SALT LAKE CITY CORPORATION

THE DEPARTMENT OF PUBLIC UTILITIES

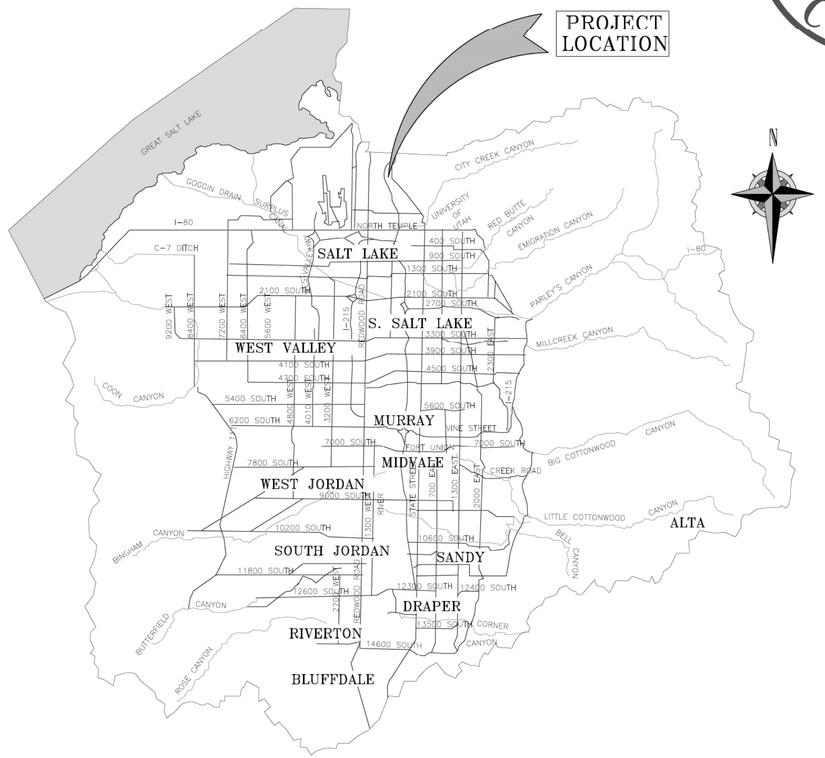
DRAWINGS FOR CONSTRUCTION OF

NEW WRF – SW-1A INFLUENT PUMP STATION (IPS)

PROJECT ADDRESS: 1805 W 500 S, SALT LAKE CITY, UT 84104, UNITED STATES

PROJECT NO. 524905396

FISCAL YEAR 2023



PROJECT VICINITY MAP

Public Utilities

ERIN MENDENHALL – MAYOR

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299	0100-P708	PUMP STATION SITE PLUMBING TYPICAL DETAILS SHEET 8 OF 15
300	0100-P709	PUMP STATION SITE PLUMBING TYPICAL DETAILS SHEET 9 OF 15
301	0100-P713	PUMP STATION SITE PLUMBING TYPICAL DETAILS SHEET 13 OF 15
302	0100-P714	PUMP STATION SITE PLUMBING TYPICAL DETAILS SHEET 14 OF 15
303	0100-P715	PUMP STATION SITE PLUMBING TYPICAL DETAILS SHEET 15 OF 15
304	0100-F711	PUMP STATION SITE FIRE ALARM TYPICAL DETAIL
305	0100-M700	PUMP STATION SITE HVAC TYPICAL DETAILS INDEX
306	0100-M701	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 1 OF 9
307	0100-M702	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 2 OF 9
308	0100-M703	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 3 OF 9
309	0100-M704	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 4 OF 9
310	0100-M705	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 5 OF 9
311	0100-M706	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 6 OF 9
312	0100-M707	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 7 OF 9
313	0100-M708	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 8 OF 9
314	0100-M709	PUMP STATION SITE HVAC TYPICAL DETAILS SHEET 9 OF 9
315	0100-I700	PUMP STATION SITE INSTRUMENT TYPICAL DETAILS INDEX
316	0100-I701	PUMP STATION SITE INSTRUMENT TYPICAL DETAILS SHEET 1 OF 4
317	0100-I702	PUMP STATION SITE INSTRUMENT TYPICAL DETAILS SHEET 2 OF 4
318	0100-I703	PUMP STATION SITE INSTRUMENT TYPICAL DETAILS SHEET 3 OF 4
319	0100-I704	PUMP STATION SITE INSTRUMENT TYPICAL DETAILS SHEET 4 OF 4
320	0100-E700	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS INDEX
321	0100-E701	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 1 OF 15
322	0100-E702	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 2 OF 15
323	0100-E703	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 3 OF 15
324	0100-E704	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 4 OF 15
325	0100-E705	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 5 OF 15
326	0100-E706	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 6 OF 15
327	0100-E707	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 7 OF 15
328	0100-E708	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 8 OF 15
329	0100-E709	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 9 OF 15
330	0100-E711	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 11 OF 15
331	0100-E712	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 12 OF 15
332	0100-E713	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 13 OF 15
333	0100-E714	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 14 OF 15
334	0100-E715	PUMP STATION SITE ELECTRICAL TYPICAL DETAILS SHEET 15 OF 15
335	0100-T700	PUMP STATION SITE TELECOM TYPICAL DETAILS INDEX
336	0100-T701	PUMP STATION SITE TELECOM TYPICAL DETAILS SHEET 1 OF 3
337	0100-T702	PUMP STATION SITE TELECOM TYPICAL DETAILS SHEET 2 OF 3
338	0100-T703	PUMP STATION SITE TELECOM TYPICAL DETAILS SHEET 3 OF 3
339	0100-Y701	PUMP STATION SITE ELECTRONIC SECURITY TYPICAL DETAILS
340	0100-Y702	PUMP STATION SITE ELECTRONIC SECURITY TYPICAL DETAILS

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.GALBICHKA
DRAWN B

GENERAL SYMBOLS

N — NORTH ARROW

LEVEL NAME / ELEVATION — LEVEL MARKER

Room Name: **101** — ROOM NAME & NUMBER

1 — GRID, NEW

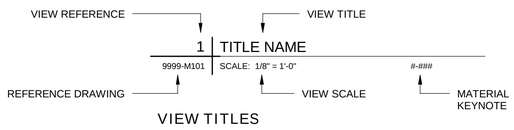
? — MATERIAL KEYNOTE

1 — GRID, EXISTING

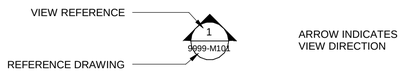
? — KEYNOTE

00 — REVISION MARKER

GENERAL ARRANGEMENT REFERENCE SYMBOLS



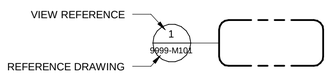
VIEW TITLES



ELEVATION REFERENCE

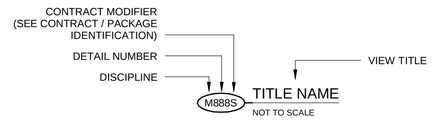


SECTION REFERENCE



CALLOUT REFERENCE

TYPICAL DETAIL REFERENCE SYMBOLS



TYPICAL DETAIL TITLES



TYPICAL DETAIL REFERENCE

DRAWING NUMBERING FORMAT

8001-D101S

- PLANT AREA CODE
- SUB-AREA CODE
- DISCIPLINE DESIGNATOR
- CONTRACT MODIFIER (SEE CONTRACT / PACKAGE IDENTIFICATION)
- SEQUENTIAL NUMBER
- DRAWING TYPE

DISCIPLINE DESIGNATORS

A	ARCHITECTURAL
B	GEOTECHNICAL
C	CIVIL
D	PROCESS MECHANICAL
E	ELECTRICAL
F	FIRE PROTECTION
G	GENERAL
I	INSTRUMENTATION
L	LANDSCAPING
M	HVAC
P	PLUMBING
R	YARD PIPING
S	STRUCTURAL
T	TELECOMMUNICATIONS
X	MECHANICAL & INSTRUMENTATION
Y	SECURITY

DRAWING TYPES

0	GENERAL; SYMBOLS, LEGENDS, ABBREVIATION LISTS, NOTES, ETC.
1	FULL PAGE PLANS; SITE PLAN, LOCATION PLANS, ETC.
2	EXTERIOR ELEVATIONS
3	BUILDING SECTIONS / WALL SECTIONS; PROFILES
4	LARGE-SCALE VIEWS; PLANS, ELEVATIONS, STAIR SECTIONS, SECTIONS THAT ARE NOT DETAILS, ETC.
5	DETAILS
6	SCHEDULES AND DIAGRAMS
7	TYPICAL DETAILS
9	3D REPRESENTATIONS; ISOMETRICS, PERSPECTIVES, PHOTOGRAPHS

CONTRACT / PACKAGE IDENTIFICATION

CONTRACT / PACKAGE NAME		CONTRACT MODIFIER (SEE NOTES)
N/A	EARLY WORKS PACKAGE 1 (EW-1)	M
N/A	EARLY WORKS PACKAGE 2 (EW-2)	M
N/A	SOLIDS TRAIN PACKAGE 1 (ST-1)	M
N/A	SOLIDS TRAIN PACKAGE 2 (ST-2)	M
N/A	LIQUID TRAIN PACKAGE 1 (LT-1)	M
N/A	LIQUID TRAIN PACKAGE 2 (LT-2)	M
N/A	INFLUENT PUMP STATION (SW-1A) FORCEMAINS (SW-1B)	S F
N/A	SITE WORKS PACKAGE 2 (SW-2)	M
N/A	SITE WORKS PACKAGE 3 (SW-3)	M
N/A	NON-PROCESS PACKAGE 1 (NP-1)	N
N/A	WETLANDS (WL-1)	W

NOTES:

1. CONTRACT MODIFIER IN TYPICAL DETAIL CALLOUTS APPLY ONLY TO THE NP-1 AND SW-1 CONTRACT.
2. CONTRACT MODIFIER IN DRAWING NUMBERS IDENTIFIES A PORTION OF WORK THAT OVERLAPS BETWEEN CONTRACTS AND ONLY A PORTION OF THE WORK APPLIES TO THE ISSUED CONTRACT AS INDICATED.

PLANT AREA & SUB-AREA CODES

00	00	GENERAL
01	00	PUMP STATION SITE
	01	IPS
	02	IPS ODOR CONTROL
	03	BYPASS STRUCTURE (EXISTING)
	04	IPS ELECTRICAL BUILDING
	05	IPS STANDBY POWER & FUEL STORAGE
	06	GAS METER (EXISTING, P19)
	07	STORAGE BUILDING (EXISTING, P8)
	08	EMERGENCY GENERATOR (EXISTING TO BE REPURPOSED, P1)
02	00	MAIN PLANT SITE
	01	WETLANDS
	02	COUNTY PUMPS 1-4 (EXISTING)
	10	DRAIN LIFT STATION
	11	DRAIN LS VALVE VAULT
03	00	WRF REDWOOD CAMPUS
	01	WEST OFFICE BUILDING
	02	WEST VEHICLE STORAGE
	03	WEST CHEMICAL STORAGE
	04	WEST HEAVY EQUIPMENT STORAGE
05	01	MAINTENANCE OPERATION BUILDING (EXISTING)
08	00	ELECTRICAL FACILITY
	01	SUBSTATION
	02	SUBSTATION CONTROL BUILDING
	03	STANDBY POWER & FUEL STORAGE
15	00	HEADWORKS FACILITY
	01	HEADWORKS BUILDING
	02	HEADWORKS ODOR CONTROL
	03	CHEMICAL STORAGE
20	00	PRIMARY CLARIFICATION FACILITY
	01	PRIMARY CLARIFIER 1
	02	PRIMARY CLARIFIER 2
	03	PRIMARY CLARIFIER 3
	04	PRIMARY CLARIFIER 4
	05	PRIMARY SLUDGE PUMP BUILDING
30	00	BIOLOGICAL NUTRIENT REMOVAL (BNR) FACILITY
	01	BNR REACTOR 1
	02	BNR REACTOR 2
	03	BNR REACTOR 3
	04	NORTH GALLERY
35	00	BLOWER & GRAVITY THICKENING FACILITY
	01	GRAVITY THICKENER 1
	02	GRAVITY THICKENER 2
	03	BLOWER BUILDING
	04	GRAVITY THICKENER ODOR CONTROL
40	00	SECONDARY CLARIFICATION FACILITY
	01	SECONDARY CLARIFIER 1
	02	SECONDARY CLARIFIER 2
	03	SECONDARY CLARIFIER 3
	04	SECONDARY CLARIFIER 4
	05	SECONDARY CLARIFIER 5
	06	SECONDARY CLARIFIER 6
	07	RAS PUMP BUILDING
45	00	UV FACILITY
	01	UV BUILDING
50	00	OUTFALL
	01	OUTFALL
	02	ELECTRICAL ENCLOSURE
60	00	WAS THICKENING FACILITY
	01	WAS THICKENING FACILITY
65	00	DIGESTION FACILITY
	01	DIGESTER 1
	02	DIGESTER 2
	03	DIGESTER 3
	04	DIGESTER 4
	05	DIGESTER CONTROL BUILDING
	06	GAS BOOSTER BUILDING (EXISTING M21)
	07	METHANE GAS FLARE BUILDING (EXISTING M52)
70	00	RESOURCE RECOVERY FACILITY
80	00	DEWATERING FACILITY
	01	DEWATERING BUILDING
	02	FILTRATE STORAGE TANKS
	03	DEWATERING ODOR CONTROL
	04	BIOSOLIDS STORAGE PAD
85	00	THERMAL DRYING FACILITY (FUTURE)
90	01	COMBINED HEAT & POWER (CHP) FACILITY
92	00	OPERATIONS MAINTENANCE AND EDUCATION CENTER FACILITY
	01	OMEC BUILDING
	02	VEHICLE CANOPY
94	00	MAINTENANCE BUILDINGS
	01	WEST MAINTENANCE
	02	EAST MAINTENANCE AND ELECTRICAL BUILDING
	03	LAB
	04	COVERED PARKING (EXISTING)
	05	COVERED STORAGE (EXISTING M33)
96	00	STORAGE FACILITIES
	01	HEAVY EQUIPMENT STORAGE BUILDING (EXISTING)
	02	NORTHWEST STORAGE BUILDING (EXISTING)
	03	SLUDGE STORAGE PAD (EXISTING)

SW-1B

SCALE: 12" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.GALBICHKA
DRAWN BY: S.GALBICHKA
CHECKED BY: E.JACOBS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SRG	GD

LAST CONFORMED SET: SW-1A: ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

LEGEND

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-G020S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 1:07:27 PM

FILE: BIM 360://60572288-Salt Lake City 2019\524905350_0000-G010.rvt

GENERAL ABBREVIATIONS

1/C	ONE CONDUCTOR
2SPD	TWO SPEED DRIVE
3D	THREE DIMENSIONAL
3W	THREE-WAY, THREE-WIRE
4W	FOUR-WAY, FOUR-WIRE
48P	48 PORT
%	PERCENT
&	AND
-	UNFINISHED/OPEN TO STRUCTURE
@	AT
°C	DEGREES CENTIGRADE (CELCIUS)
°F	DEGREES FAHRENHEIT
Ø	PHASE
Ω	OHMS
A	AMPERE
A/E	ARCHITECT/ENGINEER
A/M	AUTO / MANUAL
A/S	AUTOMATIC FIRE SPRINKLER
A/V	AUDIO/VISUAL
AAC	ALL ALUMINUM CONDUCTOR, AUTOCLAVED AREATED CONCRETE
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AAV	AUTOMATIC AIR VENT
AC	ABOVE CEILING, AIR COMPRESSOR, ALTERNATING CURRENT, AIR CONDITIONING EVAPORATOR UNIT (SPLIT SYSTEM), ASPHALT CEMENT
AC	ASPHALTIC CONCRETE
ACB	AIR CIRCUIT BREAKER
ACF	AIR CURTAIN FAN
ACI	AMERICAN CONCRETE INSTITUTE
ACK	ACKNOWLEDGE (ALARM)
ACP	ACCESS CONTROL PANEL
ACS	ACCESS CONTROL SYSTEM
ACSR	ALUMINUM CONDUCTOR STEEL REINFORCED
ACT	ACOUSTIC CEILING TILE
AD	AIR DRYER
ADA	AMERICANS WITH DISABILITIES ACT
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
ADMIN	ADMINISTRATION
ADRA	AREA DRAIN
AE	ANALYSIS ELEMENT
AF	AIR FILTER, AMP FUSE, AMP FRAME
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHP	AIR (HIGH PRESSURE)
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT, AIR INTAKE
AIC	AMPS INTERRUPTING CAPACITY
AIM	ADDRESSABLE INTELLIGENT MODULE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AIT	ANALYSIS INDICATING TRANSMITTER
AK	ANALYSIS (SAMPLER) CONTROL STATION
AlmReset	ALARM RESET
ALOH	AUTO / LOCAL / OFF / HAND
ALT	ALTERNATING
ALUM	ALUMINUM
AM	AMPLITUDE MODULATION
AMB	AMBIENT
An pH	ANALYSIS, pH
AnH2S	ANALYSIS, HYDROGEN SULFIDE
AnLEL	ANALYSIS, LOWER EXPLOSIVE LIMIT
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
AO	ANALOG OUTPUT
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AQ	AQUA
AR	AIR RECEIVER
ARCH	ARCHITECTURE
ARMM	RISER CABLE WITH OUTER SHIELD
ART	ARTICLE
ARV	AIR RELIEF VALVE
AS	AMP SWITCH, AIR SEPARATOR
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASD	ALLOWABLE STRESS DESIGN
ASH	ANALYSIS SWITCH HIGH
ASHH	ANALYSIS SWITCH HIGH HIGH
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AIR CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASSY	ASSEMBLY
AST	AIR STRIPPER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AT	ANALYSIS TRANSMITTER, AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	ANGLE VALVE
AVTR	ACID VENT THROUGH ROOF
AWG	AMERICAN WIRE GAUGE
AWH	AIR WASH
AWL	AVERAGE WATER LEVEL
AWS	AMERICAN WELDING SOCIETY
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	BOILER
B.O.	BOTTOM OF
B.O.W.	BOTTOM OF WALL
BA	BIN ACTIVATOR
BAS	BUILDING AUTOMATION SYSTEM
BAT, BATT	BATTERY
BATC, BATTC	BATTERY CHARGER
BB	BOND BEAM
BBD	BULK BAG DISPENSER
BC	BARE COPPER, BLOCK CLOSE
BCA	BURNER COMBUSTION AIR
BCV	BALL CHECK VALVE
BD	BOARD, BUILDING DRAIN
BDD	BACKDRAFT DAMPER
BET	BUILDING ENTRANCE TERMINAL
BF	BREAKER FAILURE
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BG	BIOGAS
BHP	BRAKE HORSEPOWER
BICSI	BUILDING INDUSTRY CONSULTING SERVICES INTERNATIONAL
BIF	BIOFILTER
BIL	BASIC IMPULSE LEVEL
BIO	CARD READER WITH BIOMETRICS
BK	BLACK
BKR	BREAKER, CIRCUIT BREAKER
BL	BLOWER
BLDG	BUILDING
BLKG	BLOCKING
BLV	BALANCING
BM	BEAM
BMS	BUILDING MANAGEMENT SYSTEM
BNR	BIOLOGICAL NUTRIENT REMOVAL
BOB	BOTTOM OF BEAM
BOCT	BOTTOM OF CABLE TRAY
BOD	BOTTOM OF DUCT
BOF	BOTTOM OF FOUNDATION
BOT	BOTTOM
BPV	BACK PRESSURE REGULATOR VALVE
BR	BRUSH, BROWN
BRDG	BRIDGING
BRG	BEARING
BS	STEEL BUS SUPPORT
BSD	BIOSOLIDS, DEWATERED
BSP	BIOSOLIDS, PRIMARY
BSR	BIOSOLIDS, RECIRCULATED
BSS	BIOSOLIDS, SECONDARY
BT	BREAK TANK
BTUH	BRITISH THERMAL UNITS PER HOUR
BTWN	BETWEEN
BU	BLUE
BUS	BUSINESS, ELECTRIC BUS
BUSD	ELECTRIC BUS DUCT
BV	BALL VALVE, BALANCE VALVE
BW	BACKWASH WATER (FILTERED)
BWR	BACKWASH RETURN
BWW	BACKWASH WASTE WATER
C	CONDUIT
C TO C	CENTER TO CENTER
C/W	COMPLETE WITH
CA	COMPRESSED AIR, CLEAN AGENT, COLD AISLE
CAB	CABINET
CAT	CATEGORY
CAT3	CATEGORY 3
CAT6	CATEGORY 6
CB	CIRCUIT BREAKER
CBA	COMPOST BAY
CBD	COARSE BUBBLE DIFFUSER
CBL	CABLE
CC	CLOSE COIL, CLOSE CIRCUIT, CONTROL CENTER
CCT	CORRELATED COLOR TEMPERATURE
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONDENSATE DRAIN
CDW	WATER (CONDENSATE)
CEN	CENTRATE
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFCS	CHLOROFLUOROCARBONS
CFE	CHLORINATED FINAL EFFLUENT
CFH	CUBIC FEET PER HOUR
CFL	CUT THROAT FLUME
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CGS	CHLORINE GAS SCRUBBER
CH	CONTROL HOUSE
CH4	METHANE
CHF	CHEMICAL FEEDER
CHL	CHLORINATOR
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CI	CAST IRON
CIP	CAST IN PLACE
CIPP	CURED IN PLACE PIPE
CIRC	CIRCULATION
CJ	CONTROL JOINT
CJT	CONTRACTION JOINT, CONSTRUCTION JOINT
CKT	CIRCUIT
CL	CENTER LINE
CL2	CHLORINE
CLD	CLARIFIER BLOWDOWN
CLG	CEILING
ClgLmt	COOLING LOAD LIMIT
ClgRst	COOLING LOAD RESET
CLR	CLEAR, CLEARANCE
CLS	CLOSE
Cls	CLOSED POSITION INDICATION
ClsCmd	CLOSE COMMAND
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMB	COMMUNICATIONS, BUSINESS
CMP	COMPACTOR
CMR	COMPUTER ROOM
CMS	COMMUNICATIONS, SCADA
CMU	CONCRETE MANSONRY UNIT
CO	CLEANOUT
CO2	CARBON MONOXIDE
COB	COMPUTER / OFF / BYPASS, CLEANOUT BOX
CODEC	CODER/DECODER
COH	COMPUTER / OFF / HAND
COL	COLUMN
COMB	COMBUSTIBLE GAS
COMM	COMMUNICATIONS
COMPR	COMPRESSOR
CON	CONVEYOR
CONC	CONCRETE
CONFIG	CONFIGURATION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS / CONTINUATION
COORD	COORDINATION
COP	COEFFICIENT OF PERFORMANCE
CP	CONSOLIDATION POINT, CONTROL PANEL
CPL'G	COUPLING
CPT	CONTROL POWER TRANSFORMER
CPU	CENTRAL PROCESSING UNIT
CPVC	CHLORINATED POLYVINYL CHLORIDE
CPW	CIPOLETTI WEIR
CR	CARD READER
CRI	COLOR RENDERING INDEX
CS	CARBON STEEL, COMBINATION STARTER, CONTROL SWITCH
CSA	CANADIAN STANDARD ASSOCIATION
CSJ	CONSTRUCTION SLAB JOINT
CT	CERAMIC TILE, CURRENT TRANSFORMER
CTC	COMMUNICATIONS TERMINATION CABINET
CTD	CENTERED
CTRL	CONTROL
CTVT	COMBINED CURRENT & VOLTAGE TRANSFORMER
CU	CUBIC, COPPER, CONDENSING UNIT (SPLIT AIR CONDITIOINING SYSTEM)
CV	CHECK VALVE, CKV, CONSTANT VOLUME
CW	CURTAIN WALL
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CY	CUBIC YARD, CYCLONE
CYH	CUBIC YARD PER HOUR
CYL	CYLINDER
(D)	TO BE DEMOLISHED
D	DEPTH, DATA
DACT	DIGITAL ALARM COMMUNICATOR TRANSMITTER
DAS	DISTRIBUTION ANTENNA SYSTEM
DB	DRY BULB
dB	DECIBEL
DBNK	DUCTBANK
DC	DIRECT CURRENT
DD	DATA DISTRIBUTION
DDC	DIRECT DIGITAL CONTROLLER
DE	DENSITY ELEMENTS, DEAD-END STRUCTURE
DEG	DEGREE
Density	DENSITY INDICATION
DEPT	DEPARTMENT
DETC	DE-ENERGIZED TAP CHANGER
DF	DRINKING FOUNTAIN
DG	DEGASSING
DI	DUCTILE IRON, DIGITAL INPUT
DIA	DIAMETER
DIAG	DIAGONAL
DIF	DIFFUSER
DIG	DIGESTER
DIMS	DIMENSIONS
DIP	DUCTILE IRON PIPE
DIR	DIRECTION
DISCH	DISCHARGE
DIST	DISTRIBUTION, DISTANCE
DIT	DENSITY INDICATING TRANSMITTER
DIV	DIVISION
DL	DRUM LOUVER
DMZ	DEMILITARIZED ZONE
DN	DOWN
DO	DIGITAL OUTPUT, DISSOLVED OXYGEN
DOI	DISSOLVED OXYGEN INDICATION
DP	DAMPER
DPP	DATA PATCH PANEL
DPS	DOOR POSITION SWITCH
DR	DIMENSION RATIO, DOOR
DRA	DRAIN
DS	DISCONNECT SWITCH, DOWNSPOUT
DSM	DEEP SOIL MIXING
DSN	DOWN SPOUT NOZZLE
DST	ROTARY DISTRIBUTOR
DT	DENSITY TRANSMITTER, DOUBLE TEE
DTT	DIRECT TRANSFER TRIP
DV	DIAPHRAGM VALVE
DW	DISHWASHER
DWG	DRAWING
DWL	DOWEL
DWS	DEWATERING SCREW PRESS
DWV	DRAIN WASTE VENT
(E)	EXISTING
E	EAST
E/P	EDGE OF PAVEMENT
E/W	EAST-WEST
EA	EACH, EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EBB	ELECTRIC BASEBOARD HEATER
EC	ELECTRICAL CONTRACTOR
ECC	ECCENTRIC
EDA	EQUIPMENT DISTRIBUTION AREA
EE	VOLTAGE ELEMENT
EER	ENERGY EFFICIENCY RATIO
EES	EMERGENCY EYEWASH SHOWER
EEW	EMERGENCY EYEWASH
EF	EACH FACE, EXHAUST FAN
EFF	EFFICIENCY
EG	ETHYLENE GLYCOL
EHR	EFFLUENT HEAT RETURN
EHS	EFFLUENT HEAT SUPPLY, EXTRA HIGH STRENGTH
EI	VOLTAGE INDICATOR
EIA	ELECTRONIC INDUSTRIES ALLIANCE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EMER	EMERGENCY
EMI	ELECTROMAGNETIC INTERFERENCE
EMP	ELECTROMAGNETIC PULSE
EMT	ELECTRICAL METALLIC TUBING
ENG	ENGINEER
EOA	EDGE OF ASPHALT
EP	ENGINEERED POLYMER
EPO	EMERGENCY POWER-OFF
EPR	ETHYLENE PROPYLENE RUBBER
EQ	EQUAL
EQUIP	EQUIPMENT
ER	ELEVATOR RECALL, EXHAUST REGISTER
ERV	ENERGY RECOVERY VENTILATOR
ES	ELECTRICAL SERVICE, EACH SIDE
ESD	EMERGENCY SHUTDOWN DEVICE
ESH	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
Estop	EMERGENCY STOP
ET	EXPANSION TANK
ETC	ET CETERA
EUH	ELECTRIC UNIT HEATER
EV	EVAPORATOR
EVAC	VOICE EVACUATION CONTROL UNIT
EVSE	ELECTRIC VEHICLE SUPPLY EQUIPMENT
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWEF	EACH WAY EACH FACE
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
EX	EXHAUST
EXC	EXCAVATE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	FRONT, FAN
F TO F	FACE TO FACE
f'AAC	SPECIFIED COMPRESSIVE STRENGTH OF MASONRY, PSI
f'm	SPECIFIED COMPRESSIVE STRENGTH OF AAC MASONRY, PSI
F/S	FAST / SLOW SELECTION
FA	FIRE ALARM, FROM ABOVE
FAA	FIRE ALARM ANNUNCIATOR
FAB	FABRICATE / FABRICATION
FACP	FIRE ALARM CONTROL PANEL
FAH	FLOW ALARM, HIGH
FAL	FLOW ALARM, LOW
FAR	FLAME ARRESTER
FB	FIELD BOLT, FUSE BLOCK, FROM BELOW
FBD	FINE BUBBLE DIFFUSER
FC	FERRIC CHLORIDE, FLOW CONTROL
FCH	FLAME CHECK
FCmd	START FORWARD COMMAND FOR REVERSING STARTER
FCO	FLOOR CLEANOUT
FCV	FLOW CONTROL VALVE (MODULATING)
FD	FIRE DAMPER, FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDF	FIBER DISTRIBUTION FRAME
FDN	FOUNDATION
FDU	FIBER DISTRIBUTION UNIT
FE	FINAL EFFLUENT, FLOW ELEMENT, FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET, FIELD EQUIPMENT CONTROLLER
FEXT	FAR END CROSSTALK
FF	FINISHED FLOOR, FORCE FLOW (CABINET UNIT HEATER)
FFE	FURNITURE FIXTURES AND EQUIPMENT, FINISHED FLOOR ELEVATION, FILTERED FINAL EFFLUENT
FG	FINISH GRADE, FLAP GATE, FLOW METER ULTRASONIC GENERATOR
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FI	FLOW INDICATOR
FIC	FLOW INDICATING CONTROLLER
FIG.	FIGURE
FIN	FINISH / FINISHED
FIP	FEMALE IRON PIPE
FIS	FILTER SEPARATOR
FIT	FLOW INDICATING TRANSMITTER
FLA	FULL LOAD AMPS
FLEX.	FLEXIBLE
FLG	FLANGE
FLOC	FLOCCULATION
Flow	FLOW RATE INDICATION
FlowHi	FLOW RATE HIGH ALARM
FlowLo	FLOW RATE LOW ALARM
FLR	FLOOR, FLARE
FLT	FILTRATE, FILTER
Flt	INSTRUMENT FAULT
FLV	FLOAT VALVE
FM	FREQUENCY MODULATION, FORCEMAIN
FMC	FLEXIBLE METAL CONDUIT
FND	FOUNDATION
FO	FIBER OPTIC
FOA	FOUL AIR
FOC	FACE OF CONCRETE
FOD	FUEL OIL DISPENSER
FOM	FACE OF MASONRY
FOO	FUEL OIL OVERFLOW
FOP	FUEL OIL PUMP
FOR	FORWARD / OFF / REVERSE, FUEL OIL RETURN
FOS	FOAM SEPARATOR, FUEL OIL SUPPLY
FOV	FUEL OIL VENT
FOW	FACE OF WALL
FPC	FIBER PATCH CABLE
FPE	FREEZE PROOF ENCLOSURE
FPHB	FREEZE PROOF HOSE BIBB
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPP	FIBER PATCH PANEL
FPS	FEET PER SECOND
FPT	FEMALE PIPE THREAD
FPW	FIRE PROTECTION WET
FQI	FLOW TOTALIZING INDICATOR
FQY	FLOW TOTALIZING / INTEGRATING RELAY
FR	FIRE RATED, FIBER RISER
FRJ	FIRE RESISTIVE JOINT
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FLOOR SINK
FSCU	FIRE SUPPRESSION CONTROL UNIT
FSD	FIRE SMOKE DAMPER
FSH	FLOW SWITCH HIGH
FSL	FLOW SWITCH LOW
FT	FOOT / FEET
FT	FLOW TRANSMITTER
FTG	FOOTING
FU	FIXTURE UNIT, FUSE, FUSED
FV	FLOW VALVE (OPEN / CLOSE)
FVC	FIRE VALVE CABINET
FVNR	FULL-VOLTAGE NON-REVERSING
FW	FUSION WELD
FWD	FORWARD SELECTION
G	GREEN, GENERATOR, GASKET
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GCB	GAS CIRCUIT BREAKER
GCL	GRIT CLASSIFIER
GCN	GRIT CONCENTRATOR
GCO	GRADE CLEAN OUT
GD	GRIT DEWATERING UNIT
GDR	GRINDER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT CIRCUIT INTERRUPTER PROTECTION
GFP	GROUND FAULT PROTECTION
GFPE	GROUND FAULT PROTECTION EQUIPMENT
GFR	GLASS-FIBER REINFORCEMENT
GFRP	GLASS FIBER REINFORCED POLYMER
GHz	GIGAHERTZ
GI	GREASE INTERCEPTOR, GROUND IMPROVEMENT, GALVANIZED IRON
GL	GLASS
GLV	GLOBE VALVE
GLY	GLYCOL
GLYR	GLYCOL RETURN
GLYRC	GLYCOL RETURN COLD
GLYRH	GLYCOL RETURN HOT
GLYS	GLYCOL SUPPLY
GLYSC	GLYCOL SUPPLY COLD
GLYSH	GLYCOL SUPPLY HOT
GMP	GUARANTEED MAXIMUM PRICE
GMU	GLYCOL MAKEUP UNIT
GND	GROUND
GNRP	GAS NOTIFICATION RELAY PANEL
Gpbs	GIGA BITS PER SECOND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRIT, GREEN
GRD	GRADE, GROUND
GrnCmd	TRAFFIC SIGNAL GREEN COMMAND
GRS	GREASE
GRTG	GRATING
GT	GRAVITY THICKENER
GTO	GRAVITY THICKENER OVERFLOW
GTS	GRAVITY THICKENED SLUDGE
GV	GATE VALVE
GVH	GRAVITY VENTILATOR HOOD
GVL	GRAVEL
GWH	GAS WATER HEATER
GYP	GYPSUM BOARD
H2S	HYDROGEN SULFIDE
H20	TRAFFIC-RATED
H.A.S.	HEADED ANCHOR STUD
HA	HAND / AUTO SELECTION, HOT AISLE
HACR	HEATING AIR CONDITIONING REFRIGERATION
HB	HOSE BIBB
HC	HYDROCARBONS, HORIZONTAL CROSS-CONNECT, HEATING COIL
HCM	HORIZONTAL CABLE MANAGER
HD	HEAD, HUB DRAIN
HDA	HORIZONTAL DISTRIBUTION AREA
HDG	HOT DIPPED GALVANIZED
HDPE	HIGH-DENSITY POLYETHYLENE
HDR	HEADER
HDW	HARDWARE
HEX	HEAT EXCHANGER
HF	HYDRAULIC FLUID
HGL	HYDRAULIC GRADE LINE
HGT	HEIGHT
HH	HANDHOLE
HHWR	HEATING HOT WATER RETURN
HHWS	HEATING HOT WATER SUPPLY
HK	HAND CONTROL STATION
HM	HOLLOW METAL
HMA	HOT MIX ASPHALT
HMI	HUMAN MACHINE INTERFACE
HOA	HAND / OFF / AUTO
HORIZ	HORIZONTAL
HP	HIGH POINT, HORSEPOWER, HEAT PUMP
HPT	HIGH POINT
HR	HANDRAIL
hr	HOUR
HRG	HIGH RESISTANCE GROUND
HRV	HEAT RECOVERY VENTILATOR
HRZ	HORIZONTAL
HS	HAULED SEPTAGE, HAND SWITCH, HAND SINK
HSC	HAULED SEPTAGE SCREENINGS, HYDRAULIC SYSTEM CENTER
HSS	HAULED SEPTAGE SCREEN, HOLLOW STRUCTURAL SYSTEM
HT	HEAT TRACE, HEIGHT
HtgLmt	HEATING LOAD LIMIT
HtgRst	HEATING LOAD RESET
HTR	HEATER
HTS	HEAT TREATED SLUDGE
HUM	HUMIDITY
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HVB	HORIZONTAL VOICE BLOCK
HVCB	HIGH VOLTAGE CIRCUIT BREAKER
HVDS	HIGH VOLTAGE DISCONNECT SWITCH
HVP	HORIZONTAL VOICE PATCH PANEL
HW	HEADWORKS
HWL	HIGH WATER LEVEL
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ
I	INTERLOCK
I&C	INSTRUMENTATION & CONTROL
I.F.	INSIDE FACE
I/P	INTERNET PROTOCOL
IA	INSTRUMENT AIR
IAW	IN ACCORDANCE WITH
IBC	INTERNATIONAL BUILDING CODE
IC	INTERMEDIATE CROSS-CONNECT
ICC	INTERNATIONAL CODE COUNCIL
ID	INSIDE DIAMETER
ID+	POSITIVE EFFECTIVE MOMENT OF INERTIA AT SERVICE LOAD
IDC	INSULATION DISPLACEMENT CONNECTORS
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
IE	CURRENT ELEMENT
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IFC	INTERNATIONAL FIRE CODE, ISSUE FOR CONSTRUCTION, INFLUENT CHANNEL
II	CURRENT INDICATOR
IMP	INSULATED METAL PANEL
IN	INCH, INCHES, RELAY INPUT COIL
INC	INCINERATOR
INJ	CHEMICAL INJECTOR
INSUL	INSULATE, INSULATION
INT	INTERIOR
Int	INTEGER INPUT
INV	INVERT, INVERT ELEVATION
IO	INPUT/OUTPUT
IP	INSULATED PANEL
IPGB	INTERIOR PERIMETER GROUND BUS
IPLV	INTEGRATED PART LOAD VALUE
IPS	INFLUENT PUMP STATION
IS	CURRENT SWITCH
ISDN	INTEGRAGED SERVICES DIGITAL NETWORK
ISOS	INDIVIDUAL SHIELD OVERALL SHIELD
ISP	INTERNET SERVICE PROVIDER
IT	CURRENT TRANSMITTER, INFORMATION TECHNOLOGY
IY	CURRENT RELAY
J	JUNCTION BOX
JAN	JANITOR
JBE	JOIST BEARING ELEVATION
JT	JOINT
K	THOUSAND
KA	KILOAMPERE
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KB	KEY BACKUP
Kbps	KILO BITS PER SECOND
KCMIL	THOUSAND CIRCULAR MILS
kHz	KILOHERTZ
km	KILOMETER
KNAF	K-CLASS FLUID, NATURAL MAIN COOLING, AIR, FORCED EXTERNAL COOLING
KNAN	OIL/AIR CONVECTION COOLING, INSULATING OIL FIRE POINT >300°C
KSI	KIPS PER SQUARE INCH
KV	KNIFE VALVE, KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATTS
KWH	KILOWATT HOUR
KY	TIMER RELAY

SCALE:

PROJECT ADDRESS:
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SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.GALBICHKA
DRAWN BY: S.GALBICHKA
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ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SRG	GD

LAST CONFORMED SET: SW-1A ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ABBREVIATIONS
A-K

No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
PROFESSIONAL ENGINEER
04-03-2023

DRAWING No.
0100-G021S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 1:13:01 PM

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GENERAL ABBREVIATIONS

L	LENGTH, LAVATORY, LOUVER, LINE
L/L	LEAD / LAG SELECTION
L/R	LOCAL / REMOTE SELECTION
LA	LIGHTNING ARRESTER
LAB	LABORATORY
LAH	LEVEL ALARM, HIGH
LAL	LEVEL ALARM, LOW
LAN	LOCAL AREA NETWORK
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS	POUNDS
LC	LATCHING CONNECTOR
LCD	LIQUID CRYSTAL DISPLAY
LCP	LOCAL CONTROL PANEL
Ld	HOOK DEVELOPMENT LENGTH
Ldh	HOOK DEVELOPMENT LENGTH
LE	LEVEL ELEMENT
LEC	LOCAL EXCHANGE CARRIER
LED	LIGHT EMITTING DIODE
LEL	LOWER EXPLOSIVE LIMIT
LF	LINEAR FEET
LG	LEVEL SIGHT GLASS OR CALIBRATION COLUMN, LONG
LGR	LINEAR GRILLE
LGTH	LENGTH
LI	LEVEL INDICATION
LIC	LEVEL INDICATING CONTROLLER
LIT	LEVEL INDICATING TRANSMITTER
LIU	LOCAL INTERFACE UNIT
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LO	LOCK OUT
LOR	LOCAL / OFF / REMOTE, LOCKOUT RELAY
LOS	LOCK / OFF / STOP
LP	LOW POINT, LIGHTING PANEL, LIQUID PROPANE, STEEL LIGHT POLE
LPT	LOW POINT
LSH	LEVEL SWITCH HIGH
LSHH	LEVEL SWITCH HIGH HIGH
LSL	LEVEL SWITCH LOW
LSLL	LEVEL SWITCH LOW LOW
LT	LEVEL TRANSMITTER
LTG	LIGHT, LIGHTS, LIGHTING
LV	LOW VOLTAGE
LvI	LEVEL INDICATION
LvlHi	LEVEL HIGH ALARM
LVLHiHi	LEVEL HIGH-HIGH ALARM
LvlLo	LEVEL LOW ALARM
LvlLoLo	LEVEL LOW-LOW ALARM
LWL	LOW WATER LEVEL
LWT	LEAVING WATER TEMPERATURE
XO	LOW VOLTAGE SIDE OF TRANSFORMER
M	MONITOR, MAIN, MOTOR
M/A	MANUAL / AUTO SELECTION
MA	MIXED AIR
MAC	MEDICAL AIR COMPRESSOR
MAINT	MAINTENANCE
MAN	METROPOLITAN AREA NETWORK
MATL	MATERIAL
MAU	MAKE UP AIR UNIT
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBG	METAL BAR GRATING
MBH	THOUSAND BTUH
Mbps	MEGA BITS PER SECOND
MC	MAIN CROSS-CONNECT, MECHANICAL CONTRACTOR
MCA	MAXIMUM CURRENT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCF	THOUSAND CUBIC FEET
MCJ	MASONRY CONTROL JOINT
MCOV	MAXIMUM CONTINUOUS OVER VOLTAGE, MAXIMUM CONTINUOUS OPERATING VOLTAGE
MCP	MASTER CONTROL PANEL
MCX	MONITORING CROSS SECTION IDENTIFIER
MD	MOTORIZED DAMPER
MDA	MAIN DISTRIBUTION AREA
MDD	MAXIMUM DRY DENSITY
MDF	MAIN DISTRIBUTION FRAME
ME	CENTRAL MECHANISM, MIST ELIMINATOR
MECH	MECHANICAL
MET	METER
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MAINTENANCE HOLE, METAL HALIDE
MHz	MEGAHERTZ
MIC	MICROPHONE
MIN	MINIMUM
MIP	MALE IRON PIPE
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
ML	MIXED LIQUOR
MLO	MAIN LUGS ONLY
MLR	MIXED LIQUOR RECYCLE
MM	MULTIMODE, MULTIMODE FIBER - 50 MICRON (OM4)
mm	MILLIMETER
MO	MOTOR OPERATED
MOCP	MAXIMUM OVERCURRENT PROTECTION
MOD	MODIFY, MODULATING
Moisture	MOISTURE INGRESS ALARM
MOR	MIDDLE OF ROW
MOU	MEMORANDUM OF UNDERSTANDING
MPH	MILES PER HOUR
MPOP	MINIMUM POINT OF PRESENCE
MR	MULTI-RATIO
MRS	MOTOR RATED SWITCH
MS	MOISTURE SWITCH
MSS	MANUFACTURER'S STANDARDIZATION SOCIETY
MTBM	MICROTUNNEL BORING MAINTENANCE HOLE
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
Multistate	MULTI-VARIABLE STATE
MV	MUD VALVE, MEDIUM VOLTAGE
MVA	MEGAVOLT AMPERES
MW	MAKEUP WATER - GENERIC, MEGAWATTS
MWA	MICROWAVE ANALYZER
MWX	MONITORING WELL IDENTIFIER
MXR	MIXER
(N)	NEW
N	NORTH, NEUTRAL
N/A	NOT APPLICABLE
N/S	NORTH-SOUTH
NAAMM	NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS
NAT	NATURAL
NbrMajAlm	NUMBER OF ACTIVE ALARMS
NbrMinAlm	NUMBER OF ACTIVE WARNINGS
NC	NORMALLY CLOSED
NE	NORTHEAST
NEC	NATIONAL ELECTRICAL CODE
NECA	NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
NEG	NEGATIVE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NESC	NATIONAL ELECTRIC SAFETY CODE
NEXT	NEAR END CROSSTALK
NF	NON FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
NGR	NEUTRAL GROUNDING RESISTOR
NH4	AMMONIA GAS
NIC	NOT IN CONTRACT
NM	NON METALLIC
NO	NORMALLY OPEN, NITRIC OXIDE
NO2	NITROGEN DIOXIDE
NO3	NITRATE
NO.	NUMBER
NOM	NOMINAL
NOX	NITROUS OXIDE
NPLV	NON-STANDARD PART LOAD VALUE
NPS	NOMINAL PIPE SIZE
NPSH	NET POSITIVE SUCTION HEAD
NPT	NATIONAL PIPE THREAD
NS	NETWORK SWITCH, NUTRIENT SOLUTION
NT	NEUTRALIZATION TANK
NTS	NOT TO SCALE
NV	NEEDLE VALVE
NW	NORTHWEST
O2	OXYGEN
O TO O	OUT TO OUT
O&M	OPERATION AND MAINTENANCE
O.F.	OUTSIDE FACE
O/C	OPEN / CLOSE
O/L	OVERLOAD ALARM
O/O	ON / OFF SELECTION
OA	OUTDOOR AIR
OAP	WIRELESS OUTDOOR ACCESS POINT
OC	ON CENTER, ODOR CONTROL
OCA	OPEN / CLOSE / AUTO SELECTION
OCCUP	OCCUPANCY
OCR	OPEN / CLOSE / REMOTE
OD	OUTSIDE DIAMETER
ODU	OZONE DESTRUCT UNIT
OF	OVERFLOW
OFD	OVERFLOW DRAIN
OG	ORIGINAL GROUND
OH	OVERHEAD, OPPOSITE HAND
OHGW	OVERHEAD GROUND WIRE
OI	OIL INTERCEPTOR
OIT	OPERATOR INTERFACE TERMINAL
OLTC, LTC	ON-LOAD TAP CHANGER
OnCmd	ON OR RUN COMMAND
OPN	OPEN
Opn	OPEN POSITION INDICATION
OpnCmd	OPEN COMMAND
OPNG	OPENING
OPP	OPPOSITE
OPT	OPTICAL
OR	ORANGE
ORD	OVERFLOW ROOF DRAIN
ORP	OXIDATION REDUCTION POTENTIAL
OS	OCCUPANCY SENSOR
OSC	OPEN / STOP / CLOSE SELECTION
OSH	TORQUE SWITCH HIGH
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OSHH	TORQUE SWITCH HIGH HIGH
OSP	OUTSIDE PLANT
OSW	OVERHEAD STATIC WIRE
OTDR	OPTICAL TIME DOMAIN REFLECTOMETER PORT
OUR	OXYGEN UPTAKE RATE
OUT	RELAY OUTPUT CONTACT
OVR	INTERLOCK OVERRIDE SWITCH
OWS	OPERATOR WORKSTATION
OZ	OUNCE
(R)	RELOCATED
P	PUMP, POLE, PRIMARY
P&ID	PROCESS AND INSTRUMENTATION DIAGRAM
P/C	PRECAST CONCRETE
P/M	POSITIONER / MANUAL
P/O	PERFORMED OR OBSERVED
P/R	PANEL / REMOTE
PA	PROCESS AIR
PAF	POWER-ACTUATED FASTENER
PAH	PRESSURE ALARM, HIGH
PAL	PRESSURE ALARM, LOW
PB	PULL BOX
PBF	PALMER-BOWLUS FLUME
PBX	PRIVATE BRANCH EXCHANGE
PC	PRIMARY CLARIFIER, PUMPED CONDENSATE, PERSONAL COMPUTER, POINT OF CURVATURE
PCF	POUNDS PER CUBIC FOOT
PCN	PARTICLE COUNTER
PD	PRESSURE DROP
PDC	POWER DISTRIBUTION CENTER
PDG	DIFFERENTIAL PRESSURE GAUGE
PDI	PLUMBING AND DRAINAGE INSTITUTE
PDIT	DIFFERENTIAL PRESSURE INDICATING TRANSMITTER
PDS	PROTECTIVE DISTRIBUTION SYSTEM
PDU	POWER DISTRIBUTION UNIT (POWER STRIP)
PE	PLANE END, PRIMARY EFFLUENT, PRESSURE ELEMENT, POLYETHYLENE TUBING
PEMB	PRE-ENGINEERED METAL BUILDING
PENT	PENETRATION
PF	POWER FACTOR
PFL	PARSHALL FLUME
PG	PRESSURE GAUGE, PROPYLENE GLYCOL, PUMPING GALLERY
PH	PHASE
pH	PH INDICATION, pH
PhRev	PHASE REVERSE
PI	PRIMARY INFLUENT, PRESSURE INDICATION, POINT OF INTERSECTION
PIR	PASSIVE INFRARED
PIT	PRESSURE INDICATING TRANSMITTER
PL	PLATE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PLF	POUNDS PER LINEAR FOOT
PLT	PELLETIZER
PLWD	PLYWOOD
PLY	POLYMER
PNL	PANEL
PNV	PINCH VALVE
PO4	PHOSPHORUS
POS	POSITIVE
Pos	POSITION INDICATION
PosCmd	POSITION COMMAND
POT	POTENTIOMETER
POTS	PLAIN OLD TELEPHONE SERVICE
PP	PATCH PANEL, POWER PANEL
PPD	POUNDS PER DAY
PPH	POUNDS PER HOUR
PPM	PARTS PER MILLION
PR	PAIR, PROTECTIVE RELAY
PRE	PRELIMINARY
PREFAB	PRE-FABRICATED
Press	PRESSURE INDICATION
PRESS.	PRESSURE
PressDiff	DIFFERENTIAL PRESSURE INDICATION
PressHi	PRESSURE HIGH ALARM
PressLo	PRESSURE LOW ALARM
PRI	PRIMARY
PRO	PROPANE GAS
PRV	PRESSURE REGULATOR VALVE, PRESSURE REDUCING VALVE
PS	PRIMARY SLUDGE, PUMP STATION, PRESSURE SWITCH, POWER SWITCH, PROTECTION RELAY POWER SUPPLY, POWER SOURCE
PSF	POUNDS PER SQUARE FOOT
PSH	PRESSURE SWITCH HIGH
PSHH	PRESSURE SWITCH HIGH HIGH
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PSL	PRESSURE SWITCH LOW
PSLL	PRESSURE SWITCH LOW LOW
PSU	POWER SUPPLY UNIT
PT	POINT OF TANGENT, PRESSURE TANK, PRESSURE TRANSMITTER, POTENTIAL TRANSFORMER
PTD	PAINTED
PTRV	PRESSURE AND TEMPERATURE RELIEF VALVE
PTZ	PAN, TILT, ZOOM
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWR	POWER
PwrFail	POWER FAIL
PY	PRIMARY SCUM
QTY	QUANTITY
R	R-VALUE (INSULATION), RISER, RESISTOR, RED
R/B	RUN / BYPASS
R/L	RAISE / LOWER
R/W	REINFORCED WITH
RA	RETURN AIR
RAD	RADIUS
RAF	RAISED ACCESS FLOOR
RAP	RECYCLED ASPHALT PRODUCT
RAS	RETURN ACTIVATED SLUDGE
RC	RELAY COIL
RCmd	START REVERSE COMMAND FOR REVERSING STARTER
RCO	RESIDUAL COLLECTOR
RCP	REINFORCED CONCRETE PIPE
RCSC	REASEARCH COUNCIL ON STRUCTURAL CONNECTIONS
RD	RUPTURE DISC, ROOF DRAIN, RED
RDT	ROTARY DRUM THICKENER
REC	RECOVERY, RECYCLE
RECIRC	RECIRCULATION
RED.	REDUCER/REDUCING
RedCmd	TRAFFIC SIGNAL RED COMMAND
REF	REFER / REFERENCE
REFR	REFRIGERATOR
REFRIG	REFRIGERANT
REINF	REINFORCEMENT
REL	RELIEF AIR
Rem	REMOTE SELECTED
REQD	REQUIRED
RES	RESIDUAL
REV	REVISION, REVERSE SELECTION
REX	REQUEST TO EXIT
RF	RADIO FREQUENCY, RATING FACTOR, RESINOUS FLOORING
RFI	RADIO FREQUENCY INTERFERENCE
RG	RETURN GRILLE
RGND	RESISTANCE GROUNDED
RGS	RIGID GALVANIZED STEEL
RH	ROOF HATCH, RELATIVE HUMIDITY, ROOF HYDRANT
RIO	REMOTE INPUT/OUTPUT
RM	ROOM
RMS	ROOT MEAN SQUARE
RMU	RACK MOUNTING UNIT
RND	ROUND
RO	REVERSE OSMOSIS, ROUGH OPENING, ROSE
ROR	REVERSE OSMOSIS RETURN
ROS	REVERSE OSMOSIS SUPPLY
RP	RECEPTACLES PANEL
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RR	RESTROOM
RSR	RISER
RST	RESET
RTAC	REAL-TIME AUTOMATION CONTROLLER
RTU	ROOF TOP UNIT
RU	RACK MOUNTING UNIT (1.75")
Run	MOTOR RUN
RV	ROOF VENT
RW	RAIN WATER
RWW	RAW WASTEWATER
RX	RECEIVE/RECEIVER SOUTH, RECEIVING SHAFT IDENTIFIER
S	SLOPE, SOUTH, SECONDARY, SECONDS
S.O.G.	SLAB ON GRADE
S/S	START / STOP
S/SCmd	START/STOP COMMAND FOR FVNR STARTER
SA	SUPPLY AIR, SURGE ARRESTER
SAM	SAMPLE
SAN	SANITARY SEWER
SB	SOUNDER BASE
SC	SECONDARY CLARIFIER, SPEED CONTROLLER
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SCB	SCRUBBER
SCC	SYSTEM CONTROL CENTER, SECURITY CONTROL CENTER
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SCN	SCREENINGS
SCO	SURFACE CLEANOUT
SCP	SCUPPER
SCR	SCREENING EQUIPMENT
SCWR	SOFTENED COLD WATER RETURN
SD	STORM DRAIN, SMOKE DAMPER, SUPPLY DIFFUSER
SDC	SEISMIC DESIGN
SDMPX	SUBSURFACE DEEP MONITORING POINT IDENTIFIER
SDR	STANDARD THERMOPLASTIC PIPE DIMENSION RATION
SE	SECONDARY EFFLUENT, SOUTHEAST, SPEED ELEMENT
SE+	POSITIVE EFFECTIVE SECTION MODULUS
SE-	NEGATIVE EFFECTIVE SECTION MODULUS
SEC	SECONDARY, SECTION
SECT	SECTION
SED	SEDIMENTATION
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SEJ	SEWAGE EJECTOR
SEL	SELECTOR SWITCH, SCHWEITZER ENGINEERING LABORATORIES
SEP	SEPARATOR
SERV	SERVICE
SF	SQUARE FEET, STOREFRONT SYSTEM
SF6	SULFUR HEXAFLUORIDE GAS
SFP	SMALL FORM PLUGGABLE (NETWORK RECEPTACLE MODULE)
SG	SLIDE GATE
SH	SODIUM HYPOCHLORITE
SHGC	SOLAR HEAT GAIN COEFFICIENT
SHT	SHEET
SI	SPEED INDICATOR
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SK	EQUIPMENT SKID, SINK
SL	STOP LOG, SLATE
SLC	SIGNALING LINE CIRCUIT
SLCDPU	SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
SM	SINGLE MODE, STEEL STATIC MAST
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SMP	SAMPLER
SMPX	SURFACE MONITORING POINT IDENTIFIER
SMS	SECURITY MANAGEMENT SYSTEM
SNG	SCREEN GRINDER
SNR	SIGNAL-TO-NOISE RATIO
SO2	SULPHUR DIOXIDE
SOI	SAND/OIL INTERCEPTOR
SOL	SOLENOID VALVE
SP	SET POINT, STATIC PRESSURE, SERVICE PROVIDER, STOP PLATE, STEEL POLE
SPA	SPECIAL PROTECTION AREA
Spd	MOTOR SPEED FEEDBACK, SURGE PROTECTIVE DEVICE
SpdCmd	MOTOR SPEED COMMAND
SPEC	SPECIFICATION
SPS	STANDARD PIPE SIZE
SQ	SQUARE
SQ FT	SQUARE FOOT / FEET
SQ IN	SQUARE INCH
SR	SUPPLY REGISTER
SRC	SURGE CHAMBER
SRG	SIGNAL REFERENCE GRID
SRW	SCREENED RAW WASTEWATER
SS	STAINLESS STEEL, SUSPENDED SOLIDS (DENSITY), SERVICE SINK
SSK	SLUDGE SKIMMER
SSMPX	SURFACE MONITORING POINT IDENTIFIER
SST	SECONDARY STORM, STATION SERVICE TRANSFORMER
ST	STORM, SPEED TRANSMITTER
STA	STATION
STD	STANDARD
STE	STEAM
STL	STEEL
STP	SHIELDED TWISTED PAIR/CABLES
STR	STAIR
STRD	STRAND
STRUCT	STRUCTURAL
STW	STORM SEWER
SUB	SUBNATANT
SUP	SUPERNATANT
Sup	SUPERVISORY
SW	SWITCH, SOUTHWEST
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SWH	STEAM WATER HEATER
SY	SECONDARY SCUM
SYM	SYMMETRICAL
SYS	SYSTEM
T&B	TOP AND BOTTOM
T&P	TEMPERATURE AND PRESSURE
T.O.	TOP OF
T.O.W.	TOP OF WALL
TB	TERMINAL BLOCK
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBC	TOP BACK OF CURB
TBD	TO BE DETERMINED
Tbl	TROUBLE
TC	TEMPERATURE CONTROL, TRIP COIL, TERMINATION CABINET, TRIP CIRCUIT
TCP	TEMPERATURE CONTROL PANEL
TD	TRENCH DRAIN
TDV	TRIPLE DUTY VALVE
TE	TEMPERATURE ELEMENT, TELECOMMUNICATIONS ENCLOSURE
TEL	TELEPHONE
TELCO	TELEPHONE COMPANY
TELECOM	TELECOMMUNICATIONS
TEMP	TEMPERATURE, TEMPORARY
Temp	TEMPERATURE INDICATION
TempHi	TEMPERATURE HIGH ALARM
TempLo	TEMPERATURE LOW ALARM
TERM	TERMINATION, TERMINAL
TFE	TRICKLING FILTER EFFLUENT
TG	TEMPERATURE GAUGE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
THD'D	THREADED
THK	THICK, THICKNESS
THRU	THROUGH
TI	TEMPERATURE INDICATOR
TIA	TELECOMMUNICATIONS INDUSTRIES ASSOCIATION
TK	TANK
TLS	TRANSMISSION LINE STRUCTURE
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TMS	THE MASONRY SOCIETY
TMV	THERMOSTATIC MIXING VALVE
TOC	TOP OF CONCRETE
TOCT	TOP OF CABLE TRAY
TOG	TOP OF GRATING
TOS	TOP OF STEEL, TOP OF SLAB
Total	FLOW TOTALIZER
TOV	THERMAL SHUT OFF VALVE
TP	TRAP PRIMER
TPST	TRIPLE POLE, SINGLE THROW
TR	TELECOMMUNICATIONS ROOM, TRANSFORMER
TRANS	TRANSITION
TRD	TREAD
TS	THICKENED SLUDGE, TEST SWITCH, TAMPER SWITCH
TSL	THICKENER UNDERFLOW
TSP	TOTAL STATIC PRESSURE, TUBULAR STEEL POLE, TWISTED SHIELDED PAIR
TSS	TOTAL SUSPENDED SOLIDS
TST	TWISTED SHIELDED TRIAD
TSV	TELESCOPIC VALVE
TTB	TELEPHONE TERMINAL BOARD
TURB	TURBIDITY
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TW	TEPID WATER
TWAS	THICKENED WASTE ACTIVATED SLUDGE
TX	TRANSMIT/TRANSMITTER
TYP	TYPICAL
U/P	UREA/PHOSPHATE
UA	FAULT
UBC	UNIFORM BUILDING CODE
UG	UNDERGROUND
UGPS	UNDERGROUND PULL SECTION
UH	UNIT HEATER
UHMWPE	ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
UR	URINAL
USU	UTAH STATE UNIVERSITY
UTBC	UNTREATED BASE COURSE
UTP	UNSHIELDED TWISTED PAIR
UV	ULTRAVIOLET
UVB	ULTRAVIOLET LAMP BANK
UVI	ULTRAVIOLET INTENSITY
UVT	ULTRAVIOLET TRANSMITTANCE
V	VOLT, VENT
VA	VOLT-AMPERE
VAC	VACUUM, VOLTS ALTERNATING CURRENT
VAP	VAPORIZER
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER
VBB	VOICE BACKBONE
VCM	VERTICAL CABLE MANAGER (6"W X 16"D, DOUBLE SIDED
VD	VOLUME DAMPER
VDC	VOLTS DIRECT CURRENT
VE	VIBRATION ELEMENT
VEFR	VINYL ESTER RESIN
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VHD	VOICE HORIZONTAL DISTRIBUTION-FRONT/BACK WITH FINERS
VIB	VIBRATION
VLAN	VIRTUAL LOCAL AREA NETWORK
VLT	VISIBLE LIGHT TRANSMISSION
VOIP	VOICE OVER IP
VRF	VARIABLE REFRIGERANT FLOW
VS	VALVE SUPERVISORY SWITCH / TAMPER SWITCH
VSD	VARIABLE SPEED DRIVE
VSI	VISUAL STABILITY INDEX
VT	VIBRATION TRANSMITTER, VOLTAGE TRANSFORMER, VIOLET
VTD	VOLTAGE TRANSMITTER
VTR	VENT THROUGH ROOF
VVD	VARIABLE VOLUME DAMPER
W	WEST, WEIR, WATTS, WATER
W1	POTABLE WATER
W2	POTABLE WATER (AFTER BACKFLOW PREVENTER)
W2CW	POTABLE WATER, COLD (AFTER BACKFLOW PREVENTER)
W2FW	POTABLE WATER, FIRE PROTECTION SYSTEM (AFTER BACK-FLOW PREVENTER)
W2HW	POTABLE WATER, HOT (AFTER BACKFLOW PREVENTER)
W2HWC	POTABLE HOT WATER RETURN/RECIRCULATION
W2TW	POTABLE WATER, TEPID (AFTER BACKFLOW PREVENTER)
W3	NON-POTABLE WATER (PROCESS EFFLUENT)
W3CW	NON-POTABLE WATER, COLD (PROCESS EFFLUENT)
W3HW	NON-POTABLE WATER , HOT (PROCESS EFFLUENT)
W/	WITH
W/O	WITHOUT
WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT
Warn	WARNING
WAS	WASTE ACTIVATED SLUDGE
WB	WET BULB
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WOOD
WE	WEIGHT ELEMENT
Weight	WEIGHT INDICATION
WF	WATERFLOW SWITCH
WG	WATER GAUGE, WEIR GATE
WGT	WAS GRAVITY THICKENER, WEIGHT
WH	WALL HYDRANT, WHITE
WHA	WATER HAMMER ARRESTOR
WIT	WEIGHT INDICATING TRANSMITTER
WL	WATER LEVEL
WLD	WELDER
WM	WATER METER
WP	WEATHERPROOF
WPD	WATER PRESSURE DROP
WPS	WELDING PROCEDURE SPECIFICATIONS
WRF	WATER RECLAMATION FACILITY
WS	WATERSTOP
WT	WEIGHT TRANSMITTER
WWF	WELDED WIRE REINFORCEMENT
XFMR	TRANSFORMER
YC	EVENT / STATE CONTROL
YD	YARD / YARDS
YelCmd	TRAFFIC SIGNAL YELLOW COMMAND
YH	YARD HYDRANT
YL	YELLOW
ZDA	ZONE DISTRIBUTION AREA
ZI	POSITION INDICATOR
ZIT	POSITION INDICATING TRANSMITTER
ZS	POSITION SWITCH
ZSC	POSITION SWITCH CLOSED
ZSO	POSITION SWITCH OPEN
ZT	POSITION TRANSMITTER
ZV	VARIABLE POSITION VALVE (DIVERTER GATE)

SCALE:

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.GALBICHKA
DRAWN BY: S.GALBICHKA
CHECKED BY: E.JACOBS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SWI-IA: ISSUED FOR BID	SRG	GD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ABBREVIATIONS
L-Z

SALT LAKE CITY

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-G022S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 1:16:54 PM

FILE: BIM 360://605722B8-Salt Lake City 2019/524905350_0000-G010.rvt

SERVICE	LEGEND	EXPOSURE	SIZE (INCHES)	MATERIAL [4]	MIN/MAX TEMP (DEG F)	SPECIFICATION SECTION	JOINT TYPE	MAX OPERATING PRESSURE (PSI)	TEST PRESSURE (PSI)	PIPE COLOR[1] [2]	PIPE BANDING COLOR[3]	COMMENTS
DRAIN (PROCESS)	DRA	INTERIOR EXPOSED/EMBEDDED	ALL SIZES	STEEL EPOXY LINED	32 TO 110	40 23 19.05, 40 23 19.04	FLANGED OR RIGID JOINT GROOVED-COUPLED	40	80	LIGHT GRAY	FEDERAL SAFETY WHITE WITH BLACK LETTERING	ALL STEEL DRAIN PIPE
DRAIN (PROCESS)	DRA	BURIED	≤ 28 INCH	HDPE	32 TO 110	40 23 19.05, 40 05 33	THERMAL BUTT-FUSION	5	10	GREEN	FEDERAL SAFETY WHITE WITH BLACK LETTERING	PIPES WITH LESS THAN 15 FEET OF COVER AND FLOTATION IS NOT AN ISSUE
DRAIN (PROCESS)	DRA	BURIED	≥ 30 INCH	GFRP	32 TO 110	33 30 00, 33 30 05	BELL AND SPIGOT	10	15	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	PIPES WITH 15 FEET OR MORE OF COVER
EXHAUST AIR	EA	EXTERIOR ABOVE GRADE	ALL SIZES	FRP	32 TO 110	40 23 19.05	FLANGED	N/A	N/A	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	
FOUL AIR	FOA	INTERIOR EXPOSED / OUTSIDE ABOVE GROUND	ALL SIZES	FRP	32 TO 110	44 60 14	FLANGED	10 ± 0.75	5 ± 1.0	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOUL AIR DUCTING WHERE NOT SPECIFIED AS METAL DUCTWORK.
FOUL AIR	FOA	BURIED	ALL SIZES	HDPE	32 TO 110	44 60 14	THERMAL BUTT-FUSION	10 ± 0.75	5 ± 1.0	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	DUCTING
NATURAL GAS	NG	ABOVEGROUND (MEDIUM PRESSURE)	ALL SIZES	COATED BLACK STEEL	N/A	23 11 23	WELDED	55	85	FEDERAL SAFETY YELLOW	FEDERAL SAFETY BROWN WITH WHITE LETTERING	
NATURAL GAS	NG	ABOVEGROUND (LOW PRESSURE)	ALL SIZES	COATED BLACK STEEL	N/A	23 11 23	WELDED	2	3	FEDERAL SAFETY YELLOW	FEDERAL SAFETY BROWN WITH WHITE LETTERING	
NATURAL GAS	NG	BURIED	ALL SIZES	MDPE	N/A	23 11 23	SOLVENT WELD OR THERMAL BUTT-FUSION	55	85	FEDERAL SAFETY YELLOW	N/A	PROVIDE DETECTABLE ALUMINUM-FOIL PLASTIC-BACKED TAPE OR DETECTABLE MAGNETIC PLASTIC TAPE MANUFACTURED SPECIFICALLY FOR WARNING AND IDENTIFICATION OF BURIED PIPING.
NON-POTABLE WATER	W3	INTERIOR EXPOSED	< 3 INCH	PVC	32 TO 110	40 23 19.05	SOLVENT WELD	100	150	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NON-POTABLE WATER	W3	INTERIOR EXPOSED	> 3 INCH	DUCTILE IRON CERAMIC EPOXY LINED	32 TO 110	40 23 19.05, 40 23 19.04	FLANGED OR RIGID JOINT GROOVED-COUPLED	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	EQUIVALENT STAINLESS STEEL OR MILD STEEL PIPE AS SPECIFIED IN 40 23 19.02 AND 40 23 19.03
NON-POTABLE WATER	W3	BURIED	ALL SIZES	HDPE	32 TO 110	40 23 19.05, 40 05 33	THERMAL BUTT-FUSION	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NON-POTABLE WATER, COLD (PROCESS EFFLUENT)	W3CW	INTERIOR EXPOSED	< 3 INCH	PVC		40 23 19.05	SOLVENT WELD	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NON-POTABLE WATER, COLD (PROCESS EFFLUENT)	W3CW	INTERIOR EXPOSED	> 3 INCH	DUCTILE IRON CERAMIC EPOXY LINED		40 23 19.05, 40 23 19.04	FLANGED OR RIGID JOINT GROOVED-COUPLED	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	EQUIVALENT STAINLESS STEEL OR MILD STEEL PIPE AS SPECIFIED IN 40 23 19.02 AND 40 23 19.03
NON-POTABLE WATER, COLD (PROCESS EFFLUENT)	W3CW	BURIED	ALL SIZES	HDPE		40 23 19.05, 40 05 33	THERMAL BUTT-FUSION	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NON-POTABLE WATER, HOT (PROCESS EFFLUENT)	W3HW	INTERIOR EXPOSED	< 3 INCH	PVC		40 23 19.05	SOLVENT WELD	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NON-POTABLE WATER, HOT (PROCESS EFFLUENT)	W3HW	INTERIOR EXPOSED	> 3 INCH	DUCTILE IRON CERAMIC EPOXY LINED		40 23 19.05, 40 23 19.04	FLANGED OR RIGID JOINT GROOVED-COUPLED	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	EQUIVALENT STAINLESS STEEL OR MILD STEEL PIPE AS SPECIFIED IN 40 23 19.02 AND 40 23 19.03
NON-POTABLE WATER, HOT (PROCESS EFFLUENT)	W3HW	BURIED	ALL SIZES	HDPE		40 23 19.05, 40 05 33	THERMAL BUTT-FUSION	150	200	BLUE	6-INCH (15 CENTIMETERS) RED BAND SPACED 30 INCHES (76 CENTIMETERS) APART	
NUTRIENT SOLUTION	NS		ALL SIZES	PVC	32 TO 110	40 23 19.05	SOLVENT WELD	150	200	N/A	FEDERAL SAFETY ORANGE WITH BLACK LETTERING	
POTABLE WATER	W1	BURIED	≤ 3 INCH	PVC SCH 80	45 TO 70	33 10 00	SOLVENT WELD OR PUSH-ON	90	135	WHITE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	INSTALL WITH TRACER WIRE AND MARKER TAPE
POTABLE WATER	W1	BURIED	≤ 3 INCH	PE C-901	45 TO 70	33 10 00	ELECTROFUSION	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	INSTALL WITH TRACER WIRE AND MARKER TAPE
POTABLE WATER	W1	BURIED	≥ 4 INCH	PVC C-900	45 TO 70	33 10 00	PUSH-ON / MECHANICAL JOINT	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	INSTALL WITH TRACER WIRE AND MARKER TAPE
POTABLE WATER	W1	ABOVEGROUND	3/4 TO 4	PVC SCH 80		22 11 13	SOLVENT WELD	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	
POTABLE WATER (AFTER BACKFLOW)	W2	ABOVEGROUND	3/4 TO 4	PVC SCH 80		22 11 13	SOLVENT WELD	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	
POTABLE WATER, COLD (AFTER BACKFLOW PREVENTER)	W2CW	ABOVEGROUND	3/4 TO 4	PVC SCH 80		22 11 13	SOLVENT WELD	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	
POTABLE WATER, COLD (AFTER BACKFLOW PREVENTER)	W2CW	ABOVEGROUND	3/4 TO 4	PVC SCH 80		22 11 13	SOLVENT WELD	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	
POTABLE WATER, HOT (AFTER BACKFLOW PREVENTER)	W2HW	ABOVEGROUND	3/4 TO 4	PVC SCH 80		22 11 13	SOLVENT WELD	90	135	BLUE	FEDERAL SAFETY GREEN WITH WHITE LETTERING	
RAW WASTEWATER	RWW	BURIED	ALL SIZES	HDPE	32 TO 110	40 23 19.05, 40 05 33	THERMAL BUTT-FUSION	40	64	N/A	FEDERAL SAFETY ORANGE WITH BLACK LETTERING	
RAW WASTEWATER	RWW	INTERIOR EXPOSED / EXTERIOR ABOVE GRADE	ALL SIZES	STEEL EPOXY LINED	32 TO 110	40 23 19.05, 40 23 19.03	"3-10 IN: GROOVED >10IN: FLANGED, EXCEPT WHERE INDICATED OTHERWISE"	100	150	GRAY	FEDERAL SAFETY ORANGE WITH BLACK LETTERING	
SANITARY SEWER	SAN	INTERIOR EXPOSED, BURIED WITHIN BUILDING FOOTPRINT (ENCASED)	ALL	CAST IRON, CISPI 301	N/A	22 13 16	NO-HUB CISPI 310	N/A	4.34	GRAY	FEDERAL SAFETY ORANGE WITH BLACK LETTERING	
SANITARY SEWER	SAN	BURIED WITHIN BUILDING FOOTPRINT (NON-ENCASED)	ALL	PVC	N/A	22 13 16	SOLVENT WELD	N/A	4.34	GRAY	FEDERAL SAFETY ORANGE WITH BLACK LETTERING	WATER COLUMN TESTING ONLY ON PVC. DO NOT PRESSURE TEST PVC WITH AIR.
SANITARY SEWER	SAN	BURIED, OUTSIDE THE BUILDING FOOTPRINT	4 INCH TO 27 INCH	PVC	32 TO 110	33 30 00	BELL AND SPIGOT	N/A	4.34	GREEN	FEDERAL SAFETY WHITE WITH BLACK LETTERING	WATER COLUMN TESTING ONLY ON PVC. DO NOT PRESSURE TEST PVC WITH AIR.
SANITARY SEWER	SAN	BURIED, OUTSIDE THE BUILDING FOOTPRINT	18 INCH TO 27 INCH	RCP	32 TO 110	33 30 00 / 33 42 16	BELL AND SPIGOT	5	10	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOR PIPES WITH LESS THAN 15 FEET OF COVER
SANITARY SEWER	SAN	BURIED, OUTSIDE THE BUILDING FOOTPRINT	≥ 20 INCH	GFRP	32 TO 110	33 30 00 / 33 30 05	BELL AND SPIGOT	10	15	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOR PIPES WITH 15 FEET OR MORE COVER

NOTES:

[1] PLASTIC PIPING IS NOT PAINTED.

[2] PER UTAH R317-3-4.4(H).

[3] PER ASME A13.1, SCHEME FOR IDENTIFICATION OF PIPING SYSTEMS, TABLE 4.2-1

FILE: C:\Users\smithe1\ACCDocs\AECOM\60572288-Salt Lake City 2019\Project Files\8.00 Detail Design\G\0100-G600_Pipe Schedule.dwg
DATE: 3/29/2023 12:38 PM

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: N.WILSON
DRAWN BY: S. GALBICHKA
CHECKED BY: R.SCHROEDEL
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-IA, ISSUED FOR BID	ES JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PIPE SCHEDULE
SHEET 1 OF 2

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-G601S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

SERVICE	LEGEND	EXPOSURE	SIZE (INCHES)	MATERIAL [4]	MIN/MAX TEMP (DEG F)	SPECIFICATION SECTION	JOINT TYPE	MAX OPERATING PRESSURE (PSI)	TEST PRESSURE (PSI)	PIPE COLOR[1] [2]	PIPE BANDING COLOR[3]	COMMENTS
SANITARY VENT	V	ALL	ALL	CAST IRON, CISPI 301	N/A	22 13 16	NO-HUB CISPI 310	N/A	N/A	LIGHT GRAY	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOR PROCESS AREAS TYPICALLY USE 3" AND GREATER CLASS 53 DIP CERAMIC EPOXY LINED OR LESS THAN 3" 316 SS SCHED 40
STORM DRAIN	SD	BURIED	≥4 INCH TO 48 INCH	PVC	N/A	33 40 00	BELL AND SPIGOT	2.5	5	GREEN	FEDERAL SAFETY WHITE WITH BLACK LETTERING	
STORM DRAIN	SD	BURIED	12 INCH TO 72 INCH	HDPE CORRUGATED	N/A	33 40 00	BELL AND SPIGOT	2.5	5	BLACK	FEDERAL SAFETY WHITE WITH BLACK LETTERING	SMOOTH INTERIOR/CORRUGATED EXTERIOR WITH 15 FEET OR LESS OF COVER AND FLOTATION NOT AN ISSUE.
STORM DRAIN	SD	BURIED	≥12 INCH TO 60 INCH	RCP	N/A	33 40 00	BELL AND SPIGOT	2.5	5	N/A	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOR PIPES WITH 15 FEET MORE OF COVER
STORM SEWER	STW	ALL	ALL SIZES	CAST IRON, CISPI 301	N/A	22 14 13	NO-HUB CISPI 310			LIGHT GRAY	FEDERAL SAFETY WHITE WITH BLACK LETTERING	FOR PROCESS AREAS TYPICALLY USE 3" AND GREATER CLASS 53 DIP CERAMIC EPOXY LINED OR LESS THAN 3" 316 SS SCHED 40

NOTES:

[1] PLASTIC PIPING IS NOT PAINTED.

[2] PER UTAH R317-3-4.4(H).

[3] PER ASME A13.1, SCHEME FOR IDENTIFICATION OF PIPING SYSTEMS, TABLE 4.2-1

SCALE: NO SCALE

PROJECT ADDRESS:
1363 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: N.WILSON
DRAWN BY: S. GALBICHKA
CHECKED BY: R.SCHROEDEL
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	ES	JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PIPE SCHEDULE
SHEET 2 OF 2

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-G602S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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LINE TYPES

- PRIMARY PIPE / DUCT LINE
- SECONDARY PIPE / DUCT LINE
- EXISTING PIPE / DUCT LINE
- FUTURE PIPE / DUCT LINE
- x — NEW FENCE
- x — EXISTING FENCE
- E/P — NEW EDGE OF PAVEMENT
- NEW CURB AND GUTTER
- CONTRACT DIVIDE LINE
- B — GRADE BREAK LINE
- R — RIDGE LINE
- AA — EXISTING AERATION AIR LINE
- ALP — EXISTING AIR LOW PRESSURE LINE
- CLS — EXISTING CHLORINE SOLUTION LINE
- 12" DRA — EXISTING DRAIN LINE
- FO — EXISTING FIBER OPTIC LINE
- F — EXISTING FIRE LINE
- FM — EXISTING FORCEMAIN LINE
- G — EXISTING NATURAL GAS LINE
- 8" HS — EXISTING HAULED SEPTAGE LINE
- IRR — EXISTING IRRIGATION LINE
- LOD — LIMITS OF DISTURBANCE
- ML — EXISTING MIXED LIQUOR LINE
- 4" MS — EXISTING MIXED SLUDGE LINE

LINE TYPES

- OF — EXISTING OVERFLOW LINE
- op — EXISTING OVERHEAD POWER LINE
- PD — EXISTING PROCESS DRAIN LINE
- PSD — EXISTING PRIMARY SLUDGE LINE
- 30" RAS — EXISTING RETURN ACTIVATED SLUDGE LINE
- SAN — EXISTING SANITARY SEWER LINE
- SC — EXISTING SCUM LINE
- SD — EXISTING STORM DRAIN LINE
- SE — EXISTING SECONDARY EFFLUENT LINE
- SEC — EXISTING SECONDARY TREATMENT BY-PASS LINE
- SPD — EXISTING SUMP PUMP DISCHARGE LINE
- SS — EXISTING SEWER LINE
- SUP — EXISTING SUPERNATANT RETURN LINE
- 60" TFE — EXISTING TRICKLING FILTER EFFLUENT LINE
- TPS — EXISTING THICKENED PRIMARY SLUDGE LINE
- UP — EXISTING UNDERGROUND POWER LINE
- UT — EXISTING TELECOMMUNICATIONS LINE
- W — EXISTING WATER LINE
- WAS — EXISTING WASTE ACTIVATED SLUDGE LINE
- 2" W1 — EXISTING W1 LINE
- 3" W3 — EXISTING W3 LINE
- V — EXISTING UNDERGROUND VENT PIPE
- 4214 — EXISTING CONTOUR
- 4216 — FUTURE CONTOUR
- HANDICAP ACCESSIBLE ROUTE
- 2% — SLOPE DIRECTION AND GRADE

DRAWING IDENTIFICATION

REFERENCE

VIEW REFERENCE
SEE SHEET 99-000-D888 — SHEET NUMBER

KEYNOTE

KEYNOTE NUMBER — ##

COORDINATE LABEL

COORDINATE NUMBER — ###

PROFILE SHEET SEPARATOR

SHEET NUMBER — XXXX-XXXX | XXXX-XXXX — SHEET NUMBER

HATCH TYPES

CONTRACT COLORS

- CONFORMED SET
- FUTURE EXPANSION

PAVEMENT TYPES

- AC PAVEMENT
- CONCRETE

DRAWING SYMBOLS

- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING MONUMENT
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- NEW WATER VALVE
- SANITARY SEWER MAINTENANCE HOLE
- STORM DRAIN MAINTENANCE HOLE
- EXISTING GAS VALVE
- NEW GAS VALVE
- TREE / VEGETATION
- NEW TRANSFORMER
- NEW ELECTRICAL BOX
- NEW COMMUNICATIONS BOX
- NEW BURIED VALVE BOX
- NEW DRAINAGE AREA INLET
- NEW CATCH BASIN
- NEW STORM DRAIN CLEANOUT BOX
- NEW OVERHEAD DOOR
- NEW SINGLE DOOR
- NEW DOUBLE DOOR
- NEW PRECAST MODULAR RETAINING WALL

SCALE: NTS

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M.CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: --

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL LEGEND

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C001S

SHEET _____ OF _____

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: H:\Projects\407 - AECOM\03.100 SLCWRF Upgrades\Task 8 Design\CAD\Working\20.SHEETS\10_Forcemain_PS\10_General\524905350_0100-C001S.dwg DATE: 3/29/2023 3:56 PM

GENERAL NOTES

1. HORIZONTAL DATUM IS BASED ON NAD 83 UTAH STATE PLANE CENTRAL US SURVEY FEET AND THE VERTICAL DATUM IS BASED ON NAVD88.

2. EXISTING UTILITY BACKGROUNDS ARE BASED OFF REVIEW OF EXISTING RECORD DOCUMENTS AND FIELD INVESTIGATIONS BY ENGINEER. EXISTING LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY CONTRACTOR.

3. CONTRACTOR TO CONFIRM LOCATION OF EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE DURING CONSTRUCTION OPERATIONS. IF AN EXISTING UTILITY OR NEW UTILITY NEEDS TO BE REMOVED, REPLACED, ABANDONED OR RELOCATED, CONTRACTOR WILL ADVISE ENGINEER IMMEDIATELY FOR GUIDANCE.

4. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SITE SAFETY DURING CONSTRUCTION ASSOCIATED WITH THE WORK OF THIS PROJECT WHETHER DURING NORMAL WORK HOURS OR AFTER NORMAL WORK HOURS, WEEKENDS AND HOLIDAYS.

5. CONTRACTOR SHALL UNDERSTAND AND COMPLY WITH ALL REQUIREMENTS FOR WORK WITHIN THE EXISTING WRF AND CITY ROW AND PROPERTY.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ACTIVITIES WITH PUBLIC AND PRIVATE AGENCIES; OPERATION OF THE EXISTING WRF AND OFFSITE WASTEWATER CONVEYANCE PIPELINES AND OTHER CONTRACTORS WORKING WITHIN THE PROJECT AREA.

7. CONTRACTOR SHALL PERFORM HIS WORK IN A MANNER THAT MINIMIZES DISRUPTION OF PUBLIC AND PRIVATE SERVICES.

8. CONTRACTOR IS RESPONSIBLE FOR OBTAINING BUILDING AND CONSTRUCTION PERMITS FROM THE CITY WHICH ARE NECESSARY FOR PERFORMANCE OF THE WORK INCLUDING PAYMENT OF ALL ASSOCIATED FEES.

9. THE INFLUENT PUMP STATION (IPS) IS A FULLY FUNCTIONAL AND OPERATING FACILITY 24 HOURS PER DAY, 7 DAYS PER WEEK. MATERIAL AND SUPPLY DELIVERIES ARE REQUIRED TO MAINTAIN IPS OPERATIONS. CITY EMPLOYEES MUST HAVE ACCESS TO THE FACILITIES AT ALL TIMES TO MAINTAIN OPERATING SERVICE.

10. THESE DRAWINGS REFERENCE THE APWA STANDARD 2017 SPECIFICATIONS AND PLANS AS PUBLISHED BY UTAH T2 CENTER (435) 797-2931. CONTRACTOR SHALL BE REQUIRED TO OBTAIN SUFFICIENT COPIES OF THE STANDARD SPECIFICATIONS LISTED ABOVE TO BE UTILIZED AS A REFERENCE TO THE ATTACHED CONSTRUCTION DRAWINGS. SAID SPECIFICATIONS SHALL BE CONSIDERED PART OF THE OVERALL PROJECT DESIGN AND CONSTRUCTION DOCUMENTS BY MENTION HEREIN. ANY CONFLICT BETWEEN THE APWA STANDARD SPECIFICATIONS AND THE PROJECT TECHNICAL SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

11. FIRE HYDRANT VEHICLE IMPACT PROTECTION SHALL BE PROVIDED BY INSTALLATION OF POSTS THAT MEET THE REQUIREMENTS OF IFC 312.2. POSTS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
    - 11.1. CONSTRUCTED OF STEEL NOT LESS THAN 6 INCHES IN DIAMETER FILLED WITH CONCRETE.
    - 11.2. SPACED NOT MORE THAN 4 FEET BETWEEN POSTS ON CENTER.
    - 11.3. SET NOT LESS THAN 3 FEET DEEP IN A CONCRETE FOOTING OF NOT LESS THAN 18-INCH DIAMETER.
    - 11.4. LOCATED NOT LESS THAN 3 FEET FROM THE FIRE HYDRANT.

EXISTING WRF OPERATING CONSTRAINTS

1. THE EXISTING IPS AND ALL ASSOCIATED PROCESS PIPE AND ACCESSIBILITY TO THE IPS SHALL BE MAINTAINED IN CONTINUOUS 24 HOUR A DAY OPERATION EXCEPT FOR ALLOWABLE INTERRUPTIONS OR TEMPORARY SHORT DURATION SHUT-DOWNS SCHEDULED IN ADVANCED AS APPROVED BY THE OWNER AS SPECIFIED.

2. ONLY IPS OPERATIONS/EMPLOYEES SHALL OPERATE EXISTING, ACTIVE EQUIPMENT, PIPELINES, AND PIPELINE STOP LOGS FOR TEMPORARY INTERRUPTIONS OF SERVICE, FOR APPROVED SHUT-DOWNS, AND TO RE-START SERVICE AFTER SHUT-DOWNS.

3. CONTRACTOR SHALL SUBMIT AND COORDINATE ANY EXISTING SYSTEM SERVICE INTERRUPTIONS IN WRITING TO THE CITY AND WRF OPERATIONS FOR REVIEW AND APPROVAL IN SUFFICIENT ADVANCE OF THE PROPOSED SERVICE INTERRUPTION AS SPECIFIED.

PROTECTION OF WORK AND PROPERTY

1. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITIES, STRUCTURES, IMPROVEMENTS, MONUMENTS AND BENCHMARKS AFFECTED BY THE WORK NOT DESIGNATED FOR DEMOLITION OR REMOVAL AND REPLACEMENT. ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE AFFECTED OWNER, PUBLIC AGENCIES, PRIVATE ENTITIES AND THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

2. CONTRACTOR SHALL IMPLEMENT PROCEDURES TO MINIMIZE EROSION OF AREAS DISTURBED BY THE WORK IN ACCORDANCE WITH CITY STORMWATER MANAGEMENT PERMIT. CONTRACTOR SHALL MAINTAIN ALL DISTURBED AREAS UNTIL NATIVE VEGETATION IS RE-ESTABLISHED TO THE SATISFACTION OF THE CITY.

3. DESIGNATED WETLAND AREAS EXIST ON THE PROJECT SITE AND SHALL BE PROTECTED AS SPECIFIED.

GAS, ELECTRIC, TELEPHONE, & FIBER OPTIC LINES

1. CONTRACTOR ASSUMES RESPONSIBILITY FOR WORKING AROUND AND PROTECTING ALL UTILITIES AND WRF PROCESS PIPE WHETHER SHOWN ON THE DRAWINGS OR NOT. EXISTING BURIED UTILITIES AND STRUCTURE LOCATIONS ARE APPROXIMATE AND MAY NOT REPRESENT ALL BURIED UTILITIES, WRF PROCESS PIPE OR STRUCTURES PRESENT.

2. CONTRACTOR TO VERIFY BY POTHOLING WITH NON-DESTRUCTIVE METHODS ALL UNDERGROUND UTILITIES AND KNOWN UTILITY CROSSING OR ADJACENT UTILITIES PRIOR TO CONSTRUCTION.

3. WHEN WORK IS PERFORMED ADJACENT TO OVERHEAD HIGH-POWER LINES AND WITHIN OR ADJACENT TO THEIR RIGHT OF WAY THE CONTRACTOR SHALL CALL THE AFFECTED AGENCY 72 HOURS IN ADVANCE TO SCHEDULE ALL MONITORING AND OBSERVATION OF THE WORK.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.BERZINS
DRAWN BY: B.WILD
CHECKED BY: S.BERZINS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISY-1A, ISSUED FOR BID	LMR	SB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL
GENERAL NOTES

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C002S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\lindsay.reid\OneDrive - AECOM\Documents_Projects\SLC WRF\910-CAD\20-SHEETS\10_Forcemain-IPS\0_General\524905360_0100-C002S.dwg DATE: 3/30/2023 7:32 AM

GENERAL:

G1. SCOPE
THE NOTES ON THIS SHEET AND STRUCTURAL DETAILS ARE TYPICAL AND APPLY TO THE ENTIRE PROJECT WHETHER SPECIFICALLY CALLED OUT OR NOT, EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY ON STRUCTURAL SHEETS. IF THERE ARE QUESTIONS, THEY SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ANSWERED IN WRITING PRIOR TO CONSTRUCTION.

G2. APPLICABLE SPECIFICATIONS AND CODES
- A. INTERNATIONAL BUILDING CODE (IBC) 2018 WITH APPLICABLE EDITIONS OF THE CODE REFERENCED STANDARDS.
- B. ACI 318-14
- C. ACI 350-06
- D. ASCE 7-16
- E. AISC 360-16
- F. LOCAL JURISDICTION AMENDMENTS

G3. DESIGN CRITERIA
APPLIES TO ALL STRUCTURES (UNO)
- A. RISK CATEGORY:
  1. RISK CATEGORY III APPLIES TO: ALL BUILDINGS NOT LISTED BELOW IN RISK CATEGORY IV
  2. RISK CATEGORY IV APPLIES TO: INFLUENT PUMP STATION, IPS ELECTRICAL BUILDING, STAND-BY POWER AND FUEL STORAGE, AND TRANSFORMER FOUNDATIONS ASSOCIATED WITH THESE BUILDINGS
- B. DEAD LOAD:
  1. ROOF DEAD LOADS
     a. STRUCTURE WEIGHT
     b. ROOFING AND INSULATION: 15 PSF
     c. HVAC DUCTWORK, PLUMBING, AND LIGHTING: 10 PSF
     d. FIRE SPRINKLER SYSTEM: 5 PSF WHERE NOTED
     e. MISC. PROCESS PIPE LOADS: 10 PSF
  2. FLOOR DEAD LOADS
     a. STRUCTURE WEIGHT
     b. HVAC DUCTWORK, PLUMBING, AND LIGHTING: 10 PSF
     c. FIRE SPRINKLER SYSTEM: 5 PSF PSF WHERE NOTED
     d. MISC. PROCESS PIPE LOADS: 10 PSF
- C. LIVE LOAD:
  1. ROOF: 40 PSF (NOT REDUCIBLE)
  2. PROCESS AREAS
     a. LOAD CASE 1: 200 PSF
     b. LOAD CASE 2: EQUIPMENT + 50 PSF AROUND EQUIPMENT
     c. LOAD CASE 3: MAXIMUM FORK LIFT WHEEL LOADS
  3. MECHANICAL ROOM: 150 PSF
  4. STORAGE AREAS: 250 PSF
  5. CORRIDORS, WALKWAYS, STAIRS, GRATING, CHECKER PLATE, CATWALKS, PLATFORMS: 100 PSF
  6. ELECTRICAL ROOM: 300 PSF
  7. VEHICLE LOADING: HS20 TRUCK
  8. SLAB ON GRADE, NON-VEHICLE AREAS: 200 PSF
- D. WIND:
  1. ULTIMATE DESIGN WIND SPEED: 110 MPH FOR RISK CATEGORY III STRUCTURES, 115 MPH FOR RISK CATEGORY IV STRUCTURES
  2. EXPOSURE: C
     a. FOR OTHER FACILITIES SEE DRAWINGS
- E. SEISMIC:
  ABOVE GRADE, NON WATER BEARING STRUCTURES:
  1. IMPORTANCE FACTOR, Ie = 1.25 FOR RISK CATEGORY III STRUCTURES, 1.5 FOR RISK CATEGORY IV STRUCTURES
  2. SITE CLASS: E
  3. SPECTRAL RESPONSE COEFFICIENT, SDS = 0.830
  4. SPECTRAL RESPONSE COEFFICIENT, SD1 = 1.200
- F. SNOW LOAD:
  1. GROUND SNOW LOAD = 43 PSF
  2. EXPOSURE COEFFICIENT, Ce = 1.0
  3. THERMAL COEFFICIENT, Ct = 1.0
  4. IMPORTANCE FACTOR, Is=1.2
  5. FLAT ROOF SNOW LOAD, Ps=33.1 PSF

G4. GEOTECHNICAL REPORT
THE FOLLOWING GEOTECHNICAL REPORTS WERE DEVELOPED FOR THIS PROJECT AND ARE THE BASIS OF THIS FOUNDATION DESIGN:
- A. GEOTECHNICAL REPORT: LIQUID TRAIN GEOTECHNICAL EVALUATION PREPARED BY AECOM AUGUST 2022

G5. SAFETY
- A. SAFETY AND STRUCTURE STABILITY DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LIVE LOADS ONLY AS A COMPLETED STRUCTURE. PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY DURING CONSTRUCTION.
- B. SHORING AND RESHORING OF ELEVATED STRUCTURAL SLABS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL SUBMIT DOCUMENTS SHOWING METHOD OF SHORING TO THE ENGINEER FOR REVIEW.

G6. OPENINGS
- A. OPENINGS FOR PIPES, DUCTS, CONDUITS, ETC. ARE NOT ALL SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE AND PROVIDE OPENINGS AS REQUIRED TO ACCOMMODATE ALL WORK SHOWN OR SPECIFIED IN THE CONTRACT DOCUMENTS AND OTHERWISE REQUIRED FOR THE FURNISHING OF A FUNCTIONALLY COMPLETE PROJECT. REINFORCE AROUND OPENINGS PER STANDARD STRUCTURAL DETAILS UNLESS OTHERWISE SHOWN.
- B. COORDINATE FINAL SIZE AND LOCATION OF ALL OPENINGS WITH THE ACTUAL EQUIPMENT SUPPLIED, PROJECT REQUIREMENTS, AND WITH FIELD CONDITIONS.
- C. THE ENGINEER OF RECORD PERMITS NO OPENINGS OR ALTERATIONS THROUGH BEAMS OR COLUMNS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED IN WRITING.

G7. STANDARD DETAILS
THE STANDARD DETAILS DEPICT TYPICAL DETAILING TO BE USED ON THIS PROJECT. IF CONDITIONS ARE NOT EXPLICITLY SHOWN ON THE DRAWINGS THEY SHALL BE MADE SIMILAR TO THE STANDARD DETAILS. OBTAIN APPROVAL OF ENGINEER IN WRITING FOR SIMILAR CONDITIONS PRIOR TO CONSTRUCTION.
- A. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO START OF CONSTRUCTION AS REQUIRED TO COORDINATE NEW CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN CONTRACT DOCUMENTS AND/OR FIELD CONDITIONS.
- B. CONTRACTOR TO SUBMIT FOR REVIEW ALL EQUIPMENT SIZES, OPERATING WEIGHTS, VIBRATION FORCES, SUPPORT LOCATIONS, ALONG WITH ANY FLOOR OPENINGS, NOTCHES, AND RECESSES REQUIRED BY SUCH EQUIPMENT. CONCRETE SUPPORT PADS AND/OR FRAMING REQUIRED TO SUPPORT SAID EQUIPMENT SHALL NOT BE FABRICATED AND PLACED UNTIL THE CONCRETE SUPPORT PADS AND/OR FRAMING IS APPROVED TO SUPPORT THE EQUIPMENT.
- C. SEE CIVIL DRAWINGS FOR ALL EXTERIOR PAVING AND FLATWORK.
- D. ALL WATERSTOPS SHALL BE 6 IN PVC, UNLESS NOTED OTHERWISE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ALL WATERSTOPS CONTINUOUS AND ALL JOINTS LEAK-FREE, AS REQUIRED.
- E. SHOP DRAWINGS SHALL BE FURNISHED FOR REVIEW BEFORE ANY FABRICATION AND ERECTION. POORLY EXECUTED SHOP DRAWINGS SHALL BE REJECTED AND RESUBMITTED.

CONCRETE:

C1. CAST-IN-PLACE CONCRETE SEE SPECIFICATION 03 30 00. f'c = 5000 PSI

C2. ALL SPLICES SHALL BE CLASS B, TENSION LAPS UNLESS NOTED ON PLAN.

C3. REINFORCING BARS SHALL HAVE MATCHING CORNER BARS.

C4. BEAM TOP BARS THAT ARE NOTED AS "CONT" MAY BE SPLICED AT MID-SPAN ONLY.

C5. BEAM BOTTOM BARS THAT ARE NOTED AS "CONT" MAY BE SPLICED AT SUPPORTS ONLY.

C6. DOWEL CONCRETE WALLS AND PIERS INTO FOOTINGS AND BASE SLABS WITH DOWELS THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENT. EXTEND DOWELS TO WITHIN 3" OF BOTTOM OF FOOTING, TERMINATED WITH ACI STD. 90 DEGREE HOOK, UNLESS OTHERWISE NOTED.

C7. CONCRETE COVER
UNLESS OTHERWISE NOTED, PROVIDE CONCRETE COVER FOR REINFORCING ACCORDING TO DETAIL S008S/0100-S702.

C8. SEE SPECIFICATIONS FOR REINFORCING PLACEMENT REQUIREMENTS.

C9. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE AMERICAN CONCRETE INSTITUTE STANDARDS. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), AND "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES AND COMMENTARY" (ACI 350).

C10. ALL CONCRETE SHALL BE PLACED IN CONFORMANCE WITH ACI 117-10 "SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS AND COMMENTARY."

C11. FORMED CONSTRUCTION JOINTS SHALL BE KEYED, CONSTRUCTION JOINTS AT UNFORMED SURFACES OR INTERSECTIONS SHALL BE INTENTIONALLY ROUGHENED TO 1/4" MINIMUM AMPLITUDE, SEE STANDARD DETAILS.

C12. REFER TO OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION FOR EMBEDDED ITEMS AND PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWINGS, AS REQUIRED TO ACCOMMODATE ALL WORK SHOWN OR SPECIFIED IN THE CONTRACT DOCUMENTS AND OTHERWISE REQUIRED FOR THE FURNISHING OF A FUNCTIONALLY COMPLETE PROJECT. REINFORCE AROUND OPENINGS PER STANDARD STRUCTURAL DETAILS UNLESS OTHERWISE SHOWN.

C13. CONDUITS AND PIPES SHALL BE EMBEDDED WITHIN AN ELEVATED SLAB OR BEAM, AS INDICATED IN THE TYPICAL DETAILS.

C14. CONDUITS AND PIPING EMBEDDED IN CONCRETE SHALL BE SPACED TO ALLOW A MINIMUM OF 4" BETWEEN THE CONDUITS OR PIPING, UNLESS OTHERWISE NOTED.

C15. UNLESS NOTED OTHERWISE PROVIDE 3/4"X3/4" CHAMFERS AT ALL EXPOSED EDGES AND 1/2" CHAMFERS AT JOINTS. NOT ALL CHAMFERS MAY BE SHOWN ON DRAWINGS.

C16. FIELD ADJUST REINFORCING AT OPENINGS AND EMBEDDED ITEMS AS INDICATED.

C17. ANCHOR BOLTS NOT SPECIFIED BY ENGINEER SHALL BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER, RETAINED BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE PROJECT AND CODE REQUIREMENTS. SUBMIT AS A SHOP DRAWING FOR REVIEW AND APPROVAL BY THE ENGINEER. COORDINATE LOCATION, SIZE AND EMBEDMENT PRIOR TO CASTING CONCRETE.

C18. ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT SPECIFIC APPROVAL FROM THE STRUCTURAL ENGINEER.

C19. CONTRACTOR SHALL SUBMIT A CONCRETE PLACEMENT PLAN FOR REVIEW IDENTIFYING JOINT TYPES, JOINT LOCATIONS AND CONCRETE PLACEMENT SEQUENCE.

C20. CONSTRUCTION JOINTS SHOWN ON PLAN HAVE BEEN LAID OUT TO ENSURE PROPER STRUCTURAL PERFORMANCE AND STRUCTURAL SERVICEABILITY. THE CONTRACTOR MAY NEED TO ADD OR ALTER THE CONSTRUCTION JOINT LAYOUT TO ENABLE PROPER CONCRETE FINISHING.

C21. ALL CAST IN PLACE AND POST-INSTALLED ANCHORS INDICATED IN THE STRUCTURAL DOCUMENTS SHALL COMPLY WITH ACI 318 AND CHAPTER 19 OF THE IBC. ALL EXPANSION AND ADHESIVE ANCHORS SHALL HAVE THE ICC REPORT SHOWING EQUIVALENT LOAD CAPACITY. SUBMIT AND INSTALL PER THE ICC EVALUATION REPORT.

C22. POST-INSTALLED DRILL AND EPOXY ANCHORS INTO CONCRETE SHALL BE PER SPECIFICATION.

C23. PRIOR TO INSTALLING POST INSTALLED ANCHORS INTO CONCRETE, THE CONTRACTOR SHALL LOCATE REINFORCING. DO NOT DAMAGE CONCRETE REINFORCING.

C24. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY LEAKS IN WATER BEARING STRUCTURES UTILIZING EPOXY INJECTION MATERIALS.

STEEL:

S1. MATERIALS SHALL CONFORM TO THE STANDARDS LISTED:
- A. WIDE FLANGE: ASTM A992, GRADE 50 (Fy=50 KSI)
- B. HSS SECTIONS: ASTM A500, GRADE B (Fy=46 KSI FOR RECTANGLES)
- C. PLATES, ANGLES, CHANNELS, S SHAPES: ASTM A36, GRADE 36 (Fy=36 KSI)
- D. PIPES: ASTM A501 (Fy=35 KSI)
- E. ANCHOR RODS: ASTM F1554, GRADE 36
- F. STRUCTURAL BOLTS: ASTM F3125, GRADE 325
- G. NON-STRUCTURAL BOLTS: ASTM A307

S2. BOLTED CONNECTIONS UNLESS NOTED OTHERWISE:
- A. STRUCTURAL: 3/4" DIAMETER MIN TYPE N (TENSION CONTROL), FULL DEPTH CONNECTION, (2) BOLTS MINIMUM
- B. ANCHOR RODS: 3/4" DIAMETER MIN (4) BOLTS MINIMUM, MINIMUM 12" EMBED INTO CONCRETE, PROJECTION ABOVE CONCRETE, AS REQUIRED.
- C. NON-STRUCTURAL: 5/8" DIAMETER MIN

S3. DIMENSIONS: TO CENTERLINES OF COLUMNS AND BEAMS, TOP SURFACES OF BEAMS AND TUBES AND BACKS OF CHANNELS AND ANGLES UNO.

S4. ELEVATIONS: TOP OF STEEL REFERS TO TOP SURFACE OF MEMBER OR FLANGE UNLESS OTHERWISE NOTED.

S5. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS AND SHALL BE DONE IN ACCORDANCE WITH THE LATEST STANDARDS OF THE AWS AND AISC. INSPECT ALL WELDING IN ACCORDANCE WITH THE SPECIAL INSPECTIONS AND SPECIFICATIONS.

S6. WHEN FILLET WELD SIZE IS NOT INDICATED, PROVIDE MAXIMUM WELD SIZE BASED ON CONNECTED MATERIAL THICKNESSES IN ACCORDANCE WITH AISC SPECIFICATIONS.

S7. ALL BOLTED STRUCTURAL CONNECTIONS ARE BEARING TYPE CONNECTIONS UNLESS OTHERWISE SPECIFIED TO BE SLIP-CRITICAL. PROVIDE LOAD INDICATING WASHERS AT SLIP CRITICAL CONNECTIONS.

S8. ALL STRUCTURAL STEEL FABRICATION AND ERECTION SHALL CONFORM TO AISC 360, STEEL CONSTRUCTION MANUAL AND AISC 341, SEISMIC DESIGN MANUAL.

S9. ALL STEEL BEAMS SHALL RECEIVE STANDARD CAMBER PER THE SPECIFICATIONS UNLESS NOTED OTHERWISE ON THE PLANS. BEAMS REQUIRING SPECIAL CAMBER ARE DENOTED ON THE BEAMS SHOWN ON THE FRAMING PLANS. EXAMPLE: (+1/2") INDICATES 1/2". PLACE NATURAL CAMBER OF BEAMS UPWARD.

S10. PROVIDE 3/8" STIFFENER PLATES ON EACH SIDE OF THE WEB OF ALL BEAMS AT ALL SUPPORTS THAT ARE BELOW THE BEAM, AND AT ALL COLUMNS THAT ARE ABOVE THE BEAM. OMITTING WHERE BEAMS INTERSECT.

S11. ALL STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AND A153. ALL DAMAGED GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.

S12. DO NOT PAINT STEEL TO BE ENCASED IN CONCRETE, CONTACT SURFACES OF FRICTION TYPE CONNECTIONS, AREAS WITHIN 2 INCHES OF FIELD WELDS, MACHINE FINISHED SURFACES, TOP FLANGES OF BEAMS TO RECEIVE SHEAR STUD CONNECTORS, AND STEEL THAT IS TO BE FIREPROOFED.

S13. SEE ARCHITECTURAL DRAWINGS FOR FIREPROOFING AND PAINTING OF STRUCTURAL STEEL.

S14. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT ENGINEER'S ACCEPTANCE.

ALUMINUM:

A1. STRUCTURAL ALUMINUM: SEE SPECIFICATION 05 14 05

A2. BOLTED CONNECTIONS: TYPE 304 (TYPE 316 SS IN SUBMERGED LOCATIONS) STAINLESS STEEL BOLTS, 3/4" DIAMETER MINIMUM, (2) BOLTS MINIMUM WHERE PATTERN NOT INDICATED.

A3. WELDED CONNECTIONS: WHEN FILLET WELD SIZE IS NOT INDICATED, PROVIDE MAXIMUM WELD SIZE FOR THE CONNECTED MATERIAL THICKNESSES IN ACCORDANCE WITH THE LATEST EDITION OF THE "ALUMINUM DESIGN MANUAL" BY THE ALUMINUM ASSOCIATION.

A4. DIMENSIONS: TO CENTERLINES OF COLUMNS AND BEAMS, TOP SURFACES OF BEAMS AND TUBES AND BACKS OF CHANNELS AND ANGLES UNO.

A5. ELEVATIONS: TOP OF ALUMINUM REFERS TO TOP SURFACE OR FLANGE OF MEMBER UNO.

A6. ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS OR CONCRETE:
- A. CONTACT SURFACES SHALL BE PROVIDED WITH GALVANIC SEPARATION PER SPECIFICATIONS.

A7. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT ENGINEER'S ACCEPTANCE.

GRATING NOTES:

G1. SEE SPECIFICATION FOR GRATINGS.

G2. GRATING SHALL COMPLY WITH APPLICABLE PROVISIONS AND RECOMMENDATIONS OF THE FOLLOWING:
- A. NAAMM METAL BAR GRATING MANUAL DESIGNATED ANSI/NAAMM MBG 531 "ALUMINUM AND LIGHT DUTY STEEL AND STAINLESS STEEL GRATING" AND MBG 532 "HEAVY DUTY STEEL GRATING"

G2. PERIMETER STEEL FRAMES SHALL BE PROVIDED BY MANUFACTURER OF APPROVED GRATING SYSTEM. FRAME ASSEMBLIES SHALL BE SHOP FABRICATED WITH MITER CUTS AND WELDED CORNERS AND SHALL BE SIZED TO MATCH GRATING DEPTH. ALL EXPOSED WELDS SHALL BE GROUND SMOOTH.

FOUNDATION, EXCAVATION, AND BACKFILL:

F1. REFER TO SPECIFICATIONS FOR ADDITIONAL SITE PREPARATION AND FOUNDATION SUPPORT REQUIREMENTS.

F2. SITE DRAINAGE:
- A. POSITIVE SURFACE DRAINAGE AWAY FROM BOTH EXISTING STRUCTURES AND NEW FOUNDATION EXCAVATIONS SHOULD BE PROVIDED DURING CONSTRUCTION.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND SUBGRADE STABILIZATION.

F3. BACKFILL FOUNDATION STEM WALLS EQUALLY ON EACH SIDE.

F4. DO NOT BACKFILL UNTIL CONCRETE STRENGTH HAS REACHED SPECIFIED 28 DAY STRENGTH.

F5. ALL BELOW GRADE FOUNDATION ELEMENTS ARE DESIGNED WITH FORMED SIDES, UNLESS OTHERWISE NOTED. ALL CONCRETE EXPOSED TO VIEW IN THE FINAL CONDITION SHALL BE FORMED.

PRE-ENGINEERED METAL BUILDINGS:

PEMB1. PRE-ENGINEERED METAL BUILDINGS FOUNDATIONS SHALL NOT BE CONSTRUCTED UNTIL PRE-ENGINEERED METAL BUILDING SHOP DRAWINGS ARE REVIEWED AND ACCEPTED BY THE ENGINEER.

DEFERRED SUBMITTALS:

PDS1. DEFERRED SUBMITTALS ARE THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF PERMIT APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE PERMITTING AGENCY FOR ACCEPTANCE PRIOR TO INSTALLATION OF THAT PORTION OF THE WORK.

PDS2. THE FOLLOWING IS A LIST OF DEFERRED SUBMITTALS PER IBC SECTION 107.3.4.1 THAT ARE EXPECTED TO CONTAIN STRUCTURAL CALCULATIONS OR SAFETY RELATED SYSTEM INFORMATION FOR REVIEW TO MEET BUILDING PERMITTING REQUIREMENTS FOR DESIGNED SYSTEMS. PRIOR TO INSTALLATION OF THE INDICATED STRUCTURAL ELEMENT, EQUIPMENT, DISTRIBUTION SYSTEM, OR COMPONENT OR ITS ANCHORAGE THE CONTRACTOR SHALL COMPLETE THE REQUIRED CALCULATIONS, SUPPORTING DATA, AND DRAWINGS. THE CALCULATIONS WILL NOT BE SUBMITTED TO THE ENGINEER OR OWNER. INSTEAD, THE CONTRACTOR WILL PROVIDE TO THE OWNER A LETTER CERTIFYING THE CALCULATIONS AND DESIGN WERE COMPLETED, ALONG WITH DRAWINGS SEALED BY A UTAH PROFESSIONAL ENGINEER. IF REQUIRED BY A PERMITTING AGENCY, THE COMPLETED FINAL CALCULATIONS, DATA, AND DRAWINGS SHALL BE FILED BY THE CONTRACTOR AND ACKNOWLEDGED AS ACCEPTED BY THE PERMITTING AGENCY PRIOR TO INSTALLATION OF THESE ITEMS:
- A. HANDRAIL AND GUARDRAIL SYSTEMS
- B. METAL STAIR/PLATFORM, SUPPORT, AND LANDING SYSTEM
- C. PIPE SUPPORTS < 12" DIAMETER
- D. ANY EQUIPMENT OR COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF ANCHORAGE SYSTEM CALCULATIONS.
- E. FRP GRATING AND FRP SUPPORT MEMBERS.
- F. PRE-ENGINEERED METAL BUILDING SYSTEMS.

DATE: 3/30/2023 9:23:55 AM

FILE: BIM 360://6057228-Salt Lake City 2019/5249055O_0100-S001.rvt

SCALE: 1" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.PAULS
DRAWN BY: R.PITTMAN
CHECKED BY: R.HAWTHORNE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905O36

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	RP	SP

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

STRUCTURAL GENERAL NOTES

LICENSED PROFESSIONAL ENGINEER
No. 379242
ROBERT E. HAWTHORNE
STATE OF UTAH
04-03-2023

DRAWING No.
0100-S001S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS PER IBC 2018

1. SPECIAL INSPECTIONS / TESTING -

   "SPECIAL STRUCTURAL INSPECTIONS" ARE NOT TO BE CONFUSED WITH, NOR RELIEVE THE OWNER OR OWNER'S AGENT FROM THE JURISDICTION BUILDING DEPARTMENT INSPECTIONS REQUIRED BY IBC SECTION 110. SPECIAL INSPECTIONS DO NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. MEANS AND METHODS AND JOBSITE SAFETY ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.

2. REPORTING FOR SPECIAL INSPECTION -

   SPECIAL INSPECTION AND TESTING REPORTS SHALL BE COMPLETED AND DISTRIBUTED ON A WEEKLY BASIS. REPORT DEFICIENCIES THAT HAVE NOT BEEN RESOLVED IMMEDIATELY. PROVIDE COPIES OF REPORTS TO: CONTRACTOR, OWNER, ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.SPECIAL INSPECTOR TO KEEP A NON-COMPLIANCE LIST DOCUMENTING ITEMS INSPECTED NOT MEETING APPROVED CONSTRUCTION DOCUMENTS AND WHEN / HOW RESOLVED.

3. REFER TO IBC SECTION 1705 AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONSTRUCTION DOCUMENTS FOR ADDITIONAL NON-STRUCTURAL SPECIAL INSPECTION ITEMS.

4. ANY FABRICATOR NEEDS TO BE APPROVED BY THE JURISDICTION BUILDING DEPARTMENT OR BE CERTIFIED BY AN INDUSTRY RECOGNIZED AGENCY QUALIFIED FOR SUCH CERTIFICATION. CERTIFICATION OF FABRICATORS ARE TO BE PROVIDED TO THE STRUCTURAL ENGINEER. THE SPECIAL INSPECTION ITEMS CONTAINED HEREIN ARE REQUIRED FOR ALL NON-CERTIFIED FABRICATORS

5. DEFINITION OF "PERIODIC" AND "CONTINUOUS" SPECIAL INSPECTIONS:
   - CONTINUOUS: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
   - PERIODIC: THE PART-TIME OR INTERMITTENT OBSERVATON OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.

WHERE "PERIODIC" SPECIAL INSPECTION IS REQUIRED, "PART-TIME" OR "INTERMITTENT" MEANS THAT INSPECTION OF THE TASK NEEDS TO BE PERFORMED FROM TIME TO TIME DURING THE PROGRESS OF THE TASK. THE PERIOD OF TIME BETWEEN INSPECTIONS VARIES GREATLY FOR DIFFERENT TYPES OF WORK DEPENDING ON THE TYPE OF INSPECTION DONE.

THE PERIOD OF TIME BETWEEN INSPECTIONS ALSO DEPENDS ON THE PACE OF THE CONSTRUCTION, THE NUMBER OF WORKERS, AND THE QUALITY OF THE WORKMANSHIP, AND OTHER FACTORS.

IT IS THE RESPONSIBILITY OF THE SPECIAL INSPECTOR TO PROVIDE INSPECTIONS AT AN APPROPRIATE FREQUENCY AND AT APPROPRIATE TIMES DURING CONSTRUCTION. THE INSPECTOR MUST HAVE ADEQUATE EXPERIENCE AND EXHIBIT GOOD JUDGEMENT IN DETERMINING THE FREQUENCY AND TIMING OF INSPECTIONS.

SPECIAL INSPECTIONS AND TESTS OF SOILS

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION
Y	1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	----	X	1705.6
Y	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	----	X	1705.6
Y	3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	----	X	1705.6
Y	4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	----	1705.6
Y	5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT THE SITE HAS BEEN PREPARED PROPERLY.	----	X	1705.6

SPECIAL INSPECTIONS AND TESTS OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION
Y	1. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	----	1705.8
Y	2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	----	1705.8
Y	3. FOR CONCRETE ELEMENTS, PERFORM TEST AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH CONCRETE CONSTRUCTION SPECIAL INSPECTION TABLE ON THIS SHEET.	----	----	1705.3

SPECIAL INSPECTIONS AND TESTS FOR WIND RESISTANCE

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION
	1. WIND-RESISTING COMPONENTS:			
Y	a. ROOF COVERING, ROOF DECK, AND ROOF FRAMING CONNECTIONS.	----	X	1705.11.3
Y	b. EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING.	----	X	1705.11.3

SPECIAL INSPECTIONS OF SEISMIC FORCE RESISTING AND DESIGNATED SYSTEMS

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION
	1. STRUCTURAL STEEL: (SDC B OR C WITH R>3 OR CANTILEVER COLUMNS, AND ALL SDC D, E, OR F STRUCTURES.)			
Y	a. SEISMIC-FORCE-RESISTING SYSTEM: SPECIAL INSPECTIONS OF STRUCTURAL STEEL IN THE SEISMIC-FORCE-RESISTING SYSTEMS OF BUILDING AND STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.	REFER TO SPECIAL INSPECTION AND VERIFICATION OF STEEL SEISMIC FORCE RESISTANCE SYSTEMS TABLE.		1705.12.1.1
Y	b. STRUCTURAL STEEL ELEMENTS: SPECIAL INSPECTIONS OF STRUCTURAL STEEL ELEMENTS IN THE SEISMIC-FORCE-RESISTING SYSTEMS OF BUILDINGS AND STRUCTURES OTHER THAN THOSE COVERED ABOVE, INCLUDING STRUTS, COLLECTORS, CHORDS, AND FOUNDATION ELEMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.	REFER TO SPECIAL INSPECTION AND VERIFICATION OF STEEL SEISMIC FORCE RESISTANCE SYSTEMS TABLE.		1705.12.1.2

STRUCTURAL TESTING FOR SEISMIC RESISTANCE OF SEISMIC FORCE RESISTING SYSTEMS

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND TESTING TASK	FREQUENCY OF TESTING: CONTINUOUS DURING TASK LISTED	FREQUENCY OF TESTING: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION
	1. STRUCTURAL STEEL:			
Y	a. SEISMIC-FORCE-RESISTING SYSTEM: NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL IN THE SEISMIC-FORCE-RESISTING SYSTEMS OF BUILDING AND STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.	PER AISC 341	PER AISC 341	1705.13.1.1
Y	b. STRUCTURAL STEEL ELEMENTS: NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN THE SEISMIC-FORCE-RESISTING SYSTEMS OF BUILDINGS AND STRUCTURES OTHER THAN THOSE COVERED ABOVE, INCLUDING STRUTS, COLLECTORS, CHORDS, AND FOUNDATION ELEMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.	PER AISC 341	PER AISC 341	1705.13.1.2
Y	2. SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS (SDC B, C, D, E, OR F)	PER CONSTRUCTION DOCUMENTS		1705.13.2
Y	3. DESIGNATED SEISMIC SYSTEMS (SDC C, D, E, OR F)	PER CONSTRUCTION DOCUMENTS		1705.13.3

SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

SPECIAL INSPECTION REQUIRED Y/N	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCE STANDARD	IBC REFERENCE
Y	1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	----	X	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
	2. REINFORCING BAR WELDING:				
N	a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706.	----	X	AWS D1.4 ACI 318:26.5.4	----
N	b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"	----	X		
N	c. INSPECT ALL OTHER WELDS.	X	----		
Y	3. INSPECT ANCHORS CAST IN CONCRETE.	----	X	ACI 318: 17.8.2	----
	4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.				
Y	a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	----	ACI 318: 17.8.2.4	----
Y	b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	----	X	ACI 318: 17.8.2	----
Y	5. VERIFY USE OF REQUIRED DESIGN MIX.	----	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
Y	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	----	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
Y	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	----	ACI 318: 26.4.5	1908.6,1908.7 ,1908.8
Y	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	----	X	ACI 318: 26.4.7 - 26.4.9	1908.9
	9. INSPECT PRESTRESSED CONCRETE FOR:				
N	a. APPLICATION OF PRESTRESSING FORCES.	X	----	ACI 318: 26.9.2.1	----
N	b. GROUTING OF BONDED PRESTRESSING TENDONS	X	----	ACI 318: 26.9.2.3	----
N	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	----	X	ACI 318: CH. 26.9	----
N	11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	----	X	ACI 318: 26.10.2	----
Y	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	----	X	ACI 318: 26.10.1 (b)	----

SCALE: 3/4" = 1'-0"

PROJECT ADDRESS:
1965 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.PAULS
DRAWN BY: R.PITTMAN
CHECKED BY: R.HAWTHORNE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905086

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03 SW-1A: ISSUED FOR BID	RP	SP

LAST CONFORMED SET: SW-1: ISSUED FOR CONSTRUCTION

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

SPECIAL INSPECTIONS SHEET 1 OF 4

LICENSED PROFESSIONAL ENGINEER
No. 379242
ROBERT E. HAWTHORNE
STATE OF UTAH
04-03-2023

DRAWING No.
0100-S002S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/30/2023 9:24:01 AM

FILE: BIM 360://6057228-Salt Lake City 2019/524905350_0100-S001.rvt

SPECIAL INSPECTIONS AND VERIFICATION OF STEEL CONSTRUCTION

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	TYPE OF INSPECTION: QUALITY CONTROL TASK	TYPE OF INSPECTION: QUALITY ASSURANCE TASK	REFERENCED STANDARD
	1. INSPECTION TASKS PRIOR TO WELDING:			
Y	a. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	P	P	
Y	b. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P	
Y	c. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O	
Y	d. WELDER IDENTIFICATION SYSTEM.	O	O	
Y	e. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY).	O	O	AISC 360 TABLE N5.4-1
	1) JOINT PREPARATION.			
	2) DIMENSIONS (ALIGNMENT, ROOT FACE, BEVEL)			
	3) CLEANLINESS (CONDITION OF STEEL SURFACES)			
	4) TACKING (TACK WELD QUALITY AND LOCATION)			
	5) BACKING TYPE AND FIT (IF APPLICABLE)			
Y	f. CONFIGURATION AND FINISH OF ACCESS HOLES.	O	O	
Y	g. FIT-UP OF FILLET WELDS.	O	O	
	1) DIMENSIONS (ALIGNMENT, GAPS AT ROOT)			
	2) CLEANLINESS (CONDITION OF STEEL SURFACES)			
	3) TACKING (TACK WELD QUALITY AND LOCATION)			
Y	h. CHECK WELDING EQUIPMENT.	O	---	
	2. INSPECTION TASKS DURING WELDING:			
Y	a. USE OF QUALIFIED WELDERS.	O	O	
Y	b. CONTROL AND HANDLING OF WELDING CONSUMABLES.	O	O	
	1) PACKAGING			
	2) EXPOSURE CONTROL			
Y	c. NO WELDING OVER CRACKED TACK WELDS.	O	O	
Y	d. ENVIRONMENT CONDITIONS.	O	O	
	1) WIND SPEED WITHIN LIMITS			
	2) PRECIPITATION AND TEMPERATURE			
Y	e. WPS FOLLOWED.	O	O	AISC 360 TABLE N5.4-2
	1) SETTINGS ON WELDING EQUIPMENT			
	2) TRAVEL SPEED			
	3) SELECTED WELDING MATERIALS			
	4) SHIELDING GAS TYPE/FLOW RATE			
	5) PREHEAT APPLIED			
	6) INTERPASS TEMPERATURE MAINTAINED (MIN/MAX)			
	7) PROPER POSITION (F, V, H, OH)			
Y	f. WELDING TECHNIQUES.	O	O	
	1) INTERPASS AND FINAL CLEANING.			
	2) EACH PASS WITHIN PROFILE LIMITATIONS.			
	3) EACH PASS MEETS QUALITY REQUIREMENTS.			

SPECIAL INSPECTIONS AND VERIFICATION OF STEEL CONSTRUCTION (CONT)

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	TYPE OF INSPECTION: QUALITY CONTROL TASK	TYPE OF INSPECTION: QUALITY ASSURANCE TASK	REFERENCED STANDARD
	3. INSPECTION TASKS AFTER WELDING:			
Y	a. WELDS CLEANED	O	O	
Y	b. SIZE, LENGTH, AND LOCATION OF WELDS.	P	P	
Y	c. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	P	P	AISC 360 TABLE N5.4-3
	1) CRACK PROHIBITION			
	2) WELD/BASE-METAL FUSION			
	3) CRATER CROSS SECTION			
	4) WELD PROFILES			
	5) WELD SIZE			
	6) UNDERCUT			
	7) POROSITY			
Y	d. ARC STRIKES.	P	P	
Y	e. k-AREA.	P	P	
Y	f. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).	P	P	
Y	g. REPAIR ACTIVITIES.	P	P	
Y	h. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	P	P	
	4. INSPECTION TASKS PRIOR TO BOLTING:			
Y	a. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P	
Y	b. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	O	O	
Y	c. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL.	O	O	AISC 360 TABLE N5.6-1
	1) GRADE			
	2) TYPE			
	3) BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE			
Y	d. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	O	O	
Y	e. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	P	O	
Y	f. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.	O	O	
	5. INSPECTION TASKS DURING BOLTING:			
Y	a. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	O	O	
Y	b. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	O	O	AISC 360 TABLE N5.6-2
Y	c. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING.	O	O	
Y	d. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	O	O	
	6. INSPECTION TASKS AFTER BOLTING:			AISC 360 TABLE N5.6-3
Y	a. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.	P	P	
	7. INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO PLACEMENT.			
Y	a. PLACEMENT AND INSTALLATION OF STEEL DECK.	P	P	AISC 360 TABLE N6.1
Y	b. PLACEMENT AND INSTALLATION OF STEEL HEADED ANCHOR STUDS.	P	P	
Y	c. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS.	P	P	
	8. INSPECTION OF ANCHOR ROD PLACEMENT AND PLACEMENT OF EMBEDDED ITEMS.			
Y	a. DIAMETER, GRADE, TYPE, AND LENGTH OF ANCHOR ROD OR EMBEDDED ITEM.	P	P	AISC 360 SECTION N5.7
Y	b. EXTENT OR DEPTH OF EMBEDMENT INTO CONCRETE.	P	P	
Y	9. INSPECTION OF THE FABRICATED STEEL OR ERECTED STEEL FRAME TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS.	P	P	AISC 360 SECTION N5.7

O: ITEMS NEED TO BE OBSERVED ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.

P: ITEMS NEED TO BE PERFORMED FOR EACH WELD JOINT OR MEMBER.

SPECIAL INSPECTIONS AND VERIFICATION OF STEEL SEISMIC FORCE RESISTANCE SYSTEMS

NOT REQUIRED FOR SEISMIC DESIGN CATEGORY A, NOR SEISMIC DESIGN CATEGORY B AND C WHEN STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (R=3) ARE USED, EXCLUDING CANTILEVER COLUMN SYSTEMS.

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	TYPE OF INSPECTION: QUALITY CONTROL TASK	QUALITY CONTROL DOCUMENT	QUALITY ASSURANCE TASK	QUALITY ASSURANCE DOCUMENT	REFERENCED STANDARD
	1. VISUAL INSPECTION TASKS PRIOR TO WELDING:					
Y	a. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY).	P/O	----	O	----	AISC 341 TABLE J6-1
	1) JOINT PREPARATION.					
	2) DIMENSIONS (ALIGNMENT, ROOT FACE, BEVEL)					
	3) CLEANLINESS (CONDITION OF STEEL SURFACES)					
	4) TACKING (TACK WELD QUALITY AND LOCATION)					
	5) BACKING TYPE AND FIT (IF APPLICABLE)					
Y	b. FIT-UP OF FILLET WELDS.	P/O	----	O	----	
	1) DIMENSIONS (ALIGNMENT, GAPS AT ROOT)					
	2) CLEANLINESS (CONDITION OF STEEL SURFACES)					
	3) TACKING (TACK WELD QUALITY AND LOCATION)					
	2. VISUAL INSPECTION TASKS DURING WELDING:					
	1) PRECIPITATION AND TEMPERATURE	O	----	O	----	AISC 341 TABLE J6-2
	a. WELDING PROCEDURE SPECIFICATIONS (WPS) FOLLOWED.	O	----	O	----	
	1) INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED.					
	3. VISUAL INSPECTION TASKS AFTER WELDING:					
Y	a. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	P	D	P	D	AISC 341 TABLE J6-3
	1) CRACK PROHIBITION.					
	2) WELD/BASE-METAL FUSION.					
	3) CRATER CROSS SECTION.					
	4) WELD PROFILES AND SIZES.					
	5) UNDERCUT.					
	6) POROSITY.					
Y	b. PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS.	P	D	P	D	
Y	c. BACKING REMOVED AND WELD TABS REMOVED AND FINISHED AND FILLET WELDS ADDED (IF REQUIRED).	P	D	P	D	
Y	d. REPAIR ACTIVITIES.	P	----	P	----	
	4. INSPECTION TASKS PRIOR TO BOLTING:					
Y	a. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	O	----	O	----	AISC 341 TABLE J7-1
Y	b. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	P	D	P	D	
	5. INSPECTION TASKS AFTER BOLTING:					AISC 341 TABLE J7-3
Y	a. DOCUMENT ACCEPTED OR REJECTED CONNECTIONS.	P	D	P	D	
	6. OTHER INSPECTION TASKS:					AISC 341 TABLE J8-1
Y	a. RBS REQUIREMENTS, IF APPLICABLE.	P	D	P	D	
	1) CONTOUR AND FINISH.					
	2) DIMENSION TOLERANCES.					
Y	b. PROTECTED ZONE - NO HOLES AND UNAPPROVED ATTACHMENTS MADE BY FABRICATION OR ERECTION, AS APPLICABLE.	P	D	P	D	
	7. INSPECTION OF COMPOSITE STRUCTURES PRIOR TO CONCRETE PLACEMENT:					AISC 341 TABLE J9-1
Y	a. MATERIAL IDENTIFICATION OF REINFORCING STEEL (TYPE/GRADE).	O	----	O	----	
Y	b. DETERMINATION OF CARBON EQUIVALENT FOR REINFORCING STEEL OTHER THAN ASTM A706	O	----	O	----	
Y	c. REINFORCING STEEL SIZE, SPACING, AND ORIENTATION.	O	----	O	----	
	d. REINFORCING STEEL HAS NOT BEEN REBENT IN FIELD.	O	----	O	----	
	e. REINFORCING STEEL HAS BEEN TIED AND SUPPORTED AS REQUIRED.	O	----	O	----	
	f. REQUIRED REINFORCING STEEL CLEARANCES HAVE BEEN PROVIDED.	O	----	O	----	
	g. COMPOSITE MEMBER HAS REQUIRED SIZE.	O	----	O	----	

SCALE: 3/4" = 1'-0"

PROJECT ADDRESS:
1965 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.PAULS
DRAWN BY: R.PITTMAN
CHECKED BY: R.HAWTHORNE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905086

REVISIONS

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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
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SPECIAL INSPECTIONS
SHEET 2 OF 4

LICENSED PROFESSIONAL ENGINEER
No. 379242
ROBERT E. HAWTHORNE
STATE OF UTAH

04-03-2023

DRAWING No.
0100-S003

SHEET _____ OF _____

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SPECIAL INSPECTIONS AND VERIFICATION OF STEEL SEISMIC FORCE RESISTANCE SYSTEMS (CONT)

NOT REQUIRED FOR SEISMIC DESIGN CATEGORY A, NOR SEISMIC DESIGN CATEGORY B AND C WHEN STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (R=3) ARE USED, EXCLUDING CANTILEVER COLUMN SYSTEMS.

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	TYPE OF INSPECTION				REFERENCE D STANDARD
		QUALITY CONTROL		QUALITY ASSURANCE		
		TASK	DOCUMENT	TASK	DOCUMENT	
	8. INSPECTION OF COMPOSITE STRUCTURES DURING CONCRETE PLACEMENTS:					
Y	a. CONCRETE:MATERIAL IDENTIFICATION (MZX DESIGN, COMPRESSIVE STRENGTH, MAXIMUM LARGE AGGREGATE SIZE, MAXIMUM SLUMP).	O	D	O	D	AISC 341 TABLE J9-2
Y	b. LIMITS OF WATER ADDED AT TRUCK OR PUMP.	O	D	O	D	
Y	c. PROPER PLACEMENT TECHNIQUES TO LIMIT SEGREGATION.	O	----	O	----	
	9. INSPECTION OF COMPOSITE AFTER CONCRETE PLACEMENT:					AISC 341 TABLE J9-3
Y	a. ACHIEVEMENT OF MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH AT SPECIFIED AGE.	----	D	----	D	
	10. INSPECTION OF H. PILES:					AISC 341 TABLE J10-1
Y	a. PROTECTED ZONE - NO HOLES AND UNAPPROVED ATTACHMENTS MADE BY THE RESPONSIBLE CONTRACTOR, AS APPLICABLE.	P	D	P	D	

O : ITEMS NEED TO BE OBSERVED ON A RANDOM DAILY BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.

P : ITEMS NEED TO BE PERFORMED PRIOR TO THE FINAL ACCEPTANCE OF THE ITEM.

D : THE INSPECTOR SHALL PREPARE REPORTS INDICATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS PER AISC 341 J5-3.

P/O : THE ITEMS NEED TO BE PERFORMED OR OBSERVED PER AISC 341, TABLE J6-1.

SPECIAL INSPECTIONS AND VERIFICATION OF COLD-FORMED STEEL DECK

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	TYPE OF INSPECTION		REFERENCE D STANDARD
		QUALITY CONTROL TASK	QUALITY ASSURANCE TASK	
	1. INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT:			
Y	a. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERITIES, AND BASE MATERIAL THICKNESS.	P	P	SDI-ANSI-QA-QC-2011 TABLE 1.1
Y	b. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	P	P	
	2. INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT:			
Y	a. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS.	P	P	SDI-ANSI-QA-QC-2011 TABLE 1.2
Y	b. VERIFY DECK MATERIALS ARE REPRESENTED BY MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS.	----	P	
Y	c. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES.	P	P	
	3. INSPECTION OR EXECUTION TASKS PRIOR TO WELDING:			
Y	a. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	O	O	SDI-ANSI-QA-QC-2011 TABLE 1.3
Y	b. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	O	O	
Y	c. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O	
Y	d. CHECK WELDING EQUIPMENT.	O	O	
	4. INSPECTION OR EXECUTION TASKS DURING WELDING:			
Y	a. USE OF QUALIFIED WELDERS.	O	O	SDI-ANSI-QA-QC-2011 TABLE 1.4
Y	b. CONTROL AND HANDLING OF WELDING CONSUMABLES.	O	O	
Y	c. ENVIRONMENT CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	O	O	
Y	d. WPS FOLLOWED.	O	O	
	5. INSPECTION OR EXECUTION TASKS AFTER WELDING:			
Y	a. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS.	P	P	SDI-ANSI-QA-QC-2011 TABLE 1.5
Y	b. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	P	P	
Y	c. VERIFY REPAIR ACTIVITIES.	P	P	
Y	d. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS.	P	P	
	6. INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING:			
Y	a. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS.	O	O	SDI-ANSI-QA-QC-2011 TABLE 1.6
Y	b. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	O	O	
Y	c. PROPER STORAGE FOR MECHANICAL FASTENERS.	O	O	
	7. INSPECTION OR EXECUTION TASKS DURING TO MECHANICAL FASTENING.			SDI-ANSI-QA-QC-2011 TABLE 1.7
Y	a. FASTENERS ARE POSITIONED AS REQUIRED.	O	O	
Y	b. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANFACTURER'S INSTRUCTIONS.	O	O	
	8. INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING:			SDI-ANSI-QA-QC-2011 TABLE 1.8
Y	a. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS.	P	P	
Y	b. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS.	P	P	
Y	c. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS.	P	P	
Y	d. VERIFY REPAIR ACTIVITIES.	P	P	
Y	e. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS.	P	P	

O : ITEMS NEED TO BE OBSERVED ON A INTERMITTENT BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. FREQUENCY OF OBSERVATIONS SHALL BE ADEQUATE TO CONFIRM THAT WORK WAS PERFORMED IN ACCORDANCE WITH THE APPLICABLE DOCUMENTS.

P : ITEMS NEED TO BE PERFORMED PRIOR TO FINAL ACCEPTANCE FOR EACH ITEM OR ELEMENT.

WITHIN THE LISTED TASKS, "DOCUMENT" SHALL MEAN THE INSPECTOR SHALL PREPARE REPORTS OR OTHER APPROPRIATE WRITTEN DOCUMENTATION INDICATING THAT WORK HAS OR HAS NOT BEEN PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

SCALE: 3/4" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.PAULS
DRAWN BY: R.PITTMAN
CHECKED BY: R.HAWTHORNE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905350

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SPECIAL INSPECTIONS
SHEET 3 OF 4

LICENSED PROFESSIONAL ENGINEER
No. 379242
ROBERT E. HAWTHORNE
STATE OF UTAH

04-03-2023

DRAWING No.
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LEVEL 1 QUALITY ASSURANCE OF MASONRY (TMS 602-16 TABLE 3)

SPECIAL INSPECTION REQUIRED Y/N	MINIMUM VERIFICATION	COMMENTS
Y	PRIOR TO CONSTRUCTION, VERIFY COMPLIANCE OF SUBMITTALS.	ALL LEVELS 1,2, & 3

LEVEL 2 QUALITY ASSURANCE OF MASONRY (TMS 602-16 TABLE 4)

SPECIAL INSPECTION REQUIRED Y/N	MINIMUM TESTS					COMMENTS
Y	DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.					
Y	VERIFICATION OF f_m AND f_{AAC} , EXCEPT WHERE SPECIFICALLY EXEMPTED BY CODE.					
Y	PRIOR TO CONSTRUCTION, VERIFY COMPLIANCE OF SUBMITTALS.					
	MINIMUM SPECIAL INSPECTION					
	INSPECTION TASK	FREQUENCY (a)		REFERENCE FOR CRITERIA		
		CONTINUOUS	PERIODIC	TMS 402	TMS 602	
	1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
Y	a. PROPORTIONS OF SITE-PREPARED MORTAR.	----	X	----	ART. 2.1, 2.6 A & 2.6 C	
Y	b. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	----	X	----	ART. 2.4 B, 2.4H	
Y	c. GRADE, TYPE, AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS AND PRESTRESSING TENDONS AND ANCHORAGES	----	X	----	ART. 3.4 & 3.6A	
Y	d. PRESTRESSING TECHNIQUE.	----	X	----	ART. 3.6 B	
Y	e. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY.	X (b)	X (c)		2.1 C.1	
Y	f. SAMPLE PANEL CONSTRUCTION.	----	X	----	ART 1.6 D	
	2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
Y	a. GROUT SPACE.	----	X	----	ART. 3.2 D, 3.2 F	
Y	b. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES.	----	X	SEC. 10.8&10.9	ART 2.4 & 3.6	
Y	c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	----	X	SEC. 6.1, 6.3.1, 6.3.6, 6.3.7	ART. 3.2 E & 3.4	
Y	d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	----	X	----	ART. 2.6 B & 2.4 G.1.b	
	3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:					
Y	a. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	----	X	----	ART. 1.5	
Y	b. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	----	X	----	ART. 3.3B	
Y	C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	----	X	----	ART. 3.3F	
Y	d. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	----	X	SEC. 1.2.1(e), 6.2.1, & 6.3.1	----	
Y	e. WELDING OF REINFORCEMENT	X	----	SEC. 6.1.6.1.2	----	
Y	f. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP BELOW 40F) OR HOT WEATHER (TEMP ABOVE 90F)	----	X	----	ART. 1.8 C & 1.8 D	
Y	g. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X	----	----	ART. 3.6 B	
Y	h. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X	----	----	ART. 3.5 &3.6 C	
Y	i. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X (b)	X (c)	----	ART.3.3 B.9 & 3.3F.1.b	
Y	4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	----	X	----	ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4	
	(a) FREQUENCY REFERS TO THE FREQUENCY OF SPECIAL INSPECTIONS, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODIC DURING THE LISTED TASK, AS DEFINED IN THE TABLE.					
	(b) REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY.					
	(c) REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY.					
	(d) REQUIRED FOR THE FIRST 10% OF EACH DIFFERENT TYPE OF ANCHOR AND/OR INSTALLER.					
	(e) REQUIRED FOR THE REMAINING 90% OF EACH DIFFERENT TYPE OF ANCHOR AND/OR INSTALLER.					

LEVEL 3 QUALITY ASSURANCE OF MASONRY (TMS 602-16 TABLE 4)

SPECIAL INSPECTION REQUIRED Y/N	MINIMUM TESTS					COMMENTS
Y	VERIFICATION OF f_m AND f'_{AAC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4B PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SQ FT DURING CONSTRUCTION.					
Y	VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT, AS DELIVERED TO THE PROJECT SITE.					
Y	VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5 B.1.b.3 FOR SELF-CONSOLIDATING GROUT.					
	MINIMUM SPECIAL INSPECTION					
	INSPECTION TASK	FREQUENCY (a)		REFERENCE FOR CRITERIA		
		CONTINUOUS	PERIODIC	TMS 402	TMS 602	
	1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
Y	a. PROPORTIONS OF SITE-PREPARED MORTAR.	----	X	----	ART. 2.1, 2.6 A & 2.6C	
Y	b. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	----	X	----	ART. 2.4 B, 2.4 H	
Y	c. GRADE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS AND PRESTRESSING TENDONS AND ANCHORAGES	----	X	----	ART. 3.4 & 3.6 A	
Y	d. PRESTRESSING TECHNIQUE.	----	X	----	ART. 3.6 B	
Y	e. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY.	X	----		2.1 C.1	
Y	f. SAMPLE PANEL CONSTRUCTION.	X	----	----	ART 1.6 D	
	2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
Y	a. GROUT SPACE.	X	----	----	ART. 3.2 D, 3.2 F	
Y	b. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES.	----	X	SEC. 10.8&10.9	ART 2.4 & 3.6	
Y	c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	X	----	SEC. 6.1, 6.3.1, 6.3.6, 6.3.7	ART. 3.2 E & 3.4	
Y	d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	----	X	----	ART. 2.6B & 2.4G.1.b	
	3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:					
Y	a. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	----	X	----	ART. 1.5	
Y	b. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	----	X	----	ART. 3.3 B	
Y	C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	----	X	----	ART. 3.3 F	
Y	d. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	----	X	SEC. 1.2.1(e), 6.2.1, & 6.3.1	----	
Y	e. WELDING OF REINFORCEMENT	X	----	SEC. 6.1.6.1.2	----	
Y	f. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP BELOW 40F) OR HOT WEATHER (TEMP ABOVE 90F)	----	X	----	ART. 1.8 C & 1.8 D	
Y	g. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X	----	----	ART. 3.6 B	
Y	h. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X	----	----	ART. 3.5 &3.6 C	
Y	i. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X	----	----	ART.3.3 B.9 & 3.3 F.1.b	
Y	4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	X	----	----	ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4	
	(a) FREQUENCY REFERS TO THE FREQUENCY OF SPECIAL INSPECTIONS, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODIC DURING THE LISTED TASK, AS DEFINED IN THE TABLE.					
	(b) REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY.					
	(c) REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY.					
	(d) REQUIRED FOR THE FIRST 10% OF EACH DIFFERENT TYPE OF ANCHOR AND/OR INSTALLER.					
	(e) REQUIRED FOR THE REMAINING 90% OF EACH DIFFERENT TYPE OF ANCHOR AND/OR INSTALLER.					

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DRAWN BY: R.PITTMAN
CHECKED BY: R.HAWTHORNE
APPROVED BY: G.DAVIES
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EWO NO.: -
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SPECIAL INSPECTIONS SHEET 4 OF 4

LICENSED PROFESSIONAL ENGINEER
No. 379242
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DRAWING No.
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ARCHITECTURAL SYMBOLS

- SLOPE
- 101 — DOOR
- F1 — FURNITURE
- L1 — LOUVER
- ST1 — SIGNAGE
- WA1 — SPECIALTY EQUIPMENT
- W1 — WINDOW
- W1 — WALL

ARCHITECTURAL GENERAL NOTES

A. GENERAL

1. REFER TO CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL, ELECTRICAL, PROCESS AND PLUMBING DRAWINGS FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS.
2. DETAILS SHOWN ARE TYPICAL IN NATURE AND ARE INDICATIVE OF PROFILES AND TYPES REQUIRED FOR THE WORK. REMAINDER OF THE WORK IS SIMILAR IN CHARACTER TO THESE DETAILS.
3. MATERIALS AND SYSTEMS NOTES ARE TYPICAL IN NATURE AND APPLY TO MULTIPLE DRAWINGS. NOTES ON ANY ONE DRAWING ARE TO APPLY TO ALL OTHER SIMILAR MATERIALS AND SYSTEMS UNLESS NOTED OTHERWISE.
4. ELEVATIONS NOTED ON ARCHITECTURAL DRAWINGS ARE FOR ELEVATIONS AT TOP OF FLOOR SLAB UNLESS NOTED OTHERWISE.
5. COORDINATE FLOOR AND WALL PENETRATIONS, SLEEVES AND MECHANICAL SHAFTS WITH TRADES CONTRACTORS, INCLUDING BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION CONTRACTORS.
6. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, STANDARDS, AND GOVERNING AUTHORITIES.
7. UNLESS NOTED OTHERWISE, WHERE AN ARCHITECTURAL FINISHED FLOOR IS TO BE PROVIDED REQUIRING DEPRESSED STRUCTURAL SLAB, THE FLOOR ELEVATIONS ARE TO THE TOP OF FINISHED FLOOR. WHERE AN ARCHITECTURAL FINISHED FLOOR IS INTENDED FOR SURFACE APPLICATION, THE FLOOR ELEVATIONS ARE TO TOP OF STRUCTURAL SLAB. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF DEPRESSIONS.
8. UNLESS NOTED OTHERWISE, ALL FASTENERS AND FASTENING DEVICES ARE TO BE CONCEALED IN ALL FINISHED SPACES.
9. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC ACTION.
10. ALL EXTERIOR FERROUS METAL WORK LOCATED IN EXTERIOR OR IN NON-CONDITIONED INTERIOR SPACES SHALL BE HOT-DIPPED GALVANIZED (EXCEPT FOR ORNAMENTAL METAL(S)).
11. PROVIDE A 6'-8" MINIMUM HEADROOM CLEARANCE IN ALL EXIT PASSAGES AT ALL LOCATIONS (BENEATH SPRINKLERS, PIPING, LIGHTING, ETC.)
12. THE ARCHITECT'S SELECTION OF MATERIALS AND DETAILS DOES NOT RELIEVE THE CONTRACTOR FROM VERIFYING WITH THE MATERIAL SUPPLIERS THAT THE PROPOSED MATERIALS ARE CORRECT AND PROPER FOR THE INTENDED APPLICATION AND USE.
13. BLOCKING IS REQUIRED IN STEEL STUD AND GYPSUM WALLS FOR ALL ITEMS THAT ARE ATTACHED TO THE WALL.

B. DIMENSIONING

1. ALL DIMENSIONS ARE IN FEET-INCHES UNLESS NOTED OTHERWISE.
2. EXTERIOR WALLS ARE DIMENSIONED TO THE EXTERIOR FINISHED FACE OF WALL UNLESS NOTED OTHERWISE.
3. INTERIOR WALLS AND PARTITIONS ARE DIMENSIONED TO ONE FINISHED FACE UNLESS NOTED OTHERWISE.
4. DOORS ARE LOCATED BY THEIR JAMB DETAIL RELATIVE TO ADJACENT WALLS AND PARTITIONS. DOOR OPENINGS ARE DIMENSIONED TO THE OUTSIDE FACE OF THE DOOR FRAMES.

C. PARTITION NOTES

1. EXTEND PARTITIONS TO THE UNDERSIDE OF THE STRUCTURAL DECK OR FRAMING ABOVE UNLESS SHOWN OR NOTED OTHERWISE.
2. MOVEMENT CONTROL: PROVIDE FOR VERTICAL MOVEMENT AT HEAD OF ALL CMU AND GYPSUM BOARD CONSTRUCTION WHETHER OR NOT INDICATED ON THE DRAWINGS AND NOTES.
3. MISCELLANEOUS: SEAL EXTERIOR JOINTS AROUND DOORS, WINDOWS AND LOUVER FRAMES AND AT PENETRATIONS OF MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ELEMENTS TO PREVENT AIR AND WATER LEAKAGE.
4. ANCHOR AND REINFORCE CONCRETE CURBS AS SHOWN ON STRUCTURAL DRAWINGS.
5. PROVIDE ACCESS PANELS AS REQUIRED FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT. THIS WORK SHALL BE COORDINATED BETWEEN ACCESS PANELS SUBCONTRACTOR AND MECH, ELEC, PLUMBING SUBCONTRACTOR PRIOR TO SUBMITTAL OF MEP SHOP DRAWINGS.
6. ALL GYP BD TO BE "TYPE X", 5/8" MIN THICKNESS, UNO
7. ALL BATT INSULATION TO BE INSTALLED TIGHT IN A COMPRESSION FIT TO STUDS, STRUCTURE AND ADJACENT SURFACES.
8. CONTRACTOR SHALL COORDINATE JOINT AND HEAD TERMINATION DETAILS WITH ACTUAL FIELD CONDITIONS AND FURNISH PER DETAILS SHOWN ON THE DRAWINGS.
9. REFER TO PLANS FOR LOCATIONS OF PARTITION TYPES.
10. USE MOISTURE RESISTANT WALLBOARD IN ALL TOILET ROOMS UNLESS OTHERWISE NOTED.
11. TAPE, BED AND FINISH ALL CORNERS AND JOINTS READY FOR FINISH.
12. USE ZINC ALLOY STEEL CORNER REINFORCEMENT, CASING BEADS, ETC. ON ALL APPLICATIONS. ALL BEADS TO BE POSITIVELY ATTACHED WITH FASTENERS PER TESTED ASSEMBLY (CRIMP ATTACHMENT WILL NOT BE ACCEPTABLE).
13. TAPE AND FLOAT GYPSUM WALLBOARD JOINTS EXTENDING ABOVE CEILING FINISHES.
14. MAXIMUM SPACING OF CONTROL JOINTS FOR GYPSUM AND METAL STUD PARTITIONS SHALL BE SPACED A MAXIMUM OF 30'.

D. SEALANTS

1. ALL SEALANT JOINTS SHALL BE SIZED SUCH THAT THEY WILL BE WITHIN THE MINIMUM/MAXIMUM SIZE AS RECOMMENDED BY THE MANUFACTURER IN THEIR INSTALLED POSITION.
2. ALL SEALANT JOINTS SHALL MAINTAIN CONTACT WITH THE ADJOINING PARTS WITHIN ALLOWABLE DIMENSIONED CHANGES IN THE JOINT SIZE. ALL SEALANT JOINTS SHALL MAINTAIN DURABILITY AND INTEGRITY UNDER ALL SPECIFIED CONDITIONS AND CONDITIONS OF THE LOCALITY WHERE THE PROJECT IS LOCATED.
3. ALL SEALANTS SHALL BE INSTALLED WITH APPROPRIATE JOINT FILLER.
4. PROVIDE CUSTOM COLOR FOR SEALANTS EXPOSED TO VIEW, AS SELECTED BY OWNER'S REPRESENTATIVE.
5. ALL EXPOSED JOINTS SUBJECT TO MOVEMENT ARE TO HAVE CONCEALED BACKUP WITH CAPTIVE SEALANT AND JOINT FILLER OR BOND BREAKER TAPE IN ACCORDANCE WITH SEALANT MANUFACTURER'S MINIMUM PUBLISHED REQUIREMENTS.
6. THE SEALANT MANUFACTURER SHALL VERIFY THAT ALL SEALANTS USED FOR THE EXTERIOR WALL ARE CORRECT FOR THE APPLICATION SHOWN AND WILL BE COMPATIBLE WITH EACH OTHER BEFORE, DURING AND AFTER CURING.
7. ALL GASKETS, INTERIOR AND EXTERIOR TO BE PROVIDED WITH PREMOLDED VULCANIZED CORNERS. ALL FIELD VULCANIZING TO BE EQUAL IN QUALITY TO FACTORY VULCANIZING.
8. ALL JOINTS TO BE BACKED UP BY PROPERLY SIZED CLOSED CELL BACKER ROD.

SCALE: As indicated

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: D. BLOOD
DRAWN BY: J. WOLFF
CHECKED BY: M. SCHANTZ
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	JW	DB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

GENERAL ARCHITECTURAL LEGEND & GENERAL NOTES

STATE OF UTAH
DAVID E. BLOOD
No. 11383041-0301
LICENSED ARCHITECT
04-03-2023

DRAWING No.
0100-A001

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 12:09:56 PM

FILE: BIM 360:7657:2288-Salt Lake City 2019:524905350 0100-A001.rvt

VALVES

SYMBOL	TYPE	ABBREVIATION
	BALL (N.O.)	BV
	BALL (N.C.)	BV
	BALL CHECK	BCV
	BUTTERFLY	BFV
	CHECK	CV
	PLUG (N.O.)	PV
	PLUG (N.C.)	PV
	GATE (N.O.)	GV
	GATE (N.C.)	GV
K	KNIFE GATE (N.O.)	KV
K	KNIFE GATE (N.C.)	KV
	NEEDLE	NV
	GLOBE	GLV
	PINCH	PNV
	MUD	MV
	PRESSURE REGULATOR EXTERNAL PRESSURE TAP	PRV
	PRESSURE REGULATOR SELF CONTAINED	PRV
	BACK PRESSURE REGULATOR EXTERNAL PRESSURE TAP	BPV
	BACK PRESSURE REGULATOR SELF CONTAINED	BPV
	THERMAL SHUT OFF	TOV
	PRESSURE RELIEF	ARV
	VACUUM RELIEF	ARV
	PRESSURE & VACUUM RELIEF	ARV
	VACUUM RELIEF (RUPTURE DISC)	RD
	PRESSURE RELIEF (RUPTURE DISC)	RD
	DUCKBILL CHECK	CV
	DOUBLE LEAF CHECK	CV
	FLOAT	FLV
	DIAPHRAGM	DV
	TELESCOPIC	TSV
	BACKFLOW PREVENTER	BFP
	ANGLE	AV
	THREE-WAY	3W
	FOUR-WAY	4W
	DAMPER	DP
	DEGASSING	DG
	BALANCING	BLV
	TRIPLE DUTY	TDV

PUMPS

SYMBOL	TYPE	ABBREVIATION
	CENTRIFUGAL	P
	DIAPHRAGM	P
	GEAR	P
	METERING	P
	PROGRESSING CAVITY	P
	ROTARY LOBE	P
	SUBMERSIBLE	P
	SUBMERSIBLE PROPELLER	P
	VERTICAL	P

EQUIPMENT

SYMBOL	TYPE	ABBREVIATION
	AIR DRYER BLOWER EXHAUST FAN	AD BL EF
	BRIDGE CRANE OR MONORAIL	LD
	FLUME, CUT-THROAT FLUME, PARSHALL	CFL PFL
	GRINDER	GDR
	HEAT EXCHANGER, TUBE	HEX
	HEAT EXCHANGER, SPIRAL	HEX
	HEAT EXCHANGER	HEX
	MIXER, PROPELLER	MXR
	MOTOR	M
	SCREEN, MANUAL	SCR
S	SAMPLER, MANUAL	SMP
S	SAMPLER, AUTOMATIC	SMP
	INJECTOR	INJ
	MIXER, STATIC	MXR
	EMERGENCY EYEWASH / SHOWER	EES
	HEATER, IN-LINE	HTR
	GRIT CLASSIFIER	GCL
	UV REACTOR	UV
	SCREEN, BAR	SCR
	CONVEYOR, BELT	CON
	CONVEYOR, SCREW	CON
	GRIT DEWATERING UNIT	GD
	DEWATERING SCREW PRESS	DWS
	SLUDGE SKIMMER DAF SKIMMER	SSK DDR
	SCREEN GRINDER	SNG
	WASHER / COMPACTOR	CMP
	SLUDGE SCREEN	SCN
	ROTARY DRUM THICKENER	RDT
	FLARE	FLR

GATES

SYMBOL	TYPE	ABBREVIATION
	SLIDE GATE (N.O.)	SG
	SLIDE GATE (N.C.)	SG
	WEIR GATE	WG
	STOP LOG / STOP PLATE (N.O.)	SL / SP
	STOP LOG / STOP PLATE (N.C.)	SL / SP
	FIXED WEIR	W
	FLAP GATE	FG

CONTROL VALVES[1]

- DIAPHRAGM, PRESSURE
- DIAPHRAGM, SPRING
- DIGITAL
- MOTORIZED
- PNEUMATIC
- SOLENOID
- MANUAL[2]

NOTES:
1. VALVE BODY IS FOR ILLUSTRATIVE PURPOSES ONLY. SEE VALVE & GATE LEGENDS FOR BODY TYPES.
2. MANUAL ACTUATOR NOT ALWAYS SHOWN.

FITTING SYMBOLS

- FLANGED CONNECTION
- BLIND FLANGE
- CAP OR PLUG
- REDUCER, CONCENTRIC
- REDUCER, ECCENTRIC
- UNION

NOTES:
1. FITTINGS INCLUDING BUT NOT LIMITED TO TEES, ELBOWS AND COMPANION FLANGES NOT SHOWN ON DIAGRAMS AND SCHEMATICS. REFER TO GENERAL ARRANGEMENT DRAWINGS.

ACCESSORIES & DEVICES

- AIR GAP
- AIR INTAKE
- CALIBRATION COLUMN
- DIFFUSER OR SPRAY NOZZLE
- DRAIN
- EXPANSION JOINT
- DOUBLE EXPANSION JOINT
- FILTER
- FLAME ARRESTOR
- FLEXIBLE CONNECTION
- COOLING COIL
- HOSE REEL
- ORIFICE PLATE
- PRESSURE SENSOR, INLINE
- PULSATION DAMPENER
- SEPARATOR, AIR
- SEPARATOR, LIQUID
- SIGHT GLASS
- HEATING COIL
- SILENCER
- SPECTACLE BLIND
- STRAINER
- STRAINER, BASKET
- TRAP
- VENT, AIR
- VENT, STEAM
- QUICK CONNECTOR
- VENTURI

ANNOTATION SYMBOLS

REFERENCE

PROCESS / SIGNAL CONTINUATION ON INDICATED DRAWING

COMMODITY OR LINE DESCRIPTION
REFERENCE NUMBER — A — 000-X999 — REFERENCE DRAWING
SOURCE OR DESTINATION

PROCESS / SIGNAL CONTINUATION ON INDICATED DRAWING

A — A

EQUIPMENT IDENTIFICATION

EQUIPMENT ABBREVIATION
PLANT AREA
SYSTEM NUMBER
EQUIPMENT NUMBER
AA - BBB - S999
EQUIPMENT NAME
(STATUS)

VALVE IDENTIFICATION

VALVE ABBREVIATION
PLANT AREA
EQUIPMENT NUMBER
SUFFIX (LETTER)
AA - BBB - S999Z
SYSTEM NUMBER

INSTRUMENT IDENTIFICATION

INSTRUMENT ABBREVIATION
PLANT AREA
EQUIPMENT NUMBER
SUFFIX (NUMBER)
AA - BBB - S9996
SYSTEM NUMBER

OR

INSTRUMENT ABBREVIATION
BBB 00
S9996
OPERATING FUNCTION (WHERE APPLICABLE)
SUFFIX (NUMBER)
SYSTEM NUMBER
EQUIPMENT NUMBER

PIPE IDENTIFICATION

COMMODITY
SIZE[1]
MATERIAL
88 - NNN - MMM

NOTES:
1. DIAMETER (INCHES)

DUCT / CHANNEL IDENTIFICATION

COMMODITY
SIZE[1]
88 - NNN

NOTES:
1. DIAMETER OR WIDTH x HEIGHT (INCHES)

SIGNAL IDENTIFICATION

XX, Signal Description
INPUT / OUTPUT TYPE

LINE TYPES

- PRIMARY PIPE / DUCT LINE
- SECONDARY PIPE / DUCT LINE
- EXISTING PIPE / DUCT LINE
- FUTURE PIPE / DUCT LINE
- STRUCTURE
- EXISTING STRUCTURE
- EQUIPMENT BOUNDARY
- VENDOR PACKAGE SUPPLY BOUNDARY
- INSULATED PIPE
- INSULATED PIPE WITH HEAT TRACE

SCALE: NONE

PROJECT ADDRESS:
1363 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY:	S.GALBICHKA	-
DRAWN BY:	S.GALBICHKA	-
CHECKED BY:	G.DAVIES	-
APPROVED BY:	G.DAVIES	-
DATE:	-	-
EWO NO.:	-	-
ACCOUNT NO.:	524905396	

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	SRG

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PROCESS LEGEND

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-D001S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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INSTRUMENT & FUNCTION SYMBOLS

DISCRETE INSTRUMENTS
- FIELD OR LOCALLY MOUNTED
- NOT PANEL OR CABINET MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

DISCRETE INSTRUMENTS
- SHARING COMMON HOUSING

DISCRETE INSTRUMENTS
- SECONDARY OR LOCAL CONTROL ROOM
- FIELD OR LOCAL CONTROL PANEL MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

DISCRETE INSTRUMENTS
- CENTRAL OR MAIN CONTROL ROOM
- FRONT OF MAIN PANEL MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

SHARED DISPLAY OR CONTROL
- DEDICATED SINGLE FUNCTION DEVICE
- FIELD OR LOCALLY MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR AT DEVICE

SHARED DISPLAY OR CONTROL
- SECONDARY OR LOCAL CONSOLE
- FIELD OR LOCAL CONTROL PANEL
- VISIBLE ON VIDEO DISPLAY
- NORMALLY ACCESSIBLE TO AN OPERATOR AT CONSOLE

SHARED DISPLAY OR CONTROL
- CENTRAL OR MAIN CONSOLE
- VISIBLE ON VIDEO DISPLAY
- NORMALLY ACCESSIBLE TO AN OPERATOR AT CONSOLE

COMPUTER FUNCTIONS
- FIELD OR LOCALLY MOUNTED

COMPUTER FUNCTIONS
- SECONDARY OR LOCAL COMPUTER
- VISIBLE ON VIDEO DISPLAY
- NORMALLY ACCESSIBLE TO AN OPERATOR AT TERMINAL

COMPUTER FUNCTIONS
- CENTRAL OR MAIN COMPUTER
- VISIBLE ON VIDEO DISPLAY
- NORMALLY ACCESSIBLE TO AN OPERATOR AT TERMINAL

ANNUNCIATOR POINT
- FIELD OR LOCALLY MOUNTED
- NOT PANEL OR CABINET MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

ANNUNCIATOR POINT
- FIELD OR LOCAL CONTROL PANEL
- PANEL MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

ANNUNCIATOR POINT
- CENTRAL OR MAIN CONTROL ROOM
- MAIN PANEL MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR

PROGRAMMABLE LOGIC CONTROL
- FIELD OR LOCALLY MOUNTED
- NOT PANEL OR CABINET MOUNTED
- NORMALLY ACCESSIBLE TO AN OPERATOR AT DEVICE

PROGRAMMABLE LOGIC CONTROL
- SECONDARY OR LOCAL CONSOLE
- FIELD OR LOCAL CONTROL PANEL
- VISIBLE ON VIDEO DISPLAY
- ACCESSIBLE TO AN OPERATOR AT CONSOLE

PROGRAMMABLE LOGIC CONTROL
- CENTRAL OR MAIN CONSOLE
- VISIBLE ON VIDEO DISPLAY
- NORMALLY ACCESSIBLE TO AN OPERATOR AT CONSOLE

COMPUTER DATA ACQUISITION & CONTROL SYSTEM (CDACS)
- INPUT, OUTPUT OR FUNCTION
- ACCESSIBLE
- EG: DCS OR SCADA

COMMUNICATION INTERFACE
- COMMUNICATES TO AN ADDRESSABLE DEVICE (i.e. DB=DEVICEBUS, MB=MODBUS, EN=ETHERNET, IY=CURRENT-FIELDBUS, FB=FIELDBUS, PB=PROFIBUS)

NOTE: INSTRUMENTS & DEVICES NOT NORMALLY ACCESSIBLE TO THE OPERATOR OR BEHIND-THE-PANEL DEVICES OR FUNCTIONS MAY BE DEPICTED BY USING THE SAME SYMBOLS BUT WITH DASHED HORIZONTAL BARS, E.G.:

PRIMARY ELEMENT SYMBOLS

ANNUBAR

FLOW METER CORIOLIS MASS

FLOW METER MAGNETIC

FLOW ELEMENT THERMAL MASS

FLOW ELEMENT, INTEGRAL WITH TRANSMITTER (MASS FLOW, etc)

FLOW ELEMENT IN-LINE CAPACITANCE

PROPELLER OR TURBINE METER

FLOW METER SONIC

PITOT TUBE

ROTAMETER

BEACON

POSITIVE DISPLACEMENT METER

FLOW SENSOR VORTEX

ANNULAR PRESSURE ISOLATOR

DENSITY METER

LEVEL SENSOR

SPEED SENSOR

FLOAT LEVEL ELEMENT

DISPLACEMENT LEVEL ELEMENT

BUBBLER LEVEL TUBE

UNGUIDED WAVE LEVEL ELEMENT

GUIDED WAVE LEVEL ELEMENT

CAPACITANCE / POINT LEVEL ELEMENT

VIBRATING TUNING FORK LEVEL SWITCH

THERMAL ELEMENT WITH WELL

THERMAL SENSING RTD STRIP

INSTRUMENT & DEVICE IDENTIFICATION TABLE

	FIRST LETTER		SUCCEEDING LETTERS		
CODE	MEASURING OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION				
C	CONDUCTIVITY			CONTROL	CLOSE
D	DENSITY	DIFFERENCE, DIFERENTIAL			DEVIATION
E	VOLTAGE		SENSOR, PRIMARY ELEMENT		
F	FLOW, FLOW RATE	RATIO			FAILURE / FAULT
G			GLASS, GAUGE, VIEWING DEVICE		
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER		SCAN		
K	TIME, SCHEDULE	TIME, RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE, HUMIDITY				MIDDLE, INTERMEDIATE
N					
O	TORQUE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE		POINT (TEST CONNECTION)		
Q	QUANTITY	INTEGRATE, TOTALIZE	INTEGRATE, TOTALIZE		
R	RADIATION		RECORD		RUN
S	SPEED, FREQUENCY	SAFETY		SWITCH	STOP
T	TEMPERATURE			TRANSMITTER	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
V	UNCLASSIFIED			VALVE, DAMPER, LOUVRE	
W	WEIGHT, FORCE		WELL, PROBE		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE, PRESENCE	Y AXIS		AUXILIARY DEVICE	
Z	POSITION, DIMENSION	Z AXIS, SAFETY INSTRUMENTED SYSTEM		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

NOTE:
1. THE LETTER X IS TO BE DEFINED AT THE TIME OF USE, AND MAY BE USED FOR MULTIPLE DEFINITIONS WHERE NO OTHER LETTER IS APPLICABLE.

MOTOR CONTROL SYMBOLS

2-SPD TWO SPEED

FVNR FULL VOLTAGE NON-REVERSING

FVR FULL VOLTAGE REVERSING

SS SINGLE SPEED

VFD VARIABLE FREQUENCY DRIVE

VSD VARIABLE SPEED DRIVE

RVSS REDUCED VOLTAGE SPEED STATE

MISCELLANEOUS SYMBOLS

PLC INPUT / OUTPUT POINT

HARD-WIRE INTERLOCK REFER TO CONTROL DESCRIPTION STRATEGY

RESET FOR LATCH-TYPE OPERATOR

PURGE CONNECTION OR FLUSHING DEVICE

ADDRESSABLE INPUT / MONITOR MODULE

DIAPHRAGM SEAL

CLOSED CIRCUIT TELEVISION

ANNOTATION SYMBOLS

REFERENCE

PROCESS / SIGNAL CONTINUATION ON INDICATED DRAWING

COMMODITY OR LINE DESCRIPTION
REFERENCE NUMBER — A 000-X999 — REFERENCE DRAWING
SOURCE OR DESTINATION

PROCESS / SIGNAL CONTINUATION ON INDICATED DRAWING

A A

SIGNAL IDENTIFICATION

XX, Signal Description
INPUT / OUTPUT TYPE

INSTRUMENT IDENTIFICATION

INSTRUMENT ABBREVIATION — PLANT AREA — AA - BBB - S9996 — EQUIPMENT NUMBER — SUFFIX (NUMBER) — SYSTEM NUMBER

OR

INSTRUMENT ABBREVIATION — BBB 00 — S9996 — OPERATING FUNCTION (WHERE APPLICABLE) — SUFFIX (NUMBER) — SYSTEM NUMBER — EQUIPMENT NUMBER

SCALE: NONE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S.GALBICHKA
DRAWN BY: S.GALBICHKA
CHECKED BY: G.DAVIES
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	SRG	SRG

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

INSTRUMENTATION LEGEND

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X001S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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PLUMBING SYMBOLS LIST

NOTE: NOT ALL SYMBOLS MAY BE USED.

SYMBOL	DESCRIPTION
	KEYNOTE (SEE LEGEND ON SHEET)
	FLOW ARROW
	CONNECT TO EXISTING
	END OF DEMOLITION
	PIPE CAPPED
	PIPE UNION
	PIPE GUIDES OR SLEEVES
	PIPE ANCHOR
	FLEXIBLE PIPE CONNECTION
	GENERAL SERVICE VALVE (SEE SPECIFICATIONS FOR VALVE TYPE PER APPLICATION)
	CHECK VALVE (ARROW INDICATES DIRECTION OF FLOW)
M	MANUAL BALANCING VALVE
A	AUTOMATIC BALANCING VALVE
S	SOLENOID VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
PICBV	TWO-WAY PRESSURE INDEPENDENT CONTROL AND BALANCE VALVE
	THERMOSTATIC MIXING VALVE
	PRESSURE REDUCING VALVE
VB	VACUUM BREAKER
	PLUG VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	DRAIN VALVE WITH THREADED HOSE CONNECTION
	REDUCED PRESSURE BACKFLOW PREVENTER
	PRESSURE GAUGE WITH STOPCOCK
	STRAINER WITH BLOW DOWN VALVE
AV	AUTOMATIC AIR VENT
MAV	MANUAL AIR VENT
	TEMPERATURE/PRESSURE TEST PLUG (PETE'S PLUG)
FS	WATER FLOW SWITCH
PS	PRESSURE SWITCH
CO	CLEAN OUT
WCO	WALL CLEAN OUT
FCO	FLOOR CLEAN OUT
GCO	GRADE CLEAN OUT
AD	AREA DRAIN
FD	FLOOR DRAIN
OFD	OVERFLOW ROOF DRAIN
RD	ROOF DRAIN
HB	HOSE BIBB
WH	WALL HYDRANT
YH	YARD HYDRANT
	FLOW METER
	THERMOMETER
	PITCH DOWN IN DIRECTION OF ARROW
M	METER
W / #	RISER OR STACK DESIGNATION & NUMBER
A	HOT WATER MAINTENANCE CABLE START POINT
A	HOT WATER MAINTENANCE CABLE TEE POINT
A	HOT WATER MAINTENANCE CABLE END POINT

PLUMBING GENERAL NOTES

1. COORDINATE EXACT REQUIREMENTS AND LOCATION OF WORK WITH THE WORK OF OTHER TRADES PRIOR TO FABRICATION. PROVIDE ADDITIONAL OFF SETS AND SECTIONS OF PIPING AS MAY BE REQUIRED TO MEET THE APPLICABLE JOB CONDITION REQUIREMENTS. VERIFY JOB-SITE ELEVATIONS, DIMENSIONS, AND CONDITIONS, PRIOR TO FABRICATION OR INSTALLATION OF THE WORK. COORDINATE EXACT ROUTING OF PIPING WITH OTHER TRADES SO THAT NO CONFLICTS OCCUR WITH DUCTWORK, PIPING, LIGHTS, STRUCTURE, ETC.
2. ALL FLOOR PENETRATIONS TO BE SEALED WATER TIGHT AND COMPLETELY PACKED WITH SEALANT OR FIRE STOP MATERIAL WHERE APPLICABLE BY TRADE CONTRACTORS.
3. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. INCLUDE ALL NECESSARY AND APPLICABLE APPURTENANCES, WHETHER INDICATED OR NOT.
4. INSTALL ALL WORK TO COMPLY WITH ALL LAWS, REGULATIONS, CODES AND STANDARDS (FEDERAL, STATE, AND LOCAL), AS ADOPTED BY THE AGENCIES HAVING JURISDICTION, INCLUDING REASONABLY ANTICIPATED REVISIONS BASED ON EMERGING TRENDS IN BUILDING REGULATIONS. WHERE ANY OF THESE DIFFER, THE MOST STRINGENT SHALL APPLY.
5. COORDINATE THE LOCATION OF ALL UTILITY CONNECTION POINTS, FLOOR DRAINS AND HUB DRAINS FOR EQUIPMENT WITH OTHER TRADES.
6. PROVIDE LINE SIZED SHUT-OFF VALVE IN ALL HOT AND COLD WATER BRANCHES SERVING PLUMBING FIXTURES OR EQUIPMENT.
7. ALL PIPING PENETRATIONS THRU COUNTERTOPS BY PLUMBING CONTRACTOR. PROVIDE CHROME PLATED ESCUTCHEON.
8. PROVIDE A WATER HAMMER ARRESTOR ON HOT AND COLD WATER LINES AT ENDS OF MAINS. AT ENDS OF BRANCH LINES, AT END OF LINES SERVING GROUPS OF PLUMBING FIXTURES AND FOR ALL QUICK CLOSING VALVES. SIZE AND INSTALL ARRESTORS AS RECOMMENDED BY THE PLUMBING AND DRAINAGE INSTITUTE (PDI) WH-201 TO ELIMINATE WATER HAMMER. INSTALL WHERE ACCESSIBLE FOR SERVICE AND PROVIDE ISOLATION VALVE AND ACCESS DOOR IF REQUIRED.
9. THE CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AT ALL PLUMBING RELATED PENETRATIONS OF FIRE, SMOKE AND OTHER RATED STRUCTURES, INCLUDING FLOORS, WALLS, PARTITIONS, ETC.. REFER TO ARCHITECTURAL DOCUMENTATION FOR LOCATIONS OF ALL RATED STRUCTURES, AND SPECIFIC INFORMATION AND REQUIRMENTS PERTAINING TO SAME.
10. LAYOUT AND INSTALLATION OF PIPING, EQUIPMENT AND APPURTENANCES INDICATED ON PLAN IS SCHEMATIC IN NATURE. EXACT LOCATION, ROUTING AND INSTALLATION TO BE COORDINATED WITH BUILDING STRUCTURES AND ALL OTHER TRADES.
11. UNLESS INDICATED OTHERWISE, ALL FIXTURES AND EQUIPMENT PROVIDED WITH PLUMBING SUPPLY PIPING TO BE FURNISHED WITH APPROVED/LISTED STOPS IN ACCESSIBLE LOCATIONS.
12. UNLESS INDICATED OTHERWISE BY THE ARCHITECTURAL DOCUMENTATION (WHICH SHALL TAKE PRECEDENCE), PLUMBING FIXTURES AND EQUIPMENT MOUNTING HEIGHTS SHALL BE AS INDICTAED ON PLUMBING FIXTURE SCHEDULE.
13. PLUMBING PIPING IS NOT PERMITTED TO RUN ABOVE ANY ELECTRICAL SWITCH GEAR, MOTOR CONTROL CENTERS OR PANELS (INCLUDING ACCESS/CLEARANCE SPACE 42" IN FRONT OF THESE ITEMS, AND MIN 30" WIDE), UNDER ANY CIRCUMSTANCES. LOCATION OF NEW ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED FROM INDICATION BY THE PROJECT ELECTRICAL DOCUMENTATION, AND ACTUAL INSTALLATION CONFIRMED WITH THE ELECTRICAL CONTRACTOR PRIOR TO START OF WORK.
14. THE SIZES OF SOIL, WASTE, VENT AND WATER BRANCH PIPING TO SINGLE FIXTURES SHALL BE AS SCHEDULED IN THE PLUMBING FIXTURE SCHEDULE.
15. CONTRACTOR TO PROVIDE MISCELLANEOUS STEEL AS REQUIRED TO SUPPORT EQUIPMENT AND ASSOCIATED COMPONENTS SUCH AS CONTROL PANELS, TANKS, VALVES, PIPING, VARIABLE SPEED DRIVES, ETC. MISCELLANEOUS STEEL TO CONSIST OF GALVANIZED STRUT, ANGLE IRON, CHANNELS OR OTHER STANDARD GALVANIZED STEEL ELEMENTS. ALL WELDED CONNECTIONS TO BE GROUND AND COLD GALVANIZED IN THE FIELD.
16. PROVIDE BACKFLOW PREVENTER OR VACUUM BREAKER IN DOMESTIC WATER LINES, WHERE BACKFLOW OR BACK PRESSURE MAY OCCUR, AS REQUIRED BY THE STATE OR LOCAL JURISDICTION. EQUIPMENT SUCH AS STERILIZERS, COFFEE MAKERS, WASHERS/DISINFECTORS, ULTRASONIC CLEANERS, CARBONATED VENDING MACHINES, WATER COOLED ICE MAKERS, SHOWER MIXING VALVES WITH HOSES, HOSE BIBBS AND WALL HYDRANTS ARE TO INCLUDE BACKFLOW PREVENTION DEVICES IN THE WATER LINES THAT SERVE THEM.
17. ALL SANITARY VENT LINES ARE TO TAKE OFF FROM SANITARY WASTE BRANCHES AT 45 DEGREE RISE OFF TOP OF PIPE.
18. PROVIDE SHUT-OFF BALL VALVE IN WATER LINES SERVING TRAP PRIMER DISTRIBUTION UNITS, BALANCING VALVES AND WATER HAMMER ARRESTORS.

SCALE: 12" = 1'-0"

PROJECT ADDRESS:
1965 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: R. MEADOR
DRAWN BY: C. IMPARATO
CHECKED BY: G. DAVIES
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03 SW-1A: ISSUED FOR BID	CI	RM

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PLUMBING LEGEND & GENERAL NOTES

SALT LAKE CITY

PROFESSIONAL ENGINEER
No. 10646606
RYAN E. MEADE
STATE OF UTAH
04-03-2023

DRAWING No.
0100-P001

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 10:46:03 AM

FILE: BIM 360://6507228-Salt Lake City 2019\524905350_0000-P701.rvt

LEGENDS AND SYMBOLS

NOTE: NOT ALL SYMBOLS MAY BE USED

SYMBOL	DESCRIPTION
F	MANUAL PULL STATION
CLA	CLEAN AGENT SYSTEM ACTIVATION SWITCH
CLA	CLEAN AGENT SYSTEM ABORT SWITCH
EPO	EMERGENCY POWER OFF SWITCH
CD	INDIVIDUAL FIRE ALARM WALL MOUNTED HORN/ STROBE DEVICE. CD INDICATES MINIMUM CANDELA RATING. WP INDICATES WEATHERPROOF DEVICE.
CD	INDIVIDUAL FIRE ALARM WALL MOUNTED STROBE DEVICE. CD INDICATES MINIMUM CANDELA RATING.
CA	CLEAN AGENT ACTIVATION FIRE ALARM WALL MOUNTED STROBE.
FACP	FIRE ALARM CONTROL PANEL
DACT	DIGITAL ALARM COMMUNICATOR TRANSMITTER
MIC	REMOTE VOICE EVACUATION MICROPHONE / LOCAL OPERATING CONSOLE.
ANN	FIRE ALARM ANNUNCIATOR
RSFACU CLA	CLEAN AGENT RELEASING PANEL
NAC n	NOTIFICATION CIRCUIT POWER BOOSTER, EXTENDER PANEL. n = UNIT NUMBER
FSCU xx	FIRE SUPPRESSION CONTROL UNIT. xx = SYSTEM NUMBER
AIM	ADDRESSABLE INPUT / MONITOR MODULE
AOM	ADDRESSABLE OUTPUT / CONTROL MODULE
VS	VALVE SUPERVISORY SWITCH / TAMPER SWITCH
PS	PRESSURE SWITCH
WF	WATERFLOW SWITCH
S P	SMOKE DETECTOR, PHOTOELECTRIC
S CLA	SMOKE DETECTOR, CLEAN AGENT
S ER	SMOKE DETECTOR, ELEVATOR RECALL
S	DUCT SMOKE DETECTOR
	HEAT DETECTOR

GENERAL FIRE ALARM NOTES

APPLICABLE CODES:
UTAH BUILDING CODE (2018)
UTAH FIRE CODE (2018)
NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE (2016)
NFPA 820 - STANDARD FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES (2020)

1. FULL FIRE ALARM DETECTION SYSTEM REQUIRED PER CLIENT REQUEST TO FOLLOW FM GLOBAL STANDARDS.
2. ALL EXTERIOR APPLIANCES SHALL BE WEATHERPROOF.
3. SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN 3 FEET OF HVAC SUPPLY REGISTERS OR RETURN GRILLES.
4. THE FIRE ALARM PLANS ARE DIAGRAMMATIC ONLY. DEVICES MAY REQUIRE ADJUSTMENT IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING FINAL LAYOUT TO MEET REQUIREMENTS FOR A FULLY FUNCTIONING FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 72.
5. CONTRACTOR SHALL ROUTE WIRING AND CONDUIT ALONG THE SHORTEST AND MOST COST EFFECTIVE ROUTE WHERE POSSIBLE. DO NOT MIX POWER LIMITED AND NON-POWER LIMITED WIRING WITHIN THE SAME CONDUIT. CONTRACTOR SHALL NOT EXCEED 40% CONDUIT FILL. SIGNALING LINE AND AUDIO CIRCUITS SHALL BE ROUTED IN SEPARATE CONDUITS.
6. COORDINATE ALL FIRE ALARM EQUIPMENT WITH ALL OTHER TRADES TO AVOID CONFLICTS. PROVIDE ALL NECESSARY FITTINGS, EQUIPMENT, HANGERS, OFFSETS, ROUTING, ETC TO AVOID ALL CONFLICTS AT NO ADDITIONAL COST.
7. COORDINATE JUNCTION BOX MOUNTING HEIGHTS FOR EQUIPMENT FURNISHED BY OTHER TRADES, ADJUST AS NECESSARY TO ACCOMMODATE THE EQUIPMENT SELECTED. PROVIDE ALL FINAL CONNECTIONS TO EQUIPMENT.
8. CONTRACTOR SHALL PROVIDE ALL END OF LINE RESISTORS AS REQUIRED TO MATCH THE CONTROL EQUIPMENT REQUIREMENTS AND TO SUPERVISE ALL CIRCUITS.
9. PROVIDE THE MANUFACTURER'S RECOMMENDED SIZE AND TYPE OF CABLING BETWEEN ALL FIRE ALARM EQUIPMENT REQUIRING CONNECTIONS TO FUNCTION PROPERLY. SUBMIT WIRE SIZE SUBSTITUTION FOR APPROVAL. CHANGES IN WIRE SIZE SHALL BE AT NO ADDITIONAL COST.
10. CONTRACTOR SHALL VERIFY ALL WIRE SIZES BASED ON ACTUAL CIRCUIT LENGTH INSTALLED IN THE FIELD TO STAY WITHIN THE MANUFACTURER'S ACCEPTABLE VOLTAGE DROP.
11. ALL EXTERIOR FIRE ALARM APPLIANCES AND EQUIPMENT SHALL BE WEATHERPROOF.
12. ALL PENETRATIONS OF FIRE RATED PARTITIONS AND FLOORS SHALL BE FIRESTOPPED PER THE SPECIFICATIONS. CONTRACTOR SHALL PROVIDE FIRESTOPPING SUBMISSIONS FOR EACH ASSEMBLY FOR APPROVAL PRIOR TO INSTALLATION. REFER TO FIRESTOP SPECIFICATION SECTION FOR MORE INFORMATION.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE NUMBER OF STROBE BOOSTER POWER SUPPLIES AND AUDIO AMPLIFIERS. CONTRACTOR SHALL ALLOW FOR 25 PERCENT SPARE CAPACITY ON ALL CIRCUITS.
14. MOUNTING OF FIELD DEVICES SHALL BE COORDINATED IN THE FIELD. BACK BOXES IN FINISHED AREAS SHALL BE RECESSED IN GYPSUM BOARD PARTITIONS AND GYPSUM BOARD AND LAY IN CEILINGS. DEVICES IN UNFINISHED AREAS SHALL BE SURFACE MOUNTED AND BE PROVIDED WITH THE MANUFACTURER'S SURFACE MOUNTED BACK BOXES.
15. REMOTE INDICATING SWITCHES SHALL BE PROVIDED FOR DUCT DETECTORS NOT CLEARLY VISIBLE FROM THE FLOOR, OR MORE THAN 10 FEET ABOVE THE FLOOR. REMOTE INDICATING SWITCHES SHALL BE INSTALLED WITH CENTER AT 7 FEET ABOVE THE FLOOR.
16. ROUTE ALL FIRE ALARM CABLE WITHIN METAL CONDUIT.
17. CANDELA RATINGS SHOWN ARE APPROXIMATE BASED ON NFPA 72.
18. ALL VISIBLE STROBES SHALL BE SYNCHRONIZED IN ACCORDANCE WITH NFPA 72 REQUIREMENTS.
19. ALL FIRE ALARM CIRCUITS SHALL BE CLASS B.
20. ALL FIRE PROTECTION AND DETECTION SYSTEMS SHALL HAVE THE PIPING AND CONDUIT EXPOSED FOR INSPECTION. THE PIPING AND CONDUIT MAY BE COVERED AFTER THE FIRE INSPECTION OF THE SYSTEMS HAS SUCCESSFULLY PASSED THE REQUIRED INSPECTIONS.

SCALE: As Indicated

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SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: M. LANE
DRAWN BY: D. RUTHERFORD
CHECKED BY: J. HEIM
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

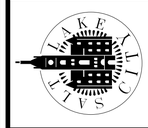
NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	DR	ML

SW-1A: ISSUED FOR BID

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

FIRE ALARM LEGEND





DRAWING No.
0100-F002

SHEET _____ OF -

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DATE: 3/29/2023 2:50:40 PM

FILE: BIM 360://60572288-Salt Lake City 2019\524905350_0000-F701.rvt

CONTROLS SYMBOLS GUIDE

NOTE: NOT ALL SYMBOLS MAY BE USED

SYMBOL	DESCRIPTION
AF	AIR FLOW MEASURING DEVICE
AS	AIR SWITCH
CT	CONDUCTIVITY TRANSMITTER
CS	CURRENT SENSOR
DP	DIFFERENTIAL PRESSURE TRANSMITTER
EPT	ELECTRONIC PNEUMATIC TRANSDUCER
ES	END SWITCH
FM	FLOW METER
HOA	HAND-OFF-AUTO SWITCH
LT	LEVEL TRANSMITTER
M	METER
PHT	PH TRANSMITTER
PS	PRESSURE SWITCH
PT	PRESSURE TRANSMITTER
SD	SMOKE DETECTOR
	STARTER
TS	TEMPERATURE SWITCH
VFD	VARIABLE FREQUENCY DRIVE
VT	VIBRATION TRANSMITTER
FS	WATER FLOW SWITCH

NOTE: IF A SYMBOL IS NEEDED AND IS NOT SPECIFIED ON THESE LISTS, SPELL IT OUT ON THE DOCUMENTS

MECHANICAL SYMBOLS LIST

NOTE: NOT ALL SYMBOLS MAY BE USED

SYMBOL	DESCRIPTION
	KEYNOTE (SEE LEGEND ON SHEET)
	AIRFLOW ARROW
	FLOW ARROW
	CONNECT TO EXISTING
	END OF DEMOLITION
	PIPE CAPPED
	PIPE DROP
	PIPE RISE
	PIPE TEE DOWN
	PIPE REDUCER
	PIPE UNION
	PIPE GUIDES OR SLEEVES
	PIPE ANCHOR
	CONCENTRIC PIPE REDUCER
	FLEXIBLE PIPE CONNECTION
	GENERAL SERVICE VALVE (SEE SPECIFICATIONS FOR VALVE TYPE PER APPLICATION)
	CHECK VALVE (ARROW INDICATES DIRECTION OF FLOW)
M	MANUAL BALANCING VALVE
A	AUTOMATIC BALANCING VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
PICBV	TWO-WAY PRESSURE INDEPENDENT CONTROL AND BALANCE VALVE
	MULTI PURPOSE VALVE
	BALL VALVE
	PUMP
	PRESSURE REDUCING VALVE
	STEAM PRESSURE REGULATING VALVE
	RELIEF VALVE
	DRAIN VALVE WITH THREADED HOSE CONNECTION
	REDUCED PRESSURE BACKFLOW PREVENTER
	PRESSURE GAUGE WITH STOPCOCK
	STRAINER WITH BLOW DOWN VALVE
	TRIPLE DUTY VALVE
AV	AUTOMATIC AIR VENT
MAV	MANUAL AIR VENT
	TEMPERATURE/PRESSURE TEST PLUG (PETE'S PLUG)
	STEAM TRAP
CO CO	CLEAN OUT
	FLOW METER
	THERMOMETER
	PITCH DOWN IN DIRECTION OF ARROW
H	HUMIDISTAT WITH ADJUSTABLE CONTROL
T	THERMOSTAT WITH ADJUSTABLE CONTROL
H	HUMIDITY SENSOR
T	TEMPERATURE SENSOR
CO2	CARBON DIOXIDE SENSOR
CO	CARBON MONOXIDE SENSOR
NO2	NITROGEN DIOXIDE SENSOR
OS	OCCUPANCY SENSOR
M	MOTORIZED DAMPER
	COIL

MECHANICAL SYMBOLS LIST CONT

NOTE: NOT ALL SYMBOLS MAY BE USED

SYMBOL	DESCRIPTION
	SUPPLY DIFFUSER WITH FLEXIBLE DUCT TAG - NECK SIZE / AIRFLOW (CFM) — TAG EXAMPLE: S1-6ø / 100
	SUPPLY DIFFUSER TAG - NECK SIZE / AIRFLOW (CFM) — TAG EXAMPLE: S1-6ø / 100
	RETURN/EXHAUST GRILLE TAG - NECK SIZE / AIRFLOW (CFM) — TAG EXAMPLE: R1-12x8 / 100 / E1-12x8 / 100
	SIDEWALL SUPPLY DIFFUSER TAG - NECK SIZE / AIRFLOW (CFM) — TAG EXAMPLE: S2-12x8 / 100
	SIDEWALL RETURN/EXHAUST GRILLE TAG / AIRFLOW (CFM) — TAG EXAMPLE: R2-12x8 / 100 / E2-12x8 / 100
DG	DOOR GRILLE
	DAMPERS/DUCT ACCESSORIES
	FD: FIRE DAMPER
	SD: SMOKE DAMPER
	FSD: FIRE/SMOKE DAMPER
M	MD: MOTORIZED DAMPER
VD	VD: VOLUME DAMPER
BDD	BDD: BACKDRAFT DAMPER
	SUPPLY AND OUTDOOR AIR RECTANGULAR DUCT ELBOW UP OVAL DUCT ELBOW UP ROUND DUCT ELBOW UP
	RETURN, RELIEF, AND EXHAUST AIR RECTANGULAR DUCT ELBOW UP OVAL DUCT ELBOW UP ROUND DUCT ELBOW UP
	SUPPLY AND OUTDOOR AIR RECTANGULAR DUCT ELBOW DOWN OVAL DUCT ELBOW DOWN ROUND DUCT ELBOW DOWN
	RETURN, RELIEF, AND EXHAUST AIR RECTANGULAR DUCT ELBOW DOWN OVAL DUCT ELBOW DOWN ROUND DUCT ELBOW DOWN
	NEW WORK DUCTWORK
	EXISTING DUCTWORK
	NEW WORK PIPING
	EXISTING PIPING
	DEMOLISHED PIPING
	NEW WORK MECHANICAL EQUIPMENT (WITH CLEARANCE SHOWN)
	GENERIC FAN
	GENERIC PUMP
	ACCESS DOOR

MECHANICAL GENERAL NOTES

1. COORDINATE THE EXACT REQUIREMENTS AND LOCATION OF WORK WITH THE WORK OF OTHER TRADES PRIOR TO FABRICATION AND INSTALLATION. PROVIDE ADDITIONAL OFFSETS AND SECTIONS IN DUCTWORK AND/OR PIPING REQUIRED TO MEET THE APPLICABLE JOB CONDITION REQUIREMENTS. VERIFY JOB SITE ELEVATIONS, DIMENSIONS, AND CONDITIONS, PRIOR TO FABRICATION OR INSTALLATION OF THE WORK. COORDINATE EXACT ROUTING OF DUCTWORK AND PIPING WITH OTHER TRADES SO THAT NO CONFLICTS OCCUR WITH DUCTWORK, PIPING, LIGHTS, STRUCTURE, ETC. PROVIDE ALL PERTINENT DATA CONCERNING THE LOCATION, DIMENSIONS, ETC., OF THE MECHANICAL EQUIPMENT THAT REQUIRES BASES, CURBS AND SUPPORTS TO THE APPROPRIATE TRADES.
2. WHERE CEILINGS ARE INDICATED, ALL DUCTS AND PIPES SHALL BE RUN ABOVE CEILING. IN EXPOSED CONDITIONS, INSTALL DUCTWORK AND PIPING TIGHT TO THE BOTTOM OF STRUCTURE.
3. ALL FIRE RATED WALL AND FLOOR PENETRATIONS ARE TO BE SEALED WATER TIGHT AND PACKED WITH FIRE STOP MATERIAL.
4. ALL ITEMS THAT REQUIRE MAINTENANCE OR ADJUSTMENT MUST BE INSTALLED IN ACCESSIBLE LOCATIONS. PROVIDE AN APPROPRIATELY SIZED ACCESS DOOR AS REQUIRED.
5. ALL SEALS, BEARINGS, PACKINGS, AND ACCESSORIES FOR ALL EQUIPMENT AND PIPING SPECIALTIES SHALL BE SUITABLE FOR THE CONTINUOUS OPERATIONAL TEMPERATURES, PRESSURES AND CHARACTERISTICS, OF THE SYSTEM THEY SERVE.
6. COORDINATE THE EXACT LOCATIONS OF DIFFUSERS, GRILLES AND REGISTERS WITH ARCHITECTURAL REFLECTED CEILING PLANS, AREA SMOKE DETECTORS, SPRINKLERS, LIGHTS AND ELECTRICAL DEVICES. AIR DEVICES SHALL NOT BE WITHIN 3 FEET OF AN AREA SMOKE DETECTOR.
7. UNLESS NOTED OTHERWISE, PROVIDE BRANCH DUCT TO DIFFUSERS SAME SIZE AS DIFFUSER NECK. FLEXIBLE DUCT CONNECTION TO THE DIFFUSER SHALL BE NO MORE THAN FIVE FEET IN LENGTH. ALL BRANCH DUCT TAKEOFFS TO AIR DEVICES SHALL HAVE A MANUAL BALANCING DAMPER INSTALLED IN AN ACCESSIBLE LOCATION.
8. AIR DEVICES PROVIDED WITH INTEGRAL BALANCE DAMPERS DO NOT REQUIRE ADDITIONAL BALANCING DAMPER AT AIR DEVICE BRANCH TAKEOFF.
9. PROVIDE ROOM TEMPERATURE THERMOSTATS FOR ALL EQUIPMENT THAT MAINTAINS SPACE TEMPERATURE. PREFERRED LOCATIONS ARE SHOWN ON THE PLANS. THERMOSTATS SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE. COORDINATE THE EXACT LOCATIONS OF THERMOSTATS WITH SWITCHES, AND ANY OTHER WALL MOUNTED FIXTURES PRIOR TO ROUGH IN.
10. UNLESS NOTED OTHERWISE, MINIMUM PIPE SIZE TO TERMINAL EQUIPMENT SHALL BE 3/4 INCH AND MINIMUM FLOW SHALL BE 0.5 GPM.
11. PROVIDE SHUT-OFF VALVES WITHIN ALL SUPPLY PIPING BRANCH TAKEOFFS FROM MAINS. PROVIDE A MANUAL BALANCE VALVE AND A SEPARATE SHUT-OFF VALVE WITHIN ALL RETURN PIPING BRANCH TAKE-OFFS FROM MAINS. LOCATE VALVES IN ACCESSIBLE LOCATIONS.
12. INSTALL ALL PIPING IN LOCATIONS AND ELEVATIONS SUCH THAT COILS, TUBES, AND FILTERS CAN BE REMOVED AND REPLACED WITHOUT MAJOR PIPING REMOVAL. LOCATE VALVES IN APPROPRIATE PLACES TO ACCOMMODATE MAINTENANCE. FOR GRAVITY FLOW PIPING, ADEQUATE SLOPE SHALL BE PROVIDED.
13. AT TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE, AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY FOR PROTECTION TO REDUCE THE AMOUNT OF DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM(S).
14. INSTALLATION OF HVAC AND REFRIGERATION EQUIPMENT SHALL NOT CONTAIN ANY CFCS OR HALONS.
15. ALL SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SYSTEMS, DEVICES SHALL BE FROM THE BUILDING STRUCTURE. SUPPORT FROM STRUCTURAL BRIDGING IS UNACCEPTABLE.
16. INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC., IN A LOCATION OR IN A MANNER THAT WILL ALLOW FREEZING AND/OR THE COLLECTION OF CONDENSATION.

SCALE: 1 : 1

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: B.WATSON
DRAWN BY: N.AHMED
CHECKED BY: C.COURCHAINE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	NA	BW

LAST CONFORMED SET: SW-1A: ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

MECHANICAL
LEGEND & GENERAL NOTES

SALT LAKE CITY

PROFESSIONAL ENGINEER
No. 10848606
RYAN E. MEAD
STATE OF UTAH
04-03-2023

DRAWING No.
0100-M001

SHEET _____ OF _____

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DATE: 30/03/2023 13:31:29

FILE: BIM 360://0057228B-Salt Lake City 2019\524905350_0100-M7701.rvt

POWER

SYMBOL	TYPE
	FLUSH FLOOR MOUNTED NEMA 5-20 DUPLEX RECEPTACLE UNLESS NOTED OTHERWISE. DUPLEX OUTLET OCCUPANCY/VACANCY SENSOR CONTROLLED
	FLUSH FLOOR MOUNTED NEMA 5-20 QUAD RECEPTACLE UNLESS NOTED OTHERWISE
	FLUSH FLOOR MOUNTED NEMA 5-20 QUAD RECEPTACLE UNLESS NOTED OTHERWISE. QUAD RECEPTACLE WITH LEFT DUPLEX OUTLET OCCUPANCY/VACANCY SENSOR CONTROLLED
	NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18" AFF UNLESS NOTED OTHERWISE
	NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18" AFF UNLESS NOTED OTHERWISE. DUPLEX RECEPTACLE WITH TOP OUTLET OCCUPANCY/VACANCY SENSOR CONTROLLED
	NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18" AFF UNLESS NOTED OTHERWISE. DUPLEX RECEPTACLE OCCUPANCY/VACANCY SENSOR CONTROLLED
	NEMA 5-20 QUAD RECEPTACLE MOUNTED +18" AFF, UNO.
	NEMA 5-20 QUAD RECEPTACLE MOUNTED +18" AFF, UNO. QUAD RECEPTACLE WITH LEFT DUPLEX OUTLET OCCUPANCY/VACANCY SENSOR CONTROLLED
WP	NEMA 5-20 DUPLEX WEATHER PROOF RECEPTACLE. VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN
G	NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18"AFF WITH GROUND FAULT CIRCUIT INTERRUPTER PROTECTION, UNO
G	NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18"AFF WITH GROUND FAULT CIRCUIT INTERRUPTER PROTECTION, UNO. DUPLEX RECEPTACLE WITH TOP OUTLET OCCUPANCY/VACANCY SENSOR CONTROLLED
	DATA DEVICE OUTLET MOUNTED +18" AFF, UNO.
	FINISHED JUNCTION BOX FOR DATA DEVICES RECESSED WALL MOUNTED AT 18" AFF UNLESS NOTED OTHERWISE. PROVIDE 1-1/2" CONDUIT WITH PULL STRING
	SPECIAL RECEPTACLE. REFER TO PLAN FOR LABEL. SEE NEMA CONFIGURATION BELOW: WLD: NEMA L12-30R FOR WELDER
	RECESSED FINISHED FLOOR BOX FOR DATA DEVICES INSTALLED BELOW GRADE. PROVIDE 1-1/2" CONDUIT WITH PULL STRING
J	RECESSED FINISHED FLOOR BOX INSTALLED BELOW GRADE.
J	FINISHED JUNCTION BOX RECESSED WALL MOUNTED 18" AFF UNLESS NOTED OTHERWISE
M	MOTOR, SIZE AS SHOWN.
	HEAVY DUTY UNFUSED DISCONNECT SWITCH. 30A SWITCH,Z P THREE POLE, MOUNTED AT +42" AFF UNLESS NOTED OTHERWISE
	FUSED DISCONNECT SWITCH. SIZE FUSES FOR EQUIPMENT BASED ON MANUFACTURER'S RECOMMENDATIONS, MOUNTED AT +42" AFF UNLESS NOTED OTHERWISE
	COMBINATION MOTOR STARTER. SIZED AS INDICATED ON DRAWINGS.
	SURFACE MOUNTED PANELBOARD OR AUTOMATIC TRANSFER SWITCH, AS INDICATED
	RECESSED MOUNTED PANELBOARD.
$M	125V 30A SINGLE POLE MOTOR RATED SWITCH MOUNTED AT 42" AFF
CR	CARD READER. PROVIDE MINIMUM 3/4" CONDUIT WITH PULLSTRING.
RS	WALL MOUNTED ROOM SCHEDULER. PROVIDE MINIMUM 3/4" CONDUIT WITH PULLSTRING
CB	ENCLOSED CIRCUIT BREAKER.
	FLUSH FLOOR BOX SERVICE FOR POWER AND TELECOM. PROVIDE HALF SWITCHED (CONTROLLED) QUAD RECEPTACLE
	FLUSH FLOOR BOX SERVICE FOR POWER AND TELECOM. SEE ALSO ASSOCIATED COMM & SECURITY PLAN DRAWING
X	X INDICATES, R - REFRIGERATOR MV - MICROWAVE DW - DISHWASHER WC - WATER COOLER GD - GARBAGE DISPOSAL G - GROUND FAULT CIRCUIT INTERRUPTER

LIGHTING

SYMBOL	TYPE
F1 F1/E	1' x 29.78W' LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
F2 F2/E	1' x 44.58W' LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
F3 F3/E	1' x 17.52W' LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
F4 F4/E	1' x 69.59W' LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
F5 F5/E	1' x 40.28W' LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
	BAY LUMINAIRE - SUSPEND AND ORIENT PER PLAN REQUIREMENTS
E1	1' x 0.8W' WALL MOUNTED LED FIXTURE. LETTER INDICATES TYPE PER FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
F2/E	1' x 44.58W' WALL MOUNTED LED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE. "E" INDICATES EMERGENCY FIXTURE
	EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED, WALL MOUNTING. COORDINATE DIRECTIONAL ARROWS WITH ARCHITECT
$a	LOW VOLTAGE ON/OFF SWITCH MOUNTED AT +42" AFF, "a", AND OTHER LOWERCASE LETTERS INDICATE SWITCHED LEG. PROVIDE WITH ZONE RAISE/LOWER DIMMING WHERE NOTED ON PLANS.
$M	MOTOR-RATED SNAP SWITCH
$	SINGLE POLE WALL SWITCH MOUNTED AT 42" AFF, 120-277V 20A-RATED
OC	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
	WALL MOUNTED DUAL RELAY, DUAL TECHNOLOGY OCCUPANCY SENSOR
OC	LOW VOLTAGE CEILING MOUNTED 360° DUAL TECHNOLOGY OCCUPANCY SENSOR. DEVICE TO BE CAPABLE OF BOTH OCCUPANCY AND VACANCY. DEVICE TO BE SET TO OCCUPANCY. VERIFY LAYOUT WITH MANUFACTURER'S SPACING REQUIREMENTS
V OC	LOW VOLTAGE CEILING MOUNTED 360° DUAL TECHNOLOGY OCCUPANCY SENSOR. DEVICE TO BE SET TO VACANCY. VERIFY LAYOUT WITH MANUFACTURER'S SPACING REQUIREMENTS
PC	LOW VOLTAGE CEILING MOUNTED PHOTOCELL. VERIFY LAYOUT WITH MANUFACTURER
	SITE LIGHTING FIXTURE, SINGLE LIGHT
	SITE LIGHTING FIXTURE, DUAL LIGHT

LIGHTING SYMBOL NOTE

1. LOWER CASE LETTER INDICATES CONTROL ZONE.
2. POLE - MOUNTED LUMINAIRES ARE IDENTIFIED WITH THE FIXTURE SCHEDULE ID. ADDITIONALLY, THE FOLLOWING ANNOTATION IS ADDED FOR LUMINAIRES THAT HAVE MORE THAN ONE TYPE OF OPTIC. "A" REFERS TO THE OPTIC USED IN THE S1A LUMINAIRE, "B" REFERS TO THE OPTIC USED IN THE S1B LUMINAIRE:

A
POLE
B

SINGLE LINE DIAGRAM

SYMBOL	TYPE
	GROUND CONNECTION
	FUSE
	CIRCUIT BREAKER
52	HIGH VOLTAGE/MEDIUM VOLTAGE CIRCUIT BREAKER
52	DRAW-OUT CIRCUIT BREAKER
M	METER OR MOTOR OPERATOR
	TRANSFORMER
	BUSHING TYPE CURRENT TRANSFORMER
	CURRENT TRANSFORMER
	VOLTAGE TRANSFORMER
	DISCONNECT SWITCH - CENTER BREAKER STYLE WITH ARCING HORNS
	DISCONNECT SWITCH - WITH ARCING HORNS
	DISCONNECT SWITCH
TS	DOOR EXTERIOR-MOUNTED TEST SWITCHES
	NEUTRAL GROUNDING RESISTOR (NGR)
	SURGE ARRESTOR STATION CLASS
G	GENERATOR
	FUSIBLE DISCONNECT SWITCH
F	FUSIBLE DISCONNECT SWITCH
VFD	VARIABLE FREQUENCY DRIVE
FSD	FIRE SMOKE DAMPER
SPD	SURGE PROTECTIVE DEVICE
2SPD	TWO SPEED DRIVE
AFD	ADJUSTABLE FREQUENCY DRIVE
PLC	PROGRAMMABLE LOGIC CONTROLLER
	COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT SWITCH
	TELEPHONE TERMINAL BOX
	HV/MV CONDUCTOR/EQUIPMENT
	LV CONDUCTOR/EQUIPMENT
	EQUIPMENT ENCLOSURE/UNIT
K	KIRK KEY INTERLOCK

WIRING

SYMBOL	TYPE
X-##	ARROW INDICATES HOMERUN TO PANEL "X", CIRCUIT ##; PANEL IS ANY SOURCE OF SUPPLY, INCLUDING MCC, SWITCHGEAR, VFD, OR OTHER SUPPLYING UNIT.
	FOR HOMERUNS, ALL CONDUIT IS 1/2" WITH #12 CONDUCTORS AND A CODE SIZED GROUNDING CONDUCTOR, UNO
	FOR HOMERUNS WHERE ONLY WIRE SIZE IS INDICATED, ALL CONDUIT IS 3/4", UNO

GROUNDING

SYMBOL	TYPE
	GROUND WIRE, 4/0 AWG BARE CU, 24" BELOW GRADE, UNLESS NOTED OTHERWISE
	BOLTED COMPRESSION CONNECTION, NEMA 2-HOLE UNLESS NOTED OTHERWISE
	EXOTHERMIC WELD TYPE CONNECTION
	GROUND ROD, 3/4" X 10' COPPER CLAD UNLESS NOTED OTHERWISE
	GROUND TEST WELL, HS20 TRAFFIC RATED, WITH 3/4" X 10' COPPER CLAD GROUND ROD
	GROUNDED OPERATOR PLATFORM, GALVANIZED STEEL, 3' X 4' UNLESS NOTED OTHERWISE

SCHEMATICS

SYMBOL	TYPE
	CONTACT, FORM A, NORMALLY OPEN
	CONTACT, FORM B, NORMALLY CLOSED
	INPUT COIL

GENERAL ELECTRICAL NOTES

1. REFERENCE DOCUMENTS FOR OTHER TRADES FOR PATHWAY AND CABLE REQUIREMENTS. COORDINATE WITH GENERAL CONTRACTOR TO DETERMINE PATHWAY SCOPE, AND FOR FURTHER EQUIPMENT PROVISION REQUIREMENTS. SCOPE REQUIRED TO SUPPORT OTHER TRADES IS ADDITIVE TO ELECTRICAL CONTRACTOR SCOPE SHOWN ON ELECTRICAL SHEETS.
2. PROVIDE CABLE AND PATHWAY SCOPE FOR COMMUNICATIONS, INSTRUMENTATION, AND CONTROLS SYSTEMS AS PART OF ELECTRICAL BASE-BID. PROVIDE CABLES AND PATHWAYS PER TYPICAL INSTRUMENT WIRING SCHEDULE, PROVIDED INSTRUMENT LOOP DIAGRAMS, SPECIFICATIONS, AND AS OTHERWISE DIRECTED IN CONTRACT DOCUMENTS.
3. SEE SPECIFICATION 01 11 00 FOR SUMMARY OF WORK.

SCALE: NOT TO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: D.BROERMAN
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

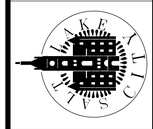
REVISIONS

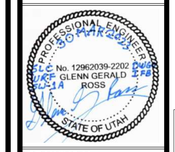
NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-1A ISSUED FOR BID	DB GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL LEGEND





DRAWING No.
0100-E001

SHEET ---- OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: Bid Set 24x36 0100-E001.dwg 3/29/2023 2:39:39 PM

ELECTRICAL/COMMUNICATION DUCTBANKS				
PT NO.	**NORTHING**	**EASTING**	**ELEVATION**	**DESCRIPTION**
1001	7,463,975.08	1,521,635.88	0.00	MH M101
1002	7,463,971.08	1,521,624.62	0.00	MH C101
1003	7,463,625.98	1,521,772.91	0.00	MH M102
1004	7,463,283.23	1,521,852.27	0.00	MH M103
1005	7,463,293.30	1,521,845.84	0.00	MH C102
1006	7,462,940.71	1,521,931.28	0.00	MH M104
1007	7,462,607.10	1,522,007.30	0.00	MH M105
1008	7,462,617.19	1,522,000.90	0.00	MH C103
1009	7,462,196.81	1,522,060.61	0.00	MH M106
1010	7,461,936.83	1,522,107.32	0.00	MH M107
1011	7,461,946.95	1,522,100.95	0.00	MH C104
1012	7,461,695.47	1,522,161.44	0.00	MH M108
1013	7,461,258.83	1,522,273.01	0.00	MH M109
1014	7,461,050.73	1,522,365.49	0.00	MH M110
1015	7,461,060.89	1,522,359.58	0.00	MH C105
1016	7,460,845.53	1,522,362.18	0.00	MH M111
1017	7,460,846.53	1,522,377.39	0.00	MH C106
1018	7,460,757.79	1,522,272.69	0.00	MH M112
1019	7,460,768.11	1,522,277.86	0.00	MH C107
1020	7,460,716.63	1,522,267.08	0.00	MH M113
1021	7,460,709.46	1,522,276.08	0.00	MH C108
1022	7,460,949.97	1,522,386.78	0.00	01-TR-99110A
1023	7,460,930.43	1,522,390.94	0.00	01-TR-99120B
1024	7,460,968.58	1,522,382.60	0.00	01-TR-99120A
1025	7,460,943.22	1,522,357.66	0.00	01-TR-99110B
1026	7,460,827.77	1,522,366.27	0.00	MH M114
1027	7,460,826.77	1,522,381.48	0.00	MH C109
1028	7,461,246.96	1,522,271.57	0.00	MH C110

GENERAL NOTES

1. REFER TO CIVIL SHEETS, ELECTRICAL SHEETS, AND DUCTBANK PROFILE SHEETS FOR ELEVATION AND FURTHER REQUIREMENTS.

SCALE: NTS

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G.ROSS
DRAWN BY: D.BROERMAN
CHECKED BY: C.ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A ISSUED FOR BID	DB	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL COORDINATE TABLE

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E002

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: \\na.aecomnet.com\lfs\AMERA\Albuquerque-USALB02\Secure_DCS\Projects_TECHNOLOGY\60572288 - Salt Lake City Reclamation WTP\900-CAD-GIS\20-SHEETS\524905396 0100-E002.dwg

GENERAL DRAWING NOTES

1 THESE DRAWINGS ARE PREPARED AND COORDINATED WITH THE PROJECT SPECIFICATIONS. TOGETHER THESE DOCUMENTS FORM THE CONTRACT DOCUMENTS. ANYTHING MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN IN THE DRAWINGS, OR SHOWN IN THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, SHALL BE OF LIKE EFFECT AS IF SHOWN AND MENTIONED IN BOTH. IN CASE OF DIFFERENCES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE STRICTER PROVISION AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL GOVERN. OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, OR THE INCORRECT DESCRIPTION OF DETAILS OF WORK WHICH ARE EVIDENTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED OR INCORRECTLY DESCRIBED DETAIL OF THE WORK. RATHER, THE WORK SHALL BE PERFORMED AS IF THE DRAWINGS HAVE BEEN VERIFIED, CHECKED AND COORDINATED WITH SHOP DRAWINGS AND SAMPLES OF THE WORK AND OF THE SPECIFICATIONS.

2 THE DRAWINGS INDICATE THE GENERAL PROPOSED LOCATION OF EQUIPMENT, CABLE PATHWAYS, AND OUTLETS. ALTHOUGH THE DRAWINGS DO NOT NECESSARILY DICTATE THE ACTUAL ROUTES OF CONDUITS, LOCATION OF EQUIPMENT AND OUTLETS AND OTHER SUPPORTING ITEMS, THEY SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE TO THE DESIGN IN THIS DOCUMENT. IT WILL BE THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE INSTALLATION OF ALL ITEMS WITH ALL OTHER EXISTING UTILITIES AND TRADES. SEE SPECIFICATION 01 11 00 FOR SUMMARY OF WORK.

3 CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUITS, DEVICE BOXES, JUNCTION BOXES, CABLE TRAY AND ASSOCIATED DEVICES, AND REQUIRED SLEEVES FOR WALL, FLOOR AND CEILING PENETRATIONS FOR A COMPLETE INSTALLATION.

4 ALL INSTALLED CONDUITS, CABLE TRAY, SLEEVES/SLOTS THAT PENETRATE FIRE RATED WALLS, FLOORS AND CEILINGS WITH CONTRACTOR INSTALLED CABLING TO BE PROPERLY FIRE STOPPED PER LOCAL CODE.

5 CONTRACTOR TO MAINTAIN A 12" MINIMUM SPACING BETWEEN CABLES AND SOURCES OF EMI, SUCH AS FLUORESCENT LIGHTS OR UNSHIELDED POWER LINES.

6 CONTRACTOR TO PROVIDE AND INSTALL ALL PLYWOOD BACKBOARDS AND FINISHES PER THE SPECIFICATIONS IN ALL TELECOMMUNICATION ROOMS UNLESS OTHERWISE NOTED.

7 NO MORE THAN 270 DEGREES IN CONDUIT BENDS IS ALLOWED IN ANY CONDUIT RUN BETWEEN PULL BOXES. CONDUIT WILL NOT ENTER/EXIT ANY PULL BOX AT 90 DEGREEES OF ANY OTHER CONDUIT ENTERING THE PULL BOX.

8 120 VAC INPUT POWER CONDUCTORS SHALL NOT BE INSTALLED IN THE SAME CONDUIT AS LOW VOLTAGE AUDIO, VIDEO, CONTROL, DC POWER OR ANY OTHER LOW VOLTAGE CABLES. ELECTRICAL CONTRACTOR TO ENSURE PROPER SEPARATION OF CLASS 1, CLASS 2, AND CLASS 3 PER NEC 725-54 (D) AND OR AHJ.

9 CONTRACTOR SHALL INSTALL APPROPRIATELY SIZED CONDUIT IAW STANDARD ANSI/TIA-569-B, "PATHWAYS AND SPACES AND THE NATIONAL ELECTRIC CODE (NEC)." ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BACK BOXES, PULL-BOXES, JUNCTION BOXES AND CONDUIT INSTALLATION. MINIMUM SIZE CONDUIT SHALL NOT BE LESS THAN 1".

10 ALL CONDUIT TO TELECOMMUNICATIONS ROOM(S) FOR TELECOMMUNICATIONS CABLING SHALL TURN DOWN OR UP WITHIN 12" OF WALL OR IN AREAS INDICATED ON FLOOR PLANS WHERE CABLE TRAY IS INSTALLED. CONDUITS FROM BELOW SHALL STUB UP 3" AFF. CONDUITS FROM ABOVE SHALL STUB DOWN TO 3" BELOW CEILING.

11 CONTRACTOR SHALL FURNISH AND INSTALL ALL NEW RACKS/CABINETS AND APPLICABLE HARDWARE UNLESS OTHERWISE NOTED.

12 ALL TELECOMMUNICATIONS CABLES SHALL MEET THE REQUIREMENTS SPECIFIED BY THE TELECOMMUNICATIONS SPECIFICATIONS FOR THIS PROJECT.

13 ALL INSTALLED CABLE AND COMPONENTS SHALL MEET THE WARRANTY REQUIREMENTS AS NOTED IN THE SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO BE A CERTIFIED STRUCTURED CABLING INSTALLER FOR THE TELECOMMUNICATIONS SYSTEM PROVIDED.

14 TELECOMMUNICATION INSTALLATION WORK SHALL FOLLOW ANSI, BICSI, EIA/TIA STANDARDS, NEC, AND OTHER APPLICABLE STANDARDS AND CODES. SEE TELECOMMUNICATIONS SPECIFICATIONS.

15 ALL PATCH CORDS AND CROSS-CONNECTS SHALL BE CFCI.

16 BRIDGED TAPS AND SPLICES ARE NOT PERMITTED.

17 NO USE OF STAPLES FOR CABLE ROUTING OR MOUNTING WILL BE PERMITTED.

18 ALL HORIZONTAL DATA CABLING SHALL BE BLUE IN COLOR, AND ALL HORIZONTAL ANALOG VOICE CABLING SHALL BE WHITE. ALL HORIZONTAL DATA JACK INSERTS SHALL BE BLUE IN COLOR, AND ALL HORIZONTAL VOICE JACK INSERTS SHALL BE WHITE IN COLOR. COORDINATE JACK AND CABLE COLOR WITH OWNER.

19 ALL HORIZONTAL UTP TELECOMMUNICATIONS WORKSTATION CABLES SHALL BE PLENUM RATED, CATEGORY 6 CABLE.

20 EACH HORIZONTAL WORKSTATION CABLE SHALL TERMINATE ON A CATEGORY 6 "RJ-45" JACK CONNECTOR ATTACHED TO THE OUTLET FACEPLATE OR AN APPROVED TERMINATION DEVICE.

21 ALL FIBER OPTIC STRANDS ARE TO BE TERMINATED WITH LC CONNECTORS ON LC-DUPLEX ADAPTER PANELS WITHIN FIBER ENCLOSURES, AND ALL COPPER BACKBONE CABLES ARE TO BE TERMINATED ON 48-PORT RJ45 PATCH PANELS IN EACH TR, SERVER ROOM.

22 CONTRACTOR WILL FURNISH AND INSTALL ALL FIBER TERMINATION HARDWARE.

23 ALL INTERIOR COPPER AND FIBER BACKBONE CABLING SHALL BE PLENUM-RATED, AND ALL EXTERIOR COPPER AND FIBER BACKBONE CABLING SHALL BE OSP-RATED OR INDOOR/OUTDOOR RATED.

24 CONTRACTOR SHALL ADHERE TO THE LATEST CONNECTORIZATION PROCEDURES AS SPECIFIED BY THE MANUFACTURER.

25 IN ALL AREAS, PROTECT CABLE FROM TENSION, COMPRESSION, TORSION, BENDING, SQUEEZING AND VIBRATION. DO NOT PULL CABLES IMPROPERLY OR EXCEED THE MANUFACTURERS TENSILE RATING.

26 ALL CABLING IS TO BE ROUTED IN WALLS WITHIN A CONDUIT DISTRIBUTION SYSTEM UNLESS OTHERWISE NOTED. CONDUIT IS TO BE STUBBED UP ABOVE DROPPED CEILING AND ALL CABLING IS TO BE ROUTED TO DISTRIBUTION CABLE TRAY SYSTEM VIA J-HOOKS OR HOME RUN TO NEAREST FLOOR SERVING TELECOM ROOM.

27 ALL STRAPPING AND LASHING OF CABLE WITHIN THE TELECOMMUNICATION ROOMS SHALL BE MADE WITH HOOK AND LOOP TIE STRAPS FOR EASY ACCESS TO CABLE BUNDLES TO FACILITATE FUTURE "MOVES, ADDS AND CHANGES". CABLE BUNDLES SHALL CONSIST OF NO MORE THAN 50 CABLES PER BUNDLE.

28 PULL CABLES SIMULTANEOUSLY WHERE MORE THAN ONE IS BEING INSTALLED IN SAME CONDUIT. USE PULLING COMPOUND OR LUBRICATE WHERE NECESSARY. COMPOUND USED MUST NOT DETERIORATE CONDUCTOR OR INSULATION. USE PULLING MEANS, INCLUDING FISH TAPE, CABLE ROPE AND BASKET WEAVE WIRE/CABLE GRIPS THAT WILL NOT DAMAGE MEDIA OR CONDUIT.

29 THE CABLING WITHIN THE TELECOMMUNICATIONS ROOM(S) SHALL BE ROUTED AND DRESSED NEATLY TO THEIR TERMINATION POINT SUCH THAT NO EXTRA CABLE IS PRESENT. AS CABLES ARE PULLED INTO THE TELECOMMUNICATION ROOM, BUNDLE THEM WITH HOOK AND LOOP ACCORDING TO THEIR TERMINATING ROW POSITION. HOOK AND LOOP EXPOSED CABLES FOR STRAIN RELIEF AT THE TERMINATION IN THE TELECOMMUNICATION ROOMS. DRESS CABLES NEATLY AT THE TERMINATION POINT AT EACH PATCH PANEL AND SECURE.

30 FOR ANY CABLING, THERE SHALL BE NO SLACK LEFT IN ANY JUNCTION BOX, OR CONDUIT UNLESS OTHERWISE NOTED. A COIL OF 3' IN EACH CABLE SHALL BE PLACED IN THE CEILING AT THE LAST SUPPORT(J-HOOK OR CABLE TRAY, ETC.) BEFORE CABLE ENTERS A FISHABLE WALL, CONDUIT, SURFACE RACEWAY OR BOX. AT ANY LOCATION WHERE CABLES ARE INSTALLED IN MOVABLE PARTITION WALLS OR MODULAR FURNITURE VIA A SERVICE POLE, APPROXIMATELY 15' OF SLACK SHALL BE LEFT IN EACH HORIZONTAL CABLE UNDER 250' IN LENGTH TO ALLOW FOR CHANGE IN THE OFFICE LAYOUT WITHOUT RE-CABLING. THESE "SERVICE LOOPS" SHALL BE SECURED AT THE LAST CABLE SUPPORT BEFORE THE CABLE LEAVES THE CEILING AND SHALL BE COILED FROM 100% TO 200% OF THE CABLE RECOMMENDED MINIMUM BEND RADIUS.

31 CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEST RESULTS AND CABLE RECORDS TO OWNER. THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL EQUIPMENT AND PERSONNEL NECESSARY TO CONDUCT TESTING. PRIOR TO TESTING, THE CONTRACTOR MUST PROVIDE A SUMMARY OF PROPOSED TEST PLAN FOR EACH CABLE TYPE INCLUDING EQUIPMENT TO BE USED, SET-UP, TEST FREQUENCIES, WAVELENGTHS, AND RESULTS FORMAT. THE METHOD OF TESTING MUST BE APPROVED BY OWNER OR OWNERS' REPRESENTATIVE.

32 CABLE SCHEDULES TO BE GENERATED AND PROVIDED BY CONTRACTOR AS PART OF THE FINAL RECORD SET.

33 SEE SHEETS 0000-G020 TO 0000-G022 FOR PROJECT ABBREVIATIONS AND GENERAL LEGEND.

34 MOUNTING HEIGHT, UNLESS OTHERWISE NOTED, IS TO CENTER LINE OF EQUIPMENT.

35 MOUNT OUTLET BOXES SO THAT NONE OCCUR BACK TO BACK IN WALLS. BOXES SHALL BE SEPARATED BY A MINIMUM OF 1 STUD SPACE OR 18".

GENERAL DRAWING NOTES (CONTINUED)

36 MECHANICAL AND ELECTRICAL EQUIPMENT IS SHOWN IN APPROXIMATE LOCATIONS. FOR EXACT LOCATIONS OF MECHANICAL AND ELECTRICAL EQUIPMENT AND PIPING, SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR REFERENCE.

37 SEAL PENETRATIONS WITH APPROVED FIRE SEALANT/FIRE STOP THROUGH FLOORS OR FIRE WALLS TO MAINTAIN THE INTEGRITY OF THE FIRE AND ACOUSTIC RATINGS OF THE WALLS AND FLOORS.

38 LOCATE ALL RACEWAYS AND CABLE TRAY TO AVOID INTERFERENCE WITH DUCTS, PIPES, MECHANICAL EQUIPMENT, WITH REMOVAL OF CEILING TILES, OR WITH ACCESS TO EQUIPMENT WHICH REQUIRES PERIODIC ADJUSTMENT OR MAINTENANCE. PROVIDE MINIMUM 12" CLEARANCE ABOVE AND TO AT LEAST ONE SIDE OF CABLE TRAY FOR PLACEMENT OF NEW CABLE.

39 ALL TELECOMMUNICATIONS GROUNDING SHALL BE IN ACCORDANCE WITH MOTOROLA R-56 SPECIFICATIONS.

40 ALL FLOOR BOXES AND POKE-THROUGH MOUNTED TELECOM OUTLETS SHALL HAVE CONDUITS THROUGH FLOOR OR UNDER FLOOR AND THROUGH WALL UP INTO ACCESSIBLE CEILING OF THE SAME FLOOR WITH MAXIMUM 2-90° BENDS. PROVIDE CONDUIT SIZED AT 25% FILL MAXIMUM.

41 COORDINATE EXACT LOCATION OF ALL WALL MOUNTED CLOCKS WITH ARCHITECTURAL DRAWING SET.

42 SEE NOTES ON INDIVIDUAL DRAWINGS FOR CROSS REFERENCE TO PERTINENT DETAILS, SECTIONS, ETC. SHOWN ON OTHER DRAWINGS.

43 ALL CABLES, STRANDS, AND TWISTED PAIRS SHALL BE FULLY TERMINATED IN WORKSTATION OUTLETS, PATCH PANELS, 110 STYLE BLOCKS OR IN FIBER DISTRIBUTION UNITS.

44 CONTRACTOR SHALL FURNISH APPROPRIATE MATCHING PATCH CORDS FOR ALL TERMINATED JACKS. LENGTHS TO VARY ACCORDING TO USAGE, AND AS NOTED, NONE SHALL BE SHORTER THAN THREE (3) METERS.

45 ALL HORIZONTAL CABLING SHALL HAVE A MINIMUM TEN (10) FOOT SERVICE LOOP AT THE TELECOM ROOM AND 3 FOOT SERVICE LOOP AT THE CABLE TRAY NEAR THE TELECOM OUTLET, PROVIDE SLACK CABLE MANAGEMENT.

46 ALL BACKBONE CABLING SHALL HAVE A MINIMUM SERVICE LOOP AT EACH END OF SIXTEEN (16) FEET.

47 FURNISH AND INSTALL 3/4" CORRUGATED INNERDUCT SLEEVING IN ALL COMMUNICATIONS CONDUIT GREATER THAN 2" AS PER MANUFACTURER'S RECOMMENDED FILL QUANTITY.

48 FLOOR BOX LOCATIONS SHOWN ARE NOT EXACT, COMMUNICATIONS CONTRACTOR SHALL FOLLOW PLAN AS CLOSELY AS POSSIBLE, PREPARE FLOOR TILES, INSTALL FLOOR BOXES IN RAISED FLOOR AND FIELD COORDINATE EXACT LOCATIONS WITH FURNITURE LAYOUT SO THAT ACCESS TO BOXES IS NOT HAMPERED BY FURNITURE AND SO THAT CABLES ARE NOT A HINDRANCE OR AT RISK OF DAMAGE BY OPERATOR AT LOCATION.

49 FURNISH AND INSTALL VOICE PATCH INTERCONNECT PATCH CORDS FOR ALL INSTALLED HORIZONTAL VOICE CABLES FROM RACK MOUNT PATCH PANELS TO WALL MOUNT CROSS-CONNECT BLOCKS.

50 CONTRACTOR SHALL PROPERLY SECURE ALL TELECOM RACKS TO THE CONCRETE FLOOR SLAB.

51 COORDINATE WITH AV DRAWINGS FOR ALL CABLING REQUIREMENTS.

52 PROVIDE CAT 6 PATCH CORDS (3 METERS) FOR ALL CAT 6 PATCH PANELS IN QUANTITIES EQUIVALENT TO PATCH PANEL JACKS. COLOR OF PATCH CORD SHALL MATCH COLOR CODING OF FUNCTION ACCORDING TO THE SPECIFICATIONS.

53 ALL JACK FACEPLATES SHALL BE 4 PORT MINIMUM.

54 PROVIDE SHIELDED CAT6 CABLE, PATCH PANELS AND JACKS FOR ALL OUTLETS SERVING PLC / DDC CABINETS AND EQUIPMENTS.

SYMBOLS

- TELECOMMUNICATIONS PHONE/DATA OUTLET, MOUNT 1'-6" AFF, UNLESS OTHERWISE NOTED. CAT6 CABLE. (1) VOICE, (3) DATA CAT6 CABLES UNLESS OTHERWISE NOTED.
- TELECOMMUNICATIONS PHONE OUTLET, MOUNT 4'-4" AFF, UNLESS OTHERWISE NOTED. CAT6 CABLE. (1) VOICE CAT6 CABLE UNLESS OTHERWISE NOTED.
- TELECOMMUNICATIONS DATA OUTLET, MOUNT 1'-6" AFF, UNLESS OTHERWISE NOTED. CAT6 CABLE. (2) DATA CAT6 CABLES UNLESS OTHERWISE NOTED.
- AV — DATA FOR AV, PROVIDE A MINIMUM OF ONE DATA CABLE TO EACH OUTLET. (1) DATA CAT6 (1) RG6 CABLE UNLESS OTHERWISE NOTED.
- WIRELESS ACCESS POINT. PROVIDE (2) CAT6 TO EACH CEILING AND WALL MOUNTED WAP.
- FLOOR MOUNTED TELECOMMUNICATIONS/POWER OUTLET. (2) VOICE (2) DATA CAT6 CABLES UNLESS OTHERWISE NOTED.

BASKET TYPE / LADDER TYPE — CABLE TRAY, MH 6" (DATA CENTER, IT ROOMS, TE ROOMS, RF BUILDING) OR 6" MAX ABOVE CEILING. SIZE AND TYPE AS INDICATED. HIDDEN LINES INDICATE UNDERFLOOR. WIRE BASKET TYPE CABLE TRAY SHALL BE USED FOR ALL UNDER ACCESS FLOOR AND ABOVE ACT CEILING LOCATIONS. LADDER TYPE RUNWAY CABLE TRAY SHALL BE USED FOR ALL IT ROOMS, DATA CENTER, VIDEO RACK ROOMS, AND TELECOM ENTRANCE FACILITIES.

- TELECOMMUNICATIONS HAND HOLE. REFER TO DRAWINGS FOR DIMENSIONS.

NOTE: NOT ALL SYMBOLS MAY BE USED

SCALE: 12" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: K. ZEBROSKY
DRAWN BY: B. MARTIR
CHECKED BY: P. VITONE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	BM	KZ

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

TELECOMMUNICATIONS LEGEND & GENERAL NOTES

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BKSI
NTS-RCDD-PRACTICE

CERT	REG. NO.	EXPIRES
RCDD	136703	12/31/2025
RCDD/NTS	136703	12/31/2024

04/03/2023
KRISTIAN ZEBROSKY

DRAWING No.
0100-T001

SHEET _____ OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/31/2023 8:05:58 AM
FILE: BM 360://6052728f-Salt Lake City 2019/524905350_8001-T001.rvt

ELECTRONIC SECURITY SYMBOLS LEGEND

ELECTRICALLY CONTROLLED AND MONITORED OPENING

0000

DOOR NUMBER

ELECTRICALLY MONITORED OPENING

0000

WALL MOUNTED CARD READER

FRAME MOUNTED CARD READER

PANIC PUSH BUTTON

WALL MOUNTED INTERCOM

FRAME MOUNTED INTERCOM

I/C MASTER INTERCOM STATION

DUAL HEIGHT PEDESTAL WITH CAMERA AND CARD READER, AND INTERCOM

PEDESTAL WITH CARD READER AND INTERCOM

PEDESTAL WITH CARD READER

S PAGING SPEAKER

INDICATES INTERLOCK GROUP

PAGING HORN

DESK MOUNTED PUSH BUTTON

FRAME MOUNTED PUSH BUTTON

WALL MOUNTED PUSH BUTTON

M CCTV MONITOR

KB CCTV KEYBOARD

ACS ACCESS CONTROL WORKSTATION

VEHICLE DETECTION LOOP

BL EMERGENCY CALL STATION

DOOR CONTACT ELECTRONICALLY CONTROLLED AND MONITORED.

CAMERA TYPE

FIXED CCTV CAMERA

PAN/TILT/ZOOM CCTV CAMERA

360 DEGREE CAMERA CEILING MOUNT

360° 360 DEGREE CAMERA PENDANT MOUNT

180 DEGREE CCTV CAMERA

PROCESS CAMERA

CAMERA TAG

0000 CAMERA NUMBER

10' - 0" MOUNTING HEIGHT

GENERAL NOTES

1. ALL CLASS 1 AND CLASS 2 CIRCUITS SHALL BE IN SEPARATE CONDUIT RACEWAYS.
2. ELECTRONIC SECURITY SYSTEM MINIMUM CONDUIT SIZE (3/4") <40% FILL TO ALL INDIVIDUAL LOCKS, DEVICES, CAMERAS. ALL CONDUITS HOMERUN TO IT/TELECOM SECURITY EQUIPMENT ROOMS. PROVIDE EACH SYSTEM WITH SEPARATE RACEWAY.
3. ALL CONTROL WIRING SYSTEMS SHALL USE STRANDED COPPER CONDUCTORS UNLESS DIRECTED SPECIFICALLY BY MANUFACTURER REQUIREMENTS.
4. DIVISION 28 SECURITY CONTRACTOR TO MAKE FINAL CONNECTIONS TO ALL SECURITY DEVICES.
5. ALL ELECTRICAL REQUIREMENTS ARE A GUIDE. CONTRACTOR IS TO BE RESPONSIBLE FOR ADJUSTMENTS REQUIRED TO CONFORM TO MANUFACTURER REQUIREMENTS AND CODE COMPLIANCE.
6. PROVIDE SEPARATE RACEWAY SYSTEM FOR 120V POWER AND CONTROL/VIDEO WIRING FOR PTZ CAMERAS.
7. DIVISION 28 SECURITY CONTRACTOR TO PROVIDE AND INSTALL ALL WIRING, CABLING, ETC. FOR A COMPLETE AND OPERATING SYSTEM. WIRE CALL OUTS ARE A GUIDE. CONTRACTOR IS RESPONSIBLE FOR FINAL SELECTION OF ALL WIRE AND CONDUIT SIZES.
8. RISER DIAGRAMS ARE DIAGRAMMATIC. REFER TO ALL DOCUMENTS IN THEIR ENTIRETY FOR COMPLETE QUANTITIES AND LOCATION OF ALL EQUIPMENT, DEVICES, COMPONENTS.
9. REFER TO PLAN DRAWINGS FOR LOCATION OF CAMERAS. REVIEW ALL CAMERA LOCATIONS WITH OWNER PRIOR TO INSTALLATION. REVIEW ALL CAMERA VIEWS WITH OWNER AFTER INSTALLATION.
10. PROVIDE TVSS AT ALL EXTERIOR VIDEO CAMERAS.
11. ALL POWER TO BE UPS BACKED UP. PROVIDE 120VAC UPS POWER TO ALL SECURITY EQUIPMENT, MONITORS, CPU'S, VIDEO EQUIPMENT, POWER SUPPLIES, NVR'S, SWITCHES, ETC. UPS PROVIDED BY OTHERS, COORDINATE FINAL LOADS WITH ELECTRICAL CONTRACTOR.
12. VERIFY THAT ALL COMPUTERS, VIDEO EQUIPMENT, MONITORS, AND MISCELLANEOUS SECURITY EQUIPMENT IS ON THE UPS SYSTEM (PROVIDED BY OTHERS)
13. SPLICES AT DOOR HARDWARE AND FIELD DEVICES ARE UNACCEPTABLE. COORDINATE WITH DOOR HARDWARE PROVIDER FOR PROPER MOLEX TYPE CONNECTORS TO ENSURE NO FIELD SPLICES. INSTALL THE MOLEX PINS AND MOLEX CONNECTORS FOR THE FIELD SIDE OF THE DOOR CONNECTION. DOOR HARDWARE CONTRACTOR TO PROVIDE MOLEX CONNECTORS AND PINS TO SECURITY CONTRACTOR PRIOR TO INSTALLATION.
14. ALL DEVICES ARE TO BE MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.

SCALE:

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: K. ZEBROSKY
DRAWN BY: K.EAGAN
CHECKED BY: K.LONG
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-1A	KZ

ISSUED FOR BID

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRONIC SECURITY
LEGEND & GENERAL NOTES

BKSI

CERT. HELD	REG. NO.	EXPIRES
RCDD	136703	12/31/2025
RCDDNTS	136703	12/31/2024

04/03/2023
KRISTIAN ZEBROSKY

DRAWING No.
0100-Y001

SHEET _____ OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/31/2023 10:46:48 AM

FILE: BIM 360://6052728-Salt Lake City 2019/5249053/50_8001-T001.rvt

BUILDING COORDINATES

PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1000	7,460,749.54	1,522,127.16	4221.50	SW CORNER INFLUENT PUMP STATION
1001	7,460,824.95	1,522,156.96	4221.50	NW CORNER INFLUENT PUMP STATION
1002	7,460,800.94	1,522,277.17	4221.50	SW CORNER ODOR CONTROL SLAB
1003	7,460,800.94	1,522,356.17	4221.36	SE CORNER ODOR CONTROL SLAB
1004	7,460,869.14	1,522,309.68	4221.50	SW CORNER ELECTRICAL BUILDING
1005	7,460,910.77	1,522,309.68	4221.50	NW CORNER ELECTRICAL BUILDING
1006	7,460,785.13	1,522,098.04	4221.18	SW CORNER VALVE PAD SLAB
1007	7,460,818.77	1,522,111.33	4221.25	NW CORNER VALVE PAD SLAB

EOA/TBC COORDINATES

PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
2000	7,460,967.93	1,522,016.83	4220.45	EXIST EOA
2001	7,460,965.93	1,522,016.80	4220.45	EOA PC, R=15
2002	7,460,950.93	1,522,031.86	4220.81	EOA PT
2003	7,460,930.40	1,522,032.03	4221.12	EOA
2004	7,460,930.40	1,522,031.36	4221.45	BEGIN TBC
2005	7,460,873.07	1,522,031.36	4220.78	TBC PC, R=50
2006	7,460,861.50	1,522,032.71	4220.64	TBC PT
2007	7,460,850.31	1,522,035.37	4220.50	TBC GB
2008	7,460,773.02	1,522,053.75	4220.80	TBC PC, R=50
2009	7,460,738.09	1,522,084.02	4220.97	TBC PT
2010	7,460,693.35	1,522,197.25	4221.40	TBC PC, R=25
2011	7,460,707.41	1,522,229.69	4221.54	TBC PT
2012	7,460,755.46	1,522,248.68	4221.76	TBC GB/PC, R=30
2013	7,460,774.44	1,522,276.58	4221.22	TBC PT
2014	7,460,774.44	1,522,356.17	4221.62	TBC/GB
2016	7,460,830.94	1,522,277.67	4221.50	BEGIN TBC PC, R=15
2017	7,460,845.94	1,522,292.67	4220.58	TBC PT
2018	7,460,845.94	1,522,379.49	4221.02	TBC PI
2019	7,460,864.14	1,522,379.49	4221.40	TBC PI
2020	7,460,864.14	1,522,304.68	4221.37	TBC PI
2021	7,460,909.38	1,522,304.68	4221.48	TBC PC, R=25
2022	7,460,915.85	1,522,305.53	4221.50	END TBC PT
2023	7,460,916.03	1,522,304.89	4221.00	EOA PC, R=25.5
2024	7,460,922.14	1,522,307.60	4221.01	EOA PT
2025	7,460,953.65	1,522,325.81	4219.97	EOA PC, R=25
2026	7,460,962.56	1,522,334.56	4219.62	EOA PT
2027	7,460,963.83	1,522,336.50	4219.56	EOA
2028	7,460,965.96	1,522,336.50	4219.80	EXIST EOA
2029	7,460,964.41	1,522,332.21	4219.80	EXIST EOA
2030	7,460,963.73	1,522,324.37	4219.80	EXIST EOA
2031	7,460,963.86	1,522,300.55	4219.80	EXIST EOA
2032	7,460,962.11	1,522,300.08	4220.48	TBC
2033	7,460,955.63	1,522,296.35	4220.64	TBC PC, R=49.5
2034	7,460,930.90	1,522,253.49	4221.74	TBC GB/PT
2035	7,460,930.90	1,522,154.34	4221.98	TBC GB
2036	7,460,930.90	1,522,072.85	4221.61	TBC GB/PC, R=14.5
2037	7,460,945.43	1,522,058.35	4221.32	TBC PT
2038	7,460,950.24	1,522,058.36	4221.26	TBC PC, R=14.5
2039	7,460,964.74	1,522,073.11	4220.95	TBC PT
2040	7,460,967.24	1,522,073.14	4220.45	EXIST EOA
2041	7,460,909.90	1,522,073.07	4221.27	TBC PC, R=10
2042	7,460,899.90	1,522,063.07	4221.23	TBC PT
2043	7,460,873.51	1,522,063.07	4221.17	TBC PC, R=20
2044	7,460,859.37	1,522,068.93	4221.13	TBC GB
2045	7,460,853.51	1,522,083.07	4221.18	TBC PT
2046	7,460,853.51	1,522,154.34	4221.42	TBC GB
2047	7,460,853.51	1,522,200.08	4221.29	TBC PC, R=50
2048	7,460,874.01	1,522,240.45	4221.15	TBC PT/GB
2049	7,460,886.05	1,522,249.24	4221.18	TBC PC, R=15
2050	7,460,909.90	1,522,237.13	4221.27	TBC PT
2051	7,460,909.90	1,522,154.34	4221.47	TBC GB
2052	7,460,899.90	1,522,061.07	4220.90	EOA/CONCRETE
2053	7,460,899.90	1,522,047.07	4220.83	EOA/CONCRETE
2054	7,460,875.90	1,522,047.07	4220.64	EOA/CONCRETE
2055	7,460,875.90	1,522,061.07	4220.84	EOA/CONCRETE
2056	7,460,833.01	1,522,104.70	4221.21	EOA PC, R=30
2057	7,460,796.07	1,522,075.51	4220.91	EOA PT
2058	7,460,792.59	1,522,076.34	4220.94	EOA PC, R=50

EOA/TBC COORDINATES

PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
2059	7,460,757.66	1,522,106.61	4221.32	EOA PT
2060	7,460,749.54	1,522,127.16	4221.50	EOA GB
2061	7,460,725.53	1,522,187.93	4221.50	EOA PC, R=15
2062	7,460,733.96	1,522,207.39	4221.50	EOA PT
2063	7,460,776.48	1,522,224.18	4221.50	EOA GB
2064	7,460,781.48	1,522,226.16	4221.48	EOA PC, R=15
2065	7,460,800.94	1,522,217.72	4221.45	EOA PT
2066	7,460,808.53	1,522,198.50	4221.50	EOA GB
2067	7,460,824.95	1,522,156.96	4221.50	EOA GB
2068	7,460,833.01	1,522,136.54	4221.38	EOA PI
2069	7,460,801.44	1,522,356.17	4221.33	TBC
2070	7,460,774.44	1,522,396.13	4221.04	TBC
2071	7,460,774.44	1,522,410.01	4220.79	TBC
2072	7,460,774.44	1,522,546.51	4218.37	TBC PC R=29.5'
2073	7,460,744.49	1,522,576.00	4217.50	TBC PT
2074	7,460,744.49	1,522,578.13	4216.99	EXIST EOA
2075	7,460,831.61	1,522,577.98	4216.21	EXIST EOA
2076	7,460,831.56	1,522,575.90	4216.54	TBC PC, R=29.5
2077	7,460,801.44	1,522,546.41	4217.46	TBC PT
2078	7,460,800.94	1,522,356.17	4221.00	EOA
2079	7,460,800.94	1,522,277.17	4220.65	EOA PI
2080	7,460,857.96	1,522,067.51	4220.69	WATERWAY CL
2081	7,460,850.78	1,522,037.32	4220.07	WATERWAY CL
2082	7,460,872.83	1,522,242.06	4220.71	WATERWAY CL
2083	7,460,847.94	1,522,292.67	4220.15	WATERWAY CL
2084	7,460,864.14	1,522,384.49	4221.40	SIDEWALK
2085	7,460,915.77	1,522,384.49	4221.40	SIDEWALK
2086	7,460,915.77	1,522,358.65	4221.40	SIDEWALK
2087	7,460,775.98	1,522,083.68	4221.08	EOA
2088	7,460,833.01	1,522,106.20	4221.22	EOA

FENCING COORDINATES

PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1500	7,460,926.17	1,522,004.36	4218.68	FENCE EXISTING TIE-IN
1501	7,460,864.37	1,522,004.36	4219.48	FENCE PI
1502	7,460,759.18	1,522,029.29	4216.98	FENCE PI
1503	7,460,678.21	1,522,234.21	4219.94	FENCE PI
1504	7,460,678.21	1,522,408.01	4219.90	FENCE PI
1505	7,460,774.94	1,522,408.01	4220.33	FENCE GATE
1506	7,460,800.94	1,522,408.01	4219.95	FENCE GATE
1507	7,460,922.69	1,522,408.01	4220.70	FENCE EXISTING TIE-IN

SCALE: NTS

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: --

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL COORDINATE TABLES
SHEET 1 OF 2

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C003S

SHEET _____ OF _____

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: H:\Projects407 - AECOM\03.100 SLCWRF Upgrades\Task 8 Design\CAD\Working\20-SHEETS\10_Forcemain_PS\10_General\524905350_0100-C003S.dwg DATE: 3/29/2023 4:11 PM

PROCESS PIPING

PT NO.	NORTHING	EASTING	ELEVATION	PIPE	DESCRIPTION
3000	7,460,850.31	1,522,035.37	4220.50	15" DRA	CATCH BASIN (TBC)
3001	7,460,887.90	1,522,054.07	4220.60	6" DRA	AREA INLET (RIM)
3002	7,460,850.01	1,522,062.85	4220.67	15" DRA	CLEANOUT BOX
3003	7,460,850.01	1,522,246.85	4220.78	15" DRA	MH (RIM)
3004	7,460,848.21	1,522,278.88	4220.45	15" DRA	CLEANOUT BOX
3005	7,460,845.94	1,522,292.67	4220.58	15" DRA	CATCH BASIN (TBC)
3006	7,460,849.11	1,522,262.18	4215.29	4" SAN	CONNECT
3007	7,460,877.18	1,522,293.44	4216.13	4" SAN	45° BEND
3008	7,460,877.18	1,522,304.68	4216.44	4" SAN	CONNECT
3009	7,460,835.94	1,522,314.92	4217.12	2" DRA	CONNECT
3010	7,460,751.85	1,522,064.61	4220.88	15" DRA	CATCH BASIN (TBC)
3011	7,460,694.27	1,522,194.93	4221.39	15" DRA	CATCH BASIN (TBC)

SANITARY/PROCESS DRAIN

PT NO.	NORTHING	EASTING	ELEVATION	PIPE	DESCRIPTION
3100	7,461,171.26	1,522,356.41	4217.54	20" SAN	MH #7 (RIM)
3101	7,461,036.80	1,522,386.59	4218.59	20" SAN	MH #6 (RIM)
3102	7,460,893.43	1,522,418.76	4217.31	20" SAN	MH #5 (RIM)
3103	7,460,804.33	1,522,388.58	4220.51	20" SAN	MH #5B (RIM)
3104	7,460,777.03	1,522,379.34	4220.81	20" SAN	MH #5A (RIM)
3105	7,460,745.52	1,522,321.14	4221.23	20"/54"/60" SAN	MH #1B (RIM)
3106	7,460,859.75	1,522,206.78	4221.38	54" SAN	MH #1 (RIM)
3107	7,460,742.47	1,522,255.37	4190.71	84" SAN	CONNECT (INV)
3108	7,460,722.49	1,522,305.95	4221.00	60"/84" SAN	MH #3 (RIM)
3109	7,460,706.33	1,522,352.70	4220.96	84" SAN	MH #3A (RIM)
3110	7,460,655.35	1,522,525.87	4216.54	84" SAN	MH #3B (RIM)
3111	7,460,635.66	1,522,560.67	4198.40	84" SAN	1800N CONNECT (INV)
3112	7,460,819.72	1,522,246.85	4221.04	54" SAN	MH #1A (RIM)

POTABLE WATERLINE (W1)

PT NO.	NORTHING	EASTING	ELEVATION (CL)	PIPE	DESCRIPTION
3250	7,460,827.11	1,522,111.62	4217.11	6" W1	FIRE HYDRANT
3251	7,460,834.41	1,522,111.62	4217.11	12" W1	12"X12"X6" TEE (MJ X FLG) W/ 6" GV (FLG X MJ)
3252	7,460,834.41	1,522,159.09	4216.97	12" W1	CONNECT
3253	7,460,832.17	1,522,159.09	4216.51	2.5" W1	22.5° BEND (MJ)
3254	7,460,829.81	1,522,158.16	4216.00	2.5" W1	CONNECT
3255	7,460,834.41	1,522,304.37	4215.48	12" W1	CONNECT
3256	7,460,867.32	1,522,304.37	4216.15	1" W1	CONNECT
3257	7,460,834.41	1,522,619.53	4212.81	12" W1	CONNECT TO 12" TEE
3258	7,460,834.41	1,522,201.66	4216.84	12" W1	VPI-DEFLECT PIPE AS NEEDED
3259	7,460,834.41	1,522,286.86	4215.84	12" W1	VPI-DEFLECT PIPE AS NEEDED
3260	7,460,834.41	1,522,373.22	4214.04	12" W1	PVI-DEFLECT PIPE AS NEEDED
3261	7,460,834.41	1,522,388.71	4213.97	12" W1	45° VERT BEND (MJ)
3262	7,460,834.41	1,522,395.21	4207.53	12" W1	45° VERT BEND (MJ)
3263	7,460,834.41	1,522,405.41	4207.48	12" W1	45° VERT BEND (MJ)
3264	7,460,834.41	1,522,411.85	4213.85	12" W1	45° VERT BEND (MJ)

NON-POTABLE WATERLINE (W2)

PT NO.	NORTHING	EASTING	ELEVATION (CL)	PIPE	DESCRIPTION
3500	7,460,828.50	1,522,161.48	4215.98	1.5" W2	CONNECT
3501	7,460,833.19	1,522,163.34	4216.07	1.5" W2	90 ° BEND
3502	7,460,814.92	1,522,272.17	4217.50	1.5" W2	CONNECT

NON-POTABLE WATERLINE (W3)

PT NO.	NORTHING	EASTING	ELEVATION (CL)	PIPE	DESCRIPTION
3750	7,460,812.66	1,522,201.54	4215.50	4" W3	CONNECT
3751	7,460,816.57	1,522,203.09	4215.53	4" W3	22.5° BEND (FW)
3752	7,460,845.01	1,522,203.09	4215.91	8" W3	8"X8"X4" TEE (FW)
3753	7,460,845.01	1,522,231.84	4215.82	8" W3	11.25° BEND (FW)
3754	7,460,846.06	1,522,237.12	4215.81	8" W3	22.5° BEND (FW)
3755	7,460,990.94	1,522,331.60	4214.56	8" W3	22.5° BEND (FW)
3756	7,461,011.54	1,522,335.27	4214.50	8" W3	22.5° BEND (FW)
3757	7,461,148.61	1,522,303.90	4214.08	8" W3	22.5° BEND (FW)
3758	7,461,167.42	1,522,288.11	4214.00	8" W3	HOT TAP 8" WATERLINE
3759	7,460,950.23	1,522,305.05	4215.44	8" W3	VPI-DEFLECT PIPE AS NEEDED
3760	7,460,985.05	1,522,327.76	4214.58	8" W3	VPI-DEFLECT PIPE AS NEEDED
3761	7,460,882.35	1,522,260.78	4215.44	1.25" W3	CONNECT
3762	7,460,872.76	1,522,275.36	4216.42	1.25" W3	30° BEND (FW)
3763	7,460,872.76	1,522,301.63	4216.46	1.25" W3	CONNECT
3764	7,460,770.44	1,522,361.17	4219.69	6" W3	6" CONDUIT
3765	7,460,805.44	1,522,361.17	4219.33	6" W3	6" CONDUIT
3766	7,460,934.20	1,522,319.48	4218.88	6" W3	6" CONDUIT
3767	7,460,951.68	1,522,289.16	4219.03	6" W3	6" CONDUIT
3768	7,460,930.34	1,522,292.08	4215.51	2" W3	2" CONNECTION
3769	7,460,918.33	1,522,310.51	4217.00	2" W3	IRRIGATION BOX W/ 2" BALL VALVE

RETURN AIR (FOA)

PT NO.	NORTHING	EASTING	ELEVATION (CL)	PIPE	DESCRIPTION
4000	7,460,813.07	1,522,147.33	4202.93	18" FOA	CONNECT
4001	7,460,833.14	1,522,155.27	4203.73	18" FOA	90° BEND (SW)
4002	7,460,831.32	1,522,159.86	4203.91	18" FOA	PC, R=100
4003	7,460,810.44	1,522,272.17	4208.16	20" FOA	CONNECT
4004	7,460,826.74	1,522,174.73	4204.49	18" FOA	PT
4005	7,460,853.64	1,522,207.32	4207.67	6" FOA	CONNECT
4006	7,460,813.74	1,522,232.58	4206.69	FOA	20"X18"X6" WYE (SW)
4007	7,460,812.87	1,522,236.46	4206.83	20" FOA	PC, R=100
4008	7,460,810.44	1,522,258.38	4207.65	20" FOA	PT

NATURAL GAS PIPELINE

PT NO.	NORTHING	EASTING	ELEVATION (CL)	DESCRIPTION
7000	7,460,837.91	1,522,602.60	4214.30	CONNECT TO EXISTING
7001	7,460,837.91	1,522,397.84	4216.04	VPI-DEFLECT PIPE AS NEEDED
7002	7,460,837.91	1,522,193.09	4216.34	2"X3/4" TEE
7003	7,460,817.74	1,522,188.71	4215.53	CONNECT

SCALE: NTS

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL COORDINATE TABLE
SHEET 2 OF 2

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C004S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: H:\Projects\407 - AECOM\03.100 SLCWRF Upgrades\Task 8 Design\CAD\Working\20-SHEETS\10_Forcemain_IPS\0_General\524905350_0100-C004S.dwg DATE: 4/27/2020 1:06 PM

FORCEMAIN
BY OTHERS

0100DC102 DEMOLITION PLAN
0100-C102S SITE PLAN
0100-C106S GRADING AND DRAINAGE PLAN
0100-C110S UTILITIES PIPING PLAN

0100-C101S SITE PLAN
0100-C105S GRADING AND DRAINAGE PLAN
0100-C109S UTILITIES PIPING PLAN

SEE SHEET 0100-E100
FOR ELECTRICAL
DRAWINGS KEY MAP

0100DC103 DEMOLITION PLAN
0100-C103S SITE PLAN
0100-C107S GRADING AND DRAINAGE PLAN
0100-C111S UTILITIES PIPING PLAN

A
B
C
D

N

0 87.5 175 350
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www.bluestakes.org
1-800-662-4111

SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	GDS	MMC

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WATER RECLAMATION FACILITY
PUMP STATION SITE

OVERALL SITE PLAN / KEY PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C100S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 15 30 60

SCALE IN FEET

P# EXISTING FACILITIES

P1	EMERGENCY GENERATOR
P2	ELECTRICAL SUBSTATION
P3	STORAGE BUILDING 1
P4	INFLUENT PUMP STATION
P5	ODOR CONTROL - PUMP STATION
P6	INFLUENT PUMP STATION CONTROL
P7	CONTROL STRUCTURE 2
P8	STORAGE BUILDING 2
P9	GRIT PUMP BUILDING
P10	GRIT CHAMBERS
P11	CONTROL STRUCTURE 1
P12	BYPASS PUMP OUTLET CONNECTION
P13	BYPASS PUMP STORAGE
P14	SCREENING BUILDING
P15	ODOR CONTROL - SCREEN & GRIT STORAGE
P16	GRIT CHAMBER INFLUENT GATE STRUCTURE
P17	RECEIVING STATION
P18	FLOW METER SHED
P19	GAS METER
P20	BYPASS STRUCTURE
P22	ORANGE STREET METER VAULT
P23	MH

P# EXISTING FACILITIES TO REMAIN

P# EXISTING FACILITIES TO REMAIN (FUTURE DEMOLITION)

SCALE: 1" = 30'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: B.WILD
DRAWN BY: B.WILD
CHECKED BY: M.GARCIA
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

EXISTING SITE PLAN

No. 12504923-2202
Grant Edvard Davies
STATE OF UTAH
PROFESSIONAL ENGINEER
04-03-2023

DRAWING No.
0100DC100

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\lindsay.reid\OneDrive - AECOM\Documents_Projects\SLC WRF\910-CAD\20-SHEETS\10_Forcemain-IPS1_Demolition\524905360_0100DC100.dwg DATE: 3/30/2023 7:34 AM



N

0 10 20 40

SCALE IN FEET

KEYNOTES

A. SAWCUT EXISTING PAVEMENT TO NEAT STRAIGHT LINE PRIOR TO PAVING NEW ACCESS ROAD.

B. ASPHALT AREA TO BE DEMOLISHED. DISPOSE OR RECYCLE ASPHALT OFF-SITE AT AN APPROVED FACILITY.

C. PROTECT EXISTING POWER POLE AND GUYWIRE.

D. PROTECT EXISTING OVERHEAD POWER LINE.

E. REMOVE TREE OR BUSH.

F. REMOVE EXISTING FENCE.

G. REMOVAL OF EXISTING POWER POLE AND OVERHEAD POWER LINES BEING DONE BY OTHERS.

H. AFTER COMPLETION OF RE-ROUTING STORM DRAIN, REMOVE EXISTING STORM DRAIN PIPE. DISPOSE OF MATERIAL OFF-SITE AT AN APPROVED FACILITY.

J. PROTECT EXISTING SANITARY SEWER PIPELINES.

K. PROTECT EXISTING STORM DRAIN PIPELINES.

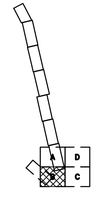
L. REMOVE EXISTING LIGHT POLE.

M. PROTECT EXISTING UTILITY STRUCTURE.

N. PROTECT EXISTING TREE.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B
DEMOLITION PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100DC102

SHEET ____ OF ____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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SCALE IN FEET

KEYNOTES

A. SAWCUT EXISTING PAVEMENT TO NEAT STRAIGHT LINE PRIOR TO PAVING NEW ACCESS ROAD.

B. ASPHALT AREA TO BE DEMOLISHED. DISPOSE OR RECYCLE ASPHALT OFF-SITE AT AN APPROVED FACILITY.

C. PROTECT EXISTING POWER POLE OR GUYWIRE.

D. PROTECT EXISTING OVERHEAD POWER LINE.

E. PROTECT EXISTING SANITARY SEWER PIPELINES.

F. PROTECT EXISTING STORM DRAIN PIPELINES.

G. PROTECT EXISTING GAS PIPELINES.

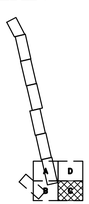
H. PROTECT EXISTING WATER PIPELINES.

GENERAL

1. PROTECT ALL EXISTING BUILDINGS AND UTILITIES.

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KEY PLAN



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PROJECT ADDRESS:
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84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA C DEMOLITION PLAN

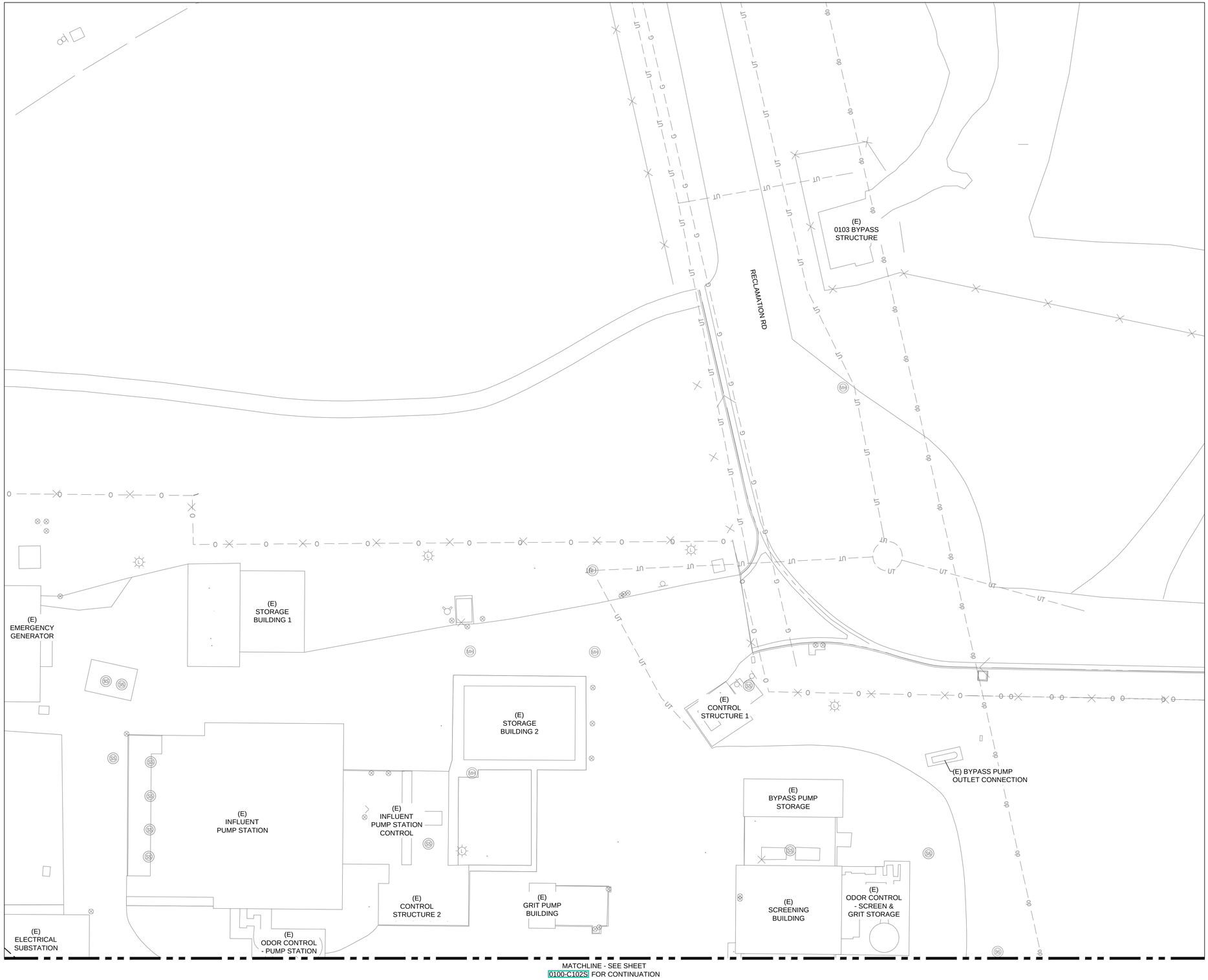
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100DC103

SHEET _____ OF _____

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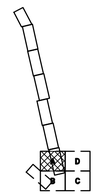
SCALE IN FEET

GENERAL NOTES

1. NO WORK ANTICIPATED BEING PERFORMED ON THIS SHEET. SHEET PROVIDED FOR REFERENCE ONLY.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: - - -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA A SITE PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C101S

SHEET _____ OF _____

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MATCHLINE - SEE SHEET 0100-C101S FOR CONTINUATION

(E) GRIT CHAMBER INFLUENT GATE STRUCTURE

(E) GRIT CHAMBERS

C705S W/ SPILL PAN

C708S 3' X 4' CONCRETE PAD

C709S 24' X 14' CONCRETE PAD

FUEL TANK

FUEL TANK

0105 IPS STANDBY POWER & FUEL STORAGE FF EL 4221.5 SEE SHEET 0105-S101

SWGR

0104 IPS ELECTRICAL BUILDING FF EL 4221.5 SEE SHEET 0104-S101

W/ SPILL PAN

0102 IPS ODOR CONTROL FF EL 4221.5 SEE SHEET 0102-S101

IPS VALVE PAD

0101 INFLUENT PUMP STATION FF EL 4221.5 SEE SHEET 0101-S101

C708S 5' X 7'-6" CONCRETE PAD

C708S 5' X 8' CONCRETE PAD

26' WIDE SLIDING GATE C738S

PROPERTY LINE

MATCHLINE - SEE SHEET 0100-C103S FOR CONTINUATION

N

0 10 20 40

SCALE IN FEET

KEYNOTES

A. SAWCUT EXISTING PAVEMENT TO NEAT STRAIGHT LINE PRIOR TO PAVING NEW ACCESS ROAD.

B. TRANSITION TO SPILL PAN.

C. TAPER CURB END TO BE FLUSH WITH PAVEMENT.

D. INSTALL 1/2" FIBER EXPANSION BOARD BETWEEN STRUCTURE AND SIDEWALK OF SLAB-ON-GRADE.

E. PROVIDE JERSEY BARRIERS AT START OF PROJECT FOR ELECTRICAL BYPASS FEEDER. COORDINATE WITH ELECTRICAL "TIE BYPASS SITE PLAN" DRAWING REQUIREMENTS.

F. INSTALL ASPHALT PAVEMENT.

G. DOWEL CURB AND GUTTER INTO IPS ODOR CONTROL PAD PER DETAIL C711S.

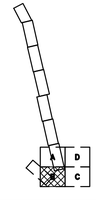
H. COHESIVE ROCK MIXTURE PER SPECIFICATION 31 23 33-201.E.

GENERAL NOTES

1. SIDEWALKS ARE 5 FT WIDE UNLESS NOTED OTHERWISE.
2. INSTALL SIX FOOT HIGH FENCE WITH 3 STRAND BARBED WIRE AND PRIVACY SLATS PER TYPICAL DETAIL C712S.
3. INSTALL BOLLARDS 1 FOOT FROM THE EDGE OF ASPHALT AND 4 FT APART CENTER TO CENTER AROUND FIRE HYDRANT. ADJUST SPACING OF ADJACENT BOLLARDS AS NEEDED TO MEET THIS REQUIREMENT.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS: 1365 W 2300 N SALT LAKE CITY, UT 84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B SITE PLAN

LICENSED PROFESSIONAL ENGINEER No. 182750 MICHAEL M. CHAMBERS STATE OF UTAH
04-03-2023

DRAWING No. 0100-C102S

SHEET _____ OF _____

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SCALE IN FEET

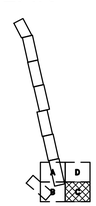
KEYNOTES

A. SAWCUT EXISTING PAVEMENT TO NEAT STRAIGHT LINE PRIOR TO PAVING NEW ACCESS ROAD.

B. PROTECT EXISTING POWER POLE.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

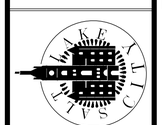
DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA C SITE PLAN



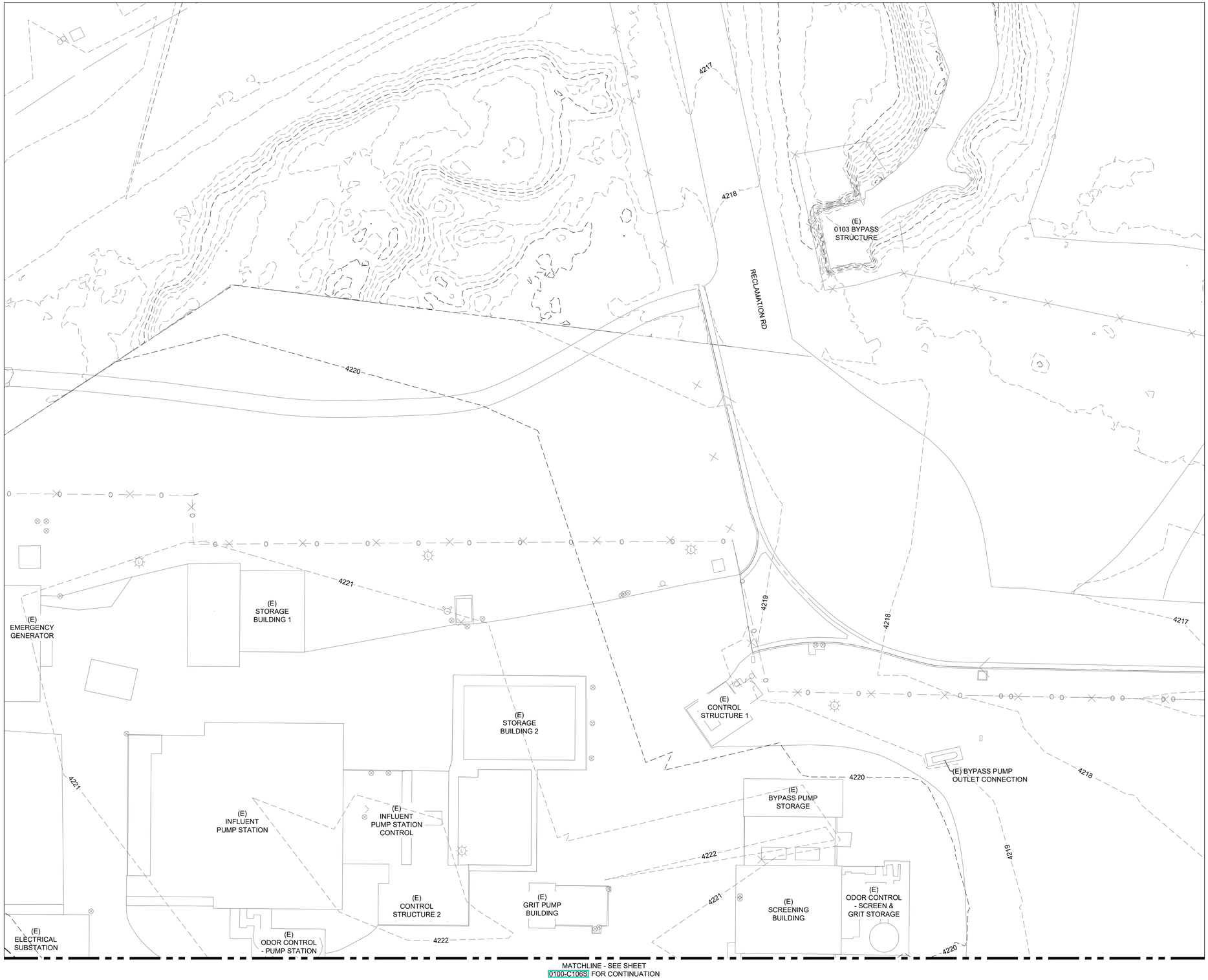


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0100-C103S

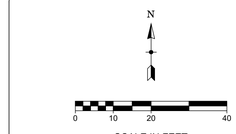
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MATCHLINE - SEE SHEET
0100-C106S FOR CONTINUATION

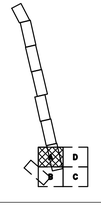


GENERAL NOTES

1. ALL TOPOGRAPHY SHOWN ON THIS SHEET IS EXISTING. SHEET PROVIDED FOR REFERENCE ONLY.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	GDS	MMC

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA A
GRADING AND DRAINAGE PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C105S

SHEET _____ OF _____

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MATCHLINE - SEE SHEET 0100-C105S FOR CONTINUATION

(E) GRIT CHAMBER INFLUENT GATE STRUCTURE

(E) GRIT CHAMBERS

0101 INFLUENT PUMP STATION FF EL 4221.5 SEE SHEET 0101-S101

0102 IPS ODOR CONTROL FF EL 4221.5 SEE SHEET 0102-S101

0104 IPS ELECTRICAL BUILDING FF EL 4221.5 SEE SHEET 0104-S101

0105 IPS STANDBY POWER & FUEL STORAGE FF EL 4221.5 SEE SHEET 0105-S101

FUEL TANK

FUEL TANK

SWGR

IPS VALVE PAD

PROPERTY LINE

MATCHLINE - SEE SHEET 0100-C107S FOR CONTINUATION

N

0 10 20 40

SCALE IN FEET

GENERAL NOTES

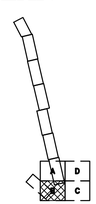
1. CONTRACTOR TO PERFORM GRADING ONLY. ALL FINAL RESTORATION/LANDSCAPING BEING DONE BY OTHERS.
2. UTBC SHALL BE GRADE 1-1/2 PER APWA 2017 SPECIFICATION SECTION 32 11 23.
3. HMA SHALL BE PG58-28 DM 1/2 PER APWA 2017 SPECIFICATION SECTION 32 12 05. MAX ALLOWABLE RAP = 25%.
4. APPLY TACK COAT TO EXISTING AC PAVEMENT PER APWA 2017 SPECIFICATION SECTION 32 12 13.13.
5. APPLY PRIME COAT TO UTBC PER APWA 2017 SPECIFICATION SECTION 32 12 13.19.
6. APPLY 4" HMA PER APWA 2017 SPECIFICATION SECTION 32 12 16.13.

KEYNOTES

A. PLACE AND COMPACT 22" MINIMUM GRANULAR BORROW AND 8" UTBC PER SPECIFICATION SECTION 31 23 00 EXCAVATION AND FILL 3.08 AND 3.06.D.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS: 1365 W 2300 N SALT LAKE CITY, UT 84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B GRADING AND DRAINAGE PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

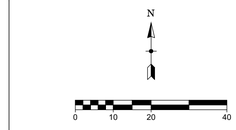
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0100-C106S

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FILE: H:\Projects\407 - AECOM\03.100 SLCWRF Upgrades\Task 8 Design\CAD\Working\20-SHEETS\10_Forcemain_IPS\3_Grading & Drainage\0524905350_0100-GNRL.dwg 4/3/2023 4:03 PM





GENERAL NOTES

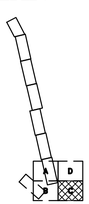
1. CONTRACTOR TO PERFORM GRADING ONLY. ALL FINAL RESTORATION/LANDSCAPING BEING DONE BY OTHERS.
2. UTBC SHALL BE GRADE 1-1/2 PER APWA 2017 SPECIFICATION SECTION 32 11 23.
3. HMA SHALL BE PG58-28 DM 1/2 PER APWA 2017 SPECIFICATION SECTION 32 12 05. MAX ALLOWABLE RAP = 25%.
4. APPLY TACK COAT TO EXISTING AC PAVEMENT PER APWA 2017 SPECIFICATION SECTION 32 12 13.13.
5. APPLY PRIME COAT TO UTBC PER APWA 2017 SPECIFICATION SECTION 32 12 13.19.
6. APPLY 4" HMA PER APWA 2017 SPECIFICATION SECTION 32 12 16.13.

KEYNOTES

A. PLACE AND COMPACT 22" MINIMUM GRANULAR BORROW AND 8" UTBC PER SPECIFICATION SECTION 31 23 00 EXCAVATION AND FILL 3.08 AND 3.06.D.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA C
GRADING AND DRAINAGE PLAN

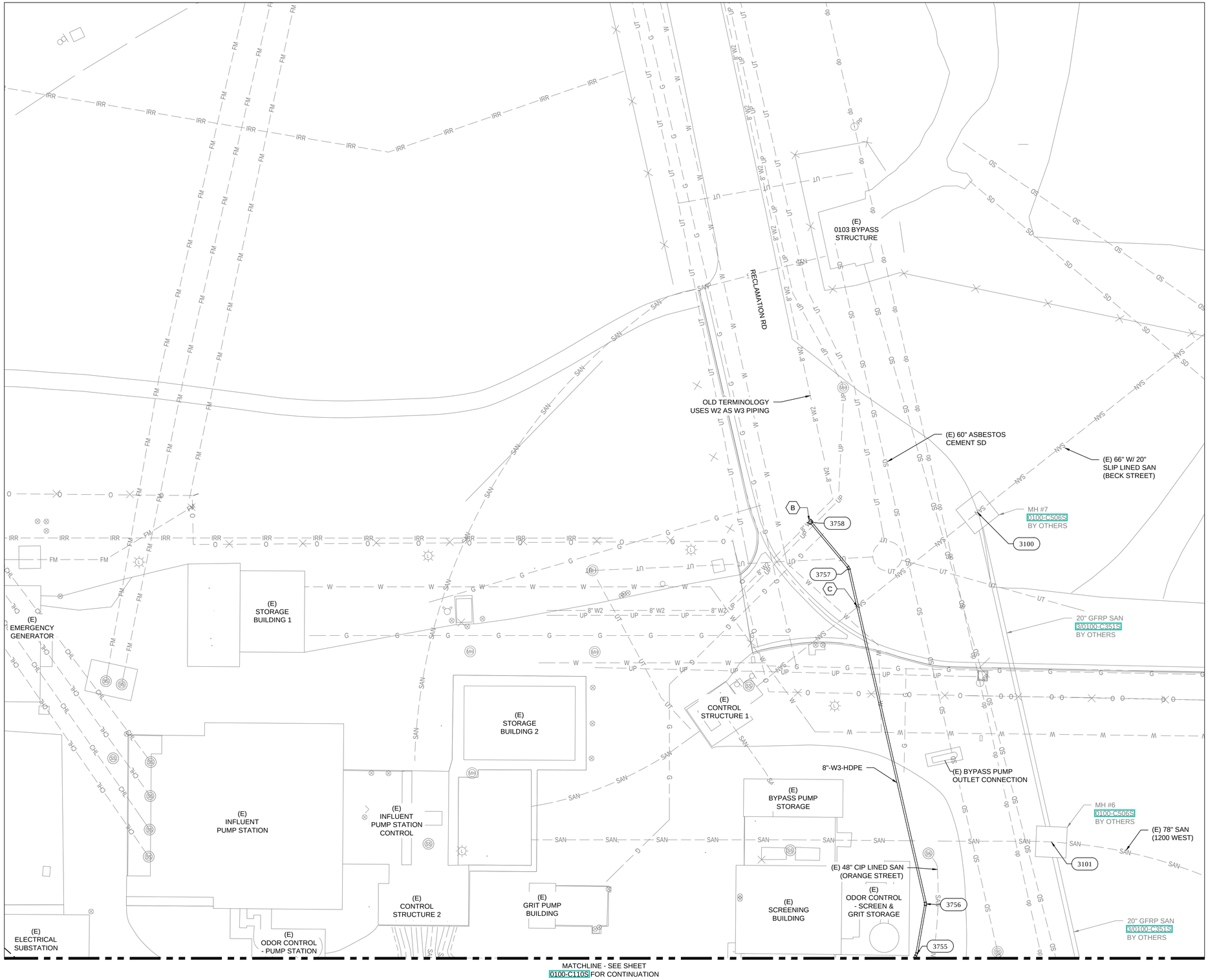
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C107S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 10 20 40

SCALE IN FEET

KEYNOTES

A. NOT USED.

B. CONNECT TO EXISTING WATER LINE.

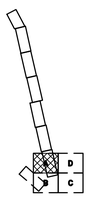
C. CAUTION. ADHERE TO SPECIFICATIONS FOR REQUIREMENTS OF CROSSING W1 PIPES.

GENERAL NOTES

1. TEST PRESSURE FOR ALL PIPELINES IS SHOWN IN THE PIPE SCHEDULE.
2. WAX TAPE WRAP ALL BURIED DUCTILE IRON VALVES AND FITTINGS, TRENTON WAX-TAPE #1, OR EQUAL. FILL VOIDS WITH A MOLDABLE MASTIC, TRENTON FILL-PRO, OR EQUAL. APPLY PRIMER, TRENTON WAX-TAPE PRIMER, OR EQUAL, TO PREPARE PIPE AND FITTINGS FOR WAX TAPE. AFTER APPLYING WAX-TAPE SYSTEM, WRAP THE VALVE OR FITTING WITH 8-MIL POLYETHYLENE WRAP AND SEAL ENDS WITH 12-MIL POLYETHYLENE TAPE, POLYKEN #900, OR EQUAL.
3. USE COR-BLUE T-BOLTS ON MJ FITTINGS AND TYPE 304 SS NUTS AND BOLTS ON BURIED FLANGES.
4. INSTALL RESTRAINED COUPLINGS PER DETAIL C738S AT ALL W1 CONNECTIONS TO THE BUILDINGS. INSTALL A BUTT FUSED JOINT OR ELECTROFUSION COUPLER AT ALL W3 CONNECTIONS TO THE BUILDINGS.
5. HDPE PIPE FOR W3 SERVICE SHALL BE DR11. PROVIDE INTEGRAL PURPLE STRIPE FOR W3 PIPE.
6. AT THE PAVED AREAS, ALL HDPE PIPE TO BE BACKFILLED AROUND AND UP TO SURFACE WITH LOW STRENGTH CONCRETE AT 50PSI COMPRESSIVE STRENGTH.
7. SEE SHEET 0100-E101S FOR ELECTRICAL INFORMATION.
8. CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES TO BE CROSSED BEFORE EXCAVATING NEW UTILITY TRENCHES.
9. INSTALL WATER PIPING IN ACCORDANCE WITH DETAIL C701S.
10. REMOVE EXISTING AC PAVEMENT AND DISPOSE OFF-SITE AT AN APPROVED LANDFILL OR RECYCLING FACILITY.
11. RESTORE AC PAVEMENT IN ACCORDANCE WITH SECTION 32 12 00. MINIMUM AC THICKNESS SHALL BE 4 INCHES.
12. UTBC SHALL BE GRADE 1-1/2" WITH MINIMUM THICKNESS OF 8 INCHES.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA A UTILITIES PIPING PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C109S

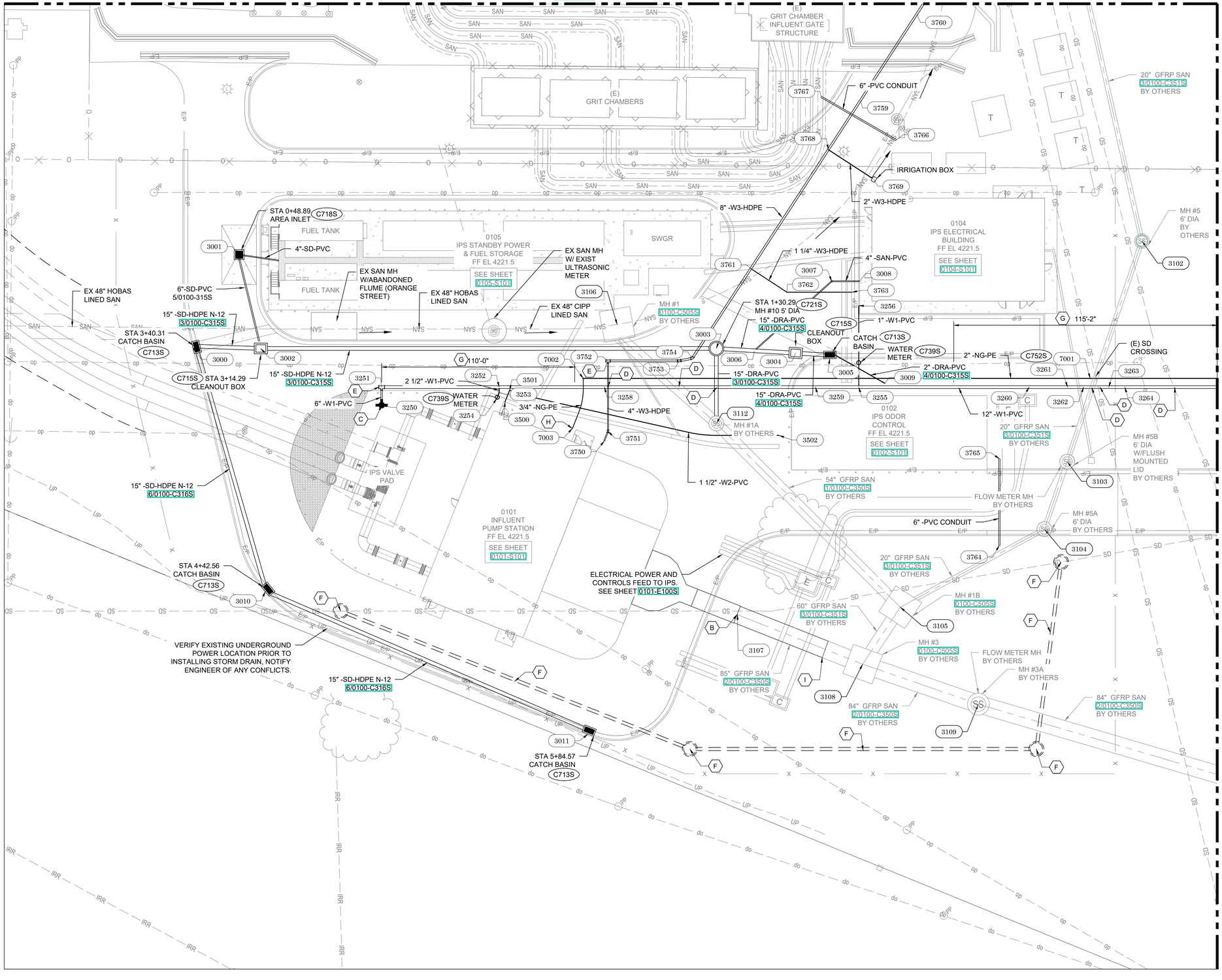
SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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MATCHLINE - SEE SHEET 0100-C109S FOR CONTINUATION

MATCHLINE - SEE SHEET 0100-C111S FOR CONTINUATION



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0 10 20 40

SCALE IN FEET

KEYNOTES

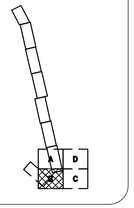
A. NOT USED.
B. SEE PROCESS (D) DRAWINGS.
C. INSTALL NEW CLASS 1 FIRE HYDRANT PER APWA PLAN 511 (SEE DETAIL C733S).
D. CAUTION. ADHERE TO SPECIFICATIONS FOR REQUIREMENTS OF CROSSING W1 PIPES.
E. INSTALL PLUG AND THRUST BLOCK ON WEST SIDE OF TEE.
F. CONTRACTOR TO VERIFY EXISTING STORM DRAIN LOCATION, REMOVE SECTION OF STORM DRAIN PIPE THROUGH IPS SITE, AND INSTALL NEW STORM DRAIN MAINTENANCE HOLES AND PIPE (MATCH EXISTING SIZE) AS SHOWN. NEW PIPE SHALL BE INSTALLED TO MATCH EXISTING INVERTS ON EACH END. STORM DRAIN REROUTING SHALL BE PAID THROUGH GENERAL ALLOWANCE.
G. RESTRAIN ALL FITTINGS AND JOINTS FOR THE DISTANCES SHOWN ON W1 PIPES.
H. CONTRACTOR SHALL EXCAVATE FOR THE 2" GAS LINE FROM CONNECTION IN 1200 W TO METER AT IPS BUILDING. CONTRACTOR SHALL COORDINATE WITH DOMINION ENERGY AND SHALL BE RESPONSIBLE FOR ANY COSTS FOR THEM TO INSTALL 2" GAS LINE. CONTRACTOR SHALL BACKFILL AND PROVIDE SURFACE RESTORATIONS PER DETAIL C703S.
I. CONTRACTOR TO PROVIDE COUPLING TO CONNECT TO OTHER SECTION

GENERAL NOTES

1. TEST PRESSURE FOR ALL PIPELINES IS SHOWN IN THE PIPE SCHEDULE.
2. WAX TAPE WRAP ALL BURIED DUCTILE IRON VALVES AND FITTINGS, TRENTON WAX-TAPE #1, OR EQUAL. FILL VOIDS WITH A MOLDABLE MASTIC, TRENTON FILL-PRO, OR EQUAL. APPLY PRIMER, TRENTON WAX-TAPE PRIMER, OR EQUAL, TO PREPARE PIPE AND FITTINGS FOR WAX TAPE. AFTER APPLYING WAX-TAPE SYSTEM, WRAP THE VALVE OR FITTING WITH 8-MIL POLYETHYLENE WRAP AND SEAL ENDS WITH 12-MIL POLYETHYLENE TAPE, POLYKEN #900, OR EQUAL.
3. USE COR-BLUE T-BOLTS ON MJ FITTINGS AND TYPE 304 SS NUTS AND BOLTS ON BURIED FLANGES.
4. INSTALL RESTRAINED COUPLINGS PER DETAIL C738S AT ALL W1 CONNECTIONS TO THE BUILDINGS. INSTALL A BUTT FUSED JOINT OR ELECTROFUSION COUPLER AT ALL W3 CONNECTIONS TO THE BUILDINGS.
5. HDPE PIPE FOR W3 SERVICE SHALL BE DR11. PROVIDE INTEGRAL PURPLE STRIPE FOR W3 PIPE.
6. AT THE PAVED AREAS, ALL HDPE PIPE TO BE BACKFILLED AROUND AND UP TO SURFACE WITH LOW STRENGTH CONCRETE AT 50PSI COMPRESSIVE STRENGTH.
7. SEE SHEET 0100-E102S FOR ELECTRICAL INFORMATION.
8. CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES TO BE CROSSED BEFORE EXCAVATING NEW UTILITY TRENCHES.
9. INSTALL WATER PIPING IN ACCORDANCE WITH DETAIL C701S.
10. REMOVE EXISTING AC PAVEMENT AND DISPOSE OFF-SITE AT AN APPROVED LANDFILL OR RECYCLING FACILITY.
11. RESTORE AC PAVEMENT IN ACCORDANCE WITH SECTION 32 12 00. MINIMUM AC THICKNESS SHALL BE 4 INCHES.
12. UTBC SHALL BE GRADE 1-1/2" WITH MINIMUM THICKNESS OF 8 INCHES.
13. SEE SHEET 0100-R102S FOR PROCESS PIPING INFORMATION.

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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS: 1365 W 2300 N SALT LAKE CITY, UT 84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B
UTILITIES PIPING PLAN

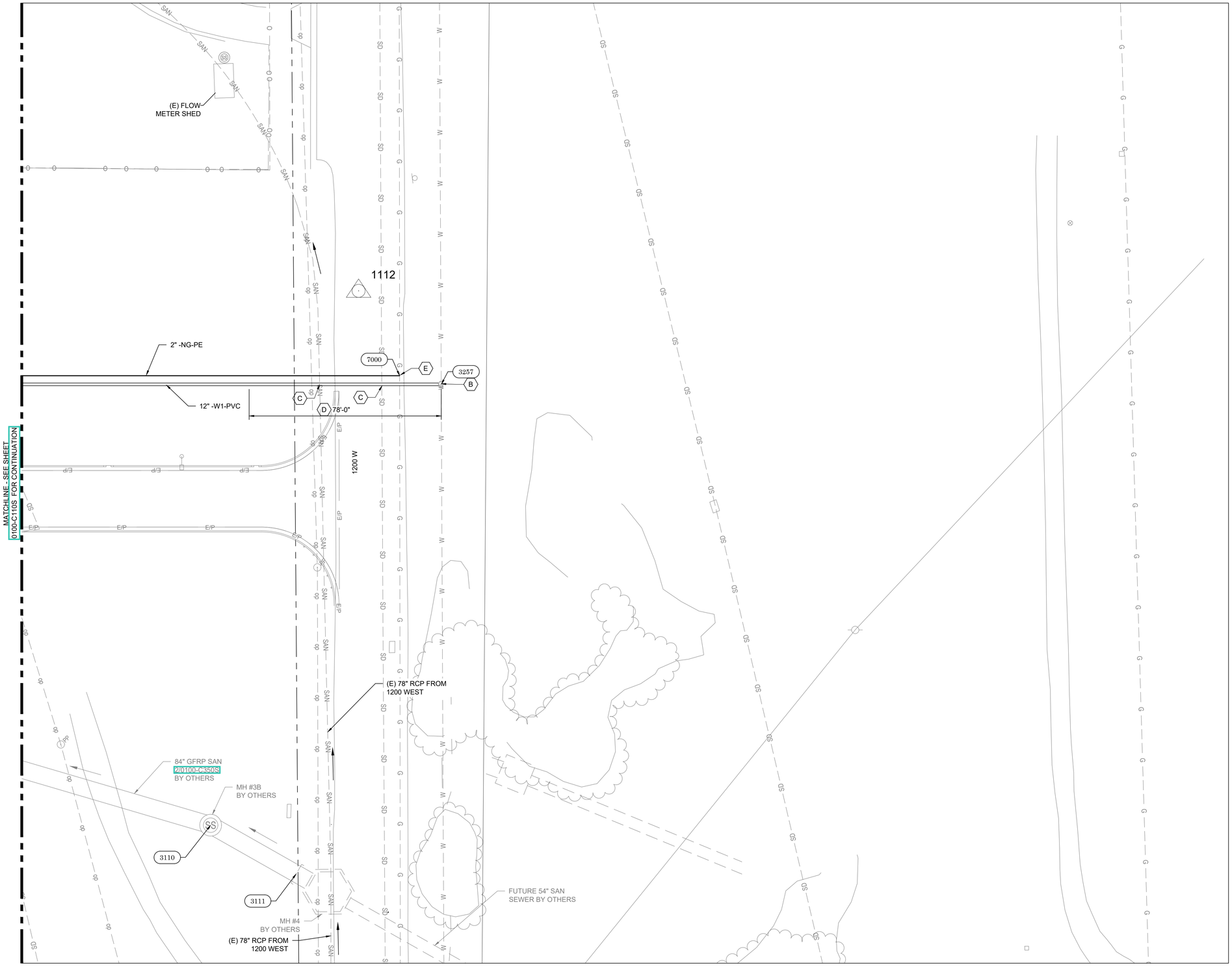
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C110S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\lindsay.reid\OneDrive - AECOM\Documents_Projects\SLC WRF\010-CAD\20\SHEETS\10_Forceman-IPS\4_Yard Piping\624905350_0100-C110S.dwg DATE: 3/30/2023 4:49 PM



N

0 10 20 40

SCALE IN FEET

KEYNOTES

A. NOT USED.

B. CONNECT TO THE NEW 12-INCH TEE THAT WILL BE INSTALLED BY OTHERS.

C. CAUTION. ADHERE TO SPECIFICATIONS FOR REQUIREMENTS OF CROSSING W1 PIPES.

D. RESTRAIN ALL FITTINGS AND JOINTS FOR THE DISTANCES SHOWN ON W1 PIPES.

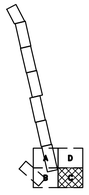
E. CONTRACTOR SHALL EXCAVATE FOR THE 2" GAS LINE FROM CONNECTION IN 1200 W TO METER AT IPS BUILDING. CONTRACTOR SHALL COORDINATE WITH DOMINION ENERGY AND SHALL BE RESPONSIBLE FOR ANY COSTS FOR THEM TO INSTALL 2" GAS LINE. CONTRACTOR SHALL BACKFILL AND PROVIDE SURFACE RESTORATIONS PER DETAIL C703S.

GENERAL NOTES

1. TEST PRESSURE FOR ALL PIPELINES IS SHOWN IN THE PIPE SCHEDULE.
2. WAX TAPE WRAP ALL BURIED DUCTILE IRON VALVES AND FITTINGS, TRENTON WAX-TAPE #1, OR EQUAL. FILL VOIDS WITH A MOLDABLE MASTIC, TRENTON FILL-PRO, OR EQUAL. APPLY PRIMER, TRENTON WAX-TAPE PRIMER, OR EQUAL, TO PREPARE PIPE AND FITTINGS FOR WAX TAPE. AFTER APPLYING WAX-TAPE SYSTEM, WRAP THE VALVE OR FITTING WITH 8-MIL POLYETHYLENE WRAP AND SEAL ENDS WITH 12-MIL POLYETHYLENE TAPE, POLYKEN #900, OR EQUAL.
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4. CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES TO BE CROSSED BEFORE EXCAVATING NEW UTILITY TRENCHES.
5. INSTALL WATER PIPING IN ACCORDANCE WITH DETAIL C701S.
6. REMOVE EXISTING AC PAVEMENT AND DISPOSE OFF-SITE AT AN APPROVED LANDFILL OR RECYCLING FACILITY.
7. RESTORE AC PAVEMENT IN ACCORDANCE WITH SECTION 32 12 00. MINIMUM AC THICKNESS SHALL BE 4 INCHES.
8. UTBC SHALL BE GRADE 1-1/2" WITH MINIMUM THICKNESS OF 8 INCHES

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1-800-662-4111

KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
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SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA C
UTILITIES PIPING PLAN

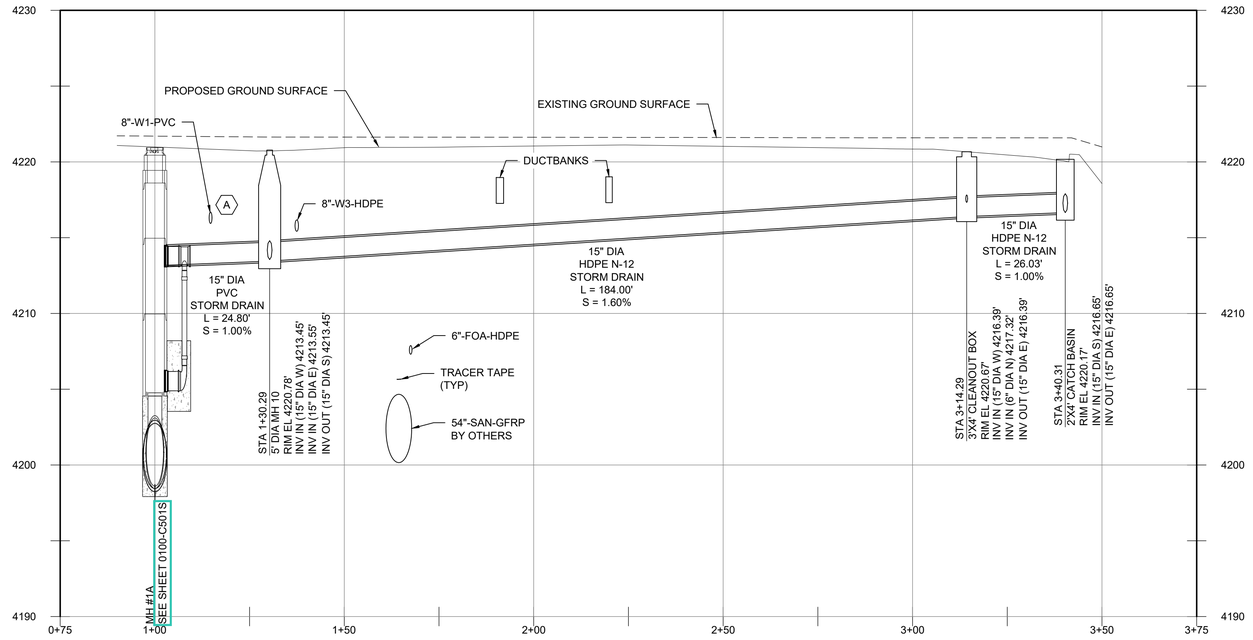
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C111S

SHEET _____ OF _____

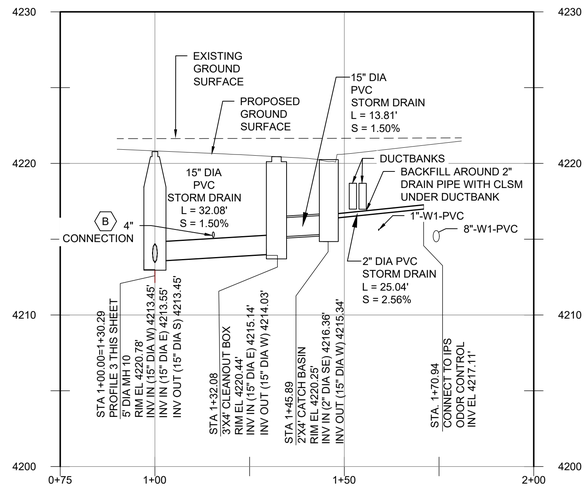
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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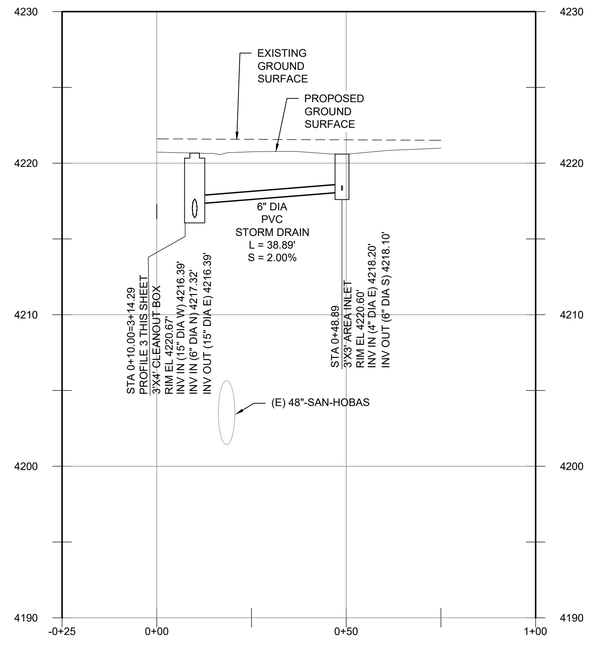
3 | STORM DRAIN

0100-C110S | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



4 | STORM DRAIN

0100-C110S | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



5 | STORM DRAIN

0100-C110S | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

KEY NOTES

A. CAUTION. ADHERE TO SPECIFICATIONS FOR REQUIREMENTS OF CROSSING W1 PIPES.

B. CONNECT 4" SEWER LATERAL TO NEW 15" PVC PIPE PER DETAIL C722S.

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1-800-662-4111

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

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WATER RECLAMATION FACILITY
PUMP STATION SITE

PIPE PROFILES
SHEET 1 OF 2

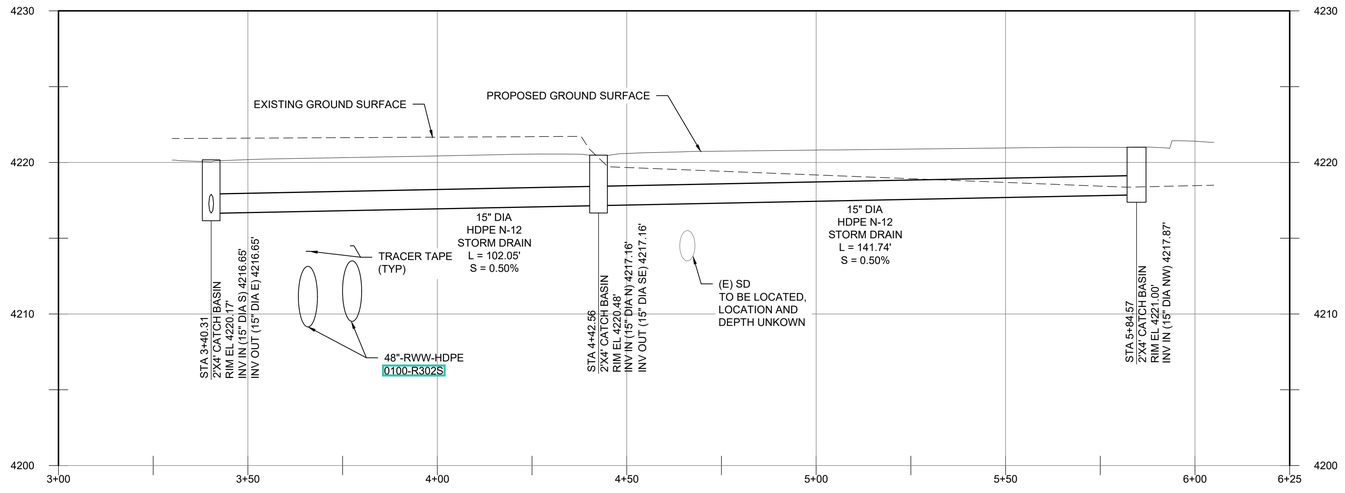
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C315S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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6 | STORM DRAIN

0100-C110S | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

KEY NOTES

A. CAUTION. ADHERE TO SPECIFICATIONS FOR REQUIREMENTS OF CROSSING W1 PIPES.

B. CONNECT 4" SEWER LATERAL TO NEW 15" PVC PIPE PER DETAIL C722S.

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SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

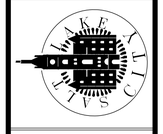
REVISIONS

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WATER RECLAMATION FACILITY
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PIPE PROFILES
SHEET 2 OF 2





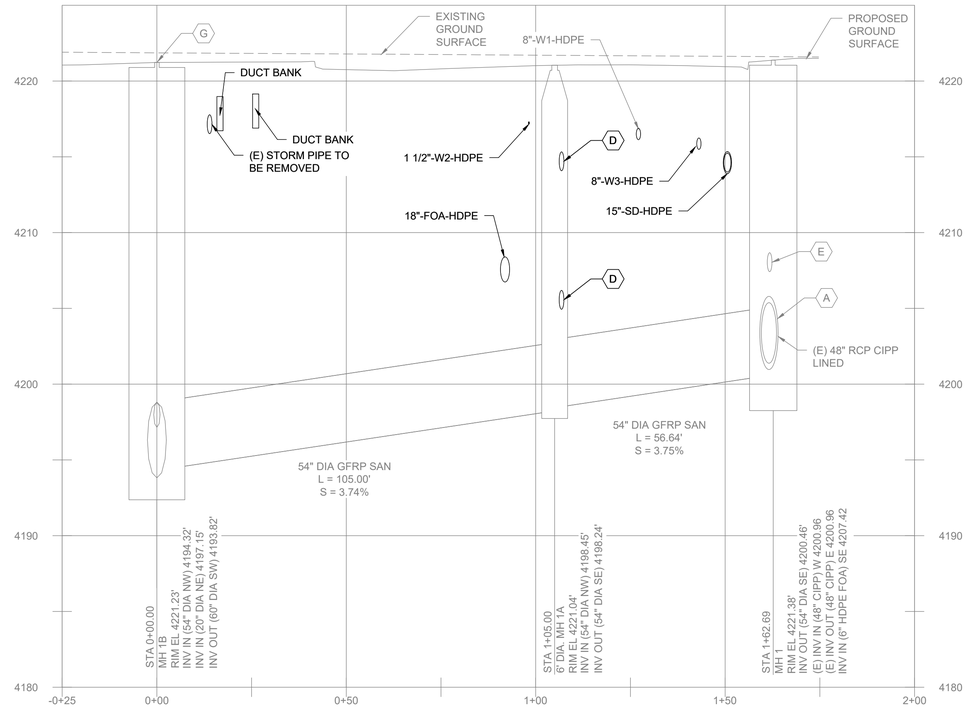
04-03-2023

DRAWING No.
0100-C316S

SHEET _____ OF _____

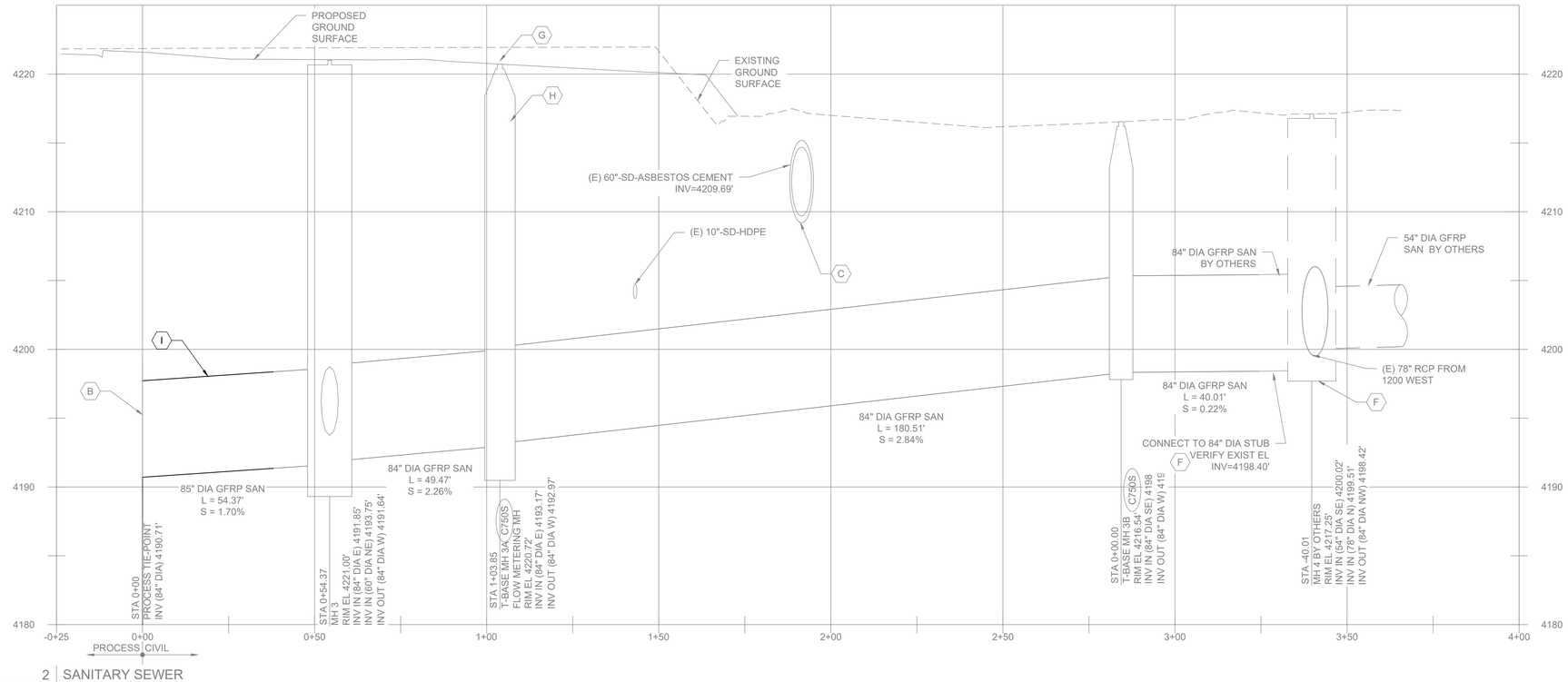
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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1 SANITARY SEWER

0100-C110 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



PROCESS CIVIL

2 SANITARY SEWER

0100-C110 SCALE HORIZ: 1" = 20'
0100-C111 SCALE VERT: 1" = 5'

KEY NOTES

A. CONSTRUCT PROPOSED MH OVER EXISTING PIPE. FORM BENCH AND FLOWLINE PRIOR TO SAW CUTTING AND REMOVING EXISTING PIPE CROWN DOWN TO NEW BENCH ELEVATION.

B. SEE PROCESS DRAWINGS FOR TIE-POINT CONNECTION.

C. CONTRACTOR TO SUPPORT THE EXISTING 60" STORM DRAIN PIPE AS NECESSARY FOR THE INSTALLATION OF THE SEWER LINE.

D. OUTSIDE DROP CONNECTION, SEE DETAIL 0100-C501S.

E. 6" HDPE FOA TO CONNECT TO MH1. SEE DETAIL D123S ON DRAWING 0100-D701S FOR PENETRATION DETAIL INTO THE MH.

F. THIS PORTION OF SEWER IS ASSOCIATED WITH THE 1800 NORTH SEWER RE-ALIGNMENT PROJECT. PRIOR TO CONNECTION OF THE PROPOSED 84" SEWER LINE THE CONTRACTOR SHALL REMOVE THE EXISTING CAP AND CONNECT TO THE EXISTING PIPE STUB. CONTRACTOR SHALL COORDINATE TIMING OF THE CONNECTION WITH THE 1800 NORTH SEWER PROJECT. EXISTING FLOWS SHALL BE CONVEYED IN THE EXISTING 78" PIPELINE UNTIL THE IPS IS OPERATIONAL.

G. ALL MANHOLES LOCATED OUT OF PAVED AREAS SHALL BE INSTALLED 6-INCHES ABOVE FINISHED GRADE AND SHALL INCLUDE CARSONITE MARKER POST.

H. FOR FLOW METERING MANHOLE DETAIL SEE T-BASE MH DETAILS C750S ON DRAWING 0100-C715S.

I. PROVIDE COUPLING AND CONNECT TO OTHERS AT 10' FROM THE EDGE OF MH#3

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH TO CENTER OF MH.
2. INVERTS ARE LABELED INTERIOR WALL OF MH STRUCTURE.
3. CONTRACTOR TO VERIFY ALL EXISTING SANITARY SEWER INVERT ELEVATIONS PRIOR TO SHOP DRAWING SUBMITTAL AND/OR STARTING CONSTRUCTION.
4. INSTALL MARKER TAPE AND TRACER WIRE PER SPECIFICATION SECTION 31 23 33.

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SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S. BERZINS
DRAWN BY: B. WILD
CHECKED BY: S. BERZINS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	LMR	SB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PROFILES
SHEET 1 OF 2

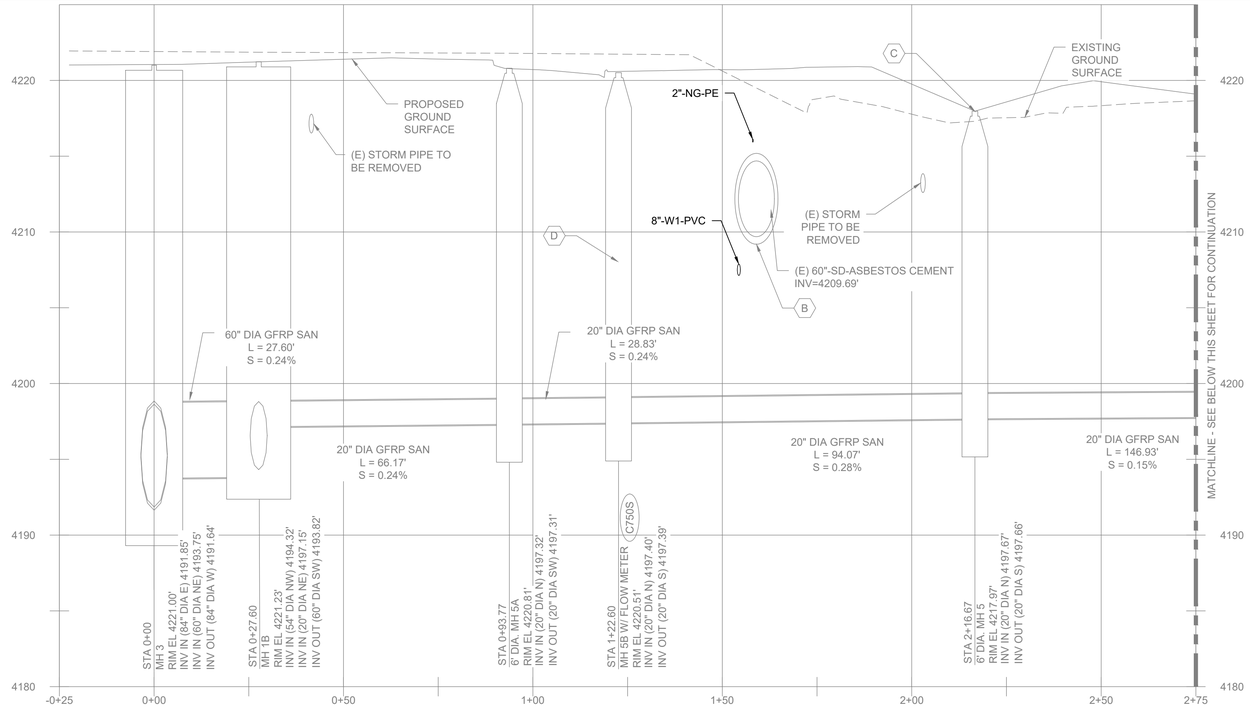
PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C350S

SHEET _____ OF _____

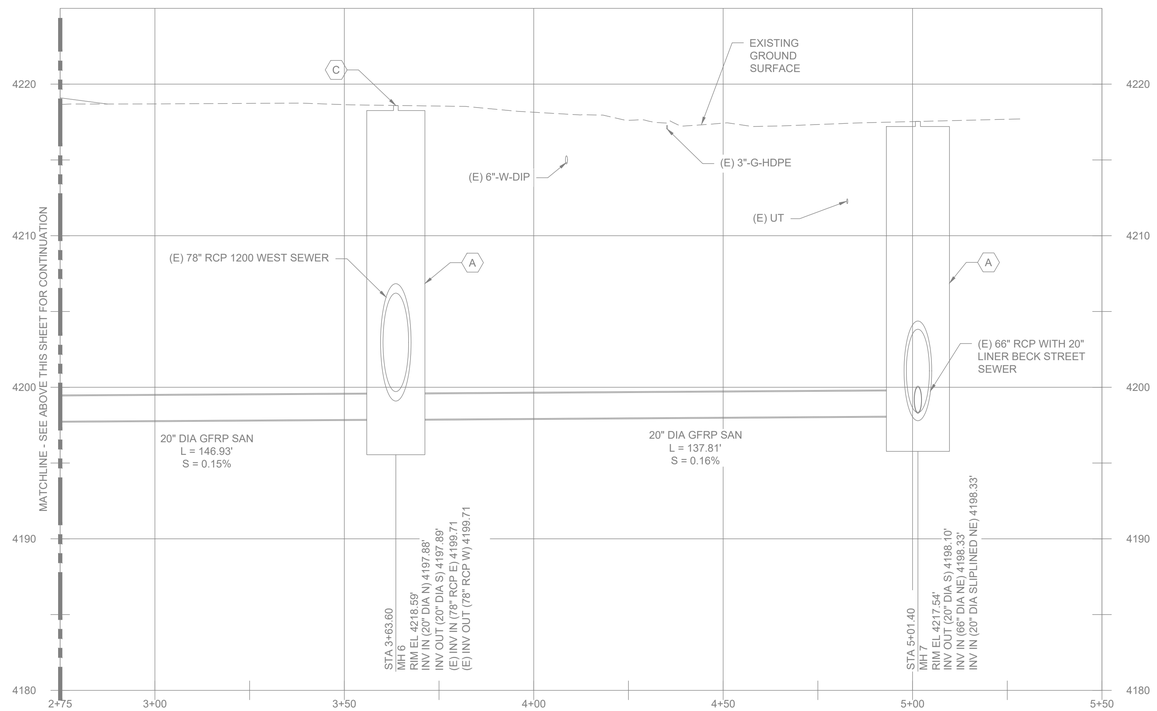
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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3 SANITARY SEWER

0100-C109 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



3 SANITARY SEWER (CONT)

0100-C109 SCALE HORIZ: 1" = 20'
0100-C110 SCALE VERT: 1" = 5'

KEY NOTES

A. CONSTRUCT PROPOSED MH OVER EXISTING PIPE. FORM BENCH AND FLOWLINE PRIOR TO SAW CUTTING AND REMOVING EXISTING PIPE CROWN DOWN TO NEW BENCH ELEVATION.

B. CONTRACTOR TO SUPPORT THE EXISTING 60" STORM DRAIN PIPE AS NECESSARY FOR THE INSTALLATION OF THE SEWER LINE.

C. ALL MANHOLES LOCATED OUT OF PAVED AREAS SHALL BE INSTALLED 6-INCHES ABOVE FINISHED GRADE AND SHALL INCLUDE A CARSONITE MARKER POST.

D. FOR FLOW METERING MANHOLE DETAIL SEE T-BASE MH DETAILS C750S ON DRAWING C100-C715S.

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH TO CENTER OF MH.
2. INVERTS ARE LABELED TO INTERIOR WALL OF MH STRUCTURE.
3. CONTRACTOR TO VERIFY ALL EXISTING SANITARY SEWER INVERT ELEVATIONS PRIOR TO SHOP DRAWING SUBMITTAL AND/OR STARTING CONSTRUCTION.
4. INSTALL MARKER TAPE AND TRACER WIRE PER SPECIFICATION SECTION 31 23 33.2.03.B.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S. BERZINS
DRAWN BY: B. WILD
CHECKED BY: S. BERZINS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	LMR	SB

LAST CONFORMED SET: ISW-1A, ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

PROFILES
SHEET 2 OF 2

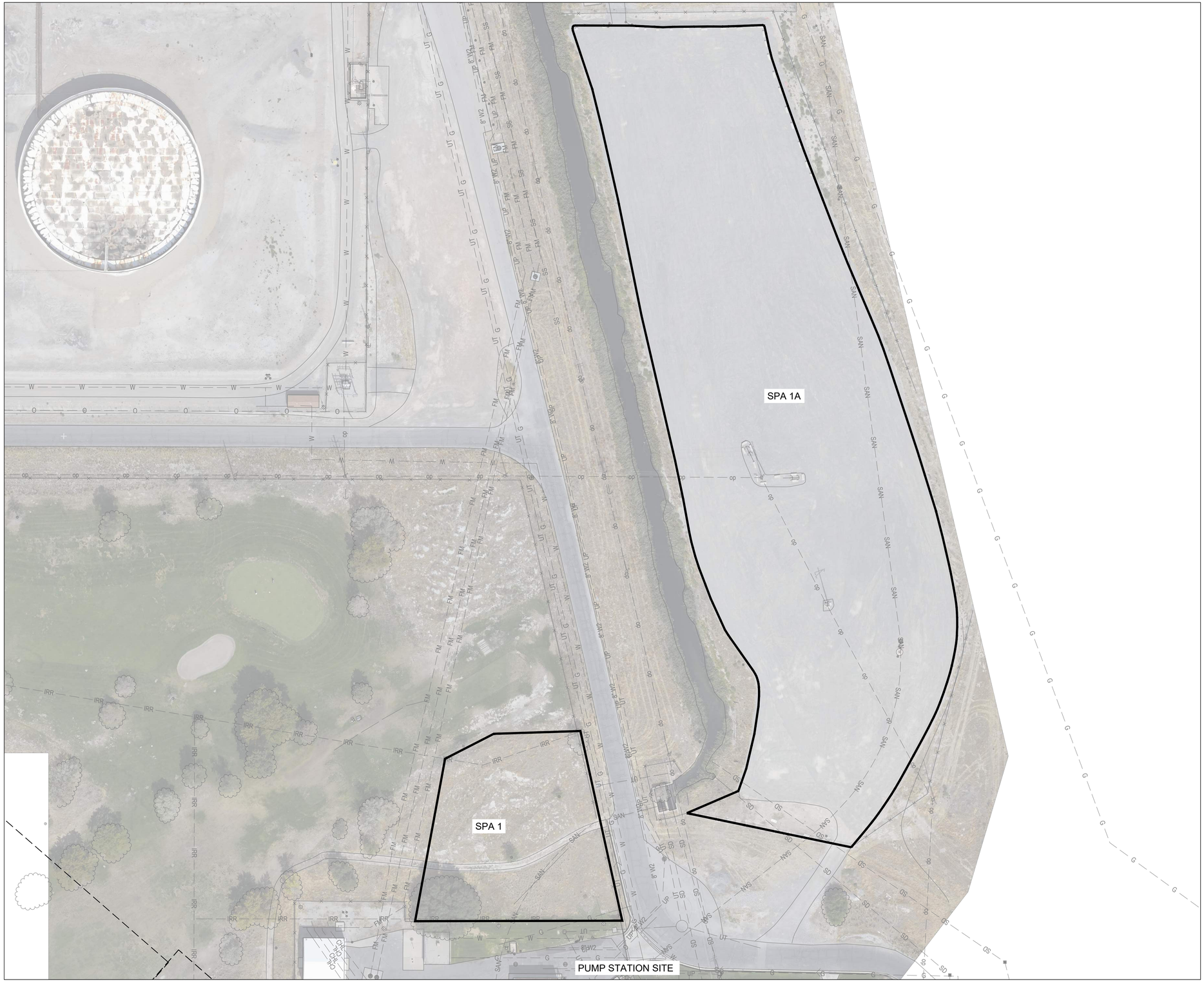
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
PROFESSIONAL ENGINEER
04-03-2023

DRAWING No.
0100-C351S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 25 50 100

SCALE IN FEET

GENERAL NOTES

1. AREA CANNOT BE DISTURBED 18" BELOW THE SURFACE.
2. AREA TO BE BROUGHT BACK TO EXISTING CONDITIONS ONCE THE PROJECT IS COMPLETE.
3. CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY IF ANY OF THE FOLLOWING CONDITIONS ARE OBSERVED:
   - DAMAGE TO FENCES OR GATES ENOUGH TO ALLOW PASSAGE OF A PERSON INTO THE SPA.
   - MISSING WARNING SIGNS AT THE ENTRANCES TO THE SPAs.
   - GOUGING, RUTTING, OR THINNING OF GRAVEL SURFACE AT SPA 1 THAT IS MORE THAN TEN SQUARE FEET IN AREA AND THAT LEAVES LESS THAN $\frac{1}{4}$ FT. OF COVER OVER THE ORANGE GEOTEXTILE MARKER BED, OR THAT EXPOSES ORANGE GEOTEXTILE MARKER BED.
   - DAMAGE OF SURFACE COVER AT SPA 1A THAT EXPOSES SOIL THAT IS MORE THAN TEN SQUARE FEET IN AREA EXPOSING SOIL THAT COULD BE ERODED TO THE CANAL.
   - OIL OR SHEEN OBSERVED ON THE CANAL ADJACENT TO SPA 1 OR 1A WITH AN ESTIMATED SURFACE AREA OF MORE THAN ONE SQUARE FOOT.

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KEY PLAN

SCALE: 1" = 50'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: JDONEGAN
DRAWN BY: LREID
CHECKED BY: G.DAVIES
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	LMR	SB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CONTRACTOR LAYDOWN AREA

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C400S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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2 | MH #1A PIPE CENTERLINE PLAN

SCALE: NTS

B | SECTION

0100-C110S | SCALE: 1"=2'

SCALE: NTS

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G.STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: N. JONES
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL DETAILS
SHEET 1 OF 3

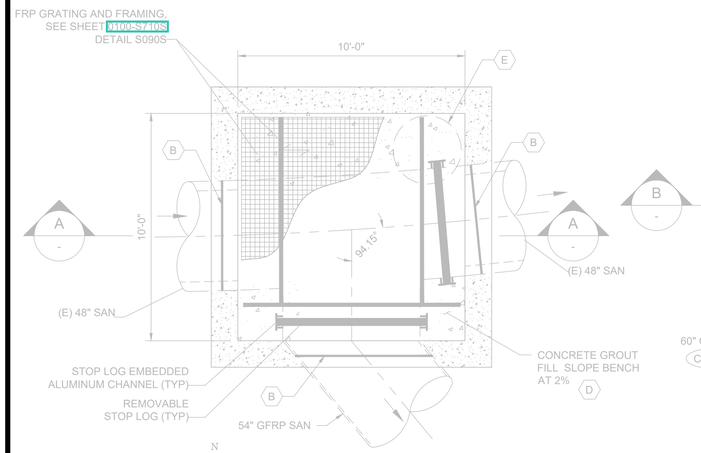
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C501S

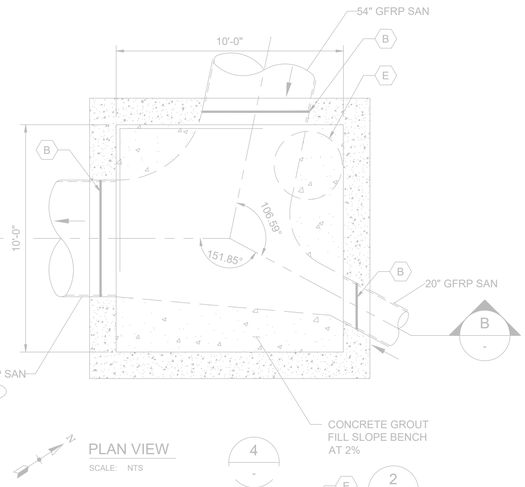
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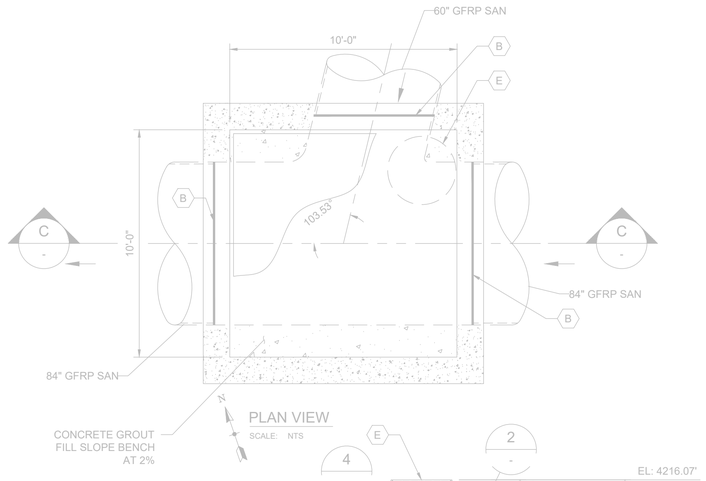


A | SECTION
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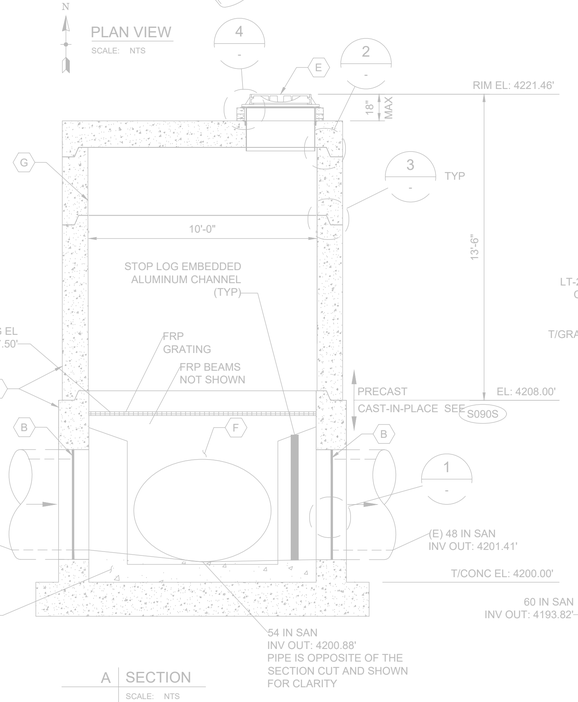
PLAN VIEW
SCALE: NTS

B | SECTION
SCALE: NTS

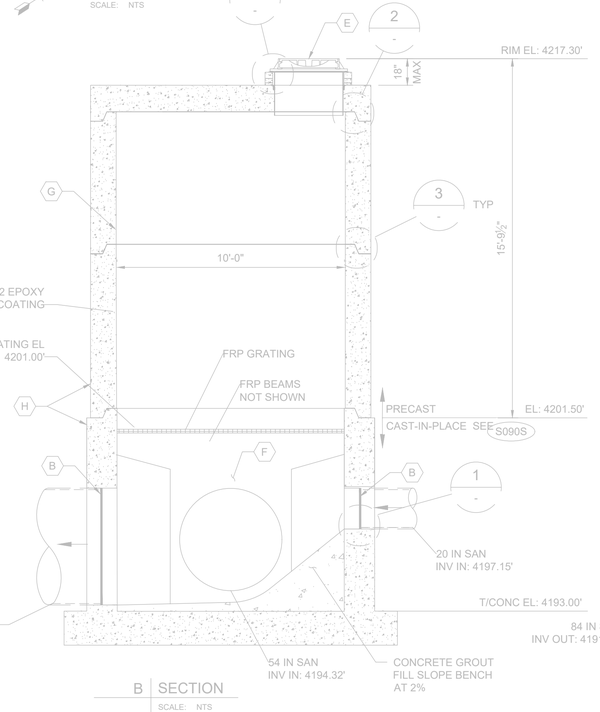


PLAN VIEW
SCALE: NTS

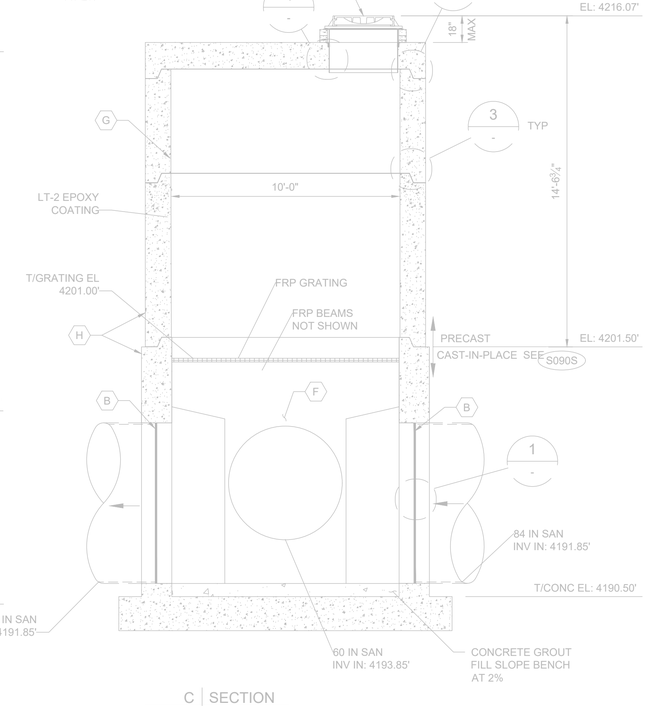
C | SECTION
SCALE: NTS



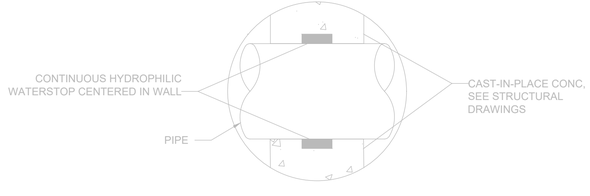
MH #1
0100-C108 SCALE: NTS



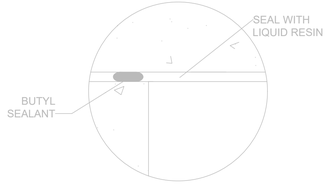
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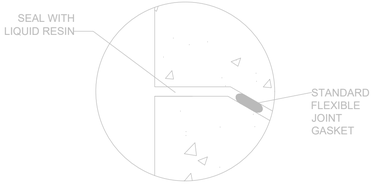
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0100-C108 SCALE: NTS



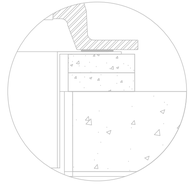
1 | WATERSTOP
SCALE: NTS



2 | JOINT DETAIL A
SCALE: NTS



3 | JOINT DETAIL B
SCALE: NTS



4 | TELESCOPIC ACCESS COLLAR DETAIL
SCALE: NTS

KEY NOTES

A. PRIOR TO ORDERING MATERIALS, CONTRACTOR SHALL SURVEY THE RECENTLY CONSTRUCTED POINTS OF CONNECTION FROM 1800 N SEWER REALIGNMENT PROJECT AND PROVIDE AS-BUILT INFORMATION TO ENGINEER. THESE TIE IN LOCATIONS WERE NOT CONSTRUCTED PRIOR TO THIS DESIGN SO ELEVATIONS ARE BASED ON DESIGN ELEVATIONS ONLY AND ARE APPROXIMATE. VERIFY PIPE END CONFIGURATION FOR CONNECTION.

B. ONE HYDROPHILIC LOW EXPANSION WATERSTOP, ADHERE ONE STRIP TO CONCRETE AND ONE STIP SECURELY TO PIPE WITH A BEAD OF HYDROPHILIC ADHESIVE. BUTT ENDS TOGETHER AND GLUE. NO MORE THAN ONE BUTT JOINT IS PERMITTED IN WATERSTOP. STRAP OR CLAMP WATERSTOP TO PIPE TO ENSURE COMPLETE ADHESION TO PIPE. REMOVE STRAP OR CLAMP PRIOR TO PLACING CONCRETE.

C. PROVIDE FRP GRATING WITH FRP SUPPORT FRAMING AS SHOWN INCLUDING ALL REQUIRED CONNECTIONS TO FRP AND CONCRETE, SEE SPECIFICATION SECTION 06 60 10. GRATING FRAMING SHALL BE LAID OUT TO ALLOW REMOVAL OF GRATING PANELS AND STOP LOGS WHILE MAINTAINING PERSONNEL ACCESS ON THE REMAINING PORTION OF GRATING. PROPOSED GRATING AND SUPPORT SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.

D. EMBEDDED GUIDE STOP LOG FRAME PER DETAIL C753S FOR 4" WIDE STOP LOG. INSTALL PER MANUFACTURER'S REQUIREMENTS.

E. NON-STANDARD LOCKING 44" FRAME AND DOUBLE COVER (36" COVER, INNER 24" COVER) PER APWA ADAPTED FOR SANITARY SERVICE.

F. CONTRACTOR SHALL PROVIDE A CHANNEL WIDTH +2" MINIMUM TO THAT OF THE OD OF THE INLET PIPING.

G. COAT INTERIOR SURFACES OF MANHOLES WITH 100% EPOXY COATING, SEE SPECIFICATION SECTION 09 91 13. EXTENTS: ALL INTERIOR MANHOLE SURFACES INCLUDING GROUT AND UNDERSIDE OF TOP DECK.

H. PROVIDE EXTERIOR COATING ON PRECAST AND CAST IN PLACE CONCRETE AS DEFINED IN SPECIFICATION SECTION 03 48 18.

GENERAL NOTES

1. PRE-CAST CONCRETE VAULTS IN ACCORDANCE WITH SECTION 03 48 18.

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www.bluestakes.org
1-800-662-4111

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S. BERZINS
DRAWN BY: B. WILD
CHECKED BY: S. BERZINS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	LMR	SB

LAST CONFORMED SET: ISW-1A, ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL DETAILS SHEET 5

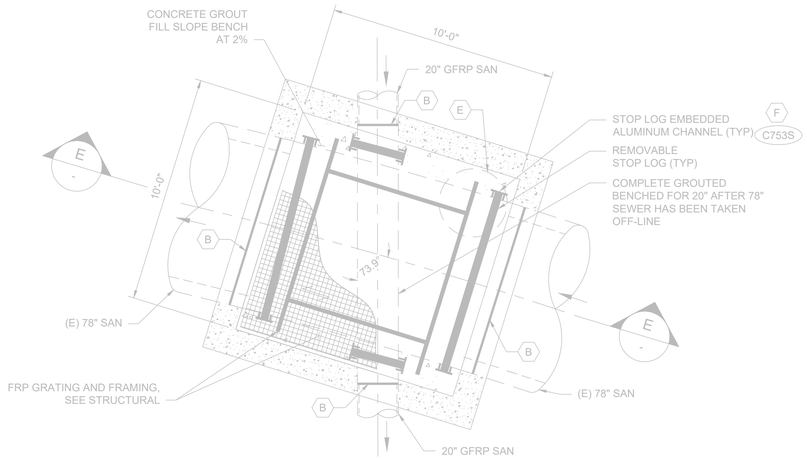
PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-C505S

SHEET _____ OF _____

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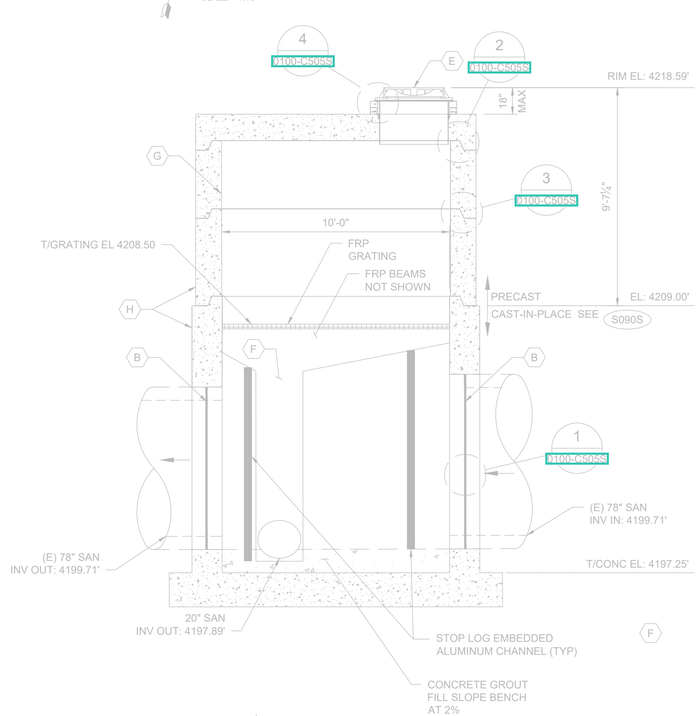
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N

PLAN VIEW

SCALE: NTS

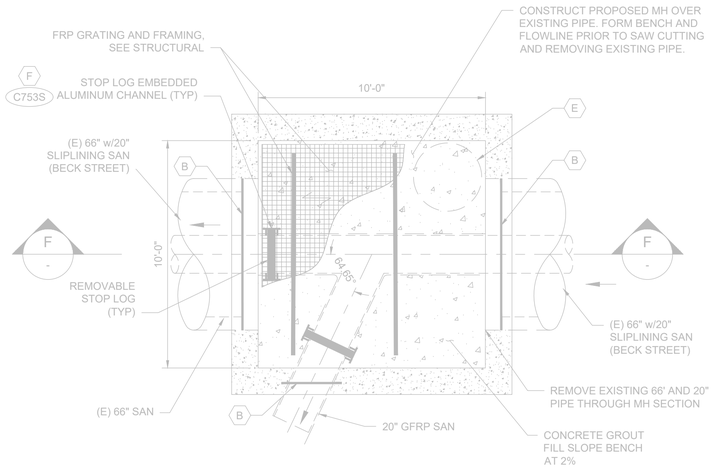


E | SECTION

SCALE: NTS

MH #6

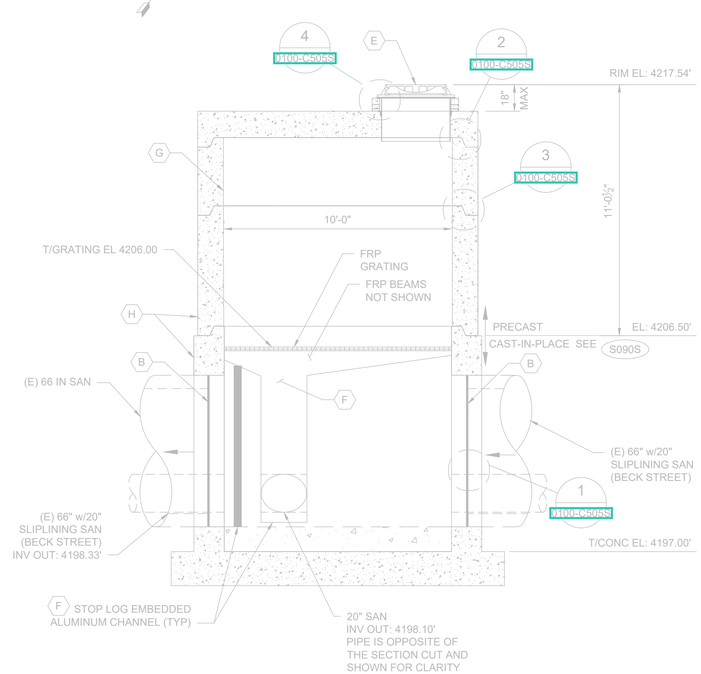
0100-C107 | SCALE: NTS



N

PLAN VIEW

SCALE: NTS



F | SECTION

SCALE: NTS

MH #7

0100-C107 | SCALE: NTS

KEY NOTES

A. PRIOR TO ORDERING MATERIALS, CONTRACTOR SHALL SURVEY THE RECENTLY CONSTRUCTED POINTS OF CONNECTION FROM 1800 N SEWER REALIGNMENT PROJECT AND PROVIDE AS-BUILT INFORMATION TO ENGINEER. THESE TIE IN LOCATIONS WERE NOT CONSTRUCTED PRIOR TO THIS DESIGN SO ELEVATIONS ARE BASED ON DESIGN ELEVATIONS ONLY AND ARE APPROXIMATE. VERIFY PIPE END CONFIGURATION FOR CONNECTION.

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C. PROVIDE FRP GRATING WITH FRP SUPPORT FRAMING AS SHOWN INCLUDING ALL REQUIRED CONNECTIONS TO FRP AND CONCRETE, SEE SPECIFICATION SECTION 06 60 10. GRATING FRAMING SHALL BE LAID OUT TO ALLOW REMOVAL OF GRATING PANELS AND STOP LOGS WHILE MAINTAINING PERSONNEL ACCESS ON THE REMAINING PORTION OF GRATING. PROPOSED GRATING AND SUPPORT SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.

D. EMBEDDED GUIDE STOP LOG FRAME PER DETAIL C753S FOR 4" WIDE STOP LOG. INSTALL PER MANUFACTURER'S REQUIREMENTS.

E. NON-STANDARD LOCKING 44" FRAME AND DOUBLE COVER (36" COVER, INNER 24" COVER) PER APWA ADAPTED FOR SANITARY SERVICE.

F. CONTRACTOR SHALL PROVIDE A CHANNEL WIDTH +2" MINIMUM TO THAT OF THE OD OF THE INLET PIPING.

G. COAT INTERIOR SURFACES OF MANHOLES WITH 100% EPOXY COATING, SEE SPECIFICATION SECTION 09 91 13. EXTENTS: ALL INTERIOR MANHOLE SURFACES INCLUDING GROUT AND UNDERSIDE OF TOP DECK.

H. PROVIDE EXTERIOR COATING ON PRECAST AND CAST IN PLACE CONCRETE AS DEFINED IN SPECIFICATION SECTION 03 48 18.

GENERAL NOTES

1. PRE-CAST CONCRETE VAULTS IN ACCORDANCE WITH SECTION 03 48 18.

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: S. BERZINS
DRAWN BY: B. WILD
CHECKED BY: S. BERZINS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	LMR / SB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

CIVIL DETAILS
SHEET 6

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

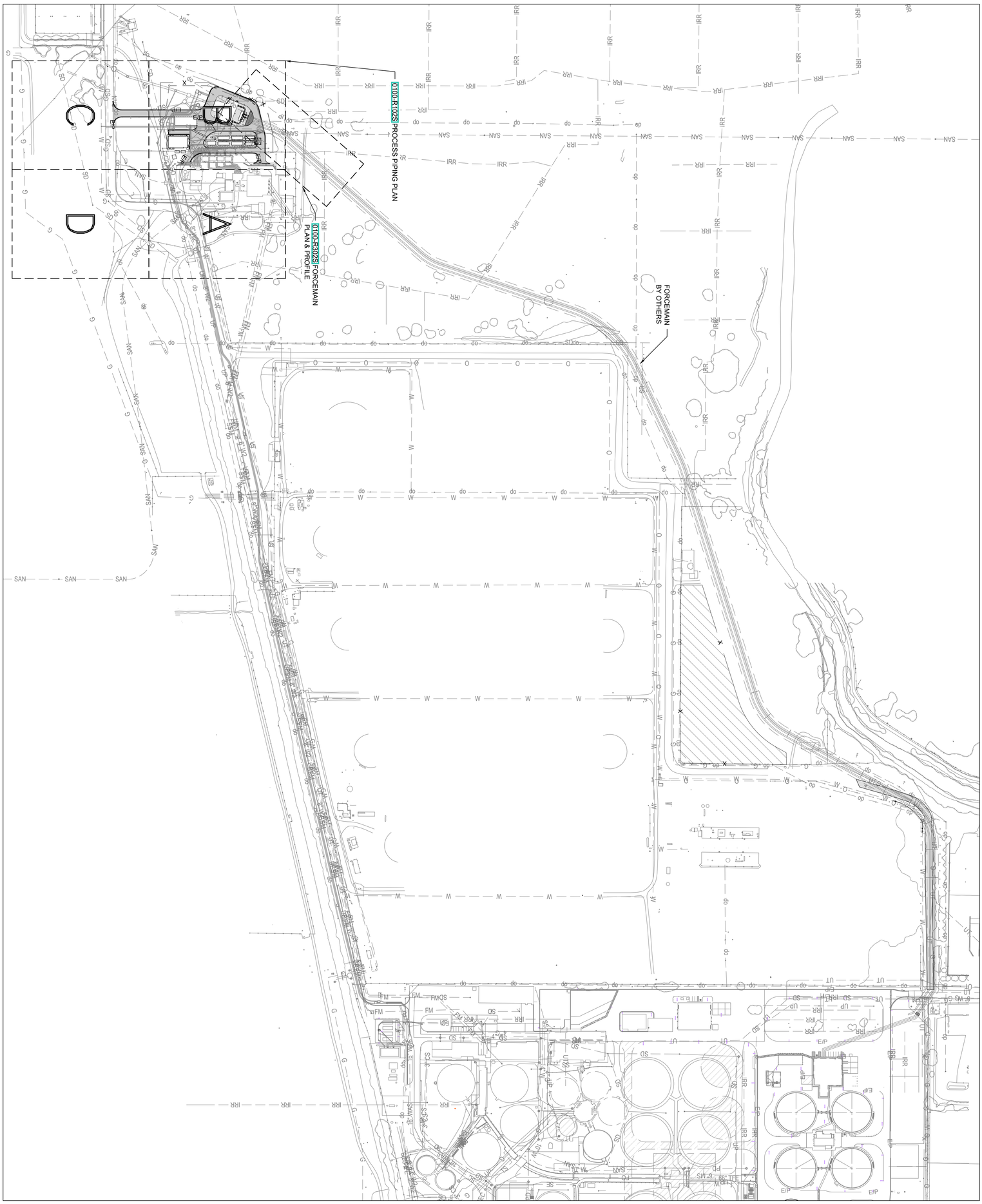
DRAWING No.
0100-C506S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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1-800-662-4111

SCALE IN FEET
0 87.5 175 350
N

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

OVERALL SITE PLAN / KEY PLAN

SHEET _____ OF _____
DRAWING No. 0100-R100S

LICENSED PROFESSIONAL ENGINEER — No. 182750 — MICHAEL W. CHAMBERS — STATE OF UTAH — 04-03-2023

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

(E)
GRIT CHAMBER
INFLUENT GATE
STRUCTURE

(E)
GRIT CHAMBERS

FUTURE FORCEMAIN

40'-0"-WIDE
UTILITY EASEMENT

BY OTHERS
SW-1A

(2) 48"-RWW-HDPE
BY OTHERS

(2) 48"-RWW-HDPE
0100-R302S

FUEL TANK

FUEL TANK

0105
IPS STANDBY POWER
& FUEL STORAGE
FF EL 4221.5
SEE SHEET
0105-S101

SWGR

0104
IPS ELECTRICAL
BUILDING
FF EL 4221.5
SEE SHEET
0104-S101

0102
IPS ODOR
CONTROL
FF EL 4221.5
SEE SHEET
0102-S101

IPS VALVE
PAD

0101
INFLUENT
PUMP STATION
FF EL 4221.5
SEE SHEET
0101-S101

4000
4001
4002
4003
4004
4005
4006
4007
4008

6" -FOA-HDPE
18" -FOA-HDPE
20" -FOA-HDPE

N
0 10 20 40
SCALE IN FEET

GENERAL NOTES

1. SEE SHEET 0100-C110S FOR YARD PIPING INFORMATION.
2. SEE SHEET 0100-C102S FOR ELECTRICAL INFORMATION.

Know what's below. 811
Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B
PROCESS PIPING PLAN

LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-R102S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: H:\Projects\407 - AECOM\03.100 SLCWRF Upgrades\Task 8 Design\CAD\Working\20-SHEETS\10_Forcemain, IPS\4_Yard Piping\524905390_0100-R102S.dwg DATE: 3/30/2023 7:13 AM

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: N. JONES
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

FORCEMAINS
OVERALL PLAN & PROFILE

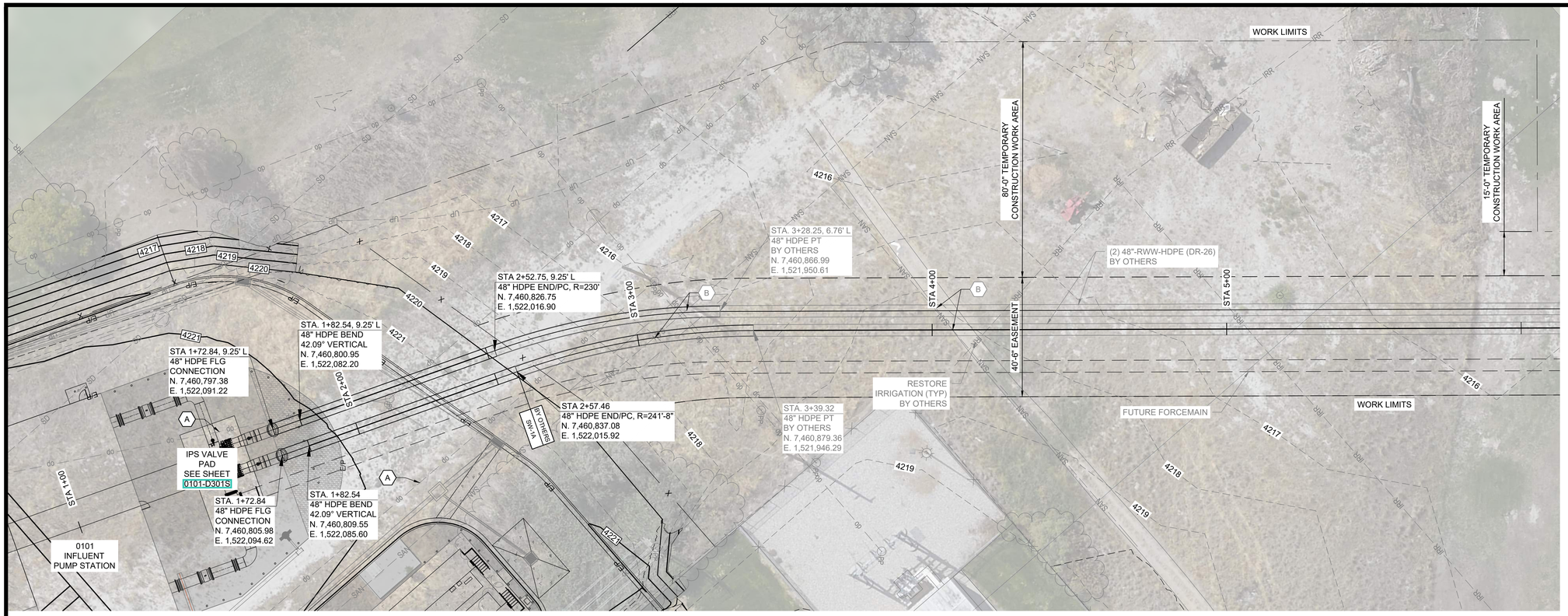
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
LICENSED PROFESSIONAL ENGINEER
04-03-2023

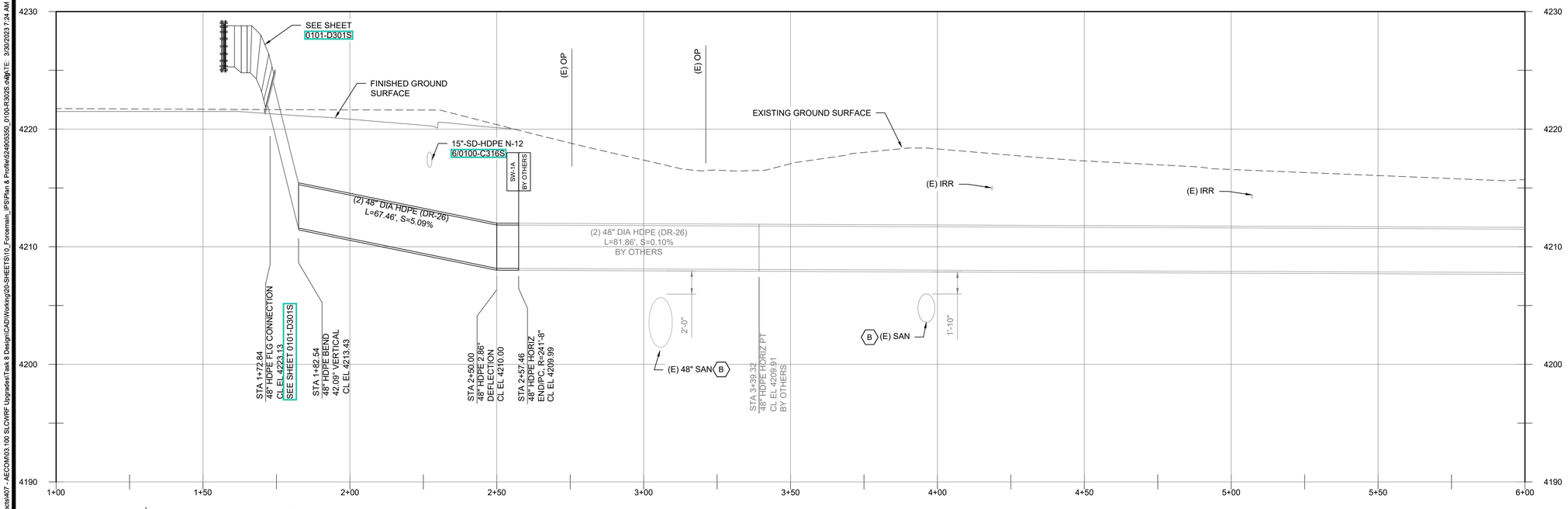
DRAWING No.
0100-R301S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

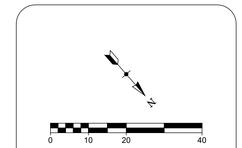
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1 RAW WASTEWATER FORCEMAIN

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

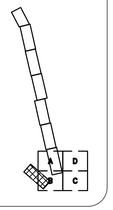
1. (2) 48" FORCEMAINS TRENCH SECTION PER DETAIL C702S, DRAWING 0100-C701S.
2. RESTORE GROUND SURFACE UNO:
   - 2.1. REMOVE TOPSOILS, LABEL STOCKPILES AND RESTORE TOPSOILS (12" THICK UNO) TO THE AREAS FROM WHICH THEY ARE REMOVED.
   - 2.2. SURVEY, REMOVE AND REPLACE TOP SOIL AND IRRIGATION FACILITIES AT TRENCHES, TRUCK LANES, STOCKPILE/STAGING AREAS, ETC. COORDINATE WITH CITY.
   - 2.3. STA 2+60 TO 23+00 RESTORE FG (TO EG) AND TOPSOIL.
   - 2.4. STA 2+60 TO 23+00 GOLF COURSE HYDROSEEDING AND SODDING RESTORATION SHALL BE DONE AS DIRECTED BY THE OWNER UNDER THE GENERAL ALLOWANCE.
   - 2.5. RESTORE 12" THICK UTBC ON GRAVEL ROADS.
   - 2.6. RESTORE PAVING AS 4" AC OVER 12" UTBC.
   - 2.7. UNO PROTECT VEGETATION NOT DESIGNATED FOR REMOVAL.
3. LOCATE, PROTECT, COORDINATE, & SUPPORT DURING CONSTRUCTION ALL EXISTING UTILITIES. RELOCATIONS ARE AT CONTRACTOR COST, EXCEPT AS NOTED IN NOTE 4.
4. CITY FRANCHISE AGREEMENTS REQUIRE NON-CITY UTILITIES TO RELOCATE THEIR OWN UTILITIES AT THEIR COST. INITIATE & COORDINATE THESE RELOCATIONS AT CONTRACTOR COST.
5. STA 1+50 TO 46+40: SUBMIT TRENCH DEWATERING PLAN TO 2' BELOW EXCAVATION. SUBMIT SLOPING AND SHORING PLANS.

KEY NOTES

- A. OVERHEAD POWER LINE TO BE RELOCATED BY OTHERS.
- B. PROTECT EXISTING TRUNK SEWER. PER PLAN, DEWATER, SLOPE & SHORE. LIMIT OPEN TRENCH PERIOD OVER SEWER TO ONE WEEK. WITHIN 2 FT OF SEWER USE ONLY HAND TOOLS TO EXCAVATE AND BACKFILL. FOR TIMELINE OF COMPLETION SEE SPEC 01 14 00.

Know what's below. 811
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BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	GDS	MMC

LAST CONFORMED SET: ISW-1A, ISSUED FOR BID ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

FORCEMAIN PLAN & PROFILES
STA 1+73 TO STA 6+00

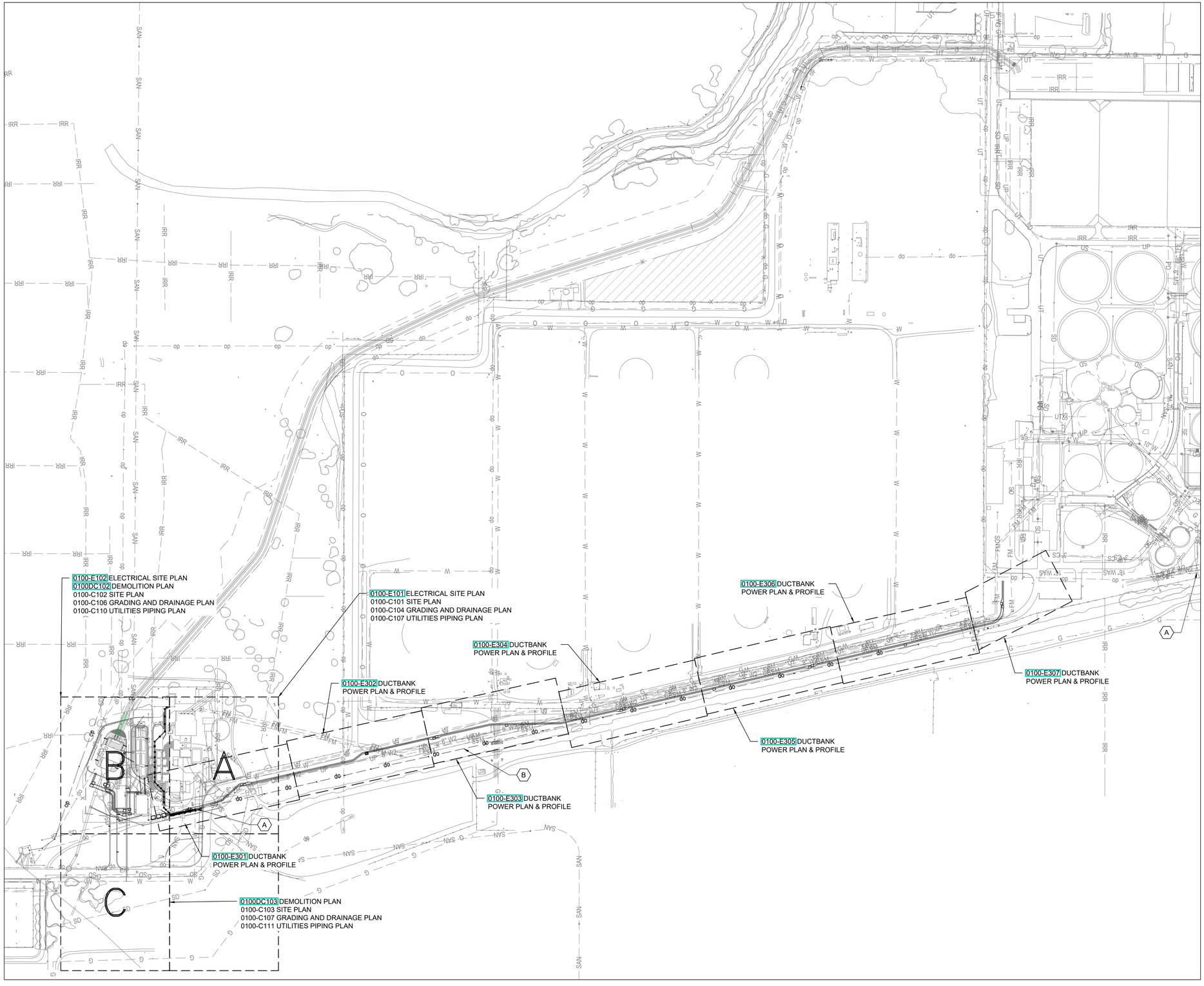
LICENSED PROFESSIONAL ENGINEER
No. 182750
MICHAEL M. CHAMBERS
STATE OF UTAH
04-03-2023

DRAWING No.
0100-R302S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 87.5 175 350

SCALE IN FEET

KEYNOTES

A. SEE KEYNOTE B. END-POLE FOR PROTECT-IN-PLACE OVERHEAD POWERLINE

B. REFERENCE SPECIFICATION 01 14 00 FOR WORK RESTRICTIONS RELATED TO THE OVERHEAD 2,400V POWERLINE. PROTECT THIS POWERLINE, IN-PLACE, AS SHOWN ON 0100-E101 AND 0100-E300 SERIES SHEETS.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

SCALE: 1" = 175'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A. ISSUED FOR BID	DB	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL LOCATION PLAN

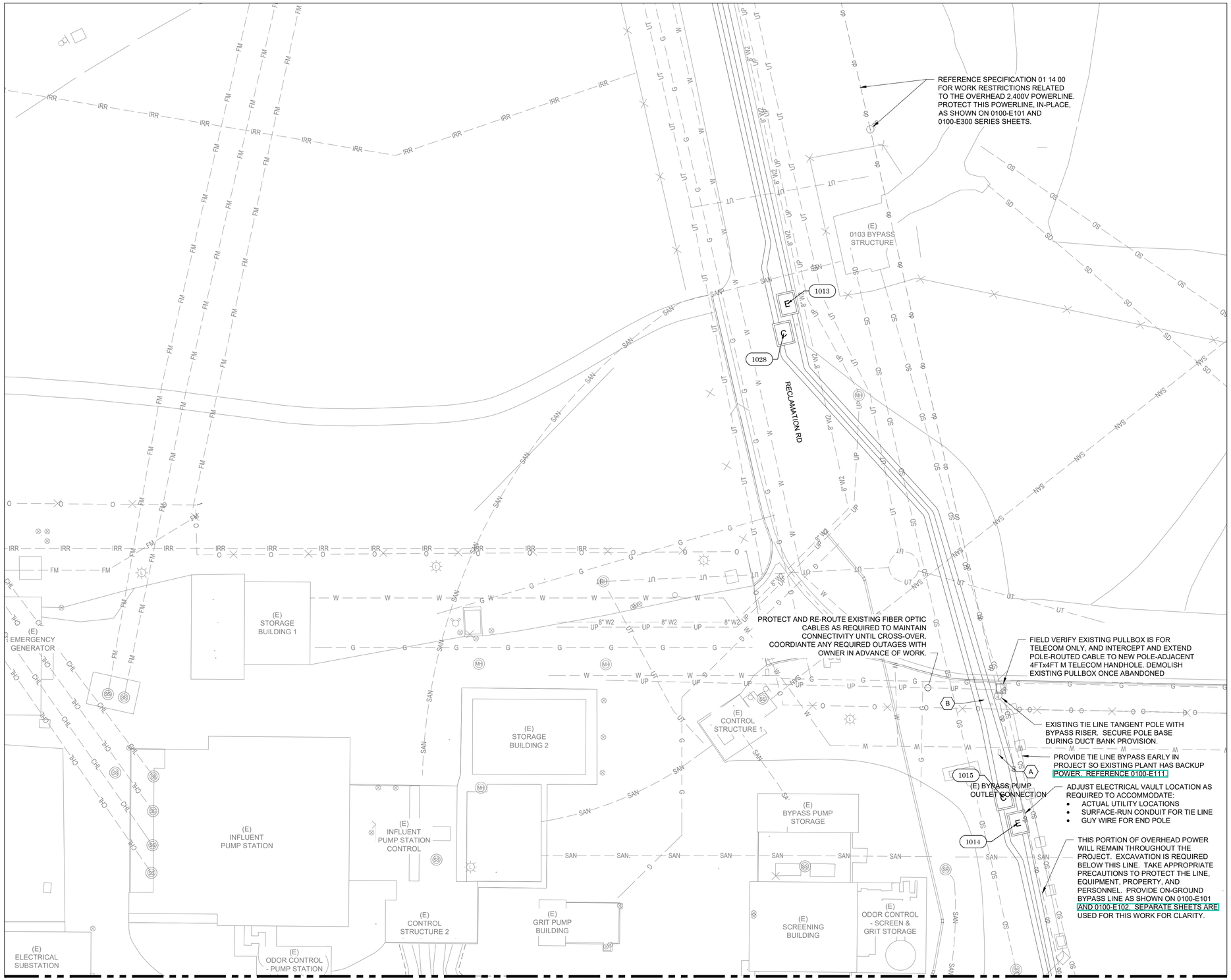
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E100

SHEET - OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: L:\Secure_DCS\Projects_TECHNOLOGY\60572288 - Salt Lake City Reclamation WTP\900-CAD-GIS\20-SHEETS\524905350_0100-E100.dwg DATE: 3/30/2023 8:30 AM



MATCHLINE - SEE SHEET 0100-E102 FOR CONTINUATION

N

0 10 20 40

SCALE IN FEET

GENERAL NOTES

1. REFERENCE DETAILS INDEXED ON 0100-E700 FOR MAINTENANCE HOLES, ESPECIALLY:
   - 1.1. E016S ON SHEET 0100-E703.
   - 1.2. E023S ON SHEET 0100-E705.
   - 1.3. E070S ON SHEET 0100-E712.

   PROVIDE SUFFICIENT MAINTENANCE HOLE DEPTH AND HEIGHT AS REQUIRED FOR BOTTOM OF DUCTBANK CONNECTION TO BE AT LEAST 18" ABOVE FLOOR.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

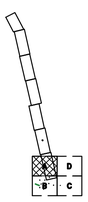
KEYNOTES

A. FIELD-VERIFY CONDUITS ASSOCIATED WITH EXISTING BOX. COORDINATE WITH, AND IF NECESSARY, REPLACE, RELOCATE, AND RECONNECT EXISTING CONDUIT CABLES AS REQUIRED TO KEEP IN SERVICE OR ADJUST DUCTBANK ALIGNMENT IN COORDINATION WITH RESIDENT ENGINEER.

B. REFERENCE SHEETS 0100-E111 AND 0100-E112 FOR TIE LINE BYPASS REQUIREMENTS. ACCOMMODATE THIS ADDITIONAL GUYING DURING CONSTRUCTION.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
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KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G.ROSS
DRAWN BY: D.BROEMAN
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A. ISSUED FOR BID	DB	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA A ELECTRICAL SITE PLAN

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E101

SHEET - OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: L:\Secure_DCS\Projects_TECHNOLOGY\60572288 - Salt Lake City Reclamation WTP\900-CAD-GIS\20-SHEETS\524905350_0100-E101.dwg DATE: 3/30/2023 8:32 AM

MATCHLINE - SEE SHEET 0100-E101 FOR CONTINUATION

DEMOLISH EXISTING POLE-MOUNTED LUMINAIRE, ASSOCIATED POLE AND FOUNDATION, AND CONDUCTORS BACK TO SOURCE OF SUPPLY. SEE 0100-E301 FOR LOCATION. PROVIDE TRACING.

PROVIDE TIE LINE BYPASS EARLY IN PROJECT SO EXISTING PLANT HAS BACKUP POWER. REFERENCE 0100-E112

(E) GRIT CHAMBER INFLUENT GATE STRUCTURE

DEMOLISH EXISTING POLE-MOUNTED LUMINAIRE, ASSOCIATED POLE AND FOUNDATION, AND CONDUCTORS BACK TO SOURCE OF SUPPLY. SEE 0100-E301 FOR LOCATION. PROVIDE TRACING.

(E) GRIT CHAMBERS

ALSO USE DUCTBANK FOR SITE LIGHTING CIRCUIT.

S2BB

SEE 0104-E100 FOR CONDUIT ROUTING NEAR IPS ELECTRICAL BUILDING AND ADJACENT TRANSFORMERS

START DUCTBANKS 3' FROM IPS ELECTRICAL BUILDING FOUNDATION. PROVIDE DEFLECTION FITTING BETWEEN FOUNDATION AND DUCTBANK. TYPICAL ALL DUCTBANKS TO IPS ELECTRICAL BUILDING. WHERE UNDERSLAB, TOP OF TOP CONDUIT TO BE AT 4217 FEET ELEVATION

BEGIN CONCRETE ENCASEMENT 5' FROM IPS STANDBY POWER & FUEL STORAGE FOUNDATION, WITH 2 DEFLECTION FITTINGS, 24" APART BETWEEN IPS STANDBY POWER & FUEL STORAGE DUCTBANK. TOP OF TOP CONDUIT AT 4218.5' ELEVATION (TYP)

S1A

S2AB

A POLE B

FUEL TANK

SEE SHEET 0105-E401

FUEL TANK 01-MCP-90000

0105 IPS STANDBY POWER & FUEL STORAGE FF EL 4221.5

SEE SHEET 0105-E402

SWGR

SEE SHEET 0105-E403

MCCB/7

01-TR-94140

01-PP-92140

MH #1

PROVIDE DUCTBANK PER E067S FOR CONDUITS CROSSING UNDER ROAD. ALSO USE DUCTBANK FOR SITE LIGHTING CIRCUIT.

7/0100-E311

4/0100-E321

5/0100-E312

0104 IPS ELECTRICAL BUILDING FF EL 4221.5

SEE SHEET 0104-E100

01-OAP-90101

3/0100-E320

6/0100-E311

TYPICAL FOR 4 VAULTS

E023S

E023S

BOND POLE GROUNDING ELECTRODE SYSTEM TO TRANSFORMERS' AND ADJACENT BUILDING ELECTRODE SYSTEMS.

PROTECT EXISTING OVERHEAD POWER POLE, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

ALSO USE DUCTBANK FOR SITE LIGHTING CIRCUIT.

8/0100-E311

COORDINATE WITH GAS LINE, TYP

COORDINATE WITH WATER LINE, TYP

2/0100-E312

4/0100-E312

EXISTING MH. PROVIDE BOTH TEMPORARY AND PERMANENT POWER AND INSTRUMENTATION CONNECTIONS TO FIT-10201. CONNECTIONS TO METER PER DETAIL E071S, CONNECTIONS NOT SHOWN FOR CLARITY.

S2BB

01-PP-94130

0102 IPS ODOR CONTROL FF EL 4221.5

SEE SHEET 0102-E100

01-LCP-90100

PROVIDE WORK SIMILAR TO KEYNOTE C, EXCEPT WITH LB BODIES INTO BUILDING, ROUTING TO PANEL 01-RP-92111 AND I&C MARSHALLING CABINET

PP0/22,24,26

S2AB

B POLE A

01-OAP-90102

LOCATE UPPER ROW OF CONDUITS WITH TOP OF CONDUIT AT 7 FEET BELOW MAIN LEVEL FINISHED FLOOR, TYP, UNO

IPS VALVE PAD

BEGIN CONCRETE ENCASEMENT 5' FROM IPS ODOR CONTROL FOUNDATION, WITH 2 DEFLECTION FITTINGS, 24" APART BETWEEN IPS STANDBY POWER & FUEL STORAGE AND DUCTBANK. WHERE UNDERSLAB, TOP OF TOP CONDUIT TO BE AT 4218 FEET ELEVATION (TYP)

3/0100-E310

1/0100-E310

S2AA

MCCB/7

5/0100-E321

0101 INFLUENT PUMP STATION FF EL 4221.5

SEE SHEET 0101-E100

3/0100-E310

5/0100-E321

1/0100-E320

S1A

MH #5B. PROVIDE BOTH TEMPORARY AND PERMANENT POWER AND INSTRUMENTATION CONNECTIONS TO EXISTING FLOW METER

PROVIDE DUCTBANK PER E067S WHERE CONDUITS CROSS UNDER ROAD. ALSO USE DUCTBANK FOR SITE LIGHTING CIRCUIT.

2/0100-E320

AT BUILDING, LOCATE UPPER ROW OF CONDUITS IN THIS DUCTBANK WITH TOP OF CONDUIT AT 9 FEET BELOW MAIN LEVEL FINISHED FLOOR

8FTx8FT INTERIOR DIMENSIONS, TYPICAL FOR 4 "E" VAULTS, THIS SHEET

9/0100-E311

1/0100-E320

E023S

E023S

TYPICAL FOR 4 VAULTS

8FTx10FT INTERIOR DIMENSIONS, TYPICAL FOR 4 "C" VAULTS, THIS SHEET

MH #3A, PROVIDE BOTH TEMPORARY AND PERMANENT POWER AND INSTRUMENTATION CONNECTIONS TO EXISTING FLOW METER. USE MH#5B AS PULLPOINT. PROVIDE SECURED/ SUPPORTED CONDUIT, 12" APART, CONFORMING TO WALLS, WITHIN MH #5B, AND BOND DUCTBANK GROUNDING ELECTRODE CONDUCTORS TOGETHER. ROUTE DEDICATED EQUIPMENT GROUNDING CONDUCTORS FROM THE ELECTRICAL BUILDING FOR EACH CIRCUIT. CONNECTIONS TO METER PER E071S. CONNECTIONS NOT SHOWN FOR CLARITY.

TYP FOR ALL POLES AND ASSOCIATED LUMINAIRES - REFERENCE SITE PLAN 0100-E102 AND DETAIL E049S FOR REQUIREMENTS FOR POLE-MOUNTED LUMINAIRES. PROVIDE #8AWG 2C+G WET LOCATION-RATED TRAY CABLE IN 1" CONDUIT FOR CONNECTIONS BETWEEN LUMINAIRES AND BACK TO SOURCE OF SUPPLY PER E071S, EXCEPT, WHERE RUNNING UNDERNEATH ROAD, PROVIDE CABLE WITHIN CONCRETE-ENCASED DUCTBANK.

TYP FOR 4 POLES WITH LUMINAIRES ADJACENT TO INFLUENT PUMP STATION BUILDING - PROVIDE LUMINAIRES WITHIN 50 FEET OF THE IPS BUILDING. REFERENCE DETAIL E049S FOR REQUIREMENTS FOR POLE-MOUNTED LUMINAIRES. PROVIDE #8AWG 3C+G WET LOCATION-RATED TRAY CABLE IN 1" CONDUIT FOR CIRCUITS BETWEEN LUMINAIRES AND BACK TO SOURCE OF SUPPLY. SUPPLY IS PP1/# - BALANCE THESE 2-POLE LOADS BETWEEN THE THREE PHASES.

NOT SHOWN: PROTECT OR PROVIDE TEMPORARY CONNECTIONS FOR CONTINUOUS OPERATION OF EXISTING FLOW METERS IN MH UPSTREAM OF MH #1, MH #3A, AND MH #5B. EXACT ROUTING OF EXISTING POWER AND SIGNAL CABLES AND CONDUITS IS NOT KNOWN. TRACE AND FIELD VERIFY EXACT ROUTE AND PROTECT ACCORDINGLY. THESE METERS ARE FED BOTH POWER AND SIGNAL FROM THE EXISTING INLET PUMP STATION CAMPUS.

MATCHLINE - SEE SHEET 0100-E103 FOR CONTINUATION

N

0 10 20 40

SCALE IN FEET

GENERAL NOTES

1. SEQUENCE MEDIUM-VOLTAGE ELECTRICAL WORK SO CUT-OVER TIME IS MINIMIZED. COORDINATE WITH OWNER FOR WITNESS OF TESTING BEFORE CUT-OVER AND FOR IDEAL CUT-OVER TIMING.
2. NOT SHOWN - PROVIDE 3 SEPARATE POWER AND 3 SEPARATE COMMUNICATIONS CONDUITS AND CABLES BETWEEN THE 0104 IPS ELECTRICAL BUILDING AND 3 METERS WITHIN UNDERGROUND VAULTS THAT ARE EXISTING TO REMAIN.
3. REFERENCE DETAILS INDEXED ON 0100-E700 FOR MAINTENANCE HOLES, ESPECIALLY E014S, E016S, AND E017S ON SHEET 0100-E703, AND E023S ON SHEET 0100-E705. MANHOLE FORMAT IS DEFINED BY MANHOLE TAG, M (MEDIUM VOLTAGE), L (LOW VOLTAGE), AND C (COMMUNICATIONS). PROVIDE SUFFICIENT MAINTENANCE HOLE DEPTH AND HEIGHT AS REQUIRED FOR BOTTOM OF DUCTBANK CONNECTION TO BE AT LEAST 18" ABOVE FLOOR.
4. CIRCUIT ABBREVIATIONS ARE AS FOLLOWS:
   - MCCB = 01-MCC-94110B
   - PP0 = 01-PP-94120

KEYNOTES

A. PROVIDE UNDERGROUND CONDUIT INTO IPS BUILDING. REFERENCE 0101-E100 FOR UNDERGROUND UNDERSLAB CONDUIT REQUIREMENTS FOR THIS BUILDING. CONNECT TO VAULTS USING CONTRACTOR MEANS AND METHODS. PROVIDE DEFLECTION JOINTS AS SHOWN IN DETAIL E060S. PENETRATE SECANT WALL WITH DUCTBANK AND TERMINATE 30 INCHES PAST SECANT WALL. COORDINATE WITH ACTUAL WALL LOCATION. DO NOT AFFIX DUCTBANK TO WALL.

B. INSTALL AN OUTDOOR WIRELESS ACCESS POINT (OAP) ON STRUCTURE INDICATED AT AN ELEVATION OF 20 TO 25 FEET. PROVIDE 3/4-INCH TELECOMMUNICATIONS CONDUIT FROM OAP TO BUILDING CTC PANEL. SEAL INTERIOR AND EXTERIOR OF CONDUITS AT BUILDING PENETRATION. GR5 CONDUIT FOR OUTDOOR CONDUIT. PROVIDE SINGLE CAT 6 SHIELDED CABLE WITHIN CONDUIT BETWEEN OAP AND CTC PANEL.

C. COORDINATE CONDUIT STUBS WITH FINAL LOCATION FOR PANEL 01-PP-94120. PROVIDE LB BODIES AND PENETRATE WALL, SEALING INTERIOR AND EXTERIOR OF CONDUITS, AND PROVIDE DEFLECTION FITTINGS BETWEEN GRADE AND THE LB BODIES.

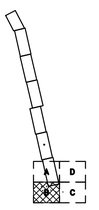
D. PROVIDE 1-INCH POWER AND 1-INCH COMMUNICATIONS CONDUITS UNDERGROUND BETWEEN THE MASTER CONTROLLER AND THE CARD READERS, WITH CABLING PER MANUFACTURER AND A #12 GROUND IN EACH CONDUIT. BOND EQUIPMENT GROUNDING CONDUCTOR AT BOTH ENDS.

E. REFERENCE SPECIFICATIONS AND REQUIREMENTS OF OTHER DISCIPLINES FOR MOTORIZED GATE OPENING AND ACCESS CONTROL SYSTEMS.

F. PROVIDE NON-METALLIC CABLE TRAY, SUPPORTED FROM VAULT WALL ONLY, ALONG TWO ADJACENT SIDES OF VAULT, AS CONVENTIONAL RACKING IS UNLIKELY TO ACCOMMODATE REQUIRED CABLING.

Know what's below. 811
Call 811 before you dig.
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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS: 1365 W 2300 N SALT LAKE CITY, UT 84116, UNITED STATES

DESIGNED BY: G.ROSS
DRAWN BY: D.BROEMAN
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-IA	ISSUED FOR BID

LAST CONFORMED SET: DB GR

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B
ELECTRICAL SITE PLAN

SALT LAKE CITY

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No. 0100-E102

SHEET - OF -----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 10 20 40

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www.bluestakes.org
1-800-662-4111

KEY PLAN

A D
B C

SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
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A	23-04-03	SW-1A: ISSUED FOR BID	DB	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA C
ELECTRICAL SITE PLAN

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E103

SHEET - OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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N

0 10 20 40

SCALE IN FEET

GENERAL NOTES

1. REFERENCE DETAILS INDEXED ON 0100-E700 FOR ADDITIONAL REQUIREMENTS.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEYNOTES

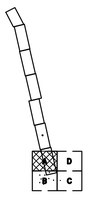
A. PROVIDE MV CABLE IN CONDUIT, ROUTING FROM RISER POLE TO EXISTING IPS SUBSTATION SWITCHGEAR BUCKET, AS SHOWN ON 0100-E112. PROVIDE CONDUIT AND CONDUCTORS:
   - (3#750KCMIL MV-105, #4/0 XHHW NEUTRAL) 5" RIGID GALVANIZED STEEL RMC-TYPE CONDUIT.
   - BAND WITH 100% OVERLAP, 2-INCH WIDE, UV-RESISTANT REFLECTIVE RED TAPE EVERY 2 FEET OF CONDUIT LENGTH, 3M SERIES 983 OR APPROVED EQUAL.
   - SUPPORT CONDUIT WITH 4-FOOT WIDE BY 4-FOOT LONG FOUNDATIONS, PER STRUCTURAL DETAIL S043S, EXCEPT SUPPORT CONDUIT ON CONSTRUCTION STRUT, AND CAST STAINLESS STEEL ANCHORS INTO SLAB.
   - MARK AT ACCESS POINTS AND EVERY 20 FEET, "ELECTRICAL HIGH VOLTAGE - DANGER - KEEP OUT" WITH UV-RESISTANT LABEL, 1/2" LETTERING.
   - PROVIDE EXPANSION FITTINGS PER FITTING MANUFACTURER'S INSTRUCTIONS, WITH 15% SAFETY MARGIN. CONTRACTOR IS RESPONSIBLE FOR CORRECT PLACEMENT, SPACING, AND PERFORMANCE OF THESE FITTINGS.

B. PROVIDE NEMA 3R PULLBOX, FOR STRAIGHT PULL, SIZED AND DESIGNED FOR PULLING MV-105 CABLE ON CONCRETE FOUNDATION PER S043S. SECURE COVER WITH PENTA-HEAD BOLT(S) AND BOLT CUTTER-RESISTANT PADLOCK. PROVIDE RED TAPE OUTLINING OF PANEL EDGES ON ALL VISIBLE ENCLOSURE FACES. 6 FOOT LENGTH MINIMUM.

C. FIELD-VERIFY EXISTING PROTECTION SCHEME AT NORTH END OF BYPASS, IN THE EXISTING MAIN PLANT 2,400V SWITCHGEAR BUILDING, AND PROVIDE, IF NOT ALREADY PRESENT, MEANS TO OPEN BREAKERS AT BOTH ENDS OF TIE FROM SCADA HMI SCREEN. ADD SIGNAGE TO LEAVE TIE BREAKER CONTROL IN AUTO, UNLESS AUTHORIZED FOR SHORT-TERM TESTING, ONLY.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN; SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS.

SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G.ROSS
DRAWN BY: G.ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH BY
A	23-04-03	SW-1A. ISSUED FOR BID	GR	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA A ELECTRICAL TIE BYPASS SITE PLAN

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH
03-04-2023

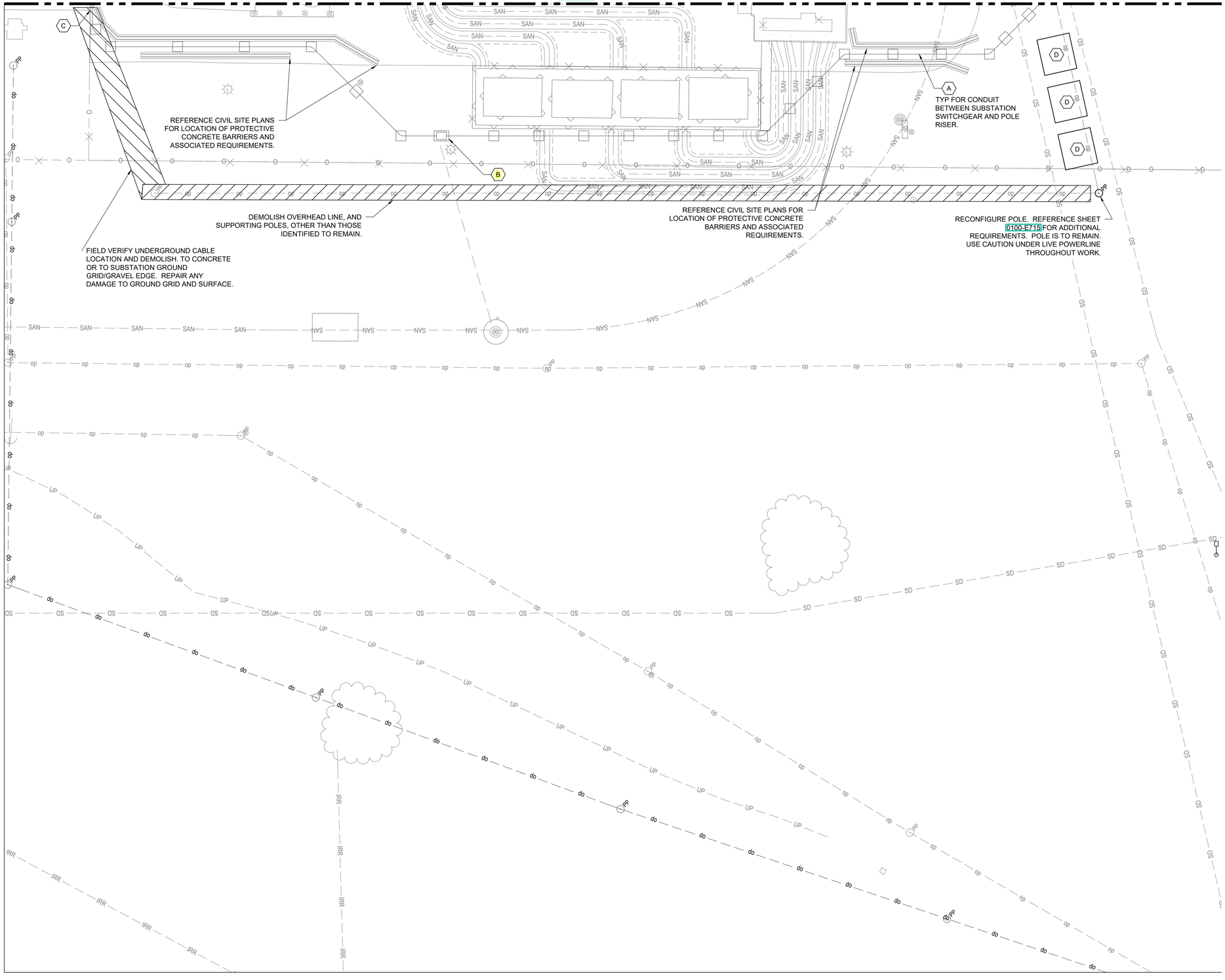
DRAWING No.
0100-E111

SHEET - OF -

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DATE: 3/30/2023 8:43 AM

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N

0 10 20 40

SCALE IN FEET

GENERAL NOTES

1. SEQUENCE MEDIUM-VOLTAGE ELECTRICAL WORK SO CUT-OVER TIME IS MINIMIZED. COORDINATE WITH OWNER FOR WITNESS OF TESTING BEFORE CUT-OVER AND FOR IDEAL CUT-OVER TIMING.
2. REFERENCE DETAILS INDEXED ON 0100-E700 FOR ADDITIONAL REQUIREMENTS.

KEYNOTES

A. PROVIDE MV CABLE IN CONDUIT, ROUTING FROM RISER POLE TO EXISTING IPS SUBSTATION SWITCHGEAR BUCKET, AS SHOWN ON 0100-E112. PROVIDE CONDUIT AND CONDUCTORS:
   - (3#750KCMIL MV-105, #4/0 XHHW NEUTRAL) 5" RIGID GALVANIZED STEEL RMC-TYPE CONDUIT.
   - BAND WITH 100% OVERLAP, 2-INCH WIDE, UV-RESISTANT REFLECTIVE RED TAPE EVERY 2 FEET OF CONDUIT LENGTH, 3M SERIES 983 OR EQUAL.
   - SUPPORT CONDUIT WITH 4-FOOT WIDE BY 4-FOOT LONG FOUNDATIONS, PER STRUCTURAL DETAIL S043S, EXCEPT SUPPORT CONDUIT ON CONSTRUCTION STRUT, AND CAST STAINLESS STEEL ANCHORS INTO SLAB.
   - MARK AT ACCESS POINTS AND EVERY 20 FEET, "ELECTRICAL HIGH VOLTAGE - DANGER - KEEP OUT" WITH UV-RESISTANT LABEL, 1/2" LETTERING.
   - PROVIDE EXPANSION FITTINGS PER FITTING MANUFACTURER'S INSTRUCTIONS, WITH 15% SAFETY MARGIN. CONTRACTOR IS RESPONSIBLE FOR CORRECT PLACEMENT, SPACING, AND PERFORMANCE OF THESE FITTINGS.

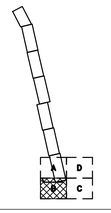
B. PROVIDE NEMA 3R PULLBOX, FOR STRAIGHT PULL, SIZED AND DESIGNED FOR PULLING MV-105 CABLE ON CONCRETE FOUNDATION PER S043S. SECURE COVER WITH PENTA-HEAD BOLT AND BOLT CUTTER-RESISTANT PADLOCK. PROVIDE RED TAPE OUTLINING OF PANEL EDGES ON ALL VISIBLE ENCLOSURE FACES. 6 FOOT LENGTH MINIMUM.

C. DELEGATED DESIGN - PROVIDE DESIGN AND FIELD ROUTING, RISING ON SUBSTATION SWITCHGEAR BUILDING EXTERIOR, WITH PULLBOX, TO ENTER BUILDING, AND ROUTE WITH CEILING-SUSPENDED CONDUIT TO EXISTING TIE BREAKER BUCKET. FIELD-VERIFY EXISTING PROTECTION SCHEME AND PROVIDE, IF NOT ALREADY PRESENT, MEANS TO OPEN BREAKERS AT BOTH ENDS OF TIE FROM SCADA HMI SCREEN. ADD SIGNAGE TO LEAVE TIE BREAKER CONTROL IN AUTO, UNLESS AUTHORIZED FOR SHORT-TERM TESTING, ONLY.

D. COORDINATE TRANSFORMER LOCATIONS TO ACCOMMODATE RE-GUYED EXISTING-TO-REMAIN END POLE AND DUCT BANKS.

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BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



SCALE: 1" = 20'

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G.ROSS
DRAWN BY: D.BROEMAN
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A ISSUED FOR BID	DB	GR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

AREA B ELECTRICAL TIE BYPASS SITE PLAN

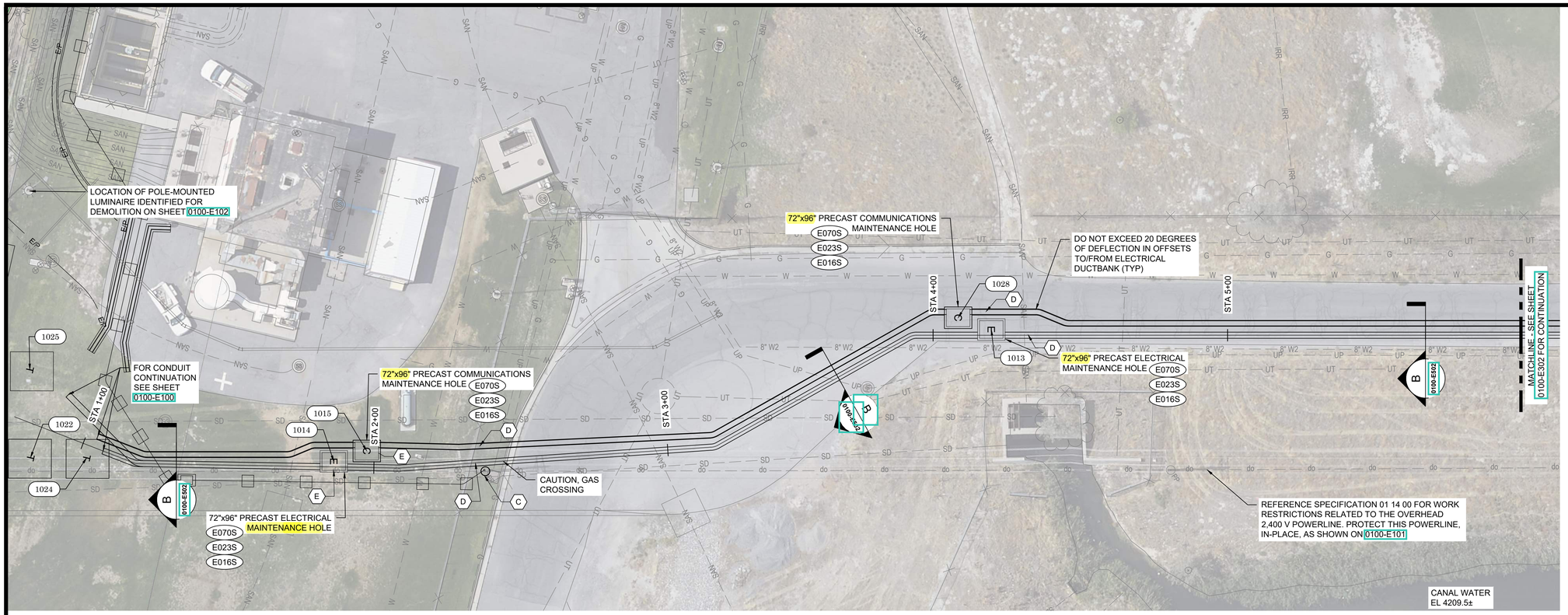
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

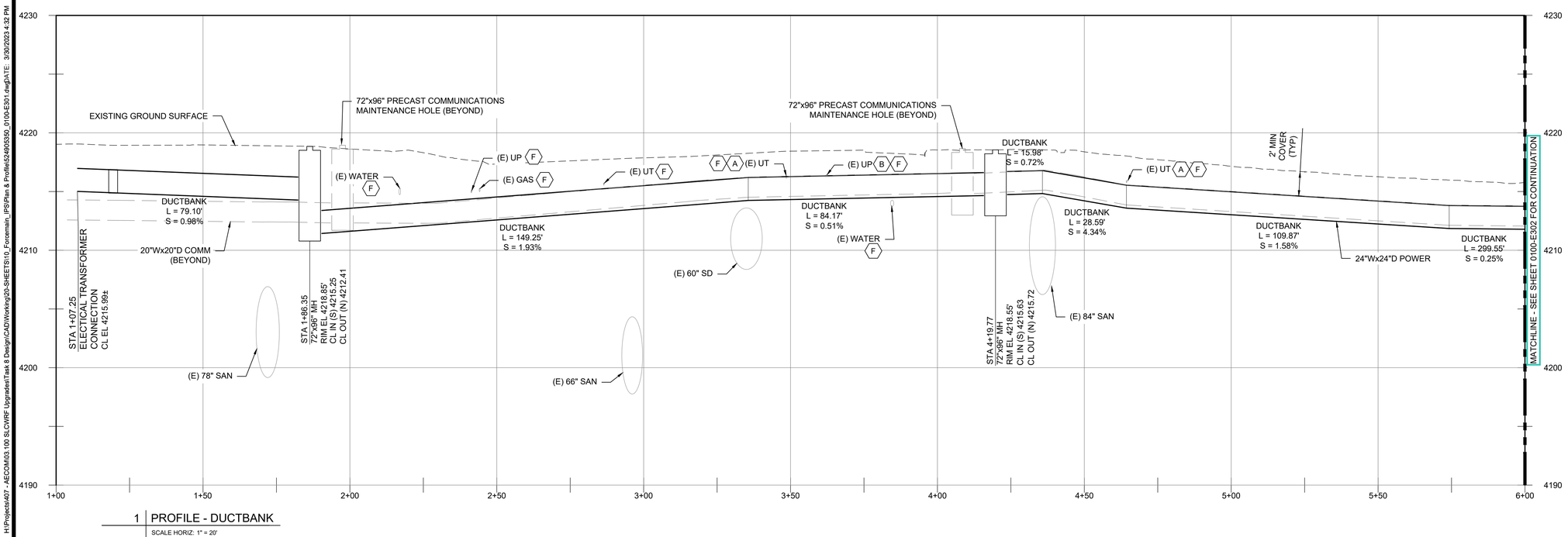
DRAWING No.
0100-E112

SHEET - OF -----

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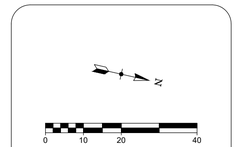
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1 | PROFILE - DUCTBANK

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

A. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING TELECOMMUNICATIONS LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

B. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING UNDERGROUND POWER LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

C. END-POLE FOR PROTECT-IN-PLACE OVERHEAD POWERLINE.

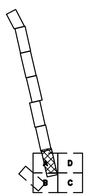
D. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

E. PROVIDE WATERPROOF SEPARABLE SPLICE CONNECTORS FOR EACH MV CABLE IN THIS MH. REFERENCE DETAIL E013S FOR ADDITIONAL REQUIREMENTS.

F. PROVIDE POTHOLING FOR SHOWN APPROXIMATE UTILITY LOCATION. COORDINATE WITH ENGINEER, AS REQUIRED TO ACCOMMODATE UTILITIES, PRIOR TO DUCTBANK/MH EXCAVATION.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN; SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS.

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 1+00 TO STA 6+00

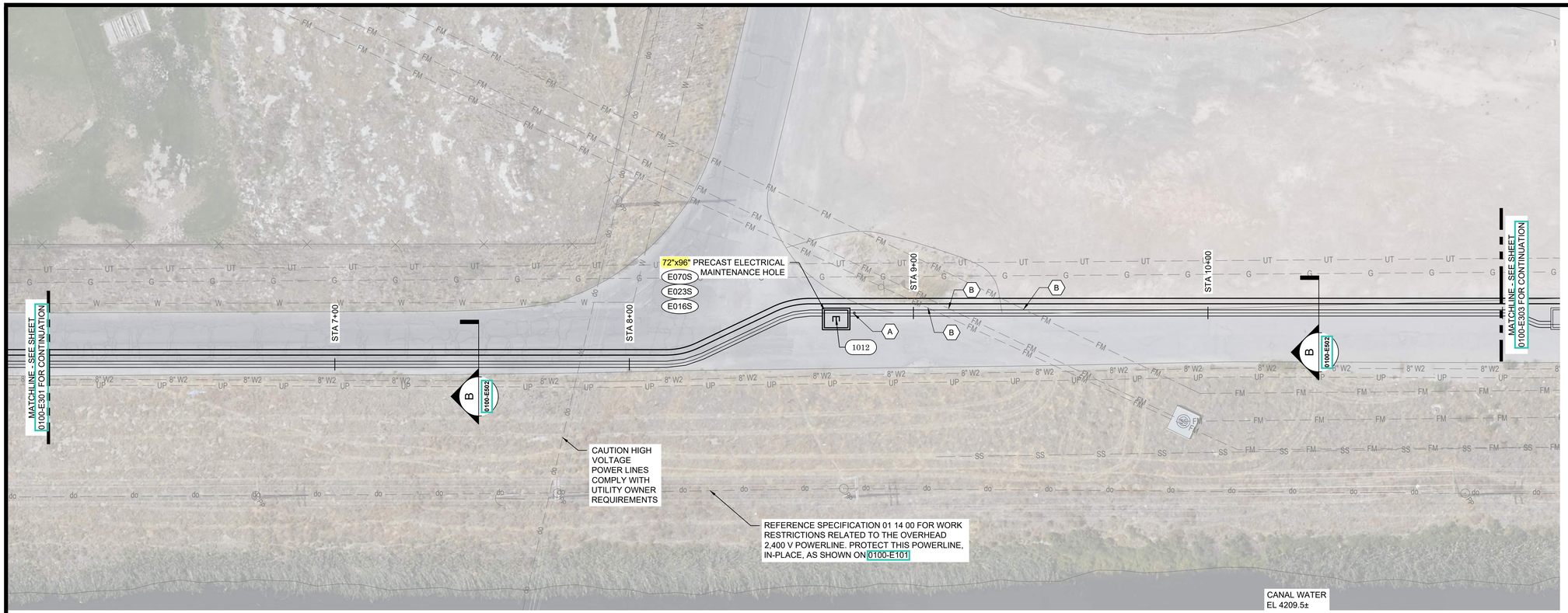
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

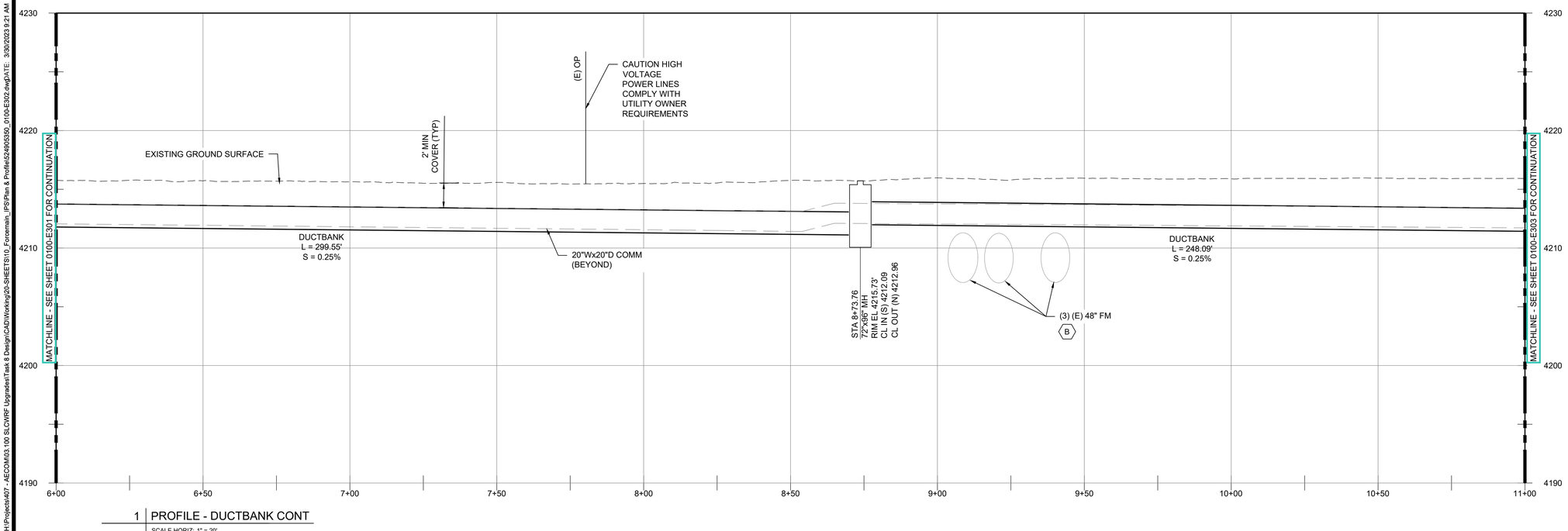
DRAWING No.
0100-E301

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

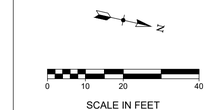
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1 PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

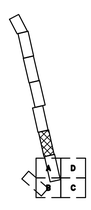
KEY NOTES

A. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

B. DUCTBANK CROSSES ABOVE EXISTING ACTIVE FORCEMAIN PIPES. MINIMIZE SOIL DISTURBANCE AROUND FORCEMAINS, AND PROVIDE MINIMUM CLEARANCE OF 6 INCHES BETWEEN BOTTOM OF EXCAVATION AND TOP OF FORCEMAIN. PROVIDE PRE-CAST DUCTBANK, LOWERED INTO PLACE, FOR A LENGTH OF 20 FEET IN EACH DUCTBANK CROSSING, CENTERED OVER THE FORCEMAIN CENTERLINE.

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Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 6+00 TO STA 11+00

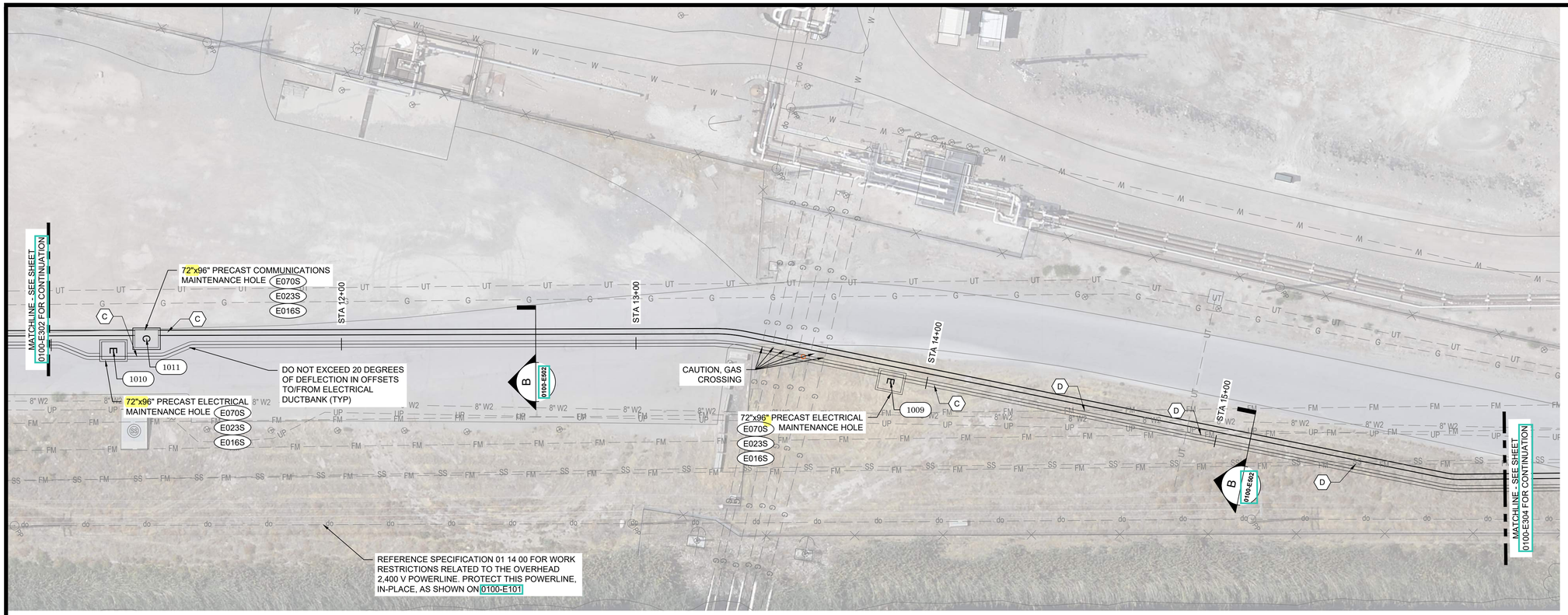
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

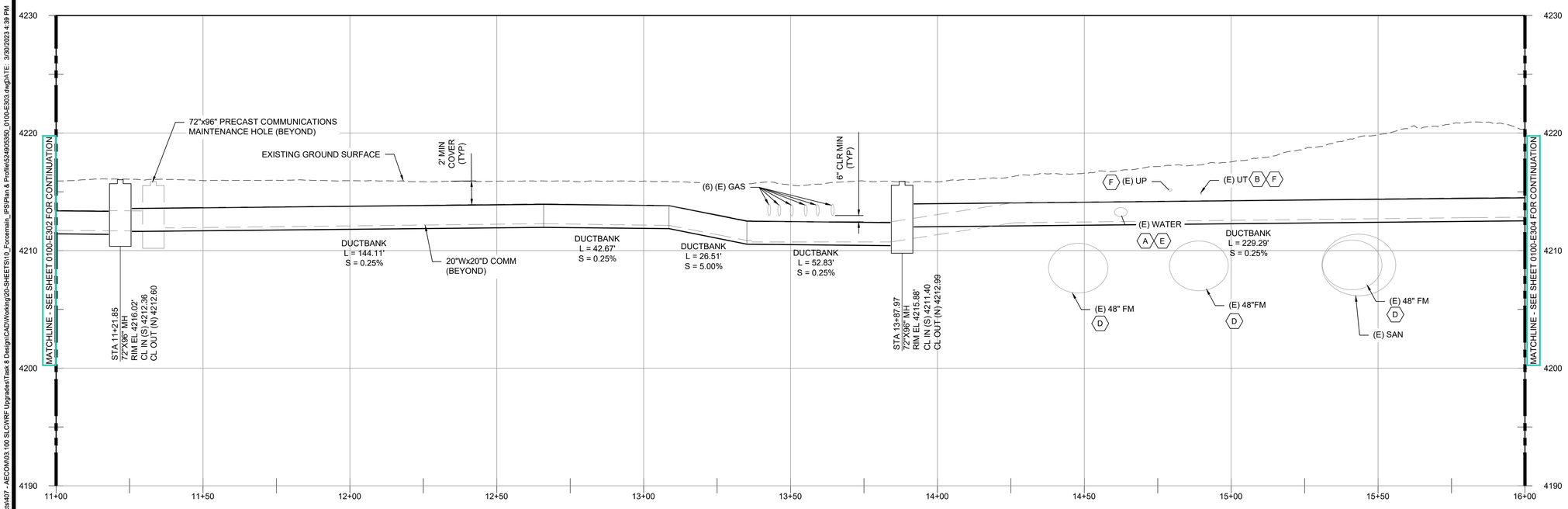
DRAWING No.
0100-E302

SHEET - OF ----

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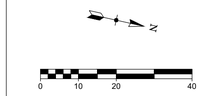
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1 | PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

A. LOOP EXISTING WATER LINE PER DETAIL C735S ON SHEET 0100-C710S.

B. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING TELECOMMUNICATIONS LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

C. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

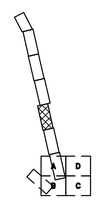
D. DUCTBANK CROSSES ABOVE EXISTING ACTIVE FORCEMAIN PIPES. MINIMIZE SOIL DISTURBANCE AROUND FORCEMAINS, AND PROVIDE MINIMUM CLEARANCE OF 6 INCHES BETWEEN BOTTOM OF EXCAVATION AND TOP OF FORCEMAIN. PROVIDE PRE-CAST DUCTBANK, LOWERED INTO PLACE, FOR A LENGTH OF 20 FEET IN EACH DUCTBANK CROSSING, CENTERED OVER THE FORCEMAIN CENTERLINE.

E. COORDINATE WITH SLCDPU TO RELOCATE UTILITIES WITH FIELD ENGINEER.

F. PROVIDE POTHOLING FOR SHOWN APPROXIMATE UTILITY LOCATION. COORDINATE WITH ENGINEER, AS REQUIRED TO ACCOMMODATE UTILITIES, PRIOR TO DUCTBANK/MH EXCAVATION.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN; SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS.

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 11+00 TO STA 16+00

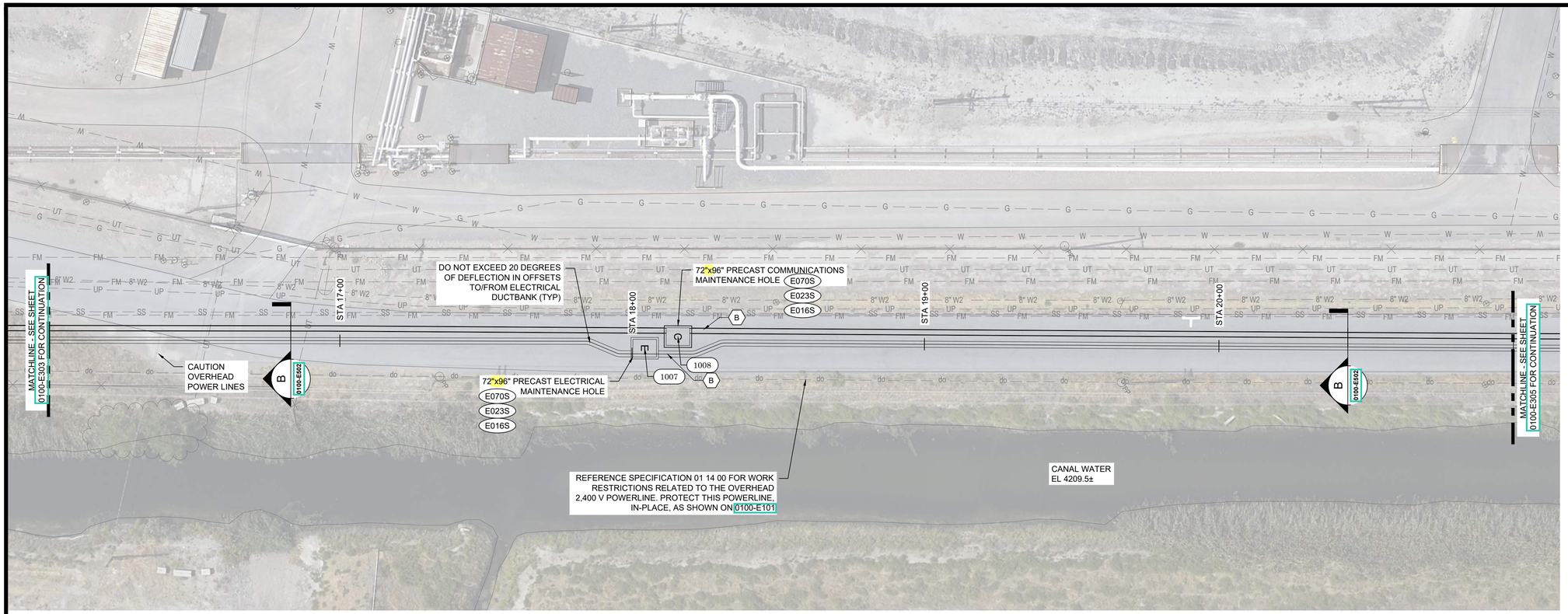
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

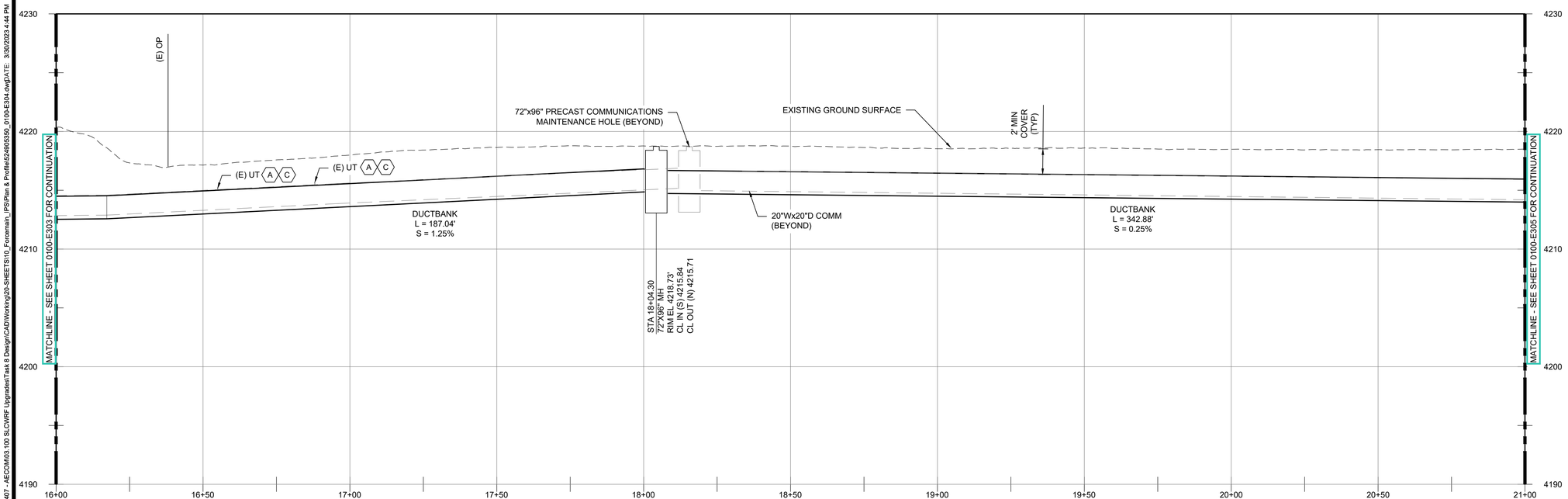
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0100-E303

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

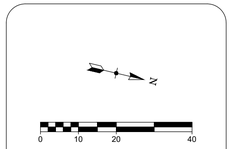
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1 PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

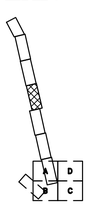
A. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING TELECOMMUNICATIONS LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

B. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

C. PROVIDE POTHOLING FOR SHOWN APPROXIMATE UTILITY LOCATION. COORDINATE WITH ENGINEER, AS REQUIRED TO ACCOMMODATE UTILITIES, PRIOR TO DUCTBANK/MH EXCAVATION.

Know what's below. 811
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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 16+00 TO STA 21+00

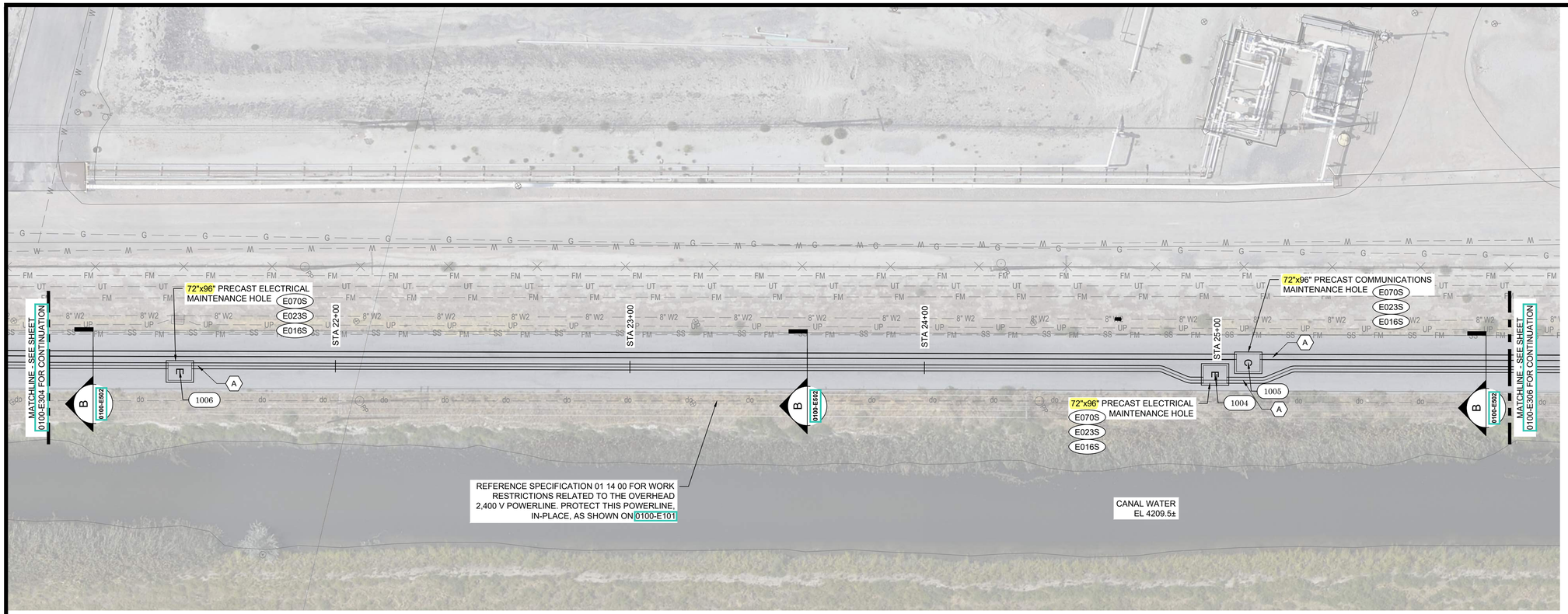
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

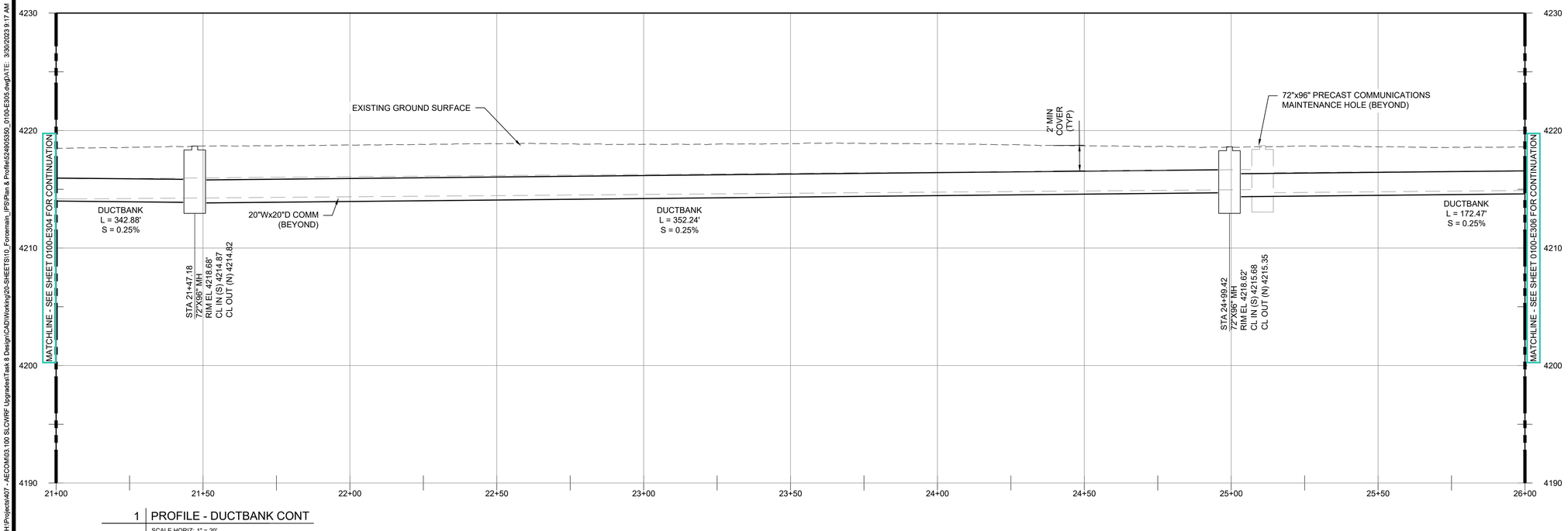
DRAWING No.
0100-E304

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

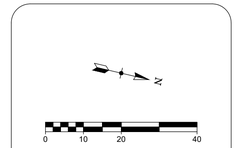
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1 PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

A. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 21+00 TO STA 26+00

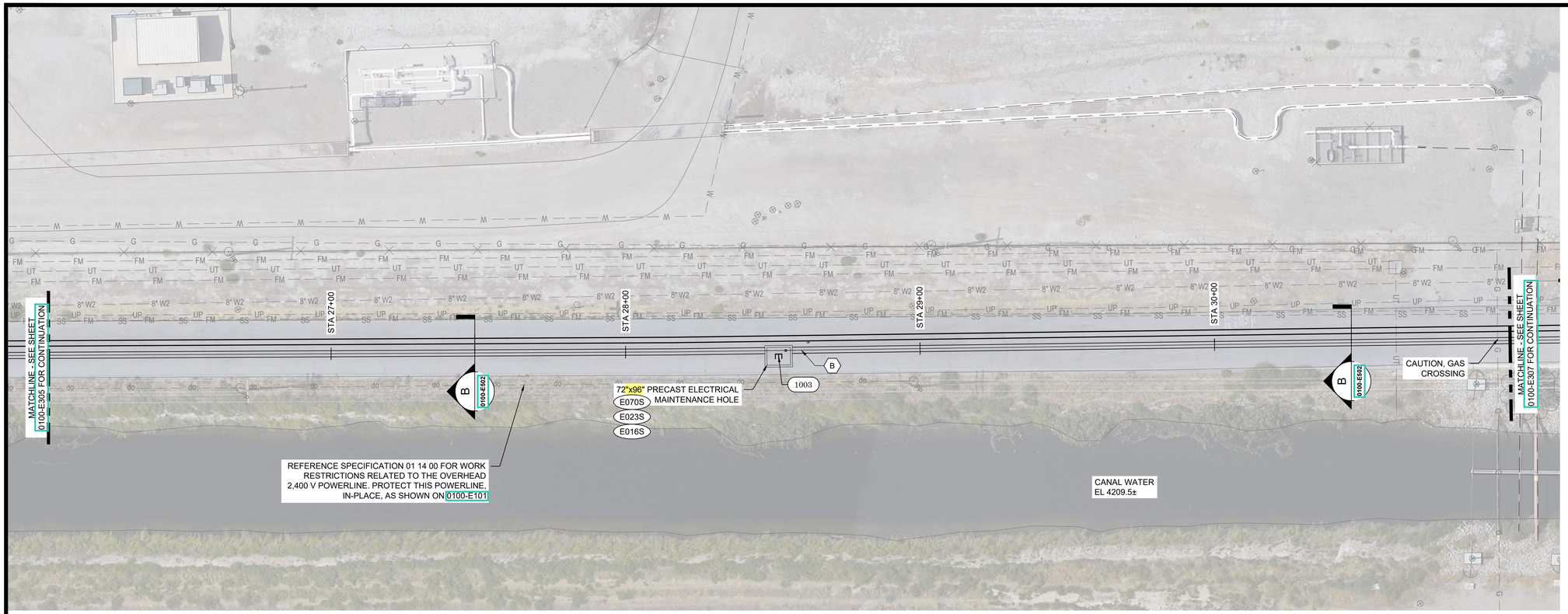
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

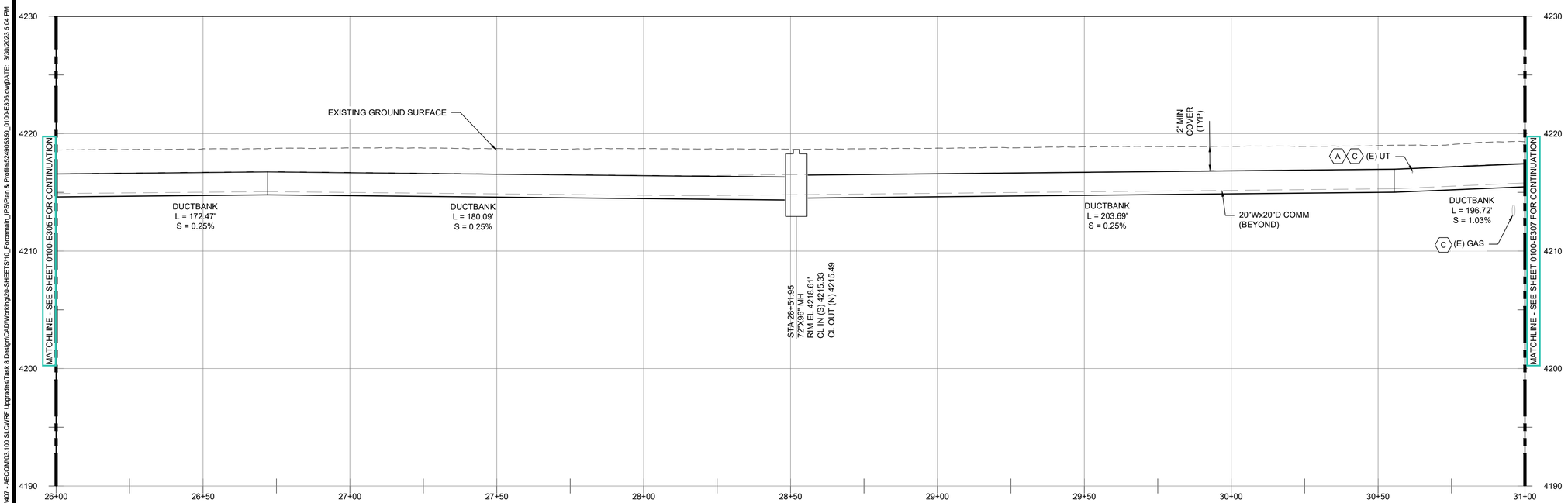
DRAWING No.
0100-E305

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

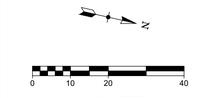
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1 PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATION, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

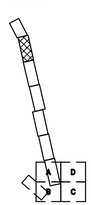
A. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING TELECOMMUNICATIONS LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

B. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

C. PROVIDE POTHOLING FOR SHOWN APPROXIMATE UTILITY LOCATION. COORDINATE WITH ENGINEER, AS REQUIRED TO ACCOMMODATE UTILITIES, PRIOR TO DUCTBANK/MH EXCAVATION.

Know what's below. 811
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BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN; SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS.

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

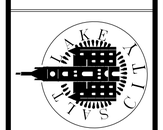
DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

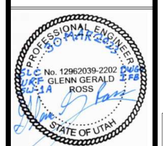
NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 26+00 TO STA 31+00



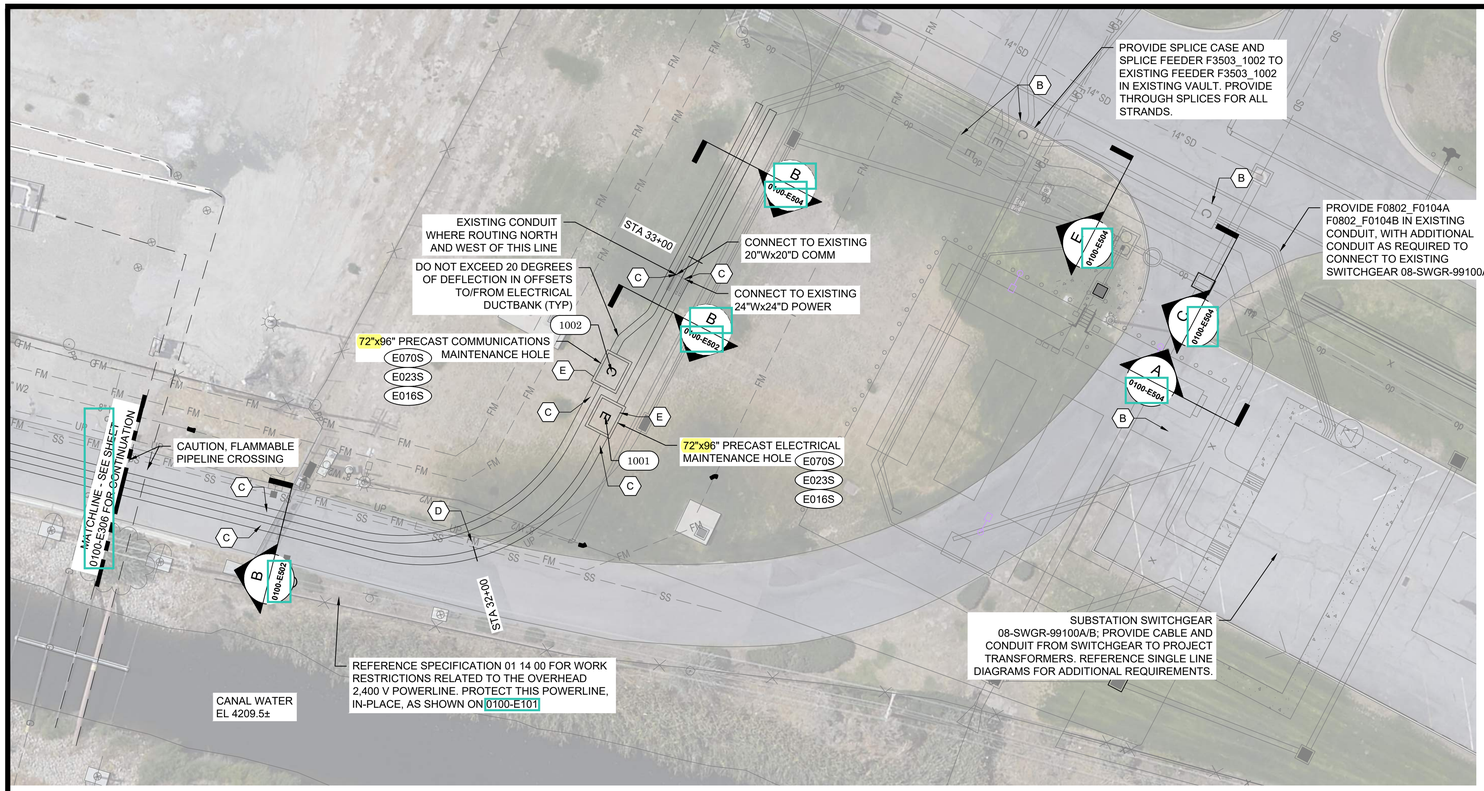


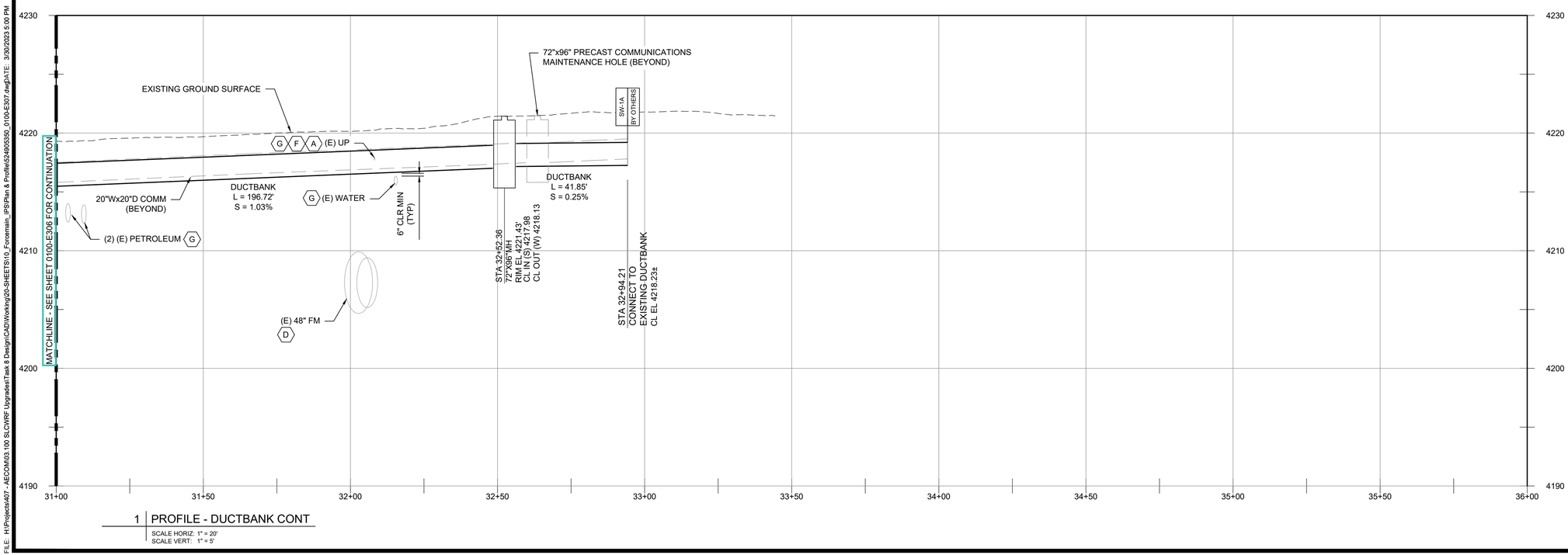
DRAWING No.
0100-E306

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

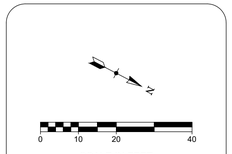
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1 PROFILE - DUCTBANK CONT

SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. CL SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.
2. PROTECT EXISTING OVERHEAD POWER POLES, INCLUDING POLE FOUNDATIONS, RISER(S), POLE, GUYING, GUY ANCHORS, WIRING, ETC.

KEY NOTES

A. FIELD ROUTE DUCTBANK UNDER OR OVER EXISTING UNDERGROUND POWER LINE AT EXISTING UTILITY CONFLICT. MAINTAIN MINIMUM DEPTH OF COVERAGE OVER DUCTBANK AND MINIMUM 6" CLEARANCE FROM EXISTING UTILITY. NOTIFY UTILITY OWNER PRIOR TO CONDUCTING UTILITY LOCATING AND PRIOR TO EXCAVATING FOR DUCTBANK PROVISION IN AREA OF EXISTING UTILITY. TRACE UTILITY TO ENSURE UTILITY MATCHES NOTIFIED OWNER BEFORE EXCAVATION AND CONSTRUCTION.

B. ROUTE POWER AND COMMUNICATIONS FEEDERS THROUGH EXISTING DUCTBANKS AND THESE MAINTENANCE HOLES ENROUTE TO THE SUBSTATION SWITCHGEAR.

C. INSTALL TRACER HAND-HOLE PER SPECIFICATIONS.

D. DUCTBANK CROSSES ABOVE EXISTING ACTIVE FORCEMAIN PIPES. MINIMIZE SOIL DISTURBANCE AROUND FORCEMAINS, AND PROVIDE MINIMUM CLEARANCE OF 6 INCHES BETWEEN BOTTOM OF EXCAVATION AND TOP OF FORCEMAIN. PROVIDE PRE-CAST DUCTBANK, LOWERED INTO PLACE, FOR A LENGTH OF 20 FEET IN EACH DUCTBANK CROSSING, CENTERED OVER THE FORCEMAIN CENTERLINE.

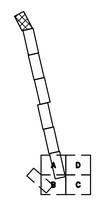
E. PROVIDE WATERPROOF SEPARABLE SPLICE CONNECTORS FOR EACH MV CABLE IN THIS MH. REFERENCE DETAIL E013S FOR ADDITIONAL REQUIREMENTS.

F. COORDINATE WITH SLCDPU TO RELOCATE UTILITIES WITH FIELD ENGINEER.

G. PROVIDE POTHOLING FOR SHOWN APPROXIMATE UTILITY LOCATION. COORDINATE WITH ENGINEER, AS REQUIRED TO ACCOMMODATE UTILITIES, PRIOR TO DUCTBANK/MH EXCAVATION.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

KEY PLAN



STAMPED FOR ELECTRICAL WORK SHOWN; SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS.

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A; ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PLAN & PROFILES
STA 31+00 TO STA 32+88

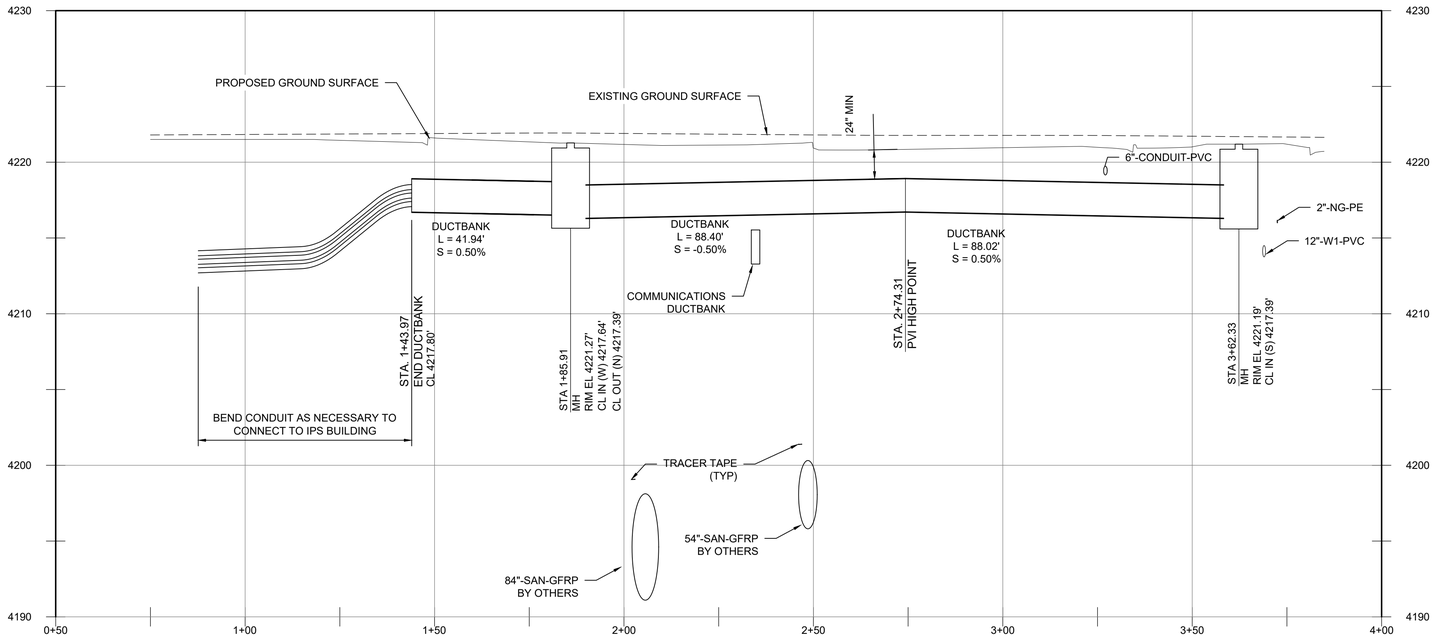
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E307

SHEET - OF ----

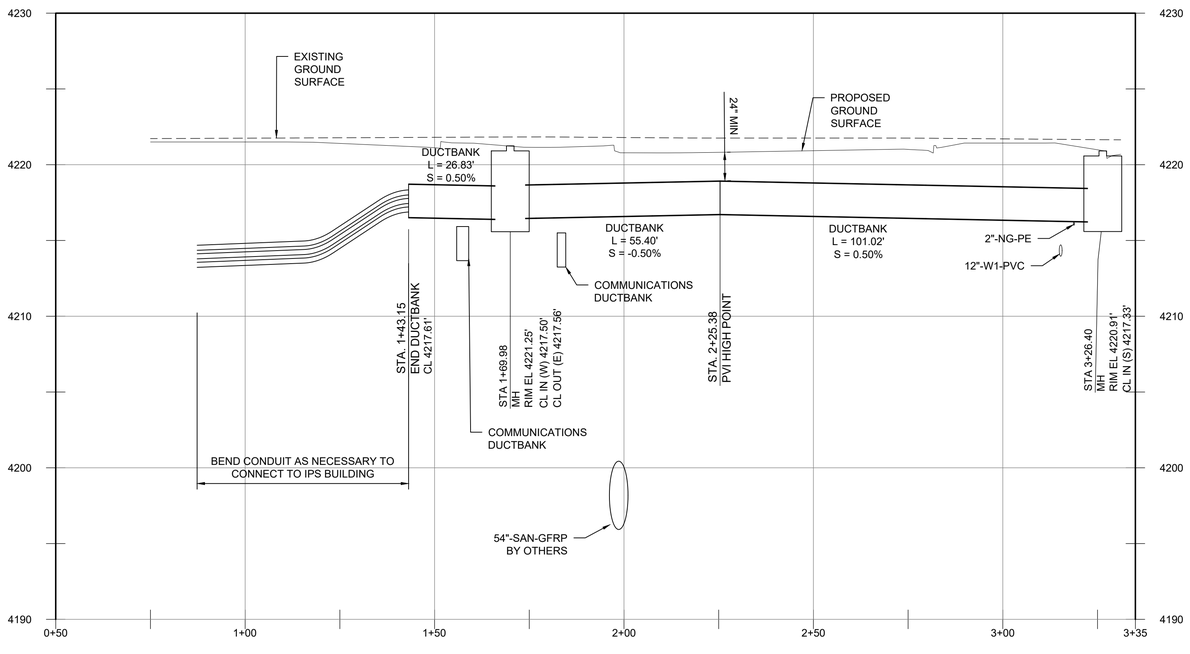
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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1 | ELECTRICAL DUCTBANK PROFILE: IPS ELEC BLDG TO IPS

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



3 | ELECTRICAL DUCTBANK PROFILE: NORTH PUMP FEED

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

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www.bluestakes.org
1-800-662-4111

STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SERVICES

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

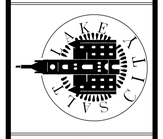
REVISIONS

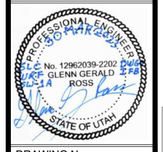
NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PROFILES
SHEET 1 OF 5



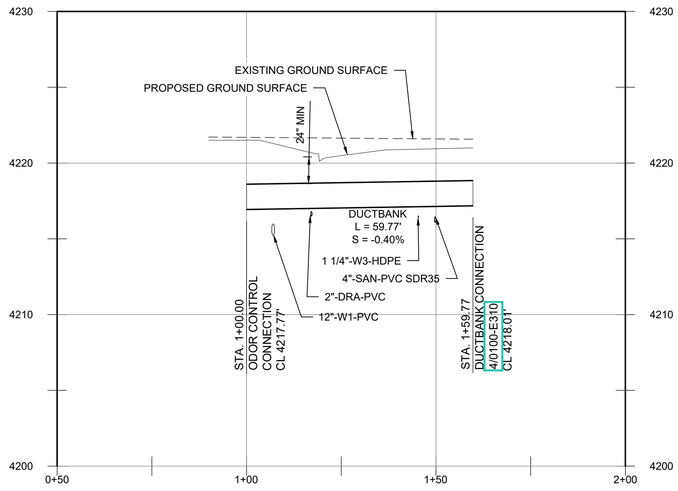


DRAWING No.
0100-E310

SHEET - OF ----

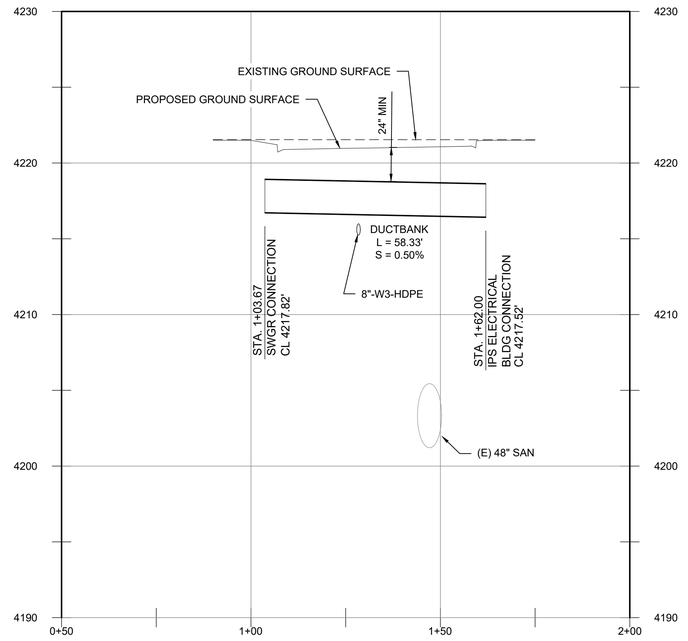
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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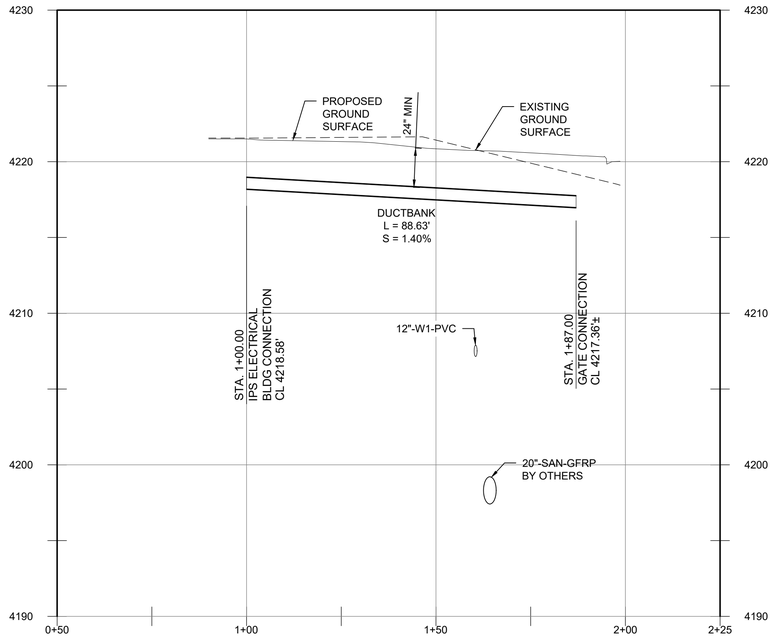
6 | ELECTRICAL DUCTBANK PROFILE: IPS ELEC BLDG TO ODOR CONTROL PANEL

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



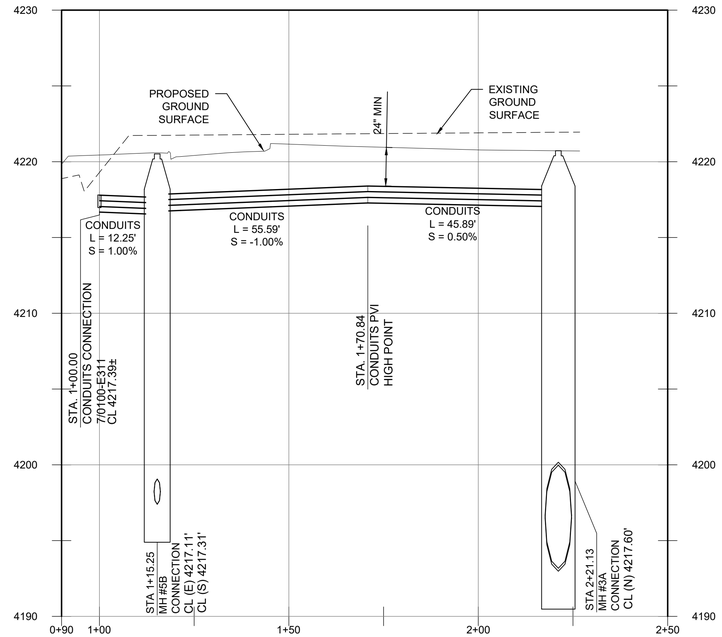
7 | ELECTRICAL DUCTBANK PROFILE: IPS ELEC BLDG TO STANDBY POWER SWITCHGEAR

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



8 | COMBINED DUCTBANK PROFILE: IPS ELEC BLDG TO ACCESS GATE

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



9 | ELECTRICAL & COMMUNICATIONS CONDUIT PROFILE: FLOW METER CONNECTIONS

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

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www.bluestakes.org
1-800-662-4111

STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

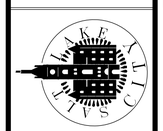
REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PROFILES
SHEET 2 OF 5



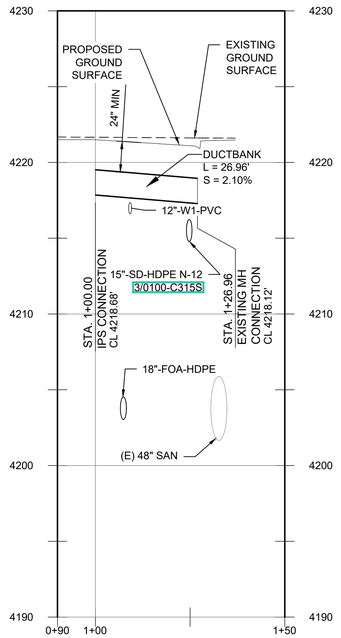


DRAWING No.
0100-E311

SHEET - OF ----

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

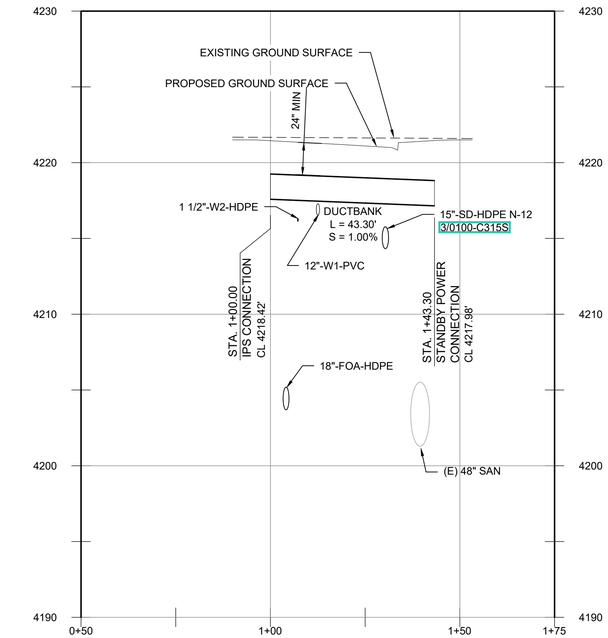
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ELECTRICAL DUCTBANK PROFILE:

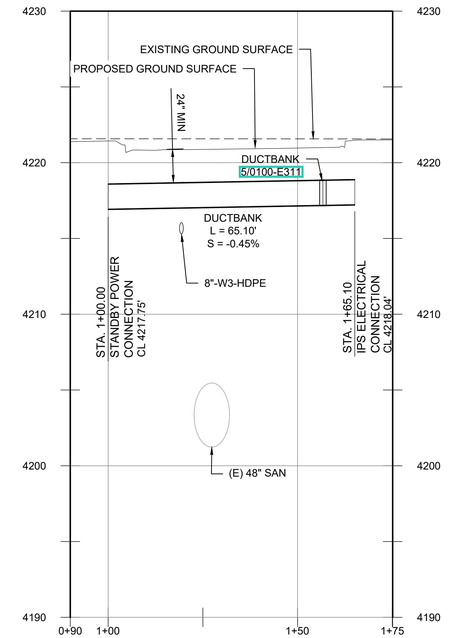
2 | IPS TO EX SAN MH

0100-E102 | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



4 | ELECTRICAL DUCTBANK PROFILE: STANDBY POWER PAD TO IPS

0100-E102 | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



ELECTRICAL DUCTBANK PROFILE:

5 | IPS ELEC BLDG TO STANDBY POWER PAD

0100-E102 | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

Know what's below. 811
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www.bluestakes.org
1-800-662-4111

STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SERVICES

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PROFILES
SHEET 3 OF 5

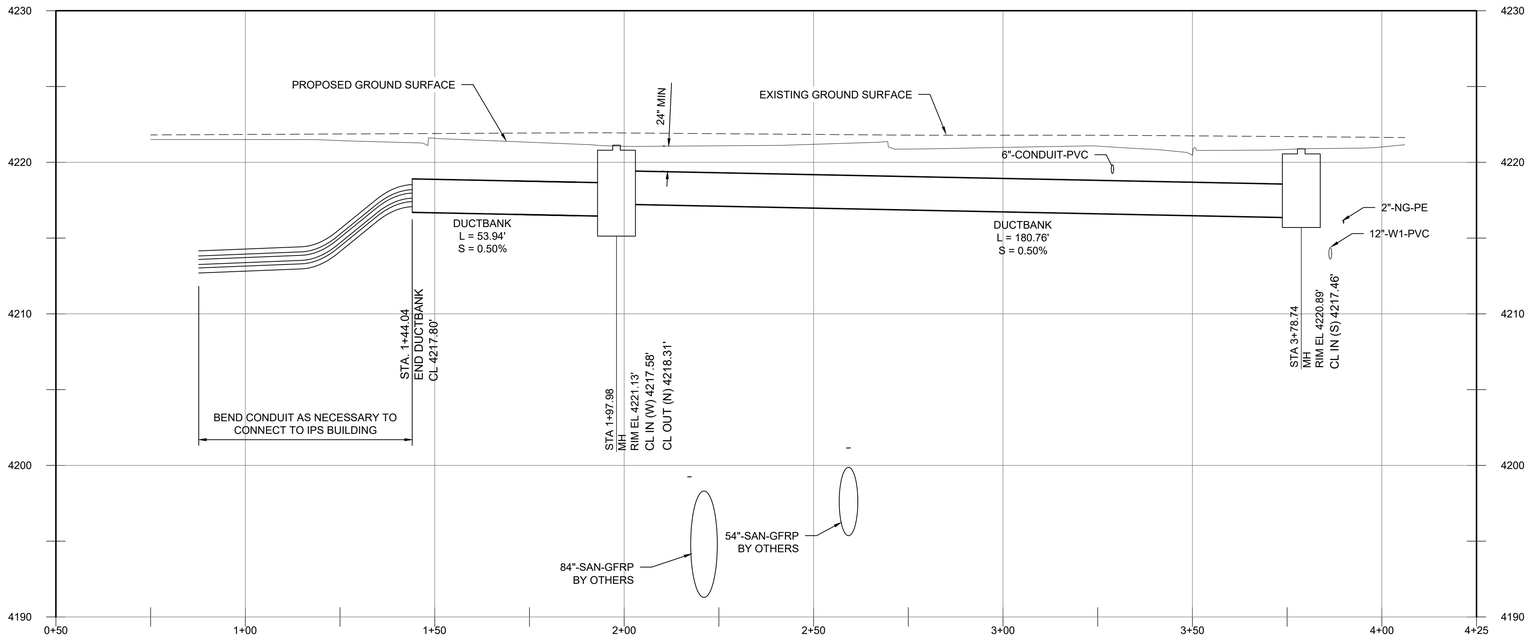
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E312

SHEET - OF ----

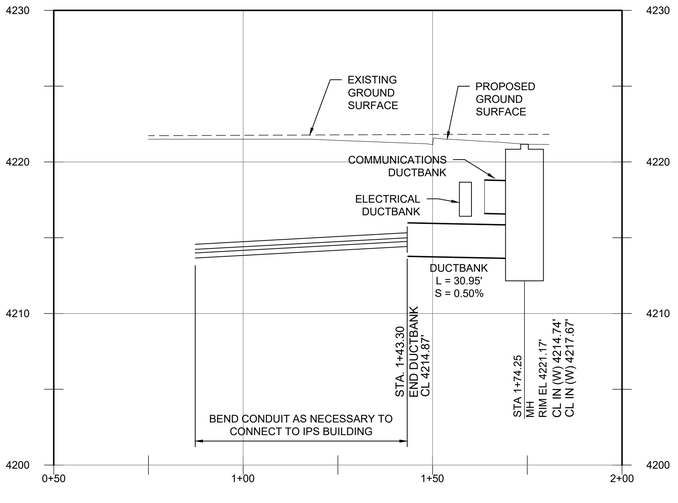
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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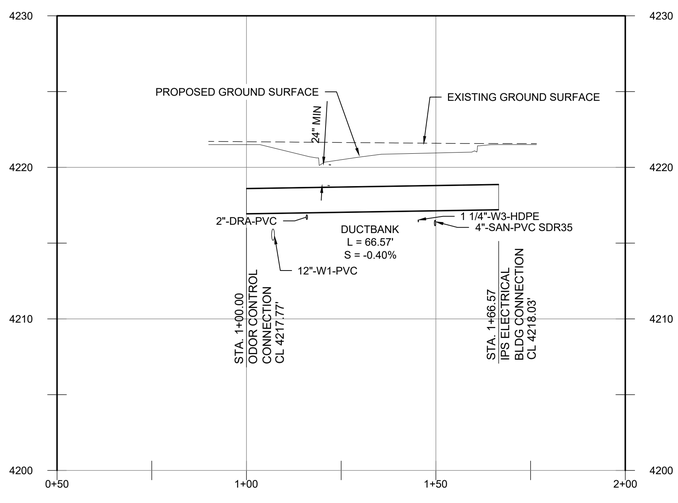
1 | COMMUNICATIONS DUCTBANK PROFILE: IPS ELEC BLDG TO IPS - MAIN TRUNK

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



2 | COMMUNICATIONS DUCTBANK PROFILE: IPS BALANCE INSTRUMENTATION TO IJB

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



3 | COMMUNICATIONS DUCTBANK PROFILE: IPS ELEC BLDG TO ODOR CONTROL PANEL

0100-E102 SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

Know what's below. 811
Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SURVEYS

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PROFILES
SHEET 4 OF 5

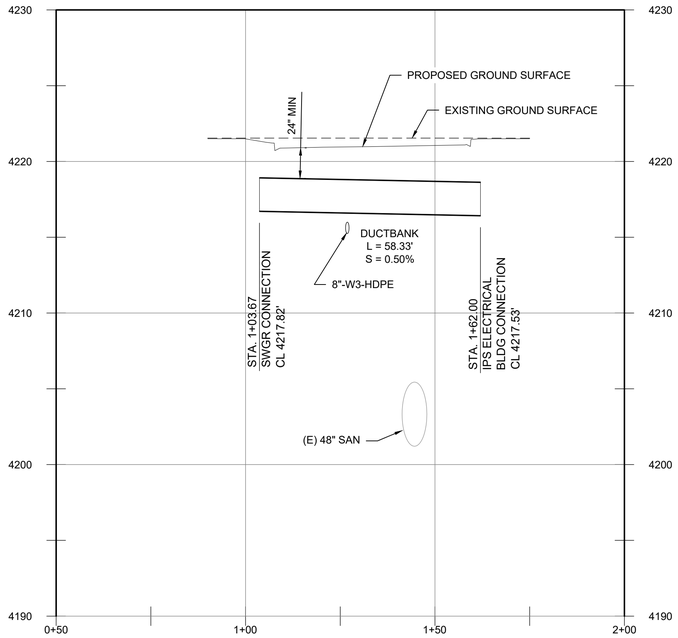
PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E320

SHEET - OF ----

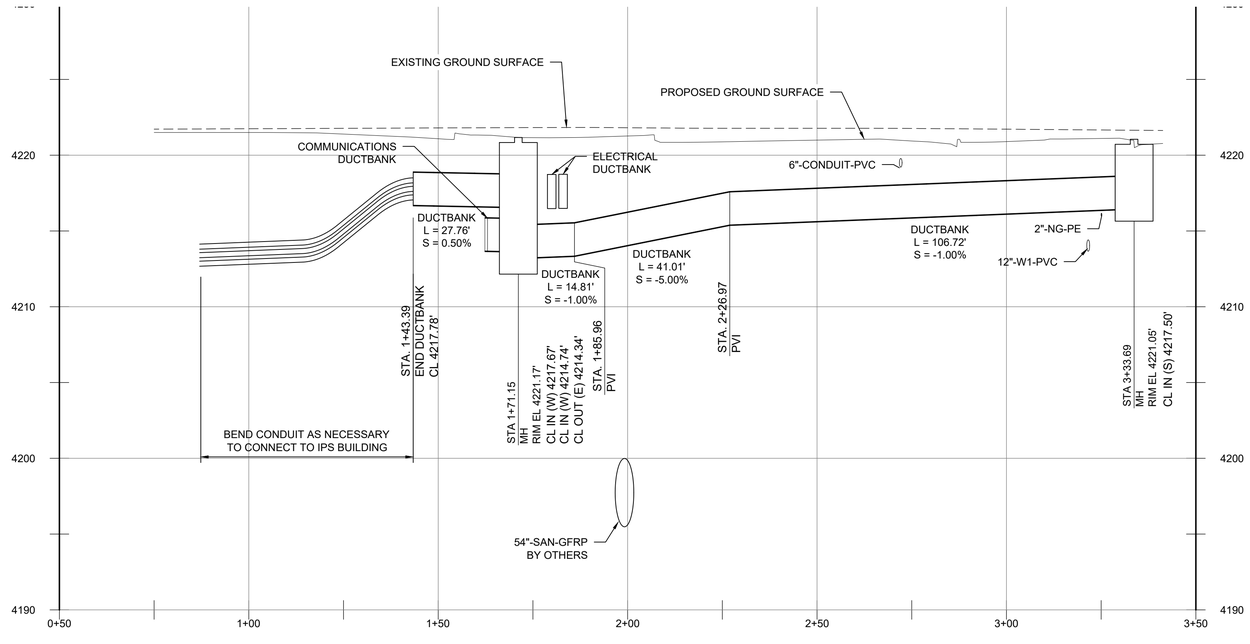
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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4 | COMMUNICATIONS DUCTBANK PROFILE: IPS ELEC BLDG TO STANDBY POWER SWITCHGEAR

0100-E102 | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'



5 | COMMUNICATIONS DUCTBANK PROFILE: PUMP INSTRUMENTATION DUCTBANK TO NORTH PUMPS

0100-E102 | SCALE HORIZ: 1" = 20'
SCALE VERT: 1" = 5'

GENERAL NOTES

1. LENGTHS SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB TO CENTER OF MH/COB. INV SHOWN ON THE PROFILES ARE FROM CENTER OF MH/COB.

Know what's below. Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

STAMPED FOR ELECTRICAL WORK SHOWN. SEE OTHER DISCIPLINES FOR OTHER UTILITIES AND SERVICES

SCALE: AS SHOWN

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. STEPHENSON
DRAWN BY: G. STEPHENSON
CHECKED BY: M. CHAMBERS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	GDS	MMC

LAST CONFORMED SET: ---

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

DUCTBANK PROFILES
SHEET 5 OF 5

PROFESSIONAL ENGINEER
No. 12962039-2202
GLENN GERALD ROSS
STATE OF UTAH

DRAWING No.
0100-E321

SHEET - OF ----

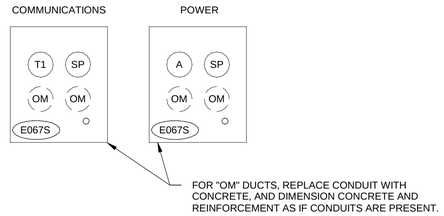
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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POWER DUCT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	F01PP94120	0100-E695, 0100-E102
SP	SPARE	N/A
OM	OMIT CONDUIT	N/A

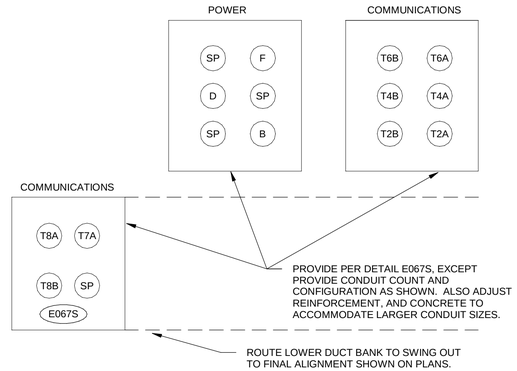
A | DUCTBANK SECTION
NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
A	F01PP94130	4"	0100-E102,E695
SP	SPARE	4"	N/A
OM	OMIT	4"	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F01LCP40100C	0000-I602, 0000-I603
SP	SPARE	N/A
OM	OMIT	N/A

B | DUCTBANK SECTION
NOT TO SCALE



C | DUCTBANK SECTION
NOT TO SCALE

POWER DUCT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
F	SPARE (FUT F01P11260)	0100-E695
D	F01P11240	0100-E695
B	F01P11220	0100-E695
SP	SPARE	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T6A AND T6B	SPARE (FUT F01P11260C, ETC.)	0100-E695
T4A AND T4B	F01P11240T; I&C CABLES	0100-E695
T2A AND T2B	F01P11220T; I&C CABLES	0100-E695
T8A AND T8B	F01FIT10501C, F01LCP11000, ADDITIONAL I&C CABLES TO PLC	0100-E695
T7A	F01CTC90302	0100-E695
SP	SPARE	N/A

NOTE: PROVIDE "I&C CABLES" PER INSTRUMENT LOOP DIAGRAMS, AS REFERENCED IN SPECIFICATION 40 61 13, EXCEPT AT NEAR-MOTOR MARSHALLING CABINET, GROUP INDIVIDUAL PAIRS AND SETS OF CABLES/WIRES INTO MULTICONDUCTOR AND MULTI-PAIR CABLES. REFERENCE INSET GENERAL NOTE, "GENERAL NOTE APPLICABLE TO DETAILS C, E, AND F" FOR ADDITIONAL REQUIREMENTS AND CONTEXT.

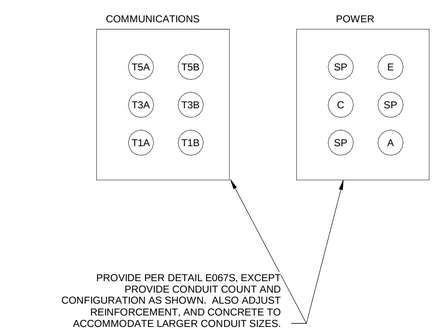
GENERAL SHEET NOTE APPLICABLE TO DETAILS C, E, AND F

THE FOLLOWING REQUIREMENTS ARE A MINIMUM. ENSURE ADEQUATE SPARE PAIRS AND CONDUCTORS ARE PROVIDED AS REQUIRED TO SUPPORT ALL DEVICES REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. PROVIDE SPARE CAPACITIES AS REQUIRED ON SHEET 0100-E102.

REFERENCE 0101-E102 FOR LOCATIONS OF 6 PULLBOXES, 01-LCP-11##0C, FOR PUMP INSTALLATIONS. ("##" VARIES.) FROM EACH PULLBOX PROVIDE THE FOLLOWING, USING THE UNDERGROUND CONDUIT SYSTEM:
- 2 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO VFD.
- 1 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED TRIADS OF #16, TO VFD.
- 3 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO PLC.
- 1 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED PAIRS OF #16, TO PLC.
- 1 TRAY CABLE, 3-CONDUCTOR PLUS GROUND, ALL CONDUCTORS #8AWG CU, TO PLC.

REFERENCE 0101-E102 FOR LOCATION OF 01-LCP-11000C, I&C MARSHALLING PANEL. FROM THIS PULLBOX PROVIDE THE FOLLOWING, USING THE UNDERGROUND CONDUIT SYSTEM:
- 9 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO PLC.
- 3 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED PAIRS OF #16, TO PLC.
- 1 TRAY CABLE, 3-CONDUCTOR PLUS GROUND, ALL CONDUCTORS #8AWG CU, TO PLC.

ENSURE ANALOG AND RTD CABLES ARE IN CONDUIT(S) SEPARATE FROM AC WAVEFORMS. DO NOT RUN THESE WITH AC POWER, DISCRETE INPUTS, NOR DISCRETE OUTPUTS.

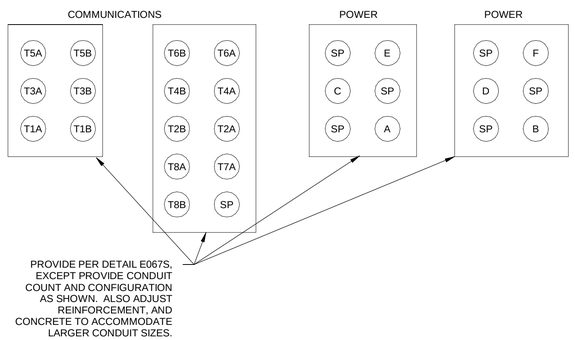


E | DUCTBANK SECTION
NOT TO SCALE

POWER DUCT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	F01P11110	0100-E695
C	F01P11130	0100-E695
E	F01P11150	0100-E695
SP	SPARE	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1A AND T1B	F01P11110T; I&C CABLES	0100-E695
T3A AND T3B	F01P11130T; I&C CABLES	0100-E695
T5A AND T5B	F01P11150T; I&C CABLES	0100-E695
SP	SPARE	N/A

NOTE: PROVIDE "I&C CABLES" PER INSTRUMENT LOOP DIAGRAMS, AS REFERENCED IN SPECIFICATION 40 61 13, EXCEPT AT NEAR-MOTOR MARSHALLING CABINET, GROUP INDIVIDUAL PAIRS AND SETS OF CABLES/WIRES INTO MULTICONDUCTOR AND MULTI-PAIR CABLES. REFERENCE INSET GENERAL NOTE, "GENERAL NOTE APPLICABLE TO DETAILS C, E, AND F" FOR ADDITIONAL REQUIREMENTS AND CONTEXT.



F | DUCTBANK SECTION
NOT TO SCALE

POWER DUCT SCHEDULE
REFERENCE DETAIL C AND DETAIL E ON THIS SHEET FOR FEEDER DATA

COMMUNICATIONS DUCT SCHEDULE
REFERENCE DETAIL C AND DETAIL E ON THIS SHEET FOR FEEDER DATA

NOTE: PROVIDE "I&C CABLES" PER INSTRUMENT LOOP DIAGRAMS, AS REFERENCED IN SPECIFICATION 40 61 13, EXCEPT AT NEAR-MOTOR MARSHALLING CABINET, GROUP INDIVIDUAL PAIRS AND SETS OF CABLES/WIRES INTO MULTICONDUCTOR AND MULTI-PAIR CABLES. REFERENCE INSET GENERAL NOTE, "GENERAL NOTE APPLICABLE TO DETAILS C, E, AND F" FOR ADDITIONAL REQUIREMENTS AND CONTEXT.

SCALE: NOT TO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

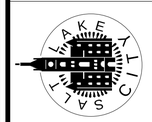
REVISIONS

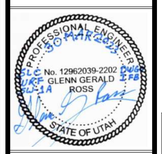
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A	23-04-03	SW-1A ISSUED FOR BID	GR	CA

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL DETAILS
SHEET 1 OF 4





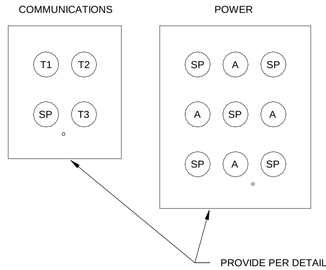
DRAWING No.
0100-E501

SHEET _____ OF -

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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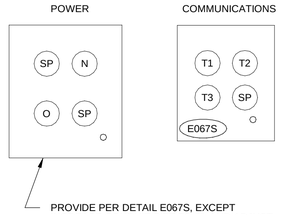
FILE: BIM 360://05722ff8-Salt Lake City 2019/524905350_0100-E701.rvt



POWER DUCT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	F01SWGR99110	0100-E102, E696
SP	SPARE	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F01SWGR90110C	0100-E695
T2	F01CP99100Z	0100-E695
T3	F01CTC90100C	0100-E695
SP	SPARE	N/A

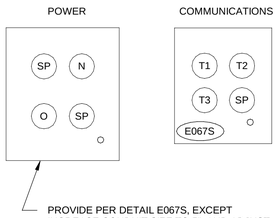
A | DIRECT BURIED CONDUIT SECTION
NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
N	F01SWGR99110A	5"	0100-E695,E696
O	F01SWGR99110B	5"	0100-E695,E696
SP	SPARE	5"	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F3503_1002	0000-I602, 0000-I603
T2	F0802_F0104A	0000-I602, 0000-I603
T3	F0802_F0104B	0000-I602, 0000-I603
SP	SPARE	N/A

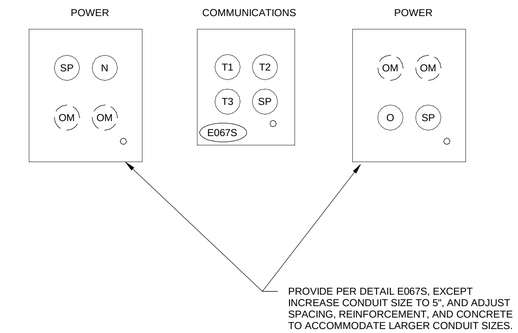
B | DUCTBANK SECTION
NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
N	F01SWGR99110A	5"	0100-E695,E696
O	F01SWGR99110B	5"	0100-E695,E696
SP	SPARE	5"	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F0111_1002,F3503_1002	0000-I602, 0000-I603
T2	F0802_F0104A	0000-I602, 0000-I603
T3	F0802_F0104B	0000-I602, 0000-I603
SP	SPARE	N/A

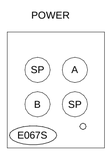
C | DUCTBANK SECTION
NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
N	F01SWGR99110A	5"	0100-E695,E696
O	F01SWGR99110B	5"	0100-E695,E696
SP	SPARE	5"	N/A
OM	NO CONDUIT, FULL CONC.	N/A	N/A

COMMUNICATIONS DUCT SCHEDULE		
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F3503_1002	0000-I602, 0000-I603
T2	F0802_F0104A	0000-I602, 0000-I603
T3	F0802_F0104B	0000-I602, 0000-I603
SP	SPARE	N/A

D | DIRECT BURIED CONDUIT SECTION
NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
A	F01TR94140	4"	0100-E102,E402,E696
B	F01PP94120	4"	0100-E102,E695
SP	SPARE	4"	N/A

F | DIRECT BURIED CONDUIT SECTION
NOT TO SCALE

SCALE: 1" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: - - -
ACCOUNT NO.: 524905386

REVISIONS

NO.	DATE		
A	23-04-03	SW-1A	ISSUED FOR BID

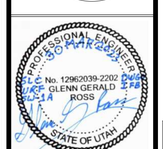
MADE BY: GR
AUTH. BY: CA

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL DETAILS
SHEET 2 OF 4





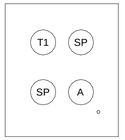
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0100-E502

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/30/2023 10:22:06 AM

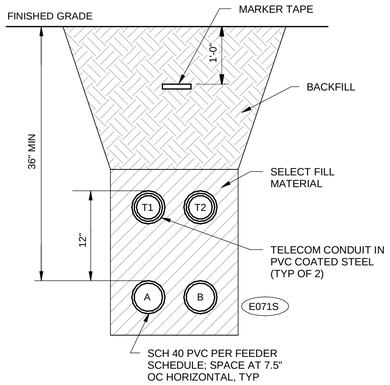
FILE: BIM 360://6057228-Salt Lake City 2019/5249053/50_0100-E701.rvt



POWER CONDUIT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	F01FIT10501	0100-E695, 0100-E102
SP	SPARE	N/A

TELECOM CONDUIT SCHEDULE		
DUCT ID (LETTER)	FEEDER	DRAWING SCHEDULE
T1	F01FIT10501C	0100-E695, 0100-E102
SP	SPARE	N/A

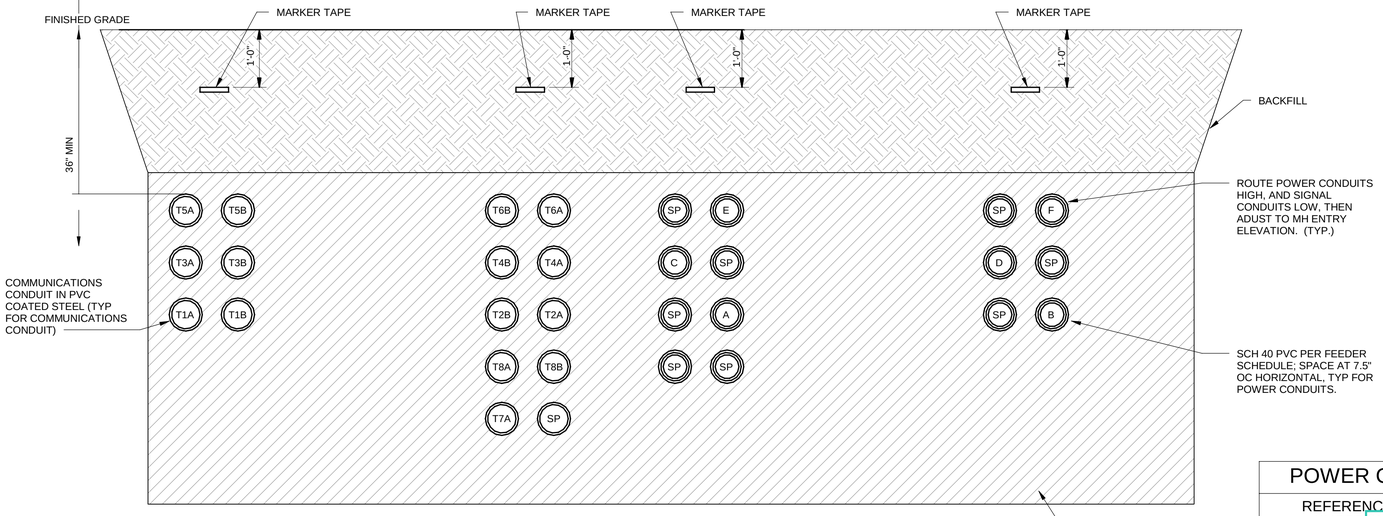
A | DUCTBANK SECTION
NOT TO SCALE



POWER CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	SPARE	N/A
B	F01FIT10301, F01FIT10101	0100-E695

COMMUNICATIONS CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	SPARE	N/A
T2	F01FIT10301C, F01FIT10101C	0100-E695

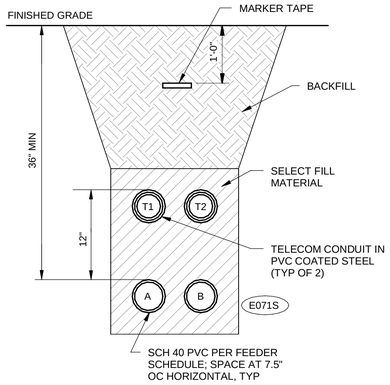
C | DUCTBANK SECTION
NOT TO SCALE



GENERAL DETAIL NOTES:
1. MAINTAIN 12 INCHES OF DISTANCE BETWEEN POWER CONDUITS AND COMMUNICATIONS CONDUITS. ROUTE COMMUNICATIONS CONDUITS IN A SINGLE LAYER WHERE CROSSING UNDER MV POWER CONDUITS.
2. COORDINATE HORIZONTAL SPACING OF CONDUITS AS REQUIRED TO ENTER DUCT BANKS AS SHOWN ON PLAN. ARRAGEMENT IS FIGURATIVE.
3. ADJUST DETAIL TO MATCH ABOVE, STARTING FROM DETAIL E071S.

E071S

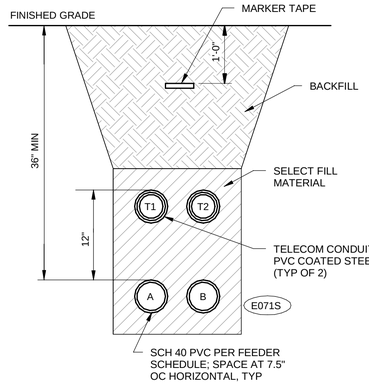
E | DUCTBANK SECTION
NOT TO SCALE



POWER CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	F01M98765	0100-E695
B	F01FIT10301, F01FIT10101	0100-E695

COMMUNICATIONS CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	F01M98765C	0100-E695
T2	F01FIT10301C, F01FIT10101C	0100-E695

B | DUCTBANK SECTION
NOT TO SCALE



POWER CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	FEEDER	DRAWING SCHEDULE
A	SPARE	N/A
B	F01FIT10101	0100-E695

COMMUNICATIONS CONDUIT SCHEDULE		
CONDUIT ID (LETTER)	CABLE	DRAWING SCHEDULE
T1	SPARE	N/A
T2	F01FIT10101C	0100-E695

D | DUCTBANK SECTION
NOT TO SCALE

GENERAL SHEET NOTE APPLICABLE TO DETAIL E

THE FOLLOWING REQUIREMENTS ARE A MINIMUM. ENSURE ADEQUATE SPARE PAIRS AND CONDUCTORS ARE PROVIDED AS REQUIRED TO SUPPORT ALL DEVICES REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. PROVIDE SPARE CAPACITIES AS REQUIRED ON SHEET 0100-E102.:

REFERENCE 0101-E102 FOR LOCATIONS OF 6 PULLBOXES, 01-LCP-11##0C, FOR PUMP INSTALLATIONS. ("##" VARIES.) FROM EACH PULLBOX PROVIDE THE FOLLOWING, USING THE UNDERGROUND CONDUIT SYSTEM:
- 2 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO VFD.
- 1 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED TRIADS OF #16, TO VFD.
- 3 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO PLC.
- 1 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED PAIRS OF #16, TO PLC.
- 1 TRAY CABLE, 3-CONDUCTOR PLUS GROUND, ALL CONDUCTORS #8AWG CU, TO PLC.

REFERENCE 0101-E102 FOR LOCATION OF 01-LCP-11000C, I&C MARSHALLING PANEL. FROM THIS PULLBOX PROVIDE THE FOLLOWING, USING THE UNDERGROUND CONDUIT SYSTEM:
- 9 OVERALL-SHIELDED TRAY CABLES, EACH WITH 12-CONDUCTOR #14 , TO PLC.
- 3 OVERALL-SHIELDED TRAY CABLES, EACH WITH 8 SHIELDED TWISTED PAIRS OF #16, TO PLC.
- 1 TRAY CABLE, 3-CONDUCTOR PLUS GROUND, ALL CONDUCTORS #8AWG CU, TO PLC.

ENSURE ANALOG AND RTD CABLES ARE IN CONDUIT(S) SEPARATE FROM AC WAVEFORMS. DO NOT RUN THESE WITH AC POWER, DISCRETE INPUTS, NOR DISCRETE OUTPUTS.

POWER CONDUIT SCHEDULE
REFERENCE DETAIL C AND DETAIL E ON SHEET 0100-E501 FOR FEEDER DATA

COMMUNICATIONS CONDUIT SCHEDULE
REFERENCE DETAIL C AND DETAIL E ON SHEET 0100-E501 FOR FEEDER DATA

NOTE: PROVIDE "I&C CABLES" PER INSTRUMENT LOOP DIAGRAMS, AS REFERENCED IN SPECIFICATION 40 61 13, EXCEPT AT NEAR-MOTOR MARSHALLING CABINET, GROUP INDIVIDUAL PAIRS AND SETS OF CABLES/WIRES INTO MULTICONDUCTOR AND MULTI-PAIR CABLES. REFERENCE INSET GENERAL NOTE ON 0100-E501 "GENERAL NOTE APPLICABLE TO DETAILS C, E, AND F" FOR ADDITIONAL REQUIREMENTS AND CONTEXT.

SCALE: As indicated

PROJECT ADDRESS: 1365 W 2300 N SALT LAKE CITY, UT 84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

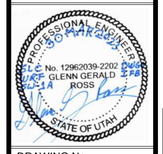
NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	GR	CA

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL DETAILS SHEET 3 OF 4





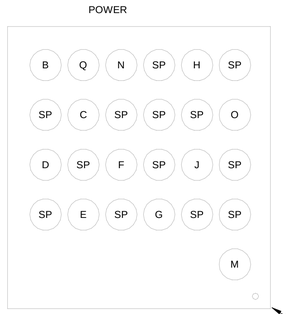
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SHEET _____ OF -

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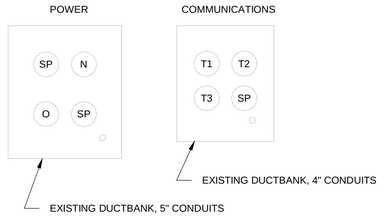
POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
B	F65TR99110 EXIST	5"	EXISTING
C	F35TR99110A EXIST	5"	EXISTING
D	F30TR99110A EXIST	5"	EXISTING
E	F20TR99110A EXIST	5"	EXISTING
F	F35TR99110B EXIST	5"	EXISTING
G	F20TR99110B EXIST	5"	EXISTING
H	F30TR99110B EXIST	5"	EXISTING
J	F80TR99110B EXIST	5"	EXISTING
N	F01TR99110A	5"	0100-E695, E696
O	F01TR99110B	5"	0100-E695, E696
Q	F08TR99110 EXIST	5"	EXISTING
M	SPARE	SP	N/A

NOTE: DUCT ID VARIES WITH SECTION AND FEEDERS.

NOTE - ROUTE FEEDERS F01CB99110A AND F01CB99110B IN SEPARATE EXISTING CONDUITS BETWEEN MH 1C AND NETWORKING CABINET IN SUBSTATION CONTROL BUILDING. PROVIDE ADDITIONAL 2-STRAND SMFO, IN EXISTING CONDUIT, TO CORRESPONDING, SEL-387L RELAY WITHIN SWITCHGEAR, AS INDICATED ON SINGLE LINE DIAGRAMS.

A | DUCTBANK SECTION

NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
N	F01SWGR99110A	5"	0100-E695,E696
O	F01SWGR99110B	5"	0100-E695,E696
SP	SPARE	5"	N/A

COMMUNICATIONS DUCT SCHEDULE			
DUCT ID (LETTER)	CABLE	DRAWING SCHEDULE	
T1	F3503_1002	0000-I602, 0000-I603	
T2	F0802_F0104A	0000-I602, 0000-I603	
T3	F0802_F0104B	0000-I602, 0000-I603	
SP	SPARE	N/A	

B | DUCTBANK SECTION

NOT TO SCALE

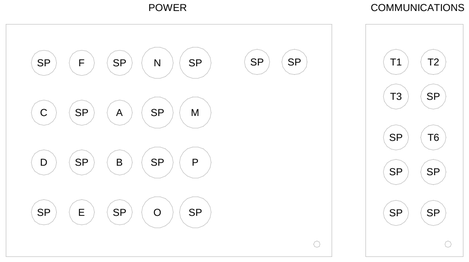


POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
A	F65TR99110	4"	EXISTING
B	F80TR99110B	4"	EXISTING
C	F20TR99110A	4"	EXISTING
D	F30TR99110A	4"	EXISTING
E	F20TR99110B	4"	EXISTING
F	F30TR99110B	4"	EXISTING
N	F35TR99110A	5"	EXISTING
P	F35TR99110B	5"	EXISTING
M	F01TR99110A	5"	0100-E695, E696
O	F01TR99110B	5"	0100-E695, E696
SP	SPARE	SP	N/A

NOTE - ROUTE FEEDERS F01CB99110A AND F01CB99110B IN SEPARATE EXISTING CONDUITS BETWEEN MH 1C AND NETWORKING CABINET IN SUBSTATION CONTROL BUILDING. PROVIDE ADDITIONAL 2-STRAND SMFO, IN EXISTING CONDUIT, TO CORRESPONDING, SEL-387L RELAY WITHIN SWITCHGEAR, AS INDICATED ON SINGLE LINE DIAGRAMS.

C | DUCTBANK SECTION

NOT TO SCALE



POWER DUCT SCHEDULE			
DUCT ID (LETTER)	FEEDER	CONDUIT SIZE	DRAWING SCHEDULE
A	F65TR99110	4"	EXISTING
B	F80TR99110B	4"	EXISTING
C	F20TR99110A	4"	EXISTING
D	F30TR99110A	4"	EXISTING
E	F20TR99110B	4"	EXISTING
F	F30TR99110B	4"	EXISTING
N	F35TR99110A	5"	EXISTING
P	F35TR99110B	5"	EXISTING
M	F01TR99110A	5"	0100-E695, E696
O	F01TR99110B	5"	0100-E695, E696
SP	SPARE	SP	N/A

COMMUNICATIONS DUCT SCHEDULE			
DUCT ID (LETTER)	CABLE	CONDUIT SIZE	DRAWING SCHEDULE
T1	FUTURE	4"	0000-I602, 0000-I603
T2	F3503_0802	4"	0000-I602, 0000-I603
T3	F0802_F0104A	4"	0100-E602, 0100-E604
T6	F0802_F0104B	4"	0100-E603, 0100-E605
SP	SPARE	4"	N/A

E | DUCTBANK SECTION

NOT TO SCALE

SCALE: 1" = 1'-0"

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: G. ROSS
DRAWN BY: G. ROSS
CHECKED BY: C. ADAMS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905386

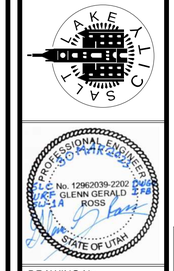
REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	GR	CA

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

ELECTRICAL DETAILS SHEET 4 OF 4



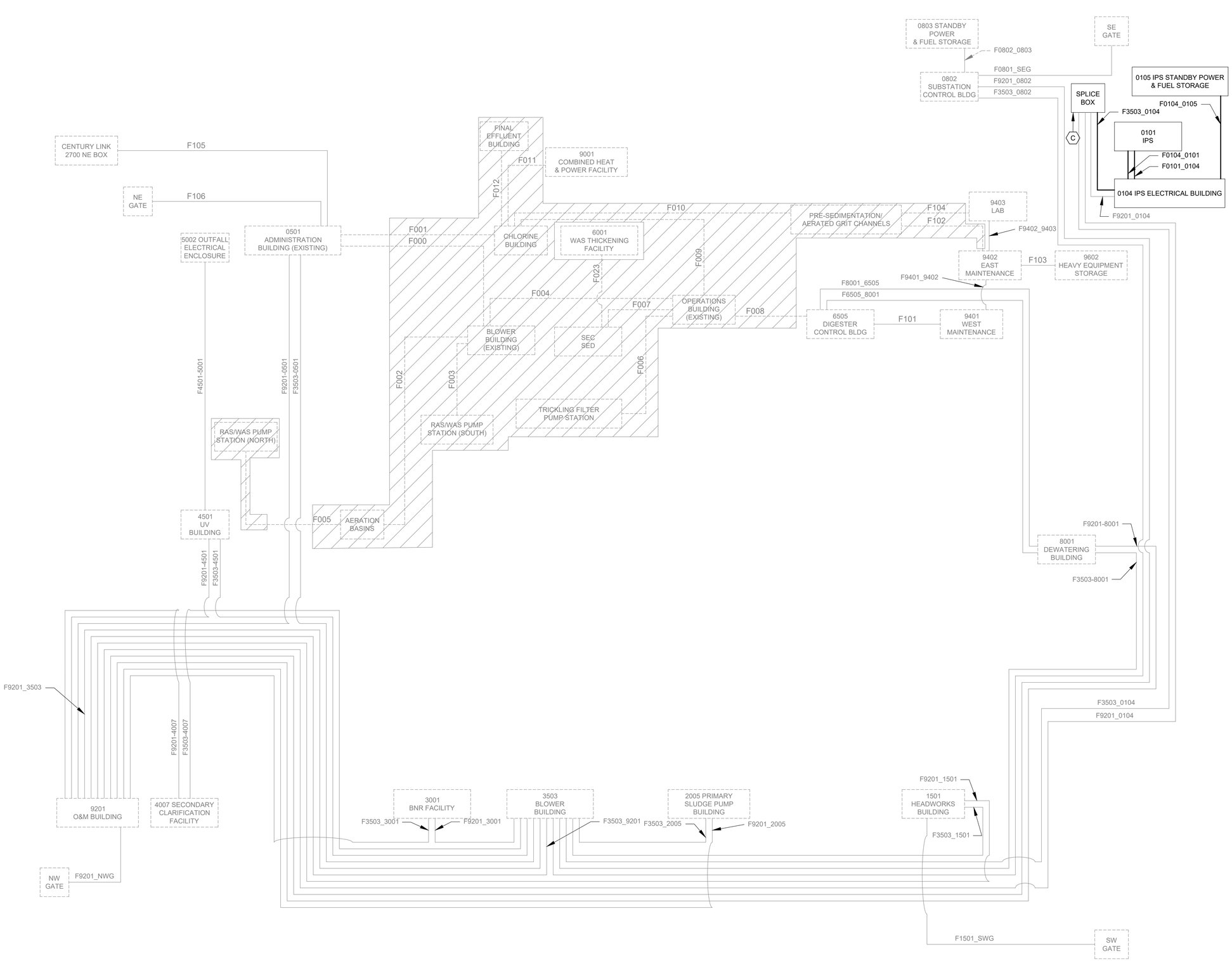
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SHEET ____ OF -

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DATE: 3/30/2023 10:22:08 AM

FILE: BIM 360://60572288-Salt Lake City 2019\524905350_0100-E701.rvt



KEYNOTES

A EACH PROCESS FACILITY WILL HAVE A DEDICATED FIBER CABLE ROUTED FROM THE PRIMARY NETWORK LOCATION (BLOWER BUILDING) AND A BACKUP FIBER CABLE ROUTED TO THE SECONDARY NETWORK LOCATION (OMEC BUILDING). THESE FIBER CABLES SHALL BE INSTALLED IN DIFFERENT CONDUITS THROUGHOUT THE ENTIRE RUN.

B SEE THE FIBER OPTIC CABLE SCHEDULE ON 0000-I603S FOR A SUMMARY OF ALL FIBER OPTIC CABLING.

C PROVIDE SPLICE CASE, AND FUSION SPLICE FEEDER F3503_0104 TO EXISTING FEEDER F3503_0104 IN EXISTING VAULT. SEE 0100-E307 FOR EXACT LOCATION AND REQUIREMENTS.

SCALE: N/A

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: M.JEPPSEN
DRAWN BY: D.LEAVITT
CHECKED BY: M.JEPPSEN
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MCJ	MPJ

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
GENERAL

NETWORK FIBER DIAGRAM

REGISTERED PROFESSIONAL ENGINEER
No. 5338864
MARK P. JEPPSEN
STATE OF UTAH
04-03-2023

DRAWING No.
0000-I602S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 11:23 AM

FILE: C:\Users\michael.johnson\Aqua Engineering\SLCDPU - 001362 D SLC WRF Expansion\050 Drafting\998 Instrumentation\0100-I609.dwg

CABLE NAME	TYPE	FROM	TO	NOTES
F000	HYBRID 36 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	0501 ADMINISTRATION BUILDING (EXISTING)	BLOWER BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F001	HYBRID 36 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	0501 ADMINISTRATION BUILDING (EXISTING)	CHLORINE BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F002	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	BLOWER BUILDING (EXISTING)	AERATION BASINS (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F003	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	BLOWER BUILDING (EXISTING)	RAS/WAS PUMP STATION (SOUTH) (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F004	HYBRID 36 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	BLOWER BUILDING (EXISTING)	OMEC BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F005	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	AERATION BASINS (EXISTING)	RAS/WAS PUMP STATION (NORTH) (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F006	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	OMEC BUILDING (EXISTING)	TRICKLING FILTER PUMP STATION (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F007	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	OMEC BUILDING (EXISTING)	SECONDARY SEDIMENTATION (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F008	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	OMEC BUILDING (EXISTING)	6505 DIGESTER CONTROL BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F009	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	OMEC BUILDING (EXISTING)	CHLORINE BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F010	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	CHLORINE BUILDING (EXISTING)	PRE-SEDIMENTATION/AERATED GRIT CHANNELS (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F011	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	CHLORINE BUILDING (EXISTING)	9001 COMBINED HEAT & POWER FACILITY (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F012	HYBRID 24 STRAND SM OS2 / 12 STRAND 62.5µm OM1 MM	CHLORINE BUILDING (EXISTING)	FINAL EFFLUENT BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F101	12 STRAND SM OS2	6505 DIGESTER CONTROL BUILDING (EXISTING)	9401 WEST MAINTENANCE BUILDING (EXISTING)	FUTURE CONTRACT - PROTECT IN PLACE
F102	12 STRAND SM OS2	PRE-SEDIMENTATION/AERATED GRIT CHANNELS (EXISTING)	9402 EAST MAINTENANCE BUILDING (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F103	12 STRAND SM OS2	9402 EAST MAINTENANCE BUILDING (EXISTING)	9602 HEAVY EQUIPMENT STORAGE BUILDING (EXISTING)	FUTURE CONTRACT - PROTECT IN PLACE
F104	12 STRAND SM OS2	PRE-SEDIMENTATION/AERATED GRIT CHANNELS (EXISTING)	9403 LAB (EXISTING)	FUTURE CONTRACT - EXISTING CABLE TO BE REMOVED
F105	ISP FIBER	0501 ADMINISTRATION BUILDING (EXISTING)	CENTURYLINK CONNECTION 2700 NE BOX (EXISTING)	FUTURE CONTRACT - PROTECT IN PLACE
F106	12 STRAND SM OS2	0501 ADMINISTRATION BUILDING (EXISTING)	NORTHEAST GATE (EXISTING)	FUTURE CONTRACT - REPLACE EXISTING MM CABLE WITH SM OS2
F0104_0101	24 STRAND SM OS2	0104 IPS ELECTRICAL BUILDING	0101 IPS	
F0101_0104	24 STRAND SM OS2	0101 IPS	0104 IPS ELECTRICAL BUILDING	
F0104_0105	12 STRAND SM OS2	0104 IPS ELECTRICAL BUILDING	0105 IPS STANDBY POWER & FUEL STORAGE	
F0802_SEG	12 STRAND SM OS2	0802 SUBSTATION CONTROL BUILDING	SOUTHEAST GATE (EXISTING)	BY OTHERS
F0802_0803	12 STRAND SM OS2	0802 SUBSTATION CONTROL BUILDING	0803 STANDBY POWER & FUEL STORAGE	BY OTHERS
F1501_SWG	12 STRAND SM OS2	1501 HEADWORKS BUILDING	SOUTHWEST GATE (EXISTING)	BY OTHERS
F3104_PS	12 STRAND SM OS2	PRE-SEDIMENTATION/AERATED GRIT CHANNELS (EXISTING)	3104 BNR DEMONSTRATION ELECTRICAL FACILITY	BY OTHERS
F3503_0501	24 STRAND SM OS2	3503 BLOWER BUILDING	0501 ADMINISTRATION BUILDING (EXISTING)	BY OTHERS
F3503_0802	24 STRAND SM OS2	3503 BLOWER BUILDING	0802 SUBSTATION CONTROL BUILDING	BY OTHERS
F3503_0104	24 STRAND SM OS2	3503 BLOWER BUILDING	0104 IPS ELECTRICAL BUILDING	FUSION SPLICE EXISTING FEEDER IN EXISTING VAULT. SEE 0000-I602S
F3503_1501	24 STRAND SM OS2	3503 BLOWER BUILDING	1501 HEADWORKS BUILDING	BY OTHERS
F3503_2005	24 STRAND SM OS2	3503 BLOWER BUILDING	2005 PRIMARY SLUDGE PUMP BUILDING	BY OTHERS
F3503_3001	24 STRAND SM OS2	3503 BLOWER BUILDING	3001 BNR FACILITY	BY OTHERS
F3503_4007	24 STRAND SM OS2	3503 BLOWER BUILDING	4007 RAS PUMP BUILDING	BY OTHERS
F3503_4501	24 STRAND SM OS2	3503 BLOWER BUILDING	4501 UV BUILDING	BY OTHERS
F3503_8001	24 STRAND SM OS2	3503 BLOWER BUILDING	8001 DEWATERING BUILDING	BY OTHERS
F3503_9201	48 STRAND SM OS2	3503 BLOWER BUILDING	9201 OMEC BUILDING	BY OTHERS
F4501_5001	12 STRAND SM OS2	4501 UV BUILDING	5001 OUTFALL ELECTRICAL ENCLOSURE	BY OTHERS
F6505_8001	24 STRAND SM OS2	6505 DIGESTER CONTROL BUILDING (EXISTING)	8001 DEWATERING BUILDING	BY OTHERS
F8001_6505	24 STRAND SM OS2	8001 DEWATERING BUILDING	6505 DIGESTER CONTROL BUILDING (EXISTING)	BY OTHERS
F9201_0501	24 STRAND SM OS2	9201 OMEC BUILDING	0501 ADMINISTRATION BUILDING (EXISTING)	BY OTHERS
F9201_0802	24 STRAND SM OS2	9201 OMEC BUILDING	0802 SUBSTATION CONTROL BUILDING	BY OTHERS
F9201_0104	24 STRAND SM OS2	9201 OMEC BUILDING	0104 IPS ELECTRICAL BUILDING	BY OTHERS
F9201_1501	24 STRAND SM OS2	9201 OMEC BUILDING	1501 HEADWORKS BUILDING	BY OTHERS
F9201_2005	24 STRAND SM OS2	9201 OMEC BUILDING	2005 PRIMARY SLUDGE PUMP BUILDING	BY OTHERS
F9201_3001	24 STRAND SM OS2	9201 OMEC BUILDING	3001 BNR FACILITY	BY OTHERS
F9201_3503	48 STRAND SM OS2	9201 OMEC BUILDING	3503 BLOWER BUILDING	BY OTHERS
F9201_4007	24 STRAND SM OS2	9201 OMEC BUILDING	4007 RAS PUMP BUILDING	BY OTHERS
F9201_4501	24 STRAND SM OS2	9201 OMEC BUILDING	4501 UV BUILDING	BY OTHERS
F9201_8001	24 STRAND SM OS2	9201 OMEC BUILDING	8001 DEWATERING BUILDING	BY OTHERS
F9201_NWG	12 STRAND SM OS2	9201 OMEC BUILDING	NORTHWEST GATE	BY OTHERS
F9401_9402	12 STRAND SM OS2	9401 WEST MAINTENANCE BUILDING (EXISTING)	9402 EAST MAINTENANCE BUILDING (EXISTING)	BY OTHERS
F9402_9403	12 STRAND SM OS2	9402 EAST MAINTENANCE BUILDING (EXISTING)	9403 LAB (EXISTING)	BY OTHERS
FXXXX_6001	24 STRAND SM OS2	TBD	6001 WAS THICKENING FACILITY	FUTURE CONTRACT
FXXXX_6001	24 STRAND SM OS2	TBD	6001 WAS THICKENING FACILITY	FUTURE CONTRACT
FXXXX_9001	24 STRAND SM OS2	TBD	9001 COMBINED HEAT & POWER FACILITY (EXISTING)	FUTURE CONTRACT
FXXXX_9001	24 STRAND SM OS2	TBD	9001 COMBINED HEAT & POWER FACILITY (EXISTING)	FUTURE CONTRACT

SCALE: N/A

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: M.JEPPSEN
DRAWN BY: D.LEAVITT
CHECKED BY: M.JEPPSEN
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MGJ	MPJ

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
GENERAL

NETWORK
CABLE SCHEDULE

REGISTERED PROFESSIONAL ENGINEER
No. 5338864
MARK P. JEPPSEN
STATE OF UTAH
04-03-2023

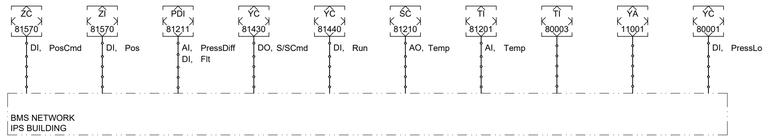
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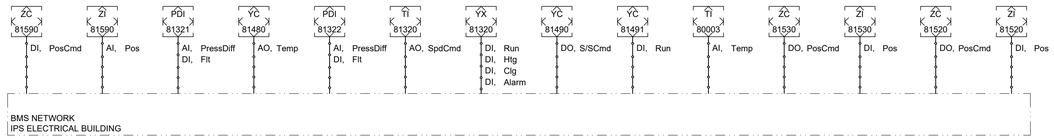
SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

DATE: 3/29/2023 11:24 AM

FILE: C:\Users\michael.johnson\Aqua Engineering\SLCDPU - 001382 D SLC WRF Expansion\050 Drafting\998 Instumentation\0100-I610.dwg





GENERAL NOTES

1. REFER TO ASSOCIATED NETWORK DRAWINGS (I6## SERIES) FOR INTERCONNECTION OF SCADA WITH BMS NETWORK.
2. REFER TO ASSOCIATED PROCESS AND INSTRUMENTATION HVAC DRAWINGS FOR INTERCONNECTION OF INSTRUMENTS AND CONTROL DEVICES WITH BMS NETWORK.
3. MULTIPLE I/O CONNECTIONS FROM THE NETWORK ARE SHOWN FOR CLARITY. SCADA INTERFACES WITH THE BMS NETWORK THROUGH SCADA'S SINGULAR COMMUNICATION WITH THE RELEVANT BMS NETWORK CONTROLLER.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: C.ROBINSON
DRAWN BY: M.MOURA
CHECKED BY: R.SCHROEDEL
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

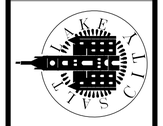
REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	SRG	CR

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
GENERAL

BMS NETWORK P&ID



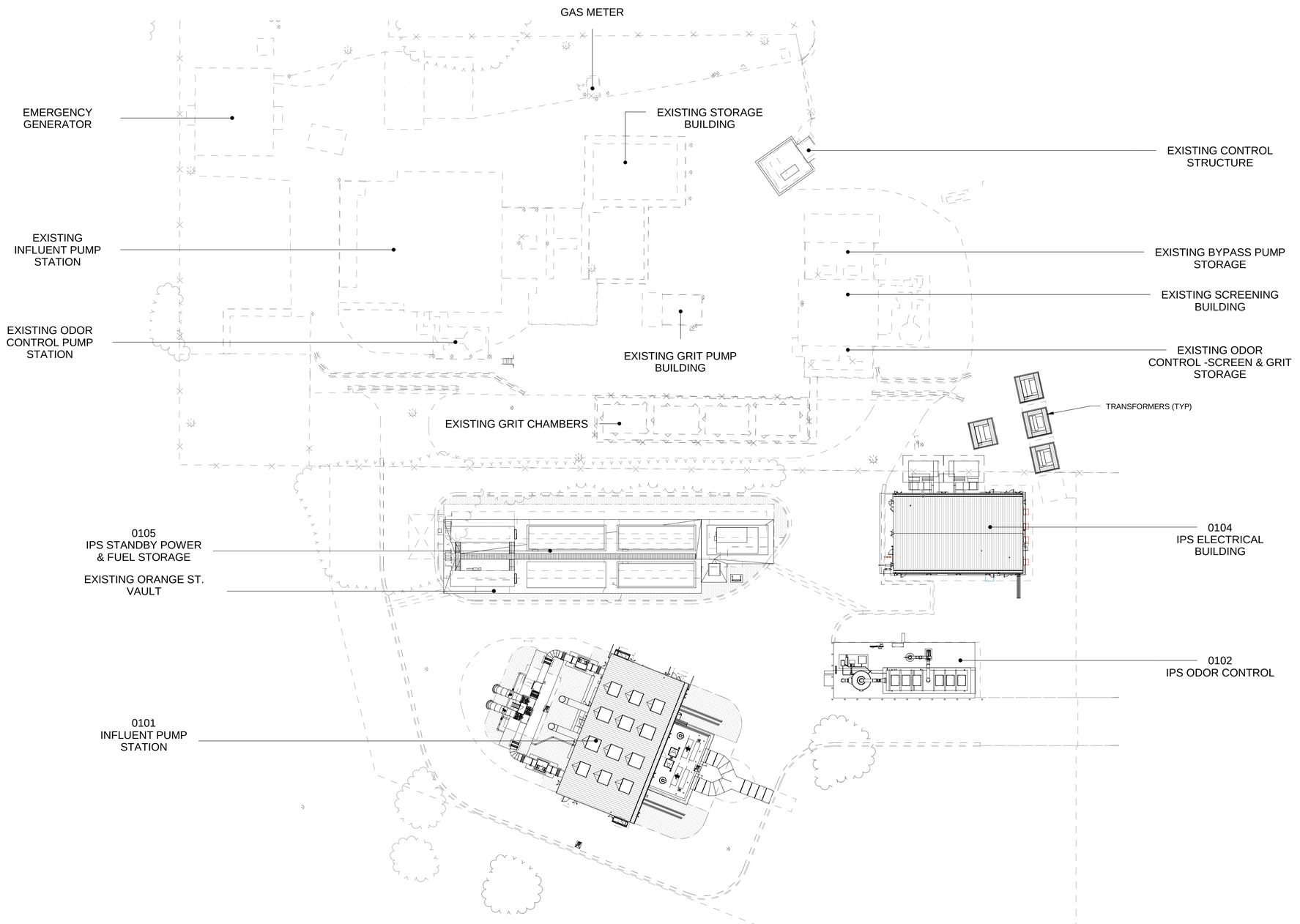


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SHEET _____ OF _____

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LOCATION PLAN

SCALE: 1" = 30'-0"

1. FOR STRUCTURES UPSTREAM OF THE IPS, SEE SITE PLANS.

SCALE: 1" = 30'-0"

PROJECT ADDRESS:
1365 W 2300 N,
SALT LAKE CITY, UT,
84116, UNITED STATES

DESIGNED BY: E.SMITH
DRAWN BY: E.SMITH
CHECKED BY: E.JACOBS
APPROVED BY: G.DAVIES
DATE: -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03 SW-1A ISSUED FOR BID	ES	JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

LOCATION PLAN

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

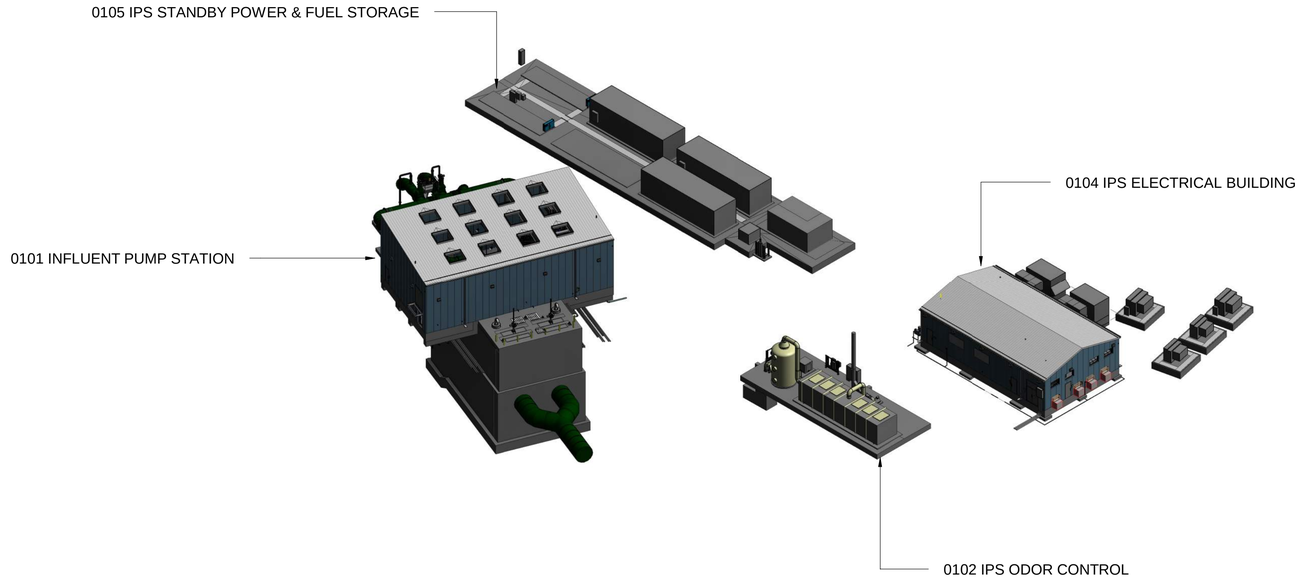
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0100-G101

SHEET _____ OF _____

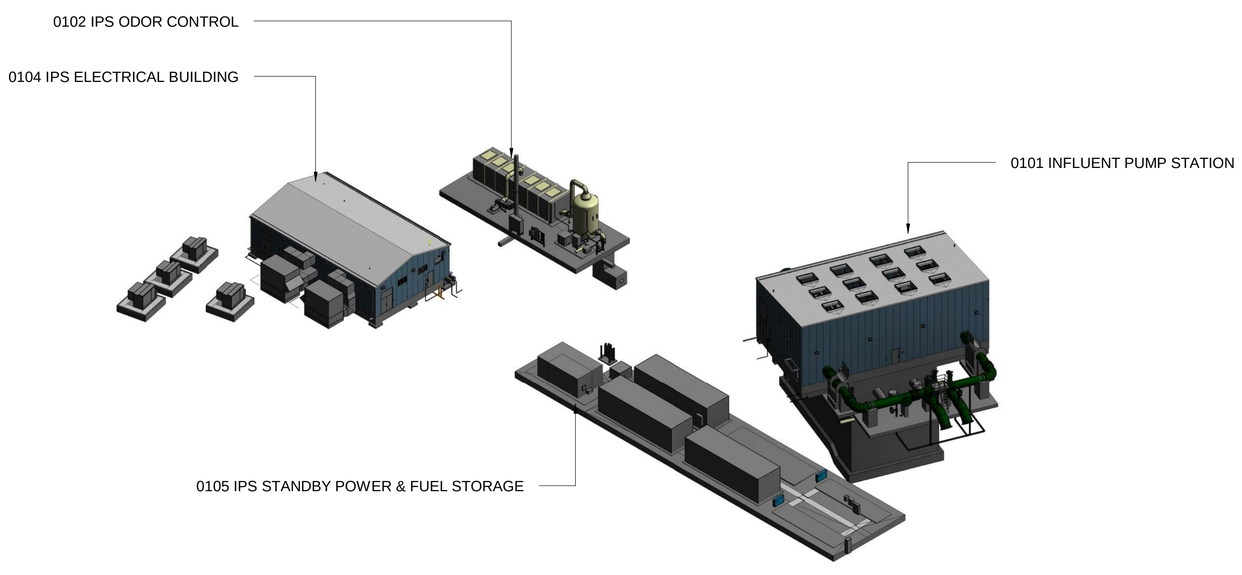
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LOOKING NW
NTS



LOOKING SE
NTS

DATE: 3/30/2023 6:23:50 AM

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SCALE:

PROJECT ADDRESS:
1365 W 2300 N,
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: E.SMITH
DRAWN BY: E.JACOBS
CHECKED BY: E.JACOBS
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 52490396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A: ISSUED FOR BID	ES	JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

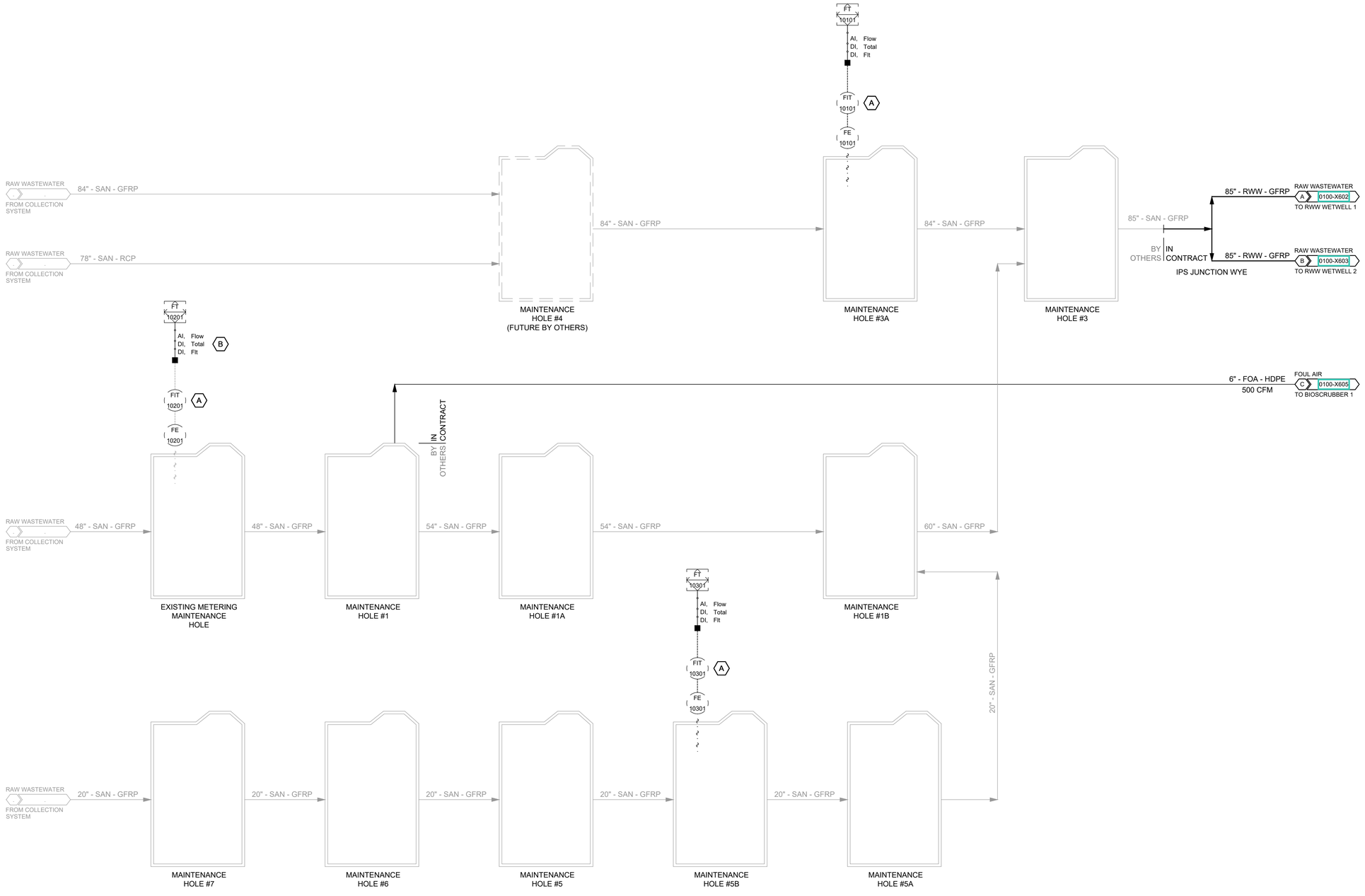
ISOMETRIC VIEWS

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-G901

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING



KEYNOTES

A. REFER TO CIVIL DRAWING 0100-C110 FOR INSTRUMENT LOCATION.

B. EXISTING FLOW METER. MIGRATE EXISTING SCADA TO NEW SCADA SYSTEM.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.DONEGAN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

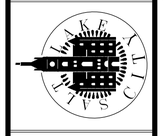
REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

RAW WASTEWATER COLLECTION P&ID



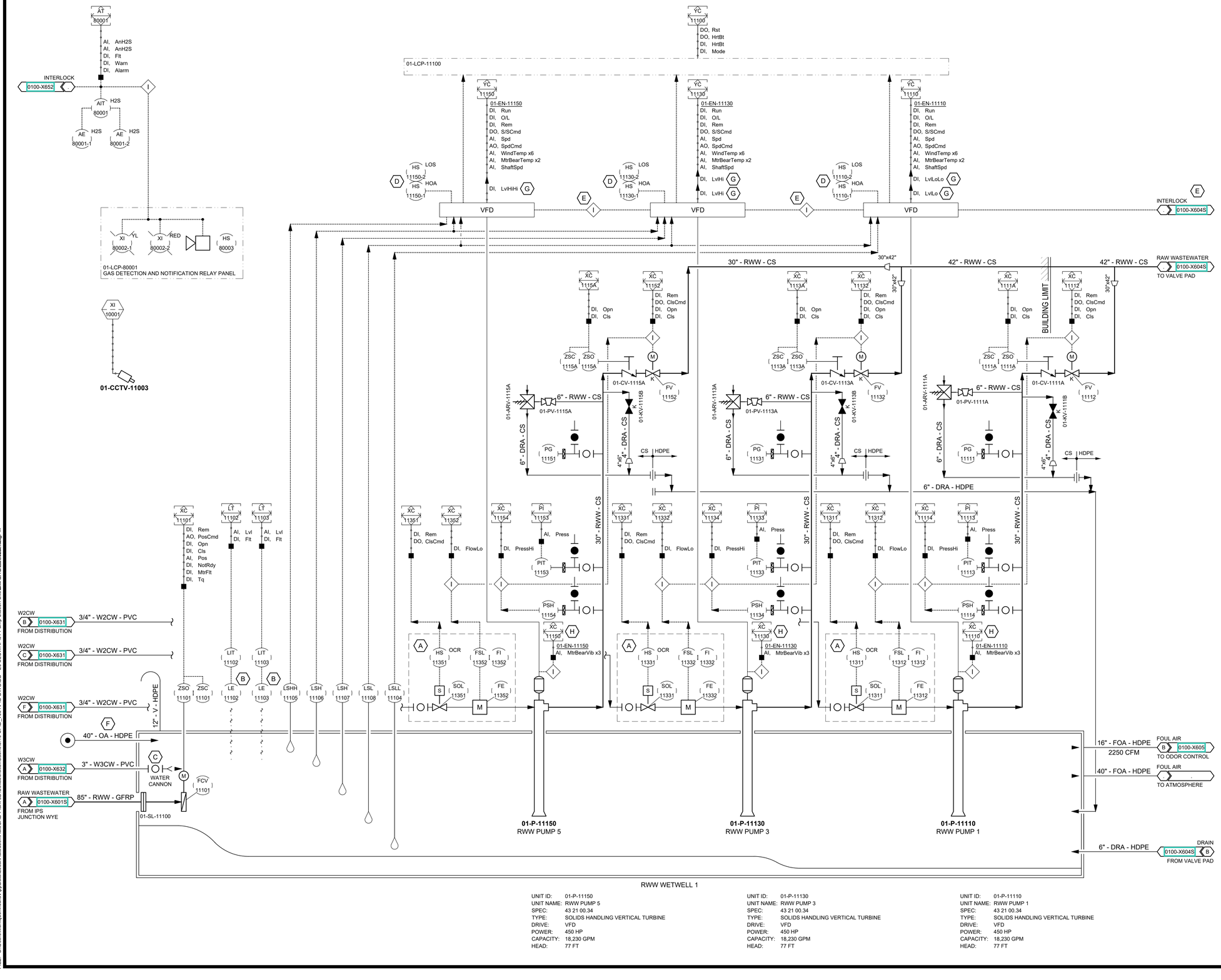


DRAWING No.
0100-X601S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\Monique.Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\CollaborationCache\8.10 SPID_v001\PID DWG\DD - 20 SLCWRF\01 Pump Station Site\0100-X601S.dwg 4/3/2023 1:29 PM



RWW WETWELL 1

UNIT ID:	01-P-11150	UNIT ID:	01-P-11130	UNIT ID:	01-P-11110
UNIT NAME:	RWW PUMP 5	UNIT NAME:	RWW PUMP 3	UNIT NAME:	RWW PUMP 1
SPEC:	43 21 00.34	SPEC:	43 21 00.34	SPEC:	43 21 00.34
TYPE:	SOLIDS HANDLING VERTICAL TURBINE	TYPE:	SOLIDS HANDLING VERTICAL TURBINE	TYPE:	SOLIDS HANDLING VERTICAL TURBINE
DRIVE:	VFD	DRIVE:	VFD	DRIVE:	VFD
POWER:	450 HP	POWER:	450 HP	POWER:	450 HP
CAPACITY:	18,230 GPM	CAPACITY:	18,230 GPM	CAPACITY:	18,230 GPM
HEAD:	77 FT	HEAD:	77 FT	HEAD:	77 FT

GENERAL NOTES

1. REFER TO PROCESS CONTROL DESCRIPTION IN SPECIFICATION 40 61 96 FOR FULL DESCRIPTION OF INTERLOCKS. IN CASE OF PLC FAILURE, PUMPS SHALL BE CAPABLE OF RUNNING IN STAGED FASHION INDEPENDENT OF PLC CONTROL.

KEYNOTES

A. SEAL WATER SYSTEM, SEE DETAIL DRAWING 0100-D705, D2262.

B. WETWELL ANALOG LEVEL TRANSMITTERS SHALL USE TWO DIFFERENT SENSOR TECHNOLOGIES; ONE SHALL USE RADAR SENSORS AND ONE SHALL USE ULTRASONIC SENSORS.

C. REFER TO DRAWING 0101-P101.

D. RWW PUMP HOA LOCATED ON ASSOCIATED VFD. REFER TO ELECTRICAL DRAWING 0104-E101 FOR INSTRUMENT LOCATION.

E. REFER TO PROCESS CONTROL NARRATIVE AND ILD-LCP.H.5A FOR FULL DESCRIPTION AND LOOP DIAGRAM OF INTERLOCK.

F. PENETRATION IS COVERED AND AIR TIGHT AND IS TO BE REMOVED FOR FORCED AIR CONNECTIONS PRIOR TO MANNED ENTRY INTO WETWELLS OR PUMP MAINTENANCE.

G. FLOAT IO SHALL BE HARDWIRED TO RESPECTIVE VFDs AND RELAYED TO THE PLC VIA ETHERNET. WHERE FLOAT SIGNAL IS SENT TO MULTIPLE PUMPS, ONLY THE LOWEST NUMBERED PUMP SHALL CONVEY FLOAT STATUS TO SCADA.

H. VIBRATION MONITORING SYSTEM SHALL BE PROVIDED BY PUMP SUPPLIER.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.DONEGAN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	MM	JD

SW-1A, ISSUED FOR BID
LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

RWW WETWELL 1
P&ID

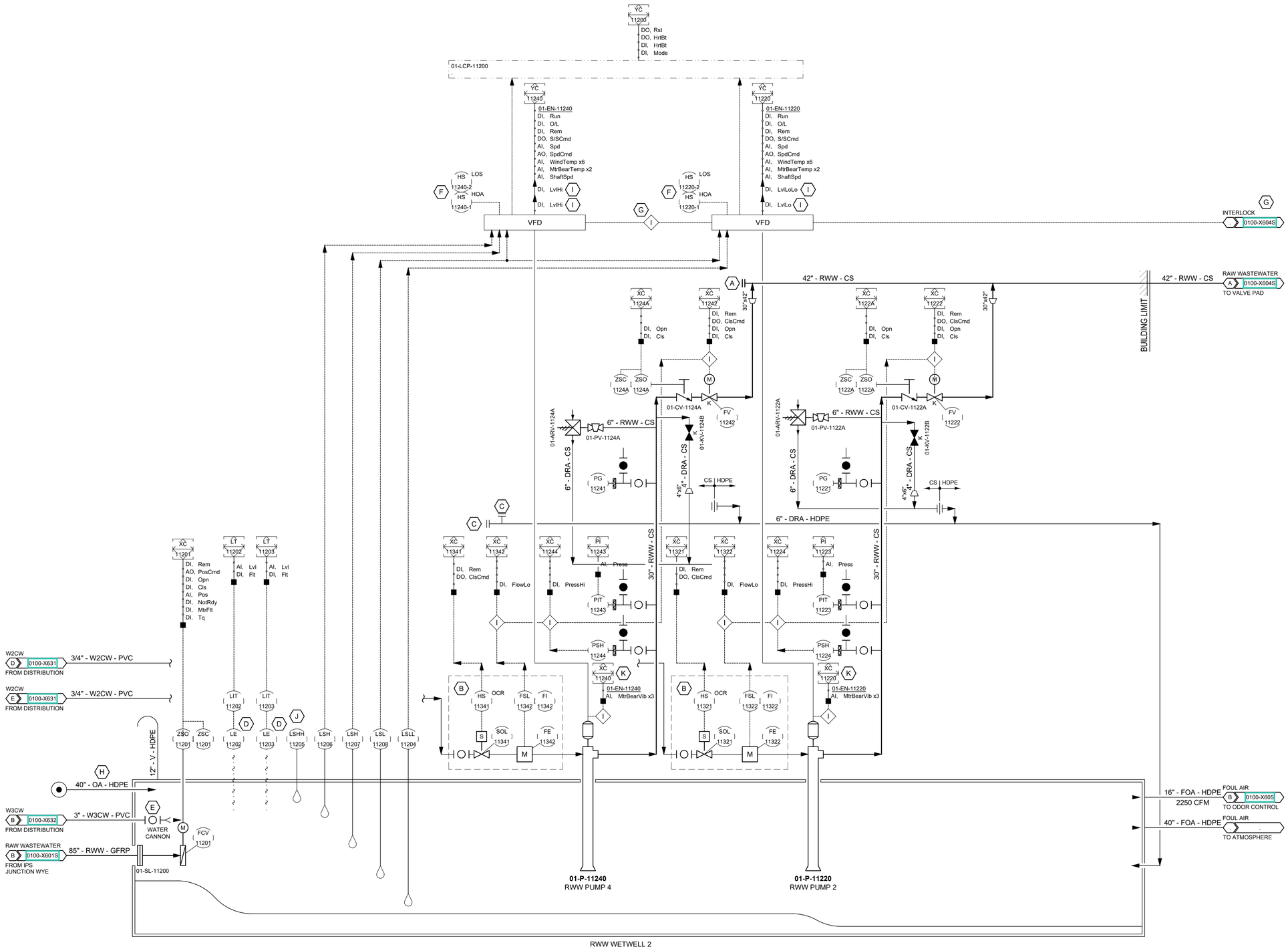
No. 12504923-2202
Grant Edward Davies
PROFESSIONAL ENGINEER
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X602

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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RWW WETWELL 2

UNIT ID:	01-P-11240	UNIT ID:	01-P-11220
UNIT NAME:	RWW PUMP 4	UNIT NAME:	RWW PUMP 2
SPEC:	43 21 00.34	SPEC:	43 21 00.34
TYPE:	SOLIDS HANDLING VERTICAL TURBINE	TYPE:	SOLIDS HANDLING VERTICAL TURBINE
DRIVE:	VFD	DRIVE:	
POWER:	450 HP	POWER:	450 HP
CAPACITY:	18,230 GPM	CAPACITY:	18,230 GPM
HEAD:	77 FT	HEAD:	77 FT

GENERAL NOTES

1. REFER TO PROCESS CONTROL DESCRIPTION IN SPECIFICATION 40 61 96 FOR FULL DESCRIPTION OF INTERLOCKS. IN CASE OF PLC FAILURE, PUMPS SHALL BE CAPABLE OF RUNNING IN STAGED FASHION INDEPENDENT OF PLC CONTROL.

KEYNOTES

A. BLIND FLANGE FOR FUTURE CONNECTION TO RWW PUMP 6.

B. SEAL WATER SYSTEM, SEE DETAIL DRAWING 0100-D705. D2262.

C. BLIND FLANGE FOR FUTURE DRAIN CONNECTION.

D. WETWELL ANALOG LEVEL TRANSMITTERS SHALL USE TWO DIFFERENT SENSOR TECHNOLOGIES; ONE SHALL USE RADAR SENSORS AND ONE SHALL USE ULTRASONIC SENSORS.

E. REFER TO DRAWING 0101-P101.

F. RWW PUMP HOA LOCATED ON ASSOCIATED VFD. REFER TO ELECTRICAL DRAWING 0104-E101 FOR INSTRUMENT LOCATION.

G. REFER TO PROCESS CONTROL NARRATIVE AND ILD-LCP.H.5A FOR FULL DESCRIPTION AND LOOP DIAGRAM OF INTERLOCK.

H. PENETRATION IS COVERED AND AIR TIGHT AND IS TO BE REMOVED FOR FORCED AIR CONNECTIONS PRIOR TO MANNED ENTRY INTO WETWELLS OR PUMP MAINTENANCE.

I. FLOAT IO SHALL BE HARDWIRED TO RESPECTIVE VFDs AND RELAYED TO THE PLC VIA ETHERNET. WHERE FLOAT SIGNAL IS SENT TO MULTIPLE PUMPS, ONLY THE LOWEST NUMBERED PUMP SHALL CONVEY FLOAT STATUS TO SCADA.

J. FLOAT TO BE TERMINATED IN ELECTRICAL ROOM IN PREPARATION FOR CONNECTION TO FUTURE PUMP 6. COORDINATE WITH ELECTRICAL DRAWINGS.

K. VIBRATION MONITORING SYSTEM SHALL BE PROVIDED BY PUMP SUPPLIER.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.DONEGAN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

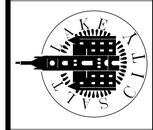
REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	MM	JD

LAST CONFORMED SET: SW-1A, ISSUED FOR BID

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

RWW WETWELL 2
P&ID



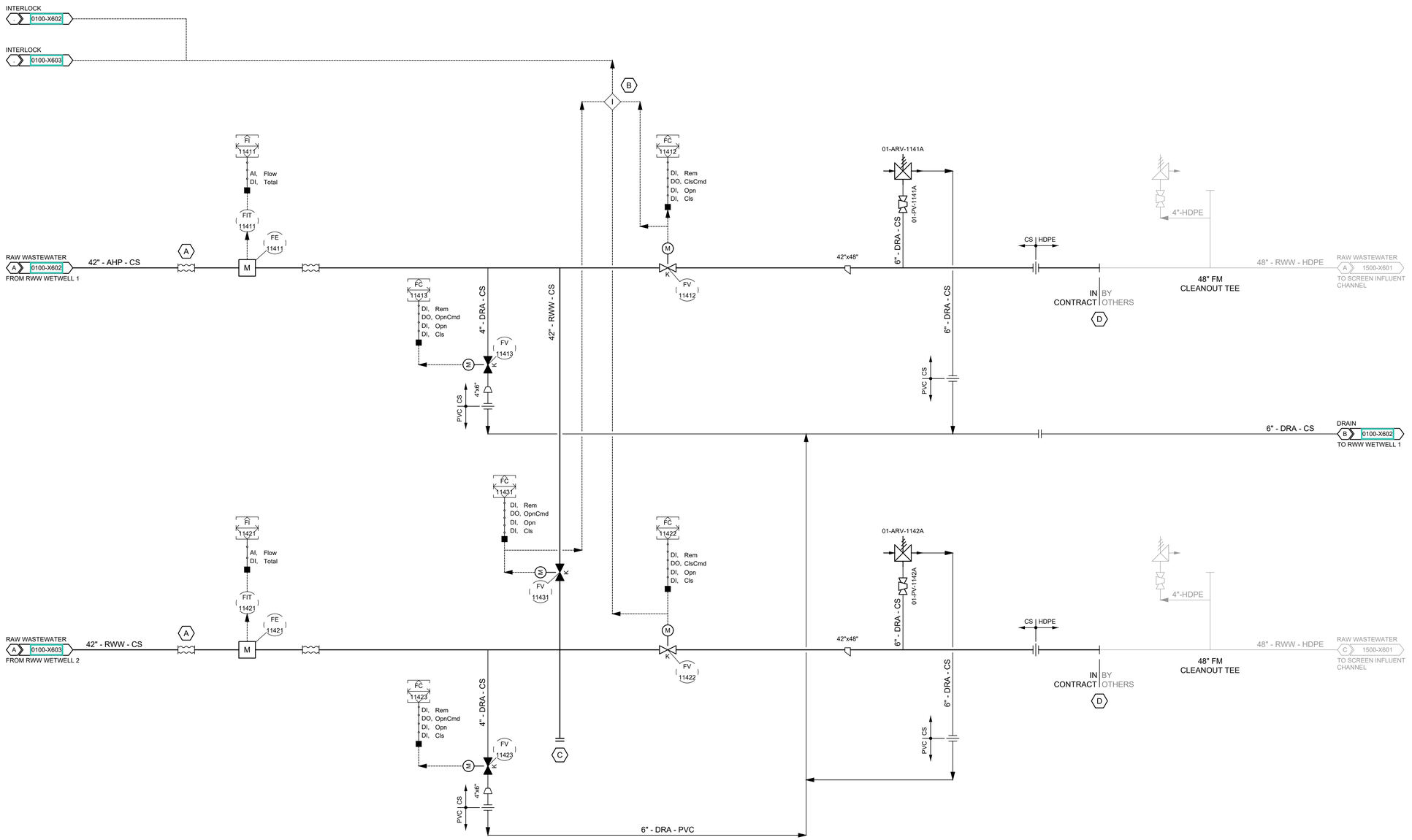


DRAWING No.
0100-X603

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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KEYNOTES

A. CONTRACTOR TO MAKE THIS CONNECTION LAST PRIOR TO REQUIRED TESTING.

B. VALVE INTERLOCK REQUIRED WHEN ON BACKUP POWER. REFER TO PROCESS CONTROL NARRATIVE AND ILD-LCP.H.5A FOR FULL DESCRIPTION AND LOOP DIAGRAM OF INTERLOCK.

C. BLIND FLANGE CONNECTION TO THIRD FORCEMAIN.

D. SEE CIVIL DRAWINGS FOR CONNECTION LOCATIONS.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.DONEGAN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	JD

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

VALVE PAD P&ID

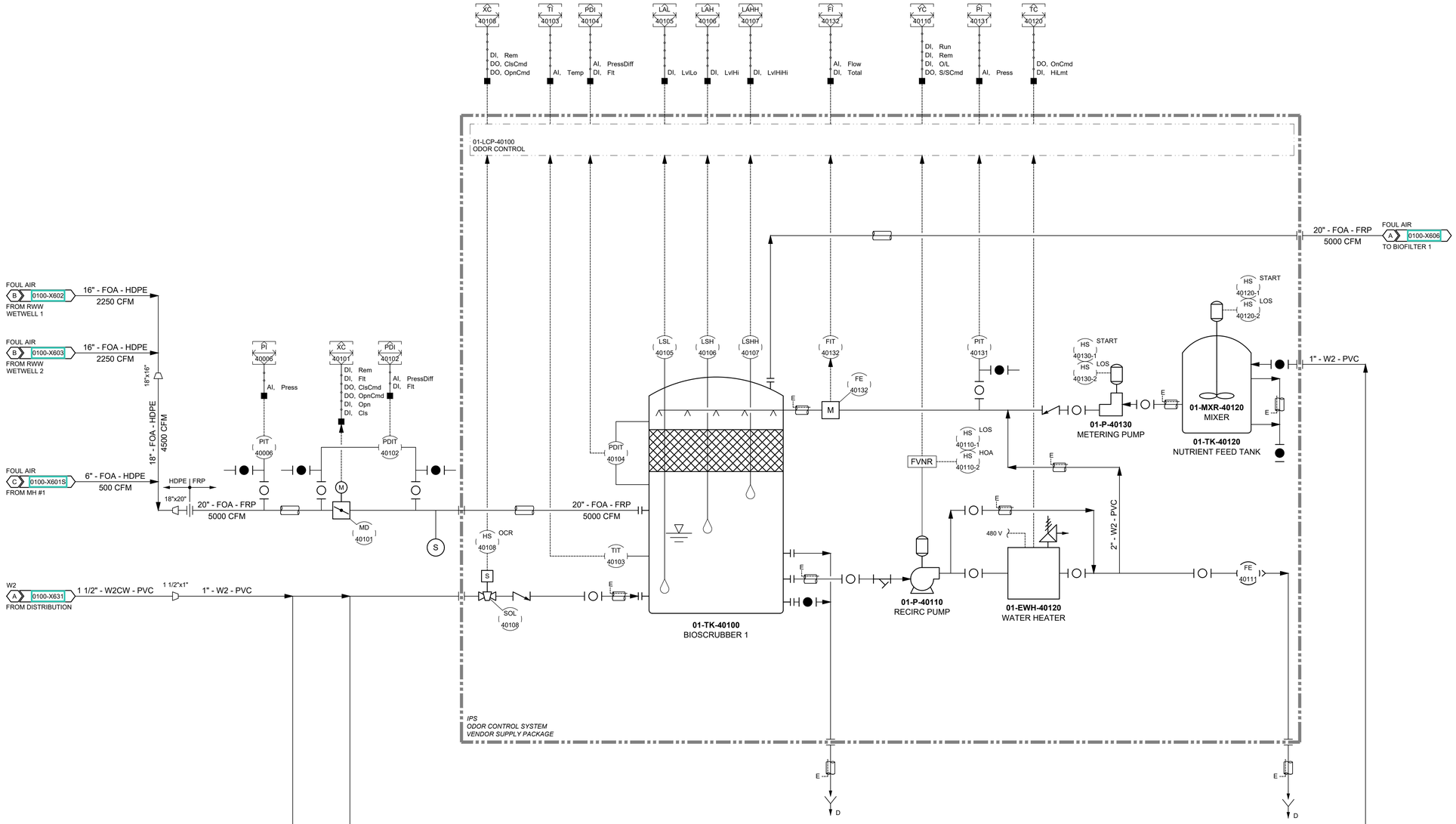
PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X604S

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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GENERAL NOTES

1. ALL EXPOSED ODOR CONTROL PROCESS WATER AND DRAIN PIPING SHALL BE HEAT TRACED AND INSULATED BY INSTALLATION CONTRACTOR.
2. THE FOUL AIR DUCTWORK AND WATER PIPING BETWEEN THE ODOR CONTROL SYSTEM VENDOR SUPPLIED EQUIPMENT SHALL BE PROVIDED BY INSTALLATION CONTRACTOR.
3. ALL FOUL AIR DUCTWORK, DAMPERS, AND EXPANSION JOINTS SHALL BE INSULATED BY THE INSTALLATION CONTRACTOR.

01-TK-40100
BIOSCRUBBER 1

UNIT ID: 01-TK-40100
UNIT NAME: BIOSCRUBBER 1
SPEC: 44 60 13
TYPE: FRP
FLUID: FOA
CAPACITY: 5000 CFM

01-P-40110
RECIRC PUMP

UNIT ID: 01-P-40110
UNIT NAME: RECIRC PUMP
SPEC: 44 60 13
TYPE: CENTRIFUGAL
DRIVE: FVNR
POWER: 5 HP
CAPACITY: 55 GPM
HEAD: 100 FT

01-EWH-40120
WATER HEATER

UNIT ID: 01-EWH-40120
UNIT NAME: WATER HEATER
SPEC: 44 60 13
POWER: 40 KW

01-P-40130
METERING PUMP

UNIT ID: 01-P-40130
UNIT NAME: METERING PUMP
SPEC: 44 60 13
TYPE: DOSING
DRIVE: DIRECT
POWER: 0.25 HP
CAPACITY: 0.0002 GPM
HEAD: 5 FT

01-TK-40120
NUTRIENT FEED TANK

UNIT ID: 01-TK-40120
UNIT NAME: NUTRIENT FEED TANK
SPEC: 44 60 13
TYPE: POLYETHYLENE
FLUID: NUTRIENT SOLUTION
CAPACITY: 100 GAL

01-MXR-40120
MIXER

UNIT ID: 01-MXR-40120
UNIT NAME: MIXER
SPEC: 44 60 13
TYPE: PROPELLER
DRIVE: DIRECT
POWER: 0.33 HP

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: T.BURGWIN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	ISW-1A, ISSUED FOR BID	MM	TB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE
BIOSCRUBBER
P&I D

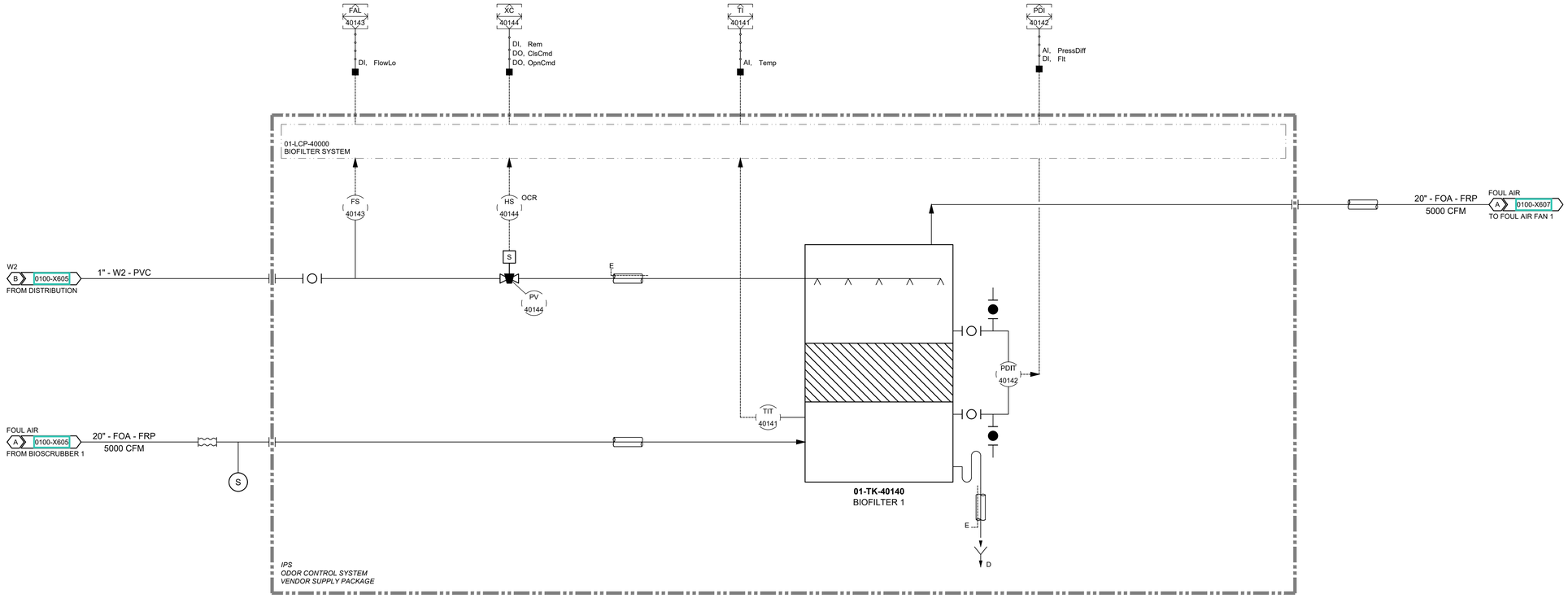
PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X605

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\Monique.Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\Collaboration\Cache\8.10 SPID_v001\PID DWG\DD - 20 SLCWRF\01 Pump Station Site\0100-X605.dwg 4/3/2023 3:03:28 PM



UNIT ID: 01-TK-40140
UNIT NAME: BIOFILTER 1
SPEC: 44 60 13
TYPE: SS316
FLUID: FOUL AIR
CAPACITY: 5000 CFM

GENERAL NOTES

1. ALL EXPOSED ODOR CONTROL PROCESS WATER AND DRAIN PIPING SHALL BE HEAT TRACED AND INSULATED BY INSTALLATION CONTRACTOR.
2. ALL FOUL AIR DUCTWORK, DAMPERS, AND EXPANSION JOINTS SHALL BE INSULATED BY THE INSTALLATION CONTRACTOR.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: T.BURGWIN
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

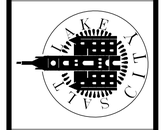
REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-IA, ISSUED FOR BID	MM / TB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

BIOFILTER 1
P&ID



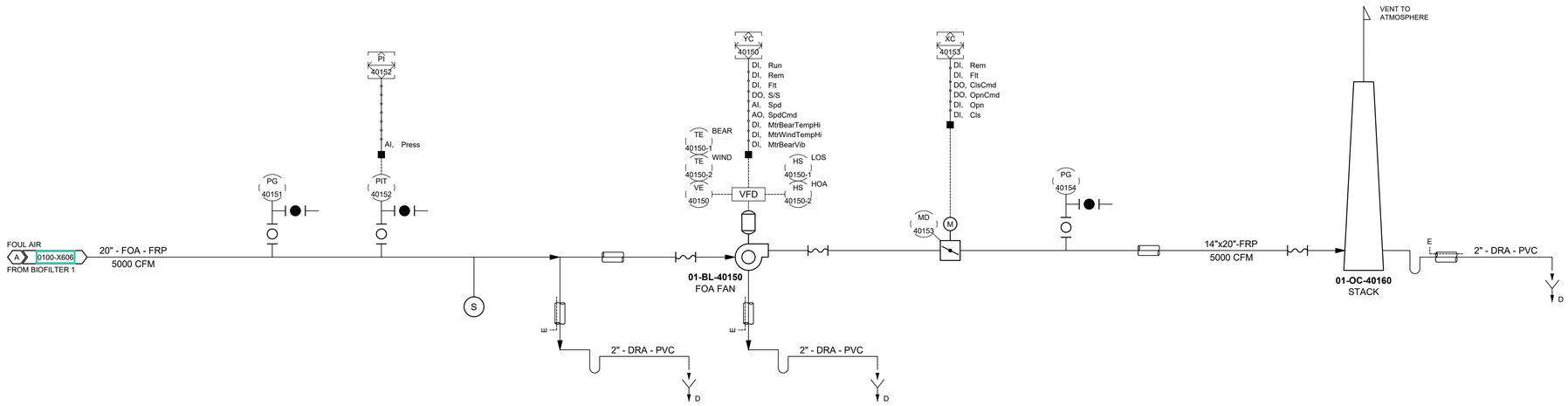


DRAWING No.
0100-X606

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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UNIT ID: 01-BL-40150
UNIT NAME: FOA FAN
SPEC: 44 60 15
TYPE: FRP CENTRIFUGAL
DRIVE: VFD
POWER: 20 HP
PRESSURE: 14 INCH H2O

GENERAL NOTES

1. ALL EXPOSED ODOR CONTROL PROCESS WATER AND DRAIN PIPING SHALL BE HEAT TRACED AND INSULATED BY INSTALLATION CONTRACTOR.
2. ALL FOUL AIR DUCTWORK, DAMPERS, AND EXPANSION JOINTS SHALL BE INSULATED BY THE INSTALLATION CONTRACTOR.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY:	T.BURGWIN
DRAWN BY:	M.MOURA
CHECKED BY:	R.KULCHAWIK
APPROVED BY:	G.DAVIES
DATE:	- - -
EWO NO.:	-
ACCOUNT NO.:	524905396

REVISIONS

NO.	DATE	MADE BY	AUTH. BY
A	23-04-03	SW-IA, ISSUED FOR BID	MM TB

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

FOUL AIR FAN P&ID

PROFESSIONAL ENGINEER
No. 12504923-2202
Grant Edward Davies
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X607

SHEET ____ OF ____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\Monique.Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\CollaborationCache\8.10 SPID_v001\PID DWG\D - 20 SLCWRF\01 Pump Station Site\0100-X607.dwg PM

UNIT ID: 01-TK-71010
UNIT NAME: W2 BREAK TANK
SPEC: 22.12.10
REF DWG #: 0101-P102

UNIT ID: 01-P-71010
UNIT NAME: W2 PUMP 1
SPEC: 22.11.23
REF DWG #: 0101-P102

UNIT ID: 01-P-71020
UNIT NAME: W2 PUMP 2
SPEC: 22.11.23
REF DWG #: 0101-P102

UNIT ID: 01-EWH-71010
UNIT NAME: WATER HEATER
SPEC: 22.34.00
REF DWG #: 0101-P102

KEYNOTES

A. BLIND FLANGE FOR FUTURE CONNECTION TO RWW PUMP 6.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.STEVENS
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	JS

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

W2CW & W2HW SYSTEMS P&ID

DRAWING No.
0100-X631

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\Monique.Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\Collaboration\Cache\8.10 SPID_v001PID DWG'DD - 20 SLCWRF\01 Pump Station Site\0101-P102.dwg 4/3/2023 1:34 PM

KEYNOTES

A. REFER TO PLUMBING DRAWING 0104-P101 FOR INSTRUMENT LOCATION.

W3CW
FROM SITE DISTRIBUTION
4" - W3CW - PVC
FI 71020
AI, Flow
DI, Total
FIT 71020
FE 71020
M
PG 71021
01-BFP-7102A
4" - W3CW - PVC
4"x3"
3" - W3CW - PVC
W3CW A 0100-X602
TO RWW WETWELL 1 WATER CANNON
3"x4"
3" - W3CW - PVC
W3CW B 0100-X603
TO RWW WETWELL 2 WATER CANNON
2 1/2" - W3CW - PVC
W3CW C 0100-X631

W1
FROM SITE DISTRIBUTION
1" - W1 - PVC
01-BFP-7104A
FI 71040
A
AI, Flow
DI, Total
FIT 71040
FE 71040
M
PG 71041
1" - W2CW - PVC
3/4"x1"
1" - W2CW - PVC
W2CW
TO WC-1
3/4" - W2CW - PVC
W2CW
TO HB
3/4" - W2CW - PVC
W2CW
TO LAV
3/4" - W2CW - PVC
480 V
1/2" - W2HW - PVC
W2HW
TO LAV
01-EWH-71020
WATER HEATER

W3
FROM SITE DISTRIBUTION
1 1/4" - W3 - PVC
01-BFP-7103A
FI 71030
A
AI, Flow
DI, Total
FIT 71030
FE 71030
M
PG 71031
1 1/4" - W3 - PVC
1 1/4"x3/4"
3/4" - W3 - PVC
W3
TO YH
1 1/4"x1"
1"x3/4"
1" - W3 - PVC
3/4" - W3 - PVC
W3
TO YH
1"x3/4"
3/4" - W3 - PVC
W3
TO YH
1"x3/4"
3/4" - W3 - PVC
W3
TO YH

UNIT ID: 01-EWH-71020
UNIT NAME: WATER HEATER
SPEC: 22 34 00
REF DWG #: 0101-P102

FILE: C:\Users\Monique Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\CollaboratorCache\8.10 SPID_v0011PID DWG\DD - 20 SLCWRF\01 Pump Station Site\0100-X632.dwg 4/3/2023 3:04 PM

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: J.STEVENS
DRAWN BY: M.MOURA
CHECKED BY: R.KULCHAWIK
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	JS

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

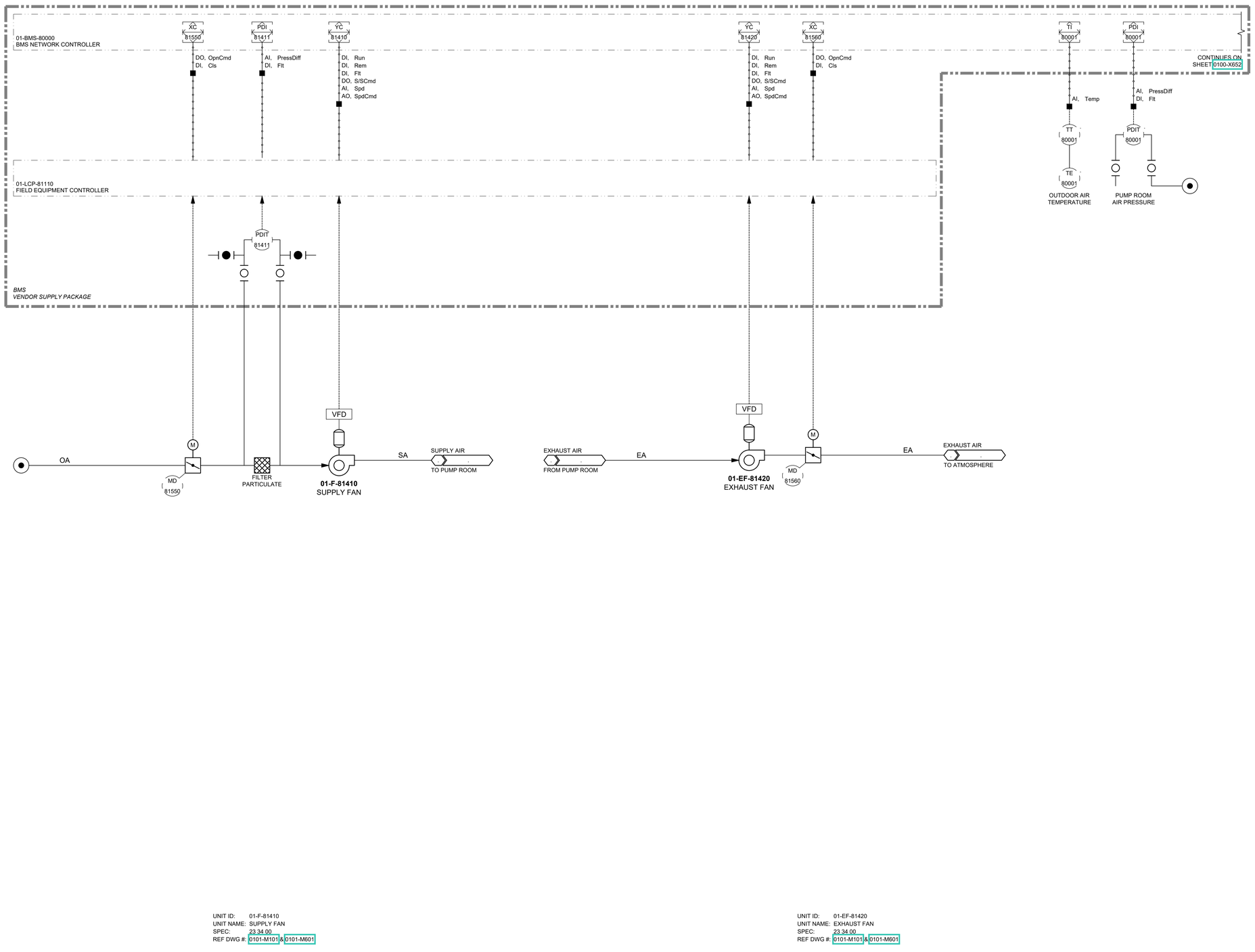
W3CW SYSTEM P&ID

PROFESSIONAL ENGINEER
No. 10849608
RYAN E. MEAD
STATE OF UTAH
04-03-2023

DRAWING No.
0100-X632

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING



UNIT ID: 01-F-81410
UNIT NAME: SUPPLY FAN
SPEC: 23 34 00
REF DWG #: 0101-M101 & 0101-M601

UNIT ID: 01-EF-81420
UNIT NAME: EXHAUST FAN
SPEC: 23 34 00
REF DWG #: 0101-M101 & 0101-M601

GENERAL NOTES

1. REFER TO DRAWING 0000-X650S, GENERAL BMS NETWORK P&ID, FOR SCADA POINTS REQUIRED TO INTERFACE WITH THE BMS NETWORK.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: B.WATSON
DRAWN BY: S.GALBICHKA
CHECKED BY: C.COURCHAINE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

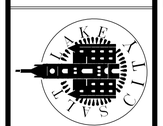
REVISIONS

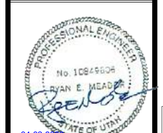
NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	BW

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

01-F-81410 & 01-EF-81420
CONTROL SCHEMATIC





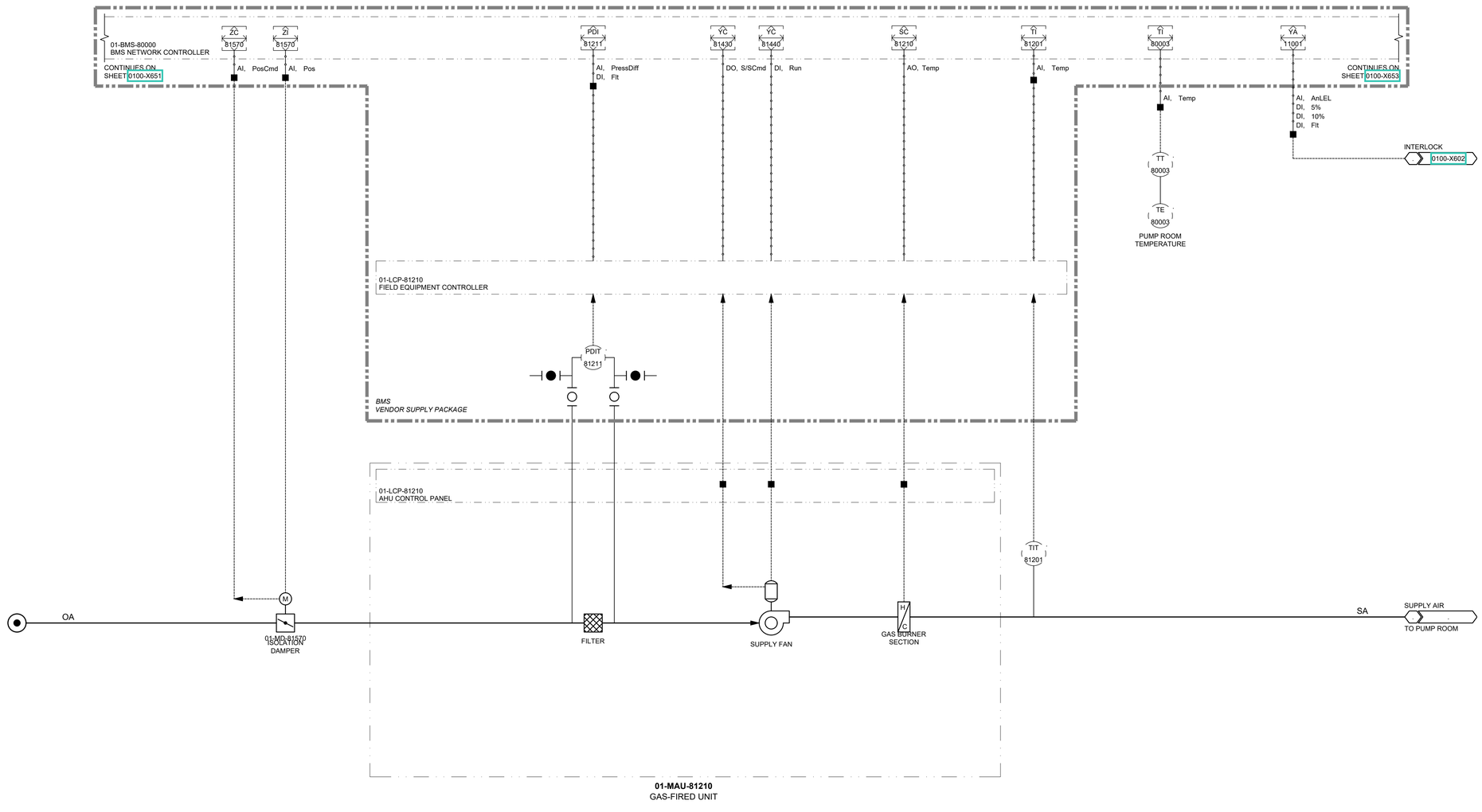
04-03-2023

DRAWING No.
0100-X651

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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UNIT ID: 01-MAU-81210
UNIT NAME: GAS-FIRED UNIT
SPEC: 23 73 33.16
REF DWG #: 0101-M101 & 0101-M601

GENERAL NOTES

1. REFER TO DRAWING 0000-X650S, GENERAL BMS NETWORK P&ID, FOR SCADA POINTS REQUIRED TO INTERFACE WITH THE BMS NETWORK.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: B.WATSON
DRAWN BY: S.GALBICHKA
CHECKED BY: C.COURCHAINE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

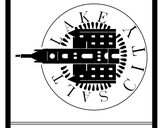
REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	BW

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

01-MAU-81210 CONTROL SCHEMATIC



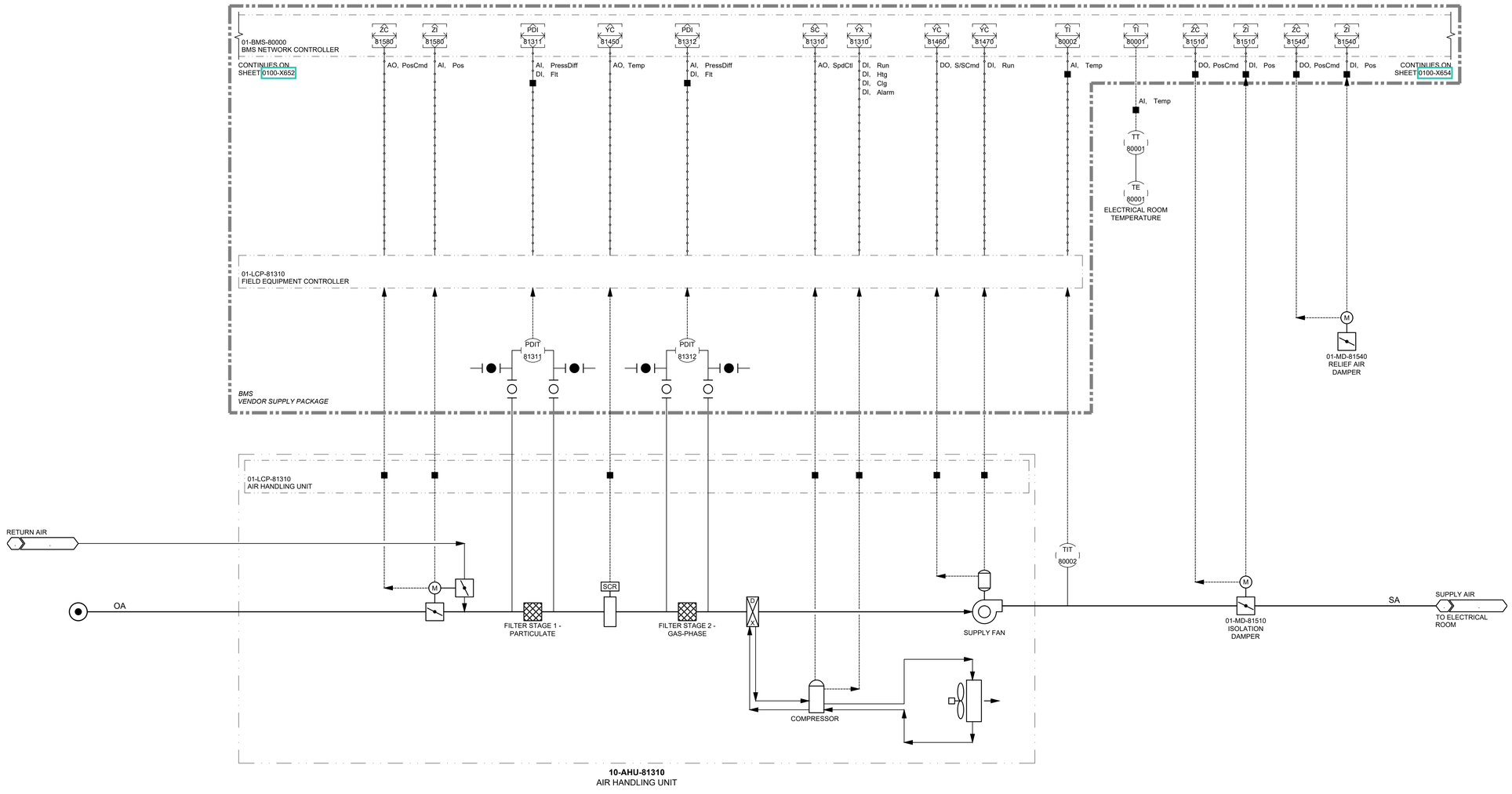


DRAWING No.
0100-X652

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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UNIT ID: 10-AHU-81310
UNIT NAME: AIR HANDLING UNIT
SPEC: 23 74 16.11
REF DWG #: 0104-M101 & 0104-M102

GENERAL NOTES

1. REFER TO DRAWING 0000-X650S, GENERAL BMS NETWORK P&ID, FOR SCADA POINTS REQUIRED TO INTERFACE WITH THE BMS NETWORK.

SCALE: NO SCALE

PROJECT ADDRESS:
1365 W 2300 N
SALT LAKE CITY, UT
84116, UNITED STATES

DESIGNED BY: B.WATSON
DRAWN BY: S.GALBICHKA
CHECKED BY: C.COURCHAINE
APPROVED BY: G.DAVIES
DATE: - - -
EWO NO.: -
ACCOUNT NO.: 524905396

REVISIONS

NO.	DATE		MADE BY	AUTH. BY
A	23-04-03	SW-1A, ISSUED FOR BID	MM	BW

LAST CONFORMED SET:

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER RECLAMATION FACILITY
PUMP STATION SITE

10-AHU-81310
CONTROL SCHEMATIC

04-03-2023

DRAWING No.
0100-X653

SHEET _____ OF _____

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

FILE: C:\Users\Monique Moura\AppData\Local\Autodesk\AutoCAD Plant 3D\CollaborationCache\8.10 SPID_v001\PID DWG\DD - 20 SLCWRF\01 Pump Station Site\0100-X653.dwg 4/3/2023 1:04:27 PM