KLAMATH RIVER RENEWAL CORPORATION

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE

VOLUME 2 - CONSTRUCTION DRAWINGS
JUNE, 2022

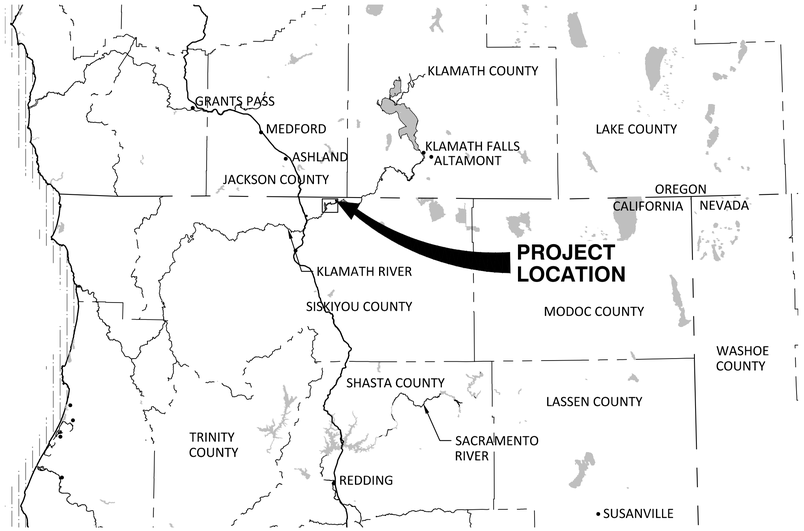
ISSUED FOR CONSTRUCTION

C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\COVER.dwg

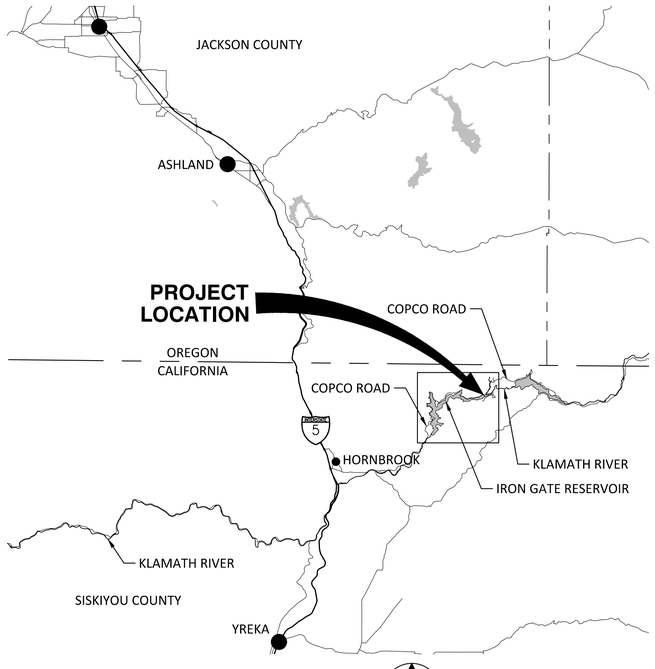
KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE DESIGN PROJECT

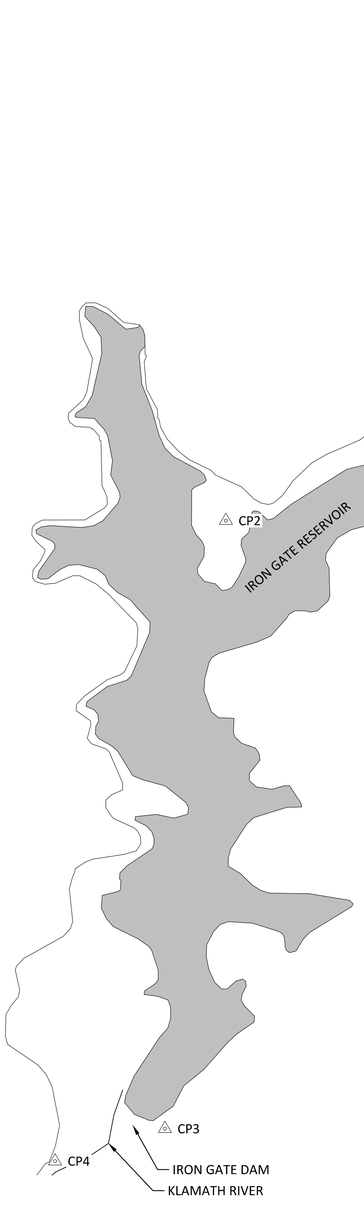
ISSUED FOR CONSTRUCTION



LOCATION MAP
NTS



VICINITY MAP



SURVEY CONTROL POINTS PLAN
NTS

SURVEY CONTROL POINT SCHEDULE

CONTROL POINT	MONUMENT_ID	NORTHING	EASTING	ELEVATION	GROUP	TYPE
CP1	WCP-101	2602481.28	6461785.59	2362.79	WOOLPERT	REBAR WITH CAP
CP2	GMA-203	2599140.91	6444628.30	2479.26	GMA	REBAR WITH CAP
CP3	GMA-205	2587906.56	6443500.04	2463.69	GMA	REBAR WITH CAP
CP4	KLAM_RTK_01	2587307.60	6441471.45	2193.84	QSI	REBAR WITH CAP

SURVEY CONTROL NOTES:

1. HORIZONTAL DATUM: HPGN NAD 1983 CALIFORNIA STATE PLANE ZONE I (FEET)
2. VERTICAL DATUM: NAVD 88 GEOID 12B.

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — JEFFREY ALAN LOWY — C 79836 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

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DAGGETT BRIDGE

LOCATION MAP VICINITY MAP AND SURVEY CONTROL POINTS

DESIGNED J. BURNS
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

DRAWING
G001

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G001.dwg Plot date: Jun 24, 2022 05:18pm, CAD User: JoeNeves

DRAWING INDEX

DWG NO	SHEET NO.	DESCRIPTION
GENERAL		
		COVER SHEET
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3	G003	STANDARD ABBREVIATIONS
4	G004	STANDARD SYMBOLS
5	G005	OVERALL PLAN
6	G006	CONTRACTOR STAGING AREA
EROSION AND SEDIMENT CONTROL		
7	EC100	EROSION AND SEDIMENT CONTROL PLAN
CIVIL		
8	C001	CIVIL GENERAL NOTES
9	C002	CIVIL STANDARD DETAILS
10	C100	CIVIL SITE PLAN
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12	C201	PLAN AND PROFILE 2
13	C202	PLAN AND PROFILE 3
14	C203	PLAN AND PROFILE 4
15	C204	PLAN AND PROFILE 5
STRUCTURAL		
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17	S002	STRUCTURAL GENERAL NOTES 2
18	S003	STRUCTURAL STANDARD DETAILS
19	S120	BRIDGE PLAN AND PROFILE
20	S121	BRIDGE ABUTMENT PLAN
21	S122	BRIDGE ABUTMENT REINFORCEMENT DETAILS
22	S123	WATERLINE SUPPORT SECTIONS AND DETAILS 1
23	S124	WATERLINE SUPPORT SECTIONS AND DETAILS 2

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JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
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DAGGETT BRIDGE

DRAWING INDEX

DESIGNED J. BURNS
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

DRAWING

G002

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G002.dwg Plot date: Jun 24, 2022 05:18pm, CAD User: JoeNeves

A/C	AIR CONDITIONING
A/E	ARCHITECT/ENGINEER
A	ARCHITECTURAL (DWG DISCIPLINE), AMP
AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
ABAN	ABANDON
AC	ALTERNATING CURRENT
ACST	ACOUSTIC
AD	ADDENDUM, AREA DRAIN
ADDL	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJUSTABLE, ADJACENT
AF	AMP FRAME, AMP FUSE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AGGR	AGGREGATE
AIC	AMPS INTERRUPTING CAPACITY
ALIG	ALIGNMENT
ALUM	ALUMINUM
ALT	ALTERNATE, ALTITUDE
AMB	AMBIENT
ANC	ANCHOR
AP	ACCESS PANEL
APRX	APPROXIMATE
APVD	APPROVED ARCH ARCHITECTURAL
ASSY	ASSEMBLY
AT	AMP TRIP
ATM	ATMOSPHERE
AUTO	AUTOMATIC
AUX	AUXILIARY
AVE	AVENUE
AVG	AVERAGE
AWG	AMERICAN WIRE GAGE
B/B	BACK TO BACK
BAL	BALANCE
BBD	BULLETIN BOARD
BC	BASE CABINET, BOTTOM CHORD, BOLT CENTER, BOLT CIRCLE
BD	BOARD
BE	BOTH ENDS, BELL END
BF	BOTH FACES, BOTTOM FACE, BLIND FLANGE, BOARD FEET
BFV	BUTTERFLY VALVE
BITUM	BITUMINOUS
BKG	BACKING
BL	BASE LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BENCHMARK, BEAM
BOC	BACK OF CURB
BOD	BOTTOM OF DUCT
BOG	BOTTOM OF GRILLE
BOL	BOTTOM OF LOUVER
BOP	BOTTOM OF PIPE
BOR	BOTTOM OF REGISTER
BOT	BOTTOM
BOU	BOTTOM OF UNIT
BP	BASE PLATE
BRG	BEARING
BRGP	BEARING PLATE
BRKT	BRACKET
BS	BOTH SIDES
BTU	BRITISH THERMAL UNIT
BTW	BETWEEN
BTWLD	BUTT WELD
BV	BALL VALVE
BW	BOTH WAYS
BYP	BYPASS
C TO C	CENTER TO CENTER
C&G	CURB & GUTTER
C	CHANNEL SHAPE, CENTIGRADE, CONDUIT, CIVIL (DRAWING DISCIPLINE)
CAP	CAPACITY
CAT	CATALOG
CAV	CAVITY
CB	CATCH BASIN
CCB	CONCRETE BLOCK
CCW	COUNTER CLOCKWISE
CF	CUBIC FEET (FOOT)
CHFR	CHAMFER
CHD	CHORD
CHH	COMMUNICATION HANDHOLE
CI	CURB INLET
CIP	CAST-IN-PLACE
CIPB	CONCRETE INTERLOCKING PAVER BALLAST
CIRC	CIRCULATION, CIRCULAR
CJ	CONSTRUCTION JOINT, CONTROL JOINT
CKT	CIRCUIT
CL	CENTERLINE, CLASS, CLOSE
CLR	CLEAR

CMH	COMMUNICATION MANHOLE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT, CONCRETE OPENING
COL	COLUMN
COM	COMMON
COMB	COMBINATION
COMM	COMMUNICATION
COMP	COMPOSITION, COMPRESSIBLE, COMPOSITE
CONC	CONCENTRIC, CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS, CONTINUED
COORD	COORDINATE
CORR	CORROSIVE, CORRUGATED
CP	CHECKER PLATE, CONTROL POINT
CPLG	COUPLING
CSK	COUNTERSINK
CTR	CENTER
CTRL	CONTROL
CU	COPPER, CUBIC
CW	CLOCKWISE
CY	CUBIC YARD
d	PENNY (NAIL MEASURE)
D	DEEP, DIFFUSER
DB	DUCT BANK, DECIBEL, DRY BULB
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DC	DIRECT CURRENT
DEG	DEGREE
DEG C	DEGREE CENTIGRADE
DEG F	DEGREE FAHRENHEIT
DEMO	DEMOLITION
DEP	DEPRESSED
DEPT	DEPARTMENT
DET	DETAIL
DI	DROP INLET, DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL, DIAGRAM
DIFF	DIFFERENTIAL, DIFFERENCE
DIM	DIMENSION
DISCH	DISCHARGE
DIST	DISTANCE, DISTRIBUTION
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DP	DEPTH
DS	DOWN SPOUT
DT	DOUBLE TEE, DRIP TRAP ASSEMBLY
DUP	DUPLICATE
DWG	DRAWING
DWL	DOWEL
E	EAST, ELECTRICAL (DWG DISCIPLINE)
EA	EACH, EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
ECC	ECCENTRIC
EDB	ELECTRICAL DUCT BANK
EE	EACH END
EF	EACH FACE
EG	EXISTING GRADE
EGL	ENERGY GRADE LINE
EFF	EFFLUENT, EFFICIENCY
EHH	ELECTRICAL HANDHOLE
EIFS	EXTERIOR INSULATION & FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELBOW, ELEVATION
ELEC	ELECTRICAL
EMBD	EMBEDDED
EMER	EMERGENCY
EMH	ELECTRICAL MANHOLE
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ES	EACH SIDE, EQUAL SPACE, EMERGENCY SHOWER
ESEW	EMERGENCY SHOWER AND EYE WASH
EST	ESTIMATE
EW	EACH WAY, EMERGENCY EYE/FACE WASH
EWC	ELECTRIC WATER COOLER
EWEF	EACH WAY, EACH FACE
EWTB	EACH WAY, TOP AND BOTTOM
EXC	EXCAVATION
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION, EXPOSED
EXT	EXTERIOR, EXTERNAL, EXTENSION

F TO F	FACE TO FACE
FAB	FABRICATE
FBO	FURNISHED BY OWNER
FC	FLUSHING CONNECTION
FCA	FLANGED COUPLING ADAPTER
FCV	FIXED CONE VALVE
FD	FLOOR DRAIN
FDC	FLEXIBLE DUCT CONNECTION
FDR	FEEDER
FE	FLANGED END
FEC	FIRE EXTINGUISHER CABINET
FEXT	FIRE EXTINGUISHER
FF	FAR FACE, FACTORY FINISH, FLAT FACE
FG	FINISHED GRADE
FIG	FIGURE
FH	FIRE HYDRANT
FIN	FINISH
FL	FLOW, FLOW LINE
FLEX	FLEXIBLE
FLG	FLANGE
FLOR	FLUORESCENT
FLR	FLOOR
FLS	FLASHING, FLUSH
FND	FOUNDATION
FNC	FENCE
FO	FINISHED OPENING
FOB	FLAT ON BOTTOM
FOC	FACE OF CONCRETE, FACE OF CURB, FIBER OPTIC CABLE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOT	FLAT ON TOP
FPT	FEMALE PIPE THREAD
FR	FRAME
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FLOOR SINK, FAR SIDE
FT	FEET, FOOT
FTG	FOOTING, FITTING FUR FURRED, FURRING
FURN	FURNITURE, FURNISH
FUT	FUTURE
FV	FACE VELOCITY
FW	FIELD WELD, FIRE WALL
FWD	FORWARD
FWE	FURNISHED WITH EQUIPMENT
FXTR	FIXTURE
G	GRILLE, GROUND, GENERAL (DWG DISCIPLINE)
GA	GAGE (METAL THICKNESS)
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GD	GUARD
GEN	GENERAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GL	GLASS
GP	GUY POLE
GR	GRADE
GRND	GROUND
GRTG	GRATING
GT	GREASE TRAP
GWB	GYPSUM WALLBOARD
GYP	GYPSUM HARDBOARD
H	HIGH
HB	HOSE BIB
HBD	HARDBOARD
HC	HANDICAPPED, HOLLOW CORE, HORIZONTAL CURVE
HC	HORIZONTAL CENTERLINE
HDR	HEADER
HDW	HARDWARE
HEX	HEXAGONAL
HH	HANDHOLE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT, HORSEPOWER
HPC	HORIZONTAL POINT OF CURVATURE
HPS	HIGH PRESSURE SODIUM
HPT	HORIZONTAL POINT OF TANGENCY
HR	HOUR
HS	HEADED STUD, HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SHAPE
HT	HEIGHT
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HWD	HARDWOOD
HWL	HIGH WATER LEVEL
HYD	HYDRAULIC HZ HERTZ, CYCLES PER SECOND

I	INSTRUMENTATION (DWG DISCIPLINE)
ID	INSIDE DIAMETER, INTERIOR DIMENSION
IE	INVERT ELEVATION
IF	INSIDE FACE
IFC	ISSUED FOR CONSTRUCTION
IH	INTAKE HOOD
IMP	IMPACT
IN	INCH
INC	INCLUDE, INCANDESCENT
INF	INFLUENT
INSTR	INSTRUMENTATION
INSUL	INSULATION
INT	INTERIOR, INTERSECTION
INTR	INTERMEDIATE, INTERIOR
INV	INVERT
IPS	IRON PIPE SIZE
IPT	INTERNAL PIPE THREAD
IRR	IRRIGATION
ISO	ISOMETRIC
JB	JUNCTION BOX
JCT	JUNCTION
JF	JOINT FILLER
JT	JOINT
K	KIP
KB	KNEE BRACE
KCMIL	THOUSAND CIRCULAR MILS
KD	KNOCK DOWN
KO	KNOCK OUT
KSI	KIPS PER SQUARE INCH
L	ANGLE, LENGTH, LAVATORY
LAM	LAMINATE
LATL	LATERAL
LB	LAG BOLT, POUND
LDR	LEADER
LF	LINEAR FOOT
LG	LONG
LH	LEFT HAND
LIN	LINEAR
LIQ	LIQUID
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LMLU	LIQUID MARKER LECTURE UNIT
LNG	LONGITUDINAL
LOC	LOCATION
LP	LOW POINT
LPS	LOW PRESSURE SODIUM
LR	LONG RADIUS
LT	LEFT
LTD	LIMITED
LTG	LIGHTING
LTL	LINTEL
LTNG	LIGHTNING
LV	LOW VOLTAGE
LVR	LOUVER
LW	LIGHTWEIGHT
LWC	LIGHTWEIGHT CONCRETE
LWL	LOW WATER LEVEL
M	MECHANICAL (DWG DISCIPLINE)
MA	MIXED AIR
MAINT	MAINTENANCE
MAN	MANUAL
MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MBR	MEMBER
MCJ	MASONRY CONTROL JOINT
MECH	MECHANICAL
MED	MEDIUM
MFR	MANUFACTURER
MH	MANHOLE, METAL HALIDE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MMB	MEMBRANE
MO	MASONRY OPENING
MOD	MODULAR, MODIFY
MON	MONUMENT
MPT	MALE PIPE THREAD
MSL	MEAN SEA LEVEL
MT	MOUNT
MU	MASONRY UNIT
MULL	MULLION
MV	MEDIUM VOLTAGE
MW	MONITORING WELL

N	NORTH, NEUTRAL
NA	NOT APPLICABLE
NAT	NATURAL
NC	NORMALLY CLOSED
NEG	NEGATIVE
NF	NEAR FACE, NON-FUSED
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN, NUMBER
NOM	NOMINAL
NPS	NOMINAL PIPE SIZE
NPT	NATIONAL PIPE THREAD
NS	NEAR SIDE
NTS	NOT TO SCALE
NWL	NORMAL WATER LEVEL
O TO O	OUT-TO-OUT
OA	OUTSIDE AIR, OVERALL
OC	ON CENTER
OCPD	OVER CURRENT PROTECTION DEVICE
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
OPT	OPTIONAL
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
OVFL	OVERFLOW
OVHG	OVERHANG
OZ	OUNCE
P	PAINT, PROCESS (DWG DISCIPLINE)
PAR	PARALLEL, PARAPET
PB	PANIC BAR, PULL BOX
PBD	PARTICLE BOARD
PC	POINT OF CURVE, PIECE, PRECAST
PCC	POINT OF COMPOUND CURVATURE
PCF	POUNDS PER CUBIC FOOT
PCT	PERCENT
PE	PLAIN END
PED	PEDESTAL
PEN	PENETRATION
PERF	PERFORATED
PERM	PERMANENT
PERP	PERPENDICULAR
PF	POWER FACTOR
PH	PHASE
PI	POINT OF INTERSECTION
PKG	PACKAGE
PL	PLATE, PROPERTY LINE
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PNEU	PNEUMATIC
POS	POSITIVE, POSITION
PP	POLYPROPYLENE, POWER POLE
PRC	POINT OF REVERSE CURVATURE
PREF	PREFINISHED
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PREP	PREPARE
PRES	PRESSURE
PROP	PROPERTY
PROT	PROTECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAGE
PT	POINT, POINT OF TANGENCY
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWD	PLYWOOD
PZ	PIEZOMETER
Q	RATE OF FLOW
QTR	QUARTER
QTY	QUANTITY
QUAL	QUALITY
R&R	REMOVE AND REPLACE
R&S	REMOVE AND SALVAGE
R	RADIUS, REGISTER, RISER
RA	RETURN AIR
RB	RESILIENT BASE, ROCK BERM
RCPT	RECEPTACLE
RD	ROOF DRAIN
REC	RECESS
RECD	RECEIVED
RECT	RECTANGULAR
RED	REDUCER
REF	REFERENCE
REINF	REINFORCING
REQD	REQUIRED
RESIL	RESILIENT

RET	RETAINING, RETURN
REV	REVISION, REVERSE
RFL	REFLECTED, REFLECTOR
RGS	RIGID GALVANIZED STEEL
RH	RELIEF HOOD, RIGHT HAND, RELATIVE HUMIDITY
RL	REQUIRED LAP
RND	ROUND
RNG	RENEWABLE NATURAL GAS
RO	ROUGH OPENING
ROW	RIGHT-OF-WAY
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RT	RIGHT
S	SOUTH, SINK, STRUCTURAL (DWG DISCIPLINE)
SA	SUPPLY AIR
SAN	SANITARY
SC	SOLID CORE
SCH	SCHEDULE
SCHEM	SCHEMATIC
SCRN	SCREEN
SE	STEEL/ALUMINUM EDGE
SEC	SECONDARY, SECONDS
SECT	SECTION
SEP	SEPARATE
SF	SQUARE FOOT
SH	SHOWER
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SLOPE
SLTD	SLOTTED
SLV	SLEEVE
SMLS	SEAMLESS
SOG	SLAB ON GRADE
SP	SOUNDPROOF, STANDPIPE
SPC	SPACING
SPEC	SPECIFICATION
SPLY	SUPPLY
SPT	SET POINT
SQ	SQUARE
SS	SERVICE SINK
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STIF	STIFFENER
STIR	STIRRUP
STL	STEEL
STOR	STORAGE
STR	STRUCTURAL, STRAIGHT
SUB	SUBSTITUTE
SUC	SUCTION
SUSP	SUSPENDED
SY	SQUARE YARD
SYM	SYMBOL
SYMM	SYMMETRICAL
SYN	SYNTHETIC
SYS	SYSTEM
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T	TILE, TREAD
TA	TEMPERED AIR
TAN	TANGENT
TBM	TEMPORARY BENCHMARK
TEMP	TEMPORARY, TEMPERATURE
THK	THICK
THRD	THREAD
THRU	THROUGH
TOB	TOP OF BOLT, TOP OF BANK, TOP OF BEAM
TOC	TOP OF CURB, TOP OF CONCRETE
TOD	TOP OF DUCT
TOF	TOP OF FOOTING
TOG	TOP OF GRATING
TOL	TOLERANCE, TOP OF LEDGER
TOM	TOP OF MASONRY
TOP	TOP OF PLATE
TOPO	TOPOGRAPHY
TOS	TOP OF SLAB, TOP OF STEEL
TOW	TOP OF WALL
TP	TELEPHONE POLE, TOE PLATE, TRAP PRIMER
TPG	TOPPING
TRANS	TRANSITION
TRD	TRENCH DRAIN
TYP	TYPICAL
U	URINAL
UG	UNDERGROUND
ULT	ULTIMATE
UNFN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY

V	VENT, VELOCITY, VOLT
VA	VOLT AMPERE
VAC	VACUUM
VAR	VARNISH, VARIABLE, VOLT AMPERES REACTIVE
VB	VAPOR BARRIER, VINYL BASE, VALVE BOX
VC	VERTICAL CURVE
VCT	VINYL COMPOSITION TILE, VERTICAL CENTERLINE
VEL	VELOCITY
VENT	VENTILATION
VERT	VERTICAL
VS	VERSES, VAPOR SEAL
VOL	VOLUME
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W/	WITH
W/O	WITHOUT
W	WATT, WEST, WIDE, WINDOW, WIRE, WIDE FLANGE BEAM
WC	WATER CLOSET, WATER COLUMN
WD	WIDTH
WF	WIDE FLANGE, WASH FOUNTAIN
WG	WIRE GLASS, WATER GAGE
WH	WALL HYDRANT, WEEP HOLE
WL	WATER LEVEL
WLD	WELDED
WM	WIRE MESH
WP	WATERPROOF, WORKING POINT
WTHP	WEATHERPROOF
WS	WATERSTOP, WATER SURFACE
WSEL	WATER SURFACE ELEVATION
WT	WEIGHT, WATER TIGHT
WWF	WELDED WIRE FABRIC
XS	EXTRA STRONG
XXS	DOUBLE EXTRA STRONG
XSECT	CROSS SECTION
YH	YARD HYDRANT
YS	YIELD STRENGTH

AGENCY AND PROJECT ABBREVIATIONS:

KRRC	KLAMATH RIVER RENEWAL CORPORATION
KRRP	KLAMATH RIVER RENEWAL PROJECT
OHWM	ORDINARY HIGH WATER MARK

GENERAL NOTES:

1. THESE ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.
2. LISTING OF ABBREVIATIONS DOES NOT IMPLY ALL ABBREVIATIONS ARE USED IN THE CONTRACT DRAWINGS.
3. ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE VARIATIONS OF THE WORD. FOR EXAMPLE, "MOD" MAY MEAN MODIFY OR MODIFICATION; "INC" MAY MEAN INCLUDED OR INCLUDING; "REINF" MAY MEAN EITHER REINFORCE OR REINFORCING.
4. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.

REV	DATE	BY	DESCRIPTION
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LICENSED PROFESSIONAL ENGINEER — JEFFREY ALAN LOWY — C 79836 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING

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McMILLEN JACOBS ASSOCIATES

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DAGGETT BRIDGE

STANDARD ABBREVIATIONS

DESIGNED J. BURNS

DRAWN J. CHASE

CHECKED J. LOWY

PROJECT DATE 6/24/22

DRAWING

G003

JOB NO: 0000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G003.dwg Plot date: Jun 24, 2022 05:18pm, CAD User: JoeNeves

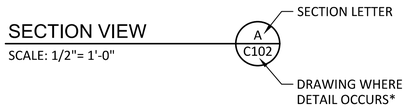
SHEET SYMBOLS

PLAN
SCALE: 1/2"= 1'-0"
0' 2' 4'

SECTION IDENTIFICATION

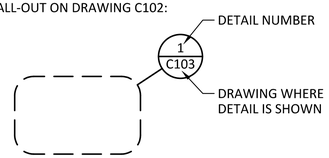
(1) SECTION CUT ON DRAWING C102:

(2) ON DRAWING C103 THIS SECTION IS IDENTIFIED AS:

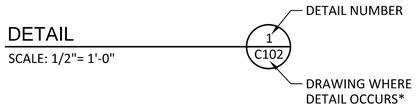


DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON DRAWING C102:



(2) ON DRAWING C103 THIS SECTION IS IDENTIFIED AS:

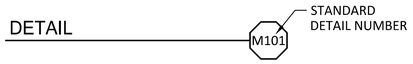


*NOTE: IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING. DRAWING NUMBER IS REPLACED BY A LINE.

STANDARD DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON PLAN OR SECTION:

(2) ON DETAIL DRAWINGS, IDENTIFIED AS:



ELEVATION/IMAGE IDENTIFICATION

SITE PLAN LINE TYPES

X X	FENCE LINE
P P	OVERHEAD POWER
455	MAJOR CONTOUR
456	MINOR CONTOUR
. . .	EDGE OF WATERLINE
TOE	TOE OF SLOPE
TOB	TOP OF BANK
SS SS	SANITARY SEWER
SD SD	STORM DRAIN
EP EP	EDGE OF PAVEMENT
EG EG	EDGE OF GRAVEL
W	WATTLE
CF CF	CONSTRUCTION FENCE
GAS	GAS LINE
IRR IRR	IRRIGATION LINE
WTR	WATER LINE
TEL	TELEPHONE LINE
COM	COMMUNICATION LINE
OHP	OVERHEAD ELECTRICAL/POWER
EUG	UNDERGROUND ELECTRICAL
P/L	PROPERTY LINE
OHP	EXISTING OVERHEAD POWER LINE
OHP&T	EXISTING OVERHEAD POWER & TELEPHONE LINE
T	EXISTING OVERHEAD TELEPHONE LINE
BT	EXISTING BURIED TELEPHONE LINE EVIDENCED BY PEDESTALS & WARNING PADDLES
	EXISTING FENCE LINE
	PROJECT BOUNDARY
	GUARD RAIL
TC	TURBIDITY CURTAIN

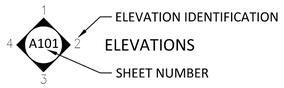
SITE PLAN SYMBOLS

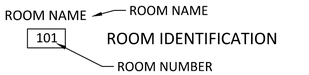
N	ARROW INDICATES DIRECTION OF PLAN NORTH
	CONIFER TREE: FIR, SPRUCE, LARCH OR PINE, 8" DIAMETER OR LARGER.
	DECIDUOUS TREE: COTTONWOOD, HAWTHORN, ASPEN, 8" DIAMETER OR LARGER.
MH	MANHOLE
EB	ELECTRIC BOX
	STORM DRAIN MANHOLE
FH	FIRE HYDRANT
YH-X	YARD HYDRANT
	SURVEY CONTROL POINT, AS NOTED.
	POLE ANCHOR
	POWER POLE
	LIGHT POLE
	SIGN
	SURVEY HUB
	SECTION CORNER
	BENCH MARK
	EXISTING HEADWALL
	EXISTING MONITORING STATION
X X	EXISTING FENCE
	STATE PLANE COORDINATE MARKER
	EXISTING TREE LINE
	EXISTING BUILDING, STRUCTURES
	EXISTING SECTION CORNER MONUMENT FOUND AS DESCRIBED
	EXISTING 5/8" REBAR CONTROL POINT MONUMENT, BORING LOCATION
W	EXISTING HOSE BIB
P	EXISTING PORTABLE IRRIGATION WATER PUMP
WELL	EXISTING 6" WATER WELL
	EXISTING ELECTRICAL OUTLET
P	EXISTING POWER POLE
T	EXISTING TELEPHONE PEDESTAL
	CONTROL POINT
	PUMP
	PUMP
TP	TEST PIT LOCATION

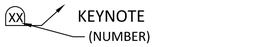
MISCELLANEOUS SYMBOLS

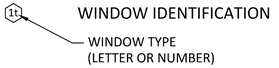
	CHANGE OF PIPE MTL
OR	END OF PIPE
℄	CENTERLINE
Ø	DIAMETER
∠	ANGLE
PL	PLATE
±	PLUS/MINUS

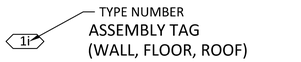
ARCHITECTURAL SYMBOLS



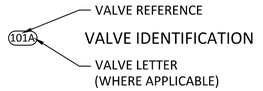








MECHANICAL SYMBOLS



HATCH SYMBOLS

	ROCK, TYPE AS NOTED (PLAN/SECTION)
	BED ROCK
	EXISTING GRADE (SECTION)
	NEW SOIL (SECTION)
	CONCRETE (SECTION/PLAN)
	SAND, GROUT (PLAN/SECTION)
	STEEL (SECTION)
	GRATING (PLAN)
	MASONRY (PLAN)
	WOOD, SIZE/TYPE AS NOTED (PLAN)
	WOOD, SIZE/TYPE AS NOTED (SECTION)
	RIP RAP (PLAN/SECTION)
	RIGID INSULATION (SECTION)
	ASPHALT CONCRETE PAVEMENT SURFACE (PLAN/SECTION)
	GRASS/VEGETATION (PLAN)
	BATT INSULATION (SECTION)
	NEW CONSTRUCTION
	EXISTING
	EXISTING TO BE REMOVED OR DEMOLISHED
	CLEARING AND GRUBBING
	ASPHALT
	GRASS/VEGETATION
	GRAVEL

GENERAL NOTES:

1. ALL SYMBOLS ARE NOT NECESSARILY USED. THIS IS A STANDARD DRAWING SHOWING COMMON SYMBOLS ON THIS PROJECT.
2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH DRAWING FOR USAGE.

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE

STANDARD SYMBOLS

DESIGNED J. BURNS
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

DRAWING
G004

JOB NO: 000000

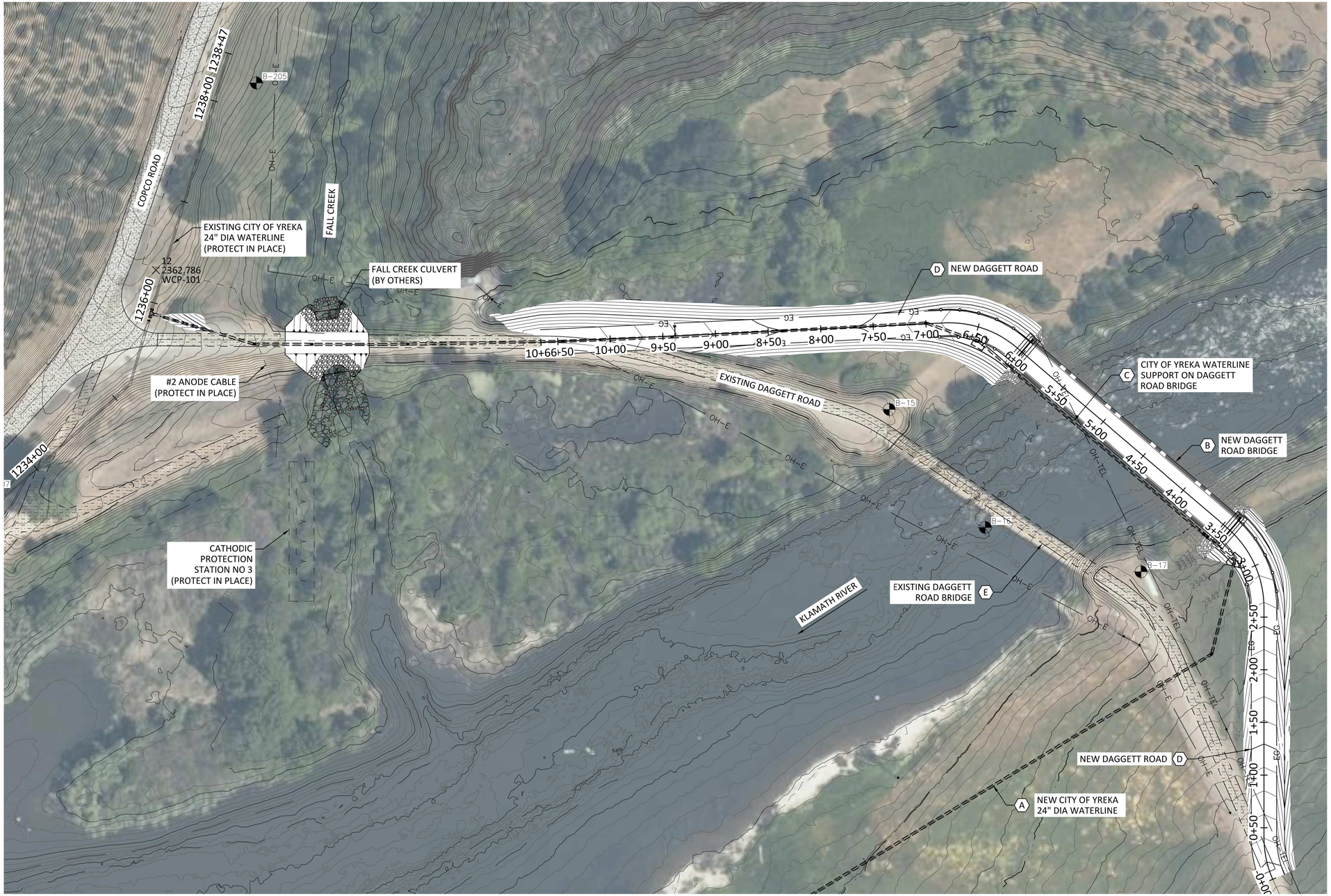
Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G004.dwg Plot date: Jun 24, 2022 05:18pm, CAD User: JoeNeves

SHEET NOTES:

1. LIDAR SURVEY PROVIDED BY KRRC ON NOVEMBER 2020, CONTRACTOR SHALL CONFIRM AND VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.
2. THE HORIZONTAL DATUM FOR THE PROJECT IS BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 1 NORTH AMERICAN DATUM OF 1983 (NAD83) IN FEET.
3. THE VERTICAL DATUM FOR THE PROJECT IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 12B).

MAJOR CONSTRUCTION ITEMS:

- A NEW CITY OF YREKA WATERLINE. NOT IN THIS PACKAGE.
- B CONSTRUCT NEW DAGGETT ROAD BRIDGE.
- C SUPPORT THE CITY OF YREKA WATERLINE ALONG THE NEW DAGGETT ROAD BRIDGE.
- D CONSTRUCT NEW DAGGETT ROAD TO NEW BRIDGE
- E ABANDON DAGGETT BRIDGE IN PLACE. RETAIN AND PROTECT EXISTING BRIDGE.



OVERALL PLAN

SCALE: 1"= 50'

0" 50' 100'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING
0 1/2 1
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE
OVERALL PLAN

DESIGNED J. BURNS
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

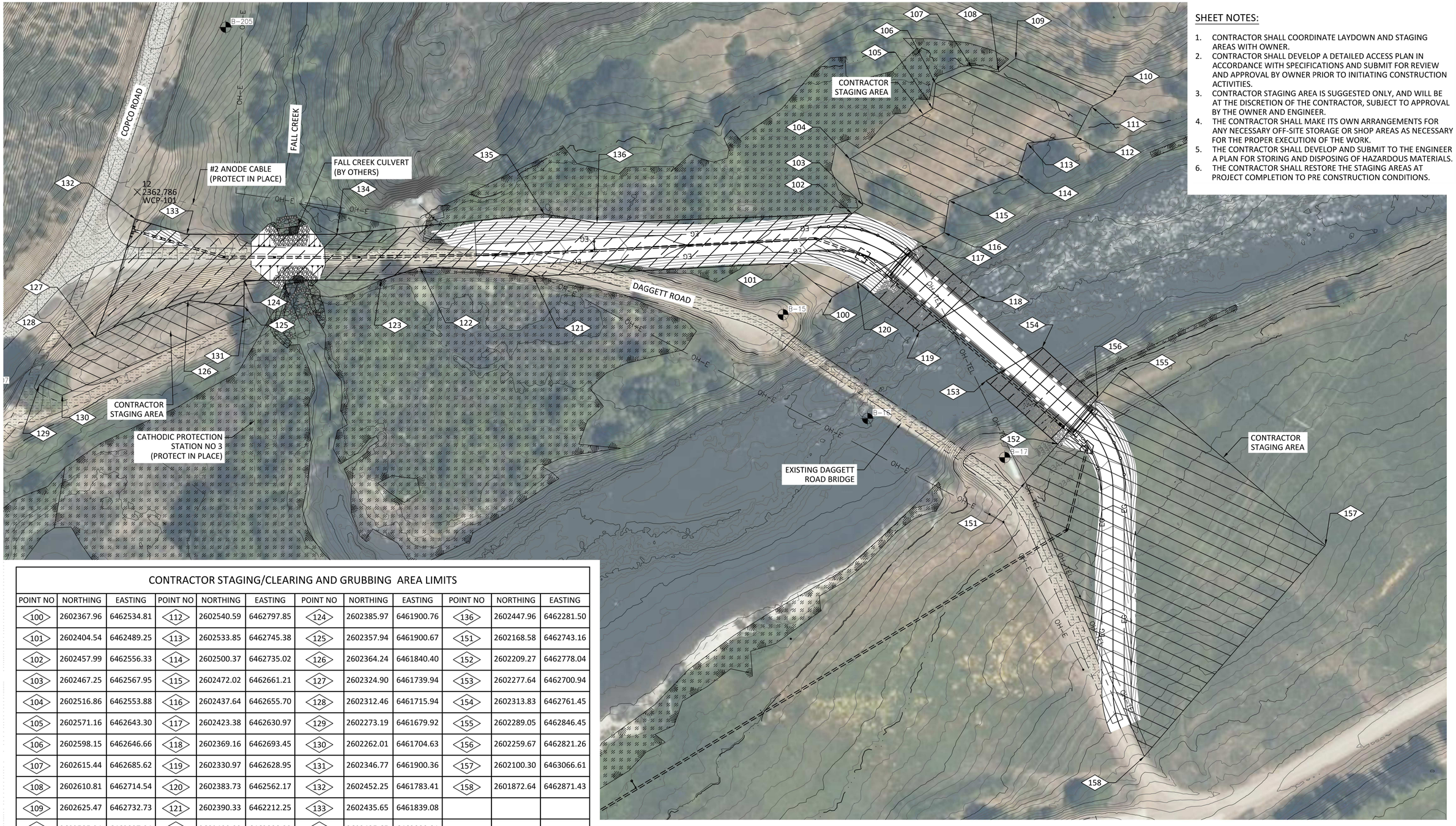
DRAWING
G005

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G005.dwg Plot date: Jun 24, 2022 05:19pm, CAD User: JoeNeves

SHEET NOTES:

1. CONTRACTOR SHALL COORDINATE LAYDOWN AND STAGING AREAS WITH OWNER.
2. CONTRACTOR SHALL DEVELOP A DETAILED ACCESS PLAN IN ACCORDANCE WITH SPECIFICATIONS AND SUBMIT FOR REVIEW AND APPROVAL BY OWNER PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
3. CONTRACTOR STAGING AREA IS SUGGESTED ONLY, AND WILL BE AT THE DISCRETION OF THE CONTRACTOR, SUBJECT TO APPROVAL BY THE OWNER AND ENGINEER.
4. THE CONTRACTOR SHALL MAKE ITS OWN ARRANGEMENTS FOR ANY NECESSARY OFF-SITE STORAGE OR SHOP AREAS AS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
5. THE CONTRACTOR SHALL DEVELOP AND SUBMIT TO THE ENGINEER A PLAN FOR STORING AND DISPOSING OF HAZARDOUS MATERIALS.
6. THE CONTRACTOR SHALL RESTORE THE STAGING AREAS AT PROJECT COMPLETION TO PRE CONSTRUCTION CONDITIONS.



CONTRACTOR STAGING/CLEARING AND GRUBBING AREA LIMITS

POINT NO	NORTHING	EASTING	POINT NO	NORTHING	EASTING	POINT NO	NORTHING	EASTING	POINT NO	NORTHING	EASTING
100	2602367.96	6462534.81	112	2602540.59	6462797.85	124	2602385.97	6461900.76	136	2602447.96	6462281.50
101	2602404.54	6462489.25	113	2602533.85	6462745.38	125	2602357.94	6461900.67	151	2602168.58	6462743.16
102	2602457.99	6462556.33	114	2602500.37	6462735.02	126	2602364.24	6461840.40	152	2602209.27	6462778.04
103	2602467.25	6462567.95	115	2602472.02	6462661.21	127	2602324.90	6461739.94	153	2602277.64	6462700.94
104	2602516.86	6462553.88	116	2602437.64	6462655.70	128	2602312.46	6461715.94	154	2602313.83	6462761.45
105	2602571.16	6462643.30	117	2602423.38	6462630.97	129	2602273.19	6461679.92	155	2602289.05	6462846.45
106	2602598.15	6462646.66	118	2602369.16	6462693.45	130	2602262.01	6461704.63	156	2602259.67	6462821.26
107	2602615.44	6462685.62	119	2602330.97	6462628.95	131	2602346.77	6461900.36	157	2602100.30	6463066.61
108	2602610.81	6462714.54	120	2602383.73	6462562.17	132	2602452.25	6461783.41	158	2601872.64	6462871.43
109	2602625.47	6462732.73	121	2602390.33	6462212.25	133	2602435.65	6461839.08			
110	2602585.24	6462837.04	122	2602400.09	6462090.32	134	2602435.65	6462000.81			
111	2602573.03	6462814.70	123	2602386.51	6462048.87	135	2602457.59	6462224.47			

CONTRACTOR STAGING AREA PLAN

SCALE: 1"= 50'

0' 50' 100'

N

ENVIRONMENTAL FEATURES

CLEARING & GRUBBING

CONTRACTOR STAGING

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

CONTRACTOR STAGING AREA

DESIGNED J. BURNS

DRAWN J. CHASE

CHECKED J. LOWY

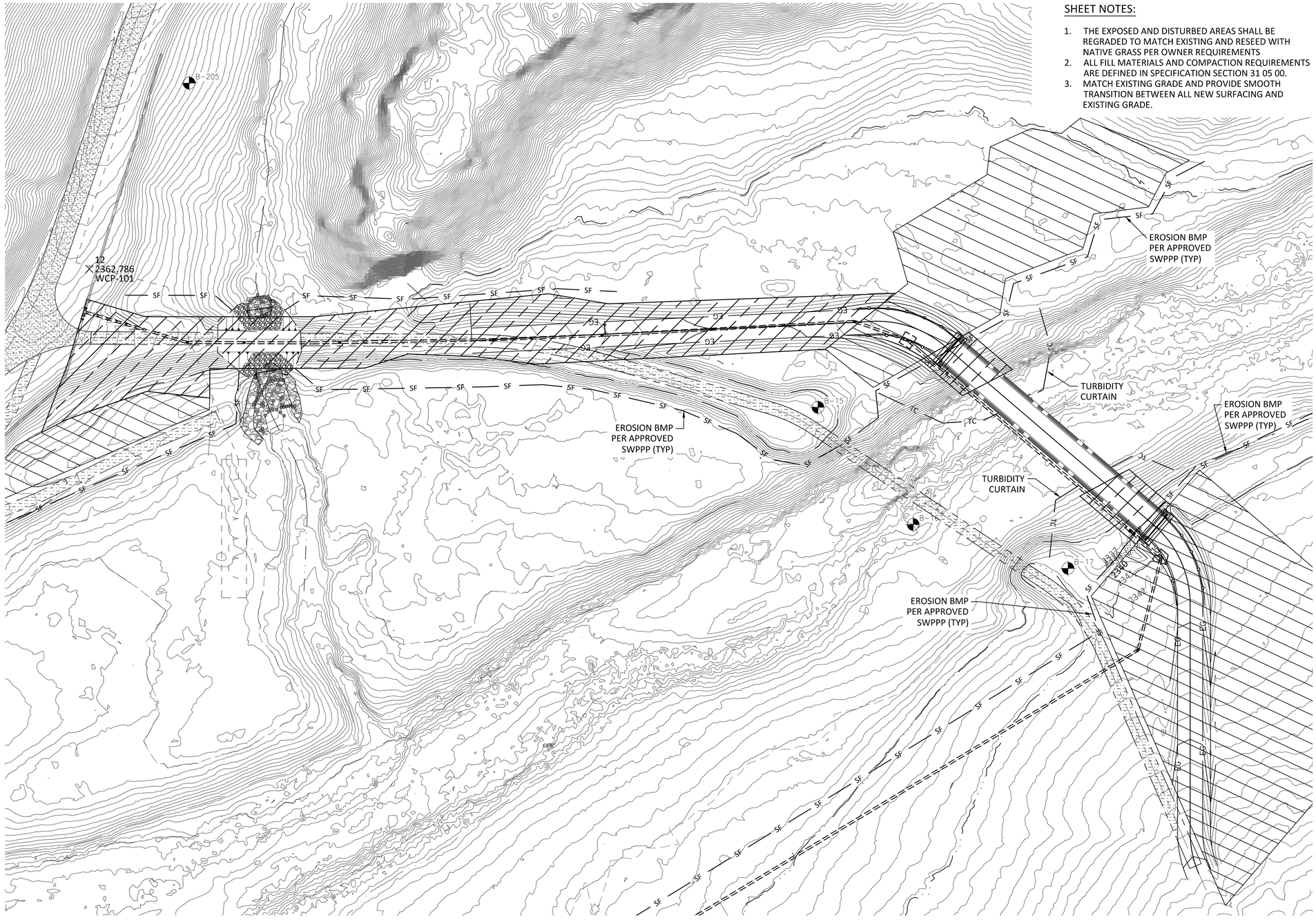
PROJECT DATE 6/24/22

DRAWING

G006

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\G006.dwg Plot date: Jun 24, 2022 05:21pm, CAD User: JoeNeves



SHEET NOTES:

1. THE EXPOSED AND DISTURBED AREAS SHALL BE REGRADED TO MATCH EXISTING AND RESEED WITH NATIVE GRASS PER OWNER REQUIREMENTS
2. ALL FILL MATERIALS AND COMPACTION REQUIREMENTS ARE DEFINED IN SPECIFICATION SECTION 31 05 00.
3. MATCH EXISTING GRADE AND PROVIDE SMOOTH TRANSITION BETWEEN ALL NEW SURFACING AND EXISTING GRADE.

EROSION AND SEDIMENT CONTROL NOTES:

GENERAL NOTES:

1. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN FOR WORK DURING CONSTRUCTION THAT MEETS ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
   - A. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES DICTATED BY FIELD CONDITIONS TO PREVENT EROSION OR THE INTRODUCTION OF DIRT, MUD, OR DEBRIS TO EXIST PUBLIC OR PRIVATE ROADWAY, ONTO ADJACENT PROPERTIES, INTO FALL CREEK, OR INTO KLAMATH RIVER DURING ANY PHASE OF CONSTRUCTION OPERATIONS. SPECIAL ATTENTION SHALL BE GIVEN TO ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NOTED BELOW.
   - B. THE GENERAL EROSION AND SEDIMENT CONTROL PLAN ON THE EC DRAWINGS ARE PROVIDED TO AID THE CONTRACTOR IN DEVELOPING THE EROSION AND SEDIMENT CONTROL PLAN ACCORDING TO CONTRACTOR SCHEDULE AND PHASING OF THE PROJECT.
   - C. EROSION CONTROL DETAILS ARE FOR INFORMATION ONLY TO AID THE CONTRACTOR. THE FINAL LOCATIONS AND DETAIL SHALL BE SHOWN ON THE CONTRACTOR'S PREPARED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) DOCUMENT.
   - D. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT. MAINTENANCE OF BOTH TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE CONSIDERED INCIDENTAL.
   - E. ALL BMP REQUIRED MATERIALS SHALL MEET OR EXCEED STATE OF CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) REQUIREMENTS.
   - F. CONTRACTOR SHALL DEVELOP A SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLAN THAT WILL BE ATTACHED TO THE SWPPP.
   - G. THE CONTRACTOR'S ECP SHALL MEET OR EXCEED THE REQUIREMENTS OUTLINED IN SPECIFICATION SECTION 31 25 00 EROSION SEDIMENTATION CONTROLS PREPARED BY KIGHT PIESOLD CONSULTING.

GRADING AND FINAL STABILIZATION:

1. CLEARING, GRUBBING, AND GROUND DISTURBING ACTIVITIES SHALL BE CONFINED TO WITHIN CLEARING LIMITS AND SHALL MEET THE REQUIREMENTS OF SPECIFICATION 31 25 00. NO GRADING OR CONSTRUCTION ACTIVITIES SHALL OCCUR OUTSIDE OF THE PROPOSED IMPROVEMENTS SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT. PRESERVE EXIST VEGETATION BEYOND DISTURBED AREA - UTILIZE AS NATURAL BUFFER STRIPS.
2. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES, FENCING, AND STAGING AREA MATERIALS WHEN CONSTRUCTION IS COMPLETE. NO CONSTRUCTION DEBRIS, DEMOLITION MATERIALS, OR EXCESS EQUIPMENT SHALL BE LEFT ON SITE.
3. CONTRACTOR SHALL REGRADE DISTURBED SLOPED TO NEAR EXIST CONDITION AS APPROVED BY THE OWNER.
4. CONTRACTOR SHALL RESEED ALL DISTURBED AREAS WITH NATIVE VEGETATION, AS REQUIRED (BY OTHERS).

BMP MEASURES:

1. CONTRACTOR SHALL FOLLOW EROSION CONTROL PLAN AS DRAFTED.
2. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PREVENT ACCUMULATION OF CONSTRUCTION WASTE AND LITTER ON-SITE.
3. CONTRACTOR SHALL INSTALL BMP MEASURES AS INDICATED AND IN ANY ADDITIONAL LOCATIONS WHERE MATERIAL COULD LEAVE THE CONSTRUCTION SITE, AT CONTRACTOR'S EXPENSE.
4. THE SILT FENCE AND/OR STRAW WATTLES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
5. CONTRACTOR SHALL HAVE AVAILABLE AT ALL TIMES ADEQUATE WATER TRUCK EQUIPMENT TO FACILITATE DUST ABATEMENT AND CONTROL.
6. STOCKPILED EXCAVATION MATERIALS SHALL BE PROTECTED FROM WATER AND WIND EROSION BY COVERING AS APPROPRIATE. NON-ACTIVE STOCKPILES WHEN EXPOSED FOR MORE THAN 14 DAYS, COVER STOCKPILES WITH IMPERMEABLE TARPS TO PROTECT DISTURBED SOILS AND SLOPES.
7. ALL TOP SOIL SHALL BE STRIPPED AND PLACED IN SEPARATE STOCKPILE. AFTER BANK RESTORATION TO EXIST GRADE, TOP SOIL SHALL BE PLACED AND RESEEDED, AS REQUIRED (BY OTHERS).
8. CONTRACTOR SHALL HAVE ON-SITE AT ALL TIMES SPILL PREVENTION AND CONTROL MEASURES.
9. ENSURE ALL EQUIPMENT IS CLEAN AND FREE OF OIL/FUEL LEAKS, DIRT, PLANTS, AND ANIMALS OR FRAGMENTS OF PLANTS, AQUATIC INVASIVE SPECIES, AND OTHER VEGETATIVE MATTER.

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"= 50'

0" 50' 100'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — JEFFREY ALAN LOWY — C 79836 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING

0 1/2 1

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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

EROSION AND SEDIMENT CONTROL PLAN

DESIGNED J. BURNS

DRAWN J. CHASE

CHECKED J. LOWY

PROJECT DATE 6/24/22

DRAWING

EC100

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\EC100.dwg Plot date: Jun 24, 2022 05:22pm, CAD User: JoeNeves

GENERAL PROJECT NOTES:

1. EXISTING TOPOGRAPHY, STRUCTURES, AND SITE FEATURES ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW FINISH GRADE, STRUCTURES, AND SITE FEATURES ARE SHOWN UNSCREENED AND HEAVY-LINED.
2. MAINTAIN, RELOCATE, OR REPLACE EXISTING SURVEY MONUMENTS, CONTROL POINTS, AND STAKES WHICH ARE DISTURBED OR DESTROYED. PERFORM THE WORK TO PRODUCE THE SAME LEVEL OF ACCURACY AS THE ORIGINAL MONUMENT(S) IN A TIMELY MANNER, AND AT THE CONTRACTOR'S EXPENSE.
3. VERTICAL DATUM BASED UPON NAVD 88 DATUM, GEOID 12B.
4. HORIZONTAL DATUM BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 1 NORTH AMERICAN DATUM OF 1983 (NAD83) IN FEET.
5. STAGING AREA SHALL BE FOR CONTRACTOR'S EMPLOYEE PARKING, CONTRACTOR'S TRAILERS AND ON-SITE STORAGE OF MATERIALS, SEE SHEET G006. COORDINATE SPECIFIC AREA LIMITS WITH OWNER.
6. ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE SHOWN.
7. SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
8. A GEOTECHNICAL EVALUATION WAS PREFORMED FOR THIS PROJECT. A 2019 GEOTECHNICAL ENGINEERING EVALUATION REPORT WAS PREPARED BY AECOM TECHNICAL SERVICES AND CDM SMITH. A GEOTECHNICAL MEMO WAS PREPARED BY CDM SMITH BASED ON THE REVIEW OF THE LARGER REPORT FOR THIS PROJECT AND IS ATTACHED TO THE PROJECT SPECIFICATIONS.
9. CONTRACTOR SHALL CONTACT KRRC A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES TO REQUEST VERIFICATION OF UNDERGROUND UTILITY LOCATIONS.
10. CONTRACTOR SHALL KEEP CONSTRUCTION ACTIVITIES WITHIN THE SITE BOUNDARIES FOR THIS PROJECT AS SHOWN. THIS INCLUDES, BUT IS NOT LIMITED TO, VEHICLES AND EQUIPMENT. LIMITS OF TRENCH EXCAVATION, STOCKPILED EXCAVATED MATERIALS, BACKFILL MATERIAL, AND PIPE MATERIAL.

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION CONFERENCE (OR AN ON-SITE MEETING) WITH THE PROJECT REPRESENTATIVE PRIOR TO THE START OF WORK.
2. CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE WHEN MATERIALS ARE ON SITE OR INSPECTION OF THE WORK IS REQUIRED. NO WORK MAY BEGIN ON ANY PROJECT WITHOUT TWENTY FOUR (24) HOUR PRIOR NOTICE.
3. ALL MATERIAL FURNISHED ON, OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES. AT THE REQUEST OF THE APPROVING AGENCY OR THE DESIGN ENGINEER, CONTRACTOR SHALL FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE SPECIFICATION REQUIREMENTS SET FORTH IN THE PROJECT SPECIFICATIONS.
4. ANY DEVIATION FROM THE APPROVED PLANS AND SPECIFICATIONS MUST HAVE DESIGN ENGINEER AND OWNER APPROVAL IN WRITING PRIOR TO CONSTRUCTION.
5. ALL DISTURBED SURFACES SHALL BE RETURNED TO ORIGINAL OR BETTER CONDITIONS.

GENERAL YARD PIPING AND UTILITIES NOTES:

1. EXISTING UNDERGROUND UTILITIES OBTAINED FROM AS-BUILTS AND FROM TOPOGRAPHIC FIELD SURVEY PROVIDED BY KRRP. CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION PRIOR TO EXCAVATION. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. IF EXISTING UTILITIES (GAS, ELECTRIC, POTABLE WATER, ETC.) ARE IN CONFLICT WITH THE PIPELINE REALIGNMENT OR TRENCH ALIGNMENT, CONTRACTOR SHALL CONTACT ENGINEER.
2. EXISTING PIPING AND EQUIPMENT ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW PIPING AND EQUIPMENT ARE SHOWN UNSCREENED AND HEAVY-LINED.
3. ALL PIPES SHALL HAVE CONSTANT UNIFORM SLOPE.
4. THE HORIZONTAL SEPARATION OF POTABLE WATER MAINS AND NON-POTABLE WATER MAINS (SANITARY SEWER, STORM DRAIN, AND IRRIGATION) SHALL BE A MINIMUM OF TEN (10) FEET OUTSIDE OF PIPE TO OUTSIDE OF PIPE. WHERE IT IS NECESSARY FOR A POTABLE WATER MAIN AND NON-POTABLE WATER MAIN TO CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION. THE CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 64572, TITLE 22, CALIFORNIA ADMINISTRATION CODE.
5. CONTRACTOR SHALL REPAIR ALL EXISTING SURFACES, UTILITIES, BUILDINGS AND FOUNDATIONS IMPACTED BY CONSTRUCTION.
6. ALL VALVES SET FLUSH WITH GRADE SHALL HAVE BOXES AND COLLARS.

DAGGETT BRIDGE ROAD
ALIGNMENT STATION AND CURVE TABLE

CURVE POINT DATA			
DESCRIPTION	STATION	NORTHING	EASTING
PC:	0+00.00	2601903.05	6462846.00
RP:		2601942.81	6462937.75
PT:	0+40.89	2601942.81	6462837.75
CIRCULAR CURVE DATA			
PARAMETER	VALUE	PARAMETER	VALUE
DELTA:	23° 25' 59.0996"	TYPE:	RIGHT
RADIUS:	100.00		
LENGTH:	40.90	TANGENT:	20.74
MID-ORD:	2.08	EXTERNAL:	2.13
CHORD:	40.61	COURSE:	N 11° 42' 59.5498" W
TANGENT DATA			
DESCRIPTION	PT STATION	NORTHING	EASTING
START:	0+40.89	2601942.81	6462837.75
END:	2+58.74	2602160.66	6462837.75
TANGENT DATA			
PARAMETER	VALUE	PARAMETER	VALUE
LENGTH:	217.84	COURSE:	N 00° 00' 00.0000" E
CURVE POINT DATA			
DESCRIPTION	STATION	NORTHING	EASTING
PC:	2+58.74	2602160.66	6462837.75
RP:		2602160.66	6462737.75
PT:	3+44.99	2602236.60	6462802.81
CIRCULAR CURVE DATA			
PARAMETER	VALUE	PARAMETER	VALUE
DELTA:	49° 24' 58.1423"	TYPE:	LEFT
RADIUS:	100.00		
LENGTH:	86.25	TANGENT:	46.01
MID-ORD:	9.16	EXTERNAL:	10.08
CHORD:	83.60	COURSE:	N 24° 42' 29.0712" W
TANGENT DATA			
DESCRIPTION	PT STATION	NORTHING	EASTING
START:	3+44.99	2602236.60	6462802.81
END:	6+07.26	2602407.23	6462603.62
TANGENT DATA			
PARAMETER	VALUE	PARAMETER	VALUE
LENGTH:	262.28	COURSE:	N 49° 24' 58.1423" W
CURVE POINT DATA			
DESCRIPTION	STATION	NORTHING	EASTING
PC:	6+07.26	2602407.23	6462603.62
RP:		2602331.28	6462538.56
PT:	6+82.90	2602431.17	6462533.75
CIRCULAR CURVE DATA			
PARAMETER	VALUE	PARAMETER	VALUE
DELTA:	43° 20' 25.9242"	TYPE:	LEFT
RADIUS:	100.00		
LENGTH:	75.64	TANGENT:	39.73
MID-ORD:	7.07	EXTERNAL:	7.61
CHORD:	73.85	COURSE:	N 71° 05' 11.1044" W
TANGENT DATA			
DESCRIPTION	PT STATION	NORTHING	EASTING
START:	6+82.90	2602431.17	6462533.75
END:	10+65.98	2602412.75	6462151.12
TANGENT DATA			
PARAMETER	VALUE	PARAMETER	VALUE
LENGTH:	383.07	COURSE:	S 87° 14' 36.5213" W

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — JEFFREY ALAN LOWY — C 79836 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

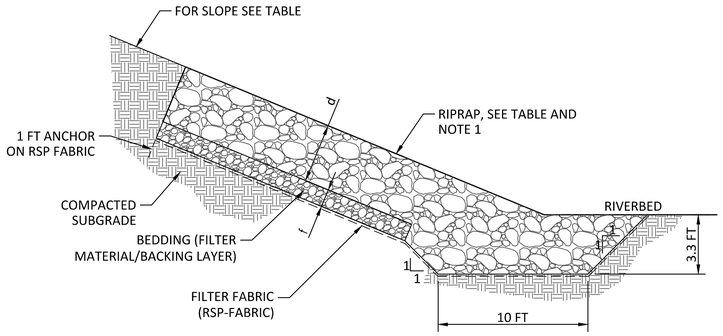
KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE
CIVIL GENERAL NOTES

DESIGNED J. BURNS
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

DRAWING
C001

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C001.dwg Plot date: Jun 24, 2022 05:22pm, CAD User: JoeNeves



NOTES:
1. THE INDIVIDUAL CLASSES OF ROCKS USED IN ROCK SLOPE PROTECTION (RSP) SHALL CONFORM TO THE SIZE TYPES AS SPECIFIED IN CALTRANS SPECIFICATINOS SECTION 72-2 ROCK SLOPE PROTECTION, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS, OR AS SHOWN ON THE PLANS.

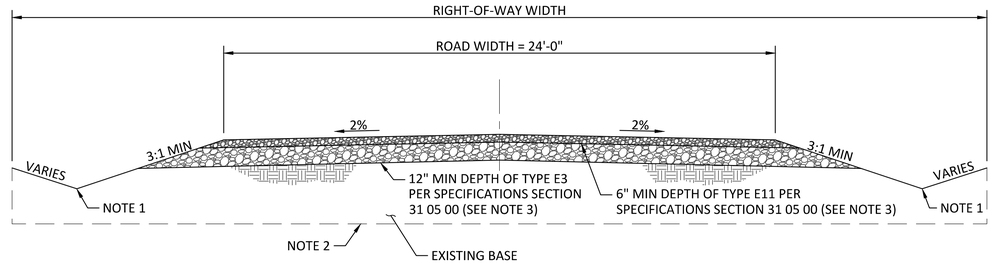
DESCRIPTION	EAST ABUTMENT	WEST ABUTMENT
SLOPE ANGLE	15 DEG	28 DEG
OUTSIDE LAYER[A], RSP-CLASS	E7B	E7B
MINIMUM LAYER THICKNESS, d	3.30 Ft	3.30 Ft
BACKING LAYER[A], RSP-CLASS	E6	E6
MINIMUM LAYER THICKNESS, f	1.25 Ft	1.25 Ft
RSP-FABRIC TYPE[B]	12 OZ NONWOVEN	12 OZ NONWOVEN
TOTAL ROCK THICKNESS (PERPENDICULAR)	4.60 Ft	4.60 Ft

A. RIPRAP SHALL MEET THE REQUIREMENT OF SPECIFICATION SECTION 31 05 00, MATERIALS FOR EARTHWORK.
B. RSP-FABRIC TYPE SHALL MEET THE REQUIREMENT OF SPECIFICATION SECTION 31 05 19, GEOTEXTILES.

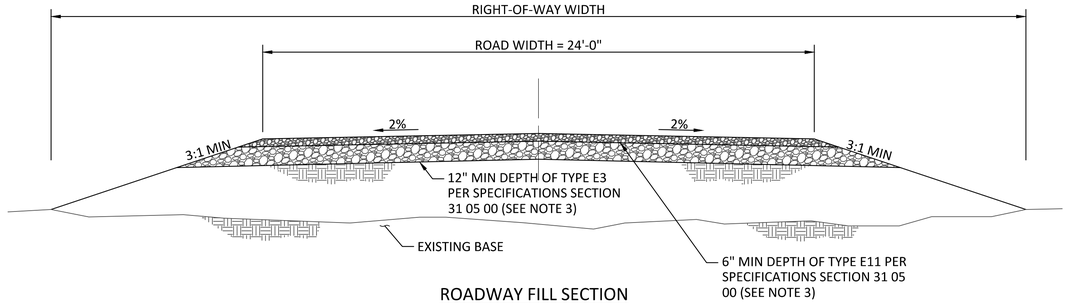
RIPRAP & ARMOR PROTECTION

SCALE: NTS

C202



ROADWAY CUT SECTION



ROADWAY FILL SECTION

NOTES:
1. BORROW DITCHES SHALL HAVE A MINIMUM 3:1 SLOPE WITH 4:1 SLOPE RECOMMENDED. THE BACKSLOPE OF THE BORROW DITCH SHALL BE MINIMUM 1:1 BACKSLOPE WITH 4:1 BACKSLOPE RECOMMENDED. THE FLOW LINE OF THE DITCH SHALL BE 12" BELOW THE LOWEST AGGREGATE BASE COURSE TO ENCOURAGE DRAINAGE.
2. OVER EXCAVATE EXISTING GRADE 12" MIN. PROOF ROLL AND BACKFILL WITH TYPE E9 PER SPECIFICATIONS, SECTION 31 05 00.
3. PLACE AND SPREAD ALL MATERIALS EVENLY IN MAXIMUM 6-INCH LIFTS COMPACTED TO A MINIMUM 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.

TYPICAL GRAVEL ROAD SECTION

SCALE: NTS

C137

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

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WARNING
0 1/2 1
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE
CIVIL STANDARD DETAILS

DESIGNED R. HUDSON
DRAWN J. CHASE
CHECKED J. LOWY
PROJECT DATE 6/24/22

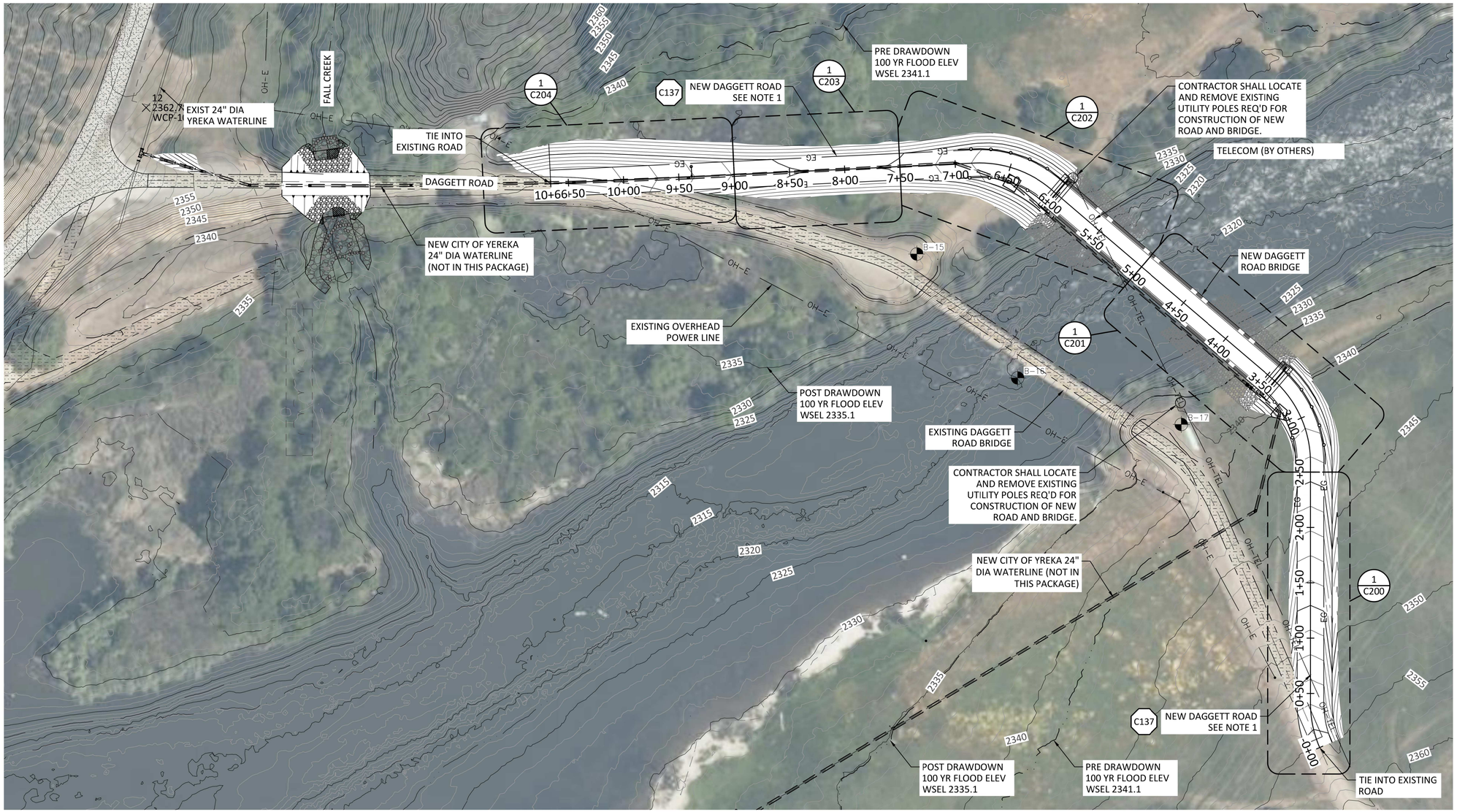
DRAWING
C002

JOB NO: 0000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C002.dwg Plot date: Jun 24, 2022 05:22pm, CAD User: JoeNeves

SHEET NOTES:

1. FOR THE NEW DAGGETT ROAD PROFILES SEE C200.



CIVIL SITE PLAN

SCALE: 1"= 50'

0" 50' 100'

N

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

CIVIL SITE PLAN

DESIGNED J. BURNS

DRAWN J. CHASE

CHECKED J. LOWY

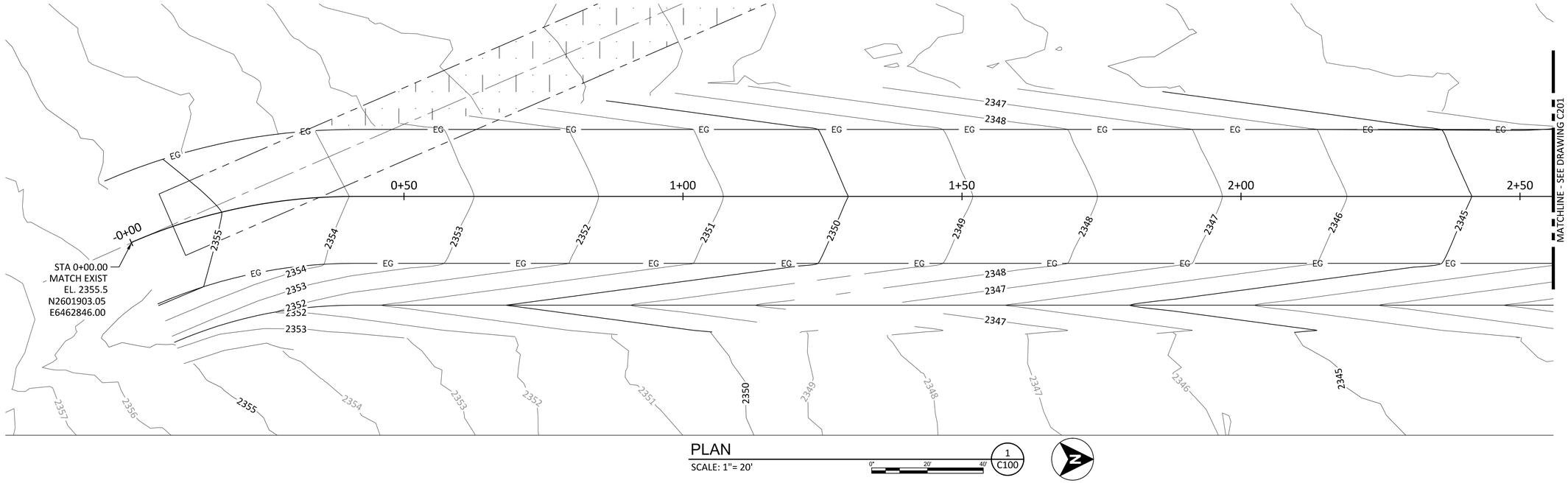
PROJECT DATE 6/24/22

DRAWING

C100

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C100.dwg Plot date: Jun 24, 2022 05:23pm, CAD User: JoeNeves

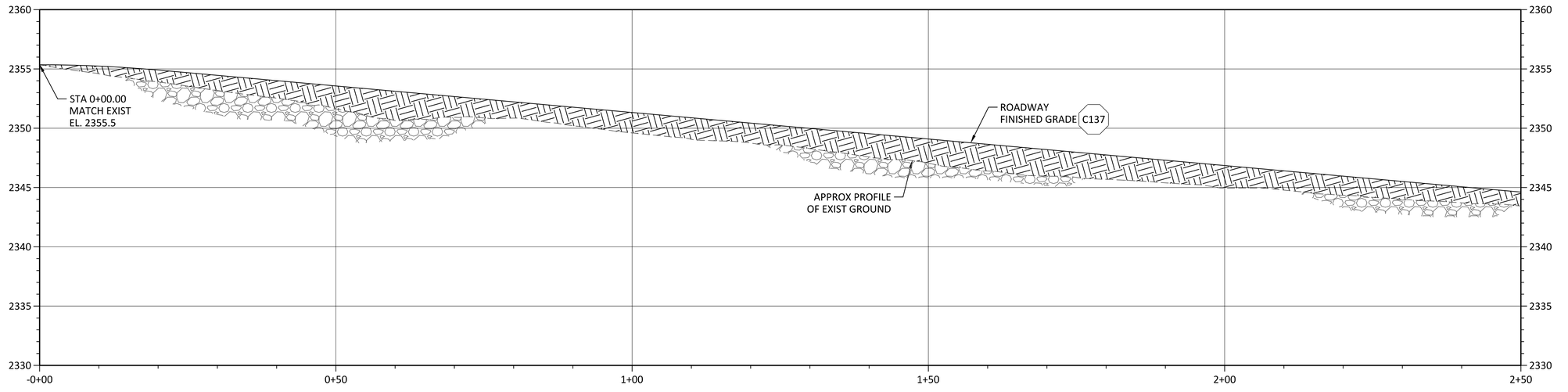


PLAN

SCALE: 1"= 20'

0" 20' 40'

1 / C100



PROFILE

SCALE: HORIZ 1"= 10'

VERT 1"= 5'

0" 10' 20'

0" 5' 10'

SHEET NOTES:

1. SEE DWG C001 FOR ROADWAY DESIGN COORDINATES.

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

PLAN AND PROFILE 1

DESIGNED J. BURNS

DRAWN R. WOOD

CHECKED J. LOWY

PROJECT DATE 6/24/22

DRAWING

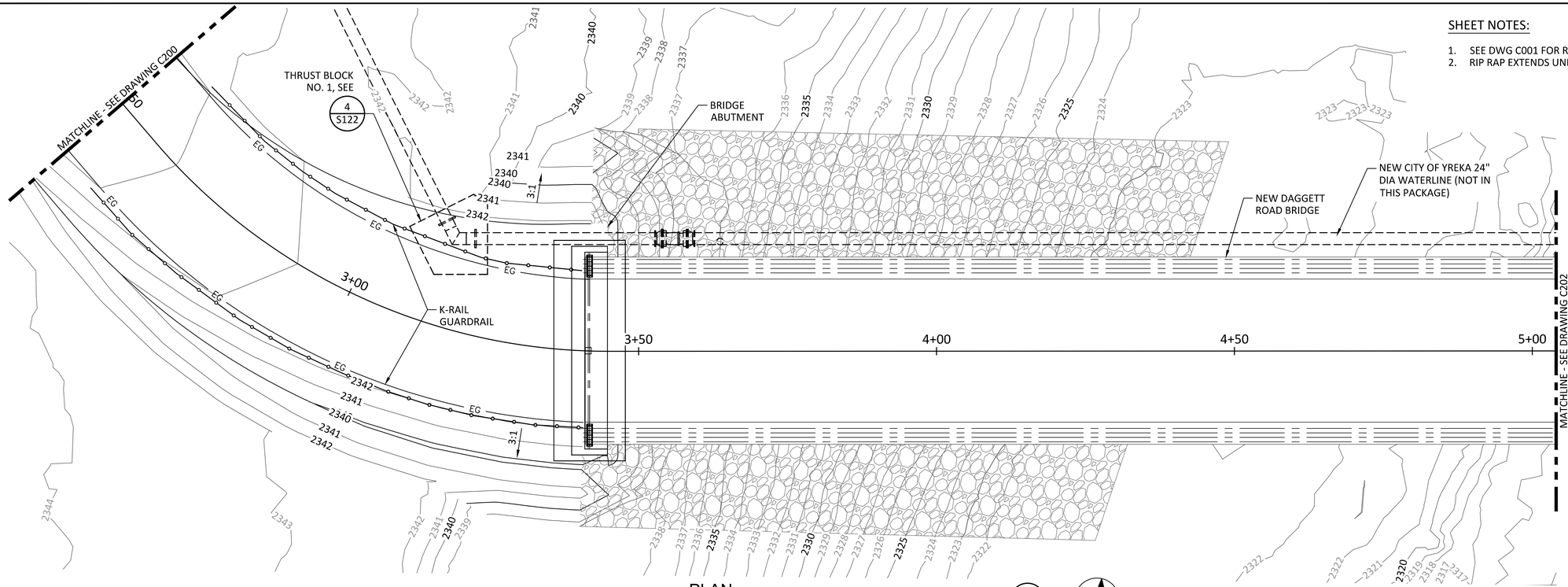
C200

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C200.dwg Plot date: Jun 24, 2022 05:25pm, CAD User: JoeNeves

SHEET NOTES:

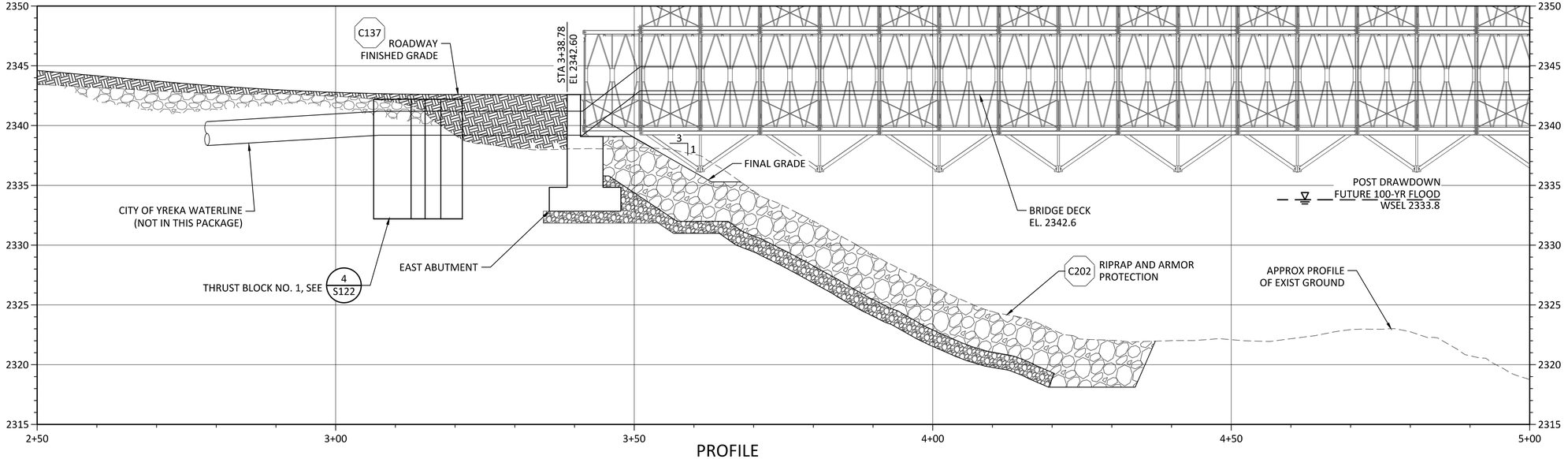
1. SEE DWG C001 FOR ROADWAY DESIGN COORDINATES.
2. RIP RAP EXTENDS UNDER BRIDGE.



PLAN

SCALE: 1"= 10'

1 C100



PROFILE

SCALE: HORIZ 1"= 10'

VERT 1"= 5'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — JEFFREY ALAN LOWY — C 79836 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

PLAN AND PROFILE 2

DESIGNED J. BURNS

DRAWN R. WOOD

CHECKED J. LOWY

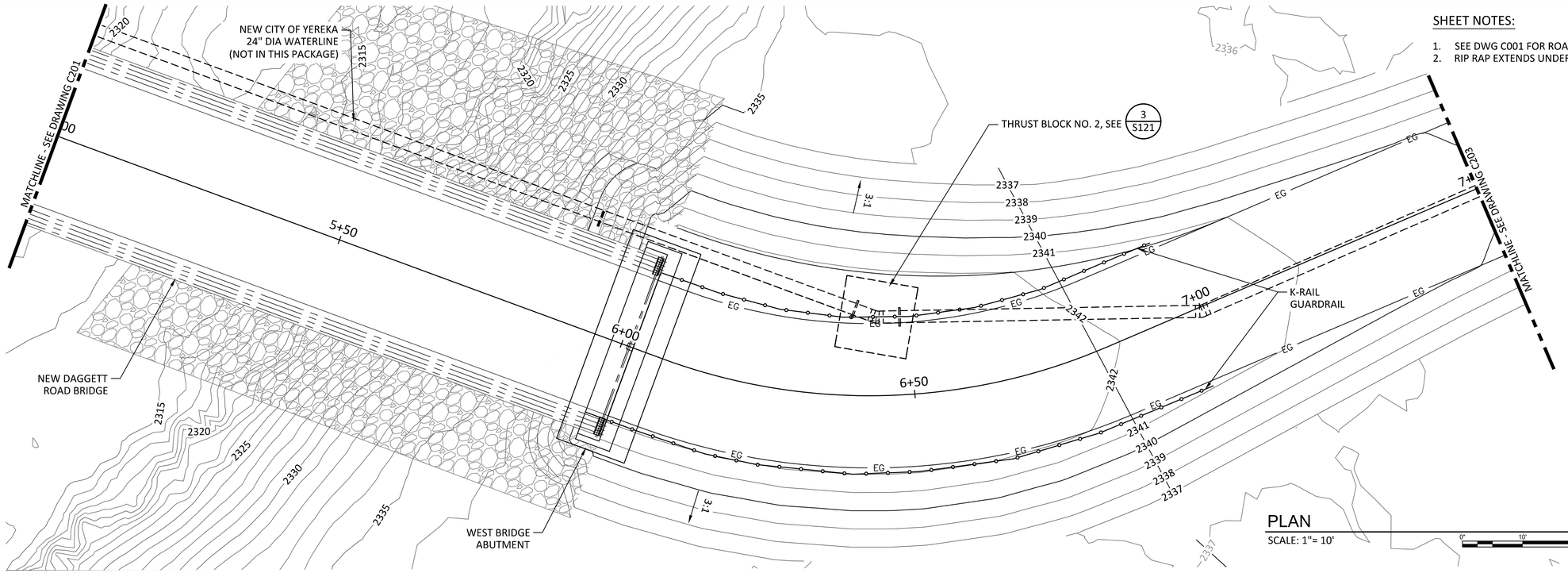
PROJECT DATE 6/24/22

DRAWING

C201

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C201.dwg Plot date: Jun 24, 2022 05:26pm, CAD User: JoeNeves

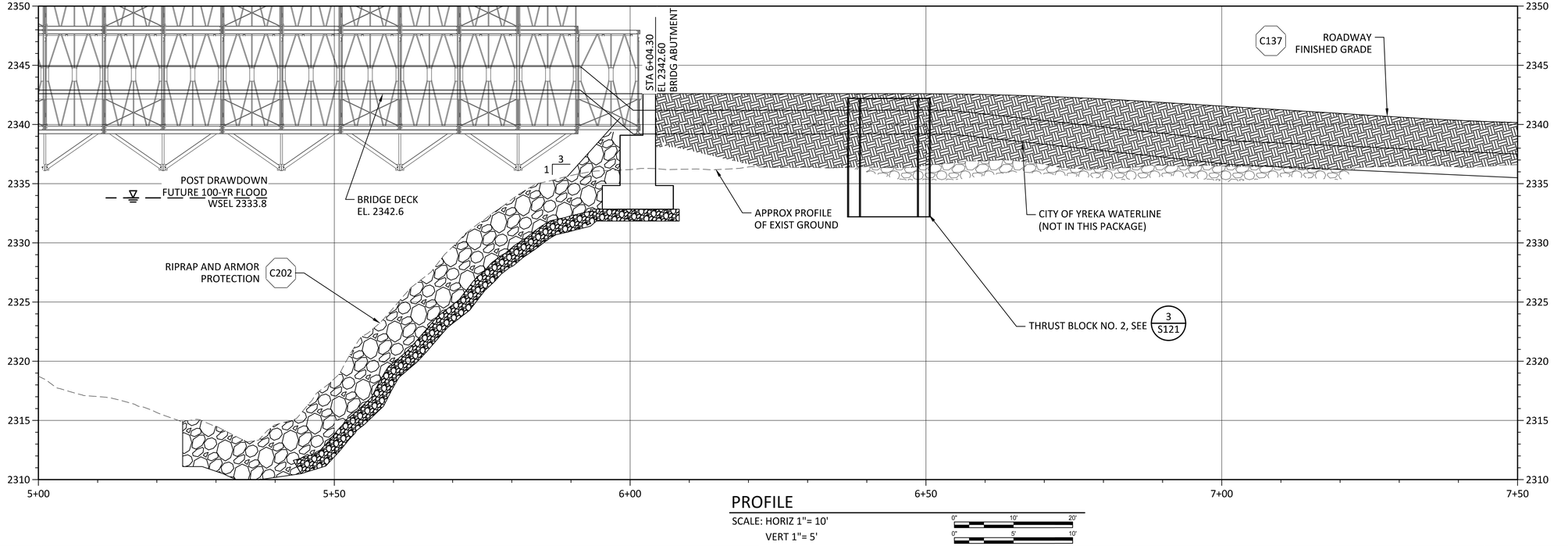


SHEET NOTES:

1. SEE DWG C001 FOR ROADWAY DESIGN COORDINATES.
2. RIP RAP EXTENDS UNDER BRIDGE.

PLAN
SCALE: 1"= 10'

1 / C100



PROFILE
SCALE: HORIZ 1"= 10'
VERT 1"= 5'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE

PLAN AND PROFILE 3

DESIGNED J. BURNS
DRAWN R. WOOD
CHECKED J. LOWY
PROJECT DATE 6/24/22

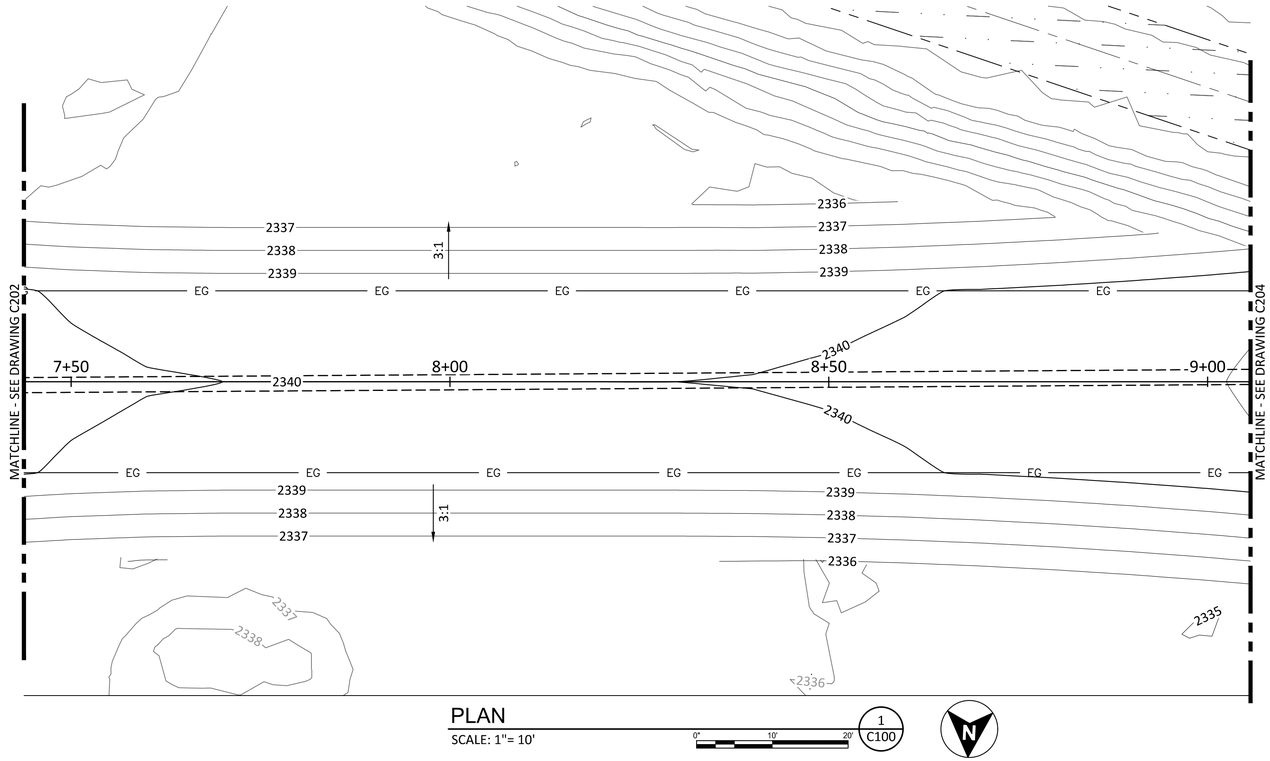
DRAWING
C202

JOB NO: 0000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C202.dwg Plot date: Jun 24, 2022 05:28pm, CAD User: JoeNeves

SHEET NOTES:

1. SEE DWG C001 FOR ROADWAY DESIGN COORDINATES.

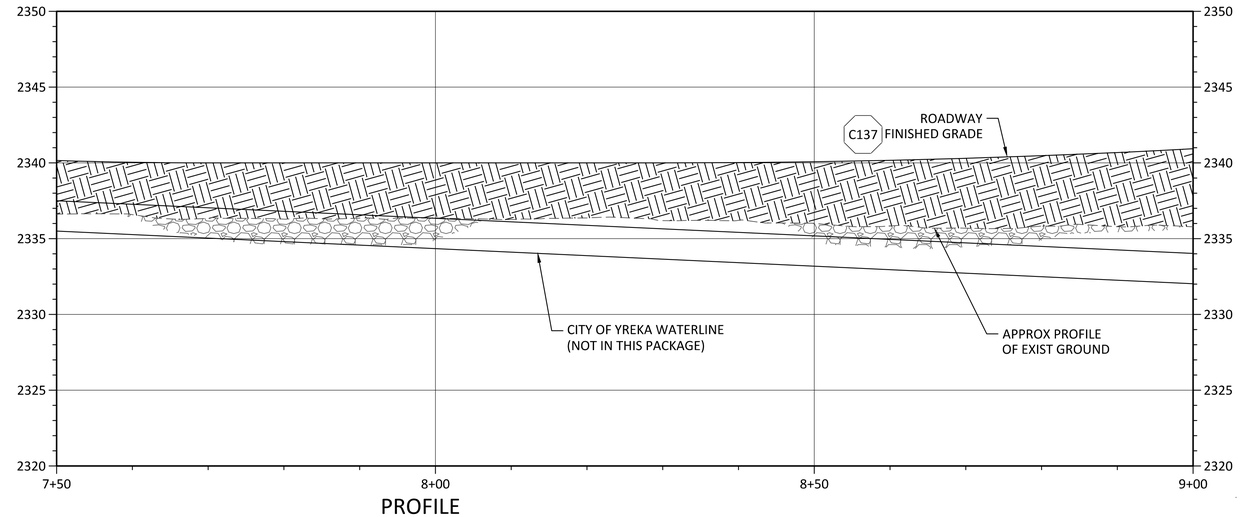


PLAN

SCALE: 1"= 10'

0' 10' 20'

1 / C100



PROFILE

SCALE: HORIZ 1"= 10'

VERT 1"= 5'

0' 10' 20'

0' 5' 10'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

PLAN AND PROFILE 4

DESIGNED J. BURNS

DRAWN R. WOOD

CHECKED J. LOWY

PROJECT DATE 6/24/22

DRAWING

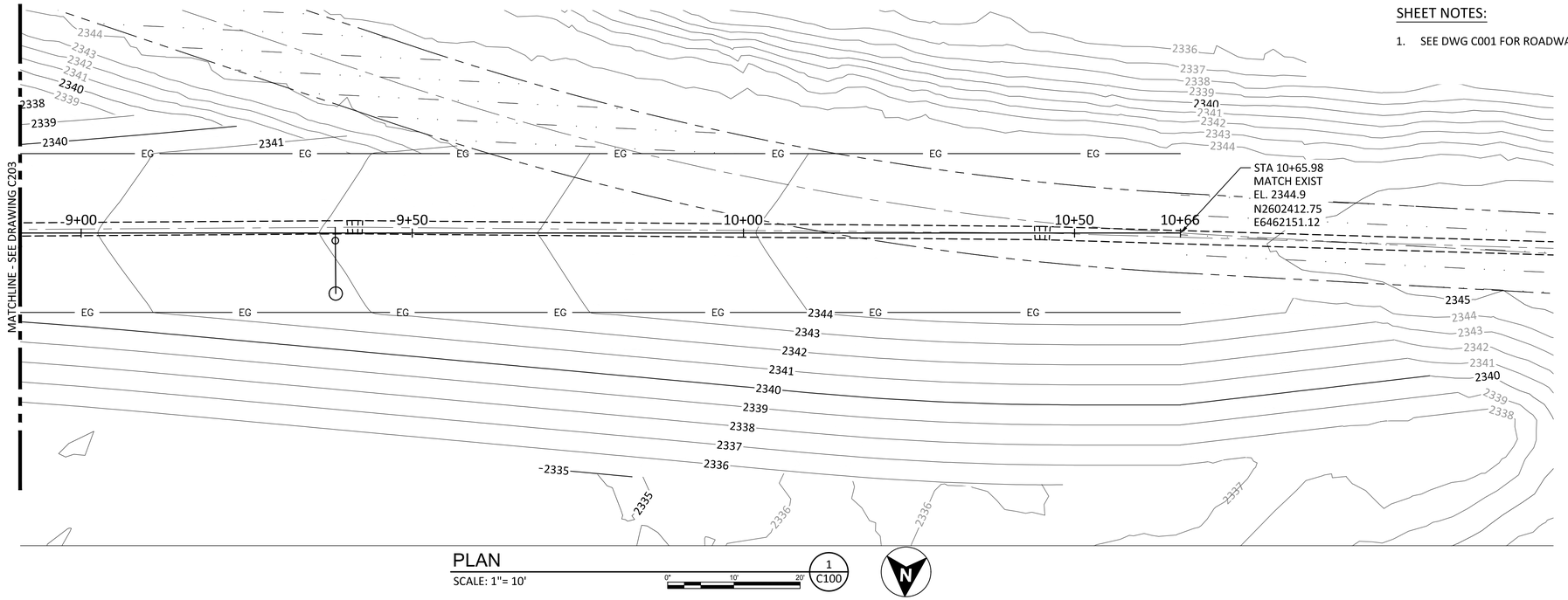
C203

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C203.dwg Plot date: Jun 24, 2022 05:30pm, CAD User: JoeNeves

SHEET NOTES:

1. SEE DWG C001 FOR ROADWAY DESIGN COORDINATES.

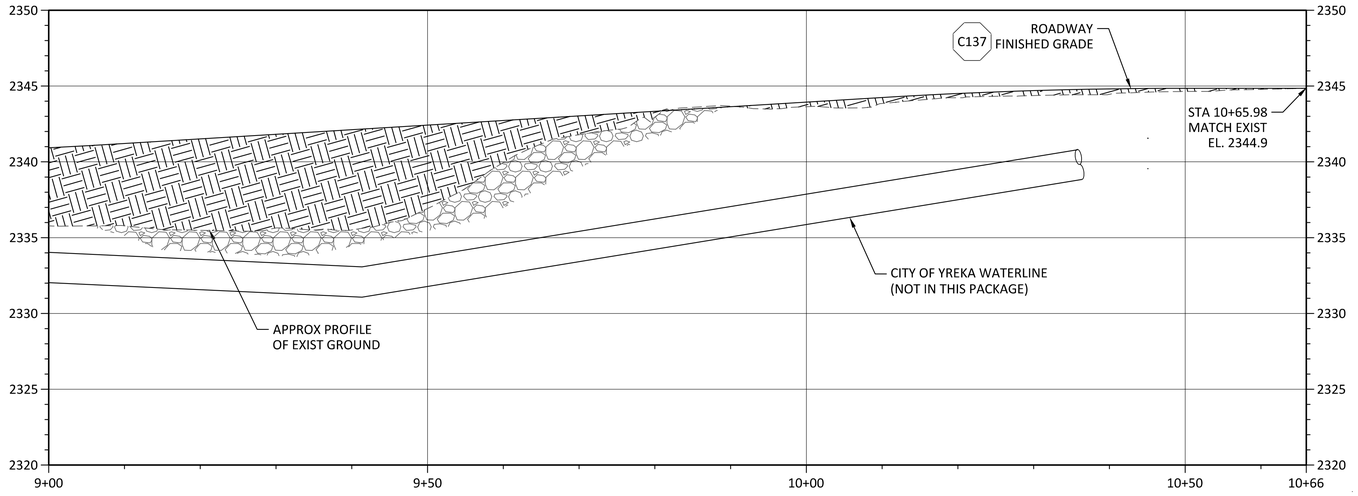


PLAN

SCALE: 1"= 10'

0' 10' 20'

1 / C100



PROFILE

SCALE: HORIZ 1"= 10'

VERT 1"= 5'

0' 10' 20'

0' 5' 10'

REV	DATE	BY	DESCRIPTION
0	6/24/22	JAL	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
JEFFREY ALAN LOWY
C 79836
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

PLAN AND PROFILE 5

DESIGNED J. BURNS

DRAWN R. WOOD

CHECKED J. LOWY

PROJECT DATE 6/24/22

DRAWING

C204

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\C204.dwg Plot date: Jun 24, 2022 05:31pm, CAD User: JoeNeves

GENERAL STRUCTURAL NOTES

DESIGN CRITERIA

1. APPLICABLE CODES: BRIDGE SUBSTRUCTURE AND WATERLINE SUPPORT
   - A. 2019 CALIFORNIA BUILDING CODE (CBC)
   - B. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   - C. AISC 360-16 SPECIFICATIONS FOR STRUCTURAL STEEL
   - D. 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH CALIFORNIA AMENDMENTS
   - E. ASCE 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
2. APPLICABLE CODES: BRIDGE SUPERSTRUCTURE
   - A. 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH CALIFORNIA AMENDMENTS
3. REFER TO THE DRAWINGS FOR ADDITIONAL AND SPECIFIC STRUCTURE LOADINGS AND REQUIREMENTS.
4. ALL LOADS SHOWN ARE SERVICE LEVEL (UNFACTORED) UNLESS SPECIFICALLY NOTED OTHERWISE.
5. DEAD LOADS:
   - A. SELF WEIGHT
6. LOASNOWDS:
   - GROUND SNOW LOAD, Pg = 54 PSF
   - TERRAIN CATEGORY = C
   - SNOW EXPOSURE FACTOR, Ce = 0.9
   - THERMAL FACTOR, Ct = 1.0
   - IMPORTANCE FACTOR, I = 1.0
   - MINIMUM ROOF SNOW LOAD, Pf = 40 PSF
7. LIVE LOADS:
   - HL-93 VEHICLE LOADING
8. WIND LOADS:
   - RISK CATEGORY II
   - BASIC WIND SPEED = 115 MPH (ULT)
9. SEISMIC LOADS:
   - MAPPED SPECTRAL RESPONSE ACCELERATIONS
     - S_S = 0.4949
     - S_1 = 0.2132
   - DESIGN SPECTRAL RESPONSE ACCELERATIONS
     - S_{DS} = 0.5939
     - S_{D1} = 0.3383
   - SITE CLASS = C
   - SEISMIC ZONE (AASHTO) = 3
   - SEISMIC DESIGN CATEGORY = D
   - IMPORTANCE FACTOR, Ie = 1.0
10. SOIL DESIGN PARAMETERS:
    - A. NET ALLOWABLE SOIL BEARING PRESSURES: 8.9 KSF
    - B. EQUIVALENT DRAINED FLUID PRESSURES:
      - ACTIVE:
      - AT REST:
      - PASSIVE:
    - C. VERTICAL SURCHARGE: HL-93 VEHICLE LOADING
    - D. COEFFICIENT OF FRICTION: 0.45
    - E. NATIVE SOIL UNIT WEIGHT: 125 PCF
    - F. GROUND WATER (GW) ELEVATION: 2335.1

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. DO NOT CUT OR MODIFY STRUCTURAL MEMBERS FOR PIPES, DUCTS, ETC, UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER.
5. 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.
6. INFORMATION (DETAILING, DIMENSIONS, CONFIGURATIONS, AND ELEVATIONS, ETC.) OF EXISTING CONSTRUCTION SHOWN REFLECTS AVAILABLE EXISTING DESIGN DOCUMENTS, AND DOES NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, ELEVATIONS AND DETAILING OF THE EXISTING STRUCTURES PRIOR TO UNDERTAKING ANY WORK THAT IS AFFECTED BY THE EXISTING STRUCTURE.

INSPECTION AND TESTING

1. SPECIFIED CONCRETE AND MASONRY AND OTHER MATERIAL TESTING RELATED TO SPECIAL INSPECTION DURING CONSTRUCTION WILL BE OWNER FURNISHED.
2. 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 OWNER.
3. SPECIAL INSPECTION, TESTING AND OBSERVATION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH SPECIFICATIONS SECTION 01 45 60.
4. SPECIAL INSPECTION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH SPECIFICATIONS SECTION 01 45 60 ON THE FOLLOWING PORTIONS OF THE WORK:
   - A. CONCRETE PLACEMENT
   - B. REINFORCING STEEL PLACEMENT
   - C. STRUCTURAL WELDING
   - D. ANCHORS, EMBEDS AND BOLTS INSTALLED IN CONCRETE
   - E. GRADING, EXCAVATION, AND FILLING
5. THE CONTRACTOR SHALL SCHEDULE THE SPECIAL INSPECTION VISITS, PROVIDE 48 HOURS NOTICE TO THE INSPECTOR, AND PROVIDE SAFE ACCESS TO ITEMS TO BE INSPECTED. THE SPECIAL INSPECTOR WILL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS AND SUBMIT RECORDS OF INSPECTION. DISCREPANCIES WILL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
6. SPECIAL INSPECTION AND ASSOCIATED TESTING REPORTS WILL BE SUBMITTED TO THE ENGINEER, CONTRACTOR, BUILDING OFFICIAL, AND OWNER WITHIN ONE WEEK OF INSPECTION OR WITHIN ONE WEEK OF TEST COMPLETION. AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES WILL BE SUBMITTED.

GEOTECHNICAL OBSERVATION

1. SPECIAL INSPECTION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH SPECIFICATIONS SECTION 01 45 60 ON THE FOLLOWING PORTIONS OF THE WORK:
   - A. SOILS

STRUCTURAL OBSERVATION

1. STRUCTURAL OBSERVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATIONS SECTION 01 45 60.
2. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY REQUIRED SPECIAL INSPECTIONS OR INSPECTIONS BY THE BUILDING OFFICIAL.

FOUNDATIONS

1. REFER TO GEOTECHNICAL DATA REPORT BY KNIGHT PIESOLD DATED DECEMBER 16, 2020.
2. FOUNDATION SLABS, SLABS-ON-GRADE AND WALL FOUNDATIONS SPECIFICALLY NOTED TO BE ON FILL SHALL BEAR ON 12" CRUSHED ROCK SURFACE SHALL BE PROOF ROLLED TO 95% COMPACTION PRIOR TO PLACING FILL.
3. FOUNDATION BEARING SURFACES SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR QUALIFIED DESIGNEE 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 AND DATA REPORTS.
4. NO BACKFILL SHALL BE PLACED BEHIND CANTILEVERED, FREE TOP WALLS UNTIL THE CONCRETE HAS ATTAINED 75 PERCENT OF ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.
5. USE UTMOST CARE TO AVOID DAMAGE TO EXISTING STRUCTURES WHEN USING EXPLOSIVES FOR EXCAVATION OF ROCK.

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. "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 (WELDING IS ONLY PERMITTED WITH WRITTEN PERMISSION FROM ENGINEER)
2. FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MSP-1 "MANUAL OF STANDARD PRACTICE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
3. MINIMUM REINFORCING FOR CONCRETE WALLS AND SLABS SHALL BE AS FOLLOWS:

THICKNESS	REINF EACH WAY	LOCATION
6"	#4@12"	CENTERED
8"	#5@12"	CENTERED
10"	#4@12"	EACH FACE
12"	#5@12"	EACH FACE

   PROVIDE LARGER SIZES AND MORE REINFORCING IN SECTIONS OF CONCRETE WHERE REQUIRED BY THE DETAILS ON THE DRAWINGS OR BY THE SPECIFICATIONS.
4. CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE:
   - WHEN PLACED IN CONTACT WITH EARTH: 3"
   - OTHER CONCRETE SURFACES: 2.5"
5. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL S141. 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.
6. 90 DEGREE BENDS, UNLESS OTHERWISE SHOWN, SHALL BE ACI 318 STANDARD HOOKS.
7. WALL CORNER AND WALL INTERSECTION REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS, AS INDICATED IN DETAIL S143.
8. 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.
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 DETAILS S142 AND S144.

WATER LINE SUPPORT BRACE

BRIDGE MANUFACTURER IS RESPONSIBLE FOR PROVIDING PIPE (WATER LINE) SUPPORT BRACE AS SHOWN ON SHEET S123. LOAD IMPOSED ON EACH PIPE SUPPORT IS PROVIDED IN THE LOAD TABLE ON SHEET S123.

LICENSED PROFESSIONAL ENGINEER
ZACHARY DAVID AUTIN
C 92204
6/24/2022
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION
0	6/24/22	ZDA	ISSUED FOR CONSTRUCTION

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE
STRUCTURAL GENERAL NOTES 1

DESIGNED K. HEINDEL
DRAWN J. CHASE
CHECKED Z. AUTIN
PROJECT DATE 6/24/22

DRAWING
S001

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S001.dwg Plot date: Jun 24, 2022 05:32pm, CAD User: JoeNeves

GENERAL STRUCTURAL NOTES

CONCRETE REINFORCING (CONT).

11. REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:

CONCRETE DESIGN STRENGTH = 4,500 PSI AT 7 DAYS[3] GRADE 60 REINF STEEL										
BAR SIZE		#3	#4	#5	#6	#7	#8	#9	#10	#11
LAP SPLICE LENGTH										
SPACING = 3"	TOP BAR[2]	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[2]	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[2]	1'-4"	1'-8"	2'-0"	2'-5"	3'-6"	4'-0"	5'-0"	6'-2"	7'-5"
	OTHER BAR	1'-4"	1'-8"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
EMBEDMENT LENGTH										
SPACING = 3"	TOP BAR[2]	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[2]	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"

[1]LAP LENGTHS ARE BASED ON MINIMUM CONCRETE COVER OF 2.5". LONGER LENGTHS ARE REQUIRED FOR CONCRETE COVER LESS THAN 2".

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

CAST IN PLACE CONCRETE

1. 28-DAY COMPRESSIVE STRENGTHS:
   STRUCTURES: 4500 PSI
   CONCRETE FILL: 3000 PSI
2. 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.
3. ROUGHEN AND CLEAN CONSTRUCTION JOINTS IN WALLS AND SLABS TO 1/4" AMPLITUDE PRIOR TO PLACING ADJACENT CONCRETE.
4. COORDINATE PLACEMENT OF OPENINGS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS AND INSERTS PRIOR TO PLACEMENT OF CONCRETE.
5. NO ALUMINUM CONDUIT OR PRODUCTS CONTAINING ALUMINUM OR ANY OTHER MATERIAL INJURIOUS TO THE CONCRETE SHALL BE EMBEDDED IN THE CONCRETE.

WELDING

1. WELDS SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS):
   D1.1, STRUCTURAL WELDING CODE - STEEL
   D1.4, STRUCTURAL WELDING CODE - REINFORCING STEEL
   D1.5, BRIDGE WELDING CODE
2. REPAIR WELDS FOUND DEFECTIVE IN ACCORDANCE WITH AWS D1.1 SECTION 5.26.
3. USE INTERMITTENT WELDS AT FIELD WELDS OF EMBED PLATES AND ANGLES TO AVOID SPALLING OR CRACKING OF THE EXISTING CONCRETE.
4. BUTT JOINT WELDS SHALL BE COMPLETE JOINT PENETRATION (CJP) UNLESS INDICATED OTHERWISE.

STRUCTURAL STEEL AND METAL FABRICATIONS

1. STRUCTURAL STAINLESS STEEL
   SHAPES A276, AISI 304, 304L FOR WELDING
   STEEL PLATE A240, AISI 304, 304L FOR WELDING
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:
   W-SHAPES A572, GRADE 50
   MISCELLANEOUS SHAPES INCLUDING
   ANGLES, CHANNELS, PLATES, ETC. A572, GRADE 50 OR A36
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 ASTM STANDARDS EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE:
   ANCHOR BOLTS (AB)
   STEEL F1554, GRADE 36
   BOLTS
   STEEL ASTM F3125, GRADE A325
   STAINLESS STEEL F593, AISI TYPE 304, CONDITION CW
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 APPROVAL OF THE ENGINEER.

FINISHING

1. CONCRETE SURFACES MUST BE FINISHED TO ENSURE SMOOTH SURFACES, WITH ONE-INCH WIDE, 45° CHAMFERS.

BRIDGE DESIGN

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A FULLY DESIGNED, ENGINEERED, AND CONSTRUCTED CLEAR SPAN BRIDGE IN ACCORDANCE WITH THE GENERAL ARRANGEMENT SHOWN ON THE CONTRACT DRAWINGS.
2. CONTRACTOR SHALL WORK WITH A QUALIFIED SUPPLIER OF THE BRIDGE ELEMENTS AND ALL DRAWINGS AND SPECIFICATIONS SHALL BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA. THE LICENSED INDIVIDUAL SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE AS A LICENSED PROFESSIONAL STAMPING DESIGNS OF A SIMILAR NATURE.
3. SHOP DRAWINGS: FABRICATION AND ERECTIONS DRAWINGS SHALL BE PROVIDED FOR REVIEW IN ACCORDANCE WITH CONTRACT REQUIREMENTS FOR SUBMITTALS. ALL DRAWINGS SHALL BE SIGNED AND SEALED BY THE APPROVED ENGINEER RESPONSIBLE FOR THE DESIGN.
4. STRUCTURAL CALCULATIONS: CALCULATIONS SHALL INCLUDE ALL DESIGN INFORMATION NECESSARY TO DETERMINE THE STRUCTURAL ADEQUACY OF THE BRIDGE AND BE STAMPED BY THE LICENSED PROFESSIONAL.
5. DESIGN REQUIREMENTS: DESIGN SHALL MEET THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
   a. LOAD RESISTANCE FACTOR DESIGN (LRFD) AS DEFINED IN THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.
   b. SEISMIC DESIGN SHALL BE THE AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN AND PROJECT SPECIFIC DESIGN CRITERIA.
   c. DESIGN LIFE SHALL BE 75 YEARS.
   d. LOADS:
      d.1. DEAD LOADS- SELF WEIGHT OF ALL MEMBERS AND SUPERIMPOSED LOADS SUCH AS RAILINGS.
      d.2. LIVE LOAD SHALL BE HL-93 OR THE MAXIMUM CONSIDERED CONSTRUCTION LOADS BASED ON CONTRACTOR SELECTED EQUIPMENT FOR CONSTRUCTION OF THE PROJECT.
      d.3. WIND LOADS BASED ON PROJECT SPECIFIC CRITERIA SHALL BE APPLY TO THE DESIGN.
      d.4. THERMAL MOVEMENTS AND LOADS SHALL BE ACCOMMODATED IN THE DESIGN
   e. STRUCTURAL ELEMENTS:
      e.1. STEEL OR PRECAST ELEMENTS SHALL BE ALLOWED FOR THE SUBSTRUCTURE.
      e.2. BRIDGE BEARINGS SHALL ALLOW FOR EXPECTED BRIDGE MOVEMENT BOTH LONGITUDINALLY AND ROTATIONALLY WHILE TRANSFERRING ALL DEAD AND LIVE LOADS TO THE ABUTMENTS.
      e.3. BRIDGE RAIL SHALL BE PROVIDED IN CONFORMANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS REQUIREMENTS.
6. PRELIMINARY BRIDGE DESIGN BASED ON INFORMATION PROVIDED BY THE FOLLOWING:
   f. ACROW, 506 2ND AVENUE STE. 1400, SEATTLE, WA.
   g. ABUTMENT DESIGN BASED ON THE FOLLOWING UNFACTORED REACTIONS PROVIDED BY THE BRIDGE MANUFACTURER:
      g.1. DEAD LOAD: 210 KIPS (2 LOCATIONS PER ABUTMENT)
      g.2. LIVE LOAD: 165 KIPS (2 LOCATIONS PER ABUTMENT)
      g.3. WIND LOAD: 54 KIPS (PER ABUTMENT)

STRUCTURAL FILL

TYPE SF (STRUCTURAL FILL / FOUNDATION BASE): CRUSHED ROCK STRUCTURAL FILL MATERIAL OF SUCH NATURE THAT IT CAN BE COMPACTED READILY BY WATERING AND ROLLING TO FORM A FIRM, STABLE BASE FOR FILL MATERIAL REQUIRED BENEATH CONCRETE FOUNDATIONS. MATERIAL SHALL BE PLACED IN MAXIMUM 6-INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557. AT THE OPTION OF THE CONTRACTOR, THE GRADING FOR EITHER THE 1.5 INCH MAXIMUM SIZE OR 0.75-INCH MAXIMUM SIZE GRADATION MAY BE USED MATERIAL BENEATH CONCRETE FOUNDATIONS. THE SAND EQUIVALENT VALUE SHALL BE GREATER THAN 22. THE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE SIZE	1.5 INCH MAX GRADATION	0.75 INCH MAX GRADATION
2 INCH	100	-
1.5 INCH	90-100	-
1 INCH	-	100
0.75 INCH	81-91	90-100
NO. 4	43-53	55-67
NO. 16	23-29	28-38
NO. 200	4-10	4-10

LICENSED PROFESSIONAL ENGINEER
ZACHARY DAVID AUTIN
C 92204
6/24/2022
CIVIL
STATE OF CALIFORNIA

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WARNING
0 1/2 1
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE
STRUCTURAL GENERAL NOTES 2

DESIGNED K. HEINDEL
DRAWN J. CHASE
CHECKED Z. AUTIN
PROJECT DATE 6/24/22

DRAWING
S002

JOB NO: 000000

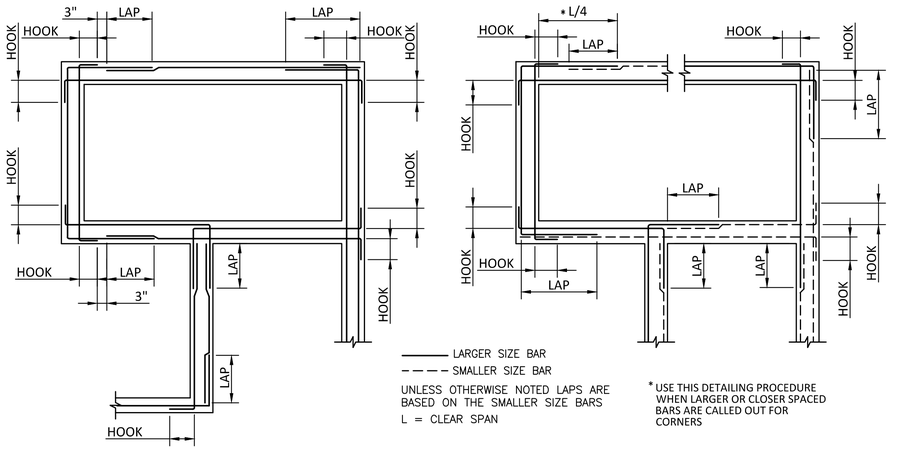
Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S002.dwg Plot date: Jun 24, 2022 05:32pm, CAD User: JoeNeves

TYPICAL LAP SPLICE LENGTHS IN INCHES, PER ACI 318/350					
		CLASS B LAP LENGTH		Ld	
BAR SIZE (#)	BAR POSITION	SPACING >= 6"	SPACING < 6"	SPACING >= 6"	SPACING < 6"
3	BOTTOM	16	16	12	12
	TOP	16	16	12	12
4	BOTTOM	16	18	12	14
	TOP	19	23	14	18
5	BOTTOM	18	26	14	20
	TOP	23	34	18	26
6	BOTTOM	21	35	17	27
	TOP	28	46	21	35
7	BOTTOM	31	51	24	40
	TOP	40	67	31	51
8	BOTTOM	35	59	27	45
	TOP	46	76	35	59
9	BOTTOM	44	66	34	51
	TOP	56	86	44	66
10	BOTTOM	52	73	40	56
	TOP	68	95	52	73
11	BOTTOM	62	80	48	62
	TOP	80	104	62	80

NOTES:
1. FOR GRADE 60 REINFORCING STEEL BARS.
2. FOR CONCRETE COMPRESSIVE STRENGTH f'c=4,500 PSI
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
4. ALL REINFORCING HOOKS SHALL BE PER ACI STANDARDS.

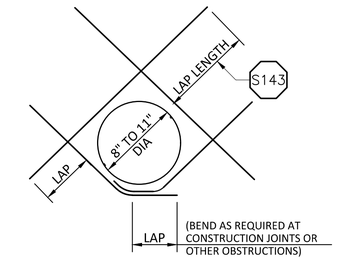
LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE
S101

SCALE: NTS



HORIZONTAL REINFORCEMENT AT WALL INTERSECTIONS
S141

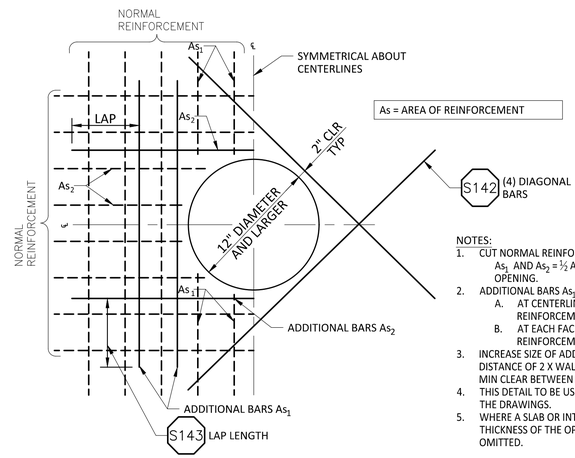
SCALE: NTS



NOTES:
1. CUT NORMAL REINFORCEMENT 2" CLEAR OF OPENING.
2. DIAGONAL BARS TO BE PLACED;
   A. AT CENTERLINE OF WALL OR SLAB WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED.
   B. AT EACH FACE OF WALL OR SLAB WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED.
3. UNLESS OTHERWISE NOTED, SIZE OF DIAGONAL BARS SHALL BE THE SIZE OF THE LARGEST NORMAL REINFORCING BAR CUT.
4. THIS DETAIL TO BE USED WHEN CALLED FOR ON THE DRAWINGS OR WHEN NO OTHER DETAIL IS SPECIFIED.

DIAGONAL REINFORCEMENT AT CIRCULAR OPENINGS
S142

SCALE: NTS



NOTES:
1. CUT NORMAL REINFORCEMENT AT OPENINGS: As_1 AND As_2 = ½ AREA OF CUT BARS TO BE ADDED ON EACH SIDE OF OPENING.
2. ADDITIONAL BARS As_1 AND As_2 TO BE PLACED:
   A. AT CENTERLINE OF WALLS OR SLABS WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED.
   B. AT EACH FACE OF WALLS OR SLABS WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED.
3. INCREASE SIZE OF ADDITIONAL BARS AS NEEDED TO FIT WITHIN A DISTANCE OF 2 X WALL/SLAB THICKNESS FROM OPENING, PROVIDE 2" MIN CLEAR BETWEEN BARS.
4. THIS DETAIL TO BE USED ONLY WHEN NO OTHER DETAIL IS INDICATED ON THE DRAWINGS.
5. WHERE A SLAB OR INTERSECTING WALL CONNECTS WITHIN ONE WALL THICKNESS OF THE OPENINGS, ADDITIONAL BARS ON THAT SIDE MAY BE OMITTED.

ADDITIONAL REINFORCEMENT AT CIRCULAR OPENINGS (12"D OR LARGER)
S144

SCALE: NTS

LICENSED PROFESSIONAL ENGINEER
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C 92204
6/24/2022
CIVIL
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WARNING
0 1/2 1
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

STRUCTURAL STANDARD DETAILS

DESIGNED K. HEINDEL
DRAWN J. CHASE
CHECKED Z. AUTIN
PROJECT DATE 6/24/22

DRAWING
S003

JOB NO: 000000

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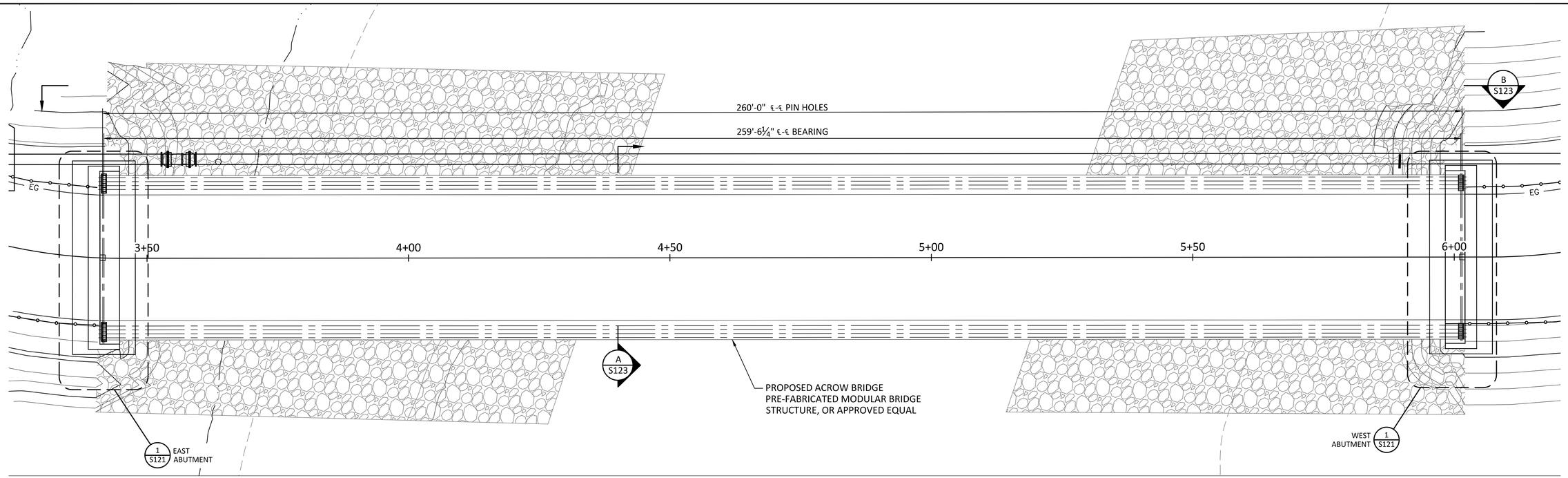
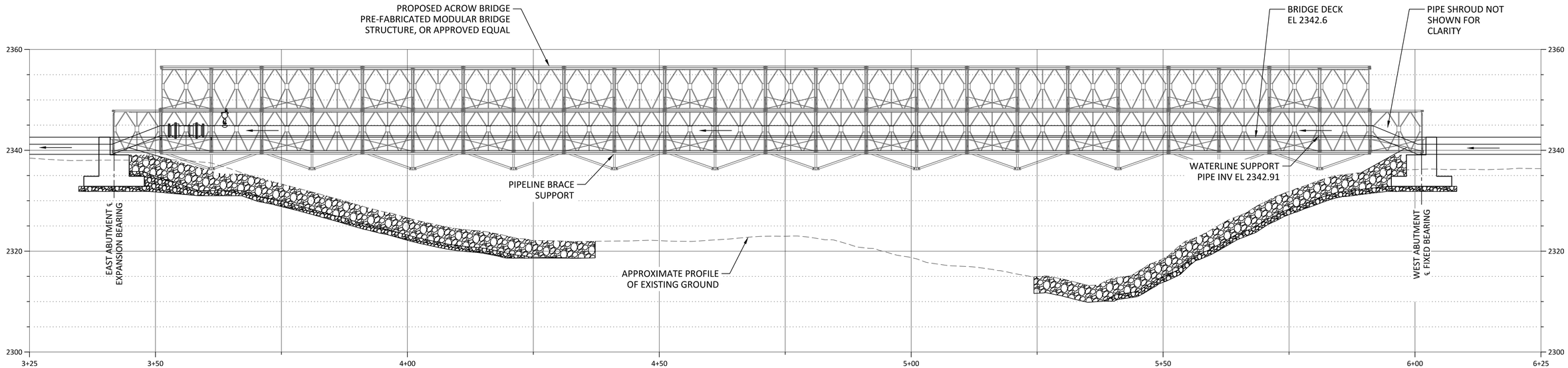


BRIDGE PLAN

SCALE: 1"= 10'



BRIDGE PROFILE

SCALE: 1"= 10'

REV	DATE	BY	DESCRIPTION
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LICENSED PROFESSIONAL ENGINEER
ZACHARY DAVID AUTIN
C 92204
6/24/2022
CIVIL
STATE OF CALIFORNIA

WARNING

0 1/2 1

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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

BRIDGE PLAN AND PROFILE

DESIGNED K. HEINDEL

DRAWN J. CHASE

CHECKED Z. AUTIN

PROJECT DATE 6/24/22

DRAWING

S120

JOB NO: 000000

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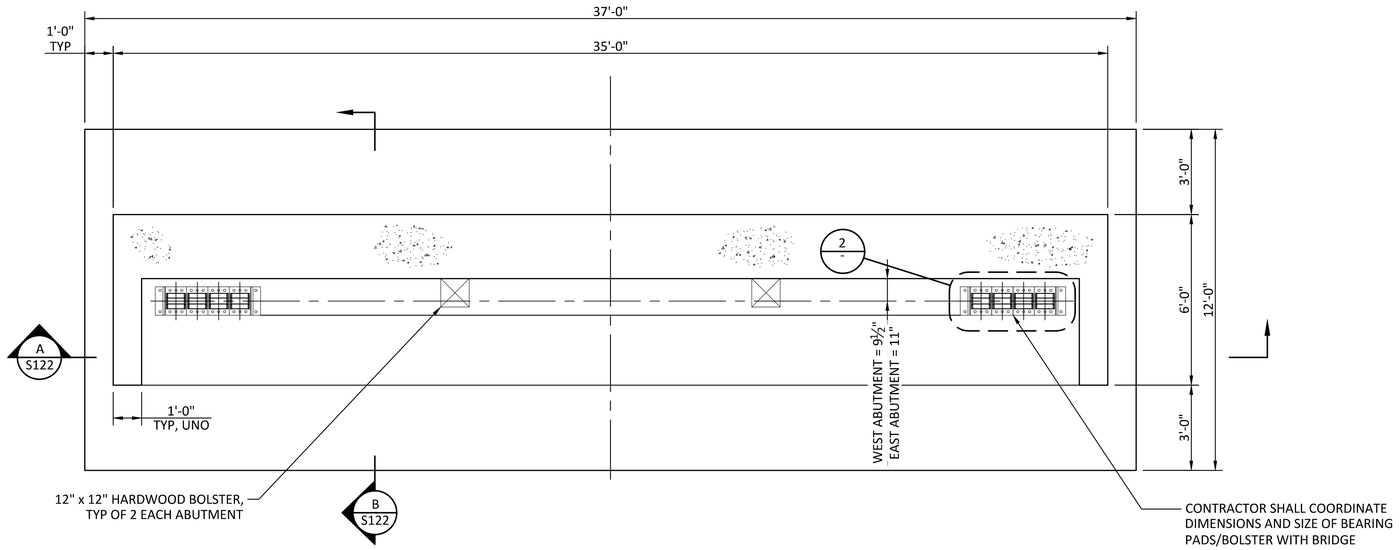
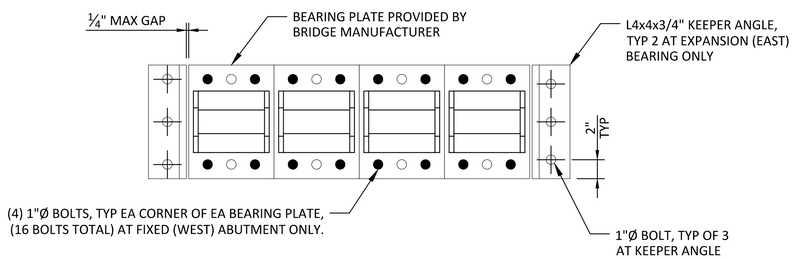


BRIDGE ABUTMENT PLAN

SCALE: 3/8"= 1'-0"

1 S120



NOTE:
ALL BOLTS SHALL BE DRILL & EPOXY SIMPSON SET XP-F1554 GR.36 W/12" MIN EMBED

DETAIL

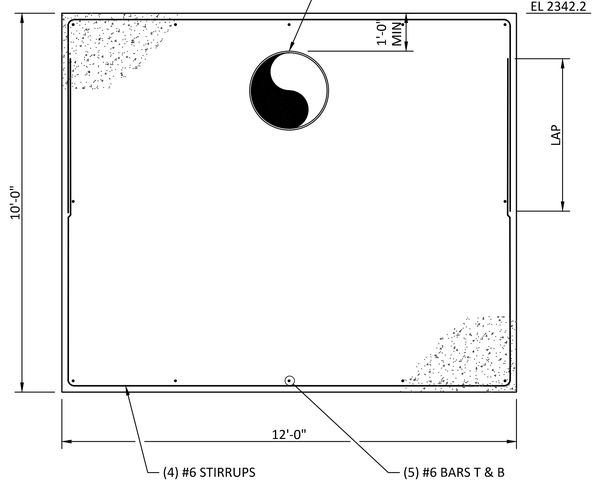
SCALE: 1 1/2"= 1'-0"

2

THRUST BLOCK NO. 2

SCALE: 1/2"= 1'-0"

3 C202



SECTION

SCALE: 1/2"= 1'-0"

A -

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0	6/24/22	ZDA	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — ZACHARY DAVID AUTIN — C 92204 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

BRIDGE ABUTMENT PLAN

DESIGNED K. HEINDEL

DRAWN J. CHASE

CHECKED Z. AUTIN

PROJECT DATE 6/24/22

DRAWING

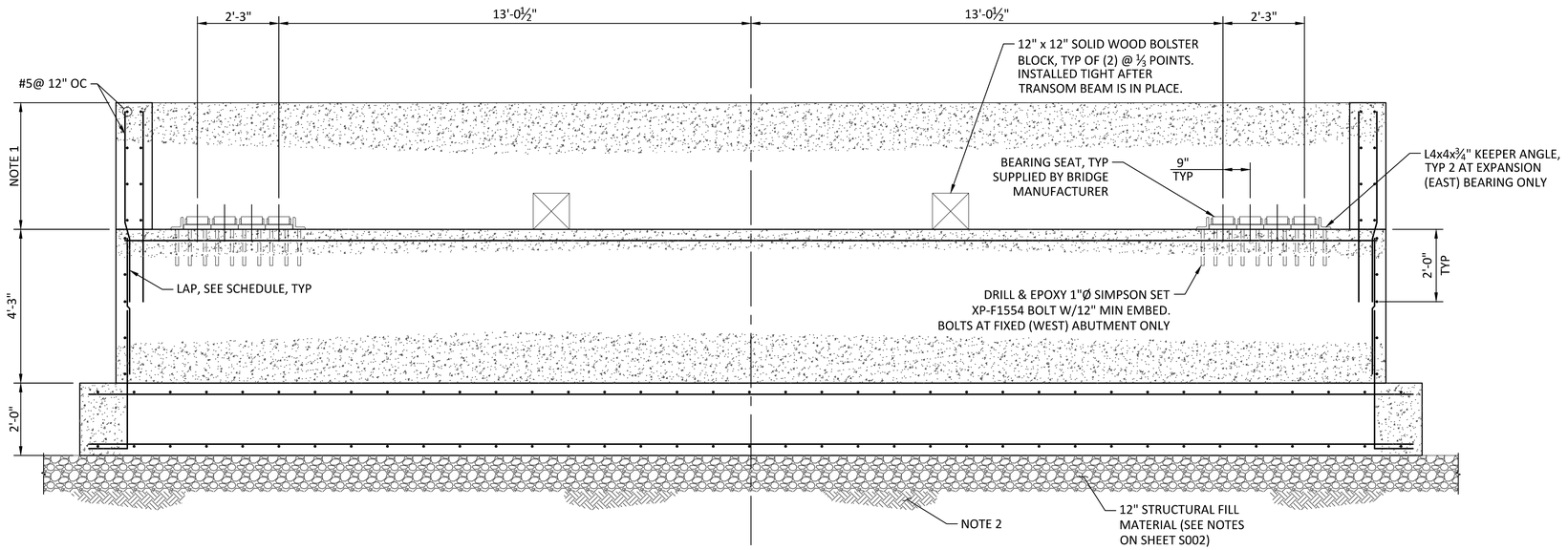
S121

JOB NO: 000000

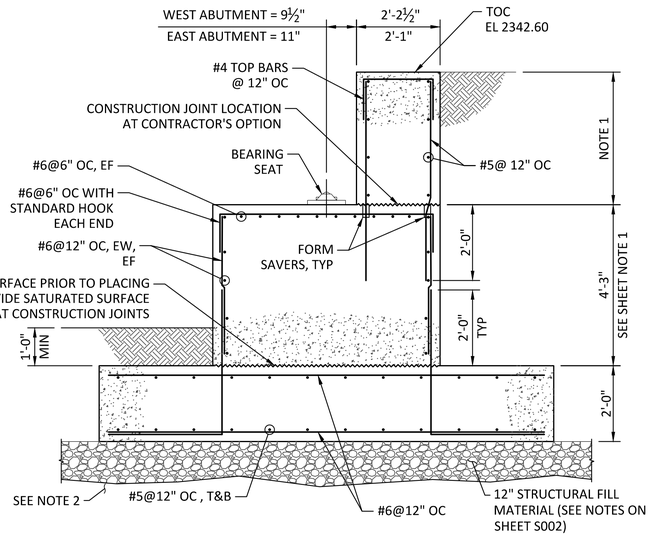
Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S121.dwg Plot date: Jun 24, 2022 05:32pm, CAD User: JoeNeves

SHEET NOTES:

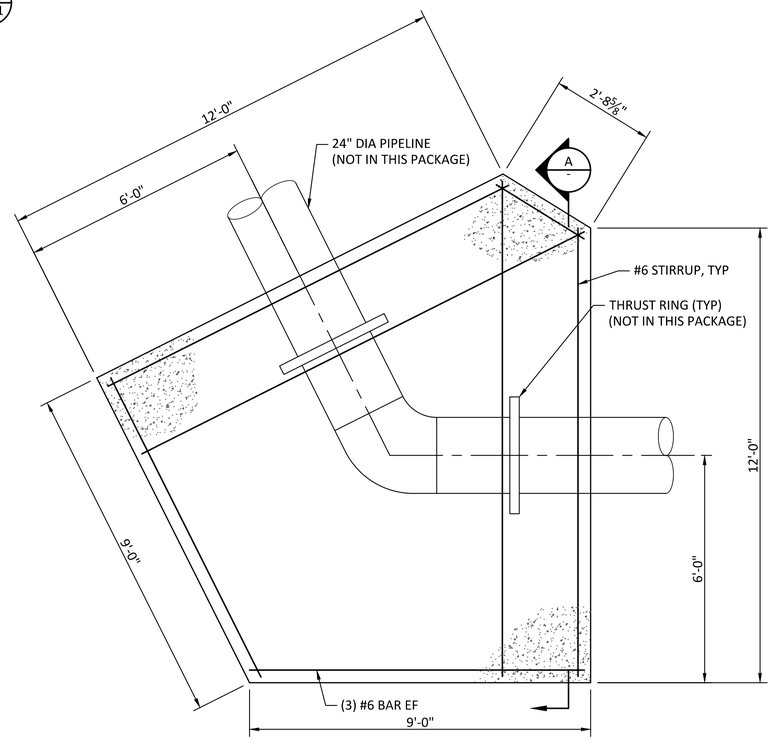
1. HEIGHT OF CONCRETE WALL SHALL BE FIELD DETERMINED FOR REQUIRED ELEVATION OF BEARING SEAT AT ENDS OF BRIDGE.
2. EXCAVATE SUBGRADE WITH SMOOTH BUCKET AND PROOF ROLL PRIOR TO PLACEMENT OF TYPE AS MATERIAL. PROOF ROLL IS TO EXTEND APPROXIMATELY 2-FT BEYOND THE EDGE OF FOOTING AND SHALL BE PERFORMED WHILE ENGINEER IS PRESENT.



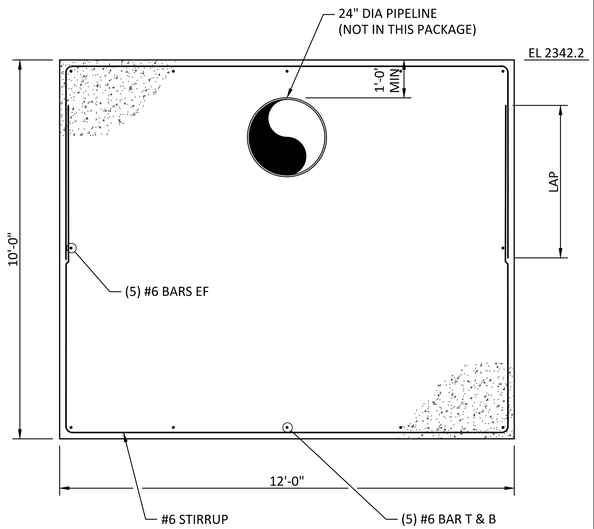
SECTION
SCALE: 1/2"= 1'-0"
A S121



SECTION
SCALE: 1/2"= 1'-0"
B S121



THRUST BLOCK NO. 1
SCALE: 1/2"= 1'-0"
4 C201



SECTION
SCALE: 1/2"= 1'-0"
A -

REV	DATE	BY	DESCRIPTION
0	6/24/22	ZDA	ISSUED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — ZACHARY DAVID AUTIN — C 92204 — 6/24/2022 — CIVIL — STATE OF CALIFORNIA

WARNING
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION
DAGGETT BRIDGE

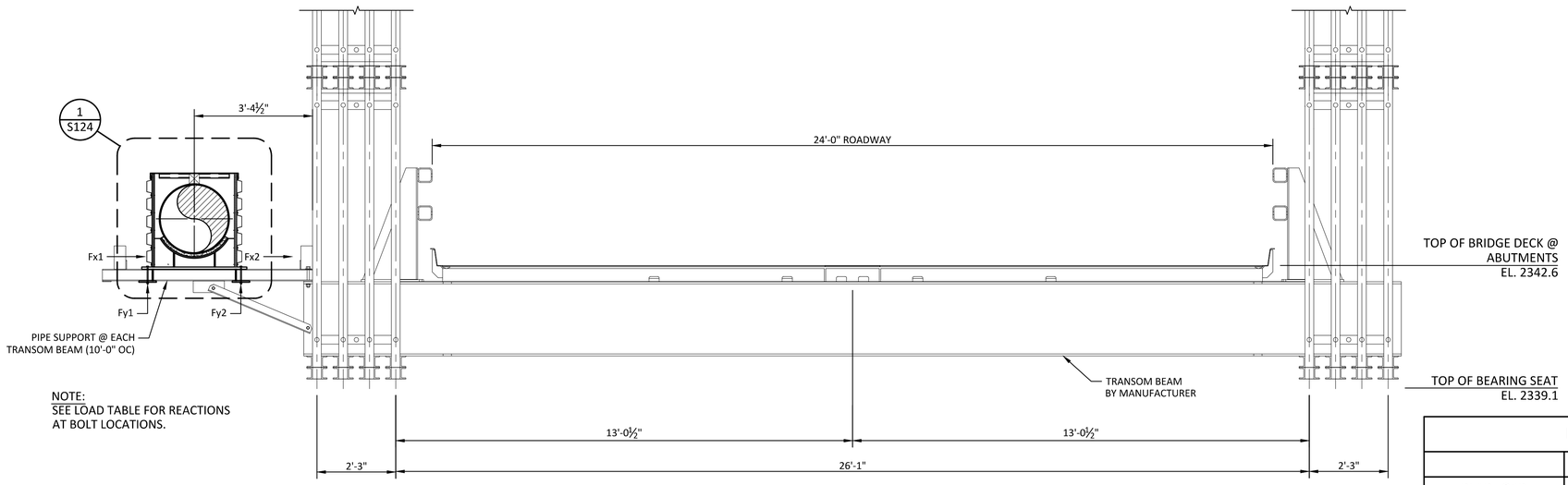
BRIDGE ABUTMENT REINFORCEMENT DETAILS

DESIGNED K. HEINDEL
DRAWN J. CHASE
CHECKED Z. AUTIN
PROJECT DATE 6/24/22

DRAWING
S122

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S122.dwg Plot date: Jun 24, 2022 05:32pm, CAD User: JoeNeves



NOTE:
SEE LOAD TABLE FOR REACTIONS
AT BOLT LOCATIONS.

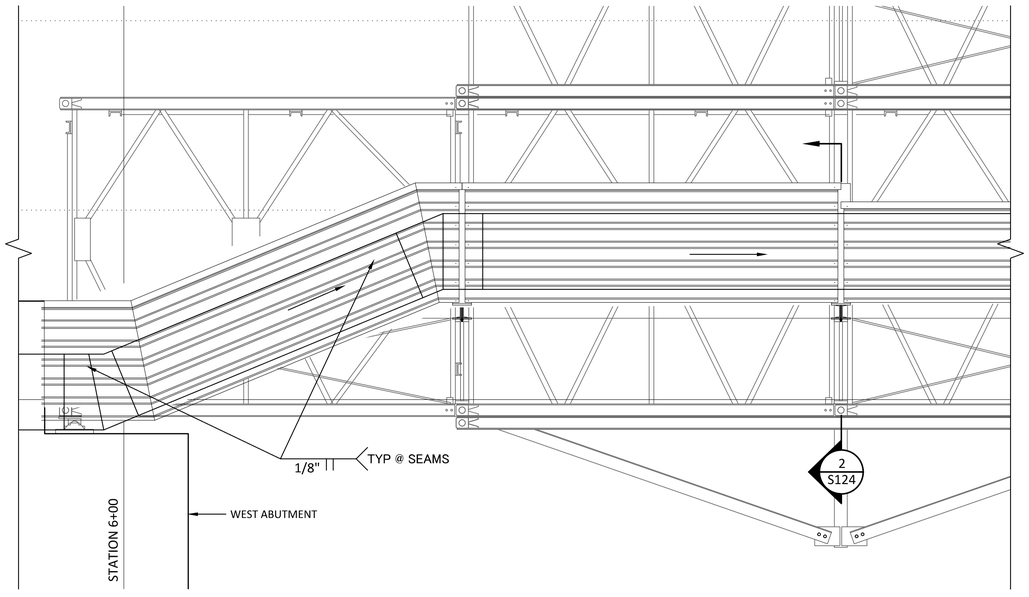
SECTION @ PIPE SUPPORT

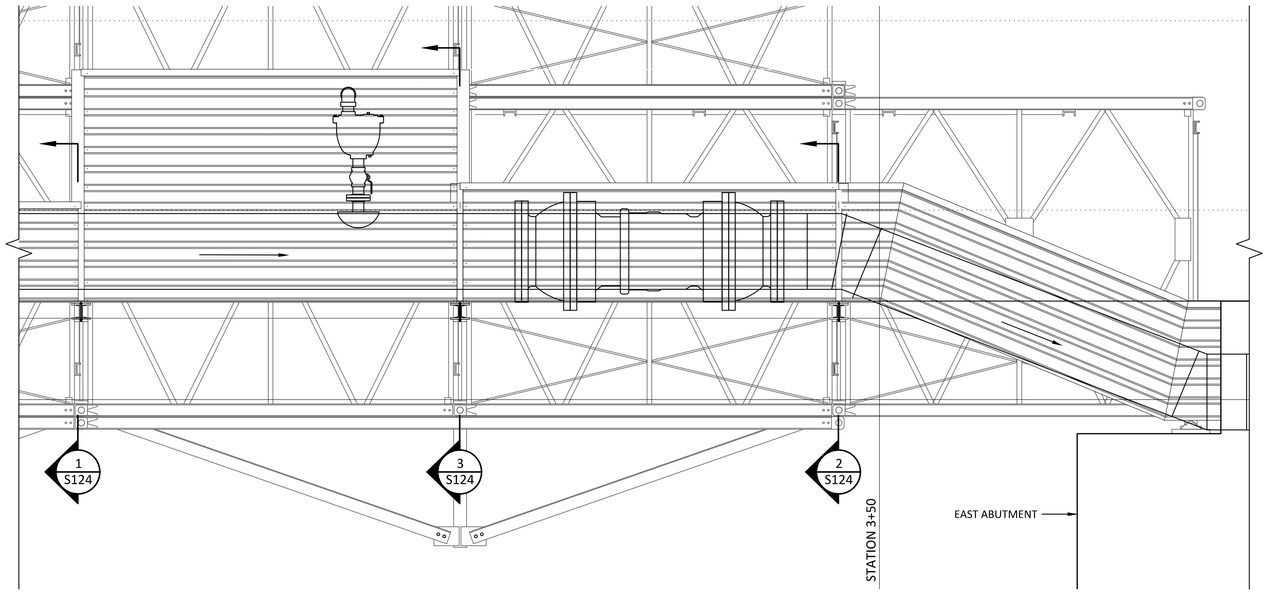
SCALE: 1/2"= 1'-0"

A S120

LOAD TABLE @ BOLT LOCATIONS, WATER LINE PIPE SUPPORT				
	Fy1	Fx1	Fy2	Fx2
DEAD LOAD	2,384	-	2,384	-
SNOW LOAD	700	-	700	-
WIND LOAD	-3,354 OR 2,454	±1,660	-3,354 OR 2,454	±1,660
SEISMIC	-228 OR 136	±228	-228 OR 136	±228

NOTE: ALL LOAD IS IN POUNDS.





PIPE SUPPORT ELEVATION

SCALE: 1/2"= 1'-0"

B S120

REV	DATE	BY	DESCRIPTION
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ZACHARY DAVID AUTIN
C 92204
6/24/2022
CIVIL
STATE OF CALIFORNIA

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KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

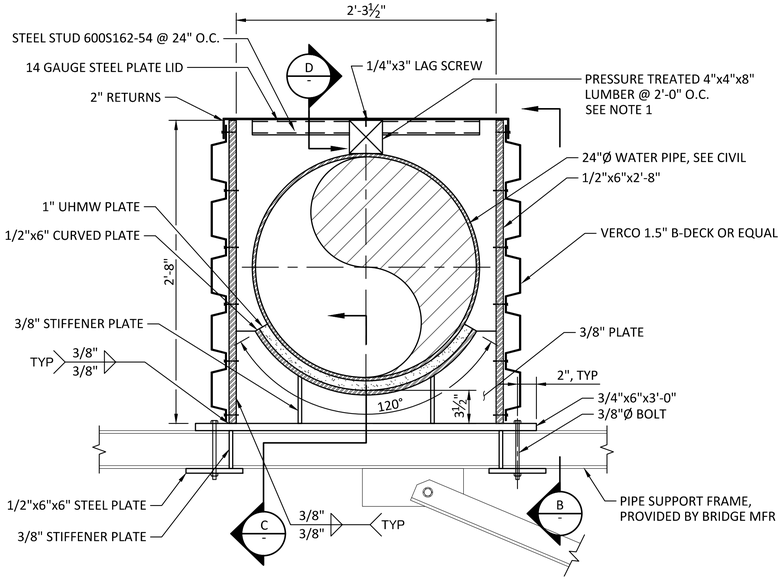
WATERLINE SUPPORT SECTIONS AND DETAILS 1

DESIGNED K. HEINDEL
DRAWN J. CHASE
CHECKED Z. AUTIN
PROJECT DATE 6/24/22

DRAWING
S123

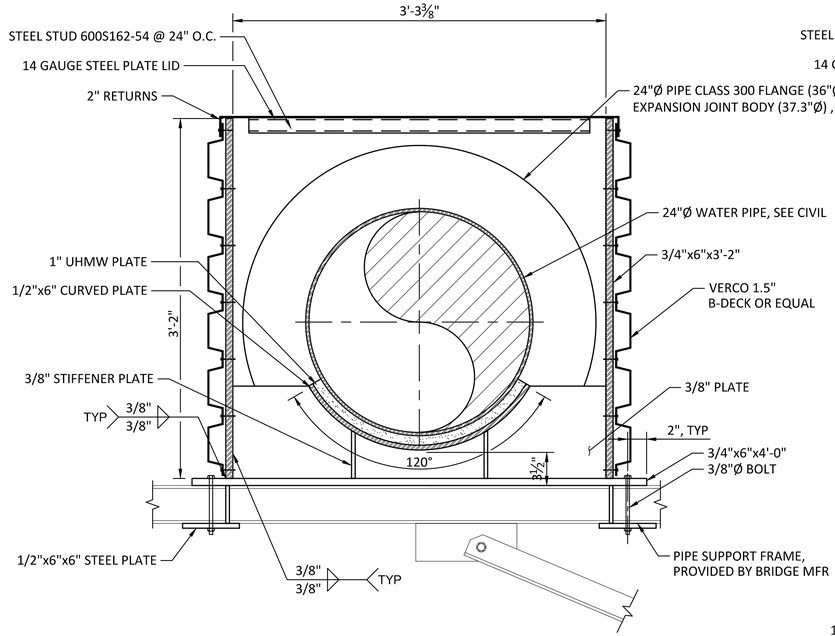
JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S123.dwg Plot date: Jun 24, 2022 05:35pm, CAD User: JoeNeves



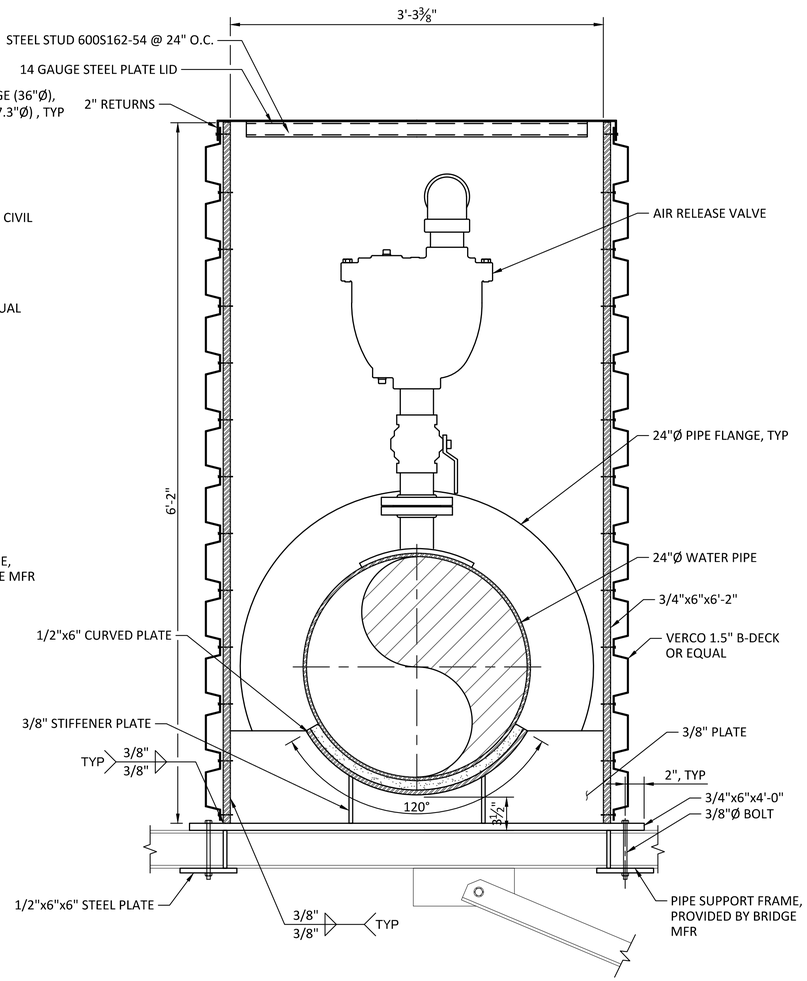
WATERLINE SUPPORT

SCALE: 1 1/2"= 1'-0" — 0" 8" 16" — 1 S123



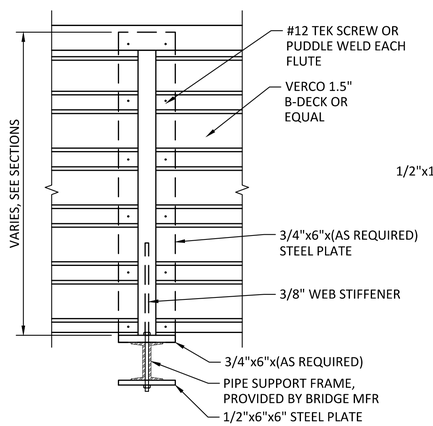
WATERLINE SUPPORT

SCALE: 1 1/2"= 1'-0" — 0" 8" 16" — 2 S123



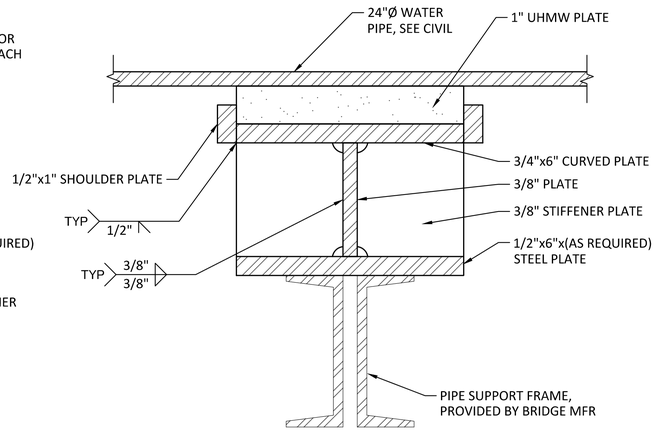
WATERLINE SUPPORT

SCALE: 1 1/2"= 1'-0" — 0" 8" 16" — 3 S123



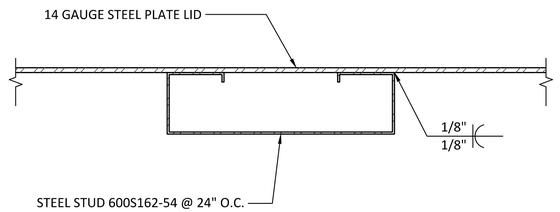
SECTION

SCALE: 1 1/2"= 1'-0" — 0" 8" 16" — B -



SECTION

SCALE: 6"= 1'-0" — 0" 2" 4" — C -



SECTION

SCALE: 6"= 1'-0" — 0" 2" 4" — D -

SHEET NOTES:

1. PRESSURE TREATED LUMBER DIMENSIONS SHALL BE FIELD VERIFIED TO PROVIDE CONTACT BETWEEN TOP OF PIPE AND STEEL PLATE LID.

REV	DATE	BY	DESCRIPTION
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McMILLEN JACOBS ASSOCIATES

KLAMATH RIVER RENEWAL CORPORATION

KLAMATH RIVER RENEWAL CORPORATION

DAGGETT BRIDGE

WATERLINE SUPPORT SECTIONS AND DETAILS 2

DESIGNED K. HEINDEL

DRAWN J. CHASE

CHECKED Z. AUTIN

PROJECT DATE 6/24/22

DRAWING

S124

JOB NO: 000000

Path: C:\Vault20\Klamath River Renewal Corp\Daggett Bridge Design\S124.dwg Plot date: Jun 24, 2022 05:35pm, CAD User: JoeNeves