

PROJECT DIRECTORY:

MECHANICAL/ELECTRICAL:
BDH Engineering
440 Regency Pkwy, Suite 135
Omaha, NE 68114
402 981 5527

OPS NORTH &
NORTHWEST COOLING
TOWER REPLACEMENT

OMAHA, NE

GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL VERIFY THE EXISTING/ACTUAL DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF THE WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE INSTALLATION OF NEW WORK WITHIN THESE EXISTING/ACTUAL CONDITIONS. DEVIATIONS IN THE EXISTING/ACTUAL CONDITIONS OR DIMENSIONS INDICATED SHALL BE COORDINATED WITH THE ARCHITECT AND OWNER IN ORDER TO MODIFY THE PLANS ACCORDINGLY.
2. THE DRAWINGS MAY SPECIFY DIMENSIONS, ELEVATIONS AND/OR CONSTRUCTION CONDITIONS TO BE FIELD VERIFIED. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL SPECIFIED DIMENSIONS, ELEVATIONS, AND/OR CONSTRUCTION CONDITIONS PRIOR TO PROCEEDING WITH CONSTRUCTION OR FABRICATION OF ANY COMPONENTS RELATED TO SUCH CONDITIONS.
3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS.
4. PROVIDE ALL SPECIFIED PRODUCTS/MATERIALS UNLESS OTHERWISE NOTED OR APPROVED BY OWNER, ARCHITECT, OR ENGINEER.

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Grand total: 10	

A/C	AIR CONDITIONING	JAN	JANITOR
A/E	ARCHITECT/ENGINEER	KIT	KITCHEN
ADDL	ADDITIONAL	LAB	LABORATORY
ADJ	ADJUSTABLE	LAV	LAVATORY
AFF	ABOVE FINISHED FLOOR	LVL	LEVEL
AFS	ABOVE FINISHED SLAB	LW	LIGHTWEIGHT
AL	ALUMINUM	M/R	MOISTURE RESISTANT
AMT	AMOUNT	MAINT	MAINTENANCE
ANOD	ANODIZED	MATL	MATERIAL
ADDL	ADDITIONAL	MAX	MAXIMUM
ADDM	ADDENDUM	MDF	MEDIUM DENSITY
ADJ	ADJUSTABLE		FIBERBOARD
AFF	ABOVE FINISH FLOOR	MECH	MECHANICAL
AFS	ABOVE FINISH SLAB	MEZZ	MEZZANINE
ALT	ALTERNATE	MFG	MANUFACTURING
ARCH	ARCHITECT(URAL)	MFR	MANUFACTURER
ACT	ACOUSTIC CEILING TILE	MISC	MISCELLANEOUS
AVE	AVENUE	MULT	MULTIPLE
BFF	BELOW FINISH FLOOR	N	NORTH
BLDG	BUILDING	N/A	NOT APPLICABLE
B.O.	BOTTOM OF	NIC	NOT IN CONTRACT
BOT	BOTTOM	NOM	NOMINAL
BRG	BEARING	NTS	NOT TO SCALE
BSMT	BASEMENT	OFCL	OWNER FURNISHED/
CIP	CAST IN PLACE		CONTRACTOR INSTALLED
CJ	CONTROL JOINT	OFF	OFFICE
CL	CLEAR	OFOL	OWNER FURNISHED/
CLG	CEILING		OWNER INSTALLED
CST	CLOSET	OH	OVERHEAD
CLR	CLEAR	OP	OPPOSITE
CMU	CONCRETE MASONRY UNIT	OPT	OPTIONAL
CONC	CONCRETE	ORIG	ORIGINAL
CONF	CONFERENCE	P	PAINT
CONT	CONTINUOUS	PLAM	PLASTIC LAMINATE
COORD	COORDINATE	PLY	PLYWOOD
CPT	CARPET	POLY	POLYSTYRENE
CT	CERAMIC TILE	POLYISO	POLYISOCYANURATE
DBL	DBL	PR	PAIR
CEMO	DEMOLISH	PREFAB	PREFABRICATED
DEPT	DEPARTMENT	PRELIM	PRELIMINARY
DF	DRINKING FOUNTAIN	PVC	POLYVINYL CHLORIDE
DIM	DIMENSION	QTY	QUANTITY
DIST	DISTANCE	RE	REFERENCE
DS	DOWNSPOUT	REQD	REQUIRED
DW	DISHWASHER	REV	REVERSE/REVISION
DWG	DRAWING	RO	ROUGH OPENING
DWR	DRAWER	S	SOUTH/STAIN
E	EAST	SC	SOLID CORE
EA	EACH	SCHED	SCHEDULE
EIFS	EXTERIOR INSULATION & FINISH SYSTEM	SCWD	SOLID CORE WOOD
		SF	SQUARE FEET
EJ	EXPANSION JOINT	SGL	SINGLE
ELEC	ELECTRICAL	SIM	SIMILAR
ELEV	ELEVATOR	SPEC	SPECIFICATION
EMER	EMERGENCY	SQ	SQUARE
ENCL	ENCLOSURE	SS	STAINLESS STEEL
ENGR	ENGINEER	ST	STREET
EPS	EXPANDED POLYSTYRENE	STD	STANDARD
EQ	EQUAL	STOR	STORAGE
EXT	EXTERIOR	STRUCT	STRUCTURAL
FE	FIRE EXTINGUISHER	SUSP	SUSPENDED
FF&E	FIXTURES FURNITURE & EQUIPMENT	T&B	TOP & BOTTOM
FFE	FINISH FLOOR ELEVATION	T&G	TONGUE & GROOVE
FLG	FLANGE/FLASHING/FLOORING	TBD	TO BE DETERMINED
FLR	FLOOR	TEMP	TEMPORARY
FPRG	FIREPROOFING	THRU	THROUGH
FT	FT	TLT	TOILET/TOILET ROOM
FTG	FOOTING	T.O.	TOP OF
FUT	FUTURE	TYP	TYPICAL
FV	FIELD VERIFY	UNFIN	UNFINISHED
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR	UTIL	UTILITY
GPL	GYPSUM PLASTER	VCT	VINYL COMPOSITION TILE
GWB	GYPSUM WALL BOARD	VERT	VERTICAL
HC	HOLLOW CORE	VEST	VESTIBULE
HD	HARDBOARD	W	WEST
HDBD	HARDWOOD	W/	WITH
HDWR	HARDWARE	W/O	WITHOUT
HM	HOLLOW METAL	W/R	WATER RESISTANT
HORIZ	HORIZONTAL	WC	WATER CLOSET
HGT	HEIGHT	WHSE	WAREHOUSE
HVAC	HEATING, VENTILATION, & AIR CONDITIONING	WMT	WALK-OFF MAT
INSUL	INSULATION		
INT	INTERIOR		



OPS NORTH &
NORTHWEST COOLING
TOWER REPLACEMENT

OMAHA, NE

COVER SHEET



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BID NUMBER 26-004

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I, Brian Howell, am the Coordinating Professional on the OPS NORTH & NORTHWEST COOLING TOWER REPLACEMENT project.

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NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL MECHANICAL / PLUMBING PLANS.

MECHANICAL	
Sheet Number	Sheet Name
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M0.0	MECHANICAL SYMBOLS LEGEND AND GENERAL NOTES
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M7.1	MECHANICAL DETAILS AND SCHEDULES
Grand total: 10	

GENERAL PLUMBING NOTES

APPLY TO ALL PLUMBING SHEETS

A. LIGHT LINE WEIGHT INDICATES EXISTING ITEMS AND ASSOCIATED MATERIALS TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED UNDER THIS CONTRACT.

B. ROUTING INDICATED ON DRAWINGS IS APPROXIMATE AND DOES NOT INCLUDE ALL OFFSETS. FITTING, VALVE, AND/OR FLANGE LOCATIONS ON VERTICAL PIPING SHALL BE PRIOR TO FINAL CONNECTION. COORDINATE LOCATION OF PLUMBING PIPING WORK WITH LIGHTING, STRUCTURAL MEMBERS, HVAC, PIPING SYSTEMS, ETC. PROVIDE OFFSETS AND CLEARANCES OR RELOCATE PLUMBING WORK AS REQUIRED TO AVOID CONFLICTS WITH WORK OF ALL OTHER TRADES.

C. PLUMBING WORK SHALL NOT BE LOCATED OVER ELECTRICAL, DATA OR COMMUNICATION EQUIPMENT ROOMS. PLUMBING WORK SHALL NOT BE LOCATED ABOVE ELECTRICAL / DATA / COMMUNICATION EQUIPMENT OR PANELS.

D. SUPPORT ALL PLUMBING PIPING, EQUIPMENT, ETC. FROM BUILDING STRUCTURE. HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBERS OR RUN THROUGH JOIST WEBS IF POSSIBLE. DO NOT USE WIRE OR PERFORATED METAL TO SUPPORT PIPING. DO NOT SUPPORT PIPING FROM CHORD OF ROOF OR CHORD OF WALL. DO NOT SUPPORT PIPING FROM SUPPORT FROM BOTTOM OF CHORD OF BAR JOIST OR FROM METAL ROOF DECK. ROUTE ABOVE GRADE DRAINAGE PIPING AS HIGH AS POSSIBLE AND COORDINATE WITH OTHER TRADES.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH ROOF OR FLOOR. SMOKE RATED OR COMBINATION FIRE & SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE & SMOKE RATED SEALANTS. SEE ARCHITECTURAL PLANS FOR RATED SEPARATIONS.

G. INSTALL ESCUTCHEON PLATES ON ALL WALL AND FLOOR PENETRATIONS SERVING EXPOSED PLUMBING PIPING WALL PENETRATIONS.

H. ALL QUINCHES IN WALL OR FLOORS FOR PIPING SHALL BE CORE DRILLED OR SAW CUT, UNLESS OTHERWISE NOTED.

I. LOCATE AND INSTALL EQUIPMENT TO PROVIDE ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES. KEEP HVAC PIPING, DUCTWORK, ETC. OUT OF CLEARANCE AREAS.

J. ALL PLUMBING PIPING WORK SHALL BE LOCATED ABOVE CEILINGS, IN A PIPE CHASE, OR OTHER CONCEALED LOCATIONS, UNLESS OTHERWISE NOTED. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE ACCESS PANEL OR ACCESS DOOR FOR ALL VALVES, DRAIN FITTINGS, ETC. AT NON-ACCESSIBLE LOCATIONS.

K. INSTALL SECTIONAL VALVES ON EACH BRANCH AND/OR RISER SERVING TWO OR MORE PLUMBING FIXTURES. DO NOT BE USED ON OVERPRESSURIZED PIPING SYSTEMS TO MAINTAIN. INSTALL SHUTOFF VALVES ON INLET AND OUTLET OF PLUMBING EQUIPMENT.

L. INSTALL STOPS AT EACH PLUMBING FIXTURE EXCEPT AT FLOWMETER LOCATIONS. SEAL ALL PLUMBING PIPING PENETRATIONS. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS OR CEILINGS WITH MATERIALS APPROPRIATE FOR RATING.

O. PIPING IN EXTERIOR BUILDING SHALL BE LOCATED ON THE INTERIOR SIDE OF BUILDING INSULATION AND VAPOR BARRIER.

P. COORDINATE INSTALLATION OF BUILDING INSULATION TO RUN CONTINUOUS BETWEEN PIPING AND EXTERIOR WALL SURFACE.

Q. COORDINATE EXACT LOCATION OF FLOOR DRAINS AND FLOOR SINKS. TOP OF GRATE SHALL BE 1/8" BELOW FINISHED FLOOR ELEVATION.

R. COMPLY WITH LOCAL UTILITY COMPANY RULES AND REGULATIONS FOR ALL GAS METER INSTALLATIONS. COORDINATE EXACT LOCATION OF GAS CONNECTIONS WITH EQUIPMENT SUPPLIED.

S. COPPER PIPING LOCATED ABOVE GRADE SHALL BE TYPE "L"; COPPER PIPING LOCATED BELOW GRADE SHALL BE TYPE "K" AND RUN CONTINUOUS WITHOUT JOINTS BELOW GRADE. TYPE "K" COPPER SHALL NOT BE USED ON OVERPRESSURIZED PIPING SYSTEMS.

T. DRAINAGE PIPING 3 INCHES AND SMALLER SHALL SLOPE NO LESS THAN 1/4 INCH PER FOOT. DRAINAGE PIPING 4 INCHES AND LARGER SHALL SLOPE NO LESS THAN 1/8 INCH PER FOOT.

U. INSTALL WALL CLEAN OUTS (WCO) WHEN LOCATED BEHIND A WALL CLOSET AT 30" A.F.F. OR AT 42" A.F.F. ABOVE CABINETS ON ALL SANITARY & STORM STACKS.

V. COORDINATE EXACT LOCATION OF PIPE CONNECTIONS WITH STORM DRAIN LOCATIONS SHOWN OF ARCHITECTURAL ROOF PLAN.

W. INSTALL VENT-THRU-ROOF (VTR) A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKE. REMOVE, REPAIR AND REPLACE WALLS, FLOORS, ROOFS AND CEILINGS TO MATCH EXISTING WHERE NECESSARY FOR PIPING AND FIXTURE REMOVAL & INSTALLATION.

Y. KITCHEN EQUIPMENT FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR. PLUMBING CONTRACTOR SHALL WASH-IN AND MAKE FINAL CONNECTIONS TO UTILITIES REQUIRED AND PROVIDE PIPING, STOPS, WATER HAMMER ARRESTERS, TRAPS AND FITTINGS FOR EQUIPMENT TO BE IN OPERATIONAL ORDER. COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR CONNECTIONS AND LOCATIONS. SEE KITCHEN EQUIPMENT CONNECTION SEQUENCE FOR RESPONSIBILITY OF WHO FURNISHES VACUUM BREAKERS AND PRESSURE REDUCING VALVES.

Z. PVC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM UNLESS THE PIPING IS INSTALLED IN A PRE-APPROVED RATED ASSEMBLY.

AA. PROVIDE ACCESSIBLE SHUTOFF VALVE INSIDE THE BUILDING FOR EACH WALL HYDRANT.

BB. CONTRACTOR SHALL COORDINATE ALL CONNECTIONS OF PLUMBING SYSTEMS WITH EXTERIOR SITE UTILITIES AND SERVICES PRIOR TO INSTALLING ANY PIPING ON THE INTERIOR. CONTRACTOR SHALL CONFIRM THAT ALL INTERIOR PIPE INVERTS AND PIPE INVERTS AT THE 5' LINE MATCH EXTERIOR PIPE INVERTS, PRIOR TO INSTALLING ANY INTERIOR PIPING BELOW FLOOR.

MECHANICAL SYMBOLS LEGEND AND GENERAL NOTES

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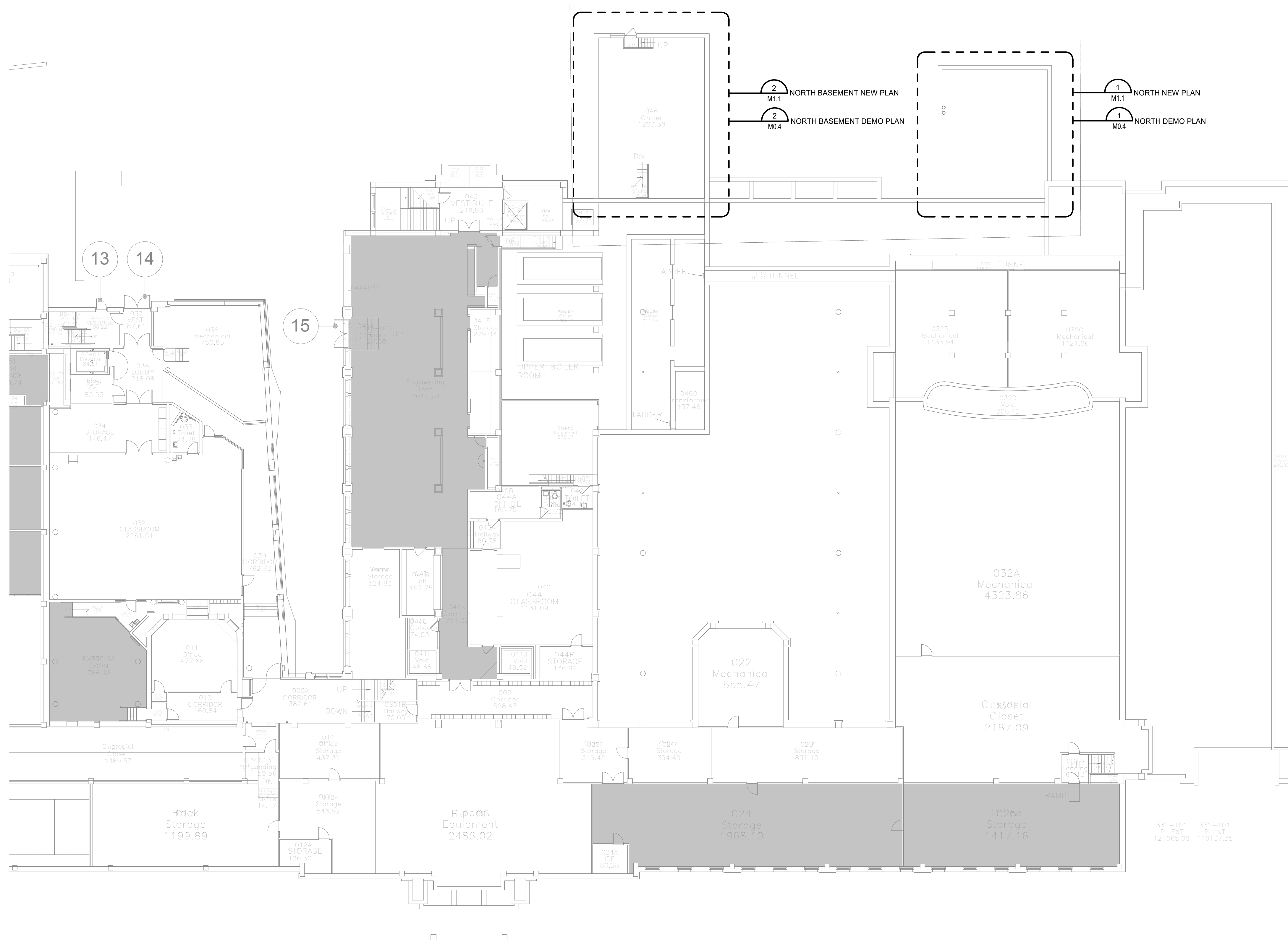
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M0.0

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NORTH MECHANICAL KEY PLAN

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



OPS NORTH & NORTHWEST COOLING TOWER REPLACEMENT

OMAHA, NE

NORTH MECHANICAL KEY PLAN

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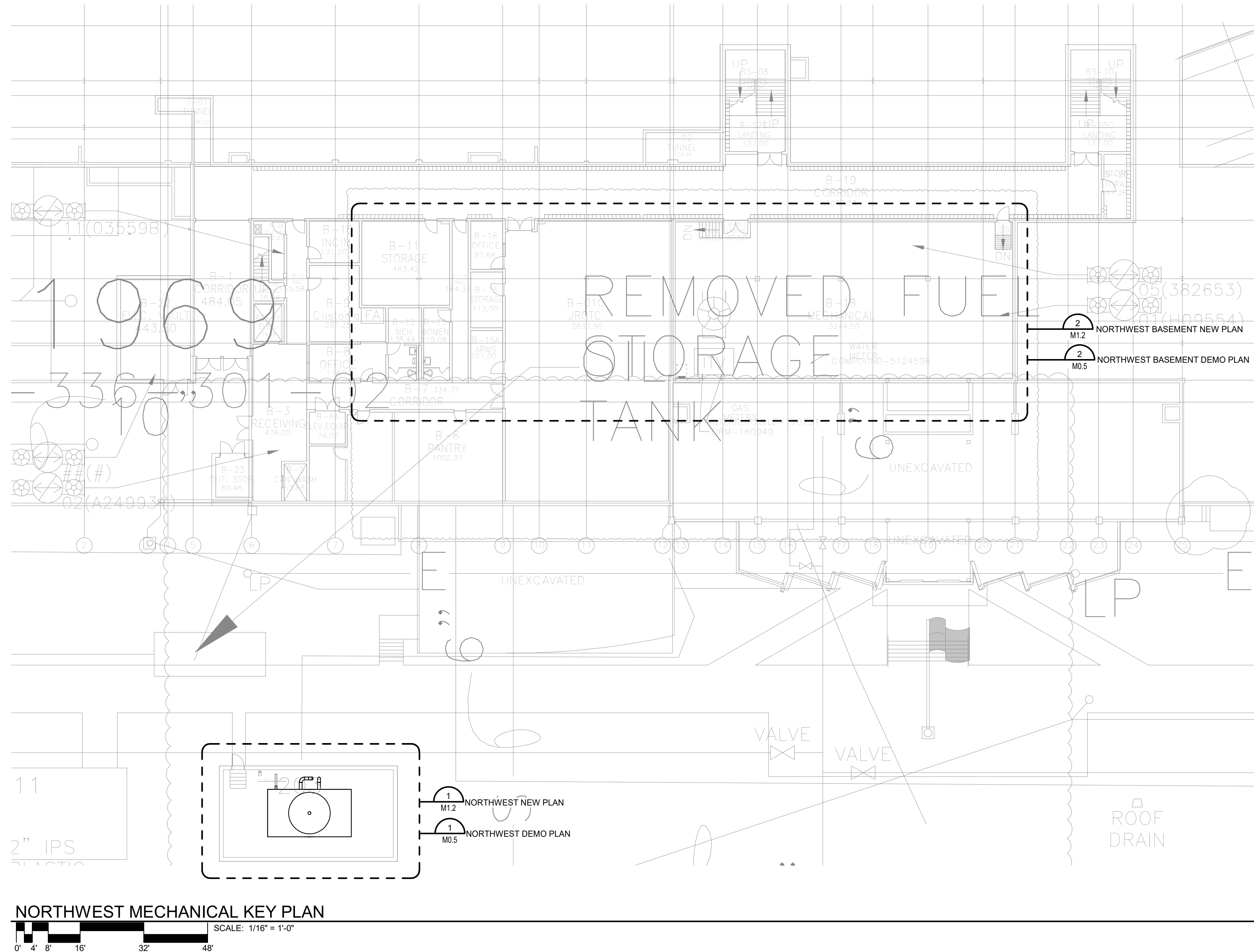
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OPS NORTH &
NORTHWEST COOLING
TOWER REPLACEMENT

OMAHA, NE

NORTHWEST MECHANICAL
KEY PLAN

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MECHANICAL DEMOLITION NOTES:

A. SEE SHEET M0.0 FOR MECHANICAL SYMBOLS LEGEND AND GENERAL PLUMBING DEMOLITION NOTES.

KEYNOTES

OPS NORTH & NORTHWEST COOLING TOWER REPLACEMENT

OMAHA, NE

NORTH MECHANICAL DEMOLITION PLAN

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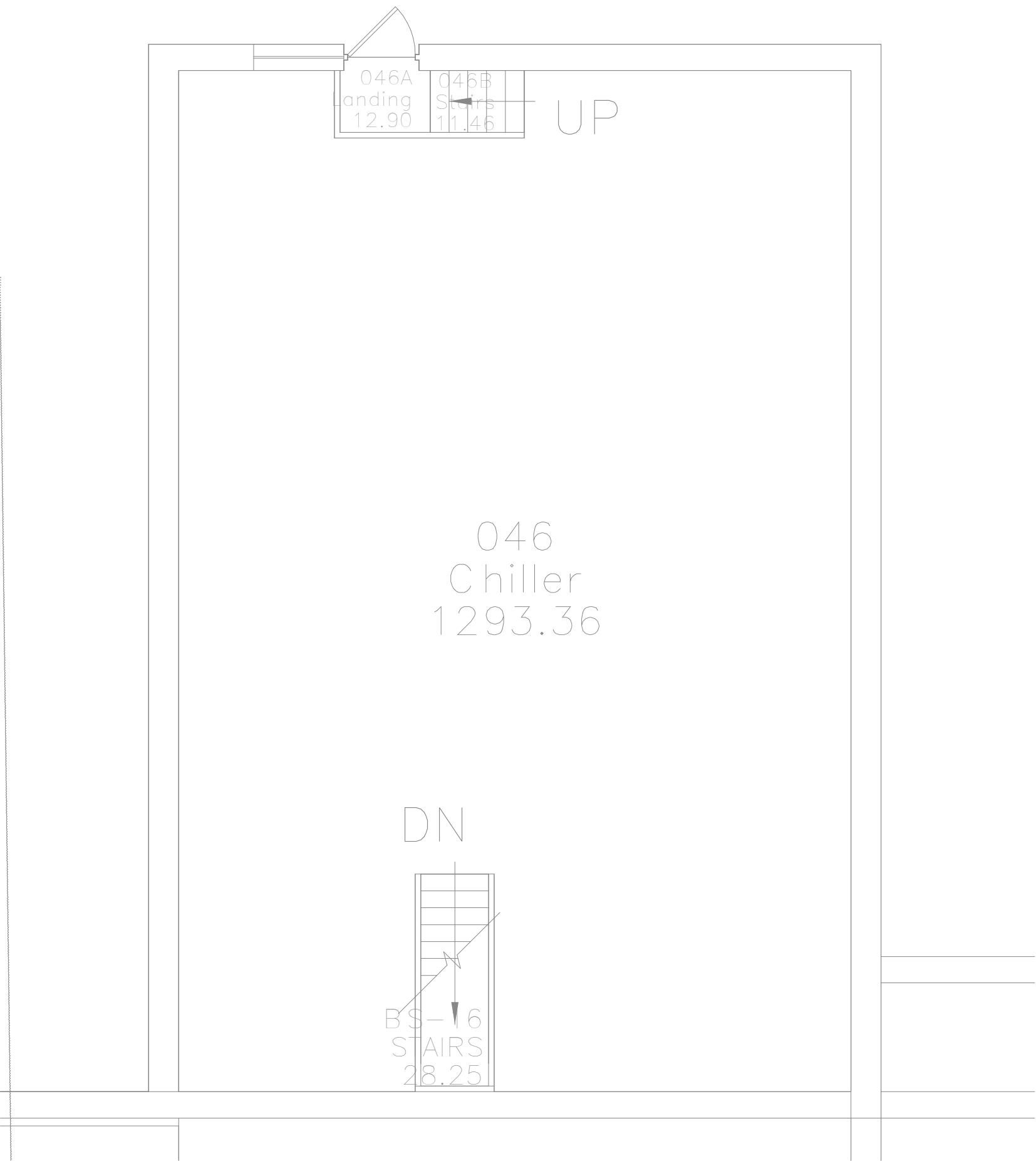
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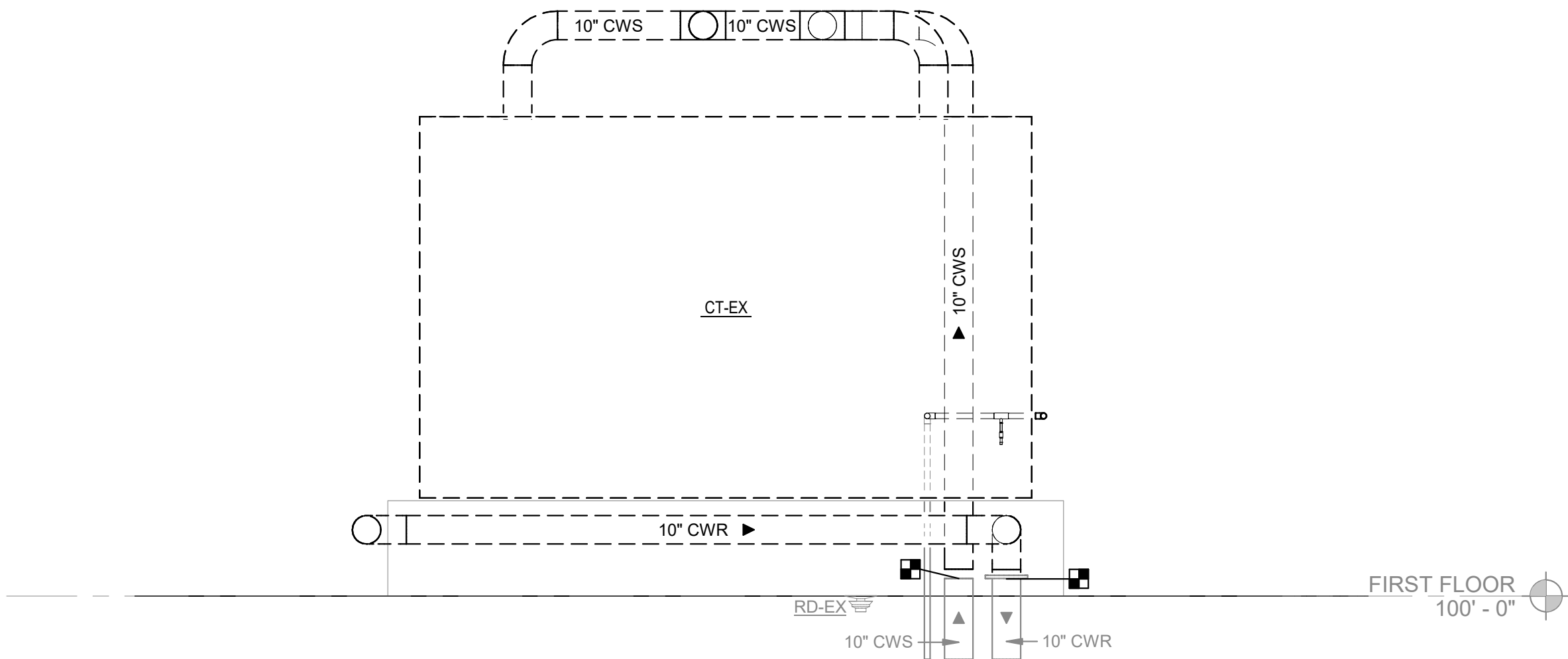
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SHEET **M0.4**



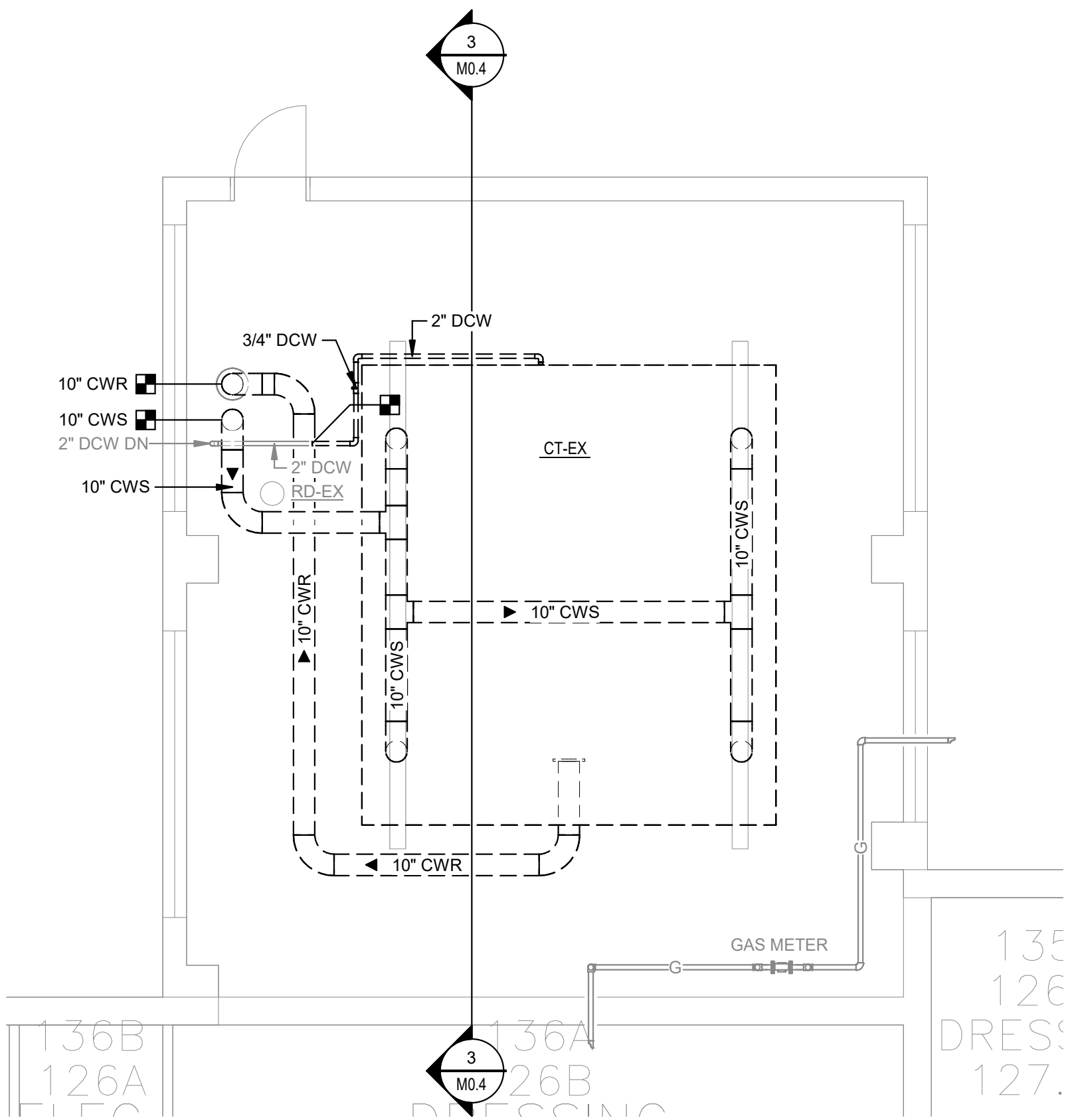
2 NORTH BASEMENT MECHANICAL DEMOLITION PLAN

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



3 SECTION AT PIPING DEMOLITION

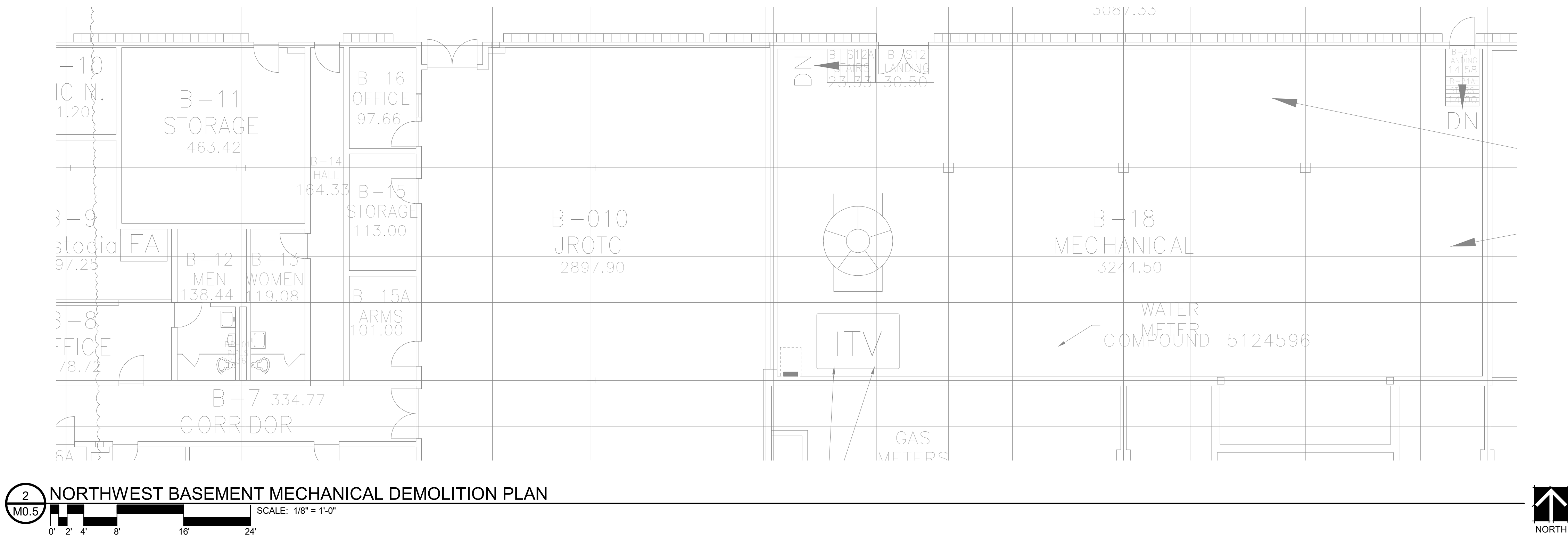
SCALE: 1/4" = 1'-0"



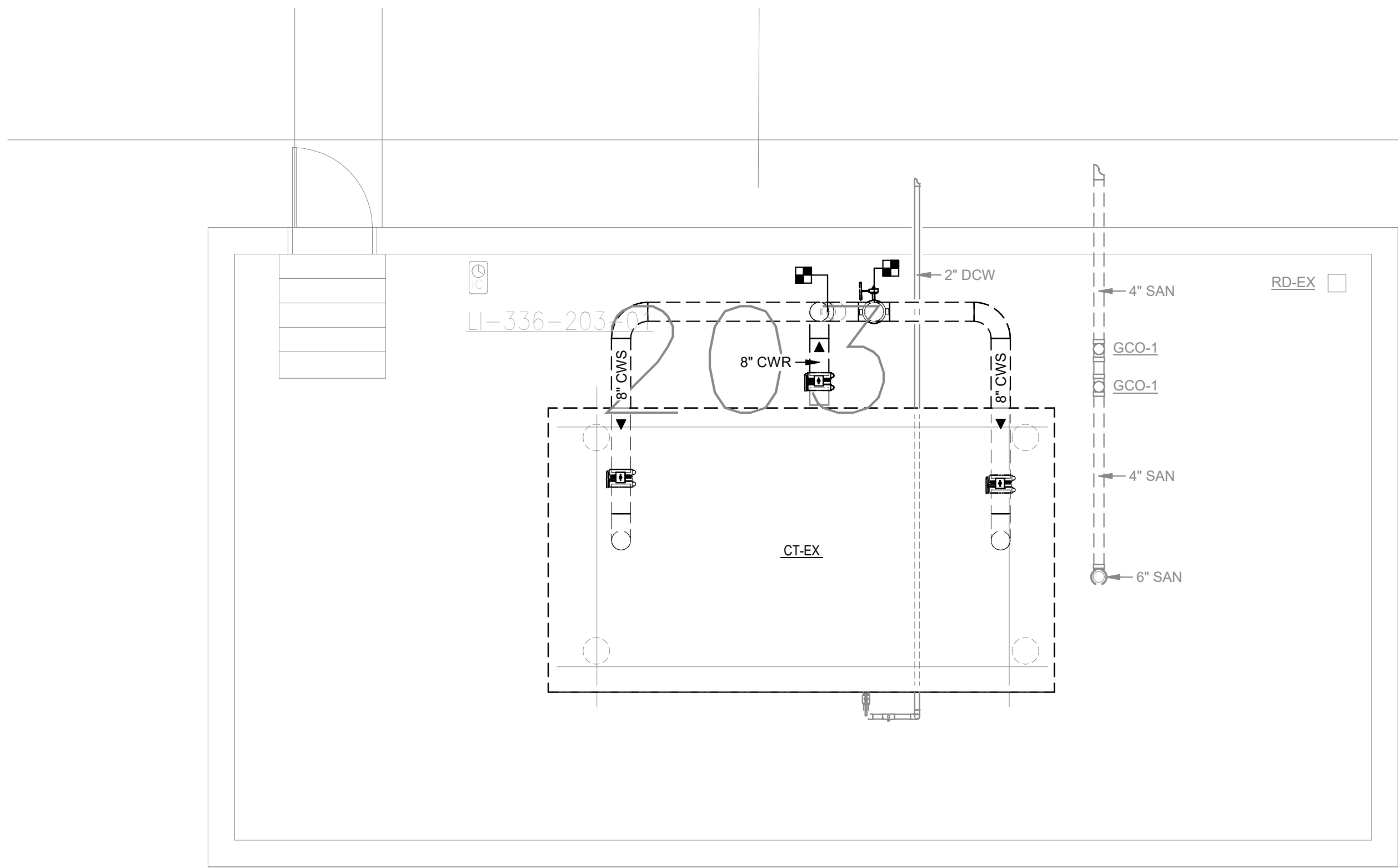
1 NORTH MECHANICAL DEMOLITION PLAN

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





2 NORTHWEST BASEMENT MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



1 NORTHWEST MECHANICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



MECHANICAL DEMOLITION NOTES:

A. SEE SHEET M0.0 FOR MECHANICAL SYMBOLS LEGEND AND GENERAL PLUMBING DEMOLITION NOTES.

KEYNOTES

OPS NORTH & NORTHWEST COOLING TOWER REPLACEMENT

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NORTHWEST MECHANICAL DEMOLITION PLAN



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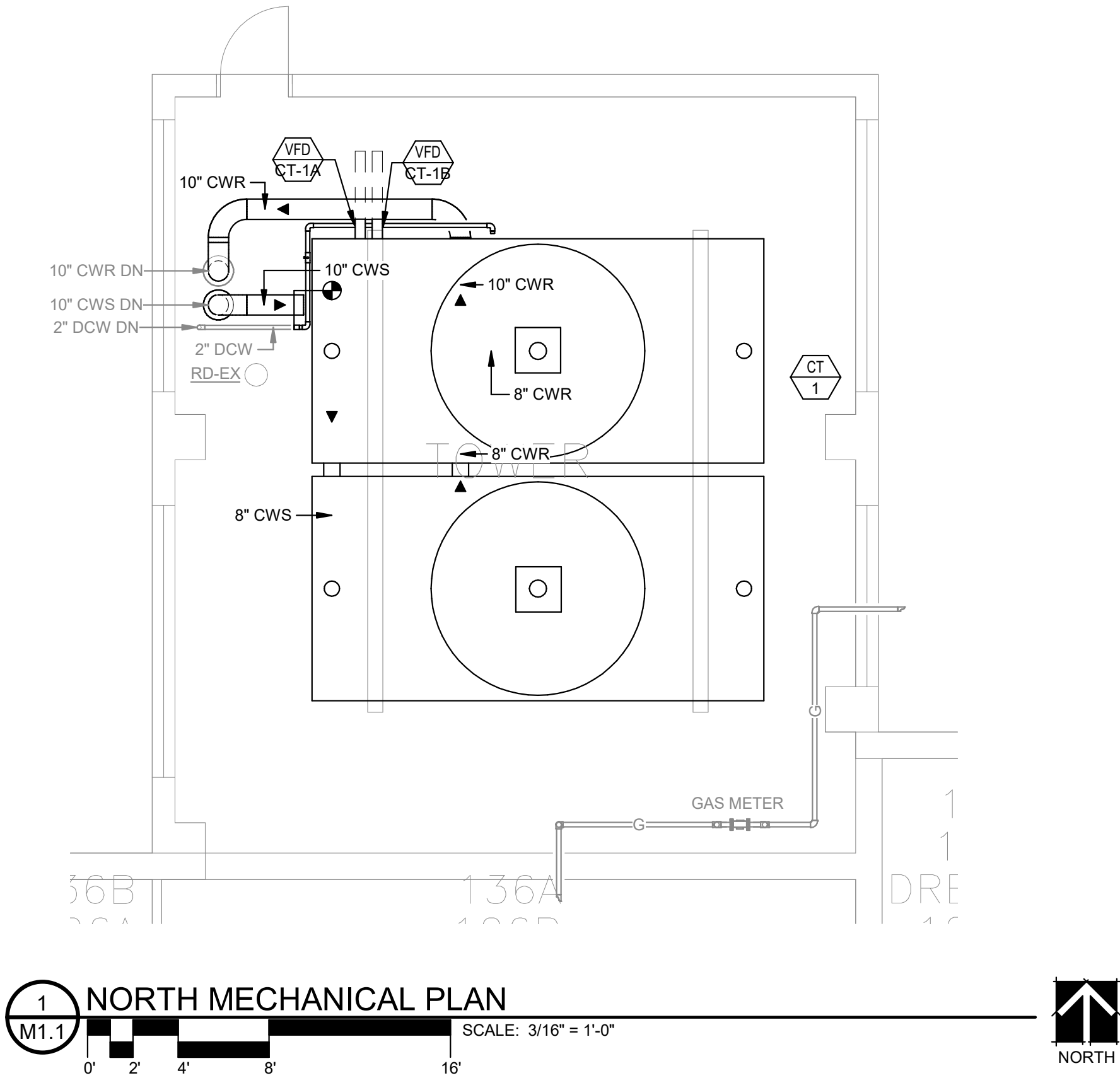
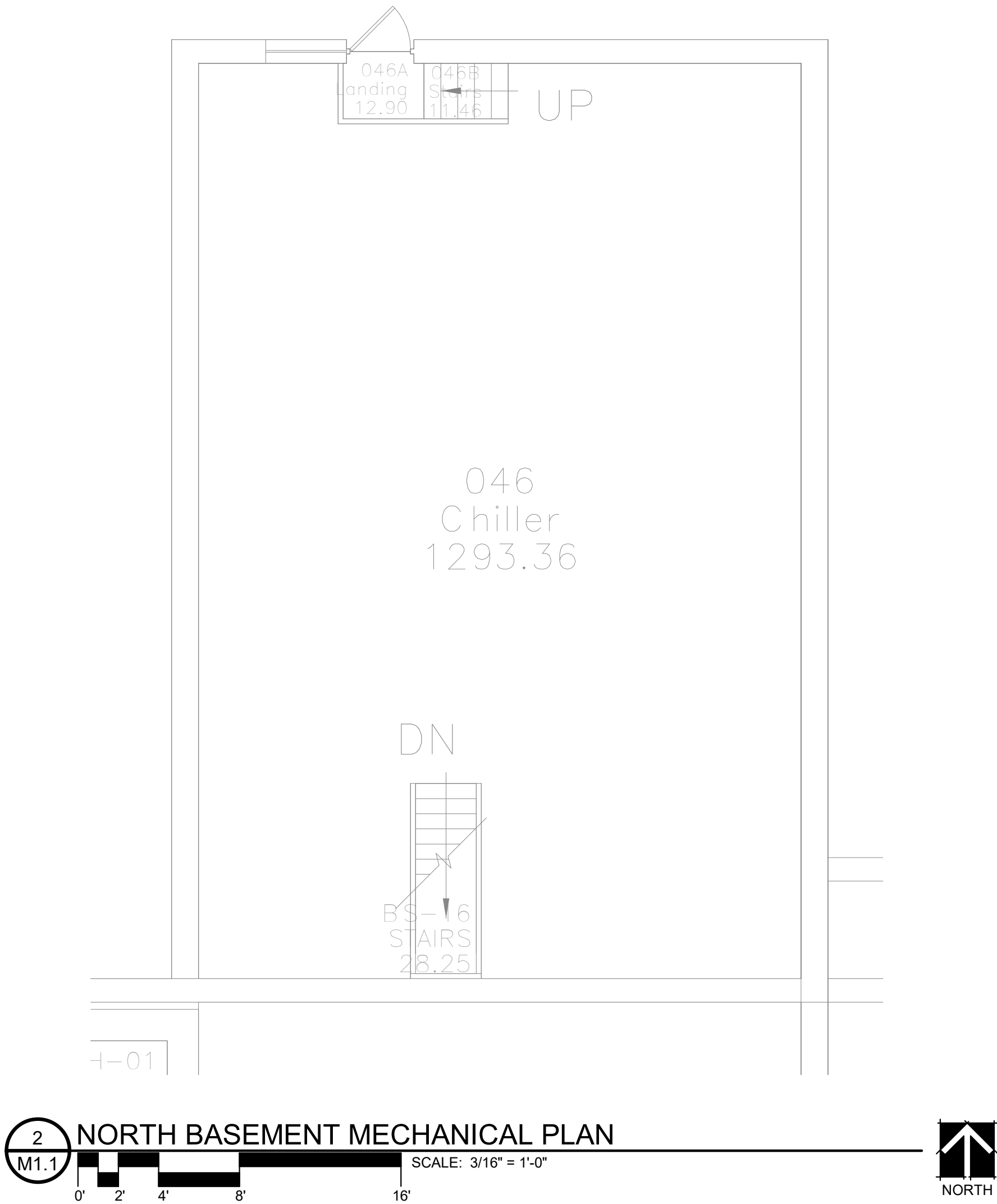
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M0.5

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25023-2-25023.DWG

Alameda County 2025023-025023 North and Northwest Cooling
Tower Replacement Project North and Northwest Cooling Tower Replacement



MECHANICAL PIPING NOTES:

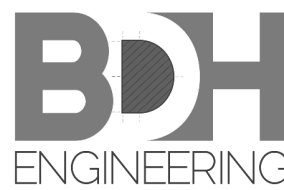
- SEE SHEET M0.0 FOR MECHANICAL SYMBOLS LEGEND AND GENERAL MECHANICAL NOTES.
- BRANCH PIPE SIZES SHALL BE 3/4" FROM MAIN TO FIXTURES UNLESS OTHERWISE NOTED. SEE DETAIL X-X FOR ADDITIONAL INFORMATION.
- SUPPORT PIPING FROM STRUCTURE AS REQUIRED. SEE PIPE SUPPORT DETAIL FOR ADDITIONAL INFORMATION.

KEYNOTES

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NORTH MECHANICAL PLAN



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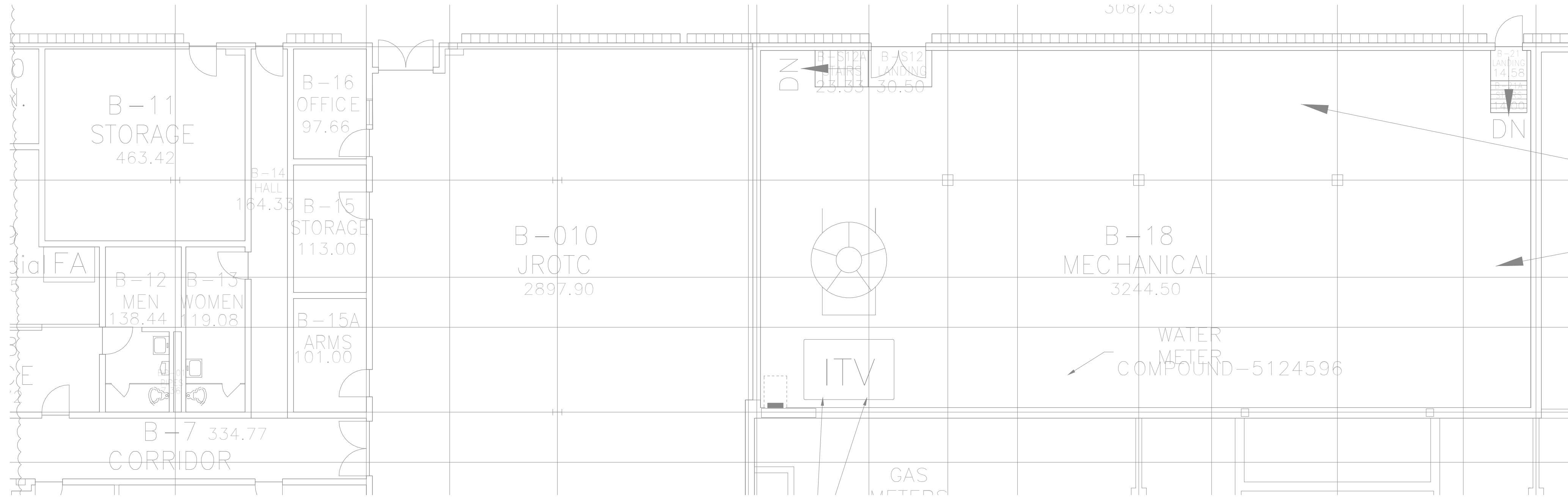
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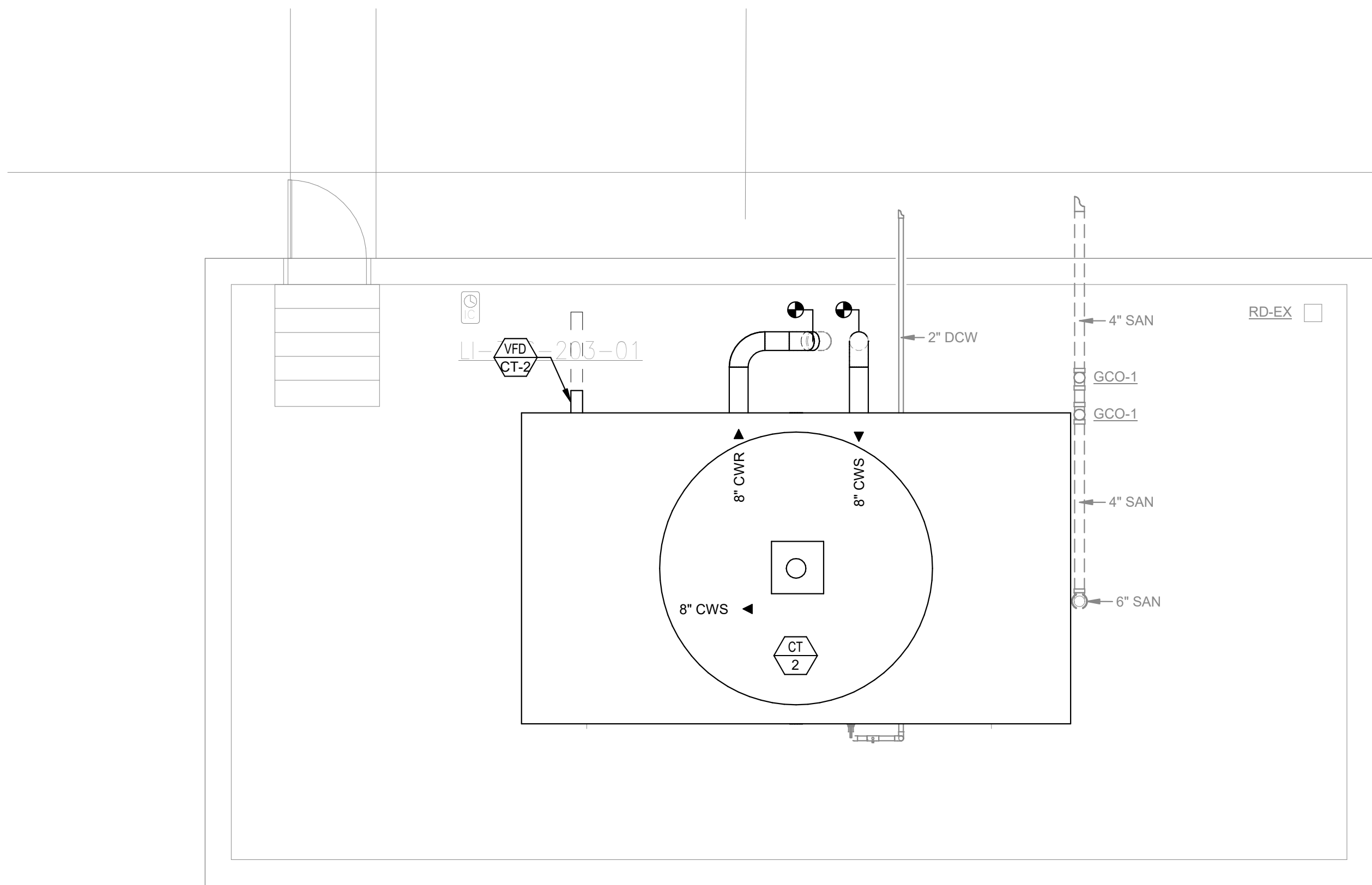
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SHEET **M1.1**



2 NORTHWEST BASEMENT MECHANICAL PLAN
M1.2 SCALE: 1/8" = 1'-0"



1 NORTHWEST MECHANICAL PLAN
M1.2 SCALE: 1/4" = 1'-0"



MECHANICAL PIPING NOTES:

- SEE SHEET M0.0 FOR MECHANICAL SYMBOLS LEGEND AND GENERAL MECHANICAL NOTES.
- BRANCH PIPE SIZES SHALL BE 3/4" FROM MAIN TO FIXTURES UNLESS OTHERWISE NOTED. SEE DETAIL X-X FOR ADDITIONAL INFORMATION.
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KEYNOTES

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NORTHWEST MECHANICAL PLAN

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PROJECT: 25023
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SHEET **M1.2**

25023-2-28.06.24

Alameda County 25023 Cooling Tower Inlet and Sump Replacement
From 25023-2-28.06.24 to 25023-2-28.06.24

COOLING TOWER																								
MARK	SERVES	TOWER CONFIGURATION	NUMBER OF CELLS	CAPACITY (TONS)	AMBIENT TEMP DB/WB (°F)	MAX FLOWRATE (GPM)	EWT (° F)	LWT (°F)	PRESS DROP (FT)	INLET CONNECTION (IN)	INLET HEIGHT (IN)	OUTLET CONNECTION (IN)	FAN DATA				ELECTRICAL				BASIN HEAT	OPERATING WEIGHT (LBS)	MANUFACTURER & MODEL NO.	REMARKS
													NO.	TYPE	FAN SPEED (RPM)	AIRFLOW (CFM)	HP	V	PH	SCCR (A)	CAPACITY			
CT-1	NORTH	CROSSFLOW	2	1000	95/78	2400	95/78	85	10	(2) @ 8"	BOTTOM	(2) @ 8"	2	GEAR	330	102,030	15 EA.	480	3	5000	18 KW PER CELL	19,180 EACH	MARLEY NC8405PAN	1-9
CT-2	NORTH WEST	CROSSFLOW	1	700	95/78	1700	95/78	85	10	10"	BOTTOM	10"	1	GEAR	347	165,300	40	480	3	5000	24 KW	24,420	MARLEY NC8407TAN	1-9

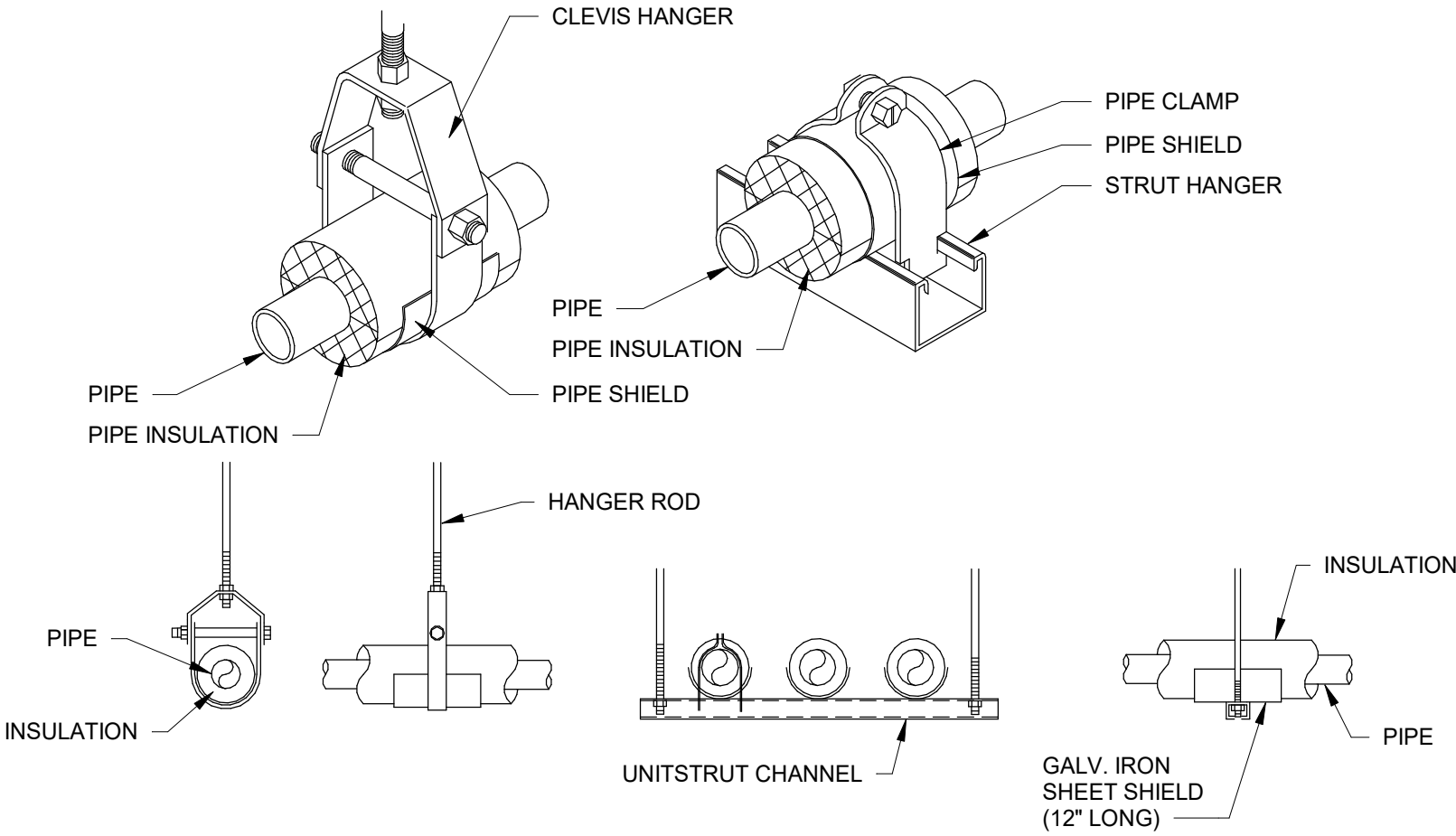
- REMARKS:
- 301L STAINLESS STEEL COLLECTION AND DISTRIBUTION BASINS, GALVANIZED STEEL STRUCTURE AND CASING, GEAR DRIVE WITH MOTOR MOUNTED OUTSIDE THE AIRSTREAM, EXTENDED LUBE LINE, ENHANCED ACCOUSTICAL PERFORMANCE QUIET FAN
 - 15 MIL PVC FILL WITH INTEGRAL LOUVERS AND DRIFT ELIMINATORS, GALVANIZED AIR INLET SCREENS, ONE 8" BOTTOM HOT WATER INLETS WITH INTEGRAL PVC PIPING FOR BALANCED DISTRIBUTION PER CELL, FLOAT TYPE MAKEUP VALVE
 - ACCESS DOOR PLATFORM ON BOTH CASED FACES, FAN DECK LADDER WITH SAFETY CAGE ON BOTH CASED FACES, LADDER EXTENTIONS TO GRADE, FAN DECK GUARDRAIL, FIBERGLASS VELOCITY RECOVERY STACK, AND STAINLESS STEEL PLENUM WALKWAY
 - REMOTE VARIABLE FREQUENCY DRIVE WITH DISCONNECT, SHAFT GROUNDING RING, AND EXTERNALLY MOUNTED MANUAL RESET VIBRATION SWITCH
 - 8" DEPRESSED SIDE SUMP OUTLET WITH TRASH SCREEN AND ANTI VORTEX PLATE PER CELL, OUTLET ON BOTTOM OF TOWER. STEEL SUMP SIDE OUTLET WITH SCREEN.
 - TOWER TO INCLUDE SINGLE POINT POWER CONTROL PANEL FOR FAN AND HEATER POWER. VFD TO BE MOUNTED REMOTE TO PANEL.
 - CTI CERTIFIED PER STD-201
 - ALTERNATE TOWER MANUFACTURERS ARE ALLOWED. CONTRACTOR RESPONSIBLE FOR ANY MODIFICATIONS FOR ALTERNATE TOWER SELECTIONS.
 - 5-YEAR WHOLE UNIT PARTS ONLY WARRANTY

VARIABLE FREQUENCY DRIVE SCHEDULE								
MARK	SERVES	LOCATED	MOTOR SIZE (HP)	ELECTRICAL			MANUFACTURER & MODEL NO.	REMARKS
				A	V	PH		
VFD-CT-1A	COOLING TOWER CT-1	ON TOWER	15	21.0	480.0	3	YASKAWA	1
VFD-CT-1B	COOLING TOWER CT-1	ON TOWER	15	21.0	480.0	3	YASKAWA	1
VFD-CT-2	COOLING TOWER CT-2	ON TOWER	40	52.0	480.0	3	YASKAWA	1

- REMARKS:
- VFD TO BE RATED FOR OUTDOOR OPERATION.

PIPING APPLICATION SCHEDULE						
SYSTEM DESCRIPTION	SIZE	MATERIAL	JOINTS	INSULATION		NOTES
				TYPE	THICKNESS	
DOMESTIC COLD WATER - OUTDOOR W/ HEAT TRACE	ALL	COPPER (TYPE L)	SOLDER	FIBERGLASS WITH ALUMINUM JACKET	1"	A
CONDENSER WATER OUTDOOR W/ HEAT TRACE	ALL	CPVC	SOLVENT	FIBERGLASS WITH ALUMINUM JACKET	1"	A

NOTES:
A) PROVIDE ALUMINUM JACKETED INSULATION WHEN LOCATED OUTDOORS



- NOTES:
- ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STEEL STRUCTURE TO THE TOP CORD OF JOISTS OF BEAMS.
 - PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.
 - PROVIDE AND INSTALL B-LINE OR ACCEPTABLE INSULATED GALVANIZED STEEL JACKET AND HANGER, STRUT MOUNTED CLAMP AND PIPE SUPPORT LOCATIONS.

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MECHANICAL DETAILS AND SCHEDULES

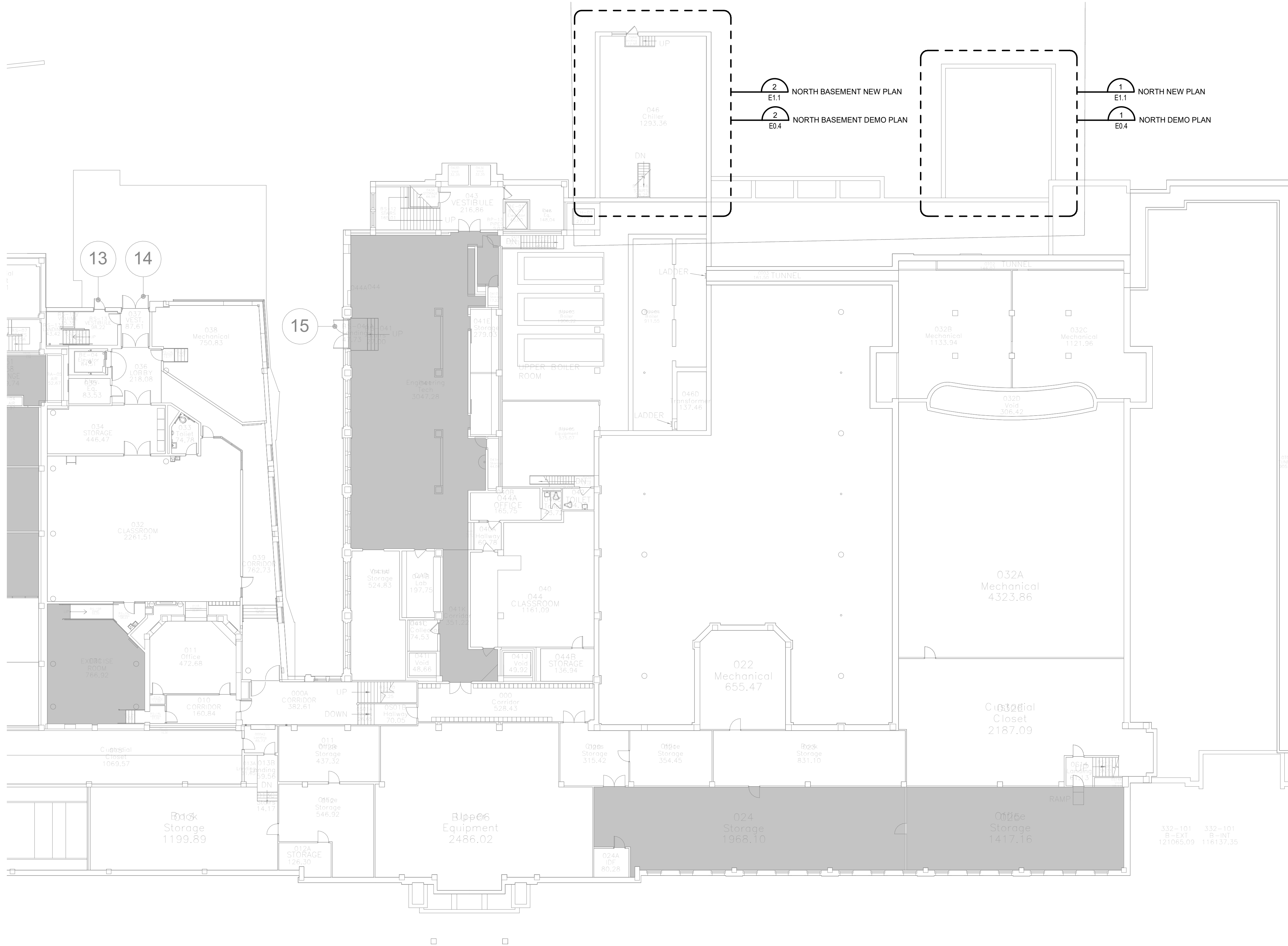
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NORTH ELECTRICAL KEY PLAN

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



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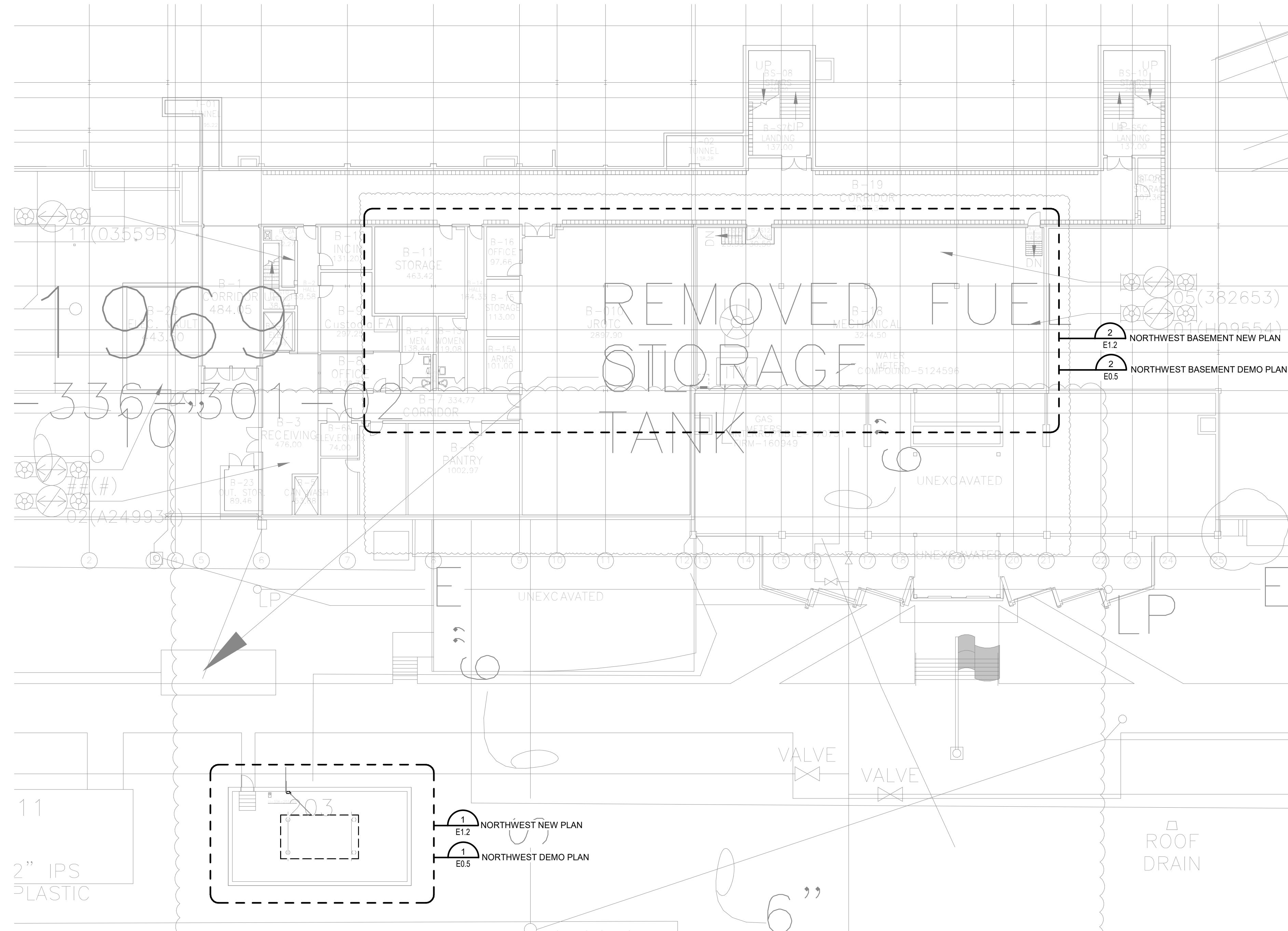
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Alameda Drive 25023 OPS North and Northwest Cooling Tower Replacement
7/9/2025 2:25:09 PM
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NORTHWEST KEY PLAN

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

0' 4' 8' 16' 32' 48'



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NORTHWEST ELECTRICAL KEY PLAN

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ELECTRICAL DEMOLITION NOTES:

A. SEE SHEET E0.0 FOR ELECTRICAL SYMBOLS LEGEND AND GENERAL ELECTRICAL DEMOLITION NOTES.

KEYNOTES

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NORTH ELECTRICAL DEMOLITION PLAN

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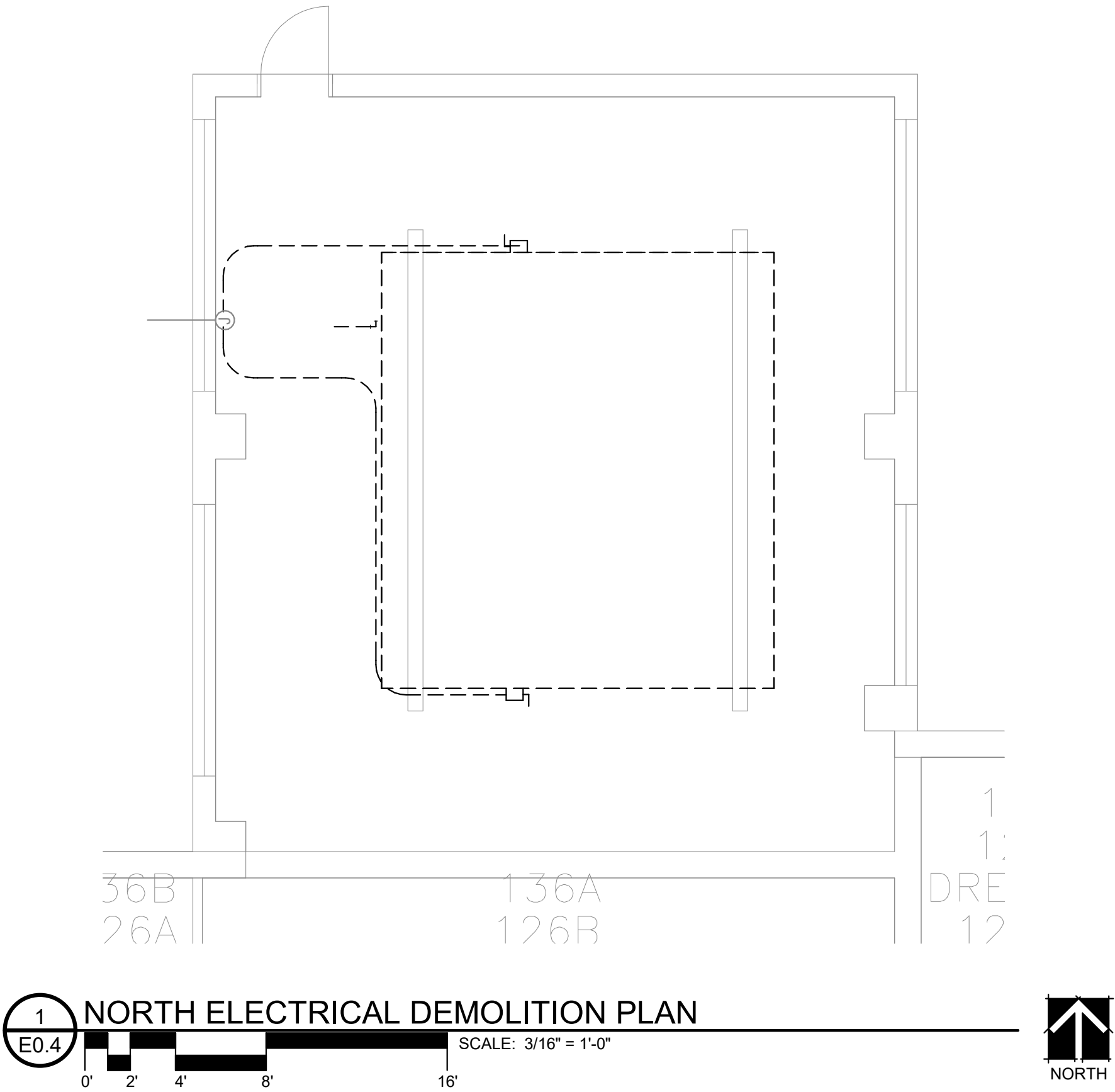
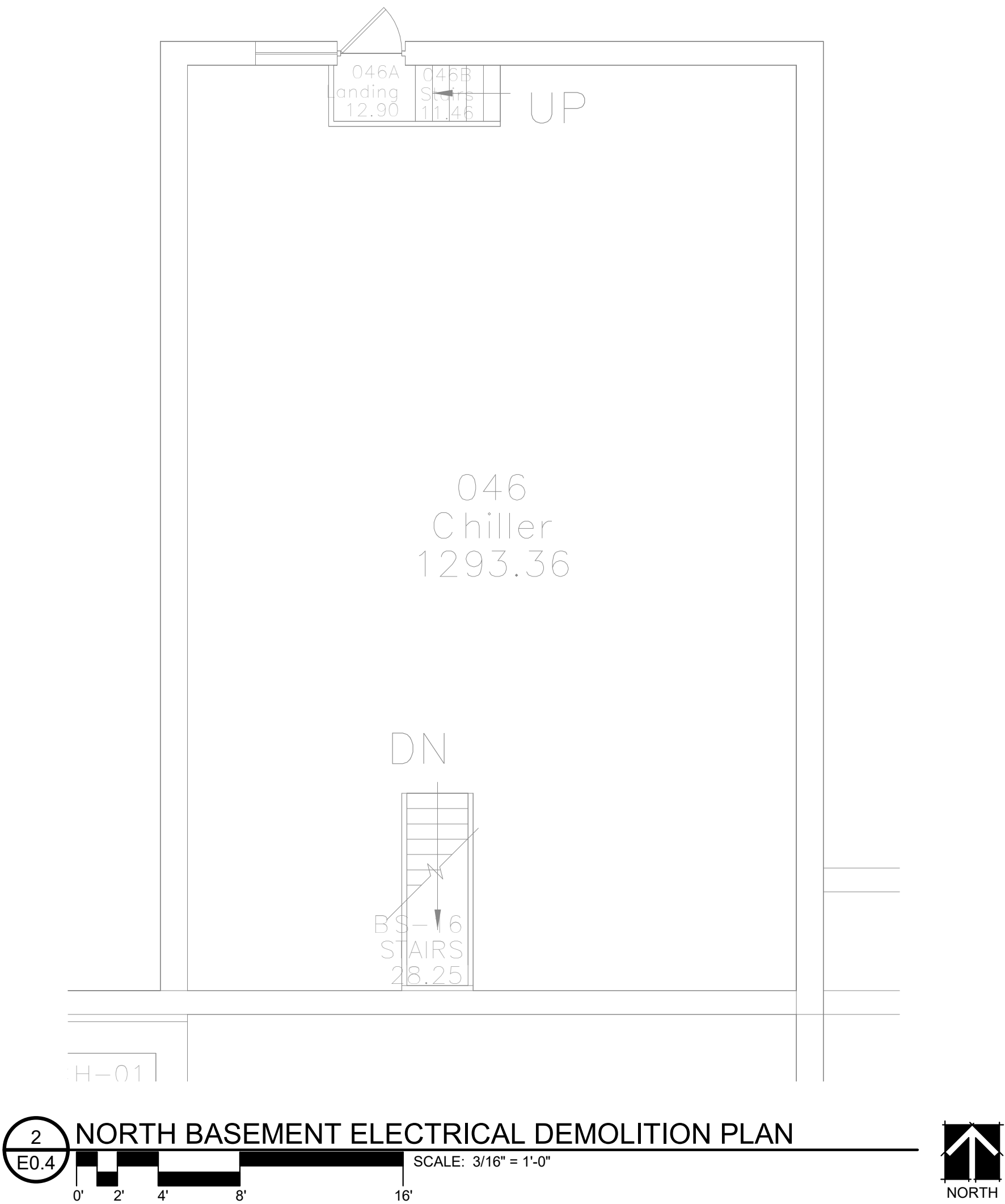
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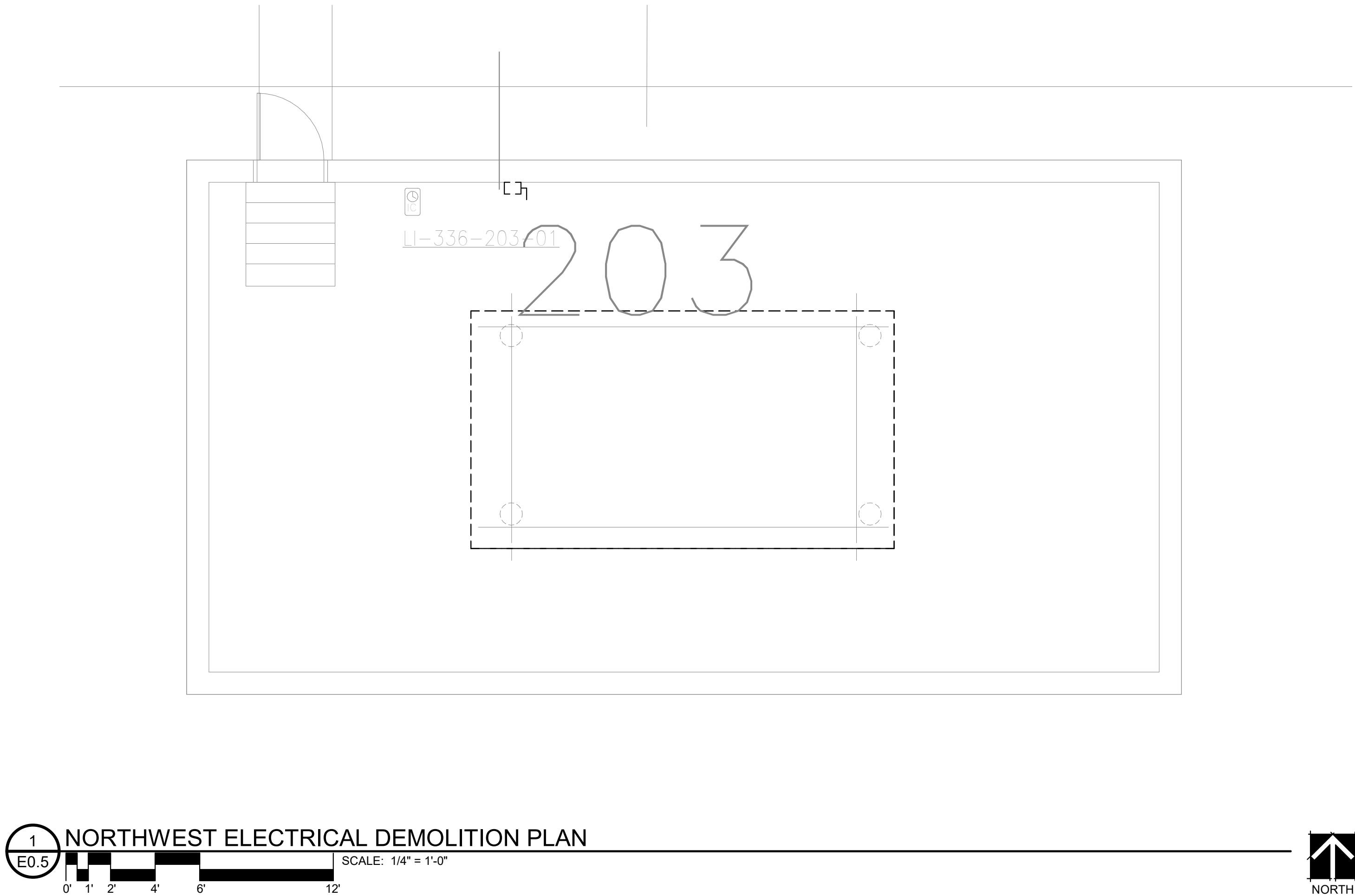
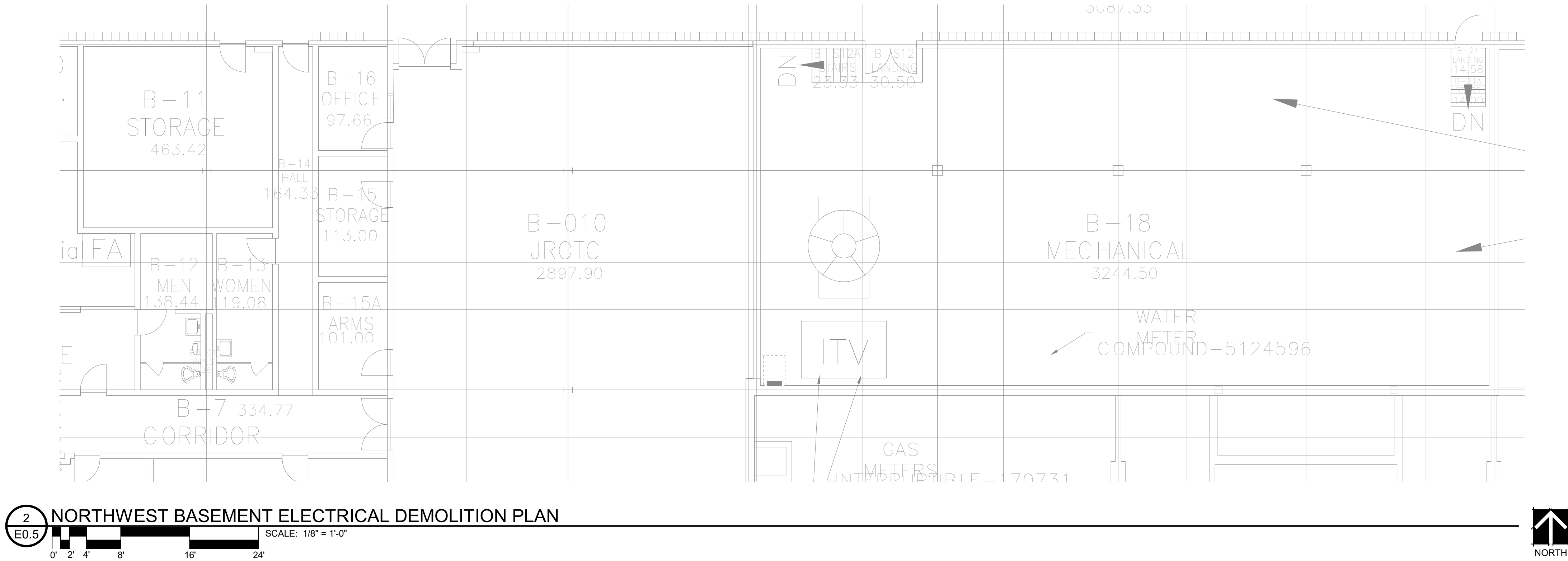
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Alameda County 2025023 OPS North and Northwest Cooling Tower Replacement
Drawn: 25023-2-25023.dwg Northwest Cooling Tower Replacement



ELECTRICAL DEMOLITION NOTES:

- A. SEE SHEET E0.0 FOR ELECTRICAL SYMBOLS LEGEND AND GENERAL ELECTRICAL DEMOLITION NOTES.

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SHEET

E0.5

ELECTRICAL POWER NOTES:

- A. SEE SHEET E0.0 FOR ELECTRICAL SYMBOLS LEGEND AND GENERAL ELECTRICAL NOTES.
B. SEE MECHANICAL AND ELECTRICAL SCHEDULE ON M7.1 FOR ADDITIONAL INFORMATION ON MECHANICAL EQUIPMENT REQUIRING POWER.

KEYNOTES

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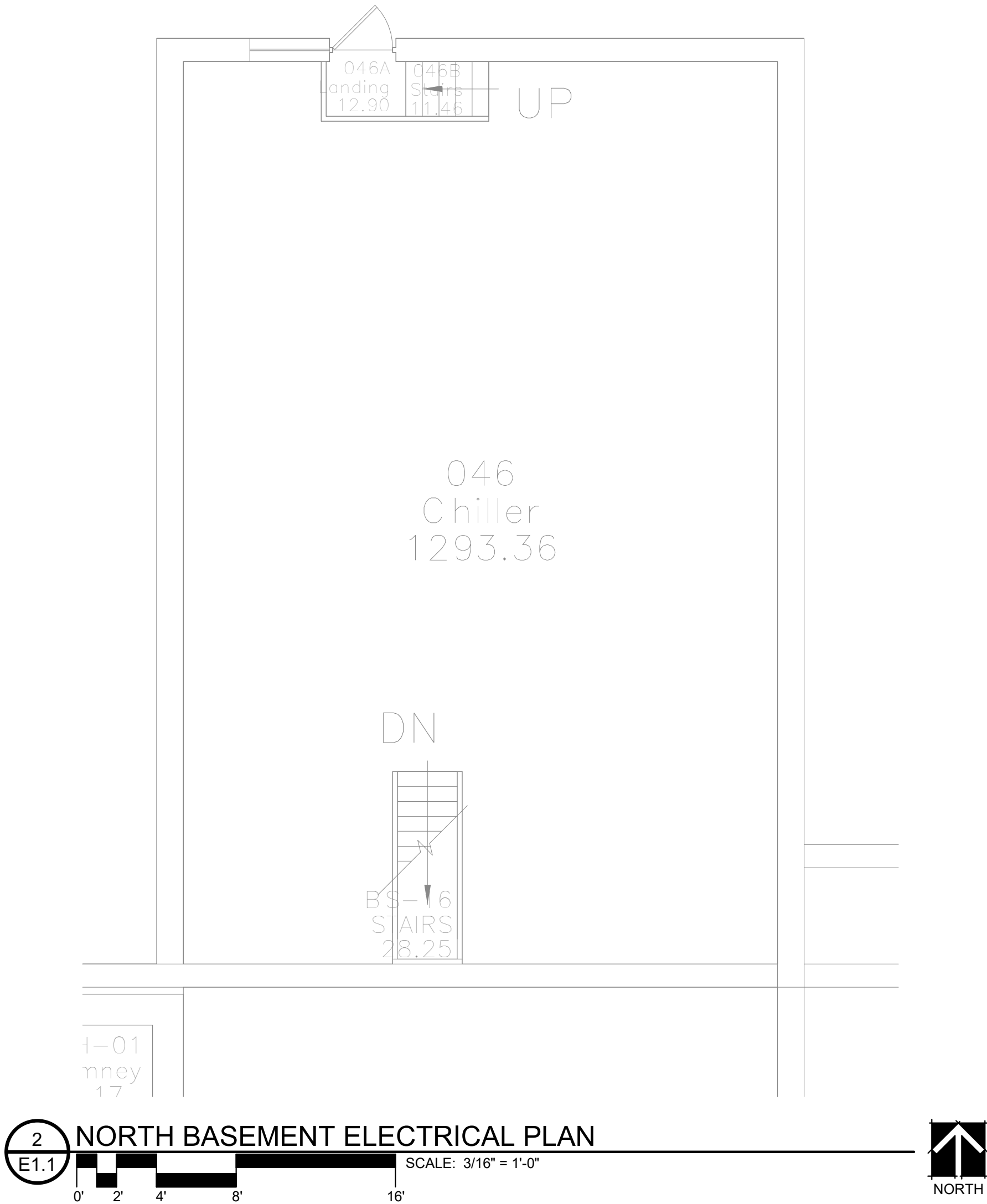
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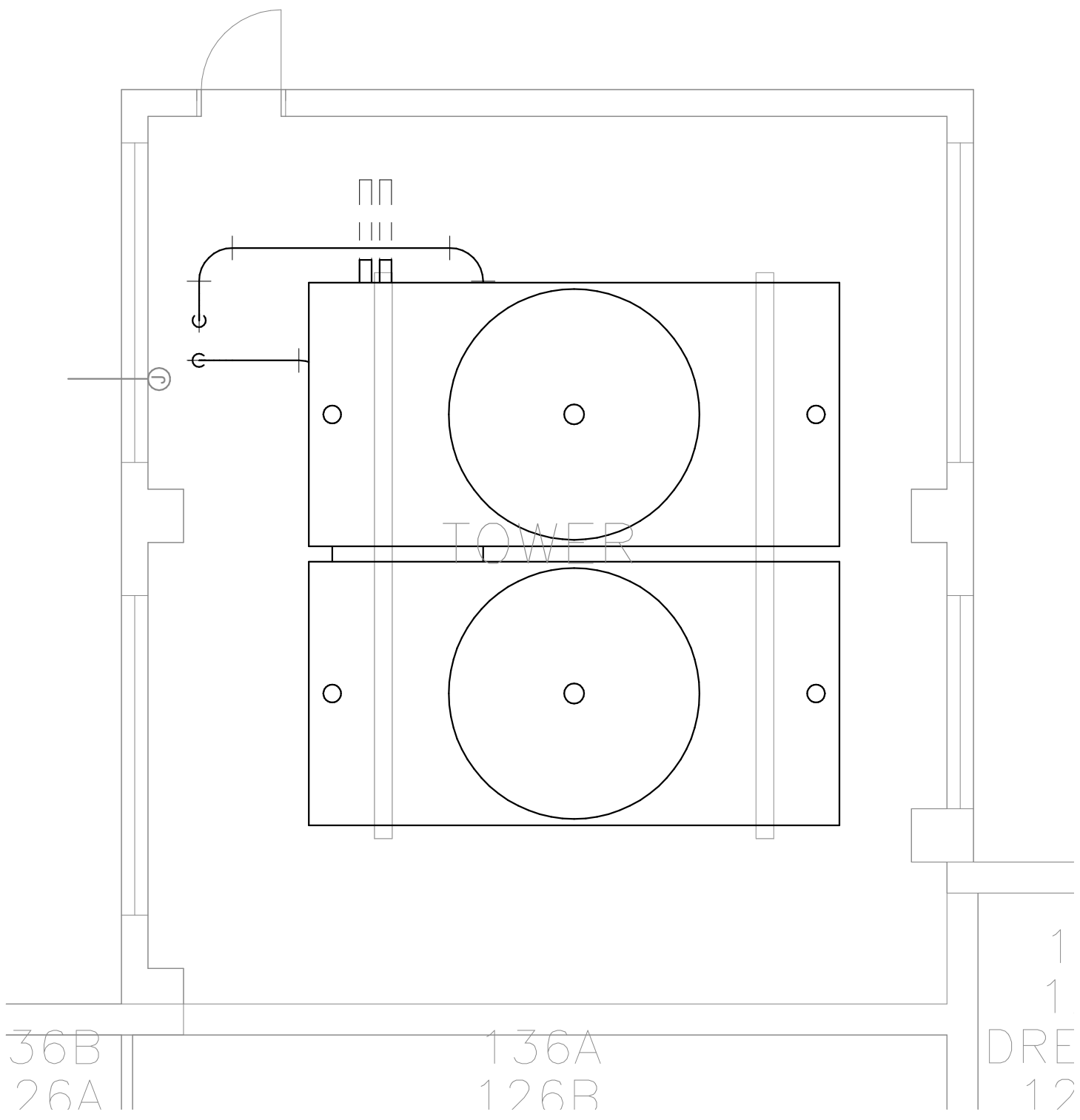
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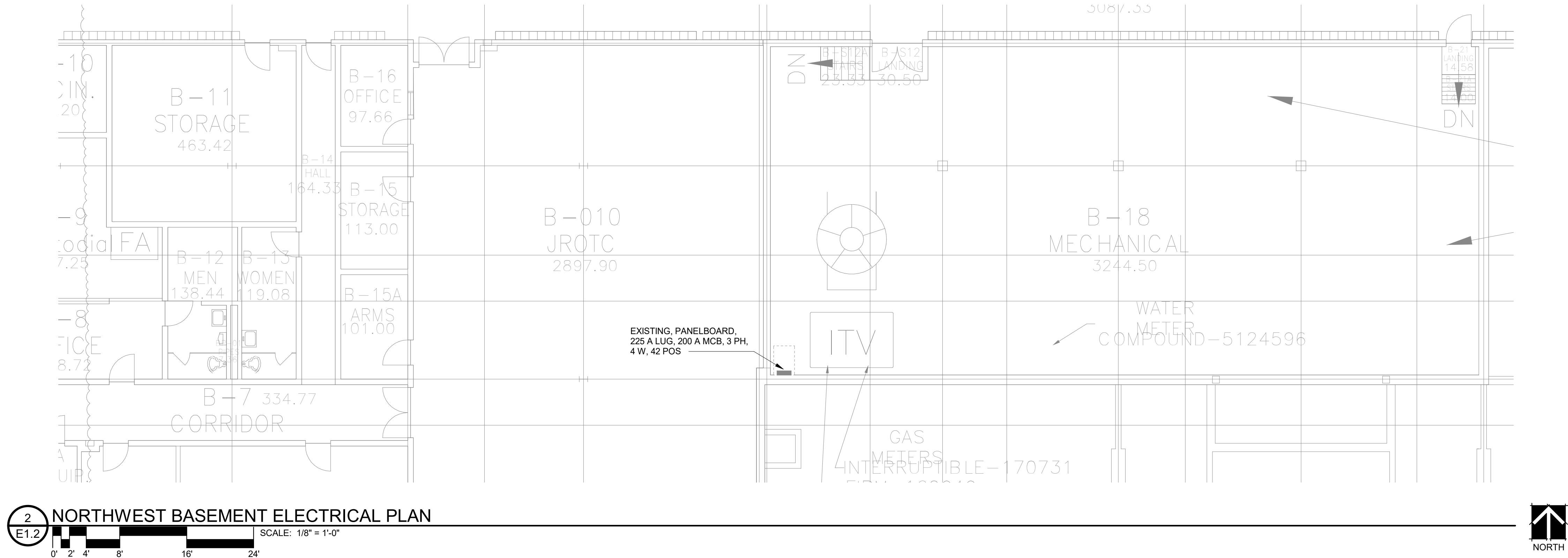
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E1.1



1 NORTH ELECTRICAL PLAN
E1.1 SCALE: 3/16" = 1'-0"



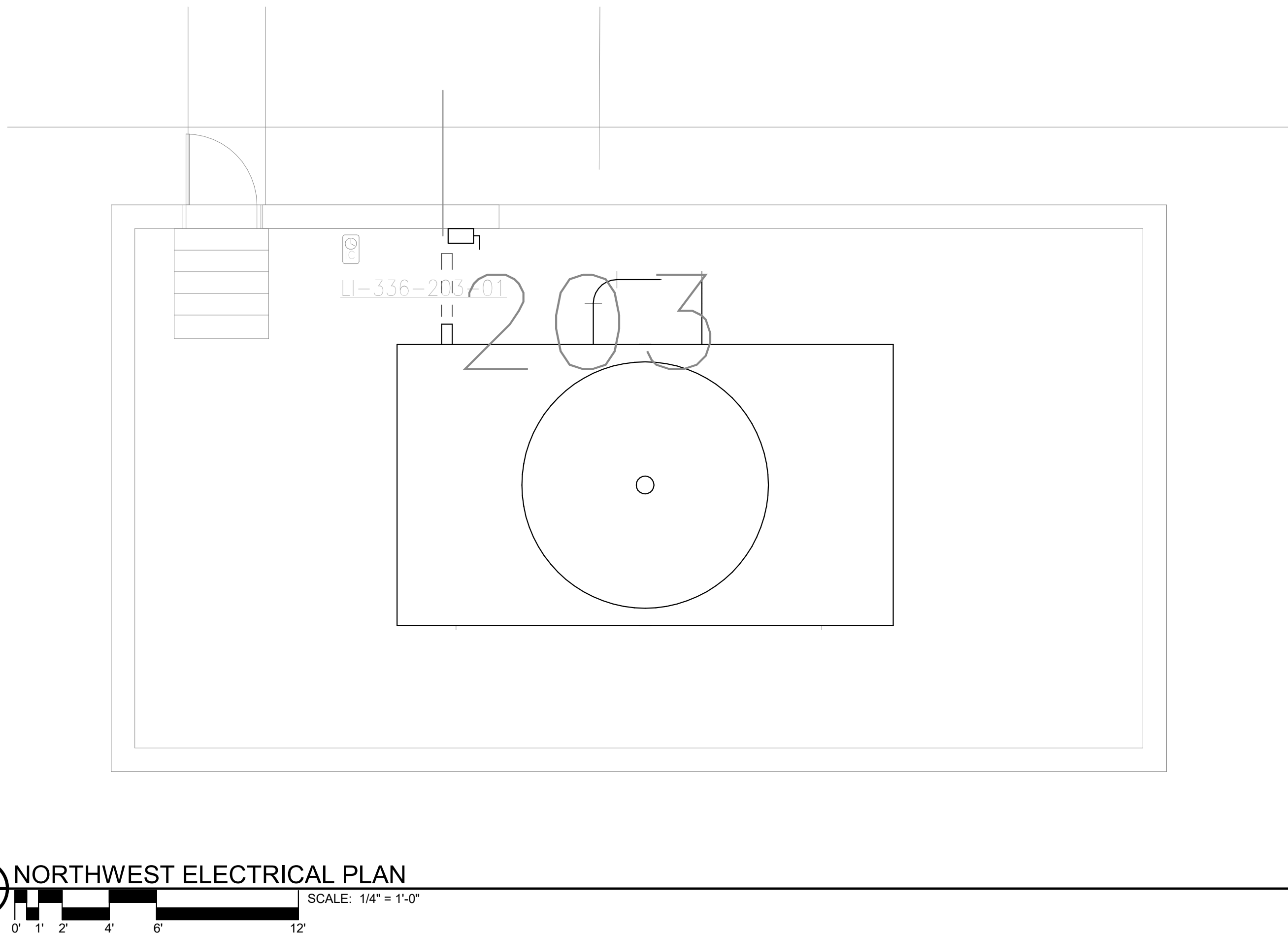


ELECTRICAL POWER NOTES:

A. SEE SHEET E0.0 FOR ELECTRICAL SYMBOLS LEGEND AND GENERAL ELECTRICAL NOTES.

B. SEE MECHANICAL AND ELECTRICAL SCHEDULE ON M7.1 FOR ADDITIONAL INFORMATION ON MECHANICAL EQUIPMENT REQUIRING POWER.

KEYNOTES



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