# LEE'S SUMMIT ANIMAL HOSPITAL NORTH

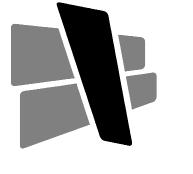
250 NW McNARY COURT LEE'S SUMMIT, MO 64086

> 04.23.21 PERMIT COMMENTS

**OWNER** 

NATIONAL VETERINARY ASSOCIATES
29229 CANWOOD STREET
AGOURA HILLS, CA 91301

**ARCHITECT** 



CURRAN

ARCHITECTURE

5719 LAWTON LOOP E. DR. #212
INDIANAPOLIS, IN 46216
O: 317.288.0681
CONTACT: SHAWN CURRAN

MEP ENGINEER

TES ENGINEERING
25760 FIRST STREET
CLEVELAND, OH 44145
O: 440.871.2410
CONTACT: DAN STECKLOW



#### **SCOPE NOTES**

IN THE EVENT OF QUESTIONS REGARDING THE CONTRACT DOCUMENTS, SPECIFICATIONS, EXISTING CONDITIONS OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT PRIOR TO BID SUBMITTAL AND PROCEEDING WITH ANY WORK IN QUESTION.

THESE CONTRACT DOCUMENTS ARE INTENDED TO DESCRIBE ONLY THE SCOPE AND APPEARANCE OF THE REAL PROPERTY IMPROVEMENTS, INCLUDING THE PERFORMANCE AND LEVEL OF QUALITY EXPECTED OF OF ITS COMPONENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL WORK COMPLETED AND MATERIALS INSTALLED BE IN FULL COMPLIANCE AT A MINIMUM, WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES HAVING JURISDICTIONAL AUTHORITY OVER THE PROJECT.

THESE CONTRACT DOCUMENTS DO NOT ATTEMPT TO INSTRUCT THE CONTRACTOR IN THE DETAILS OF HIS TRADE. THEY ARE PERFORMANCE SPECIFICATIONS IN THAT THEY DO REQUIRE THAT ALL MANUFACTURED ITEMS, MATERIALS AND EQUIPMENT BE INSTALLED IN STRICT CONFORMANCE TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS, EXCEPT IN THE CASE WHERE THE CONTRACT DOCUMENTS ARE MORE STRINGENT. ANY MISCELLANEOUS ITEMS OR MATERIALS NOT SPECIFICALLY NOTED, BUT REQUIRED FOR PROPER INSTALLATION SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ALL WORK SHALL BE WARRANTED SATISFACTORY, IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (I) YEAR, OR FOR THE PERIOD OF WARRANTY CUSTOMARY, OR STIPULATED FOR THE TRADE, CRAFT, OR PRODUCT, WHICHEVER IS LONGER. ONLY COMPETENT MECHANICS CAPABLE OF PRODUCING GOOD WORKMANSHIP CUSTOMARY TO THE TRADE SHOULD BE USED. COMMENCING WORK BY A CONTRACTOR OR SUBCONTRACTOR CONSTITUTES ACCEPTANCE OF THE CONDITIONS AND SURFACES CONCERNED. IF ANY SUCH CONDITIONS ARE UNACCEPTABLE, THE GENERAL CONTRACTOR SHALL BE NOTIFIED IMMEDIATELY, AND NO WORK SHALL BE PERFORMED UNTIL THE CONDITIONS ARE CORRECTED.

6" MTL STUDS @ 16" OC

WITH 2 LAYERS OF %"

GYPSUM WALLBOARD @

EACH SIDE. EXTEND STUDS

AND GWB. TO UNDERSIDE

OF ROOF DECK AND SEAL

BETWEEN GWB AND DECK

FOR FIRE RATED ASSEMBLY.

PROVIDE SOUND BATTS

WALL WIDTH AT WALL

TYPE W5A ONLY.

TYPE W5

**TYPE W5A** 

(PROVIDE TWO HOUR RATED

UNDERWRITERS LABORATORY

WALL ASSEMBLY U411 OR EQUAL)

INSULATION TO MATCH

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH THE PROJECT SCOPE OF WORK, BUILDING STANDARDS, SCHEDULE AND DEADLINES. THE CONTRACTOR SHALL FURTHER BE RESPONSIBLE FOR ADVISING THE OWNER OF ALL LONG LEAD ITEMS AFFECTING THE PROJECT SCHEDULE AND SHALL, UPON REQUEST FROM THE OWNER, SUBMIT ORDER CONFIRMATIONS AND DELIVERY DATES FOR SUCH LONG LEAD ITEMS TO THE OWNER.

SUBSTITUTIONS SHALL ONLY BE CONSIDERED IF THEY DO

WARRANTY. UNDER NO CIRCUMSTANCES WILL THE

OWNER BE REQUIRED TO PROVE THAT A PRODUCT PROPOSED FOR SUBSTITUTION IS OR IS NOT OF EQUAL

OUALITY TO THE PRODUCT SPECIFIED. UNDER NO

SECTIONS AND DETAILS FOR ALL DIMENSIONAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE

BE COMPLETE IN ALL RESPECTS PRIOR TO THE FINAL

THE CONTRACTOR SHALL PRESERVE ALL PRINTED

INSTRUCTIONS AND WARRANTY INFORMATION THAT IS

PROVIDED WITH EQUIPMENT OR MATERIALS USED, AND

DELIVER SAID PRINTED MATTER TO THE OWNER AT THE

TIME OF SUBSTANTIAL COMPLETION. THE CONTRACTOR

GENERAL CONTRACTOR SHALL PROVIDE A THOROUGH

CONSTRUCTION CLEANING AT PROJECT CLOSE OUT, PRIOR

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL

3 5/8" MTL STUDS @ 16" OC

WITH ONE LAYER OF 3/8"

GYPSUM WALLBOARD @

EACH SIDE. EXTEND STUDS

AND GWB. TO UNDERSIDE

OF ROOF DECK AND SEAL

BETWEEN GWB AND DECK

FOR FIRE RATED ASSEMBLY.

PROVIDE SOUND BATTS

INSULATION TO MATCH

WALL WIDTH AT WALL

TYPE W4A ONLY.

TYPE W4

(PROVIDE ONE HOUR RATED UNDERWRITERS LABORATORY

WALL ASSEMBLY U465 OR EQUAL)

**TYPE W4A** 

FABRICATED ITEMS, AND PHYSICAL SAMPLES OF ALL FINISH

MATERIALS SPECIFIED TO THE ARCHITECT FOR REVIEW.

SHALL INSTRUCT THE OWNER IN THE PROPER USE OF THE

ACCEPTANCE, UNLESS OTHERWISE NOTED.

EQUIPMENT FURNISHED BY THEIR TRADE.

TO PUNCH LIST WALK THROUGH.

INFORMATION.

CIRCUMSTANCES SHALL THE CONTRACTOR SCALE THE

DRAWINGS TO DETERMINE DIMENSIONS. REFER TO PLANS,

INSTALLATION OF ALL SELECTED MATERIALS WHICH SHALL

NOT SACRIFICE QUALITY, FUNCTIONALITY, APPEARANCE OR

CONTRACT DOCUMENTS AND RETURN THEM TO THE CONTRACTOR WITHIN SEVEN (7) WORKING DAYS EXCEPT ALL CONTRACTOR OR SUPPLIER REQUESTS FOR AS MAY OTHERWISE BE PROVIDED FOR BY THE OWNER. SUBSTITUTIONS OF SPECIFIED ITEMS SHALL BE SUBMITTED, IN THE CONTRACTOR SHALL NOT REPRODUCE AND MARK UP WRITING, ACCOMPANIED BY THE ALTERNATIVE PRODUCT INFORMATION, TO THE ARCHITECT, NO LATER THAT TEN (10) BUSINESS DAYS, PRIOR TO BID OPENING DATE.

ANY PART OF THE CONTRACT DOCUMENTS FOR SUBMITTAL AS A SHOP DRAWING. ANY SUCH SUBMITTAL WILL BE

REVIEWED SHOP DRAWINGS AND SUBMITTALS BY OTHERS

SHALL NOT BE CONSIDERED AS PART OF THE CONTRACT

DOCUMENTS. THE ARCHITECT ASSUMES NO RESPONSIBILITY

FOR DRAWINGS, SCHEDULES, AND/OR SPECIFICATIONS FOR

WORK ON THE PROJECT PREPARED BY OTHERS.

THE ARCHITECT WILL REVIEW ALL SHOP DRAWINGS,

SUBMITTALS AND SAMPLES FOR CONFORMITY WITH THE

ANY SUBMITTAL REQUIRED TO BE REVIEWED MORE THAN THE INITIAL REVIEW AND ONE (I) ADDITIONAL REVIEW, WILL BE CONSIDERED TO BE IN EXCESS OF THE SCOPE OF THE PROJECT. THE TIME REQUIRED FOR THIRD AND SUBSEQUENT REVIEWS OF A SUBMITTAL WILL BE PAID FOR BY THE CONTRACTOR TO THE ARCHITECT AT THE ARCHITECT'S STANDARD BILLING RATES, PLUS REIMBURSABLE EXPENSES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ANY EXISTING CONDITIONS AND ALL CRITICAL DIMENSIONS ASSOCIATED WITH THE PROPOSED WORK. THE CONTRACTOR SHALL CONFIRM THAT ALL WORK OUTLINED WITHIN THE CONTRACT DOCUMENTS CAN BE ACCOMPLISHED AS SHOWN, PRIOR TO BID OPENING. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONDITIONS ENCOUNTERED WHICH MAY AFFECT BUILDING CODE COMPLIANCE, LIFE SAFETY, ISSUANCE OF CERTIFICATE OF OCCUPANCY, OR COMPLETION OF THE PROJECT AS DIRECTED IN THE CONTRACT DOCUMENTS.

NO ADDITIONAL FUNDS WILL BE APPROVED FOR WORK OMITTED FROM THE CONTRACTOR'S BID DUE TO LACK OF VERIFICATION BY THE CONTRACTOR, EXCEPT AS OTHERWISE APPROVED BY THE OWNER FOR WORK ASSOCIATED WITH HIDDEN CONDITIONS WHICH ARE NOT ACCESSIBLE PRIOR TO CONSTRUCTION.

REFER TO PROJECT MANUAL (WHEN APPLICABLE) FOR ADDITIONAL REQUIREMENTS AND DIRECTIONS. ALL INTERIOR FINISHES SHALL COMPLY WITH CHAPTER EIGHT (8) OF THE 2018 INTERNATIONAL BUILDING CODE.

LIGHT GAGE METAL STUDS; STUDS, THEIR COMPONENTS AND THEIR CONNECTIONS SHALL BE ENGINEERED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE ENGINEER SHALL AFFIX THEIR SEAL AND SIGNATURE TO SHOP DRAWINGS AND CALCULATIONS SUBMITTED FOR REVIEW.

STEEL REQUIRED TO TRANSMIT GRAVITY AND/OR LATERAL LOADS TO THE STRUCTURE NOT DETAILED ON THE STRUCTURAL DRAWINGS IS THE RESPONSIBILITY OF THE METAL STUD SUPPLIER TO DESIGN, DETAIL, PROVIDE AND INSTALL.

METAL STUDS SHALL BE DESIGNED TO SUPPORT THE LOADS SHOWN IN THE DESIGN DATA IN ADDITION TO THE WEIGHT OF THE MATERIALS ATTACHED TO THE METAL STUDS. METAL STUDS SHALL BE DESIGNED USING THE LOAD COMBINATIONS IN SECTION 1605.3.1 OF THE INTERNATIONAL BUILDING CODE, 2012 EDITION. NO INCREASE IN ALLOWABLE STRESS IS ALLOWED.

DEFLECTION DUE TO LATERAL LOAD SHALL BE LIMITED TO In OF the Stud Span. For Cantilevers, the Deflection DUE TO LATERAL LOAD AT THE END OF THE CANTILEVER SHALL BE LIMITED TO  $\frac{1}{180}$  OF THE CANTILEVER DIMENSION.

METAL STUD MANUFACTURER SHALL DETERMINE FINAL LAYOUT AND GAUGE OF STUDS TO MEET THE ARCHITECTURAL AND STRUCTURAL REQUIREMENTS.

WHERE ROUGH CARPENTRY IS IN CONTACT WITH THE GROUND, EXPOSED TO WEATHER OR IN AREAS OF HIGH RELATIVE HUMIDITY PROVIDE FASTENERS AND ANCHORAGES WITH A HOT DIP ZINC COATING OF G90 COMPLYING WITH ASTM A153 OR PROVIDE FASTENERS AND ANCHORAGES OF TYPE 304 STAINLESS STEEL.

ALL WOOD SHEATHING TO BE FIRE TREATED UNLESS NOTED OTHERWISE.

**UNDERSIDE OF** 

**B.O. STRUCTURE** 

**CEILING LINE** 

SEE REFLECTED CEILING

PLAN FOR HEIGHT

3 5/8" MTL STUDSAT 4'-0" OC

MAXIMUM SPACING. EXTEND TO

UNDERSIDE OF STRUCTURE ABOVE.

3 1/8" MTL STUDS @ 16" OC

WITH ONE LAYER OF 1/8"

GYPSUM WALLBOARD @

GYPSUM BOARD TO MIN

OF 4" ABOVE ADJACENT

PROVIDE SOUND BATTS

INSULATION TO MATCH

WALL WIDTH AT WALL

**FIN FLOOR** 

Aa = FILL IN

TYPE WIA ONLY.

CEILING LINE.

EACH SIDE. EXTEND

**ROOF DECK** 

#### **ABBREVIATIONS**

ACT	ACOUSTICAL CEILING TILE	FLR	FLOOR	PLWD	PLYWOOD
ADDL	ADDITIONAL	FR	FIRE RETARDANT	PS	PROJECTION SCREEN
AFF	ABOVE FINISHED FLOOR	FT	FEET	QT	QUARRY TILE
ALUM	ALUMINUM	GA	GAUGE	R	RISER
ANOD	ANODIZED	GB	GRAB BAR	RA	RETURN AIR
APP	APPROXIMATE	GC	GENERAL CONTRACTOR	RB	RESILIENT BASE
ARCH	ARCHITECT	GYP BD	GYPSUM BOARD	RD	ROOF DRAIN
AWT	ACOUSTICAL WALL TREATMENT	HDWR	HARDWARE	REF	REFERENCE
BLDG	BUILDING	HGT	HEIGHT	REFR	REFRIGERATOR
BLKG	BLOCKING	HM	HOLLOW METAL	REQD	REQUIRED
B.O.	BOTTOM OF	HORIZ	HORIZONTAL	RO	ROUGH OPENING
ВОТ	BOTTOM	HP	HIGH POINT	SA	SUPPLY AIR
BRG	BEARING	HVAC	HEATING, VENTILATING, AIR CONDITIONING	SCHED	SCHEDULE
CAB	CABINET	HW	HOT WATER	SCMD	SOLID CORE METAL DOOR
CJ	CONTROL JOINT	INSUL	INSULATION	SCWD	SOLID CORE WOOD DOOR
CL	CENTER LINE	JAN	JANITOR	SEC	SECTION
CLR	CLEAR	JST	JOIST	SF	SQUARE FOOT
CMU	CONCRETE MASONRY UNIT	, JT	JOINT	SIM	SIMILAR
CONST	CONSTRUCTION	KD	KNOCKDOWN	SPECS	SPECIFICATIONS
COL	COLUMN	KIT	KITCHEN	SQ	SQUARE
CONC	CONCRETE	LAM	LAMINATE	SS	STAINLESS STEEL
CONT	CONTINUOUS	LAV	LAVATORY	STD	STANDARD
CPT	CARPET	LLH	LONG LEG HORIZONTAL	STL	STEEL
СТ	CERAMIC TILE	LLV	LONG LEG VERTICAL	STOR	STORAGE
CW	COLD WATER	MAS	MASONRY	STRUCT	STRUCTURAL
DET, DTL	DETAIL	MAT	MATERIAL	SUSP	SUSPENDED
DF	DRINKING FOUNTAIN	MAX	MAXIMUM	TB	TACK BOARD
DIA	DIAMETER	MB	MARKER BOARD	TEL	TELEPHONE
DIM	DIMENSION	MECH	MECHANICAL	TLT	TOILET
DWG(S)	DRAWING(S)	MEZZ	MEZZANINE	T.O.	TOP OF
EA	EACH	MFR	MANUFACTURER	TRTD	TREATED
EC	EXPOSED CEILING	MIN	MINIMUM	TV	TELEVISION
EIFS	EXTERIOR INSULATION FINISH SYSTEM	MO	MASONRY OPENING	TYP	TYPICAL
EJ	EXPANSION JOINT	MTL	METAL	UNO	UNLESS NOTED OTHERWISE
EL	ELEVATION	N/A	NOT APPLICABLE	UR	URINAL
ENG	ENGINEER	NR	NON-RATED/NO RATING	VCT	VINYL COMPOSITION TILE
EQ	EQUAL	NIC	NOT IN CONTRACT	VERT	VERTICAL
EQUIP	EQUIPMENT	OC	ON CENTER	VIF	VERIFY IN FIELD
EXIST	EXISTING	OD	OUTSIDE DIAMETER	VT	VINYL TILE
EXP	EXPANSION	OFD	OVERFLOW DRAIN	W/	WITH
EXT	EXTERIOR	ОН	OPPOSITE HAND	W/O	WITHOUT
FD	FLOOR DRAIN	OPNG	OPENING	WB	WOOD BASE
FE	FIRE EXTINGUISHER	OPP	OPPOSITE	WC	WATER CLOSET
FEC	FIRE EXTINGUISHER CABINET	ОТО	OUT TO OUT	WD	WOOD
	FINISH	PLAS LAM	PLASTIC LAMINATE	WH	WATER HEATER

#### CODE ANIAL VOIC

CC	DE AN	ALYSIS	
APPLICABLE CODES BUILDING CODE 2018 INTERNATIONAL BUILDING CODE		ACTUAL BUILDING HEIGHT AND AREA BUILDING AREA: BUILDING HEIGHT (FEET / # FLOORS):	14,123 SF 27'
PLUMBING CODE		PROJECT AREA	3,880 SF
2017 INTERNATIONAL PLUMBING CODE		TABULAR OCCUPANT LOAD (1004.1.2)	1/100
ELECTRICAL CODE		OCCUPANT LOAD FACTOR:	1/100
2017 NATIONAL ELECTRICAL CODE		ACTUAL OCCUPANT LOAD (1004.1.2)	
		SQUARE FOOTAGE / OCCUPANT LOAD FACTOR:	3880/100
FIRE CODE		TOTAL OCCUPANTS:	39
2018 INTERNATIONAL FIRE CODE			
MECHANICAL CORE		FIRE RESISTIVE REQUIREMENTS (601 AND 602)	
MECHANICAL CODE		CONSTRUCTION TYPE:	NR
2018 INTERNATIONAL MECHANICAL CODE		STRUCTURAL FRAME:	NR
FUEL GAS CODE		EXTERIOR BEARING WALLS:	NR
2018 FUEL GAS CODE		INTERIOR BEARING WALLS:	NR
2010 1 022 0, 10 0002		exterior non-bearing walls:	NR
INDIANA HANDICAPPED ACCESSIBILITY CODE		INTERIOR NON-BEARING WALLS	NR
2009 ANSI ATT7.1		FLOOR CONSTRUCTION:	NR
ADA ACCESSIBILITY GUIDELINES		ROOF CONSTRUCTION: SHAFTS:	NR N/A
OCCUPANCY (OVERALL BUILDING)			
CLASSIFICATION (302.1):	В	FIRE RESISTANCE RATED CONSTRUCTION (704, 601, 602)	
,	_	RATED EXTERIOR WALLS:	N/A
OCCUPANCY (TENANT SPACE)		FIRE SEPARATION DISTANCE	60'+ N/A
CLASSIFICATION (302.1):	В	UNPROTECTED OPENING AREA:	N/A
ACCESSORY USES (508.2.1):	N/A	INTERIOR WALL AND CEILING FINISH REQUIREMENTS (	803)
NON-SEPARATED USES (508.3.2):	N/A	SEE FINISH SCHEDULE FOR MATERIALS	003)
SEPARATED USES (508.3.3):	N/A	ALL MATERIALS ARE CLASS A RATED	
AUTOMATIC SPRINKLER SYSTEM		FIRE PROTECTION SYSTEMS	
SPRINKLER SYSTEM REQUIRED (903):	YES	STANDPIPE SYSTEM (905):	EXIST
SPRINKLER SYSTEM PROVIDED:	YES	PORTABLE FIRE EXTINGUISHERS (906.1):	SEE PLAN
		FIRE ALARM AND DETECTION SYSTEMS (907):	FILL IN
ALLOWABLE BUILDING HEIGHT		SMOKE CONTROL SYSTEMS (909):	N/A
TABULAR HEIGHT (503):	75'	SMOKE AND HEAT VENTS (910):	N/A
ALLOWABLE BUILDING AREA		EGRESS	
TABULAR AREA (503):	23,000 SF	MINIMUM WIDTH FACTOR (1005.1):	0.15
		REQUIRED MINIMUM WIDTH FROM SPACE (1005.1):	5.85"
BUILDING AREA INCREASE		MINIMUM NUMBER OF EXITS (1015):	5.05
INCREASE FOR SPRINKLERED BUILDING (506.3):	300%	ACTUAL NUMBER OF EXITS:	4
UNLIMITED AREA (507):	N/A	ACTUAL WIDTH OF EXITS:	144"
FRONTAGE INCREASE (506.2):	N/A	ALLOWABLE TRAVEL DISTANCE (1016.2):	300'
If = $(F/P25) \times W / 30$		CORRIDOR CONSTRUCTION (1018.1):	NR
TOTAL ALLOWABLE AREA WITH INCREASES:	92,000	MINIMUM CORRIDOR WIDTH (1018.2):	44"
$Aa = At + (At \times If) + (At \times Is)$		MAXIMUM DEAD END CORRIDOR (1018.4):	50'
$A_{-} = \Gamma \Pi + \Pi \Pi$		in a military being contribute (1010.1).	30

5719 LAWTON LOOP E. DR. #212

INDIANAPOLIS, IN 46216

O :: 317.288.0681

F :: 317 . 288 . 0753

CERTIFICATION

CURRAN

A-8207

THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE

THE EXCLUSIVE INTELLECTUAL PROPERTY

OF CURRAN ARCHITECTURE, AND ARE NOT

TO BE USED OR REPRODUCED. WHOLE OR IN PART, WITHOUT THE WRITTEN

CONSENT OF CURRAN ARCHITECTURE

© COPYRIGHT 2021, CURRAN ARCHITECTURE

PROJECT INFORMATION

LEE'S SUMMIT ANIMAL

HOSPITAL NORTH

250 NW McNARY COURT

LEE'S SUMMIT, MO

64086

**ELEVATION TAG - INTERIOR OR EXTERIOR** 

WINDOW OR GLAZED OPENING TAG

**SYMBOLS** 

KEYED NOTE

IF WINDOW - W#

ACCESSORY TAG

**EQUIPMENT TAG** 

FINISH TAG

**ROOM TAG** 

IF STOREFRONT - SF#

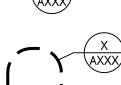
IF CURTAINWALL - CW#

WORKING POINT (NOT ALL MAY APPLY)



XXX

SECTION CUT AT AREAS SHOWN SMALL SCALE



**ENLARGED PLAN** 



ELEVATION TARGET. FINISHED FLOOR = 0'-0"



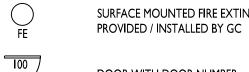
PLAN OR TRUE NORTH



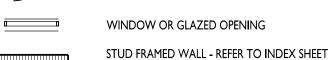
BATT INSULATION - WIDTH OF FRAMING UNO



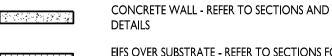
FIRE EXTINGUISHER IN SEMI-RECESSED CABINET PROVIDED / INSTALLED BY GC SURFACE MOUNTED FIRE EXTINGUISHER



DOOR WITH DOOR NUMBER



FOR INFORMATION CMU WALL - REFER TO SECTIONS AND DETAILS BRICK WALL - REFER TO SECTIONS AND DETAILS



EIFS OVER SUBSTRATE - REFER TO SECTIONS FOR WIDTH AND PROFILE

EXISTING DOOR - REFER TO DOOR SCHEDULE
EXISTING FRAMED WALL

EXISTING WINDOW WITH SILL AND / OR STOOL

	DEMO'D DOOR
=	DEMO'D WALL

WALL HEIGHT IF DESIGNATED ON PLANS. IF NOT, SEE WALL TYPES THIS SHEET

## **DRAWINGS**

COVER

#### **ARCHITECTURAL**

400 <b>I</b>	INDEX
A002	TYPICAL ACCESSIBILITY DETAILS
A100	LIFE SAFETY PLAN
AI0I	FLOOR PLAN
A102	ENLARGED RESTROOM PLANS
AII0	REFLECTED CEILING PLAN
A130	EQUIPMENT PLAN
A601	DOOR SCHEDULE
A801	FINISH SCHEDULE
A820	CASEWORK ELEVATIONS
A821	CASEWORK ELEVATIONS
A822	CASEWORK ELEVATIONS
<b>4823</b>	CASEWORK SECTIONS & DETAILS

#### **MECHANICAL**

M001	MECHANICAL LEGEND AND DETAILS
M002	MECHANICAL DETAILS
M003	MECHANICAL SCHEDULES
M004	MECHANICAL SPECIFICATIONS
M005	MECHANICAL COMPLIANCE
MIOI	MECHANICAL PLAN

#### **PLUMBING**

P00 I	P	LUMBING LEGEND	AND SCHE
P002	. P	LUMBING DETAILS	S
P003	P	LUMBING DETAILS	5
P005	P	LUMBING SPECIFIC	CATIONS
PIO	D	OMESTIC WATER	PLAN
P102	. S	ANITARY PLAN	
P201	P	LUMBING SANITA	RY ISOMETRI

#### **ELECTRICAL**

E001	ELECTRICAL LEGEND AND DETAILS
E002	ELECTRICAL ONE LINE AND SCHEDULES
E003	ELECTRICAL SPECIFICATIONS
E004	ELECTRICAL ENERGY CALCULATIONS
EIOI	LIGHTING PLAN
E102	POWER PLAN

## **ISSUE DATES** PERMIT SET

210095

INDEX

#### **WALL TYPES**

TYPE W3

TYPE W3A

NOT TO SCALE

TYPE W2

TYPE W2A

## WALL TYPE GENERAL NOTES

3 5/8" MTL STUDSAT 4'-0" OC

6" MTL STUDS @ 16" OC

WITH ONE LAYER OF %"

GYPSUM WALLBOARD @

GYPSUM BOARD TO MIN

OF 4" ABOVE ADJACENT

PROVIDE SOUND BATTS

INSULATION TO MATCH

WALL WIDTH AT WALL

TYPE W2A ONLY.

EACH SIDE, EXTEND

CEILING LINE.

MAXIMUM SPACING. EXTEND TO

UNDERSIDE OF STRUCTURE ABOVE.

NOTE: WALL HEIGHT AS MARKED ON PLANS IN CONJUNCTION WITH WALL TYPE SYMBOL WILL SUPERCEDE WALL HEIGHTS AS SHOWN ABOVE. SEE SYMBOLS LEGEND THIS SHEET.

CEMENT BOARD INSTEAD OF GYP BOARD BEHIND

ALL TILE FINISHES.

3 ¾" MTL STUDS @ 16" OC

WITH ONE LAYER OF 1/8"

GYPSUM WALLBOARD @

EACH SIDE. EXTEND TO

PROVIDE SOUND BATTS

INSULATION TO MATCH

WALL WIDTH AT WALL

TYPE W3A ONLY.

UNDERSIDE OF ROOF

DECK.

- WITH STRUCTURAL ENGINEER PRIOR TO BEGINNING CONSTRUCTION. PROVIDE DEEP LEG DEFLECTION TRACK AT TOP OF ALL METAL STUD WALLS WHERE STUDS EXTEND REFER TO ROOM FINISH SCHEDULE FOR ALL FINISH TO UNDERSIDE OF ROOF DECK OR STRUCTURE
- TYPES, SIZES AND LOCATIONS ETC. USE MOLD AND MILDEW RESISTANT GYPSUM WALLBOARD ON ALL PLUMBING WALLS. USE 5/8"
  - ALL STUD WALLS CREATING A CONCEALED WALL SPACE TO HAVE FIREBLOCKING AT INTERVALS NOT EXCEEDING 10'-0" PER 718.2.2 IBC 2012
- SELECTIONS; CEILING TYPES AND HEIGHTS; AND

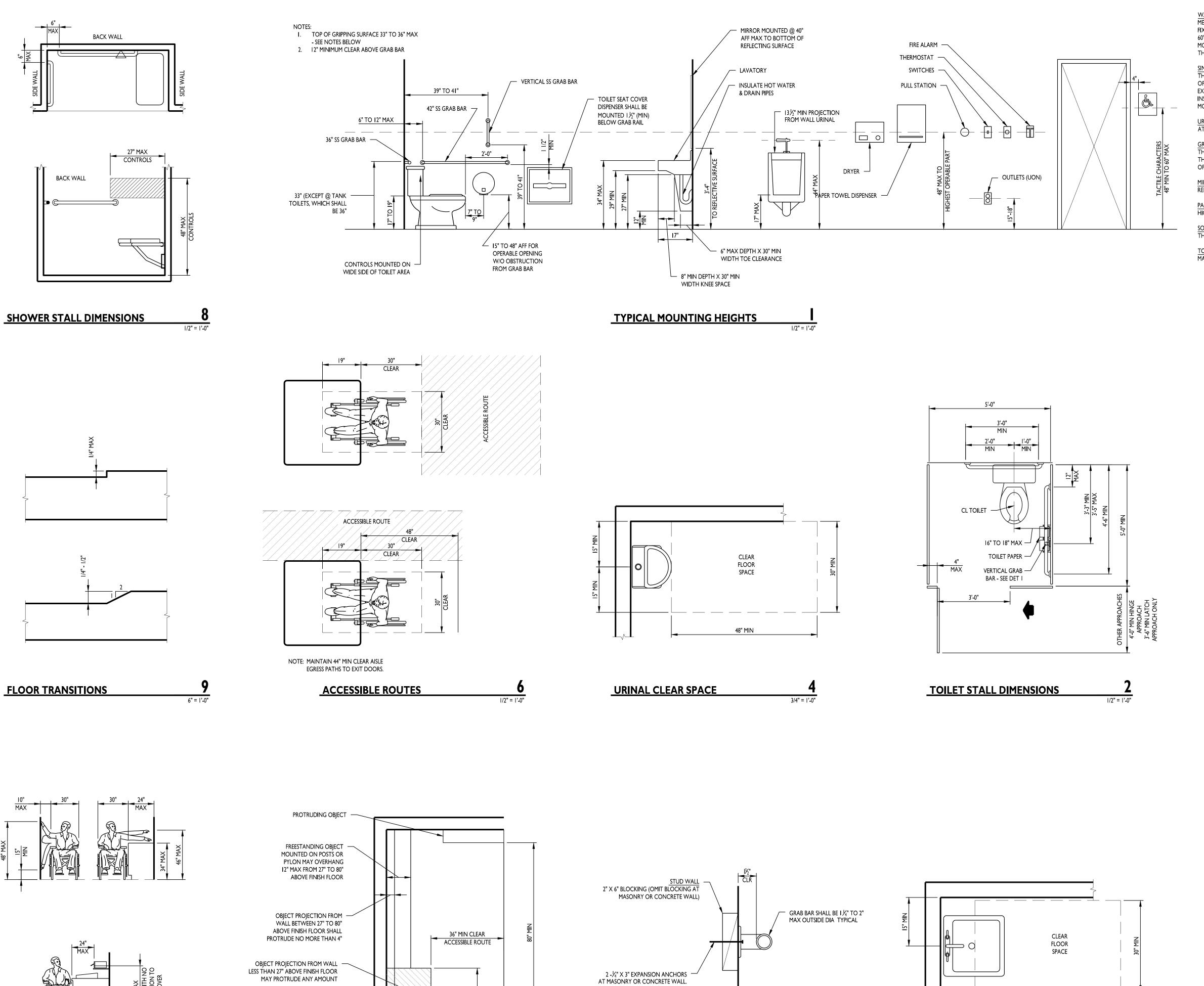
STRUCTURAL STEEL ELEMENTS-ABOVE CEILING

PLANE. COORDINATE REQUIRED BRACE SPACING

D. BRACE METAL STUD WALLS TO TOP OF

TYPE WI

TYPE WIA



2 - #10 X 2" SCREWS AT WOOD OR STEEL STUD WALL - TYPICAL.

**GRAB BAR DIMENSIONS** 

SINK CLEAR SPACE

FLOOR SHALL BE SLIP-RESISTANT -

 $\frac{1}{4}$ " Change in Level

VERTICAL CLEARANCES

SURFACE AND LEVEL WITH MAX

**REACH RANGES** 

#### **TYPICAL ADA INFO**

WATER CLOSET: WATER CLOSETS SHALL BE 17" TO 19" AFF WHEN MEASURED TO THE TOP OF THE TOILET SEAT AND THE CENTER FOR THE FIXTURE SHALL BE 18" FROM ONE WALL WITH A CLEAR FLOOR SPACE OF 60" WIDE AND 59" DEEP FOR FLOOR MOUNT AND 56" DEEP FOR WALL MOUNT. FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET.

SINK: SINK SHALL BE MOUNTED WITH THE RIM OR COUNTER NO HIGHER THAN 34" AFF PROVIDE A CLEARANCE OF AT LEAST 29" TO THE BOTTOM OF THE APRON WITH AN 8"X27" KNEE SPACE AND 6"X9" TOE SPACE. EXPOSED HOT WATER AND DRAIN PIPES UNDER SINKS SHALL BE INSULATED. FAUCETS SHALL BE LEVER-OPERATED, PUSH-TYPE AND MOTION SENSOR.

URINALS: URINALS SHALL BE STALL-TYPE OR WALL HUNG WITH THE RIM AT A MAXIMUM OF 17" AFF AND A 30" X 48" CLEAR FLOOR SPACE.

GRAB BARS: GRAB BARS SHALL BE 33" TO 36" AFF THE GRAB BAR BEHIND THE WATER CLOSET SHALL BE 36" LONG AND NO MORE THAN 6" OF OF THE SIDE WALL. THE SIDE WALL GRAB BAR SHALL BE 42" LONG AND 12" OFF THE BACK WALL.

MIRROR: MIRRORS SHALL BE MOUNTED SO THE BOTTOM OF THE REFLECTING SURFACE IS NO MORE THAN 40" AFF.

PAPER TOWEL/DRYER: PAPER TOWEL/ DRYERS SHALL BE MOUNTED NO HIGHER THAN 48" AFF.

SOAP DISPENSER: SOAP DISPENSERS SHALL BE MOUNTED NO HIGHER THAN 48" AFF.

TOILET PAPER: TOILET PAPER DISPENSERS SHALL BE INSTALLED WITHIN 36" MAX OF THE BACK WALL.

CURRAN
ARCHITECTURE
5719 LAWTON LOOP E. DR. #212
INDIANAPOLIS, IN 46216

O :: 317.288.0681

F :: 317.288.0753



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

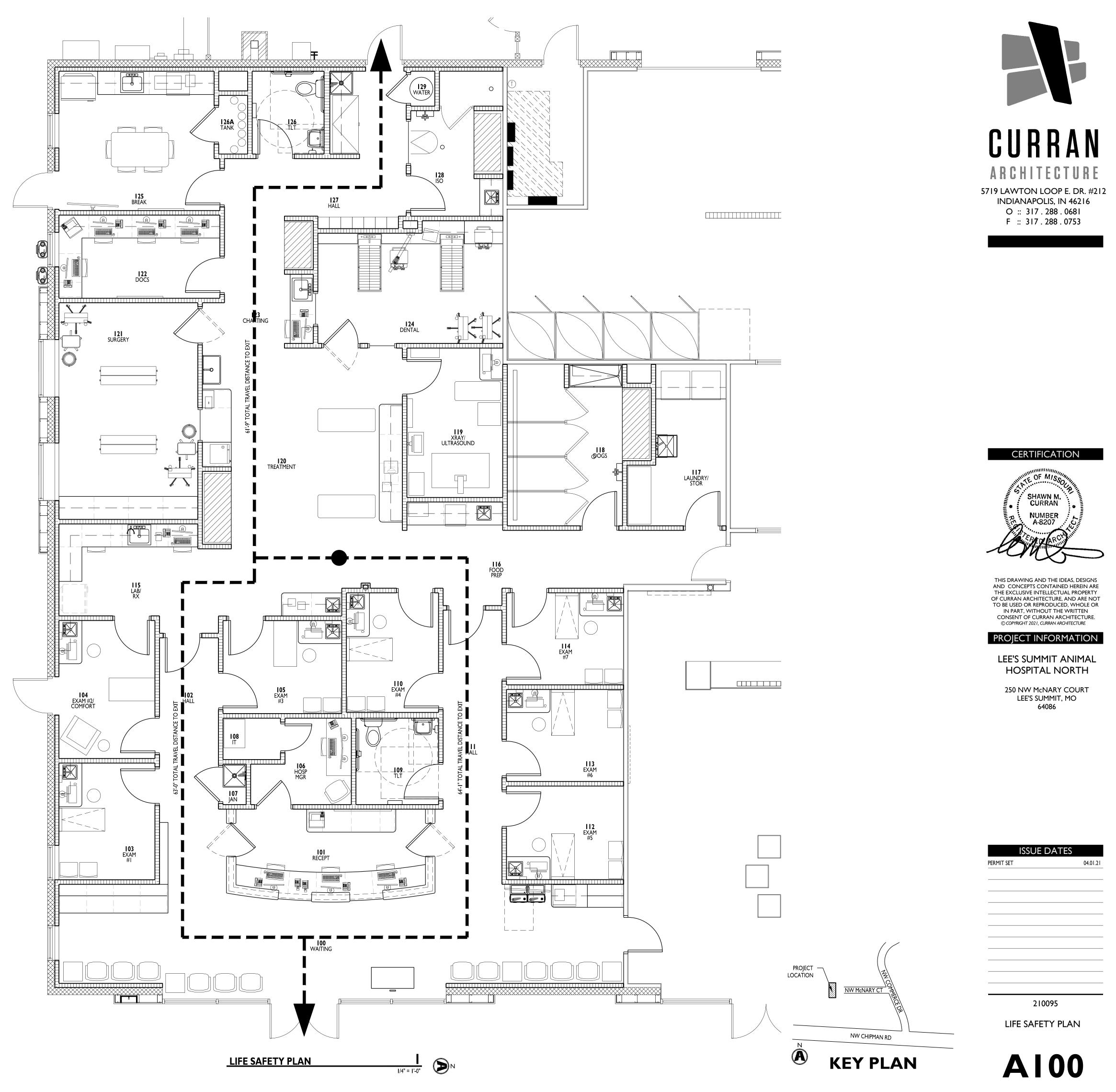
250 NW McNARY COURT LEE'S SUMMIT, MO 64086

ISSUE D	ATES
PERMIT SET	04.01.2

210095

TYPICAL ACCESSIBILITY DETAILS

A002





#### CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

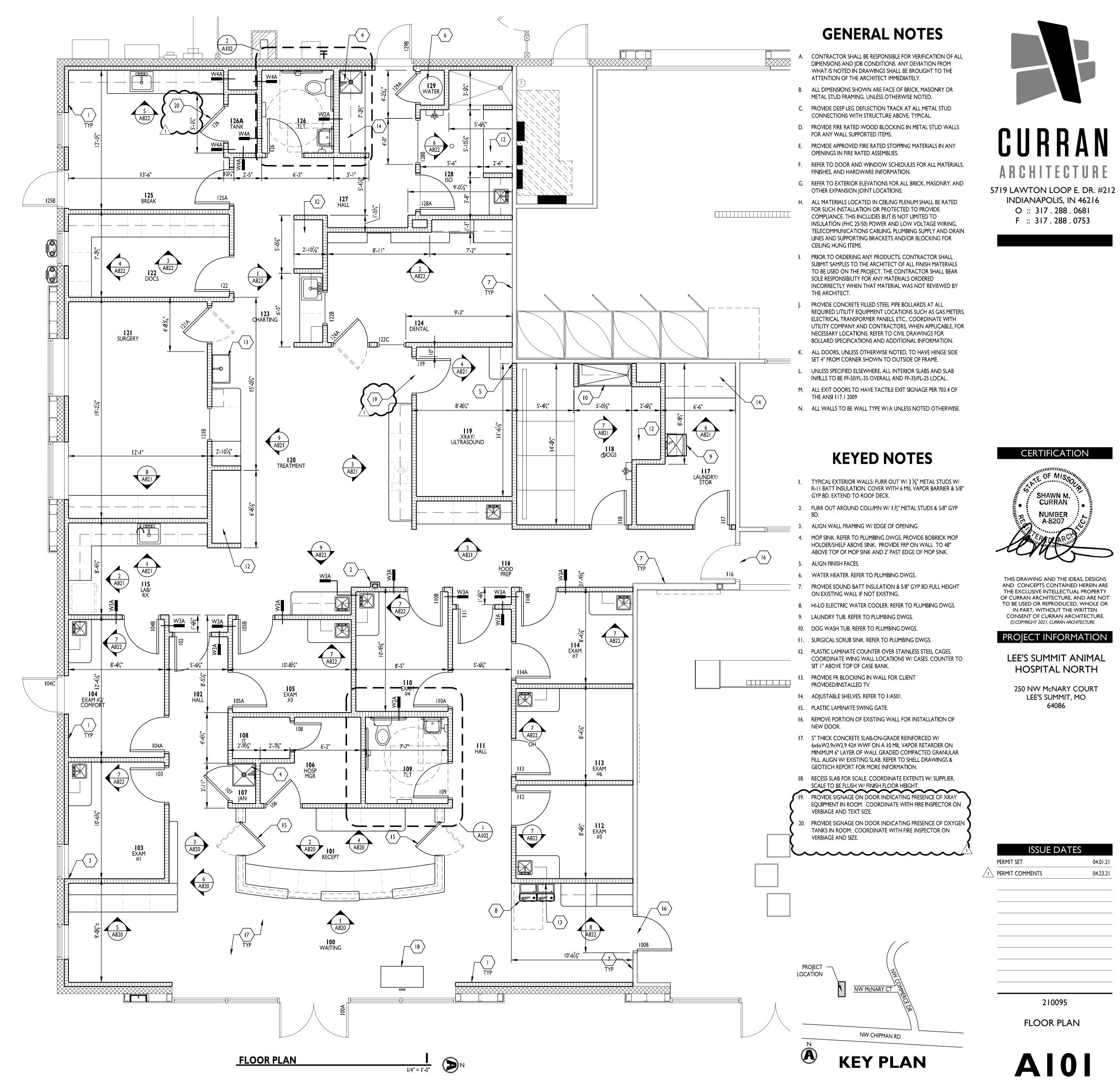
250 NW McNARY COURT LEE'S SUMMIT, MO 64086

**ISSUE DATES** PERMIT SET 04.01.21

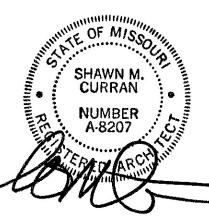
210095

LIFE SAFETY PLAN

**A100** 







INDIANAPOLIS, IN 46216

O :: 317 . 288 . 0681

F :: 317.288.0753

THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

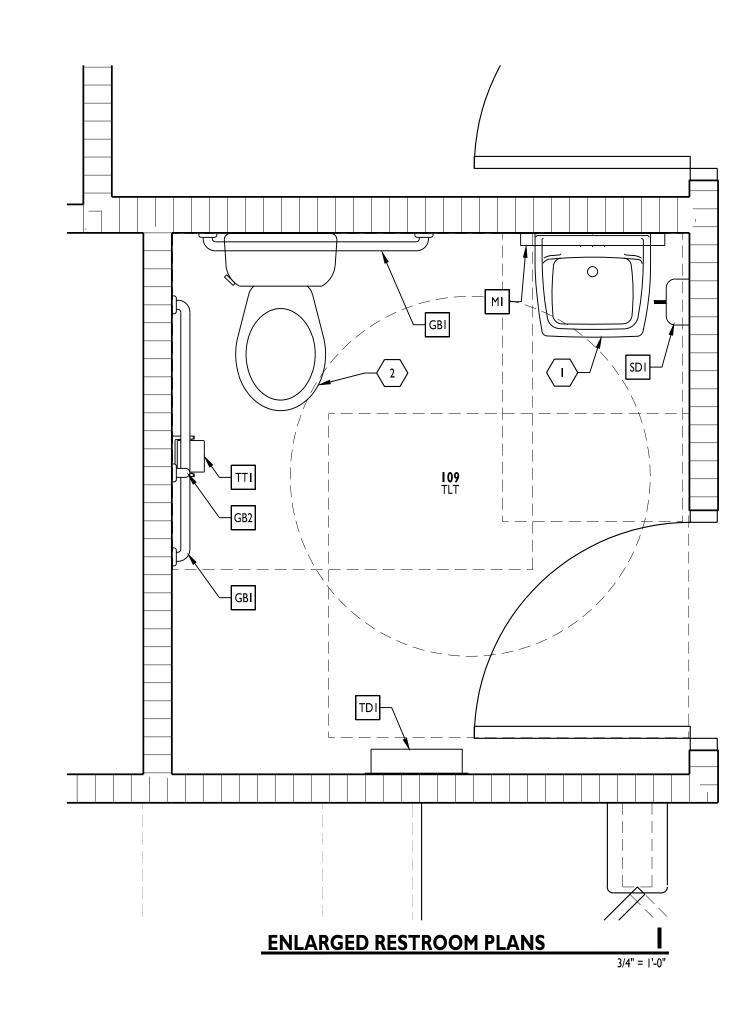
**ISSUE DATES** PERMIT SET PERMIT COMMENTS 04.23.21

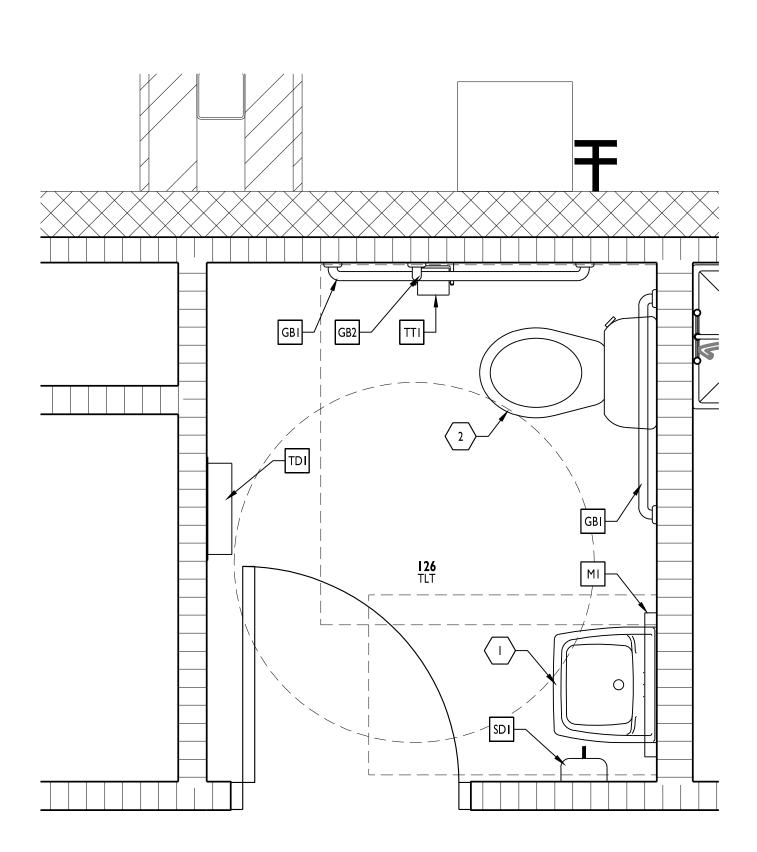
210095

FLOOR PLAN

AIOI

TTI BOBRICK B-2888 MULTI-ROLL TOILET TISSUE DISPENSER  BOBRICK B-5806 X 36 B-5806 X 42  GB2 GI BOBRICK B-5806 X 18  BOBRICK B-5806 X 18  BOBRICK B-5806 X 18  GRAB BAR FOR SHOWER STALL  MI BOBRICK B-6861 MIRROR 2'-0" X 4'-0"  TDI BOBRICK B-3944 TOWEL DISPENSER / WASTE RECEPTACLE  SDI BOBRICK B-3944 SOAP DISPENSER  BOBRICK B-2112 SOAP DISPENSER  BOBRICK B-2112 SOAP DISPENSER		TOILE	ET ACC	ESSORY SCHEDULE
BOBRICK B-5806 X 18  BOBRICK B-5806 X 18  BOBRICK B-5806 X 18  BOBRICK B-5806 X 18  BOBRICK B-6861  BOBRICK B-6861  BOBRICK B-165  TOIL  BOBRICK B-165  TOWEL DISPENSER / WASTE RECEPTACLE  BOBRICK B-3944  BOBRICK B-353  BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION BOBRICK B-353 B-353 B-370: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION	MARK	SYMBOL	MFR#	DESCRIPTION
GBI  B-5806 X 36 B-5806 X 42  BOBRICK B-5806 X 18  BOBRICK B-6861  MI  BOBRICK B-165  BOBRICK B-165  TOIL  BOBRICK B-3944  TOWEL DISPENSER / WASTE RECEPTACLE  BOBRICK B-2112  BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISP	TTI			MULTI-ROLL TOILET TISSUE DISPENSER
B-5806 X 18  B-5806 X 18  BOBRICK B-6861  BOBRICK B-165  MIRROR 2'-0" X 4'-0"  TDI  BOBRICK B-3944  TOWEL DISPENSER / WASTE RECEPTACLE  SDI  BOBRICK B-2112  BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-353 B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-353 B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-353	GBI		B-5806 X 36	36" AND 42" GRAB BARS
BOBRICK B-3944  BOBRICK B-3944  BOBRICK B-3944  BOBRICK B-3944  BOBRICK B-2112  BOBRICK B-2112  BOBRICK B-2112  BOBRICK B-2112  BOBRICK B-2102  BOBRICK B-2103  BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-250: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-270: SURFACE, MOUNT SANITARY NAPKIN B-270: SURFACE, MOUNT SANITARY NAPKIN B-270: SURFACE, MOUNT	GB2	Œ		18" VERTICAL GRAB BAR
TDI BOBRICK B-3944 TOWEL DISPENSER / WASTE RECEPTACLE  SDI BOBRICK B-2112 SOAP DISPENSER  BOBRICK B-2112 BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-353 B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT A	GB3			GRAB BAR FOR SHOWER STALL
B-3944  TOWEL DISPENSER / WASTE RECEPTACLE  BOBRICK B-2112  BOBRICK B-2112  BOBRICK B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION B-353  B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT A	MI			MIRROR 2'-0" X 4'-0"
B-2112  BOBRICK  B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATION  NDI  B-353  B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT A	TDI			TOWEL DISPENSER / WASTE RECEPTACLE
ndi 🗆 B-353 B-270: Surface, mount sanitary napkin disposal unit /	SDI	<u></u>		SOAP DISPENSER
	NDI		B-353	B-353: SANITARY NAPKIN DISPOSAL UNIT AT GWB LOCATIONS. B-270: SURFACE, MOUNT SANITARY NAPKIN DISPOSAL UNIT AT PARTITIONS
SSI BOBRICK B-5181 FOLDING SEAT FOR ADA SHOWER	SSI			FOLDING SEAT FOR ADA SHOWER
SHI ANOT APPLICABLE SHOWER HEAD	SHI	Δ	NOT APPLICABLE	SHOWER HEAD
TP	TPI			TOILET PARTITION AND/OR URINAL SCREEN POWDER COATED URINAL SCREEN BOTTOM 12" FROM FLOOR AND TOP 60" MAX FROM FLOOR





## ENLARGED RESTROOM PLANS

#### **GENERAL NOTES**

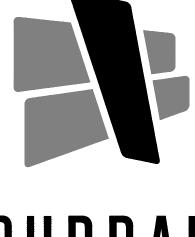
- A. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND JOB CONDITIONS. ANY DEVIATION FROM WHAT IS NOTED IN DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
- B. ALL DIMENSIONS SHOWN ARE FACE OF BRICK, MASONRY OR METAL STUD FRAMING, UNLESS OTHERWISE NOTED.
- C. PROVIDE DEEP LEG DEFLECTION TRACK AT ALL METAL STUD CONNECTIONS WITH STRUCTURE ABOVE, TYPICAL.
- D. PROVIDE FIRE RATED WOOD BLOCKING IN METAL STUD WALLS FOR ANY WALL SUPPORTED ITEMS.
- E. PROVIDE APPROVED FIRE RATED STOPPING MATERIALS IN ANY OPENINGS IN FIRE RATED ASSEMBLIES.
- F. REFER TO DOOR AND WINDOW SCHEDULES FOR ALL MATERIALS,

FINISHES, AND HARDWARE INFORMATION.

- G. REFER TO EXTERIOR ELEVATIONS FOR ALL BRICK, MASONRY, AND OTHER EXPANSION JOINT LOCATIONS.
- H. ALL MATERIALS LOCATED IN CEILING PLENUM SHALL BE RATED FOR SUCH INSTALLATION OR PROTECTED TO PROVIDE COMPLIANCE. THIS INCLUDES BUT IS NOT LIMITED TO INSULATION (FHC 25/50) POWER AND LOW VOLTAGE WIRING, TELECOMMUNICATIONS CABLING, PLUMBING SUPPLY AND DRAIN LINES AND SUPPORTING BRACKETS AND/OR BLOCKING FOR CEILING HUNG ITEMS.
- PRIOR TO ORDERING ANY PRODUCTS, CONTRACTOR SHALL SUBMIT SAMPLES TO THE ARCHITECT OF ALL FINISH MATERIALS TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR ANY MATERIALS ORDERED INCORRECTLY WHEN THAT MATERIAL WAS NOT REVIEWED BY THE ARCHITECT.
   J. PROVIDE CONCRETE FILLED STEEL PIPE BOLLARDS AT ALL
- REQUIRED UTILITY EQUIPMENT LOCATIONS SUCH AS GAS METERS, ELECTRICAL TRANSFORMER PANELS, ETC., COORDINATE WITH UTILITY COMPANY AND CONTRACTORS, WHEN APPLICABLE, FOR NECESSARY LOCATIONS. REFER TO CIVIL DRAWINGS FOR BOLLARD SPECIFICATIONS AND ADDITIONAL INFORMATION.
- K. ALL DOORS, UNLESS OTHERWISE NOTED, TO HAVE HINGE SIDE SET 4" FROM CORNER SHOWN TO OUTSIDE OF FRAME.
- L. UNLESS SPECIFIED ELSEWHERE, ALL INTERIOR SLABS AND SLAB INFILLS TO BE FF-50/FL-35 OVERALL AND FF-35/FL-25 LOCAL.
- M. ALL EXIT DOORS TO HAVE TACTILE EXIT SIGNAGE PER 703.4 OF THE ANSI 117.1 2009

#### **KEYED NOTES**

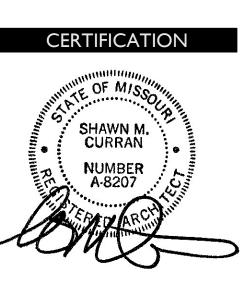
- WALL MOUNTED ADA COMPLIANT LAVATORY. PROVIDE SCALD GUARDS ON SUPPLY/WASTE LINES. REFER TO PLUMBING DWGS.
- 2. ADA COMPLIANT TANK TOILET. REFER TO PLUMBING DWGS.



CURRAN

ARCHITECTURE
5719 LAWTON LOOP E. DR. #212

INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

**ISSUE DATES** 

PROJECT — LOCATION	NW McNARY CT TRACED
	NW CHIPMAN RD
<b>A</b> K	EY PLAN

PERMIT SET 04.01	.21
210095	
ENLARGED RESTROOM	

**A102** 

PLAN



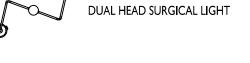
REFLECTED CEILING PLAN

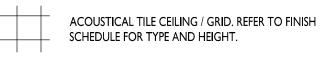
#### **CEILING LEGEND**

(NOT ALL MAY APPLY)

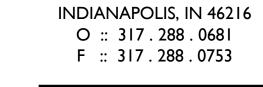












ARCHITECTURE

5719 LAWTON LOOP E. DR. #212

- 2. METAL STUD & 5/8" GYP BD CEILING AT 8'-0" AFF.
- 3. METAL STUD & 5/8" GYP BD BULKHEAD OVER LOCKERS. BOTTOM TO BE AT TOP OF LOCKERS. COORDINATE W/ SUPPLIER.
- MEDICAL GAS DISTRIBUTION IN CEILING TILE. REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION.
- DENTAL/SURGICAL LIGHT PROVIDED BY CLIENT, INSTALLED BY GC. COORDINATE W/ SUPPLIER FOR STRUCTURAL SUPPORT.
- 6. METAL STUD & GYP BD BULKHEAD OVER DESK. BOTTOM @ 9'-0"

#### CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

**ISSUE DATES** PERMIT SET 04.01.21

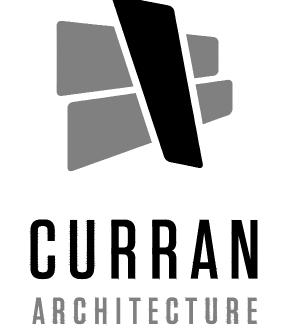
210095

REFLECTED CEILING PLAN

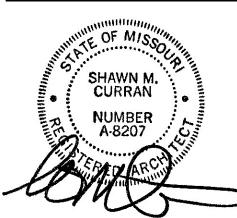
AII0

	EQUIPMEN <sup>-</sup>	T SCHEDULE	
MARK	DESCRIPTION	MANUFACTURER	MODEL NUMBER
101	WALL MOUNT EXAM TABLE, FOLDING		
102	WALL MOUNT EXAM TABLE, STATIONARY		
103	LIFT TABLE		
104	SURGERY TABLE		
105	SURGERY LIGHT		
106	ANESTHESIA MACHINE		
107	INSTRUMENT STAND		
108	KICK BUCKET		
109	AUTOCLAVE		
110	ULTRASONIC CLEANER		
Ш	MICROSCOPE		
112	HEMATOLOGY ANALYZER		
113	CENTRIFUGE		
114	BLOOD ANALYZER		
115	WIRE ROLLING SHELVING		
116	HOSE REEL		
117	GROOMING TUB		
118	KENNEL ENCLOSURE WALLS/GATES		
119	ULTRASOUND		
120	XRAY		
121	GLOVE DISPENSER		
122	WET TABLE		
123	DENTAL CART		
124	DENTAL XRAY		
125	CHEST FREEZER		
126	REFRIGERATOR 36"		
127	REFRIGERATOR 30"		
128	REFRIGERATOR 24" GLASS FRONT UNDER COUNTER		
129	DISHWASHER		
130	COFFEE MAKER		
131	MICROWAVE		
132	SCALE		
133	COMPUTER STATION		
134	PRINTER		
135	LABEL PRINTER		
136	SERVER RACK		
137	CAGE		
138	WALL MOUNT EXAM TABLE		
139	NARCOTIC LOCKUP		
140	WASHER / DRYER		
141	ROLLING EXAM TABLE		
142	WALL MOUNT TV		
143	O2 TANK & CAGE		





#### CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

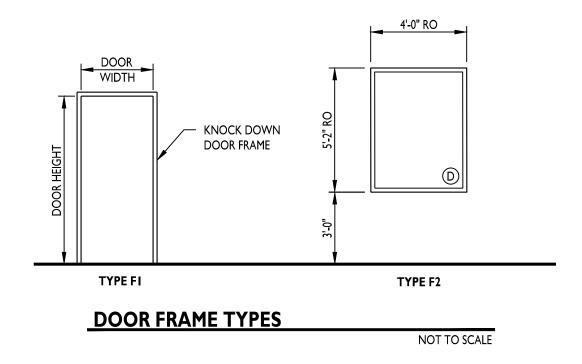
250 NW McNARY COURT LEE'S SUMMIT, MO 64086

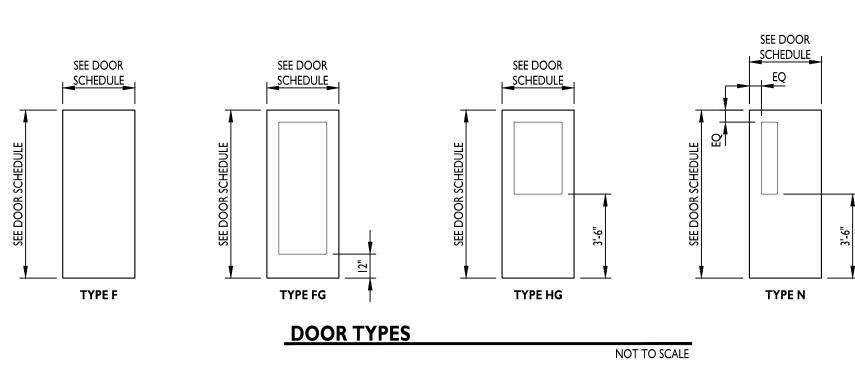
ISSUE D	
ERMIT SET	04.01.2

210095

**EQUIPMENT PLAN** 

**AI30** 





128B   -   -   -   -   -   -   -   -   -						DOOR	SCHE	DULE						CENIEDA	
March   Marc	MARK	DOOR	SIZE	MATERIAL	GLAZING	FINISH	RATING	FRAME	MATERIAL	FINISH	RATING	HARDWARE	REMARKS		
18	100A	EXIST	EXIST	EXIST	EXIST	EXIST	-	EXIST	EXIST	EXIST	-	EXIST			
10	100B	HG	3'-0" × 7'-0"	SCWD	D	MATCH EXIST	-	FI	KD	P-3	-	04		WOOD VENEER, MARSI	HFIELD OR EQUIVALENT. PROVIDE
Heat   1	102	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	03		AND HARDWARE BLOO WHITE BIRCH OR MAPI	CKING COORDINATION. VENEER
1942   1	103	Ν	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I		ONLY DE INISTALLED IN CONDITION
1	104A	Ν	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I		ONLY BE INSTALLED IN CONDITION
Miles   Mile	104B	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	03	2		
Mode	104C	EXIST	EXIST	EXIST	EXIST	EXIST	-	EXIST	EXIST	EXIST	-	EXIST			
Mail	105A	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I		
B	105B	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	03	2		
March	106	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	05		F. ANY RATED DOORS TO	O HAVE LABEL INSTALLED IN JAMB.
19	107	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	01			HAVE TACTILE EXIT SIGNAGE PER 7
100   F	108	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	05			
Column   C	109	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	02	3	SIGNAGE, VERIFY WITH	ARCHITECT.
Control   Cont	II0A	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I	1	
11	IIOB	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	03	2		INC TYPE
113   N	Ш	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	03		GLAZ	ING ITPES
13	112	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I		REQUIRED TO BE I" INSULATED GR
144   N	113	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I	B. SECTION OF GLAZING F	REQUIRED TO BE I" INSULATED TE
116	II4A	N	3'-0" × 7'-0"	SCWD	D	PRE-FINISHED	-	FI	KD	P-3	-	01	I		REQUIRED TO BE 1/4" GLASS.
116	II4B	F	3'-0" × 7'-0"	SCWD	-	PRE-FINISHED	-	FI	KD	P-3	-	03	2		
18	116	N	3'-0" × 7'-0"	НМ	D	P-3	-	FI	KD	P-3	-	04			
118	117	F	3'-0" × 7'-0"	НМ	-	P-3	-	FI	KD	P-3	-	03			
119	118	HG	3'-0" × 7'-0"	НМ	D	P-3	-	FI	KD	P-3	-	03			:
121A   N SIM	119	HG	3'-0" × 7'-0"	НМ	D	P-3	-	FI	KD	P-3	-	01			
122   F   3.0° x 7.0°   HM   -   P.3   -   FI   KD   P.3   -   BY MFR   4	121A	N SIM	3'-0" × 7'-0"	ALUM	BY MFR	PRE-FINISHED	-	FI	KD	P-3	-	BY MFR	4	- "SHGC" VALUE - MAXII	MUM OF 0.47
124A   N SIM   3'40" x 7'40"   ALUM   BY MFR   PRE-FNISHED   FI   KD   P-3   . BY MFR   4	121B	-	-	-	-	-	-	F2	-	-	-	-		1	
1246   -   -   -   -   -   -   -   -   -	122	F	3'-0" × 7'-0"	НМ	-	P-3	-	FI	KD	P-3	-	05		1	
1248   -   -   -   -   -   -   -   -   -	124A	N SIM	3'-0" × 7'-0"	ALUM	BY MFR	PRE-FINISHED	-	FI	KD	P-3	-	BY MFR	4	DOOR	IARDWARE
125A   HG   3'-0" x 7-0"   HM   D   P-3   .   FI   KD   P-3   .   OI     PASSAGE SET   PRIVACY LOCKSET   PRIVACY LOCKS	124B	-	-	-	-	-	-	F2	-	-	-	-			IANDWANE
125A   HG   3'.0" x 7'.0"   HM   D   P-3   -   FI   KD   P-3   -   01     PASSAGE SET   PRIVACY LOCKSET     125B   EXIST   E	124C	-	-	-	-	-	-	F2	-	-	-	-			
125B	125A	HG	3'-0" × 7'-0"	НМ	D	P-3	-	FI	KD	P-3	-	01			
126	125B	EXIST	EXIST	EXIST	EXIST	EXIST	-	EXIST	EXIST	EXIST	-	EXIST		3 MUTES	
126A         F         3'-0" x 7'-0"         HM         -         P-3         60 MIN         FI         KD         P-3         60 MIN         07         HARDWARE SET #04         HARDWARE SET #04           128A         HG         3'-0" x 7'-0"         HM         D         P-3         -         FI         KD         P-3         -         03         3 HINGES         3 HINGES         3 HINGES         1 PASSAGE SET         1 ENTRANCE LOCKSE         1 PASSAGE SET         1 ENTRANCE LOCKSE         1 PASSAGE SET         1 CLOSER         1 CLOSER         3 MUTES         1 CLOSER         3 MUTES         3 MU	126	F							KD	P-3			3	1	3 MUTES
128A   HG   3'-0" x 7'-0"   HM   D   P-3   -   FI   KD   P-3   -   03   3 HINGES   3 HINGES   128B   -   -   -   -   -   -   -   -   -	126A	F													
128B F2		HG				~~~	$\Gamma$ $\sim$ $\sim$				F		<del>~~~</del>		
129A F 3'-0" x 7'-0"	128B			-		_	-	F2		-	_	_		I PASSAGE SET	I ENTRANCE LOCKSET
		F	3'-0" × 7'-0"	HM	_	P-3	_		KD	P-3	_	01			
∡ 14/U ■ LANI   LANI	129B	EXIST	EXIST	EXIST	EXIST	EXIST	-	EXIST	EXIST	EXIST	_	EXIST		-	

## ENERAL DOOR AND GLAZING NOTES

- RE-FINISHED WOOD DOORS SHALL BE SOLID CORE WITH DD VENEER, MARSHFIELD OR EQUIVALENT. PROVIDE FINISH LE AND DOOR CONSTRUCTION DIAGRAM FOR APPROVAL HARDWARE BLOCKING COORDINATION. VENEER TO BE TE BIRCH OR MAPLE, FREE OF DARK GRAINS UNLESS RWISE NOTED.
- DD DOORS SHALL ONLY BE INSTALLED IN CONDITIONED
- HARDWARE TO BE MINIMUM 6 PIN BEST COMPATIBLE SYSTEM. RDINATE KEYING WITH OWNER.
- ERED AND ANNEALED GLASS TO BE CLEANED PER JFACTURER REQUIREMENTS. NYLON CLOTH METHODS
- S AROUND DOORS AND IN DOORS SHALL BE TEMPERED SS OTHERWISE NOTED IN ELEVATIONS.
- RATED DOORS TO HAVE LABEL INSTALLED IN JAMB.
- XITS DOORS TO HAVE TACTILE EXIT SIGNAGE PER 703.4 OF ANSI 117.1 2009.
- ALL OWNER PROVIDED ADA COMPLIANT RESTROOM AGE, VERIFY WITH ARCHITECT.

#### **GLAZING TYPES**

- ON OF GLAZING REQUIRED TO BE I" INSULATED GREY
- ON OF GLAZING REQUIRED TO BE I" INSULATED TEMPERED
- ON OF GLAZING REQUIRED TO BE 1/4" GLASS.
- ON OF GLAZING REQUIRED TO BE 1/4" TEMPERED GLASS. ON OF GLAZING REQUIRED TO BE I" INSULATED TEMPERED TINTED SPANDREL GLASS.

CLAZING MUST MEET THE FOLLOWING SPECIFICATIONS FOR DE COMPLIANCE:

## OOR HARDWARE

## HARDWARE SET #02

## HARDWARE SET #04

#### 3 HINGES I ENTRANCE LOCKSET I CLOSER

- HARDWARE SET #05 HARDWARE SET #06
- 3 HINGES 6 HINGES I CLASSROOM LOCKSET 2 KEYED EXIT DEVICES (PANIC)
  - 2 CLOSERS 3 MUTES

#### HARDWARE SET #07

~~~~

3 MUTES

- 3 HINGES
- I ENTRANCE LOCKSET
- I CLOSER
- I SMOKE SEAL I SMOKE SWEEP

5719 LAWTON LOOP E. DR. #212

INDIANAPOLIS, IN 46216 O :: 317.288.0681 F :: 317 . 288 . 0753

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

| PERMIT SET      | 04.01.2  |
|-----------------|----------|
| PERMIT COMMENTS | 04.23.21 |

210095

DOOR SCHEDULE

|       |                               |              | M                              | ATERIALS          | SCH  | HEDULE |                                                                                |       |                   |          |      |            | RO         | OM FI       | NISH        | SCHED                  | ULE                     |         |   |
|-------|-------------------------------|--------------|--------------------------------|-------------------|------|--------|--------------------------------------------------------------------------------|-------|-------------------|----------|------|------------|------------|-------------|-------------|------------------------|-------------------------|---------|---|
| MARK  | MATERIAL                      | MANUFACTURER |                                | PATTERN / TEXTURE |      | NUMBER | REMARKS                                                                        | ROOM# | ROOM NAME         | FLOORING | BASE | NORTH WALL | EAST WALL  | SOUTH WALL  | WEST WALL   | CABINETS / COUNTERTOPS | CEILING MAT /<br>HEIGHT | REMARKS |   |
| Т-1   | TILE                          | TBD          | TBD                            | TBD               | TBD  |        |                                                                                | 100   | WAITING           | T-I      | T-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS-1         | ACT-1 /<br>10-0         |         |   |
| Т-2   | TILE                          | TBD          | TBD                            | TBD               | TBD  |        | FROM FLOOR TO 60" AFF W/ SCHLUTER STRIP AT TOP EDGE                            | 101   | RECEPTION         | T-I      | T-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>PL-3 / SS-1  | ACT-I /<br>10-0         |         |   |
| C-I   | STAINED CONCRETE              | TBD          | TBD                            | TBD               | TBD  |        | CONCRETE TO BE STAINED & POLISHED                                              | 102   | HALL              | T-I      | T-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  |                        | ACT-1 /<br>10-0         |         |   |
| 3-1   | BASE                          | TBD          | TBD                            | 4" COVE           | TBD  |        |                                                                                | 103   | EXAM#I            | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS-I         | ACT-I /<br>10-0         |         |   |
| l     | PLASTIC LAMINATE              | TBD          | TBD                            | TBD               | TBD  |        | INSTALL ON ¼" PLYWOOD ON NOTED WALL TO 48" AFF W/ SCHLUTER STRIP AT TOP EDGE   | 104   | EXAM #2 / COMFORT | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS-I         | ACT-I /<br>10-0         |         |   |
| -2    | PLASTIC LAMINATE              | TBD          | TBD                            | TBD               | TBD  |        |                                                                                | 105   | EXAM #3           | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS-1         | ACT-I /<br>10-0         |         |   |
| -3    | PLASTIC LAMINATE              | TBD          | TBD                            | TBD               | TBD  |        |                                                                                | 106   | HOSP MANAGER      | T-I      | T-I  | P-2        | P-2        | P-2         | P-2         | -                      | ACT-I /<br>10-0         |         |   |
| -1    | SOLID SURFACE                 | TBD          | TBD                            | TBD               | TBD  |        | PRICE GRADE 3                                                                  | 107   | JANITOR           | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | -                      | GYP BD /<br>8-0         |         |   |
| j-2   | STAINLESS STEEL               | TBD          | TBD                            | TBD               | TBD  |        |                                                                                | 108   | IT                | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | -                      | GYP BD /<br>8-0         |         |   |
| -1    | PAINT                         | TBD          | TBD                            | SCRUBBABLE SATIN  | TBD  |        |                                                                                | 109   | TOILET            | T-I      | T-2  | T-2 / P-2  | T-2 / P-2  | T-2 / P-2   | T-2 / P-2   | -                      | ACT-I /<br>10-0         |         |   |
| -2    | PAINT                         | TBD          | TBD                            | SCRUBBABLE SATIN  | TBD  |        |                                                                                | 110   | EXAM #4           | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
| .3    | PAINT                         | TBD          | TBD                            | SEMI GLOSS        | TBD  |        |                                                                                | 111   | HALL              | T-I      | T-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | -                      | ACT-I /<br>10-0         |         |   |
| P-1 F | FIBERGLASS REINFORCED PLASTIC | TBD          | TBD                            | SMOOTH            | TBD  |        | FLOOR TO CEILING INSTALLATION WITH NO HORIZONTAL JOINTS UNLESS NOTED OTHERWISE | 112   | EXAM #5           | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS-1         | ACT-I /<br>10-0         |         |   |
| T-I A | COUSTICAL CEILING TILE        | ARMSTRONG    | ULTIMA                         | WHITE             | 1941 |        | PRELUDE 15 / 16" GRID                                                          | 113   | EXAM #6           | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
| Т-2 А | COUSTICAL CEILING TILE        | ARMSTRONG    | ULTIMA HEALTH ZONE<br>HIGH NRC | WHITE             | 1447 |        | PRELUDE 15 / 16" GRID                                                          | 114   | EXAM #7           | SC-I     | B-I  | PL-I / P-I | PL-I / P-I | PL-I / P-I  | PL-I / P-I  | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 115   | LAB / RX          | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 116   | FOOD PREP         | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 117   | LAUNDRY / STORAGE | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2                   | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 118   | DOGS              | SC-I     | B-I  | FRP-1      | FRP-I      | FRP-I       | FRP-1       | -                      | ACT-2 /<br>10-0         |         | , |
|       |                               |              |                                |                   |      |        |                                                                                | 119   | XRAY / ULTRASOUND | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 120   | TREATMENT         | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS- I        | ACT-I /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 121   | SURGERY           | SC-I     | B-I  | FRP-1      | FRP-I      | FRP-I       | FRP-1       | PL-2 /<br>SS- I        | ACT-2 /<br>10-0         |         | , |
|       |                               |              |                                |                   |      |        |                                                                                | 122   | DOCS              | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>PL-3         | ACT-1 /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 123   | CHARTING          | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS-I         | ACT-1 /<br>10-0         |         |   |
| •     |                               |              |                                |                   | •    |        |                                                                                | 124   | DENTAL            | SC-I     | B-I  | FRP-I      | FRP-1      | FRP-I       | FRP-I       | PL-2 /<br>SS-I         | ACT-2 /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 125   | BREAK             | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | PL-2 /<br>SS-I         | ACT-1 /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 126   | TOILET            | SC-I     | T-2  | T-2 / P-2  | T-2 / P-2  | T-2 / P-2   | T-2 / P-2   | -                      | ACT-1 /<br>10-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 126A  | TANKS             | SC-I     | B-I  | P-2        | P-2        | P-2         | P-2         | -                      | ACT-I /<br>8-0          |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 127   | HALL              | SC-I     | B-I  | P-2        | P-2        | FRP-I / P-2 | FRP-I / P-2 | -                      | ACT-I /<br>I0-0         |         |   |
|       |                               |              |                                |                   |      |        |                                                                                | 128   | ISO               | SC-I     | B-I  | FRP-I      | FRP-1      | FRP-I       | FRP-1       | PL-2 /                 | ACT-2 /                 |         |   |

SC-I

B-I

P-2

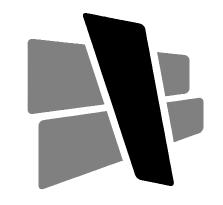
#### **GENERAL FINISH NOTES**

- A. PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE CONSTRUED THAT THE INSTALLER AND/OR FINISHER HAS INSPECTED AND ACCEPTED THE SUBSTRATE FOR RECEIVING THE WORK. NO CHANGE ORDER WILL BE ISSUED TO RECTIFY CONCEALED, UNKNOWN CONDITIONS OR UNSATISFACTORY SUBSTRATE ONCE THE FINISH WORK HAS PROCEEDED.
- B. USE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS AND MATERIALS FOR ALL FINISHES.
- CONTRACTOR TO NOTIFY ARCHITECT IMMEDIATELY IF A SPECIFIED FINISH ITEM BECOMES UNAVAILABLE.
- D. CONTRACTOR TO SUBMIT SHOP DRAWINGS, FLOORING
  TRANSITION/GRAPHIC LOCATIONS AND SUBMITTALS OF ALL
  INTERIOR ITEMS AND FINISH MATERIALS TO ARCHITECT REVIEW
  PRIOR TO PLACING ANY MATERIAL ORDERS. CONTRACTOR MUST
  ACCOUNT FOR SUBMITTAL REVIEW, ORDERING AND DELIVERY
  WHEN SCHEDULING PRODUCT INSTALLATION.
- USE SUBFLOOR REDUCER STRIPS (UNDER FLOORING) TO LEVEL MATERIALS OF UNEQUAL HEIGHTS.
- F. PROVIDE JOHNSONITE SLIM-LINE TRANSITION STRIPS WHERE FLOORING MATERIALS OF UNEQUAL THICKNESS MEET.

  TRANSITION STRIPS AT DOORS TO BE LOCATED UNDER THE CENTERLINE OF THE DOOR IN CLOSED POSITION. COLOR OF TRANSITION STRIPS TO BE SELECTED BY ARCHITECT.
- G. ALL WALL TILE TO BE INSTALLED TO FLOOR WITH NO BASE UNLESS NOTED OTHERWISE.
- H. ANY GRILLES, FIRE EXTINGUISHER CABINETS, ETC., TO BE PAINTED TO MATCH WALL COLOR ON WHICH THEY OCCUR.
- I. PROVIDE OWNER WITH A MINIMUM OF ONE FULL BOX OR 2% OF EACH FINISH PRODUCT/MATERIAL SPECIFIED ON THE PROJECT.
- J. ALL WOODWORK/MILLWORK SHALL CONFORM TO THE QUALITY STANDARDS OF ARCHITECTURAL WOODWORK INSTITUTE (AWI) PREMIUM GRADE. FABRICATOR SHALL BE FAMILIAR WITH AWI STANDARDS.
- K. FABRICATE WOODWORK/MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SAMPLES, AND/OR MATERIAL LITERATURE FOR ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH THE QUALITY STANDARDS AND DESIGN INTENT.
- L. PROVIDE ALL NECESSARY FURRING AND GROUNDS FOR WOODWORK AND FINISH ITEMS. COORDINATE LOCATION OF BLOCKING WITHIN WALLS FOR ITEMS TO BE SECURED TO SURFACE. ALL FASTENERS SHALL BE CONCEALED.
- M. FINISH ALL SIDES AND BACK OF MILLWORK/CASEWORK.
- N. ALL COUNTERTOPS TO BE I  $\frac{1}{2}$ " THICK WITH A SQUARE EDGE, UNLESS OTHERWISE NOTED. PROVIDE COUNTER SUPPORTS AS REQUIRED.
- O. PROVIDE GROMMETS IN COUNTERTOPS ABOVE RECEPTACLES. COLOR TO MATCH COUNTER SURFACE. COORDINATE WITH OWNER AND ARCHITECT ON FINAL LOCATION AND SIZE OF GROMMETS BEFORE INSTALLATION.
- P. REFER TO FINISH SCHEDULE, INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ALL MATERIAL INFORMATION AND LOCATIONS.

GYP BD /

P-2



CURRAN ARCHITECTURE

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

#### CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 202 I, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

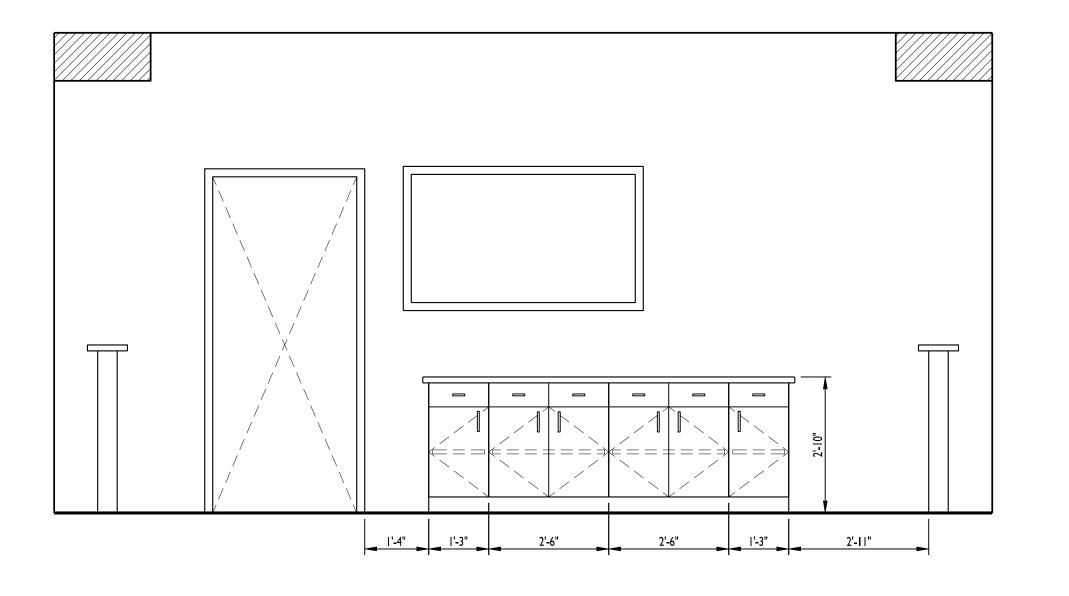
LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

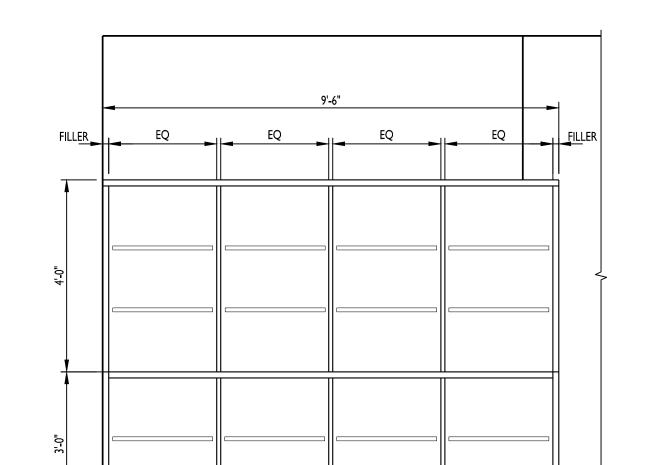
| ISSUE D    | ATES |         |
|------------|------|---------|
| PERMIT SET |      | 04.01.2 |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |
|            |      |         |

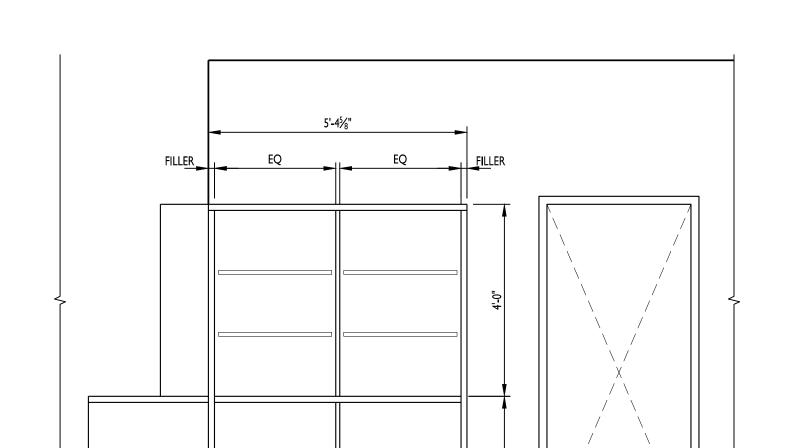
210095

FINISH SCHEDULE

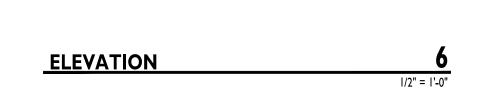


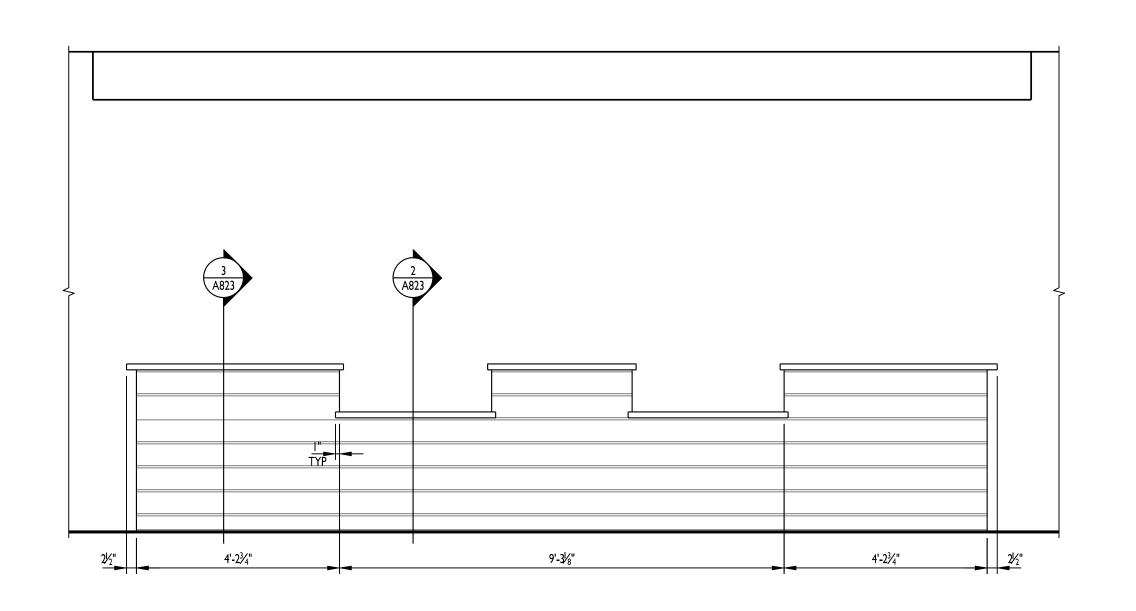
**ELEVATION** 



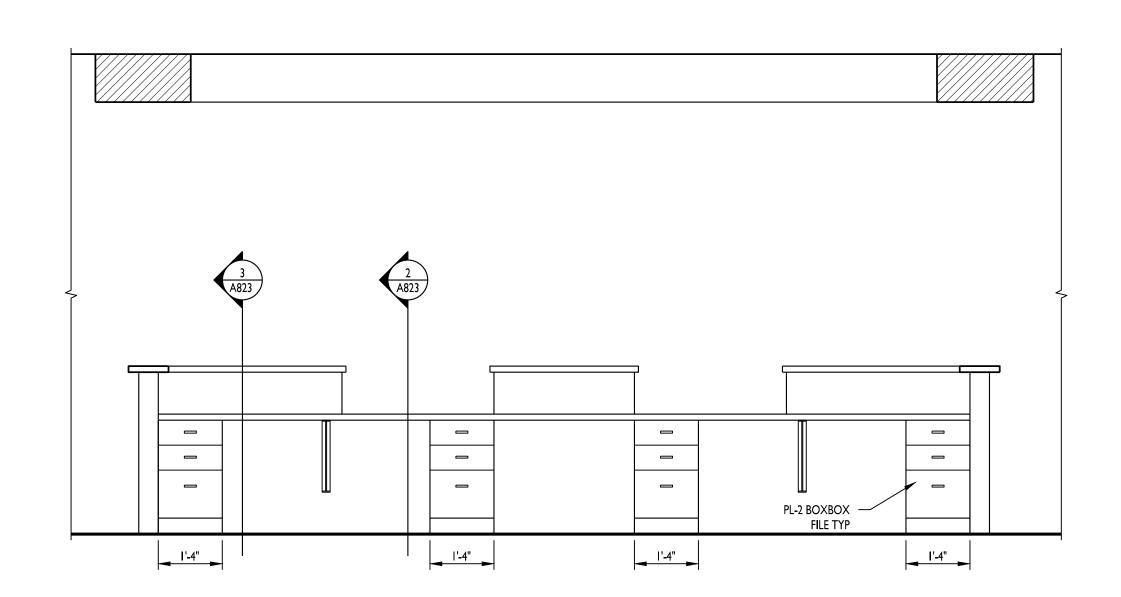


**ELEVATION** 

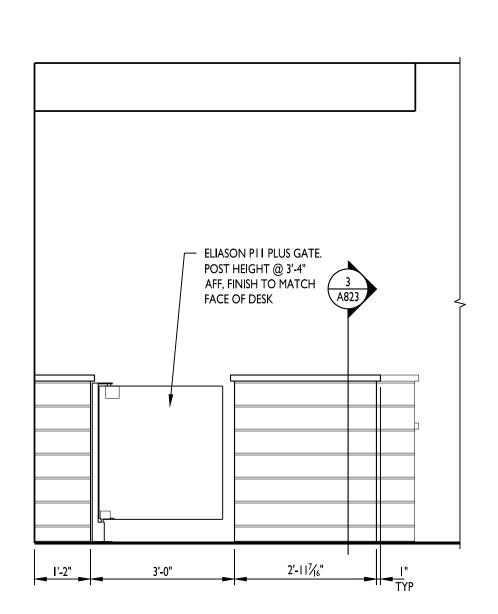




ELEVATION



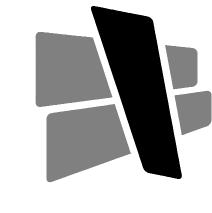
**ELEVATION** 2



ELEVATION 3

## CASEWORK GENERAL NOTES

- UNLESS SPECIFICALLY OTHERWISE NOTED, PROVIDE SELF EDGE ALONG EXPOSED FACES OF ALL COUNTER TOPS.
- PROVIDE WOOD F.R. BLOCKING IN WALL WHERE REQUIRED FOR WALL AND/OR BASE CABINET INSTALLATION. COORDINATE WITH CABINET MANUFACTURER PRIOR TO BLOCKING BEING INSTALLED. AT EXTERIOR WALL PROVIDE TREATED WOOD BLOCKING.
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADA COMPLIANT CABINETS, HANDLES, CLEAR SPACES BELOW CABINETS WHERE REQUIRED ETC WHETHER SHOWN ON THESE DETAILS OR NOT. COORDINATE WITH ARCHITECT IF ANY DISCREPANCIES ARISE.
- 4. IF SEPARATE SPECIFICATIONS ARE INCLUDED WITH THIS PROJECT THOSE DOCUMENTS WILL SUPERCEDE WHAT IS SHOWN AND/OR DETAILED ON THIS DRAWING. OTHERWISE THIS DRAWING AND DETAILS REPRESENT THE MINIMUM REQUIRED STANDARDS OF CONSTRUCTION FOR ALL BASE CABINETS, COUNTER TOPS, UPPER CABINETS, ETC.
- REFER TO FLOOR PLAN FOR ALL LENGTHS OF CABINET RUNS AS WELL AS LOCATIONS. REFER TO THE REFLECTED CEILING PLAN (IF INCLUDED) FOR ALL BULKHEAD LOCATIONS AND HEIGHTS.
- 6. CASEWORK INSTALLER IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL DIVISION 22 AND DIVISION 26 ITEMS (INCLUDING CUT OUTS) IN CASEWORK OR COUNTERTOPS. LOCATIONS AND CUT OUT COORDINATION ALSO REQUIRED FOR RECEPTACLES (DIVISION 26) IN MICROWAVE WALL CABINETS, DISHWASHER LOCATIONS, GARBAGE DISPOSAL LOCATIONS, ETC.
- PROVIDE FINISHED ENDS ON CABINETS WHERE END OF CABINET IS EXPOSED BEYOND WALL LINE, UNDER COUNTER, AT KNEE SPACE AND AT ALL SIMILAR EXPOSED AREAS.
- 8. UNLESS NOTED OTHERWISE PROVIDE EQUAL WIDTH FILLER/SCRIBE BETWEEN WALL AND CASEWORK AT ALL LOCATIONS WHERE NONE IS SHOWN. MAXIMUM WIDTH IS TO BE
- CONTRACTOR SHALL FIELD VERIFY AND CHECK ALL CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO STARTING ANY WORK. REPORT ANY DISCREPANCIES TO ARCHITECT.
- 10. ANY AND ALL PARTS OF ANY CABINETS OR COUNTERS THAT ARE VISIBLE MUST BE FINISHED WITH MATERIAL TO MATCH ADJACENT FINISHES. NOTIFY AND COORDINATE WITH ARCHITECT IF AREAS OF UNSPECIFIED FINISHES EXIST.
- 11. UNLESS NOTED OTHERWISE REFER TO ROOM FINISH SCHEDULE FOR ALL CABINET FINISHES AND MATERIALS AS WELL AS ALL OTHER ASSOCIATED, MISCELLANEOUS FINISH REQUIREMENTS. UNLESS NOTED OTHERWISE ALL INTERIOR COMPONENTS TO BE WHITE MELAMINE.
- 12. EASE ALL EXPOSED OUTSIDE EDGES AT ALL COMPONENTS FOR ITEMS SHOWN ON THIS SHEET.
- 13. REFER TO ROOM FINISH SCHEDULE FOR ALL WALL BASE REQUIREMENTS.



CURRAN

ARGHILEGIURE

5719 LAWTON LOOP E. DR. #212
INDIANAPOLIS, IN 46216
O :: 317 . 288 . 0681

F :: 317.288.0753

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE

PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

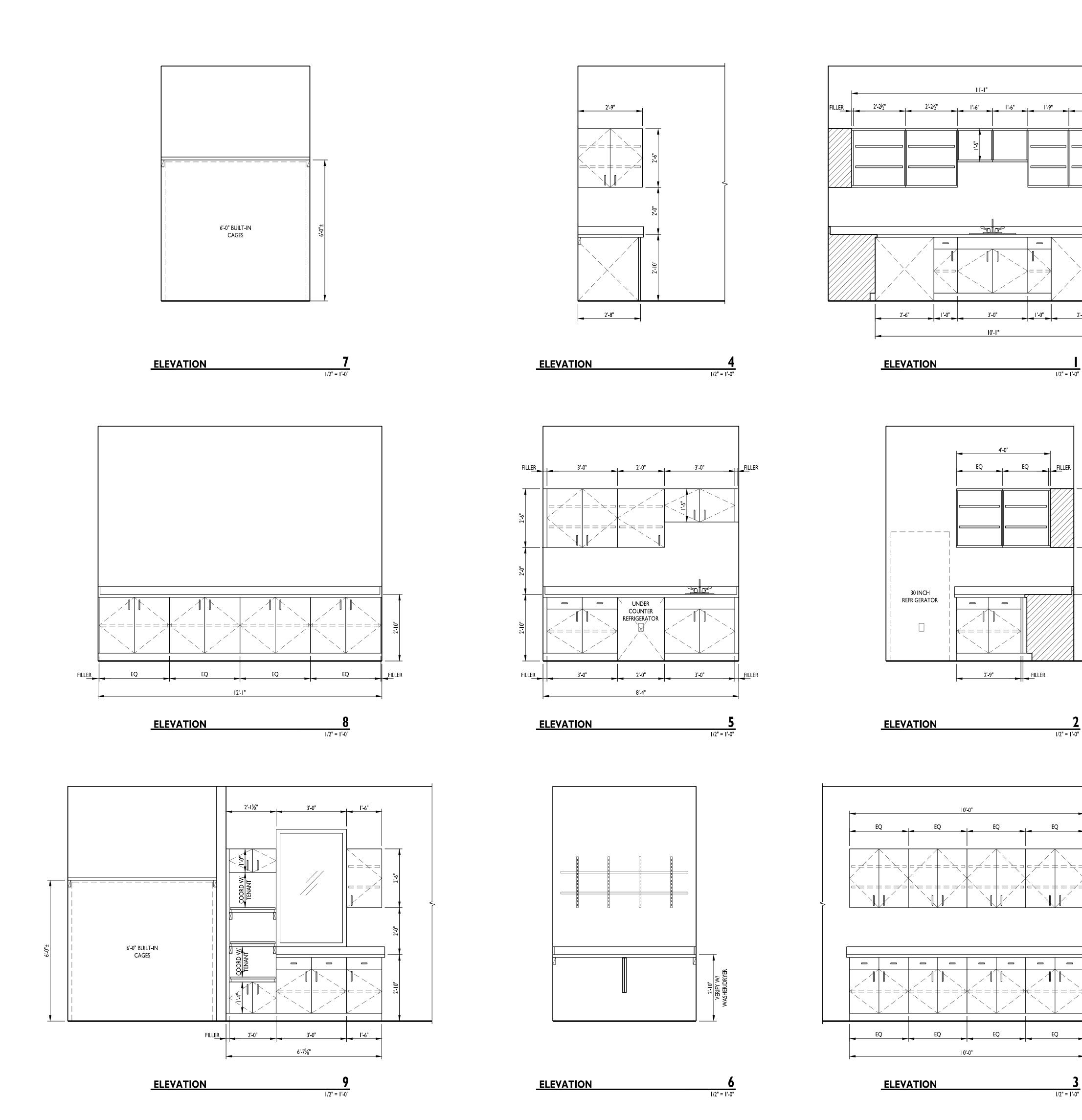
250 NW McNARY COURT LEE'S SUMMIT, MO 64086

|            | ISSUE D | AIE |
|------------|---------|-----|
| PERMIT SET |         |     |
|            |         |     |
|            |         |     |
|            |         |     |
|            |         |     |
|            |         |     |
|            |         |     |
|            |         |     |
|            |         |     |

CASEWORK ELEVATIONS

210095

**A820** 



#### **CASEWORK GENERAL NOTES**

- I. UNLESS SPECIFICALLY OTHERWISE NOTED, PROVIDE SELF EDGE ALONG EXPOSED FACES OF ALL COUNTER TOPS.
- 2. PROVIDE WOOD F.R. BLOCKING IN WALL WHERE REQUIRED FOR WALL AND/OR BASE CABINET INSTALLATION. COORDINATE WITH CABINET MANUFACTURER PRIOR TO BLOCKING BEING INSTALLED. AT EXTERIOR WALL PROVIDE TREATED WOOD BLOCKING.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADA COMPLIANT CABINETS, HANDLES, CLEAR SPACES BELOW CABINETS WHERE REQUIRED ETC WHETHER SHOWN ON THESE DETAILS OR NOT. COORDINATE WITH ARCHITECT IF ANY DISCREPANCIES ARISE.
- 4. IF SEPARATE SPECIFICATIONS ARE INCLUDED WITH THIS PROJECT THOSE DOCUMENTS WILL SUPERCEDE WHAT IS SHOWN AND/OR DETAILED ON THIS DRAWING. OTHERWISE THIS DRAWING AND DETAILS REPRESENT THE MINIMUM REQUIRED STANDARDS OF CONSTRUCTION FOR ALL BASE CABINETS, COUNTER TOPS, UPPER CABINETS, ETC.
- 5. REFER TO FLOOR PLAN FOR ALL LENGTHS OF CABINET RUNS AS WELL AS LOCATIONS. REFER TO THE REFLECTED CEILING PLAN (IF INCLUDED) FOR ALL BULKHEAD LOCATIONS AND HEIGHTS.
- 6. CASEWORK INSTALLER IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL DIVISION 22 AND DIVISION 26 ITEMS (INCLUDING CUT OUTS) IN CASEWORK OR COUNTERTOPS. LOCATIONS AND CUT OUT COORDINATION ALSO REQUIRED FOR RECEPTACLES (DIVISION 26) IN MICROWAVE WALL CABINETS, DISHWASHER LOCATIONS, GARBAGE DISPOSAL LOCATIONS, ETC.
- 7. PROVIDE FINISHED ENDS ON CABINETS WHERE END OF CABINET IS EXPOSED BEYOND WALL LINE, UNDER COUNTER, AT KNEE SPACE AND AT ALL SIMILAR EXPOSED AREAS.
- 8. UNLESS NOTED OTHERWISE PROVIDE EQUAL WIDTH FILLER/SCRIBE BETWEEN WALL AND CASEWORK AT ALL LOCATIONS WHERE NONE IS SHOWN. MAXIMUM WIDTH IS TO BE
- 9. CONTRACTOR SHALL FIELD VERIFY AND CHECK ALL CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO STARTING ANY WORK. REPORT ANY DISCREPANCIES TO ARCHITECT.
- 10. ANY AND ALL PARTS OF ANY CABINETS OR COUNTERS THAT ARE VISIBLE MUST BE FINISHED WITH MATERIAL TO MATCH ADJACENT FINISHES. NOTIFY AND COORDINATE WITH ARCHITECT IF AREAS
- 11. UNLESS NOTED OTHERWISE REFER TO ROOM FINISH SCHEDULE FOR ALL CABINET FINISHES AND MATERIALS AS WELL AS ALL OTHER ASSOCIATED, MISCELLANEOUS FINISH REQUIREMENTS. UNLESS NOTED OTHERWISE ALL INTERIOR COMPONENTS TO BE WHITE MELAMINE.

OF UNSPECIFIED FINISHES EXIST.

- 12. EASE ALL EXPOSED OUTSIDE EDGES AT ALL COMPONENTS FOR ITEMS SHOWN ON THIS SHEET.
- 13. REFER TO ROOM FINISH SCHEDULE FOR ALL WALL BASE REQUIREMENTS.

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317.288.0753



© COPYRIGHT 2021, CURRAN ARCHITECTURE PROJECT INFORMATION

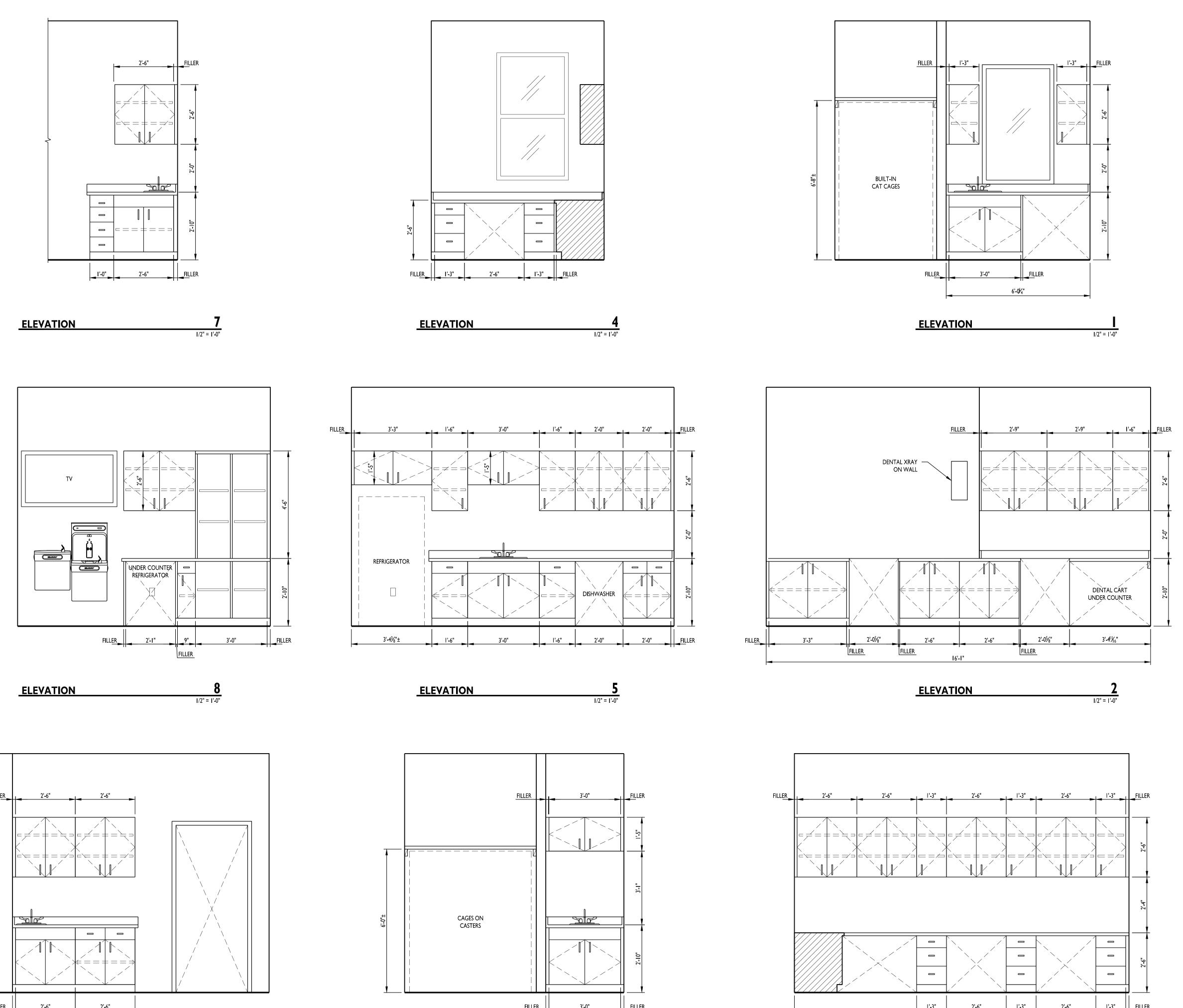
IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

| ISSUE D    |         |
|------------|---------|
| PERMIT SET | 04.01.2 |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |

CASEWORK ELEVATIONS



**ELEVATION** 

**ELEVATION** 

#### **CASEWORK GENERAL NOTES**

- I. UNLESS SPECIFICALLY OTHERWISE NOTED, PROVIDE SELF EDGE ALONG EXPOSED FACES OF ALL COUNTER TOPS.
- 2. PROVIDE WOOD F.R. BLOCKING IN WALL WHERE REQUIRED FOR WALL AND/OR BASE CABINET INSTALLATION. COORDINATE WITH CABINET MANUFACTURER PRIOR TO BLOCKING BEING INSTALLED. AT EXTERIOR WALL PROVIDE TREATED WOOD
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADA COMPLIANT CABINETS, HANDLES, CLEAR SPACES BELOW CABINETS WHERE REQUIRED ETC WHETHER SHOWN ON THESE DETAILS OR NOT. COORDINATE WITH ARCHITECT IF ANY DISCREPANCIES ARISE.
- 4. IF SEPARATE SPECIFICATIONS ARE INCLUDED WITH THIS PROJECT THOSE DOCUMENTS WILL SUPERCEDE WHAT IS SHOWN AND/OR DETAILED ON THIS DRAWING. OTHERWISE THIS DRAWING AND DETAILS REPRESENT THE MINIMUM REQUIRED STANDARDS OF CONSTRUCTION FOR ALL BASE CABINETS, COUNTER TOPS, UPPER CABINETS, ETC.
- 5. REFER TO FLOOR PLAN FOR ALL LENGTHS OF CABINET RUNS AS WELL AS LOCATIONS. REFER TO THE REFLECTED CEILING PLAN (IF INCLUDED) FOR ALL BULKHEAD LOCATIONS AND HEIGHTS.
- 6. CASEWORK INSTALLER IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL DIVISION 22 AND DIVISION 26 ITEMS (INCLUDING CUT OUTS) IN CASEWORK OR COUNTERTOPS. LOCATIONS AND CUT OUT COORDINATION ALSO REQUIRED FOR RECEPTACLES (DIVISION 26) IN MICROWAVE WALL CABINETS, DISHWASHER LOCATIONS, GARBAGE DISPOSAL LOCATIONS, ETC.
- 7. PROVIDE FINISHED ENDS ON CABINETS WHERE END OF CABINET IS EXPOSED BEYOND WALL LINE, UNDER COUNTER, AT KNEE SPACE AND AT ALL SIMILAR EXPOSED AREAS.
- 8. UNLESS NOTED OTHERWISE PROVIDE EQUAL WIDTH FILLER/SCRIBE BETWEEN WALL AND CASEWORK AT ALL LOCATIONS WHERE NONE IS SHOWN. MAXIMUM WIDTH IS TO BE
- 9. CONTRACTOR SHALL FIELD VERIFY AND CHECK ALL CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO STARTING ANY WORK. REPORT ANY DISCREPANCIES TO ARCHITECT.
- 10. ANY AND ALL PARTS OF ANY CABINETS OR COUNTERS THAT ARE VISIBLE MUST BE FINISHED WITH MATERIAL TO MATCH ADJACENT FINISHES. NOTIFY AND COORDINATE WITH ARCHITECT IF AREAS OF UNSPECIFIED FINISHES EXIST.
- 11. UNLESS NOTED OTHERWISE REFER TO ROOM FINISH SCHEDULE FOR ALL CABINET FINISHES AND MATERIALS AS WELL AS ALL OTHER ASSOCIATED, MISCELLANEOUS FINISH REQUIREMENTS. UNLESS NOTED OTHERWISE ALL INTERIOR COMPONENTS TO BE WHITE MELAMINE.
- 12. EASE ALL EXPOSED OUTSIDE EDGES AT ALL COMPONENTS FOR ITEMS SHOWN ON THIS SHEET.

14'-0"

**ELEVATION** 

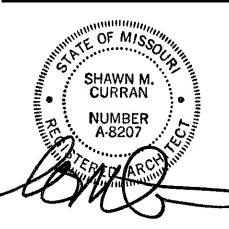
13. REFER TO ROOM FINISH SCHEDULE FOR ALL WALL BASE REQUIREMENTS.

5719 LAWTON LOOP E. DR. #212

INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681

F :: 317.288.0753

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2021, CURRAN ARCHITECTURE PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO

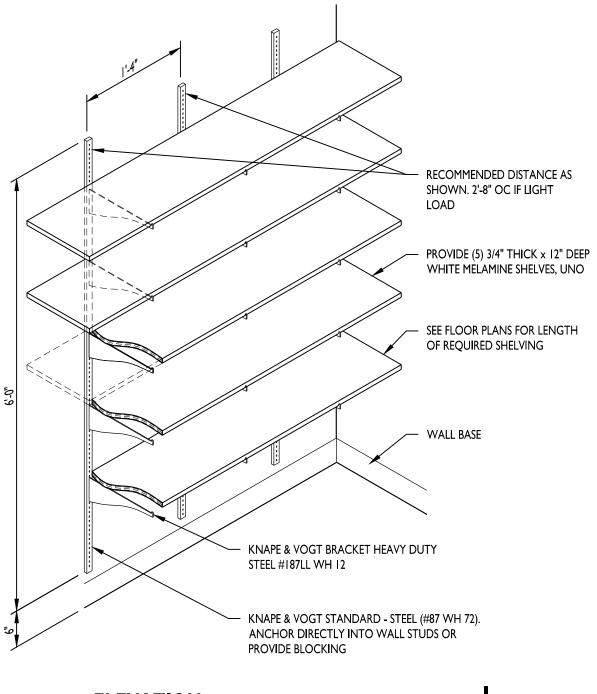
64086

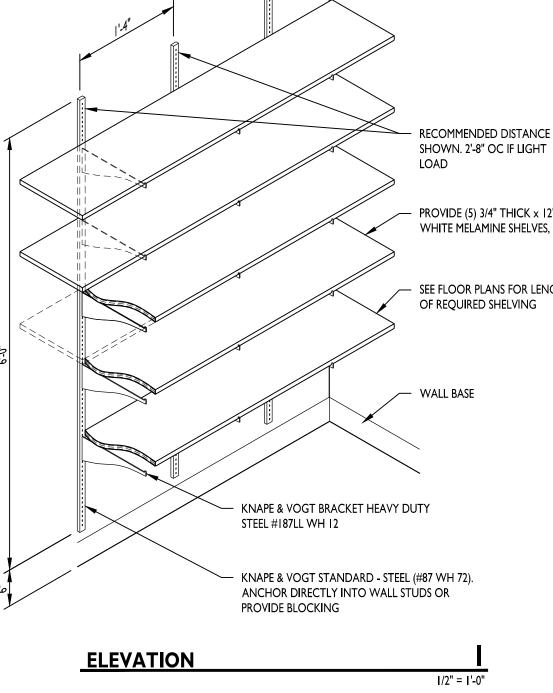
| ISSUE D    | ATES     |
|------------|----------|
| PERMIT SET | 04.01.21 |
|            |          |
|            |          |
|            |          |
|            |          |
|            |          |
|            |          |
|            |          |
|            |          |
|            |          |

210095

CASEWORK ELEVATIONS







#### PROVIDE I/2" X I/2" REVALS W/ -BRUSHED ALUM FINISH ABOVE COUNTERTOP COUNTERTOP SEE ROOM FINISH SCHEDULE COUNTERTOP SEE ROOM -FINISH SCHEDULE - COUNTER **BEYOND** RAKKS BRACKET EH-1818 — MDF BOARD W/ PLASTIC OR EQUAL LAMINATE FINISH. PROVIDE I/2" X I/2" REVALS W/ PROVIDE ACCESS PANEL & BRUSHED ALUM FINISH CHASE FOR POWER & VOICE/DATA MDF BOARD W/ PLASTIC LAMINATE FINISH

**ELEVATION** 

#### **CASEWORK GENERAL NOTES**

- I. UNLESS SPECIFICALLY OTHERWISE NOTED, PROVIDE SELF EDGE ALONG EXPOSED FACES OF ALL COUNTER TOPS.
- PROVIDE WOOD F.R. BLOCKING IN WALL WHERE REQUIRED FOR WALL AND/OR BASE CABINET INSTALLATION. COORDINATE WITH CABINET MANUFACTURER PRIOR TO BLOCKING BEING INSTALLED. AT EXTERIOR WALL PROVIDE TREATED WOOD BLOCKING.
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADA COMPLIANT CABINETS, HANDLES, CLEAR SPACES BELOW CABINETS WHERE REQUIRED ETC WHETHER SHOWN ON THESE DETAILS OR NOT. COORDINATE WITH ARCHITECT IF ANY DISCREPANCIES ARISE.
- 4. IF SEPARATE SPECIFICATIONS ARE INCLUDED WITH THIS PROJECT THOSE DOCUMENTS WILL SUPERCEDE WHAT IS SHOWN AND/OR DETAILED ON THIS DRAWING. OTHERWISE THIS DRAWING AND DETAILS REPRESENT THE MINIMUM REQUIRED STANDARDS OF CONSTRUCTION FOR ALL BASE CABINETS, COUNTER TOPS, UPPER CABINETS, ETC.
- 5. REFER TO FLOOR PLAN FOR ALL LENGTHS OF CABINET RUNS AS WELL AS LOCATIONS. REFER TO THE REFLECTED CEILING PLAN (IF INCLUDED) FOR ALL BULKHEAD LOCATIONS AND HEIGHTS.
- 6. CASEWORK INSTALLER IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL DIVISION 22 AND DIVISION 26 ITEMS (INCLUDING CUT OUTS) IN CASEWORK OR COUNTERTOPS. LOCATIONS AND CUT OUT COORDINATION ALSO REQUIRED FOR RECEPTACLES (DIVISION 26) IN MICROWAVE WALL CABINETS, DISHWASHER LOCATIONS, GARBAGE DISPOSAL LOCATIONS, ETC.
- 7. PROVIDE FINISHED ENDS ON CABINETS WHERE END OF CABINET IS EXPOSED BEYOND WALL LINE, UNDER COUNTER, AT KNEE SPACE AND AT ALL SIMILAR EXPOSED AREAS.
- 8. UNLESS NOTED OTHERWISE PROVIDE EQUAL WIDTH FILLER/SCRIBE BETWEEN WALL AND CASEWORK AT ALL LOCATIONS WHERE NONE IS SHOWN. MAXIMUM WIDTH IS TO BE
- 9. CONTRACTOR SHALL FIELD VERIFY AND CHECK ALL CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO STARTING ANY WORK. REPORT ANY DISCREPANCIES TO ARCHITECT.

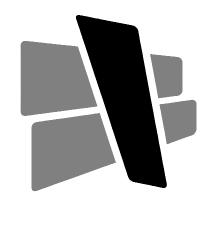
10. ANY AND ALL PARTS OF ANY CABINETS OR COUNTERS THAT ARE

- VISIBLE MUST BE FINISHED WITH MATERIAL TO MATCH ADJACENT FINISHES. NOTIFY AND COORDINATE WITH ARCHITECT IF AREAS OF UNSPECIFIED FINISHES EXIST. 11. UNLESS NOTED OTHERWISE REFER TO ROOM FINISH SCHEDULE
- FOR ALL CABINET FINISHES AND MATERIALS AS WELL AS ALL OTHER ASSOCIATED, MISCELLANEOUS FINISH REQUIREMENTS. UNLESS NOTED OTHERWISE ALL INTERIOR COMPONENTS TO BE WHITE MELAMINE.
- ITEMS SHOWN ON THIS SHEET.

REQUIREMENTS.

13. REFER TO ROOM FINISH SCHEDULE FOR ALL WALL BASE

12. EASE ALL EXPOSED OUTSIDE EDGES AT ALL COMPONENTS FOR



5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681

F :: 317.288.0753



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE. © COPYRIGHT 2021, CURRAN ARCHITECTURE

#### PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

250 NW McNARY COURT LEE'S SUMMIT, MO 64086

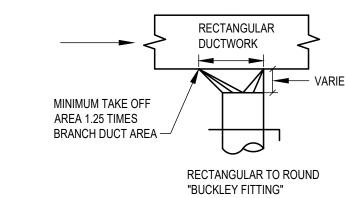
| COUNTERTO | P SEE ROOM —                                |                                               | COUNTER                                                                                         |
|-----------|---------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------|
| FINISH    | H SCHEDULE                                  |                                               | BEYOND                                                                                          |
| MDF BOARD | OR EQUAL SESS PANEL & OR POWER & VOICE/DATA | 3"<br>  O   O   O   O   O   O   O   O   O   O | MDF BOARD W/ PLASTIC<br>LAMINATE FINISH. PROVID<br>1/2" X 1/2" REVALS W/<br>BRUSHED ALUM FINISH |

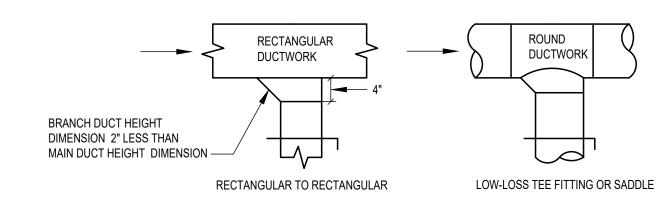
**ELEVATION** 

|            | ISSUE DA | ATES |          |
|------------|----------|------|----------|
| PERMIT SET |          |      | 04.01.21 |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            |          |      |          |
|            | 21009    | 5    |          |

CASEWORK SECTIONS & DETAILS

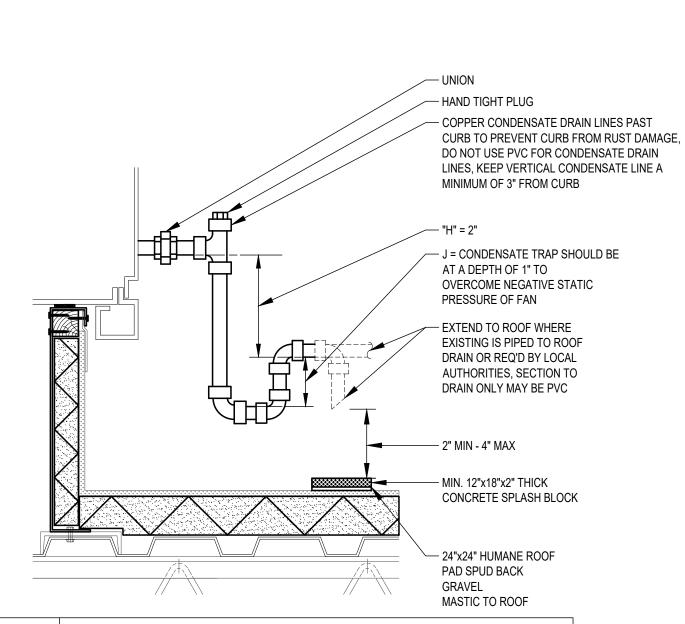
| ABBR                     | EVIATIONS (ABBREVIATI                                                                     | ONS SHOWN ARE        | NOT NECESSARILY USED ON DRAWINGS)                                       | HVAC SYMBOLS                                                                                                                         |            |
|--------------------------|-------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------|
| ABV<br>A/C               | AMP, AMPERE<br>ABOVE<br>AIR CONDITIONER, AIR CONDITIONING,                                | ID<br>IE<br>IN       | INSIDE DIAMETER<br>INVERT ELEVATION<br>INCH, INCHES                     | (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON DRAWII  SUPPLY AIR DIFFUSER - SHADING INDICATES PATTERN, NO PATTERN SHOWN EQUALS 4-WA | ,          |
| CC<br>CCU                | ABOVE CEILING AIR COOLED CHILLER AIR COOLED CONDENSING UNIT                               | IN WC<br>KVA         | INCHES OF WATER COLUMN  KILOVOLT-AMPS                                   | OR AS NOTED                                                                                                                          | ΑY         |
| DJ<br>FC                 | ADJUSTABLE<br>ABOVE FINISHED CEILING                                                      | KW<br>KWH            | KILOWATTS<br>KILOWATT-HOUR                                              | RETURN OR EXHAUST AIR GRILLE                                                                                                         |            |
| FF<br>FG<br>-            | ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ACOUSTIC LINING                                 | L<br>LAT             | INTERNALLY LINED<br>LEAVING AIR TEMPERATURE                             | 2 12"Ø ROUND DUCTWORK. DIAMETER IN INCHES                                                                                            |            |
| NSI<br>PD                | AMERICAN NAT'L STANDARDS INSTITUTE<br>AIR PRESSURE DROP                                   | LBS, #<br>LDB<br>LP  | POUNDS<br>LEAVING DRY BULB<br>LOW PRESSURE                              | RECTANGULAR DUCTWORK. SIZE IN INCHES, FIRST NUMBER IS SIDE SHOWN                                                                     |            |
| .RCH<br>.RI<br>.SHRAE    | ARCHITECT, ARCHITECTURAL AIR CONDITIONING & REFRIG INSTITUTE AMERICAN SOCIETY OF HEATING, | LF<br>LRA<br>LTG     | LOCKED ROTOR AMPS<br>LIGHTING                                           | XX/XXL 7 INTERNALLY LINED DUCT                                                                                                       |            |
| SME                      | REFRIGERATION & AC ENGINEERS<br>AMERICAN SOCIETY OF MECHANICAL ENGRS                      | LWB<br>LWT           | LEAVING WET BULB<br>LEAVING WATER TEMPERATURE                           | INTERNALET LINED BOOT                                                                                                                |            |
| SSY<br>STM<br>.UX        | ASSEMBLY AMERICAN SOCIETY OF TESTING & MATLS AUXILIARY                                    | MAX<br>MBH           | MAXIMUM<br>1000 BTU PER HOUR                                            | SUPPLY OR OUTSIDE AIR DUCT                                                                                                           |            |
| .WG<br>.WS               | AMERICAN WIRE GAUGE<br>AMERICAN WELDING SOCIETY                                           | MC<br>MCA<br>MCC     | MECHANICAL CONTRACTOR MINIMUM CIRCUIT AMPACITY MOTOR CONTROL CENTER     | RETURN, RELIEF OR EXHAUST AIR DUCT                                                                                                   |            |
| WWA<br>/F                | AMERICAN WATER WORKS ASSOC.  BELOW FLOOR                                                  | MD<br>MECH           | MOTORIZED DAMPER<br>MECHANICAL                                          | DIFFUSER/GRILLE LABEL:  A - TYPE/DESIGNATION                                                                                         |            |
| AS<br>DD                 | BUILDING AUTOMATION SYSTEM<br>BACKDRAFT DAMPER                                            | MFR<br>MH<br>MIN     | MANUFACTURER<br>MANHOLE, METAL HALIDE<br>MINIMUM                        | A B B A - TYPE/DESIGNATION B - NECK SIZE (INCHES) C - AIRFLOW (CFM)                                                                  |            |
| FW<br>LDG<br>MS          | BOILER FEED WATER BUILDING BUILDING MANAGEMENT SYSTEM                                     | MOCP<br>MTD          | MAXIMUM OVER CURRENT PROTECTION MOUNTED                                 |                                                                                                                                      |            |
| OD<br>OP                 | BOTTOM OF DUCT BOTTOM OF PIPE                                                             | MUA                  | MAKE-UP AIR                                                             | 90 DEGREE DUCTWORK ELBOW W/ TURNING                                                                                                  | /ANES      |
| SOS<br>STU               | BOTTOM OF STRUCTURE<br>BRITISH THERMAL UNIT                                               | N/A<br>N.C.<br>NC    | NOT APPLICABLE<br>NORMALLY CLOSED<br>NOISE CRITERIA                     | TURNING VANES                                                                                                                        |            |
| A<br>C                   | COMBUSTION AIR<br>CONCRETE                                                                | NEC<br>NEMA          | NATIONAL ELECTRICAL CODE<br>NATIONAL ELECTRICAL MFR'S ASSOC.            | RADIUS DUCTWORK ELBOW - ROUND OR RECTANGULAR                                                                                         |            |
| FH<br>FM                 | CUBIC FEET PER HOUR<br>CUBIC FEET PER MINUTE                                              | NFPA<br>NIC<br>N.O.  | NATIONAL FIRE PROTECTION ASSOC.<br>NOT IN CONTRACT<br>NORMALLY OPEN     | ROUND OR RECTANGULAR                                                                                                                 |            |
| HWR/CHW<br>IRC<br>KT     | /S CHILLED WATER RETURN/SUPPLY CIRCULATING CIRCUIT                                        | NTS                  | NOT TO SCALE                                                            | RECTANGULAR DUCTWORK BRANCH TAKE-OI WITH 45 DEGREE BRANCH INLET                                                                      | ∓F         |
| CL<br>CLG                | CENTERLINE<br>CEILING                                                                     | O/H<br>OA<br>OBD     | OVERHEAD OUTSIDE AIR (VENTILATION AIR) OPPOSED BLADE DAMPER             | , was 5555 55 to 5 to 5 to 5 to 5 to 5 to 5                                                                                          |            |
| CO<br>CONN<br>COP        | CLEANOUT<br>CONNECT, CONNECTION<br>CLEANOUT PLUG                                          | OC<br>OD             | ON CENTER<br>OVERFLOW DRAINAGE, OUTSIDE DIAMETER                        | HIGH EFFIECENY "BUCKLEY" TAP WITH DAMPI                                                                                              | <u>-</u> K |
| OL<br>TE                 | COLUMN<br>CONNECT TO EXISTING                                                             | OPNG<br>ORD<br>OS&Y  | OPENING<br>OVERFLOW ROOF DRAIN<br>OUTSIDE STEM AND YOKE                 | DUCTWORK SIZE TRANSITION                                                                                                             |            |
| CW<br>CWR/CWS<br>C       | DOMESTIC COLD WATER CONDENSING WATER RETURN/SUPPLY DEGREES CELSIUS                        | OSHA                 | OCCUPATIONAL SAFETY &HEALTH ADMIN.                                      | SUPPLY OR OUTSIDE AIR DUCT UP                                                                                                        |            |
| )<br>)B                  | DEPTH<br>DRY BULB                                                                         | PB<br>PD<br>PH, Ø    | PUSH BUTTON<br>PRESSURE DROP<br>PHASE                                   | SUPPLY OR OUTSIDE AIR DUCT DOWN                                                                                                      |            |
| IB<br>DDC<br>DEG         | DECIBEL DIRECT DIGITAL CONTROL DEGREES                                                    | PIV<br>PLBG          | POST INDICATOR VALVE<br>PLUMBING                                        | RETURN OR EXHAUST AIR DUCT UP                                                                                                        |            |
| DEG<br>DIA (OR Ø)<br>DIM | DIAMETER<br>DIMENSION                                                                     | PSI<br>PRV           | POUNDS PER SQUARE INCH<br>PRESSURE RELIEF VALVE                         | RETURN OR EXHAUST AIR DUCT DOWN                                                                                                      |            |
| DISC<br>DN               | DISCONNECT<br>DOWN                                                                        | RA<br>RCP<br>RD      | RETURN AIR<br>REFLECTED CEILING PLAN<br>ROOF DRAIN                      | IN-LINE 90 DEGREE RISE IN DUCT                                                                                                       |            |
| DOM<br>DS<br>DWG         | DOMESTIC<br>DOWNSPOUT<br>DRAWING                                                          | RECIRC<br>REINF      | RECIRCULATE<br>REINFORCING, REINFORCED                                  | IN-LINE 90 DEGREE DROP IN DUCT                                                                                                       |            |
| )X                       | DIRECT EXPANSION  EACH                                                                    | REL<br>REQ<br>REV    | RELOCATED REQUIRED REVISION, REVISE                                     | RISE   INCLINED RISE IN DUCT                                                                                                         |            |
| A<br>AT<br>C             | ENTERING AIR TEMPERATURE ELECTRICAL CONTRACTOR                                            | REX<br>RH            | REMOVE EXISTING RELATIVE HUMIDITY                                       |                                                                                                                                      |            |
| DB<br>LEV                | ENTERING DRY BULB<br>ELEVATION                                                            | RHG<br>RL            | REFRIGERANT HOT GAS REFRIGERANT LIQUID                                  | POINT OF CONNECTION - NEW TO EXISTING                                                                                                |            |
| ELEC<br>ENCL<br>EQUIP    | ELECTRICAL<br>ENCLOSURE<br>EQUIPMENT                                                      | RLA<br>RPM<br>RR     | RUNNING LOAD AMPS<br>REVOLUTIONS PER MINUTE<br>REMOVE AND RELOCATE      | MD MANUAL VOLUME DAMPER                                                                                                              |            |
| SP<br>TR                 | EXTERNAL STATIC PRESSURE EXISTING TO REMAIN                                               | RS<br>RWC            | REFRIGERANT SUCTION<br>RAIN WATER CONDUCTOR                             | MOTORIZED DAMPER                                                                                                                     |            |
| :WB<br>:WT<br>:XH        | ENTERING WET BULB<br>ENTERING WATER TEMPERATURE<br>EXHAUST                                | SA<br>SAN            | SUPPLY AIR<br>SANITARY                                                  | FIRE DAMPER                                                                                                                          |            |
| ΞX                       | EXISTING                                                                                  | SD<br>SECT<br>SF     | SMOKE DETECTOR, STORM DRAIN<br>SECTION<br>SQUARE FEET, SQUARE FOOT      | T THERMOSTAT                                                                                                                         |            |
| A<br>ACP<br>CO           | FIRE ALARM FIRE ALARM CONTROL PANEL FLOOR CLEANOUT                                        | SHT<br>SM            | SHEET<br>SHEET METAL                                                    | (H) HUMIDISTAT                                                                                                                       |            |
| D<br>F                   | FIRE DAMPER<br>FINISHED FLOOR                                                             | SMACNA<br>SP<br>SPEC | SHEET METAL & A/C CONT NAT'L ASSOC.<br>STATIC PRESSURE<br>SPECIFICATION | S SENSOR                                                                                                                             |            |
| LA<br>LEX<br>P           | FULL LOAD AMPS<br>FLEXIBLE<br>FIRE PROTECTION                                             | SQ<br>ST             | SQUARE<br>STORM WATER                                                   | C CARBON DIOXIDE SENSOR                                                                                                              |            |
| PM<br>T                  | FEET PER MINUTE<br>FOOT, FEET                                                             | STD<br>SURF<br>SUSP  | STANDARD<br>SURFACE<br>SUSPEND                                          | SD DUCT SMOKE DETECTOR                                                                                                               |            |
| W<br>F                   | FILTERED WATER<br>DEGREES FAHRENHEIT                                                      | TDH                  | TOTAL DYNAMIC HEAD                                                      | DRAWING NOTE REFERENCE                                                                                                               |            |
| i<br>iA                  | GAS<br>GAUGE                                                                              | TE<br>THRU<br>TP     | TENANT EXHAUST (TOILET)<br>THROUGH<br>TOTAL PRESSURE                    | ф ROUND                                                                                                                              |            |
| AL<br>ALV<br>C           | GALLON<br>GALVANIZED<br>GENERAL CONTRACTOR                                                | TSP<br>TSTAT         | TOTAL STATIC PRESSURE<br>THERMOSTAT                                     | OVAL OR FLAT OVAL                                                                                                                    |            |
| FI, GFIC<br>PD           | GROUND FAULT INTERRUPTER<br>GALLONS PER DAY                                               | TWR/TWS              |                                                                         | UC UNDERCUT DOOR 3/4" FOR AIRFLOW                                                                                                    |            |
| SPH<br>SPM<br>SRD        | GALLONS PER HOUR<br>GALLONS PER MINUTE<br>GROUND                                          | U/F<br>U/G           | UNDERFLOOR<br>UNDERGROUND                                               |                                                                                                                                      |            |
| W                        | GREASE WASTE                                                                              | U/S<br>UL            | UNDERSLAB<br>UNDERWRITERS LABORATORIES, INC.                            |                                                                                                                                      |            |
| l<br>ID<br>IHWR/HHW      | HEIGHT<br>HEAD, HUB DRAIN<br>/S HEATING HOT WATER RETURN/SUPPLY                           | V                    | UNLESS OTHERWISE NOTED  VOLT, VENT                                      |                                                                                                                                      |            |
| HWR/HHW<br>IOA<br>IP     | /S HEATING HOT WATER RETURN/SUPPLY HAND-OFF-AUTOMATIC HORSEPOWER, HEAT PUMP               | VA<br>VAC            | VOLT-AMPERE, VALVE<br>VACUUM                                            |                                                                                                                                      |            |
| ISTAT<br>ITG             | HUMIDISTAT<br>HEATING                                                                     | VAV<br>VD<br>VTR     | VARIABLE AIR VOLUME<br>VOLUME DAMPER<br>VENT THROUGH ROOF               |                                                                                                                                      |            |
| ITR<br>IVAC<br>IW        | HEATER HEATING, VENTILATING & A/C DOMESTIC HOT WATER                                      | W                    | WATT, WIDTH                                                             |                                                                                                                                      |            |
| HWR<br>HYD               | DOMESTIC RECIRCULATED HOT WATER<br>HYDRANT                                                | W/<br>W/O<br>WB      | WITH<br>WITHOUT<br>WET BULB                                             |                                                                                                                                      |            |
| Z                        | HERTZ                                                                                     | WC                   | WATER COLUMN                                                            |                                                                                                                                      |            |



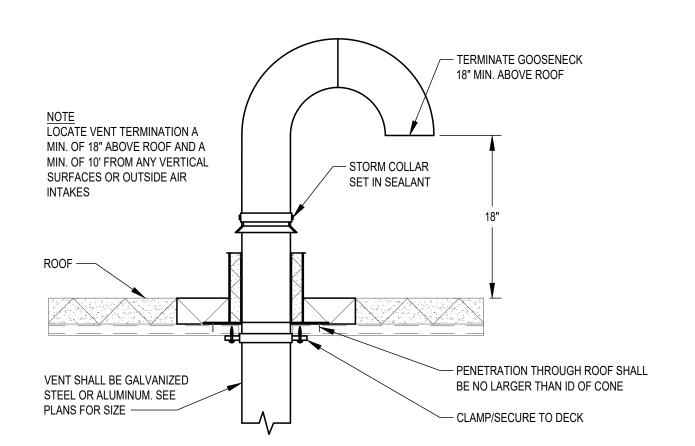


#### **DUCT BRANCH TAKE-OFF DETAIL**

M001 SCALE: NONE

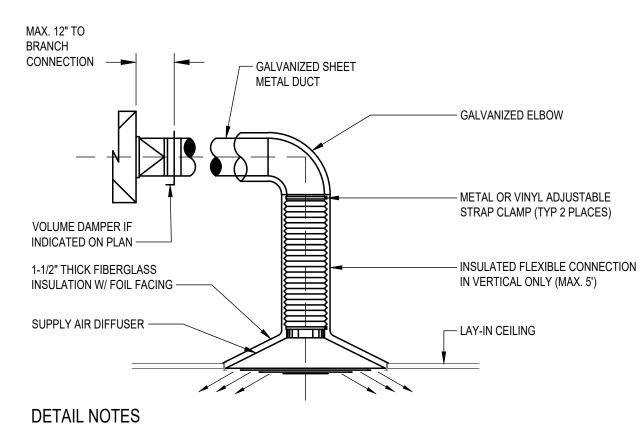


#### RTU CONDENSATE DETAIL M001 SCALE: NONE



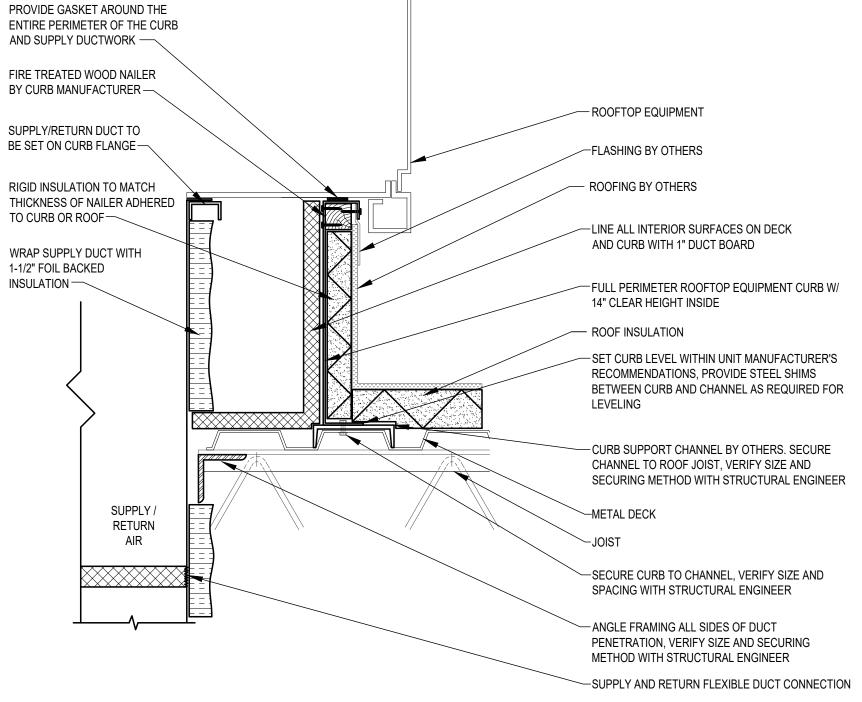
#### **DETAIL NOTES** 1. SEAL ALL JOINT PER MANUFACTURER'S REQUIREMENTS. SCREWS MAY NOT PENETRATE DUCTWORK.

| 5    | DRYER VENT THRU ROOF DETAIL |
|------|-----------------------------|
| M001 | SCALE: NONE                 |



1. DO NOT LOCATE DAMPERS ABOVE DRYWALL/INACCESSIBLE CEILING LOCATIONS.

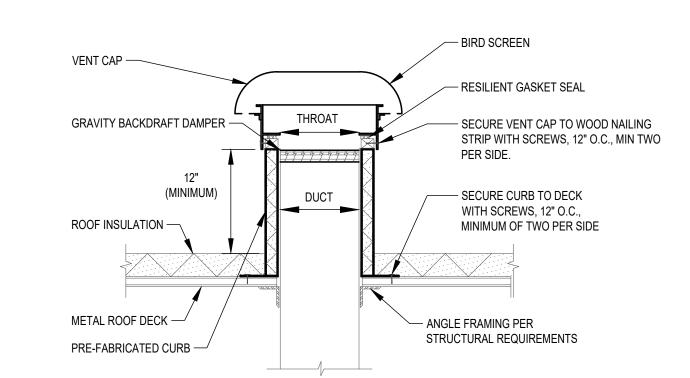
CEILING DIFFUSER MOUNTING DETAIL M001 SCALE: NONE



DETAIL NOTES

1. CONTRACTOR TO COORDINATE INSTALLATION WITH BUILDING OWNER APPROVED ROOFER FOR PROPER SEQUENCE TO PERMIT FLASHING AND COUNTERFLASHING INSTALLATION.

#### 4 RTU CURB DETAIL - JOIST M001 SCALE: NONE



**DETAIL NOTES** 

- HVAC CONTRACTOR TO COORDINATE INSTALLATION WITH LANDLORD APPROVED ROOFING CONTRACTOR FOR PROPER SEQUENCE TO PERMIT FLASHING AND COUNTERFLASHING INSTALLATION.
- GOOSENECK TERMINATION NOT PERMITTED.

| 6    | EXHAUST AIR VENT CAP DETAIL |
|------|-----------------------------|
| M001 | SCALE: NONE                 |



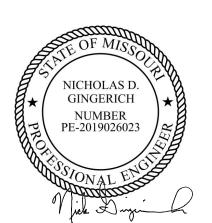
ARCHITECTURE 5719 LAWTON LOOP E. DR.

#212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317.288.0753

DRAWN BY: PDN CHECKED BY: JRE

25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

PROJECT INFORMATION

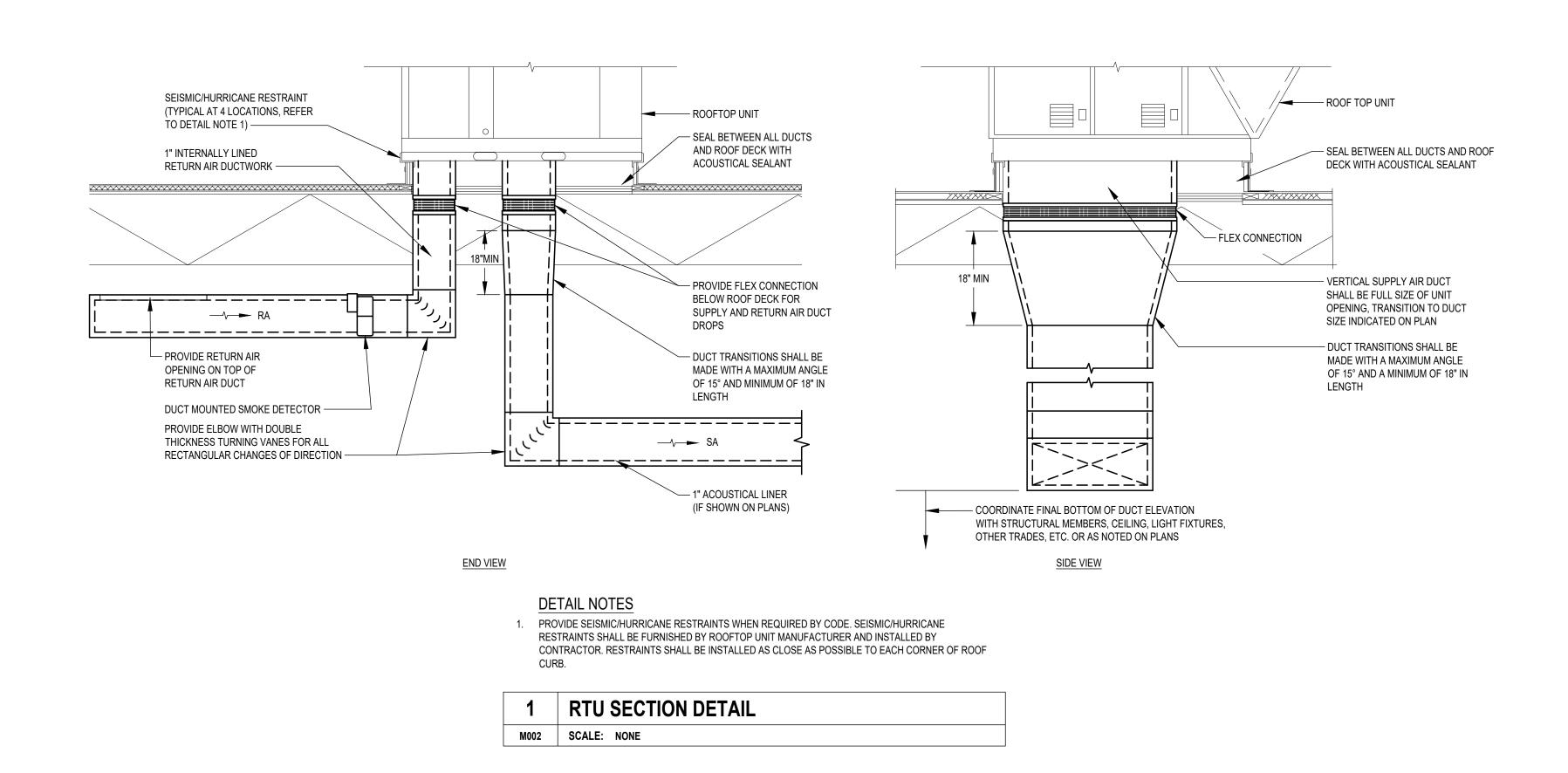
© COPYRIGHT 2020, CURRAN ARCHITECTURE

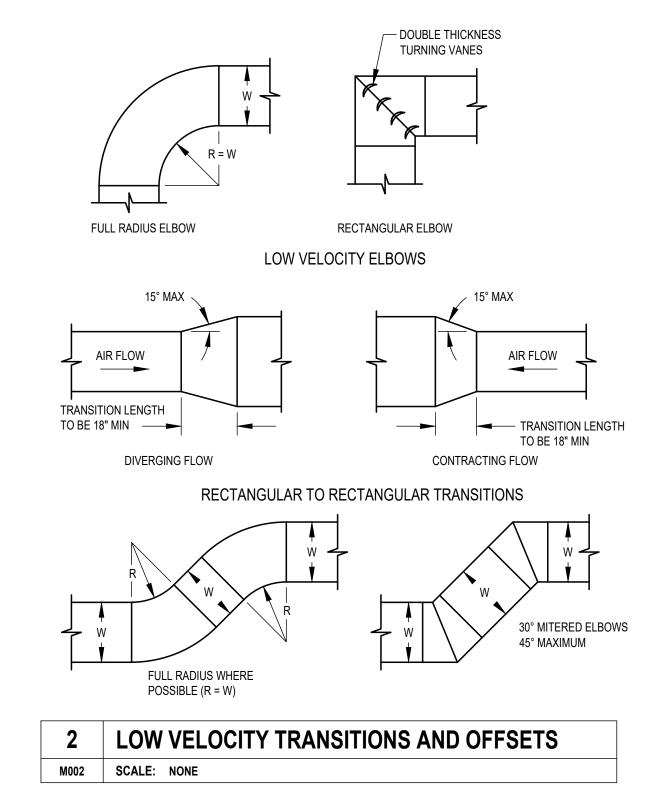
LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

| ISSUE DATE               | S       |
|--------------------------|---------|
| PERMIT SET               | 04.01.2 |
| 1 PERMIT REVIEW COMMENTS | 04.21.2 |
|                          |         |
|                          |         |
|                          |         |
| <del></del>              |         |
|                          |         |
|                          |         |
|                          |         |

210095 MECHANICAL LEGEND AND DETAILS







## CURRAN ARCHITECTURE

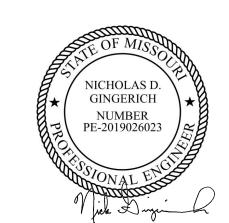
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: PDN CHECKED BY: JRE



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

#### LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

| ISSUE DATES            |          |
|------------------------|----------|
| PERMIT SET             | 04.01.21 |
| PERMIT REVIEW COMMENTS | 04.21.21 |
|                        |          |
|                        |          |
|                        |          |
|                        |          |
|                        |          |
|                        |          |
|                        |          |
|                        |          |
|                        |          |

210095
MECHANICAL DETAILS

M002

## ROOFTOP HVAC UNIT SCHEDULE

|       | NOMINAL MIN OA |       |           |                 |      | SUPPLY F        | SUPPLY FAN DATA DX COOLING DATA |                |               |              |                     | GAS HEATING DATA    |                   |                |                   | UNIT CHARACTERISTICS |                |                 |                   |                     |          |           |                              |                   |
|-------|----------------|-------|-----------|-----------------|------|-----------------|---------------------------------|----------------|---------------|--------------|---------------------|---------------------|-------------------|----------------|-------------------|----------------------|----------------|-----------------|-------------------|---------------------|----------|-----------|------------------------------|-------------------|
| TAG   | SERVICE        | MFR   | MODEL No. | NOMINAL<br>TONS | EER  | MIN OA<br>(CFM) | AIR FLOW<br>(CFM)               | ESP<br>(IN WC) | MOTOR<br>(HP) | FAN<br>(RPM) | EAT °DB/°WB<br>(°F) | LAT °DB/°WB<br>(°F) | SENSIBLE<br>(MBH) | TOTAL<br>(MBH) | COOLING<br>STAGES | EAT/LAT<br>(°F)      | INPUT<br>(MBH) | OUTPUT<br>(MBH) | HEATING<br>STAGES | VOLTAGE<br>(V-φ-Hz) | UNIT MCA | UNIT MOCP | OPERATING<br>WEIGHT<br>(LBS) | NOTES/ACCESSORIES |
| RTU-1 | FRONT          | TRANE | YSC092    | 7.5             | 11.2 | 0               | 2800                            | 1.0            | 1.0           | 915          | 76.8/64.2           | 56.6/54.4           | 67.4              | 87.0           | 2                 | 52.6/93.0            | 150/105        | 120/84          | 2                 | 208-3-60            | 39.0     | 50.0      | 1182                         | 1-19              |
| RTU-2 | BACK           | TRANE | YSC092    | 7.5             | 11.2 | 0               | 2750                            | 1.0            | 3.0           | 921          | 78.5/65.6           | 57.8/55.7           | 67.6              | 88.7           | 2                 | 47.3/101.4           | 200/140        | 160/112         | 2                 | 208-3-60            | 45.0     | 50.0      | 1182                         | 1-19              |

\* OUTSIDE AIR FOR VENTILATION IS PROVIDED BY ERV INTO THE RTU'S RETURN AIR SYSTEM.

#### NOTES/ACCESSORIES

101° CONDENSING TEMPERATURE

- REFRIGERANT R410A
- 3. REFERENCE DRYBULB ECONOMIZER
- POWER EXHAUST
- 5. 24" INSULATED ROOF CURB
- 6. UNIT MOUNTED HACR BREAKER DISCONNECT
- 7. UNPOWERED GFCI RECEPTACLE
- 8. BELT DRIVE
- 9. SUPPLY FAN VFD WITH SINGLE ZONE VAV CONTROLLER
- 10. THROUGH THE BASE ELECTRICAL AND GAS
- 11. HAIL GUARD WITH TOOL LESS REMOVAL
- 12. PROGRAMMABLE SEVEN DAY AUTO CHANGE OVER THERMOSTAT
- 14. ONCE THE RTU'S ARE OPERATIONAL PROVIDE 2" MERV 8 FILTERS. INSPECT FILTERS DAILY. REPLACE AS NEEDED BUT NOT LONGER THAN 7 DAYS UNTIL UNIT IS ADJUSTED BY BALANCE CONTRACTOR. AT THE DISCRETION OF THE TENANT CONSTRUCTION REPRESENTATIVE THIS FILTER REPLACEMENT CAN BE EXTENDED PAST THE 7 DAY LIMIT. ALL UN-USED FILTERS TO REMAIN ON SITE FOR FUTURE USE BY TENANT. NEVER OPERATE THE RTU(S) IN COOLING DURING ANY SANDING OR DEMOLITION OR IF ANY TYPE OF FINE PARTICULATE COULD BE AIR BORNE. ALL RETURN AIR GRILLES OPENING IN RETURN AIR GRILLES OPENING IN RETURN AIR DUCTWORK SHALL BE COVERED WITH CHEESE CLOTH OR A THROW AWAY FILTER (CHEAP CUT TO FIT FILTER ROLL) UNTIL UNITS ARE ADJUSTED BY THE BALANCING

(°F) | EAT (°F) | LAT (°F) | (°F)

96.0/75.0 81.6/68.2 72.0/59.9 88.1/68.9 -1.0/-2.5 37.2/30.8 68.0/52.7

- 15. MICRO-PROCESSOR CONTROLS
- 16. 5 YEAR PARTS AND LABOR COMPRESSOR WARRANTY
- 17. STAINLESS STEEL HEAT EXCHANGER WITH STAGED HEAT
- 18. 10 YEAR PARTS WARRANTY ON HEAT EXCHANGER
- 19. APPROVED ALTERNATES: CARRIER, AAON, YORK/JOHNSON CONTROLS, AND LENNOX

CONTRACTOR. REMOVE THIS CHEESE CLOTH FILTER UPON TESTING BY BALANCE CONTRACTOR.

GREENHECK ECV-40-FM-H

(CFM)

| ENERG | ENERGY RECOVERY VENTILATOR SCHEDULE |     |           |                       |                     |                     |                |                         |        |            |        |                         |        |            |        |         |         |  |
|-------|-------------------------------------|-----|-----------|-----------------------|---------------------|---------------------|----------------|-------------------------|--------|------------|--------|-------------------------|--------|------------|--------|---------|---------|--|
|       |                                     |     |           | FAN DATA              |                     |                     |                | SUMMER PERFORMANCE DATA |        |            |        | WINTER PERFORMANCE DATA |        |            |        |         |         |  |
| TAG   | SERVICE                             | MFR | MODEL No. | SUPPLY AIR SUPPLY ESP | SUPPLY FAN<br>MOTOR | EXHAUST<br>AIR FLOW | EXHAUST<br>ESP | EXHAUST<br>FAN MOTOR    | OA EAT | SUPPLY LAT | RETURN | EXHAUST                 | OA EAT | SUPPLY LAT | RETURN | EXHAUST | VOLTAGE |  |

(IN WC)

(HP)

(CFM)

| ı |
|---|
|   |
|   |
|   |
|   |
|   |

NOTES/ACCESSORIES UL LISTED

ERV-1

- OUTDOOR INSTALLATION
- 3. POLYMER WHEEL WITH SILICA GEL DESICCANT
- 4. HINGED ACCESS PANELS
- 5. DIRECT DRIVE SUPPLY AND EXHAUST FAN
- SINGLE POINT POWER
- NON-FUSED DISCONNECT SWITCH
- 8. ENERGY WHEEL ECONOMIZER CONTROL STOP WHEEL, ENTHALPY BASED (18 BTU/LB)
- 9. ROTATION SENSOR
- ROOF CURB
- 11. MOTORIZED OUTSIDE AIR DAMPER 12. ALTERNATES APPROVED BY ENGINEER

| ELECTR | ELECTRIC UNIT HEATER SCHEDULE |       |           |          |                       |                  |                   |                   |                     |             |                              |                   |
|--------|-------------------------------|-------|-----------|----------|-----------------------|------------------|-------------------|-------------------|---------------------|-------------|------------------------------|-------------------|
|        |                               |       |           |          | ELECTRIC HEATING DATA |                  |                   |                   |                     | CHARACTERIS | STICS                        |                   |
| TAG    | SERVICE                       | MFR   | MODEL No. | MOUNTING | INPUT (W)             | OUTPUT<br>(BTUH) | HEATING<br>STAGES | AIR FLOW<br>(CFM) | VOLTAGE<br>(V-φ-Hz) | UNIT AMPS   | OPERATING<br>WEIGHT<br>(LBS) | NOTES/ACCESSORIES |
| EUH-1  | CORRIDOR                      | QMARK | CWH3150F  | VERTICAL | 1500                  | 5118             | 1                 | 100               | 120-1-60            | 12.5        | 25                           | 1-5               |

(HP)

#### NOTES/ACCESSORIES

- 1. ELECTRIC DISCONNECT
- 2. INTEGRAL THERMOSTAT
- 3. HIGH LIMIT SWITCH 4. WALL RECESSED MOUNTING BRACKET
- 5. MARKEL, BERKO, TRANE ACCEPTABLE ALTERNATE MANUFACTURES

| EXHAUS | ST FAN SCHEDULE |               |            |                  |                |           |       |                     |                              |                   |  |
|--------|-----------------|---------------|------------|------------------|----------------|-----------|-------|---------------------|------------------------------|-------------------|--|
| TAG    | SERVICE         | MFR           | MODEL No.  | AIRFLOW<br>(CFM) | ESP<br>(IN WC) | MOTOR (W) | SONES | VOLTAGE<br>(V-φ-Hz) | OPERATING<br>WEIGHT<br>(LBS) | NOTES/ACCESSORIES |  |
| TF-1   | 108 IT          | GREENHECK     | SP-A390-VG | 200              | 0.3            | 27        | 2.5   | 120-1-60            | 27                           | 1-5               |  |
| EF-1   | 128 ISO         | GREENHECK     | SP-A390-VG | 250              | 0.3            | 38        | 3.0   | 120-1-60            | 27                           | 1-4,6             |  |
| EF-2   | 126A TANK       | SOLER & PALAU | SWF-100    | 100              | 0.25           | 57        |       | 120-1-60            | 28                           | 1-3,7,8           |  |

#### NOTES/ACCESSORIES

- 1. DISCONNECT SWITCH NEMA 1- FACTORY MOUNTED & WIRED
- 2. AMCA SEAL & U.L. LISTED
- 3. FAN SPEED CONTROLLER FACTORY MOUNTED & WIRED
- 4. HANGING VIBRATION ISOLATORS
- 5. LINE VOLTAGE REVERSE ACTING COOLING THERMOSTAT WITH REMOTE TEMP SENSOR WIRED TO STAT FAN ON TEMP. RISE ABOVE 80°F.

#### 6. CONTROLLED BY SWITCH 7. GALVANIZED STEEL WITH BAKED ENAMEL COATING B. GRAVITY BACK DRAFT DAMPER

| AIR DIS | AIR DISTRIBUTION SCHEDULE |          |       |           |                          |              |                  |  |  |  |  |  |
|---------|---------------------------|----------|-------|-----------|--------------------------|--------------|------------------|--|--|--|--|--|
| TAG     | SERVICE                   | MOUNTING | MFR   | MODEL No. | MODULE/<br>DIFFUSER SIZE | FRAME/BORDER | NOTES/ACESSORIES |  |  |  |  |  |
| S1      | SUPPLY                    | CEILING  | TITUS | OMNI      | 24" X 24"                | #3 LAY-IN    | 1,2              |  |  |  |  |  |
| R1      | RETURN                    | CEILING  | TITUS | 350RL     | NECK SIZE +2"            | #3 LAY-IN    | 1,3              |  |  |  |  |  |
| E1      | EXHAUST                   | CEILING  | TITUS | 350RL     | NECK SIZE + 2"           | #3 LAY-IN    | 1,3              |  |  |  |  |  |
| E2      | EXHAUST                   | CEILING  | TITUS | 350RL     | NECK SIZE + 2"           | #3 LAY-IN    | 1,3,4            |  |  |  |  |  |
| T1      | TRANSFER                  | WALL     | TITUS | 350RL     | NECK SIZE + 2"           | #1 SURFACE   | 1                |  |  |  |  |  |
| T2      | TRANSFER                  | CEILING  | TITUS | 350RL     | NECK SIZE +2"            | #3 LAY-IN    | 1,3              |  |  |  |  |  |

#### NOTES/ACCESSORIES

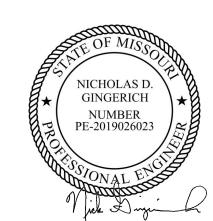
- 1. FINISH WHITE POWDER COAT
- 2. SECTORIZING BAFFLE (SB) AS REQUIRED BY DIRECTIONAL ARROWS ON PLAN, OTHERWISE FOUR (4) WAY BLOW
- 3. SQUARE TO ROUND NECK ADAPTER. REFER TO PLANS FOR NECK SIZE AND DUCT SIZE
- 4. RAPID MOUNT FRAME

## ARCHITECTURE 5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE. © COPYRIGHT 2020, CURRAN ARCHITECTURE

LEE'S SUMMIT ANIMAL

HOSPITAL NORTH

PROJECT INFORMATION

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

**ISSUE DATES** 

PERMIT SET

PERMIT REVIEW COMMENTS

|                     |                       |                                     |           | ZONE DATA                               |                                        |                                           |                                  |                        |                         |             | SYSTE                               | M DATA                           |                                   |
|---------------------|-----------------------|-------------------------------------|-----------|-----------------------------------------|----------------------------------------|-------------------------------------------|----------------------------------|------------------------|-------------------------|-------------|-------------------------------------|----------------------------------|-----------------------------------|
| ZONE NAME           | FLOOR<br>AREA<br>(SF) | REQUIRED<br>OUTSIDE AIR<br>(CFM/SF) | OCCUPANCY | REQUIRED<br>OUTSIDE AIR<br>(CFM/PERSON) | BREATHING ZONE<br>OUTSIDE AIR<br>(CFM) | ZONE AIR<br>DISTRIBUTION<br>EFFECTIVENESS | REQUIRED<br>OUTSIDE AIR<br>(CFM) | SUPPLY<br>AIR<br>(CFM) | OUTDOOR AIR<br>FRACTION | SYSTEM NAME | SYSTEM<br>VENTILATION<br>EFFICIENCY | REQUIRED<br>OUTSIDE AIR<br>(CFM) | DELIVERED<br>OUTSIDE AIR<br>(CFM) |
| 100 WAITING         | 429                   | 0.06                                | 22        | 7.50                                    | 191                                    | 0.8                                       | 239                              | 900                    | 0.266                   |             |                                     |                                  |                                   |
| 101 RECEPTION       | 156                   | 0.06                                | 5         | 5.00                                    | 34                                     | 0.8                                       | 43                               | 250                    | 0.172                   |             |                                     |                                  |                                   |
| 102 HALL            | 110                   | 0.06                                | 0         | 0.00                                    | 7                                      | 0.8                                       | 9                                | 100                    | 0.090                   |             |                                     |                                  |                                   |
| 103 EXAM #1         | 85                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 200                    | 0.145                   |             |                                     |                                  |                                   |
| 104 EXAM #2         | 100                   | 0.18                                | 1         | 7.50                                    | 25.5                                   | 0.8                                       | 32                               | 200                    | 0.160                   |             |                                     |                                  |                                   |
| 105 EXAM #3         | 84                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 150                    | 0.193                   |             |                                     |                                  |                                   |
| 106 HOSP MGR        | 67                    | 0.06                                | 1         | 5.00                                    | 9                                      | 0.8                                       | 12                               | 150                    | 0.080                   | RTU-1       | 0.860                               | 476                              | 1400                              |
| 110 EXAM #4         | 84                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 150                    | 0.193                   |             |                                     |                                  |                                   |
| 111 HALL            | 122                   | 0.06                                | 0         | 0.00                                    | 7                                      | 0.8                                       | 9                                | 50                     | 0.180                   |             |                                     |                                  |                                   |
| 112 EXAM #5         | 83                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 100                    | 0.290                   |             |                                     |                                  |                                   |
| 113 EXAM #6         | 82                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 100                    | 0.290                   |             |                                     |                                  |                                   |
| 114 EXAM #7         | 81                    | 0.18                                | 1         | 7.50                                    | 22.5                                   | 0.8                                       | 29                               | 100                    | 0.290                   |             |                                     |                                  |                                   |
| 109 TOILET          | 60                    | 0.00                                | 0         | 0.00                                    | 0                                      | 0.8                                       | 0                                | 50                     | 0.000                   |             |                                     |                                  |                                   |
| 115 LAB/RX          | 115                   | 0.18                                | 2         | 7.50                                    | 36                                     | 0.8                                       | 45                               | 150                    | 0.300                   |             |                                     |                                  |                                   |
| 116 FOOD PREP       | 274                   | 0.06                                | 2         | 5.00                                    | 26                                     | 0.8                                       | 33                               | 150                    | 0.220                   |             |                                     |                                  |                                   |
| 117 LAUNDRY/STOR    | 97                    | 0.12                                | 0         | 0.00                                    | 12                                     | 0.8                                       | 15                               | 150                    | 0.100                   |             |                                     |                                  |                                   |
| 118 DOGS            | 161                   | 0.18                                | 2         | 7.50                                    | 44                                     | 0.8                                       | 55                               | 150                    | 0.367                   |             |                                     |                                  |                                   |
| 119 XRAT/ULTRASOUND | 109                   | 0.18                                | 2         | 7.50                                    | 35                                     | 0.8                                       | 44                               | 150                    | 0.293                   |             |                                     |                                  |                                   |
| 120 TREATMENT       | 276                   | 0.18                                | 3         | 7.50                                    | 72.5                                   | 0.8                                       | 91                               | 150                    | 0.607                   |             |                                     |                                  |                                   |
| 121 SURGERY         | 230                   | 0.18                                | 3         | 7.50                                    | 63.5                                   | 0.8                                       | 80                               | 400                    | 0.200                   |             |                                     |                                  |                                   |
| 122 DOCTORS         | 100                   | 0.06                                | 1         | 5.00                                    | 11                                     | 0.8                                       | 14                               | 350                    | 0.040                   | RTU-2       | 1.0                                 | 395                              | 1850                              |
| 123 CHARTING        | 97                    | 0.06                                | 1         | 5.00                                    | 11                                     | 0.8                                       | 14                               | 150                    | 0.093                   |             |                                     |                                  |                                   |
| 124 DENTAL          | 164                   | 0.18                                | 2         | 7.50                                    | 45                                     | 0.8                                       | 57                               | 150                    | 0.380                   |             |                                     |                                  |                                   |
| 125 BREAK           | 170                   | 0.06                                | 1         | 5.00                                    | 15                                     | 0.8                                       | 19                               | 350                    | 0.054                   |             |                                     |                                  |                                   |
| 127 HALL            | 87                    | 0.06                                | 0         | 0.00                                    | 5                                      | 0.8                                       | 7                                | 100                    | 0.070                   |             |                                     |                                  |                                   |
| 128 ISO             | 101                   | 0.12                                | 0         | 0.00                                    | 12                                     | 0.8                                       | 15                               | 100                    | 0.150                   |             |                                     |                                  |                                   |
| 129 WATER           | 59                    | 0.12                                | 0         | 0.00                                    | 7                                      | 0.8                                       | 9                                | 100                    | 0.090                   |             |                                     |                                  |                                   |
| 129 TOILET          | 54                    | 0.00                                | 0         | 0.00                                    | 0                                      | 0.8                                       | 0                                | 100                    | 0.000                   | ]           |                                     |                                  |                                   |

AIR BALANCE SCHEDULE

900

250

250

200

200

150

150

50

150

200

100

100

100

600

150

150

150

400

350

400

100

75

150

75

3250

**EQUIPMENT TAG** 

100

102

103

105

106

107

109

110

112

113

114

115,116,120,123

117

118

119

125

126

127

128

129

ERV-1

SUPPLY AIR OUTSIDE RETURN AIR EXHAUST PRESSURE

900

250

50

150

50

150

350

400

200

200

150

50

100

150

100

100

100

600

150

150

400

150

100

75

75

250

2850

TOTAL BUILDING

PRESSURIZATION

0

0 200

0

0

0

-50

-50

0

150

0

0

0

0

0

-250

400

(CFM) | AIR (CFM) | (CFM) | AIR (CFM)

NOTES 1. SPACE OUTSIDE AIR REQUIREMENTS BASED ON IMC 2018

UNIT CHARACTERISTICS

LAT (°F)

(V-φ-Hz)

UNIT MCA | UNIT MOCP | WEIGHT

OPERATING

NOTES/ACCESSORIES

1-12

MECHANICAL SCHEDULES

210095

#### GENERAL PROVISIONS

#### A. GENERAL CONDITIONS, CODES & STANDARDS

- GENERAL CONDITIONS OF THE CONTRACT FOUND IN THE ARCHITECTURAL DRAWINGS, GENERAL AND SPECIAL CONDITIONS OF THE AMERICAN INSTITUTE OF ARCHITECTS (AIA) AND ANY OF THE
- OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE REFER TO THE GENERAL CONDITIONS ON THE ARCHITECTURAL DOCUMENTS AND THE GENERAL AND SPECIAL CONDITIONS OF THE AIA FOR ADDITIONAL REQUIREMENTS REGARDING; SAFETY, COORDINATION & COOPERATION, WORKMANSHIP, PROTECTION, CUTTING AND PATCHING, DAMAGE
- TO OTHER WORK, PRELIMINARY OPERATIONS, STORAGE, ADJUSTMENTS, CLEANING, ETC. 3. ALL WORK SHALL BE IN CONFORMANCE WITH ALL LOCALLY ENFORCED, FEDERAL, STATE AND LOCAL CODES AND ORDINANCES INCLUDING ANY SPECIAL THE OWNER REQUIREMENTS IN
- ADDITION TO THOSE SPECIFIED. 4. CONTRACTOR SHALL PAY FOR AND OBTAIN ALL NECESSARY LICENSES, PERMITS AND INSPECTIONS REQUIRED TO PROCEED WITH THE WORK. THIS SHALL INCLUDE ALL REQUIRED COORDINATION WITH THE LOCAL UTILITY COMPANIES AND THEIR ASSOCIATED FEES OR COSTS.

#### B. SCOPE OF WORK

- 1. THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLING, CONNECTING, AND OPERATION OF ALL EQUIPMENT WHICH IS A PART OF THE MECHANICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND AS REQUIRED BY SIMILAR INSTALLATIONS. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK AND WHICH IS USUALLY INCLUDED IN WORK OF A SIMILAR CHARACTER SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED TO PROVIDE THE OWNER A COMPLETE, CODE APPROVED AND OPERATIONAL MECHANICAL SYSTEM.
- 2. CAREFULLY READ SPECIFICATION FOR ALL PARTS OF THE WORK SO AS TO BECOME FAMILIAR WITH ALL TRADES' WORK SCOPE. CONSULT WITH OTHER TRADES TO INSURE PROPER LOCATIONS AND AVOID INTERFERENCES. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE WORK IS COMMENCED.
- 3. CONTRACTORS SHALL BE HELD TO HAVE EXAMINED THE PREMISES AND SITE SO AS TO COMPARE THEM WITH THE DRAWINGS AND SPECIFICATIONS. NOTE THE EXISTING CONDITIONS AND OTHER WORK THAT WILL BE REQUIRED, AND THE NATURE OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. NO ALLOWANCE SHALL BE MADE TO THE CONTRACTOR BY REASON OF THIS FAILURE TO HAVE MADE SUCH EXAMINATION OR OF ANY ERROR ON HIS PART.
- 4. ALL EXISTING UTILITY AND MECHANICAL SERVICES SHALL BE FIELD VERIFIED. CORRECTIONS TO THE DESIGN AND INSTALLATION SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER. 5. PROVIDE ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF HVAC WORK. ALL CORE DRILLING OR CUTTING OF FIRE RATED FLOORS, SHAFTS, AND WALLS SHALL BE FIRESTOPPED PRIOR TO FINISH PATCHING. ALL PENETRATIONS SHALL BE FIRE SEALED TO MATCH THE FIRE RATING OF THE FLOORS, SHAFTS, AND WALLS PENETRATED. THIS CONTRACTOR IS RESPONSIBLE TO COORDINATE OPENINGS IN WALLS AND FLOORS WITH THE GENERAL TRADES CONTRACTOR. THE FINAL LOCATIONS AND SIZES OF ALL DUCT, PIPE AND LOUVER OPENINGS SHALL BE PROVIDED
- BY THIS CONTRACTOR. 6. THIS CONTRACT SHALL ALSO INCLUDE ALL LABOR, MATERIALS AND MISCELLANEOUS EXPENSES REQUIRED FOR ALL REQUIRED MECHANICAL DEMOLITION OF THE EXISTING AREAS BEING
- a. THE DEMOLITION SHALL CONSIST OF THE COMPLETE REMOVAL (PROPERLY DISPOSED OFF SITE UNLESS OTHERWISE NOTED) OF ALL MECHANICAL EQUIPMENT, PIPING, DUCTWORK, MATERIALS, ETC. NOT REQUIRED IN THE FINAL DESIGN AND INSTALLATION OF THE MECHANICAL HVAC SYSTEMS FOR THE NEW RENOVATED AREAS.
- b. ALL UNUSED SERVICES SHALL BE REMOVED BACK TO THEIR RESPECTIVE MAIN AND CAPPED OR IF THE MAIN IS NOT REQUIRED, THE MAIN SHALL BE REMOVED IN IT'S ENTIRETY. c. COORDINATE ALL DEMOLITION WITH THE ARCHITECTURAL DOCUMENTS AND THE ARCHITECT AND THE OWNER'S GENERAL REQUIREMENTS.
- 7. ALL WORK INCLUDING, BUT NOT LIMITED TO PARTS, MATERIAL, EQUIPMENT AND LABOR SHALL BE GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE BY THE ENGINEER AND OWNER. WHERE AN EQUIPMENT MANUFACTURER HAS A WARRANTY THAT EXCEEDS ONE YEAR, THAT WARRANTY PERIOD SHALL APPLY TO THIS PROJECT.

#### C. DOCUMENTS

- 1. THE DRAWINGS ARE DIAGRAMMATIC, ALL WORK SHALL BE PERFORMED AS INDICATED ON THE DRAWINGS UNLESS EXISTING CONDITIONS OR COORDINATION ISSUES REQUIRE CHANGES. THESE CHANGES SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER.
- 2. ANY INCIDENTAL ITEMS OR LABOR, ETC. NOT INCLUDED IN THE SPECIFICATIONS OR THE DRAWINGS BUT REASONABLY IMPLIED AS NECESSARY FOR THE COMPLETE INSTALLATION OF ALL APPARATUS SHALL BE INCLUDED IN BID.
- 3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED EVEN THOUGH NOT MENTIONED IN
- 4. IF ERRORS ARE FOUND IN THE DRAWINGS OR SPECIFICATIONS OR DISCREPANCIES OCCUR BETWEEN THE SAME, OR BETWEEN THE FIGURES ON THE DRAWINGS, AND THE SCALE OF SAME OR BETWEEN THE LARGER AND SMALLER DRAWINGS, OR IN THE DESCRIPTIVE MATTER ON THE DRAWINGS SHALL BE REFERRED TO THE OWNER FOR REVIEW AND FINAL DECISION PRIOR TO THE BID DUE DATE.
- 5. THE BIDDING OF THIS WORK WILL CONTEMPLATE THE USE OF EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED HEREIN. WHERE MORE THAN ONE MANUFACTURER IS MENTIONED ANY ONE MAY BE UTILIZED. SUBSTITUTE MANUFACTURERS MAY BE OFFERED ONLY AS AN ALTERNATE TO THE SPECIFIED EQUIPMENT AND MATERIAL AND MUST BE SUBMITTED AS SPECIFIED IN THE ARCHITECTURAL DOCUMENTS.
- 6. MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THE SYSTEMS CAN BE OF ANY RECOGNIZED MANUFACTURE PROVIDED THESE ITEMS MEET MINIMUM STANDARDS AS SET IN THESE SPECIFICATIONS. REFER TO EACH SECTION FOR ANY SPECIFIC REQUIREMENTS.

#### D. COORDINATION

- 1. CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY EXISTING SERVICES WHICH ARE REQUIRED TO BE MAINTAINED OPERATIONAL AND SHALL EXERCISE EXTRA CAUTION IN THE PERFORMANCE OF ALL WORK TO AVOID DISTURBING SUCH FACILITIES. ALL COSTS FOR REPAIR OF
- DAMAGES TO SUCH SERVICES SHALL BE PAID BY THE CONTRACTOR CAUSING THE DAMAGE. 2. EACH CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR THROUGH THE NEGLECT OF HIS, OR HIS SUB-TRADE'S PERSONNEL. ALL PATCHING, REPAIRING, REPLACEMENT AND PAINTING, ETC. SHALL BE DONE AS DIRECTED BY THE OWNER BY THE CRAFTSMEN OF THE TRADES INVOLVED. THE COSTS OF SUCH WORK SHALL BE PAID BY THE CONTRACTOR CAUSING THE DAMAGE.

#### E. METHODS

- 1. EQUIPMENT, PIPING, DUCTWORK, ETC. SHALL NOT BE SUPPORTED FROM ANY CEILINGS, OTHER PIPING, CONDUIT OR DUCTWORK, ROOF DECK, OR JOIST BRIDGING. ITEMS SHALL BE SUPPORTED FROM ACCEPTABLE STRUCTURAL BUILDING COMPONENTS AS DETERMINED BY THE ARCHITECT AND STRUCTURAL ENGINEER.
- 2. ALL ROOF PENETRATIONS, FLASHINGS AND COUNTER FLASHINGS SHALL BE PERFORMED BY THE OWNER'S ROOFING CONTRACTOR AT THE REQUESTING CONTRACTOR'S COST.

#### F. SUBMITTALS

- 1. SHOP DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT OF ALL EQUIPMENT AND ACCESSORIES PROVIDED FOR THE PROJECT WHETHER SPECIFIED HERE-IN OR ON THE DRAWINGS. REVIEW OF THE SHOP DRAWINGS SHALL BE FOR GENERAL DESIGN CONCEPT AND ADHERENCE WITH THE SPECIFICATIONS. QUANTITY OF SHOP DRAWINGS SUBMITTED SHALL BE AS SPECIFIED BY THE ARCHITECT. SHOP DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR SHOWING LOCATIONS AND MEASUREMENTS FROM COLUMNS OF ALL CONCEALED AND EXPOSED PIPING, DUCTWORK, CONDUIT, EQUIPMENT, ACCESSORIES, ETC., AND SUBMITTED PRIOR TO INSTALLATION. THE OWNER MAY MAKE REPRODUCIBLE COPIES OF THEIR DRAWINGS AVAILABLE FOR USE IN PREPARATION OF SHOP DRAWINGS, HOWEVER THE OWNER SHALL NOT BE HELD RESPONSIBLE FOR NOT CONFIRMING ALL INFORMATION ON THE DRAWINGS PRIOR TO FABRICATION AND/OR
- INSTALLATION. 2. PROJECT RECORD DOCUMENTS - MAINTAIN AT THE JOBSITE ONE COPY OF ALL CONTRACT DOCUMENTS CLEARLY MARKED AS "PROJECT RECORD COPY". THESE DRAWINGS ARE TO BE MAINTAINED IN GOOD CONDITION, UPDATED DAILY FOR CHANGES ENCOUNTERED AND AVAILABLE AT ALL TIMES FOR INSPECTION BY THE OWNER. DO NOT USE FOR FIELD CONSTRUCTION! PROJECT RECORD DOCUMENTS ARE TO BE KEPT CURRENT WITH EXACT DIMENSIONS OF ALL WORK, EQUIPMENT, PIPING, VALVES, DUCTWORK, ETC. MARK ALL INFORMATION IN RED LINES AND NOTES SO AS TO BE EASILY IDENTIFIED FROM THE BASE DRAWING. UPON COMPLETION OF THE WORK, ONE SET OF THESE DOCUMENTS SHALL BE TURNED OVER TO THE OWNER AS ONE
- QUALIFICATION FOR FINAL PAYMENT. 3. AFTER THE BALANCING AND ACCEPTANCE TESTS ARE COMPLETED AND ACCEPTED BY THE OWNER, THREE COMPLETE SETS OF AS-BUILT DOCUMENTATION SHALL BE PROVIDED. IT SHALL INCLUDE, BUT NOT BE LIMITED TO ACCURATE PLAN DRAWINGS, SYSTEM AND CONTROL SCHEMATICS, SEQUENCE OF OPERATION. WIRING DIAGRAMS AND OPERATION AND MAINTENANCE MANUALS.

#### II. INSULATION

#### A. GENERAL

- 1. INSTALLATION SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS, AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES.
- CLEAN AND DRY SURFACES PRIOR TO INSULATING. 3. EXTEND INSULATION WITHOUT INTERRUPTION THROUGH WALLS, FLOORS, HANGERS AND SIMILAR

PENETRATIONS OF THE VAPOR BARRIER BY STAPLES, HANGERS OR WHERE OTHERWISE DAMAGED.

- PENETRATIONS
- 4. INSULATION JACKET AND FITTING COVER MUST BE PLENUM RATED. 5. IT IS ESSENTIAL THAT THE INTEGRITY OF THE VAPOR-BARRIER BE MAINTAINED. SEAL ALL
- 6. MAINTAIN ACCESS TO BALANCING DAMPERS AND VALVES. 7. INSULATION SHALL BE BY OWENS-CORNING, KNAUF, OR MANVILLE.

#### B. HVAC DUCTWORK

- 1. INTERNALLY INSULATE WITH 1 INCH THICK, 1-1/2# DENSITY ACOUSTICAL INSULATION (AIR SIDE BLACK COATED TO MEET NFPA) ALL DUCTWORK NOTED AS REQUIRING SUCH. INTERNAL INSULATION SHALL BE INSTALLED PER THE REQUIREMENTS OF THE SMACNA GUIDE AND THE MANUFACTURER'S RECOMMENDATIONS. DUCT SIZES NOTED ON DRAWING ARE SHEET METAL DIMENSIONS.
- ALL SUPPLY AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 1-1/2 INCH OF 0.75 LB/CU.FT. FIBERGLASS, FOIL BACKED DUCT WRAPPING AND COMPLY WITH ENERGY CODE REQUIREMENTS. ALL RETURN AIR DUCTWORK SHALL BE WRAPPED WITH 1-1/2 INCH OF 0.75 LB/CU.FT. FIBERGLASS,

#### FOIL BACKED DUCT WRAPPING AND COMPLY WITH ENERGY CODE REQUIREMENTS. III. HVAC

#### A. GENERAL

1. THE PROJECT CONSISTS OF INSTALLLATION OF NEW HVAC EQUIPMENT AND DUCT SYSTEMS. ALL MECHANICAL EQUIPMENT, DUCTWORK, ETC. MUST BE FIELD VERIFIED FOR EXACT LOCATION PRIOR TO INSTALLATION.

- 1. INDOOR CONDENSATE PIPING SHALL BE TYPE "L" COPPER CONDENSATE DRAIN FOR THE INDOOR AIR HANDLING UNIT INSTALLED PER THE MANUFACTURERS REQUIREMENTS AND DETAILS. DRAIN SHALL DISCHARGE INTO AN EXISTING FLOOR DRAIN.
- 2. OUTDOOR CONDENSATE PIPING SHALL BE TYPE "L" COPPER CONDENSATE DRAIN FOR THE ROOFTOP MOUNTED AIR CONDITIONING UNIT, INSTALLED PER THE MANUFACTURERS
- REQUIREMENTS AND DETAILS. DRAIN SHALL DISCHARGE INTO A ROOF DRAIN. REFRIGERATION PIPING SHALL BE COPPER TYPE ACR WITH SILVER BRAZED JOINTS OR INDUSTRY
- STANDARD "LINE SETS" SPECIFICALLY MANUFACTURED FOR THE APPLICATION. ROUTE PIPING THROUGH ROOF WITH PREFABRICATED PIPE CURBS. SEAL ROOF PENETRATIONS WEATHER TIGHT.

#### C. DUCTWORK AND AIR DISTRIBUTION

- 1. DUCTWORK ROUND OR RECTANGULAR OR SPIRAL SHALL BE OF GALVANIZED STEEL CONSTRUCTION AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE" MANUAL AND THE FOLLOWING PRESSURE / SEAL SCHEDULE:
- a. DUCTWORK BETWEEN ROOFTOP UNIT AND ENERGY RECOVERY UNIT 3" W.G. POSITIVE
- PRESSURE, SEAL CLASS A. b. OTHER SUPPLY AIR DUCTWORK - 2" W.G. POSITIVE PRESSURE, SEAL CLASS B.
- c. RETURN DUCTWORK 2" W.G. NEGATIVE PRESSURE, SEAL CLASS B. d. EXHAUST DUCTWORK - 2" W.G. NEGATIVE PRESSURE, SEAL CLASS A.
- 2. ROUND DUCT ELBOWS SHALL BE LONG SWEEP, 1-1/2 TIMES THE CENTERLINE RADIUS UNLESS CLEARANCE IS NOT AVAILABLE AT WHICH TIME MITERED ELBOWS WITH TURNING VANES SHALL BE
- 3. SPIRAL DUCT AND FITTINGS SHALL BE MANUFACTURED FROM G-60 GALVANIZED STEEL MEETING
- ASTM-A924 AND A653 REQUIREMENTS. a. CONSTRUCTION (1) BRANCH CONNECTIONS SHALL BE MADE WITH 90 CONICAL AND 45 STRAIGHT TAPS AS SHOWN ON THE DRAWINGS. BRANCH CONNECTIONS SHALL BE MADE AS A SEPARATE FITTING.
- FACTORY OR FIELD INSTALLATION OF TAPS INTO SPIRAL DUCT SHALL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL OF THE ENGINEER. (2) ELBOWS SHALL BE FABRICATED WITH A CENTERLINE RADIUS OF 1.5 TIMES THE DIAMETER. 90 AND 45 ELBOWS IN DIAMETERS 3 INCH ROUND THROUGH 12 INCH ROUND SHALL BE
- STAMPED OR PLEATED ELBOWS. OTHER ELBOWS SHALL BE OF THE GORED TYPE. CIRCUMFERENTIAL AND LONGITUDINAL SEAMS OF ALL FITTINGS SHALL BE A CONTINUOUS WELD OR SPOT WELDED AND SEALED WITH MASTIC. ALL WELDS SHALL BE PAINTED TO PREVENT CORROSION (3) FIELD JOINTS FOR ROUND DUCTS UP TO AND INCLUDING 36 INCH DIAMETER AND OVAL DUCTS
- UP TO AND INCLUDING 41 INCH MAJOR AXIS SHALL BE MADE WITH A 2 INCH SLIP-FIT OR SLIP COUPLING. 4. RECTANGULAR ELBOWS SHALL BE FURNISHED WITH DOUBLE THICKNESS TURNING VANES.
- TURNING VANES SHALL BE FASTENED WITH A DOUBLE ROW OF SCREWS. 5. FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET OF RTU'S, ERV'S AND CENTRIFUGAL FANS. INSTALL FLEXIBLE CONNECTIONS WITH 3" WIDE DOUBLE NEOPRENE COATED FLAME RETARDANT, NFPA 90A APPROVED, FIBERGLASS FLEXIBLE CONNECTION. FLEXIBLE CONNECTION TO HAVE A
- MINIMUM OF 24 GAGE, 3" WIDE SHEET METAL COLLARS PERMANENTLY ATTACHED TO EACH SIDE. MITERED OFFSETS GREATER THAN 30 DEGREES IN EITHER DIRECTION SHALL NOT BE PERMITTED. CHANGES IN DUCT SIZES SHALL BE MADE BY UNIFORM TAPER SECTION WITH A MAXIMUM INCLUDE ANGLE OF DIVERGENCE OF 15 DEGREES.
- 8. RECTANGULAR BALANCING DAMPERS RUSKIN MD25 SHALL BE SINGLE BLADE UP TO 6" IN HEIGHT AND 36" IN WIDTH, AND RUSKIN MD35 MULTI-BLADE FOR LARGER SIZES. ALL ROUND BALANCING DAMPERS SHALL BE COMMERCIAL GRADE SINGLE BLADE UP TO 16" IN DIAMETER SHALL INCORPORATE LOCKING TYPE INDICATING ADJUSTMENT. BALANCING DAMPERS SHALL BE

INSTALLED IN ALL BRANCH DUCTS OFF MAIN AND ON ALL TAPS OFF DUCTS TO DIFFUSERS UNLESS

- OTHERWISE NOTED ON DRAWINGS. 9. FINAL CONNECTIONS TO DIFFUSERS MAY BE MADE WITH FLEXIBLE AIR DUCTWORK BUT ITS USE IS LIMITED TO STRAIGHT HORIZONTAL OR VERTICAL RUNS. ALL CHANGES OF DIRECTION IN A DUCT SYSTEM (GALVANIZED OR FLEXIBLE) SHALL BE MADE WITH AN APPROPRIATE GALVANIZED ELBOW.
- MAXIMUM LENGTH OF ANY FLEXIBLE AIR DUCT IS 5'-0". 10. FLEXIBLE AIR DUCTS TO DIFFUSERS SHALL BE ATCO RUBBER PRODUCTS, INC. MODEL UPC #070, INSULATED (R=4.2), U.L. 181 RATED AND CLASS 1 AIR CONNECTOR. MAXIMUM LENGTH OF FLEXIBLE AIR DUCT TO DIFFUSER TO BE 5'-0".
- 11. DOUBLE THICKNESS INSULATED ACCESS DOORS SHALL BE PROVIDED AT ALL FIRE DAMPERS FOR ACCESS TO FUSIBLE LINK. DOOR SHALL BE SIZED TO ALLOW FOR EASY SERVICE AND
- ACCESSIBILITY. ACCESS DOORS SHALL BE A MINIMUM OF 24" IN THE LONGEST DIMENSION. 12. PROVIDE 3"x3"x1/4" ANGLE FRAMING AROUND THE ROOF OPENINGS FOR THE SUPPLY AND RETURN AIR DUCTWORK.
- 13. SUPPORT ALL SHEET METAL AND EQUIPMENT FROM ANGLE IRON CONNECTED TO STRUCTURAL STEEL DO NOT SUSPEND DUCT OR FOUIPMENT FROM METAL DECK OR JOIST BRIDGING
- 14. FIRE DAMPERS SHALL BE RUSKIN AND SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTION AND SMACNA REQUIREMENTS FOR A U.L. APPROVED INSTALLATION. FIRE DAMPERS SHALL BE TYPE "B" (BLADES AND FRAME COMPLETELY OUT OF THE AIRSTREAM) FOR ALL WALL ASSEMBLIES AND SHALL BE INSTALLED WITH THE APPROPRIATE WALL SLEEVE AND ANGLES PER UL 555. FIRE DAMPERS SHALL BE INSTALLED IN ALL FIRE RATED WALLS. VERIFY FIRE RATED WALL LOCATIONS AND RATINGS ON THE ARCHITECTURAL DOCUMENTS. FOR ALL FLOOR PENETRATIONS PROVIDE RUSKIN TYPE "LR" FIRE DAMPERS. SEE DETAILS ON DRAWINGS FOR ADDITIONAL INSTALLATION REQUIREMENTS REQUIRED FOR A COMPLETE INSTALLATION.
- a. SEE SCHEDULE ON DRAWINGS

#### IV. HVAC EQUIPMENT

#### A. GENERAL

- 1. INSTALLATION OF ALL EQUIPMENT SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION INFORMATION AND INSTRUCTIONS, REQUIREMENTS AND ANY ADDITIONAL GUIDELINES. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL REQUIRED ACCESSORIES REQUIRED TO COMPLETE THE INSTALLATIONS
- 2. HVAC EQUIPMENT SHALL BE "STARTED UP" BY A FACTORY TRAINED AND AUTHORIZED SERVICE
- 3. ALL FACTORY STARTUP FORMS SHALL BE COMPLETED AND TURNED OVER TO THE OWNER WITH ALL COMPLETED WARRANTY CARDS PRIOR TO FINAL APPROVAL.

#### B. PACKAGE ROOFTOP HEATING AND AIR-CONDITIONING UNITS

- 1. SEE DRAWING FOR INDIVIDUAL UNIT PERFORMANCE REQUIREMENTS. 2. UNIT SHALL BE OF ONE-PIECE PACKAGED CONSTRUCTION COMPLETELY ASSEMBLED, WIRED AND
- 3. WIRING SHALL COMPLY WITH LATEST EDITION OF THE NEC AND SHALL INCORPORATE 3-LEG OVERLOAD PROTECTION FOR THE COMPRESSOR(S).
- 4. UNIT SHALL BE COMPLETE WITH PRESSURE SAFETY CONTROLS, ANTI-SHORT CYCLE PROTECTION AND CONTROLS (WHEN SPECIFICALLY NOTED ON THE DRAWINGS).

#### C. ELECTRIC HEATING EQUIPMENT

- 1. ELECTRIC UNIT HEATERS (EUH) -
- a. SEE DRAWING FOR INDIVIDUAL UNIT PERFORMANCE.

#### VI. CONTROLS

- A. CONTROL WIRING SHALL BE PLENUM RATED CABLE WITH COLOR CODED 18 AWG WIRES (MINIMUM). B. CONTRACTOR SHALL PROVIDE ALL WIRING BETWEEN THERMOSTAT AND EQUIPMENT (AIR HANDLER,
- ROOFTOP UNIT, CONDENSING UNIT, ETC.). C. CONTRACTOR SHALL FURNISH AND INSTALL A 120 VOLT SUPPLY AIR DUCT MOUNTED PHOTOELECTRIC
- SMOKE DETECTOR. DETECTOR SHALL BE WIRED, BY THE ELECTRICAL CONTRACTOR, TO SHUT DOWN UNIT UPON ACTIVATION.
- D. LOCAL CONTROL PANELS SHALL BE PROVIDED FOR ALL RELAYS, TRANSDUCERS, AND OTHER FIELD
- INTERFACE DEVICES. 1. PANELS SHALL BE NEMA TYPE SUITABLE FOR EACH APPLICATION.
- 2. ALL WIRING IN PANEL SHALL BE ROUTED IN WIRING TRAYS. 3. PROVIDE FINAL, AS-BUILT CONTROL DRAWING MOUNTED INSIDE THE PANEL.
- 4. CONTRACTOR SHALL PROVIDE ALL WIRING AND/OR TUBING BETWEEN CONTROL PANEL(S) AND REMOTE CONTROL DEVICES.

#### E. THERMOSTATS

- 1. FURNISH AND INSTALL A HONEYWELL 7 DAY PROGRAMMABLE HEATING/COOLING THERMOSTAT AND CLEAR LOCKABLE COVER WITH APPROPRIATE CONTROL WIRING BETWEEN THERMOSTAT, ROOFTOP AS REQUIRED TO PROVIDE A COMPLETE OPERATING SYSTEM. WIRING SHALL BE
- 2. THERMOSTATS SHALL BE MOUNTED WHERE INDICATED ON THE DOCUMENTS.
- 3. CONTRACTOR SHALL PROGRAM THERMOSTAT PER THE OWNER'S REQUIREMENTS AND TRAIN OWNER'S PERSONNEL IN THE OPERATION AND PROGRAMMING OF THE THERMOSTAT AND SYSTEM.

#### F. TEMPERATURE SENSORS

VII. TESTING AND BALANCING

- 1. FURNISH AND INSTALL THE TEMPERATURE SENSORS WITH APPROPRIATE CONTROL WIRING BETWEEN THERMOSTAT, ROOFTOP AS REQUIRED TO PROVIDE A COMPLETE OPERATING SYSTEM.
- WIRING SHALL BE MINIMUM 18 AWG.

#### 2. TEMPERATURE SENSORS SHALL BE MOUNTED WHERE INDICATED ON THE DOCUMENTS.

- A. TESTING AND BALANCING SHALL NOT BEGIN UNTIL THE SYSTEM HAS BEEN COMPLETED, IS IN FULL WORKING ORDER AND ALL EQUIPMENT START-UP HAS BEEN COMPLETED. ALL HVAC SYSTEMS AND EQUIPMENT SHALL BE PUT INTO FULL OPERATION AND THE OPERATION OF SAME CONTINUED DURING EACH WORKING DAY OF THE TESTING AND BALANCING.
- B. AN INDEPENDENT "AABC" OR "NEBB" CERTIFIED AIR AND WATER BALANCE CONTRACTOR SHALL TEST AND BALANCE THE SYSTEM AND REPORT RESULTS TO THE ENGINEER AND THE OWNER.
- 1. ALL WORK SHALL BE DONE UNDER DIRECT SUPERVISION OF THE CERTIFIED BALANCING ENGINEER AND BY QUALIFIED BALANCING TECHNICIANS.
- 2. METHODS AND FORMS SHALL BE IN ACCORDANCE WITH THE CERTIFICATION AGENCIES
- RECOMMENDATIONS AND REQUIREMENTS. COMPLY WITH ASHRAE RECOMMENDATIONS PERTAINING TO MEASUREMENTS, INSTRUMENTS.
- TESTING, ADJUSTING AND BALANCING.

#### 4. ALL QUANTITIES SHALL BE WITHIN 10% OF THE DESIGN VALUES. 5. CONTRACTOR SHALL PROVIDE ANY SHEAVE CHANGES REQUIRED ON THE HVAC UNIT.

#### C. PERFORMANCE TEST

- 1. AFTER ALL HVAC EQUIPMENT IS INSTALLED, TESTED AND BALANCED AS SPECIFIED HEREIN THEY SHALL BE OPERATED AND PLACED UNDER SURVEILLANCE FOR A PERIOD OF AT LEAST ONE (1) DAY THIS MAY INCLUDE THE DAY OF STARTUP. TO VERIFY THAT ALL EQUIPMENT IS PRODUCING THE REQUIRED CAPACITY. THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPERATION OF
- THE EQUIPMENT DURING THE ENTIRE PERIOD. 2. TEST SHALL BE PERFORMED WITH ALL CONTROLS IN THE AUTOMATIC POSITION AND BUILDING
- LIGHTS, DAMPERS, ETC. POSITIONED TO SIMULATE NORMAL OPERATION OF THE HVAC SYSTEM. DURING THE TEST, CONTROL SETTINGS MAY REQUIRE ADDITIONAL ADJUSTMENTS TO PRODUCE THE BEST BALANCED SYSTEM OPERATION. THEIR FINAL SETTING OF EACH OPERATING AND SAFETY CONTROL SHALL BE RECORDED, THEY SHALL INCLUDE, BUT NOT LIMITED TO,
- THERMOSTATS, LIMIT CONTROLS, AND OTHER SIMILAR ITEMS. 4. SHOULD COMPLETION OF THE INSTALLATION OCCUR AT SUCH TIME THAT THE REQUIRED PERFORMANCE TEST MUST BE CONDUCTED DURING A SEASON WHEN THE FULL OPERATION OF EITHER THE HEATING OR COOLING SYSTEM CAN NOT BE CHECKED, THE CONTRACTOR SHALL PERFORM THE TEST AND RECORD ALL SUCH DATA AS IS AVAILABLE WITH SYSTEM OPERATING AUTOMATICALLY UNDER THE PREVAILING WEATHER CONDITIONS. THAT PART OF THE SYSTEM WHICH CAN NOT BE TESTED SHALL BE DELAYED UNTIL THE WEATHER IS APPROPRIATE, AT WHICH TIME THE REMAINING PART OF THE REQUIRED TESTS SHALL BE CONDUCTED AND DATA RECORDED
- D. ACCEPTANCE AND CHECK-OUT CONTRACTOR SHALL PROVIDE QUALIFIED PERSONNEL, AT NO ADDITIONAL COST TO THE OWNER, AS MAY BE REQUIRED BY THE ENGINEER FOR THE PURPOSE OF VERIFYING PROPER OPERATION AND INSTALLATION OF THEIR WORK AT THE TIME OF REQUEST FOR ACCEPTANCE.

#### VIII. SEQUENCE OF OPERATION

#### A. ROOFTOP UNIT

- 1. WALL MOUNTED THERMOSTAT FURNISHED AS ACCESSORY TO UNIT SHALL SEQUENCE HEATING AND COOLING. PROVIDE WITH SUB-BASE TO MANUALLY SELECT HEATING, COOLING, FAN ON-OFF, AUTO OPERATION.
- 2. UNIT SHALL OPERATE IN OCCUPIED OR UNOCCUPIED MODES BASED UPON TIME CLOCK SEQUENCE AS DETERMINED BY OWNER.
- 3. UNOCCUPIED MODE THE SUPPLY FAN WILL BE OFF, THE OUTDOOR AIR DAMPER WILL GO TO 100%
- CLOSED POSITION AND UNIT WILL CYCLE ON WITH CALL FOR HEATING OR COOLING. 4. OCCUPIED MODE - THE SUPPLY FAN SHALL RUN CONTINUOUSLY, THE OUTDOOR AIR DAMPER WILL OPEN TO THE MINIMUM AIR POSITION AND THE UNIT WILL GO INTO THE HEATING OR COOLING
- MODE, BASED UPON ROOM THERMOSTAT SETPOINT TEMPERATURE. 5. UPON A CALL FOR COOLING, AND THE OUTDOOR AIR TEMPERATURE IS 55 DEGREES F. (ADJUSTABLE) OR COOLER, THE UNIT SHALL GO INTO ECONOMIZER MODE. IF THE OUTDOOR AIR
- TEMPERATURE IS GREATER THAN 55 DEGREES F. (ADJUSTABLE), THE OUTSIDE AIR DAMPER SHALL GO TO MINIMUM POSITION, AND THE COMPRESSORS WILL BE ENERGIZED. 6. UPON A CALL FOR HEATING, THE ELECTRIC HEAT/GAS BURNER SHALL STAGE
- 7. A LOW TEMPERATURE THERMOSTAT WILL DE-ENERGIZE THE SUPPLY FAN AND CLOSE THE OUTSIDE AIR DAMPER IF THE MIXED AIR TEMPERATURE IS SENSED AT 40 DEGREES F OR COLDER. 8. DUCT MOUNTED SMOKE DETECTOR SHALL SHUT DOWN THE UNIT, CLOSE THE OUTSIDE AIR
- DAMPER AND SEND A SIGNAL TO THE FIRE ALARM PANEL WHEN ACTIVATED. BOTH SAFETIES WILL REQUIRE MANUAL RESET, AND WILL ACTIVATE AN ALARM AT THE LOCAL CONTROL PANEL.

#### IX. LABELING

#### A. SUMMARY

SECTION INCLUDES NAMEPLATES, TAGS, STENCILS AND PIPE MARKERS.

#### B. REFERENCES

1. ASME A13.1 (AMERICAN SOCIETY OF MECHANICAL ENGINEERS) - SCHEME FOR THE IDENTIFICATION OF PIPING SYSTEMS.

#### C. NAMEPLATES

1. PRODUCT DESCRIPTION: LAMINATED THREE-LAYER PLASTIC WITH ENGRAVED BLACK LETTERS ON LIGHT CONTRASTING BACKGROUND COLOR.

#### D. TAGS

- METAL TAGS:
- a. BRASS WITH STAMPED LETTERS; TAG SIZE MINIMUM 1-1/2 INCHES DIAMETER.
- 2. INFORMATION TAGS: a. CLEAR PLASTIC WITH PRINTED "DANGER," "CAUTION," OR "WARNING" AND MESSAGE; SIZE 3-1/4 X 5-5/8 INCHES WITH GROMMET AND SELF-LOCKING NYLON TIES.
- 3. TAG CHART: TYPEWRITTEN LETTER SIZE LIST OF APPLIED TAGS AND LOCATION IN ANODIZED ALUMINUM FRAME.

#### E. STENCILS

- 1. STENCILS: WITH CLEAN CUT SYMBOLS AND LETTERS OF FOLLOWING SIZE:
- a. DUCTWORK 1-3/4 INCHES HIGH LETTERS. STENCIL PAINT: SEMI-GLOSS ENAMEL, COLORS AND LETTERING SIZE CONFORMING TO ASME A13.1.

#### F. PIPE MARKERS

- 1. COLOR AND LETTERING: CONFORM TO ASME A13.1
- PLASTIC PIPE MARKERS:
- a. FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PREFORMED TO FIT AROUND PIPE OR PIPE COVERING. LARGER SIZES MAY HAVE MAXIMUM SHEET SIZE WITH SPRING FASTENER.

- 2. CONTRACTOR TO PROVIDE LABELS AT EACH ENTRANCE DOOR TO CHILLER ROOM "DO NOT ENTER ROOM WHEN BEACON IS FLASHING"

1. DESCRIPTION: POLYESTER OR LAMINATED MYLAR, SIZE 1.9 X 0.75 INCHES, ADHESIVE BACKED WITH

#### H. PREPARATION

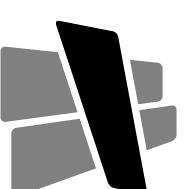
1. DEGREASE AND CLEAN SURFACES TO RECEIVE ADHESIVE FOR IDENTIFICATION MATERIALS.

#### I. INSTALLATION

- INSTALL IDENTIFYING DEVICES AFTER COMPLETION OF COVERINGS AND PAINTING. 2. INSTALL PLASTIC NAMEPLATES WITH CORROSIVE-RESISTANT MECHANICAL FASTENERS, OR ADHESIVE.
- CLEAR LACQUER. FOR UNFINISHED CANVAS COVERING, APPLY PAINT PRIMER BEFORE APPLYING

3. INSTALL LABELS WITH SUFFICIENT ADHESIVE TO ENSURE PERMANENT ADHESION AND SEAL WITH

- 4. INSTALL TAGS USING CORROSION RESISTANT CHAIN. NUMBER TAGS CONSECUTIVELY BY LOCATION 5. IDENTIFY EQUIPMENT WITH PLASTIC NAMEPLATES.
- 6. IDENTIFY CONTROL PANELS AND MAJOR CONTROL COMPONENTS OUTSIDE PANELS WITH PLASTIC NAMEPLATES.
- 7. IDENTIFY VALVES IN MAIN AND BRANCH PIPING WITH TAGS. 8. TAG AUTOMATIC CONTROLS, INSTRUMENTS, AND RELAYS. KEY TO CONTROL SCHEMATIC.
- 9. IDENTIFY PIPING, CONCEALED OR EXPOSED, WITH PLASTIC PIPE MARKERS, PLASTIC TAPE PIPE MARKERS OR STENCILED PAINTING. IDENTIFY SERVICE, FLOW DIRECTION, AND PRESSURE. INSTALL IN CLEAR VIEW AND ALIGN WITH AXIS OF PIPING. LOCATE IDENTIFICATION NOT TO EXCEED 20 FEET ON STRAIGHT RUNS INCLUDING RISERS AND DROPS, ADJACENT TO EACH VALVE AND TEE, AT EACH SIDE OF PENETRATION OF STRUCTURE OR ENCLOSURE, AND AT EACH OBSTRUCTION.

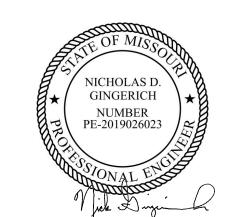


5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED. WHOLE OR IN PART, WITHOUT THE WRITTEN

CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2020, CURRAN ARCHITECTURE

ROJECT INFORMATION LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR

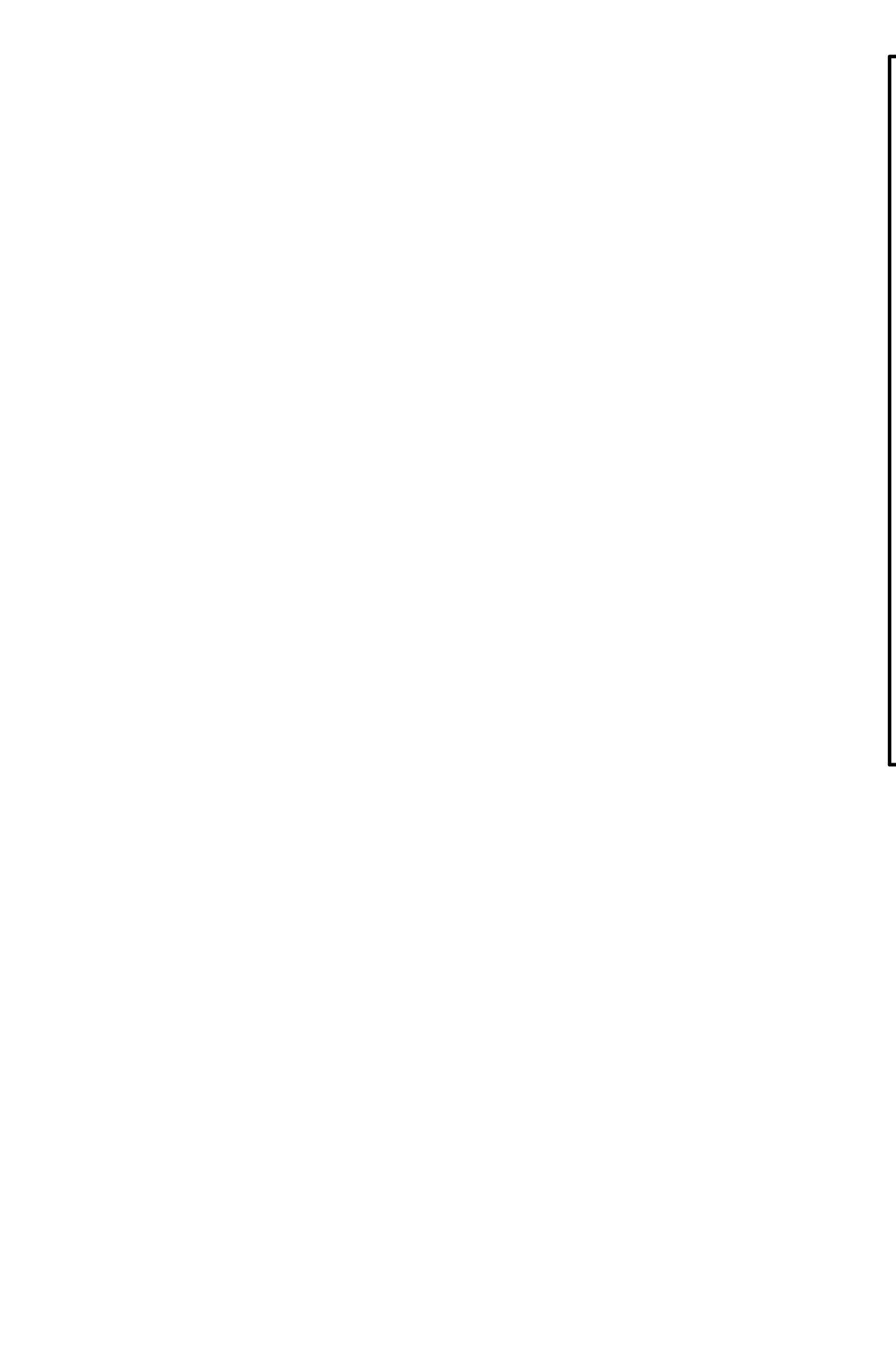
LEE'S SUMMIT, MO

64086

ISSUE DATES PERMIT SET PERMIT REVIEW COMMENTS

04.21.21

**MECHANICAL** 





#### Project Information

Energy Code: 2018 IECC
Project Title: Lee's Summ

Project Title: Lee's Summit Animal Hospital North Location: Lees Summit, Missouri

Climate Zone: 4a
Project Type: Alteration

Construction Site: 810A NW Commerce Dr Lee's Summit, MO 64086 Designer/ TES En

Designer/Contractor: TES Engineering 25760 1st St Cleveland, OH 44145 4408712410

#### Mechanical Systems List

#### Quantity System Type & Description

1 RTU-1 (Single Zone):

Heating: 1 each - Central Furnace, Gas, Capacity = 120 kBtu/h

Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 87 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.20 EER, Required Efficiency: 11.00 EER + 12.6 IEER
Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP method): Passes

Fans: FAN 1 Supply, Constant Volume, 2800 CFM, 1.0 motor nameplate hp, 95.0 fan efficiency grade

Owner/Agent:

1 RTU-2 (Single Zone):

Summit Mechanical Comcheck.cck

Heating: 1 each - Central Furnace, Gas, Capacity = 160 kBtu/h
 Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
 Cooling: 1 each - Single Package DX Unit, Capacity = 89 kBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 11.20 EER, Required Efficiency: 11.00 EER + 12.6 IEER
 Fan System: FAN SYSTEM 2 -- Compliance (Motor nameplate HP method): Passes

Fans:
FAN 2 Supply, Constant Volume, 2750 CFM, 3.0 motor nameplate hp, 95.0 fan efficiency grade

#### **Mechanical Compliance Statement**

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Pratikkumar Navadiya - Mechanical Engineer<br/>Name - TitlePratikkumar Navadiya03/22/21SignatureDate

Project Title: Lee's Summit Animal Hospital North Report date: 03/22/2

Data filename: G:\Curran Architecture\Lee's Summit Animal Hospital\Engineering\Mechanical\ComCheck\Lee's Page 1 of 11



#### COMcheck Software Version 4.1.5.1

Energy Code: 2018 IECC

thergy code: 2016 IECC

Requirements: 100.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COM*check* Requirements.

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

| Section<br>#<br>& Reg.ID     | Plan Review                                                                                                                                                                                                                                                                          | Complies?                                           | Comments/Assumptions     |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------|
| C103.2<br>[PR2] <sup>1</sup> | Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks. | □Complies □Does Not □Not Observable □Not Applicable | Requirement will be met. |

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Data filename: G:\Curran Architecture\Lee's Summit Animal Hospital\Engineering\Mechanical\ComCheck\Lee's Page 2 of 11

#### Additional Comments/Assumptions:

Project Title: Lee's Summit Animal Hospital North

Summit Mechanical Comcheck.cck



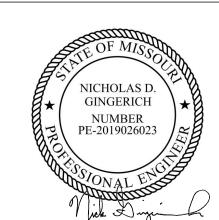
5719 LAWTON LOOP E. DR.

#212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681

F :: 317.288.0753

25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

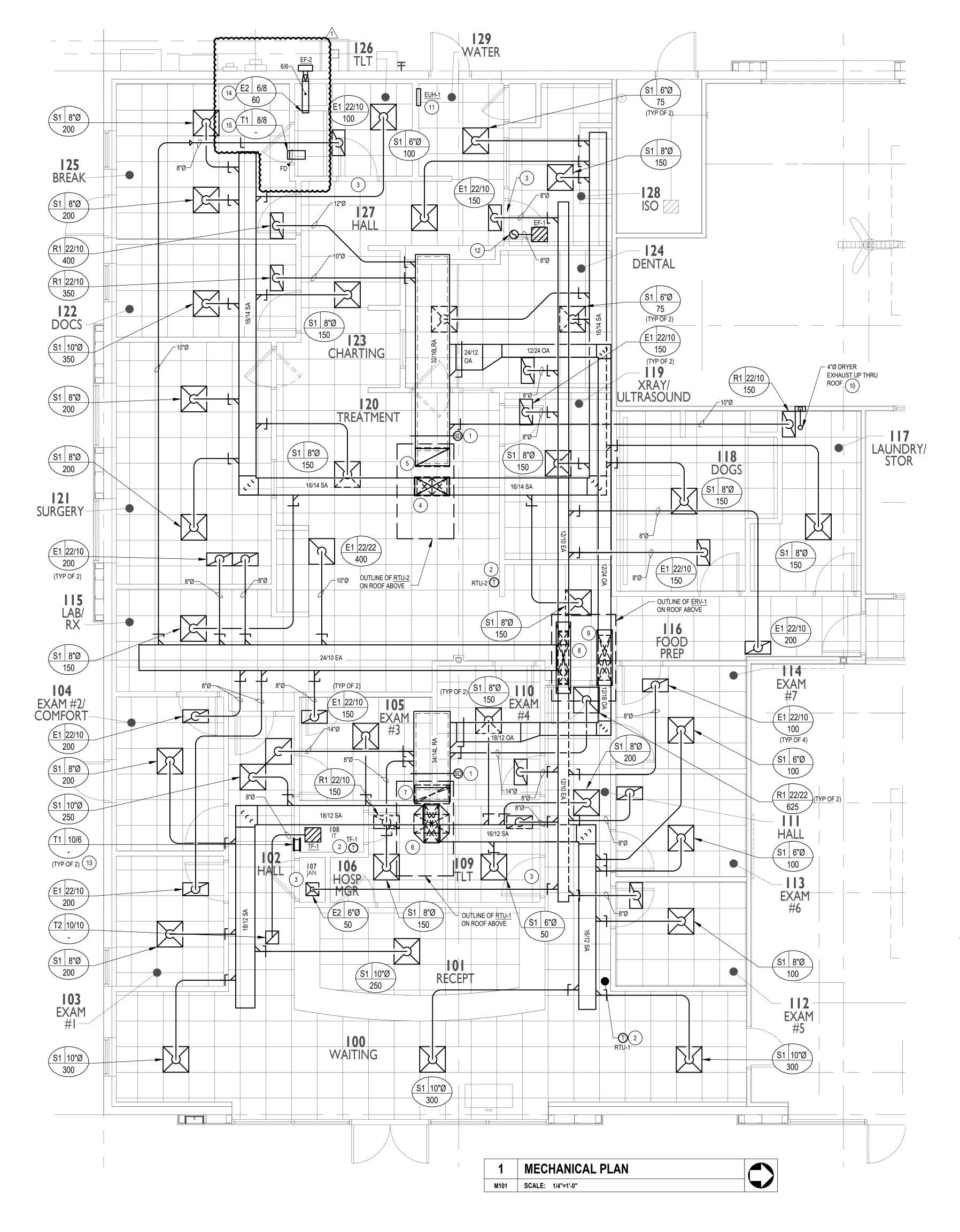
LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

| ISSUE DATES              |         |
|--------------------------|---------|
| PERMIT SET               | 04.01.2 |
| 1 PERMIT REVIEW COMMENTS | 04.21.2 |

210095 MECHANICAL COMPLIANCE

M005



#### GENERAL SHEET NOTES

- 1. EXISTING MECHANICAL INFORMATION IS BASED ON LIMITED EXISTING BUILDING DRAWINGS AND FIELD WORK. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS FOR ACCURACY. CONTRACTOR SHALL NOTIFY OWNER, ARCHITECT AND ENGINEER OF ANY SITUATIONS THAT MODIFY OR INCREASE THE SCOPE OF WORK FROM THAT IS DESCRIBED IN THE DOCUMENTS.
- 3. REFER TO DRAWINGS AND PROJECT SPECIFICATIONS OF OTHER DISCIPLINES FOR ADDITIONAL PROJECT INFORMATION AND REQUIREMENTS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN THE INFORMATION PRESENTED AND FIELD CONDITIONS.
- PRIOR TO ANY ISOLATION OF SYSTEMS, SHUTDOWNS OR DEMOLITION THE CONTRACTOR SHALL PROVIDE NECESSARY INVESTIGATION AND NOTIFY THE FACILITIES ENGINEERING/MAINTENANCE PERSONNEL OF WORK TO BE PERFORMED SO AS TO AVOID ANY DETRIMENTAL SHUTDOWN OF SYSTEMS TO ADJACENT SPACES.
- 8. MECHANICAL SYSTEMS INSTALLATION MUST MAINTAIN INTEGRITY OF WALLS, PARTITIONS AND FLOORS DESIGNATED AS EITHER FIRE RATED OR "SMOKE TIGHT". SEAL AROUND ALL PENETRATIONS THROUGH RATED OR SMOKE TIGHT ASSEMBLIES. COORDINATE W/ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
- 9. LIMITED ABOVE CEILING CLEARANCES EXIST. COORDINATE LOCATION AND ELEVATION OF MECHANICAL WORK WITH ALL DUCTWORK, SPRINKLERS, LIGHT FIXTURES, AND OTHER CEILING BUILT-IN FIXTURES. CONTACT ENGINEER OR ARCHITECT IMMEDIATELY SHOULD ANY CONFLICT ARISE.
- 10. ALL ROOF PENETRATIONS, PATCHING AND FLASHING SHALL BE PERFORMED BY A LANDLORD APPROVED ROOFING CONTRACTOR AT THIS CONTRACTOR'S EXPENSE. COORDINATE ROOF PENETRATIONS AND ROOFTOP EQUIPMENT LOCATIONS WITH LANDLORD AND GENERAL CONTRACTOR.
- 11. NOTHING IS PERMITTED TO BE ATTACHED TO, SUSPENDED FROM, OR PENETRATE THE ROOF DECK.

  CONTRACTOR MAY ATTACH TO OR SUSPEND FROM THE TOP CHORD OF THE JOIST OR THE STRUCTURAL STEEL WHICH EXISTS ABOVE THE SPACE.
- 12. COORDINATE FINAL ROOFTOP UNIT LOCATIONS WITH LANDLORDS STRUCTURAL ENGINEER. ROOFTOP UNITS AND MAKE-UP AIR UNIT TO BE LOCATED WITHIN STRUCTURAL BAY. PROVIDE 10' CLEARANCE FROM UNIT OUTSIDE AIR INTAKE TO ANY EXHAUST/VENTS ON ROOF.
- 13. GENERAL CONTRACTOR TO LABEL ALL ROOFTOP EQUIPMENT WITH TENANT NAME, SPACE NUMBER AND EQUIPMENT IDENTIFICATION (RTU-1, ETC.), PER MALL SPECIFICATIONS AND STANDARDS.
- 14. REFER TO LANDLORD CRITERIA MANUAL FOR ADDITIONAL STANDARDS AND REQUIREMENTS.
- 15. COORDINATE ALL THERMOSTAT AND SENSOR LOCATIONS WITH FURNITURE LAYOUT AND ARCHITECTURAL PLANS. DEVICES ARE TO BE INSTALLED AND WIRED BY THE HVAC CONTRACTOR, MOUNT PER ADA REQUIREMENTS.
- 16. CHANGES IN DUCT SIZES SHALL BE MADE BY UNIFORM TAPER SECTION WITH A MAXIMUM INCLUDE ANGLE OF DIVERGENCE OF 15 DEGREE.
- 17. DUCT SIZES INDICATED REPRESENT EXTERNAL SHEET METAL DIMENSIONS AND INCLUDE ALLOWANCE FOR INTERNAL INSULATION.
- 18. ALL SUPPLY AND MAKE-UP AIR DUCTWORK NOT EXPOSED SHALL BE EXTERNALLY INSULATED.
- 19. BRANCH DUCTS SERVING DIFFUSERS SHALL BE SIZED TO MATCH DIFFUSER NECK SIZE INDICATED UNLESS NOTED OTHERWISE.
- 20. PITCH POCKETS ARE NOT PERMITTED ON THE ROOF FOR CONDENSATE DRAINS, POWER OR CONTROL WIRING. ALL CONNECTIONS ARE TO BE MADE INSIDE THE EQUIPMENT CURB OR THROUGH PRE-MANUFACTURED PIPING CURB.
- 21. CONTRACTOR MUST REPLACE ALL AIR FILTERS IN ROOFTOP UNITS WITH NEW CLEAN FILTERS BEFORE AIR BALANCING AND PRIOR TO FINAL TURNOVER TO TENANT.

#### SHEET KEYNOTES

- 1 SMOKE DETECTOR PROVIDE IN RETURN DUCT, FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, MOUNTED BY MECHANICAL CONTRACTOR. COORDINATE REQUIRED LENGTH OF SAMPLING TUBE WITH FLECTRICAL CONTRACTOR
- THERMOSTAT MOUNTED ON WALL AT 48" AFF TO BOTTOM. COORDINATE EXACT LOCATION WITH FURNITURE LAYOUT AND ARCHITECTURAL PLANS. THERMOSTAT SHALL BE WIRED TO CONTROL INTERFACE ON ASSOCIATED ROOF TOP UNIT.
- 3 COORDINATE WITH G.C. TO PROVIDE 1" DOOR UNDERCUT FOR TRANSFER AIR.
- 4 34/16L SA DOWN FROM UNIT. SPLIT INTO TWO(2) 16/14 DUCT. TRANSITION TO FULL SIZE OF UNIT SUPPLY AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 5 32/16L RA UP TO UNIT. TRANSITION TO FULL SIZE OF UNIT RETURN AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 6 36/14L SA DOWN FROM UNIT. SPLIT INTO ONE(1) 18/12 AND ONE(1) 16/12 DUCT. TRANSITION TO FULL SIZE OF UNIT SUPPLY AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 7 34/14L RA UP TO UNIT. TRANSITION TO FULL SIZE OF UNIT RETURN AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 50/12L EA UP TO UNIT. SPLIT INTO TWO(2) 12/10 AND ONE(1) 24/10 DUCT. TRANSITION TO FULL SIZE OF UNIT EXHAUST AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 9 44/14L OUTSIDE AIR SUPPLY DOWN FROM UNIT. SPLIT INTO ONE(1) 24/12 AND ONE(1) 18/12 DUCT. TRANSITION TO FULL SIZE OF UNIT FRESH AIR CONNECTION SIZE IN RISE, WITH FLEX CONNECTION BELOW ROOF DECK. PROVIDE ELBOW WITH TURNING VANES IN TRANSITION TO HORIZONTAL.
- 10 PROVIDE DRYER VENT WALL BOX. TRANSITION FROM DRYER BOX CONNECTION IN WALL AND ROUTE 4"Ø UP THROUGH ROOF. REFER TO TERMINATION DETAIL FOR ADDITIONAL INFORMATION.
- 11 WALL MOUNTED ELECTRIC HEATER 1' AFF FROM BOTTOM OF HEATER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- 12 8" EXHAUST UP THROUGH ROOF TO CURB AND CAP.
- MOUNT TRANSFER GRILLE ON BOTH SIDE OF WALL AS HIGH AS POSSIBLE BELOW CEILING. GRILLE IS TO BE LOCATED IN THE SPACE BETWEEN 2 WALL STUDS WITH TRANSFER DUCT SIZE TO MATCH. FIELD COORDINATE THE EXACT LOCATION OF THE GRILLE AND ENSURE THAT THERE IS TO BE NO HORIZONTAL FRAMING, OR OTHER OBSTRUCTIONS IN THE STUD SPACE.

NW CHIPMAN RD

**KEY PLAN** 

14 MOUNT EXHAUST GRILLE IN WALL APPROXIMATE 1'-0" AFF. PROVIDE FULL SIZE SHEET METAL SLEEVE THROUGH WALL.

MOUNT TRANSFER GRILLE AS HIGH AS POSSIBLE BELOW CEILING.



# CURRAN

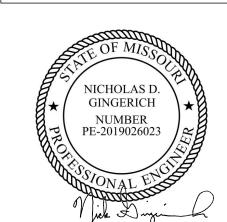
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: PDN CHECKED BY: JRE



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

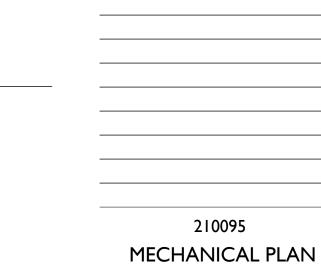
#### LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

ISSUE DATES

04.01.21

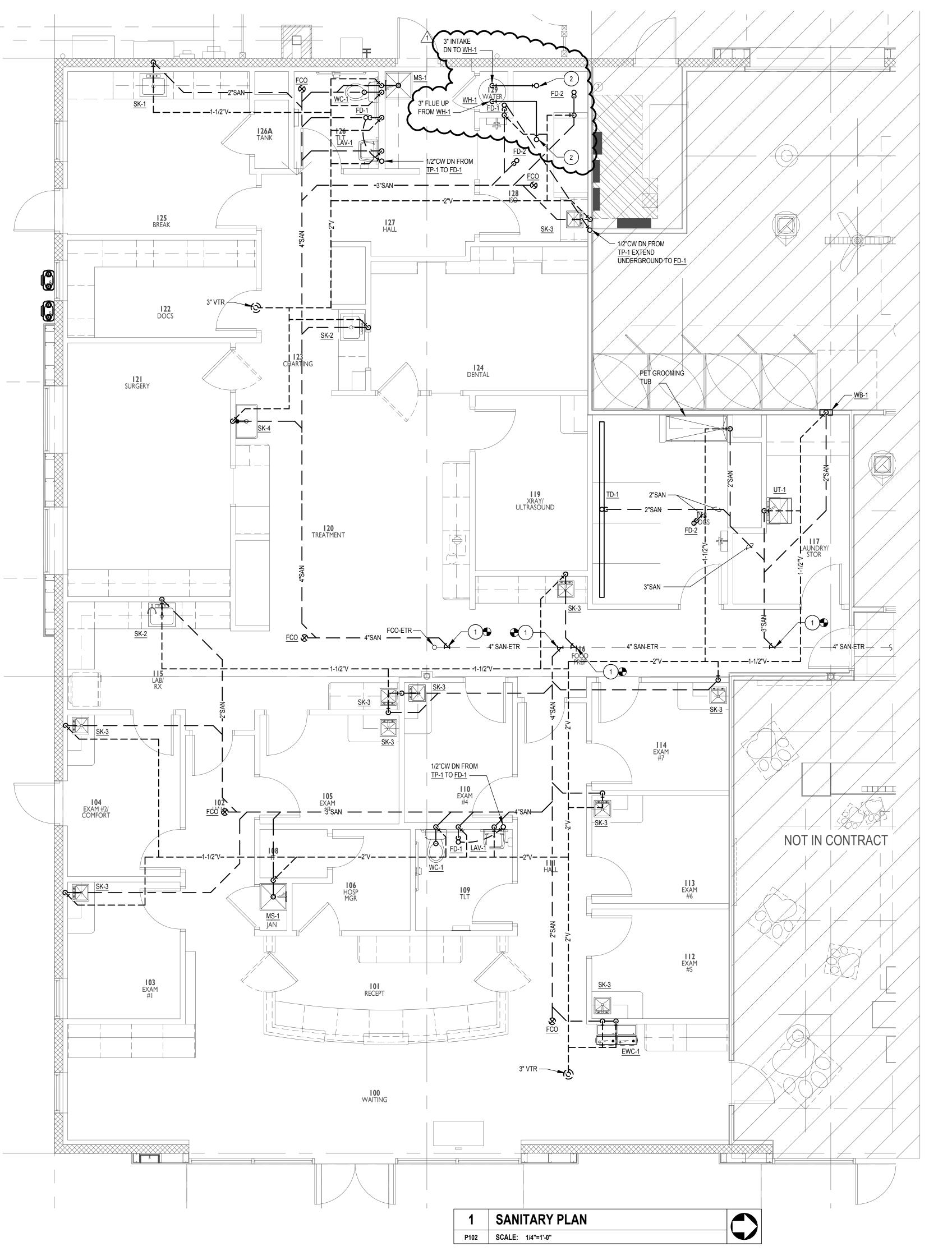
04.21.21



PERMIT SET

PERMIT REVIEW COMMENTS

MIOI

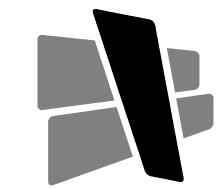


#### GENERAL SHEET NOTES

- 1. EXISTING PLUMBING INFORMATION IS BASED ON LIMITED EXISTING BUILDING DRAWINGS AND FIELD WORK. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS FOR ACCURACY. CONTRACTOR SHALL NOTIFY OWNER, ARCHITECT AND ENGINEER OF ANY SITUATIONS THAT MODIFY OR INCREASE THE SCOPE OF WORK FROM THAT IS DESCRIBED IN THE DOCUMENTS.
- 2. ANYTHING NOT NOTED AS EXISTING IS TO BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
- 3. REFER TO DRAWINGS AND PROJECT SPECIFICATIONS OF OTHER DISCIPLINES FOR ADDITIONAL PROJECT INFORMATION AND REQUIREMENTS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN THE INFORMATION PRESENTED AND FIELD CONDITIONS.
- 4. PRIOR TO ANY ISOLATION OF SYSTEMS, SHUTDOWNS OR DEMOLITION THE CONTRACTOR SHALL PROVIDE NECESSARY INVESTIGATION AND NOTIFY THE FACILITIES ENGINEERING/MAINTENANCE PERSONNEL OF WORK TO BE PERFORMED SO AS TO AVOID ANY DETRIMENTAL SHUTDOWN OF SYSTEMS TO ADJACENT SPACES.
- 5. PROTECT EQUIPMENT, FIXTURES, PIPING, DUCTWORK, ETC. INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY THE ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS.
- WHERE PIPE, DUCTWORK, INSULATION, FIXTURES OR EQUIPMENT TO REMAIN IS DAMAGED OR DISTURBED, REMOVE THE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY AND QUALITY. WHERE IDENTICAL MATERIALS ARE UNAVAILABLE OR CANNOT BE USED, USE MATERIALS WHOSE INSTALLED PERFORMANCE EQUALS OR SURPASSES THAT OF THE EXISTING MATERIALS.
- 7. MAINTAIN AND RESTORE, IF INTERRUPTED BY DEMOLITION OR IN THE PATH OF NEW CONSTRUCTION, ALL UTILITIES PASSING THROUGH AND SERVING OUTSIDE OF DEMOLITION AREA.
- 8. PLUMBING INSTALLATION MUST MAINTAIN INTEGRITY OF WALLS, PARTITIONS AND FLOORS DESIGNATED AS EITHER FIRE RATED OR "SMOKE TIGHT". SEAL AROUND ALL PENETRATIONS THROUGH RATED OR SMOKE TIGHT ASSEMBLIES. COORDINATE WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
- 9. SPACE ABOVE CEILING IS INDICATED TO BE A RETURN AIR PLENUM. CONSTRUCTION MATERIALS ABOVE CEILING SHALL BE NONCOMBUSTIBLE, OR HAVE A MAXIMUM 25 FLAME SPREAD AND 50 SMOKE DEVELOPMENT FINISH RATING. WIRING SHALL BE LABELED PLENUM RATED PER NFPA 70.
- 10. PROVIDE STOP VALVES AT EVERY FIXTURE ON BOTH HOT AND COLD WATER SUPPLY LINES. VALVES, ESCUTCHEONS, FITTINGS, ETC. MUST BE CHROME PLATED. WHERE EXPOSED, CHROME PLATED PIPE IS TO BE USED.
- 11. ALL SANITARY PIPING INSTALLED UNDERGROUND IS TO BE PITCHED @ 1% SLOPE EXCEPT FOR 2" LINES WHICH SHALL BE PITCHED AT 2% SLOPE.
- 12. ALL OVERHEAD PIPING IS TO BE ROUTED TIGHT TO BUILDING STRUCTURE.
- 13. DO NOT ROUTE ANY WATER CONVEYING PIPING OVER ELECTRICAL EQUIPMENT.
- 14. ALL ACCESSIBLE P-TRAPS MUST BE PROVIDED WITH BOTTOM CLEANOUT PLUGS.
- 15. INSULATE EXPOSED P-TRAPS, HOT AND COLD VALVES AND PIPING SERVING HANDICAPPED LAVATORIES.
- 16. NOTHING IS PERMITTED TO BE ATTACHED TO, SUSPENDED FROM, OR PENETRATE THE ROOF DECK. CONTRACTOR MAY ATTACH TO OR SUSPEND FROM THE TOP CHORD OF THE JOIST OR THE STRUCTURAL STEEL WHICH EXISTS ABOVE THE SPACE.
- 17. ALL CONCEALED PIPING SHALL BE TESTED AND PROVEN LEAK PROOF AND FREE FROM DEFECTS PRIOR TO CONCEALMENT.
- 18. ALL FLOOR DRAINS AND CLEANOUTS ARE TO BE INSTALLED FLUSH WITH THE FINISHED FLOOR.

#### SHEET KEYNOTES

- 1 CONNECT SANITARY PIPING TO EXISTING 4" SAN MAIN UNDER SLAB IN THIS AREA. CONTRACTOR TO FIELD VERIFY EXACT SIZE AND LOCATION PRIOR TO COMMENCING WORK.
- 2 EXTEND 3" AIR INTAKE AND 3" FLUE EXHAUST UP THROUGH ROOF SEPARATELY WITH GOOSENECK DOWN. TERMINATE 4 FEET ABOVE FINISHED ROOF LEVEL WITH BIRD SCREEN. ENSURE 4 FEET OF HORIZONTAL SEPARATION BETWEEN INTAKE AND EXHAUST. INTAKE AND FLUE MATERIAL SHALL BE UL 1738 LISTED PVC MANUFACTURED BY IPEX.



# CURRAN

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: JJC CHECKED BY: DLJ



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION

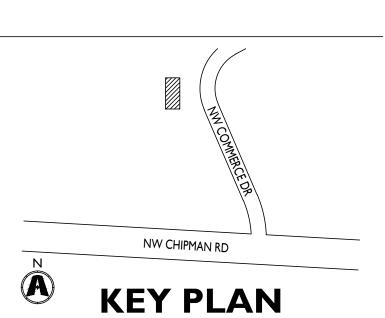


THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

#### LEE'S SUMMIT ANIMAL HOSPITAL NORTH

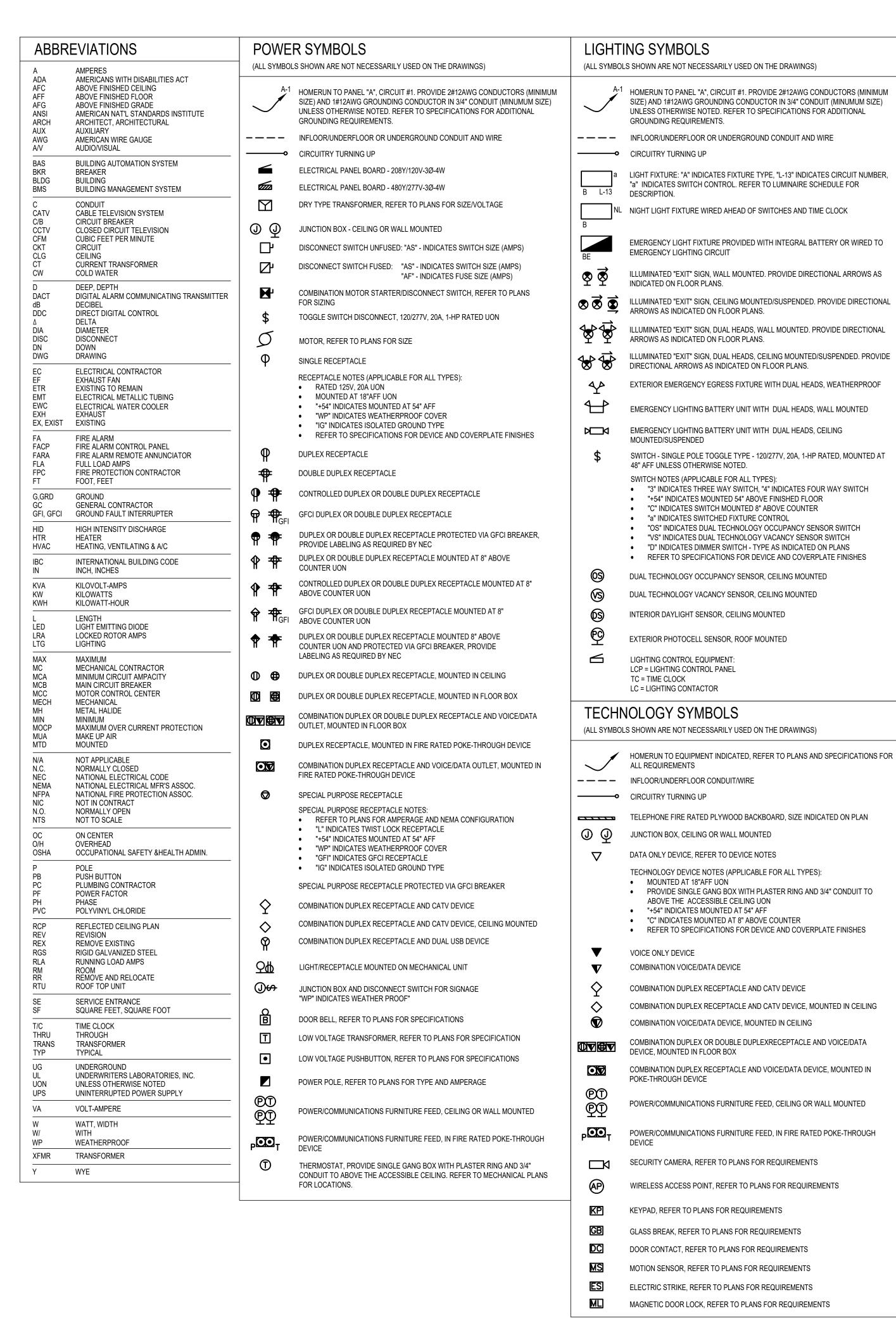
810A NW COMMERCE DR LEE'S SUMMIT, MO 64086



|            | ISSUE DATE     | S        |
|------------|----------------|----------|
| PERMIT SI  | ET             | 04.01.21 |
| 1 PERMIT R | EVIEW COMMENTS | 04.21.21 |
|            |                |          |
|            |                |          |
|            |                |          |
|            |                |          |
|            |                |          |

210095 SANITARY PLAN

**PI02** 



FIRE ALARM SYMBOLS (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS) FIRE ALARM PANEL: FACP = FIRE ALARM CONTROL PANEL FAEP = FIRE ALARM EXTENDER PANEL FAAP = FIRE ALARM ANNUCIATOR PANEL FACU = FIRE ALARM CONTROL UNIT FIRE ALARM MANUAL PULL STATION, MOUNTED AT 48" AFF FIRE ALARM BELL ONLY ALARM SIGNAL, WALL MOUNTED AT 80" AFF FIRE ALARM BELL ONLY ALARM SIGNAL, CEILING MOUNTED/SUSPENDED FIRE ALARM HORN ONLY ALARM SIGNAL, WALL MOUNTED AT 80" AFF

DØ4 FIRE ALARM HORN ONLY ALARM SIGNAL, CEILING MOUNTED/SUSPENDED FIRE ALARM HORN/STROBE ALARM SIGNAL, WALL MOUNTED AT 80" AFF FIRE ALARM HORN/STROBE ALARM SIGNAL, CEILING MOUNTED/SUSPENDED

FIRE ALARM VISUAL ONLY ALARM SIGNAL, WALL MOUNTED AT 80" AFF ⊗ FIRE ALARM VISUAL ONLY ALARM SIGNAL, CEILING MOUNTED/SUSPENDED FIRE ALARM SPEAKER/STROBE ALARM SIGNAL, WALL MOUNTED AT 80" AFF

**⇒**SD>

TS

FS

PHOTOELECTRIC SMOKE DETECTOR, CEILING MOUNTED/SUSPENDED DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTOR WITH SAMPLING TUBE, FURNISHED AND WIRED BY EC, MOUNTED BY MC. EC SHALL PROVIDE REMOTE INDICATOR LIGHT/AUDIBLE ALARM LOCATED IN OCCUPIED SPACE.

FIRE ALARM SPEAKER/STROBE ALARM SIGNAL, CEILING MOUNTED/SUSPENDED

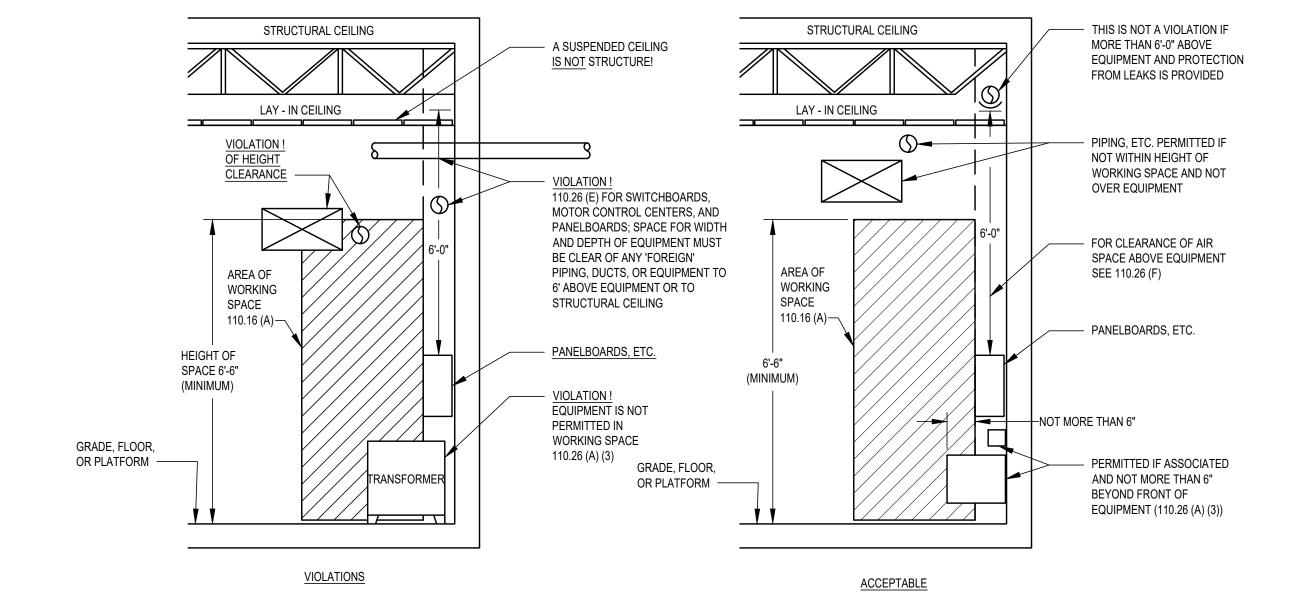
FIXED TEMPERATURE HEAT DETECTOR, CEILING MOUNTED/SUSPENDED CARBON MONOXIDE DETECTOR, CEILING MOUNTED/SUSPENDED

VALVE SUPERVISORY SWITCH WATER FLOW DETECTOR SWITCH FIRE ALARM HORN/STROBE 96" MAXIMUM FIRE ALARM MANUAL PULL STATION -80" MINIMUM —— MISCELLANEOUS -TELEPHONE OUTLET -THERMOSTAT-RECEPTACLE -WALL SWITCH -DATA OUTLET -48" MAXIMUM UNLESS LOCATED ABOVE "OBSTRUCTION" SUCH AS A COUNTER, THEN 42" MAXIMUM -18" MINIMUM —

CEILING

FINISHED FLOOR

TYPICAL MOUNTING HEIGHTS (UON) E001 SCALE: NONE



SUMMARY OF NEC 110.26 CLEARANCE REQUIREMENTS

#### GENERAL ELECTRICAL NOTES

FULLY FUNCTIONAL SYSTEM.

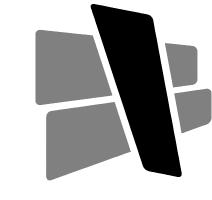
INSTALL ALL EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO WALLS OR STRUCTURAL MEMBERS. CONDUITS SHALL BE RUN SO THAT THE STRUCTURAL SURFACE (INCLUDING ALL RADIUSES AND CONTOURS) AND SHALL BE INSTALLED SUCH THAT THEY DO NOT OBSTRUCT PASSAGEWAYS OR ACCESS TO EQUIPMENT. ALL VISIBLE CONDUITS SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION AND MULTIPLE RACEWAYS SHALL BE INSTALLED AND GROUPED TOGETHER WHERE POSSIBLE. ALL RACEWAYS VISIBLE TO THE PUBLIC SHALL BE APPROVED BY THE ARCHITECT, OWNER, AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN. PROVIDE CLEAR AND LEGIBLE CONDUIT ROUTING PLANS TO THE ARCHITECT AND GENERAL CONTRACTOR FOR REVIEW TWO WEEKS PRIOR TO SCHEDULED WORK.

COORDINATE ALL CEILING MOUNTED DEVICES AND LIGHT FIXTURES AND ALL FLOOR MOUNTED DEVICES AND EQUIPMENT WITH THE STRUCTURAL ENGINEERING PLANS, ARCHITECTURAL PLANS, AND THE GENERAL CONTRACTOR IN THE FIELD

- ENSURE THAT ALL MECHANICAL EQUIPMENT DISCONNECTING MEANS ARE READILY ACCESSIBLE AND PROVIDED WITH NEC REQUIRED CLEARANCES. COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN.

E001 SCALE: NONE

- PRIOR TO ROUGH-IN. ALL ELECTRICAL CONNECTIONS SHALL MEET LOCAL, STATE, AND NATIONAL CODE REQUIREMENTS. PROVIDE FINAL CONNECTION TO ALL ELECTRICALLY POWERED EQUIPMENT UNLESS OTHERWISE NOTED. COORDINATE SCOPE OF WORK WITH GENERAL, MECHANICAL, PLUMBING, FIRE PROTECTION CONTRACTORS. COORDINATE ALL WORK
- BETWEEN TRADES AND FIELD CONDITIONS.
- PROVIDE ALL REQUIRED MISCELLANEOUS SUPPORTS FOR A COMPLETE AND FUNCTIONAL ELECTRICAL INSTALLATION, INCLUDING BUT NOT LIMITED TO: MISCELLANEOUS STEEL, UNI-STRUT, ALL-THREAD, AIRCRAFT CABLE, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- REFER TO THE "MEP" SERIES OF DRAWINGS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS. COORDINATE FINAL SCOPE OF WORK IN THE FIELD. VERIFY ALL EQUIPMENT CHANGES WITH MECHANICAL OR
- PLUMBING CONTRACTOR AND MAKE ADJUSTMENTS AS NECESSARY TO CIRCUIT BREAKERS, FEEDERS, PANEL SCHEDULES, ETC. NOTE ALL CHANGES ON AS-BUILT PLANS
- VERIFY DIRECTION OF DOOR SWING PRIOR TO ROUGH-IN OF ALL LIGHTING CONTROL DEVICES. DEVICES SHALL BE READILY ACCESSIBLE AND NOT LOCATED BEHIND OPEN DOORS, WALL MOUNTED SHELVING, OR OTHER EQUIPMENT. COORDINATE WITH GENERAL CONTRACTOR AND FIELD CONDITIONS.
- REFER TO ARCHITECTURAL CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. IN AREAS WITHOUT CEILINGS, FIXTURES SHALL BE CENTERED, ALIGNED, OR SPACED BETWEEN ARCHITECTURAL OR STRUCTURAL
- ELEMENTS. COORDINATE EXACT LAYOUT IN THE FIELD, VERIFY LOCATIONS WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN. LIGHTING CONTROL VENDOR SHALL PROVIDE FINAL LIGHTING CONTROL DRAWINGS DURING CONSTRUCTION SUBMITTAL PHASE. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL SYSTEM REQUIREMENTS FOR A
- EXIT SIGNS SHALL BE LOCATED SO THAT THEY ARE NOT BLOCKED FROM VIEW BY LIGHT FIXTURES, ARCHITECTURAL ELEMENTS, EQUIPMENT, SHELVING, ETC. EXIT SIGNS AT EGRESS DOORWAYS SHALL BE CENTERED ABOVE DOOR UNLESS
- OTHERWISE NOTED. DIRECTIONAL INDICATORS SHALL BE VERIFIED WITH THE EGRESS PATHWAYS AS INDICATED ON THE LIFE SAFETY PLAN. COORDINATE ALL EXIT SIGN LOCATIONS WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO
- PROVIDE GFCI PROTECTION FOR ALL RECEPTACLES AS REQUIRED PER NEC 210.8. GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE. IN LOCATIONS WHERE THE RECEPTACLE IS NOT READILY ACCESSIBLE, PROVIDE A GFCI CIRCUIT BREAKER FOR PROTECTION. DO NOT INSTALL GFCI RECEPTACLES POWERED FROM GFCI CIRCUIT BREAKERS
- INSTALL ALL LUMINAIRES PER NEC 410.10. ALL WET LOCATION FIXTURES, INCLUDING BUT NOT LIMITED TO: IN-GRADE, EXTERIOR CANOPY, WALL MOUNTED, ETC. SHALL BE PROTECTED FROM WATER PENETRATION. ALL FIXTURES AND
- COMPONENTS SHALL BE LISTED FOR INTENDED USE.
- M. ALL SYSTEMS AND COMPONENTS, INCLUDED BUT NOT LIMITED TO: POWER WIRING, LOW VOLTAGE WIRING, SECURING METHODS, ETC., INSTALLED WITHIN PLENUMS SHALL BE PLENUM RATED.
- CONDUITS SHALL BE INSTALLED 1-1/2" BELOW UNDERSIDE OF ROOF DECK PER NEC 300.4.
- ALL LOW VOLTAGE LIGHTING CONTROL WIRING, INCLUDING BUT NOT LIMITED TO: 0-10V WIRING, DMX WIRING, ETC., SHALL BE PLENUM RATED OR SHALL BE INSTALLED WITHIN CONDUIT. LOW VOLTAGE CONDUCTORS SHALL NOT BE ROUTED WITHIN THE SAME CONDUIT AS POWER CONDUCTORS. CONTROL WIRING SHALL BE INSTALLED AS REQUIRED BY MANUFACTURER AND NEC REQUIREMENTS.
  - ELECTRICAL CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTION REQUIREMENTS WITH LOCAL UTILITY COMPANY UPON COMMENCING WORK. ALL TELEPHONE AND COMMUNICATION CABLING ENTERING THE BUILDING SHALL BE PROTECTED VIA SURGE SUPPRESSION DEVICE. COORDINATE ALL REQUIREMENTS IN FIELD WITH UTILITY COMPANY, INSTALL ALL REQUIRED COMPONENTS.
  - ALL POWER AND CONTROL WIRING FOR FIRE ALARM SYSTEMS, SECURITY SYSTEMS, ETC. (REGARDLESS OF VOLTAGE) SHALL BE INSTALLED WITHIN CONDUIT. COORDINATE ALL REQUIREMENTS WITH ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO ROUGH-IN.

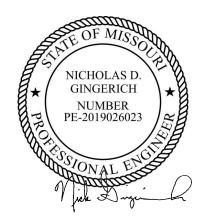


5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317.288.0753



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2020, CURRAN ARCHITECTURE

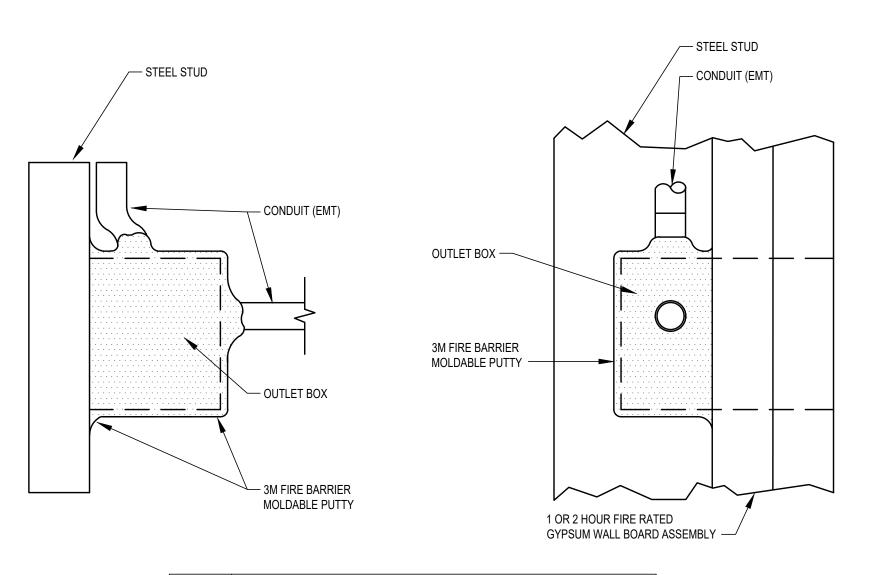
PROIECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

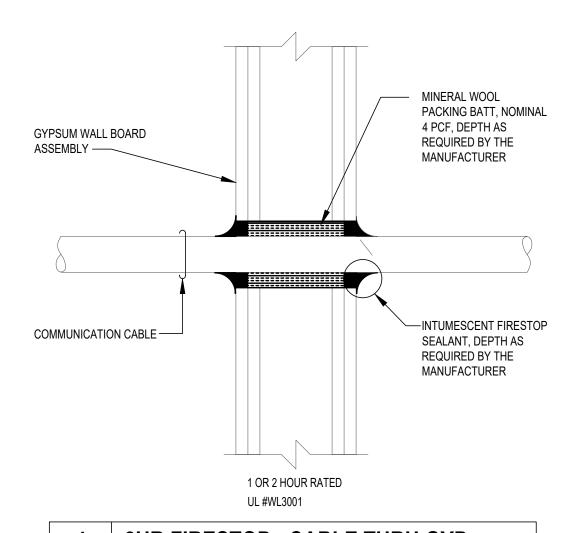
810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

| ISSUE DATES            |         |
|------------------------|---------|
| PERMIT SET             | 04.01.2 |
| PERMIT REVIEW COMMENTS | 04.21.2 |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |
|                        |         |

210095 **ELECTRICAL LEGEND AND** 



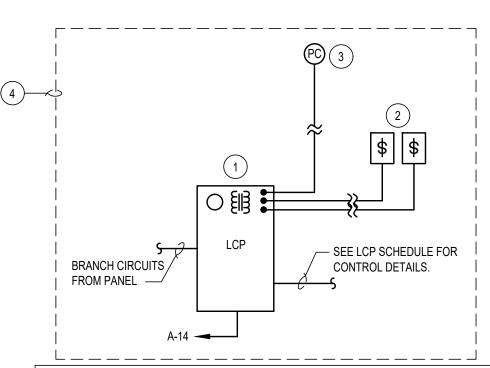
## 3 2HR FIRESTOP - OUTLET BOX IN GYP E002 SCALE: NONE



## 4 2HR FIRESTOP - CABLE THRU GYP

2. REFER TO PLANS FOR FIXTURE COUNTS AND MOUNTING HEIGHTS.

E002 SCALE: NONE



| L   | IGH I I            | NG RE                                                 | LAY PA                                                                                                                                                                                                                                                                                                    | NEL LO                                                                                                                                                                                                                                                                                                                                                                                        | CP SCHEDULE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|--------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RI  | ELAY               | CONTROL                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                               | LOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| NO. | TYPE**             | ZONE                                                  | VAC                                                                                                                                                                                                                                                                                                       | CIRCUIT#                                                                                                                                                                                                                                                                                                                                                                                      | CIRCUIT NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1   | SM                 | ZONE #1                                               | 120                                                                                                                                                                                                                                                                                                       | A-4                                                                                                                                                                                                                                                                                                                                                                                           | LIGHT FIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2   | SM                 | ZONE #1                                               | 120                                                                                                                                                                                                                                                                                                       | A-6                                                                                                                                                                                                                                                                                                                                                                                           | LIGHT FIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3   | DM                 | ZONE #1                                               | 120                                                                                                                                                                                                                                                                                                       | A-60                                                                                                                                                                                                                                                                                                                                                                                          | DENTAL/XRAY RM LTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 4   | DM                 | ZONE #1                                               | 120                                                                                                                                                                                                                                                                                                       | A-66                                                                                                                                                                                                                                                                                                                                                                                          | SURGERY ROOM LIGHTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|     |                    |                                                       |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5   | SM                 | ZONE #2                                               | 120                                                                                                                                                                                                                                                                                                       | A-10                                                                                                                                                                                                                                                                                                                                                                                          | SIGN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6   | SM                 | ZONE #2                                               | 120                                                                                                                                                                                                                                                                                                       | A-12                                                                                                                                                                                                                                                                                                                                                                                          | SHOW WINDOW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7   | SM                 | ZONE #2                                               | 120                                                                                                                                                                                                                                                                                                       | -                                                                                                                                                                                                                                                                                                                                                                                             | SPARE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|     | RI NO. 1 2 3 4 5 6 | RELAY  NO. TYPE**  1 SM  2 SM  3 DM  4 DM  5 SM  6 SM | RELAY         CONTROL           NO.         TYPE**         ZONE           1         SM         ZONE #1           2         SM         ZONE #1           3         DM         ZONE #1           4         DM         ZONE #1           5         SM         ZONE #2           6         SM         ZONE #2 | RELAY         CONTROL           NO.         TYPE**         ZONE         VAC           1         SM         ZONE #1         120           2         SM         ZONE #1         120           3         DM         ZONE #1         120           4         DM         ZONE #1         120           5         SM         ZONE #2         120           6         SM         ZONE #2         120 | RELAY         CONTROL           NO.         TYPE**         ZONE         VAC         CIRCUIT #           1         SM         ZONE #1         120         A-4           2         SM         ZONE #1         120         A-6           3         DM         ZONE #1         120         A-60           4         DM         ZONE #1         120         A-66           5         SM         ZONE #2         120         A-10           6         SM         ZONE #2         120         A-12 |

LIGHTING ZONES NOTE:
LIGHTING ZONES HAVE BEEN ASSIGNED AS FOLLOWS:

HTING ZONES HAVE BEEN ASSIGNED AS FOLLC

8 SM ZONE #2 120 - SPARE

ZONE 1 - INTERIOR LIGHTING\* ZONE 2 - SIGNS\*

VERIFY ZONING AND SCHEDULE WITH OWNER.

\* VERIFY ZONING AND SCHEDULE WITH OWNER.

\*\* VERIFY ZONING AND SCHEDULE WITH OWNER. MINIMUM SCHEDULING IS
PHOTOCELL ON AND PHOTOCELL OFF.

SM = SWITCHING MODULE, DM = DIMMING MODULE. REFER TO DETAIL FOR EQUIPMENT CATALOG INFORMATION.

ALL LIGHTING SHOWN IN AREAS WITH LOCAL OCCUPANCY SENSOR CONTROL TO BE A STAND ALONE SYSTEM NOT ON THIS RELAY PANEL.

ALL OTHER EXISTING EXTERIOR LIGHTS TO BE POWERED AND CONTROLLED VIA

LANDLORD HOUSE PANEL.

#### <u>DETAIL KEYNOTES</u>

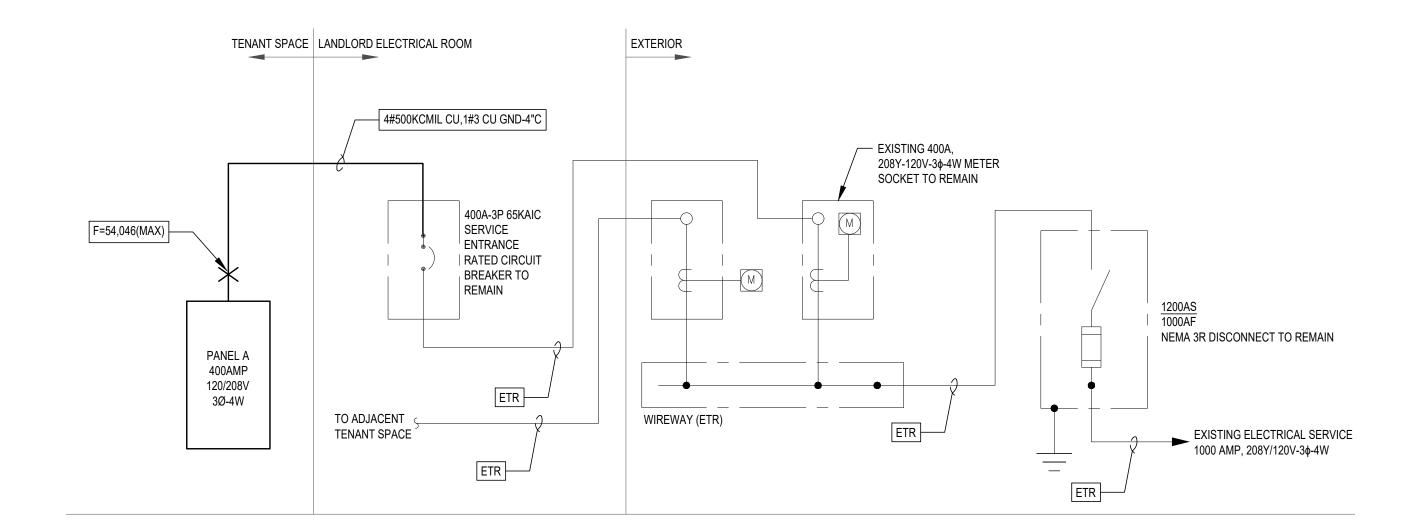
- 1 24-HOUR, 7-DAY TIMECLOCK, HUBBELL CX-08-2-S-08-3L-M.
- 2 PROVIDE (2) MANUAL OVERRIDE SWITCHES, WEATHERPROOF, IN LOCKABLE ENCLOSURE. LABEL SWITCH "INTERIOR LIGHTING OVERRIDE" AND "SIGN OVERRIDE". COORDINATE EXACT SWITCH LOCATION WITH OWNER.
- 3 PHOTOCELL ON AT DUSK, PHOTOCELL OFF AT DAWN AUTOMATICALLY.
- 4 COORDINATE ALL WIRING WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH IN.

CONTRACTOR IS TO HOMERUN 18/4 WIRE BACK TO THE RELAY PANEL FROM EACH OVERRIDE LOCATION.

| 2    | LIGHTING CONTROL DIAGRAM |
|------|--------------------------|
| E002 | SCALE: NONE              |

| TYPE | LAMP | WATTAGE | DESCRIPTION                                                                                                                                                                   | MANUFACTURER         | CATALOG#                                  | VOLT | REMARKS                                                                        |
|------|------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------|------|--------------------------------------------------------------------------------|
| А    | LED  | 29      | 2x2' LED ARCHITECTURAL TROFFER, 80 CRI, 3500K, 3420 LUMENS,<br>GRID LAY IN CEILING, CURVE SHIELDING, 0-10V DIMMING, DAMP<br>LOCATION LISTED                                   | COLUMBIA<br>LIGHTING | LCAT22-35-ML-G-ED-U                       | 120  |                                                                                |
| В    | LED  | 24      | 4' LED UNDERCABINET LIGHT 3500K, 1666 LUMENS, 90 CRI, 120V, INTEGRAL ROCKER SWITCH.                                                                                           | COLUMBIA<br>LIGHTING | CUC4-CS-ED120                             | 120  | COORDINATE MOUNTING HEIGH<br>AND LOCATION WITH ARCHITEC<br>PRIOR TO ROUGH-IN   |
| С    | LED  | 39      | 2x2' LED ARCHITECTURAL TROFFER, 80 CRI, 3500K, 4398 LUMENS, GRID LAY IN CEILING, CURVE SHIELDING, 0-10V DIMMING, DAMP LOCATION LISTED                                         | COLUMBIA<br>LIGHTING | LCAT22-35-VL-G-ED-U                       | 120  |                                                                                |
| D    | LED  | 83      | 2'X2' LED SURGICAL LIGHT, 80CRI, 3500K, 10828 LUMENS,<br>STANDARD 0-10V DIMMING                                                                                               | LEGRAND KENALL       | M4SEDI-22-75L-35K8-DCC-120-<br>2F-2H-ASYM | 120  |                                                                                |
| EM   | LED  | 5.4     | LED THERMOPLASTIC EMERGENCY LIGHT, WHITE HOUSING, 1300 LUMENS, AND SELF DIAGNOSTICS. WALL OR CEILING MOUNTED TO ELECTRICAL OUTLET BOXES. DAMP LOCATION LISTED.                | COMPASS              | CU2HLHOSD                                 | 120  | COORDINATE FINAL MOUNTING HEIGHT AND LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN |
| EXC  | LED  | 4.1     | WHITE THERMOPLASTIC LED EXIT SIGN AND COMBINATION EMERGENCY LIGHT WITH RED LETTERS, UNIVERSAL FACE, CEILING OR WALL MOUNTED, SELF-DIAGNOSTICS, NICAD BATTERY. UNIVERSAL INPUT | COMPASS              | CCRSD                                     | 120  | COORDINATE FINAL MOUNTING HEIGHT AND LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN |
| F    | LED  | 27      | LED ROUND 15" SURFACE MOUNTED DOWNLIGHT 1600 LUMENS, 3500K, WHITE FINISH.                                                                                                     | WAC LIGHTING         | FM-115-3500K-WT                           | 120  |                                                                                |
| G    | LED  | 20      | LED ROUND 13" SURFACE MOUNTED DOWNLIGHT 1600 LUMENS, 3500K, WHITE FINISH.                                                                                                     | WAC LIGHTING         | FM-113-3500K-WT                           | 120  |                                                                                |
| Н    | LED  | 30      | 2X2 EDGE-LIT FLAT PANEL 3500K, 3338 LUMENS, 0-10V DIMMABLE DRIVER DOWN TO 10%                                                                                                 | COLUMBIA<br>LIGHTING | CFP22-33-35                               | 120  |                                                                                |
| K    | LED  | 25      | 2' LED WALL MOUNTED OVER THE COUNTER LIGHT, 80CRI, 3500K,<br>1664 LUMENS, SURFACE MOUNTED, FROSTED LENSE AND FLAT<br>PLASTIC END CAPS, 0-10V DIMMING                          | COLUMBIA<br>LIGHTING | CWM-2-35-ML-SM-FR-FP-ED-U                 | 120  | COORDINATE MOUNTING HEIGH<br>AND LOCATION WITH ARCHITEC<br>PRIOR TO ROUGH-IN   |
| L    | LED  | 47      | 4' LED SURFACE MOUNTED FIXTURE, 3500K, 5449-6763 LUMEN<br>RANGE, RIBBED CLEAR ACRYLIC SHIELDING, 0-10V DIMMING                                                                | COLUMBIA<br>LIGHTING | LXEM-4-35-HL-RA-ED-U                      | 120  | PROVIDE ALL ACCESSORIES FOR A SURFACE MOUNTED INSTALLATION                     |
| М    | LED  | 44      | 2' LED SURFACE MOUNTED FIXTURE, 3500K, 4254-5416 LUMEN<br>RANGE, RIBBED CLEAR ACRYLIC SHIELDING, 0-10V DIMMING                                                                | COLUMBIA<br>LIGHTING | LXEM-2-35-HL-RA-ED-U                      | 120  | PROVIDE ALL ACCESSORIES FOR A SURFACE MOUNTED INSTALLATION                     |

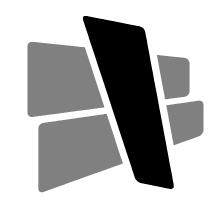
3 COORDINATE DIRECTIONAL ARROW FOR EXIT SIGNS IN FIELD AND WITH ARCHITECT. SEE PLANS FOR MORE INFORMATION ON DIRECTIONAL ARROWS.



## 1 ONE LINE DIAGRAM E002 SCALE: NONE

| PA                   | NEL NA       | ME          | CIRCUIT BREAKER REMARKS                                                            |                     | PANE         | L CHARA | ACTER      | ISTICS     |              | CIRCUIT BREAKER TYPE/ACCESSORY                          | (            | OPTION      | <b>4</b> S |
|----------------------|--------------|-------------|------------------------------------------------------------------------------------|---------------------|--------------|---------|------------|------------|--------------|---------------------------------------------------------|--------------|-------------|------------|
|                      |              |             |                                                                                    | 400                 | 400          |         |            | 400        | <b></b>      |                                                         | М            | OUNTI       | ING        |
|                      | _            |             | CC=CONTROLLED CIRCUIT, EX=EXISTING LOAD TO<br>REMAIN, ML=MODIFIED LOAD ON EXISTING | 400                 | 400          | 20      | 8 /        | 120        | 65K          | A=AFCI, S=SHUNT TRIP, H=HACR G=GFCI,                    |              | FLUSH       |            |
|                      | Α            |             | BREAKER, CL=CIRCUIT WIRED THROUGH CURRENT                                          |                     |              |         | <u>.</u>   |            |              | L= C/B LOCK, HT=HANDLE TIE NB=NEW CIRCUIT               | BUS          | MATE        | FRIAL      |
|                      |              |             | LIMITER                                                                            | BUS                 | MCB          | 3-9     | <b>7</b> . | 4-W        | AIC          | BREAKER, IG=ISOLATED GROUND                             |              | COPPE       |            |
| Ckt                  |              | aker        | LOAD DESCRIPTION                                                                   | Load Type           | Load VA      | Phas    |            | Load VA    | Load Type    | LOAD DESCRIPTION                                        |              | aker        | Ckt No     |
| No 1                 | (Rem<br>20/1 | narks)<br>H | EUH-1                                                                              | Н ,                 | 1,500        | L1 L2   | L3         | 557        | 1            | LIGHT FIXTURES                                          | (Rem<br>20/1 | narks)<br>T | 2          |
| 3                    | 20/1         | - ' '       | RP-1                                                                               | X                   | 276          |         |            | 518        | L            | LIGHT FIXTURES                                          | 20/1         | CC          | 4          |
| 5                    | 20/1         |             | WH-1                                                                               | X                   | 600          |         |            | 942        | <u> </u>     | LIGHT FIXTURES AND EF-1                                 | 20/1         | CC          | 6          |
| 7                    | 20/1         |             | WAITING AREA GENERAL RECEPT                                                        | R                   | 1,080        |         |            | 1,162      | ı            | EXAM ROOM LIGHTS                                        | 20/1         | $\vdash$    | 8          |
| 9                    | 20/1         |             | SCALE                                                                              | R                   | 200          |         |            | 1,102      | L            | SIGN                                                    | 20/1         | CC          | 10         |
| 11                   | 20/1         |             | WAITING COFFEE COUNTER RECEPT                                                      | R                   | 720          |         |            | 360        | -            | SHOW WINDOW                                             | 20/1         | CC          | 12         |
| 13                   | 20/1         |             | WAITING AREA TV                                                                    | R                   | 200          |         |            | 200        | X            | LCP                                                     | 20/1         | L           | 14         |
| 15                   | 20/1         | G           | FWC                                                                                | X                   | 180          |         |            | 540        | R            | DENTAL GENERAL RECEPTACLES                              | 20/1         | ┝┶          | 16         |
| 17                   | 20/1         | G           | RECEPTION WORK STATIONS                                                            | R                   | 540          |         |            | 720        | R            | DENTAL GENERAL RECEPTACLES  DENTAL GENERAL RECEPTACLES  | 20/1         | <del></del> | 18         |
| 19                   | 20/1         |             | RECEPTION COPIER                                                                   | R                   | 360          |         |            | 500        | X            | DENTAL POWER                                            | 20/1         | $\vdash$    | 20         |
| 19<br>21             | 20/1         |             | HVAC RECEPT                                                                        | R                   | 360          |         |            | 500        | X            | DENTAL POWER  DENTAL POWER                              | 20/1         | <del></del> | 22         |
|                      | 20/1         |             | EXAM ROOM #1, #2 AND LAB WORKSTATIONS                                              | R                   | 900          |         |            | 720        | R            | SURGERY GENERAL RECEPTACLES                             | 20/1         | ⊢-          | 1 22       |
| 23<br>25             | 20/1         |             | LAB COUNTER RECEPT                                                                 | R                   | 900<br>540   |         |            | 720<br>540 | R            | SURGERY GENERAL RECEPTACLES SURGERY GENERAL RECEPTACLES | 20/1         | <del></del> | 26         |
|                      | 20/1         | G           | LAB FRIDGE                                                                         | R                   | 180          |         |            | 720        | R            | SURGERY TABLE POWER                                     | 20/1         |             | 28         |
| 27<br>29             | 20/1         | <u> </u>    | TREATMENT AREA/FOOD PREP COUNTER                                                   | R                   | 540          |         |            | 720        | R            | SURGERY TABLE POWER SURGERY TABLE POWER                 | 20/1         | G           | 30         |
|                      |              |             |                                                                                    | R                   | 360          |         |            | 720        | R            |                                                         | 20/1         | <u> </u>    | 32         |
| 31                   | 20/1         |             | CHARTING WORKSTATIONS  DOC ROOM WORKSTATIONS                                       |                     | 720          |         |            | 180        | R            | XRAY RECEPTACLES  XRAY RECEPTACLES                      |              | $\vdash$    | 34         |
| 33<br>35             | 20/1         |             |                                                                                    | R                   | 200          |         |            | 180        | R            |                                                         | 20/1         | —           | 36         |
| 37                   | 20/1         |             | DOC ROOM PRINTER                                                                   | R                   | 200          |         |            | 1.800      |              | XRAY RECEPTACLES  XRAY POWER                            | 20/1         | —           | 38         |
|                      |              | G           | BREAK ROOM FRIDGE BREAK ROOM COUNTER RECEPT                                        | R                   | 360          |         |            | 1,800      | X            | XRAY POWER  XRAY POWER                                  | 20/1<br>20/1 | —           |            |
| 39                   | 20/1         |             |                                                                                    | R                   |              |         |            | ,          | X            |                                                         |              | —           | 40         |
| <del>1</del> 1       | 20/1         |             | MICROWAVE                                                                          | R                   | 1,500<br>500 |         |            | 1,800      | X            | XRAY POWER  XRAY POWER                                  | 20/1         | ₩           | 42         |
| 43<br>45             | 20/1         | G           | DISHWA SHER                                                                        | R                   |              |         |            | 1,800      | X            |                                                         | 20/1         | —           | 44         |
| 15                   | 20/1         |             | BREAK ROOM TV                                                                      | R                   | 200          |         |            | 500        | X            | MEDICAL GAS CONTROL PANELS                              | 20/1         | —           | 46         |
| 47                   | 20/1         | G           | CHEST FREEZER                                                                      | R                   | 500          |         |            |            | X            | SPARE                                                   | 20/1         | —           | 48         |
| <del>1</del> 9       | 20/1         |             | GENERAL RECEPTACLES                                                                | R                   | 540          |         |            | 50         | M            | TF-1                                                    | 20/1         | —           | 50         |
| 51                   | 20/1         |             | FOOD PREP MICROWAVE                                                                | R                   | 1,500        |         |            | 1,176      | M            | FOOD DISPOSAL                                           | 20/1         | —           | 52         |
| 53                   | 20/1         |             | FOOD PREP FRIGE                                                                    | R                   | 500          |         |            | 14,560     | X            | X-RAY                                                   | 150/2        | ⊢—          | 54         |
| 55                   | 20/1         |             | EXAM ROOM #3, #4 & MANGER OFFICE                                                   | R                   | 1,080        |         |            | 14,560     | X            | DECERTAL T. (AND DOLLED                                 | 00/4         | —           | 56         |
| 57                   | 20/1         |             | EXAM ROOM #5, #6 & #7                                                              | R                   | 1,080        |         |            | 540        | R            | RECEPTION TV AND POWER                                  | 20/1         |             | 58         |
| 59                   | 20/1         |             | SERVER                                                                             | R                   | 360          |         |            | 913        | L            | SURGERY/DENTAL/XRAY ROOM LIGHTING                       | 20/1         | CC          | 60         |
| 61                   | 20/1         |             | SERVER                                                                             | R                   | 180          |         |            | 400        | L            | SURGER/DENTAL/TREATMENT LIGHTS                          | 20/1         | —           | 62         |
| 63                   | 50/2         |             | DRYER                                                                              | R                   | 4,000        |         |            | 200        | X            | OXYGEN MANIFOLD CONTROLLER                              | 20/1         | <del></del> | 64         |
| 65                   | 00/4         |             | IAM OLUED                                                                          | R                   | 4,000        |         |            |            |              |                                                         | 2004         |             |            |
| 67                   | 30/1         |             | WASHER                                                                             | X                   | 2,000        |         |            | 57         | M            | FF-2<br>SPARE                                           | 20/1         |             | 68         |
| 69<br>74             | 20/1         |             | LAUNDRY ROOM/DOG RECEPTACLES                                                       | R                   | 720          |         |            |            |              |                                                         | 20/1         |             | 70         |
| 71                   | 20/1         |             | SPARE                                                                              | X                   |              |         |            | 0.000      | X            | SPARE                                                   | 20/1         | <del></del> | 72         |
| 73                   | 20/1         |             | SPARE                                                                              | X                   |              |         |            | 2,089      | M            | ED. / 4                                                 | 20/2         |             | 74         |
| 75                   | 20/1         |             | SPARE                                                                              | X                   |              |         |            | 2,089      | M            | ERV-1                                                   | 20/3         | Н           | 76         |
| 77                   | 20/1         |             | SPARE                                                                              | X                   | 4.700        |         |            | 2,089      | M            |                                                         |              | <del></del> | 78         |
| 79                   | EU/2         | н           | RTU-1                                                                              | M                   | 4,732        |         |            | 5,403      | M            | RTU-2                                                   | 50/3         | н           | 80         |
| 31                   | 50/3         |             | KIU-I                                                                              | M                   | 4,732        |         |            | 5,403      | M            | KIU-Z                                                   | 30/3         | "           | 82         |
| 33                   | MT 2         |             |                                                                                    | M                   | 4,732        |         |            | 5,403      | М            |                                                         |              | Щ_          | 84         |
| INCT [               | NOTES:       |             |                                                                                    |                     |              |         |            | 0          |              | NO SUBSESSION OF D                                      | CI           | BFEED L     | LIGS       |
|                      |              |             |                                                                                    |                     |              |         |            | 0          |              | NO SUBFEED LOAD                                         | 506          | or EED L    | -000       |
| -1.0                 |              | - 1         | Talali labe - 1                                                                    | 7 III II (IZV ( A ) | 0.45         |         |            | 0          | Total Commit | oted Load in IO/A Dhoop A                               |              |             |            |
| _                    | Load         | 4.05        | Total Lighting Load                                                                |                     |              |         |            | 43.11      |              | cted Load in KVA - Phase A                              |              |             |            |
|                      | nd %         | 1.25        | Total Track lighting Loa                                                           |                     | 0.00         |         |            | 29.87      |              | cted Load in KVA - Phase B                              |              |             |            |
|                      | Vindow       |             | Total Receptacle Loa                                                               |                     |              |         |            | 43.90      | 1            | cted Load in KVA - Phase C                              |              |             |            |
|                      | 1 (FT)       |             | Total Show Window Loa                                                              |                     | 0.00         |         |            | 116.88     | l            | cted Load in KVA - All Phases                           |              |             | l          |
| HVAC                 | Load         |             | Total Motor Loa                                                                    |                     | 37.96        |         |            | 324.4      | 1            | cted Load in Amps                                       |              |             |            |
| _                    | nd %         | 1.00        | Total Electric Heat Loa                                                            |                     | 1.50         |         |            | 108.65     | l            | emand Load in KVA - All Phases                          |              |             | l          |
| Dema                 |              |             | T ( 152 )                                                                          | -L IIVII /LO / * \  | 44           |         |            | 2012       | エ-4-14 につこ   |                                                         | 1            |             |            |
| Dema<br>Misc<br>Dema | Load         | 1.00        | Total Misc Loa<br>Kitchen Appliance Loa                                            |                     |              |         |            | 301.6      | Total NEC D  | emand Load in Amps                                      |              |             | ŀ          |

| LOAD DESCRIPTION              | i    |             | KW     | NEC      | KW     |
|-------------------------------|------|-------------|--------|----------|--------|
| LOAD DESCRIPTION              | ı    | (CONNECTED) | DEMAND | (DEMAND) |        |
| Total Lighting Load "L"       | 6.45 | 125%        | 8.07   |          |        |
| Total Track lighting Load "D" | 0    | FT          | 0.00   | NEC      | 0.00   |
| Total Receptacle Load "R"     |      |             | 29.70  | NEC      | 19.85  |
| Total Show Window Load "C"    | 0    | FT          | 0.00   | NEC      | 0.00   |
| Total Motor Load "M"          |      |             | 37.96  | 100%     | 37.96  |
| Total Electric Heat Load "H"  |      |             | 1.50   | 100%     | 1.50   |
| Total Misc Load "X"           |      |             | 41.28  | 100%     | 41.28  |
| Kitchen Appliance Load "K"    |      |             | 0.00   | 65%      | 0.00   |
| FUTURE LOAD                   |      |             | 0.00   | 100%     | 0.00   |
| TOTAL LOAD (KW)               |      |             | 116.88 |          | 108.65 |
| TOTAL LOAD (AMPS)             |      |             | 324.4  |          | 301.6  |



## GUKKAN ARCHITECTURE

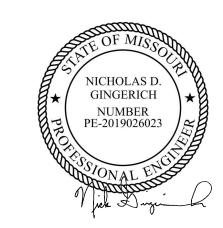
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: RAS CHECKED BY: EJR



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

LEE'S SUMMIT ANIMAL

PROJECT INFORMATION

HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

| l.01. |
|-------|
| 1.21. |
|       |
|       |
|       |
|       |
|       |
|       |
|       |
|       |
|       |
|       |
|       |

210095 ELECTRICAL ONE LINE AND SCHEDULES

**E002** 

#### **ELECTRICAL SPECIFICATIONS**

#### **DIVISION 26 - ELECTRICAL**

#### GENERAL PROVISIONS

#### A. GENERAL CONDITIONS, CODES & STANDARDS

- 1. GENERAL CONDITIONS OF THE CONTRACT FOUND IN THE ARCHITECTURAL DRAWINGS, GENERAL AND SPECIAL CONDITIONS OF THE AMERICAN INSTITUTE OF ARCHITECTS (AIA) AND ANY OF THE OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE.
- REFER TO THE GENERAL CONDITIONS ON THE ARCHITECTURAL DOCUMENTS AND THE GENERAL AND SPECIAL CONDITIONS OF THE AIA FOR ADDITIONAL REQUIREMENTS REGARDING; SAFETY, COORDINATION & COOPERATION, WORKMANSHIP, PROTECTION, CUTTING AND PATCHING, DAMAGE TO OTHER WORK, PRELIMINARY OPERATIONS,
- STORAGE, ADJUSTMENTS, CLEANING, ETC. ALL WORK SHALL BE IN CONFORMANCE WITH ALL LOCALLY ENFORCED, FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES INCLUDING ANY SPECIAL THE OWNER
- REQUIREMENTS IN ADDITION TO THOSE SPECIFIED. CONTRACTOR SHALL PAY FOR AND OBTAIN ALL NECESSARY LICENSES, PERMITS AND INSPECTIONS REQUIRED TO PROCEED WITH THE WORK. THIS SHALL INCLUDE ALL REQUIRED COORDINATION WITH THE LOCAL UTILITY COMPANIES AND THEIR ASSOCIATED FEES OR COSTS.
- 5. ALL EQUIPMENT AND MATERIALS USED SHALL BE NEW AND UL LISTED FOR THE APPLICATION, AND SHALL BEAR AN APPROPRIATE UL LABEL

#### B. SCOPE OF WORK

- THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLING, CONNECTING, AND OPERATION OF ALL EQUIPMENT WHICH IS A PART OF THE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND AS REQUIRED BY SIMILAR INSTALLATIONS. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK AND WHICH IS USUALLY INCLUDED IN WORK OF A SIMILAR CHARACTER SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED TO PROVIDE THE OWNER A COMPLETE, CODE APPROVED AND OPERATIONAL ELECTRICAL
- CAREFULLY READ SPECIFICATION FOR ALL PARTS OF THE WORK SO AS TO BECOME FAMILIAR WITH ALL TRADES' WORK SCOPE. CONSULT WITH OTHER TRADES TO INSURE PROPER LOCATIONS AND AVOID INTERFERENCES. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE WORK IS COMMENCED.
- CONTRACTORS SHALL BE HELD TO HAVE EXAMINED THE PREMISES AND SITE SO AS TO COMPARE THEM WITH THE DRAWINGS AND SPECIFICATIONS, NOTE THE EXISTING CONDITIONS AND OTHER WORK THAT WILL BE REQUIRED, AND THE NATURE OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. NO ALLOWANCE SHALL BE MADE TO THE CONTRACTOR BY REASON OF THIS FAILURE TO HAVE MADE SUCH **EXAMINATION OR OF ANY ERROR ON HIS PART**
- ALL EXISTING UTILITY AND ELECTRICAL SERVICES SHALL BE FIELD VERIFIED. CORRECTIONS TO THE DESIGN AND INSTALLATION SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- PROVIDE ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF ELECTRICAL WORK. ALL CORE DRILLING OR CUTTING OF FIRE RATED FLOORS, SHAFTS, AND WALLS SHALL BE FIRESTOPPED PRIOR TO FINISH PATCHING. ALL PENETRATIONS SHALL BE FIRE SEALED TO MATCH THE FIRE RATING OF THE FLOORS, SHAFTS, AND WALLS PENETRATED.
- TEMPORARY ELECTRICAL SERVICE, LIGHTING, AND RELATED WIRING SHALL BE PROVIDED TO OSHA REQUIREMENTS FOR THE USE OF ALL TRADES DURING CONSTRUCTION.
- TEMPERATURE AND INTERLOCK CONTROL COMPONENTS AND ALL RELATED WIRING AND CONDUIT SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- THIS CONTRACT SHALL ALSO INCLUDE ALL LABOR, MATERIALS AND MISCELLANEOUS EXPENSES REQUIRED FOR ALL REQUIRED ELECTRICAL DEMOLITION OF THE EXISTING
  - a. THE DEMOLITION SHALL CONSIST OF THE COMPLETE REMOVAL (PROPERLY DISPOSED OFF SITE UNLESS OTHERWISE NOTED) OF ALL ELECTRICAL EQUIPMENT, WIRING, CONDUIT, MATERIALS, ETC. NOT REQUIRED IN THE FINAL DESIGN AND INSTALLATION OF THE ELECTRICAL SYSTEMS FOR THE NEW RENOVATED AREAS.
  - ALL UNDERGROUND SERVICES NOT BEING REUSED SHALL BE CAPPED BELOW THE FLOOR, WIRING REMOVED, AND FLOOR PENETRATIONS REPAIRED TO MATCH ADJACENT SURFACES.
  - c. ALL ABOVE GROUND CIRCUITS SHALL BE REMOVED BACK TO THE SOURCE UNLESS INDICATED OTHERWISE.
- d. COORDINATE ALL DEMOLITION WITH THE ARCHITECTURAL DOCUMENTS, THE ARCHITECT, AND THE OWNER'S GENERAL REQUIREMENTS. ALL WORK INCLUDING, BUT NOT LIMITED TO PARTS, MATERIAL, EQUIPMENT AND LABOR
- SHALL BE GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE BY THE ENGINEER AND OWNER. WHERE AN EQUIPMENT MANUFACTURER HAS A WARRANTY THAT EXCEEDS ONE YEAR, THAT WARRANTY PERIOD SHALL APPLY TO THIS PROJECT.

#### C. DOCUMENTS

- 1. THE DRAWINGS ARE DIAGRAMMATIC; ALL WORK SHALL BE PERFORMED AS INDICATED ON THE DRAWINGS UNLESS EXISTING CONDITIONS OR COORDINATION ISSUES REQUIRE
- CHANGES. THESE CHANGES SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER. ANY INCIDENTAL ITEMS OR LABOR, ETC. NOT INCLUDED IN THE SPECIFICATIONS OR THE DRAWINGS BUT REASONABLY IMPLIED AS NECESSARY FOR THE COMPLETE INSTALLATION
- OF ALL APPARATUS SHALL BE INCLUDING IN BID. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED EVEN THOUGH NOT
- MENTIONED IN BOTH. IF ERRORS ARE FOUND IN THE DRAWINGS OR SPECIFICATIONS, OR DISCREPANCIES OCCUR BETWEEN THE SAME, OR BETWEEN THE FIGURES ON THE DRAWINGS AND THE SCALE OF SAME, OR BETWEEN THE LARGER AND SMALLER DRAWINGS, OR IN THE DESCRIPTIVE MATTER ON THE DRAWINGS, SUCH ERRORS SHALL BE REFERRED TO THE
- OWNER FOR REVIEW AND FINAL DECISION PRIOR TO THE BID DUE DATE. THE BIDDING OF THIS WORK WILL CONTEMPLATE THE USE OF EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED HEREIN. WHERE MORE THAN ONE MANUFACTURER IS MENTIONED ANY ONE MAY BE UTILIZED. SUBSTITUTE MANUFACTURERS MAY BE OFFERED ONLY AS AN ALTERNATE TO THE SPECIFIED EQUIPMENT AND MATERIAL AND MUST BE SUBMITTED AS SPECIFIED IN THE ARCHITECTURAL DOCUMENTS.
- MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THE SYSTEMS CAN BE OF ANY RECOGNIZED MANUFACTURE PROVIDED THESE ITEMS MEET MINIMUM STANDARDS AS SET IN THESE SPECIFICATIONS. REFER TO EACH SECTION FOR ANY SPECIFIC REQUIREMENTS.

#### D. COORDINATION

- CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY EXISTING SERVICES WHICH ARE REQUIRED TO BE MAINTAINED OPERATIONAL AND SHALL EXERCISE EXTRA CAUTION IN THE PERFORMANCE OF ALL WORK TO AVOID DISTURBING SUCH FACILITIES. ALL COSTS FOR REPAIR OF DAMAGES TO SUCH SERVICES SHALL BE PAID BY THE CONTRACTOR CAUSING THE DAMAGE.
- EACH CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR THROUGH THE NEGLECT OF HIS, OR HIS SUB-TRADE'S PERSONNEL. ALL PATCHING, REPAIRING, REPLACEMENT AND PAINTING, ETC. SHALL BE DONE AS DIRECTED BY THE OWNER BY THE CRAFTSMEN OF THE TRADES INVOLVED. THE COSTS OF SUCH WORK SHALL BE PAID BY THE CONTRACTOR CAUSING THE DAMAGE.
- IT IS ESSENTIAL THAT ALL WORK AT THE PROJECT BE DONE AT SUCH TIME AND IN SUCH MANNER AS NOT TO INTERFERE WITH THE OPERATIONS OF THE SPACE, ADJACENT SPACES, OR FACILITY. A WORK SCHEDULE SHALL BE ARRANGED WITH THE OWNER, INCLUDING PREMIUM TIME WORK TO FACILITATE WORK WITH A MINIMUM OF INTERFERENCE TO THE OWNER'S OPERATIONS.

#### METHODS

- EXCAVATIONS SHALL BE MADE IN OPEN TRENCHES. FLOORS SHALL BE SAW CUT. CONDUIT SHALL BE LAID ON AN APPROPRIATELY GRADED 6" BED OF CLEAN AND DRY SAND. ENGINEERED FILL SHALL BE USED TO BACKFILL TO 6" ABOVE THE CONDUIT. BACKFILL THE REMAINDER OF THE TRENCH UTILIZING THE EXCAVATED MATERIAL IF APPROVED BY THE ARCHITECT OR THE OWNER. IF THE EXCAVATED MATERIALS ARE NOT ACCEPTABLE, ENGINEERED FILL ACCEPTABLE TO THE ARCHITECT SHALL BE UTILIZED TO BACKFILL THE REMAINDER OF THE TRENCH. BACKFILL SHALL BE ACCOMPLISHED IN 9" LIFTS WITH ALL LIFTS COMPACTED TO 95% PROCTOR. PATCH FLOOR TO MATCH EXISTING.
- EQUIPMENT, CONDUIT, ETC. SHALL NOT BE SUPPORTED FROM ANY CEILINGS, OTHER PIPING, OTHER CONDUIT OR DUCTWORK, ROOF DECK, OR JOIST BRIDGING. ITEMS SHALL BE SUPPORTED FROM ACCEPTABLE STRUCTURAL BUILDING COMPONENTS AS DETERMINED BY THE ARCHITECT AND STRUCTURAL ENGINEER.
- ALL ROOF PENETRATIONS. FLASHINGS AND COUNTER FLASHINGS SHALL BE PERFORMED BY THE OWNER'S ROOFING CONTRACTOR AT THE REQUESTING CONTRACTORS COST.

- SHOP DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT OF ALL EQUIPMENT AND ACCESSORIES PROVIDED FOR THE PROJECT WHETHER SPECIFIED HERE-IN OR ON THE DRAWINGS. REVIEW OF THE SHOP DRAWINGS SHALL BE FOR GENERAL DESIGN CONCEPT AND ADHERENCE WITH THE SPECIFICATIONS. QUANTITY OF SHOP DRAWINGS SUBMITTED SHALL BE AS SPECIFIED BY THE ARCHITECT. SHOP DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR SHOWING LOCATIONS AND MEASUREMENTS FROM COLUMNS OF ALL CONCEALED AND EXPOSED PIPING, DUCTWORK, CONDUIT, EQUIPMENT, ACCESSORIES, ETC., AND SUBMITTED PRIOR TO INSTALLATION. THE OWNER MAY MAKE REPRODUCIBLE COPIES OF THEIR DRAWINGS AVAILABLE FOR USE IN PREPARATION OF SHOP DRAWINGS, HOWEVER THE OWNER SHALL NOT BE HELD RESPONSIBLE FOR NOT CONFIRMING ALL INFORMATION ON THE DRAWINGS PRIOR TO FABRICATION AND/OR INSTALLATION.
- PROJECT RECORD DOCUMENTS MAINTAIN AT THE JOBSITE ONE COPY OF ALL CONTRACT DOCUMENTS CLEARLY MARKED AS "PROJECT RECORD COPY". THESE DRAWINGS ARE TO BE MAINTAINED IN GOOD CONDITION, UPDATED DAILY FOR CHANGES ENCOUNTERED AND AVAILABLE AT ALL TIMES FOR INSPECTION BY THE OWNER. DO NOT USE FOR FIELD CONSTRUCTION! PROJECT RECORD DOCUMENTS ARE TO BE KEPT CURRENT WITH EXACT DIMENSIONS OF ALL WORK, EQUIPMENT, DISTRIBUTION CONDUIT, CIRCUITS, ETC. MARK ALL INFORMATION IN RED LINES AND NOTES SO AS TO BE EASILY IDENTIFIED FROM THE BASE DRAWING. UPON COMPLETION OF THE WORK, ONE SET OF THESE DOCUMENTS SHALL BE TURNED OVER TO THE OWNER AS ONE QUALIFICATION FOR FINAL PAYMENT.
- THREE COMPLETE SETS OF AS-BUILT DOCUMENTATION SHALL BE PROVIDED. IT SHALL INCLUDE, BUT NOT BE LIMITED TO ACCURATE PLAN DRAWINGS, WIRING DIAGRAMS AND OPERATION AND MAINTENANCE MANUALS.

#### PRODUCTS

#### A. CONDUIT

- CONDUIT SHALL BE HEAVY WALL RIGID GALVANIZED STEEL WHERE EXPOSED AND SUBJECT TO DAMAGE, 8'-0" AFF AND BELOW, AND IN WET LOCATIONS WHERE INDICATED ON THE DRAWINGS. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC AND SHALL BE CONCRETE ENCASED (3" MINIMUM) WHERE INDICATED ON THE DRAWINGS. A TRANSITION SHALL BE MADE TO HEAVY WALL RIGID GALVANIZED STEEL BEFORE PVC CONDUITS PENETRATE THE FLOOR SLAB. INTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING (EMT). METAL CLAD (MC) CABLE MAY BE USED IF APPROVED BY THE OWNER, AND INSTALLED IN LOCATIONS PERMITTED BY CODE.
- FLEXIBLE METAL CONDUIT SHALL BE USED FROM OUTLET BOX TO INDIVIDUAL RECESSED LIGHT FIXTURES, AND FOR FINAL CONNECTIONS TO MOTORS AND OTHER DEVICES

#### CONDUIT FITTINGS AND BOXES

SUBJECT TO VIBRATION.

- INTERIOR OUTLET BOXES SHALL BE STANDARD GALVANIZED SHEET STEEL TYPE, NOT LESS THAN 14 GAUGE IN THICKNESS, WITH KNOCKOUT OPENINGS, EXTENSIONS, PLASTER RINGS AND COVER PLATES TO ACCOMMODATE THE DEVICES INSTALLED. COVER PLATES SHALL BE SMOOTH PLASTIC TO MATCH DEVICE COLOR. USE STEEL PLATES WITH ROUNDED CORNERS FOR SURFACE BOXES. OUTDOOR (WET LOCATION) OUTLET BOXES SHALL BE CAST ALUMINUM TYPE WITH DEVICE COVERS TO SUIT.
- OUTLET BOXES SHALL NOT BE LESS THAN 4 INCHES SQUARE, 1-1/2 INCHES DEEP COUPLINGS AND CONNECTORS FOR EMT SHALL BE DIE CAST ZINC OR STEEL. BUSHING SHALL BE GROUNDING TYPE WITH INSULATING PLASTIC INSERT.
- FLOOR BOXES SHALL BE FLUSH SERVICE TYPE.. RECTANGULAR CAST METAL CONSTRUCTION GANGABLE ADJUSTABLE WITH BRASS (ALUMINUM) COVER AND TRIM/FLANGE AS REQUIRED. COVER TYPE SHALL BE AS INDICATED ON LEGEND.

#### WIRE AND CABLE

AND SPLICES

- CONDUCTORS FOR POWER AND LIGHTING SHALL BE NEW 600-VOLT, 90°C, TYPE XHHW, THHW, OR THWN INSULATION, MINIMUM SIZE #12-AWG, EXCEPT FOR CONTROL WIRING WHICH MAY BE #14-AWG. OTHER SIZES SHALL BE AS NOTED ON THE DRAWINGS. CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE APPROVED BY THE OWNER.
- BRANCH CIRCUIT RUNS EXCEEDING 100 FEET IN TOTAL LENGTH FROM THE PANELBOARD TO THE LAST DEVICE. SHALL BE #10-AWG CONDUCTORS UNLESS OTHERWISE NOTED. COMPRESSION TYPE LUGS AND CONNECTORS SHALL BE USED FOR ALL TERMINATIONS
- 4. ALL LOW VOLTAGE COMMUNICATIONS, FIRE ALARM, DATA, SECURITY, TELEPHONE AND ALL OTHER MISCELLANEOUS LOW VOLTAGE WIRING INSTALLED IN CEILING SHALL BE PLENUM RATED.

#### D. WIRING DEVICES

- DUPLEX RECEPTACLES SHALL BE GROUNDING TYPE, NEMA 5-20R, RATED FOR 20 AMPS. 125 VOLTS, WITH PROVISIONS FOR BACK AND SIDE WIRING.
- CONTROLLED RECEPTACLES SHALL BE PROVIDED WITH IDENTIFIABLE MARKINGS. SWITCHES SHALL BE TOGGLE OPERATED, QUIET TYPE, RATED FOR 20 AMPS, 120/277
- VOLTS, WITH PROVISIONS FOR BACK AND SIDE WIRING. THREE WAY AND FOUR WAY SWITCHES SHALL BE PROVIDED WHERE INDICATED. DIMMERS SHALL BE LUTRON "NOVA T-STAR" SERIES, OF A RATING, VOLTAGE AND WATTAGE SUITABLE FOR LOAD SERVED.
- COLORS OF DEVICES SHALL BE SELECTED BY ARCHITECT. WIRING DEVICES SHALL BE SPECIFICATION GRADE, AS MANUFACTURED BY HUBBELL,

#### PASS & SEYMOUR, ARROW HART, LEVITON AND GENERAL ELECTRIC.

#### E. LIGHTING AND RECEPTACLE PANELBOARDS

- BRANCH CIRCUIT PANELBOARDS SHALL BE DEAD FRONT TYPE, WITH MAIN LUGS OR MAIN OVERCURRENT DEVICE AS INDICATED, BRANCH OVERCURRENT DEVICES AS NOTED AND AN EQUIPMENT GROUND BAR, ALL IN A SURFACE OR FLUSH MOUNTED SHEET STEEL ENCLOSURE. MINIMUM SHORT CIRCUIT CAPACITY SHALL BE 10,000 AMPS SYMMETRICAL FOR 120/208V UNLESS NOTED OTHERWISE. ELECTRICAL PANELS MOUNTED ON INTERIOR OF BUILDING SHALL BE NEMA 1 TYPE
- UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 3. CIRCUIT BREAKERS SHALL BE BOLT ON TYPE; WITH MOLDED PLASTIC CASE; 1, 2, OR 3 POLE AS INDICATED; QUICK-MAKE, QUICK-BREAK; AND THERMAL-MAGNETIC TRIP DEVICE.
- 4. ALL BREAKERS FEEDING HVAC EQUIPMENT SHALL BE HACR RATED, UNLESS OTHERWISE NOTED. ALL EQUIPMENT RATED 100A OR LESS SHALL HAVE 60 DEGREE C MINIMUM TERMINATIONS. ALL EQUIPMENT RATED OVER 100A SHALL HAVE 75 DEGREE MINIMUM TERMINATIONS.
- INDIVIDUAL SINGLE POLE CIRCUIT BREAKERS, WITH IDENTIFIED TIES, OR 2/3 POLE BREAKERS SHALL BE PROVIDED FOR EACH UNGROUNDED CONDUCTOR IN ALL
- MULTI-WIRE BRANCH CIRCUITS. 7. PANELBOARDS SHALL BE AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, SIEMENS, AND EATON.

#### F. SAFETY SWITCHES AND MOTOR STARTERS

- 1. SAFETY SWITCHES SHALL BE FUSIBLE OR NON-FUSIBLE AS INDICATED ON THE DRAWINGS. SWITCHES SHALL BE QUICK-MAKE, QUICK-BREAK, HEAVY DUTY VISIBLE BLADE TYPE. ENCLOSURES SHALL BE RATED FOR INSTALLATION IN DESIGNATED AREA AS INDICATED ON PLANS. INTERIOR ENCLOSURES SHALL BE NEMA 1 TYPE UNLESS OTHERWISE INDICATED ON THE DRAWINGS. EXTERIOR ENCLOSURES SHALL BE NEMA 3R TYPE UNLESS OTHERWISE INDICATED ON THE DRAWINGS. FUSES SHALL BE DUAL ELEMENT - TIME DELAY
- MAGNETIC MOTOR STARTERS SHALL BE COMBINATION TYPE WITH THERMAL OVERLOAD, INTEGRAL FUSED SAFETY SWITCH, H-O-A SELECTOR SWITCH, CONTROL TRANSFORMER, RUNNING PILOT LIGHT, NEMA TYPE 1 ENCLOSURE, AND (2) NORMALLY OPEN AND (2)
- NORMALLY CLOSED AUXILIARY CONTACTS. ALL MOTORS OVER 1/8 HP SHALL BE PROVIDED WITH THERMAL OVERLOAD PROTECTION. OVERLOAD PROTECTION SHALL BE PROVIDED INTEGRAL WITH THE MOTOR WINDINGS AND/OR MOTOR CONTROLLER (PROVIDED BY OTHERS) UNLESS OTHERWISE INDICATED ON
- ALL EQUIPMENT RATED 100A OR LESS SHALL HAVE 60 DEGREE C MINIMUM TERMINATIONS. ALL EQUIPMENT RATED OVER 100A SHALL HAVE 75 DEGREE MINIMUM TERMINATIONS.

#### G. LUMINAIRES AND LAMPS

ALL LUMINAIRES SHALL BE SPECIFIED ON THE LUMINAIRE SCHEDULE. EMERGENCY LIGHTING AS INDICATED, SHALL PROVIDE A MINIMUM OF ONE FOOTCANDLE ALONG THE PATH OF EGRESS. EMERGENCY FIXTURE SUPPLIER SHALL PROVIDE FOOTCANDLE PRINTOUT TO VERIFY EMERGENCY LIGHT LEVELS.

#### III. EXECUTION

#### A. GENERAL MISCELLANEOUS

- 1. ALL CONDUIT RUN IN FINISHED AREAS SHALL BE CONCEALED. CONDUIT SMALLER THAN 3/4" SHALL NOT BE USED FOR ANY CIRCUIT HOMERUNS.
- RACEWAYS EXPOSED TO DIFFERENT TEMPERATURES SHALL BE FILLED WITH AN APPROVED MATERIAL IN ACCORDANCE WITH ARTICLE 300.7 OF THE NATIONAL ELECTRICAL
- 3. HANGERS, SUPPORTS, OR FASTENINGS SHALL BE PROVIDED AT EACH ELBOW, AT THE ENDS OF STRAIGHT RUNS TERMINATING AT BOXES OR CABINETS, AND AT INTERMEDIATE POINTS AS REQUIRED BY CODE. CONDUITS OR BOXES SHALL NOT BE SUPPORTED BY CEILING SUPPORT WIRES OR OTHER CEILING SUPPORTING HARDWARE.
- ACCESS PANELS SHALL BE PROVIDED FOR ALL JUNCTION BOXES AND PULL BOXES INSTALLED ABOVE DRYWALL CEILINGS, COORDINATE SIZE AND LOCATION WITH ARCHITECT.
- FIXTURE SUPPORTS SHALL BE IN ACCORDANCE WITH ARTICLE 410-30 OF THE NATIONAL ELECTRICAL CODE, OR ANY LOCAL CODES WHICH MY APPLY.
- PROVIDE PERMANENT NAMEPLATES WITH DESIGNATIONS FOR PANELBOARDS, FEEDER DEVICES, DISTRIBUTION EQUIPMENT AND STARTERS. 7. PROVIDE TYPEWRITTEN DIRECTORY CARDS WITH BRANCH CIRCUIT IDENTIFICATION FOR
- BRANCH CIRCUIT PANELBOARDS. PANELBOARDS, FEEDER DEVICES, DISTRIBUTION EQUIPMENT AND STARTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS IN ACCORDANCE WITH NEC 110.16. INSTALL HANDLE GUARDS ON ALL BREAKERS FOR NIGHT LIGHTING, EMERGENCY AND
- SIMILAR CIRCUITS THE ELECTRICAL CONTRACTOR SHALL BALANCE PANELBOARD LOADING TO WITHIN 10% ON EACH PHASE BASED ON INSTALLED CONDITIONS. LOAD BALANCING CIRCUIT CHANGES SHALL BE PERFORMED OUTSIDE THE NORMAL OCCUPANCY WORKING SCHEDULE AND AT
- A TIME DIRECTED BY LANDLORD. 10. ALL FLUSH MOUNTED PANELBOARDS SHALL HAVE (3) 3/4" EMPTY CONDUITS INSTALLED TO ABOVE ACCESSIBLE CEILING FOR FUTURE USE.
- 11. THE FINAL LOCATIONS OF ALL EQUIPMENT, OUTLETS, ETC. SHALL BE SUBJECT TO REASONABLE CHANGES IN LOCATION UP TO THE TIME OF ROUGHING-IN, AT NO
- ADDITIONAL COST TO THE OWNER. 12. CONTACT ELECTRIC POWER COMPANY AND MAKE NECESSARY ARRANGEMENTS FOR ELECTRIC SERVICE.
- 13. CONTACT TELEPHONE COMPANY AND MAKE NECESSARY ARRANGEMENTS FOR TELEPHONE SERVICE. 14. AT ALL TIMES KEEP PREMISES AND BUILDING IN A NEAT AND ORDERLY CONDITION,
- FOLLOWING OWNER'S INSTRUCTION IN REGARD TO STORING OF MATERIALS, PROTECTIVE MEASURES AND DISPOSING OF DEBRIS ALL SERVICE EQUIPMENT SHALL BE IDENTIFIED AS BEING SUITABLE FOR USE AS SERVICE EQUIPMENT. SERVICE EQUIPMENT SHALL BE FIELD MARKED WITH THE MAXIMUM
- 16. RACEWAYS BELOW DRIVEWAYS, PARKING LOTS, AND ANY RACEWAYS INSTALLED BELOW GRADE SHALL BE INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE PER NEC 300-5.

AVAILABLE FAULT CURRENT AND THE DATE THE CALCULATION WAS PERFORMED. FIELD

MARKING SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE INSTALLATION

#### B. GROUNDING

- GROUND ALL CONDUITS, CABINETS, MOTORS, PANELS, AND OTHER EXPOSED NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 250.
- GROUNDING OF THE ELECTRICAL SYSTEM SHALL BE BY MEANS OF AN INSULATED GROUNDING CONDUCTOR INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUIT CONDUCTORS IN ALL CONDUITS.

#### FIRE ALARM NOTES

- PRINCIPAL OCCUPANCY CLASSIFICATION IS GROUP B.
- SPACE IS PROVIDED WITH FULL SPRINKLER COVERAGE.
- OCCUPANT LOAD IS LESS THAN 500.
- A FIRE ALARM SYSTEM IS REQUIRED.
- 5. AIR HANDLING SYSTEMS WITH AN AGGREGATE CAPACITY OVER 2,000 CFM REQUIRE DUCT SMOKE DETECTORS WITH LOCAL VISIBLE AND AUDIBLE SUPERVISORY SIGNAL MOUNTED IN AN APPROVED LOCATION. DUCT SMOKE DETECTOR MONITORING SHALL BE BY OTHERS UNDER SEPARATE CONTRACT WITH THE OWNER.
- 6. FIRE ALARM SYSTEM INSTALLED OR MODIFIED BY THIS CONTRACTOR IS TO BE VERIFIED AND CERTIFIED BY AHJ AT THIS CONTRACTOR'S EXPENSE.
- 7. FIRE ALARM SYSTEM MANUFACTURER TO MATCH EXISTING BUILDING FIRE ALARM SYSTEM. COORDINATE

#### FIRE ALARM SPECIFICATIONS

- 1. A COMPLETE EXTENSION OF THE EXISTING FIRE ALARM SYSTEM SHALL BE PROVIDED AS DESCRIBED ON THE DRAWINGS. ALL DEVICES, WIRING, BACKBOXES, PROGRAMMING, START-UP, INSTRUCTION AND TESTING REQUIRED FOR A COMPLETE OPERATING SYSTEM SHALL BE PROVIDED.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH SHOP DRAWINGS, COMPLETE WITH EQUIPMENT CUTS AND FLOOR PLANS (WITH WIRING INDICATED). AS WELL AS BATTERY CALCULATIONS, AND VOLTAGE DROP CALCULATIONS FOR REVIEW AND APPROVAL BY THE ARCHITECT, ENGINEER, AND ALL AUTHORITIES HAVING JURISDICTION. FLOOR PLAN DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR AND/OR SUPPLIER. NICET 4 CERTIFICATION AND STAMP IS ACCEPTABLE, IF APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH FIRE ALARM DRAWINGS, CALCULATIONS, AND EQUIPMENT INFORMATION FOR ALL REQUIRED LOCAL MUNICIPALITY, OR STATE PERMITS. THE ELECTRICAL CONTRACTOR SHALL ARRANGE AND COORDINATE ALL REQUIRED TESTING AND INSPECTIONS REQUIRED BY THE LOCAL MUNICIPALITY FIRE DEPARTMENT. THE ELECTRICAL CONTRACTOR SHALL INCLUDE FIRE DEPARTMENT COSTS IN BID.
- ALL HVAC UNITS OR GROUP OF HVAC UNITS WITH A COMMON PLENUM AND A DESIGN CAPACITY GREATER THAN 2000 CFM SHALL AUTOMATICALLY SHUT DOWN ASSOCIATED HVAC UNIT OR UNITS. WHERE A DUCT SMOKE DETECTOR IS NOT VISIBLE OR ACCESSIBLE FROM THE FLOOR, REMOTE AUDIBLE/VISUAL ALARM INDICATOR/TEST SWITCHES SHALL BE PROVIDED IN AN APPROVED LOCATION, AT A HEIGHT ACCESSIBLE AND VISIBLE FROM THE FLOOR. HVAC DUCT DETECTORS SHALL BE CONNECTED TO A CENTRAL STATION MONITORING SYSTEM UNDER SEPARATE CONTRACT WITH THE OWNER.
- FIRE ALARM SIGNAL SHALL INITIATE THE FOLLOWING ACTIONS:
- a. CONTINUOUSLY OPERATE ALARM NOTIFICATION APPLIANCES.
- b. IDENTIFY ALARM AND SPECIFIC INITIATION DEVICE AT FIRE CONTROL PANEL. c. INTERRUPT TENANT SOUND SYSTEM.
- d. UNLOCK ELECTRIC DOORS IN EGRESS PATHS.
- e. SHUT DOWN AIR HANDLING SYSTEMS.
- f. SWITCH HVAC EQUIPMENT CONTROLS TO FIRE ALARM MODE. g. CLOSE SMOKE DAMPERS IN AIR DUCTS OF DESIGNATED AIR-CONDITIONING DUCT SYSTEMS.
- ALL FIRE ALARM VISIBLE DEVICES SHALL BE ADA COMPLIANT. STROBE INTENSITIES AS DELEGATED DESIGN BY SYSTEM VENDOR. CEILING MOUNTED DEVICES SHALL HAVE A RATING WITH THE LISTED REQUIREMENTS FOR A SPECIFIC CEILING HEIGHT.
- ALL WALL MOUNTED STROBES, SPEAKER-STROBES, OR HORN STROBES SHALL BE MOUNTED SUCH THAT THE LENS IS NOT LESS THAN 80 INCHES AND NOT MORE THAN 96 INCHES ABOVE THE FINISHED FLOOR
- 8. ALL AUDIBLE NOTIFICATION APPLIANCES SHALL BE SET TO ACHIEVE A SOUND PRESSURE AT LEAST 15dB ABOVE THE AVERAGE AMBIENT SOUND LEVEL. ALL CABLES FOR THE FIRE ALARM SYSTEM SHALL BE RATED FOR THE INTENDED USE.

FIRE ALARM SYSTEM MONITORING SHALL BE BY OTHERS UNDER SEPARATE CONTRACT WITH

- THE OWNER. PROVIDE A SEPARATE LINE ITEM COST FOR A (1), (3), (5) YEAR MAINTENANCE, TESTING AND MONITORING AGREEMENT. AGREEMENT TO INCLUDE MONITORING TO A UL LISTED CENTRAL STATION PER NFPA 72 REQUIREMENTS, ALL CODE REQUIRED TESTING OF THE FIRE ALARM SYSTEM PER NFPA 72 AND OBC (MONTHLY VISUAL INSPECTION SHALL BE BY THE OWNER). CLEANING OF DEVICES SHALL BE DONE UPON SYSTEM REQUEST, AND ALL COST ASSOCIATED WITH MAINTENANCE OF THE SYSTEM SHALL BE PROVIDED (DUE TO DEFECTIVE EQUIPMENT
- ONLY). PROVIDE A YEARLY REPORT TO THE OWNER. FIRE ALARM SYSTEM SHALL MATCH BASE BUILDING SYSTEM MANUFACTURER.



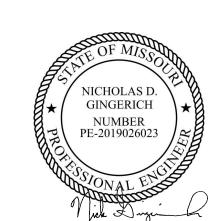
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

25760 First Street

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS AND CONCEPTS CONTAINED HEREIN ARE THE EXCLUSIVE INTELLECTUAL PROPERTY OF CURRAN ARCHITECTURE, AND ARE NOT TO BE USED OR REPRODUCED, WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF CURRAN ARCHITECTURE.

© COPYRIGHT 2020, CURRAN ARCHITECTURE

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR

LEE'S SUMMIT, MO

64086

PROJECT INFORMATION

ISSUE DATES PERMIT SET

04.21.21

PERMIT REVIEW COMMENTS

210095 **ELECTRICAL** 

**SPECIFICATIONS** 



Construction Site: Owner/Agent: Designer/Contractor:

810A NW Commerce Dr
Lee's Summit, MO 64086

Cleveland, OH 44145
4408712410

#### Allowed Interior Lighting Power

| A                                                                    | В                   | С                      | D                        |
|----------------------------------------------------------------------|---------------------|------------------------|--------------------------|
| Area Category                                                        | Floor Area<br>(ft2) | Allowed<br>Watts / ft2 | Allowed Watts<br>(B X C) |
| 1-BREAK 125 (Common Space Types:Lounge/Breakroom)                    | 202                 | 0.62                   | 125                      |
| 2-TLT 126 (Common Space Types:Restrooms)                             | 56                  | 0.85                   | 48                       |
| 3-HALL 127 (Common Space Types:Corridor/Transition <8 ft wide)       | 261                 | 0.66                   | 172                      |
| 4-WATER 129 (Common Space Types:Storage <50 sq.ft.)                  | 10                  | 0.46                   | 5                        |
| 5-ISO 128 (Common Space Types:Laundry/Washing Area)                  | 105                 | 0.43                   | 45                       |
| 6-DOCS 122 (Common Space Types:Copy/Print Room)                      | 117                 | 0.56                   | 66                       |
| 7-DENTAL 124 (Healthcare Facility:Operating Room)                    | 175                 | 2.17                   | 380                      |
| 8-SURGERY 121 (Healthcare Facility:Operating Room)                   | 225                 | 2.17                   | 488                      |
| 9-XRAY/ULTRASOUND 119 (Healthcare Facility:Imaging)                  | 116                 | 1.06                   | 123                      |
| 10-TREATMENT (Healthcare Facility:Recovery)                          | 275                 | 1.03                   | 283                      |
| 11-FOOD PREP 116 (Common Space Types:Corridor/Transition <8 ft wide) | 306                 | 0.66                   | 202                      |
| 12-LAB/RX (Healthcare Facility:Imaging)                              | 127                 | 1.06                   | 135                      |
| 13-HALL 102 (Common Space Types:Corridor/Transition <8 ft wide)      | 119                 | 0.66                   | 79                       |
| 14-HALL 111 (Common Space Types:Corridor/Transition <8 ft wide)      | 130                 | 0.66                   | 86                       |
| 15-DOGS 118 (Common Space Types:Storage)                             | 171                 | 0.63                   | 108                      |
| 16-LAUNDRY/STORAGE 117 (Common Space Types:Laundry/Washing Area)     | 108                 | 0.43                   | 46                       |
| 18-EXAM #2/COMFORT 104 (Healthcare Facility:Exam/Treatment)          | 118                 | 1.68                   | 198                      |
| 17-EXAM #1 103 (Healthcare Facility:Exam/Treatment)                  | 99                  | 1.68                   | 166                      |
| 19-EXAM #3 105 (Healthcare Facility:Exam/Treatment)                  | 89                  | 1.68                   | 150                      |
| 20-EXAM #4 110 (Healthcare Facility:Exam/Treatment)                  | 91                  | 1.68                   | 153                      |
| 21-EXAM #5 112 (Healthcare Facility:Exam/Treatment)                  | 91                  | 1.68                   | 153                      |
| 22-EXAM #6 113 (Healthcare Facility:Exam/Treatment)                  | 90                  | 1.68                   | 151                      |
| 23-EXAM #7 114 (Healthcare Facility:Exam/Treatment)                  | 90                  | 1.68                   | 151                      |
| 24-IT 108 (Common Space Types:Electrical/Mechanical)                 | 21                  | 0.43                   | 9                        |
| 25-JAN 107 (Common Space Types:Storage)                              | 9                   | 0.63                   | 6                        |
| 26-HOSP MGR (Common Space Types:Office - Enclosed)                   | 61                  | 0.93                   | 57                       |
| 27-TLT 109 (Common Space Types:Restrooms)                            | 61                  | 0.85                   | 52                       |
| 28-WAITING 109 (Common Space Types:Lobby - General)                  | 643                 | 1.00                   | 643                      |
| 29-126A TANK (Common Space Types:Electrical/Mechanical)              | 20                  | 0.43                   | 9                        |
|                                                                      |                     | Total Allowed Watts    | s = 4287                 |

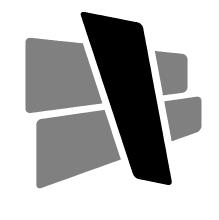
| Project Title: | Lee's Summit Animal Hospital North                                                                              | Report date: | 03/31/ | 21 |
|----------------|-----------------------------------------------------------------------------------------------------------------|--------------|--------|----|
|                | G:\Curran Architecture\Lee's Summit Animal Hospital\Engineering\Electrical\Lee's Summit Electrical Comcheck.cck | Page         | 1 of   | 8  |

| A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast                | B<br>Lamps/<br>Fixture | C<br># of<br>Fixtures | D<br>Fixture<br>Watt. | (C X I   |
|-------------------------------------------------------------------------------|------------------------|-----------------------|-----------------------|----------|
| BREAK 125 ( Common Space Types:Lounge/Breakroom 202 sq.ft.)                   |                        |                       |                       |          |
| LED 1: H: Other:                                                              | 1                      | 4                     | 30                    | 12       |
| TLT 126 ( Common Space Types:Restrooms 56 sq.ft.)                             |                        |                       |                       |          |
| LED 1 copy 1: H: Other:                                                       | 1                      | 1                     | 30                    | 3        |
| LED 3: K: Other:                                                              | 1                      | 1                     | 25                    | 2        |
| HALL 127 (Common Space Types:Corridor/Transition <8 ft wide 261 sq.ft.)       |                        |                       |                       |          |
| LED 4 copy 1: A: Other:                                                       | 1                      | 5                     | 29                    | 14       |
| LED 33: B: Other:                                                             | 1                      | 1                     | 24                    | 2        |
| WATER 129 (Common Space Types:Storage <50 sq.ft. 10 sq.ft.)                   |                        |                       |                       |          |
| LED 6: G: Other:                                                              | 1                      | 1                     | 20                    | 2        |
| ISO 128 ( Common Space Types:Laundry/Washing Area 105 sq.ft.)                 |                        |                       |                       |          |
| LED 4 copy 2: A: Other:                                                       | 1                      | 2                     | 29                    | 5        |
| LED 32: M: Other:                                                             | 1                      | 1                     | 44                    | 4        |
| DOCS 122 (Common Space Types:Copy/Print Room 117 sq.ft.)                      |                        |                       |                       |          |
| LED 4 copy 3: H: Other:                                                       | 1                      | 3                     | 30                    | 9        |
| DENTAL 124 ( Healthcare Facility:Operating Room 175 sq.ft.)                   |                        |                       |                       |          |
| LED 9: D: Other:                                                              | 1                      | 2                     | 83                    | 16       |
| LED 39 copy 1: MED LIGHT: Other:                                              | 1                      | 2                     | 100                   | Exemp    |
| Exemption:Medical/dental task lighting                                        |                        |                       |                       |          |
| SURGERY 121 (Healthcare Facility:Operating Room 225 sq.ft.)                   |                        |                       |                       |          |
| LED 9 copy 1: D: Other:                                                       | 1                      | 4                     | 83                    | 33       |
| LED 39: MED LIGHT: Other:                                                     | 1                      | 4                     | 100                   | Exemp    |
| Exemption:Medical/dental task lighting                                        |                        |                       |                       |          |
| XRAY/ULTRASOUND 119 ( Healthcare Facility:Imaging 116 sq.ft.)                 |                        |                       |                       |          |
| LED 4 copy 1: D: Other:                                                       | 1                      | 2                     | 83                    | 16       |
| TREATMENT ( Healthcare Facility:Recovery 275 sq.ft.)                          |                        |                       |                       |          |
| LED 4 copy 4: A: Other:                                                       | 1                      | 2                     | 29                    | 5        |
| LED 9 copy 2: D: Other:                                                       | 1                      | 2                     | 83                    | 16       |
| LED 39 copy 2: MED LIGHT: Other:                                              | 1                      | 2                     | 100                   | Exemp    |
| Exemption:Medical/dental task lighting                                        |                        |                       |                       |          |
| FOOD PREP 116 ( Common Space Types:Corridor/Transition <8 ft wide 306 sq.ft.) |                        |                       |                       |          |
| LED 4 copy 5: A: Other:                                                       | 1                      | 5                     | 29                    | 14       |
| LED 33 copy 1: B: Other:                                                      | 1                      | 1                     | 24                    | 2        |
| LED 9 copy 3: D: Other:                                                       | 1                      | 1                     | 83                    | 8        |
| LAB/RX ( Healthcare Facility:Imaging 127 sq.ft.)                              |                        |                       |                       |          |
| LED 4 copy 6: A: Other:                                                       | 1                      | 2                     | 29                    | 5        |
| LED 33 copy 2: B: Other:                                                      | 1                      | 1                     | 24                    | 2        |
| HALL 102 (Common Space Types:Corridor/Transition <8 ft wide 119 sq.ft.)       |                        |                       |                       |          |
| LED 4 copy 8: A: Other:                                                       | 1                      | 3                     | 29                    | 8        |
| HALL 111 (Common Space Types:Corridor/Transition <8 ft wide 130 sq.ft.)       |                        |                       |                       |          |
| LED 4 copy 7: A: Other:                                                       | 1                      | 3                     | 29                    | 8        |
| DOGS 118 ( Common Space Types:Storage 171 sq.ft.)                             |                        |                       |                       |          |
| LED 4 copy 8: L: Other:                                                       | 1                      | 2                     | 47                    | 9        |
| LED 32 copy 1: M: Other:                                                      | 1                      | 4                     | 44                    | 17       |
| LAUNDRY/STORAGE 117 ( Common Space Types:Laundry/Washing Area 108 sq.ft.)     |                        |                       |                       |          |
| LED 4 copy 9: H: Other:                                                       | 1                      | 3                     | 30                    | 9        |
| EXAM #2/COMFORT 104 ( Healthcare Facility:Exam/Treatment 118 sq.ft.)          |                        |                       | 100 PM                |          |
| LED 4 copy 2: D: Other:                                                       | 1                      | 2                     | 83                    | 16       |
|                                                                               | '                      | _                     | 30                    | 10       |
| EXAM #1 103 ( Healthcare Facility:Exam/Treatment 99 sq.ft.)                   | 1                      | 2                     | 83                    | 16       |
| LED 4 copy 3: D: Other:                                                       | 1                      | 2                     | 03                    | 10       |
| EXAM #3 105 ( Healthcare Facility:Exam/Treatment 89 sq.ft.)                   |                        |                       |                       |          |
| Project Title: Lee's Summit Animal Hospital North                             |                        |                       | Donort data           | V 02/2   |
| rroject frue: Lee's Summit Animal Mospital North                              |                        |                       | Report date           | :. U3/3. |

| A<br>Fixture ID : Description / Lamp / \                                                                                                                                                                                                                                           | <i>N</i> attage Per Lamp / Ballast                                                                                                               | B<br>Lamps/<br>Fixture | C<br># of<br>Fixtures                              | D<br>Fixture<br>Watt.                                | (C X [          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------|------------------------------------------------------|-----------------|
| LED 4 copy 4: D: Other:                                                                                                                                                                                                                                                            |                                                                                                                                                  | 1                      | 2                                                  | 83                                                   | 16              |
| EXAM #4 110 ( Healthcare Facility:Exam/Treatil LED 4 copy 5: D: Other:                                                                                                                                                                                                             | ment 91 sq.ft.)                                                                                                                                  | 1                      | 2                                                  | 83                                                   | 16              |
| EXAM #5 112 ( Healthcare Facility:Exam/Treatment 91 sq.ft.) LED 4 copy 6: D: Other:                                                                                                                                                                                                |                                                                                                                                                  | 1                      | 2                                                  | 83                                                   | 16              |
| EXAM #6 113 ( Healthcare Facility:Exam/Treatil<br>LED 4 copy 7: D: Other:                                                                                                                                                                                                          | ment 90 sq.ft.)                                                                                                                                  | 1                      | 2                                                  | 83                                                   | 16              |
| EXAM #7 114 ( Healthcare Facility:Exam/Treatil LED 4 copy 8: D: Other:                                                                                                                                                                                                             | ment 90 sq.ft.)                                                                                                                                  | 1                      | 2                                                  | 83                                                   | 16              |
| IT 108 ( Common Space Types:Electrical/Mech<br>LED 1 copy 2: F: Other:                                                                                                                                                                                                             | anical 21 sq.ft.)                                                                                                                                | 1                      | 1                                                  | 27                                                   | 2               |
| JAN 107 ( Common Space Types:Storage 9 sq<br>LED 6 copy 1: G: Other:                                                                                                                                                                                                               | <u>.ft.)</u>                                                                                                                                     | 1                      | 1                                                  | 20                                                   | 2               |
| HOSP MGR ( Common Space Types:Office - E<br>LED 4 copy 9: H: Other:                                                                                                                                                                                                                | inclosed 61 sq.ft.)                                                                                                                              | 1                      | 2                                                  | 30                                                   | 6               |
| TLT 109 ( Common Space Types:Restrooms 6: LED 1 copy 3: H: Other:                                                                                                                                                                                                                  | 1 sq.ft.)                                                                                                                                        | 1                      | 1                                                  | 30                                                   | 3               |
| LED 3 copy 1: K: Other: WAITING 109 ( Common Space Types:Lobby -                                                                                                                                                                                                                   | General 643 sq.ft.)                                                                                                                              | 1                      | 1                                                  | 25                                                   | 2               |
| LED 4 copy 10: A: Other:<br>LED 4 copy 11: C: Other:                                                                                                                                                                                                                               |                                                                                                                                                  | 1<br>1                 | 6<br>2                                             | 29<br>39                                             | 17<br>7         |
| 126A TANK ( Common Space Types:Electrical/<br>LED 32 copy 1: M: Other:                                                                                                                                                                                                             | Mechanical 20 sq.ft.)                                                                                                                            | 1                      | 1                                                  | 44                                                   | 4               |
|                                                                                                                                                                                                                                                                                    |                                                                                                                                                  |                        |                                                    |                                                      | 000             |
| Interior Lighting PASSES  Interior Lighting Compliance Statement Compliance Statement: The proposed interior                                                                                                                                                                       | lighting alteration project represe                                                                                                              | nted in this docu      | ıment is co                                        | sed Watts =                                          | ith the         |
| Interior Lighting Compliance Statement                                                                                                                                                                                                                                             | lighting alteration project represe ations submitted with this permit a BIECC requirements in COMcheck                                           | nted in this docu      | iment is co                                        | nsistent w                                           | ith the<br>ting |
| Interior Lighting Compliance Statement<br>Compliance Statement: The proposed interior<br>building plans, specifications, and other calcular<br>systems have been designed to meet the 2018                                                                                         | lighting alteration project represe ations submitted with this permit a BIECC requirements in COMcheck                                           | nted in this docu      | nment is co<br>proposed ir<br>and to com           | nsistent w                                           | ith the<br>ting |
| Interior Lighting Compliance Statement Compliance Statement: The proposed interior building plans, specifications, and other calcula systems have been designed to meet the 2018 applicable mandatory requirements listed in the                                                   | lighting alteration project represe ations submitted with this permit a IECC requirements in COMcheck ne Inspection Checklist.                   | nted in this docu      | nment is co<br>proposed ir<br>and to com           | nsistent wi<br>hterior ligh<br>ply with ar<br>5/2012 | ith the<br>ting |
| Interior Lighting Compliance Statement<br>Compliance Statement: The proposed interior<br>building plans, specifications, and other calcula<br>systems have been designed to meet the 2018<br>applicable mandatory requirements listed in the<br>RACHEL SPAUDIE-ELECTRICAL ENGINEER | lighting alteration project represe ations submitted with this permit a B IECC requirements in COMcheck ne Inspection Checklist.  Rachel Spaudie | nted in this docu      | ument is con<br>proposed in<br>and to com<br>03/16 | nsistent wi<br>hterior ligh<br>ply with ar<br>5/2012 | ith the<br>ting |
| Interior Lighting Compliance Statement<br>Compliance Statement: The proposed interior<br>building plans, specifications, and other calcula<br>systems have been designed to meet the 2018<br>applicable mandatory requirements listed in the<br>RACHEL SPAUDIE-ELECTRICAL ENGINEER | lighting alteration project represe ations submitted with this permit a B IECC requirements in COMcheck ne Inspection Checklist.  Rachel Spaudie | nted in this docu      | ument is con<br>proposed in<br>and to com<br>03/16 | nsistent wi<br>hterior ligh<br>ply with ar<br>5/2012 | ith the<br>ting |

Data filename: G:\Curran Architecture\Lee's Summit Animal Hospital\Engineering\Electrical\Lee's Summit Page 3 of 8

Electrical Comcheck.cck



# CURRAN ARCHITECTURE

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: RAS CHECKED BY: EJR



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

#### LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

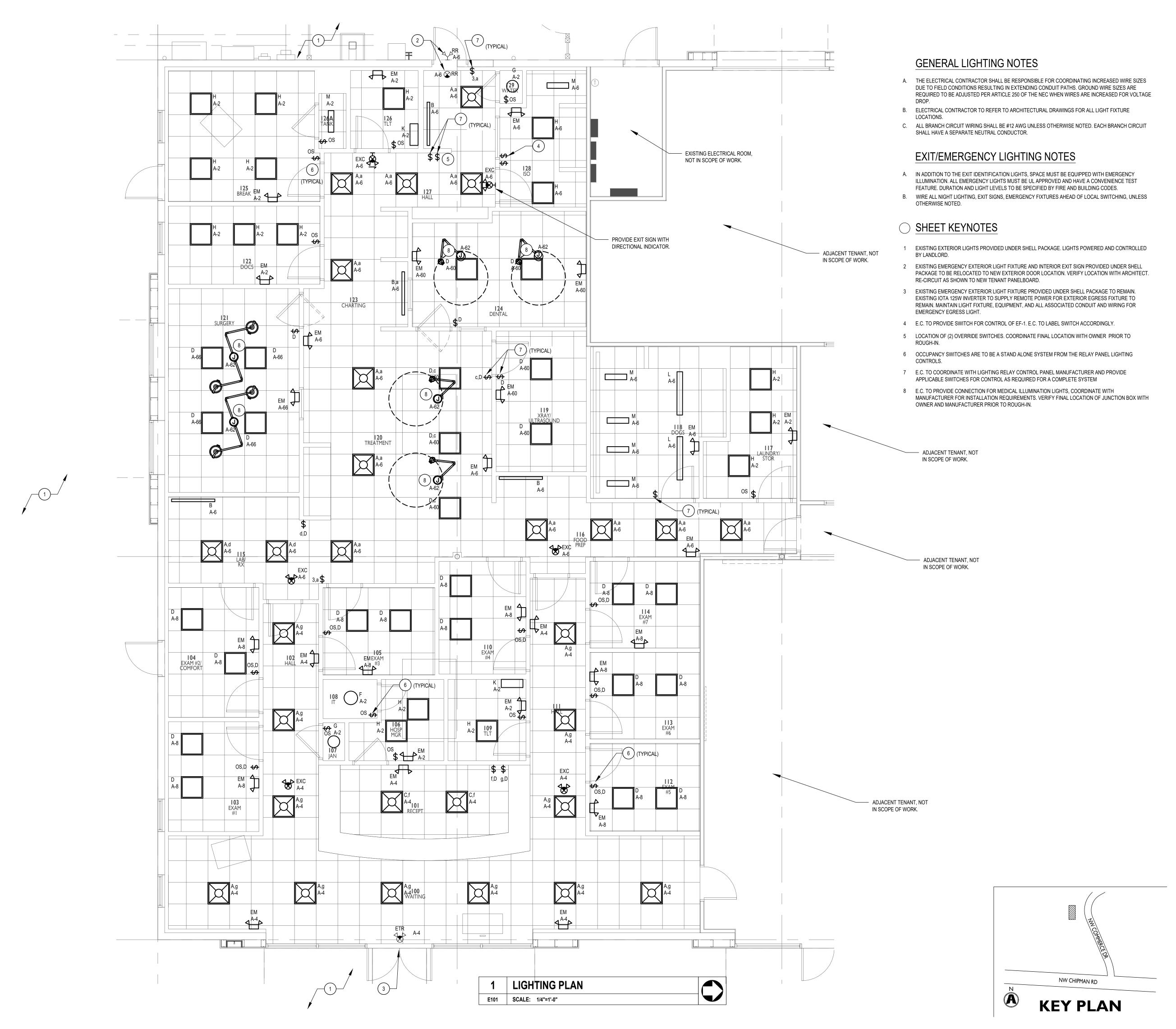
PERMIT SET 04.01.21

PERMIT REVIEW COMMENTS 04.21.21

210095

ELECTRICAL ENERGY CALCULATIONS

E004





# CURRA

ARCHITECTURE

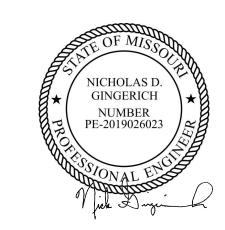
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

DRAWN BY: RAS CHECKED BY: EJR



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

LEE'S SUMMIT ANIMAL HOSPITAL NORTH

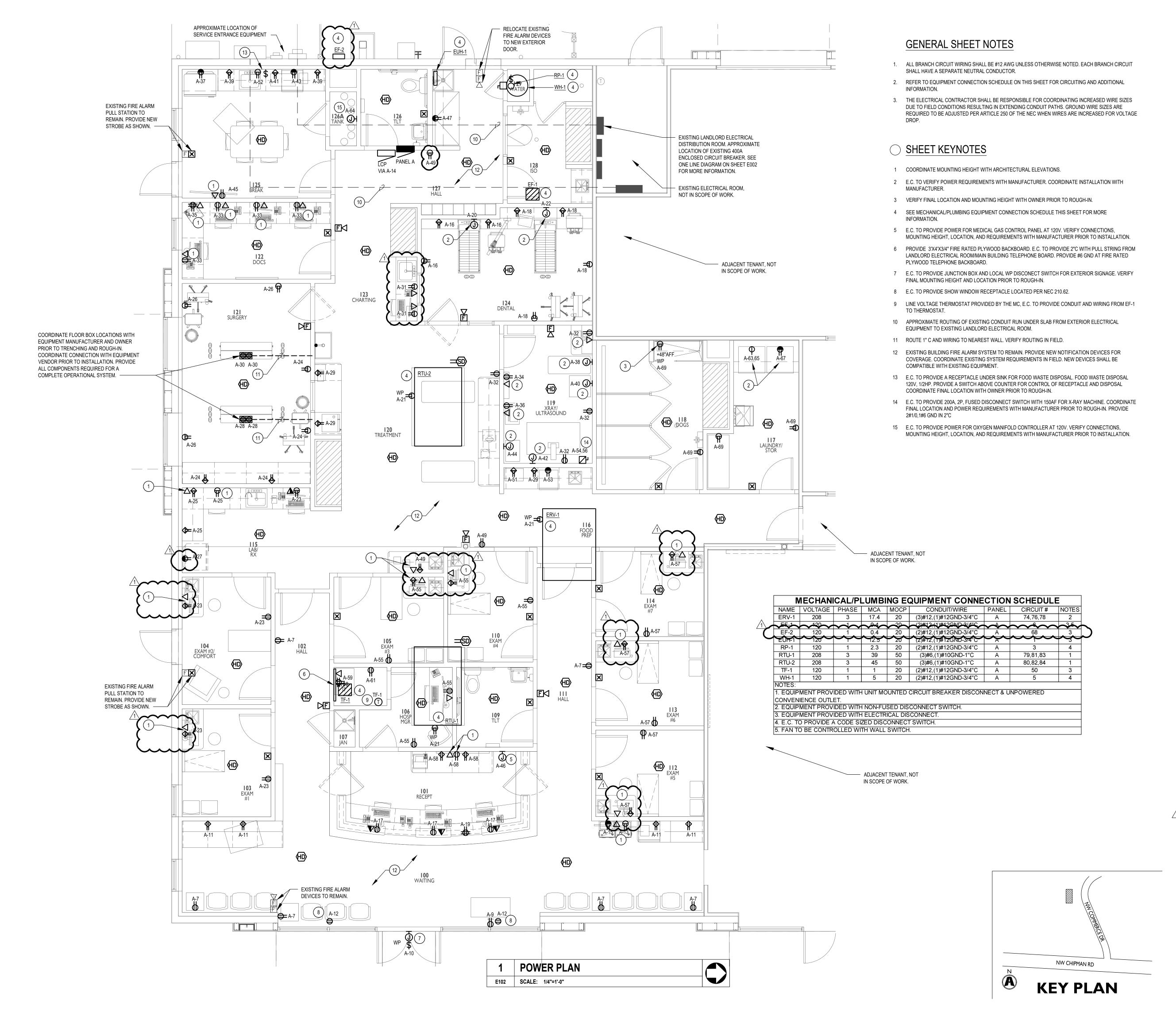
810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

PERMIT SET 04.01.

PERMIT REVIEW COMMENTS 04.21.

210095 LIGHTING PLAN

EI0I





# CURRAN

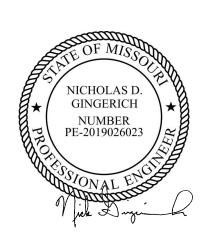
5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753

RAWN RY: RAS CHECKED RY: EJR



25760 First Street Cleveland, OH 44145 P 440 871 2410 F 440 871 7954 tesengineering.com

CERTIFICATION



THIS DRAWING AND THE IDEAS, DESIGNS
AND CONCEPTS CONTAINED HEREIN ARE
THE EXCLUSIVE INTELLECTUAL PROPERTY
OF CURRAN ARCHITECTURE, AND ARE NOT
TO BE USED OR REPRODUCED, WHOLE OR
IN PART, WITHOUT THE WRITTEN
CONSENT OF CURRAN ARCHITECTURE.
© COPYRIGHT 2020, CURRAN ARCHITECTURE

PROJECT INFORMATION

#### LEE'S SUMMIT ANIMAL HOSPITAL NORTH

810A NW COMMERCE DR LEE'S SUMMIT, MO 64086

PERMIT SET 04.0

PERMIT REVIEW COMMENTS 04.2

210095 POWER PLAN

**EI02**