

LANEY COLLEGE CENTRAL UTILITY PLANT

900 FALLON STREET, OAKLAND, CA 94607

PCCD RFQ 19-20/12 - DESIGN CRITERIA DOCUMENTS - SEPTEMBER 3, 2020

PERALTA COMMUNITY COLLEGE DISTRICT

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& TAM**
ARCHITECTS

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SEAL
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NOT FOR
CONSTRUCTION**

APPROVALS

PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET,
OAKLAND, CA 94607

**DESIGN CRITERIA
DOCUMENTS**

ISSUE DATE **SEPTEMBER 3, 2020**

N&T JOB NUMBER **21942.10**

REVISIONS

DATE	DESCRIPTION

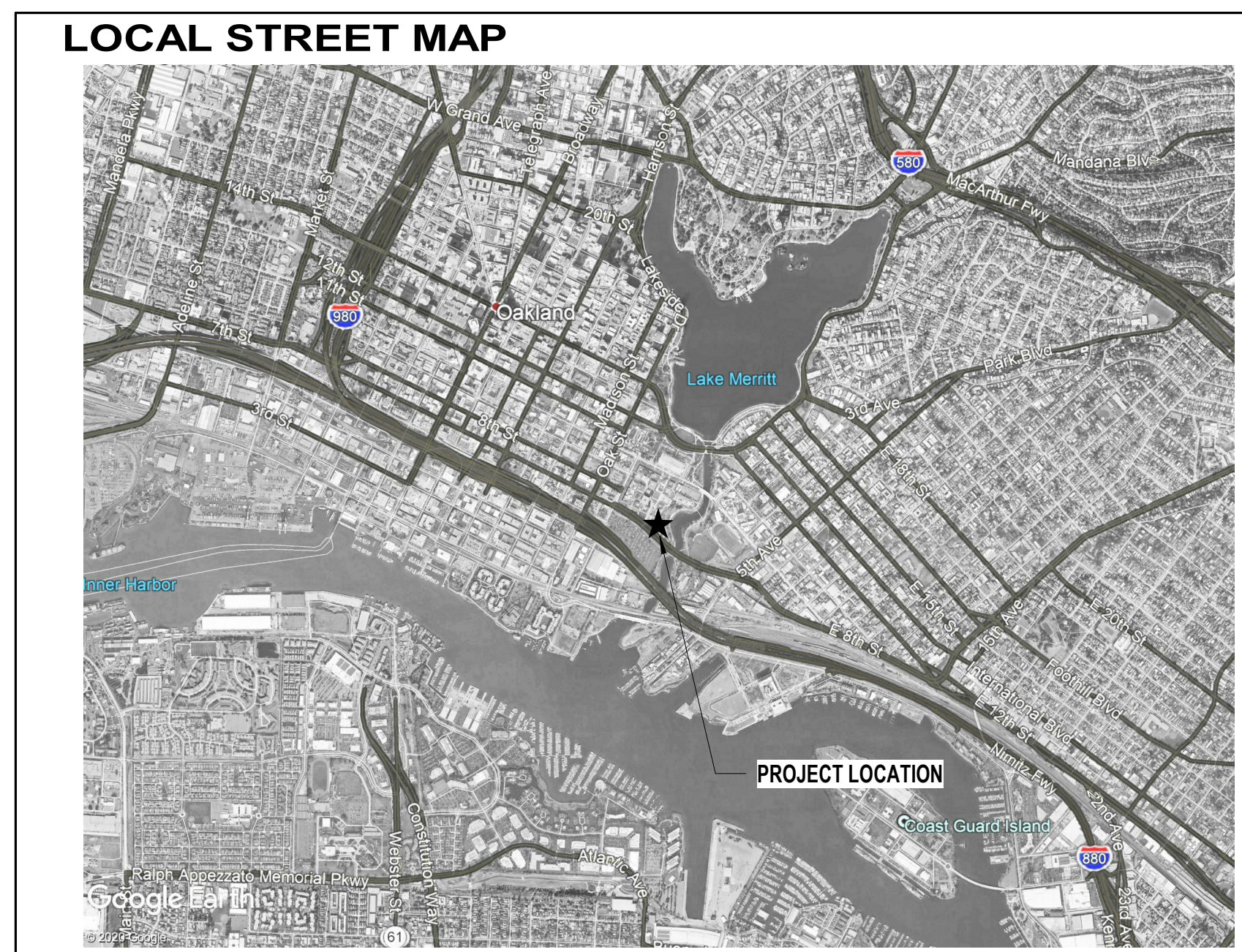
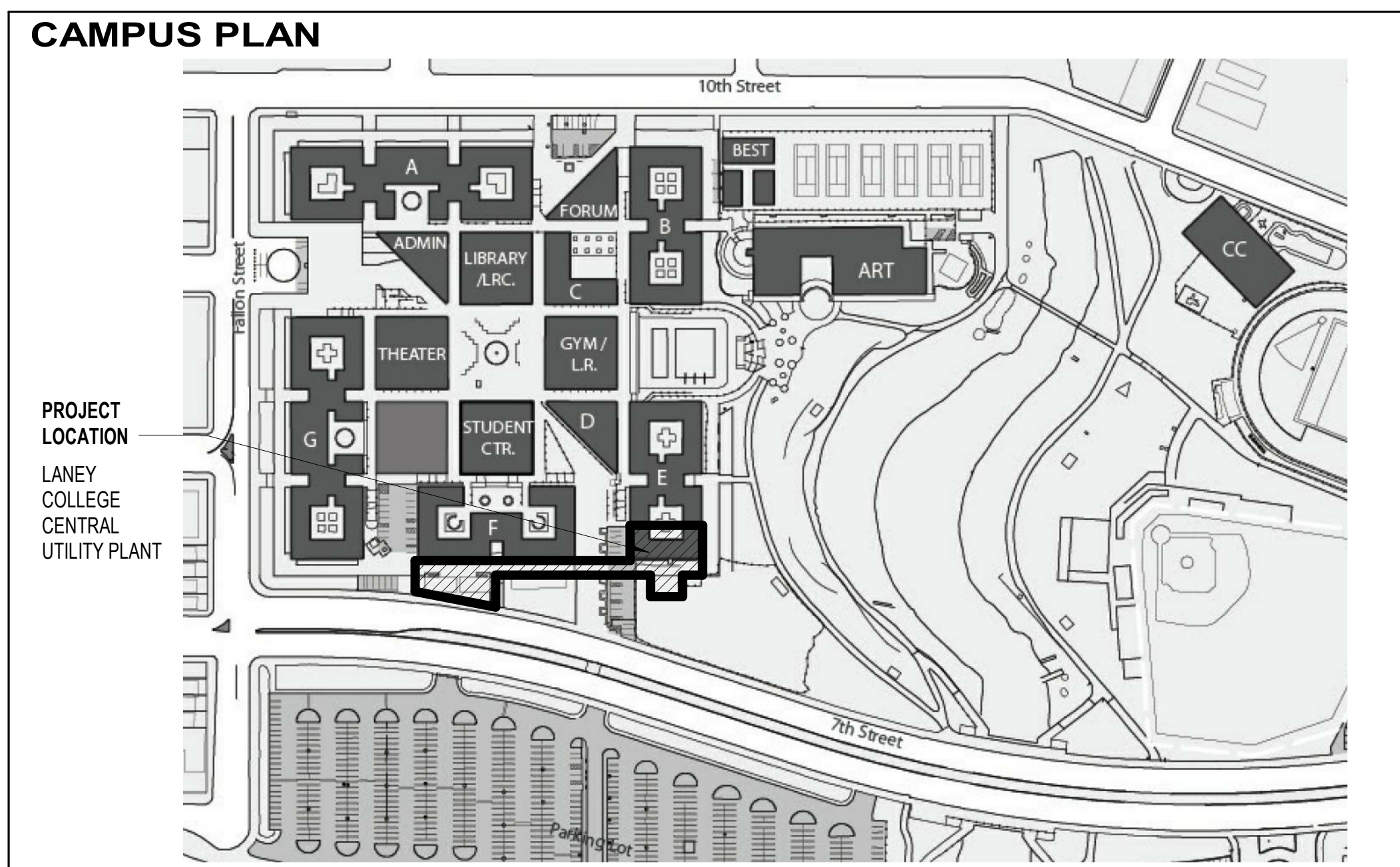
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SHEET TITLE

COVER SHEET

SHEET NUMBER

GO.00



PROJECT SUMMARY

THE PROJECT INCLUDES THE REPLACEMENT OF THE EXISTING CHILLERS & BOILERS, RELOCATION OF THE EXISTING COOLING TOWERS, REPAIR OR REPLACEMENT OF ASSOCIATED PUMPS, PIPING, VALVES AND BUILDING AUTOMATION SYSTEM. THE NEW CHILLERS AND BOILERS WILL BE LOCATED IN THE EXISTING CENTRAL PLANT IN BUILDING E AND THE COOLING TOWERS WILL MOVE TO A NEW ENCLOSURE SOUTH OF BUILDING F. NEW PIPING TO BE INCLUDED FROM NEW COOLING TOWER LOCATION TO BUILDING E.

THE PROJECT SCOPE INCLUDES, BUT IS NOT LIMITED TO: MODIFICATIONS TO THE EXISTING CHILLER AND BOILER SPACES TO ACCOMMODATE NEW EQUIPMENT, DEMOLITION OF EXISTING COOLING TOWER UTILITY STRUCTURE, CONSTRUCTION OF A NEW UTILITY STRUCTURE AND PROVISION OF UTILITIES CONNECTING THE CENTRAL UTILITY PLANT WITH THE NEW UTILITY BUILDING AND THE FUTURE LEARNING RESOURCE CENTER (NOT PART OF PROJECT).

CONTRACTOR WILL BE RESPONSIBLE FOR PREPPING ALL AREAS FOR NEW SCOPE OF WORK INCLUDING PATCHING AND REPAIRING EXISTING CONDITIONS WHERE AFFECTED BY ANY AND ALL DEMOLITION WORK.

THE WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, TRANSPORTATION, SERVICES, PERMITS, TEMPORARY CONTROLS AND CONSTRUCTION FACILITIES, AND ALL GENERAL CONDITIONS, SEISMIC REQUIREMENTS, GENERAL REQUIREMENTS AND INCIDENTALS REQUIRED TO COMPLETE THE WORK ON THE PROJECT IN ITS ENTIRETY AS DESCRIBED IN THE CONTRACT DOCUMENTS.

9/3/2020 8:32:02 AM BIM: 360/PPCCD Laney CUP/PPCCD Laney CUP.rvt

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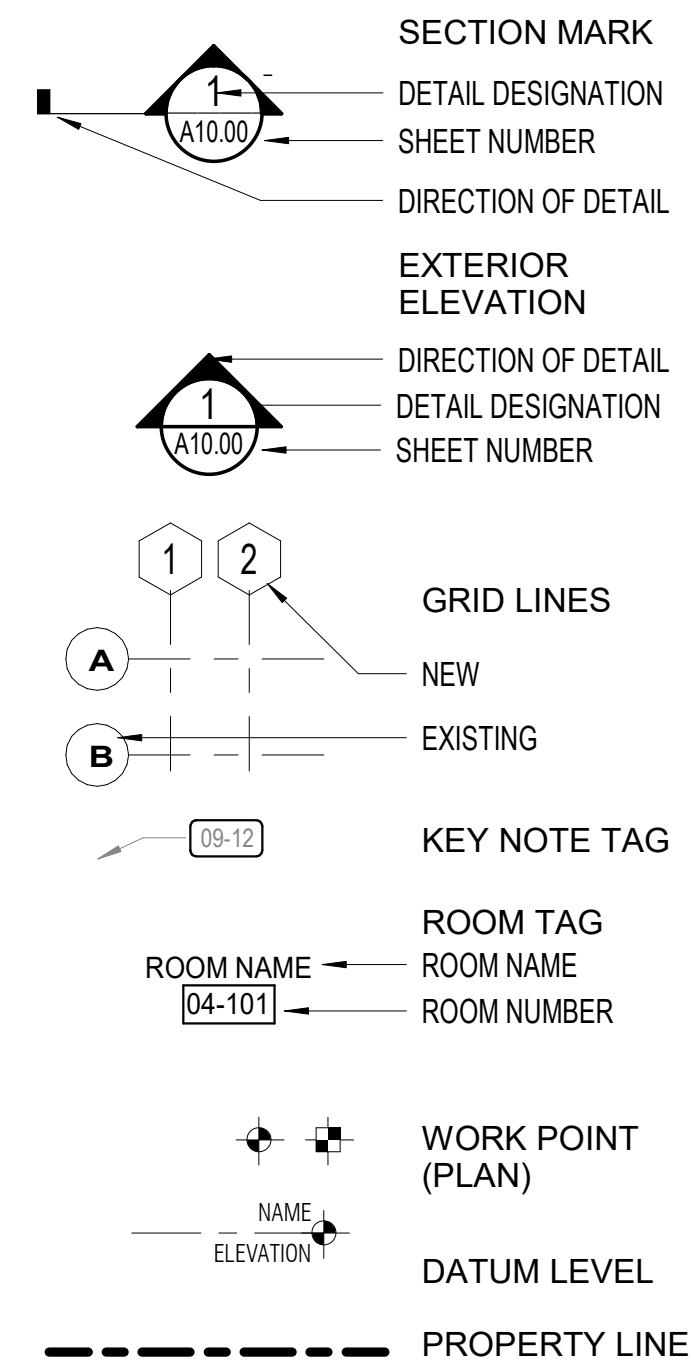
ABBREVIATIONS

&	AND	MECH	MECHANICAL
(E)	EXISTING	MET	METAL
(N)	NEW	MFR	MANUFACTURER
@	AT	MIN	MINIMUM
ADJ	ADJACENT/ADJUSTABLE	MISC	MISCELLANEOUS
AFF	ABOVE FINISHED FLOOR	MTD	MOUNTED
ALT	ALTERNATE	MTL	METAL
ALUM	ALUMINUM	MUL	MULLION
APPROX	APPROXIMATE	N	NORTH
AV	AUDIO VISUAL	NA	NOT APPLICABLE
BLDG	BUILDING	NIC	NOT IN CONTRACT
BM	BEAM	NO	NUMBER
BO	BOTTOM OF	NOM	NOMINAL
BOT	BOTTOM	NTS	NOT TO SCALE
BUR	BUILT UP ROOF	OCC	OCCUPANT
CB	CARRIAGE BOLT	OD	OUTSIDE DIAMETER/OVERFLOW DRAIN
CE	CIVIL ENGINEER	OF	OUTSIDE FACE
CEM	CEMENT/CEMENTITIOUS	OFCl	OWNER FURNISHED
CJ	CONTROL JOINT		
CLG	CEILING	OFD	OVERFLOW DRAIN
CLR	CLEAR	OPP	OPPOSITE
CO	CLEAN OUT	OPP HD	OPPOSITE HAND
COL	COLUMN	PT	POINT/PRESSURE TREATED
CONC	CONCRETE	PTD	PAINTED
CONN	CONNECTION	PVC	POLYVINYLCHLORIDE
CONT	CONTINUOUS	QTY	QUANTITY
CTR	CENTER	R	RISER
D	DEPTH	RAD	RADIUS
DBL	DOUBLE	RD	ROOF DRAIN
DEMO	DEMOLITION	REF	REFERENCE
DIA	DIAMETER	REQD	REQUIRED
DIM	DIMENSION	REV	REVISION
DN	DOWN	RM	ROOM
DR	DOOR	RO	ROUGH OPENING
DS	DOWNSPOUT	S	SOUTH
DTL	DETAIL	SASF	SELF ADHERING SHEET FLASHING
DWG	DRAWING	SASM	SELF ADHERING SHEET MEMBRANE
E	EAST	SCD	SEE CIVIL DRAWINGS
EA	EACH	SCHED	SCHEDULE
ELEC	ELECTRICAL	SEC	SECTION
ELEV	ELEVATION/ELEVATOR	SED	SEE ELECTRICAL DRAWINGS
EOS	EDGE OF SLAB	SFRM	SPRAY-APPLIED FIRE RESISTIVE MATERIAL
EP	ELECTRICAL PANEL	SHT	SHEET
EQ	EQUAL	SIM	SIMILAR
EQUIP	EQUIPMENT	SMD	SEE MECHANICAL DRAWINGS
EXT	EXTERIOR	SOG	SLAB ON GRADE
FA	FIRE ALARM	SP	SPACE
FD	FLOOR DRAIN	SPD	SEE PLUMBING DRAWINGS
FDN	FOUNDATION	SPEC	SPECIFICATION
FE	FIRE EXTINGUISHER	SQ	SQUARE
FEC	FIRE EXTINGUISHER CABINET	SS	STAINLESS STEEL
FIN	FINISH	STD	STANDARD
FIN FLR	FINISH FLOOR	STL	STEEL
FIXT	FIXTURE	STOR	STORAGE
FLR	FLOOR	SYS	SYSTEM
FOC	FACE OF CONCRETE	T	TREAD
FOF	FACE OF FINISH	TBD	TO BE DETERMINED
FT	FOOT/FEET	TO	TOP OF
FTG	FOOTING	TOC	TOP OF CONCRETE/CURB
GA	GAUGE	TOP	TOP OF PAVING
GALV	GALVANIZED	TOS	TOP OF STEEL
GC	GENERAL CONTRACTOR	TOW	TOP OF WALL
GL	GLASS/GLAZING	TYP	TYPICAL
GR	GRADE	UON	UNLESS OTHERWISE NOTED
GSM	GALVANIZED SHEET METAL	VENT	VENTILATION
GWB	GYPSPUM WALL BOARD	VERT	VERTICAL
GYP	GYPSPUM	VIF	VERIFY IN FIELD
H	HIGH / HEIGHT	W	WEST / WIDTH / WIDE
HM	HOLLOW METAL	WD	WOOD
HORIZ	HORIZONTAL	WH	WATER HEATER
HT	HEIGHT	WIN	WINDOW
HVAC	HEATING VENTILATION & AIR CONDITIONING	WO	WHERE OCCURS
INCL	INCLUDE/INCLUDING	WP	WORK POINT
INSUL	INSULATION	WT	WEIGHT
INT	INTERIOR		
JST	JOIST		
JT	JOINT		
LAM	LAMINATE		
LF	LINEAR FEET		
MAX	MAXIMUM		

GENERAL NOTES

- WORK SHALL MEET OR EXCEED THE MINIMUM STANDARDS OF APPLICABLE CODES AND ORDINANCES AND SHALL NOT BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THOSE CODES.
- CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
- VERIFY ALL DIMENSIONS AND INSPECT CONDITION OF IN-PLACE CONSTRUCTION BEFORE STARTING WORK. PROCEEDING WITH THE WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS.
- CONTRACTOR SHALL EXAMINE THE DOCUMENTS AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE START OF WORK.
- THE CONTRACTOR AND ALL SUBCONTRACTORS ARE REQUIRED TO VISIT AND INSPECT THE SITE PRIOR TO CONSTRUCTION OR ORDERING ANY MATERIALS.
- ITEMS MARKED "NIC" ARE NOT IN CONTRACT. SUCH ITEMS ARE INCLUDED IN THE DOCUMENTS WHEN CONTRACTOR'S COORDINATION IS REQUIRED OR FOR CLARIFICATION OF PROJECT LIMITS.
- DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL SIMILAR CASES, UON.
- DIMENSIONS
 - IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM THE DRAWINGS.
 - ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - ELEVATION MARKERS REFER TO THE TOP OF THE SLAB ON GRADE DATUM. FLOOR AND ROOF ELEVATIONS NOTED ARE TO TOP OF STRUCTURAL ASSEMBLY, UON. WALL HEIGHT ELEVATIONS ARE TO TOP OF FRAMING, UON.
 - STUD WALLS: ALL DIMENSIONS ARE TO THE FACE OF STUD, UON.
 - CEILING HEIGHT DIMENSIONS: ARE FROM FINISHED FLOOR TO FINISHED FACE OF CEILING, UON.
 - OPENINGS: DOOR DIMENSIONS ARE TO THE EDGE OF DOOR PANEL, UON. LOCATE UNDIMENSIONED DOORS 4" FROM FINISHED FACE OF INTERSECTING PARTITION TO HINGE EDGE OF DOOR PANEL.
 - ALL DIMENSIONS NOTED "CLEAR" OR "CLR" INDICATE DIMENSION FROM FACE OF FINISH TO FACE OF FINISH OR OBJECT, UON AND MUST BE STRICTLY MAINTAINED.
 - ALL DIMENSIONS NOTED "VERIFY" OR "VIF" ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY VARIANCE FROM THE REQUIRED DIMENSIONS MUST BE BROUGHT IMMEDIATELY TO THE ARCHITECT'S ATTENTION.
 - COORDINATE WITH EQUIPMENT CONTRACTORS FOR ROUGH-IN DIMENSIONS AND TEMPLATES.
- EXISTING BUILDING AND SITE DOCUMENTATION IS BASED ON AVAILABLE DOCUMENTATION PROVIDED BY THE OWNER AND LIMITED SITE OBSERVATION INVESTIGATIONS. AS BUILT CONDITIONS MAY VARY. CONTRACTOR IS TO USE CAUTION IN DEMOLITION AND IS TO NOTIFY ARCHITECT IMMEDIATELY IF ANY VARIATIONS OR DISCREPANCIES ARE UNCOVERED.
- CONTRACTOR TO MAINTAIN SAFE & COMPLIANT EGRESS FROM OCCUPIED AREAS TO THE PUBLIC WAY OR TO SAFE DISPERSAL AREAS DURING CONSTRUCTION ACTIVITIES.
- PROTECT EXISTING CONDITIONS TO REMAIN. CONFIRM W/ ARCHITECT AND/OR OWNERS REPRESENTATIVE ITEMS TO BE SALVAGED PRIOR TO START OF DEMOLITION.
- PROTECT ALL (E) BUILDING & SITE INFRASTRUCTURE TO REMAIN.
- THE DRAWINGS INDICATE THE GENERAL EXTENT OF CONSTRUCTION NECESSARY FOR THE WORK BUT ARE NOT INTENDED TO BE ALL-INCLUSIVE. ALL DEMO AND NEW WORK NECESSARY FOR A COMPLETED PROJECT IN ACCORDANCE W/ THE CONTRACT DOCUMENTS SHALL BE INCLUDED REGARDLESS OF WHETHER OR NOT SHOWN IN THE CONTRACT DOCUMENTS. THE INTEGRITY AND CONTINUITY OF ALL EXISTING FIRE, THERMAL, ACOUSTIC, & WEATHER BARRIER ASSEMBLIES IS TO BE STRICTLY MAINTAINED. SELECTIVE REMOVAL, REPLACEMENT, PATCHING & REPAIR SHALL BE PROVIDED TO MAINTAIN INTEGRITY OF EXISTING ASSEMBLIES AND FINISHES TO MATCH EXISTING ADJACENT ASSEMBLIES AND FINISHES.
- PROVIDE TEMPORARY BARRIERS FOR SAFETY, SECURITY & CLEANLINESS

SYMBOLS LEGEND



PRELIMINARY CODE ANALYSIS

OCCUPANCY GROUP	CENTRAL UTILITY PLANT - BUILDING E		NEW UTILITY BUILDING
	PREVIOUS (1)	2019 CBC	2019 CBC
	A3 & B MIXED OCCUPANCY	B with A3 ACC OCC <i>Dining (A3) 1769 sf = < 10% of first floor. CBC 508.2.3</i> <i>Occupancy separation (B & A3) not required. CBC 508.2.4</i> <i>CUP spaces req'd to be separated by ratings or sprinklered per CBC Table 509. Ratings provided per 1998 as-built (2)</i>	S1 <i>No sprinklers required by 903.2.9.</i>
CONSTRUCTION TYPE	I - FR	IA	IB
SPRINKLER SYSTEM	NO	NO	NO
BASIC ALLOWABLE FLOOR AREA	UNLIMITED	UNLIMITED	48000
ACTUAL FLOOR AREA	35,607	NO CHANGE	2500
FIRST FLOOR	18,918		
SECOND FLOOR	14,545		
PENTHOUSE	2,144		
ALLOWABLE AREA INCREASES	NOT USED	NOT USED	NOT USED
BASIC ALLOWABLE BUILDING HEIGHT/NO OF STORIES	UNLIMITED	UNLIMITED	160' / 11 STORIES
ACTUAL BUILDING HEIGHT/NO OF STORIES	2 STORIES W/EQUIP PENTHOUSE	NO CHANGE	15' / 1 STORY

(1) SHEET A-4, BEGINNER'S INN KITCHEN PROJECT, DSA #108426, APPROVED APRIL 17, 2007 (2001 CBC)
 (2) SHEET M-101, LANEY CENTRAL CHILLER PLANT, DSA #101235, APPROVED DECEMBER 13, 1999 (1995 CBC)

SHEET INDEX

GENERAL	G0.00 COVER SHEET
	G1.01 SHEET INDEX / SITE PLAN
	2
CIVIL	C1.00 CIVIL COVER SHEET
	C2.00 EXISTING CONDITIONS PLAN - WEST
	C2.01 EXISTING CONDITIONS PLAN - EAST
	C3.00 DEMOLITION PLAN - WEST
	C3.01 DEMOLITION PLAN - EAST
	C4.00 COMPOSITE CIVIL PLAN - WEST
	C4.01 COMPOSITE CIVIL PLAN - EAST
	7
ARCHITECTURE	A1.31 CENTRAL UTILITY PLANT PLANS
	A2.32 FLOOR & ROOF PLAN - NEW UTILITY BUILDING
	A3.11 BUILDING ELEVATIONS & SECTIONS
	3
MECHANICAL	M0.01 HVAC LEGENDS AND ABBREVIATIONS
	M0.02 HVAC EQUIPMENT SCHEDULES
	M1.01 DEMO PLAN - CENTRAL UTILITY PLANT AND EXISTING COOLING TOWER ENCLOSURE
	M2.01 FLOOR PLANS - CENTRAL UTILITY PLANT AND NEW UTILITY BUILDING
	M2.02 FLOOR PLAN - FUTURE CENTRAL UTILITY PLANT
	M5.01 CHILLED WATER PLANT PIPING SCHEMATIC
	M5.02 HOT WATER PLANT PIPING SCHEMATIC
	M5.03 FUTURE WORK - ALT A ELECTRIC BOILER HEATING PIPING SCHEMATIC
	M5.04 FUTURE WORK - ALT B CONDENSOR WATER STORAGE PIPING SCHEMATIC
	9
ELECTRICAL	E0.01 SYMBOLS LIST AND DRAWING INDEX
	E1.01 ELECTRICAL SITE PLAN
	E2.01 POWER SINGLE LINE DIAGRAM AND LOAD CALCULATIONS
	3
	TOTAL SHEETS : 24

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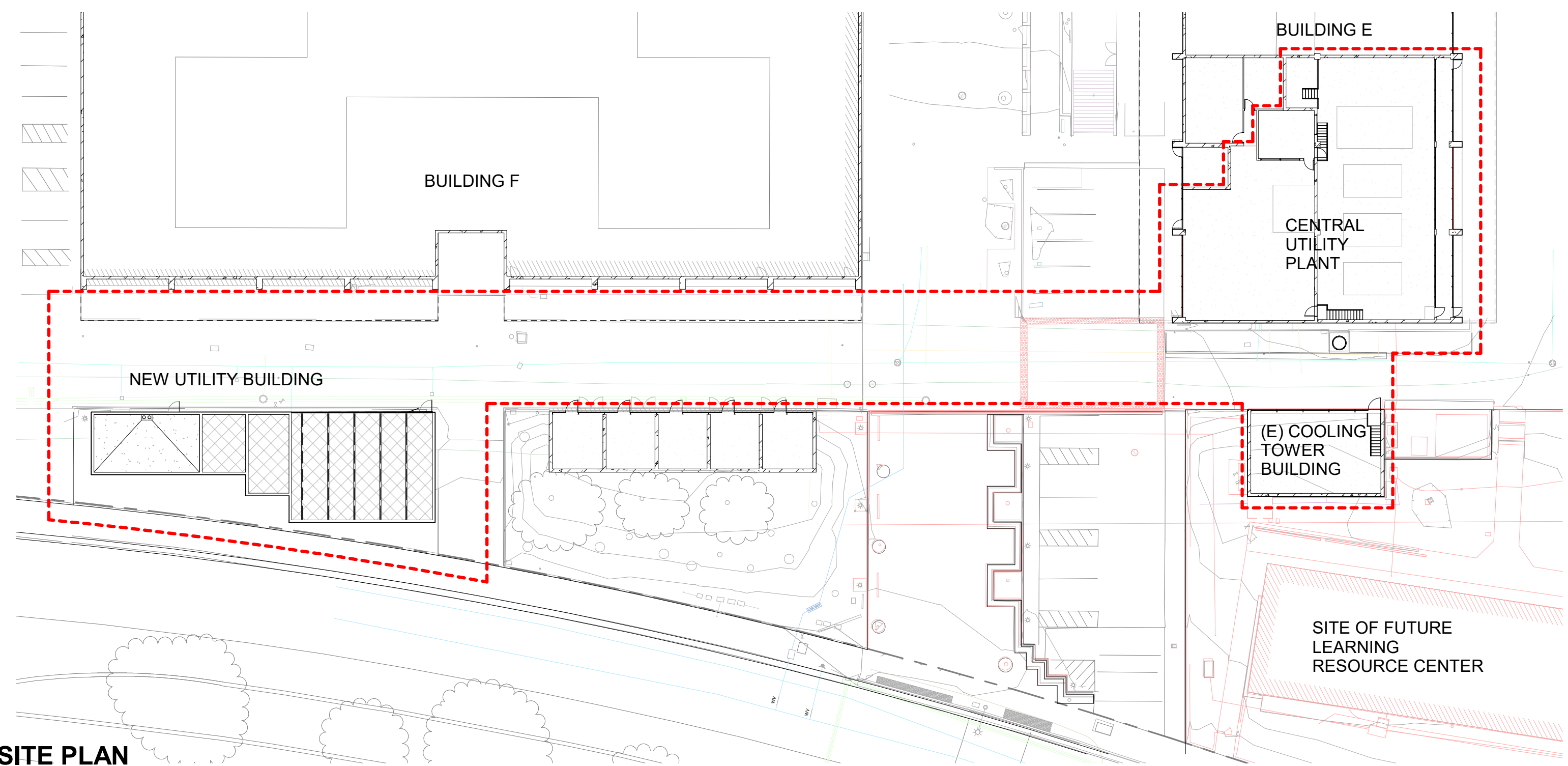
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 SHEET TITLE

SHEET INDEX / SITE PLAN

SHEET NUMBER

G1.01

1 SITE PLAN
 G1.01 1" = 30'-0"



LINETYPES

EXISTING		PROPOSED
	CONTOUR - MAJOR	N/A
	CONTOUR - MINOR	N/A
	DIRT ROAD	N/A
	EASEMENT	N/A
	FENCE	N/A
	FLOWLINE / SWALE	
	RETAINING WALL	
	TOE OF BANK	
	TOP OF BANK	
	TREE DRIPLINE	N/A
	ELECTRICAL LINE	
	FIRE WATER	
	GAS LINE	
	HIGH VOLTAGE	
	LIGHTING	
	SANITARY SEWER	
	STORM DRAIN	N/A
	TELECOM LINE	
	WATER	
	CHILLED WATER RETURN & SUPPLY LINES	
	HOT WATER RETURN & SUPPLY LINES	
	JOINT TRENCH	

SYMBOLS

EXISTING		PROPOSED
	BOLLARD	N/A
	SIGN	N/A
	TREE / TREE TO BE REMOVED	
	LIGHT - POST MOUNTED	
	SANITARY SEWER - CLEANOUT	
	SANITARY SEWER - MANHOLE	N/A
	STORM DRAINAGE - AREA DRAIN	N/A
	STORM DRAINAGE - CLEANOUT	N/A
	STORM DRAINAGE - DROP INLET	N/A
	STORM DRAINAGE - MANHOLE	
	GAS VALVE	N/A
	UTILITY MANHOLE - ELECTRIC	N/A
	FIRE DEPARTMENT CONNECTION	N/A
	FIRE HYDRANT	N/A
	POST INDICATOR VALVE	N/A
	WATER METER	N/A
	WATER VALVE	
	POT HOLE	N/A
	FOUND / SET - CONTROL POINT	

MATERIAL LEGEND

	BUILDING
	CONCRETE
	ASPHALT CONCRETE

POT HOLE INFORMATION

DATE	#	DESCRIPTION	*DEPTH
6/30/2020	1	1.5"-COPPER - WATER, 2"-COPPER - WATER, 2"-BLACK TAPE WRAPPED STEEL - GAS, 2"-COPPER-WATER, 2"-BLACK TAPE WRAPPED PLASTIC-ELEC, 1"-BLACK PLASTIC-ELECTRIC	3'-1.5" 3'-0" 3'-1.5" 3'-1" 2'-4.5" 2'-0"
7/1/2020	2	115KV DUCT BANK ENCASED IN GREY CONCRETE	TOP 4'-8" BOTTOM 8'-4"
6/30/2020	3	8" BLACK STEEL - UNKNOWN	1'-8"
6/30/2020	4	4" YELLOW PLASTIC - GAS	2'-11"
7/1/2020	5	115KV DUCT BANK ENCASED IN GREY CONCRETE	6'-3"
7/2/2020	6	36" ML & CS - WATER	13'-8"
6/30/2020	7	36" ML & CS - WATER	8'-3"
6/30/2020	8	18" ASBESTOS CONCRETE - SD	5'-7"
7/2/2030	9	NO UTILITY FOUND	N/A
7/2/2030	10	** 12KV ENCASED IN GREY CONCRETE	TOP 2'-4" BOTTOM 2'-9"

* MEASUREMENTS ARE TO TOP OF PIPE OR CONCRETE UNLESS NOTED OTHERWISE

** PRIVATE 12KV DUCT BANK PER SHEET E401 OF CIVIC CENTER SITE PLANS INCLUDES 4x4", 1x5" CONDUIT

SURVEY CONTROL POINTS

CP #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	2116788.244919	6052293.367427	18.13	CP CUT X
9	2116724.090685	6052352.714069	17.51	CP CUT X
10	2116860.886068	6052344.027591	17.35	CP CUT X
16	2116745.914899	6052553.301559	17.75	CP 60D
17	2116741.900273	6052359.723717	18.20	CP 60D
19	2116797.727068	6052510.736814	17.93	CP MAG
22	2116949.523444	6052222.027888	17.68	CP MAG
25	2116889.744779	6052195.541673	19.18	CP 60D

BASIS OF TOPOGRAPHY

TOPOGRAPHY SHOWN WAS PERFORMED BY FIELD SURVEY ON MARCH 6-8TH, 2019.

HORIZONTAL DATUM IS CALIFORNIA STATE PLANE COORDINATES, NORTH AMERICAN DATUM OF 1983 (NAD83), ZONE 3, EPOCH 2010.0000 PER GPS OPUS SOLUTION.

VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER GPS OPUS SOLUTION.

BODC JURISDICTIONAL LINE IS A RESULT OF PLOTTING CONTOUR 5.63', WHICH WAS DETERMINED FROM TIDAL STATION 9414764 (OAKLAND INNER HARBOR), WHICH LISTS MHW AS 5.75' AND NAVD88 AS 0.12. THE DIFFERENCE BEING 5.63'

GEOTECHNICAL REPORT

GEOTECHNICAL INVESTIGATION AND GEOLOGIC HAZARDS EVALUATION REPORT FOR LANEY COLLEGE LIBRARY LEARNING RESOURCE CENTER DATED FEBRUARY 28, 2020 WAS PREPARED BY FUGRO.

GENERAL NOTES

- PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL VERIFY ALL INTERFACES BETWEEN EXISTING CONDITIONS AND NEW CONSTRUCTION FOR GRADING AND DRAINAGE; INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND OR AT GRADE FACILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL CONTRACT DOCUMENTS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL APPROPRIATE JURISDICTIONAL AGENCY PERMITS WHICH MAY BE NECESSARY TO ACCOMPLISH WORK SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER 48 HOURS PRIOR TO COMMENCING WORK. THE GEOTECHNICAL ENGINEER SHALL OBSERVE CONSTRUCTION TO VERIFY THAT EXISTING AND INSTALLED CONDITIONS.
- IF, AT ANY TIME DURING GRADING OPERATIONS, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
- THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (800-227-2600) A MINIMUM OF 48 HOURS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL OBTAIN AN O.S.H.A. PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE 5' OR DEEPER. ALL TRENCHES 5' IN DEPTH OR GREATER SHALL BE SHORED AND BRACED ACCORDING TO STATE LAW.
- UTILITIES AS SHOWN CONFORM TO AVAILABLE RECORD DATA. THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION AND DEPTHS BY POT-HOLING OF ALL UTILITIES WITH APPROPRIATE AGENCIES AND TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
- RECORD DATA REFERENCES FOR EXISTING UTILITIES INCLUDE
 - "CIVIC CENTER SITE", DATED 2/26/68, BY SKIDMORE, OWINGS & MERRILL ARCHITECTS
 - "LANEY COLLEGE INTERIM HOUSING", DATED 11/28/07, BY POWELL & PARTNERS ARCHITECTS
 - "ELECTRICAL AND COMM. SITE PLAN" BY YEI ENGINEERS, INC
 - "ENGINEER'S INN PORTABLE KITCHEN", DATED 9/19/06, BY WLC ARCHITECTS
- THIS SURVEY DOES NOT REFLECT A FINAL BOUNDARY DETERMINATION. THE BOUNDARY SHOWN HERON IS DEPICTED FOR GRAPHICAL PURPOSES ONLY.

ABBREVIATIONS

AC	ASPHALT CONCRETE
AD	AREA DRAIN
ACR	ACCESS COMPLIANT RAMP
CAB	CABINET
CIP	CAST IRON PIPE
CONC	CONCRETE
CUP	CENTRAL UNIT PLANT
CWS/R	CHILLED WATER SUPPLY / CHILLED WATER RETURN
CP	CONTROL POINT
EBMUD	EAST BAY MUNICIPAL WATER DISTRICT
ELEC	ELECTRIC
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
EX	EXISTING
EV	ELECTRICAL VEHICLE
FL	FLOWLINE
FS	FINISH SURFACE
FW	FIRE WATER
GB	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HV	HIGH VOLTAGE
HWS/R	HOT WATER SUPPLY / HOT WATER RETURN
IRR	IRRIGATION
JT	JOINT TRENCH
LRC	LEARNING RESOURCE CENTER
MEP	MECHANICAL ELECTRICAL PLUMBING
MH	MANHOLE
ML & CS	MORTAR LINED AND COATED STEEL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PG&E	PACIFIC GAS & ELECTRIC
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SDCO	STORM DRAIN CLEANOUT
SS	SANITARY SEWER
STL	STEEL
TG	TOP OF GRATE
TW	TOP OF WALL
tw	TOE OF WALL
UNO	UNLESS NOTED OTHERWISE
VCP	VITRIFIED CLAY PIPE
VIF	VERIFY IN FIELD
W	WATER

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APPROVALS

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LANEY CENTRAL
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**Design Criteria
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CONSTRUCTION**

CSW | ST 2


**CSW/Stuber-Strooh
Engineering Group, Inc.**
45 Leveroni Court
Novato, CA 94949
tel: 415.883.9850
fax: 415.883.9835

APPROVALS

PROJECT TITLE
**Peralta Community
College District
LANEY CENTRAL
UTILITY PLANT**

900 Fallon St
Oakland, CA 94607

**Design Criteria
Documents**

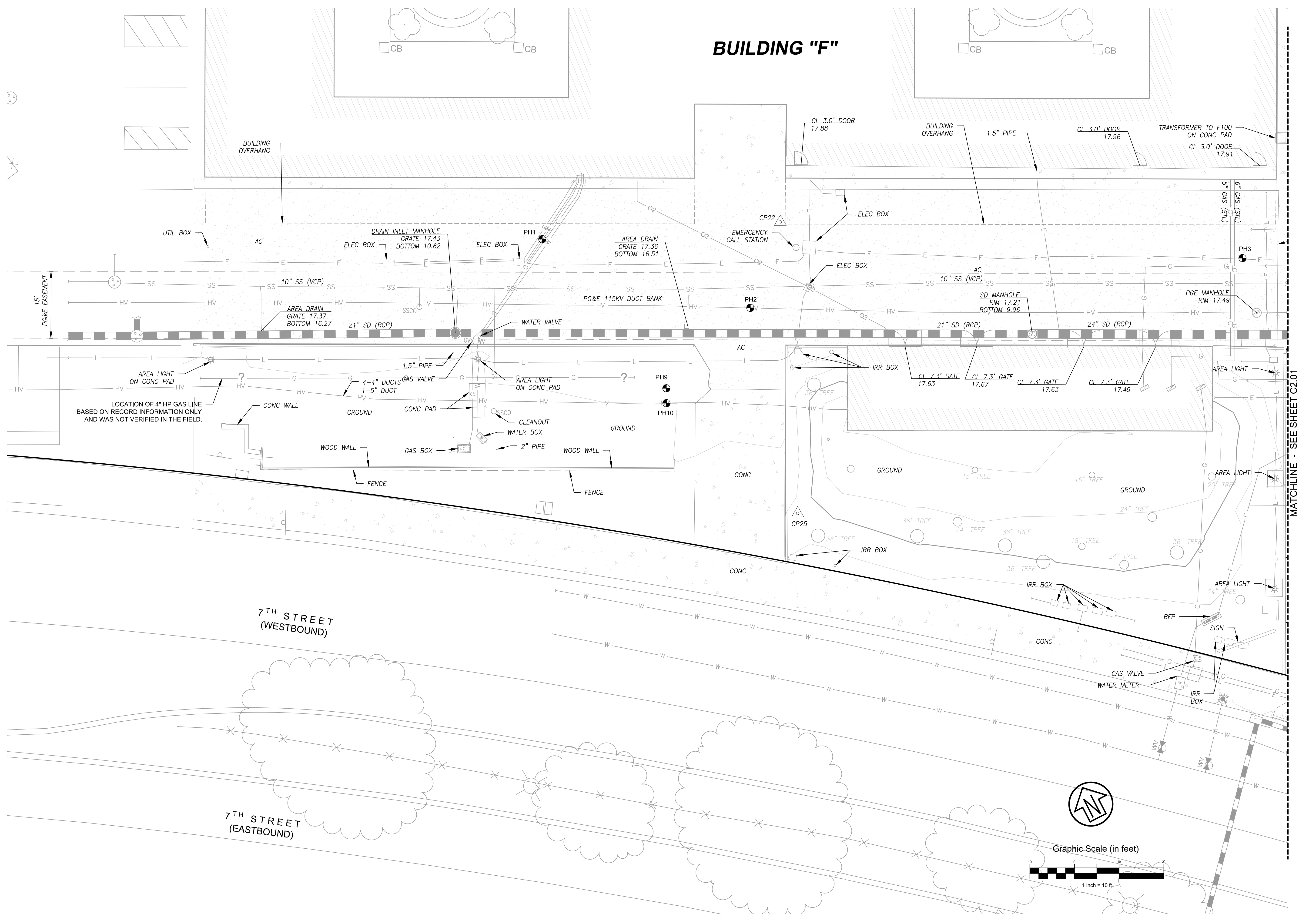
ISSUE DATE	09.03.2020
N&T JOB NUMBER	21942.10
REVISIONS	
 DATE	DESCRIPTION

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SHEET TITLE

**EXISTING CONDITIONS
PLAN - WEST**

SHEET NUMBER

C2.00



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CSW | ST 2

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45 Leveroni Court
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APPROVALS

PROJECT TITLE
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LANEY CENTRAL
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900 Fallon St
Oakland, CA 94607

**Design Criteria
Documents**

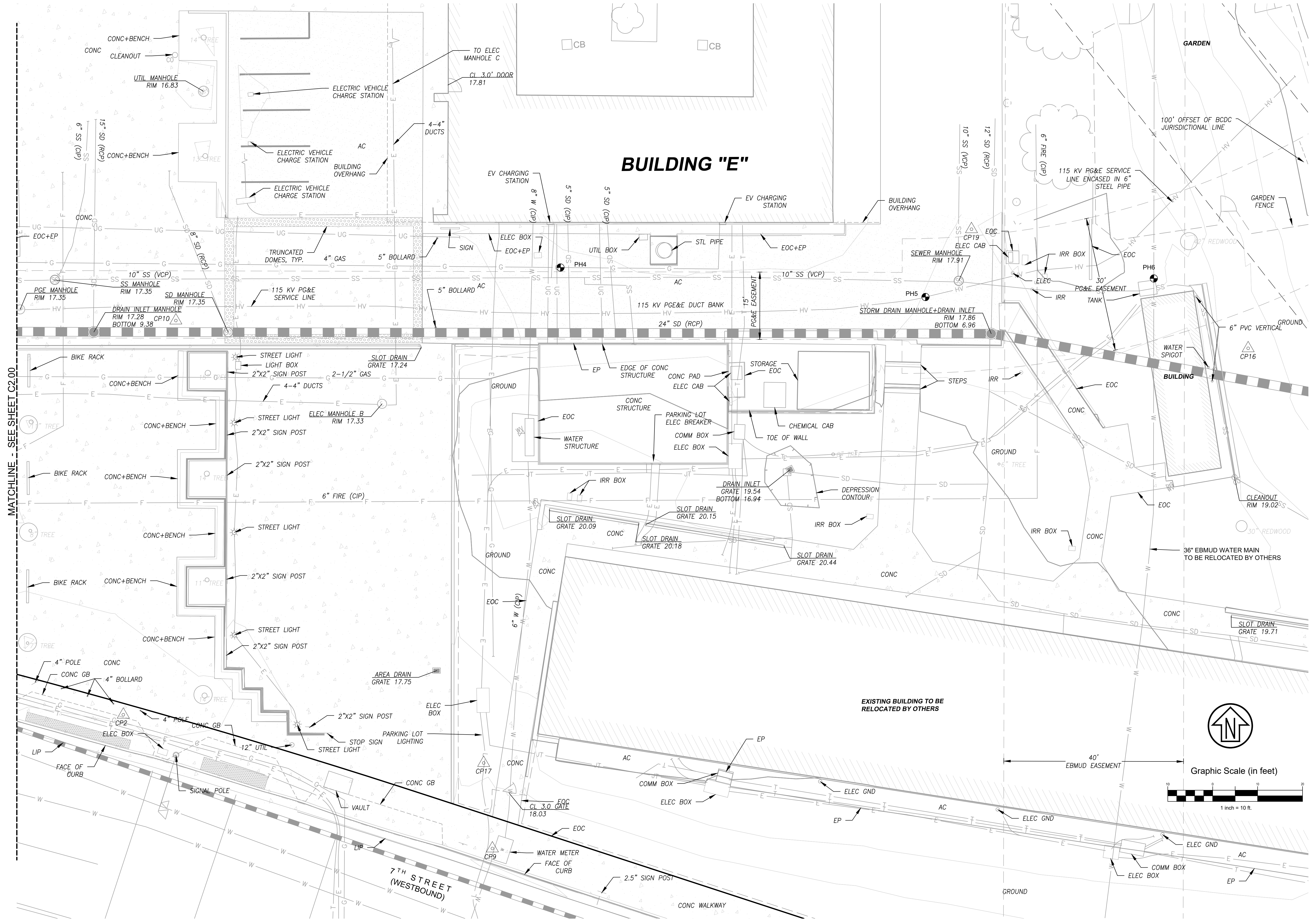
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REVISIONS	
▲ DATE	DESCRIPTION

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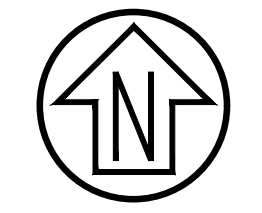
**EXISTING CONDITIONS
PLAN - EAST**

SHEET NUMBER

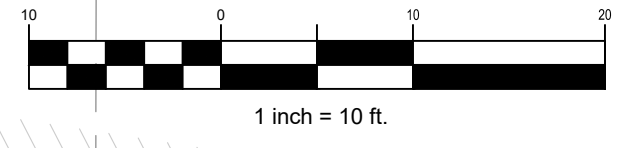
C2.01



MATCHLINE - SEE SHEET C2.00



Graphic Scale (in feet)



EXISTING BUILDING TO BE RELOCATED BY OTHERS

7TH STREET
(WESTBOUND)

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CSW | ST 2

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Engineering Group, Inc.**

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APPROVALS

PROJECT TITLE
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College District
LANEY CENTRAL
UTILITY PLANT**

900 Fallon St
Oakland, CA 94607

**Design Criteria
Documents**

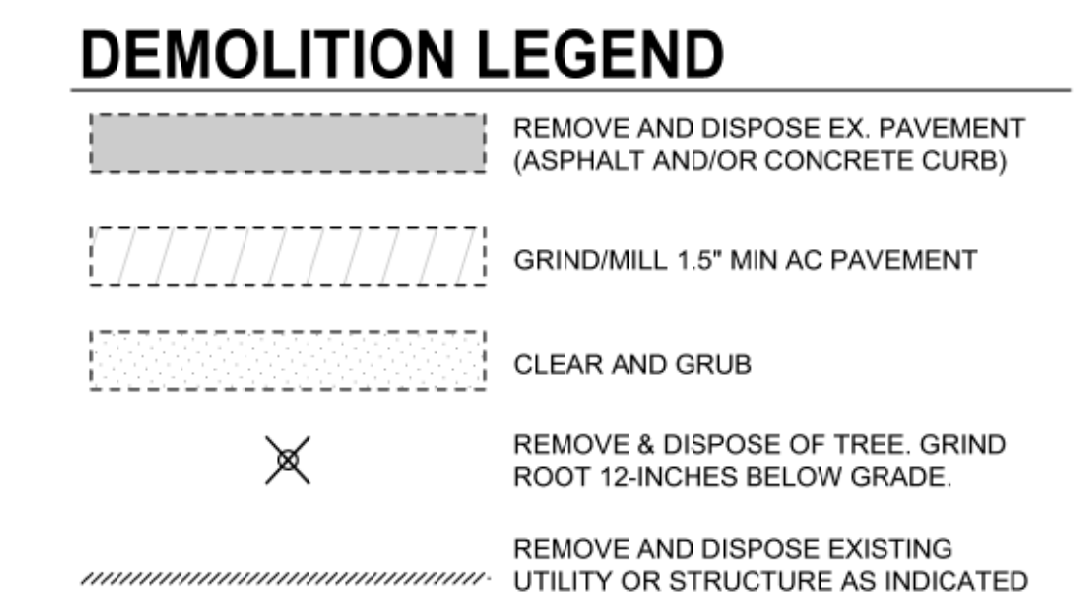
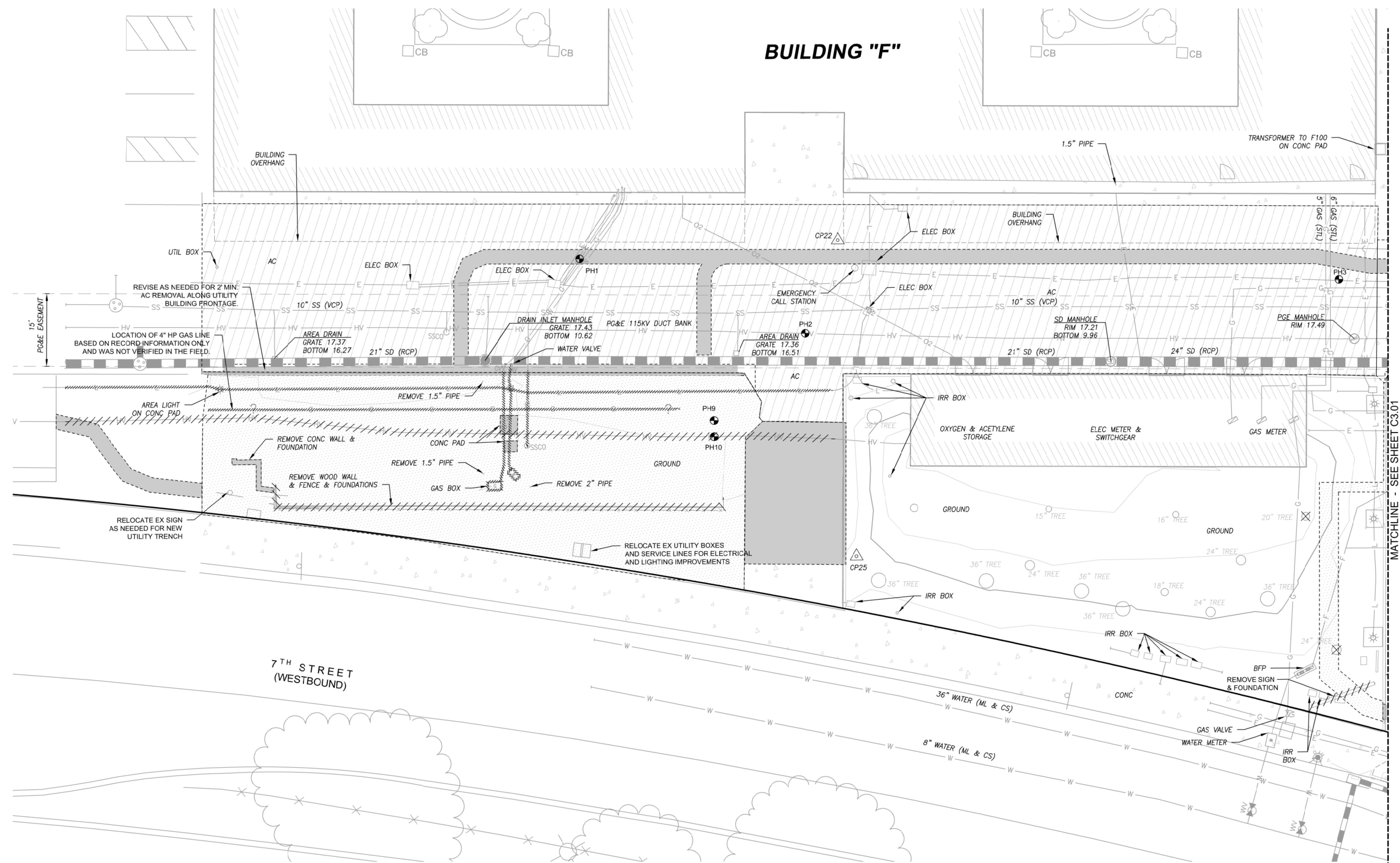
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N&T JOB NUMBER	21942.10
REVISIONS	
	DATE DESCRIPTION

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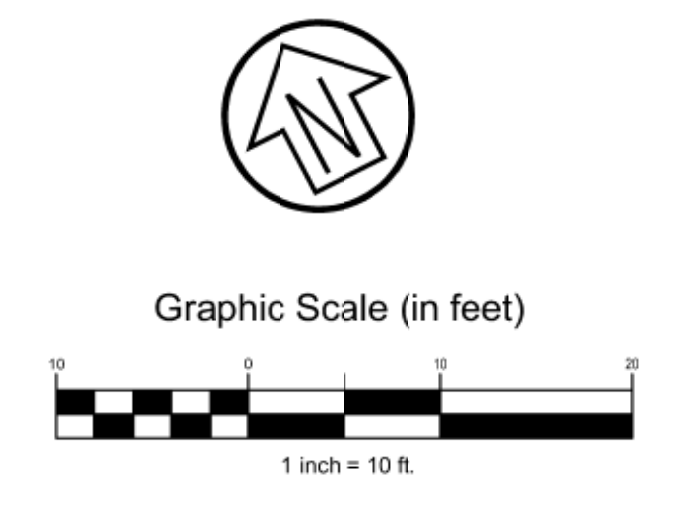
**DEMOLITION PLAN -
WEST**

SHEET NUMBER

C3.00



- ### NOTES
- CONTRACTOR SHALL OBTAIN CITY ENCROACHMENT PERMIT FOR ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
 - CONTRACTOR SHALL RELOCATE EXISTING SIGNS, TRASH CANS, IRRIGATION FACILITIES, AND OTHER SITE FEATURES NOT INDICATED IN PLANS FOR THE NEW UTILITY BUILDING AND SITE UTILITY IMPROVEMENTS.
 - ALL FACILITIES, UTILITIES, AND TREES OUTSIDE THE LIMIT OF DEMOLITION SHALL BE PROTECTED IN PLACE, UNLESS NOTED OTHERWISE.



MATCHLINE - SEE SHEET C3.01

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CSW | ST 2

**CSW/Stuber-Stroeh
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APPROVALS

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College District
LANEY CENTRAL
UTILITY PLANT**

900 Fallon St
Oakland, CA 94607

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Documents**

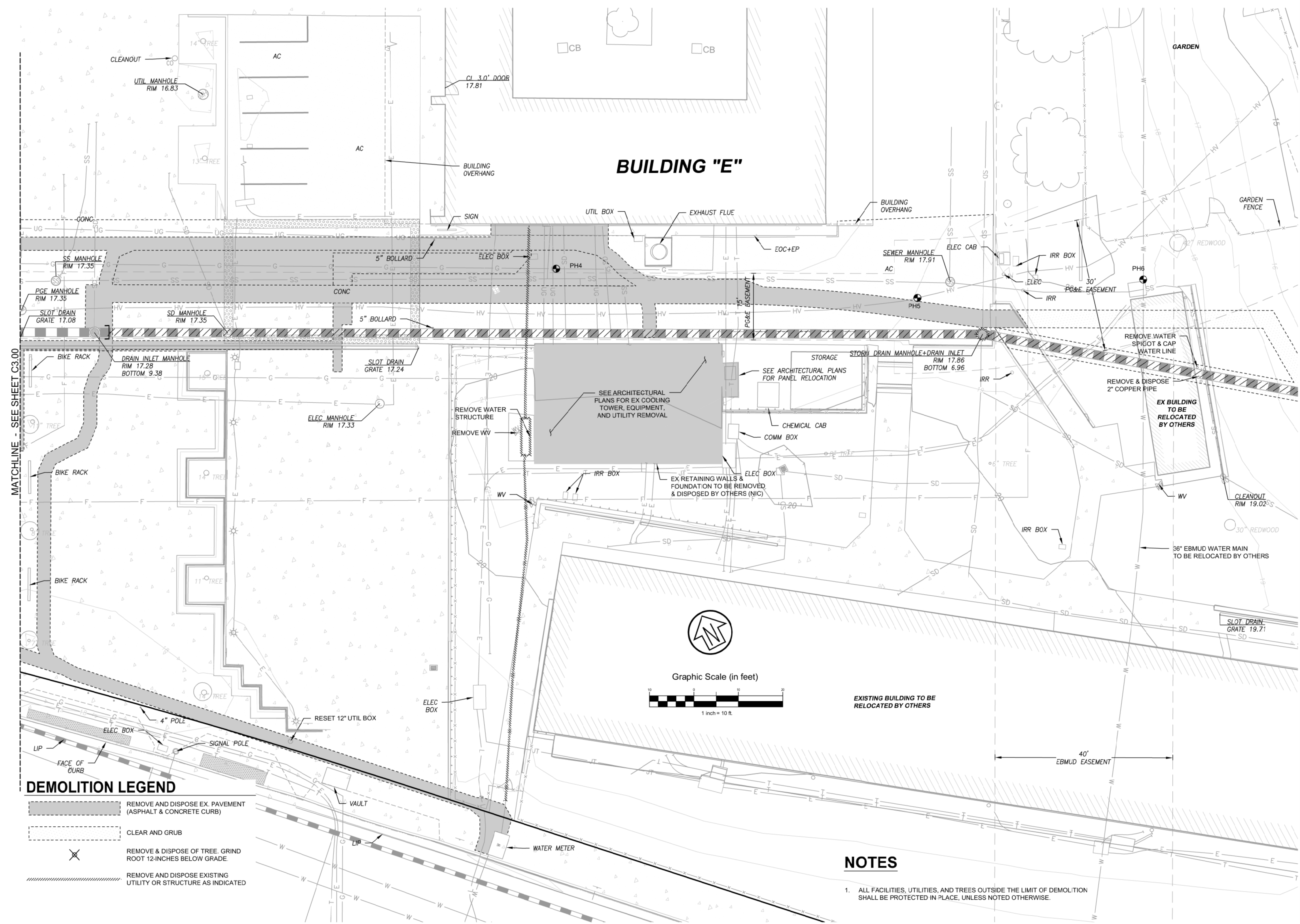
ISSUE DATE	09.03.2020
N&T JOB NUMBER	21942.10
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DATE	DESCRIPTION

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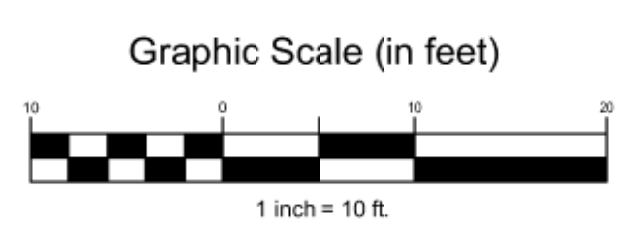
**DEMOLITION PLAN -
EAST**

SHEET NUMBER

C3.01



MATCHLINE - SEE SHEET C3.00



EXISTING BUILDING TO BE
RELOCATED BY OTHERS

DEMOLITION LEGEND

- REMOVE AND DISPOSE EX. PAVEMENT (ASPHALT & CONCRETE CURB)
- CLEAR AND GRUB
- REMOVE & DISPOSE OF TREE. GRIND ROOT 12-INCHES BELOW GRADE.
- REMOVE AND DISPOSE EXISTING UTILITY OR STRUCTURE AS INDICATED

NOTES

1. ALL FACILITIES, UTILITIES, AND TREES OUTSIDE THE LIMIT OF DEMOLITION SHALL BE PROTECTED IN PLACE, UNLESS NOTED OTHERWISE.

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CSW | ST 2

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APPROVALS

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**Peralta Community
College District
LANEY CENTRAL
UTILITY PLANT**

900 Fallon St
Oakland, CA 94607

**Design Criteria
Documents**

ISSUE DATE	09.03.2020
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▲ DATE	DESCRIPTION

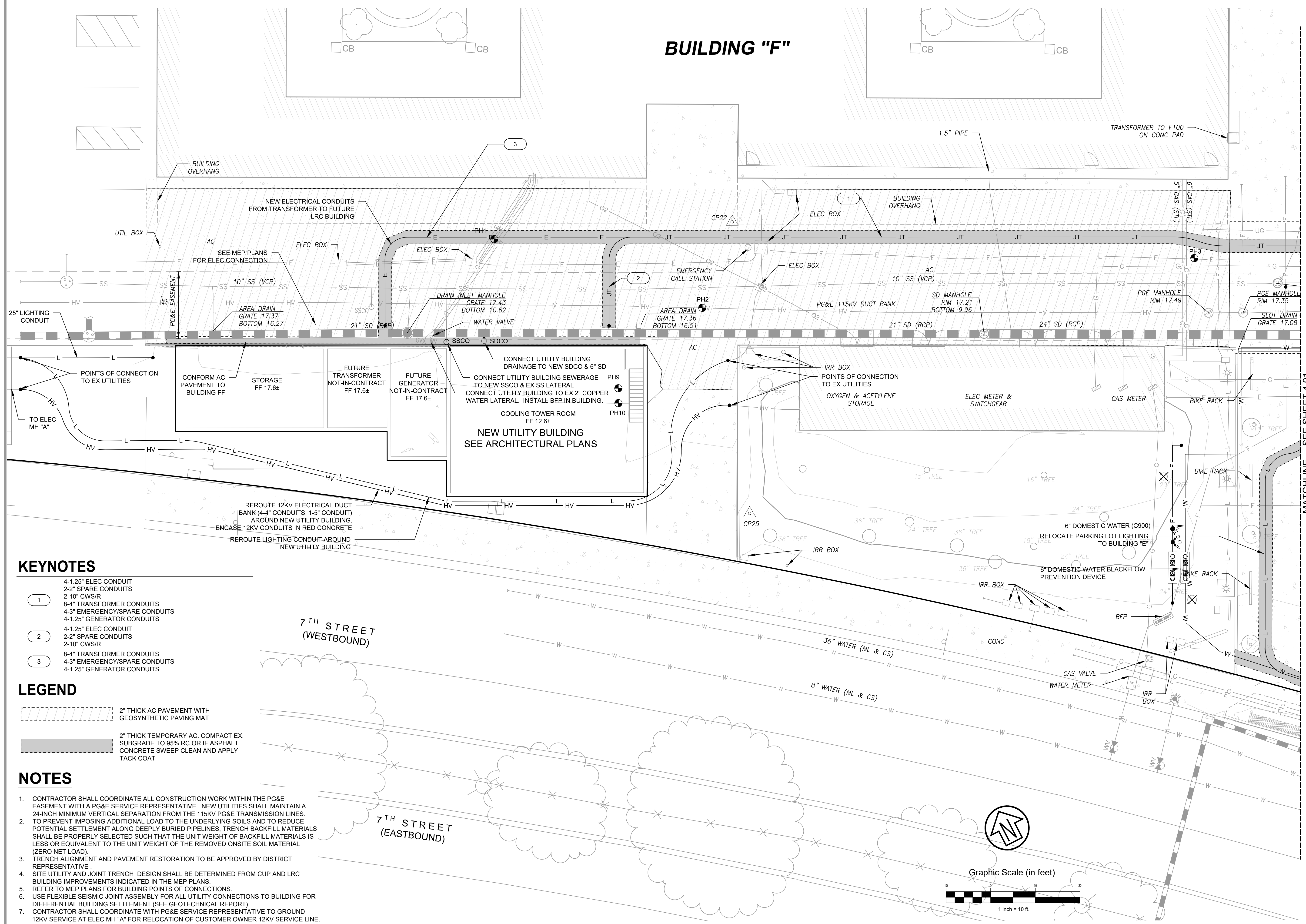
DRAWN BY **RJS** CHECKED BY **RJS**
SHEET TITLE

**COMPOSITE CIVIL
PLAN - WEST**

SHEET NUMBER

C4.00

BUILDING "F"



KEYNOTES

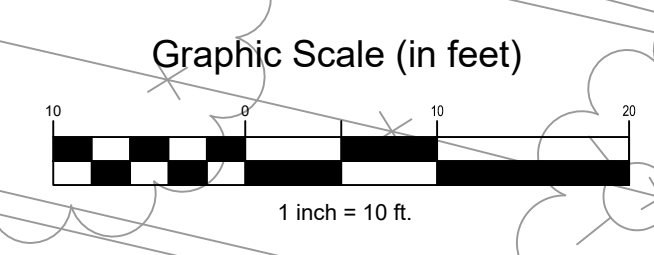
- 1 4-1.25" ELEC CONDUIT
2-2" SPARE CONDUITS
2-10" CWS/R
8-4" TRANSFORMER CONDUITS
4-3" EMERGENCY/SPARE CONDUITS
4-1.25" GENERATOR CONDUITS
- 2 4-1.25" ELEC CONDUIT
2-2" SPARE CONDUITS
2-10" CWS/R
8-4" TRANSFORMER CONDUITS
4-3" EMERGENCY/SPARE CONDUITS
4-1.25" GENERATOR CONDUITS
- 3 4-1.25" ELEC CONDUIT
2-2" SPARE CONDUITS
2-10" CWS/R
8-4" TRANSFORMER CONDUITS
4-3" EMERGENCY/SPARE CONDUITS
4-1.25" GENERATOR CONDUITS

LEGEND

- 2" THICK AC PAVEMENT WITH GEOSYNTHETIC PAVING MAT
- 2" THICK TEMPORARY AC. COMPACT EX. SUBGRADE TO 95% RC OR IF ASPHALT CONCRETE SWEEP CLEAN AND APPLY TACK COAT

NOTES

1. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WORK WITHIN THE PG&E EASEMENT WITH A PG&E SERVICE REPRESENTATIVE. NEW UTILITIES SHALL MAINTAIN A 24-INCH MINIMUM VERTICAL SEPARATION FROM THE 115KV PG&E TRANSMISSION LINES.
2. TO PREVENT IMPOSING ADDITIONAL LOAD TO THE UNDERLYING SOILS AND TO REDUCE POTENTIAL SETTLEMENT ALONG DEEPLY BURIED PIPELINES, TRENCH BACKFILL MATERIALS SHALL BE PROPERLY SELECTED SUCH THAT THE UNIT WEIGHT OF BACKFILL MATERIALS IS LESS OR EQUIVALENT TO THE UNIT WEIGHT OF THE REMOVED ONSITE SOIL MATERIAL (ZERO NET LOAD).
3. TRENCH ALIGNMENT AND PAVEMENT RESTORATION TO BE APPROVED BY DISTRICT REPRESENTATIVE.
4. SITE UTILITY AND JOINT TRENCH DESIGN SHALL BE DETERMINED FROM CUP AND LRC BUILDING IMPROVEMENTS INDICATED IN THE MEP PLANS.
5. REFER TO MEP PLANS FOR BUILDING POINTS OF CONNECTIONS.
6. USE FLEXIBLE SEISMIC JOINT ASSEMBLY FOR ALL UTILITY CONNECTIONS TO BUILDING FOR DIFFERENTIAL BUILDING SETTLEMENT (SEE GEOTECHNICAL REPORT).
7. CONTRACTOR SHALL COORDINATE WITH PG&E SERVICE REPRESENTATIVE TO GROUND 12KV SERVICE AT ELEC MH "A" FOR RELOCATION OF CUSTOMER OWNER 12KV SERVICE LINE.



MATCHLINE - SEE SHEET 4.01


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APPROVALS

PROJECT TITLE
**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET,
OAKLAND, CA 94607

**DESIGN CRITERIA
DOCUMENTS**

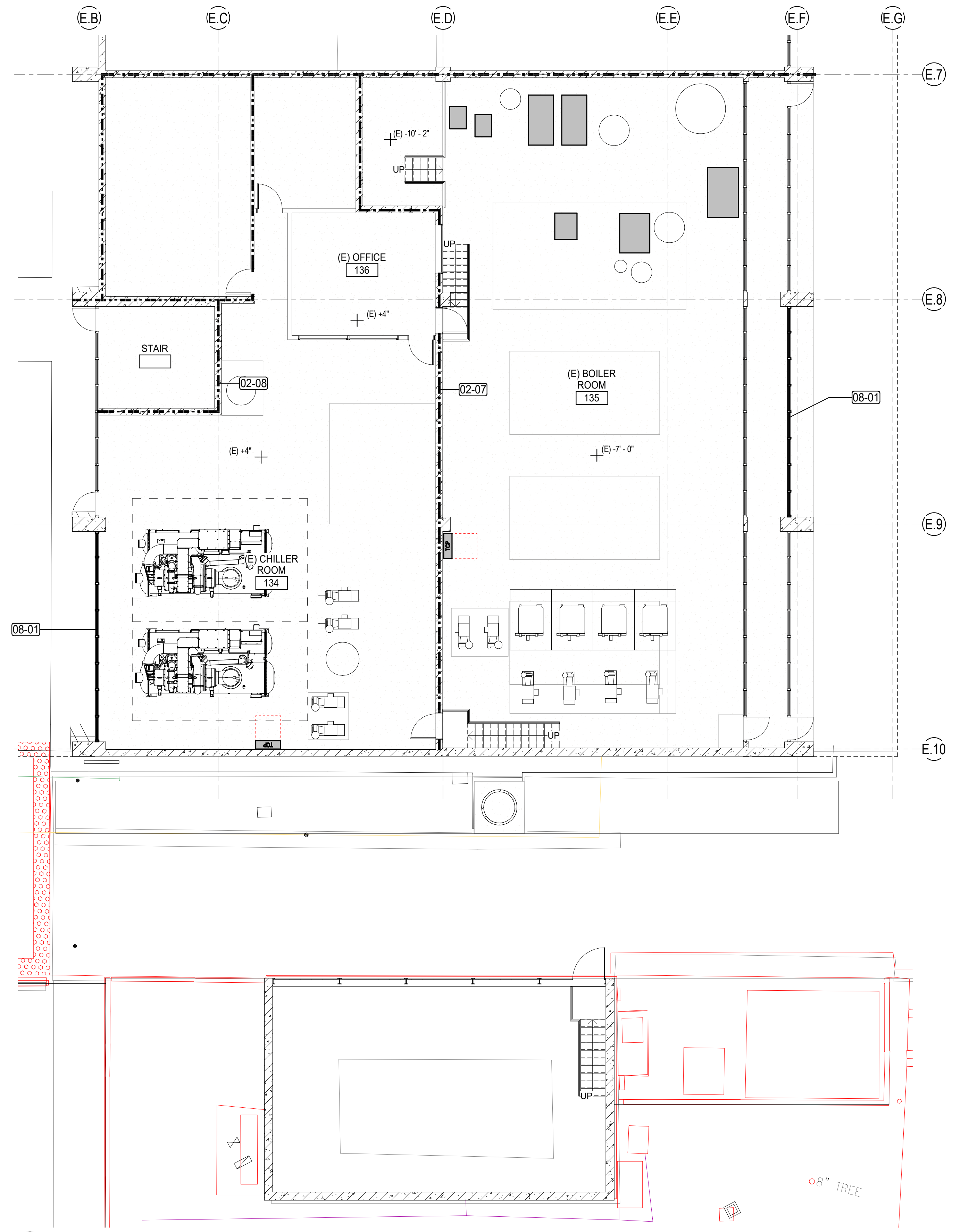
ISSUE DATE	SEPTEMBER 3, 2020
N&T JOB NUMBER	21942.10
REVISIONS	
 DATE	DESCRIPTION

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SHEET TITLE

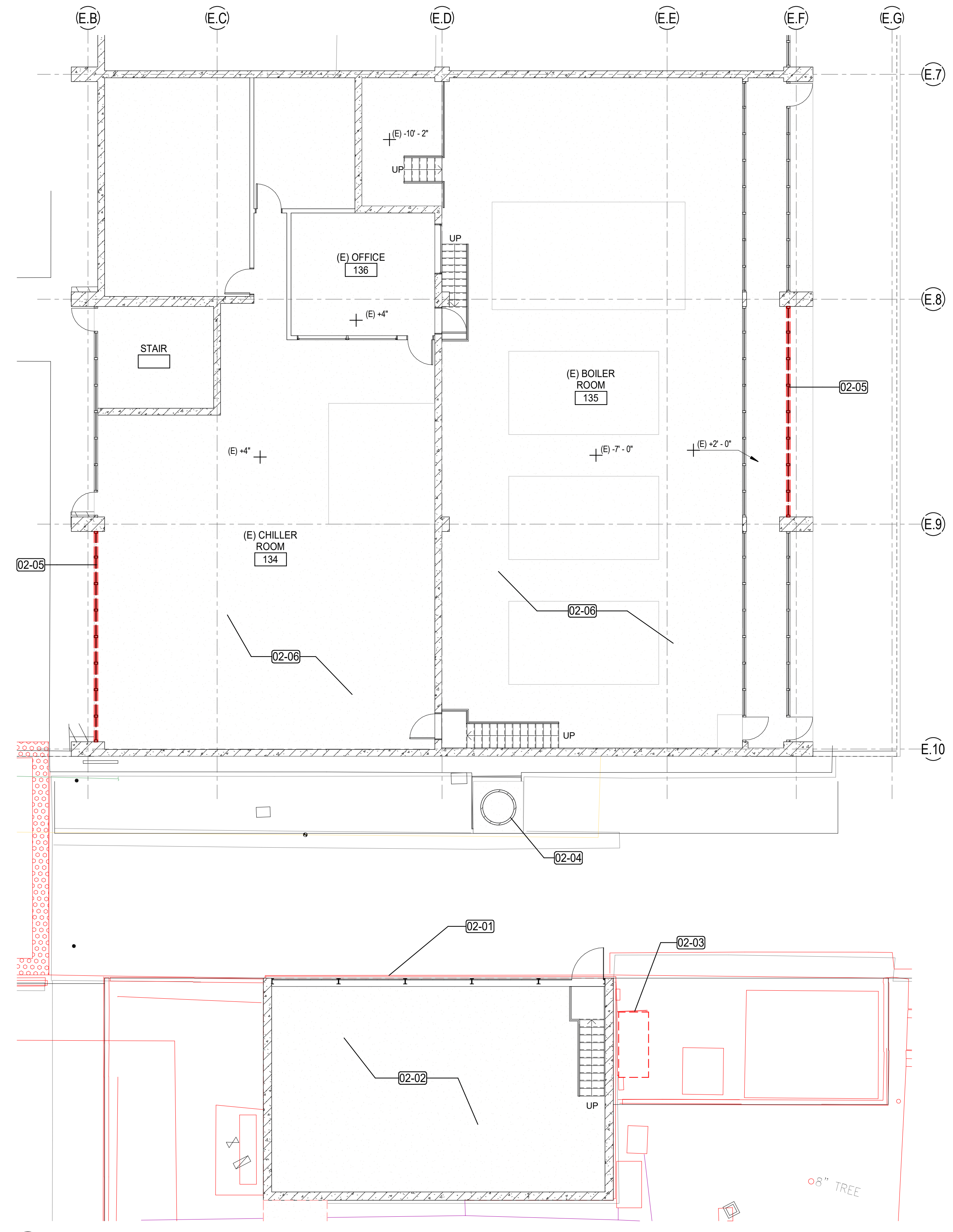
**CENTRAL UTILITY
PLANT PLANS**

SHEET NUMBER

A1.31



2 FLOOR PLAN - BUILDING E CENTRAL UTILITY PLANT
A1.31 1/8" = 1'-0"



1 DEMO PLAN - BUILDING E CENTRAL UTILITY PLANT
A1.31 1/8" = 1'-0"

NOTE	DESCRIPTION
02-02	REMOVE (E) CHILLERS, EQUIPMENT, PIPING AND INFRASTRUCTURE, S.M.D.
02-03	REMOVE & RELOCATE (E) ELECTRICAL PANEL. S.C.D, S.E.D.
02-04	(E) COMBUSTION FLUE TO REMAIN
02-05	REMOVE (E) WINDOW WALL FOR CONSTRUCTION ACCESS. PRESERVE FOR REINSTALLATION.
02-06	REMOVE (E) MECH EQUIPMENT AND PIPING, S.M.D.

NOTE	DESCRIPTION
02-07	(E) 1-HOUR OCCUPANCY SEPARATION
02-08	(E) 2-HOUR OCCUPANCY SEPARATION
08-01	REINSTALL (E) STOREFRONT

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APPROVALS

PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET,
OAKLAND, CA 94607

**DESIGN CRITERIA
DOCUMENTS**

ISSUE DATE: **SEPTEMBER 3, 2020**
N&T JOB NUMBER: **21942.10**
REVISIONS

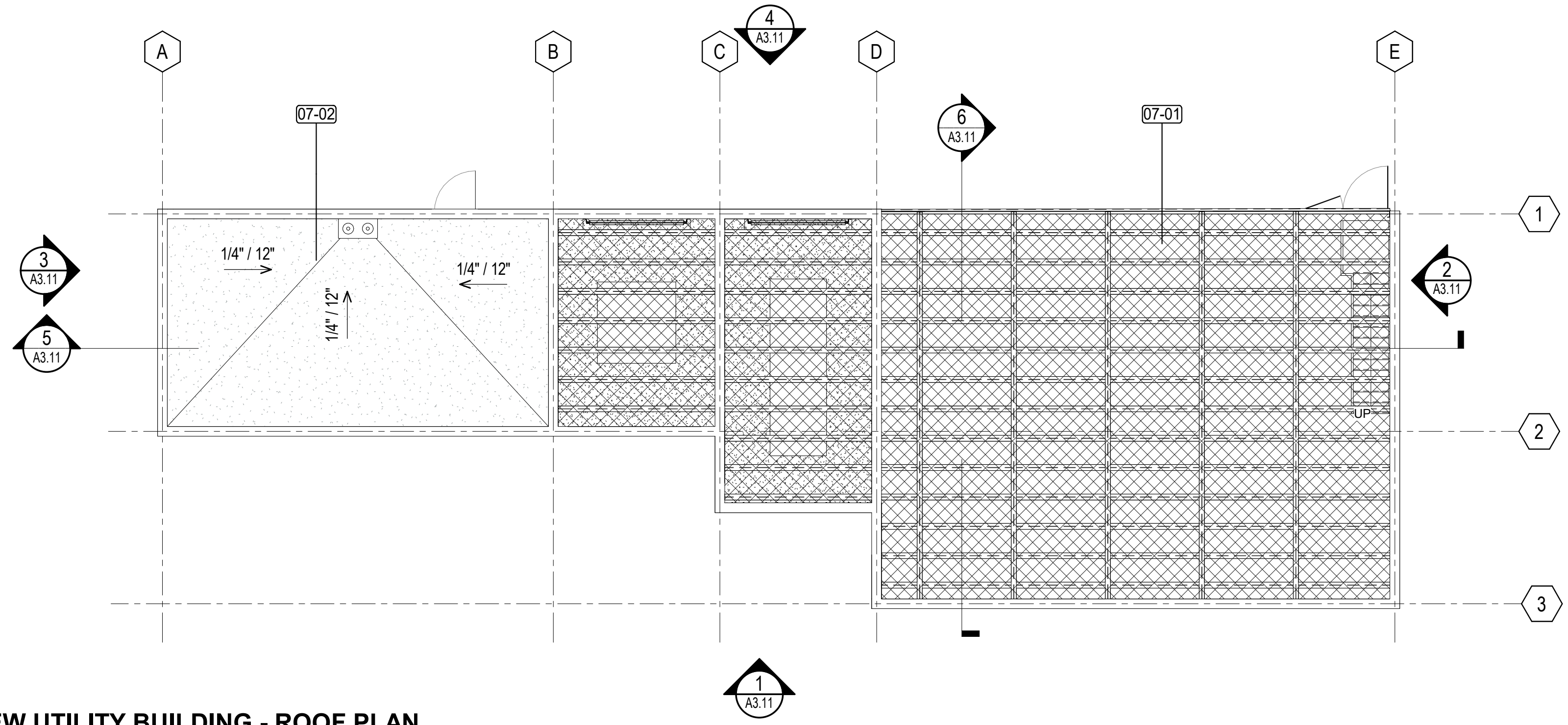
DATE	DESCRIPTION

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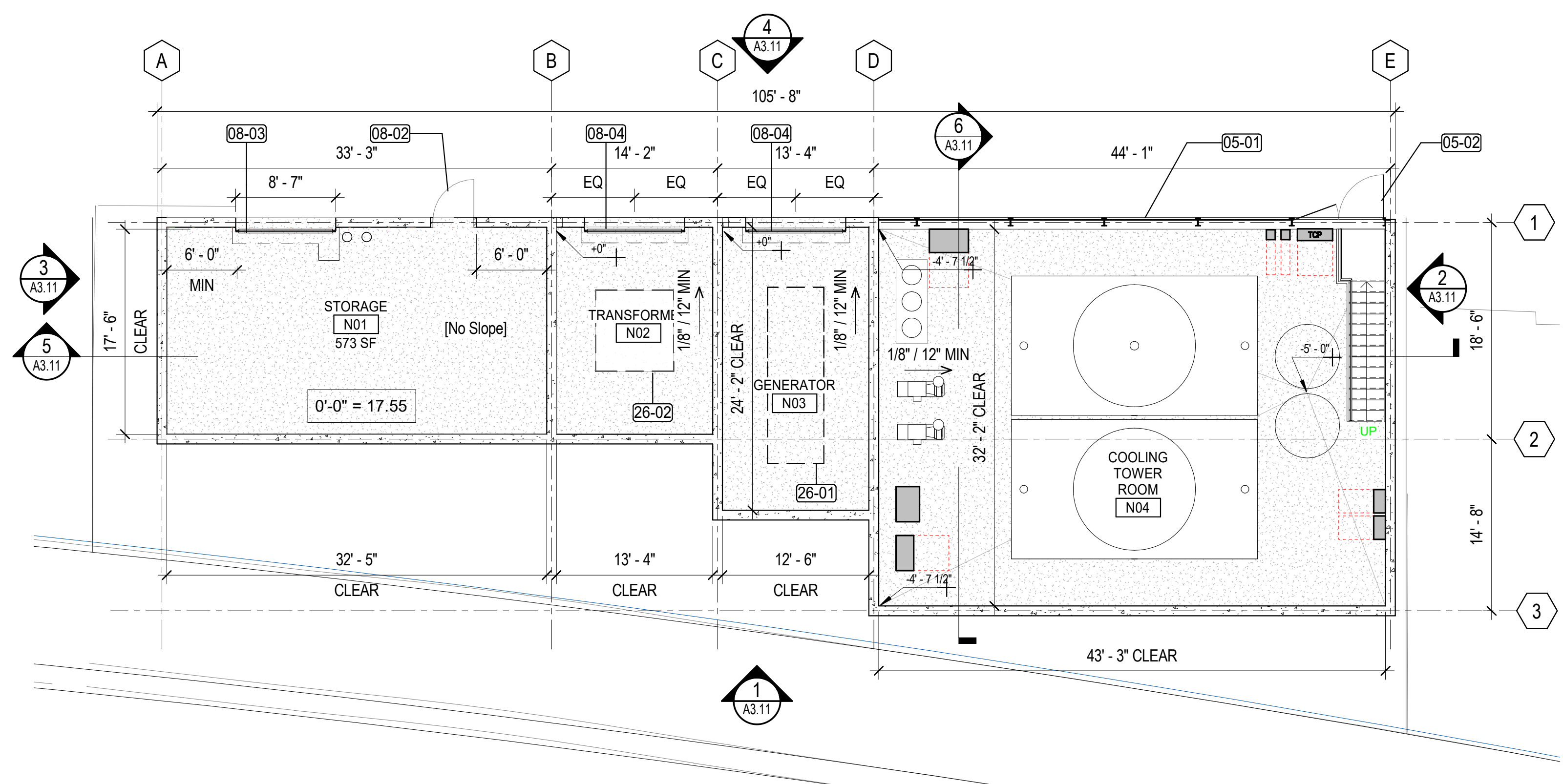
SHEET TITLE
**FLOOR & ROOF PLAN -
NEW UTILITY BUILDING**

SHEET NUMBER

A2.32



2 NEW UTILITY BUILDING - ROOF PLAN
A2.32 1/8" = 1'-0"

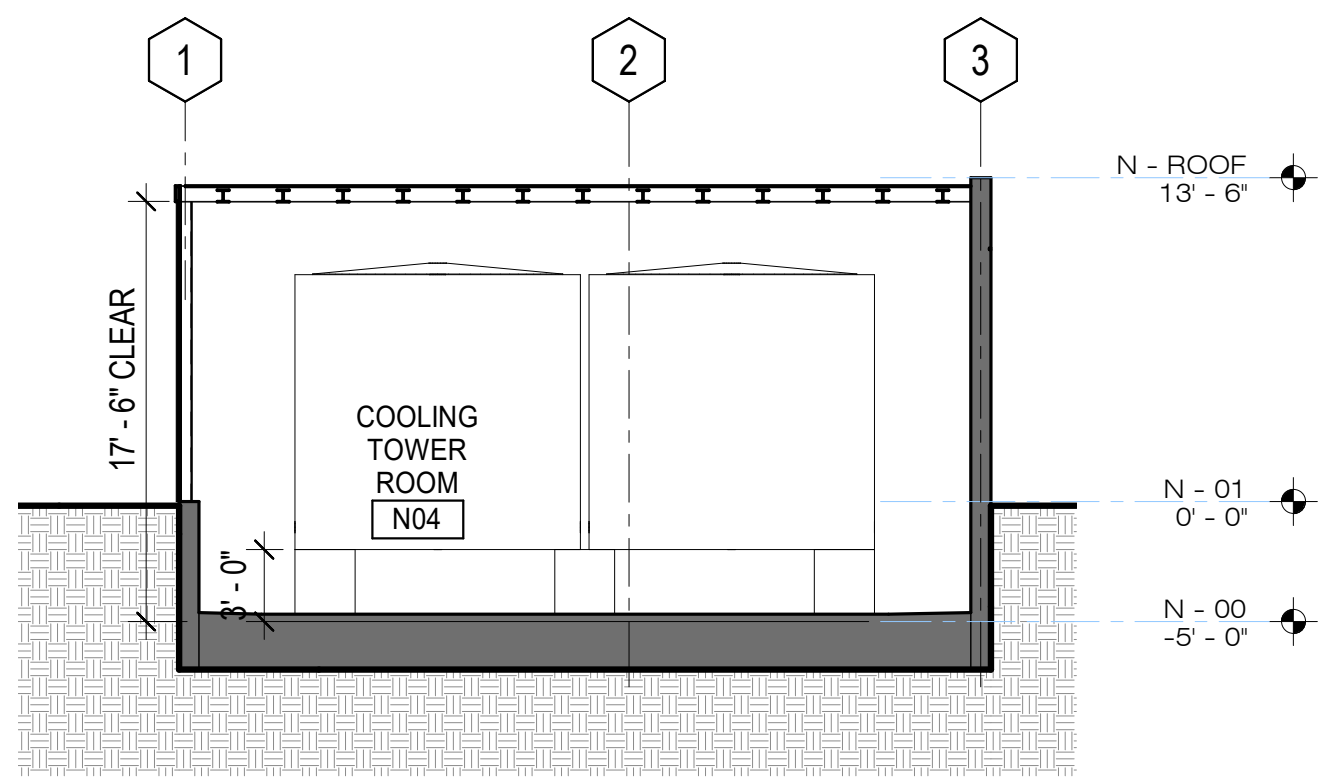


1 NEW UTILITY BUILDING - FLOOR PLAN
A2.32 1/8" = 1'-0"

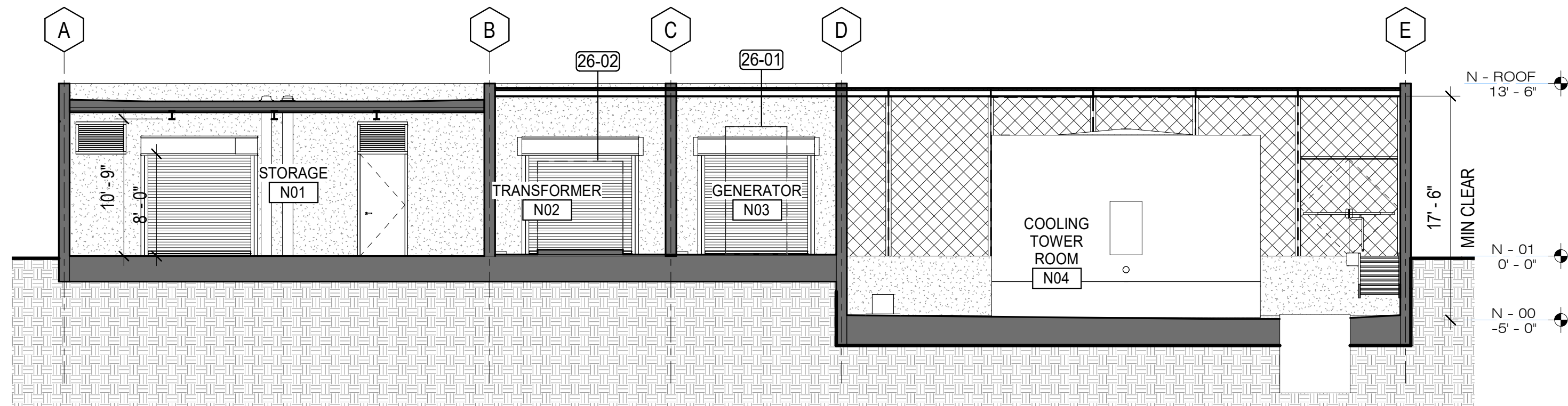
SPACE REQUIREMENTS						
#	Name	AREA	FLOOR	WALLS	CEILINGS	COMMENTS
BUILDING E						
132	(E) CHILLER ROOM	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
133	(E) BOILER ROOM	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
131	(E) OFFICE	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
134	(E) CHILLER ROOM	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
135	(E) BOILER ROOM	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
136	(E) OFFICE	EXISTING	CLEAN, REPAIR & SEAL (E) CONC	PAINT (E) WALLS		SEE MECH AND ELEC DRAWINGS
NEW UTILITY BUILDING						
N01	STORAGE	500 SF MIN.	SEALED CONC	SEALED CONC	EXPOSED STRUCTURE	WEATHER TIGHT, UNCONDITIONED
N02	TRANSFORMER	S.E.D	SEALED CONC, SLOPE TO DRAIN	SEALED CONC	WIRE MESH	SEE MECH AND ELEC DRAWINGS
N03	GENERATOR	S.E.D.	SEALED CONC, SLOPE TO DRAIN	SEALED CONC	WIRE MESH	SEE MECH AND ELEC DRAWINGS
N04	COOLING TOWER ROOM	S.M.D.	SEALED CONC, SLOPE TO DRAIN	SEALED CONC, WIRE MESH	WIRE MESH	SEE MECH AND ELEC DRAWINGS

KEYNOTES

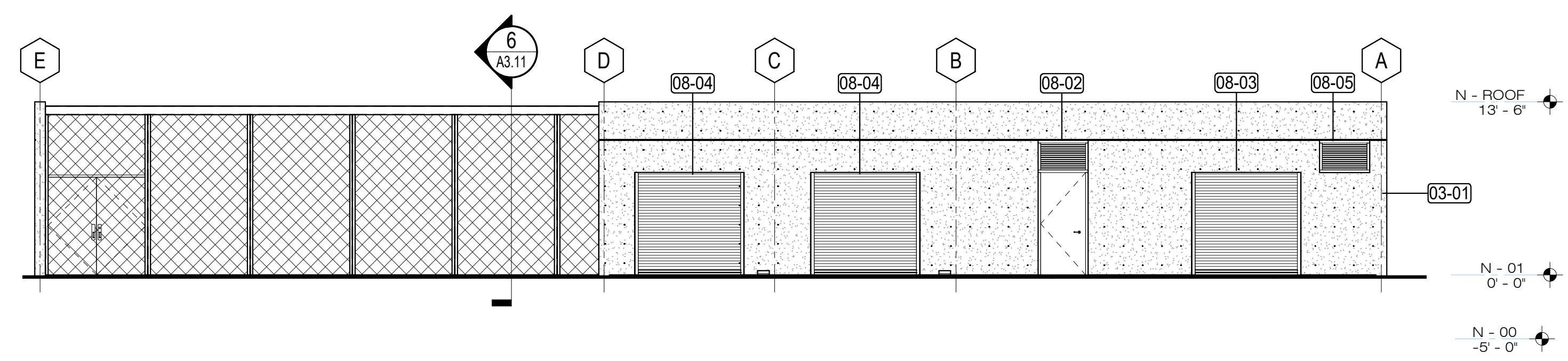
NOTE	DESCRIPTION
05-01	WIRE MESH PARTITION
05-02	LOCKABLE WIRE MESH GATE, SEE SCHEDULE
07-01	WIRE MESH OVER STRUCTURE TO MATCH (E) UTILITY STRUCTURE (TBD)
07-02	TPO ROOF OVER TAPERED INSULATION OVER STEEL DECK
08-02	HOLLOW-METAL DOOR WITH LOUVER TRANSOM
08-03	OVERHEAD COILING DOOR, MOTORIZED, SOLID SLATS
08-04	OVERHEAD COILING DOOR, PUSH-UP OPERATION, VENILATED SLATS
26-01	FUTURE GENERATOR, N.I.C
26-02	FUTURE TRANSFORMER, N.I.C.



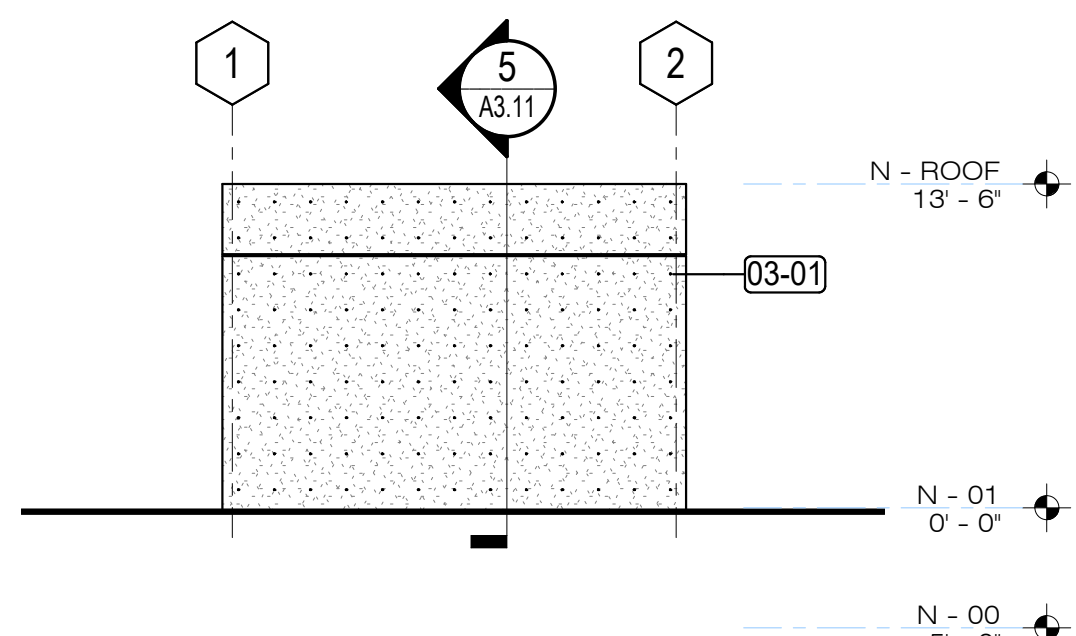
6 NORTH-SOUTH SECTION
A3.11 1/8" = 1'-0"



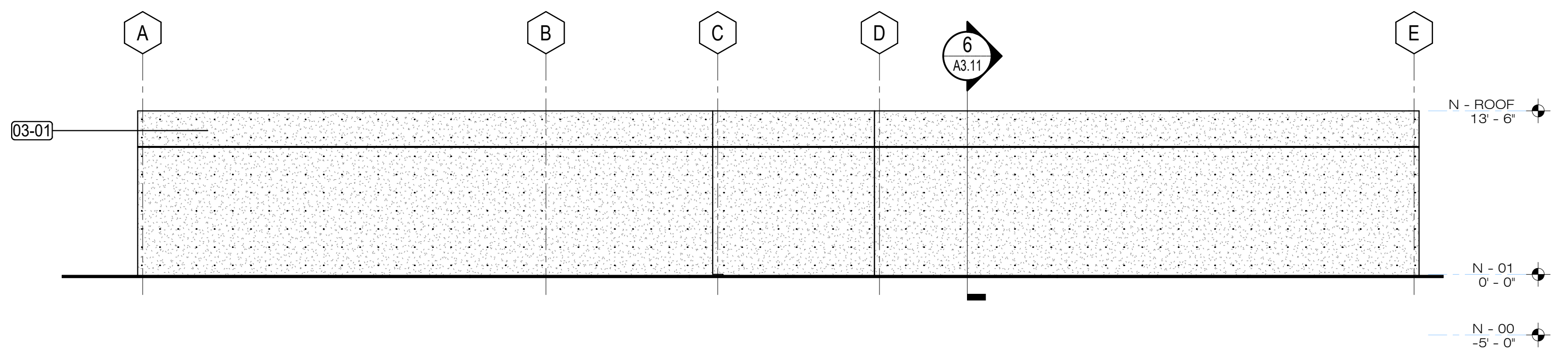
5 EAST-WEST SECTION
A3.11 1/8" = 1'-0"



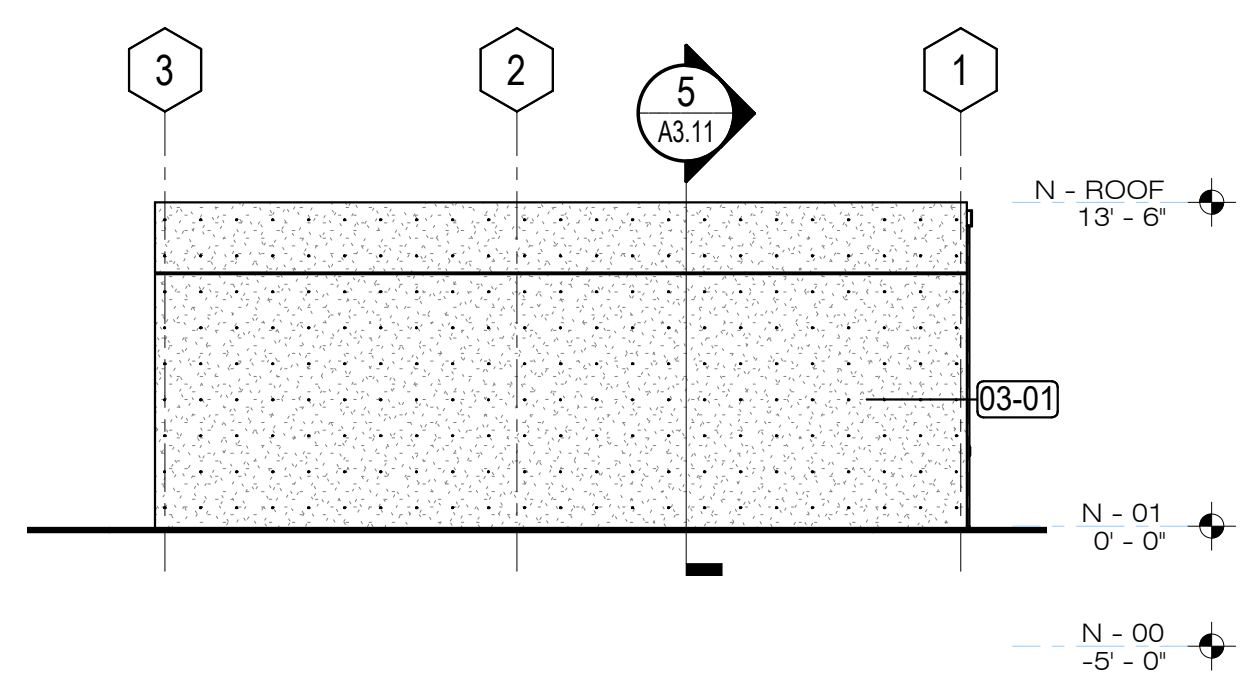
4 NORTH ELEVATION
A3.11 1/8" = 1'-0"



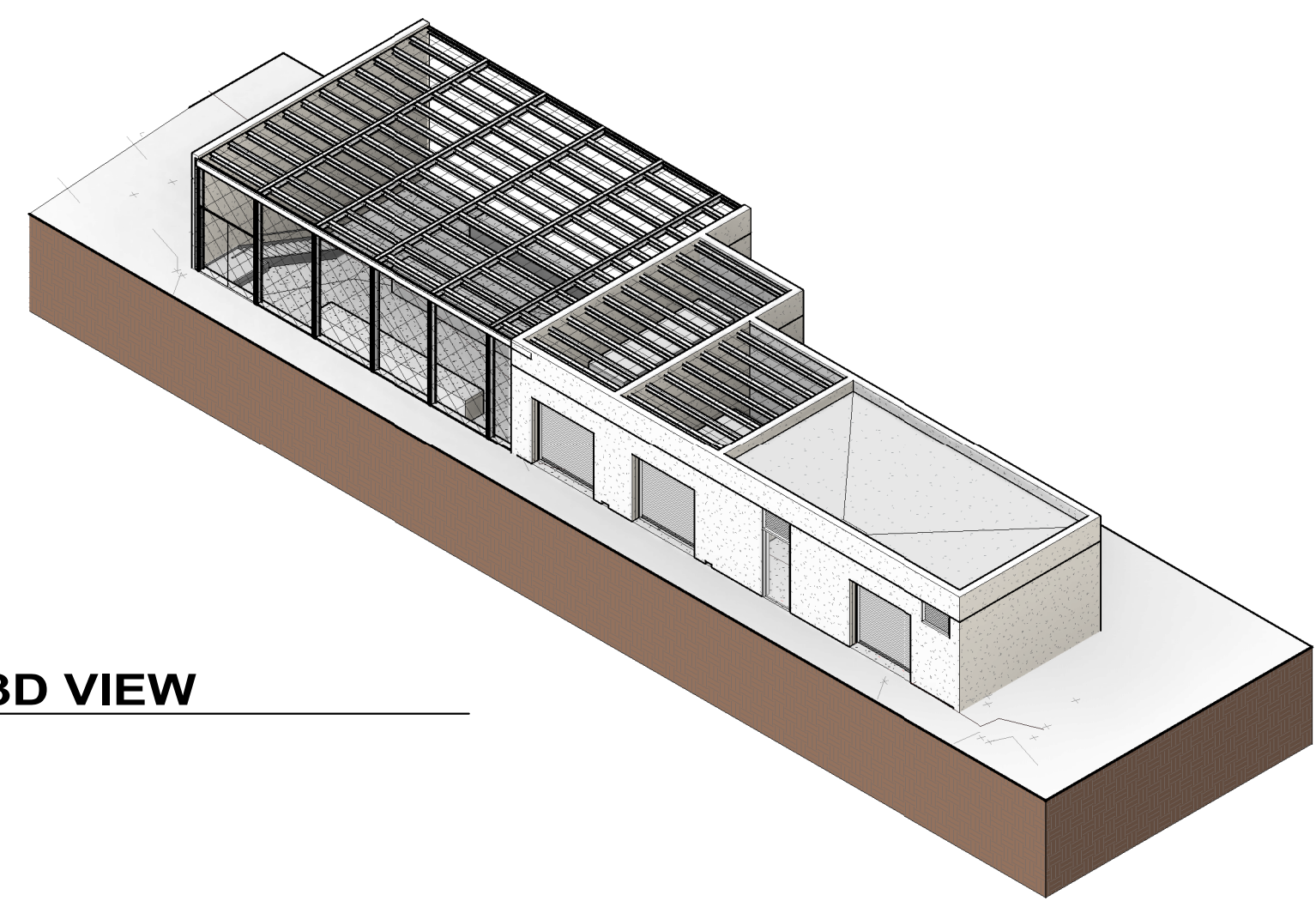
3 WEST ELEVATION
A3.11 1/8" = 1'-0"



1 SOUTH ELEVATION
A3.11 1/8" = 1'-0"



2 EAST ELEVATION
A3.11 1/8" = 1'-0"



3D VIEW

KEYNOTES

NOTE	DESCRIPTION
03-01	CONCRETE WALL, FINISH AND FORM-TIE PATTERN TO MATCH (E) ADJACENT UTILITY STRUCTURES
08-02	HOLLOW-METAL DOOR WITH LOUVER TRANSOM
08-03	OVERHEAD COILING DOOR, MOTORIZED, SOLID SLATS
08-04	OVERHEAD COILING DOOR, PUSH-UP OPERATION, VENTILATED SLATS
08-05	LOUVER
26-01	FUTURE GENERATOR, N.I.C
26-02	FUTURE TRANSFORMER, N.I.C.

NOLL & TAM ARCHITECTS

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APPROVALS

PROJECT TITLE
PERALTA COMMUNITY COLLEGE DISTRICT LANEY COLLEGE CENTRAL UTILITY PLANT

900 FALLON STREET, OAKLAND, CA 94607

DESIGN CRITERIA DOCUMENTS

ISSUE DATE	SEPTEMBER 3, 2020
N&T JOB NUMBER	21942.10
REVISIONS	
DATE	DESCRIPTION

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SHEET TITLE
BUILDING ELEVATIONS & SECTIONS

SHEET NUMBER

A3.11

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APPROVALS



Taylor Engineering

1080 Marina Village Parkway, Suite 501
Alameda, CA 94501-6427
Phone: (510) 749-9135

PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET
OAKLAND, CA 94607

**DESIGN CRITERIA
DOCUMENTS**

ISSUE DATE **SEPTEMBER 03, 2020**

NAT JOB NUMBER **21942.10**

REVISIONS

DATE	DESCRIPTION

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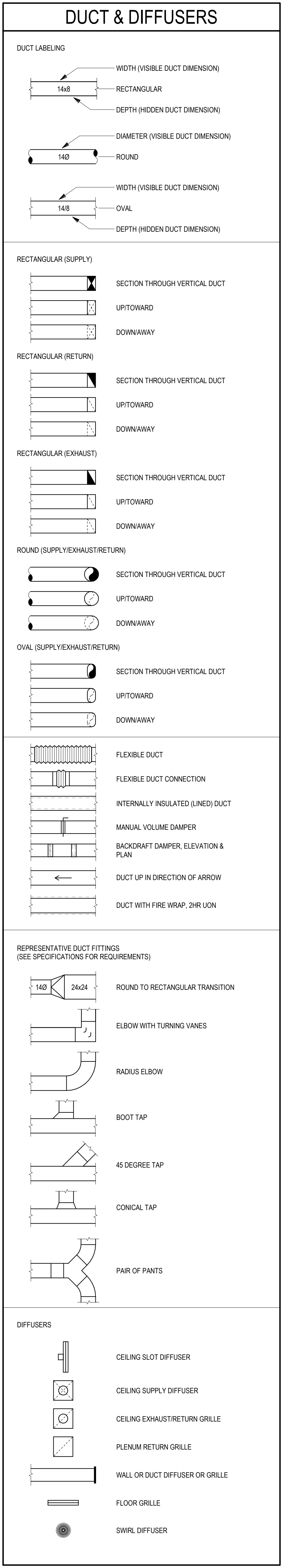
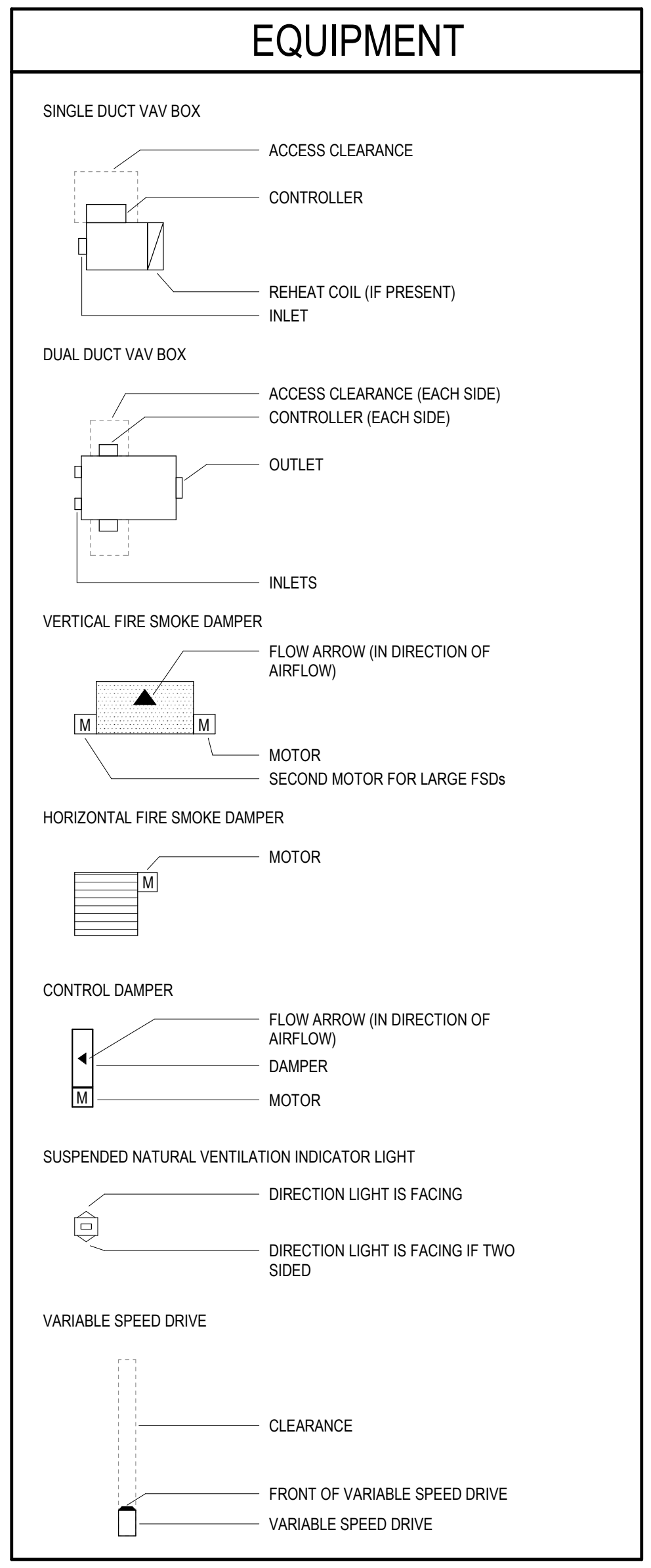
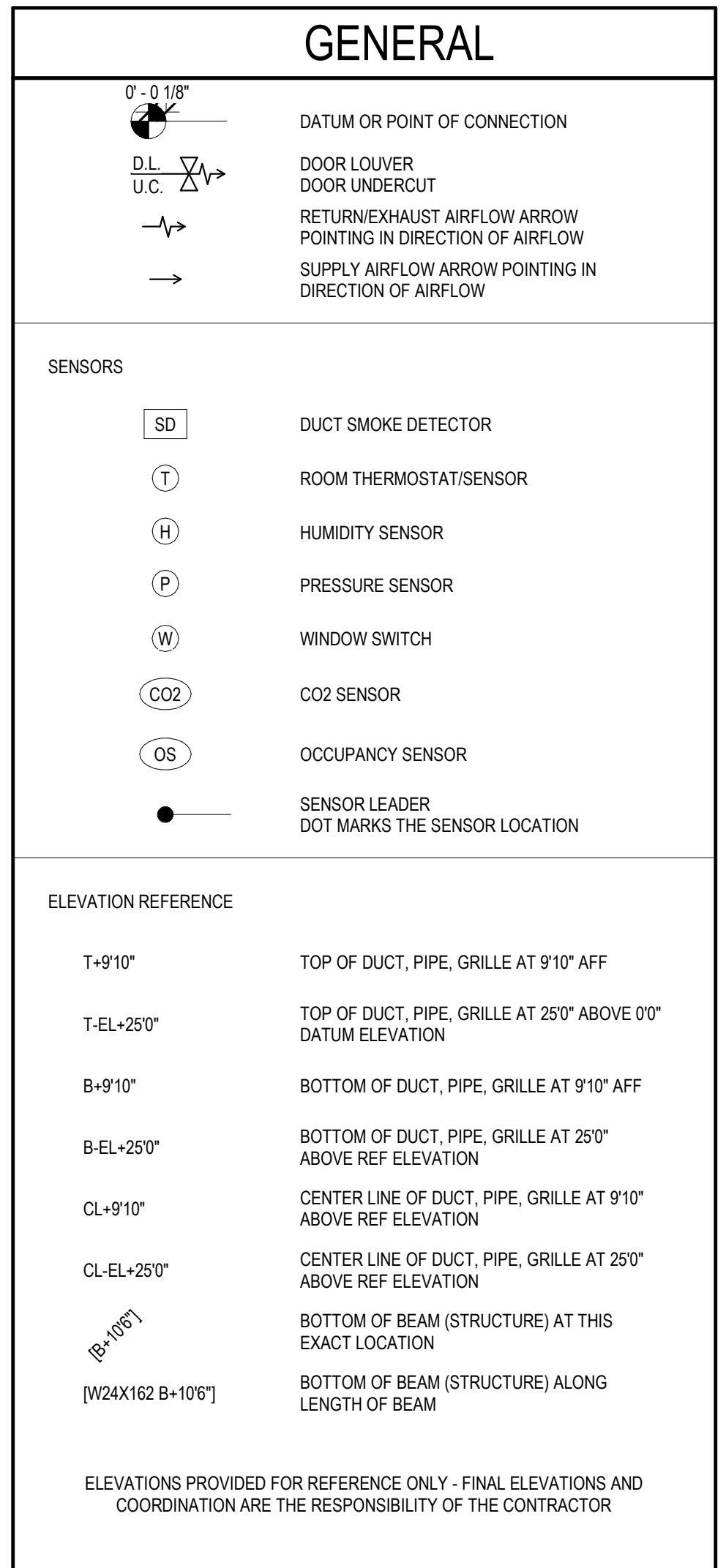
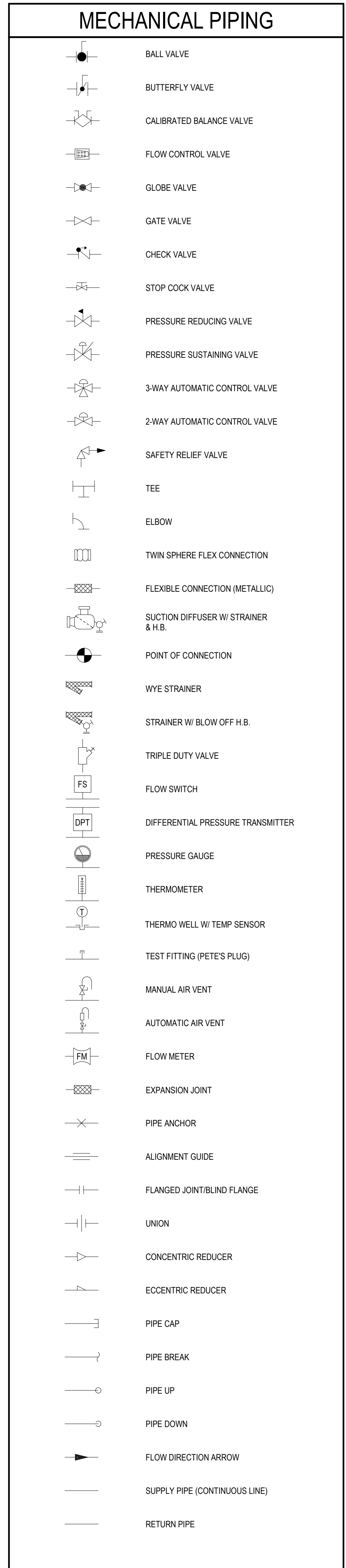
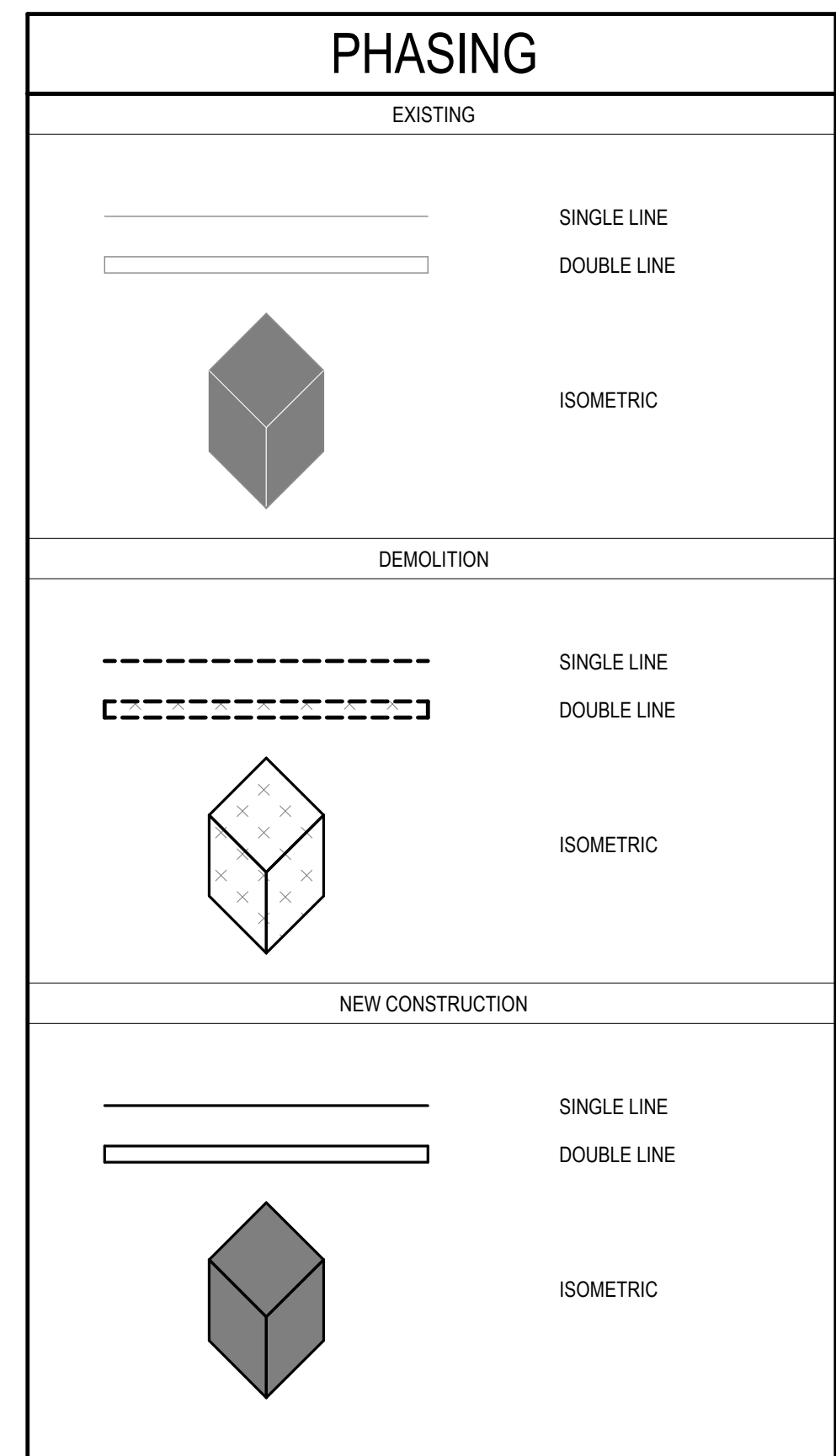
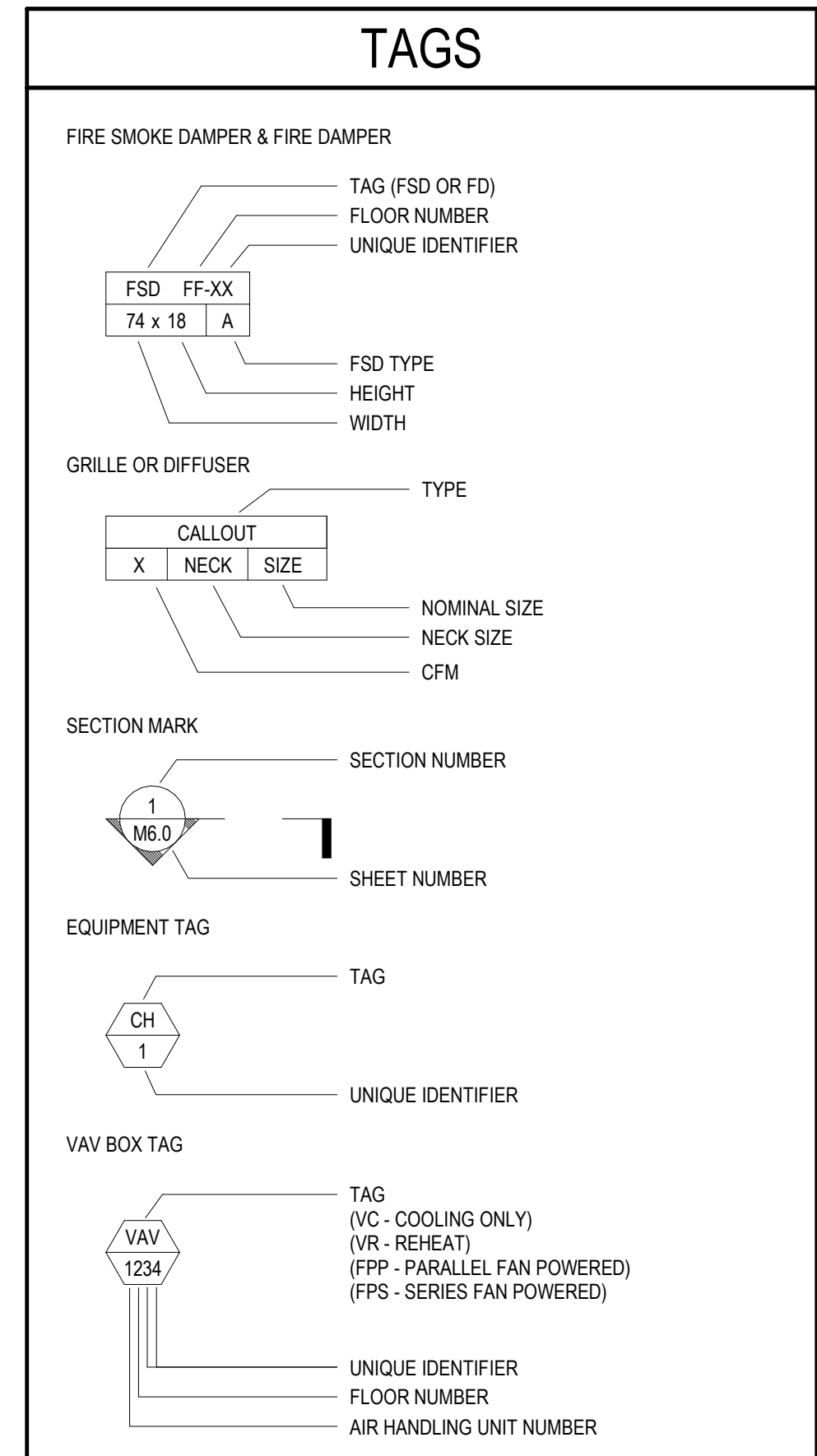
SHEET TITLE

**HVAC LEGENDS AND
ABBREVIATIONS**

SHEET NUMBER

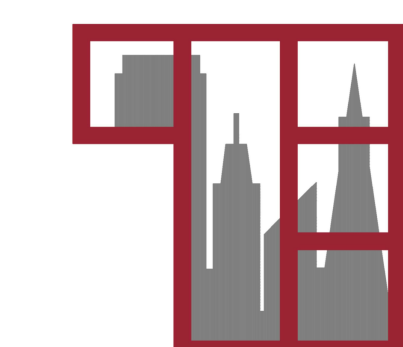
M0.01

ABBREVIATION	DESCRIPTION
Ø	ROUND
∅	PHASE
(E)	EXISTING
(N)	NEW
(R)	RELOCATED
ABBR.	ABBREVIATION
ABS	ABSOLUTE
AF	AIRFOIL
AFF	ABOVE FINISHED FLOOR
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP IN INCHES WATER COLUMN
B+	BOTTOM ELEVATION
BD	BELT DRIVE
BDD	BACK DRAFT DAMPER
BF	BOTTOM FLAT
BHP	BRAKE HORSEPOWER
BP	BEAM PENETRATION
C.A.	COMBUSTION AIR
CAP	CAPACITY
CAP STAGE	CAPACITY STAGES
C.A.P.	CEILING ACCESS PANEL
CARTR	CARTRIDGE
CENTR	CENTRIFUGAL
OFF	CAP FOR FUTURE
CFM	CUBIC FEET PER MINUTE
CHOR	CHANGEOVER RETURN
CHOS	CHANGEOVER SUPPLY
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CL	CENTERLINE
CLG	CEILING
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
COP	COEFFICIENT OF PERFORMANCE
OCWR	CLOSED CONDENSER WATER RETURN
CCWS	CLOSED CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DD	DIRECT DRIVE
DEFL	DEFLECTION
DELTA P	DIFFERENTIAL PRESSURE
DI	DIGITAL INPUT
DL	DRAIN LINE
DO	DIGITAL OUTPUT
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER/TRANSDUCER
E.A.	EXHAUST AIR
E-PWR	EMERGENCY POWER
ECM	ELECTRICALLY COMMUTATED MOTOR
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATING
EFF	EFFICIENCY
ET	EXPANSION TANK
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
FAS	FIRE ALARM SYSTEM
FD	FIRE DAMPER
FF	FAN POWERED PARALLEL VAV BOX
FPI	FINS PER INCH
FPF	FINS PER FOOT
FPM	FEET PER MINUTE
FPP	FAN POWERED PARALLEL VAV BOX
FPS	FAN POWERED SERIES VAV BOX
FSD	FIRE SMOKE DAMPER
FT	FEET
FT2	SQUARE FEET
GPM	GALLONS PER MINUTE
H	HEIGHT
H.B.	HOSE BIB
HEAD	PRESSURE RISE IN FEET OF WATER COLUMN
HP	HORSEPOWER
HRR	HEAT RECOVERY RETURN
HRS	HEAT RECOVERY SUPPLY
HS	HUMIDITY SENSOR
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
ID	INSIDE DIMENSION
IN	INCHES
IN WC	INCHES OF WATER COLUMN
IRLV	INTEGRATED PART LOAD VALUE
KBH	1,000 BTU/H
KW	KILOWATTS
LDB	LEAVING DRY BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MANUF	MANUFACTURER
MCA	MINIMUM CIRCUIT AMPS
MOCP	MAXIMUM OVERCURRENT PROTECTION
MED	MEDIUM
MERV	MINIMUM EFFICIENCY REPORTING VALUE
MIN	MINIMUM
MIN OA	MINIMUM OUTDOOR AIR CFM
MOD	MODULATING CAPACITY CONTROL
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NPLV	NON-STANDARD PART LOAD VALUE
O.F.	OVER FLOW
O-PWR	OPTIONAL STANDBY POWER
OA	OUTSIDE AIR
OADB	OUTDOOR AIR DRY BULB TEMPERATURE
OAWB	OUTDOOR AIR WET BULB TEMPERATURE
OD	OUTSIDE DIMENSION
OCC	OCCUPIED
OP WT	OPERATING WEIGHT
P.O.C.	POINT OF CONNECTION
P.C.	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PRESS	PRESSURE
PROP	PROPELLER
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH, ABSOLUTE
PSIG	POUNDS PER SQUARE INCH, GAUGE
QTY	QUANTITY
QTY@H/L	QUANTITY AT HEIGHT BY LENGTH
R.A.	RETURN AIR
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
REFR	REFRIGERANT
S.A.	SUPPLY AIR
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.M.	SHEET METAL
S-PWR	STANDBY POWER (LEGALLY REQUIRED)
SCT	SATURATED CONDENSING TEMPERATURE
SD	SMOKE DETECTOR
SENS	SENSIBLE
SST	SATURATED SUCTION TEMPERATURE
ST	STORAGE TANK
T+	TOP ELEVATION
TF	TOP FLAT
TS	TEMPERATURE SENSOR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UN	UNLESS OTHERWISE NOTED
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
VC	VARIABLE VOLUME COOLING ONLY
VR	VARIABLE VOLUME REHEAT
W	WIDTH
W/	WITH
W.A.P.	WALL ACCESS PANEL
WPD	WATER PRESSURE DROP IN FEET WATER COLUMN



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CONSTRUCTION**

APPROVALS



Taylor Engineering
1080 Marina Village Parkway, Suite 501
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Phone: (510) 749-9135

PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET
OAKLAND, CA 94607

**DESIGN CRITERIA
DOCUMENTS**

ISSUE DATE **SEPTEMBER 03, 2020**

N&T JOB NUMBER **21942.10**

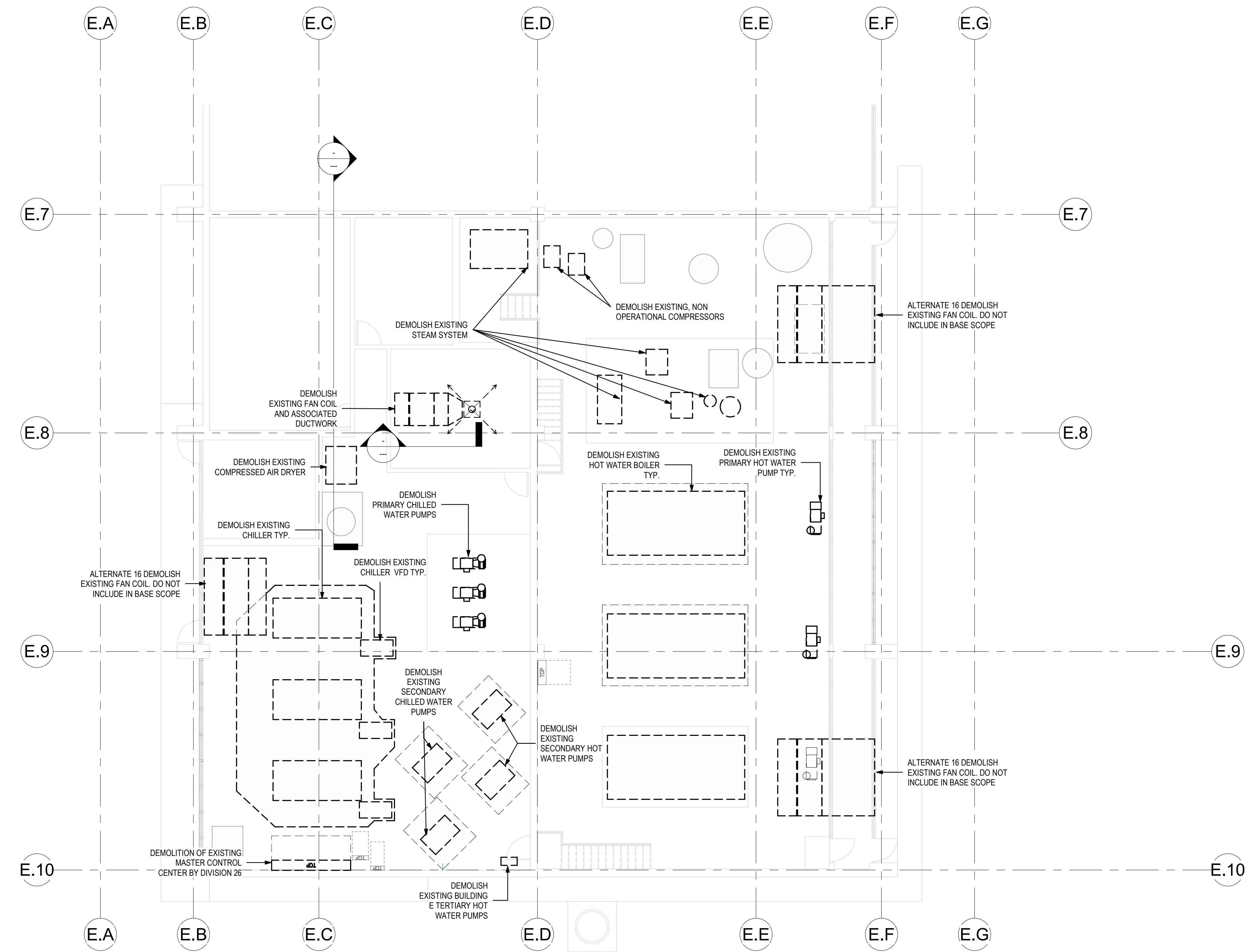
REVISIONS
DATE DESCRIPTION

DRAWN BY **JFA** CHECKED BY **BG**

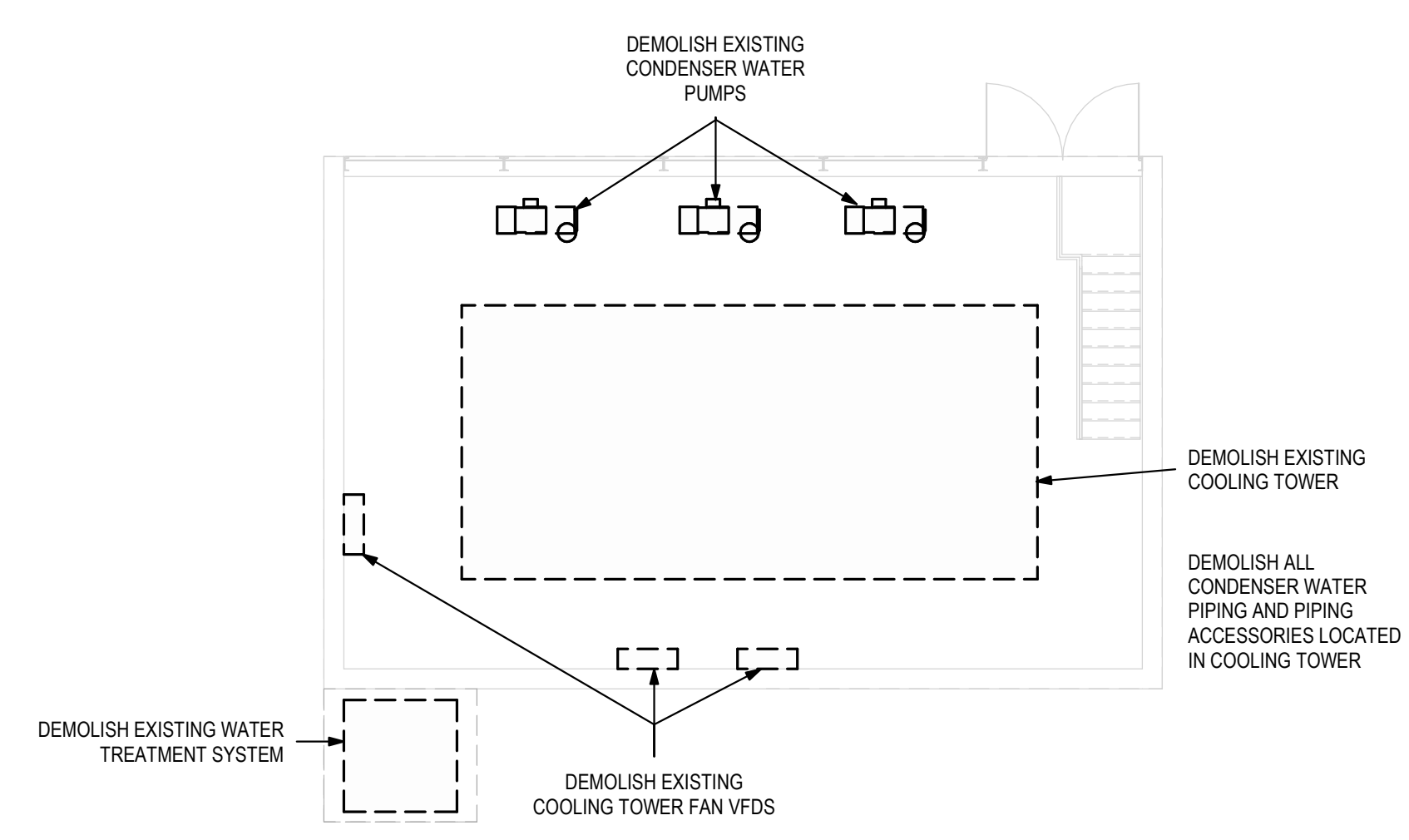
SHEET TITLE
**DEMO PLAN - CENTRAL
UTILITY PLANT AND
EXISTING COOLING
TOWER ENCLOSURE**

SHEET NUMBER

M1.01



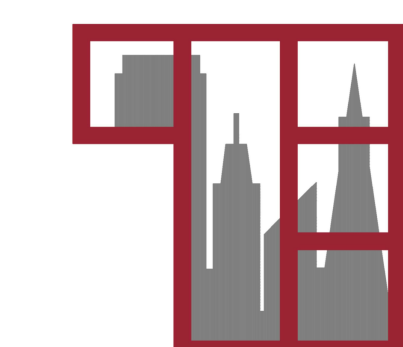
1 - Building E Mech Demolition Plan
1/8" = 1'-0"



2 - EXISTING COOLING TOWER ENCLOSURE
1/8" = 1'-0"

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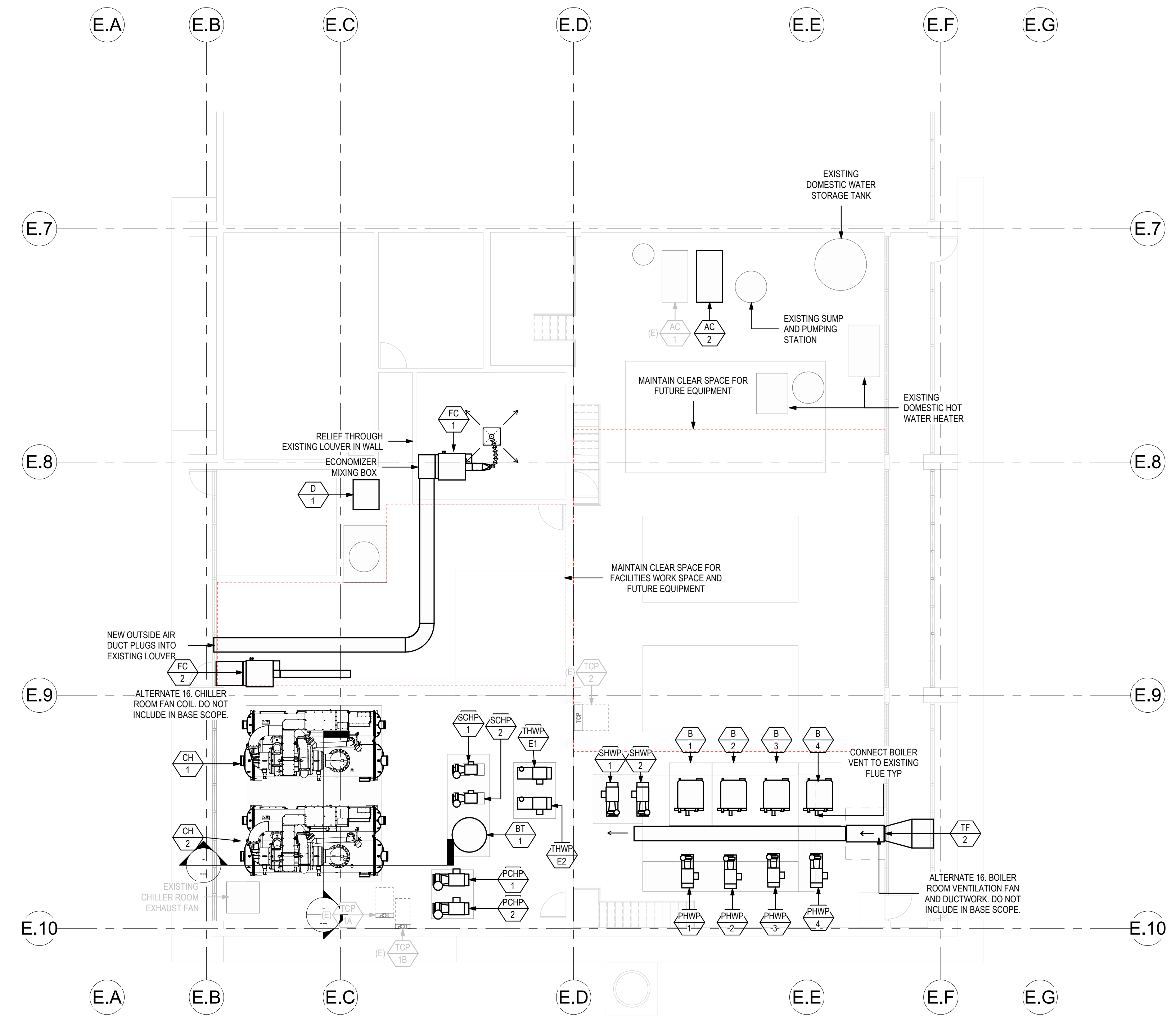
REVISIONS	DATE	DESCRIPTION

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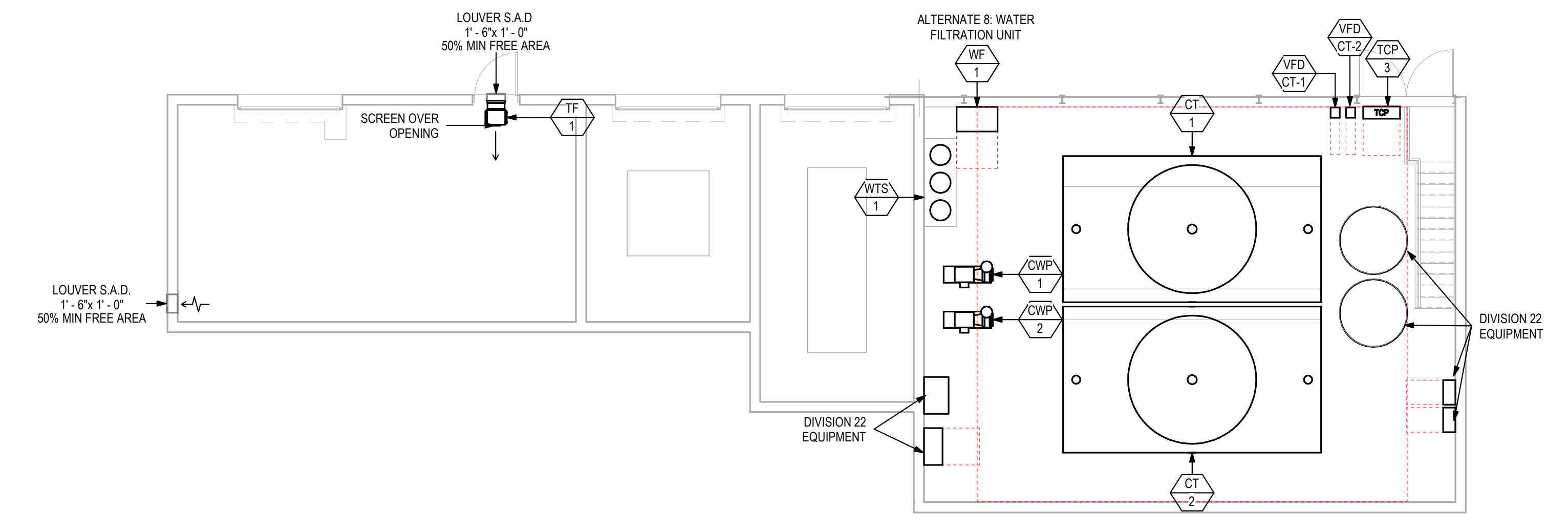
SHEET TITLE
**FLOOR PLANS -
CENTRAL UTILITY
PLANT AND NEW
UTILITY BUILDING**

SHEET NUMBER

M2.01



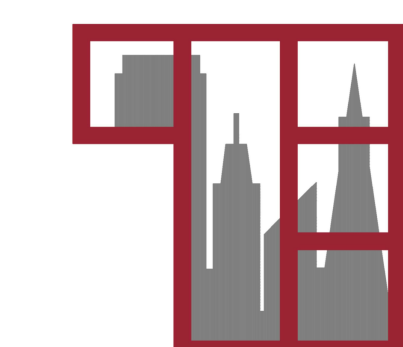
1 Building E - Chiller and Boiler Room Floor Plan
1/8" = 1'-0"



2 COOLING TOWER ENCLOSURE FLOOR PLAN
1/8" = 1'-0"

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PROJECT TITLE

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900 FALLON STREET
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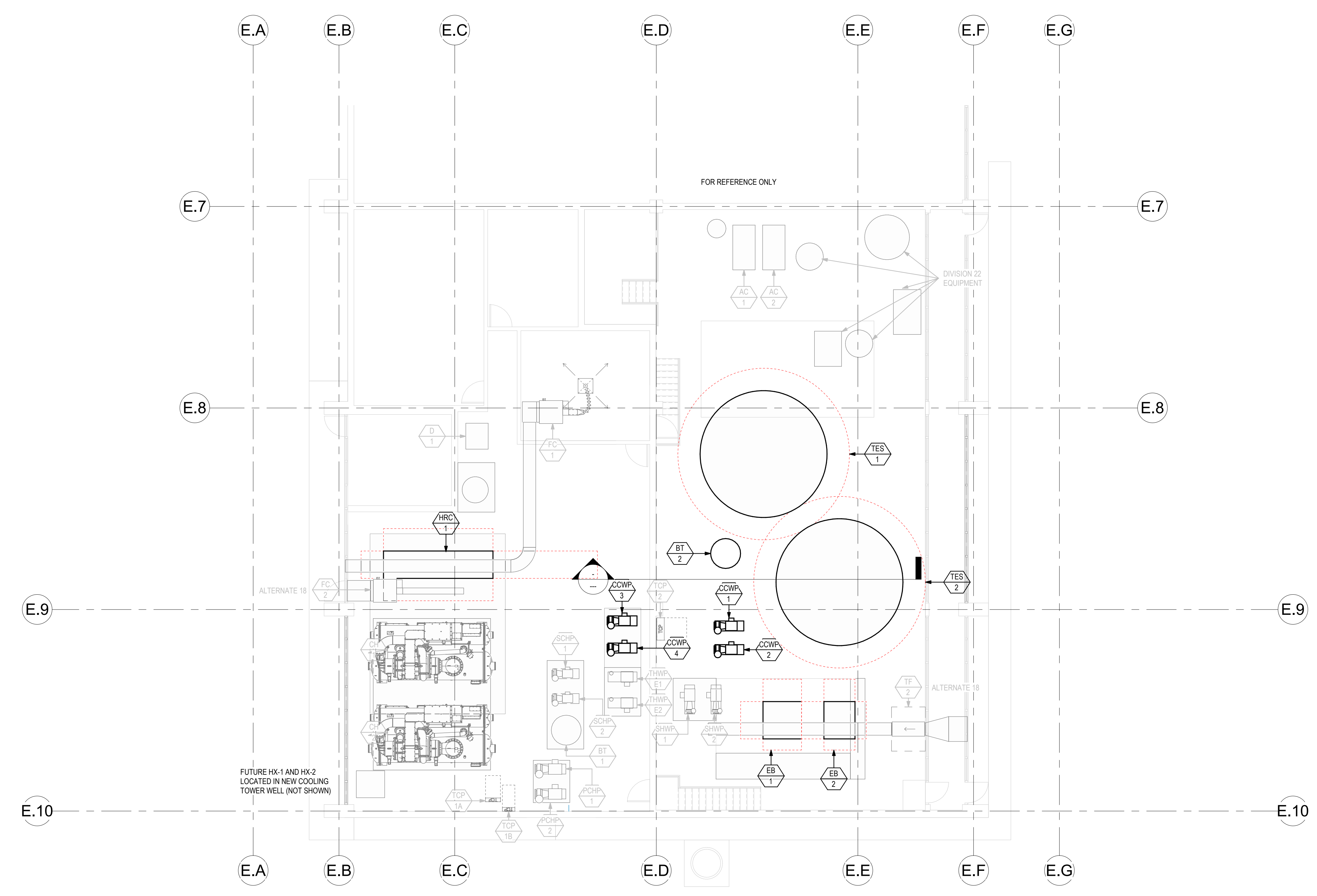
REVISIONS
DATE DESCRIPTION

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SHEET TITLE
**FLOOR PLAN - FUTURE
CENTRAL UTILITY
PLANT**

SHEET NUMBER

M2.02



1 FUTURE CENTRAL UTILITY PLANT LAYOUT
1/8" = 1'-0"

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PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
UTILITY PLANT**

900 FALLON STREET
OAKLAND, CA 94807

**DESIGN CRITERIA
DOCUMENTS**

ISSUE DATE **SEPTEMBER 03, 2020**

N&T JOB NUMBER **21942.10**

REVISIONS

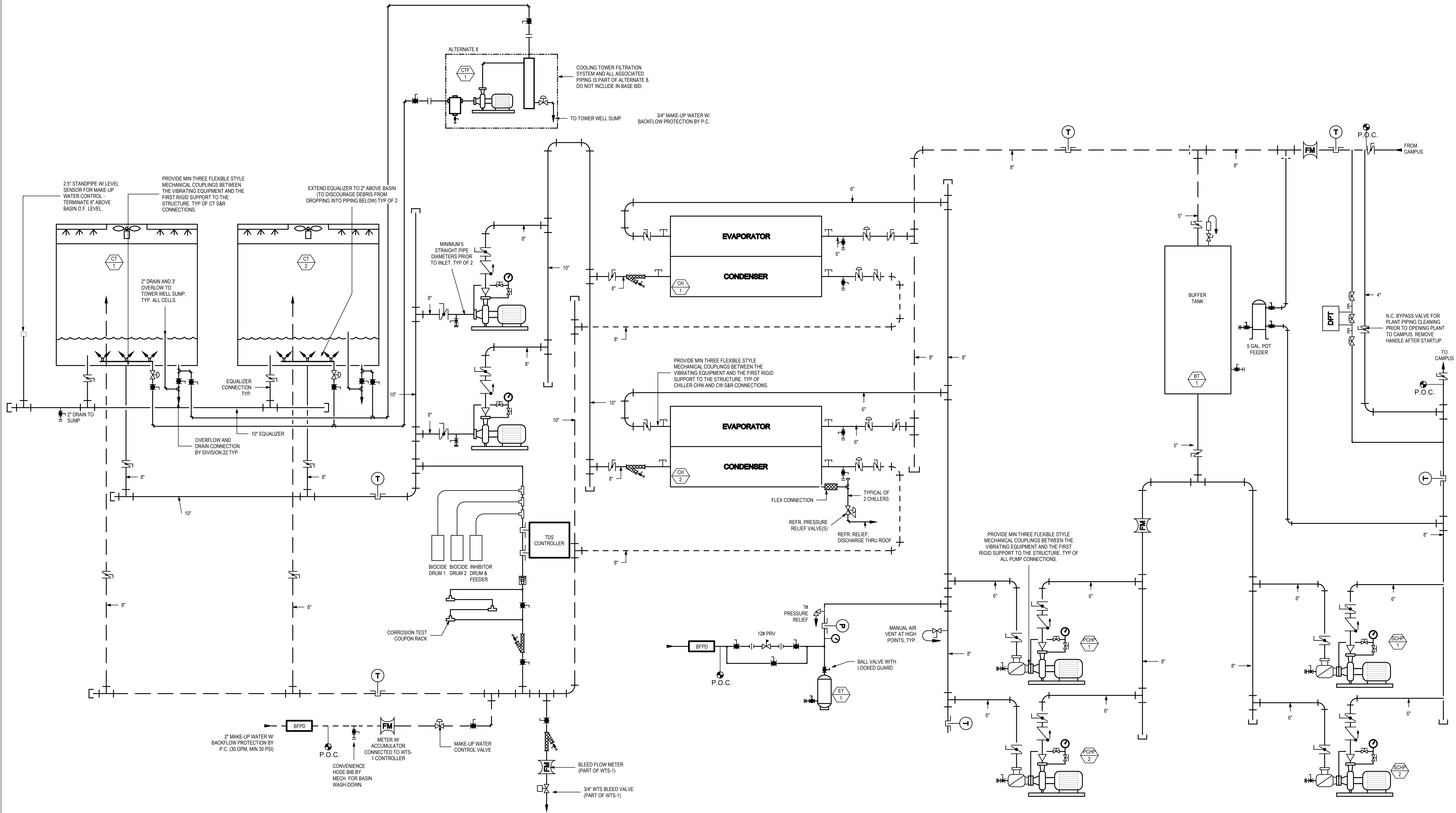
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DRAWN BY **JFA** CHECKED BY **BG**

SHEET TITLE
**CHILLED WATER PLANT
PIPING SCHEMATIC**

SHEET NUMBER

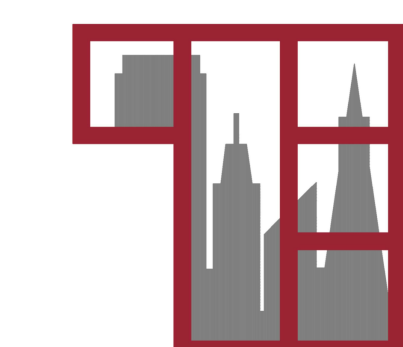
M5.01



8/27/2020 12:15:57 PM C:\Users\jfa\Documents\LANEY_CUP_Schematics_2020\jfa\m5.01@taylor-engineering.com.rvt

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PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
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900 FALLON STREET
OAKLAND, CA 94607

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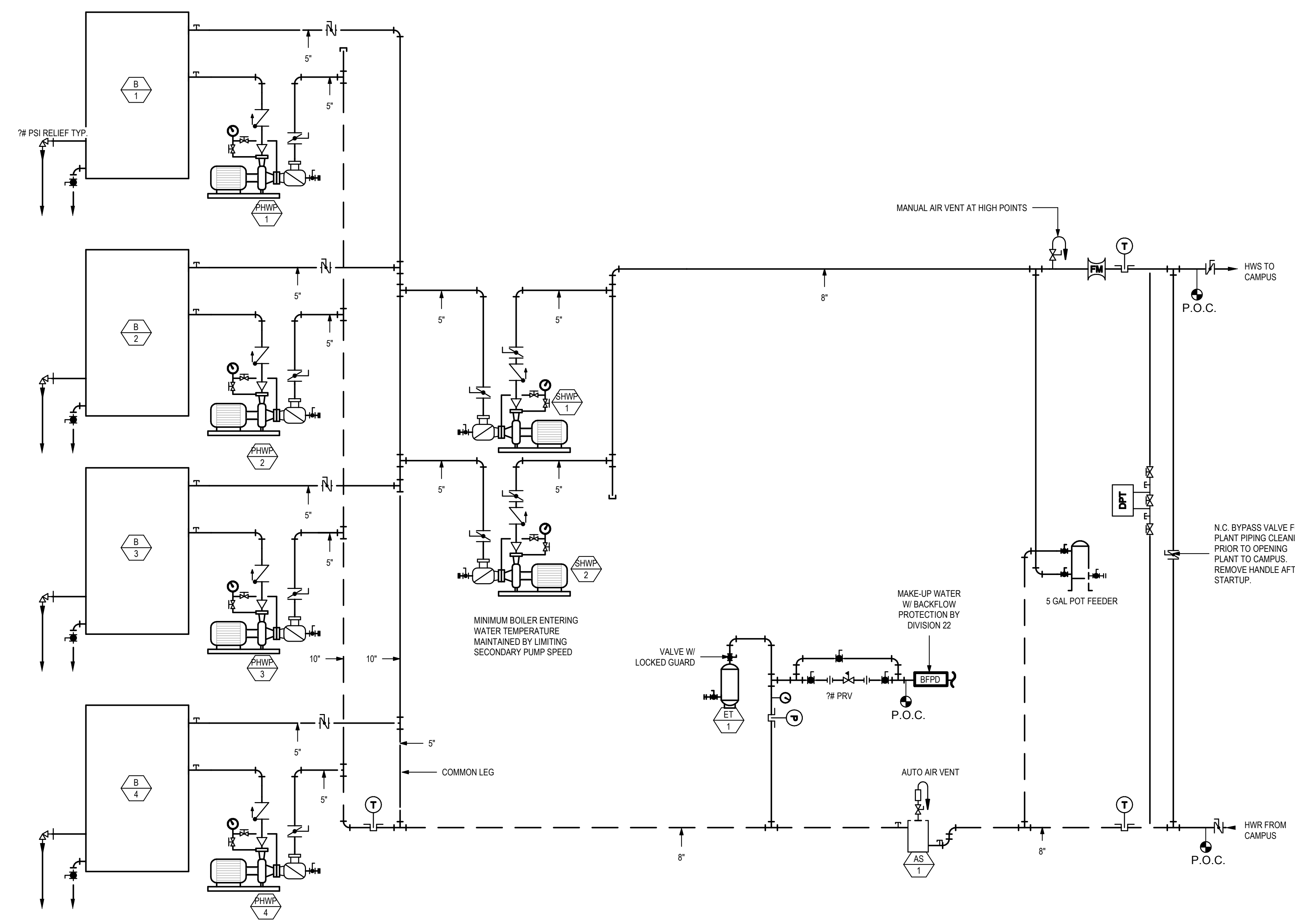
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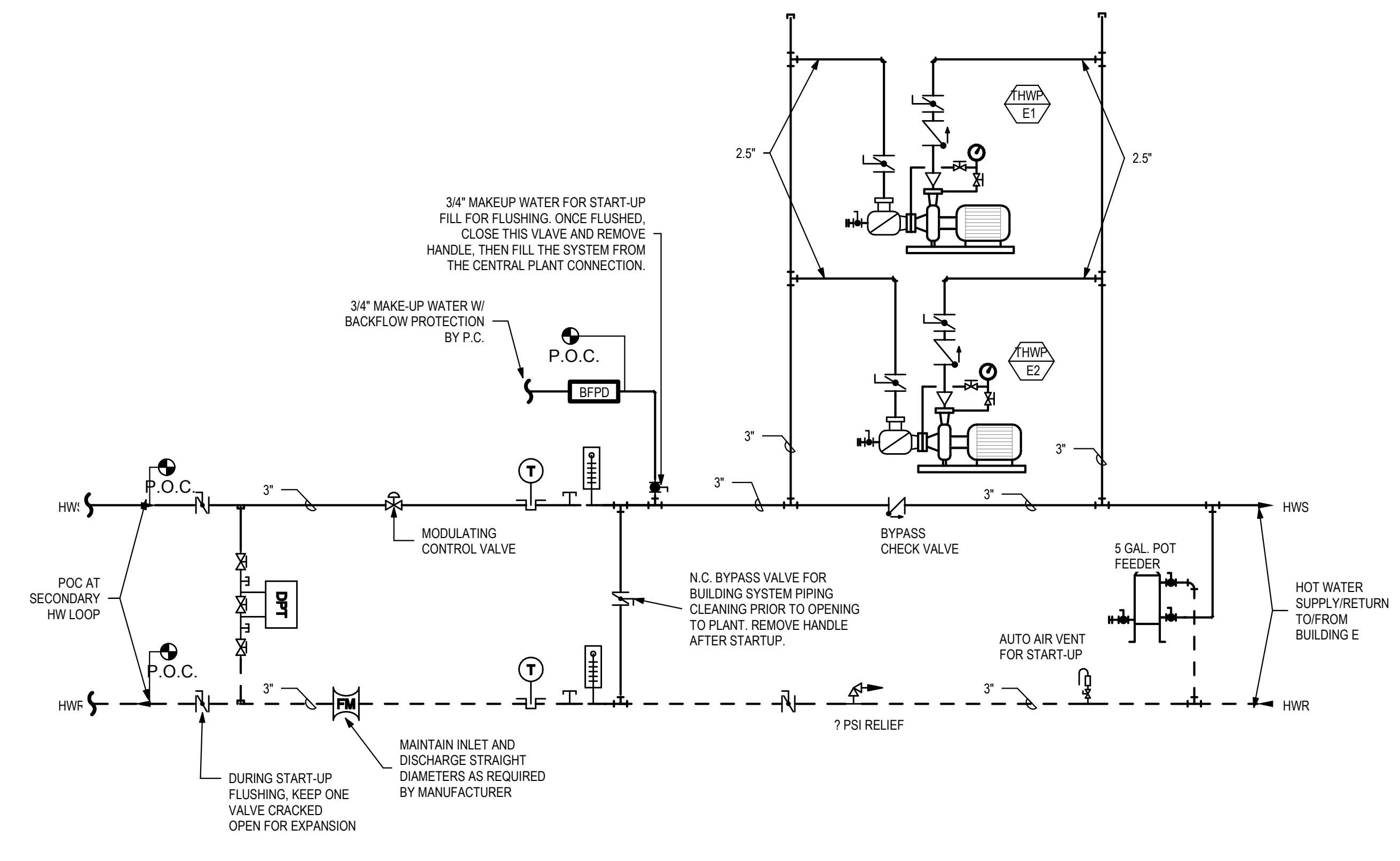
SHEET TITLE
**HOT WATER PLANT
PIPING SCHEMATIC**

SHEET NUMBER

M5.02



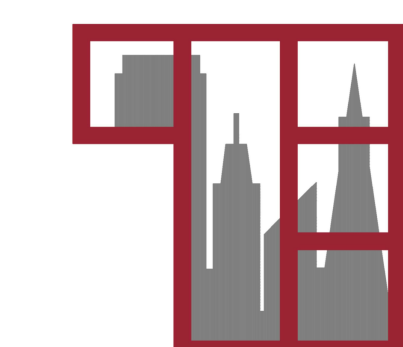
1 BOILER PLANT SCHEMATIC



2 BUILDING E TERTIARY PUMP SCHEMATIC

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APPROVALS



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PROJECT TITLE

**PERALTA COMMUNITY
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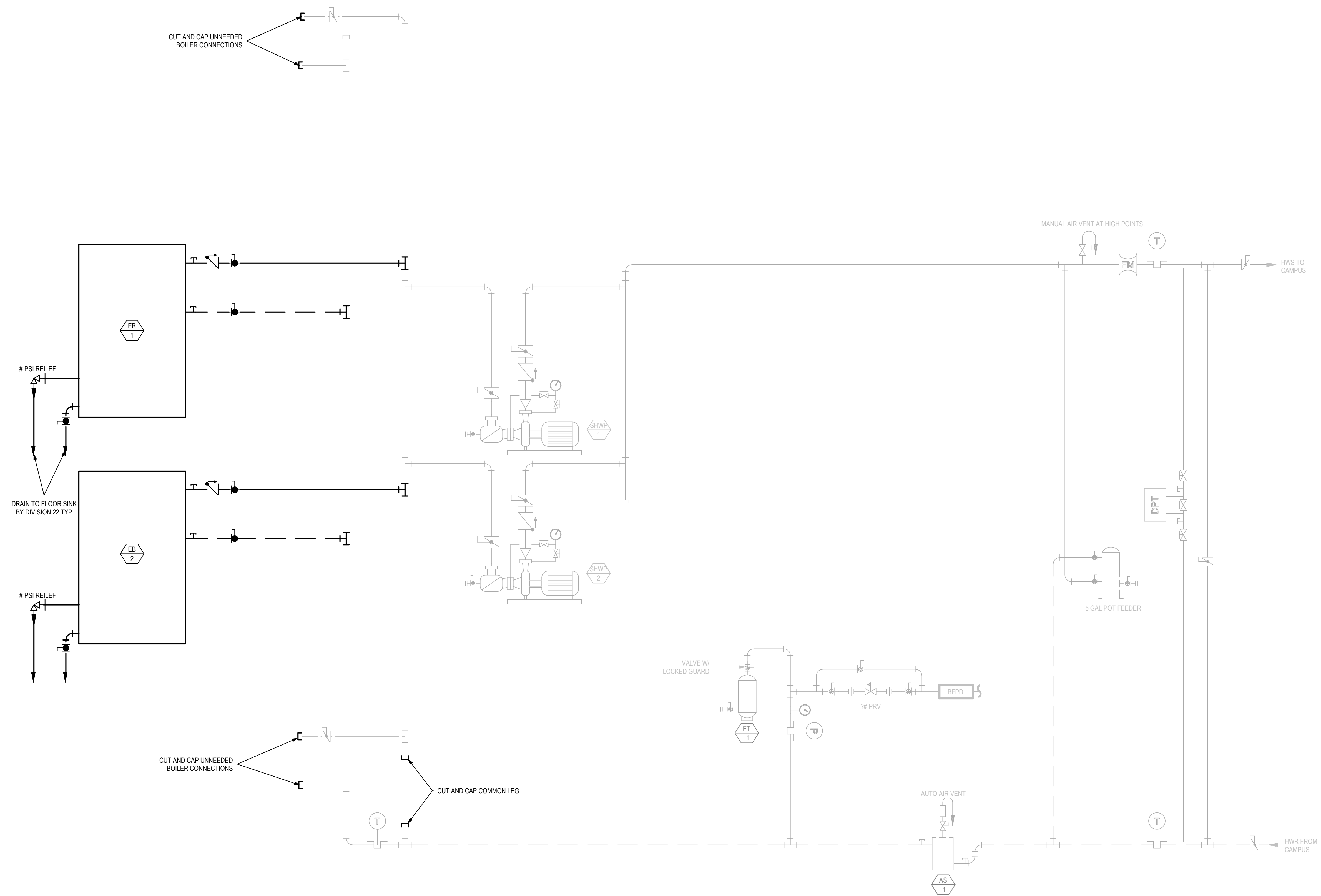
REVISIONS	DATE	DESCRIPTION

DRAWN BY **JFA** | CHECKED BY **BG**

SHEET TITLE
**FUTURE WORK - ALT A
ELECTRIC BOILER
HEATING PIPING
SCHEMATIC**

SHEET NUMBER

M5.03



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PROJECT TITLE

**PERALTA COMMUNITY
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900 FALLON STREET
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DOCUMENTS**

ISSUE DATE **SEPTEMBER 03, 2020**

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REVISIONS

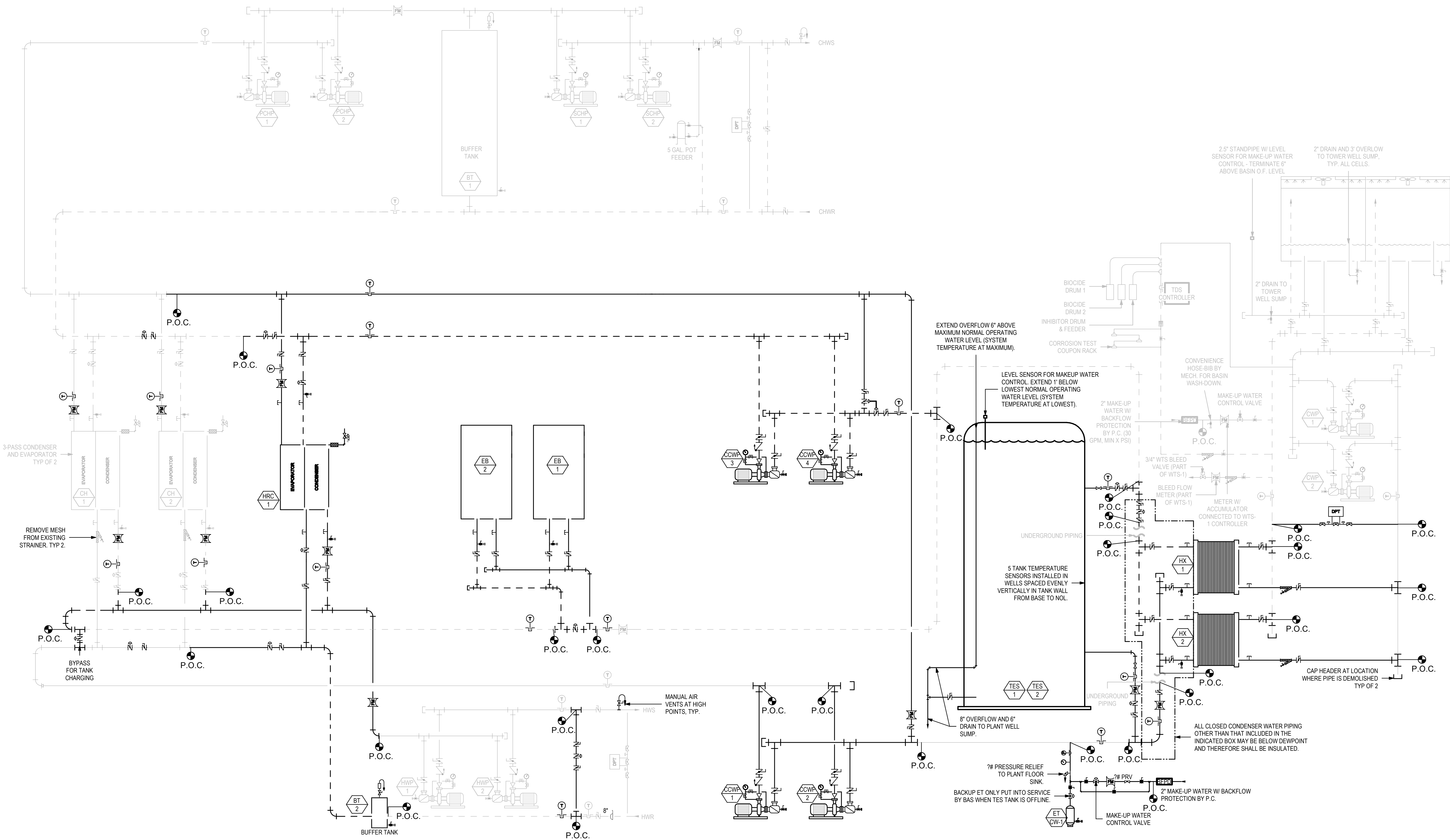
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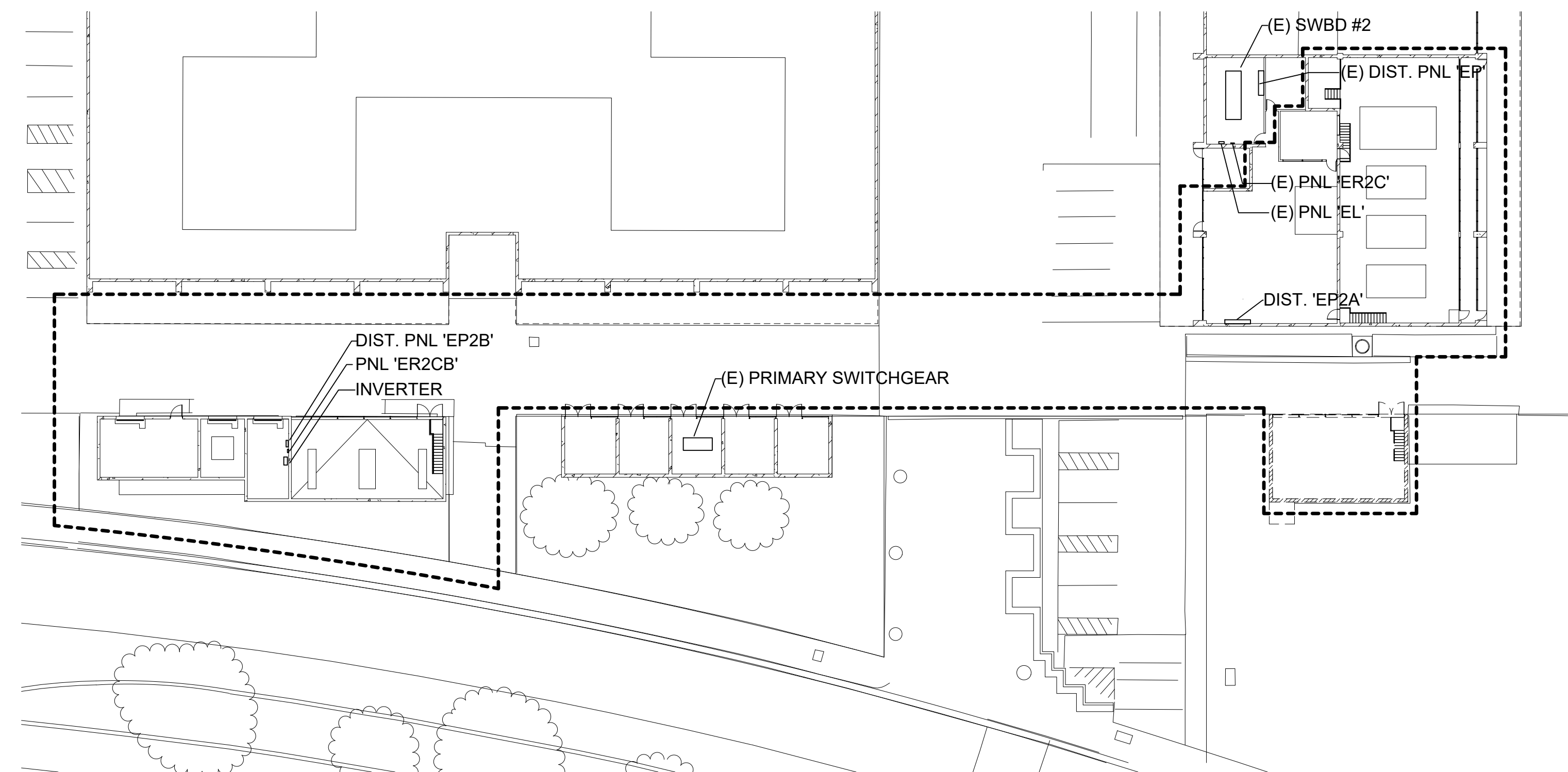
DRAWN BY **JFA** CHECKED BY **BG**

SHEET TITLE
**FUTURE WORK - ALT B
CONDENSER WATER
STORAGE PIPING
SCHEMATIC**

SHEET NUMBER

M5.04





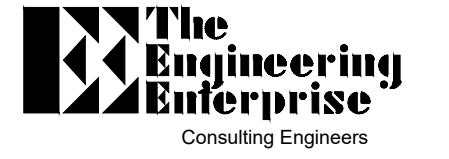
A
E1.01

ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

NOLL & TAM
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ALAMEDA, CA. 94501
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PROJECT TITLE

**PERALTA COMMUNITY
COLLEGE DISTRICT
LANEY COLLEGE
CENTRAL
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900 FALLON STREET,
OAKLAND, CA 94607

CRITERIA DOCUMENTS

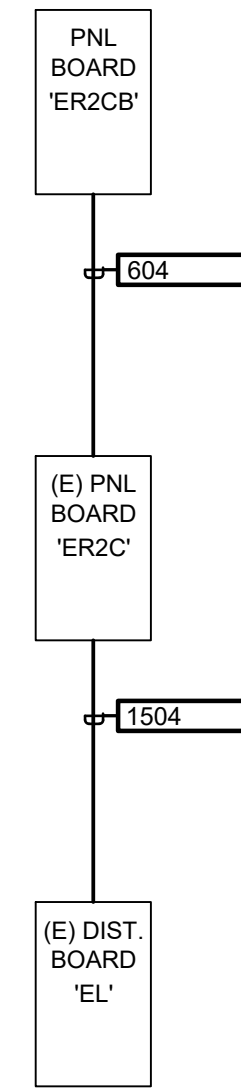
ISSUE DATE	AUGUST 10, 2020
N&T JOB NUMBER	21942.10
REVISIONS	
DATE	DESCRIPTION

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SHEET TITLE

**ELECTRICAL
SITE
PLAN**

SHEET NUMBER

E1.01



MECHANICAL AND PLUMBING LOAD CALCULATION/CONNECTION											
ITEM	DESCRIPTION	LOCATION	SERVING	VOLTS / PHASE	LOAD	MCCP	WIRE / CONDUIT	EMERGENCY POWER	CIRCUIT	NOTES	
CH-1	CHILLER	CUP	CAMPUS	460/3	381	A	600	5003	EP-1		
CH-2	CHILLER	CUP	CAMPUS	460/3	381	A	600	5003	EP-2		
CT-1	COOLING TOWER	UTILITY BUILDING	CAMPUS	460/3	15	HP	40	303	EP2B-1		
CT-2	COOLING TOWER	UTILITY BUILDING	CAMPUS	460/3	15	HP	40	303	EP2B-2		
FC-1	FAN COIL	CUP	CAMPUS	208/3	0.25	HP	15	203	ER2C-7,9,11		
FC-2	FAN COIL	CUP	CAMPUS	208/3	0.18	HP	15	203	ER2C-7,9,11		
TF-1	TRANSFER FAN	CUP	CAMPUS	208/3	1	HP	15	203	ER2C-13,15,17		
B-1	BOILER	CUP	CAMPUS	208/3	18	A	25	303	ER2C-16,21,23		
B-2	BOILER	CUP	CAMPUS	208/3	18	A	25	303	ER2C-25,27,29		
B-3	BOILER	CUP	CAMPUS	208/3	18	A	25	303	ER2C-31,33,35		
B-4	BOILER	CUP	CAMPUS	208/3	18	A	25	303	ER2C-37,39,41		
KHP-1	PUMP	CUP	CAMPUS	460/3	10	HP	25	203	EP2A-1		
KHP-2	PUMP	CUP	CAMPUS	460/3	10	HP	25	203	EP2A-2		
SKHP-1	PUMP	CUP	CAMPUS	460/3	50	HP	100	903	EP2A-3		
SKHP-2	PUMP	CUP	CAMPUS	460/3	50	HP	100	903	EP2A-4		
PHWP-1	PUMP	CUP	CAMPUS	460/3	7.5	HP	20	203	EP2A-5		
PHWP-2	PUMP	CUP	CAMPUS	460/3	7.5	HP	20	203	EP2A-6		
PHWP-3	PUMP	CUP	CAMPUS	460/3	7.5	HP	20	203	EP2A-7		
PHWP-4	PUMP	CUP	CAMPUS	460/3	7.5	HP	20	203	EP2A-8		
SHWP-1	PUMP	CUP	CAMPUS	460/3	20	HP	50	403	EP2A-9		
SHWP-2	PUMP	CUP	CAMPUS	460/3	20	HP	50	403	EP2A-10		
THWP-1	PUMP	CUP	CAMPUS	460/3	5	HP	15	203	EP2A-11		
THWP-2	PUMP	CUP	CAMPUS	460/3	5	HP	15	203	EP2A-12		
TRWP-1	PUMP	CUP	CAMPUS	460/3	20	HP	50	403	EP2A-13		
CW-2	PUMP	CUP	CAMPUS	460/3	20	HP	50	403	EP2A-14		
WT-1	WATER TREATMENT	CUP	CAMPUS	120/1	15.00	A	20	202	ER2C-16		
AC-1	AIR CONDITIONING UNIT	CUP	CAMPUS	460/3	25.00	HP	60	503	EP2A-15		
IS-1	CONDENSER WATER LOOP	CUP	CAMPUS	120/1	15.00	A	20	202	ER2C-18		
ICP-3	SOLENOID VALVE	CUP	CAMPUS	120/1	15.00	A	20	202	ER2C-20		
SE-1	SEWER EJECTOR PUMP	UTILITY BUILDING	UTILITY BUILDING	460/3	3.00	HP	15	203	INVERTER	EP2B-3	1
SDP-1	STORM DRAIN PUMP	UTILITY BUILDING	UTILITY BUILDING	460/3	2.00	HP	15	203	INVERTER	EP2B-4	1
				460/3	2.00	HP	15	203	INVERTER	EP2B-5	1
				460/3	2.00	HP	15	203	INVERTER	EP2B-6	1

EQUIPMENT CONNECTION SCHEDULE NOTES

A. THE ABOVE INFORMATION IS FOR A SPECIFIC MANUFACTURER. ACTUAL MANUFACTURER FOR EQUIPMENT MAY BE DIFFERENT. COORDINATE WITH MECHANICAL EQUIPMENT SUBMITTALS FOR LOADS AND OVER CURRENT PROTECTION REQUIREMENTS PRIOR TO INSTALLATION OF WIRING.

B. MCCP = MAXIMUM OVER CURRENT PROTECTION
MCA = MINIMUM CIRCUIT AMPACITY

C. PROVIDE DISCONNECTING MEANS FOR EACH ITEM OF EQUIPMENT LISTED IN THE SCHEDULE ABOVE, EXCEPT AS SPECIFICALLY NOTED OTHERWISE IN SCHEDULE NOTES, BELOW.

WIRING CONNECTION SCHEDULE NOTES

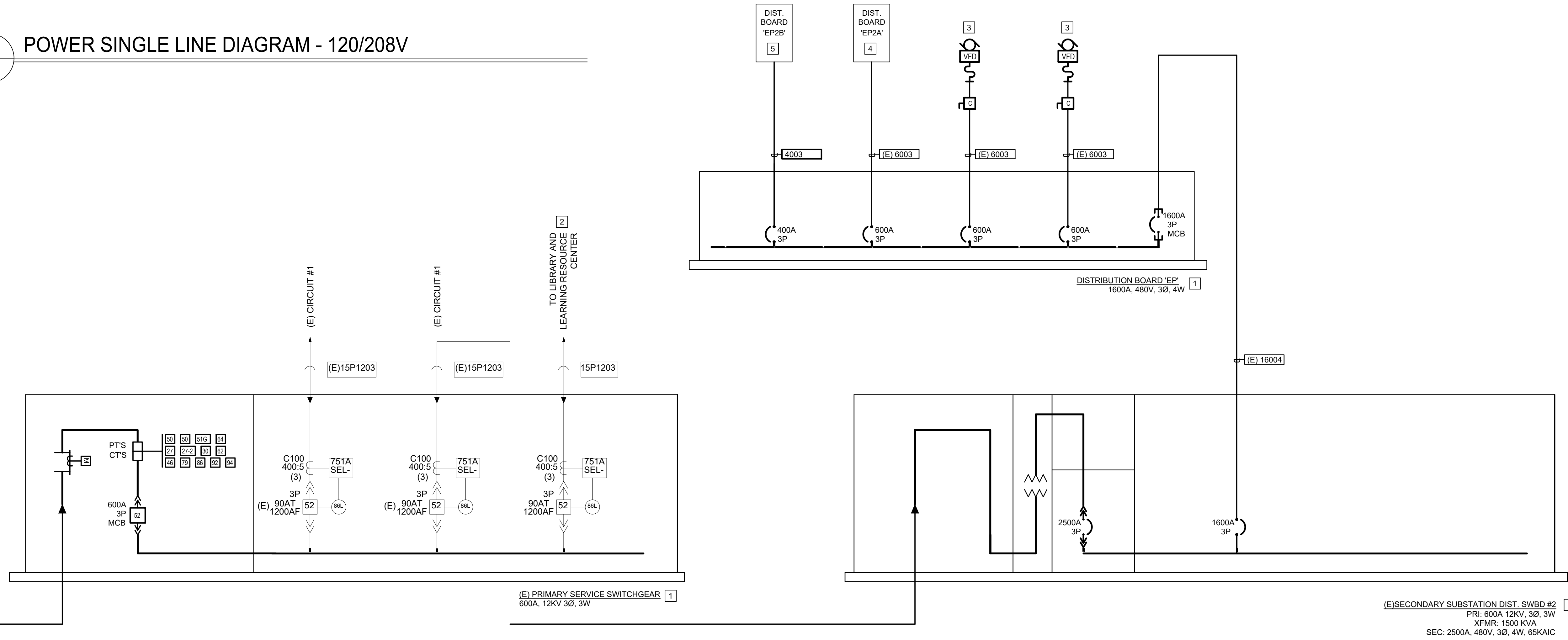
1. ROUTE THROUGH INVERTER

CONDUIT SCHEDULE

202 2 #12 CU, 1 #12 CU GND, IN 3/4" C.
203 3 #12 CU, 1 #12 CU GND, IN 3/4" C.
303 3 #10 CU, 1 #10 CU GND, IN 3/4" C.
403 3 #8 CU, 1 #10 CU GND, IN 3/4" C.
503 3 #8 CU, 1 #10 CU GND, IN 3/4" C.
903 3 #2 CU, 1 #8 CU GND, IN 1-1/4" C.
5003 2 SETS OF (3 #250 kcmil CU, 1 #2 CU GND, IN 2-1/2" C.)

- GENERAL NOTES**
- A. SINGLE LINE DRAWING IS AT SCHEMATIC DESIGN LEVEL AND PROVIDED FOR REFERENCE ONLY TO COMPLEMENT THE ELECTRICAL DESIGN NARRATIVE.
- NUMBERED SHEET NOTES**
- ONLY ELECTRICAL DISTRIBUTION RELEVANT TO THIS PROJECT IS SHOWN. OTHER EXISTING DISTRIBUTION MAY BE PRESENT.
 - NEW LIBRARY AND LEARNING RESOURCE CENTER SERVICE TO BE PROVIDED AS A PART OF THAT PROJECT. PROVIDE TRANSFORMER SPACE AND SERVICE CONDUIT PATHWAYS AS A PART OF THIS PROJECT. COORDINATE EXACT SERVICE PROJECT WITH FINAL CONSTRUCTION DOCUMENTS FOR THE LIBRARY AND LEARNING RESOURCE CENTER PROJECT.
 - REUSE EXISTING BREAKER AND EXTEND FEEDER TO NEW CHILLER.
 - REPLACE EXISTING MCC-2 WITH NEW DISTRIBUTION BOARD EP2A. REUSE EXISTING BREAKER AND FEEDER. RECONNECT ALL EXISTING EQUIPMENT RETROFIT FROM MCC-2 TO THIS PANEL. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
 - REPLACE EXISTING MCC-3 WITH NEW DISTRIBUTION BOARD EP2B. REUSE EXISTING BREAKER AND FEEDER. RECONNECT ALL EXISTING EQUIPMENT RETROFIT FROM MCC-3 TO THIS PANEL. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE.

B POWER SINGLE LINE DIAGRAM - 120/208V
E2.01



A POWER SINGLE LINE DIAGRAM - 277/480V
E2.01

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APPROVALS

PROJECT TITLE
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900 FALLON STREET,
OAKLAND, CA 94607

CRITERIA DOCUMENTS

ISSUE DATE AUGUST 10, 2020
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SHEET TITLE

POWER SINGLE LINE DIAGRAM AND LOAD CALCULATIONS

SHEET NUMBER

E2.01