INDEX OF SHEETS

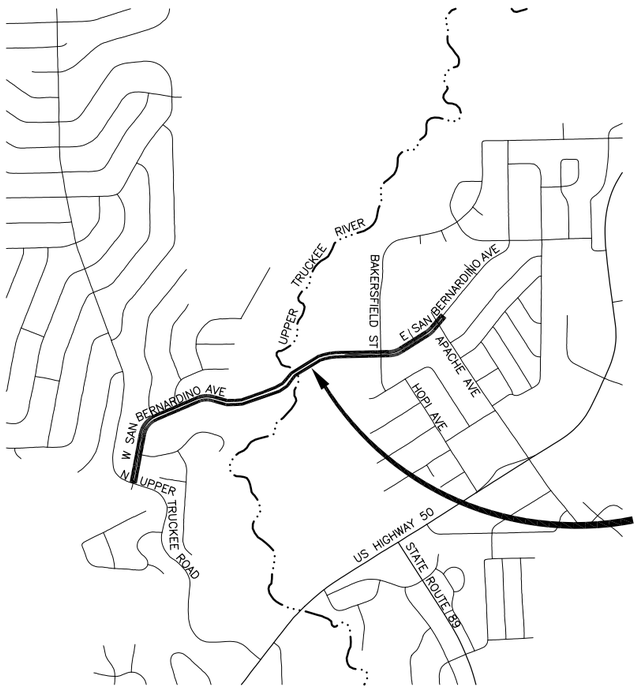
COUNTY OF EL DORADO, CA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR THE CONSTRUCTION OF THE 2022

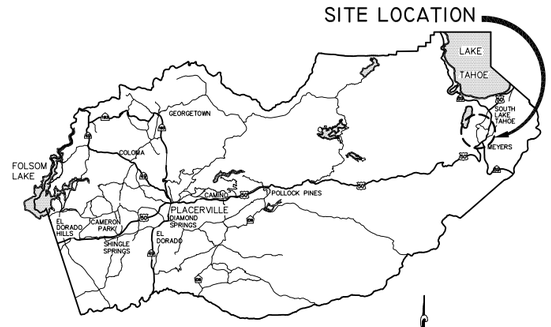
SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT

IN THE COUNTY OF EL DORADO, DISTRICT 5,
PORTION OF SEC 29, PORTION OF EAST 1/4 SEC 30, PORTION OF
SOUTH 1/4 SEC 20, T12N, R18E, MDM

To be supplemented with 2015 Standard Plans and Specifications of the California Department of Transportation, unless otherwise noted.



LOCATION MAP
SCALE: 1" = 1000'



VICINITY MAP
COUNTY OF EL DORADO

FUNDING AGENCY

SURFACE TRANSPORTATION BLOCK GRANT
TAHOE REGIONAL PLANNING AGENCY
CORONAVIRUS RESPONSE AND
RELIEF SUPPLEMENTAL ACT OF 2021 PROGRAM
STATE TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL AID PROJECT
STPL 5925(162)

CONTRACTOR'S LICENSE CLASSIFICATION: Bidders shall be properly licensed to perform the Work pursuant to the State Contractor's License Law (Business and Professions Code section 7000 et seq.) and shall possess a CLASS A LICENSE or equivalent combination of Classes required by the categories and type of Work included in the Contract Documents and Plans, at the time the Contract is awarded, and shall maintain a valid license through completion and acceptance of the Work including guarantee and warranty period. If the Contractor possesses a Class A license instead of the equivalent combination of Classes required by the categories and type of work included in the Contract Documents and Plans, then the Contractor or a subcontractor must also possess a CLASS C27 "Landscaping Contractor" license. Failure of the successful Bidder to obtain proper and adequate licensing for an award of the Contract shall constitute a failure to execute the Contract, and shall result in forfeiture of the Bidders security.

REVISIONS

MARK	DATE	BY	

REGISTERED PROFESSIONAL ENGINEER
DONALDO S. PALAROAN
No. C66083
Exp. 06-30-23
CIVIL
STATE OF CALIFORNIA

SUBMITTED BY: DONALDO S. PALAROAN P.E. — *MARCH 04, 2022* DATE
SENIOR CIVIL ENGINEER
STATE OF CALIFORNIA NO. C66083

BOARD OF SUPERVISORS

JOHN HIDAHL	I
GEORGE TURNBOO	II
WENDY THOMAS	III
LORI PARLIN	IV
SUE NOVASEL	V

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION
(530) 573-7900 (530) 621-5900
924 B EMERALD BAY ROAD 2850 FAIRLANE CT
SOUTH LAKE TAHOE, CA PLACERVILLE, CA
96150 95667

ADOPTED AND APPROVED BY: DATE

LORI PARLIN
CHAIR, EL DORADO COUNTY BOARD OF SUPERVISORS

APPROVED BY: DATE

RAFAEL MARTINEZ, DIRECTOR
DEPARTMENT OF TRANSPORTATION

DATE

JOHN H. KAHLING, P.E. NO. C52426
DEPUTY DIRECTOR, ENGINEERING

CONTRACT NO. 5971, CIP NO. 95117

SAN BERNARDINO CLASS 1
BIKE TRAIL PROJECT

TITLE SHEET

SHEET 1 OF 29

Drawing name: \\CDAData\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\01_SB_1_Title.dwg

GENERAL NOTES

1. ALL IMPROVEMENTS WILL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION (DOT). IMPROVEMENT CONSTRUCTION MUST COMPLY WITH THESE PLANS AND THE 2015 CALTRANS STANDARD PLANS, UNLESS NOTED OTHERWISE. ALL REFERENCES TO THE "STANDARD SPECIFICATIONS" MEAN THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) 2015 STANDARD SPECIFICATIONS. CONSTRUCTION NOT SPECIFIED ON THESE PLANS OR IN SPECIFIC COUNTY OF EL DORADO (COUNTY) ORDINANCES MUST CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. YOU ARE OBLIGATED TO BE FAMILIAR WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS NOT DISCUSSED IN THE GENERAL NOTES. THE CONTRACT SPECIAL PROVISIONS SUPERSEDE THE STANDARD SPECIFICATIONS WHERE DISCREPANCIES OCCUR.

2. CONSTRUCTION HOURS WILL BE WEEKDAYS BETWEEN 8:00 A.M. AND 6:30 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM DOT.

3. THE LOCATIONS AND EXTENT OF UNDERGROUND UTILITIES IN THE WORK AREA AS SHOWN ARE APPROXIMATE AND ARE NOT NECESSARILY COMPLETE. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE UTILITIES BASED UPON AVAILABLE RECORDS. YOU MUST DETERMINE THE TYPE, LOCATION, SIZE, AND/OR DEPTH OF THE UTILITIES WITHIN THE WORK AREA BEFORE STARTING WORK. YOU OR ANY SUBCONTRACTOR FOR THIS CONTRACT ARE RESPONSIBLE FOR DAMAGES DUE TO THE FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND UTILITIES. YOU MUST CONTACT UNDERGROUND SERVICE ALERT AT (800) 642–2444 AT LEAST 48 HOURS BEFORE ANY CONSTRUCTION. YOU ASSUME COMPLETE RESPONSIBILITY FOR DAMAGED UTILITIES.

4. UNLESS SHOWN OTHERWISE, YOU ARE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS, INCLUDING CONSTRUCTION STAKES DURING CONSTRUCTION AND YOU ARE RESPONSIBLE FOR THE COST TO REPLACE ANY SUCH SURVEY MONUMENTS, MARKERS, OR STAKES.

5. YOU WILL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS, PILOT CAR, OR OTHER DEVICES NECESSARY TO CONTROL TRAFFIC THROUGH THE JOB SITE AND FOR PUBLIC SAFETY UNDER THESE PLANS, THE STANDARD SPECIFICATIONS, AND CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

6. YOU AGREE TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE WORK, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND FURTHER AGREE THAT THIS REQUIREMENT APPLIES CONTINUOUSLY AND IS NOT LIMITED TO NORMAL WORKING HOURS UNDER THE CONTRACT AND STANDARD SPECIFICATIONS.

7. THERE WILL BE NO GRADING OR LAND DISTURBANCE BETWEEN OCTOBER 15 AND MAY 1 UNLESS APPROVALS ARE OBTAINED FROM THE TAHOE REGIONAL PLANNING AGENCY (TRPA), AS PROVIDED IN THE LIMITED EXEMPTION DESCRIBED IN CHAPTER 64, SUBSECTION 64.2.B. OF THE TRPA CODE OF ORDINANCES. APPROVALS FOR GRADING BETWEEN OCTOBER 15 AND MAY 1 MUST ALSO BE OBTAINED FROM THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD. IF REQUIRED, DOT WILL OBTAIN THESE APPROVALS.

8. YOU WILL MAINTAIN A SET OF PLANS ON THE JOB SITE SHOWING "AS–CONSTRUCTED" CHANGES MADE TO DATE. UPON COMPLETION OF THE WORK, YOU WILL GIVE TO THE COUNTY A SET OF PLANS, MARKED UP TO THE SATISFACTION OF DOT, REFLECTING THE AS–CONSTRUCTED MODIFICATIONS.

9. ALL CONTROL STATIONING AND DATA DIMENSIONING REFERENCE THE CENTERLINE OF THE FACILITY SHOWN, UNLESS NOTED OTHERWISE.

10. YOU WILL NOT CLOSE OFF ANY UTILITY LINES OR OPEN VALVES OR TAKE ANY OTHER ACTION WHICH WOULD AFFECT THE OPERATION OF WATER OR SEWER SYSTEMS WITHOUT APPROVAL FROM THE SOUTH TAHOE PUBLIC UTILITY DISTRICT (STPUD). APPROVAL MUST BE REQUESTED AT LEAST 48 HOURS BEFORE INTERRUPTION OF THE UTILITY SERVICE IS REQUIRED. ANY INTERRUPTION TO ACTIVE WATER OR SEWER SERVICES, INCLUDING FIRE HYDRANTS, WHETHER INTENTIONAL OR NOT, MUST BE KEPT TO A MINIMUM TIME PERIOD. IF SERVICE TO BUILDINGS IS TO BE OFF FOR MORE THAN FOUR HOURS, YOU MUST ADVISE STPUD.

11. YOU ARE REQUIRED TO IMPLEMENT DUST CONTROL MEASURES TO ENSURE THAT DUST RESULTING FROM YOUR ACTIVITIES IS CONTROLLED AND COMPLIES WITH THE PROVISIONS OF SECTION 7, "LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC," AND SECTION 14, "ENVIRONMENTAL STEWARDSHIP," OF THE STANDARD SPECIFICATIONS, COUNTY, AND LOCAL ORDINANCES.

12. YOU ARE RESPONSIBLE FOR IMPLEMENTING ALL TEMPORARY EROSION CONTROL MEASURES. THE TEMPORARY EROSION CONTROL MEASURES MUST COMPLY WITH THE TRPA "HANDBOOK OF BEST MANAGEMENT PRACTICES" AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). DOT WILL CONTACT TRPA BEFORE THE START OF THE WORK FOR A PRE–GRADE INSPECTION OF THE INSTALLED TEMPORARY EROSION CONTROL FACILITIES. YOU ARE RESPONSIBLE FOR THE MAINTENANCE AND PERFORMANCE OF THE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE WORK.

13. CONSTRUCTION LIMITS SHOWN DELINEATE THE BOUNDARIES FOR YOUR ACTIVITIES BEYOND THE COUNTY ROAD RIGHT–OF–WAY. TEMPORARY FENCE (TYPE ESA) MUST BE ERECTED ALONG THESE BOUNDARIES BEFORE WORK STARTS. VEGETATION WITHIN THESE LIMITS MUST BE PROTECTED TO THE EXTENT FEASIBLE. ALL TREES MUST BE PROTECTED UNLESS SHOWN TO BE REMOVED.

14. UNLESS NOTED OTHERWISE, ALL REVEGETATION IS TO BE COMPLETED BY OTHERS.

15. YOU WILL ONLY USE THE DESIGNATED SITES SHOWN FOR STORAGE OF EQUIPMENT AND MATERIALS. YOU ARE RESPONSIBLE FOR THE SECURITY OF EQUIPMENT AND MATERIALS.

16. IT IS YOUR AND YOUR SUBCONTRACTOR(S) RESPONSIBILITY TO EXAMINE THE JOB SITE BEFORE THE OPENING OF BID PROPOSALS. YOU MUST BECOME FAMILIAR WITH THE NATURE AND LOCATION OF THE WORK AND THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE AFFECTING THE AVAILABILITY OF TRANSPORTATION, THE DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRICITY, ROADS, THE UNCERTAINTIES OF WEATHER, THE CONDITIONS OF THE GROUND, SURFACE AND SUBSURFACE MATERIALS, THE EQUIPMENT AND FACILITIES NEEDED FOR AND DURING THE PERFORMANCE OF THE WORK. FAILURE BY YOU OR YOUR SUBCONTRACTOR(S) TO ACQUAINT YOURSELVES WITH THE INFORMATION AVAILABLE WILL NOT RELIEVE YOU OR YOUR SUBCONTRACTOR(S) FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.

17. ELEVATIONS FOR PIPE INVERTS, FLOWLINES, TOPS OF GRATES, RIMS, ETC., ARE BASED ON THE TOPOGRAPHIC INFORMATION SHOWN. YOU WILL VERIFY ALL NECESSARY SURFACE ELEVATIONS IN THE FIELD AND NOTIFY THE TD OF ANY DISCREPANCIES WHICH MIGHT AFFECT THE OPERATION OF THE NEW FACILITIES BEFORE BREAKING GROUND FOR THE INSTALLATION. DOT MUST BE CONTACTED IF ELEVATIONS ARE INCORRECT SO PROPER ADJUSTMENTS CAN BE MADE BEFORE THE INSTALLATION OF THE FACILITIES.

18. EXCEPT FOR THOSE OBTAINED BY DOT, YOU MUST OBTAIN, AT YOUR EXPENSE, ALL PERMITS, LICENSES, INSURANCE POLICIES, ETC., NECESSARY TO COMPLY WITH STATE AND LOCAL LAWS ASSOCIATED WITH THE PERFORMANCE OF THE WORK.

19. YOU ARE RESPONSIBLE TO REVIEW THE CONTRACT DOCUMENTS FOR SUBMITTALS REQUIRED FOR COUNTY REVIEW AND ACCEPTANCE.

20. THE COUNTY WILL PROVIDE CONSTRUCTION STAKING IN COMPLIANCE WITH SECTION 5–1.26 OF THE STANDARD SPECIFICATIONS.

21. THE PLANS SHOW SLOPE LENGTHS FOR PIPE ROUNDED TO THE NEAREST FOOT. ALL PIPE LENGTHS AND INVERT ELEVATIONS SHOWN ON THE PLANS ARE TO THE CENTERLINE OF THE STRUCTURES TO WHICH THE PIPES ARE ATTACHED. SEE THE STANDARD SPECIFICATIONS FOR THE MAXIMUM ALLOWABLE DEFLECTION ANGLE AT EACH PIPE JOINT.

22. YOU ARE RESPONSIBLE TO MAINTAIN THE GRADING LIMITS AS SHOWN ON THE PLANS, DETAILS, CROSS SECTIONS, AND AS DIRECTED BY THE ENGINEER.

ABBREVIATIONS

NOTE: LOWER CASE TEXT WITHIN PLAN SET INDICATES EXISTING

△	DELTA = DEFLECTION ANGLE
A	ARCH OR ASPEN
AB	AGGREGATE BASE
ABAND	ABANDONED
ABC	ARTICULATED BLOCK CHANNEL
AC	ASPHALT CONCRETE
AP	ANGLE POINT
APN	ASSESSOR'S PARCEL NUMBER
BC	BEGIN CURVE
BCR	BEGIN CURB RETURN
BGN	BEGIN
BLC	BLANKET–LINED CHANNEL
BV	BAY VIEW
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
C	CEDAR
CALCS	CALCULATIONS
CATV	CABLE TELEVISION
CC	CENTER TO CENTER
CF	CUBIC FEET OR CURB FACE
CHD	CHORD DIRECTION
CIR	CIRCLE
℄	CENTERLINE
CL	CLASS OR CENTERLINE
CLR	CLEAR
CO	CURB OPENING OR CLEANOUT
CO.	COUNTY
CONC	CONCRETE
CONST	CONSTRUCT
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CT	CALTRANS OR COURT
CTC	CALIFORNIA TAHOE CONSERVANCY
CY	CUBIC YARD
C&G	CURB AND GUTTER
D	DEPTH
DBL	DOUBLE
DET	DETAIL
DI	DRAINAGE INLET OR DUCTILE IRON
DIA OR ø	DIAMETER
DISS	DISSIPATOR
DR	DRIVE
D/W	DRIVEWAY
E	EAST
EA	EACH
EC	END OF CURVE
ECR	END OF CURB RETURN
ELEV	ELEVATION
ELEC	ELECTRIC
ENGR	ENGINEER
EP	EDGE OF PAVEMENT
ESA	ENVIRONMENTALLY SENSITIVE AREA
ESMT	EASEMENT
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EX OR EXIST	EXISTING
F	FIR
FES	FLARED END SECTION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FS	FINISH SURFACE
G	GAS
GA	GAUGE
GB	GRADE BREAK
GLS	GRASS–LINED SWALE
GW	GROUND WATER
H	HORIZONTAL
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HWL	HIGH WATER LINE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INCR	INCREASE
INST	INSTALL
INTRXN	INTERSECTION
L	LENGTH
LC	LENGTH OF CHORD
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
LTD	LAKE TAHOE DATUM
MAT'L	MATERIAL
MISC	MISCELLANEOUS
MOC	MID POINT ON CURVE
MOD	MODIFIED
N	NORTH
NIC	NOT IN CONTRACT
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NTS	NOT TO SCALE
OAE	OR APPROVED EQUAL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND
OH	OVERHEAD
OVEREX OR O/X	OVEREXCAVATION
P	PINE
PC	POINT OF BEGINNING OF CURVE
PCC	PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND CURVE
PERF	PERFORATED
PL	PROPERTY LINE
PCVCE	POINT OF COMPOUND VERTICAL CURVE ELEVATION
PCVCS	POINT OF COMPOUND VERTICAL CURVE STATION
POR	PORTION
PRVCE	POINT OF REVERSE VERTICAL CURVE ELEVATION
PRVCS	POINT OF REVERSE VERTICAL CURVE STATION
PP	POWER/UTILITY POLE
PRC	POINT OF REVERSE CURVE
PROP	PROPOSED
PT	POINT OR POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVIE	POINT OF VERTICAL INTERSECTION ELEVATION
PVIS	POINT OF VERTICAL INTERSECTION STATION
PVMT	PAVEMENT
R	RADIUS
R&R	REMOVE & REPLACE
RC	RELATIVE COMPACTION
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REF	REFERENCE
REQ'D	REQUIRED
RLC	ROCK–LINED CHANNEL
ROW	RIGHT–OF–WAY
RSP	ROCK SLOPE PROTECTION
RT	RIGHT
RW	RETAINING WALL
S	SOUTH OR SANITARY SEWER
SCO	SEWER CLEAN OUT
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SED FB	SEDIMENT FOREBAY
SEZ	STREAM ENVIRONMENT ZONE
SF	SQUARE FEET
SHT	SHEET
SL	SLOPE LENGTH
SMH	SEWER MANHOLE
ST	SEDIMENT TRAP OR STREET
STA	STATION
STD	STANDARD
STL	STEEL
STPUD	SOUTH TAHOE PUBLIC UTILITY DISTRICT
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TELEPHONE
TBC	TOP BACK OF CURB
TBD	TOP BACK OF DIKE
TD	TOP OF DIKE
TBR	TO BE REMOVED
TG	TOP OF GRATE
TTL	TOTAL
TRANS	TRANSITION
TRM	TURF REINFORCEMENT MAT
TRPA	TAHOE REGIONAL PLANNING AGENCY
TYP	TYPICAL
UG	UNDERGROUND
UKN	UNKNOWN
USFS	UNITED STATES FOREST SERVICE
V	VERTICAL
W	WEST OR WATER
W/	WITH
W/O	WITHOUT
WC	WILLOW CLUSTER
WV	WATER VALVE

LEGEND

EXISTING	
(SCREENED AND/OR DASHED)	EXISTING (AS NOTED)
	RIGHT–OF–WAY OR PROPERTY LINE
	DRAINAGE OR SLOPE EASEMENT
	UTILITY (PUE) EASEMENT
	LAND CAPABILITY BOUNDARY
	10' SEZ SETBACK
OR	ROCK
	FOUND MONUMENT
	SURVEY CONTROL POINT
XXXX.X	ELEVATION
S	SEWER MANHOLE
SCO	SEWER CLEAN OUT
	DRAINAGE INLET
GM	GAS METER
WV	WATER VALVE
WM	WATER METER
M	MONITORING WELL
W W W W	WATER LINE
S S S S	SEWER LINE
G G G G	GAS LINE
	STORM DRAIN
OH OH	OVERHEAD UTILITIES
	POWER/UTILITY POLE
	UTILITY POLE & GUY ANCHOR
	FIRE HYDRANT
X	FENCE
	FLOWLINE
28"D	TREE, DIAMETER AND TYPE
	STUMP
WC	WILLOW CLUSTER
	LANDSCAPE LIGHTING

PROPOSED	
	CENTERLINE
	SAWCUT (AS NOTED)
	AC PAVEMENT
	AC REMOVAL
XXXX.XX	ELEVATION
	ELEVATION, EG CL, PROPOSED (PROFILE ONLY)
	CSP INLET/RISER OR STORM DRAIN MANHOLE, DRAINAGE INLET
	CUT OR FILL SLOPE
X X	DETAIL REF NUMBER SHEET NUMBER
	ROCK
	SD PIPE (MATERIAL AS NOTED)
–RSF ESA–	REINFORCED SILT FENCE AND TYPE ESA FENCE
	FLARED END SECTION
#:#	SLOPE RATIO, H:V
	ARTICULATED BLOCK CHANNEL
	BLANKET–LINED CHANNEL
	TREE REMOVAL
	FLOWLINE
c c c	CUT
f f f	FILL

UTILITIES

CABLE TELEVISION	CHARTER COMMUNICATIONS, (775) 221–4147
NATURAL GAS	SOUTHWEST GAS, (530) 543–3225
ELECTRIC	LIBERTY UTILITIES, (530) 541–6400
SEWER & WATER	SOUTH TAHOE PUD, (530) 544–6474
TELEPHONE	AT&T, (530) 888–2031
STORM DRAIN	CO. OF EL DORADO DOT, (530) 573–3180

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER — DONALDO S. PALAMBAN — No. C66083 Exp. 06-30-22 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
GENERAL NOTES, ABBREVIATIONS, AND LEGEND

SHEET ii
2 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 2 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

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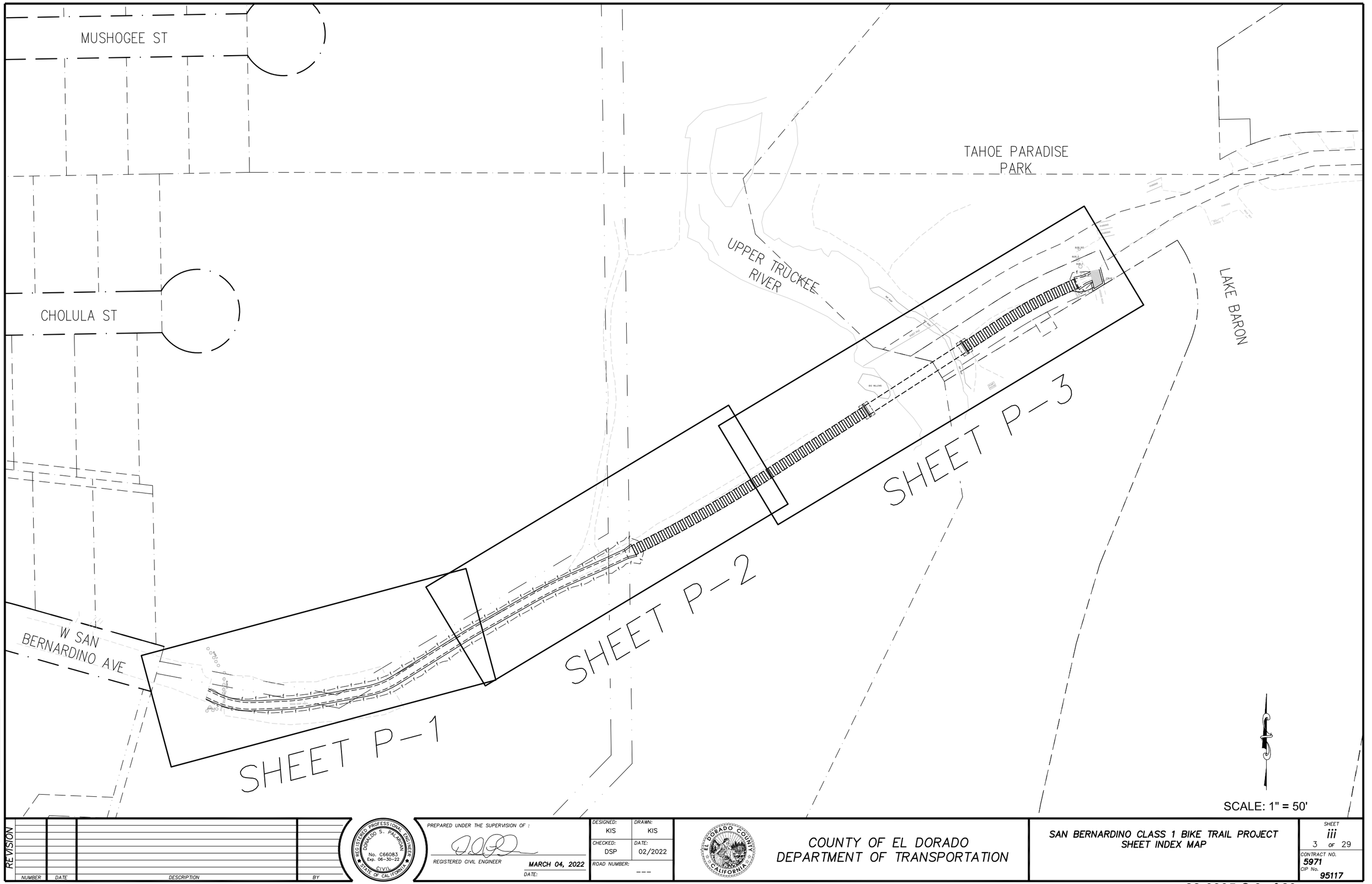

SCALE: 1" = 50'

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER DONALDO S. PALARCAN No. C66083 Exp. 06-30-22 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	---

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
SHEET INDEX MAP

SHEET iii
3 OF 29
CONTRACT NO. 5971
CIP No. 95117

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

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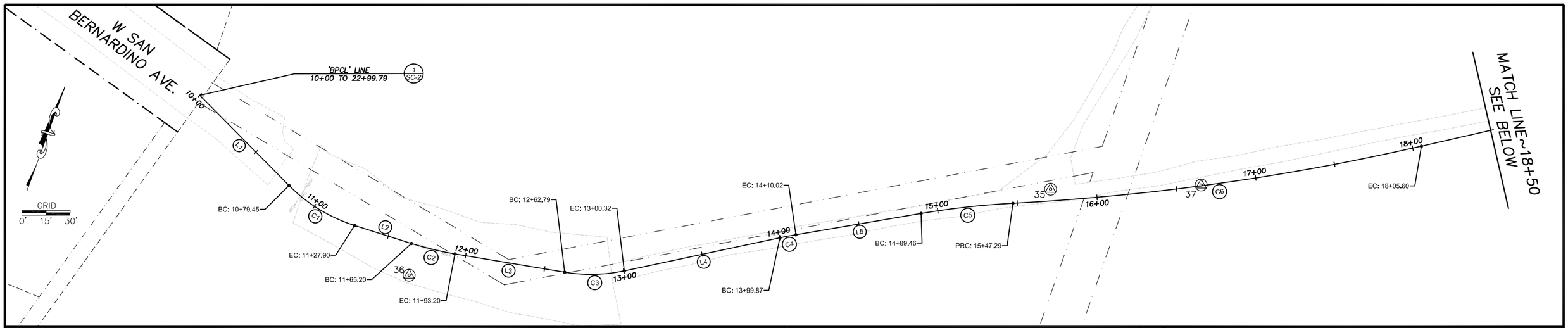
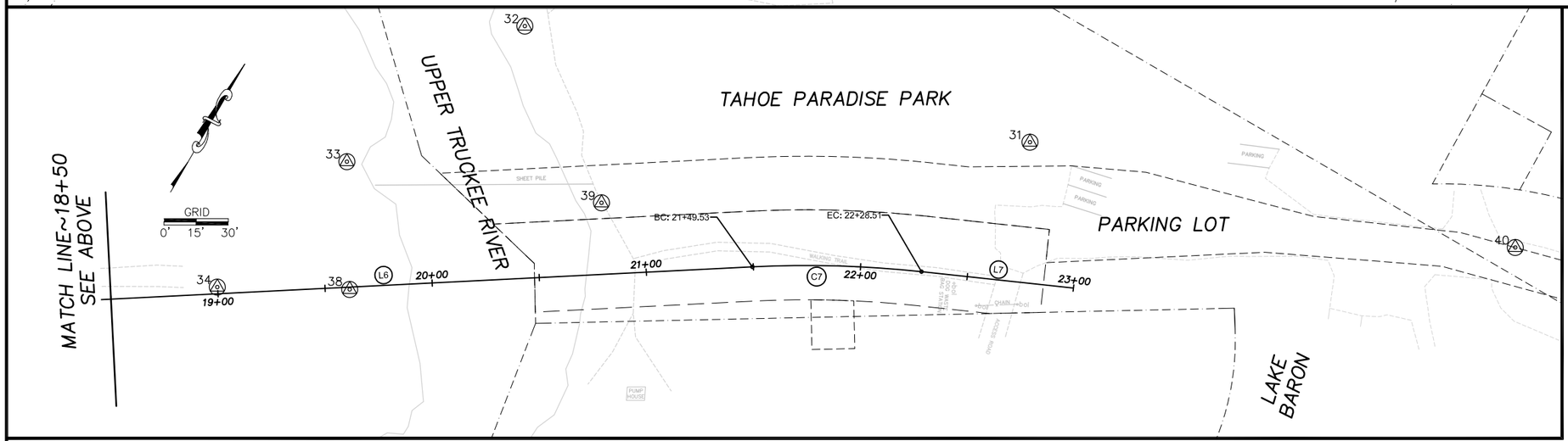




NUMBER	BEG STATION	END STATION	DESCRIPTION	LENGTH	RADIUS	COURSE	DELTA	BEGINNING Y	BEGINNING X	ENDING Y	ENDING X
L1	10+00	10+79.45	LINE	79.45	---	S64°44'25"E	---	2079734.85	7122554.89	2079700.95	7122626.74
C1	10+79.45	11+27.90	CURVE LEFT	48.46	100.00	---	27°45'46"	2079700.95	7122626.74	2079691.48	7122673.78
L2	11+27.90	11+65.20	LINE	37.29	---	N87°29'49"E	---	2079691.48	7122673.78	2079693.11	7122711.04
C2	11+65.20	11+93.20	CURVE LEFT	28.00	200.00	---	8°01'17"	2079693.11	7122711.04	2079696.29	7122738.84
L3	11+93.20	12+62.79	LINE	69.59	---	N79°28'32"E	---	2079696.29	7122738.84	2079709.00	7122807.25
C3	12+62.79	13+00.32	CURVE LEFT	37.53	100.00	---	21°30'09"	2079709.00	7122807.25	2079722.54	7122842.02
L4	13+00.32	13+99.87	LINE	99.55	---	N57°58'23"E	---	2079722.54	7122842.02	2079775.33	7122926.42
C4	13+99.87	14+10.02	CURVE RIGHT	10.16	200.00	---	2°54'34"	2079775.33	7122926.42	2079780.49	7122935.16
L5	14+10.02	14+89.46	LINE	79.44	---	N60°21'13"E	---	2079780.49	7122935.16	2079819.79	7123004.20
C5	14+89.46	15+47.29	CURVE RIGHT	57.83	500.00	---	6°37'38"	2079819.79	7123004.20	2079845.43	7123056.00
C6	15+47.29	18+05.60	CURVE LEFT	258.30	1500.00	---	9°51'59"	2079845.43	7123056.00	2079966.35	7123283.89
L6	18+05.60	21+49.53	LINE	343.93	---	N57°06'51"E	---	2079966.35	7123283.89	2080153.10	7123572.71
C7	21+49.53	22+28.51	CURVE RIGHT	78.98	500.00	---	9°03'03"	2080153.10	7123572.71	2080190.58	7123642.14
L7	22+28.51	22+99.79	LINE	71.28	---	N66°09'54"E	---	2080190.58	7123642.14	2080219.38	7123707.34

'BP' ALIGNMENT
10+00 TO 22+99.79
1
SC-2

LEGEND

- LINE LABEL (LX)
- CURVE LABEL (CX)
- PROJECT CONTROL XX
- SUPPLEMENTAL CONTROL XX
- RIGHT OF WAY
- LOT LINE
- PUBLIC UTILITY EASEMENT LINE
- STPUD EASEMENT LINE
- EDGE OF PAVEMENT
- DIRT PARKING/ROAD/TRAIL

HORIZONTAL DATUM

BASIS OF BEARINGS FOR SURVEY CONTROL IS GRID NORTH, CALIFORNIA COORDINATE SYSTEM (NAD 83) ZONE 2, US SURVEY FT, 1991.35 EPOCH, ESTABLISHED USING CONVENTIONAL MEASUREMENTS TO CONTROL POINTS SHOWN ON THIS SHEET. ALL DISTANCES ARE GRID DISTANCES. DIVIDE BY .999625 TO OBTAIN GROUND DISTANCES.

VERTICAL DATUM

ELEVATION DATUM IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1929. TBM POINTS ARE CONTROL POINTS SHOWN ON THIS SHEET

CONTROL TABLE

CONTROL NUMBER	Y	X	ELEVATION	DESCRIPTION
31	2080268.24	7123655.71	6297.36	10" SPIKE
32	2080197.40	7123424.62	6296.05	10" SPIKE
33	2080101.04	7123384.38	6292.76	10" SPIKE
34	2080020.14	7123361.31	6295.28	10" SPIKE
35	2079861.70	7123075.11	6297.70	10" SPIKE
36	2079674.01	7122716.44	6307.35	10" SPIKE
37	2079896.36	7123162.68	6296.61	10" SPIKE
38	2080050.07	7123415.35	6294.04	10" SPIKE
39	2080143.78	7123496.82	6295.45	10" SPIKE
40	2080338.85	7123876.30	6309.66	MAG NAIL

PROJECT CONTROL ESTABLISHED FOR THE DESIGN AND CONSTRUCTION OF THE COUNTY OF EL DORADO COUNTRY SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT (CIP 95117)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

Drawing name: \\CDA\Data5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\0a_SR_SURVEY_SC1.dwg

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER DONALDO S. PALAROAN No. C66083 Exp. 06-30-22 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER

DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	---

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

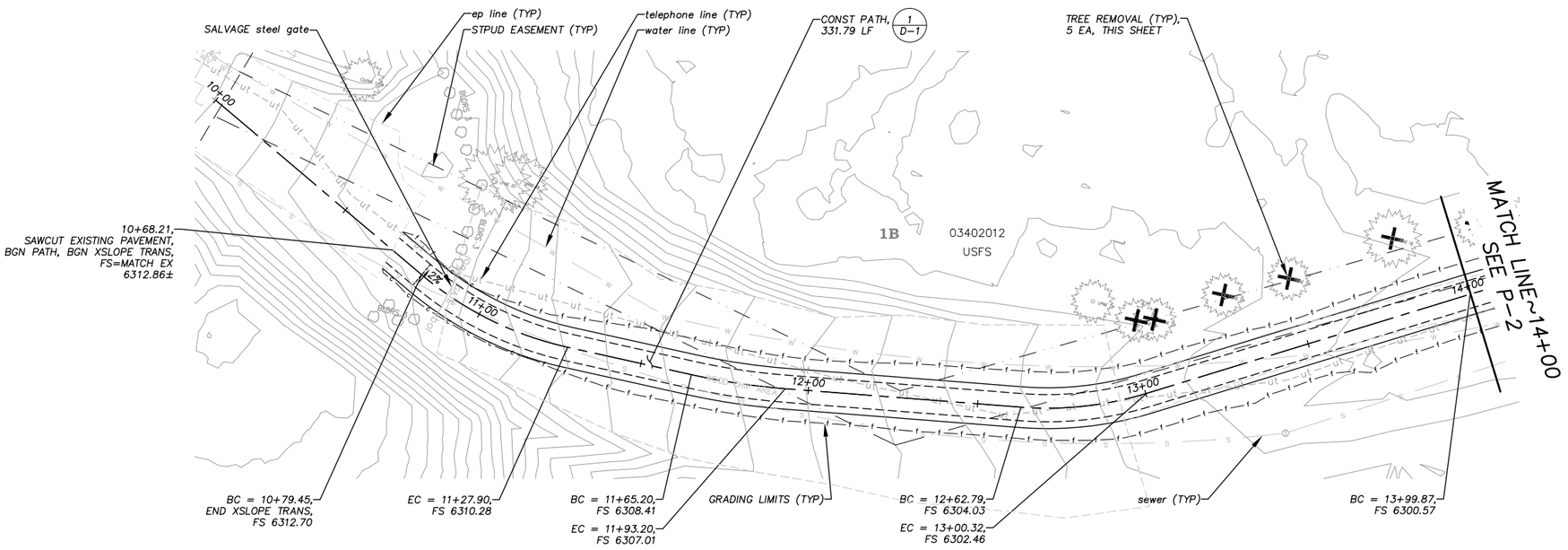
SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
SURVEY CONTROL AND ALIGNMENT LISTING

SHEET SC-1
4 OF 29
CONTRACT NO. 5971
CIP No. 95117

NOTE:
THIS PROJECT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA. YOU MUST EXERCISE UTMOST CARE TO PROTECT AND MAINTAIN EXISTING VEGETATION AND MINIMIZE SOIL COMPACTION WITHIN CONSTRUCTION AREAS.

!! WARNING !!

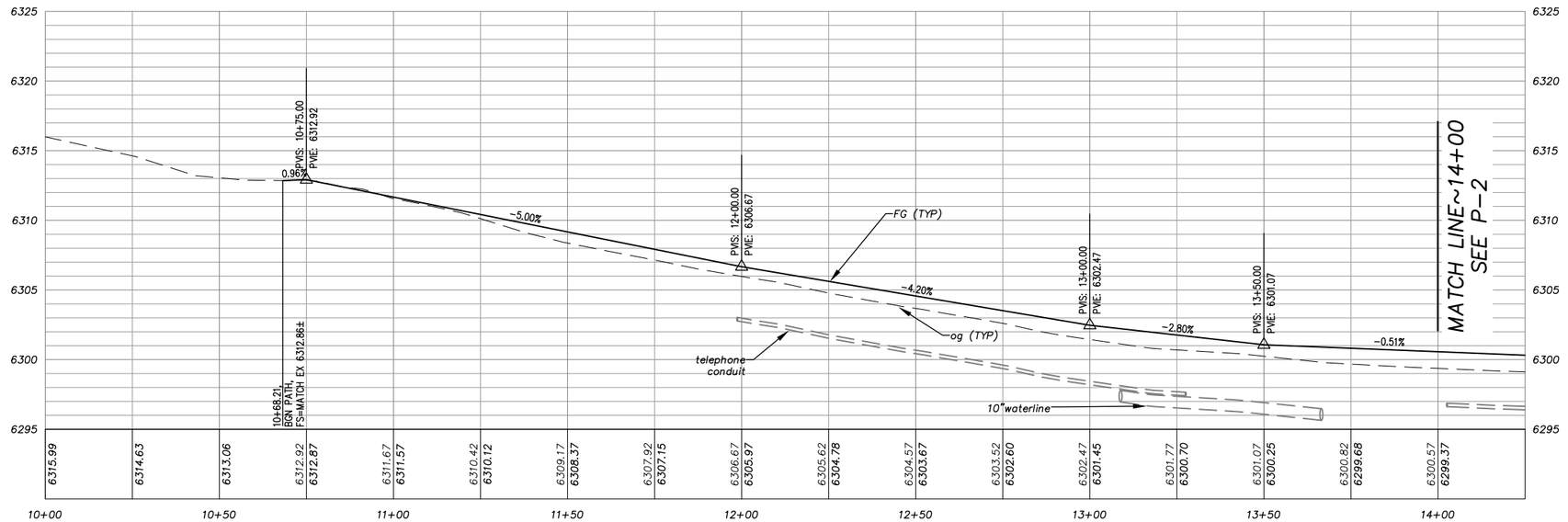
THE LOCATION AND/OR ELEVATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE ONLY APPROXIMATE. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES.



PLAN & PROFILE

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

10+00 TO 14+00



REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER — DONALDO S. PALAGANAS — No. C66083 Exp. 06-30-22 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

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KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	---

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
LAYOUT STA 10+00 – 14+00

SHEET P–1
5 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 5 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES Drawing name: \\DA0data\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\SB_JMPLAN.dwg

NOTE:
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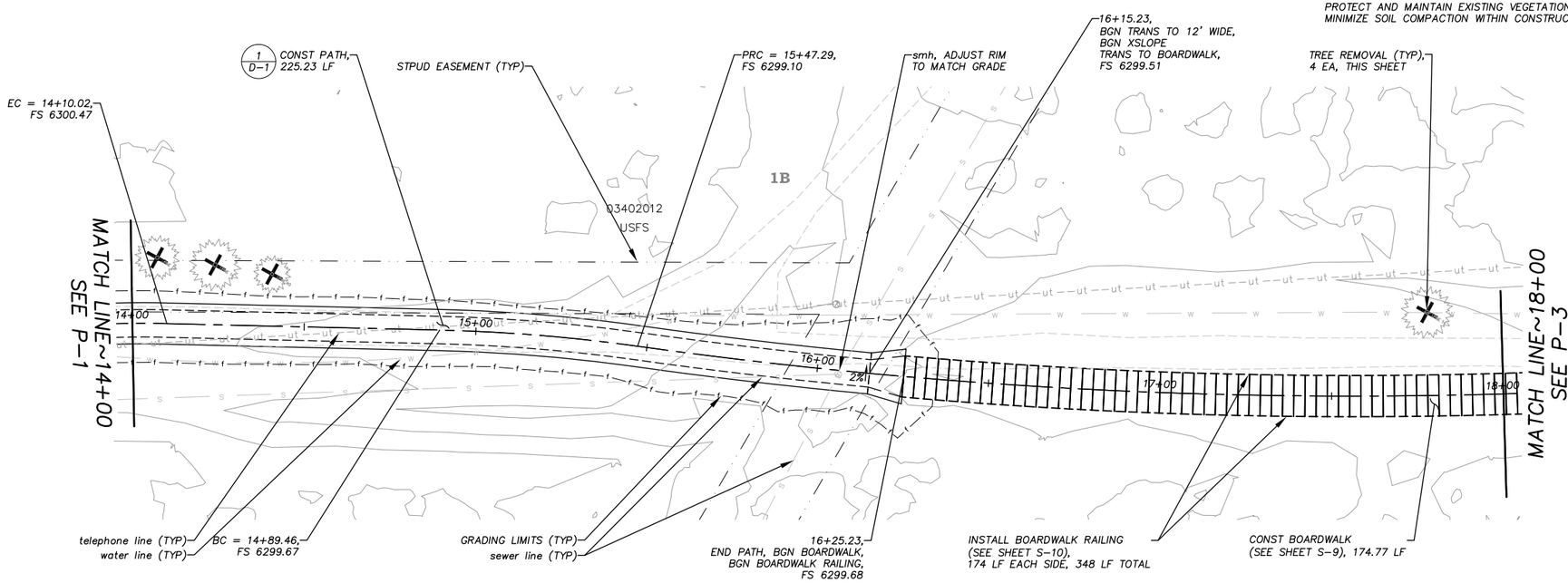
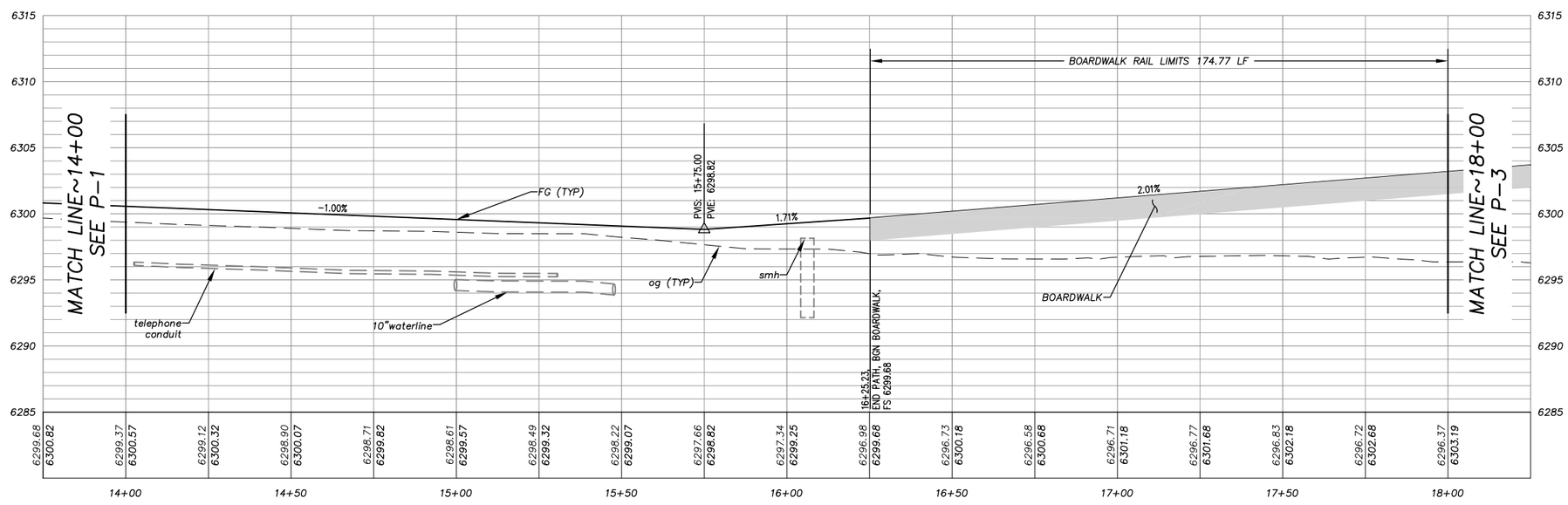


PLAN & PROFILE

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

14+00 TO 18+00



FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES Drawing name: \\DATA\Data5\TD-SLT-Engineering\CIVIL 3D PROJECTS\YS117\Engineering\MPLAN\SB_MPLAN.dwg

REVISION NUMBER	DATE	DESCRIPTION	BY

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PREPARED UNDER THE SUPERVISION OF :

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DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
LAYOUT STA 14+00 – 18+00

SHEET P-2
6 OF 29
CONTRACT NO. 5971
CIP No. 95117

NOTE:
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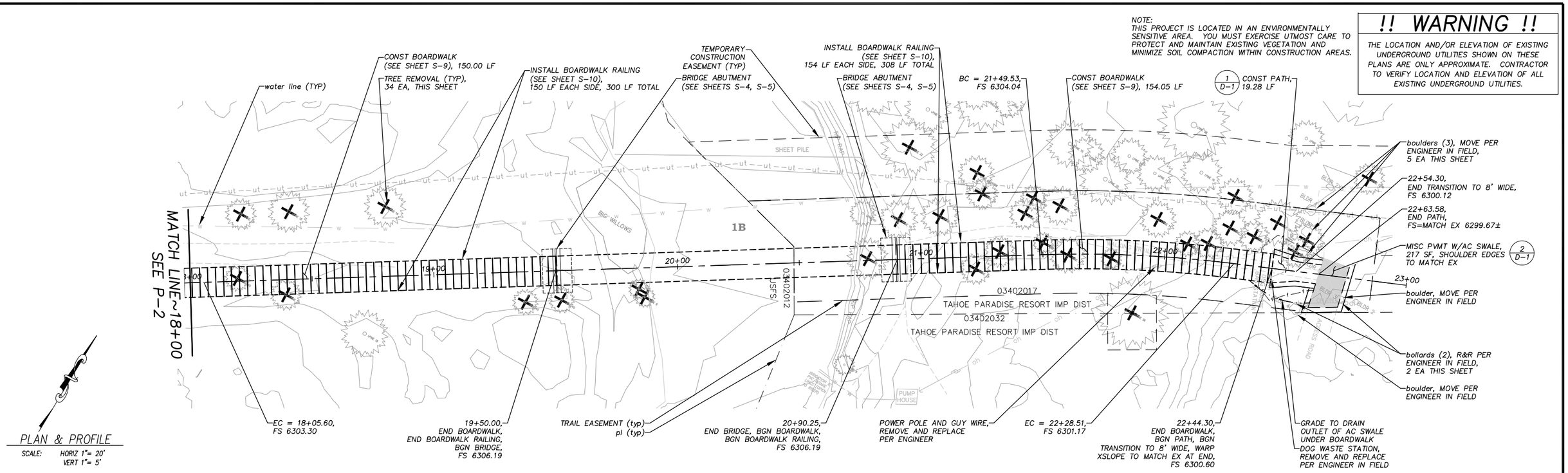
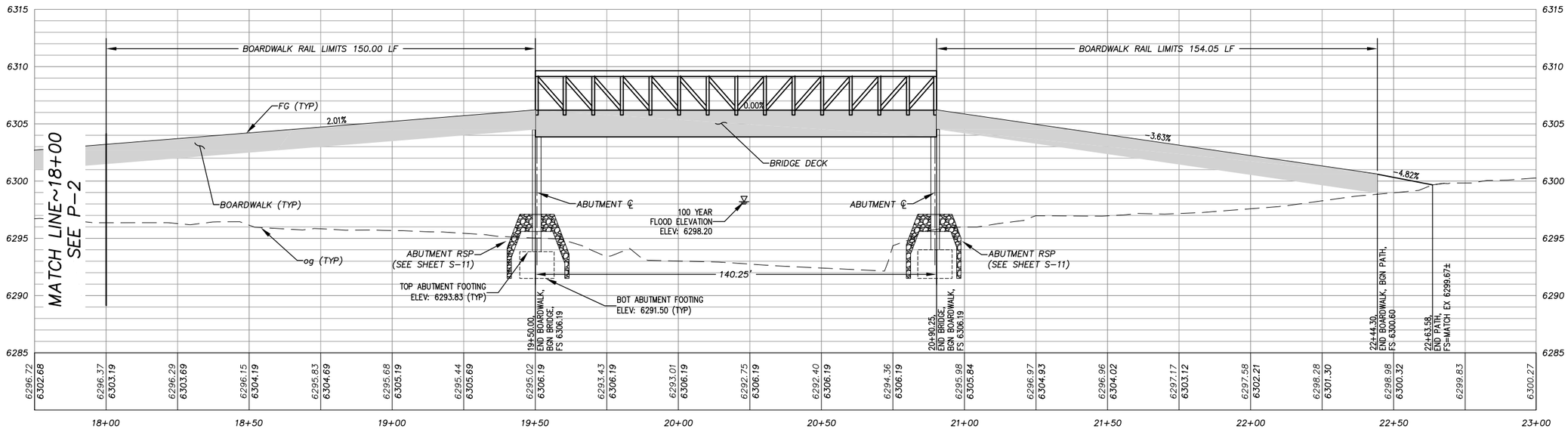


PLAN & PROFILE

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

18+00 TO 22+70.93



FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

Drawing name: \\DATA\data5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\SB_JMPLAN.dwg

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER DONALDO S. PALAGANAS No. C66083 Exp. 06-30-22 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER

DATE: MARCH 04, 2022

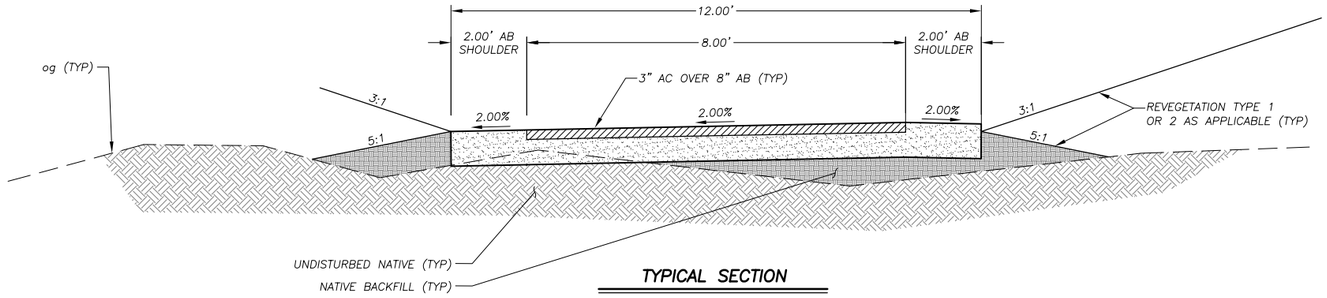
DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	---

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
LAYOUT STA 18+00 – 23+00

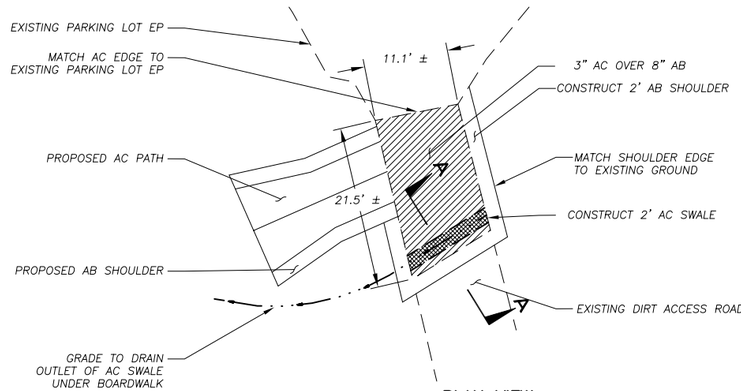
SHEET P-3
7 OF 29
CONTRACT NO. 5971
CIP No. 95117



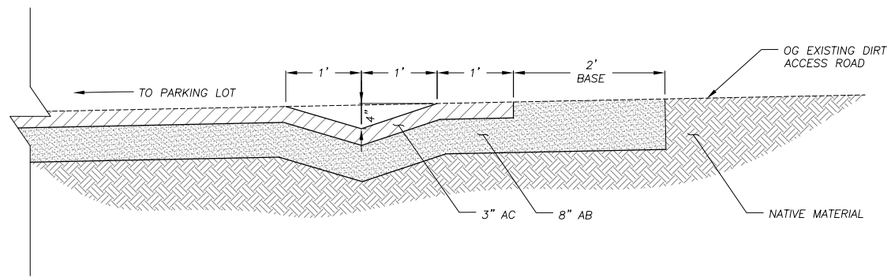
TYPICAL SECTION

PATH
NTS

1
D–1



PLAN VIEW



SECTION A–A

MISCELLANEOUS PAVING
NTS

2
D–1

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER — DONALDO S. PALAGANAS — No. C66083 Exp. 06-30-22 — CIVIL — STATE OF CALIFORNIA

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CHECKED:	DATE:
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ROAD NUMBER:	

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

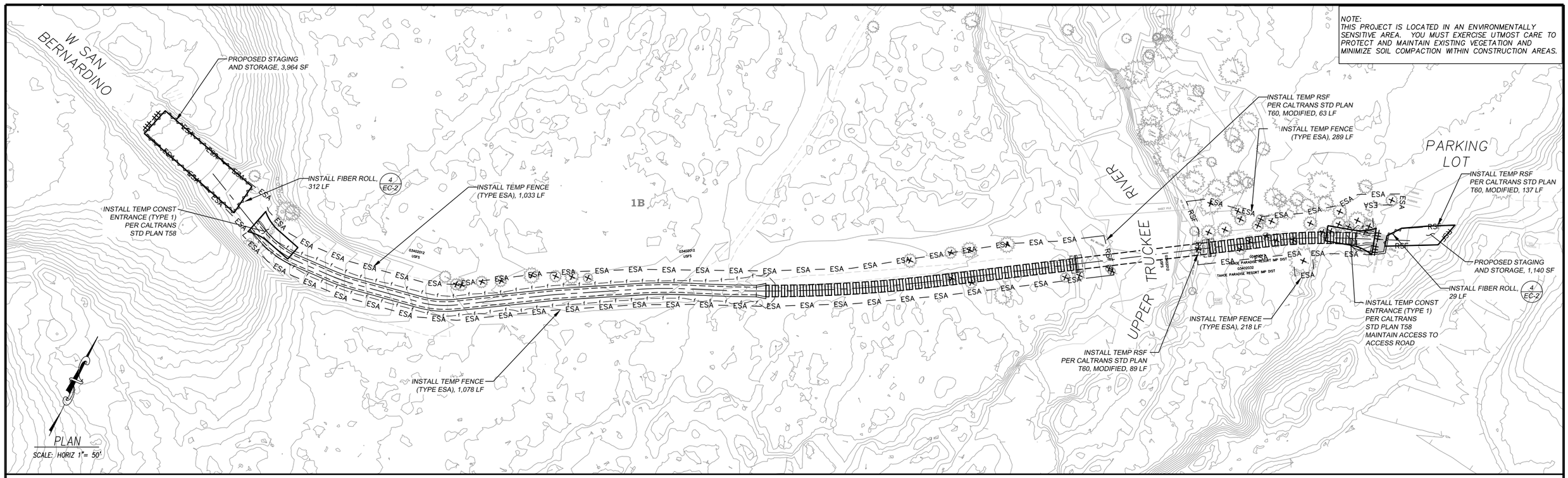
SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
CONSTRUCTION DETAILS

SHEET D–1
8 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 8 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

Drawing name: \\CDAData5\TP-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\SB_D1.dwg



NOTE:
THIS PROJECT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA. YOU MUST EXERCISE UTMOST CARE TO PROTECT AND MAINTAIN EXISTING VEGETATION AND MINIMIZE SOIL COMPACTION WITHIN CONSTRUCTION AREAS.

LEGEND

- SEDIMENT CONTROL
- TRAFFIC BARRICADE
- TREE TRUNK PROTECTION
- 1B LAND CAPABILITY DESIGNATION
- LAND CAPABILITY DESIGNATION
- LAND CAPABILITY 1B SETBACK
- RSF REINFORCED SILT FENCE
- ESA TEMPORARY FENCE (TYPE ESA)
- FIBER ROLL
- EDGE OF PAVEMENT
- RIGHT OF WAY/PROPERTY LINE
- PROPOSED STAGING, STORAGE, OR TIRE WASH AREAS

NOTES:

1. FOR STAGING AND STORAGE AREAS ON PAVEMENT, PLACE TEMPORARY FENCE (TYPE ESA) IN SHOULDER AND PLACE FIBER ROLLS ON EP TO CONTAIN SEDIMENT WITH IN THE PAVED AREAS.
2. YOUR ATTENTION IS DIRECTED TO THE SWPPP, TEMPORARY EROSION CONTROL SHEETS, REVEGETATION PLAN SHEET, AND THE SPECIAL PROVISIONS REGARDING TEMPORARY EROSION CONTROL REQUIREMENTS FOR STAGING AREAS.
3. STAGING AREAS SHOWN ARE FOR THE TEMPORARY STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT WHICH ARE TO BE USED ON THIS PROJECT.

TEMPORARY EROSION CONTROL SUMMARY OF QUANTITIES

TEMPORARY CONSTRUCTION ENTRANCE	DRAIN INLET PROTECTION	TEMPORARY FIBER ROLL (STAGE/STORE)	REINFORCED SILT FENCE	TEMPORARY FENCE (TYPE ESA)	TEMPORARY FENCE (TYPE ESA) TREE TRUNK PROTECTION
2	–	341 LF	289 LF	2,888 LF	–

REVISION NUMBER	DATE	DESCRIPTION	BY

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PREPARED UNDER THE SUPERVISION OF :
REGISTERED CIVIL ENGINEER
DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

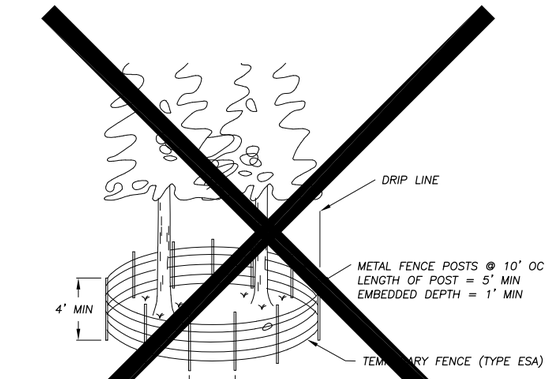
SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
TEMPORARY EROSION CONTROL PLAN

SHEET EC–1
9 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 9 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

Drawing name: \\DOAdata5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MP\LAN\SBL_EC1.dwg

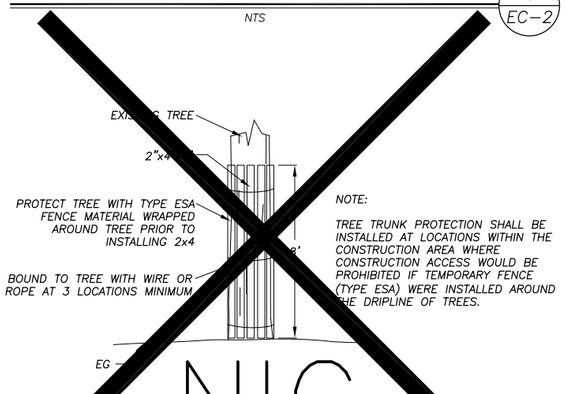


NIC

TEMPORARY FENCE (TYPE ESA) AT DRIPLINES

1 EC-2

NTS



NOTE:

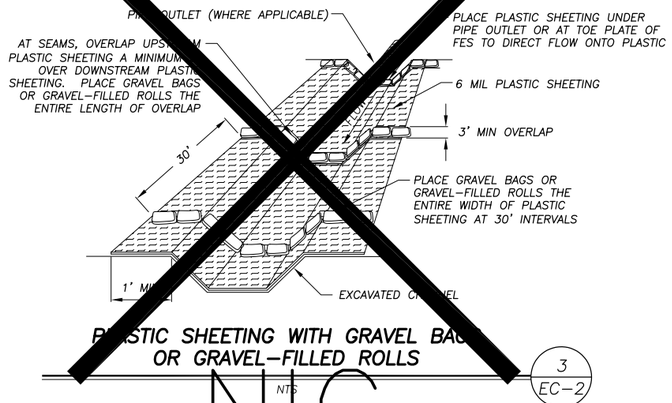
TREE TRUNK PROTECTION SHALL BE INSTALLED AT LOCATIONS WITHIN THE CONSTRUCTION AREA WHERE CONSTRUCTION ACCESS WOULD BE PROHIBITED IF TEMPORARY FENCE (TYPE ESA) WERE INSTALLED AROUND THE DRIPLINE OF TREES.

NIC

WOODEN TREE TRUNK PROTECTION

2 EC-2

NTS

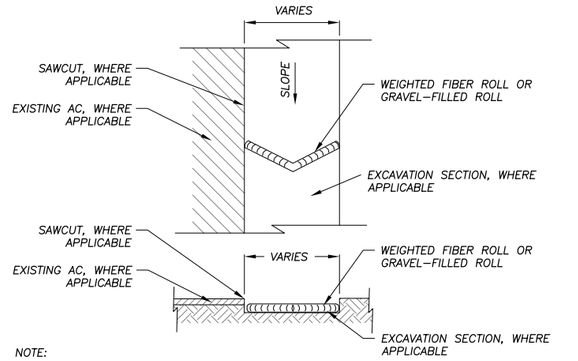


NIC

PLASTIC SHEETING WITH GRAVEL BAGS OR GRAVEL-FILLED ROLLS

3 EC-2

NTS



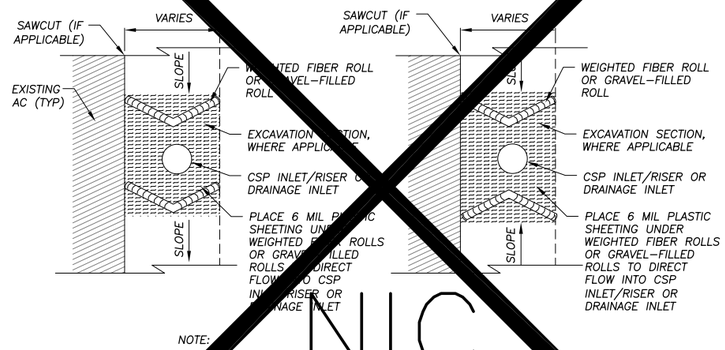
NOTE:

SPACING INTERVALS FOR WEIGHTED FIBER ROLL OR GRAVEL-FILLED ROLL TEMPORARY SEDIMENT CONTROL ON GRADE SHALL BE AT 50' OC FOR SLOPES GREATER THAN 5% AND AT 100' OC FOR SLOPES LESS THAN OR EQUAL TO 5%.

WEIGHTED FIBER ROLLS OR GRAVEL-FILLED ROLLS

4 EC-2

NTS



NOTE:

SEE ALSO TYPE 2 OR TYPE 3X, CALTRANS STD PLANS T61 AND T62.

NIC

DRAIN INLET PROTECTION

5 EC-2

NTS

NOT USED

6 EC-2

NTS

GENERAL NOTES:

1. LOCATIONS AND LF OF TEMPORARY REINFORCED SILT FENCE REQUIRED FOR THE STAGING AREAS ARE NOT SHOWN. YOU ARE TO INCLUDE THESE AREAS IN YOUR TEMPORARY EROSION CONTROL PLAN SUBMITTAL.
2. LENGTHS OF TEMPORARY REINFORCED SILT FENCE AND TEMPORARY FENCE (TYPE ESA) DOES NOT INCLUDE MINIMUM LIMITS FOR TREE PROTECTION. TREE PROTECTION FENCING IS TO BE AS SHOWN AND/OR AS DETERMINED IN THE FIELD.

REVISION			
NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER — DONALDO S. PALAGAN — No. C66083 Exp. 06-30-22 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — MARCH 04, 2022 — DATE:

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
TEMPORARY EROSION CONTROL DETAILS

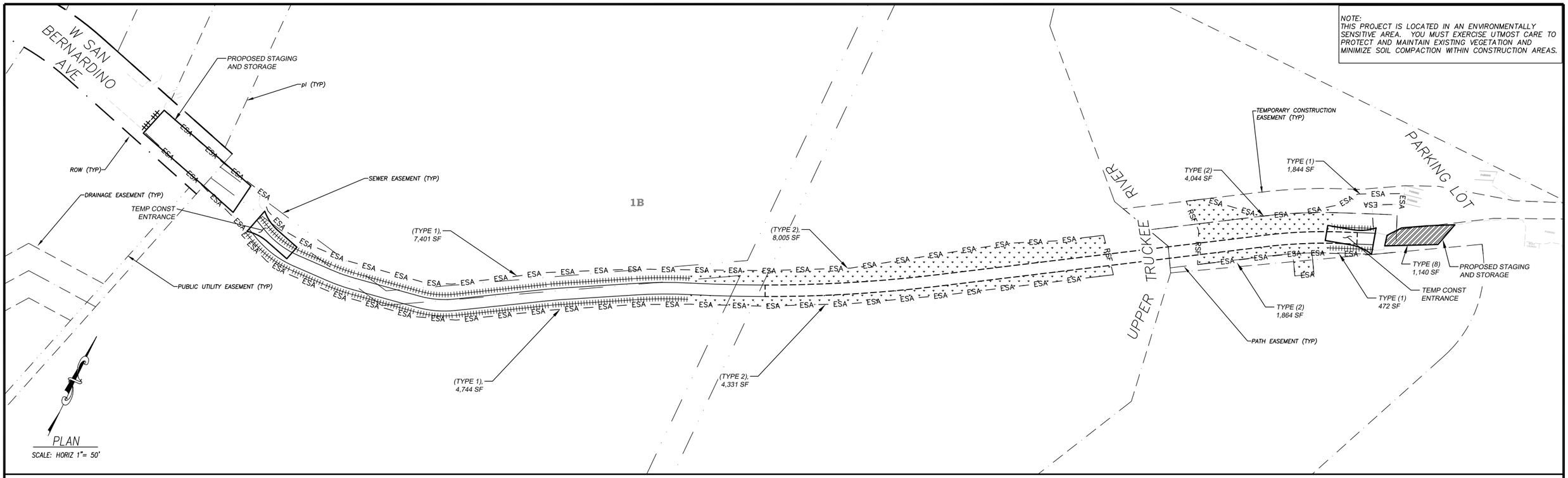
SHEET EC-2 10 OF 29

CONTRACT NO. 5971
CIP No. 95117

22-0335 C 10 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

Drawing name: \\CDAData5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\SB_EC2.dwg



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SYMBOL LEGEND

- REVEGETATION AREA (TYPE 1)
- REVEGETATION AREA (TYPE 2)
- REVEGETATION AREA (TYPE 8)
- STAGING AND STORAGE AREAS

NOTES

1. REVEGETATION TYPE (1) FOR AREAS ADJACENT TO ROAD/PATH SHOULDERING, PIPE INSTALLATION, DISTURBED AREAS ADJACENT TO IMPROVEMENTS, AND GRADE TO DRAIN LOCATIONS, UNLESS NOTED OTHERWISE.
2. ALL REVEGETATION AREAS DESCRIBED ABOVE WILL BE IRRIGATED WITH A WATER TRUCK BY THE COUNTY FOR TWO YEARS FOLLOWING INSTALLATION TO ENSURE OPTIMUM VEGETATION SURVIVAL.
3. SEE SPECIAL PROVISIONS FOR LOCATIONS WHERE SCARIFYING IS REQUIRED PRIOR TO REVEGETATION TREATMENT.

REVEGETATION WORK LEGEND

TYPE (1) – STEP A: CONTRACTOR TO PLACE 2" COMPACTED TOPSOIL MIX
STEP B: COUNTY TO PLACE SEED
STEP C: CONTRACTOR TO APPLY 1" MULCH
STEP D: CONTRACTOR TO APPLY TACKIFIER.

TYPE (2) – MEADOW AREAS:
STEP A: CONTRACTOR TO LOOSEN SOIL
STEP B: COUNTY TO PLACE SEED
STEP C: CONTRACTOR TO APPLY TACKIFIER.

TYPE (3) – N/A.

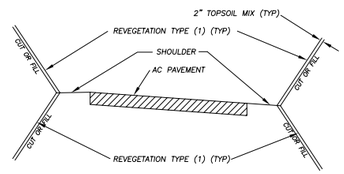
TYPE (4) – N/A.

TYPE (5) – N/A.

TYPE (6) – N/A.

TYPE (7) – N/A.

TYPE (8) – STEP A: CONTRACTOR TO REGRADE TO MATCH SURROUNDING AREA.
STEP B: CONTRACTOR TO PLACE 3" WOOD CHIPS.



TYPICAL BIKE PATH REVEGETATION

NTS

REVEGETATION SUMMARY	
REVEGETATION TYPE	TOTAL (SF)
TYPE (1)	14,461
TYPE (2)	18,244
TYPE (8)	1,140

AMENDMENT PER REVEGETATION TYPE					
REVEGETATION TYPE	HUMUS (CY)	TOPSOIL MIX (CY)	MULCH (CY)	TACKIFIER (SF)	WOOD CHIPS (CY)
TYPE (1)	23	90	45	14,461	–
TYPE (2)	–	–	–	18,244	–
TYPE (8)	–	–	–	–	11
TOTALS	23	90	45	32,705	11

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER – DONALDO S. PALAGANAS – No. C66083 Exp. 06-30-22 – CIVIL – STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

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DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
REVEGETATION PLAN

SHEET R–1
11 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 11 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES
Drawing name: \\DATA\dot5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MP\LAN\SB_R1.dwg

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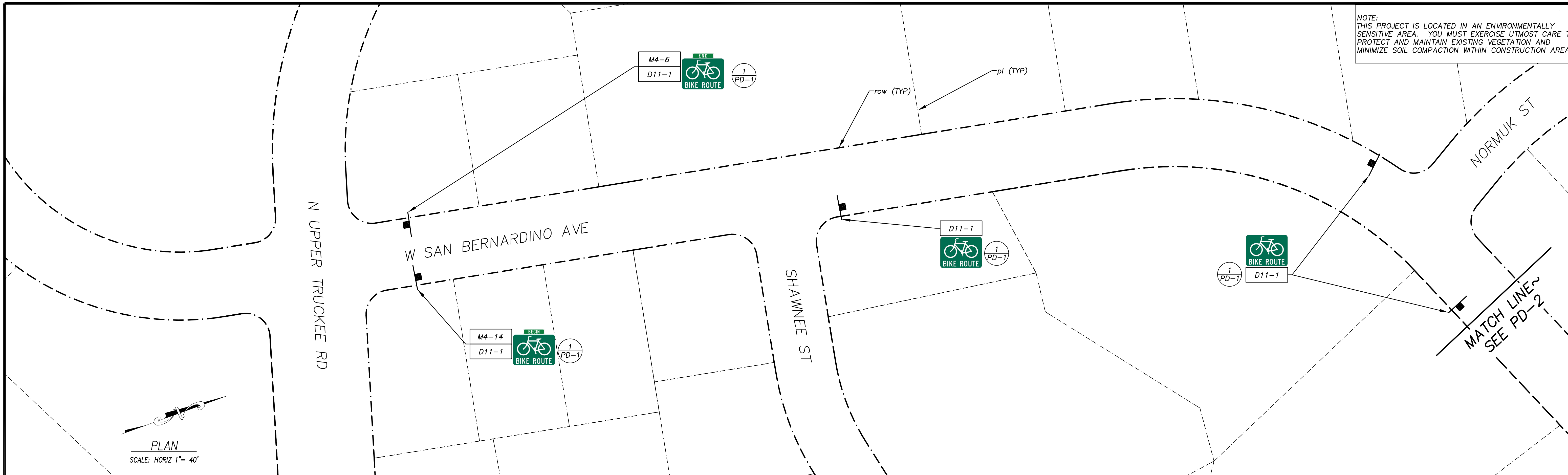


PLAN
SCALE: HORIZ 1"= 40'

SIGNING LEGEND

- XX – SIGN NUMBER, SEE TABLE DETAILS
- – EXIST SIGN
- – INSTALL SIGN
- – INSTALL DOUBLE SIDED SIGN
- ✳ – REMOVE AND REPLACE

CONSTRUCTION NOTES:

- (A) — 4" SOLID YELLOW STRIPE PAINTED PER DIMENSIONS SHOWN
- (B) — "PATH ENDS" PAVEMENT MARKING (H=48", W=38") PER CALTRANS RSP A24D (½ SIZE) PLACE 5' ℄ FROM LIMIT LINE
- (C) — DASHED CENTERLINE STRIPING PER CAMUTCD FIG 9C-2

NOTES:
1) FINISH ON BACK OF SIGN: MIDNIGHT GREEN ENDURA SHIELD IV, TNEMEC SEMIGLOSS HIGH BUILD ACRYLIC POLYURETHANE ENAMEL NO. 75-J7751

2) ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST APPROVED CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

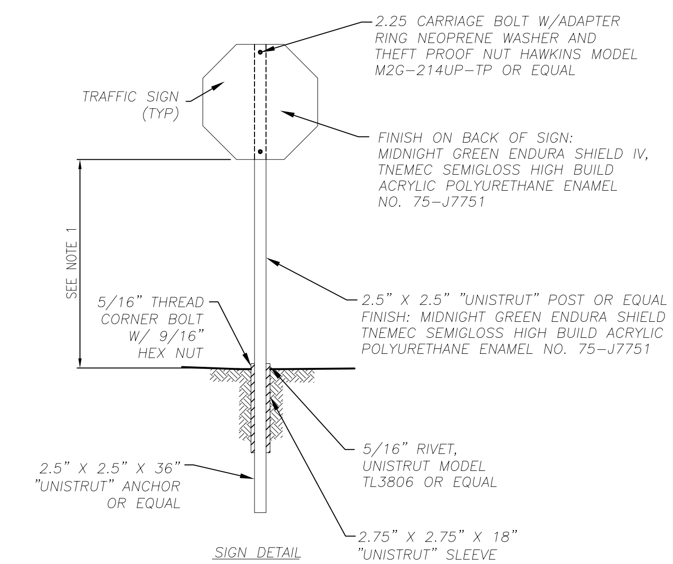
3) ASTM DESIGNATION APPLIES TO ALL COLORS ON SIGN OR RAIL. BLACK SHALL BE NON-REFLECTIVE.

ROADWAY AND BIKE PATH SIGNS

SIGN DESIGNATION	SIGN MESSAGE AND DESCRIPTION	SIGN SIZE	QTY	SIGN COLORS	RETROREFLECTIVE ASTM TYPE
D11-1	"BIKE ROUTE" SIGN	24"x18"	15	WHITE ON GREEN	III
M4-14	"BEGIN" SIGN	12"x6"	2	WHITE ON GREEN	III
M4-6	"END" SIGN	12"x6"	2	WHITE ON GREEN	III
M6-1	TURN ARROW SIGN	12"x9"	1	WHITE ON GREEN	III
M6-3	"UP" ARROW SIGN	12"x9"	2	WHITE ON GREEN	III
R44A (CA)	"NO MOTOR VEHICLES" SIGN	12"x24"	2	BLACK ON WHITE	III

PAVEMENT STRIPING

TYPE	SHEET	SPRAYABLE PAINT YELLOW LF
SOLID YELLOW STRIPING	PD-1	–
	PD-2	71
	PD-3	–
BROKEN YELLOW CENTERLINE STRIPING	PD-1	–
	PD-2	507
	PD-3	–
	TOTAL	578



SIGN DETAIL

NOTES:
1. 7' ABOVE EP.
2. LETTERING TO BE CENTERED.
3. POST SHALL BE 3' FROM EP.

BIKE PATH SIGN INSTALLATION (1 / PD-1)
NTS

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER DONALDO S. PALARONI No. C66083 Exp. 06-30-22 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
REGISTERED CIVIL ENGINEER
MARCH 04, 2022
DATE:

DESIGNED: KIS | DRAWN: KIS
CHECKED: DSP | DATE: 02/2022
ROAD NUMBER: ---

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
SIGNING AND PAVEMENT DELINEATION

SHEET PD-1
12 OF 29
CONTRACT NO. 5971
CIP No. 95117

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

NOTE:
THIS PROJECT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA. YOU MUST EXERCISE UTMOST CARE TO PROTECT AND MAINTAIN EXISTING VEGETATION AND MINIMIZE SOIL COMPACTION WITHIN CONSTRUCTION AREAS.

CHOLULA ST

W SAN BERNARDINO AVE

MATCH LINE~ SEE PD-1

D11-1 BIKE ROUTE — 1/PD-1

row (TYP)

pl (TYP)

D11-1 M6-3 BIKE ROUTE — 1/PD-1

ep (TYP)

MATCH LINE~ SEE BELOW

1/PD-1 R44A (CA)

BIKE PATH
NO MOTOR VEHICLES OR MOTORIZED BICYCLES

A

C

PLAN
SCALE: HORIZ 1"= 40'

C

MATCH LINE~ SEE ABOVE

UPPER TRUCKEE RIVER

pl (TYP)

PARKING LOT

TEMPORARY CONSTRUCTION EASEMENT (TYP)

1/PD-1 R44A (CA)

BIKE PATH
NO MOTOR VEHICLES OR MOTORIZED BICYCLES

ep (TYP)

A

D11-1 M6-3 BIKE ROUTE — 1/PD-1

MATCH LINE~ SEE PD-3

TRAIL EASEMENT (TYP)

PLAN
SCALE: HORIZ 1"= 40'

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER — DONALDO S. PALADRAN — No. C66083 Exp. 06-30-22 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
SIGNING AND PAVEMENT DELINEATION

SHEET PD-2
13 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 13 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

Drawing name: \\CDAData\DS-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MAP\LAN\SBL_PD.dwg

NOTE:
THIS PROJECT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA. YOU MUST EXERCISE UTMOST CARE TO PROTECT AND MAINTAIN EXISTING VEGETATION AND MINIMIZE SOIL COMPACTION WITHIN CONSTRUCTION AREAS.

TEMPORARY CONSTRUCTION EASEMENT (FOR ACCESS TO PROJECT)

pl (TYP)
row (TYP)
ep (TYP)

E SAN BERNARDINO AVE

BAKERSFIELD ST

BIKE ROUTE
D11-1
1 PD-1

sign (TYP)

MATCH LINE~ SEE PD-2

MATCH LINE~ SEE BELOW

TAHOE PARADISE PARK

PLAN
SCALE: HORIZ 1"= 40'

INDIGO WAY

BEGIN
BIKE ROUTE
M4-14
D11-1
1 PD-1

MATCH LINE~ SEE ABOVE

E SAN BERNARDINO AVE

D11-1
BIKE ROUTE
1 PD-1

sign (TYP)
ep (TYP)
row (TYP)
pl (TYP)

APACHE AVE

D11-1
M6-1(R)
BIKE ROUTE
1 PD-1

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

PLAN
SCALE: HORIZ 1"= 40'

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER
DONALDO S. PALAROAN
No. C66083
Exp. 06-30-22
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
SIGNING AND PAVEMENT DELINEATION

SHEET PD-3
14 OF 29
CONTRACT NO. 5971
CIP No. 95117

22-0335 C 14 of 29

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES

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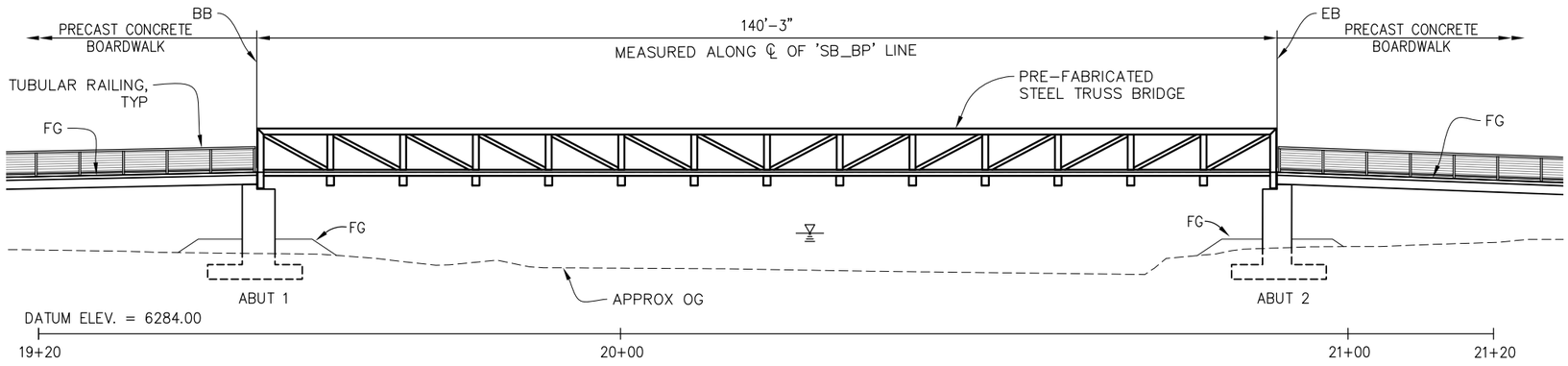
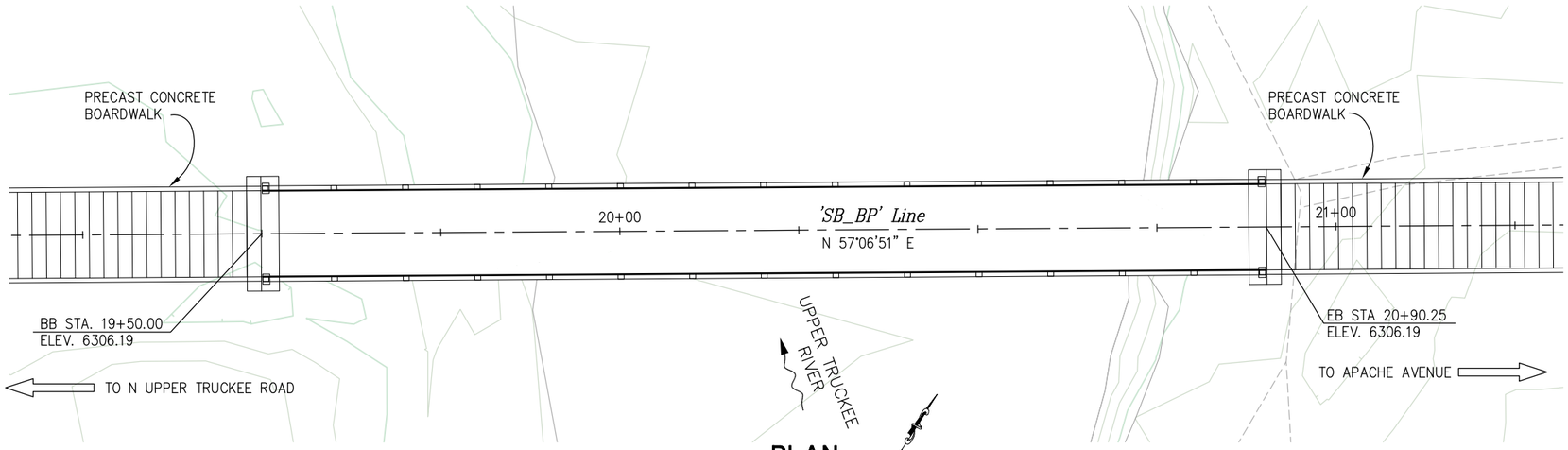
PROFILE GRADE

NO SCALE



ELEVATION

1" = 10'

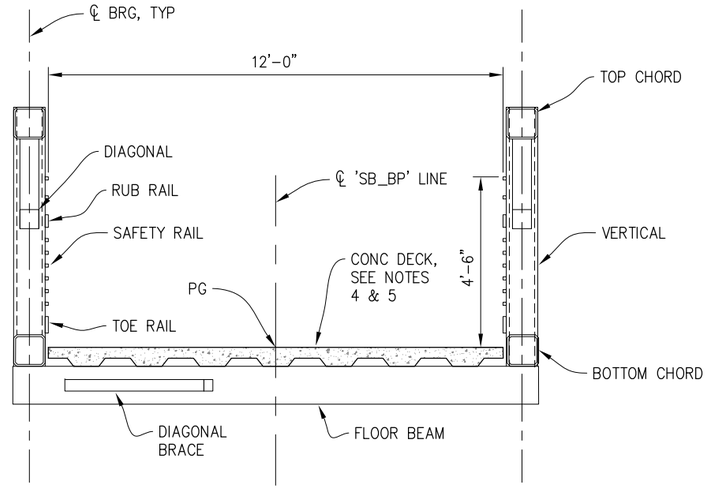


PLAN

1" = 10'

QUANTITIES:

STRUCTURE EXCAVATION (BRIDGE)	178 CY
STRUCTURE BACKFILL (BRIDGE)	87 CY
GEOSYNTHETIC REINFORCED SUBGRADE (BRIDGE FOOTING)	51 CY
FURNISH AND INSTALL PRECAST CONCRETE BOARDWALK SYSTEM	1 LS
STRUCTURAL CONCRETE, BRIDGE FOOTING	41 CY
STRUCTURAL CONCRETE, BRIDGE	59 CY
BAR REINFORCING STEEL (BRIDGE)	20,892 LB
FURNISH AND INSTALL PREFABRICATED STEEL TRUSS BRIDGE	1 LS
ROCK SLOPE PROTECTION (60 LB, CLASS II, METHOD B)	116 CY
ANTI-GRAFFITI COATING	4,747 SF
FURNISH AND INSTALL TUBULAR STEEL RAILING	958 LF



TYPICAL SECTION

1/2" = 1'-0"

NOTES:

1. FOR "GENERAL NOTES", SEE "INDEX TO PLANS" SHEET
2. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES IN PLACE
3. CONTRACTOR TO VERIFY ALL CONTROLLING FIELD DIMENSIONS PRIOR TO ORDERING OR FABRICATING ANY MATERIALS
4. BRIDGE FABRICATOR SHALL DESIGN CAST-IN-PLACE REINFORCED CONCRETE DECK. CALCULATIONS AND SHOP DRAWINGS MUST BE SUBMITTED FOR REVIEW
5. ALL BRIDGE DECK REINFORCEMENT MUST BE EPOXY COATED AND HAVE A MINIMUM OF 2 ½" COVER OVER TOP LAYER OF REINFORCEMENT
6. FOR SPREAD FOOTING DATA TABLE AND HYDROLOGIC SUMMARY, SEE "FOUNDATION PLAN" SHEET

INDEX TO BRIDGE PLANS

LEGEND:

— INDICATES DIRECTION OF WATER FLOW

— INDICATES HIGH WATER SURFACE ELEVATION (6298.20)

GENERAL PLAN
SCALE : AS SHOWN

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER — DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: 03/04/22

DESIGNED: DWH	DRAWN: SGM
CHECKED: MSF	DATE: 2/7/22
ROAD NUMBER: –	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET **S-1**
15 OF 29
W.O. No. **95117**

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (2009), AND AASHTO LRFD BRIDGE DESIGN SPECIFICATION (8TH EDITION) WITH CALIFORNIA AMENDMENTS, PREFACE DATED JANUARY 2014, EXCEPT FOR BOARDWALK FOUNDATIONS

SEISMIC DESIGN: CALTRANS SEISMIC DESIGN CRITERIA (SDC), VERSION 2.0, APRIL 2019

DEAD LOAD: NO ALLOWANCE FOR FUTURE WEARING SURFACE

LIVE LOAD: H10 VEHICLE AND 90 PSF PEDESTRIAN (PED) LOADING

SNOW LOAD: 218 PSF

WIND LOADING: WIND LOAD IN ACCORDANCE WITH ARTICLE 3.4 OF AASHTO SPECIFICATIONS; BASIC WIND SPEED = 100 MPH

SEISMIC LOAD: SOIL PROFILE: Vs30 = 270 M/S (886 FT/S)
MOMENT MAGNITUDE: Mmax = 7.5
PEAK GROUND ACCELERATION = 0.42g

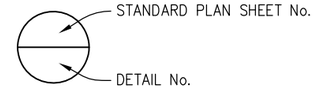
REINFORCED CONCRETE: fy = 60 KSI
f'c = 3.6 KSI, UNLESS NOTED OTHERWISE
n = 8

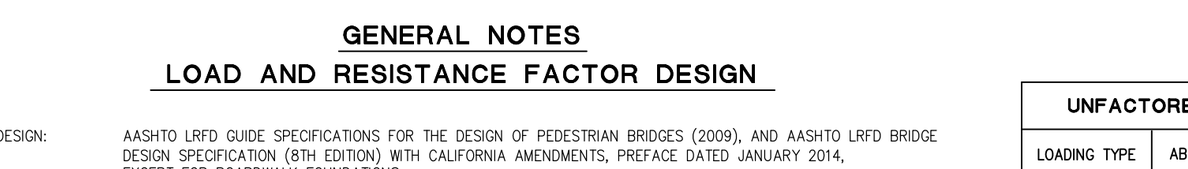
STRUCTURAL STEEL: TUBULAR SECTIONS: ASTM A847; fy = 50 KSI
BRIDGE ANCHOR BOLTS: ASTM F1554; fy = 55 KSI

UNFACTORED BRIDGE LOADS		
LOADING TYPE	ABUT 1 (KIPS)	ABUT 2 (KIPS)
DEAD LOAD	138	138
LIVE LOAD	77 (PED) 20 (H10)	77 (PED) 20 (H10)
SNOW LOAD	212	212
TRANSVERSE WIND	61	61
WIND UPLIFT	−30	−30
LONGITUDINAL SEISMIC	116	0
TRANSVERSE SEISMIC	58	58

CALTRANS STANDARD PLANS DATED 2018

A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LINES AND SYMBOLS (SHEET 5 OF 5)
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL – BRIDGE





CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

STRUCTURAL CONCRETE, BRIDGE (3.6 KSI @ 28 DAYS)

STRUCTURAL CONCRETE, BRIDGE (4.0 KSI @ 28 DAYS)

STRUCTURAL CONCRETE, BRIDGE FOOTING (3.6 KSI @ 28 DAYS)

ACCELERATION RESPONSE SPECTRA CURVE

INDEX TO PLANS
SCALE : AS SHOWN

ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\95117 San Bernardino CL1 BP\CADD Files\Sheets\S-Sheets.dwg Layout Tab: S-2 Mar 03,2022 - 11:36am DHarrington

FOR REDUCED PLANS 0 1 2

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER
DUSTIN W. HARRINGTON
No. C71517
License Expires 12-31-23
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
REGISTERED CIVIL ENGINEER
03/04/22
DATE:

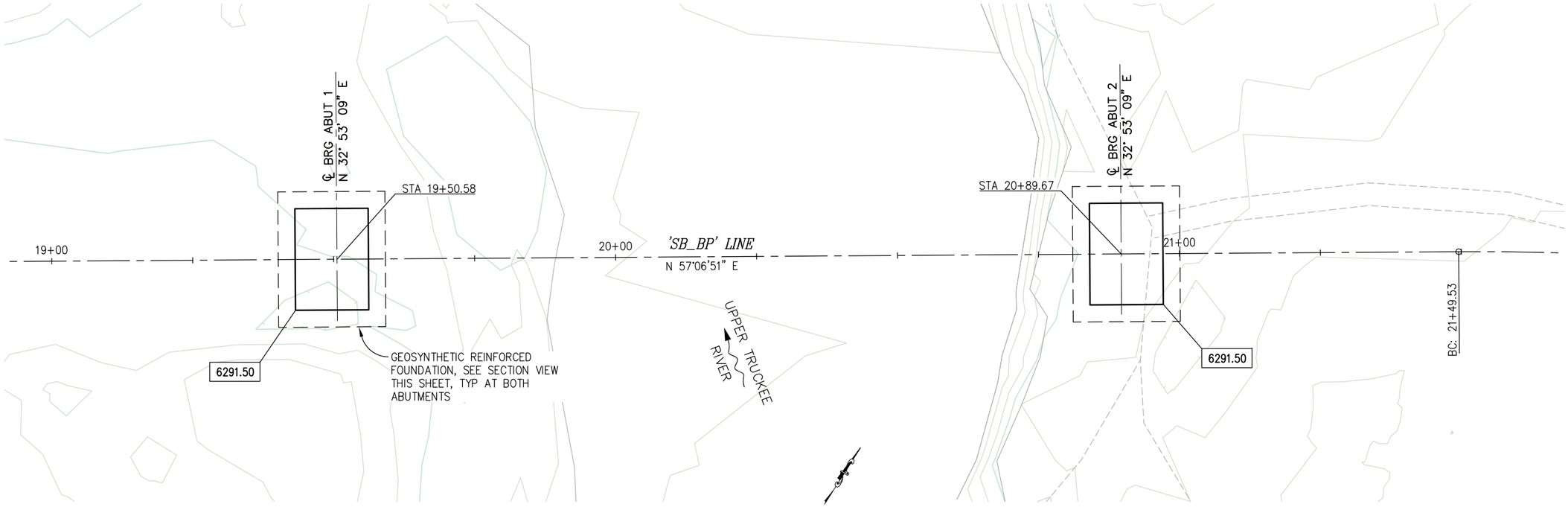
DESIGNED: DWH	DRAWN: SGM
CHECKED: MSF	DATE: 2/7/22
ROAD NUMBER:	–

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

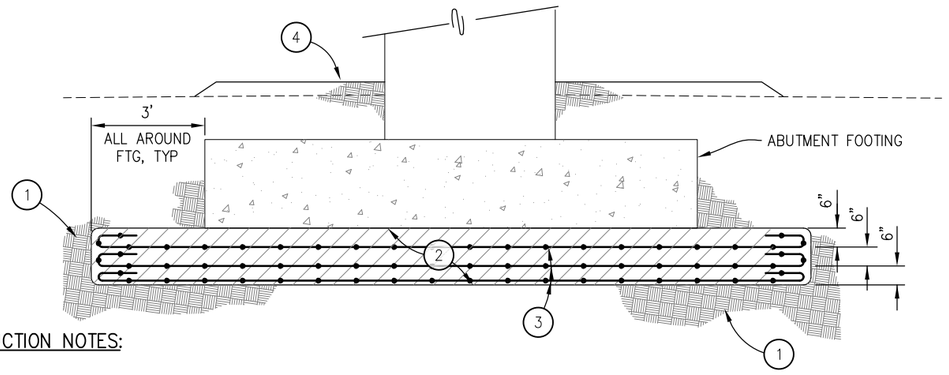
SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET
S-2
16 OF 29
W.O. No.
95117



FOUNDATION PLAN

1" = 10'



CONSTRUCTION NOTES:

1. — UNDISTURBED NATIVE SOIL
2. — AB (CLASS 2) REINFORCED GRANULAR FILL, PLACE IN 6" UNIFORM LIFTS AND COMPACT TO 95%
3. — TENSAR TX7 OR TX190L GEOGRID OR APPROVED EQUAL
4. — FINISH GRADE, COMPACTED TO 95% IN 8" MAX THICK LAYERS PER "STRUCTURE BACKFILL" STANDARD SPECIFICATIONS

TYPICAL GEOSYNTHETIC REINFORCEMENT SECTION

NO SCALE

SCOUR DATA TABLE		
SUPPORT NO.	LONG TERM (DEGRADATION AND CONTRACTION) SCOUR ELEVATION (FT)	SHORT TERM (LOCAL) SCOUR DEPTH (FT)
ABUT 1	6294.85	2.93
ABUT 2	6295.33	2.74

HYDROLOGIC SUMMARY TABLE			
DRAINAGE AREA = 39.86 SQ. MI.			
	DESIGN FLOOD	BASE FLOOD	FLOOD OF RECORD
FREQUENCY (YEARS)	50	100	1997 YEAR
DISCHARGE (CFS)	4072.2	5168.9	5120
WATER SURFACE ELEVATION (FT) AT BRIDGE	6297.76	6298.20	6299.73

NOTE: FLOODPLAIN DATA BASED ON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND ARE SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY EL DORADO COUNTY. INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATION.

SPREAD FOOTING DATA TABLE		
SUPPORT LOCATION	SERVICE PERMISSIBLE NET CONTACT STRESS (SETTLEMENT) (KSF)	STRENGTH/CONSTRUCTION FACTORED GROSS NOMINAL BEARING RESISTANCE øb=0.45 (KSF)
ABUT 1	8.4	6.48
ABUT 2	8.4	6.48

LEGEND:

XXXX.XX — BOTTOM OF FOOTING ELEVATION

INDICATES DIRECTION OF WATER FLOW

FOUNDATION PLAN
SCALE : AS SHOWN

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER — DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: 03/04/22

DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	3/4/22
ROAD NUMBER:	
—	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

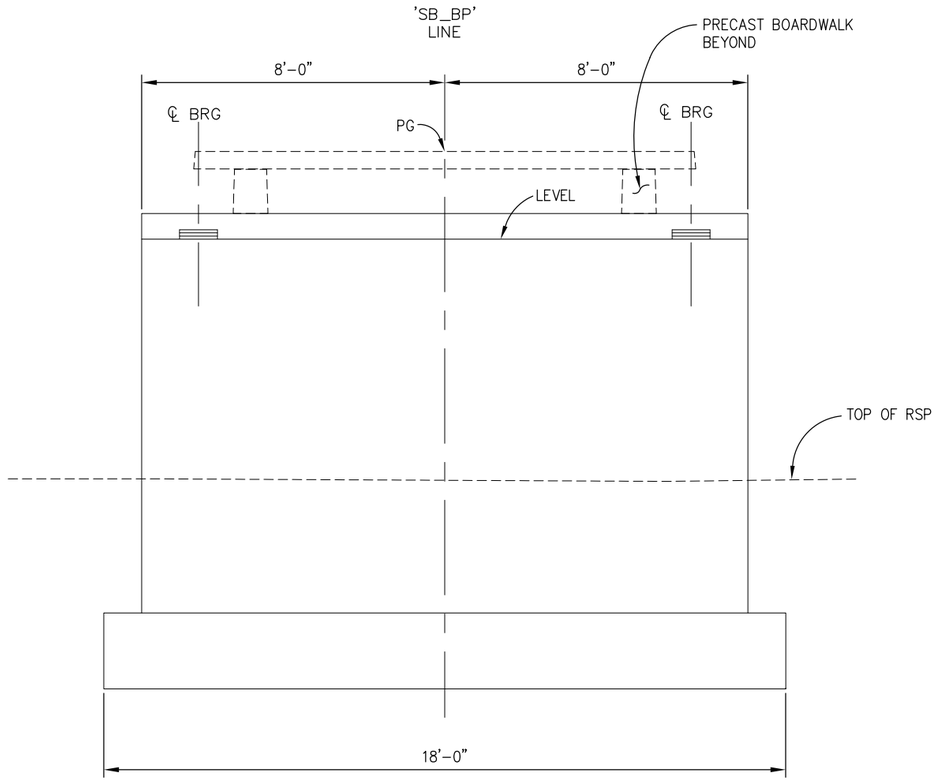
SHEET S-3 17 OF 29

W.O. No. 95117

22-0335 C 17 of 29

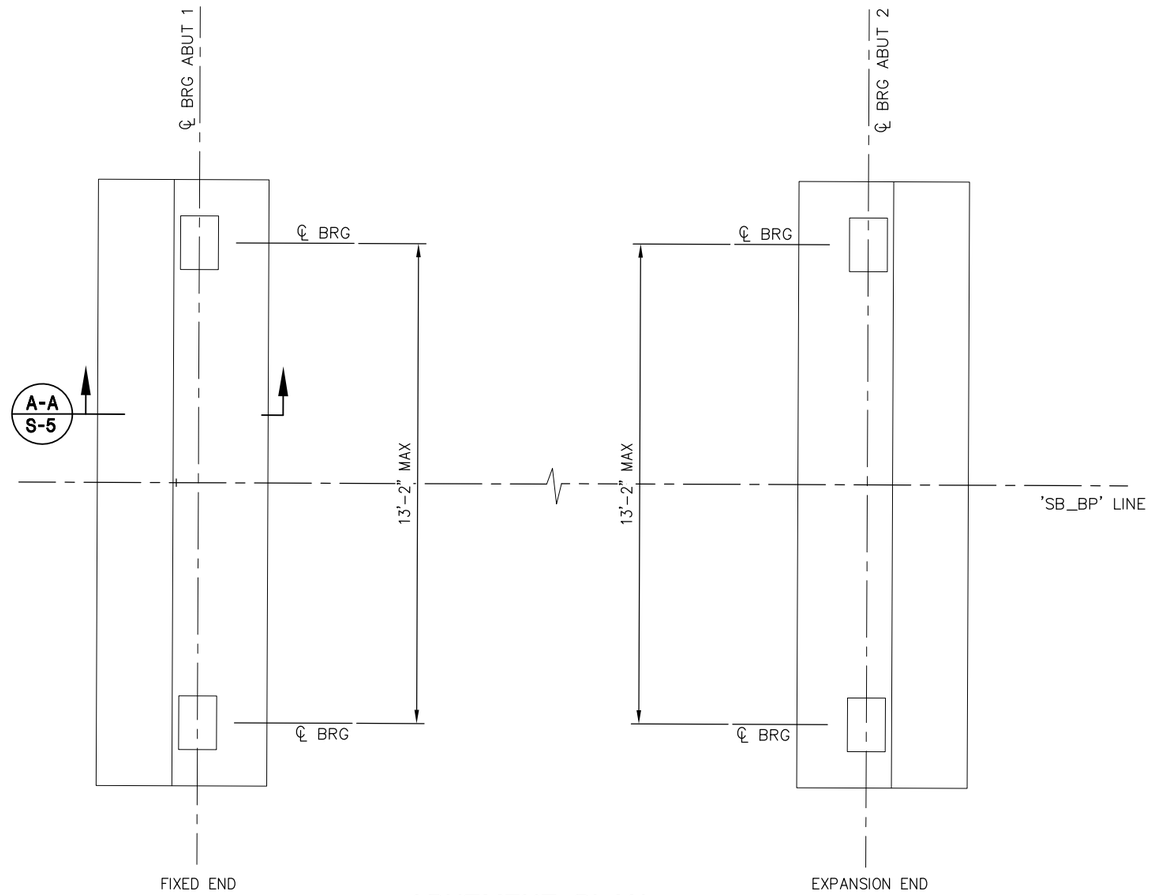
ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\95117 San Bernardino CL1 BP\CADD Files\Sheets\S-Sheets.dwg Layout Tab: S-3 Mar 07,2022 - 11:49am DHarrington

FOR REDUCED PLANS
0 1 2



ABUTMENT ELEVATION

1/2" = 1'-0"



ABUTMENT PLAN

1/2" = 1'-0"

ABUTMENT LAYOUT
SCALE : AS SHOWN

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER — DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — STATE OF CALIFORNIA

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DWH	SGM
CHECKED:	DATE:
MSF	2/7/22
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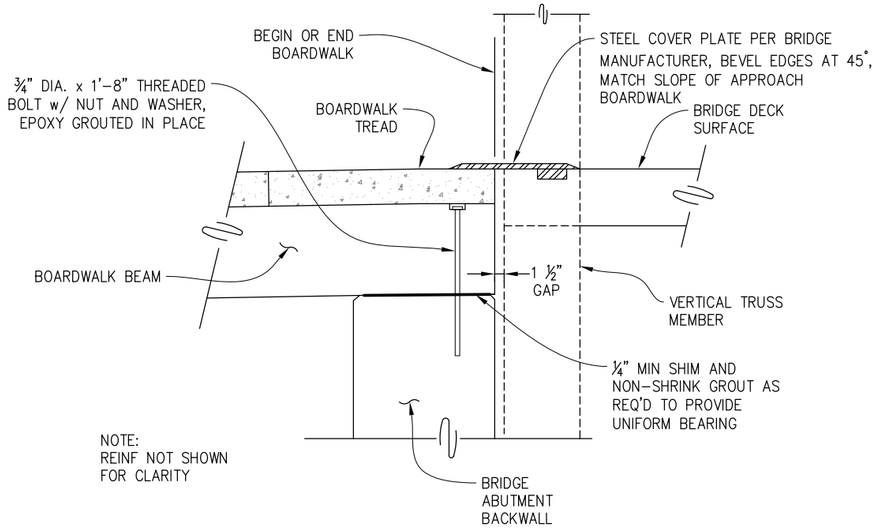
–	

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

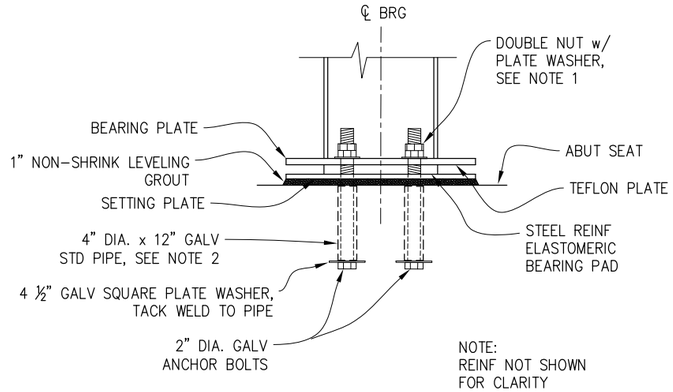
SHEET S-4
18 OF 29
W.O. No. 95117

22-0335 C 18 of 29



1 BOARDWALK AT ABUTMENT

1" = 1'-0"

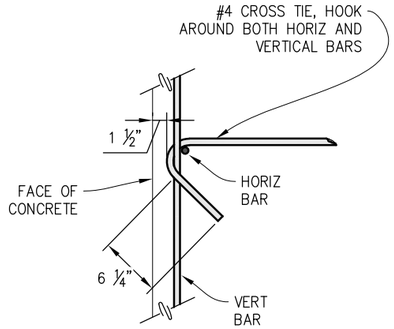


2 BRIDGE BEARING ASSEMBLY

NO SCALE

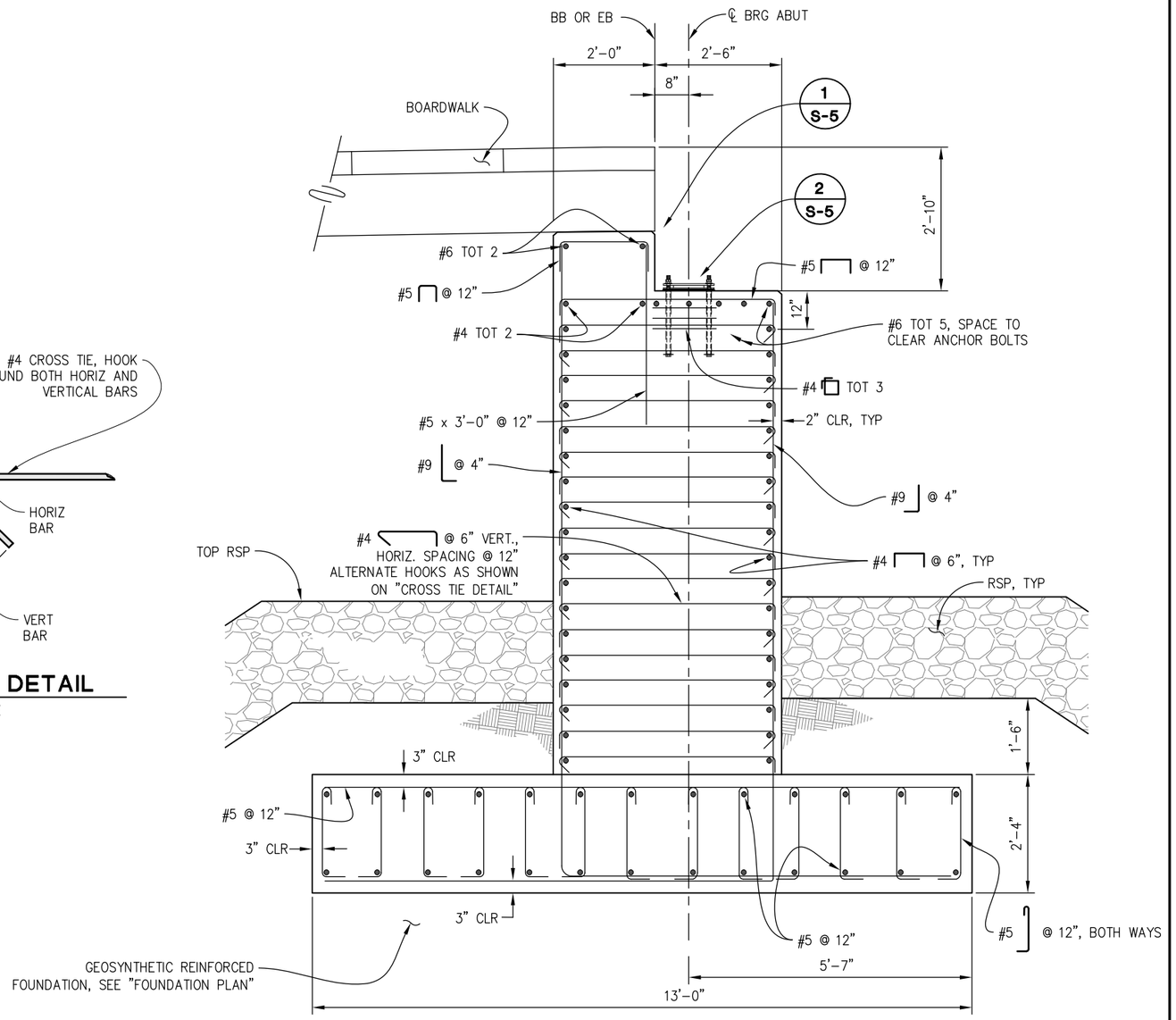
NOTES:

1. EXPANSION END: BOTTOM NUT FINGER TIGHT, TOP NUT SNUG TIGHT TO ALLOW MOVEMENT
   FIXED END: BOTH NUTS SNUG TIGHT
2. FILL PIPE WITH NON-SHRINK GROUT AFTER SETTING TRUSS
3. REPRESENTATIVE BEARING SHOWN, BRIDGE MANUFACTURER TO SUBMIT COMPLETE BEARING DETAILS FOR APPROVAL PRIOR TO CONSTRUCTION



CROSS TIE DETAIL

NO SCALE



SECTION A-A

3/4" = 1'-0"

ABUT 1 SHOWN, ABUT 2 SIMILAR

ABUTMENT DETAILS
SCALE : AS SHOWN

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER — DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — STATE OF CALIFORNIA

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REGISTERED CIVIL ENGINEER — DATE: 03/04/22

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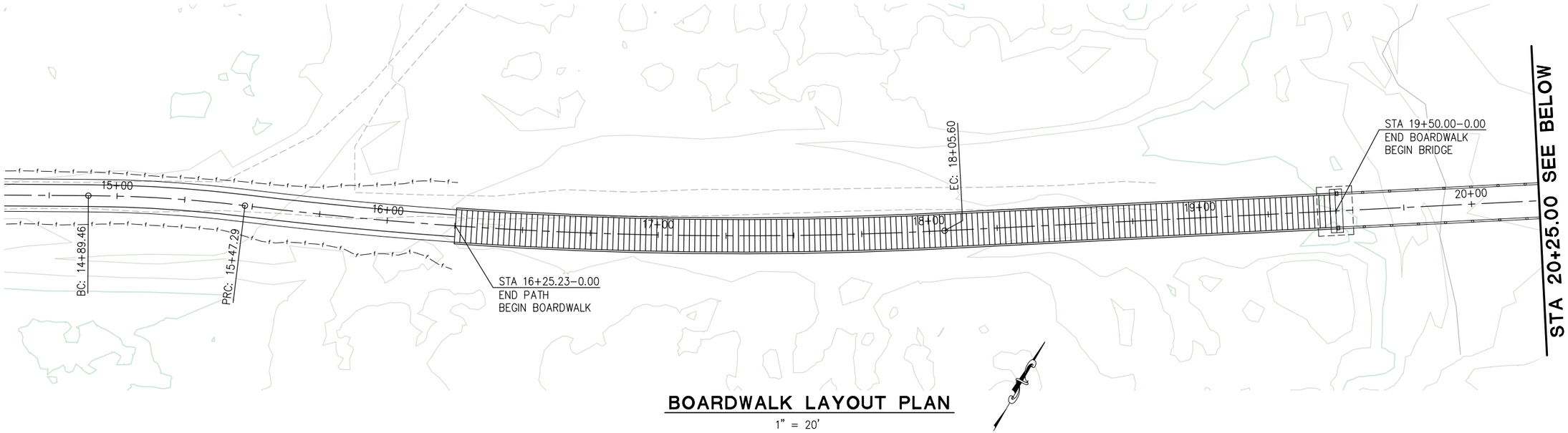
ROAD NUMBER:	
–	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

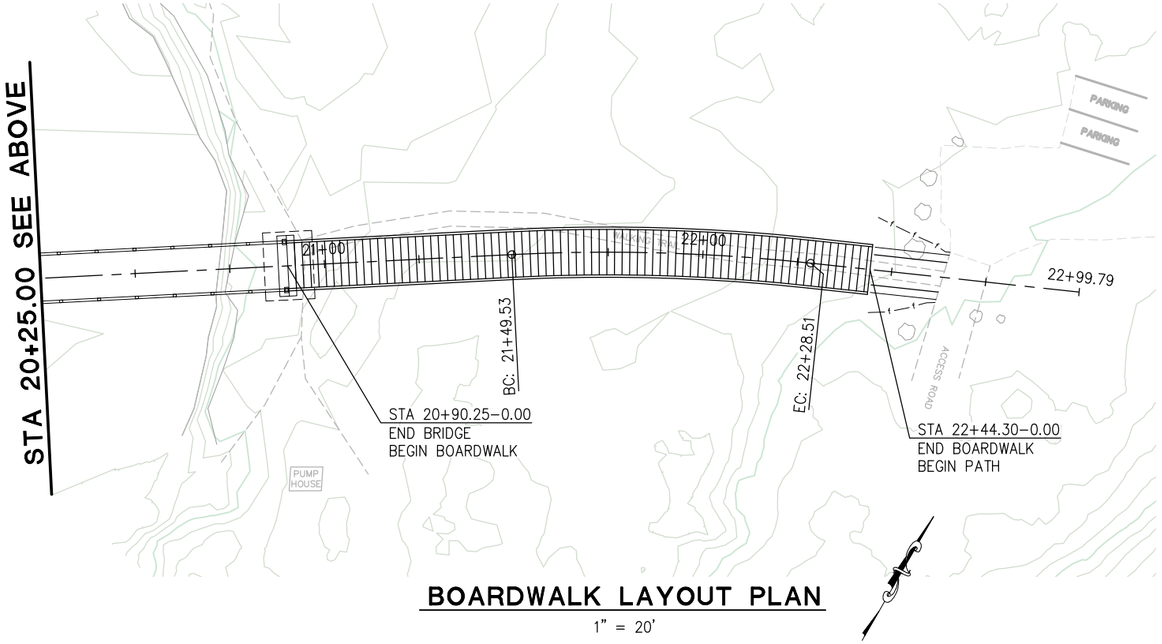
SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET S-5
19 OF 29
W.O. No. 95117



BOARDWALK LAYOUT PLAN

1" = 20'



BOARDWALK LAYOUT PLAN

1" = 20'

BOARDWALK LAYOUT PLAN
SCALE : AS SHOWN

FOR REDUCED PLANS 0 1 2 ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\95117 San Bernardino CL1 BP\CADD Files\Sheets\S-Sheets.dwg Layout Tab: S-6 Mar 03,2022 - 11:41am DHarrington

REVISION			
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REGISTERED PROFESSIONAL ENGINEER
DUSTIN W. HARRINGTON
No. C71517
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CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER

DATE: 03/04/22

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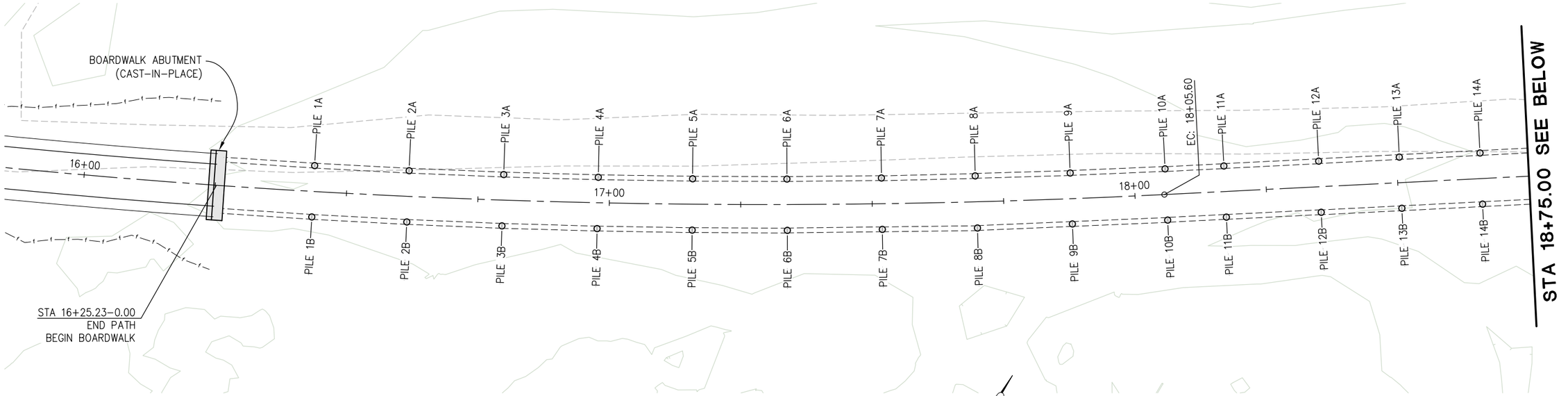
–	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET
S-6
20 OF 29
W.O. No. **95117**



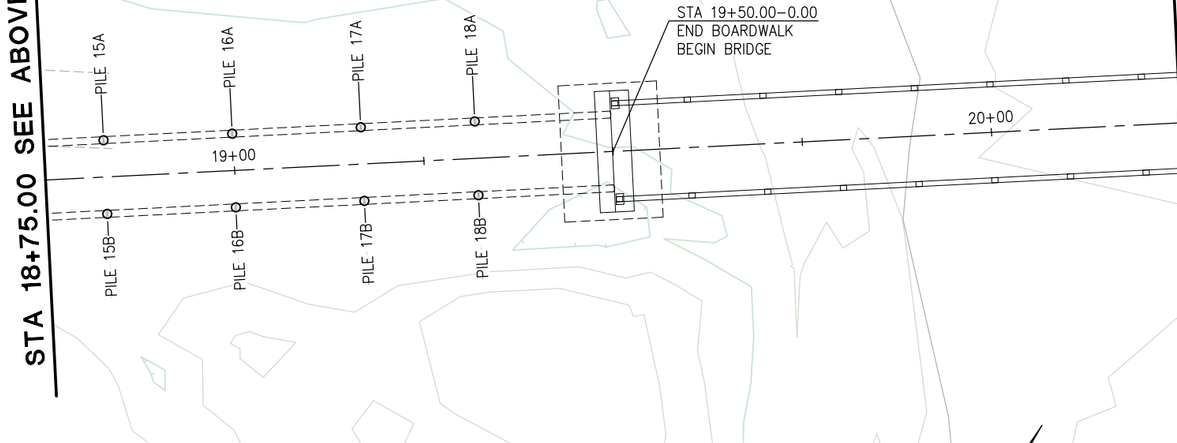
BOARDWALK FOUNDATION PLAN

1" = 10'

NOTE: BOARDWALK BEAM LENGTHS VARY. REFER TO PERMATRAK BOARDWALK DRAWINGS FOR BEAM LENGTHS AND LOCATIONS. PILE LOCATIONS SHOWN ARE APPROXIMATE.

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (KIPS)	ALLOWABLE AXIAL CAPACITY (KIPS)		DESIGN TIP DEPTH (FT)	SPECIFIED TIP DEPTH (FT)
			COMPRESSION	TENSION		
PILE 1A	14" FRP	36.2	42	0	25 (a)	25
PILE 1B	14" FRP	36.2	42	0	25 (a)	25
PILE 2A	14" FRP	34.7	42	0	25 (a)	25
PILE 2B	14" FRP	35.6	42	0	25 (a)	25
PILE 3A	14" FRP	35.1	42	0	25 (a)	25
PILE 3B	14" FRP	35.6	42	0	25 (a)	25
PILE 4A	14" FRP	35.1	42	0	25 (a)	25
PILE 4B	14" FRP	34.7	42	0	25 (a)	25
PILE 5A	14" FRP	37.8	42	0	25 (a)	25
PILE 5B	14" FRP	37.8	42	0	25 (a)	25
PILE 6A	14" FRP	37.8	42	0	25 (a)	25
PILE 6B	14" FRP	37.8	42	0	25 (a)	25
PILE 7A	14" FRP	37.9	42	0	25 (a)	25
PILE 7B	14" FRP	37.9	42	0	25 (a)	25
PILE 8A	14" FRP	36.8	42	0	25 (a)	25
PILE 8B	14" FRP	36.9	42	0	25 (a)	25
PILE 9A	14" FRP	35.6	42	0	25 (a)	25
PILE 9B	14" FRP	35.6	42	0	25 (a)	25
PILE 10A	14" FRP	35.6	42	0	25 (a)	25
PILE 10B	14" FRP	35.6	42	0	25 (a)	25
PILE 11A	14" FRP	37.0	42	0	25 (a)	25
PILE 11B	14" FRP	37.0	42	0	25 (a)	25
PILE 12A	14" FRP	36.3	42	0	25 (a)	25
PILE 12B	14" FRP	36.3	42	0	25 (a)	25
PILE 13A	14" FRP	33.4	42	0	25 (a)	25
PILE 13B	14" FRP	33.4	42	0	25 (a)	25



BOARDWALK FOUNDATION PLAN

1" = 10'

PILE DATA TABLE NOTES:

DESIGN TIP DEPTHS ARE CONTROLLED BY: (a) COMPRESSION, (c) SETTLEMENT, (d) LATERAL LOAD

FRP = FIBER-REINFORCED POLYMER COMPOSITE PILE (APPROX 6" WALL THICKNESS)

TIP DEPTHS ARE MEASURED FROM THE GROUND ELEVATION

THE ESTIMATED DOWNDRAG LOAD IS 17 KIPS FOR PILES 21A THROUGH 26B
NET ULTIMATE PILE CAPACITY = 2.25 x ALLOWABLE AXIAL CAPACITY - DOWNDRAG LOAD

PILE DATA TABLE CONTINUED ON SHEET S-8

NOTE: REFER TO CONTRACT SPECIAL PROVISIONS FOR TEST PILE REQUIREMENTS.

BOARDWALK FOUNDATION PLAN
SCALE : AS SHOWN

REVISION NUMBER	DATE	DESCRIPTION	BY

DUSTIN W. HARRINGTON No. C71517 REGISTERED PROFESSIONAL ENGINEER CIVIL License Expires 12-31-23 STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER 03/04/22 DATE:

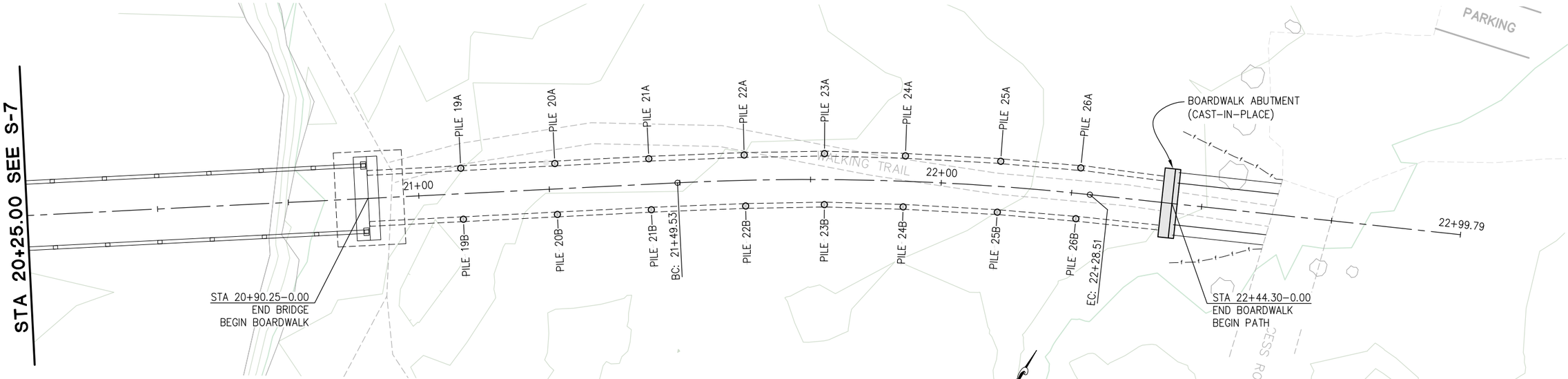
DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	2/7/22
ROAD NUMBER:	
-	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET S-7
21 OF 29
W.O. No. 95117



BOARDWALK FOUNDATION PLAN

1" = 10'

NOTE: BOARDWALK BEAM LENGTHS VARY. REFER TO PERMATRAK BOARDWALK DRAWINGS FOR BEAM LENGTHS AND LOCATIONS. PILE LOCATIONS SHOWN ARE APPROXIMATE.

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (KIPS)	ALLOWABLE AXIAL CAPACITY (KIPS)		DESIGN TIP DEPTH (FT)	SPECIFIED TIP DEPTH (FT)
			COMPRESSION	TENSION		
PILE 14A	14" FRP	32.6	42	0	25 (a)	25
PILE 14B	14" FRP	32.6	42	0	25 (a)	25
PILE 15A	14" FRP	32.6	42	0	25 (a)	25
PILE 15B	14" FRP	32.6	42	0	25 (a)	25
PILE 16A	14" FRP	32.6	42	0	25 (a)	25
PILE 16B	14" FRP	32.6	42	0	25 (a)	25
PILE 17A	14" FRP	32.4	42	0	25 (a)	25
PILE 17B	14" FRP	32.4	42	0	25 (a)	25
PILE 18A	14" FRP	36.5	42	0	25 (a)	25
PILE 18B	14" FRP	36.5	42	0	25 (a)	25
PILE 19A	14" FRP	36.0	42	0	25 (a)	25
PILE 19B	14" FRP	36.0	42	0	25 (a)	25
PILE 20A	14" FRP	32.9	42	0	25 (a)	25
PILE 20B	14" FRP	32.9	42	0	25 (a)	25
PILE 21A	14" FRP	34.7	42	0	25 (a)	25
PILE 21B	14" FRP	34.7	42	0	25 (a)	25
PILE 22A	14" FRP	36.0	42	0	25 (a)	25
PILE 22B	14" FRP	35.7	42	0	25 (a)	25
PILE 23A	14" FRP	35.7	42	0	25 (a)	25
PILE 23B	14" FRP	34.8	42	0	25 (a)	25
PILE 24A	14" FRP	35.5	42	0	25 (a)	25
PILE 24B	14" FRP	34.5	42	0	25 (a)	25
PILE 25A	14" FRP	34.4	42	0	25 (a)	25
PILE 25B	14" FRP	33.7	42	0	25 (a)	25
PILE 26A	14" FRP	37.0	42	0	25 (a)	25
PILE 26B	14" FRP	36.5	42	0	25 (a)	25

PILE DATA TABLE NOTES:

DESIGN TIP DEPTHS ARE CONTROLLED BY: (a) COMPRESSION, (c) SETTLEMENT, (d) LATERAL LOAD

FRP = FIBER-REINFORCED POLYMER COMPOSITE PILE (APPROX 6" WALL THICKNESS)

TIP DEPTHS ARE MEASURED FROM THE GROUND ELEVATION

THE ESTIMATED DOWNDRAG LOAD IS 17 KIPS FOR PILES 21A THROUGH 26B
NET ULTIMATE PILE CAPACITY = 2.25 x ALLOWABLE AXIAL CAPACITY - DOWNDRAG LOAD

PILE DATA TABLE BEGINS ON SHEET S-7

NOTE: REFER TO CONTRACT SPECIAL PROVISIONS FOR TEST PILE REQUIREMENTS.

BOARDWALK FOUNDATION PLAN
SCALE : AS SHOWN

REVISION

NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER
DUSTIN W. HARRINGTON
No. C71517
License Expires 12-31-23
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER

03/04/22
DATE:

DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	2/7/22
ROAD NUMBER:	
-	

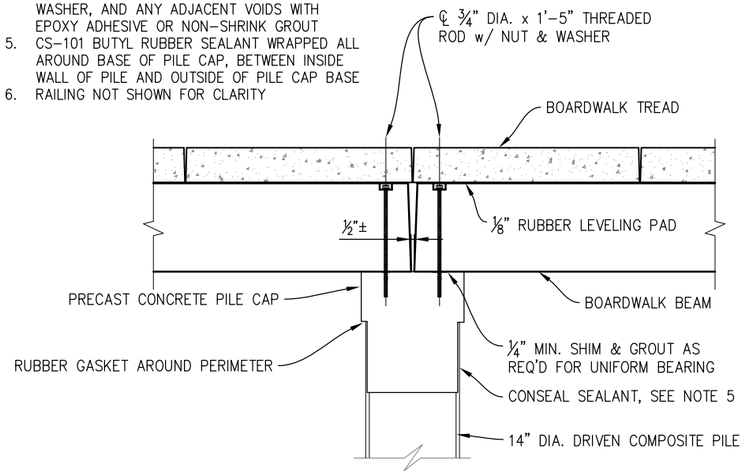
EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

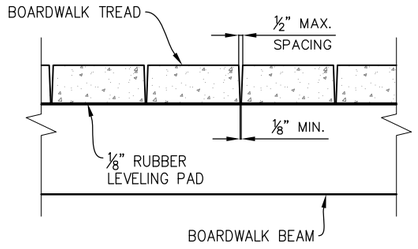
SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET
S-8
22 OF 29
W.O. No. **95117**

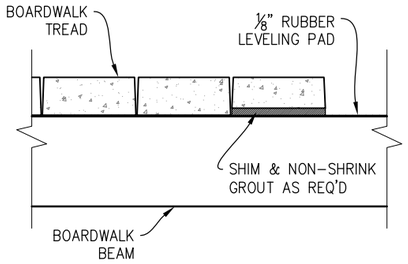
NOTES:
1. SET THREADED BAR IN EPOXY ADHESIVE ANCHORING SYSTEM
2. MIN. 3" THREADED BAR EMBEDMENT INTO PILE CAP
3. DRILLED HOLE SHALL BE ⅞" DIAMETER
4. COMPLETELY COVER THREADED BAR, NUT, WASHER, AND ANY ADJACENT VOIDS WITH EPOXY ADHESIVE OR NON-SHRINK GROUT
5. CS-101 BUTYL RUBBER SEALANT WRAPPED ALL AROUND BASE OF PILE CAP, BETWEEN INSIDE WALL OF PILE AND OUTSIDE OF PILE CAP BASE
6. RAILING NOT SHOWN FOR CLARITY



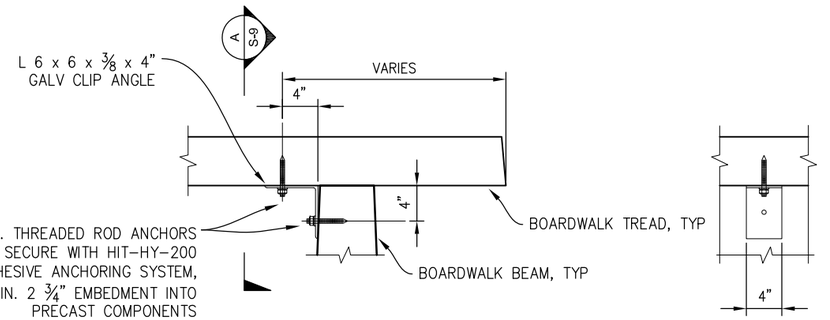
TYPICAL PILE CONNECTION DETAIL
NO SCALE



TYPICAL TREAD SPACING DETAIL
NO SCALE



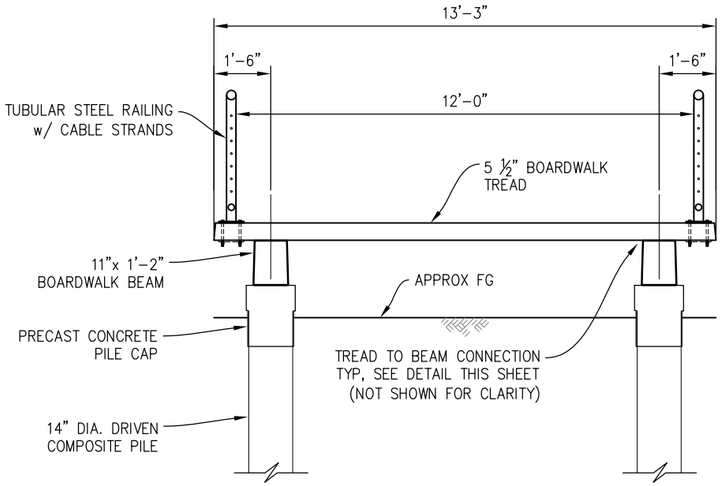
TYPICAL SHIM/GROUT DETAIL
NO SCALE



A S-9 **SECTION**
NO SCALE

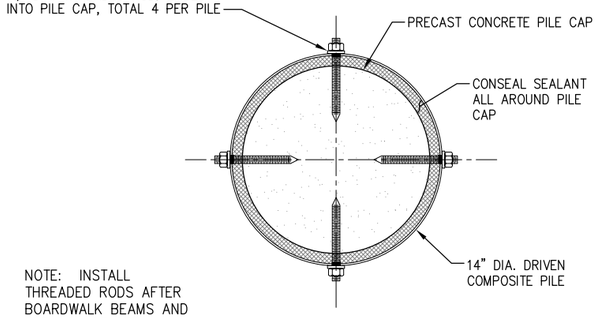
NOTES:
1. ALL HOLES TO BE DRILLED BY CONTRACTOR
2. ONE (1) CLIP ANGLE REQ'D AT EACH END OF EACH TREAD, TWO (2) CLIPS TOTAL PER TREAD
3. ANCHORS SHALL MEET REQUIREMENTS OF ACI 355.4
4. INSTALL ANCHORS NO SOONER THAN 14 DAYS AFTER DELIVERY OF PRECAST COMPONENTS

TREAD TO BEAM CONNECTION
NO SCALE



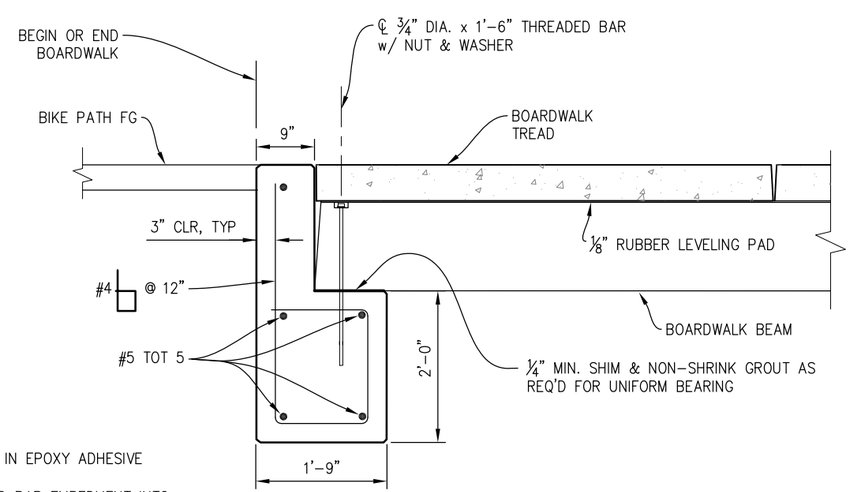
NOTE:
APPLY ANTI-GRAFFITI COATING TO SIDES AND UNDERSIDE OF BOARDWALK TREADS AT LOCATIONS WHERE BOARDWALK FG IS 3' OR GREATER ABOVE GROUND.

TYPICAL SECTION
NO SCALE



NOTE: INSTALL THREADED RODS AFTER BOARDWALK BEAMS AND TREADS ARE SET

TYPICAL PILE SECTION
NO SCALE



NOTES:
1. SET THREADED BAR IN EPOXY ADHESIVE ANCHORING SYSTEM
2. MIN. 3 ½" THREADED BAR EMBEDMENT INTO ABUTMENT
3. DRILLED HOLES SHALL BE ⅞" DIAMETER
4. COMPLETELY COVER THREADED BAR, NUT, WASHER, AND ANY ADJACENT VOIDS WITH EPOXY ADHESIVE OR NON-SHRINK GROUT
5. RAILING NOT SHOWN FOR CLARITY

BOARDWALK ABUTMENT DETAIL
NO SCALE

BOARDWALK TYPICAL DETAILS
SCALE : AS SHOWN

ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\95117 San Bernardino CL1 BP\CADD Files\Sheets\S-Sheets.dwg Layout Tab: S-9 Mar 07,2022 - 11:51am DHarrington
0 1 2
FOR REDUCED PLANS

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER
DUSTIN W. HARRINGTON
No. C71517
License Expires 12-31-23
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
REGISTERED CIVIL ENGINEER
DATE: 03/04/22

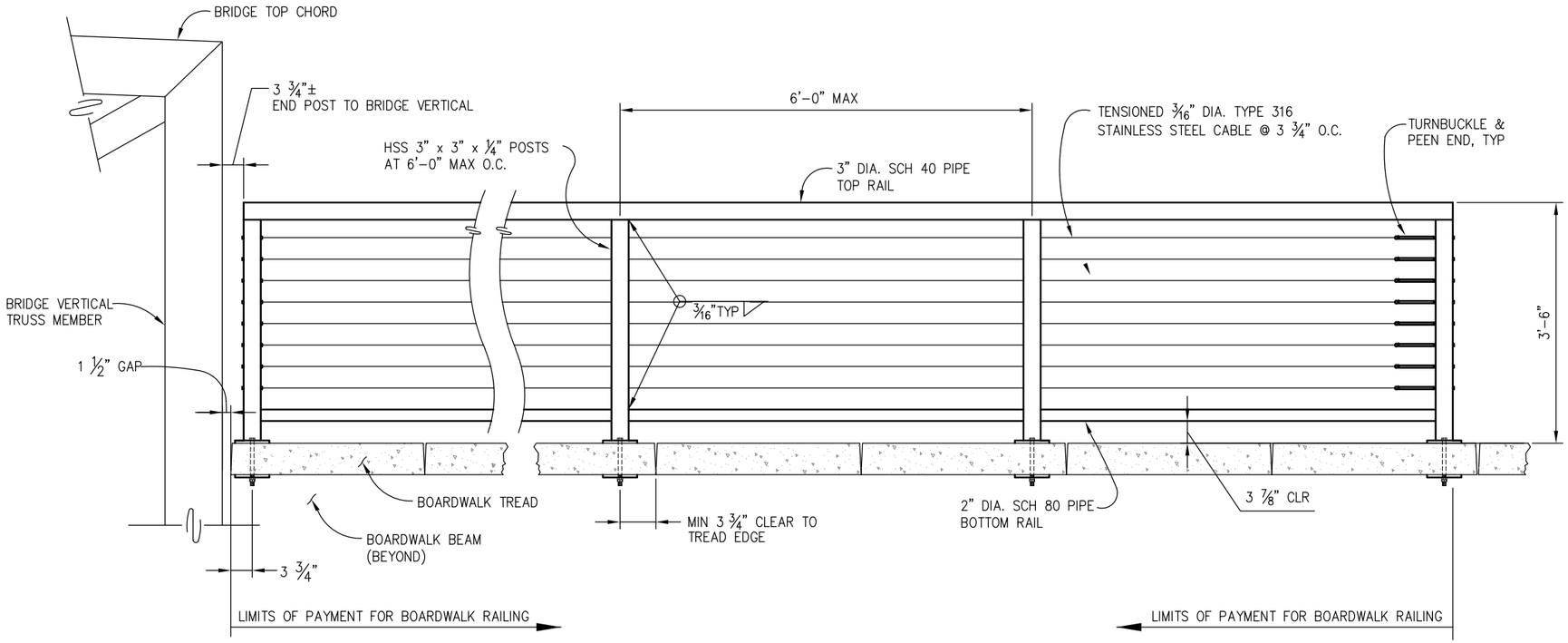
DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	3/4/22
ROAD NUMBER:	–

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

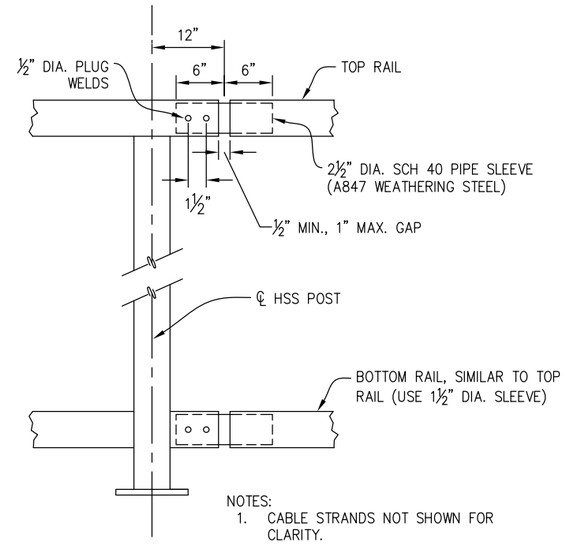
SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET **S-9**
23 OF 29
W.O. No. **95117**



TUBULAR RAILING

1" = 1'-0"

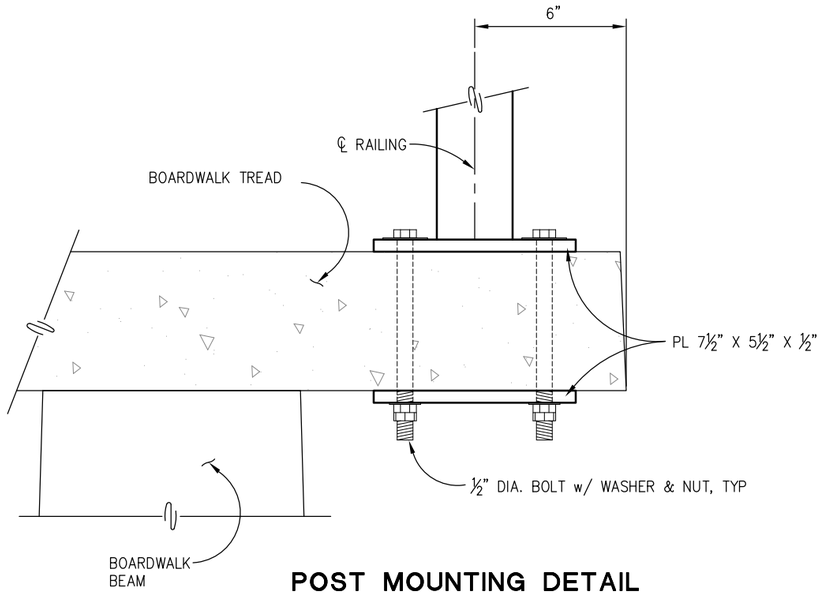


NOTES:

1. CABLE STRANDS NOT SHOWN FOR CLARITY.
2. LOCATE PLUG WELDS ON OUTSIDE FACE OF RAILING.
3. EXPANSION JOINTS TO BE SPACED EVERY 20–25 FEET, EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

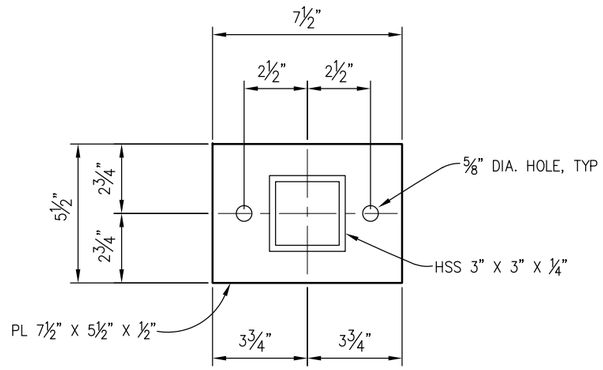
EXPANSION JOINT DETAIL

NO SCALE



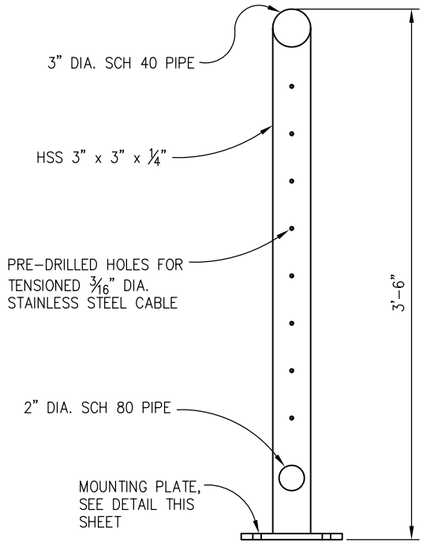
POST MOUNTING DETAIL

NO SCALE



MOUNTING PLATE DETAIL

NO SCALE



NOTES:

1. ALL HSS POSTS AND PIPE RAILS TO BE A847 WEATHERING STEEL
2. ALL HARDWARE (BOLTS, WASHERS, NUTS) TO BE ASTM F593 STAINLESS STEEL 18-8
3. TENSIONED CABLE TO BE 1x19 TYPE 316 STAINLESS STEEL

POST DETAIL

NO SCALE

BOARDWALK RAILING
SCALE : AS SHOWN

REVISION				
NUMBER	DATE	DESCRIPTION	BY	

REGISTERED PROFESSIONAL ENGINEER — DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: 03/04/22

DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	2/7/22
ROAD NUMBER:	
–	

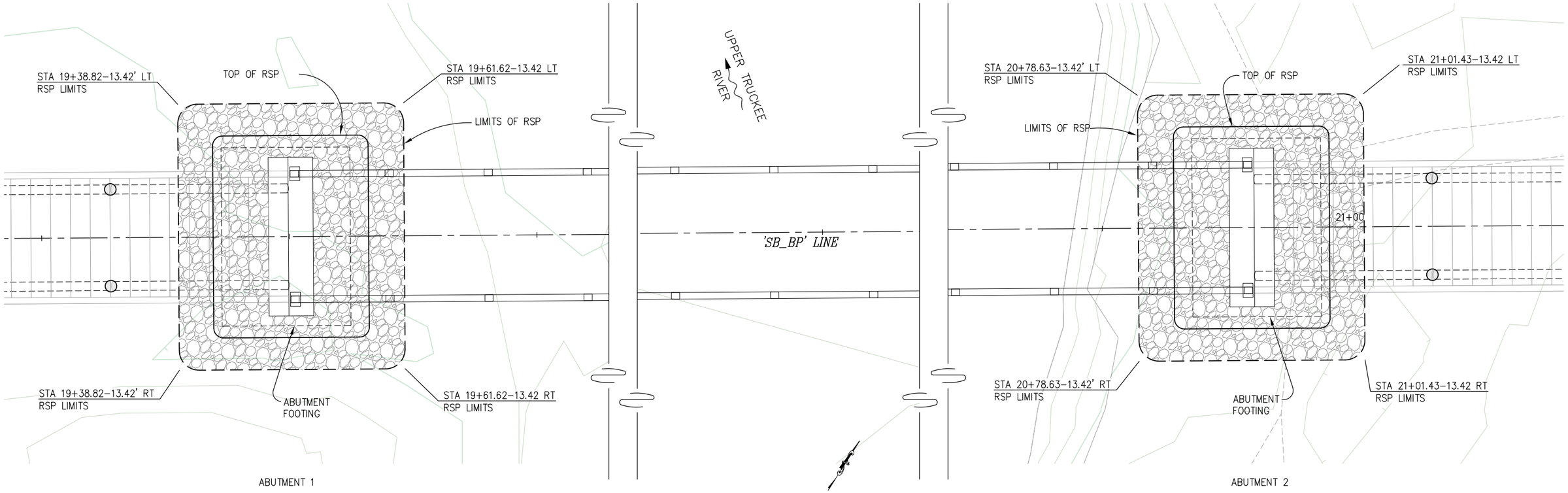
EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

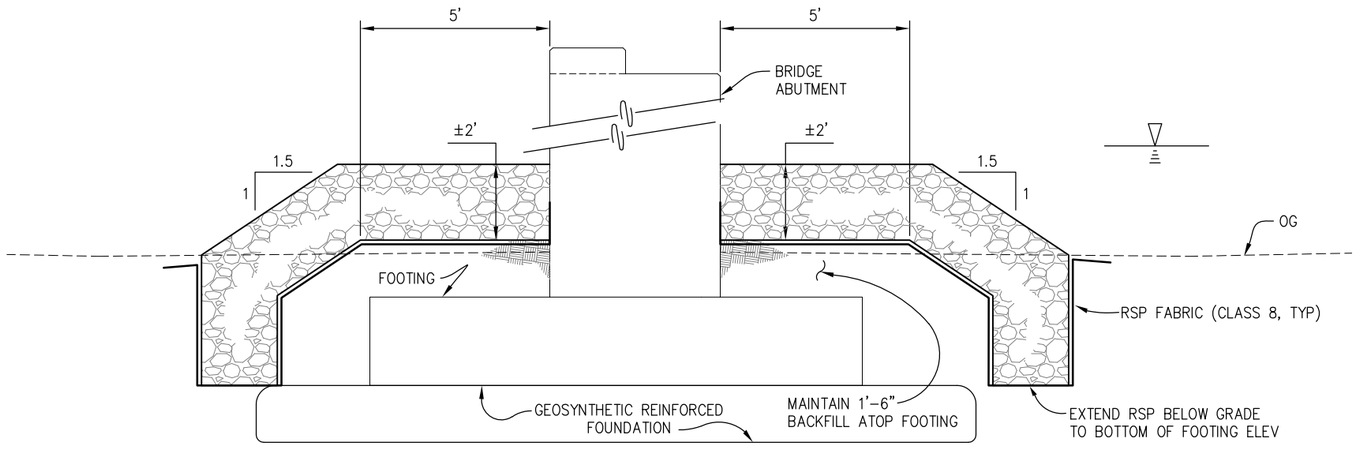
SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET **S-10** 24 OF 29

W.O. No. **95117**



PLAN
1" = 5'



LEGEND

— INDICATES LIMITS OF ROCK SLOPE PROTECTION (150 LB, CLASS III, METHOD B)

— INDICATES 100–YEAR DESIGN WATER SURFACE ELVATION (6298.20)

ROCK SLOPE PROTECTION
SCALE : AS SHOWN

ORIGINAL SCALE IS IN INCHES
Drawing name: Z:\Civil 3D Projects\95117 San Bernardino CL1 BP\CADD Files\Sheets\S-Sheets.dwg Layout Tab: S-11 Mar 03,2022 - 11:45am DHarrington

FOR REDUCED PLANS

REVISION NUMBER	DATE	DESCRIPTION	BY

DUSTIN W. HARRINGTON — No. C71517 — License Expires 12-31-23 — CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :
REGISTERED CIVIL ENGINEER
DATE: 03/04/22

DESIGNED:	DRAWN:
DWH	SGM
CHECKED:	DATE:
MSF	2/7/22
ROAD NUMBER:	
–	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO
CLASS 1 BIKE TRAIL PROJECT

SHEET
S-11
25 OF 29
W.O. No.
95117

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
3	ED	N/A	N/A	26	29

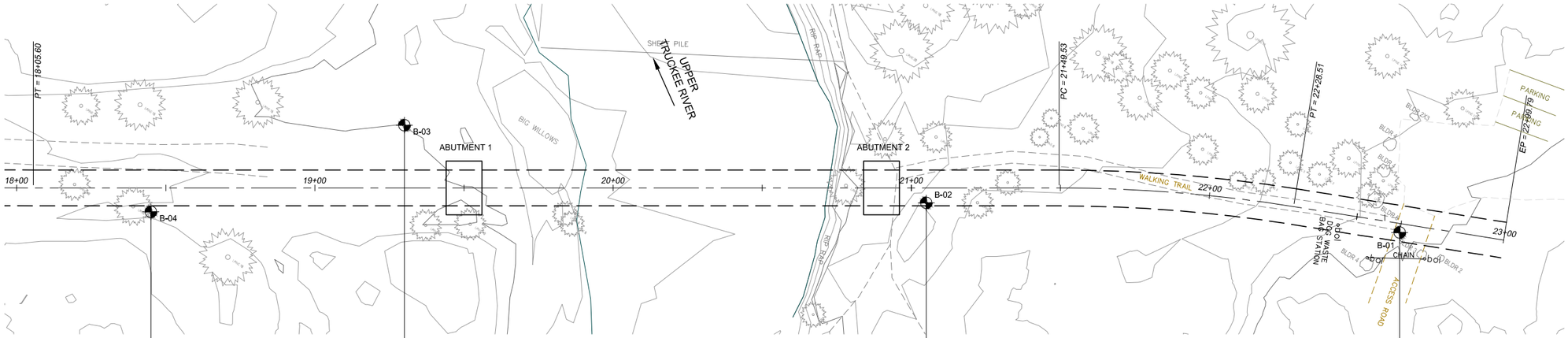
REGISTERED CIVIL ENGINEER — DATE 9-30-2021

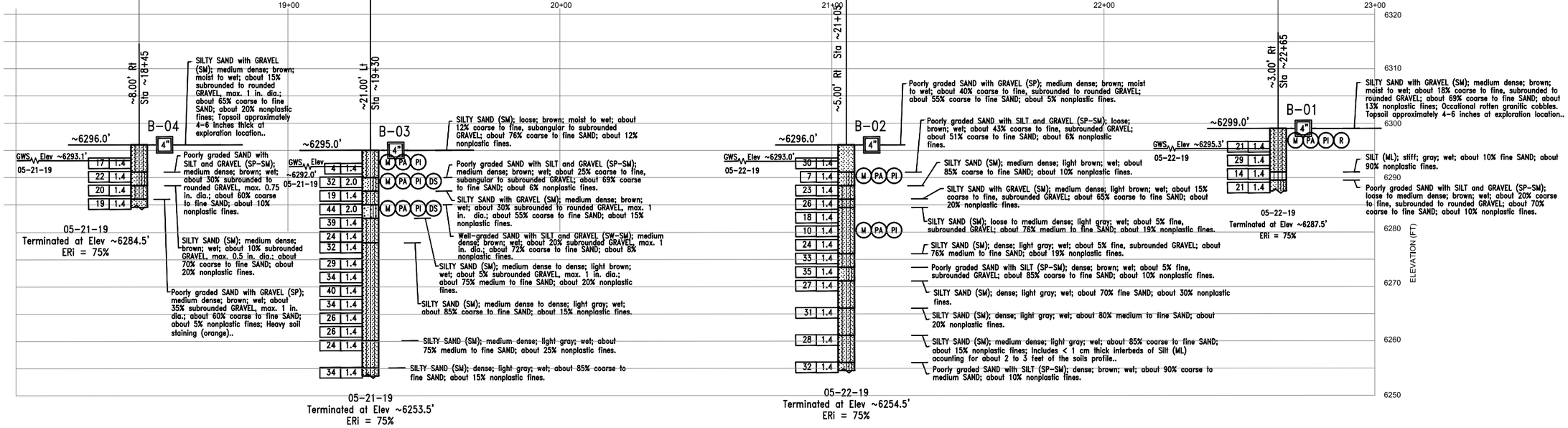
3/4/2022
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PANCRAS I. NGAM. V. IMALARAJ — No. 73484 — Exp. 12-31-2022 — CIVIL — STATE OF CALIFORNIA

Corestone Engineering, Inc.
10751 Grayslake Dr.
Reno, Nevada 89521
775-636-5916

PLAN AND PROFILE
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'





NOTES

1. FIELD CLASSIFICATION OF SOILS WAS IN ACCORDANCE WITH THE CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010), SEE LOG OF TEST BORINGS NO. 2, "SOILS LEGEND".
2. STANDARD PENETRATION TESTS WERE PERFORMED IN ACCORDANCE WITH ASTM D 1586-99 USING A HAMMER OPERATED WITH AN AUTOMATED DROP SYSTEM, DRILL RODS WERE 1 5/8-INCH DIAMETER "A"-RODS; SAMPLER WAS DRIVEN WITH STEEL LINERS.
3. "2.4 INCH SAMPLER": ID=2.4 INCH, OD=2.9 INCH. DRIVEN IN SAME MANNER AS SPT ("1.4 INCH") SAMPLER.
4. IF LABORATORY TESTS ARE NOT SHOWN AS BEING PERFORMED, THE SOIL DESCRIPTIONS PRESENTED ON THE LOTB ARE BASED SOLELY ON THE VISUAL PRACTICES DESCRIBED IN THIS MANUAL.
5. THE LENGTH OF EACH SAMPLED INTERVAL IS SHOWN GRAPHICALLY ON THE BORING LOG. WHOLE NUMBER BLOW COUNTS ("N") REPRESENT THE "STANDARD PENETRATION RESISTANCE" INTERVAL IN ACCORDANCE WITH THE CALTRANS SOIL & LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010).
6. CONSISTENCY OF SOILS SHOWN IN ( ) WHERE ESTIMATED.
7. GROUNDWATER SURFACE (GWS) ELEVATIONS IN THE BORINGS INDICATED ON THE LOG OF TEST BORING SHEETS REFLECT THE FLUID LEVEL IN THE BORINGS ON THE SPECIFIED DATE.
8. GROUNDWATER ELEVATIONS ARE SUBJECT TO SEASONAL FLUCTUATIONS AND MAY OCCUR AT HIGHER OR LOWER ELEVATIONS DEPENDING ON THE CONDITIONS AT ANY PARTICULAR TIME.
9. BORING LOCATIONS WERE MEASURED IN THE FIELD WITH RESPECT TO EXISTING FEATURES THEN CORRELATED TO THE TOPOGRAPHIC SURVEY DRAWING PROVIDED BY COUNTY OF EL DORADO.
10. EXISTING GROUND PROFILE & PROPOSED GRADE AT CENTERLINE WERE BASED ON THE PROJECT PLANS PROVIDED BY COUNTY OF EL DORADO.

SHEET S-12

VIMAL P. VIMALARAJ, P.E. G.E. DESIGN OVERSIGHT	DRAWN BY	SEAN MCMICKEN	JONATHAN PAYNE FIELD INVESTIGATION BY:	ENGINEERING SERVICES GEOTECHNICAL SERVICES	PREPARED FOR THE **COUNTY OF ELDORADO** DEPARTMENT OF PUBLIC WORKS	DIVISION OF ENGINEERING DESIGN BRANCH
SIGN OFF DATE	CHECKED BY	VIMAL P. VIMALARAJ, P.E. G.E.	DATE: 05-21-2019 & 05-22-2019			

BRIDGE NO.
POST MILES

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT

LOG OF TEST BORINGS 1

GS CIVIL LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: ENGLISH
PROJECT NUMBER & PHASE: 5012-02-1
CONTRACT NO.:
FILE => SREQUEST

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				26	29

REGISTERED CIVIL ENGINEER 9-30-2021 DATE

3/4/2022
PLANS APPROVAL DATE

Corestone Engineering, Inc.
10751 Grayslake Dr.
Reno, Nevada 89521
775-636-5916

REGISTERED PROFESSIONAL ENGINEER
PANCHALINGAM VIMALARAJ
No. 73484
Exp. 12-31-2022
CIVIL
STATE OF CALIFORNIA

GWS = Ground Water Surface

CEMENTATION	
DESCRIPTION	CRITERIA
WEAK	CRUMBLES OR BREAKS WITH HANDLING OR LITTLE FINGER PRESSURE.
MODERATE	CRUMBLES OR BREAKS WITH CONSIDERABLE FINGER PRESSURE.
STRONG	WILL NOT CRUMBLE OR BREAK WITH FINGER PRESSURE.

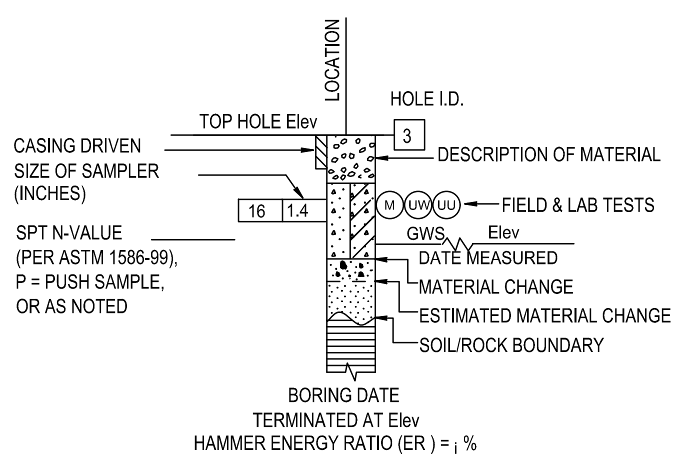
BOREHOLE IDENTIFICATION

SYMBOL	HOLE TYPE	DESCRIPTION
	A	AUGER BORING (HOLLOW OR SOLID STEM BUCKET)
	R RW RC P	ROTARY DRILLED BORING (CONVENTIONAL) ROTARY DRILLED WITH SELF-CASING WIRE-LINE ROTARY CORE WITH CONTINUOUSLY-SAMPLED, SELF-CASING WIRE-LINE ROTARY PERCUSSION BORING (AIR)
	R RC	ROTARY DRILLED DIAMOND CORE ROTARY DRILLED DIAMOND CORE, CONTINUOUSLY SAMPLED
	HD HA	HAND DRIVEN (1-INCH SOIL TUBE) HAND AUGER
	D	DYNAMIC CONE PENETRATION BORING
	CPT	CONE PENETRATION TEST (ASTM D 5778)
	O	OTHER (NOTE ON LOTB)

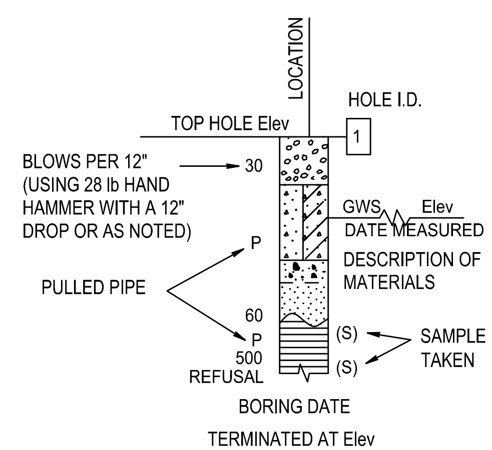
Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS

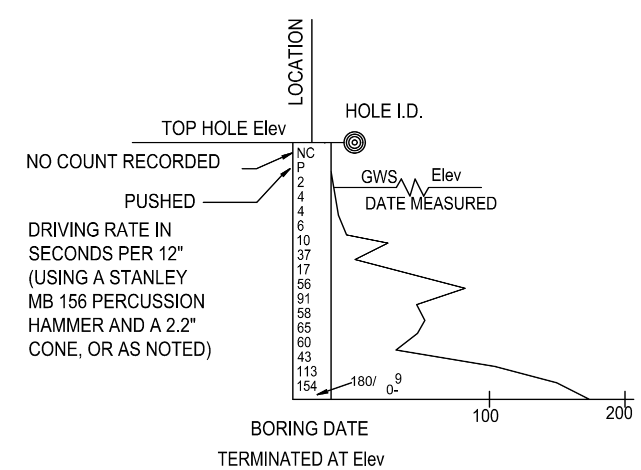
DESCRIPTION	SHEAR STRENGTH (tsf)	POCKET PENETROMETER MEASUREMENT, PP, (tsf)	TORVANE MEASUREMENT, TV, (tsf)	VANE SHEAR MEASUREMENT, VS, (tsf)
VERY SOFT	LESS THAN 0.12	LESS THAN 0.25	LESS THAN 0.12	LESS THAN 0.12
SOFT	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
MEDIUM STIFF	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
STIFF	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
VERY STIFF	1 - 2	2 - 4	1 - 2	1 - 2
HARD	GREATER THAN 2	GREATER THAN 4	GREATER THAN 2	GREATER THAN 2



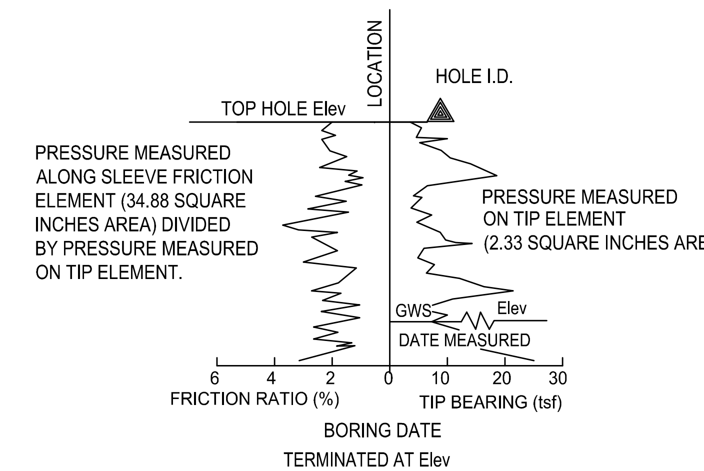
ROTARY BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING



CONE PENETRATION TEST (CPT) BORING

GROUP SYMBOLS AND NAMES

GRAPHIC/SYMBOL	GROUP NAMES	GRAPHIC/SYMBOL	GROUP NAMES
GW	WELL-GRADED GRAVEL WELL-GRADED GRAVEL WITH SAND	CL	LEAN CLAY LEAN CLAY WITH SAND LEAN CLAY WITH GRAVEL SANDY LEAN CLAY SANDY LEAN CLAY WITH GRAVEL GRAVELLY LEAN CLAY GRAVELLY LEAN CLAY WITH SAND
GP	POORLY-GRADED GRAVEL POORLY-GRADED GRAVEL WITH SAND		
GW-GM	WELL-GRADED GRAVEL WITH SILT WELL-GRADED GRAVEL WITH SILT AND SAND	CL-ML	SILTY CLAY SILTY CLAY WITH SAND SILTY CLAY WITH GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY WITH GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY WITH SAND
GW-GC	WELL-GRADED GRAVEL WITH CLAY (OR SILTY CLAY) WELL-GRADED GRAVEL WITH CLAY AND SAND (OR SILTY CLAY AND SAND)		
GP-GM	POORLY-GRADED GRAVEL WITH SILT POORLY-GRADED GRAVEL WITH SILT AND SAND	ML	SILT SILT WITH SAND SILT WITH GRAVEL SANDY SILT SANDY SILT WITH GRAVEL GRAVELLY SILT GRAVELLY SILT WITH SAND
GP-GC	POORLY-GRADED GRAVEL WITH CLAY (OR SILTY CLAY) POORLY-GRADED GRAVEL WITH CLAY AND SAND (OR SILTY CLAY AND SAND)		
GM	SILTY GRAVEL SILTY GRAVEL WITH SAND	OL	ORGANIC LEAN CLAY ORGANIC LEAN CLAY WITH SAND ORGANIC LEAN CLAY WITH GRAVEL SANDY ORGANIC LEAN CLAY SANDY ORGANIC LEAN CLAY WITH GRAVEL GRAVELLY ORGANIC LEAN CLAY GRAVELLY ORGANIC LEAN CLAY WITH SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND		
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL WITH SAND	OL	ORGANIC SILT ORGANIC SILT WITH SAND ORGANIC SILT WITH GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT WITH GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT WITH SAND
SW	WELL-GRADED SAND WELL-GRADED SAND WITH GRAVEL		
SP	POORLY-GRADED SAND POORLY-GRADED SAND WITH GRAVEL	CH	FAT CLAY FAT CLAY WITH SAND FAT CLAY WITH GRAVEL SANDY FAT CLAY SANDY FAT CLAY WITH GRAVEL GRAVELLY FAT CLAY GRAVELLY FAT CLAY WITH SAND
SW-SM	WELL-GRADED SAND WITH SILT WELL-GRADED SAND WITH SILT AND GRAVEL		
SW-SC	WELL-GRADED SAND WITH CLAY (OR SILTY CLAY) WELL-GRADED SAND WITH CLAY AND GRAVEL (OR SILTY CLAY AND GRAVEL)	MH	ELASTIC SILT ELASTIC SILT WITH SAND ELASTIC SILT WITH GRAVEL SANDY ELASTIC SILT SANDY ELASTIC SILT WITH GRAVEL GRAVELLY ELASTIC SILT GRAVELLY ELASTIC SILT WITH SAND
SP-SM	POORLY-GRADED SAND WITH SILT POORLY-GRADED SAND WITH SILT AND GRAVEL		
SP-SC	POORLY-GRADED SAND WITH CLAY (OR SILTY CLAY) POORLY-GRADED SAND WITH CLAY AND GRAVEL (OR SILTY CLAY AND GRAVEL)	OH	ORGANIC FAT CLAY ORGANIC FAT CLAY WITH SAND ORGANIC FAT CLAY WITH GRAVEL SANDY ORGANIC FAT CLAY SANDY ORGANIC FAT CLAY WITH GRAVEL GRAVELLY ORGANIC FAT CLAY GRAVELLY ORGANIC FAT CLAY WITH SAND
SM	SILTY SAND SILTY SAND WITH GRAVEL		
SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL	OH	ORGANIC ELASTIC SILT ORGANIC ELASTIC SILT WITH SAND ORGANIC ELASTIC SILT WITH GRAVEL SANDY ORGANIC ELASTIC SILT SANDY ORGANIC ELASTIC SILT WITH GRAVEL GRAVELLY ORGANIC ELASTIC SILT GRAVELLY ORGANIC ELASTIC SILT WITH SAND
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND WITH GRAVEL		
PT	PEAT	OL/OH	ORGANIC SOIL ORGANIC SOIL WITH SAND ORGANIC SOIL WITH GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL WITH GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL WITH SAND
	COBBLES COBBLES AND BOULDERS BOULDERS		

FIELD AND LABORATORY TESTING

- (C) CONSOLIDATION (ASTM D2435)
- (CL) COLLAPSE POTENTIAL (ASTM D4546)
- (CP) COMPACTION CURVE (CTM 216)
- (CR) CORROSIVITY TESTING (CTM 643, CTM 422, CTM 417)
- (CU) CONSOLIDATED UNDRAINED TRIAXIAL (ASTM D4767)
- (DS) DIRECT SHEAR (ASTM D3080)
- (EI) EXPANSION INDEX (ASTM D4829)
- (M) MOISTURE CONTENT (ASTM D2216)
- (OC) ORGANIC CONTENT-% (ASTM D2974)
- (P) PERMEABILITY (CTM 220)
- (PA) PARTICLE SIZE ANALYSIS (ASTM D422)
- (PI) PLASTICITY INDEX (AASHTO T 90) LIQUID LIMIT (AASHTO T 89)
- (PL) POINT LOAD INDEX (ASTM D5731)
- (PM) PRESSURE METER
- (R) R-VALUE (CTM 301)
- (SE) SAND EQUIVALENT (CTM 217)
- (SG) SPECIFIC GRAVITY (AASHTO T 100)
- (SL) SHRINKAGE LIMIT (ASTM D4943)
- (SW) SWELL POTENTIAL (ASTM D4546)
- (UC) UNCONFINED COMPRESSION-SOIL (ASTM D2166)
UNCONFINED COMPRESSION-ROCK (ASTM D7012 - METHOD C)
- (UU) UNCONSOLIDATED UNDRAINED TRIAXIAL (ASTM D2850)
- (UW) UNIT WEIGHT (ASTM D7263 - METHOD B)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
3	ED	N/A	N/A	28	29

REGISTERED CIVIL ENGINEER — DATE 9-30-2021

PLANS APPROVAL DATE 3/4/2022

REGISTERED PROFESSIONAL ENGINEER — PANCHALINGAM V. VIMALARAJ — No. 73484 — Exp. 12-31-2022 — CIVIL — STATE OF CALIFORNIA

Corestone Engineering, Inc.
10751 Grayslake Dr.
Reno, Nevada 89521
775-636-5916

APPARENT DENSITY OF COHESIONLESS SOILS

DESCRIPTION	SPT N (BLOWS / 12 INCHES)
VERY LOOSE	0 - 5
LOOSE	5 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	GREATER THAN 50

MOISTURE

DESCRIPTION	CRITERIA
DRY	NO DISCERNABLE MOISTURE
MOIST	MOISTURE PRESENT, BUT NO FREE WATER
WET	VISIBLE FREE WATER

PERCENT OR PROPORTION OF SOILS

DESCRIPTION	CRITERIA
TRACE	PARTICLES ARE PRESENT BUT ESTIMATED TO BE LESS THAN 5%
FEW	5% - 10%
LITTLE	15% - 25%
SOME	30% - 45%
MOSTLY	50% - 100%

PARTICLE SIZE

DESCRIPTION		SIZE
BOULDER		GREATER THAN 12"
COBBLE		3" - 12"
GRAVEL	COARSE	3/4" - 3"
	FINE	1/5" - 3/4"
SAND	COARSE	1/16" - 1/5"
	MEDIUM	1/64" - 1/16"
	FINE	1/300" - 1/64"
SILT AND CLAY		LESS THAN 1/300"

SHEET S-14

VIMAL P. VIMALARAJ, P.E. G.E. DESIGN OVERSIGHT SIGN OFF DATE	DRAWN BY	SEAN MCMICKEN	JONATHAN PAYNE FIELD INVESTIGATION BY: DATE: 05-21-2019 & 05-22-2019	ENGINEERING SERVICES GEOTECHNICAL SERVICES	PREPARED FOR THE **COUNTY OF ELDORADO** DEPARTMENT OF PUBLIC WORKS	DIVISION OF ENGINEERING DESIGN BRANCH	BRIDGE NO. POST MILES
	CHECKED BY	VIMAL P. VIMALARAJ, P.E. G.E.					

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT

LOG OF TEST BORINGS 3

GS CIVIL LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: ENGLISH
PROJECT NUMBER & PHASE: 5012-02-1
CONTRACT NO.:

FILE => $REQUEST

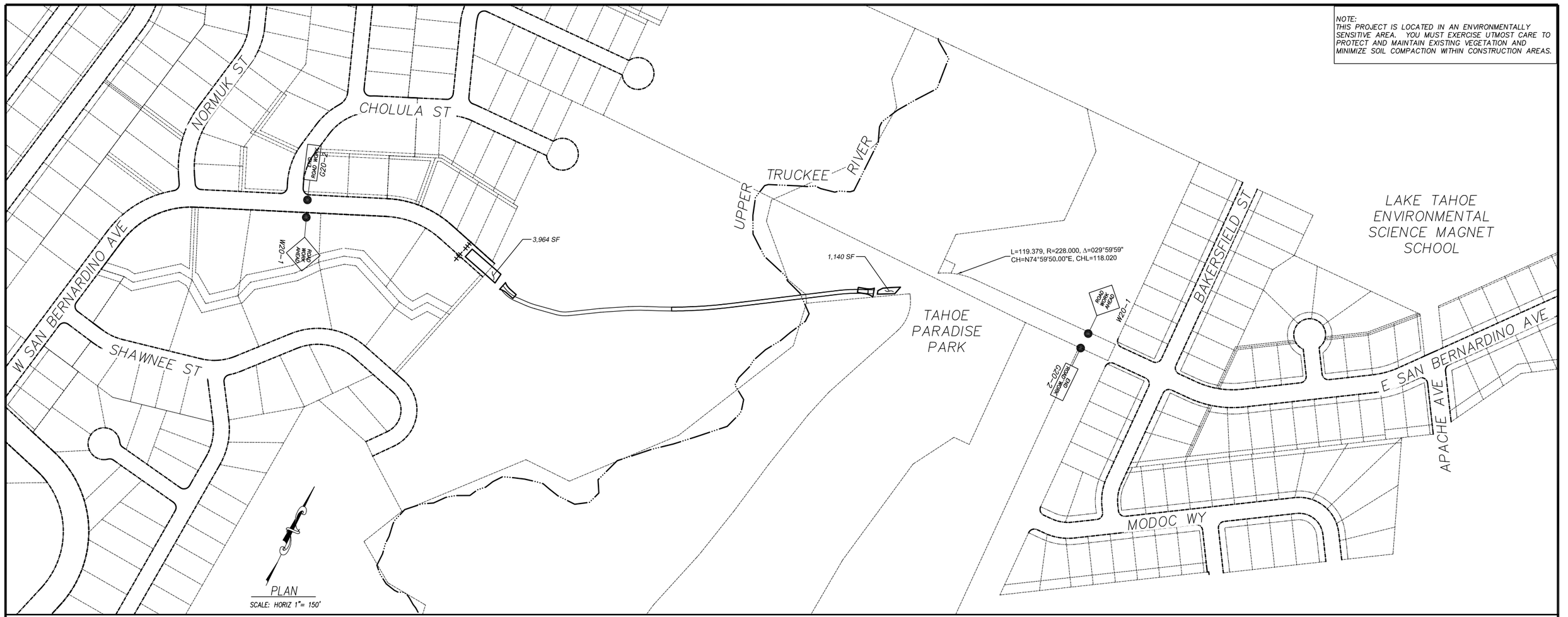
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
				28	29

DATE PLOTTED =>

TIME PLOTTED =>

NOTE:
THIS PROJECT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA. YOU MUST EXERCISE UTMOST CARE TO PROTECT AND MAINTAIN EXISTING VEGETATION AND MINIMIZE SOIL COMPACTION WITHIN CONSTRUCTION AREAS.



PLAN
SCALE: HORIZ 1"= 150'

LEGEND

- PROPOSED STAGING AREA WITH SF
- APPROXIMATE SIGN LOCATION
- G20-2 "END ROAD WORK" SIGN
- W20-1 "ROAD WORK AHEAD" SIGN
- TRAFFIC BARRICADE

NOTES:

1. THIS PLAN HAS BEEN PREPARED AS A GUIDE FOR YOU IN PREPARATION OF A COMPLETE TRAFFIC CONTROL PLAN AND TO AID IN YOUR PLANNING FOR STAGING/STORAGE OF MATERIALS AND EQUIPMENT. YOUR TRAFFIC CONTROL PLAN WILL INCLUDE DETAILED CONTROLS INCLUDING FLAGGERS, LANE CLOSURES, AND SIGNS FOR ALL ITEMS OF ROAD WORK WHICH WILL REQUIRE ALTERATION OF EXISTING TRAFFIC PATTERNS. THE LEGEND SHOWS THE LIST OF SIGNS TO BE REQUIRED AS A MINIMUM.
2. YOUR TRAFFIC CONTROL PLAN WILL ADDRESS EACH PHASE OF CONSTRUCTION (e.g. PIPE PLACEMENT, STRUCTURES ADJACENT TO AND/OR AFFECTING THE ROADWAY, ETC.) AND WILL CONFORM TO PART 6 OF THE CALIFORNIA MUTCD ENTITLED "TEMPORARY TRAFFIC CONTROL" AND THE SPECIAL PROVISIONS. YOUR TRAFFIC CONTROL PLAN WILL ALSO INCLUDE ALL SIGNING REQUIRED AT INTERSECTING STREETS WITHIN THE AREA THAT WILL REQUIRE TRAFFIC CONTROL.
3. WHEN LANE CLOSURES ARE REMOVED AND ROADS ARE OPEN TO PUBLIC TRAFFIC, ALL DRIVEWAYS WITHIN THE WORK AREA WILL BE ACCESSIBLE AND OPERATIONAL.
4. YOU WILL NOT EXCAVATE MORE THAN CAN BE INSTALLED AND BACKFILLED IN ONE WORKING DAY.
5. YOUR ATTENTION IS DIRECTED TO THE SWPPP, TEMPORARY EROSION CONTROL SHEETS, REVEGETATION PLAN SHEET, AND THE SPECIAL PROVISIONS REGARDING TEMPORARY EROSION CONTROL REQUIREMENTS FOR STAGING AREAS.
6. STAGING AREAS SHOWN ARE FOR THE TEMPORARY STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT WHICH ARE TO BE USED ON THIS PROJECT.

Drawing name: \\DOAdata5\TD-SLT-Engineering\CIVIL 3D PROJECTS\95117\Engineering\MPLAN\SB_T-1.dwg

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

REVISION NUMBER	DATE	DESCRIPTION	BY

REGISTERED PROFESSIONAL ENGINEER DONALDO S. PALAMBAN No. C66083 Exp. 06-30-22 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF :

REGISTERED CIVIL ENGINEER — DATE: MARCH 04, 2022

DESIGNED:	DRAWN:
KIS	KIS
CHECKED:	DATE:
DSP	02/2022
ROAD NUMBER:	

EL DORADO COUNTY CALIFORNIA

COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO CLASS 1 BIKE TRAIL PROJECT
TRAFFIC CONTROL PLAN

SHEET T-1 29 OF 29
CONTRACT NO. 5971
CIP No. 95117