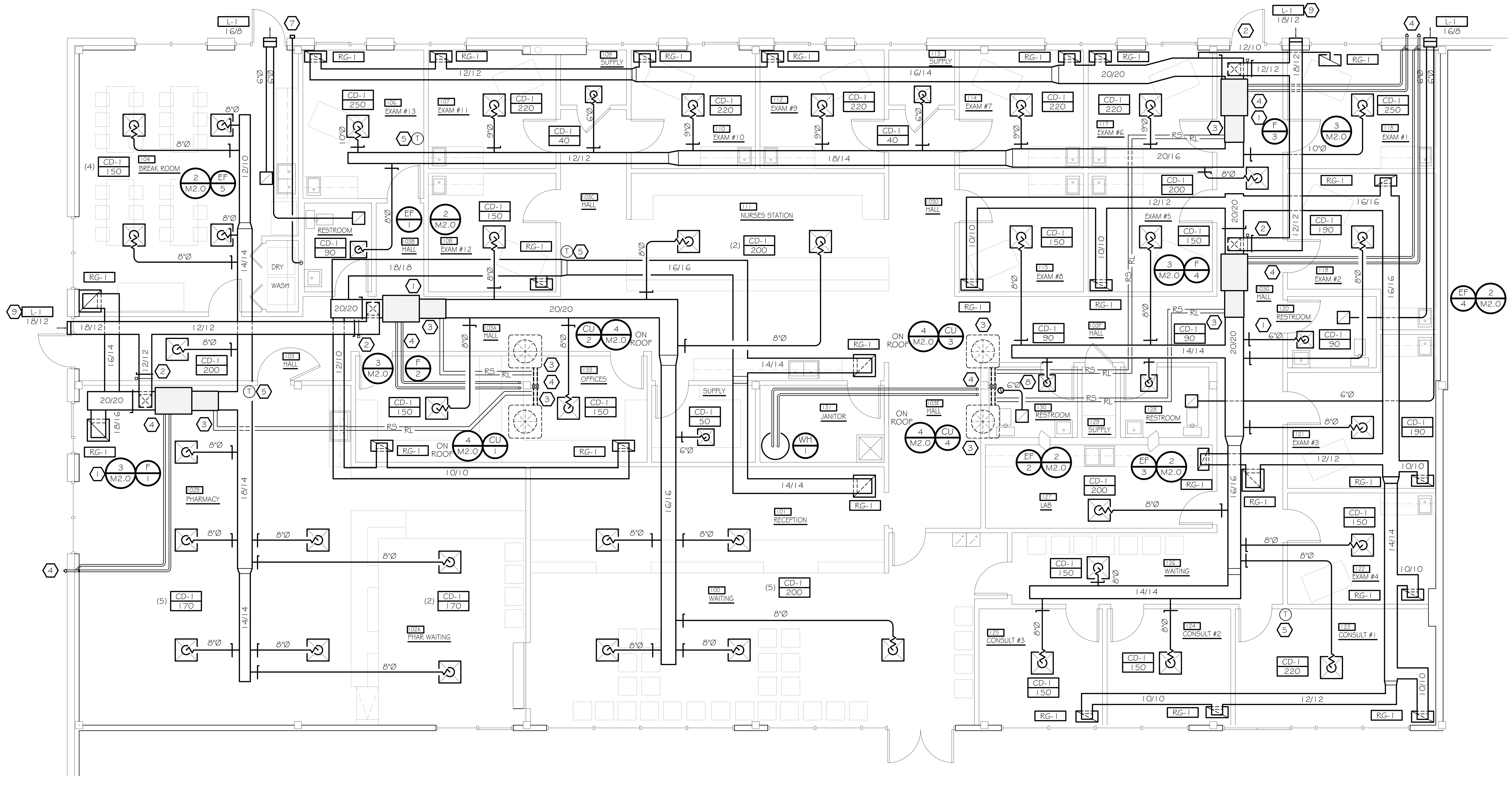
PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
MECHANICAL NOTES, SYMBOL LEGEND, & SPECIFICATIONS

PROJECT NUMBER

REVISIONS

SHEET NUMBER
M0.1



MECHANICAL PLAN

SCALE: 3/16" = 1'-0"

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REFERENCE NOTES

1. LOCATE NEW FURNACE AND DX COOLING COIL IN CEILING SPACE. PROVIDE SERVICE ACCESS CLEARANCE.
2. MOTORIZED DAMPER.
3. EXTEND REFRIGERANT LINES FROM TO DX COOLING COIL TO NEW ROOFTOP CONDENSING UNIT.
4. EXTEND FURNACE FLUE/COMBUSTION AIR DUCTS TO CONCENTRIC VENT KIT.
5. 7 DAY PROGRAMMABLE THERMOSTAT.
6. CEILING SPACE TO BE USED AS A RETURN AIR PLENUM.
7. DRYER VENT AS PER MANUFACTURER'S REOMMENDATIONS.
8. EXTEND EXHAUST DUCT UP IN SHAFT THROUGH ROOF. PROVIDE TERMINATION CAP.
9. MAINTAIN 10 FT. MINIMUM CLEARANCE FROM OUTSIDE AIR INTAKE TO FURNACE FLUES, DRYER VENT OUTLETS, OR EXHAUST OUTLETS.

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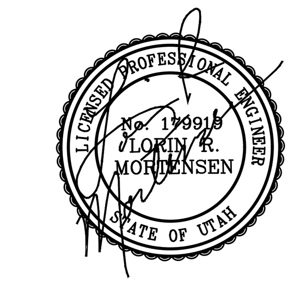

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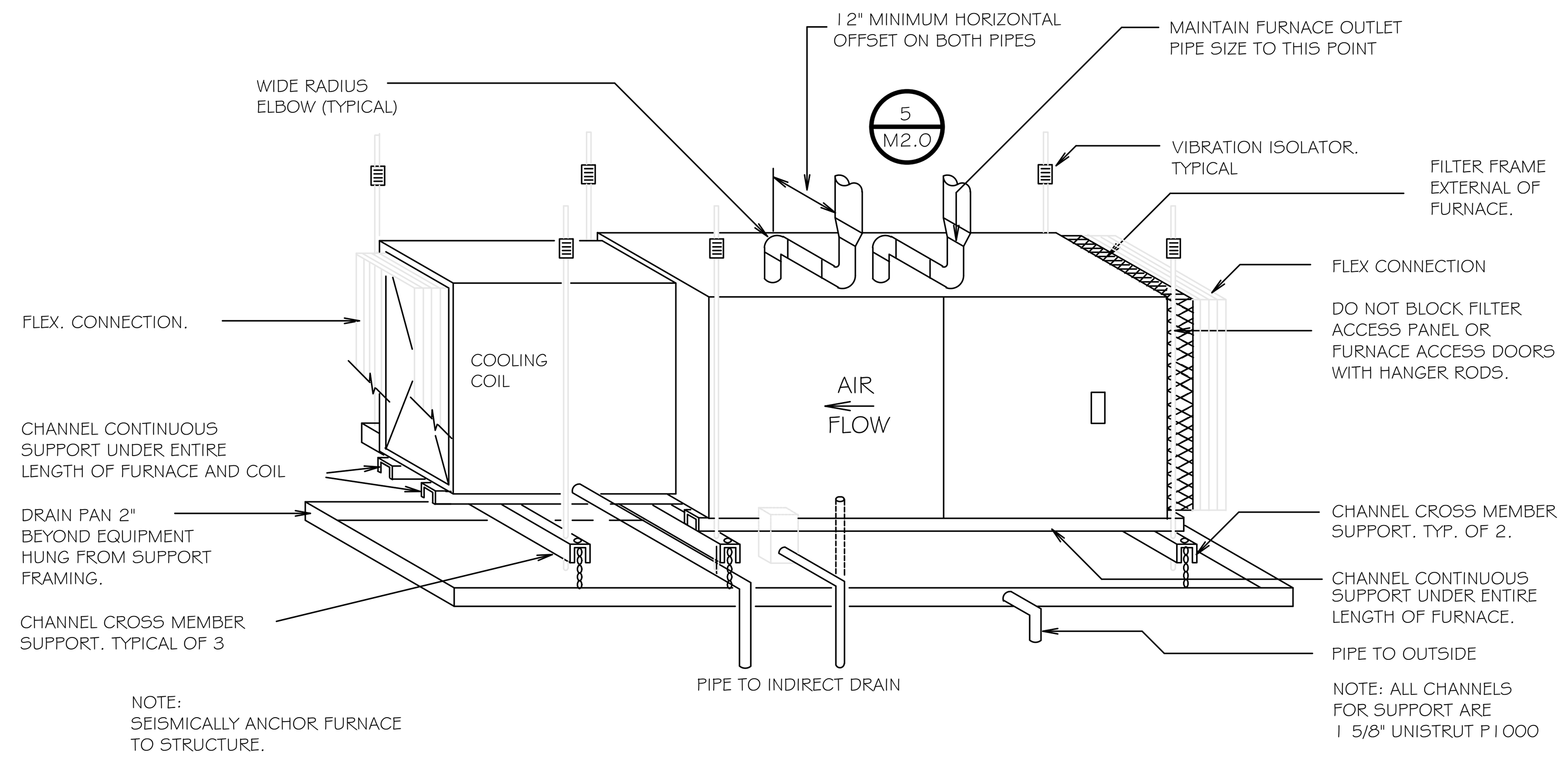
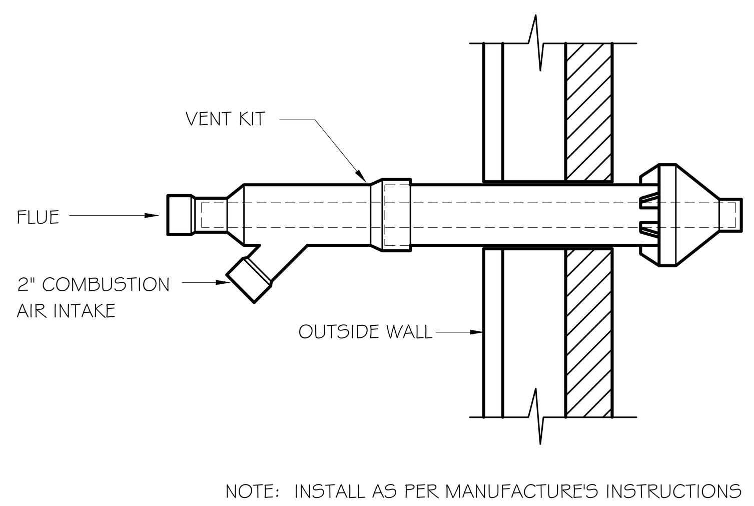
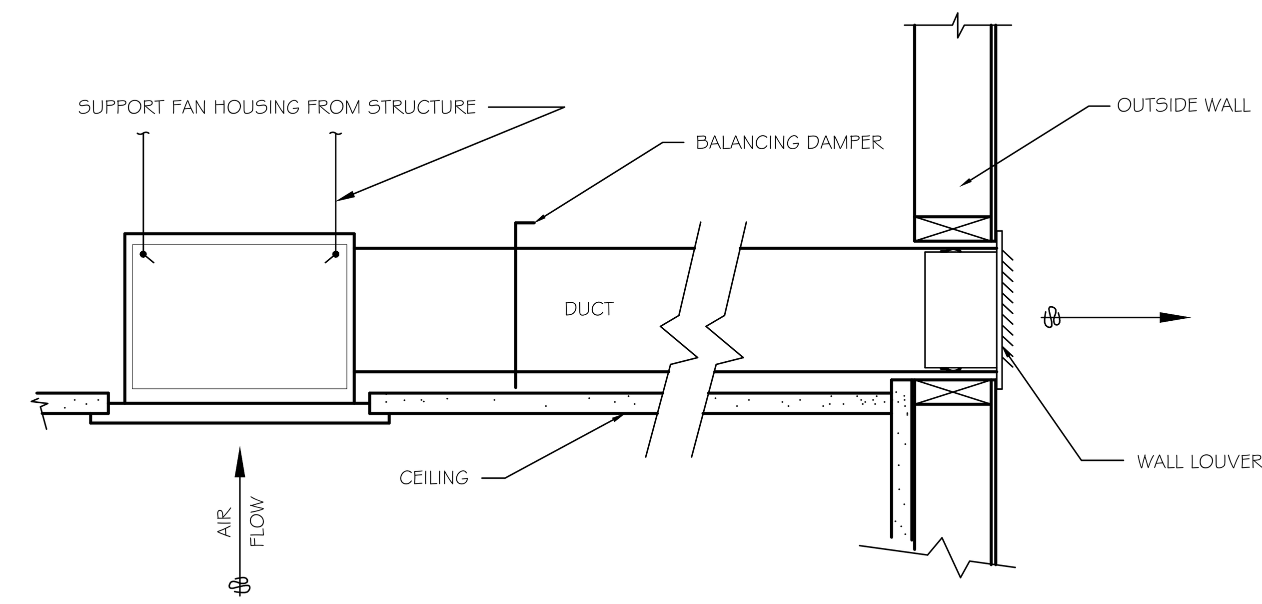


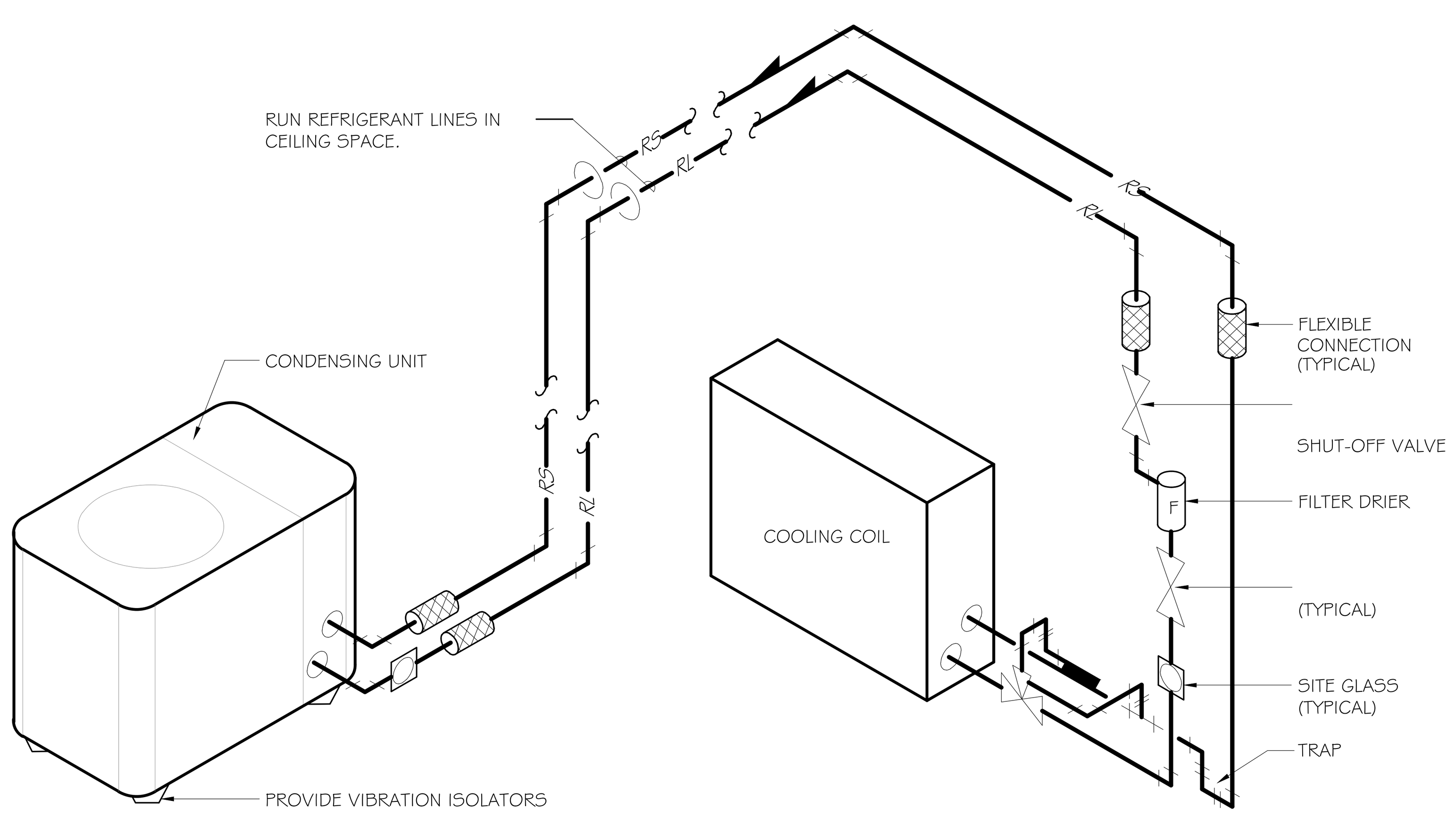
3 M2.0 HORIZONTAL FURNACE
NOT TO SCALE



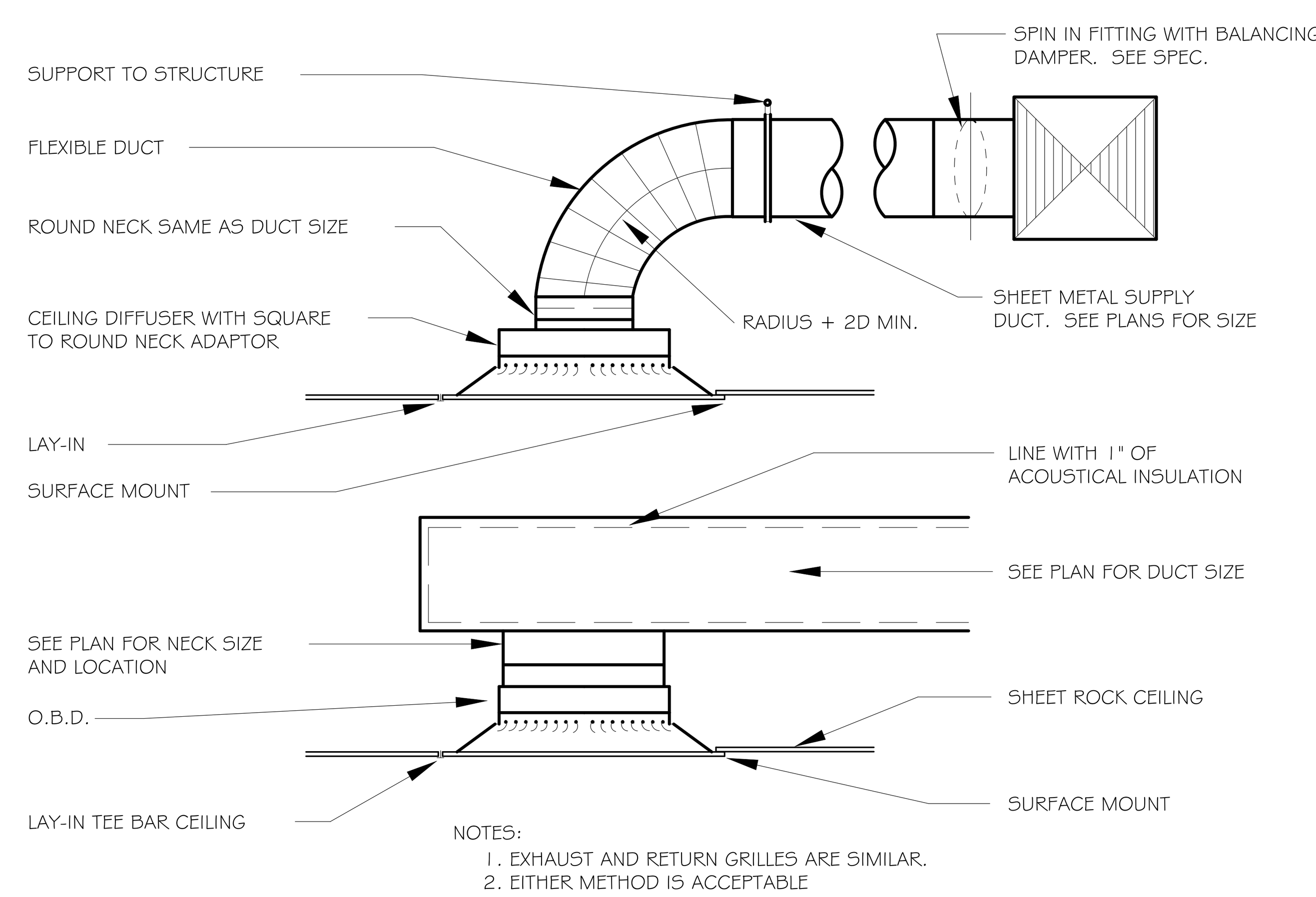
5 M2.0 VENT KIT DETAIL
NOT TO SCALE



2 M2.0 CEILING EXHAUST FAN DETAIL
NOT TO SCALE



4 M2.0 TYPICAL REFRIGERANT SCHEME
NOT TO SCALE



1 M2.0 CEILING DIFFUSER DETAIL
NOT TO SCALE

REGISTER AND GRILLE SCHEDULE

SYMBOL	MANUFACTURER	MODEL	DESCRIPTION	MAX. NC	NECK SIZE	MAX. CFM
CD-1	PRICE	SCD	LOUVERED FACE CEILING DIFFUSERS REMOVABLE FACE & CORE. W/O.B.D. FRAME SHALL BE FOR SURFACE OR LAY-I IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" X 24", 24" X 12", OR 12" X 12" AS REQ'D. TO FIT CEILING TILE SPACE AVAILABLE. PROVIDE ROUND NECK ADAPTER.	30	6 x 6 8 x 8 9 x 9 10 x 10 6 x 18 12 x 12 15 x 15 18 x 18	125 220 250 320 350 425 625 900
L-1	AIROLITE	K6774	WALL LOUVER. STATIONARY 4" THICK 45 BLADE 12 GA. EXT. ALUMINUM BLADES, 8 GA. EXT. JAMBS. CHANNEL FRAME, BRONZE ANODIZED FINISH WITH BIRD SCREEN. COLOR BY ARCHITECT.	30	SEE PLANS	
RG-1	PRICE	535	LOUVERED FACE CEILING RETURN AIR UNIT, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" X 24", 24" X 12" OR 12" X 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. AIR QUANTITY SHALL MATCH ROOM SUPPLY OR EXHAUST AIR QUANTITY.	30	10 x 10 12 x 12 14 x 14 10 x 22 16 x 16 18 x 18 24 x 24 36 x 24	350 500 550 625 725 900 1300 2200

FURNACE SCHEDULE

SYMBOL	MANUFACTURER & MODEL NO.	FUEL TYPE	BTU INPUT	BTU OUTPUT	CFM	MINIMUM OUTSIDE AIR CFM	HP	SP	VOLTS/PHASE CYCLE	COIL MODEL NO.	COMMENTS
F 1	YORK TG9S	NAT. GAS	80,000	75,000	1990	600	1/2	0.8	115/1/60	-	(1)(2)(3)(4)
F 2	YORK TG9S	NAT. GAS	80,000	75,000	1990	300	1/2	0.8	115/1/60	-	(1)(2)(3)(4)
F 3	YORK TG9S	NAT. GAS	80,000	75,000	1990	600	1/2	0.8	115/1/60	-	(1)(2)(3)(4)
F 4	YORK TG9S	NAT. GAS	80,000	75,000	1990	300	1/2	0.8	115/1/60	-	(1)(2)(3)(4)

(1) RATINGS BASED ON 4600' ELEVATION.
(2) PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTOMATIC HEATING AND COOLING CHANGEOVER
(3) PROVIDE BOTTOM RETURN AND SIDE PLENUM CONNECTIONS, FILTER HOUSING, AND CONCENTRIC VENT KIT..
(4) FURNACE, COIL, AND CONDENSING UNIT SHALL BE BY THE SAME MANUFACTURER.

CONDENSING UNIT SCHEDULE

SYMBOL	MANUFACTURER & MODEL	BTU CAPACITY	REFRIGERANT TYPE	VOLTS/PHASE/CYCLES	MCA	SEER	COMMENTS
CU 1	YORK TCGD60	60,000	R-410A	208/1/60Hz	35	13	(1)(2)(3)(4)(5))6)
CU 2	YORK TCGD60	60,000	R-410A	208/1/60Hz	35	13	(1)(2)(3)(4)(5))6)
CU 3	YORK TCGD60	60,000	R-410A	208/1/60Hz	35	13	(1)(2)(3)(4)(5))6)
CU 4	YORK TCGD60	60,000	R-410A	208/1/60Hz	35	13	(1)(2)(3)(4)(5))6)

(1) ALL CONDITIONS AT 4600' ELEVATION.
(2) 95°F. AMBIENT - 40 SST.
(3) UNIT COMPLETE WITH STARTER
(4) FURNACE, DX EVAPORATOR, AND CONDENSING UNIT SHALL BE COORDINATED TO PROVIDE A MATCHED COIL / CU SYSTEM.
(5) VERIFY VOLTAGE AND PHASE AVAILABLE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING OF ANY EQUIPMENT.
(6) SIZE REFRIGERANT PIPING AS PER MANUFACTURER'S RECOMMENDATIONS.

EXHAUST FAN SCHEDULE

SYMBOL	MANUFACTURER	MODEL	CFM	STATIC PRESSURE IN. WG.	H.P.	RPM	VOLTS/PHASE/CYCLE	COMMENTS
EF 1	GREENHECK	CEILING SP-B110	100	0.375	80 WATTS	950	115/1/60	(1)(2)(3)
EF 2	GREENHECK	CEILING SP-B110	100	0.375	80 WATTS	950	115/1/60	(1)(2)(3)
EF 3	GREENHECK	CEILING SP-B110	100	0.375	80 WATTS	950	115/1/60	(1)(2)(3)
EF 4	GREENHECK	CEILING SP-B110	100	0.375	80 WATTS	950	115/1/60	(1)(2)(3)
EF 5	GREENHECK	CEILING SP-B200	180	0.375	172 WATTS	1100	115/1/60	(1)(2)(3)

(1) ALL CAPACITIES AT 4600 FT. ELEVATION.
(2) CEILING EXHAUST FAN
PROVIDE GRAVITY BACKDRAFT DAMPER, INTEGRAL THERMAL OVERLOAD PROTECTION, WALL LOUVER, AND VARIABLE SPEED CONTROL.
(3) ON-OFF SWITCH BY ELECTRICAL.

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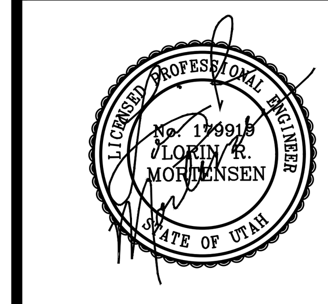

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PLUMBING SYMBOL LEGEND

SOIL, WASTE-ABOVE GRADE	
SOIL, WASTE-BELOW GRADE	
VENT	
COLD WATER	
HOT WATER	
HOT WATER CIRCULATE	
GAS	G
RAIN WATER-ABOVE GRADE	RW
RAIN WATER-BELOW GRADE	RW
OVERFLOW RAIN WATER-ABOVE GRADE	ORW
DRAIN LINE	D
WALL HYDRANT	W.H.
HOSE BIBB	H.B.
CLEANOUT TO GRADE	C.O.T.G.
FLOOR CLEANOUT	F.C.O.
WALL CLEANOUT	W.C.O.
SHUT OFF VALVE	
CHECK VALVE	
ANGLE VALVE	
VENTURI	
BALANCING OR PLUG COCK	
FLOW SETTER	
GAS COCK	
BUTTERFLY VALVE	
BALL VALVE	
RELIEF VALVE	
PRESSURE REDUCING VALVE	
GAUGE COCK	
STRAINER	
FLEXIBLE CONNECTION	
PRESSURE GAUGE	
THERMOMETER	
REDUCER CONCENTRIC	
REDUCER ECCENTRIC	
90° ELBOW UP	
90° ELBOW DOWN	
90° TEE UP	
90° TEE DOWN	
UNION	
CAPPED PIPE	
ANCHOR	

PLUMBING ABREVIATIONS

BHP	BRAKE HORSE POWER	NTS	NOT TO SCALE
BTU	BRITISH THERMAL UNIT	NO	NUMBER
CLG	COOLING	OZ	OUNCE
CW	COLD WATER	PSI	POUNDS PER SQUARE INCH
DP	DEPTH OR DEEP	PSIA	PSI ABSOLUTE
ID	INSIDE DIAMTER	PSIG	PSI GAUGE
OD	OUTSIDE DIAMTER	PRESS	PRESSURE
(E)	EXISTING	PD	PRESSURE DROP
EFF	EFFICIENCY	RECIRC	RECIRCULATE
ELEV	ELEVATION	RPM	REVOLUTIONS PER MINUTE
(F)	FUTURE	RW	RAIN WATER
F	FARENHEIT	SCW	SOFT COLD WATER
FC	FLEXIBLE CONNECTION	SF	SAFETY FACTOR
FT	FEET	SL	SEA LEVEL
GAL	GALLON(S)	SPEC	SPECIFICATION(S)
GPH	GALLONS PER HOUR	SQ	SQUARE
GPM	GALLONS PER MINUTE	STD	STANDARD
HD	HEAD	SPLY	SUPPLY
HT	HEIGHT	TEMP	TEMPERATURE
HTG	HEATING	TD	TEMP. DROP OR DIFF.
HP	HORSE POWER	R	THERMAL RESITANCE
HW	HOT WATER	T	TIME
LG	LENGTH	VAC	VACUUM
MAX	MAXIMUM	VENT	VENT, VENTILATION
MIN	MINIMUM	VERT	VERTICAL
NO	NORMALLY OPEN	VOL	VOLUME
NC	NORMALLY CLOSED	WTR	WATER
N/A	NOT APPLICABLE	WT	WEIGHT
NIC	NOT IN CONTRACT	YR	YEAR

PLUMBING SPECIFICATIONS ③

FIRE SPRINKLER SYSTEM

A. NOT INCLUDED IN THIS CONTRACT.

PLUMBING SPECIALTIES

A. PROVIDE AND INSTALL WATER PRESSURE REGULATING VALVE RATED FOR INITIAL WORKING PRESSURE OF 150 PSIG (Inlet) WITH INLET AND OUTLET SHUTOFF VALVES, PRESSURE GAUGE, AND DRAIN VALVE.

B. PROVIDE AND INSTALL CLEANOUTS AND COVER PLATES WHERE INDICATED ON THE DRAWINGS. INSTALL A CLEANOUT AT EACH PLUMBING FIXTURE. CLEANOUT FLOOR COVER PLATES SHALL BE MOUNTED FLUSH WITH THE FLOOR. COORDINATE CLEANOUT COVER PLATES WITH WALL OR FLOOR SURFACE FINISH.

WATER HEATERS

A. PROVIDE A WATER HEATER AS SHOWN ON THE DRAWINGS THAT COMPLIES WITH ASME BOILER AND PRESSURE VESSEL CODE, UL LISTING, AGA STANDARDS, AND ASHRAE ENERGY STANDARDS.

B. SUBMIT MANUFACTURERS CUTSHEET FOR REVIEW AND APPROVAL INCLUDING MANUFACTURER, TYPE, MODEL NUMBER, CAPACITY, ELECTRICAL REQUIREMENTS, AND OPTIONS.

C. INSTALL WATER HEATER LEVEL AND PLUMB ON CONCRETE EQUIPMENT PAD UNLESS OTHERWISE NOTED. INSTALL WATER HEATER ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. ANCHOR WATER HEATER TO EQUIPMENT PAD. INSTALL EARTHQUAKE BRACING SECURE TO STRUCTURAL MEMBERS.

D. INSTALL WATER HEATER WITH RELIEF VALVE, SHUTOFF VALVES, UNIONS, THERMOMETERS, DRAIN LINE, GAS CONNECTION, VENT AND RECIRCULATION SYSTEM AS INDICATED ON THE DRAWINGS.

PLUMBING SPECIFICATIONS ②

VALVES

A. PROVIDE AND INSTALL BALL SHUTOFF VALVES WHERE SHOWN ON PLANS FOR LINES 3" AND SMALLER. BALL VALVES SHALL BE MSS SP-110, CLASS 150 BRONZE BODY AND BONNET AND VINYL-COVERED STEEL HANDLE.

B. PROVIDE AND INSTALL BUTTERFLY VALVES WHERE SHOWN ON PLANS FOR LINES 4" AND LARGER. BUTTERFLY VALVES SHALL BE MSS SP-67, ASTM A 126 CAST-IRON BODY AND BONNET WITH EPDM SEALS.

FUEL GAS PIPING

A. COORDINATE INSTALLATION OF GAS YARD LINE AND GAS METER WITH THE GAS COMPANY. WORK TO BE PERFORMED BY THE GAS COMPANY PAID BY THE CONTRACTOR.

B. COMPLY WITH NFPA 54 "NATIONAL FUEL GAS CODE", LOCAL GAS COMPANY REQUIREMENTS, AND ALL OTHER APPLICABLE CODES FOR GAS PIPING MATERIALS, COMPONENTTS, INSTALLATIONS, INSPECTIONS, TESTING, AND PURGING.

C. GAS PIPING SHALL BE SEAMLESS, GRADE B, SCHEDULE 40 BLACK STEEL WITH THREADED FITTINGS.

D. INSTALL SHUTOFF VALVE DOWNSTREAM OF THE GAS METER OUTSIDE OF THE BUILDING.

F. INSTALL 2 PSIG - TO - 4 OZ. GAS PRESSURE REGULATOR WHERE SHOWN ON THE DRAWINGS. INSTALL AND VENT AS REQUIRED BY MANUFACTURERS INSTRUCTIONS.

G. INSTALL GAS SHUTOFF VALVE AT ALL GAS APPLIANCES. CONNECT TO APPLIANCE WITH APPROVED FLEXIBLE CONNECTION. INSTALL TEE FITTING SEDIMENT TRAPS WITHIN 6' OF EACH APPLIANCE.

PLUMBING PIPING

A. WATER DISTRIBUTION PIPING - BELOW GROUND (150 PSIG):
3-1/2" AND SMALLER - USE TYPE K SOFT TUBE WITH CAST COPPER ALLOY BRAZED JOINT PRESSURE FITTINGS.

B. WATER DISTRIBUTION PIPING - ABOVE GROUND (125 PSIG):
3-1/2" AND SMALLER - USE TYPE L HARD COPPER TUBE WITH CAST COPPER ALLOY BRAZED JOINT PRESSURE FITTINGS.

C. WASTE AND VENT PIPING - BELOW GROUND (10-FOOT HEAD OF WATER):
2" TO 6" - USE ACRYLONITRILE-BUTADIENE-STYRENE (ABS) PLASTIC PIPE WITH ABS SOCKET-TYPE DRAIN, WASTE, AND VENT PIPE PATTERN FITTINGS WITH SOLVENT CEMENTED JOINTS OR PVC.

D. WASTE AND VENT PIPING - ABOVE GROUND (10-FOOT HEAD OF WATER):
2" TO 8" - USE HUB-AND-SPIGOT CAST-IRON SOIL PIPE WITH CAST IRON SOIL PIPE FITTINGS, NEOPRENE RUBBER GASKETS, AND COMPRESSION JOINTS OR PVC.

E. STORM DRAINAGE PIPING - ABOVE GROUND (10-FOOT HEAD OF WATER):
2" TO 8" - USE HUBLESS CAST-IRON SOIL PIPE WITH CAST IRON SOIL PIPE FITTINGS, HEAVY-DUTY, SHEILDED, STAIN-LESS-STEEL COUPLINGS.

F. INSTALL HANGERS FOR HORIZONTAL COPPER AND CAST IRON PIPING TO MEET MINIMUM REQUIREMENTS OF IPC 2015.

G. SUPPORT HORIZONTAL ABS AND PVC PIPING WITH PIPE HANGERS LOCATED AT 4' MAXIMUM SPAN.

H. CLEAN, FLUSH, AND TEST ALL WATER DISTRIBUTION PIPING TO 1-1/2 TIMES THE OPERATING PRESSURE FOR A TIME PERIOD OF 4 HOURS. PURGE AND DISINFECT POTABLE WATER SYSTEMS WITH A WATER/CHLORINE SOLUTION IN ACCORDANCE WITH THE LOCAL HEALTH CODE REQUIREMENTS. TEST AND SUBMIT SATISFACTORY REPORT PRIOR TO BUILDING OCCUPANCY.

I. CLEAN, FLUSH, AND TEST THE WASTE AND VENT PIPING SYSTEM TO 10 FEET HEAD OF WATER.

PLUMBING FIXTURES

A. PROVIDE AND INSTALL PLUMBING FIXTURES WHERE INDICATED ON THE DRAWINGS FOR A COMPLETE PLUMBING SYSTEM. PROVIDE ALL REQUIRED CARRIERS, SUPPORTS, EQUIPMENT, HANGERS, FITTINGS, TRIM, STOPS, AND ACCESSORIES ASSOCIATED WITH THE PLUMBING FIXTURES. COORDINATE THE COLOR STYLE, COLOR, AND ACCESSORIES OF EACH FIXTURE WITH THE BUILDING OWNER. ALL FIXTURES NOTED AS ACCESSIBLE SHALL COMPLY WITH A.D.A. REQUIREMENTS. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL SUB-CONTRACTOR. INSTALL ALL PLUMBING FIXTURES PLUMB, LEVEL, AND ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO THE PLUMBING FIXTURE SCHEDULE.

B. PROVIDE PLUMBING FIXTURES FROM THE FOLLOWING MANUFACTURERS:
- WATER CLOSETS AND URINALS:
  - AMERICAN STANDARD, BRIGGS, CRANE, ELJER, KOHLER
- LAVATORIES:
  - ACORN,AMERICAN STANDARD, BRIGGS, CRANE, ELJER, ELKAY, KOHLER
- SINKS AND SERVICE SINKS:
  - AMERICAN STANDARD, BRIGGS, CRANE, ELJER, ELKAY, KOHLER
- DRINKING FOUNTAINS AND WATER COOLERS:
  - ELKAY, HALSEY TAYLOR, HAWS, OASIS, SUNROC
- FLUSHOMETERS:
  - SLOAN, ZURN
- FAUCETS:
  - AMERICAN STANDARD, BRIGGS, CHICAGO, CRANE, DELTA, ELJER, ELKAY, GERBER, KOHLER, MOEN, PRICE PFISTER, SYMMONS, T & S BRASS

C. SUBMIT MANUFACTURERS CUTSHEET FOR REVIEW AND APPROVAL FOR EACH PLUMBING FIXTURE INCLUDING MANUFACTURER, MODEL, STYLE, OPTIONS, AND ACCESSORIES.

PLUMBING SPECIFICATIONS ①

BASIC PLUMBING REQUIREMENTS

A. COMPLY WITH THE REQUIREMENTS OF THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC), AND INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND THE CURRENT NATIONAL ELECTRIC CODE (NEC) INCLUDING ALL STATE AMENDMENTS. COMPLY WITH THE AUTHORITY HAVING JURISDICTION AND ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL CODES AND REGULATIONS IN EFFECT AT THE BID DATE.

B. PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL PLUMBING FIXTURES, EQUIPMENT, VALVES, AND ACCESSORIES INCLUDING MANUFACTURER'S NAME, CATALOG NUMBER, DESCRIPTION, SIZE, CAPACITY, ELECTRICAL REQUIREMENTS, OPERATION, AND MAINTENANCE INFORMATION. SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE PLUMBING AND GENERAL CONTRACTOR PRIOR TO ENGINEER'S REVIEW. FIXTURES, EQUIPMENT, ETC. SHALL NOT BE ORDERED UNTIL APPROVED SHOP DRAWINGS HAVE BEEN RECEIVED.

C. PREPARE COORDINATION DRAWINGS DETAILING ALL MAJOR EQUIPMENT AND SYSTEMS. INCLUDE EQUIPMENT CONNECTIONS, CLEARANCES, FIRE-RATED WALL OR FLOOR PENETRATIONS, CONCRETE PADS, AND SUPPORT DETAILS IN COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE IN CONJUNCTION WITH THE MECHANICAL, FIRE SPRINKLER (WHERE REQUIRED), ELECTRICAL, REFLECTED CEILINGS, AND ALL OTHER APPLICABLE TRADES.

D. PREPARE RECORD "AS BUILT" DOCUMENTS INCLUDING ALL CHANGES FROM THE ORIGINAL BID DOCUMENTS. SUBMIT COMPLETE "AS BUILT" DOCUMENTS AT THE COMPLETION OF THE PROJECT.

E. PROVIDE 2 SETS OF OPERATION AND MAINTENANCE (O & M) MANUALS CONTAINING INFORMATION FOR ALL MECHANICAL AND PLUMBING SYSTEMS. THE MANUALS SHALL CONTAIN A LIST OF ALL SUB-CONTRACTORS AND SUPPLIERS, EQUIPMENT CUT SHEETS, START-UP INFORMATION, BALANCING REPORTS, AND MAINTENANCE REQUIREMENTS. THE MANUALS SHALL BE HARD BACKED 3-RING BINDERS WITH THE PROJECT LABELED ON THE COVER AND SPLINE.

F. INSTALL ALL PLUMBING EQUIPMENT AND MATERIALS IN COORDINATION WITH ALL OTHER TRADES. VERIFY ALL ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.

G. PROVIDE AND INSTALL ACCESS DOORS WHERE EQUIPMENT OR VALVES ARE CONCEALED BEHIND FINISHED SURFACES.

H. PROVIDE FACTORY-AUTHORIZED EQUIPMENT START-UP, COMMISSIONING, AND TRAINING OF ALL PLUMBING EQUIPMENT.

I. INSTALL ALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS. INSTALL ALL PIPING FREE FROM SAGS AND BENDS AND AT THE SLOPE INDICATED (WHERE REQUIRED). INSTALL PIPING AND EQUIPMENT TO PROVIDE THE MAXIMUM POSSIBLE HEADROOM.

J. ALL WORK SHALL BE PERFORMED BY CERTIFIED AND SKILLED WORKERS WITH PRIOR EXPERIENCE IN THEIR PARTICULAR TRADE.

K. THE PLUMBING SUB-CONTRACTOR SHALL PROVIDE WARRANTY THE ENTIRE PLUMBING SYSTEM FOR A PERIOD OF ONE YEAR. INCLUDE THE WARRANTY AND ALL OTHER GUARANTEES AND WARRANTIES IN THE OPERATION AND MAINTENANCE MANUAL.

L. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED PIPING, EQUIPMENT, OR OTHER DAMAGE DURING CONSTRUCTION.

M. PROVIDE AND INSTALL ALL PLUMBING EQUIPMENT, PIPING, FIXTURE, AND ACCESSORIES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ALL FITTINGS, VALVES, TRANSITIONS, AND OTHER DEVICES AS REQUIRED FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM.

BASIC PLUMBING MATERIALS AND METHODS

A. ALL PIPE AND PIPE FITTINGS SHALL BE NEW AND SHALL BE AMERICAN MADE WITH APPROVED LABELS. DELIVER, STORE, AND PROTECT PIPING DURING CONSTRUCTION FROM DAMAGE, DIRT, AND MOISTURE.

B. PROVIDE AND INSTALL DIELECTRIC FITTINGS AND FLEXIBLE CONNECTORS WERE REQUIRED FOR PROPER SYSTEM FLUID, PRESSURE, AND TEMPERATURE.

C. PROVIDE PIPE ESCUTCHEONS FOR ALL EXPOSED WALL AND CEILING PENETRATIONS. PROVIDE COVER PLATES FOR ALL FLOOR AND WALL CLEANOUTS.

D. SEAL ALL PIPE PENETRATIONS THROUGH WALLS AND FLOORS AIR TIGHT. CAULK ALL FIRE RATED PIPE PENETRATIONS WITH APPROVED FIRE-STOPPING MATERIAL.

E. CUT, CHANNEL, CHASE, AND DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, AND OTHER SURFACES NECESSARY FOR PROPER INSTALLATION. REPAIR AS REQUIRED TO MATCH ADJACENT SURFACES.

HANGERS AND SUPPORTS

A. PROVIDE AND INSTALL PIPE SUPPORTS AND HANGERS AS REQUIRED FOR ALL PIPING AND EQUIPMENT ACCORDING TO MANUFACUTERS STANDARDIZATION SOCIETY (MSS) STANDARDS.

VIBRATION ISOLATION AND SEISMIC CONTROLS

A. PROVIDE AND INSTALL VIBRATION ISOLATORS, FLEXIBLE CONNECTIONS, ISOLATION PADS, AND OTHER EQUIPMENT TO PREVENT NOISE AND VIBRATION TRANSMISSION.

PIPING AND EQUIPMENT IDENTIFICATION

A. PROVIDE EQUIPMENT PIPE AND EQUIPMENT TAGS, LABELS, AND IDENTIFICATION INDICATING FLOW DIRECTION, AREA SERVED, SYSTEM TYPE AND OTHER IDENDIFYING INFORMATION. COMPLY WITH ASME PIPING AND EQUIPMENT IDENTIFICATION STANDARDS.

INSULATION

A. PROVIDE AND INSTALL GLASS FIBER PREFORMED PIPE INSULATION WITH VAPOR PROOF COATING ACCORDING TO THE FOLLOWING SCHEDULE:
- DOMESTIC COLD WATER PIPING:
  - 1/2" TO 2" PIPE SIZE - 3/4" INSULATION
  - 2" AND ABOVE - 1" INSULATION
- DOMESTIC HOT WATER AND RECIRCULATED HOT WATER PIPING:
  - 1/2" TO 2" PIPE SIZE - 1" INSULATION
  - 2" AND ABOVE - 1-1/2" INSULATION
- RAIN WATER PIPING AND PLUMBING VENTS (WITHIN 6' OF ROOF):
  - 1/2" TO 2" PIPE SIZE - 3/4" INSULATION
  - 2" AND ABOVE - 1" INSULATION

B. GLASS FIBER INSULATION SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS.

C. SEAL ALL ENDS AND JOINTS TO PROVIDE A COMPLETELY SEALED INSULATION SYSTEM. PROVIDE COVER HANGER INSERTS AND SHIELDS WITH JACKET MATERIAL MATCHING ADJACENT PIPE INSULATION.

E. PROVIDE SNAP ON INSULATION KIT ON ALL ADA COMPLIANT LAVATORIES AND SINKS.

PLUMBING GENERAL NOTES

1. PROVIDE ALL EQUIPMENT, PIPING, MATERIALS, LABOR, PERMITS, AND FEES TO CONSTUCT A COMPLETE AND OPERATIONAL PLUMBING SYSTEM FOR THE ENTIRE PROJECT AS SHOWN ON THE DRAWINGS.
2. COORDINATE THE EXACT LOCATION OF ALL PLUMBING FIXTURES AND DRAINS WITH THE ARCHITECTURAL DRAWINGS AND THE GENERAL CONTRACTOR.
3. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR, MECHANICAL SUB-CONTRACTOR, ELECTRICAL SUB-CONTRACTOR, AND ALL OTHER TRADES IN THE PROJECT.
4. ALL PLUMBING INFORMATION IS NOT SHOWN ON THE PLUMBING DRAWINGS. COORDINATE ALL PLUMBING WORK WITH THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, CIVIL, AND ELECTRICAL DRAWINGS.
5. PLUMBING PLANS ARE SCHEMATIC IN NATURE AND THEREFORE DO NOT SHOW ALL DROPS, RISERS, AND OFFSETS. THE CONTRACTOR SHALL MAKE ALL REQUIRED MODIFICATIONS TO PROVIDE A COMPLETE AND OPERATIONAL PLUMBING SYSTEM. MAJOR MODIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.
6. DO NOT RUN PIPING ABOVE ELECTRICAL PANELS. PROVIDE 4'-0" DEEP X 6'6" HIGH CLEAR ACCESS SPACE IN FRONT OF PANELS. DO NOT RUN PIPING IN ELECTRICAL ROOMS.
7. INSTALL ALL PIPING SHOWN IN EXTERIOR WALLS ON THE WARM (ROOM) SIDE OF THE BUILDING INSULATION.
8. INSTALL WATER, GAS, AND VENT PIPING AS HIGH AS POSSIBLE ABOVE THE CEILING UNLESS NOTED OTHERWISE.
9. INSTALL WASTE PIPING BELOW THE FLOOR UNLESS NOTED OTHERWISE.
10. PROVIDE AND INSTALL 2" MINIMUM WASTE PIPE SIZE BELOW GRADE.
11. INSTALL EXTERIOR PIPING 48" MINIMUM BELOW GRADE.
12. INSTALL PLUMBING VENTS A MINIMUM OF 3 FEET ABOVE OR 10 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH THE MECHANICAL SUB-CONTRACTOR.
13. PAINT ALL ROOFTOP PLUMBING VENTS, CONCENTRIC VENTS, AND FLUES TO MATCH THE ROOF COLOR.
14. WATER CLOSET FLUSH VALVE CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE FIXTURE.
15. COORDINATE BUILDING WIDE SEWER AND WATER SHUTDOWN FOR SEWER AND WATER CONNECTIONS. PROVIDE ADEQUATE NOTICATION TO BUILDING OWNER AND OCCUPANTS.

Mortensen Engineering, Inc.
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LICENSED PROFESSIONAL ENGINEER
No. 179915
LORIN R. MORTENSEN
STATE OF UTAH

DATE
November 7, 2018

PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
PLUMBING NOTES, SYMBOL LEGEND, & SPECIFICATIONS

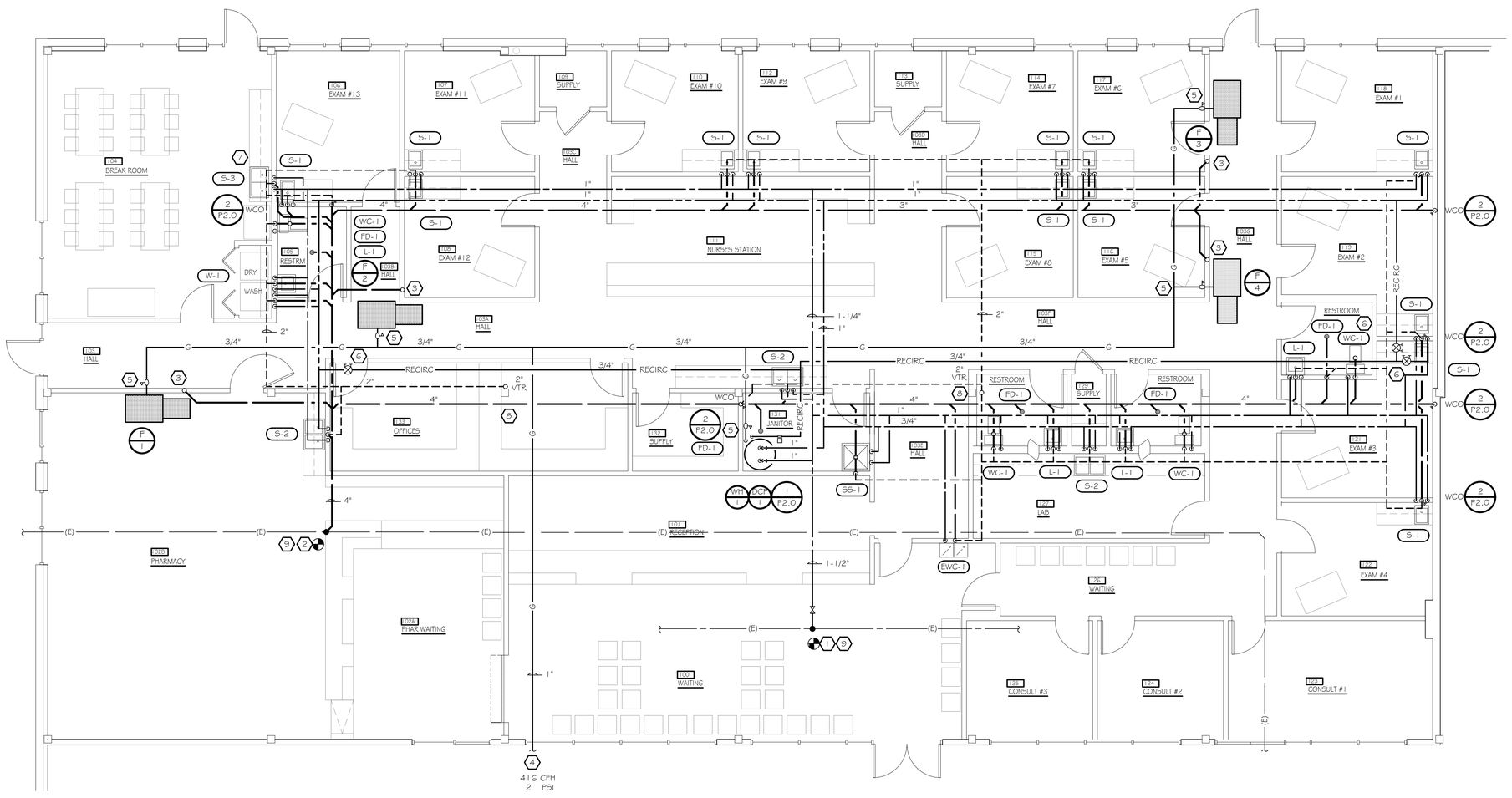
PROJECT NUMBER

REVISIONS

SHEET NUMBER
P0.1

REFERENCE NOTES

1. CONNECT NEW WATER LINE TO EXISTING WATER MAIN LINE. VERIFY EXACT SIZE, LOCATION, & MATERIAL.
2. CONNECT NEW WASTE LINE TO THE EXISTING WASTE LINE. VERIFY EXISTING LINE LOCATION, ELEVATION, SIZE, & MATERIAL.
3. PROVIDE AIR GAP FITTING FOR HX CONDENSATE DISCHARGE LINE AND COOLING COIL CONDENSATE LINE.
4. EXTEND NEW GAS LINE TO EXISTING GAS METER AT SE CORNER OF EXISTING BUILDING. FIELD VERIFY EXACT METER LOCATION.
5. 2 LB. - TO - 4 OZ. GAS PRESSURE REGULATOR.
6. CIRCUIT SETTER. SET AT 1 GPM.
7. CONNECT CW, HW, AND WASTE LINE TO UNDERCOUNTER DISHWASHER.
8. EXTEND NEW VENT LINE UP IN EXISTING SHAFT TO VENT THROUGH ROOF.
9. COORDINATE BUILDING SEWER AND WATER SHUTDOWN FOR SEWER AND WATER CONNECTIONS.



PLUMBING PLAN
SCALE: 3/16" = 1'-0"

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LICENSED PROFESSIONAL ENGINEER
No. 139918
JUDD W. MORTENSEN
STATE OF UTAH

DATE
November 7, 2018

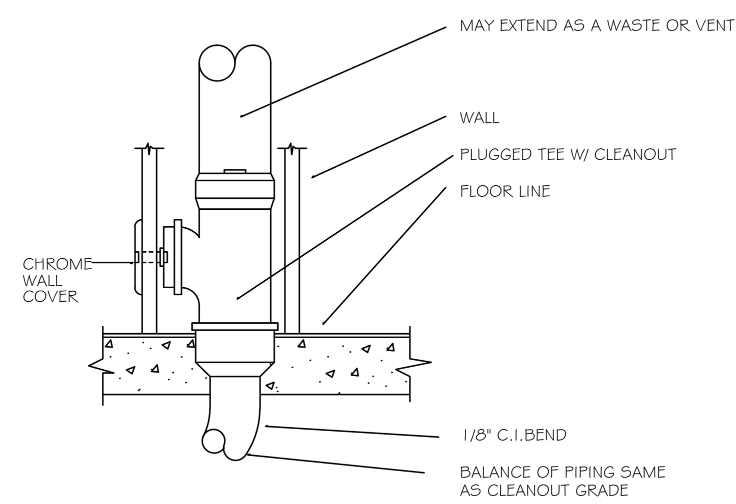
PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
PLUMBING PLAN

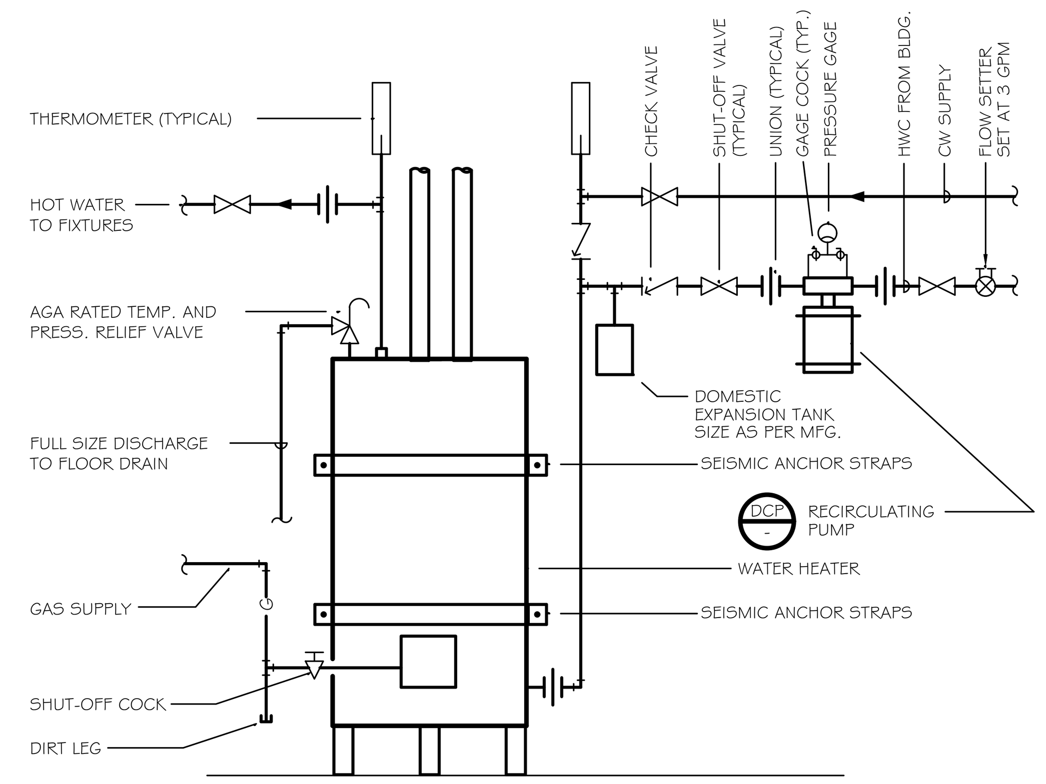
PROJECT NUMBER

REVISIONS

SHEET NUMBER
P1.0



WALL CLEANOUT DETAIL (2 / P2.0)
NOT TO SCALE



WATER HEATER DETAIL (1 / P2.0)
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

FIX. NO.	FIXTURE	TYPE	DESCRIPTION	WASTE	TRAP	VENT	HW	CW
EWC-1	ACCESSIBLE ELECTRIC WATER COOLER	ACCESSIBLE BARRIER-FREE	ACORN AQUA A112108F WALL MOUNTED BARRIER FREE BI-LEVEL WATER COOLER WITH ONE-PIECE STAINLESS STEEL TOP AND RECEPTOR, WELDED STEEL FRAME, AND STEEL PANELS WITH BAKED ENAMEL COATING. 1/4 HP, 115/1/60, FAN COOLED CONDENSER, 8 GPH OF 50 ° F WATER AT 80° F INLET WATER. STAINLESS STEEL.	1 1/2"	1 1/4"	1 1/4"	-	1/2"
FD-1	FLOOR DRAIN	TOILET ROOMS	SMITH FIGURE 2010-BP CAST IRON BODY AND FLASHING COLLAR WITH PROTECTIVE CAP AND ROUND NICKEL BRONZE ADJUSTABLE STRAINER HEAD WITH SECURED SQUARE HOLE GRATE. DEEP SEAL TRAP. TRAP PRIMER CONNECTION.	2"	2"	1 1/2"	-	-
L-1	ACCESSIBLE LAVATORY	ACCESSIBLE WALL HUNG RECTANGULAR	KOHLER K-2006 KINGSTON 21"x 18" VITREOUS CHINA WALL HUNG LAVATORY WITH SINGLE HOLE CENTER AND DRILLING FOR FLOOR MOUNTED CARRIERS WITH CONCEALED ARM BRACKETS; K-7715 OPEN GRID STRAINER; CHICAGO NO. 2200-CP SINLGE LEVER FAUCET. (1)	1 1/2"	1 1/4"	1 1/4"	1/2"	1/2"
S-1	EXAM SINK	SINGLE COMPARTMENT	ELKAY LR1716 18 GAUGE TYPE 304 STAINLESS STEEL COUNTERTOP SELF RIMMING SINK. DIMENSIONS: 17"x 16"x 7 1/2" WITH (2) FAUCET HOLES ON 8" CENTERS; LK-35 DUO-STRAINER; CHICAGO 785-E3 HI-LITE QUATURN FITTING: NO. 317 WRIST BLADE HANDLES: GN-1A-ES SPOUT. (1)	2"	1 1/2"	1 1/2"	1/2"	1/2"
S-2	LAB SINK	TWO COMPARTMENT SINK	ELKAY LR3319 18 GAUGE TYPE 304 STAINLESS STEEL COUNTERTOP SELF RIMMING SINK. DIMENSIONS: 33"x 19 1/2"x 7 1/2" WITH (2) FAUCET HOLES ON 8" CENTERS; LK-35 DUO-STRAINER; CHICAGO 785-E3 HI-LITE QUATURN FITTING: NO. 317 WRIST BLADE HANDLES: GN-1A-ES SPOUT. REVERSE OSMOSIS FAUCET AT PHARMARY SK. (1)	2"	1 1/2"	1 1/2"	1/2"	1/2"
S-3	BREAKROOM SINK	TWO COMPARTMENT SINK	ELKAY LR3319 18 GAUGE TYPE 304 STAINLESS STEEL COUNTERTOP SELF RIMMING SINK. DIMENSIONS: 33"x 19 1/2"x 7 1/2" WITH (2) FAUCET HOLES ON 8" CENTERS; LK-35 DUO-STRAINER; CHICAGO NO. 785-CP DECK FAUCET WITH GN GOOSE NECK L8 SWING SPOUT, 317 HANDLES, DISPOSAL, & E3 AERATOR. (1)	2"	1 1/2"	1 1/2"	1/2"	1/2"
SS-1	SERVICE SINK	FLOOR MOUNTED CORNER INSTALLED SERVICE SINK	KOHLER K-6710 WHITBY WHITE ENAMELED CAST IRON CORNER SERVICE SINK WITH K-8940 COATED WIRE RIM GUARD, K-9146 STRAINER, AND DEEP SEAL TRAP. CHICAGO 897-CP WALL MOUNTED FAUCET WITH VACUUM BREAKER, PAIL HOOK, WALL BRACE, 369 HANDLES, 3/4" MALE HOSE OUTLET, & WALL HOOK.	3"	3"	1 1/2"	1/2"	1/2"
WC-1	WATER CLOSET	ACCESSIBLE FLOOR MOUNTED TANK TYPE	KOHLER K-3481 WELLWORTH FLOOR MOUNTED VITREOUS CHINA CLOSE-COUPLED REVERSE TRAP ELONGATED ADA TOILET WITH BOLT CAPS; PLASTIC OPEN FRONT SEAT; 12" ROUGHING-IN. ACTUATOR SHALL BE ON THE WIDE SIDE OF STALL. 1.6 GAL./ FLUSH MAX. INGENIUM FLUSHING SYSTEM.	3"	-	1 1/2"	-	1/2"
W-1	WASHER CONNECTION		WALL BOX WITH SHUT-OFF VALVES, HOSE CONNECTIONS, DRAIN OUTLET WITH 2" STAND. PIPE WITH TRAP AND VENT. SYMMONS OR GUY GRAY.	2"	2"	1 1/2"	1/2"	1/2"

(1) PROVIDE SYMMONS THERMIXER MODEL 5-120 THERMOSTATIC MIXING VALVE BELOW LAVATORIES AND SINK. SET OUTLET AT 110° F. CONNECT TO HOT WATER INLET OF FAUCET.

DOMESTIC WATER CIRCULATE PUMP SCHEDULE

PUMP NO.	MANUFACTURER AND MODEL NO.	GPM	HEAD FT.	H.P.	RPM	VOLTS/PHASE/ CYCLE	EQUIPMENT OR AREA SERVED	COMMENTS
DCP 1	BELL & GOSSETT SERIES PRs	3	-	1/4	1750	120/1/60	ALL ROOMS & FIXTURES	(1) (2)

(1) ALL BRONZE CONSTRUCTION.
(2) EQUIPPED WITH 24 HOUR, 7 DAY PROGRAMMABLE TIMER.

GAS FIRED DOMESTIC HOT WATER HEATER SCHEDULE

SYMBOL	MANUFACTURERS AND MODEL NO.	TANK CAPACITY GALLONS	FUEL TYPE	INPUT BTUH (1)	AMP	VOLTS/ PHASE/ CYCLE	RECOVERY RATE @ 90° F RISE GPH	WATER TEMP IN/OUT	STACK/ INTAKE SIZE	COMMENTS
WH 1	A.O. SMITH GPDH-50	50	NAT GAS	50,000	3	120/1/60	41	50/140	3"Ø	

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LICENSED PROFESSIONAL ENGINEER
No. 179919
LORIN R. MORTENSEN
STATE OF UTAH

DATE
November 7, 2018

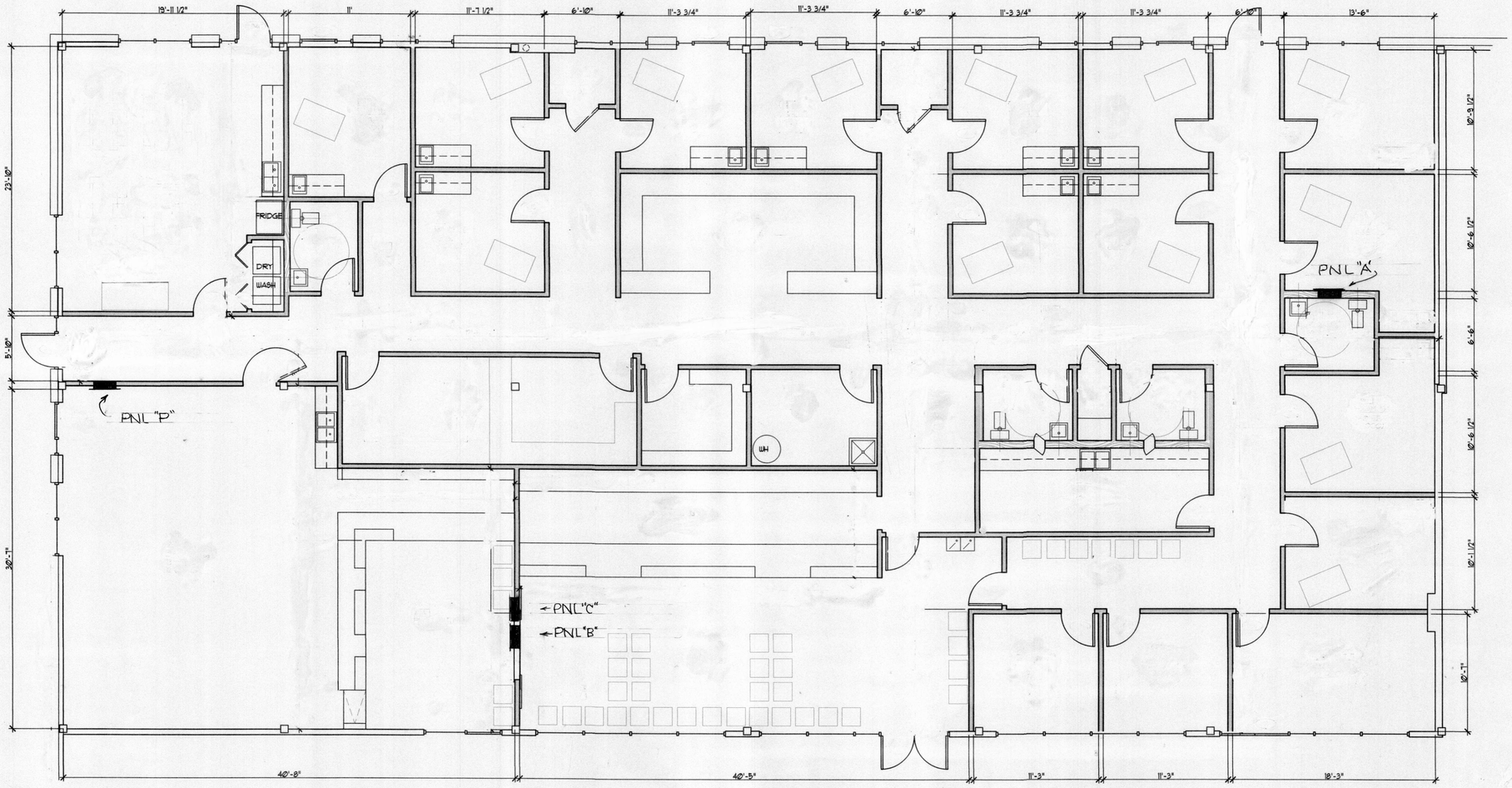
PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
PLUMBING
DETAILS &
SCHEDULES

PROJECT NUMBER

REVISIONS

SHEET NUMBER
P2.0



POWER CIRCUITS PLAN

JOSEPH T. BECK ARCHITECT, INC.
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SMITHFIELD , UTAH
(435) 764-6742

PROFESSIONAL ENGINEER
11-5-18
No. 146456-2202
DIXON W. THOMSON
STATE OF UTAH

DATE
OCT 1, 2018

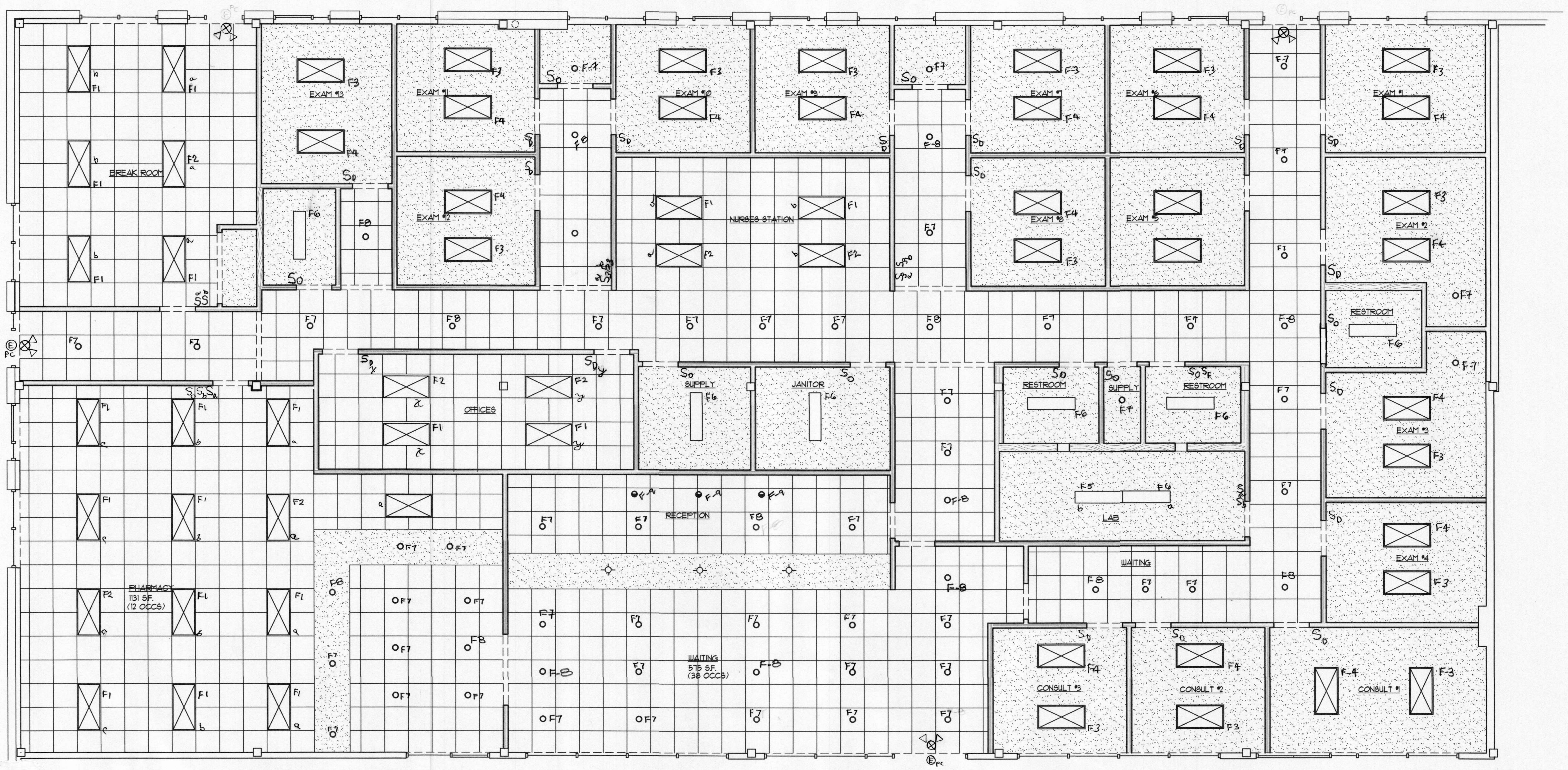
PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
PANELS, CIRCUITS

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
E-1



FIXTURE LIST

TYPE WATTS	No.	LAMPS TYPE 4000K	WATTS	VOLTS (120 / 277 / 480)	MOUNTING (REC / SURF / PEND / WALL / STEP / GRND / POLE)	MANUFACTURER	CATALOG No.	REMARKS
F-1		LED	36W	✓	GRID 2X4	NICOR	WHITE TPE1024SMV401	
F-2		↓	↓	✓	↓ ↓	↓	↓ ↓ -E2	EMERGENCY
F-3		↓	↓	✓	SOLID ↓	↓	↓ ↓	SHEET ROCK
F-4		↓	↓	✓	↓ ↓	↓	↓ ↓ -E2	↓ EMERGENCY
F-5		↓	39W	✓	SURF. 1X4	↓	ACW-20-45-U-40	
F-6		↓		✓	↓ ↓	↓	↓ E1	EMERGENCY
F-7		↓	23W	✓	REC CAN	↓	CDL6-2-20-40K-WH	
F-8		↓	23W	✓	↓ ↓	↓	↓	-E1 EMERGENCY
F-9		↓	16W	✓	↓ WALL WASH	↓	WHITE DLQ5-MA-10-4K	W-DLQ5-FRAME W-CADDY-BARS
⊗		↓		✓	UNIV.	SURE-LITE	APC7-6	EM. EXIT
Ⓔ		↓	18W	✓	WALL	RP-LIGHT	REL5LED-W-C	EM EGRESS COLD TEMP
⊕		INC.		✓	PEND		DECORATIVE	BY OWNER

SYMBOLS

- WIRING CONCEALED IN OR ABOVE CEILING.
- WIRING CONCEALED IN OR UNDER FLOOR
- WIRING EXPOSED
- HOME RUN TO PANELBOARD CIRCUITS AS NOTED.
- CONDUIT TURNED UP.
- CONDUIT TURNED DOWN.
- 2-#12, 1/2" (3/4") CONDUIT
- 3-#12, 1/2" (3/4") CONDUIT
- 4-#12, 3/4" CONDUIT
- 5-#12, 3/4" CONDUIT
- 6-#12, 1" CONDUIT
- 7-#12, 1" CONDUIT
- 8-#12, 1" CONDUIT.
- 9-#12, 1-1/4" CONDUIT

CEILING / WALL / FLOOR

- LIGHTING OUTLET WITH FIXTURE AS NOTED.
- FLUORESCENT FIXTURE
- EXIT SIGN OUTLET WITH FIXTURE AS NOTED
- FIXTURE TYPE (A) TOTAL NUMBER OF WATTS (100)
- DUPLEX RECEPTACLE, 120V, 20AMP 15" AFF SPEC GRADE
- SINGLE RECEPTACLE, 120V, 20AMP. 15" AFF
- RECEPTACLE
- RECEPTACLE
- JUNCTION BOX (J-BOX).
- TELEPHONE OUTLET, 1-GANG BOX W/1-HOLE COVER. +12" OR AS NOTED
- CLOCK OUTLET WITH CLOCK TYPE AS INDICATED, +96" OR AS NOTED.
- TOGGLE SWITCH-SUBSCRIPT INDICATES TYPE OF SWITCH, 46" OR ADA NOTED. BRYANT 20A., SPEC. GRADE
  - 3- 3 WAY
  - P- PILOT LIGHT, G- GFI
  - D- DIMMER, EATON DF10P-C2 LED
  - MC-MOMENTARY CONTACT
  - M- MOTOR RATED WITH OL RELAY, O-OCCUPANCY D.
- F FAN-VARIABLE SPEED BY MECHANICAL
- POWER OR LIGHTING PANEL
- MAIN DISTRIBUTION PANEL
- DISCONNECT SWITCH
- MOTOR STARTER, SIZE AS NOTED
- COMBINATION DISCONNECT SWITCH & MOTOR STARTER.
- STOP-START PUSHBUTTON STATION
- FIRE ALARM PULL STATION, +54".
- SINGLE FIRE ALARM HORN, +96".
- DOUBLE FIRE ALARM HORN, +96".
- BELL LOCATION, +96".
- PUSHBUTTON, +48"

ABBREVIATIONS:

WP-WEATHERPROOF	DT-DUSTTIGHT
VT-VAPORTIGHT	XP-EXPLOSION PROOF
WT-WATERTIGHT	J -JUNCTION
RT-RAINTIGHT	CB-CIRCUIT BREAKER
EXO-SAFETY SWITCH	

E- EXISTING

ADA - ICC A117.1-2018

LIGHTINGING PLAN

JOSEPH T. BECK ARCHITECT, INC.
497 EAST 520 SOUTH
SMITHFIELD, UTAH
(435) 764-6742

PROFESSIONAL ENGINEER No. 146456-2202 DIXON W. THOMSON STATE OF UTAH 11-5-18

DATE: OCT 1, 2018

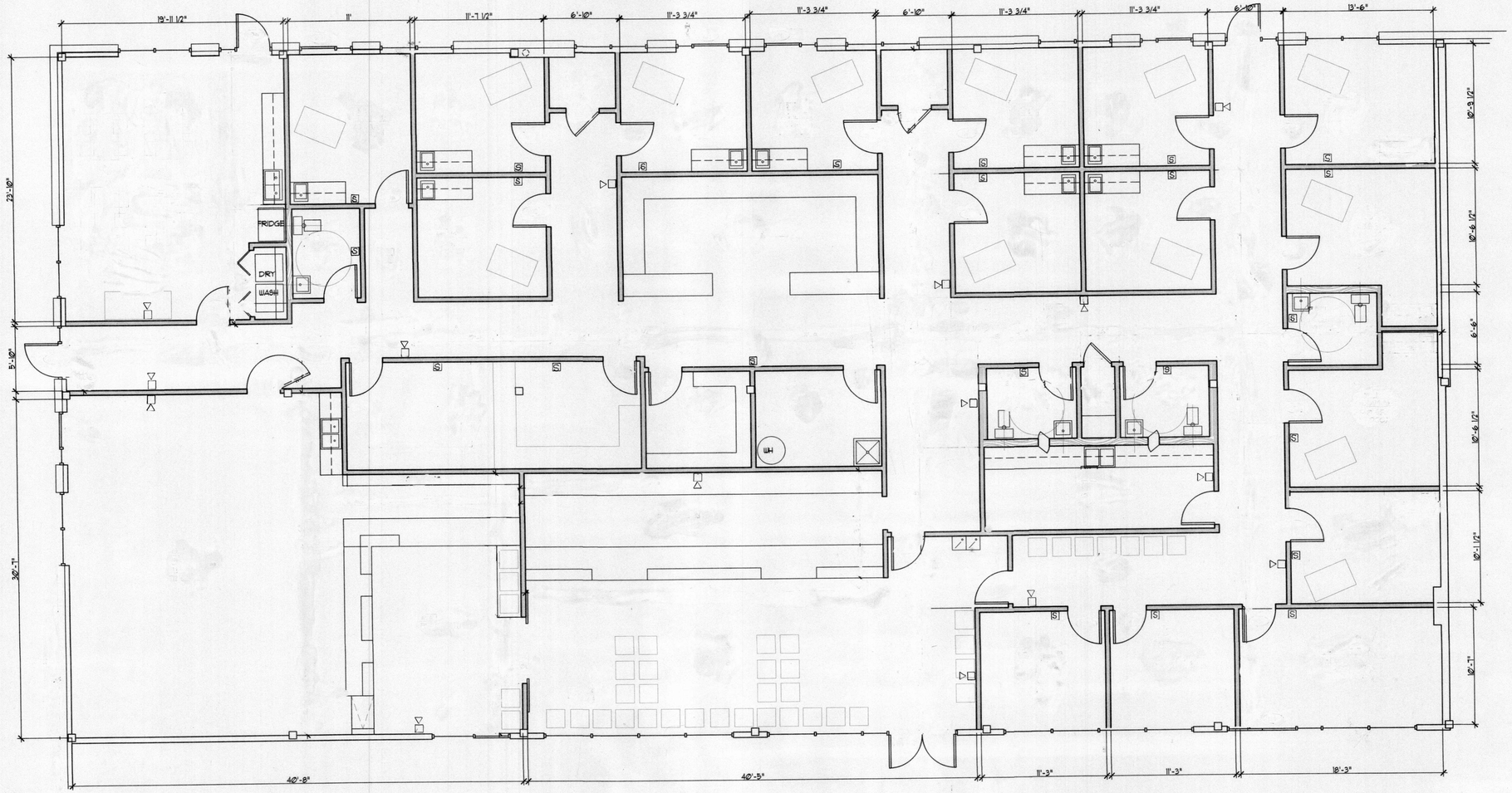
PROJECT TITLE: BEAR LAKE MEDICAL CLINIC NEW CLINIC REMODEL PROVIDENCE, UTAH

SHEET TITLE

PROJECT NUMBER: -

REVISIONS

SHEET NUMBER: E-2



NOTES

1. THE CLINIC AND PHARMACY TELEPHONE SYSTEM WILL BE SERVED FROM THE EXISTING OFFICE SYSTEM IMMEDIATELY ABOVE ON THE SECOND FLOOR. THE ELECTRICAL CONTRACTOR WILL INSTALL OUTLET BOXES AT TELEPHONE OUTLETS AND STUB UP TO 1/2" CONDUIT FOR SINGLE PHONE LOCATIONS AND 3/4" CONDUIT FOR MULTIPLE PHONE LOCATOINS ABOVE THE GRID CEILING. FOR TELEPHONE OUTLETS IN SHEETROCK CEILING AREAS. RUN THE STUB UP TO ACCESSIBLE GRID CEILING AREA. INDICATE WHAT LOCATION SERVED ON THESE EXTEDED STUB UPS.

2. THE CLINIC AND PHARMACY FIRE ALARM SYSTEM WILL BE A NEW ZONE OF THE EXISTING NOTIFIER FIRE ALARM CONTROL PANEL. IT WILL REQUIRE A MCCULLOUGH CONDUIT LOOP BACK. RED CONDUIT WITH 14 AWG WIRE, 2 CONDUCTORS IN AND 2 CONDUCTORS BACK. COMMISSIONING WILL BE BY THE NOTIFIER REPRESENTATIVE.

3. THE BURGLAR ALARM SYSTEM AND I.T. SYSTEMS WILL BE BY OTHERS THAN THE ELECTRICAL CONTRACTOR.

4. ALL NON LOCKING RECEPTACLES SHALL BE CHILD TAMPER RESISTANT UNLESS LOCATED BEHIND A LARGE, DIFFICULT TO MOVE APPLIANCES, OR ABOVE 5' 3" OR CHILD INACCESSIBLE ABOVE A COUNTER. ALL DEVICES TO BE 20 AMP SPECIFICATION GRADE.

5. SEE NEC 210.63 (5)

6. LABORATORY WORK COUNTER APPROXIMATELY 20' LENGTH HAS 3000 WIREMOLD. PROVIDE 8-20 AMP DUPLEX RECEPTACLES. DIVIDE BETWEEN 4- DEDICATED CIRCUITS.

7. THERE ARE 4 FURNACES 120V, 1-PHASE, ½ H.P., 10 AMPS. PROVIDE SSU WITH 15 AMP TIME DELAY FUSE. FEED FROM PANEL BOARD CLOSEST TO FURNACE.

8. THERE ARE 4 ROOF MOUNTED CONDENSING UNITS 208 VOLT, 1-PHASE, FLA 28 AMP. FEED 2 POLE BREAKER FROM CLOSEST PANEL BOARD. PROVIDE 3 R NONFUSED DISCONNECT AND A 120 VOLT DEDICATED, WP-GFI RECEPTACLE WITH IN USE COVER ADJACENT TO CONDENSORS PER NEC DISTANCE.

9. ADJACENT TO EACH OF FOUR PANEL BOARDS, INSTALL FLUSH MOUNTED CPD DEVICE, EATON CVX100-208Y WITH FLUSHMOUNT PLATE 12.

10. AT NURSES STATION, ROOM 111, INSTALL APROXIMATELY 23' OF PLUG MOLD IN BOTH OF LOCATIONS. (A) AGAINST THE WALL AT THE COUNTER HEIGHT TO BACK OF STATION AND (B) AT COUNTER HEIGHT AT ISLAND THAT IS IN FRONT OF STATION. TO FEED (B), USE POWER POLE MOUNTED AT SOUTH END OF COUNTER. USE WIRE MOLD V20 SERIES 2 CIRCUIT 5 FT. LENGTH WITH 12" CENTERS, DEDICATED CIRCUITS TO (A) AND 4 DEDICATED TO (B) ALTERNATE FEED TO ADJACENT.

NOTIFIER SYMBOLS

S STROBE SWL
HORN STROBE P2WL
POWER SUPPLY FCP5-2458
SMOKE DETECTOR FSP-951

FIRE ALARM NOTE

1. ALL FOUR FURNACE/AIR CONDITIONER FANS ARE 1990 CEM AND WILL NOT REQUIRE SMOKE DUCT DETECTORS. FURNACE FANS WILL SHUT DOWN DURING ALARM CONDITION.

2. MECHANICAL CONTRACTOR IS FURNISHING VARIABLE SPEED CONTROL FOR CEILING FANS. VERIFY FAN SWITCH BOX REQUIREMENTS.

FIRE ALARM PLAN AND NOTES

JOSEPH T. BECK ARCHITECT, INC.
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11-5-18
No. 146456-2202
DIXON W. THOMSON
STATE OF UTAH

DATE
OCT 1, 2018

PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE , UTAH

SHEET TITLE
FIRE ALARM SYSTEM

PROJECT NUMBER
-

REVISIONS

SHEET NUMBER
E-3

TRANSFORMER - T1

KVA	500
Voltage secondary	208
%Z	3.3
%Z TOL	No Change

FAULT - X1

$I_{total\ s.c.\ (L-L-L)}$	42,058 AMPS
Voltage (L-L)	208 V

CREATE LABEL DELETE

CONDUCTOR

CONDUCTOR RUN - C1

LENGTH	15 FT
SIZE	500
QTY (per phase)	6
TYPE	Three Single Conductors
CONDUIT	Steel
WIRE	Cu, 600 V

FAULT - X2

$I_{total\ s.c.\ (L-L-L)}$	40,460 AMPS
V (L-L)	208 V

CREATE LABEL DELETE

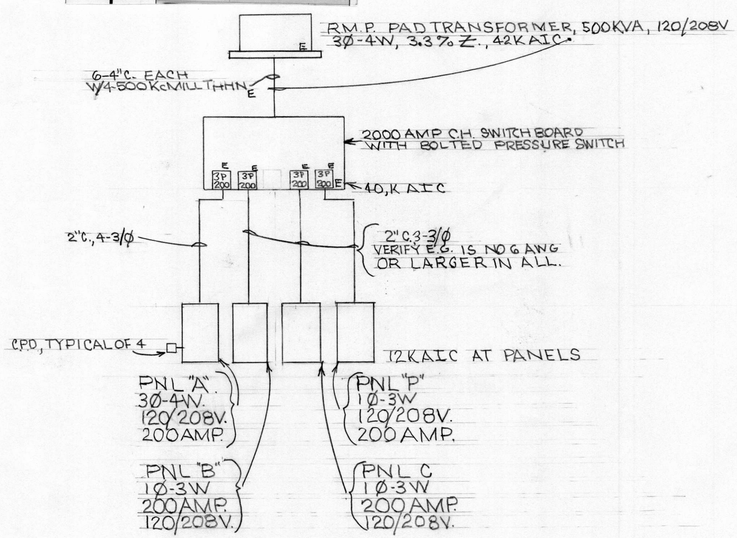
CONDUCTOR

CONDUCTOR RUN - C2

LENGTH	90 FT
SIZE	3/0
QTY (per phase)	1
TYPE	Three Single Conductors
CONDUIT	Steel
WIRE	Cu, 600 V

FAULT - X3

$I_{total\ s.c.\ (L-L-L)}$	12,037 AMPS
V (L-L)	208 V



POWER RISER DIAGRAM

PANELBOARD SCHEDULE

PANEL C — TYPE EATON PWRLINE I 120/208 VOLTS 1 ϕ 3 W

MOUNTING: ☒ FLUSH ☐ SURFACE — 200 AMP. MAINS: ☒ LUGS ☐ BREAKER

BRANCH BREAKERS QBH 22K

ITEM	AMP. RATING	POLE	CIR. NO.	LEFT PHASE LOADING A	B	C	RIGHT PHASE LOADING A	B	C	CIR. NO.	AMP. RATING	POLE	ITEM
CPD	30	2	1	–						2			
		–	3		–					4			
			5							6			
			7							8			
			9							10			
			11							12			
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			33							34			
			35							36			
			37							38			
			39							40			
			41							42			

FEEDER: ☐ TOP ☒ BOTTOM 3/0 AWG OR MCM — ← TOTALS — TOTAL CONN. LOAD _____ WATTS

INTEGRATED EQUIPMENT RATING 12K AMPS RMS SYM. — PE-35/74

PANELBOARD SCHEDULE

PANEL P — TYPE EATON PWRLINE I 120/208 VOLTS 1 ϕ 3 W

MOUNTING: ☒ FLUSH ☐ SURFACE — 200 AMP. MAINS: ☒ LUGS ☐ BREAKER

BRANCH BREAKERS QBH 22K

ITEM	AMP. RATING	POLE	CIR. NO.	LEFT PHASE LOADING A	B	C	RIGHT PHASE LOADING A	B	C	CIR. NO.	AMP. RATING	POLE	ITEM
CPD	30	2	1	–						2			
		–	3		–					4			
			5							6			
			7							8			
			9							10			
			11							12			
			13							14			
			15							16			
			17							18			
			19							20			
			21							22			
			23							24			
			25							26			
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			

FEEDER: ☐ TOP ☒ BOTTOM 3/0 AWG OR MCM — ← TOTALS — TOTAL CONN. LOAD _____ WATTS

INTEGRATED EQUIPMENT RATING 12K AMPS RMS SYM. — PE-35/74

PANELBOARD SCHEDULE

PANEL A — TYPE EATON PWRLINE I 120/208 VOLTS 3 ϕ 4 W

MOUNTING: ☒ FLUSH ☐ SURFACE — 200 AMP. MAINS: ☒ LUGS ☐ BREAKER

BRANCH BREAKERS QBH 22K

ITEM	AMP. RATING	POLE	CIR. NO.	LEFT PHASE LOADING A	B	C	RIGHT PHASE LOADING A	B	C	CIR. NO.	AMP. RATING	POLE	ITEM
CPD	30	3	1	–						2			
		–	3		–					4			
		–	5			–				6			
			7							8			
			9							10			
			11							12			
			13							14			
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			35							36			
			37							38			
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			41							42			
			43							44			
			45							46			
			47							48			
			49							50			
			51							52			
			53							54			

FEEDER: ☐ TOP ☒ BOTTOM 3/0 AWG OR MCM — ← TOTALS — TOTAL CONN. LOAD _____ WATTS

INTEGRATED EQUIPMENT RATING 12K AMPS RMS SYM. — PE-35/74

PANELBOARD SCHEDULE

PANEL B — TYPE EATON PWRLINE I 120/208 VOLTS 1 ϕ 3 W

MOUNTING: ☒ FLUSH ☐ SURFACE — 200 AMP. MAINS: ☐ LUGS ☐ BREAKER

BRANCH BREAKERS QBH 22K

ITEM	AMP. RATING	POLE	CIR. NO.	LEFT PHASE LOADING A	B	C	RIGHT PHASE LOADING A	B	C	CIR. NO.	AMP. RATING	POLE	ITEM
CPD	30	2	1							2			
			3							4			
			5							6			
			7							8			
			9							10			
			11							12			
			13							14			
			15							16			
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			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			

FEEDER: ☐ TOP ☒ BOTTOM 3/0 AWG OR MCM — ← TOTALS — TOTAL CONN. LOAD _____ WATTS

INTEGRATED EQUIPMENT RATING 12K AMPS RMS SYM. — PE-35/74

ELECTRICAL POWER PLAN

DRAWN BY

DATE

CHECKED BY

ENGINEERED BY

TITLE PANEL SCHEDULES AND POWER RISER

DATE OCT 1, 2018

PROJECT TITLE
BEAR LAKE MEDICAL CLINIC
NEW CLINIC REMODEL
PROVIDENCE, UTAH

PROFESSIONAL ENGINEER No. 146456-2202 DIXON W. THOMSON STATE OF UTAH

#	REVISIONS

PRINT DATE

SHEET E-4