

ELEVATOR RENOVATIONS AT ROANOKE ISLAND AQUARIUM

FILE # 22-24684-01
CD PHASE

ABBREVIATIONS

1R1S	(1) ROD + (1) SHELF
ACI	AMERICAN CONCRETE INSTITUTE
ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHU	AIR HANDLING UNIT
ALUM.	ALUMINUM
AM	ANTE MERIDEM
ARCH.	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BFE	BASE FLOOD ELEVATION
B.O.	BOTTOM OF
CJ	CONTROL JOINT
CAB.	CABINET
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CONC.	CONCRETE
CONT.	CONTINUOUS
CPET	COMMON PATH OF EXIT TRAVEL
CW	COLD WATER
DBL	DOUBLE
DR.	DOOR
DWG.	DRAWING
DVV	DRAIN/ WASTE/ VENT
DS	DOWNSPOUT
DTL.	DETAIL
EC	ELECTRICAL CONTRACTOR
EJ	EXPANSION JOINT
ELECT.	ELECTRICAL
ELEV.	ELEVATION
ETC.	ETCETERA
E.T.R.	EXISTING TO REMAIN
EW/C	ELECTRIC WATER COOLER
EXIST.	EXISTING
EXT.	EXTERIOR
FBGLS.	FIBERGLASS
FOP	FIBER CEMENT PANEL
FD	FLOOR DRAIN
FF	FINISH FLOOR
FEC	FIRE EXTINGUISHER CABINET
FJ	FALSE JOINT
FLR.	FLOOR
GC	GENERAL CONTRACTOR
GA.	GAUGE
GALV.	GALVANIZED
GEN	GENERAL
GS	GYPSUM STUD
GWB	GYPSUM WALL BOARD
H/C	HANDICAPPED
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ.	HORIZONTAL
HP	HEAT PUMP
IM	ICEMAKER
INSUL.	INSULATION
INT.	INTERIOR
KW	KILOWATT
LOC.S.	LOCATIONS
LSL	LAMINATED STRAND LUMBER
MAX.	MAXIMUM
MBT	MARBLE THRESHOLD
MC	MECHANICAL CONTRACTOR
MCJ	MASONRY CONTROL JOINT
MEJ	MASONRY EXPANSION JOINT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MT	METAL THRESHOLD
MTL	METAL
NCSBC	NORTH CAROLINA STATE BUILDING CODE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
O.C.	ON CENTER
O.D.	OVERFLOW DRAIN/OUTSIDE DIAMETER
O.H.	OPPOSITE HAND
OPNG.	OPENING
O/S	OUTSIDE
OTB	OPEN TO BELOW
PC	PLUMBING CONTRACTOR
PH	PHASE
PJ	PANEL JOINT
PL	POINT LOAD
P-LAM	PLASTIC LAMINATE
PME	PLUMBING, MECHANICAL, & ELECTRICAL
PP	PUSH PAD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
P.T.	PRESSURE TREATED
PNTD	PAINTED
P.W. / PWD	PLYWOOD
RC	REINFORCED CONCRETE
ROP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REINF	REINFORCED OR REINFORCING
REQ'D	REQUIRED
RL	ROOF LEADER
RUB	RUBBER
SAN	SANITARY
SF	SQUARE FOOT OR SQUARE FEET
SIM	SIMILAR
SP	SOUTHERN PINE
SPF	SPRUCE/ PINE/ FIR
SS	STAINLESS STEEL
STOR	STOREFRONT
STL.	STEEL
TD	TRAVEL DISTANCE
TME	TO MATCH EXISTING
T.O.	TOP OF
T.O.P.	TOP OF PLATE
TRD.	TREAD
TRD.	TREAD
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLTY/VOLTAGE
VCT	VINYL COMPOSITE TILE
VERT.	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
WGL	WIRE GLASS
WD	WOOD

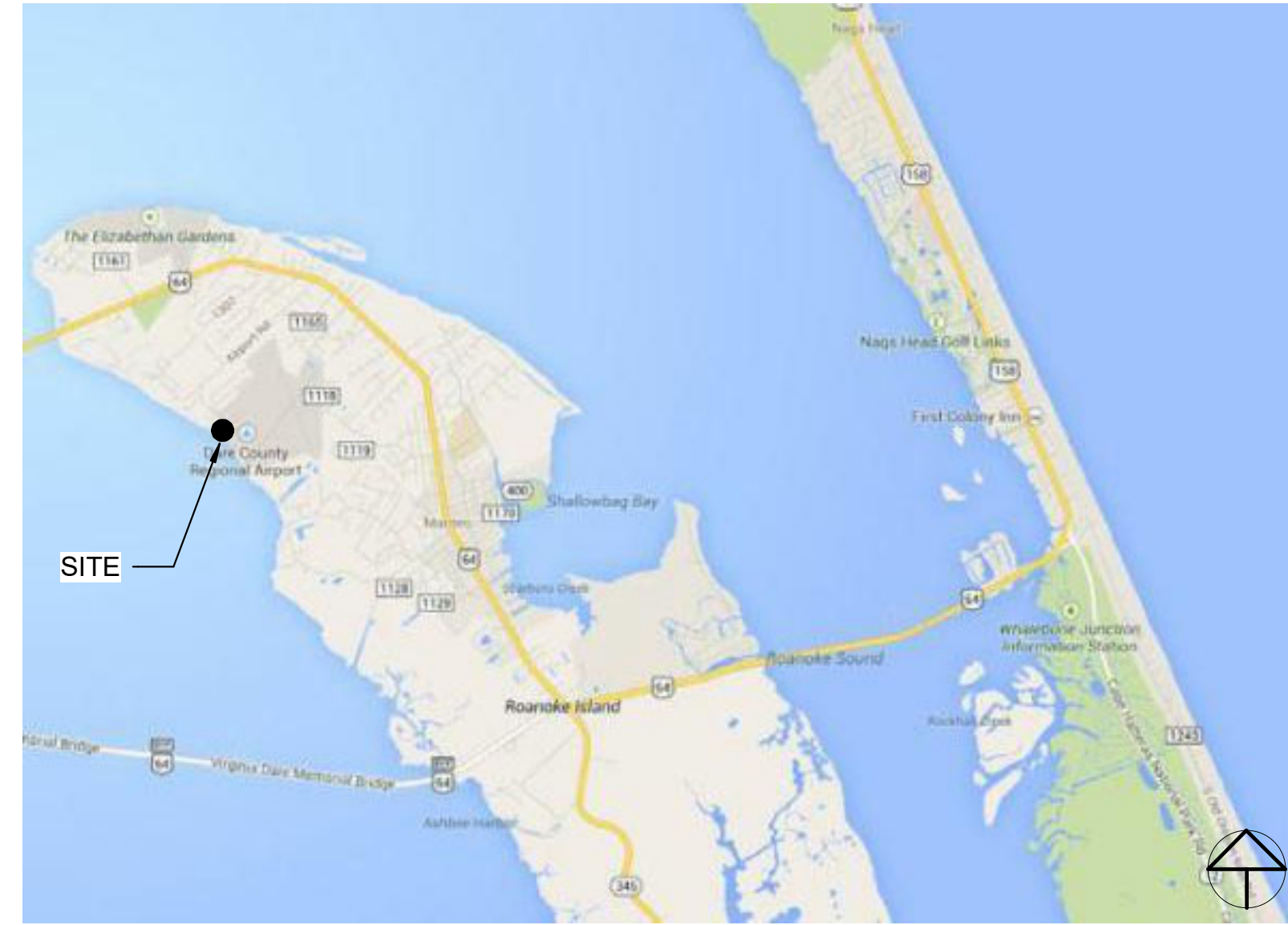
DRAWING SYMBOLS

	DRAWING NUMBER View Name 1/8" = 1'-0"	DRAWING TITLE
	DRAWING NUMBER A101	EXTERIOR ELEVATION KEY
	DRAWING NUMBER A101	INTERIOR ELEVATION KEY
	Name Elevation	LEVEL CALLOUT
	1	DOOR TAG
	A	WINDOW TAG
	A	WALL TAG
	Room name 101	ROOM TAG
	5'-0"	DIMENSION (FACE OF STUD U.N.O.)
	1 SIM A101	SECTION KEY
	1 SIM A101	DETAIL KEY
	1 SIM A101	ENLARGED PLAN OR DETAIL KEY

DRAWING INDEX

Drawing Index	
Sheet Number	Sheet Name
A001	Cover Sheet
A002	Appendix B
A101	Floor Plans & Sections
PM1.1	Plumbing & Mechanical
E0.1	Electrical Notes
E1.1	Electrical Plans

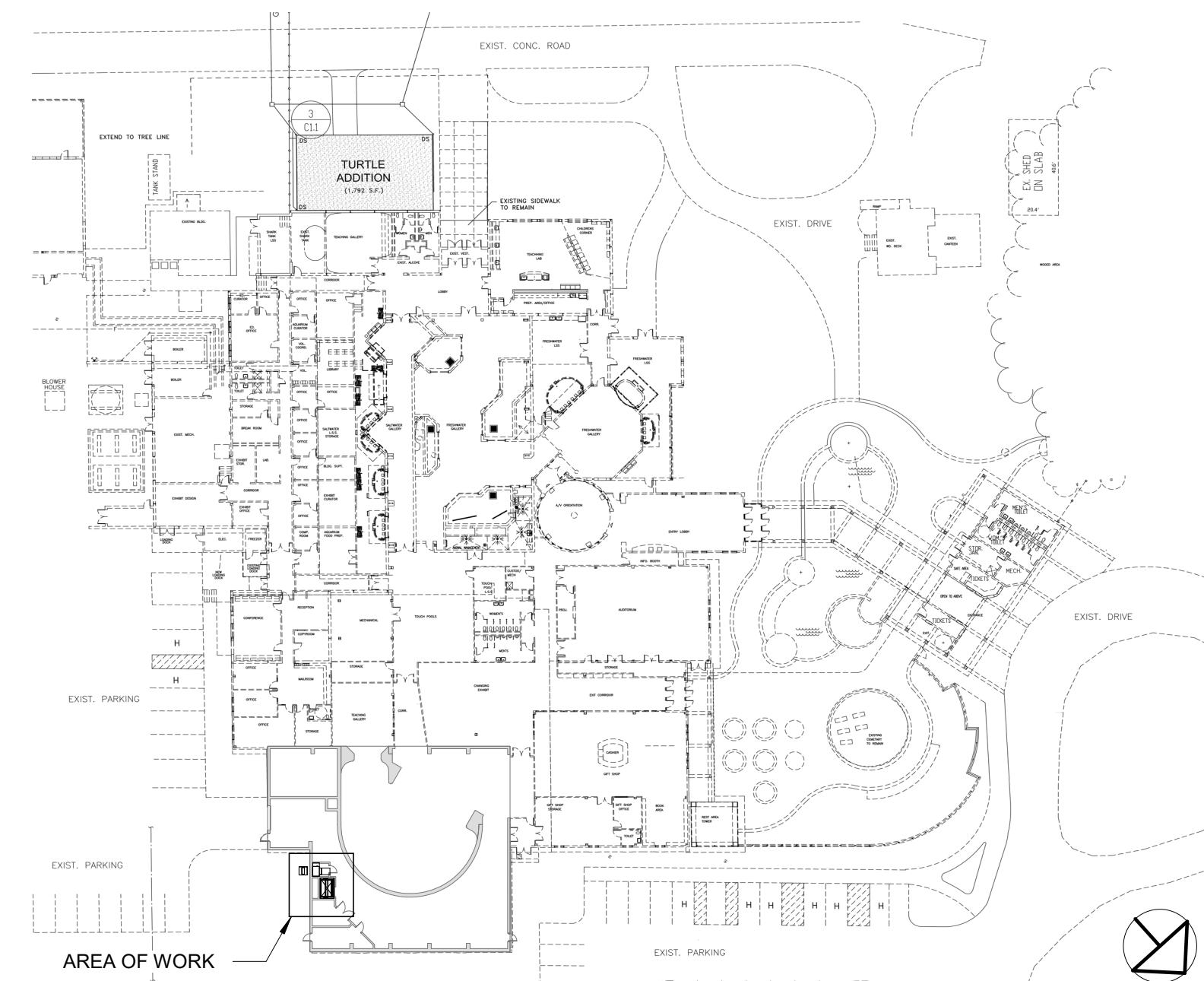
VICINITY PLAN



SITE MAP



KEY PLAN



PROJECT TEAM

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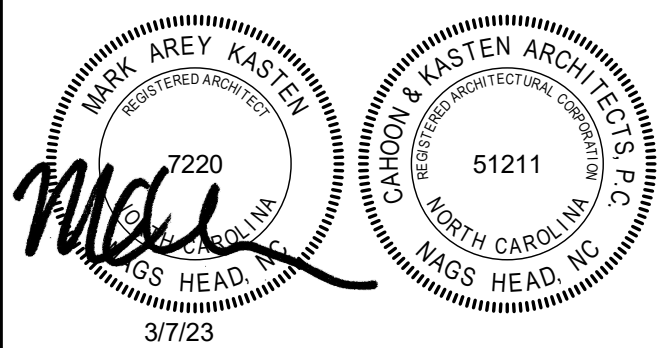
cahoon+kasten
ARCHITECTS

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Project:	Elev. Reno. at Roanoke Island Aquarium
Project No:	SCO#22-24684-01A
Location:	374 Airport Rd, Manteo, NC 27954
Title:	Cover Sheet
Date:	March 7, 2023
Scale:	As indicated

CD PHASE

The designer shall not be responsible for any error, omission, defect or deficiency in the contract documents ("error") prepared by the designer or its consultants which in any way impacts the schedule of the project, results in a lack of coordination among the contract documents, delays the completion of the project or which in any other way causes any damage or loss to the owner, contractor, subcontractors, or other entity involved in the project, unless: (i) designer is promptly notified of such error, in any event within 14 days of the date such error was discovered or could reasonably have been discovered; and (ii) designer is given opportunity at the time of discovery to address such error, and, if appropriate, take such steps as are necessary to correct and resolve it. Failure to comply with the provisions of this paragraph shall constitute a waiver of any claim for damages, or a right to offset against designer by owner, contractor or others and shall in no event cause or allow a reduction in the fees otherwise due designer for services provided on the project.



Revisions:

No.	Description	Date

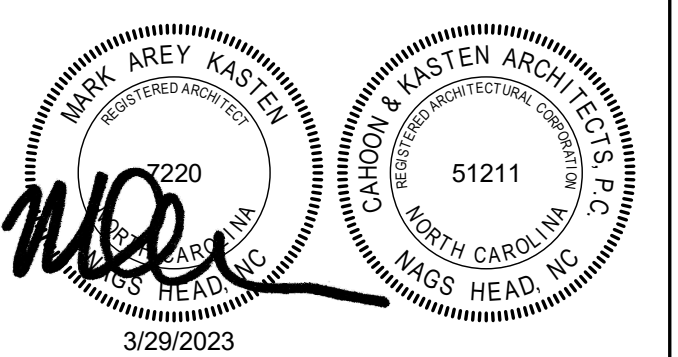
Designed: Designer
Drawn: Author
Reviewed: Checker
Cad File:

A001

Project: **Elev. Reno. at Roanoke Island Aquarium**
Project No: **SCO#22-24684-01A**
Location: **374 Airport Rd, Manteo, NC 27954**
Title: **Floor Plans & Sections**
Date: **March 7, 2023**
Scale: **As indicated**

CD PHASE

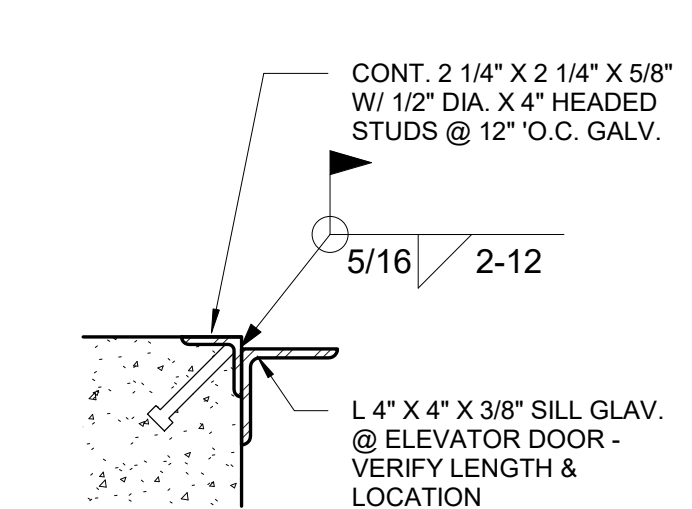
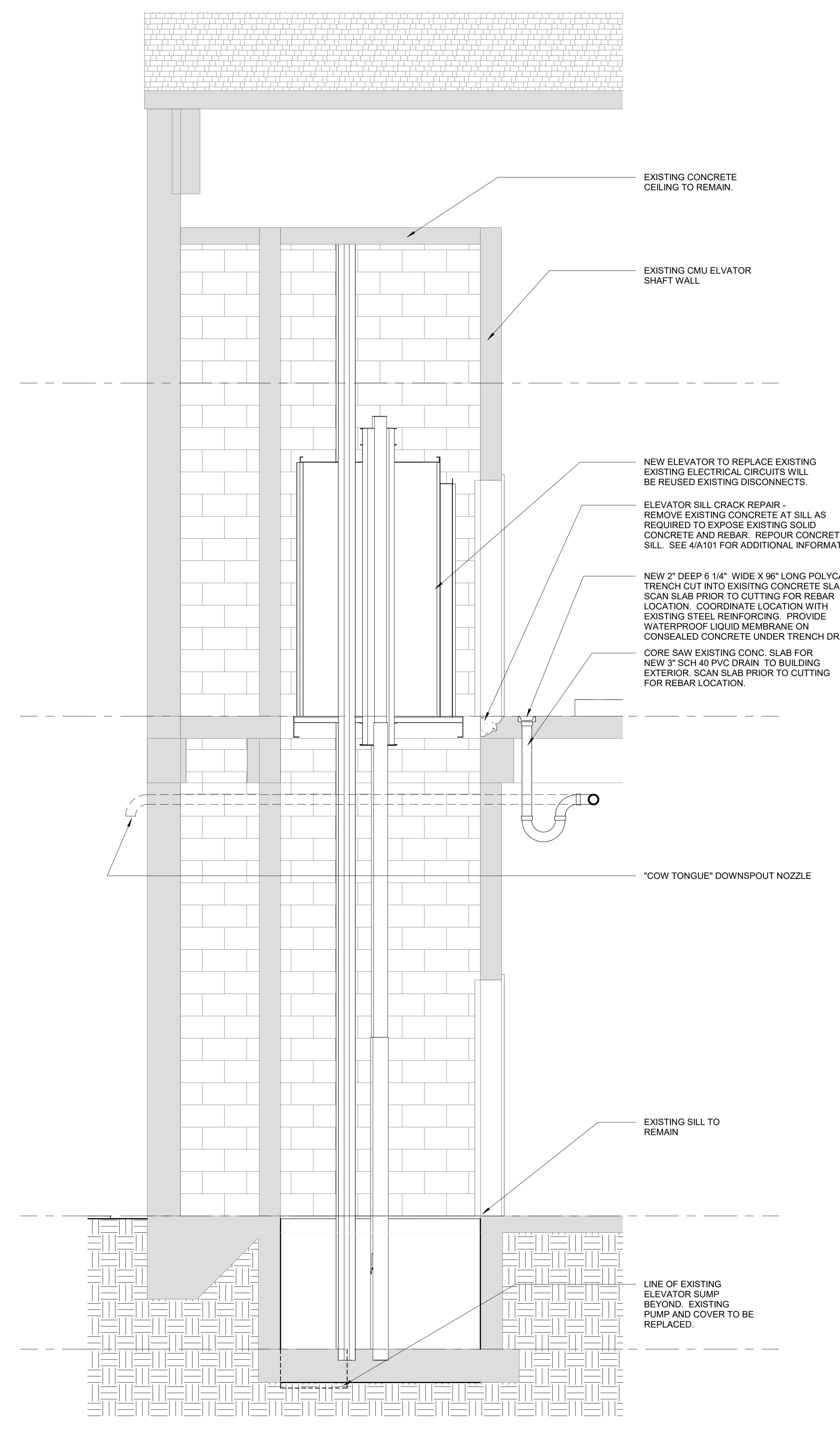
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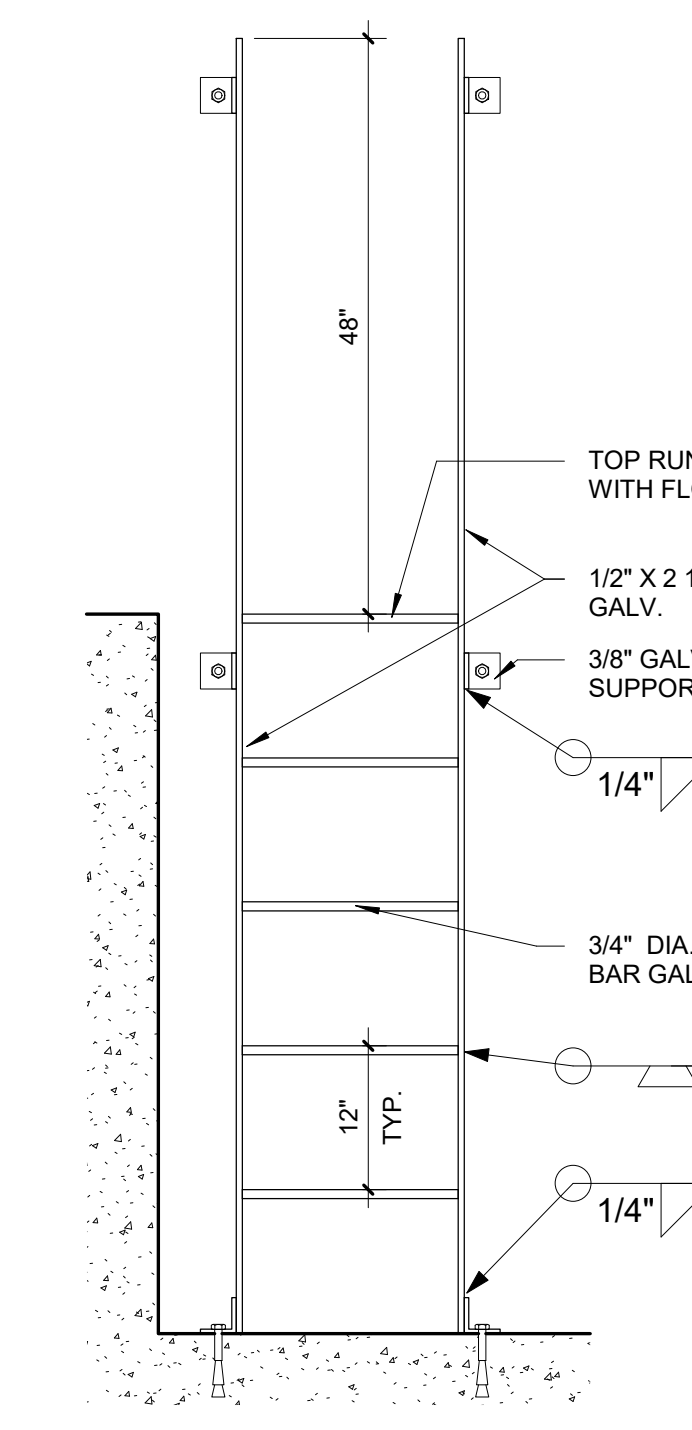
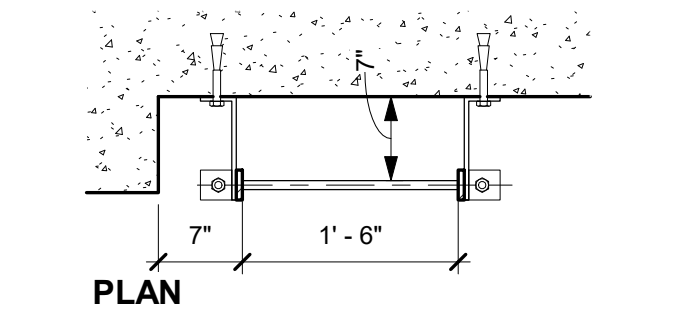
Revisions:

No.	Description	Date

Designed: Designer
Drawn: Author
Reviewed: Checker
Cad File: **A101**



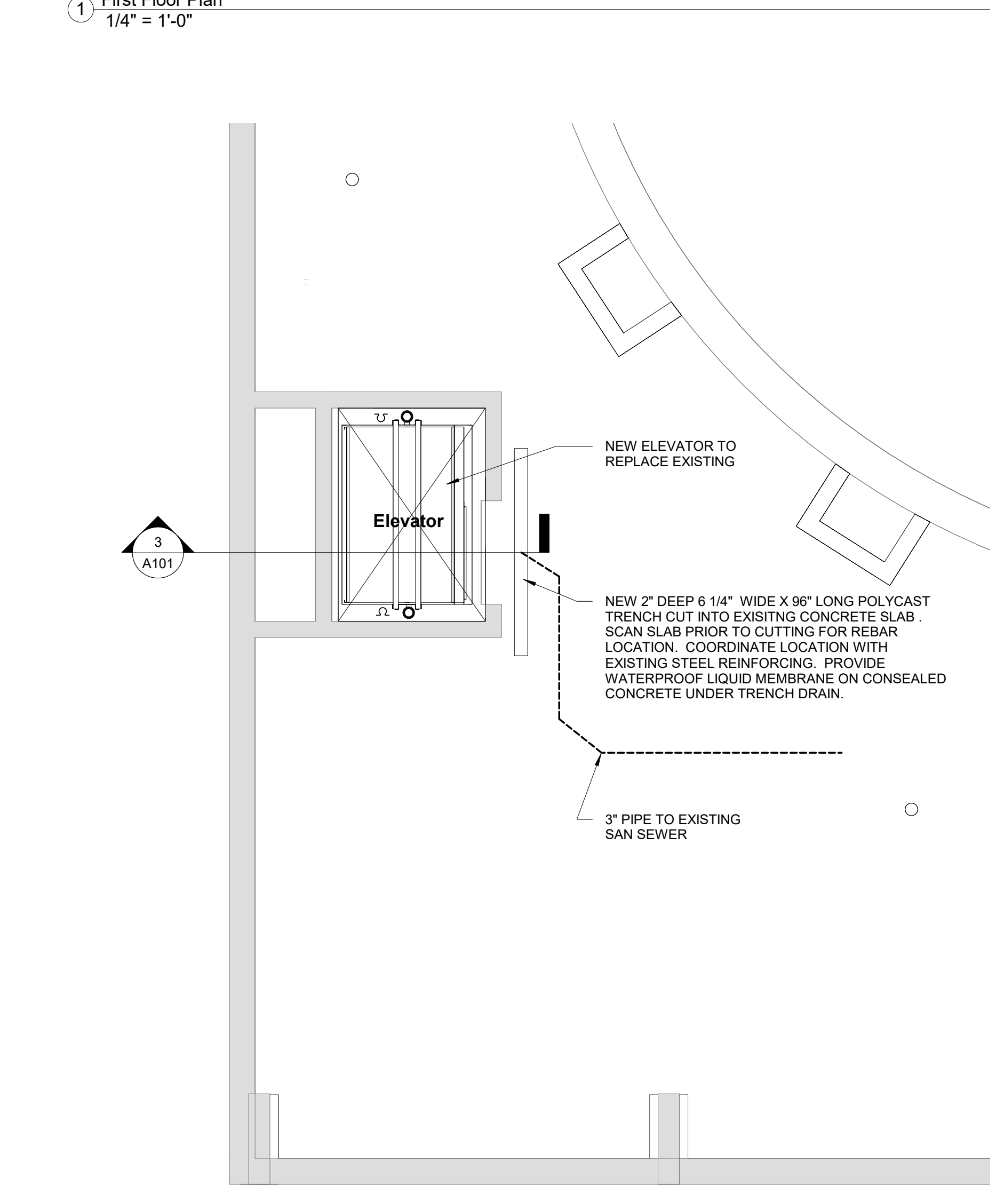
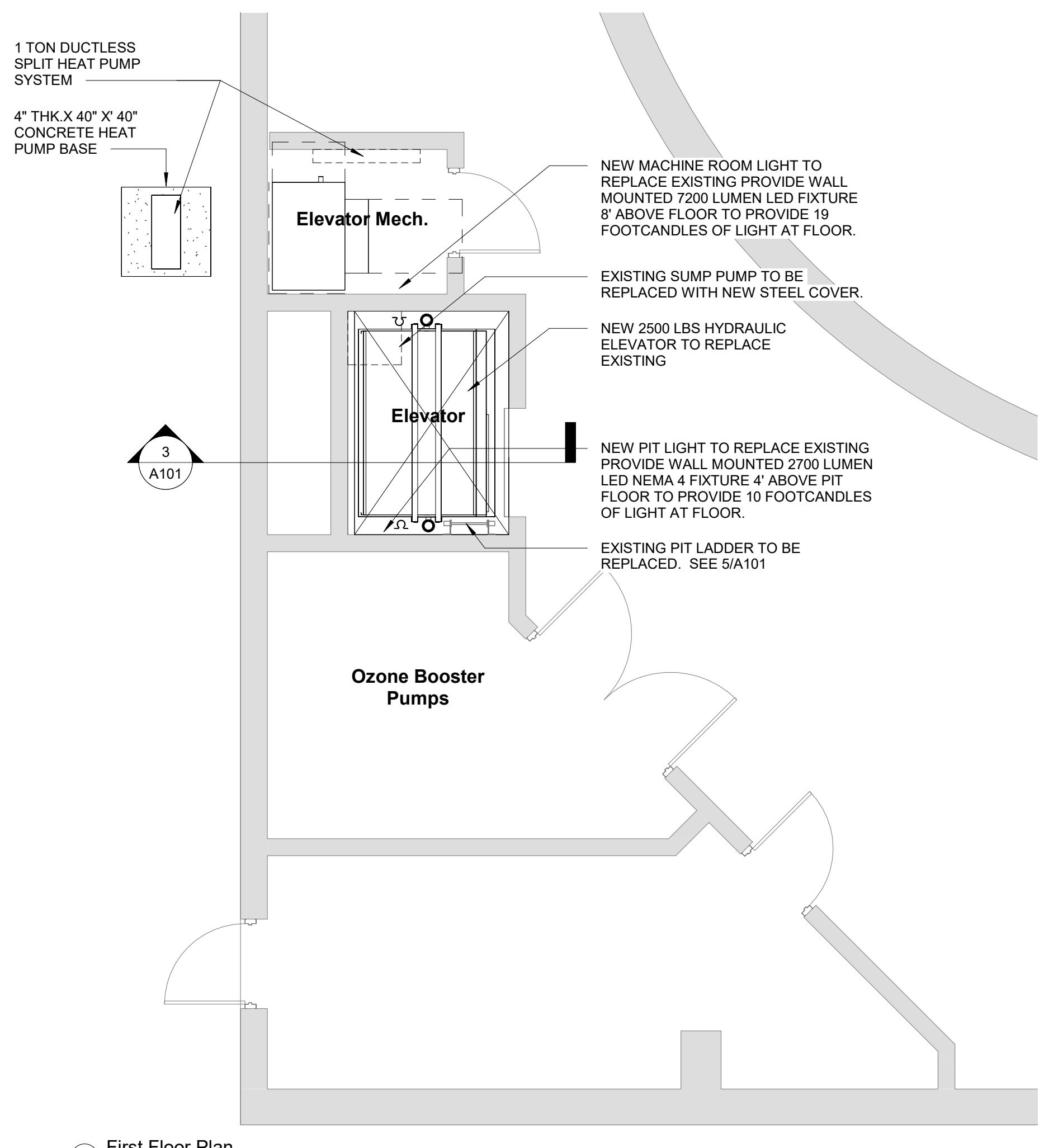
4 Elevator Opening Edge
1 1/2" = 1'-0"



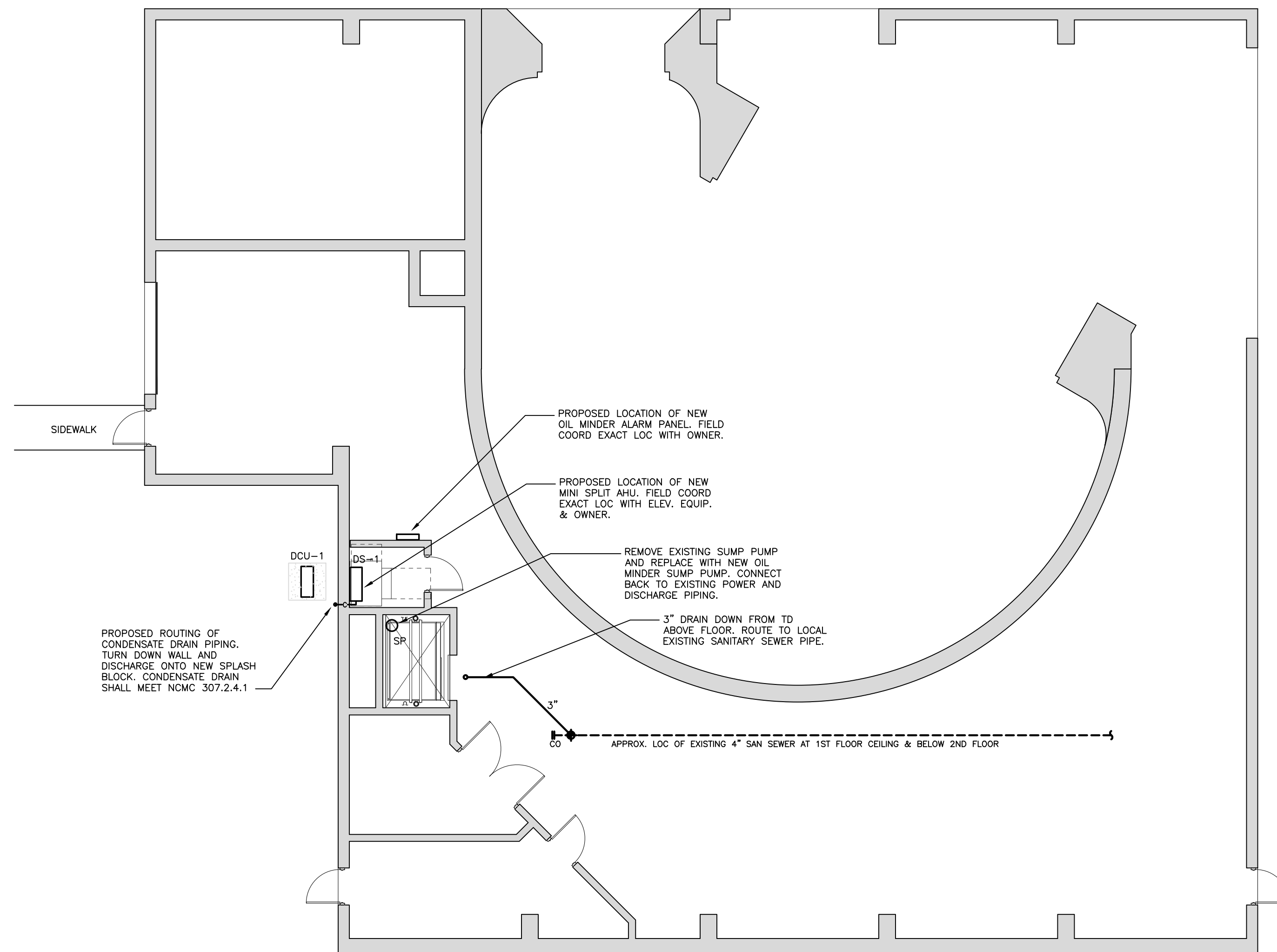
5 Elevator Pit Ladder
3/4" = 1'-0"

- ELEVATOR NOTES:**
- ALL EXISTING EQUIPMENT WILL BE DEMOLISHED INCLUDING BUT NOT LIMITED TO:
1. GUIDE RAILS
 2. JACK ASSEMBLY
 3. PIT BUFFERS AND SUPPORTS
 4. OIL SUPPLY LINE & FITTINGS
 5. SUMP PUMP, SUMP PUMP GRATING, & SUMP PUMP PLUMBING
 6. HOISTWAY CONDUIT WIRING AND RELATED FIXTURES/EQUIPMENT
 7. TRAVEL CABLES AND JUNCTION BOXES.
 8. CAR SLING.
 9. CAB.
 10. DOOR OPERATOR
 11. HOISTWAY FASCIA
 12. HOISTWAY DOORS, HANGERS, GUIDES, STRUT ANGLES, AND RELATED EQUIPMENT
 13. CAR DOOR AND DOOR PROTECTION DEVICE.
 14. ALL HOISTWAY DOOR ENTRANCE FRAMES
 15. PATCHWORK AROUND ENTRANCES FRAMES/PATCHWORK INSIDE THE HOISTWAY.
- MATERIALS:**
1. WHERE REQUIREMENTS FOR EQUIPMENT OPERATION ALLOW, # 316 STAINLESS IS TO BE USED
 2. WHERE REQUIREMENTS FOR EQUIPMENT OPERATION ALLOW, ALLUMINIUM TO BE USED.
 3. ALL ELEVATOR MECHANICAL DEVICES ARE TO BE NEMA 4 RATED.
 4. ALL BOXES, FIXTURES IN THE HOISTWAY, CAR TOP, PIT ARE TO BE NEMA 4 RATED
 5. ALL PIT LIGHTING AND FIXTURES ARE TO BE NEMA 4 RATED.
 6. FLEXIBLE LIQUID TIGHT CONDUIT IS TO BE USED UNLESS CONDITIONS DICTATE OTHERWISE
 7. PROVIDE TWO (2) COATS OF ASTM B115 RATED PRIMER, TWO (2) COATS ASTM B117 PAINT TO ALL STEEL SURFACES IN THE HOISTWAY. THIS IS INCLUDING BUT NOT LIMITED TO HOISTWAY BEAMS, ANGLES, CHANNELS, AND ALL STEEL ELEVATOR COMPONENTS.
 8. ALL FASTENING HARDWARE TO BE USED FOR INSTALLATION IS TO BE #316 STAINLESS STEEL.

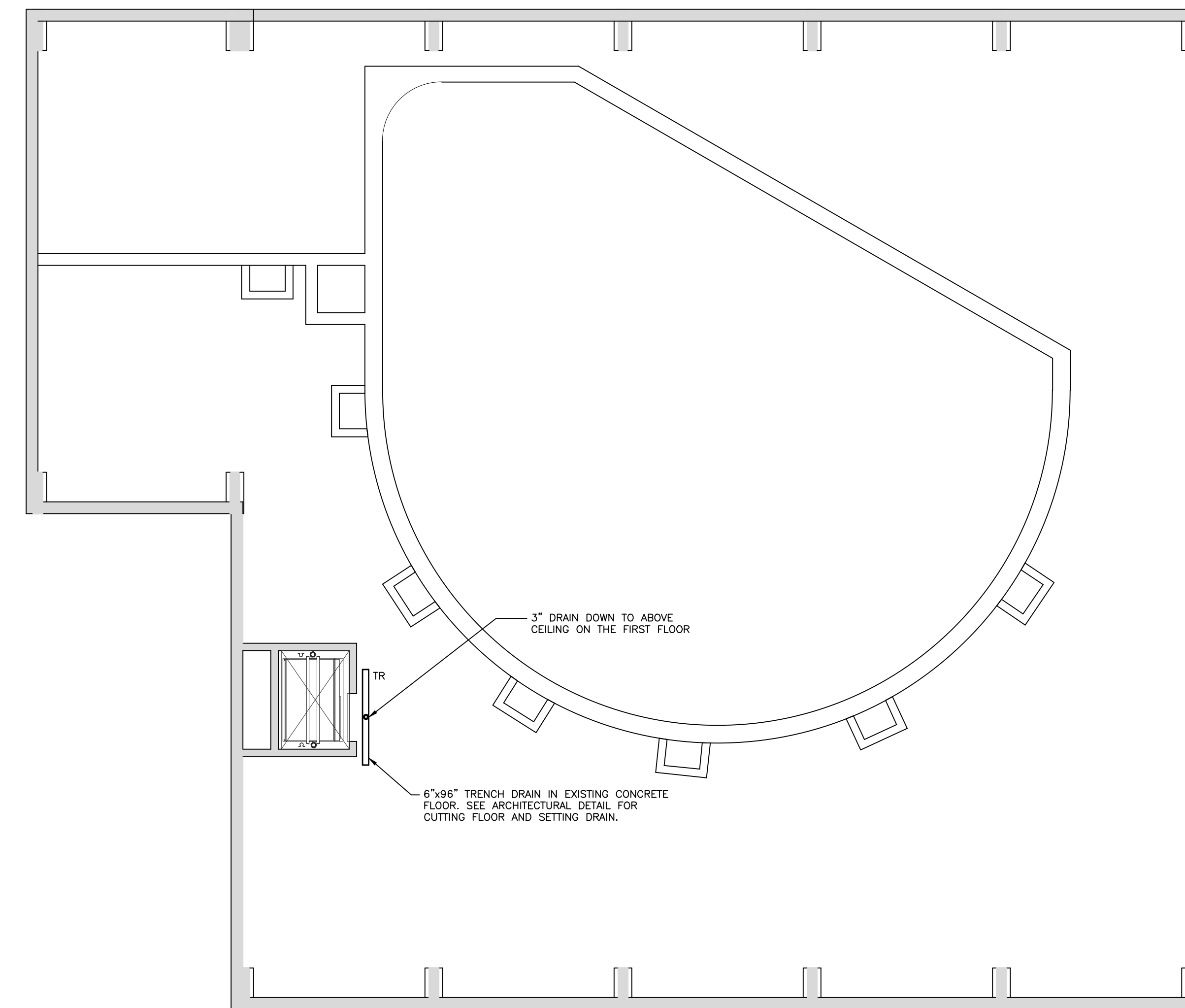
3 Section 1
1/2" = 1'-0"



2 Second Floor Plan
1/4" = 1'-0"



1ST FLR PLMB & MECH PLAN
SCALE: 1/8"=1'-0"



2ND FLR PLMB & MECH PLAN
SCALE: 1/8"=1'-0"

PLUMBING GENERAL NOTES:

- THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH N.C. PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.
- ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, TEES, REROUTING, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, TEES, ELBOWS, ETC. FOR A COMPLETE WORKING PLUMBING SYSTEM.
- THE CONTRACTOR SHALL OBTAIN AND PAY ANY FEES RELATED TO PERMITTING, INSPECTIONS, TAPS, ETC. THAT MAY BE REQUIRED FOR A STATE CONSTRUCTION PROJECT. ENGINEER OF RECORD IS THE AUTHORITY HAVING JURISDICTION.
- CONTRACTOR SHALL COORDINATE ANY PLUMBING SYSTEM REQUIRING SHUTDOWN WITH THE OWNER 48 HOURS IN ADVANCE.
- ALL SANITARY SEWER PIPING SHOWN IS BELOW SLAB/ABOVE CEILING/WITHIN WALLS UNLESS NOTED OTHERWISE. ALL SANITARY VENT PIPING SHOWN IS ABOVE CEILING/WITHIN WALLS UNLESS NOTED OTHERWISE.
- ALL WASTE AND VENT PIPING SHALL BE CAST IRON PIPE. PROVIDE CASKETERED HUB & SPIGOT PIPE FOR WASTE PIPING AND HUBLESS PIPE WITH STAINLESS STEEL BANDS FOR VENT PIPING TO CONFORM TO SCO STANDARDS.
- ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
- ALL PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY NC PLUMBING CODE AND MANUFACTURERS RECOMMENDATIONS.
- ALL PIPING PENETRATIONS THRU NEW AND EXISTING FLOORS/WALLS SHALL BE SEALED TO EQUAL RATING OF THE NEW/EXISTING WALL.
- ALL PLUMBING SYSTEMS SHALL BE TESTED AS REQUIRED PER N.C. PLUMBING CODE.
- THE PLUMBING CONTRACTOR SHALL COORDINATE ALL UNDER SLAB PIPING WITH ALL STRUCTURAL FOUNDATIONS, P.C. SHALL COORDINATE ALL UNDER SLAB PIPING WITH ELEVATION INVERTS WITH THE SITE UTILITY INVERTS.
- METAL ROOF DECKING SHALL NOT BE PENETRATED TO SUPPORT WASTE LINES, VENT LINES, AND WATER SUPPLY LINES.

PLUMBING FIXTURE SCHEDULE								
ITEM	DESCRIPTION	FINISH	COLD	HOT	VENT	WASTE	ADA	
TD	TRENCH DRAIN 4" WIDE WITH 2" BOTTOM RADIUS. APPROXIMATELY 96" IN LENGTH AND A MINIMUM OF 3.5" DEEP TO BOTTOM OF TRENCH FROM TOP OF FINISHED FLOOR PROVIDE WITH REMOVEABLE CAST IRON OR STEEL GRATE ALONG ENTIRE LENGTH OF TRENCH CAPABLE OF SUPPORTING HEAVY WHEEL TRAFFIC	CONCRETE			2"	4"		
SP	SUMP PUMP- ZOELLER OIL GUARD SYSTEM WITH PUMP MODEL NO. FM2809 (FLOAT OPERATED, SUBMERSIBLE) TEMPERATURE TO 130°. NON-CLOGGING VORTEX IMPELLAR DESIGN. (OR EQUAL PRODUCT FROM MANUFACTURERS IN SPECIFICATIONS).	CAST FINISH.				1-1/2"		

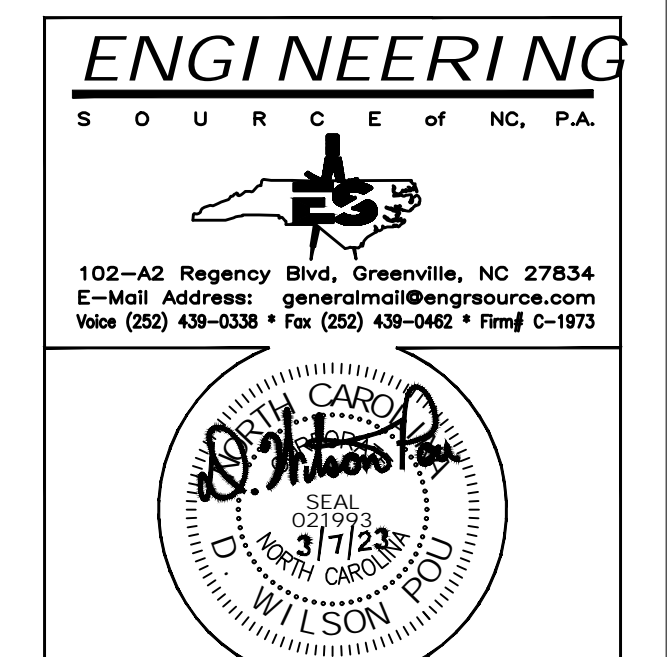
*MODEL NUMBERS ARE PROVIDED TO ESTABLISH A LEVEL OF QUALITY. EQUAL QUALITY PRODUCTS ARE ACCEPTABLE.

DUCTLESS SPLIT-SYSTEM SCHEDULE													
SUPPLY FAN						HEAT PUMP					COOLING	HEATING	
MARK	CFM	MANUF./MODEL	VOLT/PH	MCA	MOCP	MARK	MANUF./MODEL	VOLT/PH	MCA	MOCP	TC (BTUH)	TC (BTUH)	SEER
DS-1	200	MITSUBISHI/MSZ-GI-09	-	0.1	-	DCU-1	MITSUBISHI/LS-090	208/1	16.0	25	9,000	-	18

- HEATING AND COOLING CAPACITIES ARE MINIMUM ACCEPTABLE VALUES
- PROVIDE WITH FILTERS AND FILTER FRAMES.
- PROVIDE WITH SINGLE POINT POWER CONNECTION & "LOW-AMBIENT" KIT.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH E.C. FUSES REQUIRED FOR EQUIPMENT PURCHASED.
- AMP RATINGS GIVEN ARE MAXIMUM VALUES.
- BASIS OF DESIGN IS MITSUBISHI, EQUIPMENT BY DAIKIN, TRANE, & CARRIER ARE CONSIDERED EQUALS.

Project: **Elev. Reno. at Roanoke Island Aquarium**
 Project No: **SCO#22-24684-01 ES22056**
 Location: **374 Airport Rd, Manteo, NC 27954**
 Title: **PLMB & MECH PLANS**
 Date: **March 07, 2023**
 Scale: **As indicated**

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Revisions:

No.	Description	Date

Designed: DWP
 Drawn: DWP
 Reviewed: DWP
 Cad File: **PM1.1**

ELECTRICAL NOTES:

- * "NEC" IS DEFINED AS BEING THE CURRENT NFPA-70 THAT HAS BEEN ADOPTED BY THE NC CODE COUNCIL AND THE NC DEPT OF INSURANCE.
- 1. DO NOT SCALE THESE DRAWINGS; REFER TO LARGEST SCALE ARCHITECTURAL PLANS.
- 2. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE NOT INTENDED TO SHOW MINOR DETAILS AND EXACT LOCATIONS. DESIGN ADJUSTMENTS SHALL BE ANTICIPATED BY THE CONTRACTOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- 3. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CURRENT NEC/NFPA 70. CONTRACTOR SHALL NOTIFY ENGINEER REGARDING ANY CODE DISCREPANCIES SHOWN ON PLAN. THE ENGINEER OF RECORD AND THE OFFICE OF STATE CONSTRUCTION ARE THE AUTHORITIES HAVING JURISDICTION. SCHEDULING OF ALL INSPECTIONS WITH THE NC-DOI ELECTRICAL INSPECTOR FOR THIS AREA IS THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. INSPECTIONS MAY ONLY BE SCHEDULED ON WEEKDAYS, MONDAY THRU FRIDAY, UNLESS APPROVED BY SCO PRIOR TO SCHEDULING.
- 4. CONTRACTOR SHALL INSTALL, GROUND AND BOND SYSTEM PER THE NEC WITH ALL NC MODIFICATIONS.
- 5. MINIMUM WIRE SIZE SHALL BE #12 AWG., MINIMUM CONDUIT SIZE SHALL BE 3/4" REGARDLESS OF NEC OR SCO GUIDELINES ALLOWANCES FOR SMALLER CONDUIT.
- 6. ELECTRICAL CONTRACTOR SHALL PROVIDE HACR RATED CIRCUIT BREAKERS ON ALL HVAC EQUIPMENT.
- 7. CONDUCTORS SHALL BE COPPER TYPE THHN, THWN, OR THW. BRANCH CIRCUIT CONDUCTOR SHALL NOT BE SMALLER THAN NO. 12 AWG., EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. HOME RUNS ORIGINATING MORE THAN 50' AT 120V FROM PANEL LOCATION SHALL BE NO. 10 AWG MINIMUM SIZE. WIRES NO. 10 AWG AND SMALLER SHALL BE SOLID; WIRES NO. 8 AWG AND LARGER SHALL BE STRANDED. PROVISIONS OF SECTION 210-5 OF THE NEC SHALL BE STRICTLY COMPLIED WITH AND BE CONSISTENT THROUGHOUT ENTIRE SYSTEM.
- 8. ALL CIRCUITS SHALL BE PROVIDED WITH AN INSULATED EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250-122. HASHMARK FOR GROUNDING CONDUCTOR IS NOT INDICATED ON THESE DRAWINGS. RACEWAY SHALL NOT BE USED AS EQUIPMENT GROUND.
- 9. ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL EMPTY CONDUIT SHALL HAVE A PULL WIRE.
- 10. ALL CONDUIT FITTINGS SHALL BE COMPRESSION TYPE WITH INSULATED THROATS. ALL EXTERIOR CONDUIT FITTINGS SHALL BE LISTED FOR USE IN WET LOCATIONS PER NEC ARTICLE 314.
- 11. SERVICE ENTRANCE CONDUCTORS SHALL BE IN CONDUIT (RIGID OR PVC). EXTERIOR CONDUIT EXPOSED ABOVE SLAB SHALL BE RIGID. INTERIOR CONDUIT EXPOSED SHALL BE ELECTRICAL METALLIC TUBING (EMT). EMT SHALL BE COLD-ROLLED STEEL TUBING w/A COATING ON THE OUTSIDE AND PROTECTED ON THE INSIDE BY A ZINC, ENAMEL, OR EQUIVALENT CORROSION RESISTANT COATING AND CONFORMING TO THE REQUIREMENTS OF ANSI C 80.3-1996 OR LATER EDITION. ALL UNDERGROUND CONDUIT SHALL BE UL LISTED SCHD 40 PVC CONFORMING TO ARTICLES 352 & 300 OF THE NEC. WHERE SCHD 40 PVC IS INSTALLED BELOW GRADE OR UNDER FLOOR SLABS, THE ELBOWS REQUIRED TO TURN THE RACEWAY UP INTO CABINETS, EQUIPMENT, ETC., SHALL BE OF RIGID STEEL AND SHALL CONTINUE AS RIGID STEEL TO THE CABINET, EQUIPMENT, ETC. ALL FEEDER AND BRANCH CIRCUITS SHALL BE IN CONDUIT.
- 12. ALL JUNCTION OR DEVICE BOXES SHALL HAVE A COVER.
- 13. ALL 1P-20A CIRCUITS SHALL BE 2-#12 & 1-#12G IN 3/4" C WITH NO SHARED NEUTRALS, U.N.O.
- 14. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH ALL VOLUMES OF THE NCSBC, INSPECTORS HAVING JURISDICTION, AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- 15. EACH PIECE OF ELECTRICAL GEAR, EQUIPMENT, ETC., SHALL BEAR A CERTIFICATION LABEL FROM A THIRD PARTY TESTING AGENCY ACCREDITED BY THE NC BUILDING CODE COUNCIL.
- 16. METAL ROOF DECKING SHALL NOT BE PENETRATED TO SUPPORT ELECTRICAL ITEMS.
- 17. COLOR CODE JUNCTION BOXES, CONDUIT, AND INSTALL ENGRAVED PHENOLIC LABELS FOR ELECTRICAL GEAR, DISCONNECTS, ETC. PER SCO ELECTRICAL GUIDELINES. FASTEN LABELS WITH SCREW FASTENERS.
- 18. E.C. SHALL INSTALL HEAVY DUTY NEMA-1 DISCONNECTS AT ALL INTERIOR LOCATIONS INDICATED AND HEAVY DUTY NEMA-3R DISCONNECTS AT ALL EXTERIOR LOCATIONS INDICATED ON THESE DRAWINGS.
- 19. VERIFY WITH OWNER LOCATION/TYPE OF ALL FIXTURES, PANEL BOXES, OUTLET PLACEMENT, ETC. BY HOLDING AN ELECTRICAL WALK THROUGH ON THE BUILDING SITE ONCE FRAMING IS COMPLETED.
- 20. ELECTRICAL BOXES INSTALLED IN U.L. RATED WALLS SHALL BE LOCATED A MINIMUM OF 2'-0" FROM ANY OTHER ELECTRICAL BOX IN THAT WALL.
- 21. LIGHTING SWITCHES, RECEPTACLES AND/OR DATA OUTLETS SHALL NOT BE MOUNTED BACK TO BACK IN ANY WALL.
- 22. CONTRACTOR SHALL PERFORM GROUNDING TEST AS REQUIRED BY SCO AND NC-DOI REQUIREMENTS.
- 23. E.C. SHALL INSTALL COMPLY WITH ANSI A117.1 FOR OUTLET AND CONTROL SWITCH MOUNTING HEIGHTS FOR ADA ACCESSIBILITY.
- 24. E.C. SHALL BE RESPONSIBLE FOR ALL LINE SIDE AND LOAD SIDE WIRING ON ALL EQUIPMENT REQUIRING ELECTRICAL POWER. EXTERNALLY MOUNTED DISCONNECT SWITCHES AND ALL REQUIRED FUSES SHALL BE FURNISHED BY THE CONTRACTOR PROVIDING THE EQUIPMENT. E.C. SHALL BE RESPONSIBLE FOR INSTALLING EXTERNALLY MOUNTED DISCONNECT SWITCHES AND PROVIDING LOAD SIDE WIRING AND CONDUIT TO EQUIPMENT. ALL FINAL CONNECTIONS TO EQUIPMENT SHALL BE DONE BY THE CONTRACTOR PROVIDING THE EQUIPMENT. SEE "ELECTRICAL CONNECTION DETAIL".
- 25. "PROVIDE" IS DEFINED AS FURNISH AND INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
- 26. THE TERM "VERIFY" RELATIVE TO THESE DRAWINGS SHALL BE DEFINED AS OBTAINING EQUIPMENT INSTALLATION INSTRUCTIONS FROM EQUIPMENT SUPPLIER OR OBTAINED OWNER'S REPRESENTATIVE'S APPROVAL.
- 27. E.C. IS RESPONSIBLE FOR DEMOLITION OF EXISTING LIGHT FIXTURES THAT ARE INDICATED TO BE REPLACED. E.C. SHALL FIELD VERIFY EXISTING SWITCH CIRCUITING AND REWORK SWITCH WIRING TO PROVIDE CONTROL OF LIGHTS AS INDICATED ON PLANS.
- 28. ALL RECEPTACLES WITHIN 6 FEET OF A SINK, BATHTUB, SHOWER, SUMP, OR THE LIKE SHALL BE GFCI PROTECTED REGARDLESS OF WHETHER THEY ARE INDICATED ON THESE PLANS. E.C. SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXACT DISTANCES AND PROVIDING THE GFCI PROTECTION AS REQUIRED.

LIGHT FIXTURE SCHEDULE						
TYPE	DESCRIPTION	LAMPS	VOLTS	WATTS	B.F.	
A	4' STRIP STYLE ENCLOSED LED LIGHT FIXTURE FOR EXTREME ENVIRONMENTS WITH MEDIUM LUMEN OUTPUT (6,000 LUMENS) AND OPALQUE LENS. PROVIDE COLUMBIA # LXEM-40-HL-RFP-E-U OR WILLIAMS # 96-4-L62/840-PCFR-DRV-UNV OR LITHONIA # FEM-L48-600LM-LPPFL-WD-MVOLT-40K-80CRI	LED	MULTI	55W	-	

ELECTRICAL LEGEND (REFER TO MOUNTING HEIGHT SCHEDULE FOR MOUNTING HEIGHT INFORMATION)

	FLUORESCENT LIGHT FIXTURE, 2x4 FT.		WALL SWITCH, SINGLE POLE, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT LIGHT FIXTURE NIGHT LIGHT		WALL SWITCH, DIMMER, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT STRIP LIGHT, 8 FT.		WALL SWITCH, 3-WAY, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT STRIP LIGHT, 4 FT.		MANUAL MOTOR STARTER, 20A, 120V
	FLUORESCENT LIGHT FIXTURE, 1x4 FT.		DOUBLE GANG WALL SWITCH, 20 AMP, 120V., "SPEC. GRADE"
	FLUORESCENT LIGHT FIXTURE, 2'x2'		WALL MOUNTED OCCUPANCY SENSOR
	POLE MOUNTED LIGHT FIXTURE, AS SPECIFIED		CEILING MOUNTED OCCUPANCY SENSOR
	FLUORESCENT LIGHT FIXTURE WALL SCONCE		NON-FUSED DISCONNECT SWITCH, 240V, 30A, U.N.O.
	OWNER SELECTED PENDANT MOUNTED		FUSED DISCONNECT SWITCH
	EXTERIOR TWO-HEAD LIGHT		DISCONNECT FUSE SIZE
	EXTERIOR DOOR LIGHT		DISCONNECT FRAME SIZE
	LIGHT AND EXHAUST FAN COMBINATION		FIRE ALARM MANUAL PULL STATION
	EXHAUST FAN		FIRE ALARM HORN/STROBE
	H.I.D. LIGHT FIXTURE, AS SPECIFIED.		FIRE ALARM STROBE
	RECESSED OR SURFACE MOUNTED ROUND FIXTURE		SMOKE DETECTOR
	RECESSED NIGHT LIGHT		HEAT DETECTOR, CEILING MOUNTED
	H.I.D. WALL PACK		DUCT SMOKE DETECTOR
	BOLLARD EXTERIOR LIGHT		FIRE ALARM CONTROL PANEL, FLUSH MOUNTED.
	EXTERIOR GROUND MOUNTED FLOOD LIGHT		GROUND - EXTEND AND CONNECT TO APPROVED GROUND
	JUNCTION BOX		ELECTRICAL PANEL - SURFACE MOUNTED.
	TELEPHONE OUTLET WITH COVER SEE DETAIL FOR INSTALLATION INSTRUCTIONS.		ELECTRICAL PANEL - FLUSH MOUNTED.
	DATA/LAN OUTLET WITH COVER. SEE DETAIL FOR INSTALLATION INSTRUCTIONS.		UNSWITCHED CIRCUIT, 2#12 & 1 #12 G. IN 3/4" C., U.N.O.
	EXIT LIGHT		SWITCHED CIRCUIT
	EMERGENCY EXIT LIGHT		PANEL NAME-CIRCUIT #
	EMERGENCY LIGHT WALL MOUNTED UNLESS NOTED OTHERWISE.		WP WEATHER PROOF
	DUPLEX RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		GFI GROUND FAULT INTERRUPTER
	GFI DUPLEX RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		A.F.F. ABOVE FINISHED FLOOR
	220 V. RECEPTACLE, MATCH APPLIANCE PLUG		NL NIGHT LIGHT
	FLUSH MOUNTED FLOOR DUPLEX RECEPTACLE		U.N.O. UNLESS NOTED OTHERWISE
	FLUSH MOUNTED FLOOR DATA/LAN OUTLET		IG ISOLATED GROUND
	QUAD RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		LC LIGHTING CONTACTOR
			EWC ELECTRIC WATER COOLER
			AC ABOVE COUNTER
			BC BELOW COUNTER

Project: **Elev. Reno. at Roanoke Island Aquarium**
 Project No: **SCO#22-24684-01 ES22056**
 Location: **374 Airport Rd, Manteo, NC 27954**
 Title: **ELECTRICAL PLANS**
 Date: **March 07, 2023**
 Scale: **As indicated**

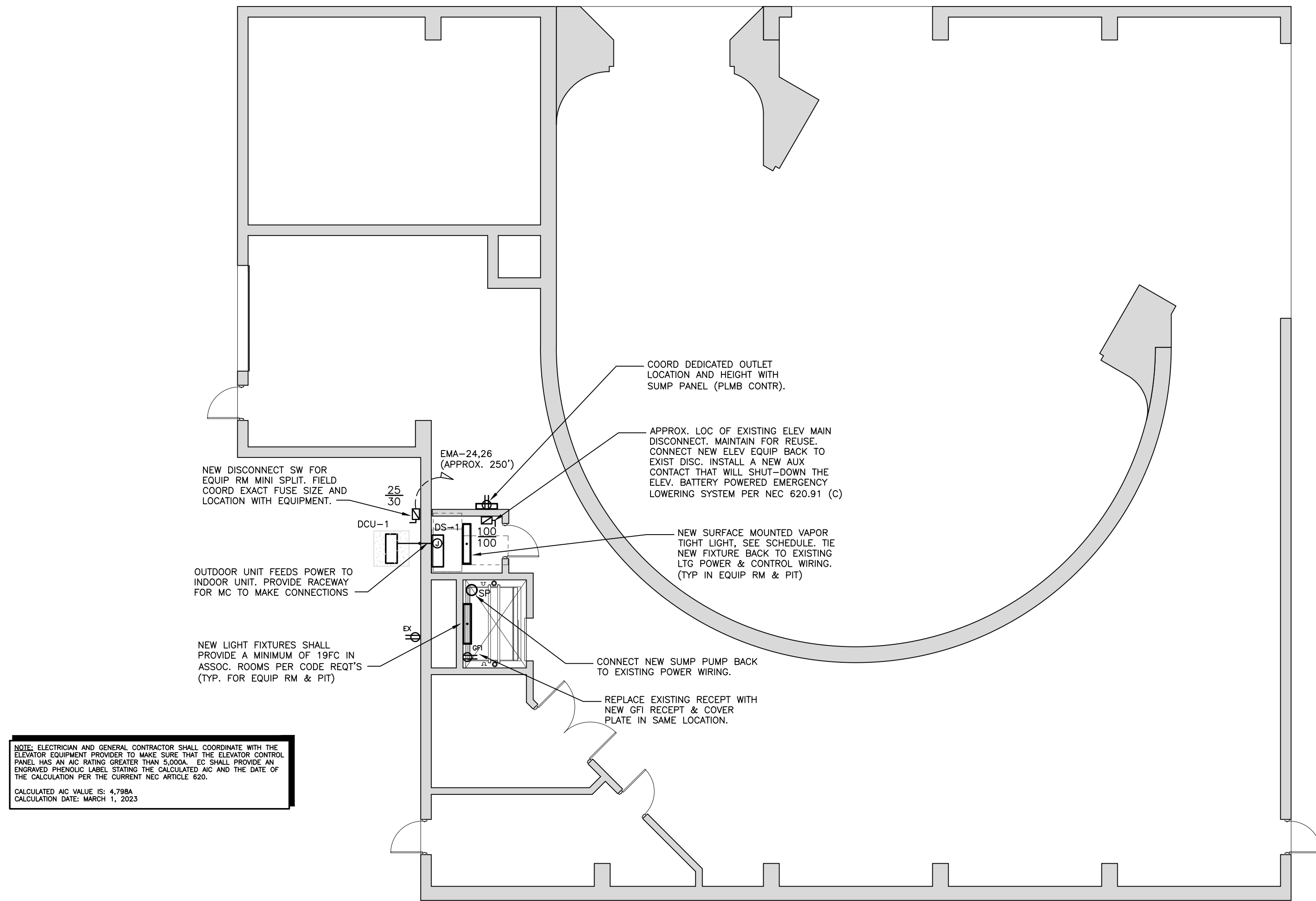
The designer shall not be responsible for any error, omission, defect or deficiency in the contract documents ("error") prepared by the designer or its consultants which in any way impacts the schedule of the project, results in a lack of coordination among the contract documents, delays the completion of the project or which in any other way causes any damage or loss to the owner, contractor, subcontractors, or other entity involved in the project, unless: (i) designer is promptly notified of such error, in any event within 14 days of the date such error was discovered or could reasonably have been discovered; and (ii) designer is given opportunity at the time of discovery to address such error, and, if appropriate, take such steps as are necessary to correct and resolve it. Failure to comply with the provisions of this paragraph shall constitute a waiver of any claim for damages, or a right to offset against designer by owner, contractor or others and shall in no event cause or allow a reduction in the fees otherwise due designer for services provided on the project.

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Revisions:

No.	Description	Date

Designed: DWP
 Drawn: DWP
 Reviewed: DWP
 Cad File:



NOTE: ELECTRICIAN AND GENERAL CONTRACTOR SHALL COORDINATE WITH THE ELEVATOR EQUIPMENT PROVIDER TO MAKE SURE THAT THE ELEVATOR CONTROL PANEL HAS AN AIC RATING GREATER THAN 25000. EIC SHALL PROVIDE AN ENGRAVED PERMANENT LABEL STATING THE CALCULATED AIC AND THE DATE OF THE CALCULATION PER THE CURRENT NEC ARTICLE 600.
CALCULATED AIC VALUE IS: 4,788A
CALCULATION DATE: MARCH 1, 2023

1ST FLR ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

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EXISTING PANELBOARD SCHEDULE - "EMA"																											
MAIN: 200 MCB				VOLTAGE: 208/120				PHASE: 3				WIRE: 4				MOUNTING: SURFACE				AIC: 22,000				BUS BARS: COPPER			
CKT #	BKR	POLE	WIRE	COND	DESCRIPTION	LOAD (KVA)						LOAD (KVA)						DESCRIPTION		COND WIRE SIZE	POLE	BKR	TRIP	CKT #			
						LTG	REC	MTR	A/C	HTG	KIT	MISC	A	B	C	LTG	REC	MTR	A/C						HTG	KIT	MISC
1	20	1	12	3/4"	ELEV EQUIP RM LTS	0.2														SPARE	3/4"	12	1	20	2		
3	20	1	12	3/4"	ELEV SUMP PUMP							0.5								GENSET FUEL PUMP	3/4"	12	1	20	4		
5	20	1	12	3/4"	ELEV PIT REC		0.2													GENSET BATT CHARG	3/4"	12	1	20	6		
7	20	1	12	3/4"	ELEV CONTROL PNL							0.5								GENSET CRANKCASE	3/4"	12	2	20	8		
9	20	1	12	3/4"	ELEV CAB LTS	0.2																			10		
11	20	1	12	3/4"	ELEV EQUIP RM REC	0.2														CIRC PUMP	3/4"	12	3	20	12		
13	20	1	12	3/4"	ELEV PIT LTS	0.2																				14	
15	20	1	12	3/4"	BOILER RM LTS	0.2																				16	
17	20	1	12	3/4"	BOILER							0.5								SPACE						18	
19	20	3	12	3/4"	AIR COMP - CONTROLS							1.0								SPACE						20	
21												1.0								SPACE						22	
23												1.0								* DCU-1 *	3/4"	8	2	30	24		
25																										26	
27																										28	
29																										30	
31																										32	
33																										34	
35																										36	
37																										38	
39																										40	
41																										42	
LIGHTING (KVA):						0.8	0.8	0.4	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	3.2	0.0	0.0	4.7	CONNECTED LOAD (KVA):				13.6	
RECEPTACLES (KVA):						0.4															DEMAND LOAD (KVA):				13.8		
MOTORS (KVA):						0.0	PHASE A						5	41.7							CONNECTED LOAD (AMPS):				37.7		
A/C (KVA):						3.2	PHASE B						4	32.5							DEMAND LOAD (AMPS):				37.3		
HEATING (KVA):						0.0	PHASE C						5	39.2													
KITCHEN (KVA):						0.0	KVA								AMPS												
MISCELLANEOUS (KVA):						9.2																					

NOTES: * INDICATES A NEW C/B IN AN EXISTING SPACE. FIELD VERIFY HVAC UNIT DATA PLATE PRIOR TO ORDERING C/B.

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[Signature]
3/7/23
CARTER
LSON

Revisions:

No.	Description	Date