SITES RESERVOIR

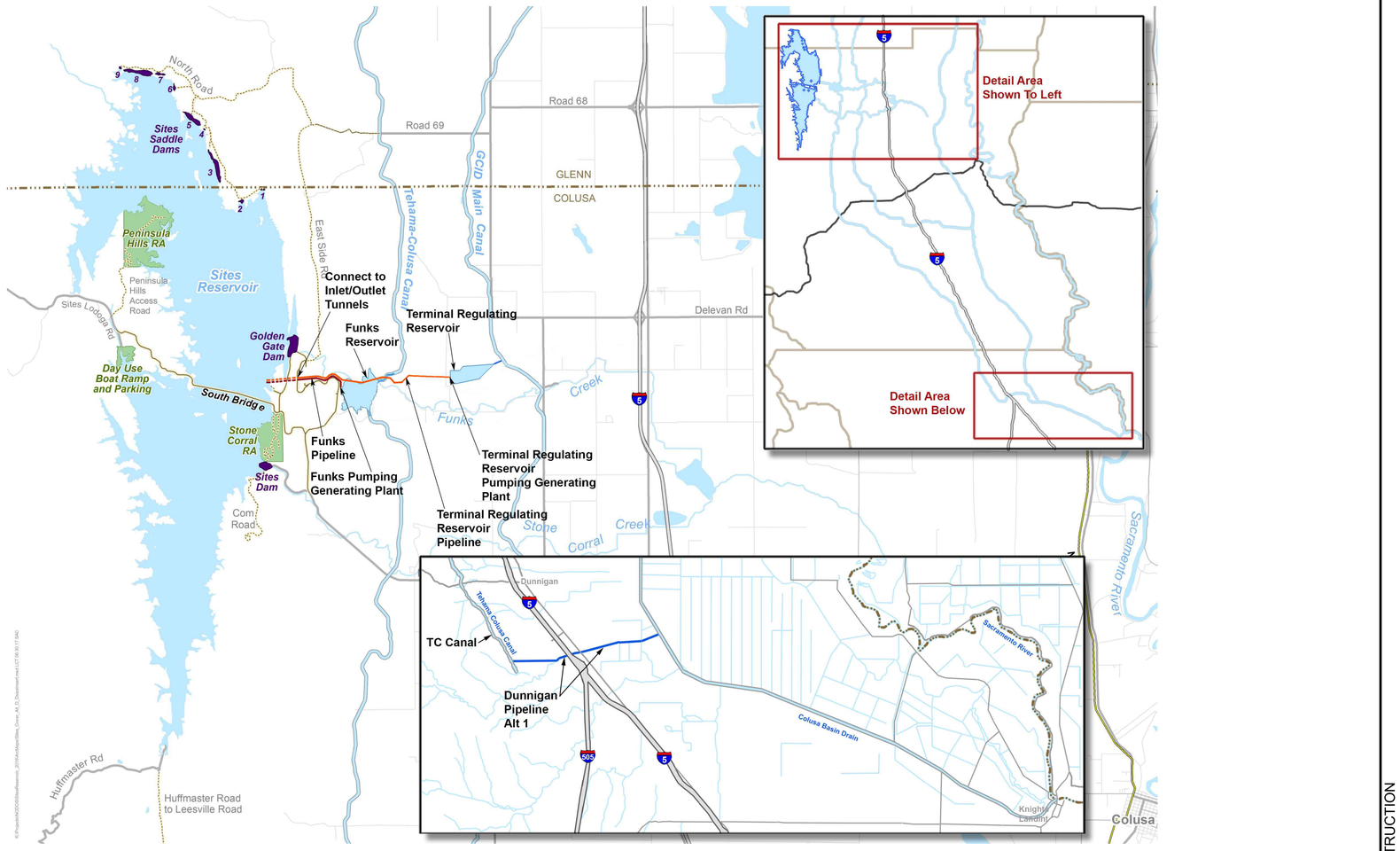
MAXWELL / SITES PUMPING AND GENERATING PROJECT

FUNKS RESERVOIR

30% DESIGN - CLIENT REVIEW

DECEMBER 19, 2023

PROJECT LOCATION MAP



OVERALL PROJECT SITE MAP - DUNNIGAN PIPELINE NOT INCLUDED IN THIS PACKAGE

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: D. CAVE
DRAWN BY: D. CAVE
CHECKED BY: W. OHLIN
IN CHARGE: P. RUDE
DATE: 12-19-2023

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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
GENERAL
COVER SHEET,
LOCATION MAP AND SITE MAP

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0001
SHT 1 OF 20

Plot Date: 12/18/2023 4:24 PM
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File: C:\pw\working\hdr_sites_reservoir\dms02763\MPG-0001-G-0001_FNK_RES.dwg

PRELIMINARY - NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

SHEET NUMBER	DRAWING NUMBER	TITLE
1	MPG-0001-G-0001	COVER SHEET, LOCATION MAP AND SITE MAP
2	MPG-0001-G-0002	INDEX OF DRAWINGS
3	MPG-0001-G-0010	ABBREVIATIONS
4	MPG-0001-G-0020	GENERAL SYMBOLS AND DRAWING NUMBERING LEGEND
5	MPG-0001-G-0101	GENERAL CIVIL LEGEND
6	MPG-0001-G-0301	GENERAL STRUCTURAL NOTES 1
7	MPG-0001-G-0302	GENERAL STRUCTURAL NOTES 2
8	MPG-0045-C-2001	OVERALL LOCATION AND SURVEY CONTROL PLAN
9	MPG-2115-C-2101	FUNKS RESERVOIR - STOCKPILE AND HAUL ROUTE - PLAN
10	MPG-2115-C-2102	FUNKS RESERVOIR - RESERVOIR EXCAVATION STOCKPILES AND IMPOUNDMENT - PLAN
11	MPG-2115-C-2103	FUNKS RESERVOIR - WEST EXCAVATION - PLAN
12	MPG-2115-C-2104	FUNKS RESERVOIR - EAST EXCAVATION - PLAN
13	MPG-2115-C-2105	FUNKS RESERVOIR - PGP COFFERDAM - PLAN AND PROFILE
14	MPG-2115-C-2106	FUNKS RESERVOIR - PGP APPROACH CHANNEL - PLAN
15	MPG-2115-C-2107	FUNKS RESERVOIR - PGP COFFERDAM - SECTION AND DETAILS
16	MPG-2115-C-2108	FUNKS RESERVOIR - RESERVOIR EXCAVATION - PROFILES
17	MPG-2115-C-2109	FUNKS RESERVOIR - PGP APPROACH CHANNEL - PROFILES
18	MPG-2115-C-3410	FUNKS RESERVOIR - PGP APPROACH CHANNEL - DETAILS
19	MPG-2115-C-3411	FUNKS RESERVOIR - SEDIMENT IMPOUNDMENT - PLAN AND PROFILE
20	MPG-2115-C-3412	FUNKS RESERVOIR - SEDIMENT IMPOUNDMENT BERM - PROFILE AND DETAILS

Plot Date: 12/5/2023 8:44 PM
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File: C:\pwworking\hdr_sites_reservoir\dms02763\MPG-0001-G-0002_FNK_RES.dwg

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: S. KHALAMYZER
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MAXWELL / SITES PUMPING AND GENERATING
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FUNKS RESERVOIR
INDEX OF DRAWINGS

VERIFY SCALES
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0 1"

DRAWING NO.
MPG-0001-G-0002
SHT 2 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

@	AT
L	ANGLE
A/C	AIR CONDITIONING
A/C UNIT	AIR CONDITIONING UNIT
AB	ANCHOR BOLT, AGGREGATE BASE
ABUT	ABUTMENT
ABV	ABOVE
AC	ALTERNATING CURRENT, ASPHALT CONCRETE BASE
ACC	ACCESSIBLE
ACI	AMERICAN CONCRETE INSTITUTE
ACR	ACRYLIC PLASTIC
ACS DR	ACCESS DOOR
ACS PNL	ACCESS PANEL
ACSR	ALUMINUM CABLE STEEL REINFORCED
ACST	ACOUSTIC
ACT	ACOUSTICAL CEILING TILE
ADDM	ADDENDUM
ADH	ADHESIVE
ADJ	ADJACENT, ADJOINING, ADJUSTABLE, ADJUST
ADO	AUTOMATIC DOOR OPERATOR
AFF	ABOVE FINISHED FLOOR
AGGR	AGGREGATE
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AI	AREA INLET
AIC	AMPERE INTERRUPTING CAPACITY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
A.L.	ACTIVE LEAF
ALT	ALTERNATE
ALUM	ALUMINUM
AMB	AMBIENT
AMP	AMPERE
ANOD	ANODIZE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPD	APPROVED
APPROX	APPROXIMATE
ARCH	ARCHITECT
ARFCD	AMERICAN RIVER FLOOD CONTROL DISTRICT
ARI	AMERICAN REFRIGERATION INSTITUTE
ARN	ARCADE CREEK NORTH
ARS	ARCADE CREEK SOUTH
ARV	AIR RELEASE VALVE
ASB	ASBESTOS
ASC	ABOVE SUSPENDED CEILING
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATC	ACOUSTICAL TILE CEILING
AUTO	AUTOMATIC
AVE	AVENUE
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
AWT	ACOUSTICAL WALL TREATMENT
BB	BEGINNING OF BRIDGE, BULLETIN BOARD
B-B	BACK-TO-BACK
BC	BEGIN HORIZONTAL CURVE, BOOKCASE
BD	BOARD
BDRY	BOUNDARY
BEG	BEGIN
BEJ	BRICK EXPANSION JOINT
BEV	BEVEL
BFV	BUTTERFLY VALVE
BITUM	BITUMINOUS
BJT	BED JOINT
BK	BACK
BKF	BACKFILL
BL	BUILDING LINE
BLDG	BUILDING
BLKT	BLANKET
BLVD	BOULEVARD
BLW	BELOW
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BO	BOTTOM OF
BOT	BOTTOM
BP	BEGINNING POINT, BACK PLASTER(ED)
BR	BRIDGE
BRCG	BRACING
BRDG	BRIDGING
BRG	BEARING
BRG PL	BEARING PLATE
BRK	BRICK
BRKT	BRACKET
BRZ	BRONZE
BS	BOTH SIDES
BSMT	BASEMENT
Btu	BRITISH THERMAL UNIT
BtuH	BTU PER HOUR
BTWN	BETWEEN
BV	BALL VALVE
BUR	BUILT-UP ROOFING
BVC	BEGIN VERTICAL CURVE
BW	BOTH WAYS, BARBED WIRE
CAB	CABINET
CAP	CAPACITY
CARV	COMBINATION AIR RELEASE VALVE
CB	CATCH BASIN, CEMENT BENTONITE
CBD	COLUSA BASIN DRAIN
C-C	CENTER-TO-CENTER
CCS	CALIFORNIA COORDINATE SYSTEM
CCT	CUBICLE CURTAIN TRACK
CCTV	CLOSED CIRCUIT TELEVISION
CE	COVER ELEVATION
CEM	CEMENT
CEM PLAS	CEMENT PLASTER
CER	CERAMIC
CFDM	COFFER DAM
CFI	CONDUCTIVE FLOORING
CFLG	COUNTERFLASHING
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CG	CORNER GUARD
CH BD	CHALKBOARD
CHFR	CHAMFER
CHIM	CHIMNEY
CHK	CHECK
CHNL	CHANNEL
CHR PL	CHROME PLATED
CI	CAST IRON, CURB INLET
CIP	CAST-IN-PLACE
CIRC	CIRCULAR
CJ	CONTROL JOINT
CJ	CONSTRUCTION JOINT
CKT	CIRCUIT
CKT BRKR	CIRCUIT BREAKER
CL	CONTROL LINE
	CENTER LINE
CL-6	CHAIN LINK FENCE (6 FT)
CLG	CEILING
CLG HT	CEILING HEIGHT
CLGL	CLEAR GLASS
CLL	CONTRACT LIMIT LINE
CLO	CLOSET
CLOS	CLOSURE
CLR	CLEAR, CLEARANCE
CLS	CLASS
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLWG	CLEAR WIRED GLASS
cm	CENTIMETER(S)
CM	CORRUGATED METAL
CMP	CORRUGATED METAL PIPE
CMPST	COMPOSITE
CMU	CONCRETE MASONRY UNIT
CND	CONDUIT
CNL	CONDUCTIVE NEOPRENE LATEX
CNR	CORNER
CNTR	COUNTER
CO	COUNTY, CLEANOUT
CO2	CARBON DIOXIDE
COL	COLUMN
COM	COMMON
COMB	COMBINED, COMBUSTION
COMPT	COMPARTMENT
CONC	CONCRETE
COND	CONDUIT
CONN	CONNECT
CONSTR	CONSTRUCTION
CONT	CONTINUE
CONTR	CONTRACTOR
CONV	CONVENTIONAL
COORD	COORDINATE
CORR	CORRIDOR
COV	COVER
CPRS	COMPRESSIBLE
CP	CATCH POINT
CPT	CONE PENETRATION TEXT, CARPET
CR	CREEK
CRCMF	CIRCUMFERENCE
CRES	CORROSIVE RESISTANT STEEL
CRG	CROSS GRAIN
CRS	COURSE(S)
CS	CAST STONE
CSK	COUNTERSUNK
CSMT	CASEMENT
CT	COURT, CERAMIC TILE, CURRENT TRANSFORMER
C TO C	CENTER TO CENTER
CTR	CENTER
CU	CONDENSING UNIT
Cu	COPPER
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CU YD	CUBIC YARDS
CUFPB	CENTRAL VALLEY FLOOD PROTECTION BOARD
CULV	CULVERT
CV	CEILING VENT
CVH	CONDUCTIVE VINYL HOMOGENEOUS (SHEET TYPE)
CVHS	CENTRAL VALLEY HYDROLOGY STUDY
CW	COLD WATER
CYL	CYLINDER
D	DEPTH
d	PENNY (AS IN NAIL - 10D)
D.O.T.	DEPARTMENT OF TRANSPORTATION
DAT	DATUM
DB	DRY BULB
DBL	DOUBLE
DBL ACT DR	DOUBLE ACTING DOOR
DCJ	DOWELED CONTROL JOINT
DCJT	DUMMY CONTROL JOINT
DEG	DEGREE
DEMO	DEMOLITION
DEPR	DEPRESSION
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DH	DUCT HEATER
DI	DRAINAGE INLET, DROP INLET
DIA, Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DISC	DISCONNECT
DISP	DISPENSER
DIST	DISTANCE
DISTR PNL	DISTRIBUTION PANEL
DIV	DIVISION
DL	DEAD LOAD
DMPF	DAMPPROOFING
DMPR	DAMPER
DMT	DEMOUNTABLE
DN	DOWN
DNP	DUNNIGAN PIPELINE
DR	DOOR, DRAIN, DRIVE
DRB	DRAINBOARD
DR CL	DOOR CLOSER
DS	DOWNSTREAM, DOWNSPOUT, DOUBLE STRENGTH (GLASS)
DSM	DEEP SOIL MIX
DTL	DETAIL
DT	DRAIN TILE
DVTL	DOVETAIL
DWG	DRAWING
DWLS	DOWELS
DWR	DEPARTMENT OF WATER RESOURCES, DRAWER
DX	DIRECT EXPANSION
DWY	DRIVEWAY
E	EAST, EASTING
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EB	END OF BRIDGE
EC	END HORIZONTAL CURVE
ECR	END CURB RETURN
EF, E.F.	EACH FACE
EG	EXISTING GRADE
EJ	EXPANSION JOINT
EL	ELEVATION - GRADE OR BUILDING
ELECT	ELECTRIC
ELEV, EL	ELEVATION
ELV	ELECTRIC VAULT
EM	EXPANDED METAL
EMB	EMBANKMENT
EMD	ESTIMATED MAXIMUM DEMAND
EMER	EMERGENCY
ENCL	ENCLOSE(URE)
ENGR	ENGINEER
ENTR	ENTRANCE, ENTERING
EOD	EDGE OF DECK
EP	END POINT, ELECTRICAL PANELBOARD
EPRF	EXPLOSION PROOF
EPY	EPOXY COATING
ESA	ENVIRONMENTALLY SENSITIVE AREA
EQ	EQUAL
EQUIP	EQUIPMENT
ESCAL	ESCALATOR
EST	ESTIMATE(D)
EVC	END VERTICAL CURVE
E.W.	EACH WAY
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXC	EXCAVATE, EXCAVATION
EXH	EXHAUST
EXH A	EXHAUST AIR
EXST, (E)	EXISTING
EXP	EXPANSION
EXP	EXPOSED
EXP BT	EXPANSION BOLT
EXT	EXTERIOR
F	FAHRENHEIT
FA	FIRE ALARM
FA	FRESH AIR
FAC	FIRE APPARATUS CLOSET
FAI	FRESH AIR INTAKE
F BRK	FIRE BRICK
FC	FOOT CANDLE
FC BRK	FACE BRICK
FCG	FACING
FCJ	FLOOR CONSTRUCTION JOINT
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDMPR	FIRE DAMPER
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEB	FIRE EXTINGUISHER BRACKET
FEC	FIRE EXTINGUISHER CABINET
FF	FACTORY FINISH
FF EL	FINISH FLOOR ELEAVATION
FG	FINISHED GRADE
FGL	FIBERGLASS
FH	FIRE HYDRANT
FH	FLAT HEAD
FHC	FIRE HOSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FHR	FIRE HOSE RACK
FHS	FIRE HOSE STATION
FHWS	FLAT HEAD WOOD SCREW
FIG	FIGURE
FIN	FINISH
FIN FLR	FINISH FLOOR
FIXT	FIXTURE
FJT	FLUSH JOINT
FL	FLOW LINE
FLASH	FLASHING
FLR	FLOOR
FLEX	FLEXIBLE
FLG	FLOORING
FLR PL	FLOOR PLATE
FLUOR	FLUORESCENT
FN	FENCE
FNK	FUNKS
FO	FIBER OPTIC
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FIRE PARTITION
FP	FIREPROOF
FPM	FEET PER MINUTE
FR	FIRE RESISTANT
FR	FRAME
FRG	FORGED
FRMG	FRAMING
FRT	FIRE-RETARDANT
FS	FULL SIZE
FSTNR	FASTEN(ER)
FT	FEET, FOOT
FTG	FOOTING
FURG	FURRING
FUT	FUTURE
FW	FIRE WATER
FWC	FABRIC WALL COVERING
G	NATURAL GAS
GA	GAGE
GAL	GALLON(S)
GALV	GALVANIZED
GALV STL	GALVANIZED STEEL
GB	GRADE BREAK, GRAB BAR
GC	GENERAL CONTRACTOR
GCID	GLENN-COLUSA IRRIGATION DISTRICT
GEN	GENERAL
GF	GROUND FACE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFE	GOVERNMENT-FURNISHED EQUIPMENT
GFE/CI	GOVERNMENT-FURNISHED EQUIPMENT CONTRACTOR INSTALLED
GG	GOLDEN GATE DAM
GI	GALVANIZED IRON
GIP	GALVANIZED IRON PIPE
GKT	GASKET(ED)
GL	GLASS
GL BLK	GLASS BLOCK
GLF	GLASS FIBER
GLZ	GLAZING
GLZ CMU	GLAZED CONCRETE MASONRY UNITS
GND	GROUND
GOVT	GOVERNMENT
GPM	GALLONS PER MINUTE
GPT	GYPSUM TILE
GRAN	GRANITE
GR LN	GRADE LINE
GRTG	GRATING
GST	GLAZED STRUCTURAL TILE
GSU	GLAZED STRUCTURAL UNITS
GT	GROUT
GWT	GLAZED WALL TILE
GYP	GYPSUM
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	HEIGHT
HB	HOSE BIBB
HC	HOLLOW CORE
HCD	HALON CONTAINMENT DAMPER
HCP	HANDICAPPED
HD	HEAD
HD	HEAVY DUTY
HDBD	HARDBOARD
HD JT	HEAD JOINT
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HES	HIGH EARLY-STRENGTH CEMENT
HEX	HEXAGON
HH	HANDHOLE
HK	HOOK(S)
HM	HOLLOW METAL
HNDRL	HANDRAIL
HORIZ, HOR	HORIZONTAL
HP	HINGE POINT, HIGH PRESSURE, HORSEPOWER
HPT	HIGH POINT
HPU	HYDRAULIC POWER UNIT
HR	HOUR
HS	HIGH STRENGTH
HSGYP	HIGH-STRENGTH GYPSUM PLASTER
HSKPG	HOUSEKEEPING
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HEADWALL, HIGH WATER
HWM	HIGH WATER MARK
HWY	HIGHWAY
HYDR	HYDRAULIC
Hz	HERTZ
I-80	INTERSTATE 80
IB	IMPORTED BORROW
IC	INTERCOM
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IESNA	ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA
ILK	INTERLOCK
IN	INCH, INCHES
INCIN	INCINERATOR
INCL	INCLUDED
INSF	INSULATING FILL
INSUL	INSULATION
INT	INTERIOR
INTM	INTERMEDIATE
INV	INVERT
I/O	INLET/OUTLET
IP	IRON PIPE
IPS	IRON PIPE SIZE
I.P.S.	INSIDE PIPE SIZE
IR	IRRIGATION
JAN CLO	JANITOR'S CLOSET
J-BOX	JUNCTION BOX
JCT	JUNCTION
JST	JOIST
JT	JOINT
KIP	KILOPOUND (1000 POUNDS)
KIT	KITCHEN
KOP	KNOCKOUT PANEL
KPL	KICKPLATE
kV	KILOVOLTS
kVA	KILOVOLT AMPERES
kVAR	KILOVOLT AMPERES REACTIVE
kW	KILOWATT
KWY	KEYWAY
L	LENGTH
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE
LAT	LEAVING AIR TEMPERATURE
LAU	LAUNDRY
LAV	LAVATORY
LB	LAG BOLT
LB	POUND
LBL	LABEL
LBR	LUMBER
LC	LIGHT CONTROL
LD	LOAD
LDCC	LOW DENSITY CELLULAR CONCRETE
LDG	LOADING
LF	LINEAR FOOT (FEET)
LG	LENGTH
LH	LEFT HAND(ED)
LIN	LINEAR
LKR	LOCKER
LL	LIVE LOAD
LLD	LEAD-LINED DOOR
LM	LUMEN
LMST	LIMESTONE
LNTL	LINTEL
LOC	LOCATION
LOL	LAYOUT LINE
LONG	LONGITUDINAL
LP	LIGHTPROOF
LPD	LIGHTPROOF DOOR
LPL	LIGHTPROOF LOUVER
LPT	LOW POINT
LR	LONG RADIUS, LIVING ROOM
LS	LANDSIDE, LAWN SPRINKLER
LT	LEFT, LIGHT
LT WT	LIGHTWEIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
LWT	LEAVING WATER TEMPERATURE
m	METER(S)
M&B	MATCHED AND BEADED
MAINT	MAINTENANCE
MACH	MACHINE
MAS	MASONRY
MATL	MATERIAL(S)
MAX	MAXIMUM
MB	MACHINE BOLTS
MBR	MEMBER
MC	MEDICINE CABINET
MCJ	MASONRY CONTROL JOINT
MCO	METAL-CASED OPENING
MDS	METAL DIVIDER STRIP
MECH	MECHANICAL
MECH RM	MECHANICAL ROOM
MED	MEDIUM
MEMB	MEMBRANE
MES	METAL EDGE STRIP
MFD	METAL FLOOR DECKING
MFG	MANUFACTURING
MFR	MANUFACTURER
MG	MOTOR GENERATOR
MGT	MATTE-GLAZED TILE
MH	MANHOLE
MI	MALLEABLE IRON
MIN	MINIMUM
MIRR	MIRROR
MISC	MISCELLANEOUS
ML	METAL LATH
ML	MONOLITHIC
MLDG	MOULDING
MLWK	MILLWORK
mm	MILLIMETER(S)
MNIC	MATERIAL NOT IN CONTRACT (INSTALLATION BY CONTRACTOR)
MO	MASONRY OPENING
MOD	MODULAR
MOD.	MODIFIED, MODIFY
MON	MONUMENT
MOT	MOTOR
MP	MOVABLE PARTITION
MPG	MAXWELL / SITES PUMPING AND GENERATING
MR	MOP RECEPTOR
MRB	MARBLE BASE
MRD	METAL ROOF DECKING
MS	MACHINE SCREWS
MT	METAL THRESHOLD
MT	MOUNT
MTD	MOUNTED
MTFR	METAL FURRING
MTL	METAL
MVBL	MOVABLE
MULL	MULLION
MUTD	MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES
MW	MONITORING WELL
N	NORTH
N/A	NOT APPLICABLE
NAD83	NORTH AMERICAN DATUM OF 1983
NAS	NORTH AREA STREAMS
NAT	NATURAL
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEMDC	NATOMAS EAST MAIN DRAINAGE CANAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NGS	NATIONAL GEODETIC SURVEY
NGVD	NATIONAL GEODETIC VERTICAL DATUM
Ni	NICKEL
NIC	NOT IN CONTRACT
NL	NAILABLE
N.L.	NEOPRENE LATEX
N.M.W.S.	NEW MAX WATER SURFACE
NM	NONMETALLIC
NO	NUMBER, NORMALLY OPEN
NOM	NOMINAL
NR	NOISE REDUCTION
NRC	NOISE REDUCTION COEFFICIENT
N'REQD	NOT REQUIRED
NTS	NOT TO SCALE
O-O	OUT-TO-OUT
OA	OUTSIDE AIR
OBSC	OBSCURE
OBW	OBSERVATION WINDOW
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
OFC	OFFICE
OFST	OFFSET
OG	ORIGINAL GROUND
OGL	OBSCURE GLASS
OH	OVERHEAD
OHW	OVERHEAD WIRE
OHWM	ORDINARY HIGH WATER MARK
OHMS	OVALHEAD MACHINE SCREW
OHWS	OVALHEAD WOOD SCREW
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPQ	OPAQUE
OPS	OPERATIONS
OPT	ONE PASS TRENCH METHOD
OPTN	OPTION
OS & Y	OUTSIDE SCREW AND YOKE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWGL	OBSCURE WIRED GLASS
P	POLE
PA	PUBLIC ADDRESS
PAR	PARALLEL
PB	PANIC BAR
PBD	PARTICLE BOARD
PBS	PUSH BUTTON STATION
PC	POINT OF CURVATURE, PIECE
PCC	POINT OF COMPOUND CURVE, PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCP	CEMENT PLASTER (PORTLAND)
PCVC	POINT OF COMPOUND VERTICAL CURVE
PD	PAVEMENT DRAIN
PED	PEDESTAL
PERF	PERFORATE(D)
PERIM	PERIMETER
PG	PROFILE GRADE
PG&E	PACIFIC GAS & ELECTRIC
PGP	PUMPING AND GENERATING PLANT
PH	PILOT HOLE, PHASE
PHAR	PHARMACY
PI	POINT OF INTERSECTION
PIPU	PREFAB ISOLATION POWER UNIT
PIV	POST INDICATING VALVE
PL	PROPERTY LINE, PLATE
P/L	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLAT	PLATFORM
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PLG	PILING
PL GL	PLATE GLASS
PLYWD	PLYWOOD
PNL	PANEL
PT	PAINT(ED)
POB	POINT OF BEGINNING
POC	POINT OF HORIZONTAL CURVE
POE	POINT OF ENDING
POI	POINT OF INTERCONNECTION
POL	POLISHED
PORC	PORCELAIN
PORT	PORTABLE
POT	POINT OF TANGENT
POVC	POINT OF VERTICAL CURVE
PP	POWER POLE
PPGL	POLISHED PLATE GLASS
PPM	PARTS PER MILLION
PR	PAIR
PRC	POINT OF REVERSE CURVE
PREFAB	PREFABRICATE(D)
PREFIN	PREFINISHED
PREFMD	PREFORMED
PRKG	PARKING
PROJ	PROJECT
PRV	PRESSURE-REGULATING VALVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PS	PUMP STATION, PIPE SPACE
P.S.	PRESSED STEEL
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS CONC	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY, PNEUMATIC TUBE
PT.	POINT
PT CONC	POST-TENSIONED CONCRETE
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PV	PAVED
PVC	POLYVINYL CHLORIDE
PVG	PAVING
PVMT	PAVEMENT
PW	PASS WINDOW
PWS	PIPELINE WARNING SIGN
QT	QUARRY TILE
QT.	QUART
QTR	QUARTER
1/4 RND	QUARTER ROUND
QTY	QUANTITY
R	RADIUS, RANGE, RISER
RA	RETURN AIR
RAB	RABBETED
RA GR	RETURN AIR GRILLE
RAR	RETURN AIR REGISTER
RB	RUBBER BASE, RESILIENT BASE
RBL	RUBBLE STONE
RBR	RUBBER
RC	REMOTE CONTROL
RCP	REINFORCED CONCRETE PIPE
RCVR	RECEIVER
RD	ROAD, ROOF DRAIN
RDG INS	RIGID INSULATION
RDY	ROADWAY
RECPT	RECEPTACLE
REC ROOM	RECREATION ROOM
RECT	RECTIFIER
REF	REFERENCE
REFL	REFLECT
REFR	REFRIGERATION
REG	REGISTER
REG	REGLET
REINF	REINFORCE
REL	RELOCATE
REM	REMOVE(ABLE)
REPL	REPLACEMENT
REQD	REQUIRED
RESIL	RESILIENT
RET	RETAINING, RETURN
REV	REVISED, REVISION
RFG	ROOFING
RH	RELATIVE HUMIDITY
RH	RIGHT HAND
RH	ROOF HATCH
RK	RACK
RLG	RAILING
RM	RIVER MILE, ROOM
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RP	RADIUS POINT, RETRACTABLE PARTITION
RPM	REVOLUTIONS PER MINUTE
RPRT	RAISED PATTERN RUBBER TILE
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION
RT	RIGHT
RTE	ROUTE
RTF	RUBBER TILE FLOOR
RVS	REVERSE
RVT	RIVET
R/W, ROW	RIGHT-OF-WAY
RW	RELIEF WELL, RAW WATER
RWC	RAINWATER CONDUCTOR
S	SOUTH
SA	SUPPLY AIR
SAFCA	SACRAMENTO AREA FLOOD CONTROL AGENCY
S.B.	SECURITY BARS
SB	SOIL BENTONITE, SPLASH BLOCK
SBF	SOUTH BAY FOUNDRY
SC	SOLID CORE
SCB	SOIL-CEMENT-BENTONITE
SCCB	SLAG CEMENT-CEMENT-BENTONITE
SCH, SCHED	SCHEDULE
SCRN	SCREEN
SCT	STRUCTURAL CLAY TILE
SD	SADDLE DAM, STORM DRAIN
SDI	STEEL DOOR INSTITUTE
SECT	SECTION
SEQ	SEQUENCE
SFGL	SAFETY GLASS
SFTU	STRUCTURAL FACING TILE UNIT
SFU	STRUCTURAL FACING UNIT
SG	SHEET GLASS
SHLDR	SHOULDER
SHT	SHEET
SHTHG	SHEATHING
SHV	SHELVING
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SKLT	SKYLIGHT
SLO	SLOPE
SLNT	SEALANT
SLV	SLEEVE
SM	SHEET METAL
SMS	SHEET METAL SCREWS
SOV	SHUT OFF VALVE
SPC	SPACER
SPCL	SPECIAL
SPD	SOUNDPROOF DOOR
SPEC	SPECIFICATION, SPECIAL
SPF	SOUNDPROOF
SP FIN	SPECIAL FINISH
SPH	SPACE HEATER
SPKR	SPEAKER
SQ	SQUARE
SQHD	SQUARE HEAD
S&R	SHELF AND ROD
SS	SANITARY SEWER, SERVICE SINK, STANDING SEAM (ROOF)
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STG	SEATING
STL	STEEL
STOR	STORAGE
ST PR	STATIC PRESSURE
STR	STRINGER
STRUCT	STRUCTURAL
STWY	STAIRWAY
SUB FL	SUBFLOOR
SUSP	SUSPENDED
SV	SHEET VINYL
SW	SWITCH
SWBD	SWITCHBOARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SWR	SEWER
SYM	SYMBOL
SYMM	SYMMETRICAL
SYNTH	SYNTHETIC
SYS	SYSTEM
T	TREAD
TAN	TANGENT
TB	TOWEL BAR
TC	TERRA COTTA/ TEHAMA-COLUSA
T-C	TEHAMA-COLUSA
TCCA	TEHAMA-COLUSA CANAL AUTHORITY
TCP	TRAFFIC CONTROL PLAN
TEL	TELEPHONE
TEMP	TEMPORARY, TEMPERATURE
TER	TERRAZZO
TERM	TERMINAL
T&G	TONGUE AND GROOVE
TG	TOP OF GRADE
TGL	TOGGLE
TH	TRUSS HEAD
THK	THICK(NESS)
THRES	THRESHOLD
THW	TOP OF HEADWALL
TK BD	TACKBOARD
TKS	TACKSTRIP
TO	TOP OF
TOC	TOP OF CONCRETE
TOL	TOP OF LEVY, TOLERANCE
TOP	TOP OF PIPE
TOPO	TOPOGRAPHY
TOS	TOP OF SLOPE, TOP OF SLAB, TOP OF STEEL
TOT	TOTAL
TOW	TOP OF WALL
TP	TELEPHONE POLE
TPD	TOILET PAPER DISPENSER
TPTN	TOILET PARTITION
TRANS	TRANSITION, TRANSOM, TRANSVERSE
TRR	TERMINAL REGULATING RESERVOIR
TRW	TERMINAL REGULATING RESERVOIR WEST
TSTAT	THERMOSTAT
TV	TELEVISION
TYP	TYPICAL
UC	UNIT COOLER
UG, UGND	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
ULDC	URBAN LEVEE DESIGN CRITERIA
UNEX	UNEXCAVATED
UNFIN	UNFINISHED
U.P.R.R.	UNION PACIFIC RAILROAD
UPS	UNINTERRUPTIBLE POWER SUPPLY
UR	URINAL
US	UPSTREAM
USACE	U.S. ARMY CORPS OF ENGINEERS
USBR	UNITED STATES BUREAU OF RECL
UTIL	UTILITY
UV	UNIT VENTILATOR
V	VOLT
VAC	VACUUM
VAR	VARIES, VARNISH
VB	VINYL BASE
VC	VERTICAL CURVE
VCT	VINYL COMPOSITION TILE
VCT	VITRIFIED CLAY TILE
VD	VAULT DOOR
VENT	VENTILATOR(TION)
VERT	VERTICAL
VEST	VESTIBULE
VF	VINYL FABRIC
VFD	VARIABLE FREQUENCY DRIVE
VG	VERTICAL GRAIN
VH	VINYL HOMOGENEOUS
VJ	V-JOINT(ED)
VNR	VENEER
VOL	VOLUME
VR	VAPOR RETARDER
VRM	VERMICULITE
VS	VENT STACK
V.T.	VOLTAGE TRANSFORMER
VTR	VENT THRU ROOF
VWC	VINYL WALL COVERING
W	WEST, WATER
W/	WITH
W/OUT	WITHOUT
WB	WET BULB
WBL	WOOD BLOCKING
WC	WATER CLOSET
W/C	WHEELCHAIR
WCO	WOOD-CASED OPENING
WD	WIDTH, WOOD, WOOD DOOR
WDSP	WASTE DISPOSER
WDW	WINDOW
WF	WIDE FLANGE
WGL	WIRED GLASS
WH	WALL HUNG
WH	WATER HEATER
WHB	WHEEL BUMPER
WHM	WATT-HOUR METER
WI	WROUGHT IRON
WKSH	WORK SHOP
WM	WATER METER, WIRE MESH
W/O	WITHOUT
WP	WATERPROOF(ING)
WP	WEATHERPROOF
WP	WORKING POINT
WR	WASTE RECEPTACLE
WRB	WARDROBE
WS	WATER SURFACE, WATERSTOP
W.S.	WASTE STACK
WSCT	WAINSCOT
WSD	WATERSIDE
WSE	WATER SURFACE ELEVATION
WSP	WELDED STEEL PIPE
WT	WEIGHT
WTH	WIDTH
WV	WATER VALVE
W/W	WALL TO WALL
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
WWR	WELDED WIRE REINFORCEMENT
WY	WAY
XFMR	TRANSFORMER
XSEC	CROSS SECTION
YD	YARD
YD	YARD DRAIN
YR	YEAR
YRS	YEARS

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REV	DATE	BY	CHK.	APPR.	DESCRIPTION
				P.RU	

DESIGNED BY: D. CAVE
DRAWN BY: D. CAVE
CHECKED BY: W. OHLIN
IN CHARGE: P. RUDE
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Sites

SITES RESERVOIR

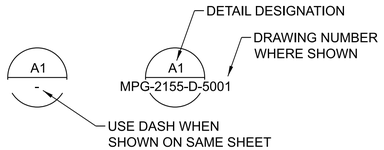
MAXWELL / SITES PUMPING AND GENERATING
GENERAL
ABBREVIATIONS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0010

PRELIMINARY - NOT FOR CONSTRUCTION

GENERAL SYMBOLS



0330-056 STANDARD DETAIL

ON DRAWING WHERE DETAIL OR SECTION IS CALLED OUT

ON DRAWING WHERE DETAIL OR SECTION IS SHOWN

DRAWING NUMBERING LEGEND

MPG-2155-S-2001

- MPG-2155 — LOCATION / PACKAGE CODE; FACILITY / AREA NUMBER
- S — DISCIPLINE DESIGNATOR
- 2001 — DRAWING TYPE CODE

LOCATION / PACKAGE NUMBER AND CODE

1 - STS - SITES RESERVOIR
2 - MPG - MAXWELL / SITES PUMPING AND GENERATING
3 - SCD - RESERVOIR CLEARING AND DEMOLITION
4 - HFR - HUFFMASTER ROAD
5 - DNP - DUNNIGAN PIPELINE
6 - CCA - TEHAMA-COLUSA CANAL AUTHORITY
7 - CID - GLENN-COLUSA IRRIGATION DISTRICT
8 - REC - SITES RECREATION
9 - MIT - SITES MITIGATION

MPG FACILITY / AREA NUMBERS

0001 - GENERAL
0010 - GEOTECH
0045 - OVERALL SITE CIVIL
0060 - OVERALL SITE ELECTRICAL
0065 - INSTRUMENTATION AND CONTROLS
2005 - ACCESS ROADS
2010 - TRANSMISSION
2015 - PGE POI SWITCHYARD
2030 - VALVE VAULT
2040 - ENVIRONMENTAL WATER PIPELINE DISSIPATION STRUCTURE
2100 - FNK - TEMPORARY CONSTRUCTION
2105 - FNK - SITE CIVIL
2107 - FNK - RETAINING WALL
2110 - FNK - YARD PIPING
2115 - FNK - RESERVOIR
2120 - FNK - PIPELINE
2125 - FNK - SITE AND GENERAL ELECTRICAL
2130 - FNK - SUBSTATION
2135 - FNK - INSTRUMENTATION AND CONTROLS
2145 - FNK - ADMINISTRATION AND OPERATIONS BUILDING
2150 - FNK - MAINTENANCE AND STORAGE BUILDING
2155 - FNK - PUMPING PLANT
2160 - FNK - SWITCHGEAR BUILDING
2161 - FNK - EMERGENCY GENERATOR
2165 - FNK - GENERATING PLANT
2170 - FNK - CHILLER YARD
2171 - FNK - HVAC BUILDING
2175 - FNK - EMERGENCY DISSIPATION STRUCTURE
2180 - FNK - FIRE WATER TANK
2181 - FNK - FIRE WATER PUMPING PLANT
2185 - FNK - SURGE CONTROL SYSTEM
2190 - FNK - FLOW METER VAULT
2200 - TRR -TEMPORARY CONSTRUCTION
2205 - TRR - SITE CIVIL
2207 - TRR - SHEET PILE WALL
2210 - TRR - YARD PIPING
2215 - TRR - RESERVOIR
2220 - TRR - PIPELINE
2225 - TRR - SITE ELECTRICAL
2230 - TRR - SWITCHYARD
2231 - TRR - SUBSTATION
2235 - TRR - INSTRUMENTATION AND CONTROL
2240 - TRR - TRANSMISSION
2255 - TRR - PUMPING PLANT
2260 - TRR - SWITCHGEAR BUILDING
2261 - TRR - EMERGENCY GENERATOR
2265 - TRR - GENERATING PLANT
2270 - TRR - CHILLER YARD
2271 - TRR - HVAC BUILDING
2275 - TRR - ENERGY DISSIPATION STRUCTURE
2280 - TRR - FIRE WATER TANK
2281 - TRR - FIRE WATER PUMPING PLANT
2285 - TRR - SURGE CONTROL SYSTEM
2291 - TRR - CHECK STRUCTURE 1
2292 - TRR - CHECK STRUCTURE 2
2293 - TRR - CHECK STRUCTURE 3
2294 - TRR - CHECK STRUCTURE 4

DISCIPLINE DESIGNATOR

A - ARCHITECTURAL
B - GEOTECHNICAL
C - CIVIL
D - PROCESS MECHANICAL
E - ELECTRICAL
F - FIRE PROTECTION
FET - FOUNDATION EXCAVATION AND TREATMENT
G - GENERAL
H - HVAC
I - INTERIORS
J - PLUMBING
K - TRANSMISSION
L - LANDSCAPE
M - BUILDING MECHANICAL
N - INSTRUMENTATION AND CONTROLS
P - PIPELINE
Q - EQUIPMENT
R - ROADWAY
S - STRUCTURAL
T - TELECOMMUNICATIONS
V - SURVEY MAPPING
Y - YARD PIPING

DRAWING TYPE CODE

0000 - GENERAL AND 3D RENDERINGS
1000 - DEMOLITION
2000 - PLANS AND PLAN AND PROFILE
3000 - SECTIONS, ELEVATIONS AND PROFILES
4000 - ENLARGED PLANS
5000 - DETAILS
6000 - SCHEDULES AND DIAGRAMS
7000 - USER DEFINED
8000 - USER DEFINED
9000 - STD DETAILS

REV	DATE	BY	CHK.	APPR.	DESCRIPTION
				P.RU	

DESIGNED BY: D. CAVE
DRAWN BY: D. CAVE
CHECKED BY: W. OHLIN
IN CHARGE: P. RUDE
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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
GENERAL
GENERAL SYMBOLS
AND DRAWING NUMBERING LEGEND

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0020
SHT 4 OF 20

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LEGEND AND SYMBOLS

EXISTING FEATURES	PROPOSED FEATURES
DRAIN ROCK	
FENCE	
SUBSTATION FENCE	
GATE	
MAJOR CONTOURS	
MINOR CONTOURS	
SILO(S), TANK(S)	
TRAFFIC SIGN	
FIRE HYDRANT	
POST	
TREE	
PALM TREE	
BUSH	
POLE	
SURVEY CONTROL POINT	
MANHOLE	
MISC UTILITY	
UTILITY BOX	
TRAFFIC LIGHT	
UTILITY JUNCTION	
BILLBOARD	
CATCH BASIN, RECT	
VA-TRAF-BARR-POST	
COMMUNICATION ANTENNA	
UTILITY VALVE	
SIGN, REFLECTIVE	
MAILBOX	
STORM DRAIN INLET	
ROAD, CENTER	
ROAD, ALIGNMENT	
ROAD	
DRIVEWAY	
BUILDING OUTLINE	
WALL, RETAINING WALL	
WALL, RETAINING WALL WITH CONC BARRIER	
PIPE, UNIDENTIFIED	
HEADWALL	
CULVERT	
SANITARY SEWER UNDERGROUND PIPE	
SANITARY SEWER MANHOLE	
WATER UNDERGROUND PIPE	
NATURAL GAS UNDERGROUND PIPE	
FIBER OPTIC LINE	
ELEC UNDERGROUND	
ELEC OVERHEAD	
POWER POLE	
GUY WIRE	
GUY ANCHOR	
TRANSMISSION TOWER, METAL	
CANAL	
RAILROAD	
DITCH/FLOW LINE	
STORM DRAIN UNDERGROUND PIPE	
STORM DRAIN MANHOLE	
SLOPE BANK, CUT	
SLOPE BANK, FILL	
290.00 SPOT ELEVATION	290.00
BORE LOCATION & # BORING LOCATION AND NUMBER	BORE LOCATION & #
TEST PIT LOCATION AND NUMBER	LOCATION AND #
AUG - # DWR AUGER HOLE	
LC - # DWR CORE HOLE	
DH - # USBR CORE HOLE	
XX GEOTECHNICAL BORING	XX
STRUCTURE, BUILDING OR FACILITY LOCATION POINT - COORDINATES	N 1000.00 E 1000.00

EXISTING FEATURES	PROPOSED FEATURES
SLOPE PERCENT OR RISE:RUN	2%
FLOW ARROW	
DIRECTION ARROW	
WATER SURFACE	
PIEZOMETER	
EARTH SLOPE	
N/A STEEL CHECKER PLATE	
BENTONITE CEMENT GROUT	
BENTONITE PELLET SEAL	
CUTOFF WALL (DETAILS/SECTIONS)	
ORIGINAL GROUND	
AGGREGATE BASE	
DAM/LEVEE FILL	
DAM/LEVEE EMBANKMENT FILL	
FINE SAND	
CONCRETE	
CLSM	
ROCK SLOPE PROTECTION	
ASPHALT CONCRETE PAVEMENT	
GRAVEL SURFACING	
CUTOFF WALL (PLANS)	
LIMITS OF WORK	
BREAK LINE	
PIPE BREAK LINE	
CENTERLINE	
SPRING LINE CENTERLINE	
DEMOLITION	
STRUCTURE, BUILDING OR FACILITY	
EXISTING PIPE TO BE ABANDONED	
EXISTING PIPE TO BE DEMOLISHED	
CONSTRUCTION CONTRACT LIMIT	
CONSTRUCTION EASEMENT	C/E
CABLE TV	CATV
COMMUNICATION	COMM
FIRE PROTECTION WATER SUPPLY	F
GUARD RAIL	
PROPERTY LINE	
CONTRACTOR STAGING BOUNDARY	
RIGHT OF WAY	R/W
SILT FENCE	SF
TELEPHONE OVERHEAD	T-OVH
TELEPHONE UNDERGROUND	T
TEMPORARY CONSTRUCTION EASEMENT	TCE
PERMANENT EASEMENT	PE

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: B. CHELONIS
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IN CHARGE: P. RUDE
DATE: 12-19-2023

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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
GENERAL
CIVIL LEGEND

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0101
SHT 5 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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DESIGN CRITERIA

1. APPLICABLE CODE: 2022 CALIFORNIA BUILDING CODE (CBC) INCLUDING REFERENCED CODES AND STANDARDS.
2. REFER TO FACILITY DRAWINGS FOR ADDITIONAL AND SPECIFIC STRUCTURE LOADINGS AND REQUIREMENTS.
3. ALL LOADS SHOWN ARE SERVICE LEVEL (UNFACTORED) UNLESS SPECIFICALLY NOTED OTHERWISE.
4. DEAD LOADS: SELF WEIGHT
5. ROOF LOADS:
   - GROUND SNOW LOAD, Pg = 0 PSF
   - ROOF LIVE LOAD = 20 PSF
6. FLOOR LIVE LOADS:
   - PROCESS AREAS = 200 PSF
   - ELECTRICAL AREAS = 300 PSF
   - CORRIDORS, STAIRWAYS, ACCESS WAYS = 100 PSF
   - WALKWAYS AND ELEVATED PLATFORMS = 100 PSF
   - VEHICLE DRIVE AREAS = AASHTO DESIGN TRUCK OR DESIGN TANDEM
7. WIND LOADS:
   - ASCE 7-16 METHOD = MWFRS DIRECTIONAL PROCEDURE, UNO
   - BASIC WIND SPEED (3-SECOND GUST) = 104 MPH, RISK CATEGORY IV
   - BASIC WIND SPEED (3-SECOND GUST) = 100 MPH, RISK CATEGORY III
   - BASIC WIND SPEED (3-SECOND GUST) = 93 MPH, RISK CATEGORY II
   - EXPOSURE CATEGORY = C
8. FUNKS RESERVOIR SEISMIC LOADS:
   - MAPPED SPECTRAL RESPONSE ACCELERATIONS
     - S_S = 0.867g
     - S_1 = 0.359g
   - SITE-SPECIFIC DESIGN SPECTRAL RESPONSE ACCELERATIONS
     - S_{DS} =0.TBDg
     - S_{D1} =0.TBDg
   - SITE CLASS = D
   - SEISMIC DESIGN CATEGORY = D
9. TERMINAL REGULATING RESERVOIR SEISMIC LOADS:
   - MAPPED SPECTRAL RESPONSE ACCELERATIONS
     - S_S = 0.841g
     - S_1 = 0.350g
   - SITE-SPECIFIC DESIGN SPECTRAL RESPONSE ACCELERATIONS
     - S_{DS} =0.TBDg
     - S_{D1} =0.TBDg
   - SITE CLASS = D
   - SEISMIC DESIGN CATEGORY = D
10. RISK CATEGORY = SEE FACILITY DRAWINGS
11. IMPORTANCE FACTOR = SEE FACILITY DRAWINGS
12. LATERAL FORCE-RESISTING SYSTEM = SEE FACILITY DRAWINGS
13. FUNKS RESERVOIR SOIL DESIGN PARAMETERS:
    - NET ALLOWABLE SOIL BEARING PRESSURES: = TBD PSF (SHALLOW FOUNDATIONS)
    - GROUNDWATER (GW) ELEVATION:
      - MAXIMUM HIGH GW = EL 205.0
    - EQUIVALENT DRAINED FLUID PRESSURES:
      - ACTIVE: = TBD PCF
      - AT REST: = TBD PCF
      - PASSIVE: = TBD PCF
    - EQUIVALENT UNDRAINED FLUID PRESSURES:
      - ACTIVE: = TBD PCF
      - AT REST: = TBD PCF
      - PASSIVE: = TBD PCF
    - DYNAMIC FLUID PRESSURES:
      - YIELDING WALLS LATERAL FORCE: = TBD H LBS (APPLIED AT 0.6H)
      - NON-YIELDING WALLS: = TBD H PSF
      - WHERE H IS HEIGHT OF SOIL ADJACENT TO THE WALL
    - VERTICAL SURCHARGE: = EQUIVALENT 2 FT OF SOIL
    - COEFFICIENT OF FRICTION: = 0.TBD
    - MODULUS OF SUBGRADE REACTION = TBD PCI (1 FT SQUARE PLATE)
    - NATIVE SOIL UNIT WEIGHT = TBD PCF
    - MINIMUM FOOTING EMBEDMENT DEPTH: = TBD IN
14. TERMINAL REGULATING RESERVOIR SOIL DESIGN PARAMETERS:
    - NET ALLOWABLE SOIL BEARING PRESSURES: = TBD PSF (SHALLOW FOUNDATIONS)
    - GROUNDWATER (GW) ELEVATION:
      - MAXIMUM HIGH GW = EL 124.0
    - EQUIVALENT DRAINED FLUID PRESSURES:
      - ACTIVE: = TBD PCF
      - AT REST: = TBD PCF
      - PASSIVE: = TBD PCF
    - EQUIVALENT UNDRAINED FLUID PRESSURES:
      - ACTIVE: = TBD PCF
      - AT REST: = TBD PCF
      - PASSIVE: = TBD PCF
    - DYNAMIC FLUID PRESSURES:
      - YIELDING WALLS LATERAL FORCE: = TBD H^2 LBS (APPLIED AT 0.6H)
      - NON-YIELDING WALLS: = TBD H PSF
      - WHERE H IS HEIGHT OF SOIL ADJACENT TO THE WALL
    - VERTICAL SURCHARGE: = EQUIVALENT 2 FT OF SOIL
    - COEFFICIENT OF FRICTION: = 0.TBD
    - MODULUS OF SUBGRADE REACTION = TBD PCI (1 FT SQUARE PLATE)
    - NATIVE SOIL UNIT WEIGHT = TBD PCF
    - MINIMUM FOOTING EMBEDMENT DEPTH: = TBD IN
15. FACTOR OF SAFETY FOR BOUYANCY UPLIFT RESISTANCE:
    - NORMAL OPERATION FOS = 1.5 MINIMUM
    - SCHEDULED MAINTENANCE FOS = 1.25 MINIMUM
    - EXTREME MAINTENANCE FOS = 1.1 MINIMUM

GENERAL INFORMATION

1. FOR ABBREVIATIONS NOT LISTED, SEE ASME Y14.38 “ABBREVIATIONS AND ACRONYMS: PUBLICATION AS DISTRIBUTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).
2. DESIGN DETAILS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS OCCURRING THROUGHOUT THE PROJECT, WHETHER OR NOT THEY ARE INDIVIDUALLY CALLED OUT.
3. VERIFY FINAL OPENING DIMENSIONS IN WALLS, SLABS, AND DECKS WITH OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION OF THESE ELEMENTS.
4. FOR NUMBER, TYPE, SIZE, ARRANGEMENT, AND/OR LOCATION OF EQUIPMENT PADS, SEE OTHER DISCIPLINE DRAWINGS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO PLACING SLABS, WALLS AND FOUNDATIONS. COORDINATE PIPING OPENINGS WITH OTHER DISCIPLINE DRAWINGS.
5. DO NOT CUT OR MODIFY STRUCTURAL MEMBERS FOR PIPES, DUCTS, ETC, UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER.
6. VISITS TO THE JOB SITE BY THE ENGINEER TO OBSERVE THE CONSTRUCTION DO NOT IN ANY WAY MEAN THAT ENGINEER IS GUARANTOR OF CONSTRUCTOR'S WORK, NOR RESPONSIBLE FOR THE COMPREHENSIVE OR SPECIAL INSPECTIONS, COORDINATION, SUPERVISION, OR SAFETY AT THE JOB SITE.

INSPECTION AND TESTING

1. SPECIAL INSPECTION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL SCHEDULE BOTH INSPECTIONS.
2. SPECIFIED CONCRETE AND MASONRY AND OTHER MATERIAL TESTING RELATED TO SPECIAL INSPECTION DURING CONSTRUCTION WILL BE OWNER FURNISHED.
3. SPECIFIED LABORATORY TEST MIXES AND SIMILAR TEST RESULTS TO VERIFY MATERIAL QUALITY AND CONFORMANCE TO SPECIFICATIONS, AND SUBMITTED FOR REVIEW PRIOR TO ACCEPTANCE FOR USE ON THE PROJECT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. SPECIAL INSPECTION AND TESTS AND STRUCTURAL OBSERVATION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH CBC SECTIONS 110 AND 1704 AS INDICATED IN THE STATEMENT OF SPECIAL INSPECTIONS. REFER TO DRAWINGS [xxx] TO [xxx].

FOUNDATIONS

1. REFER TO GEOTECHNICAL DATA REPORT NO. TBD.
2. EXCAVATIONS SHALL BE SHORED TO PREVENT SUBSIDENCE AND DAMAGE TO ADJACENT EXISTING STRUCTURES, ROADS, UTILITIES, ETC.
3. FOUNDATION BEARING SURFACES SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FORMWORK OR REINFORCING STEEL. THE OBSERVATION SHALL VERIFY IF THE ACTUAL EXPOSED SUBGRADE IS AS ANTICIPATED BY THE SITE SPECIFIC BORINGS, TEST PITS AND DATA REPORTS.
4. NO BACKFILL SHALL BE PLACED BEHIND WALLS UNTIL THE WALL'S CONCRETE HAS ATTAINED 100 PERCENT AND TOP SUPPORTING SLAB'S CONCRETE HAS ATTAINED 80 PERCENT OF THEIR SPECIFIED 28 DAY COMPRESSIVE STRENGTH, OR UNTIL TOP-OF-WALL FRAMING SYSTEMS, INCLUDING STEEL DIAPHRAGMS, HAVE BEEN COMPLETED.
5. NO BACKFILL SHALL BE PLACED BEHIND CANTILEVERED, FREE TOP, WALLS UNTIL THE CONCRETE HAS ATTAINED 100 PERCENT OF ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.
6. USE OF EXPLOSIVES IS ONLY ALLOWED WITH WRITTEN PERMISSION FROM ENGINEER.

FORMWORK, SHORING, AND BRACING

1. STRUCTURES SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED FOR STABILITY UNDER FINAL CONDITIONS ONLY. DESIGN SHOWN DOES NOT INCLUDE NECESSARY COMPONENTS OR EQUIPMENT FOR STABILITY OF THE STRUCTURES DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR WORK RELATING TO CONSTRUCTION ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, AND OTHER WORK AIDS REQUIRED TO SAFELY PERFORM THE WORK SHOWN.
2. TEMPORARY SHORING SHALL REMAIN IN PLACE UNTIL ELEVATED CONCRETE FLOOR OR SLABS HAVE REACHED 80 PERCENT OF THE 28 DAY COMPRESSIVE STRENGTH AS DETERMINED BY FIELD CYLINDER BREAKS.
3. “BURY” BARS OR “CARRIER” BARS ARE NOT ALLOWED FOR THE BOTTOM MATS OF REINFORCING IN ALL ELEVATED SLABS AND ARE NOT ALLOWED FOR THE TOP MATS OF REINFORCING IN ELEVATED SLABS LESS THAN 12 INCHES THICK.

CONCRETE REINFORCING

1. REINFORCING STEEL:
   - TYPICAL: ASTM A615, GRADE 60
   - WELDED: ASTM A706, GRADE 60
2. FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI “MANUAL OF STANDARD PRACTICE”AND ACI 301 “SPECIFICATIONS FOR STRUCTURAL CONCRETE”.
3. CONCRETE COVER FOR REINFORCING, UNLESS SHOWN OTHERWISE, SHALL BE:
   - WHEN CAST AGAINST EARTH: 3”
   - INTERIOR, DRY, HUMIDITY CONTROLLED AREAS:
     - WALLS AND SLABS: 3/4"
     - BEAM STIRRUPS AND COLUMN TIES: 1 1/2"
   - OTHER CONCRETE SURFACES: 2”
4. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING STANDARD DETAIL. WALL CORNER REINFORCING SIZES AND SPACINGS SHALL BE AS SHOWN ON THE DRAWINGS AND REFERENCED TO THIS DETAIL. TYPICAL HORIZONTAL WALL REINFORCING SHALL LAP WITH THE CORNER HORIZONTAL REINFORCING.
5. 90 DEGREE BENDS, UNLESS OTHERWISE SHOWN, SHALL BE ACI 318 STANDARD HOOKS.
6. WALL FOOTING CORNER AND INTERSECTION REINFORCEMENT BARS SHALL BE EXTENDED INTO CONNECTING FOOTINGS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING FOOTING. OUTSIDE FACE WALL FOOTING REINFORCEMENT SHALL BE LAPPED WITH CORNER BARS. ALL WALL FOOTING REINFORCEMENT SHALL BE CONTINUOUS THROUGH COLUMNS OR PILASTERS FOOTINGS.
7. LAP VERTICAL WALL BARS WITH DOWELS FROM BASE SLABS AND EXTEND INTO TOP FACE OF ROOF SLABS AND LAP WITH TOP SLAB REINFORCEMENT. PROVIDE A MINIMUM OF FOUR FULL HEIGHT VERTICAL BARS WITH MATCHING DOWELS AT WALL ENDS, CORNERS AND INTERSECTIONS WITH SIZE TO MATCH TYPICAL VERTICAL REINFORCING STEEL SHOWN OR REQUIRED BY NOTES ABOVE.
8. LOCATE ELEVATED SLAB AND BEAM TOP BAR SPLICES AT MIDSPAN AND BOTTOM BAR SPLICES AT SUPPORTS.
9. REINFORCING STEEL FOR FOOTINGS AND SLABS ON GRADE SHALL BE ADEQUATELY SUPPORTED ON BAR SUPPORTS WITH SPACERS TO KEEP REINFORCING ABOVE THE PREPARED GRADE. LIFTING REINFORCING OFF GRADE DURING CONCRETE PLACEMENT IS NOT PERMITTED.
10. REFER TO OPENING REINFORCING STANDARD DETAILS.
11. REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:

CONCRETE DESIGN STRENGTH = 4,000 PSI **		GRADE 60 REINFORCING STEEL								
BAR SIZE		#3	#4	#5	#6	#7	#8	#9	#10	#11
LAP SPLICE LENGTH ***										
SPACING = 3"	TOP BAR *	1'-4"	1'-8"	2'-1"	3'-0"	5'-2"	6'-8"	8'-6"	10'-10"	13'-4"
	OTHER BAR	1'-4"	1'-4"	1'-8"	2'-4"	4'-0"	5'-2"	6'-7"	8'-4"	10'-3"
SPACING = 4"	TOP BAR *	1'-4"	1'-8"	2'-0"	2'-5"	3'-10"	5'-0"	6'-5"	8'-1"	10'-0"
	OTHER BAR	1'-4"	1'-4"	1'-7"	1'-10"	3'-0"	3'-11"	4'-11"	6'-3"	7'-8"
SPACING ≥ 6"	TOP BAR *	1'-4"	1'-8"	2'-0"	2'-5"	3'-6"	4'-0"	5'-0"	6'-2"	7'-5"
	OTHER BAR	1'-4"	1'-4"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
EMBEDMENT LENGTH										
SPACING = 3"	TOP BAR *	1'-0"	1'-3"	1'-8"	2'-4"	4'-0"	5'-2"	6'-7"	8'-4"	10'-3"
	OTHER BAR	1'-0"	1'-0"	1'-3"	1'-10"	3'-1"	4'-0"	5'-1"	6'-5"	7'-11"
SPACING = 4"	TOP BAR *	1'-0"	1'-3"	1'-7"	1'-10"	3'-0"	3'-11"	4'-11"	6'-3"	7'-8"
	OTHER BAR	1'-0"	1'-0"	1'-3"	1'-5"	2'-4"	3'-0"	3'-10"	4'-10"	5'-11"
SPACING ≥ 6"	TOP BAR *	1'-0"	1'-3"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
	OTHER BAR	1'-0"	1'-0"	1'-3"	1'-5"	2'-1"	2'-5"	3'-0"	3'-8"	4'-5"

* TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.

** WHERE 3,000 PSI CONCRETE IS USED, INCREASE ABOVE LENGTHS BY 16%.

*** LAP LENGTHS ARE BASED ON MINIMUM CONCRETE COVER OF 2". LONGER LENGTHS ARE REQUIRED FOR CONCRETE COVER LESS THAN 2”.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. KELLOGG
DRAWN BY: S. METCALF
CHECKED BY: H. HENRIKSON
IN CHARGE: P. RUDE
DATE: 12-19-2023

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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
GENERAL
STRUCTURAL NOTES 1

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0301
SHT 6 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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CAST IN PLACE CONCRETE

1. 28-DAY COMPRESSIVE STRENGTHS (TO MEET STRUCTURAL STRENGTH REQUIREMENTS):
   HYDRAULIC STRUCTURES: 4,500 PSI
   BUILDING STRUCTURES: 4,000 PSI
   CONCRETE FILL: 3,500 PSI
   CURBS AND SIDEWALKS: 3,500 PSI
   DUCT BANKS AND PIPE ENCASEMENTS NOT INTEGRAL WITH FOUNDATIONS: 3,500 PSI

2. 56-DAY COMPRESSIVE STRENGTHS (TO MEET DURABILITY REQUIREMENTS FOR ACI 318 AND ACI 350):
   HYDRAULIC STRUCTURES: 5,000 PSI
   BUILDING STRUCTURES: 4,500 PSI
   CONCRETE FILL: 4,000 PSI
   CURBS AND SIDEWALKS: 4,000 PSI
   DUCT BANKS AND PIPE ENCASEMENTS NOT INTEGRAL WITH FOUNDATIONS: 4,000 PSI

3. CONTINUOUS WATERSTOP AS SPECIFIED SHALL BE INSTALLED IN ALL CONSTRUCTION JOINTS IN WALLS AND SLABS OF WATER HOLDING BASINS AND BELOW GRADE STRUCTURES UNLESS SPECIFICALLY NOTED OTHERWISE.

4. CONSTRUCTION JOINTS INDICATED ARE SUGGESTED LOCATIONS. CONTRACTOR MAY REVISE LOCATION OF JOINTS, SUBJECT TO SPECIFIED REQUIREMENTS. LAYOUT SHOWING ALL CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW BY ENGINEER.

5. ROUGHEN AND CLEAN CONSTRUCTION JOINTS IN WALLS AND SLABS AS SPECIFIED PRIOR TO PLACING ADJACENT CONCRETE, EXPOSING CLEAN AGGREGATE OF 1/4" AMPLITUDE SOLIDLY EMBEDDED IN MORTAR MIX.

6. COORDINATE PLACEMENT OF OPENINGS, PIPE PENETRATIONS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS AND INSERTS PRIOR TO PLACEMENT OF CONCRETE.

7. NO ALUMINUM CONDUIT OR PRODUCTS CONTAINING ALUMINUM OR ANY OTHER MATERIAL INJURIOUS TO THE CONCRETE SHALL BE EMBEDDED IN THE CONCRETE.

8. CONDUIT SHALL NOT BE PLACED PARALLEL WITH BEAM OR COLUMN REINFORCEMENT UNLESS SPECIFICALLY INDICATED IN DRAWINGS.

9. PATCH FORM TIE HOLES IN ACCORDANCE WITH STANDARD DETAILS.

CONCRETE UNIT MASONRY

1. MASONRY WALL TYPE: SPECIAL REINFORCED WALLS.

2. DESIGN COMPRESSIVE STRENGTH, f'm, OF THE FINISHED ASSEMBLY AND MATERIAL PROPERTIES SHALL BE PER THE TABLE BELOW.

3. MORTAR: ASTM C270, TYPE S, HYDRATED.

4. GROUT: ASTM C476 COARSE GROUT. USE OF WATER REDUCERS OR SUPERPLASTICIZERS IS NOT PERMITTED.

5. CONCRETE MASONRY UNITS: ASTM C90, MEDIUM WEIGHT, LINEAR SHRINKAGE SHALL NOT EXCEED 0.065 PERCENT.

6.

DESIGN COMPRESSIVE STRENGTH f 'm (PSI)	UNIT STRENGTH (PSI)	GROUT STRENGTH (PSI) MIN / MAX	MORTAR PROPERTIES
2,000	1,900	2,000 / 3500	Type S

7. PLACE COURSES IN WALLS, COLUMNS, AND PILASTERS IN RUNNING BOND PATTERN.

8. PROVIDE MATCHING FOUNDATION DOWELS FOR ALL TYPICAL AND ADDITIONAL VERTICAL BARS.

9. PROVIDE VERTICAL BARS AND DOWELS WITH LAP LENGTHS AS SHOWN IN DETAIL 0422-004.

10. STAGGER ADJACENT LAP SPLICES BY 24 INCHES WHEN SEPARATED BY 3 INCHES OR LESS.

11. PROVIDE NUMBER OF FULL HEIGHT VERTICAL BARS AT EDGES OF OPENINGS AS SHOWN IN DETAIL 0422-004.

12. PROVIDE FULL HEIGHT VERTICAL BARS IN 3 CELLS AT WALL CORNERS AND INTERSECTIONS AS SHOWN IN DETAIL 0422-001.

13. PROVIDE HORIZONTAL CORNER AND INTERSECTION BARS WITH LAP LENGTHS AS SHOWN IN DETAIL 0422-001.

14. PROVIDE REINFORCED LINTELS ABOVE AND REINFORCED BOND BEAMS BELOW OPENINGS AS SHOWN IN DETAIL 0422-002.

15. PROVIDE FULL HEIGHT VERTICAL BARS WITH MATCHING DOWELS IN CELLS ADJACENT TO OPENINGS AS SHOWN IN DETAIL 0422-002.

16. GROUTING: SOLID GROUT ALL CMU WALLS.

17. DO NOT PLACE CONDUIT IN CELLS CONTAINING PARALLEL REINFORCEMENT.

WELDING

1. WELDS SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS), LATEST EDITION:
   D1.1, STRUCTURAL WELDING CODE – STEEL
   D1.2, STRUCTURAL WELDING CODE – ALUMINUM
   D1.3, STRUCTURAL WELDING CODE – SHEET STEEL
   D1.4, STRUCUTRAL WELDING CODE – REINFORCING STEEL
   D1.6, STRUCTURAL WELDING CODE – STAINLESS STEEL

2. REPAIR WELDS FOUND DEFECTIVE IN ACCORDANCE WITH AWS D1.1 CLAUSE 7.25.

3. USE INTERMITTENT WELDS AND A LOW HEAT INPUT WELDING PROCESS AT FIELD WELDS OF EMBED PLATES AND ANGLES TO AVOID SPALLING OR CRACKING OF THE EXISTING CONCRETE.

4. BUTT JOINT AND GROOVE WELDS SHALL BE COMPLETE JOINT PENETRATION (CJP) UNLESS INDICATED OTHERWISE.

STRUCTURAL STEEL AND METAL FABRICATIONS

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
   W-SHAPES A992
   MISCELLANEOUS SHAPES INCLUDING ANGLES, CHANNELS, PLATES, ETC. A36
   SQUARE OR RECTANGULAR STEEL TUBING A500, GRADE C
   STEEL PIPE A53, GRADE B
   STAINLESS STEEL SHAPES A276

2. ALUMINUM SHALL CONFORM TO THE FOLLOWING STANDARDS:
   STRUCTURAL SHAPES B308
   PLATES B209

3. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, CURRENT EDITION, AND CURRENT OSHA STANDARDS.

4. FASTENERS SHALL BE HIGH STRENGTH BOLTS CONFORMING TO THE FOLLOWING EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE:
   UNLESS SHOWN OTHERWISE F3125, GRADE A325, TYPE1
   ANCHOR BOLTS (AB)
   STAINLESS STEEL F593, AISI TYPE 304 OR 316, CONDITION CW
   STEEL F1554, GR 36
   GALVANIZED STEEL F1554, GR 36 / A153
   MACHINE BOLTS (MB) A307, GRADE B

5. ITEMS TO BE EMBEDDED IN CONCRETE SHALL BE CLEAN AND FREE OF OIL, DIRT AND PAINT.

6. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS. NO CUTTING OR BURNING OF STRUCTURAL STEEL IS PERMITTED WITHOUT THE WRITTEN APPROVAL OF JACOBS.

7. ALL STEEL MEMBERS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED TO ASTM A123 UNLESS NOTED OTHERWISE. MEMBERS THAT ARE WELDED AFTER GALVANIZING SHALL BE TOUCHED UP WITH A ZINC RICH COATING AFTER COMPLETIONS AND INSPECTION OF THE WELD.

OPEN WEB METAL JOIST FRAMING

1. JOISTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE AISC AND THE STEEL JOIST INSTITUTE (SJI).

2. SEE ROOF FRAMING PLANS FOR DESIGN LOADS.

3. LOADS INDICATED ON THE DRAWINGS ARE MINIMUM DESIGN LOADS AND SHALL NOT BE CONSTRUED TO BE ALL LOADS APPLICABLE TO THE DESIGN OF THE JOISTS. DEAD LOADS INFERRED BY THE DRAWINGS WHICH WOULD BE INCLUDED IN COMMON PRACTICE, INCLUDING EQUIPMENT LOADS AND CONSTRUCTION LOADS, SHALL BE INCLUDED IN THE DESIGN.

4. VERIFY AND COORDINATE EQUIPMENT WEIGHTS, LOCATIONS, AND ATTACHMENT REQUIREMENTS PRIOR TO JOIST FABRICATION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE VERTICAL AND LATERAL SUPPORT OF EQUIPMENT AS SPECIFIED IN SECTION 01 88 15, ANCHORAGE AND BRACING. JOIST MANUFACTURER SHALL COORDINATE AND SUPPLY ADDITIONAL DIAGONAL WEB MEMBERS AT CONCENTRATED LOAD LOCATIONS.

5. JOIST SIZES AND CHORD SIZES INDICATED ON THE PLANS ARE MINIMUM ONLY. DESIGN BY THE JOIST MANUFACTURER MAY RESULT IN A LARGER SIZE. JOISTS SHALL HAVE DOUBLE ANGLE CHORDS.

6. DESIGN JOIST TOP CHORD AT END OF ROOF SUB-DIAPHRAGMS AND JOISTS DESIGNATED AS DRAG STRUTS FOR ADDITIONAL AXIAL LOAD (BOTH TENSION AND COMPRESSION) AS INDICATED ON THE ROOF FRAMING PLANS.

7. PROVIDE CALCULATIONS, PRODUCT DATA, MATERIAL PROPERTIES, CONNECTION DETAILS, ETC FOR ALL TYPES OF JOISTS. CALCULATIONS SHALL BE STAMPED AND SIGNED BY AN ENGINEER REGISTERED IN THE STATE OF CA.

8. JOIST BRIDGING, BOTTOM CHORD BRACING, AND OTHER ACCESSORIES SHALL BE PER THE MANUFACTURER'S STANDARDS AND AS INDICATED ON THE DRAWINGS. BRACING SHALL EXTEND TO WALLS, SEE DETAIL 0521-022.

9. JOISTS SHALL BE CAMBERED FOR DEAD LOAD AS REQUIRED BY SJI. PROVIDE STANDARD SJI CAMBER UNLESS NOTED OTHERWISE. JOIST CAMBER SHALL BE SHOWN ON SHOP DRAWINGS.

STEEL DECKING

1. FOR DECK SIZE, GAGE, AND FASTENING CONFIGURATIONS, SEE FRAMING PLANS. FASTENING CONFIGURATIONS SHOWN ARE SPECIFIC TO THE DECK PRODUCT USED AS BASIS OF DESIGN. CONTRACTOR SHALL FASTEN THE DECKING IN ACCORDANCE WITH INSTALLED DECK MANUFACTURER'S RECOMMENDATIONS TO MEET SPECIFIED CAPACITY REQUIREMENTS.

2. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE SHEET STEEL".

3. DECKING SHALL HAVE A MINIMUM 1 1/2 INCHES BEARING ON SUPPORTS.

4. DECKING SHALL BE CONTINUOUS OVER THREE SPANS MINIMUM, EXCEPT WHERE SHOWN OTHERWISE.

5. LOCATE OPENINGS FOR EQUIPMENT PER OTHER DISCIPLINE DRAWINGS.

DEFERRED SUBMITTALS

1. 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.

2. THE FOLLOWING IS A LIST OF DEFERRED SUBMITTALS 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, SUBMIT THE REQUIRED CALCULATIONS AND SUPPORTING DATA AND DRAWINGS FOR REVIEW AND ACCEPTANCE.

SPECIFICATION SECTION	ITEM
01 88 15	ANCHORAGE AND BRACING
05 21 19	OPEN WEB STEEL JOIST FRAMING
33 16 13.12	BOLTED STEEL STORAGE TANK
40 05 15	PIPING SUPPORT SYSTEMS
OTHER	ANY EQUIPMENT OR COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF EQUIPMENT OR ANCHORAGE SYSTEM CALCULATIONS

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. KELLOGG
DRAWN BY: S. METCALF
CHECKED BY: H. HENRIKSON
IN CHARGE: P. RUDE
DATE: 12-19-2023

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REGISTERED PROFESSIONAL ENGINEER
JEREMY KELLOGG
5698
CALIFORNIA

Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
GENERAL
STRUCTURAL NOTES 2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0001-G-0302
SHT 7 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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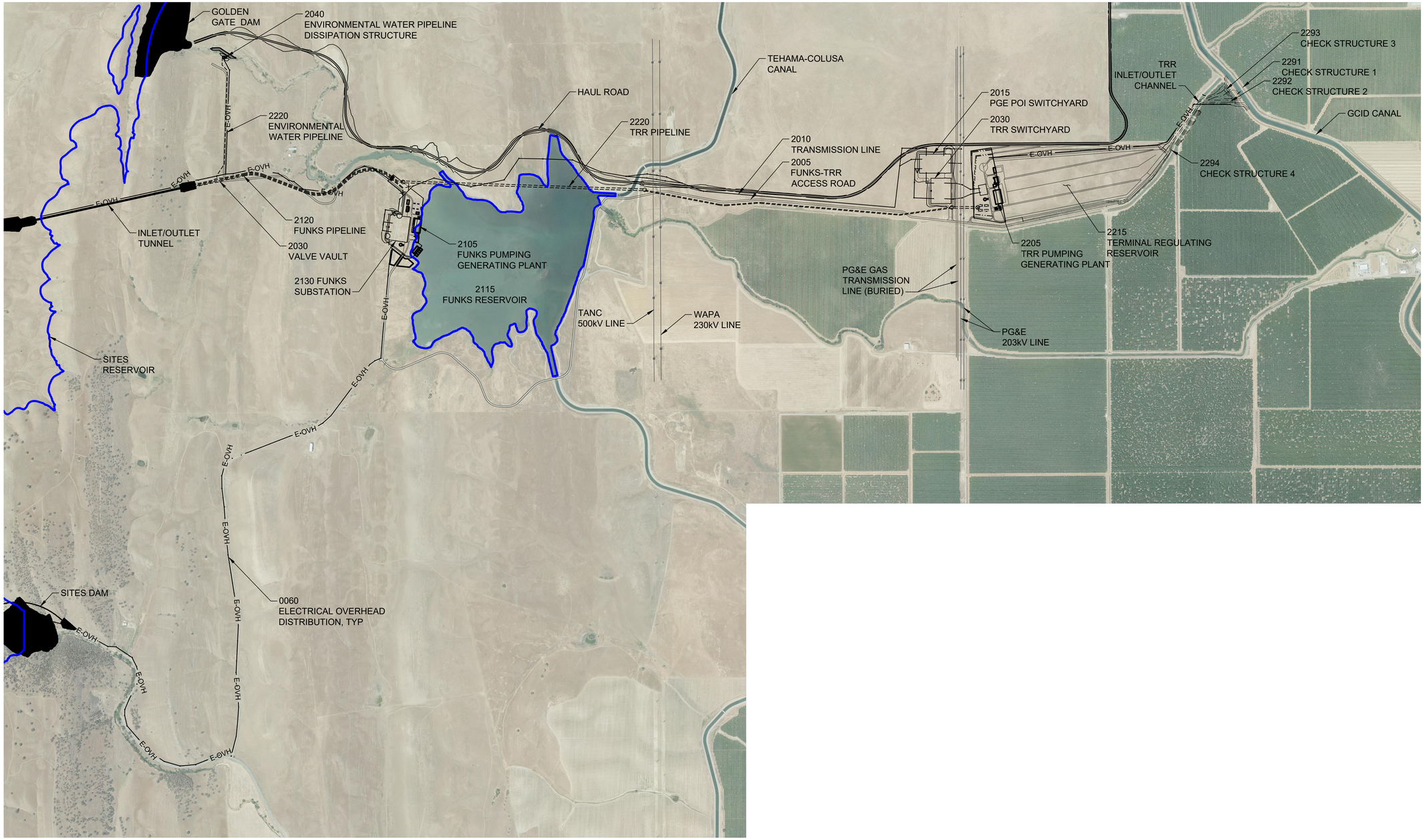

GENERAL NOTES

1. AERIAL PHOTOGRAPHY WAS FLOWN ON MAY 13 AND 14, 2022 BY GEOTERRA, INC. AND WAS DELIVERED TO JACOBS IN SEPTEMBER 2022.
2. MAPPING WAS COMPILED BY R.E.Y. ENGINEERS, INC. FROM AERIAL LIDAR DATA, COLLECTED BY GEOTERRA, INC. ON FEBRUARY 8 AND 9, 2022, AND SUPPLEMENTAL GROUND SURVEY AND BATHYMETRY PERFORMED BY R.E.Y ENGINEERS.
3. HORIZONTAL DATUM: 2011 REALIZATION OF THE NORTH AMERICAN DATUM OF 1983 (NAD83(2011)), EPOCH 2017.50. MAPPING PROJECTION IS US STATE PLANES COORDINATES, CALIFORNIA ZONE 2, SURVEY FEET.
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), GEOID18.
5. SOURCE OF BATHYMETRY IN FUNKS RESERVOIR: R.E.Y. ENGINEERS, INC CONDUCTED THE BATHYMETRIC SURVEY IN SEPTEMBER OF 2020. DATA COLLECTION WAS BY EXTENDED RANGE-POLE WITH GPS RTK ROVER FROM A RAFT. DENSE VEGETATION IN THE RESERVOIR PREVENTED USE OF SONAR.
6. SITES PROJECT JOINT POWERS AUTHORITY GPS CONTROL NETWORK ESTABLISHED IN JANUARY 2023 RECORD OF SURVEY IS RECORDED WITH COLUSA COUNTY RECORDS, DOCUMENT NUMBER 2023-0001608 AND WAS FILED JUNE 27, 2023.

PLAN
HORIZ SCALE: 1" = 1000'

0 1000' 2000' N

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: B.CHELONIS
DRAWN BY: B. CHELONIS
CHECKED BY: W. OHLIN
IN CHARGE: P. RUDE
DATE: 12-19-2023

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C 59851
CALIFORNIA

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SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
CIVIL
OVERALL LOCATION AND SURVEY CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-0045-C-2001
SHT 8 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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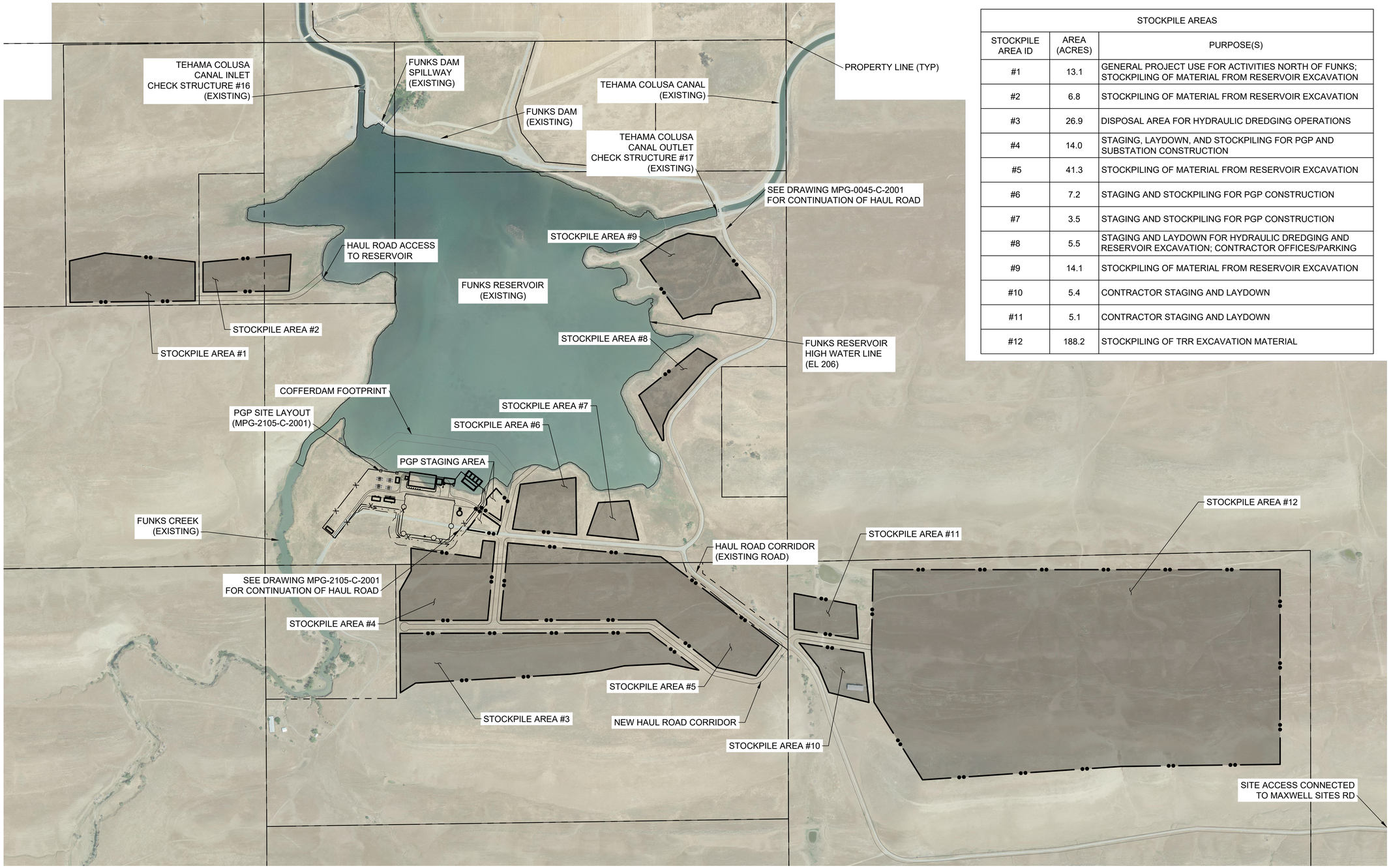

STOCKPILE AREAS		
STOCKPILE AREA ID	AREA (ACRES)	PURPOSE(S)
#1	13.1	GENERAL PROJECT USE FOR ACTIVITIES NORTH OF FUNKS; STOCKPILING OF MATERIAL FROM RESERVOIR EXCAVATION
#2	6.8	STOCKPILING OF MATERIAL FROM RESERVOIR EXCAVATION
#3	26.9	DISPOSAL AREA FOR HYDRAULIC DREDGING OPERATIONS
#4	14.0	STAGING, LAYDOWN, AND STOCKPILING FOR PGP AND SUBSTATION CONSTRUCTION
#5	41.3	STOCKPILING OF MATERIAL FROM RESERVOIR EXCAVATION
#6	7.2	STAGING AND STOCKPILING FOR PGP CONSTRUCTION
#7	3.5	STAGING AND STOCKPILING FOR PGP CONSTRUCTION
#8	5.5	STAGING AND LAYDOWN FOR HYDRAULIC DREDGING AND RESERVOIR EXCAVATION; CONTRACTOR OFFICES/PARKING
#9	14.1	STOCKPILING OF MATERIAL FROM RESERVOIR EXCAVATION
#10	5.4	CONTRACTOR STAGING AND LAYDOWN
#11	5.1	CONTRACTOR STAGING AND LAYDOWN
#12	188.2	STOCKPILING OF TRR EXCAVATION MATERIAL

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. STOCKPILE AREAS MAY BE USED FOR CONTRACTOR STAGING AND LAYDOWN.

SHEET KEY NOTES

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
CIVIL
FUNKS RESERVOIR
STOCKPILE AND HAUL ROUTE
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2101
SHT 9 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/18/2023 2:41 PM
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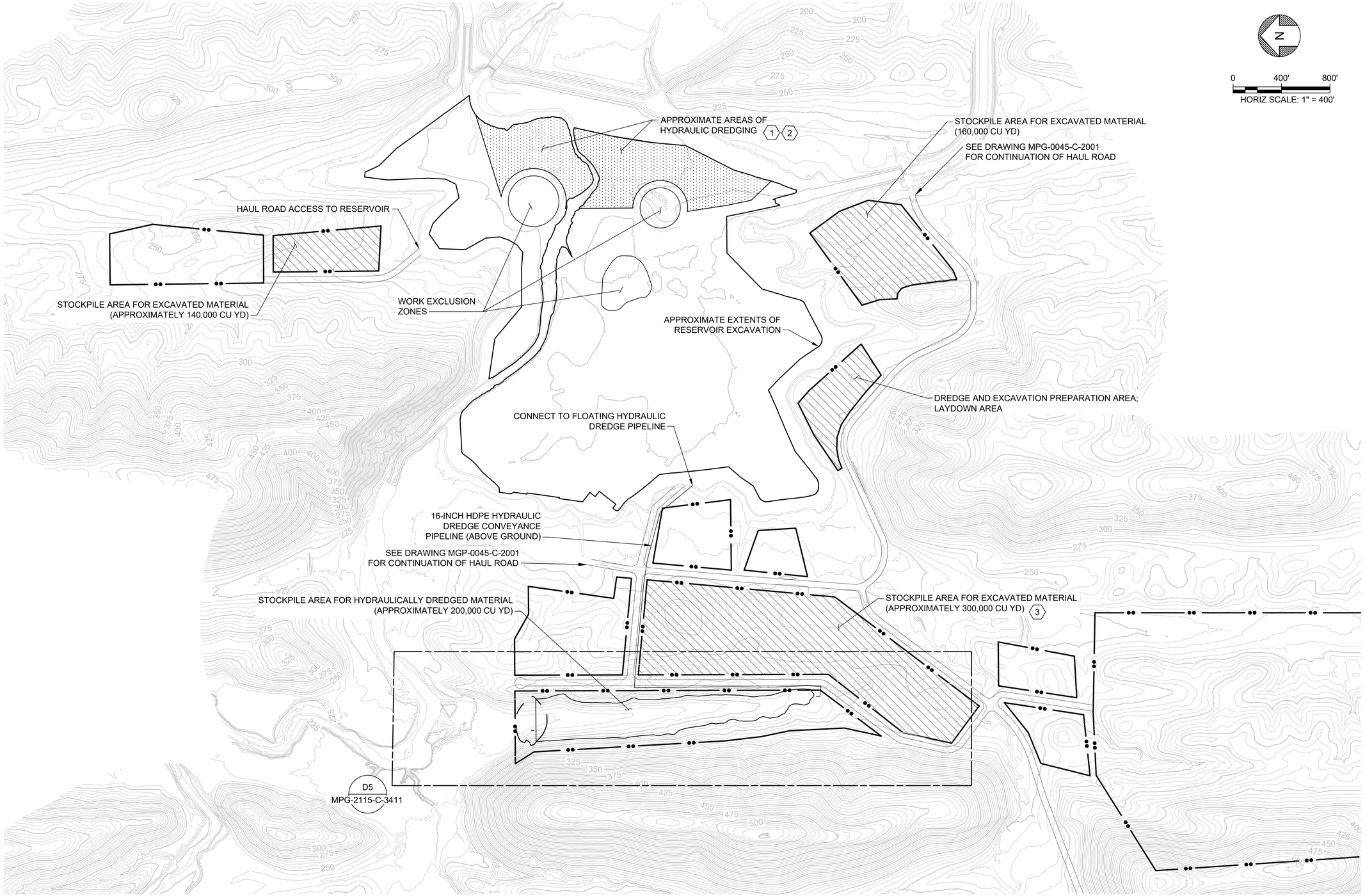

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.

SHEET KEY NOTES

1. ALL AREAS OUTSIDE OF HYDRAULIC DREDGING AREA WILL BE EXCAVATED DURING RESERVOIR OUTAGE PERIODS.
2. ONE BOOSTER PUMP STATION REQUIRED ALONG THE 16-INCH HYDRAULIC DREDGE CONVEYANCE PIPELINE.
3. CAPACITY INCLUDES ALLOWANCE FOR SEGREGATION OF SEDIMENTS.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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REGISTERED PROFESSIONAL ENGINEER
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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
CIVIL
FUNKS RESERVOIR
RESERVOIR EXCAVATION STOCKPILES AND IMPOUNDMENT PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2102
SHT 10 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 12:15 PM
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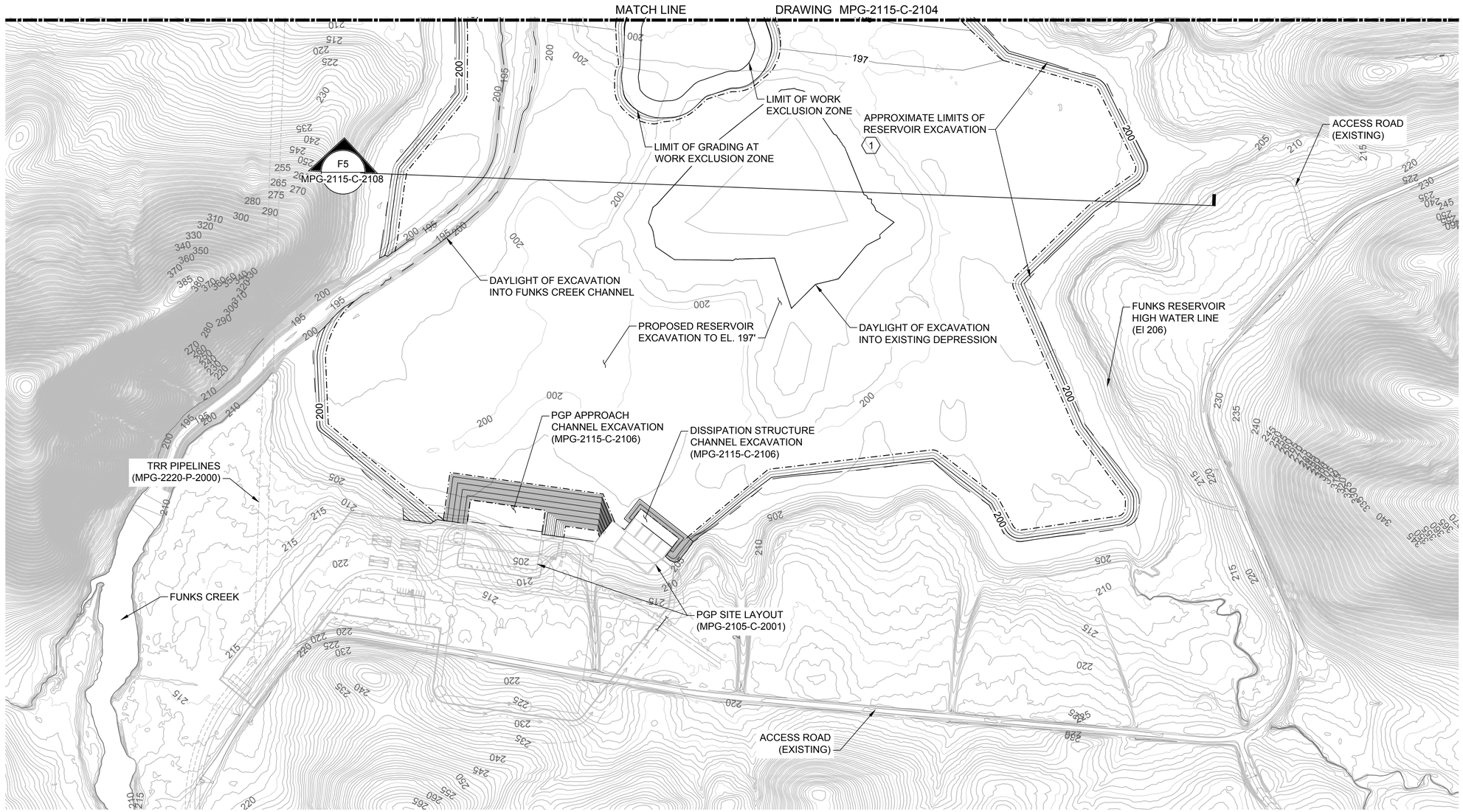

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.

SHEET KEY NOTES

1. RESERVOIR EXCAVATION WILL BE A MINIMUM OF 60 FT FROM WORK EXCLUSION ZONES AND APPROXIMATELY 100 FT FROM THE RESERVOIR HIGH WATER LINE.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
FUNKS RESERVOIR
WEST EXCAVATION
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2103
SHT 11 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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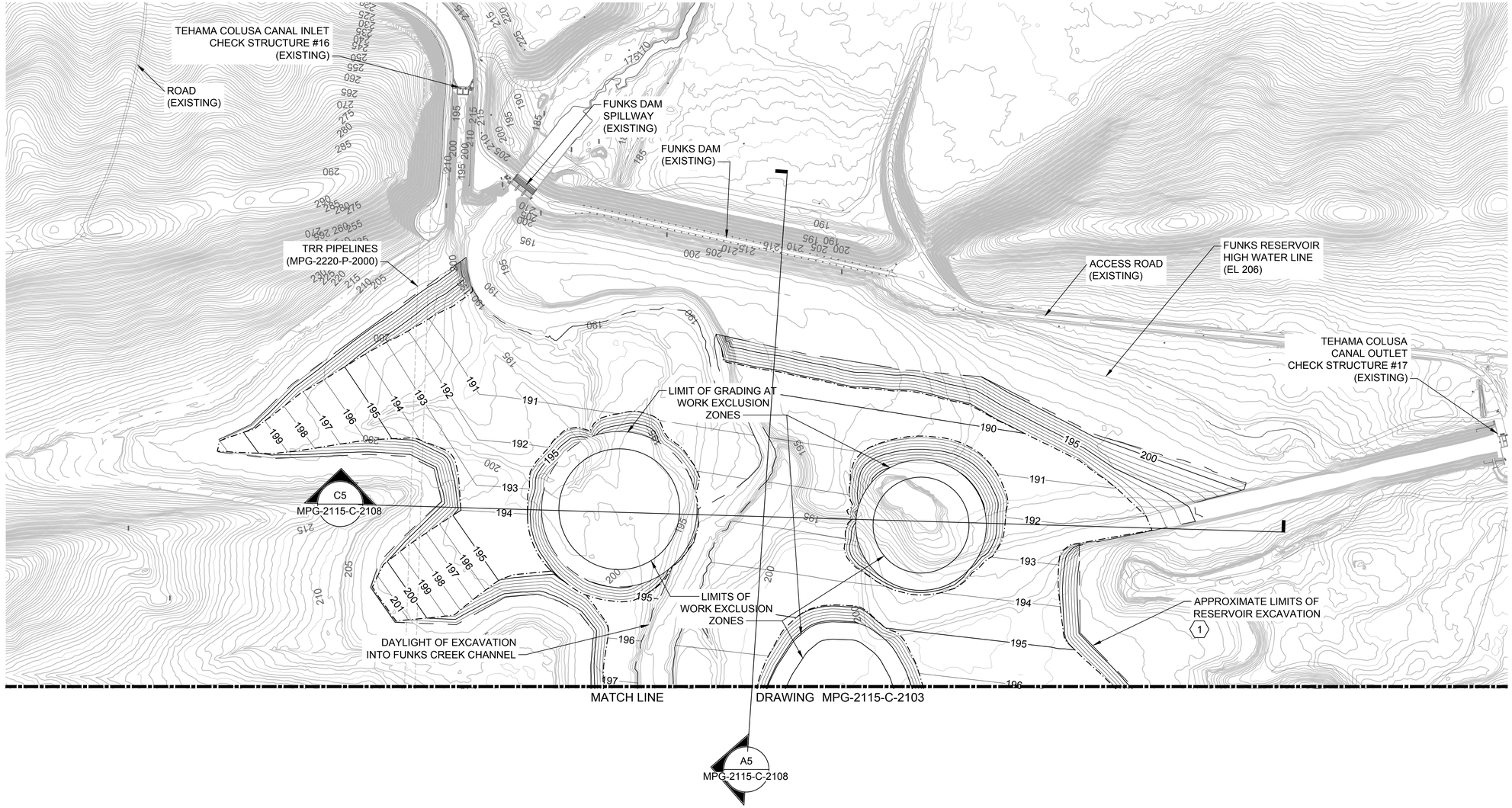

0 200' 400'

HORIZ SCALE: 1" = 200'

N

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. APPROXIMATE AREA OF HYDRAULIC DREDGING IS NOT SHOWN, SEE DWG MPG-2115-C-2102.

SHEET KEY NOTES

1. RESERVOIR EXCAVATION WILL BE A MINIMUM OF 60 FT FROM WORK EXCLUSION ZONES AND APPROXIMATELY 100 FT FROM THE RESERVOIR HIGH WATER LINE.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
FUNKS RESERVOIR
EAST EXCAVATION
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2104
SHT 12 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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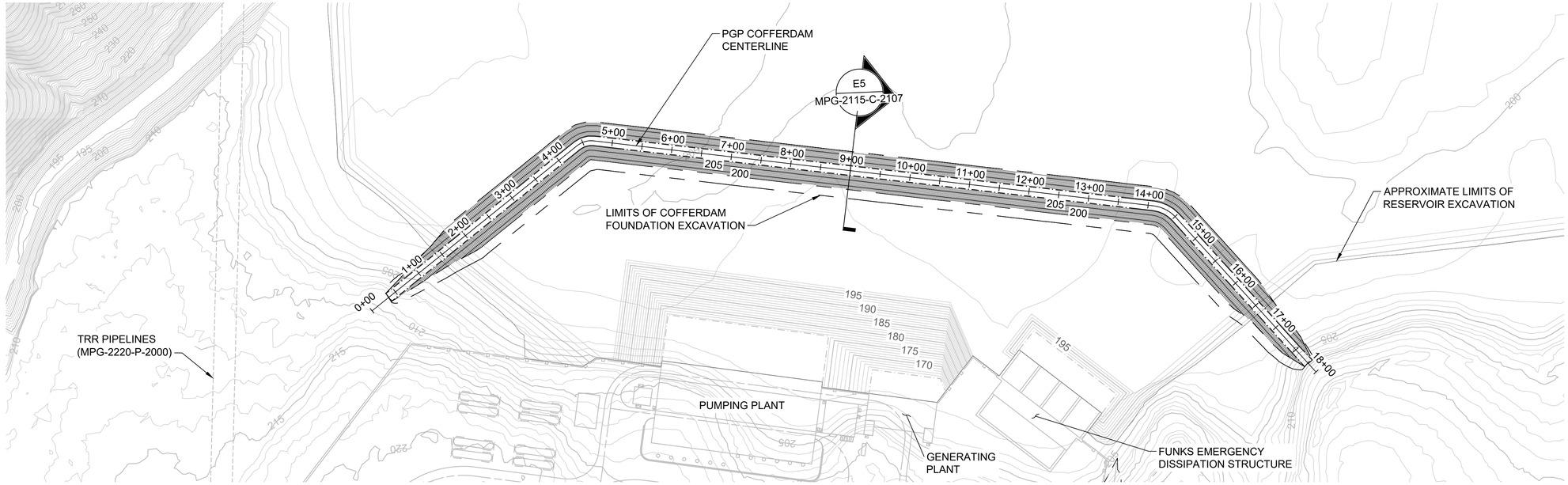
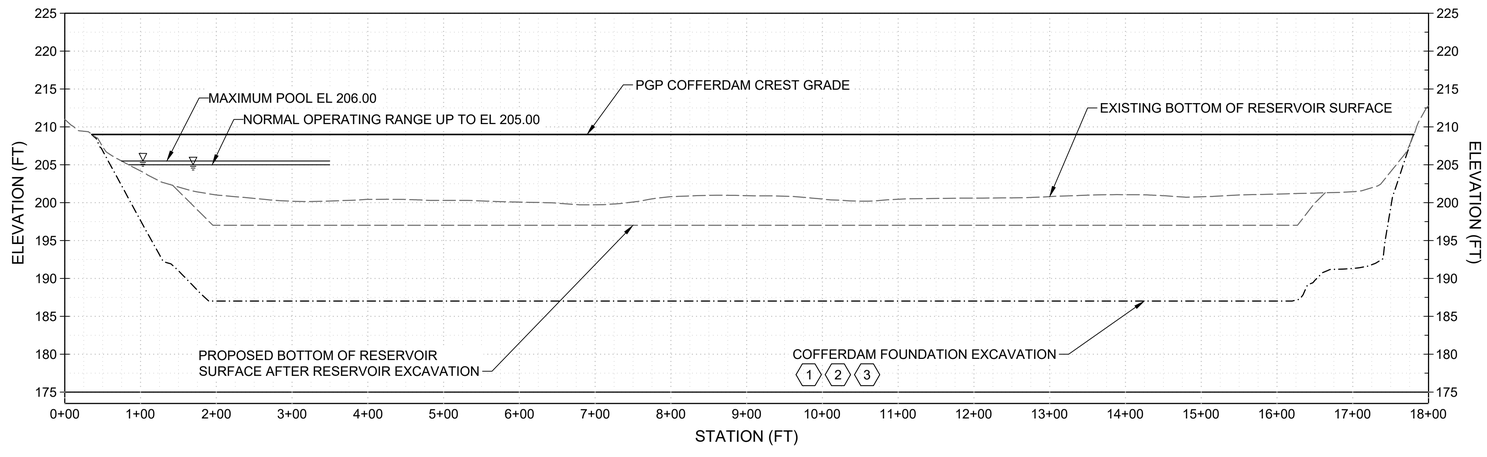


PGP COFFERDAM PLAN

HORIZ SCALE: 1" = 100'



PGP COFFERDAM PROFILE

HORIZ SCALE: 1" = 100'
VERT SCALE: 1" = 1'

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. FOR FUNKS PGP OVERALL SITE PLAN REFER TO DWG MPG-2105-C-2001.

SHEET KEY NOTES

1. COFFERDAM FOUNDATION EXCAVATION WILL BE PERFORMED IN DRY DURING RESERVOIR OUTAGE PERIOD OR WILL BE PERFORMED VIA MECHANICAL DREDGING.
2. EXTENTS AND BOTTOM ELEVATION OF COFFERDAM EXCAVATION IS APPROXIMATE AND WILL BE REVISED IN THE FIELD BASED ON ENCOUNTERED GEOLOGIC CONDITIONS.
3. COFFERDAM FOUNDATION EXCAVATION SHALL BE OBSERVED BY A FIELD ENGINEER PRIOR TO BACKFILLING WITH ROCKFILL.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
FUNKS RESERVOIR
PGP COFFERDAM
PLAN AND PROFILE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2105
SHT 13 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/18/2023 2:30 PM
Saved By: SKHALAMEYZER
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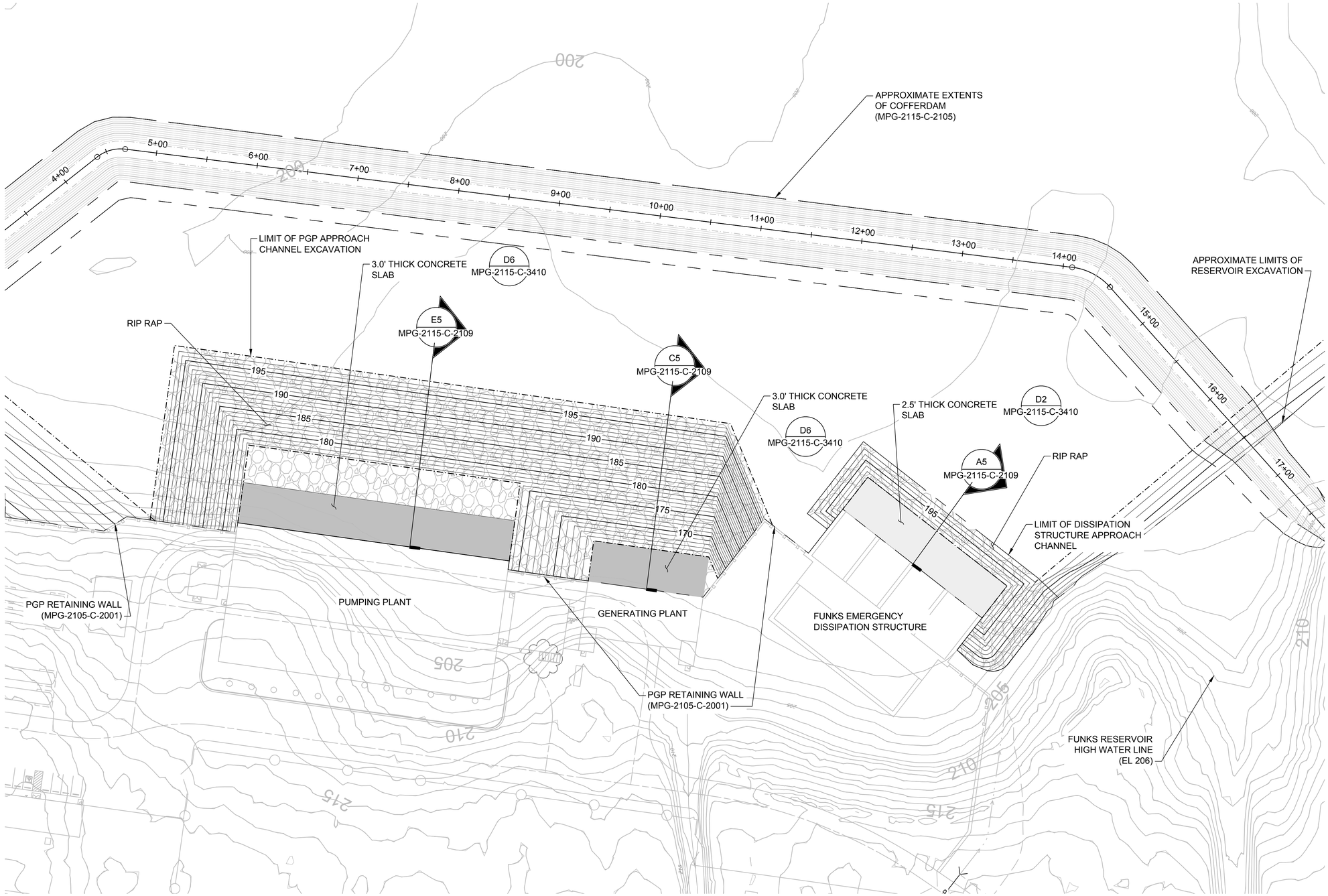

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. FOR FUNKS PGP OVERALL SITE PLAN REFER TO DWG MPG-2105-C-2001.

SHEET KEY NOTES

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
FUNKS RESERVOIR
PGP APPROACH CHANNEL
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2106
SHT 14 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 7:06 PM
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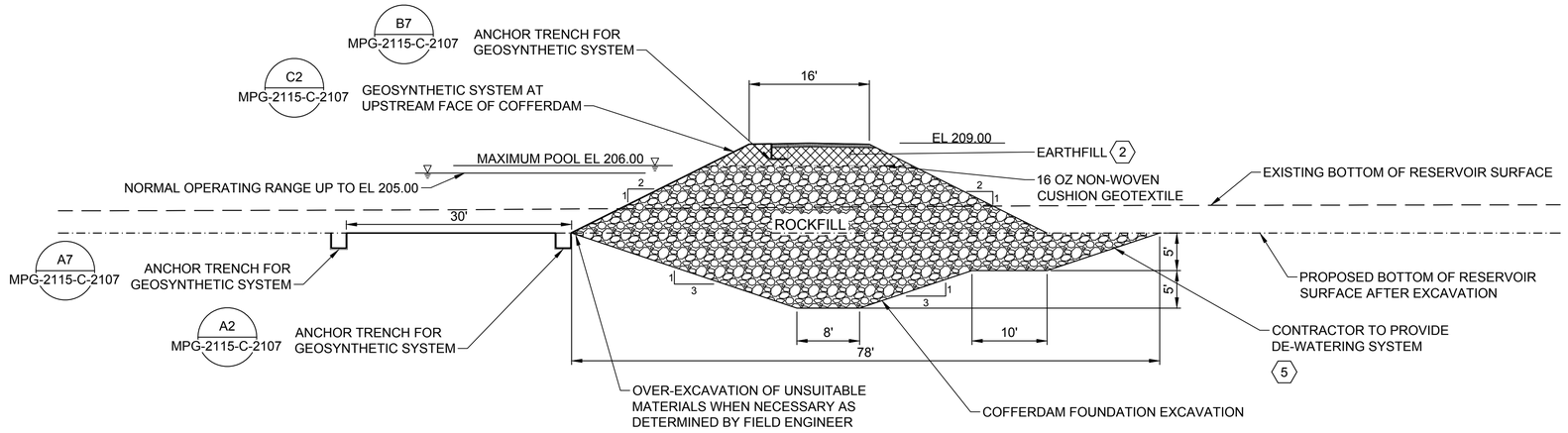
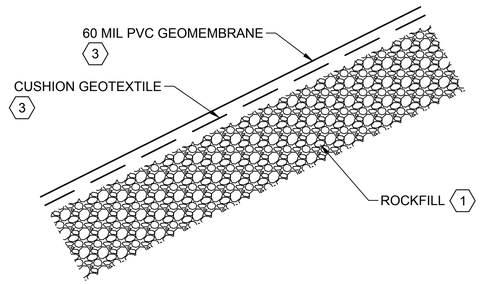


E5 TYP. COFFERDAM SECTION
1" = 10'

MPG-2115-C-2105

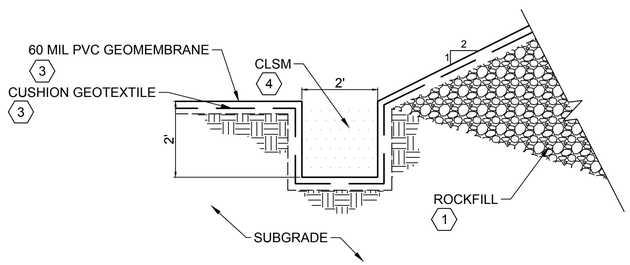
HORIZ SCALE: 1" = 10'

VERT SCALE: 1"=10'



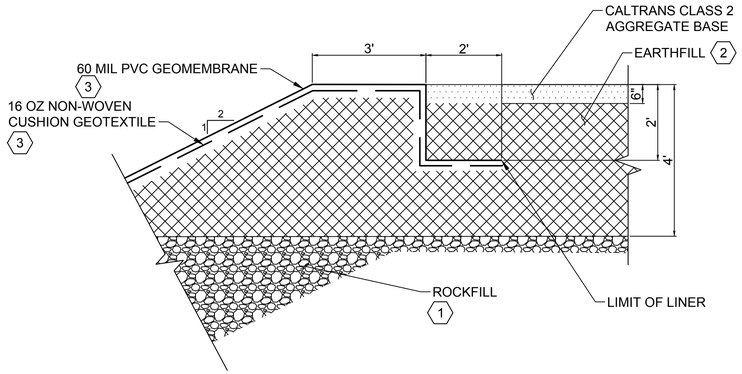
C2 GEOSYNTHETIC SYSTEM DETAIL
SCALE: NTS

MPG-2115-C-2107



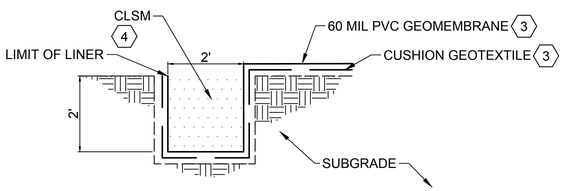
A2 ANCHOR TRENCH DETAIL
SCALE: NTS

MPG-2115-C-2107



B7 ANCHOR TRENCH DETAIL
SCALE: NTS

MPG-2115-C-2107



A7 ANCHOR TRENCH DETAIL
SCALE: NTS

MPG-2115-C-2107

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. SEE DWG MPG-2115-C-2105 FOR COFFERDAM FOUNDATION EXCAVATION NOTES.

SHEET KEY NOTES

1. ROCKFILL SHALL BE HARD, SOUND, DURABLE, CRUSHED OR QUARRIED ROCK WITH NO PARTICLES LARGER THAN 30". ROCKFILL SHALL NOT BE SUBJECT TO DISINTEGRATION BY THE ACTION OF AIR OR WATER, AND SHALL NOT HAVE INDIVIDUAL PIECES THAT ARE ROUNDED, WORN, OR WEATHERED.
2. EARTHFILL SHALL CONSIST OF SOIL WITH A USCS CLASSIFICATION OF GW, SW, GM, GC, SM, SP, OR COMBINATION THEREOF (PER ASTM 2487), FREE FROM ORGANICS OR OTHER DELETERIOUS MATERIAL, AND SHALL NOT CONTAIN ROCKS OR LUMPS GREATER THAN 3". EARTHFILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8-INCHES AND SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90%.
3. GEOMEMBRANE SHALL BE 60-MIL, SMOOTH PVC, AND SHALL BE FACTORY SEAMED TO MINIMIZE FIELD SEAMING AND WASTE. GEOTEXTILE SHALL BE NONWOVEN POLYPROPYLENE WITH A MINIMUM WEIGHT OF 16 OZ/SY.
4. CLSM SHALL CONSIST OF A MIXTURE OF AGGREGATE, PORTLAND CEMENT, FLY ASH, WATER AND BENTONITE. WHEN TESTED IN ACCORDANCE WITH CALIFORNIA TEST 548, THE COMPRESSIVE STRENGTH OF A SAMPLE WILL BE AT LEAST 60 PSI AT 7 CALENDAR DAYS, AND 100 PSI TO 150 PSI AT 28 CALENDAR DAYS.
5. DEWATERING AT THE TOE OF THE COFFERDAM IS ANTICIPATED TO INCLUDE SEEPAGE COLLECTION FEATURES SUCH AS DITCHES, SUMPS, AND ASSOCIATED PUMPING EQUIPMENT TO RETURN WATER TO FUNKS RESERVOIR.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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PGP COFFERDAM
SECTION AND DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2107
SHT 15 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 6:21 PM
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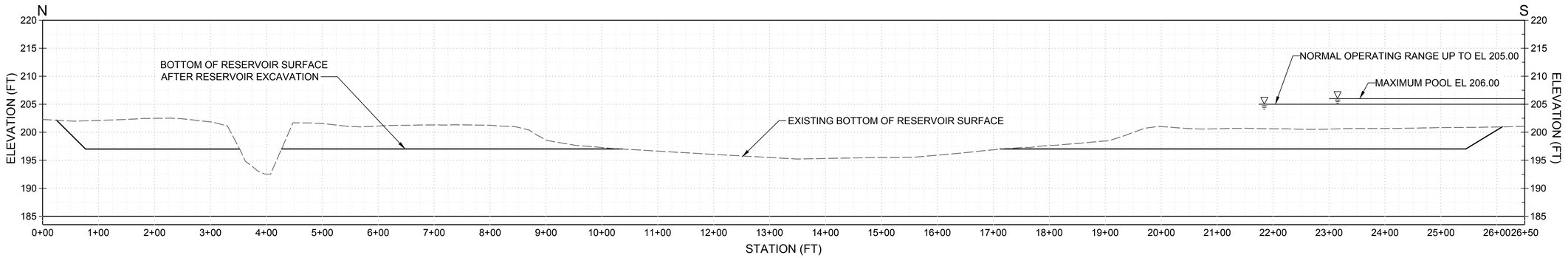
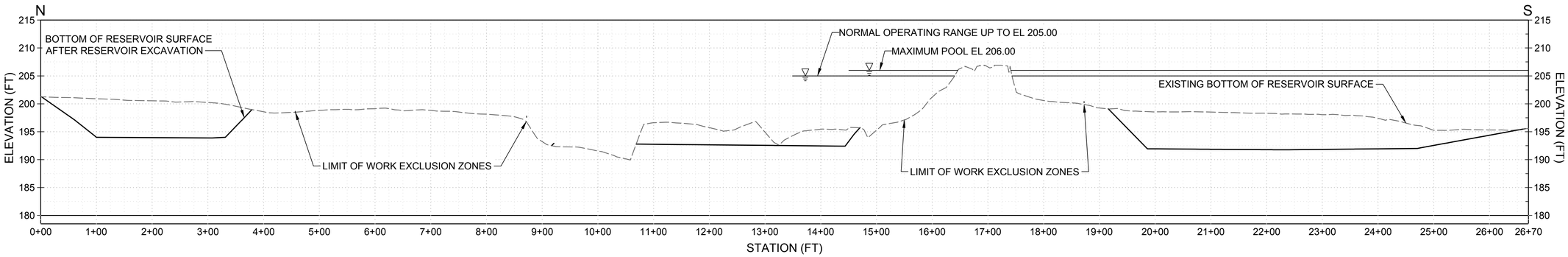


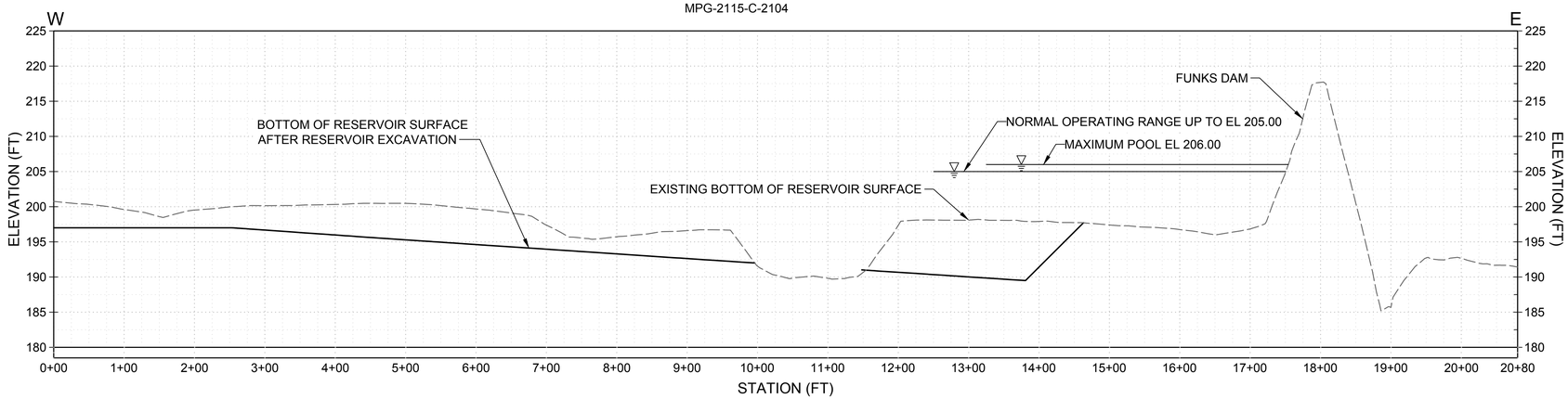
F5 RESERVOIR EXCAVATION PROFILE
SCALE: 1" = 100'

MPG-2115-C-2103



C5 RESERVOIR EXCAVATION PROFILE
SCALE: 1" = 100'

MPG-2115-C-2104



A5 RESERVOIR EXCAVATION PROFILE
SCALE: 1" = 100'

MPG-2115-C-2104

HORIZ SCALE: 1" = 100'

VERT SCALE: 1"=10'

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. CONSTRUCTION CONTROL TO BE GENERATED ELECTRONICALLY BY CONTRACTOR'S SURVEYOR. GRADING PLAN WILL BE PROVIDED IN ELECTRONIC FORMAT TO CONTRACTOR'S SURVEYOR UPON APPROVAL BY OWNER.

SHEET KEY NOTES

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
FUNKS RESERVOIR
RESERVOIR EXCAVATION PROFILES

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2108
SHT 16 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 6:51 PM
Saved By: SKHALAMEYZER
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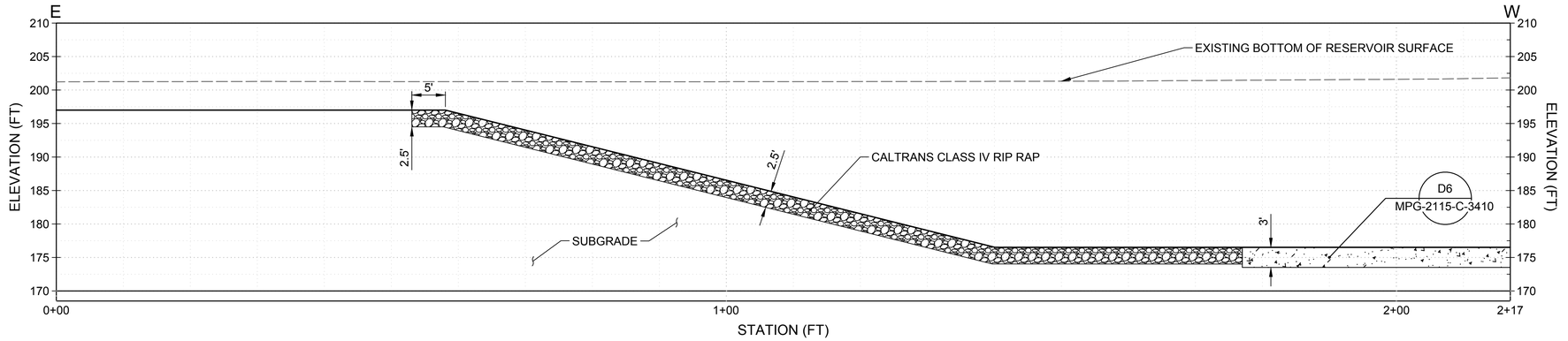
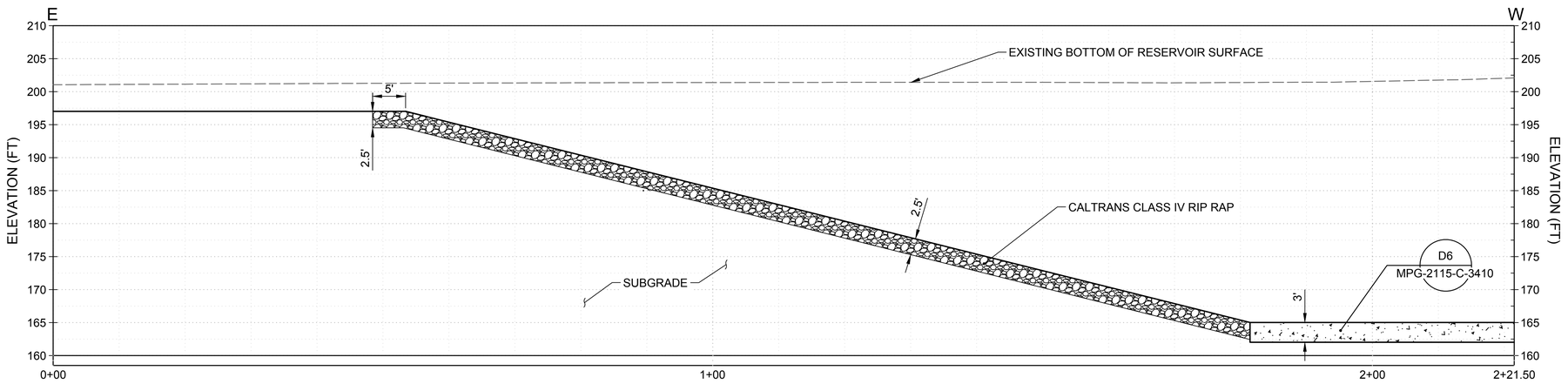


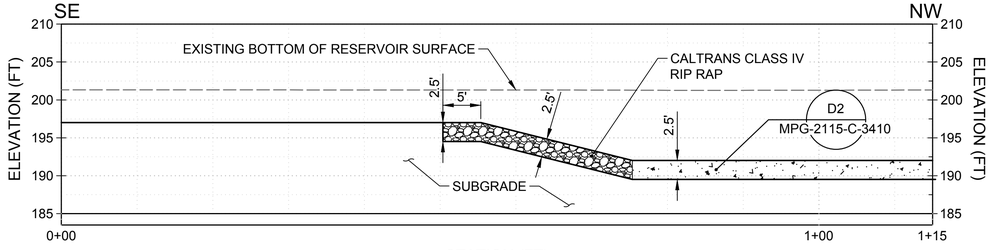
E5 APPROACH CHANNEL AT PUMPING PLANT PROFILE (TYP)
SCALE: 1" = 10'

MPG-2115-C-2106



C5 APPROACH CHANNEL AT GENERATING PLANT PROFILE (TYP)
SCALE: 1" = 10'

MPG-2115-C-2106



A5 APPROACH CHANNEL AT EMERGENCY DISSIPATION STRUCTURE PROFILE (TYP)
SCALE: 1" = 10'

MPG-2115-C-2106

0 10' 20'
HORIZ SCALE: 1" = 10'

0 10' 20'
VERT SCALE: 1"=10'

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. REINFORCEMENT NOT SHOWN FOR CLARITY, REFER TO DWG MPG-2115-C-3410 FOR CONCRETE DETAILS.

SHEET KEY NOTES

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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CIVIL
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PGP APPROACH CHANNEL
PROFILES

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-2109
SHT 17 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 7:05 PM
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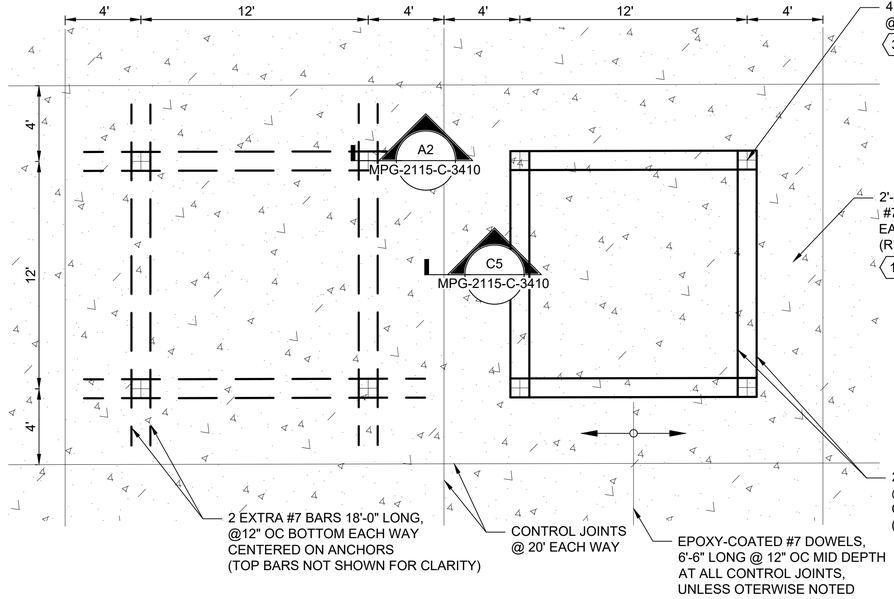
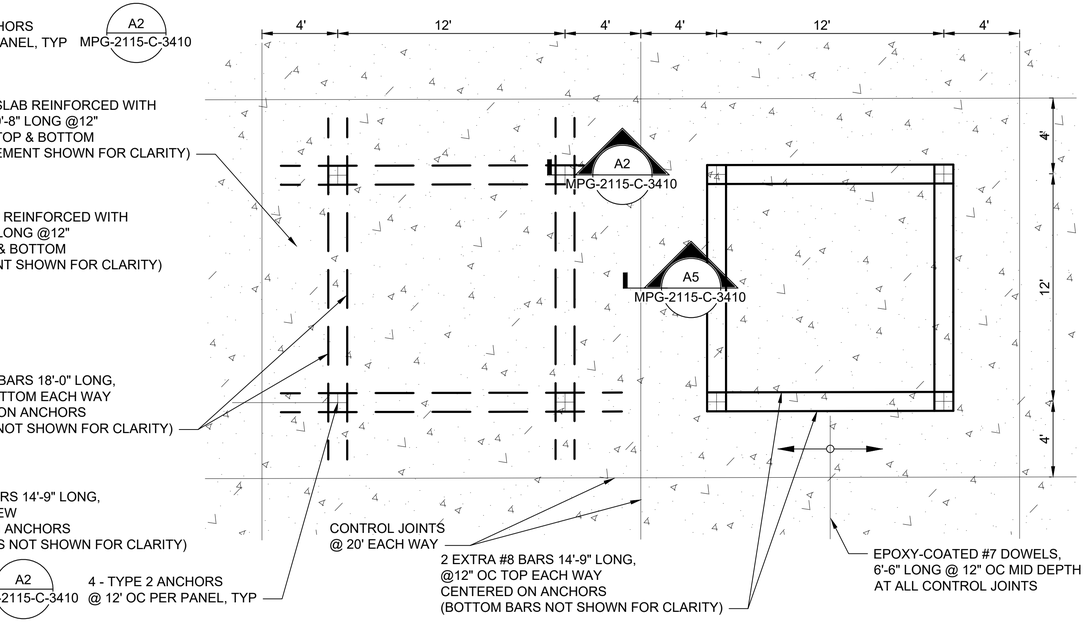


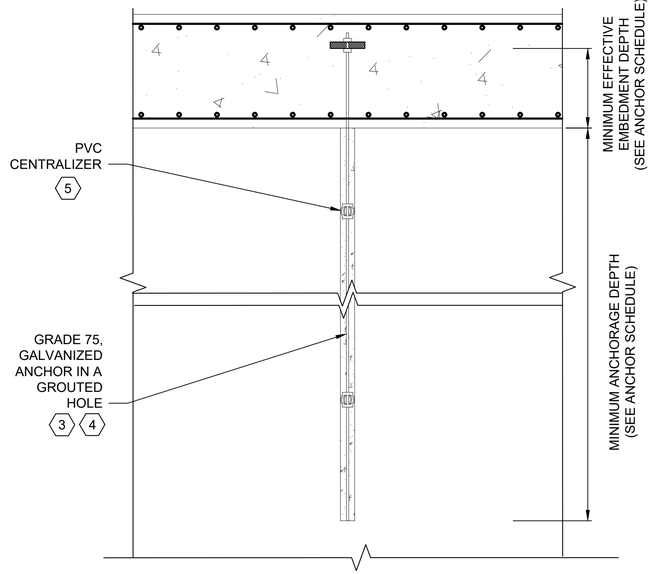
D2 2.5' THICK SLAB, CONTROL JOINT, AND ANCHOR LAYOUT
SCALE: NTS

MPG-2115-C-2106



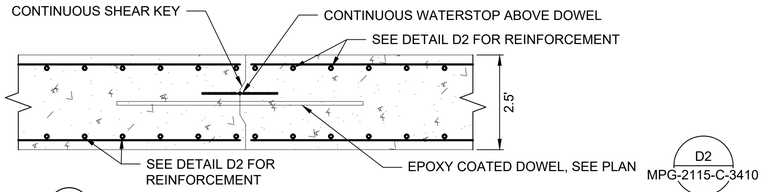
D6 3' THICK SLAB, CONTROL JOINT, AND ANCHOR LAYOUT
SCALE: NTS

MPG-2115-C-2106



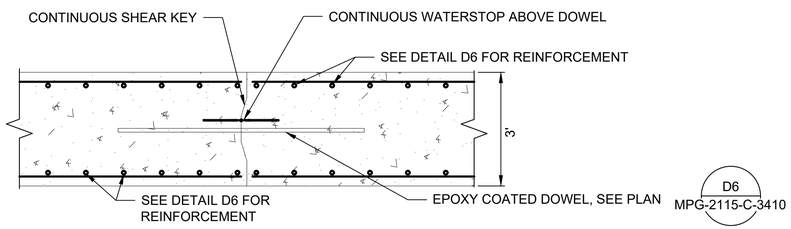
A2 SLAB ANCHOR
SCALE: NTS

MPG-2115-C-3410



C5 CONTROL JOINT FOR 2.5' THICK SLAB
SCALE: NTS

MPG-2115-C-3410



A5 CONTROL JOINT FOR 3.0' THICK SLAB
SCALE: NTS

MPG-2115-C-3410

ANCHOR SCHEDULE				
TYPE	Ø	MIN. EFFECTIVE EMBEDMENT IN SLAB (FT)	MIN. ANCHOR BOND LENGTH (FT)	HEADING: BOREHOLE DIAMETER (IN)
1	#11	1'-6"	16	4
2	#14	2'-0"	16	4.5

GENERAL NOTES

1. A 3/4-INCH CHAMFER SHALL BE PROVIDED ON ALL EXPOSED CORNERS AND EDGES.
2. REINFORCEMENT SHALL BE ASTM A615 GRADE 60. 3-INCH CLEAR COVER UNLESS OTHERWISE NOTED.

SHEET KEY NOTES

1. CONCRETE SHALL BE NORMAL WEIGHT WITH A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
2. PROVIDE 2 EXTRA #7 BARS AT ALL CORNERS AND EDGES FOR EACH PANEL.
3. SLAB ANCHOR BARS TO BE WILLIAMS GRADE 75, GALVANIZED FOR CORROSION PROTECTION. ANCHORS SHALL BE SUBJECT TO A PULLOUT TESTING PROGRAM PER ASTM 4435.
4. SLAB ANCHORS TO BE INSTALLED IN A WATER TIGHTNESS TESTED HOLE.
5. PVC CENTRALIZER SPACED AT 5' OC ALONG THE ENTIRE BAR LENGTH, MAXIMUM 3' FROM THE END OF THE BAR.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

Jacobs
2525 AIRPARK DR
REDDING, CA 96001
(530) 243-5831
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REGISTERED
PROFESSIONAL
ENGINEER
JAY GRIFFIN
C81266
CALIFORNIA

Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
CIVIL
FUNKS RESERVOIR
PGP APPROACH CHANNEL
DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-3410
SHT 18 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/18/2023 6:47 PM
Saved By: SKHALAMEYZER
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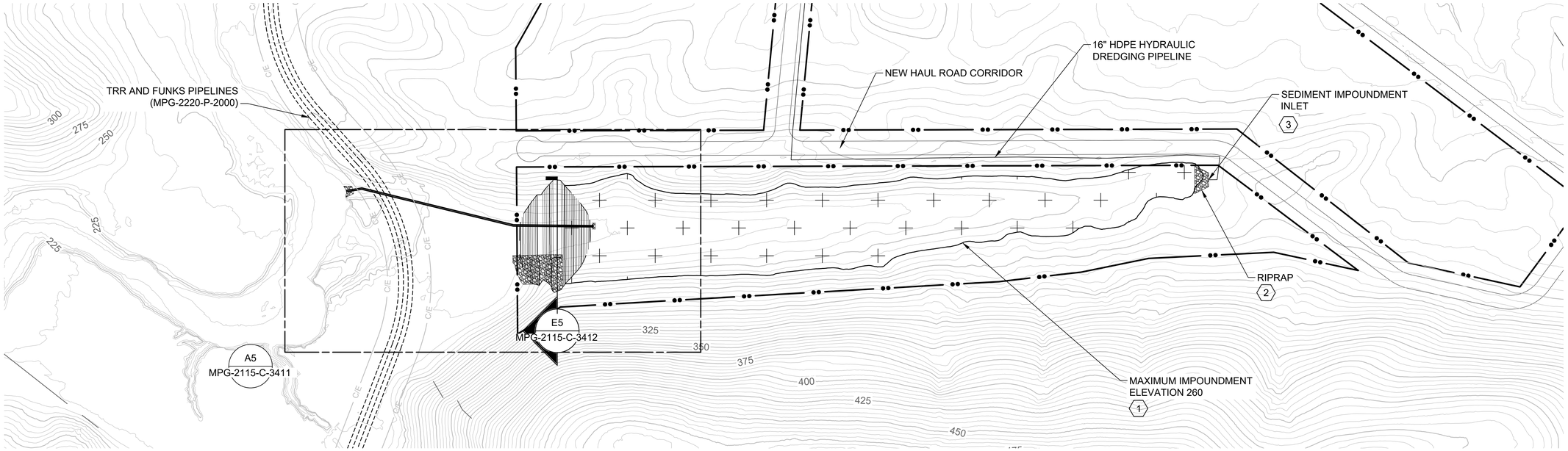
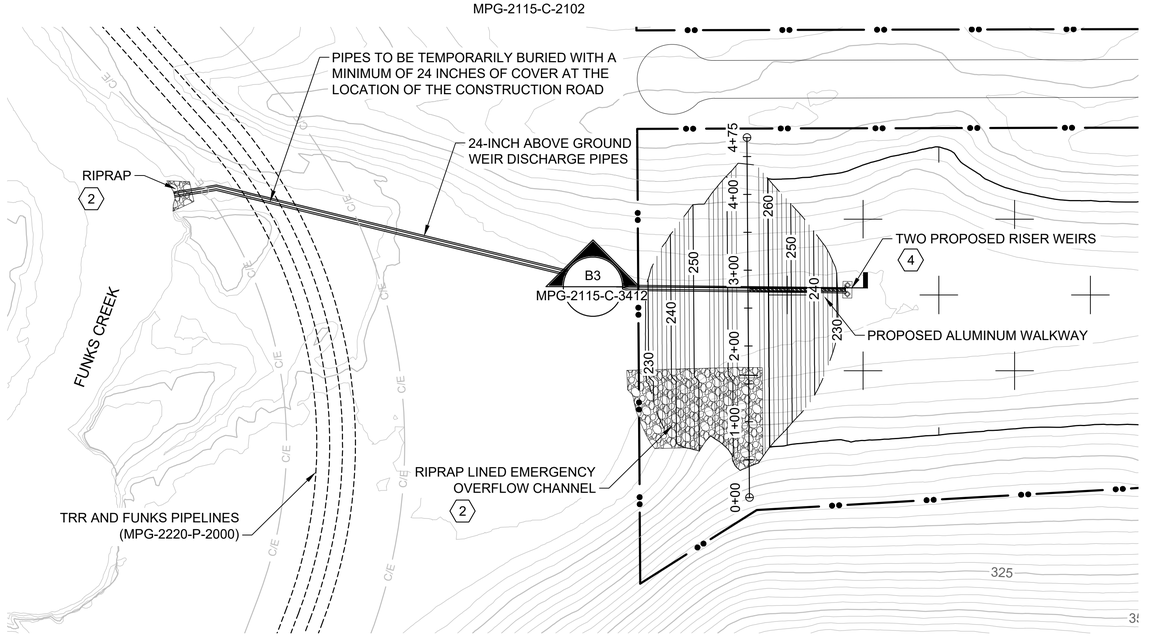


D5 SEDIMENT IMPOUNDMENT PLAN VIEW

HORIZ SCALE: 1" = 200'

0 200' 400'

MPG-2115-C-2102



A5 SEDIMENT IMPOUNDMENT BERM PLAN VIEW

HORIZ SCALE: 1" = 100'

0 100' 200'

MPG-2115-C-3411

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. KEY AND SCARIFY EXISTING MATERIAL PRIOR TO EARTHFILL PLACEMENT. PLACE EARTHFILL IN COMPACTED LIFTS WITH THICKNESS NOT EXCEEDING 6-INCHES.
3. EARTHFILL WILL CONSIST OF WELL GRADED CLAYEY MATERIAL WITH A MIN. 25% PASSING THE NO. 200 SIEVE, HAVE A MAX PARTICLE SIZE OF 3 IN. AND BE FREE OF ORGANIC MATERIAL.

SHEET KEY NOTES

1. CONTRACTOR TO CLEAR AND GRUB WITHIN THE EXTENTS OF THE IMPOUNDMENT.
2. RIPRAP SHALL BE CALTRANS CLASS IV.
3. CONTRACTOR MAY ADD FLOCCULANT OR OTHER APPROVED PRODUCTS TO ENHANCE SETTLING OF SEDIMENTS.
4. RISER WEIRS TO BE STEEL FRAMED WITH SLOTS FOR 12-INCH TALL COMPOSITE WEIR BOARDS. WEIRS SHALL BE FOUNDED ON 24-INCH THICK CONCRETE SLAB AND CONNECTED TO 24-INCH HDPE OUTLET PIPES.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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Sites

SITES RESERVOIR

MAXWELL / SITES PUMPING AND GENERATING
CIVIL
FUNKS RESERVOIR
SEDIMENT IMPOUNDMENT
PLAN AND PROFILE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-3411
SHT 19 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

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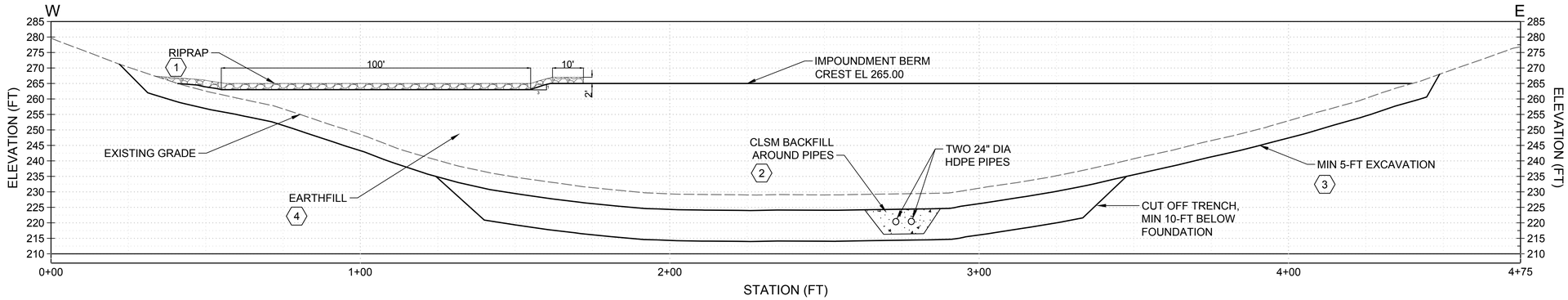
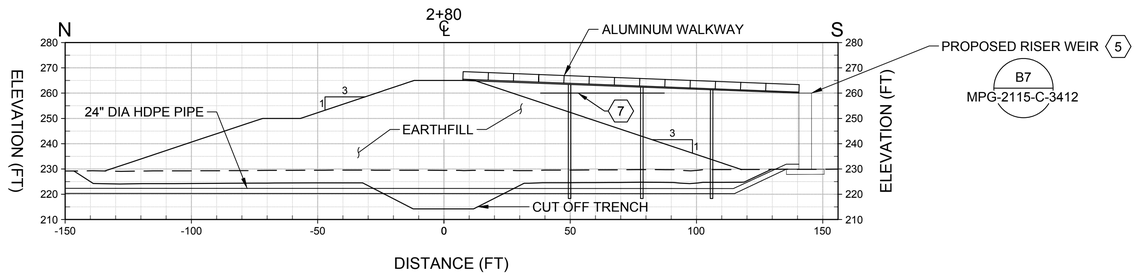


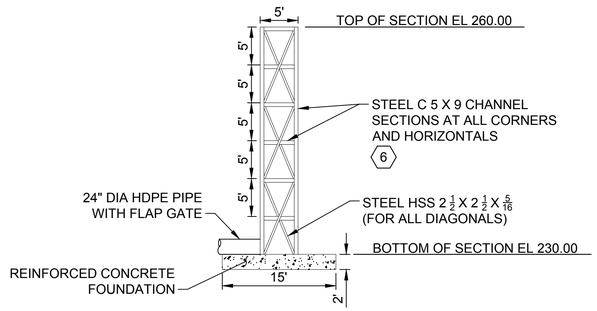
E5 STOCKPILE #3 IMPOUNDMENT BERM PROFILE
SCALE: 1"=20'

MPG-2115-C-3411



B3 SECTION (TYP.)
SCALE: 1"=30'

MPG-2115-C-3411



B7 RISER WEIR DETAIL
SCALE: 1"=10'

MPG-2115-C-3412

GENERAL NOTES

1. FOR SURVEY AND MAPPING NOTES REFER TO DWG MPG-0045-C-2001.
2. CONTRACTOR TO CLEAR AND GRUB WITHIN THE EXTENTS OF THE IMPOUNDMENT.

SHEET KEY NOTES

1. RIPRAP SHALL BE D50 = 18".
2. CLSM SHALL CONSIST OF A MIXTURE OF AGGREGATE, PORTLAND CEMENT, FLY ASH, WATER AND BENTONITE. WHEN TESTED IN ACCORDANCE WITH CALIFORNIA TEST 548, THE COMPRESSIVE STRENGTH WILL BE AT LEAST 60 PSI AT 7 CALENDAR DAYS, AND 100 PSI AT 28 CALENDAR DAYS.
3. KEY AND SCARIFY EXISTING MATERIAL PRIOR TO EARTHFILL PLACEMENT. PLACE EARTHFILL IN COMPACTED LIFTS WITH THICKNESS NOT EXCEEDING 6-INCHES.
4. EARTHFILL WILL CONSIST OF WELL GRADED CLAYEY MATERIAL WITH A MIN 25% PASSING THE NO. 200 SIEVE, HAVE A MAX PARTICLE SIZE OF 3 IN AND BE FREE OF ORGANIC MATERIAL.
5. RISER WEIRS TO BE STEEL FRAMED WITH SLOTS FOR 12-INCH TALL COMPOSITE WEIR BOARDS. WEIRS SHALL BE FOUNDED ON 24-INCH THICK CONCRETE SLAB AND CONNECTED TO 24-INCH DIA HDPE OUTLET PIPES.
6. CORNERS TO INCLUDE TWO CHANNEL SECTIONS TO SERVE AS GUIDES FOR 12-INCH TALL COMPOSITE WEIR BOARDS ON ALL SIDES OF THE RISER WEIR STRUCTURES.
7. MAXIMUM OPERATING ELEVATION 260 FT.

REV	DATE	BY	CHK.	APPR.	DESCRIPTION

DESIGNED BY: J. GRIFFIN
DRAWN BY: S.KHALAMEYZER
CHECKED BY: B. MARTINEZ
IN CHARGE: P. RUDE
DATE: 12-19-2023

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SEDIMENT IMPOUNDMENT BERM
PROFILE AND DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

DRAWING NO.
MPG-2115-C-3412
SHT 20 OF 20

PRELIMINARY - NOT FOR CONSTRUCTION

Plot Date: 12/7/2023 7:48 PM
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