

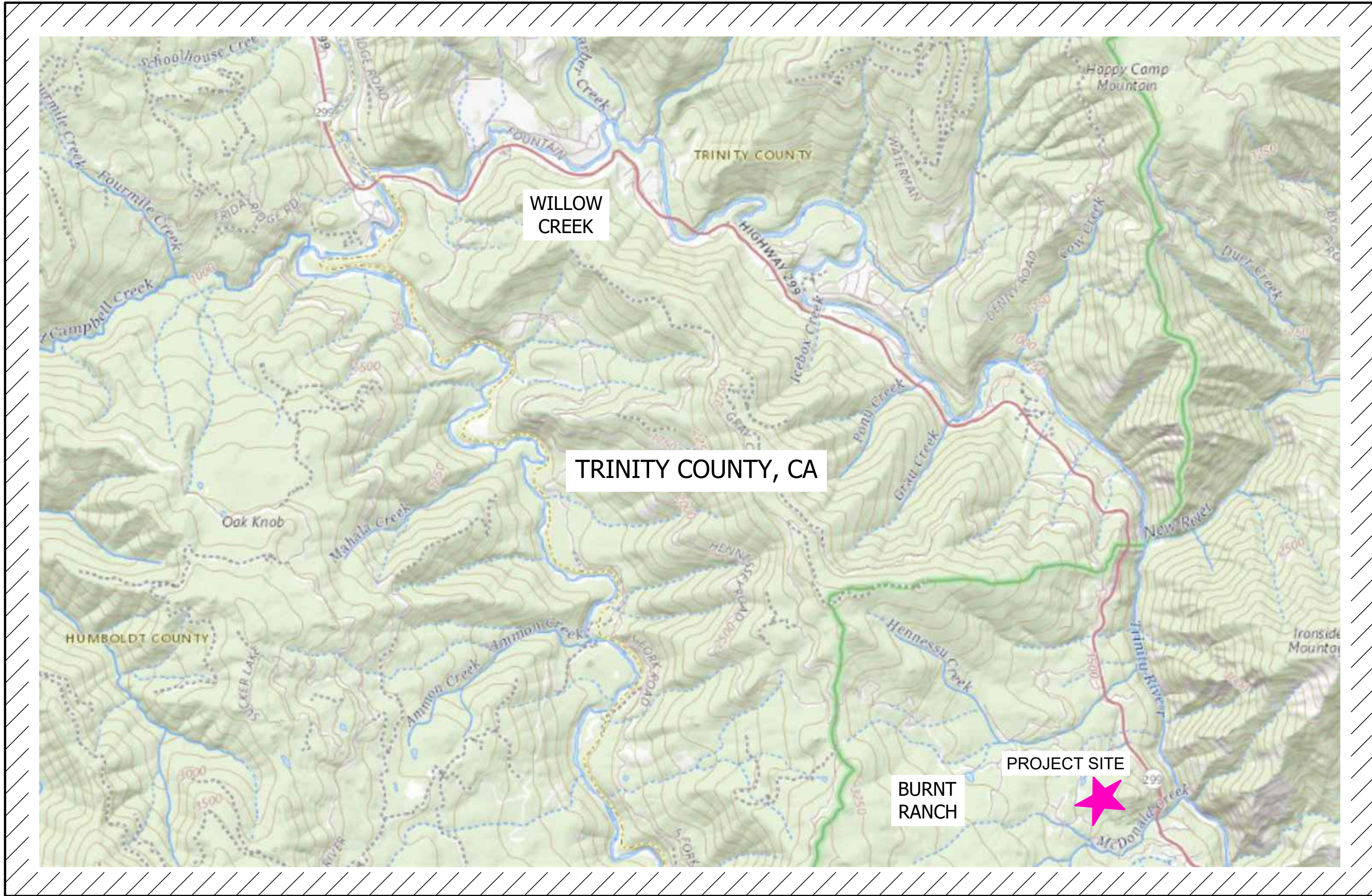
LEGEND

	PROPERTY LINE
	CENTER LINE
	EXISTING FOGLINE STRIPE
	EXISTING EDGE OF PAVEMENT
	NEW ACCESS DRIVEWAY CENTERLINE
	NEW EDGE OF PAVEMENT
	EXISTING GROUND CONTOUR (10-FT INTERVAL)
	EXISTING GROUND CONTOUR (1-FT INTERVAL)
	EXISTING ACCESS DRIVEWAY
	NEW DRIVEWAY
	EXISTING CULVERTS
	NEW CULVERTS
	PAVED WATERWAY
	RIP RAP
	FLOW LINE OF DITCH OR WATERWAY
	SURFACE FLOW DIRECTION
	NEW FENCE LINE
	EXISTING FENCE LINE
	EXISTING WATERLINE
	NEW WATERLINE
	EXISTING SEWER LINE
	NEW SEWER LINE
	ROADSIDE SIGNS
	CUT SLOPE
	FILL SLOPE
	EXISTING UTILITY POLE
	EXISTING UTILITY POLE W/ GUY ANCHOR(S)
	EXISTING WATER VALVE
	NEW WATER VALVE
	EXISTING ELECTRIC BOX
	EXISTING PEDASTAL
	NEW PEDASTAL
	EXISTING WATER METER
	NEW WATER METER
	EXISTING FIRE HYDRANT
	NEW FIRE HYDRANT
	NEW ELECTRIC TRANSFORMER
	EXISTING STREET LIGHT
	NEW STREET LIGHT
	EXISTING TREE
	EXISTING TREES/BRUSH AREA

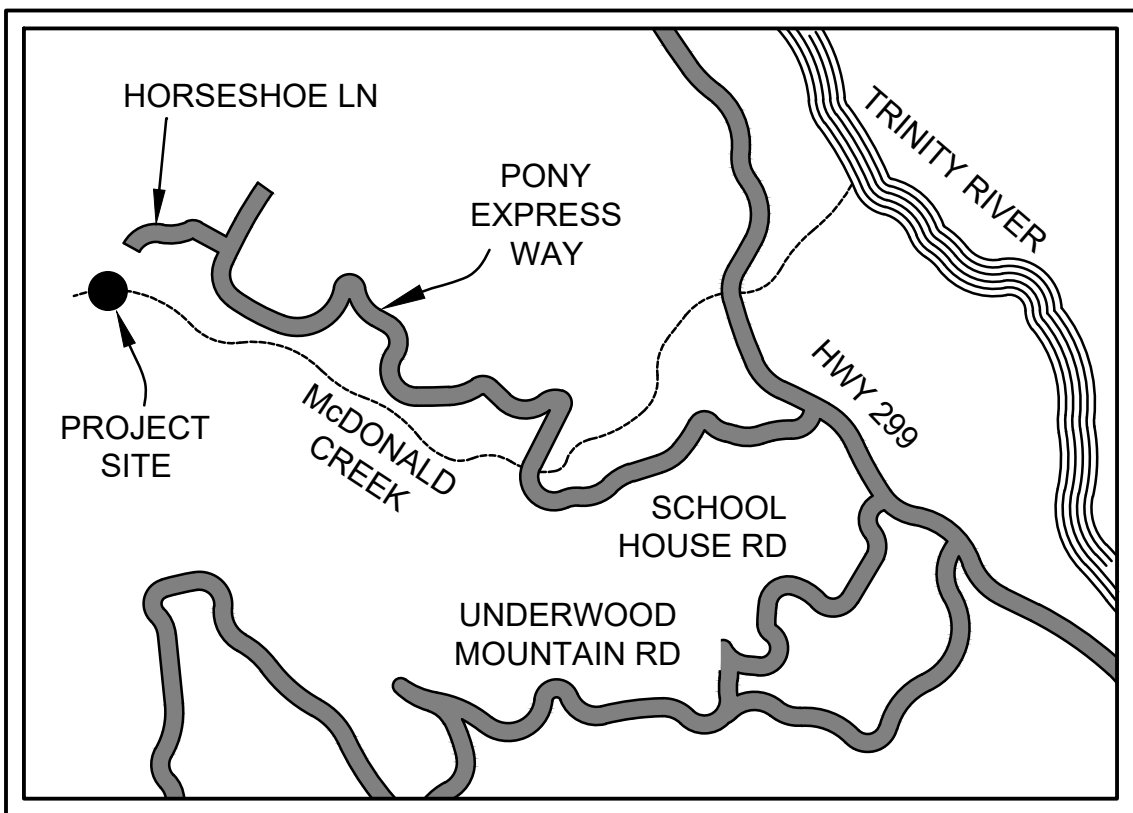
BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT

for:

BURNT RANCH ESTATES MUTUAL WATER COMPANY
BURNT RANCH, TRINITY COUNTY, CALIFORNIA



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SHEET INDEX

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C4	EXISTING CONDITIONS - UPPER TANK SITE
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C8	PROPOSED CONDITION LOWER TANK SITE
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C25	WATER STORAGE TANK DETAILS
C26	WATER STORAGE TANK DETAILS
C27	WATER STORAGE TANK DETAILS
C28	WATER DETAILS
C29	WATER DETAILS
C30	WATERLINE ALIGNMENT DATA

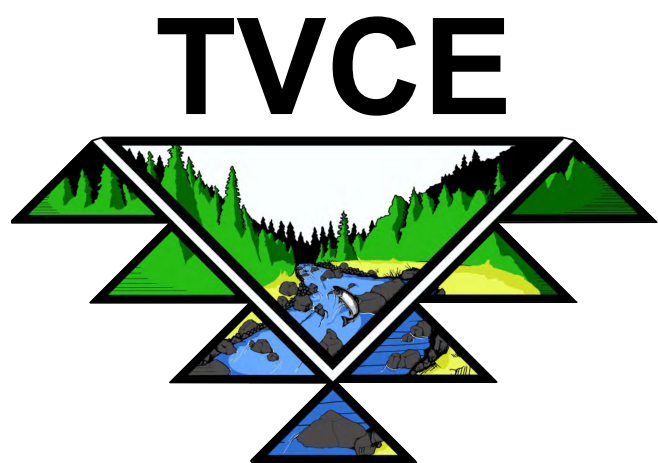
ABBREVIATIONS

AC	ASPHALT CONCRETE	FM	FLOW METER	R	RADIUS, RANGE
ACP	ASBESTOS CEMENT PIPE	FNC	FENCE	RD	ROAD
AD	AREA DRAIN, ALGEBRAIC DIFFERENCE IN GRADE	G	GAS SERVICE	RB	REBAR
AG	ABOVE GROUND	GD	GRADE	RCE	REGISTERED CIVIL ENGINEER
AGG.	AGGREGATE	GND	GROUND	RCP	REINFORCED CONCRETE PIPE
APPROX.	APPROXIMATE	GV	GATE VALVE	RSE	REINFORCED SOIL EMBANKMENT
B	BELL FITTING	H	HORIZONTAL	RSP	ROCK SLOPE PROTECTION
BIT	BITUMINOUS	HCCSD	HAPPY CAMP COMMUNITY SERVICES DISTRICT	R/W	RIGHT OF WAY
BK	BACK	HCS	HAPPY CAMP SANITARY DISTRICT	RD	ROAD
BLD'G	BUILDING	HD	HEAD	RT	ROUTE, RIGHT
BOW	BOTTOM OF WALL	HDPE	HIGH DENSITY POLYETHYLENE PIPE	RW	RAW WATER
BVCE	BEGIN VERTICAL CURVE ELEVATION	HORIZ	HORIZONTAL	S	SLOPE, SOUTH
BVCS	BEGIN VERTICAL CURVE STATION	HS	HIGH STRENGTH	SB	SET BACK
BW	BACKWASH	HM	HUMBOLDT MERIDIAN	SD	STORM DRAIN
C	CIVIL	HWY	HIGHWAY	SEC	SECTION
CB	CATCH BASIN	INT	INTERSECTION	S.F.	SQUARE FEET
C.I.P.	CAST IN PLACE	INT-X	INTERSECTION	SHT	SHEET
CL	CLASS	INV	INVERT	SHLDR	SHOULDER
CL	CENTERLINE	IRR	IRRIGATION WATER LINE	SIM	SIMILAR
CL	CENTERLINE	JB	ELECTRICAL JUNCTION BOX	SL	STREET LIGHT
CONC.	CONCRETE	K	VERTICAL CURVE COEFFICIENT	SO	SQUARE
COR.	CONTRACTING OFFICERS' REPRESENTATIVE	L	LENGTH	SR	STATE ROUTE
CMP	CORRUGATED METAL PIPE	L.F.	LINEAL FEET	STA	STATION
CP	CONTROL POINT	LS	LICENSED SURVEYOR, LUMP SUM	STD	STANDARD
D	DELTA	LT	LEFT	ST	SEPTIC TANK
DIA	DIAMETER	MAX.	MAXIMUM	SW	SURFACE WASH
DIP	DUCTILE IRON PIPE	MIN.	MINIMUM	T, TEL	TELEPHONE
D/W, DWY	DRIVEWAY	MJ	MECHANICAL JOINT	TBD	TO BE DETERMINED
DET	DETAIL	MOD	MODULAR, MODIFY	TC	TOP OF CONCRETE, TOP OF CURB
DH	DEPARTMENT OF HEALTH	MP	MECHANICALLY STABILIZED EARTH	THD	THREAD, THREADED
DI	DRAINAGE INLET	MSE	MECHANICALLY STABILIZED EARTH	TOW	TOP OF WALL
DIA	DIAMETER	MTN	MOUNTAIN	TP	TOP OF ASPHALT PAVEMENT
DIM, DIMS	DIMENSIONS	NGS	NATIONAL GEODETIC SURVEY	TYP	TYPICAL
(E), EXIST	EXISTING	(N)	NEW	TVCE	TRINITY VALLEY CONSULTING ENGINEERS
EA	EASTING, EAST, ELECTRIC	N	NORTHING, NORTH	TW	TOP OF CONC. WALK
EG	EASTING, EAST, ELECTRIC	NO	NUMBER	UG	UNDERGROUND
EL, ELEV	ELEVATION	NTS	NOT TO SCALE	UGV	UNDERGROUND VOLTAGE LINE
EP	EDGE OF PAVEMENT	OC	ON CENTER	VAR	VARIABLE
ET	ELECTRICAL TRANSFORMER	OHU	OVERHEAD UTILITY LINES	VC	VERTICAL CURVE
EVCE	END VERTICAL CURVE ELEVATION	OUT	OUTLET	VERT	VERTICAL
EVCS	END VERTICAL CURVE STATION	PC	POINT OF BEGINNING	VOLTAGE	VOLTAGE
EXC	EXCAVATION	PERF	PERFORATED	W	WEST, WATER, WIDTH
F/C	FACE OF CURB	PI	POINT OF INTERSECTION	W/O	WITHOUT
FES	FLARED END SECTION	PIL	PROPERTY LINE	WI	WITH
FG	FINISH GRADE	POB	POINT OF BEGINNING	WM	WATER METER
FL	FLOW LINE, FOGLINE	POLY	POLYMER	WP	WEATHER PROOF
FLG	FLANGE FITTING	PP	POWER POLE/UTILITY POLE	WVR	WATER VALVE
		PRC	POINT OF REVERSE CURVE	YR	YEAR
		PRV	PRESSURE RELIEF VALVE		
		PT	POINT OF TANGENCY		
		PVC	POINT OF VERTICAL CURVE		
		PVI	POINT OF VERTICAL INTERSECTION		

NOTICE:
NOT LESS THAN 48-HOUR NOTICE IS REQUIRED PRIOR TO STARTING ANY EXCAVATION NEAR UNDERGROUND UTILITIES BELONGING TO CITY & PACIFIC GAS & ELECTRIC. CALL (USA) UNDERGROUND SERVICE ALERT 1-800-227-2600

PRELIMINARY

Plans BY:
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 WALNUT WAY/P.O. BOX 1567
WILLOW CREEK, CA 95573
PHONE (530) 629-3000
FAX (530) 629-3011

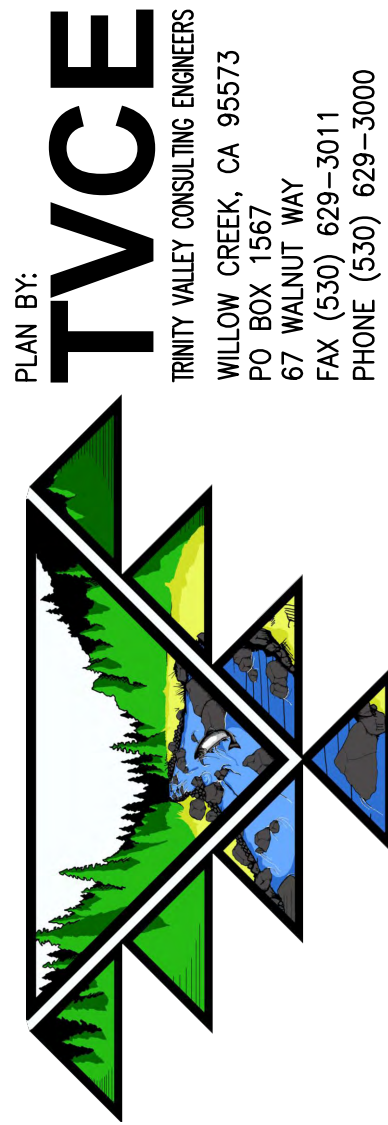
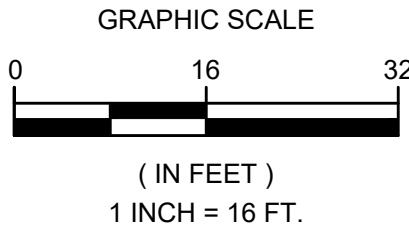
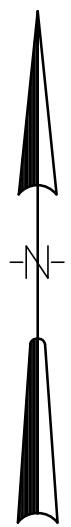
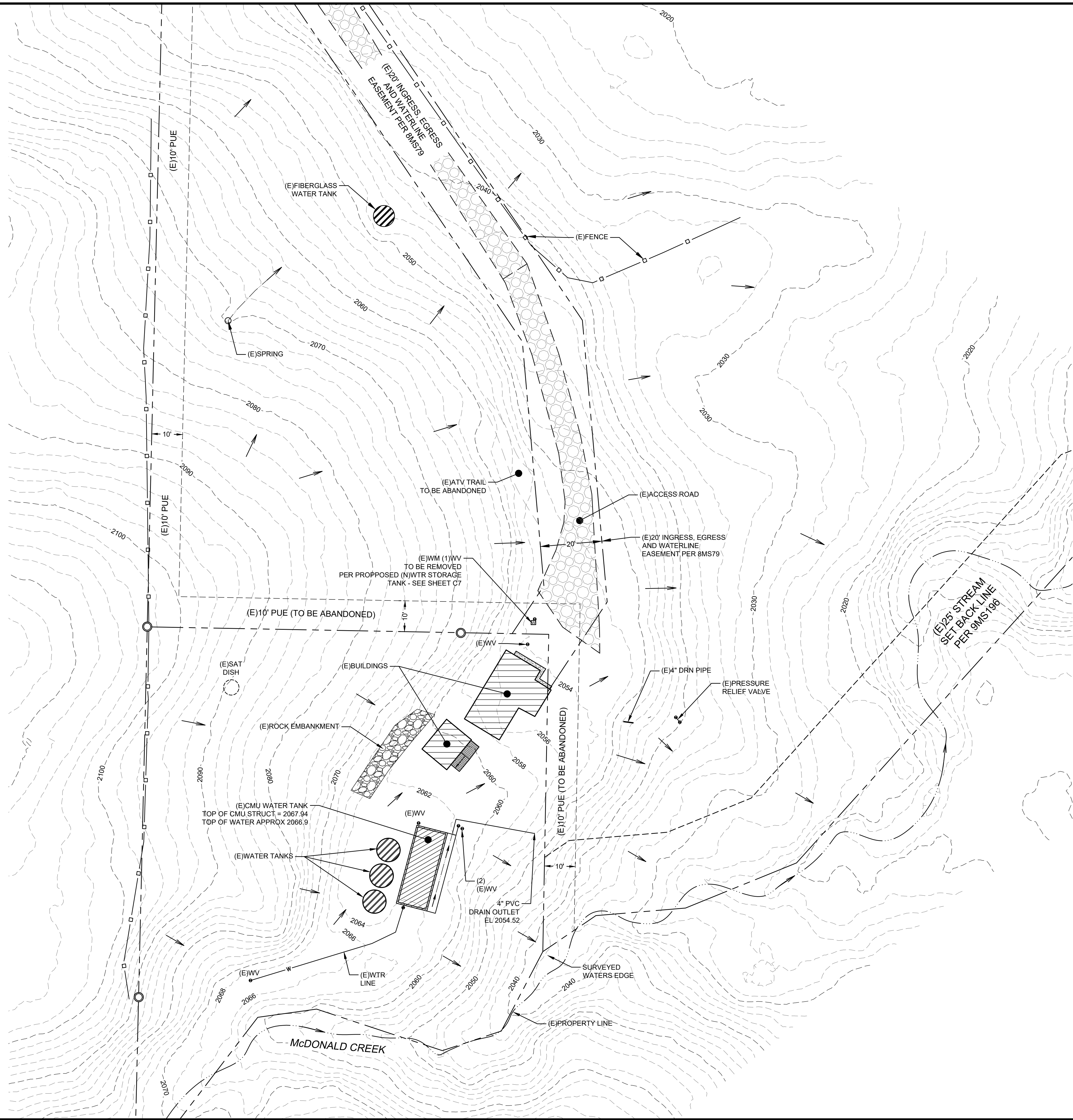


Project No. 1754

March 27, 2024

SHEET C1

C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C4 EXISTING CONDITIONS UPPER SITE.DWG



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PRELIMINARY

REVISIONS

BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

EXISTING CONDITIONS
UPPER TANK SITE

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

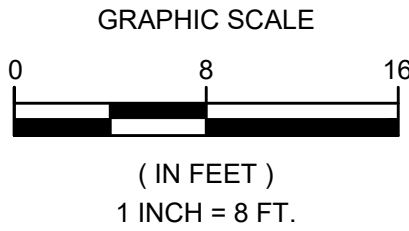
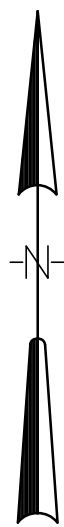
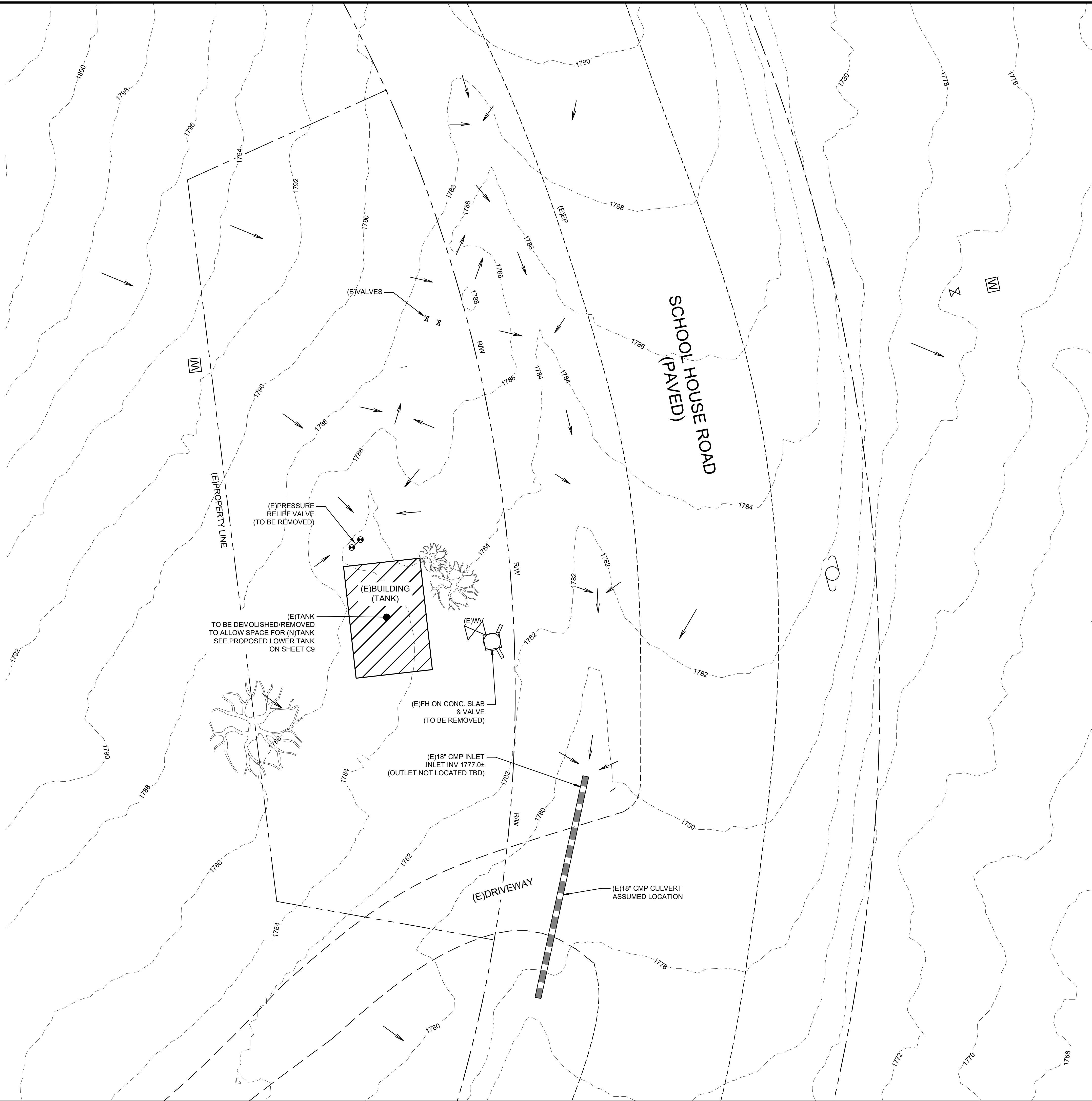
10/2/2023

SCALE: 1" = 16'

PROJECT NO: 1754

C4

C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C5 EXISTING CONDITIONS LOWER SITE.DWG



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MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

EXISTING CONDITIONS
LOWER TANK SITE

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

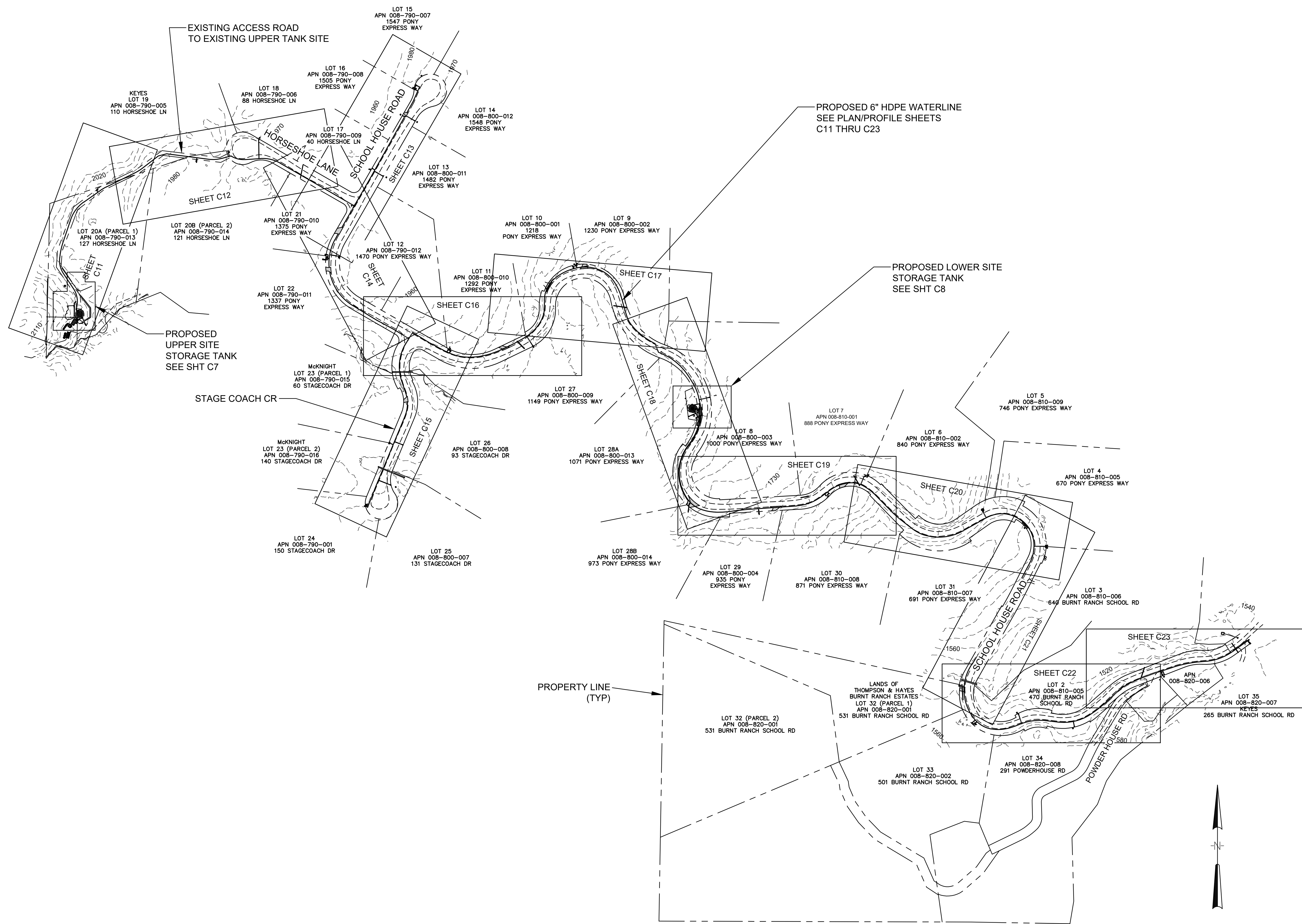
DATE: 10/2/2023

SCALE: 1" = 8'

PROJECT NO: 1754

C5

C:\TVC\PROJECTS\BURNED RANCH WATER\DWG\06 PROPOSED SITE OVERVIEW.DWG



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BURNED RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNED RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNED RANCH, CA 95527

PROPOSED
SITE OVERVIEW

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

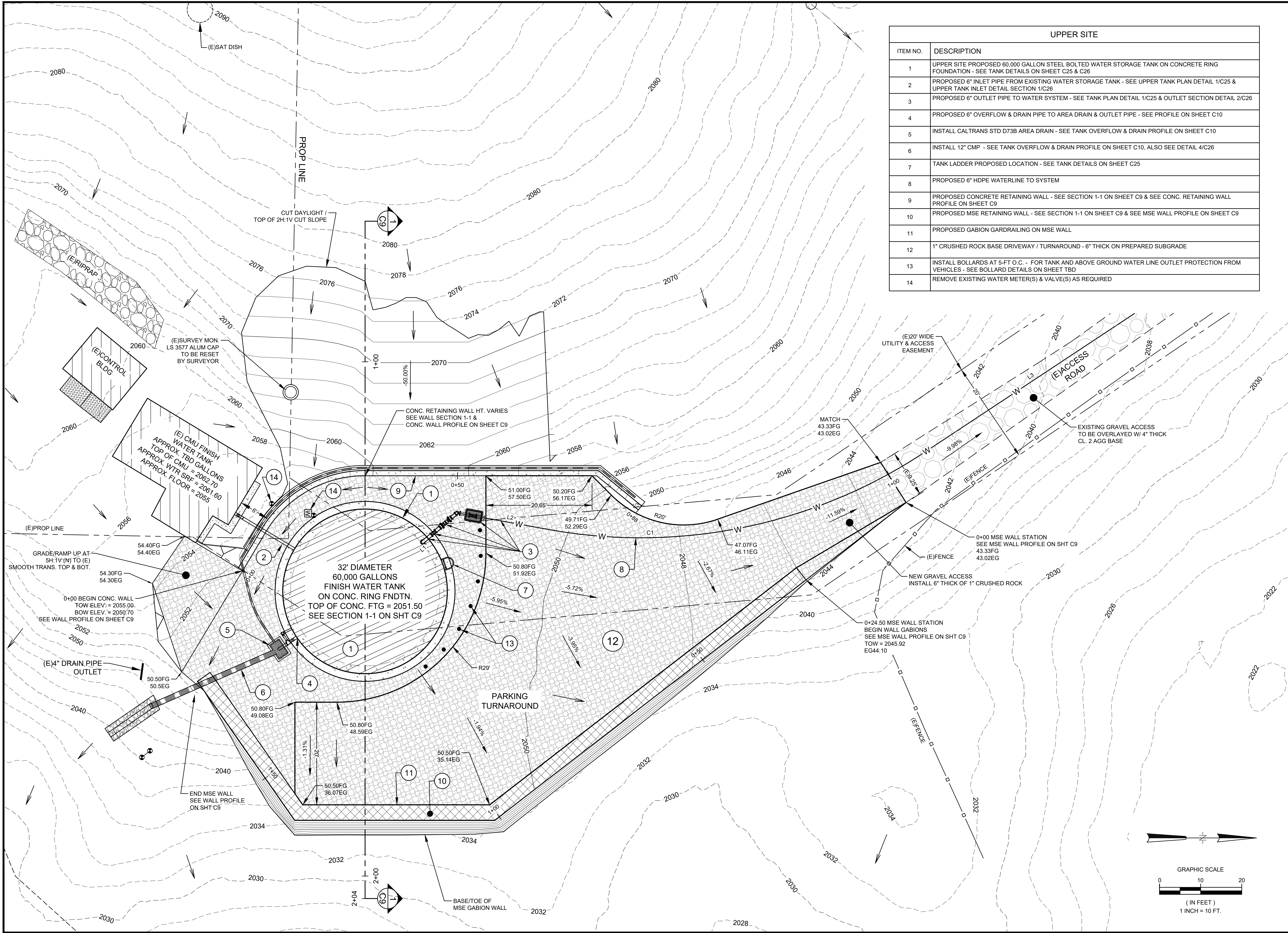
DATE: 3/26/24

SCALE: 1" = 200'

PROJECT NO: 1754

C6

C:\TVCE PROJECTS\BURNED RANCH WATER\DWG\7 PROPOSED CONDITIONS UPPER SITE.DWG



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MUTUAL WATER COMPANY
PO BOX 102
BURNED RANCH, CA 95527

PROPOSED CONDITIONS
UPPER SITE

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

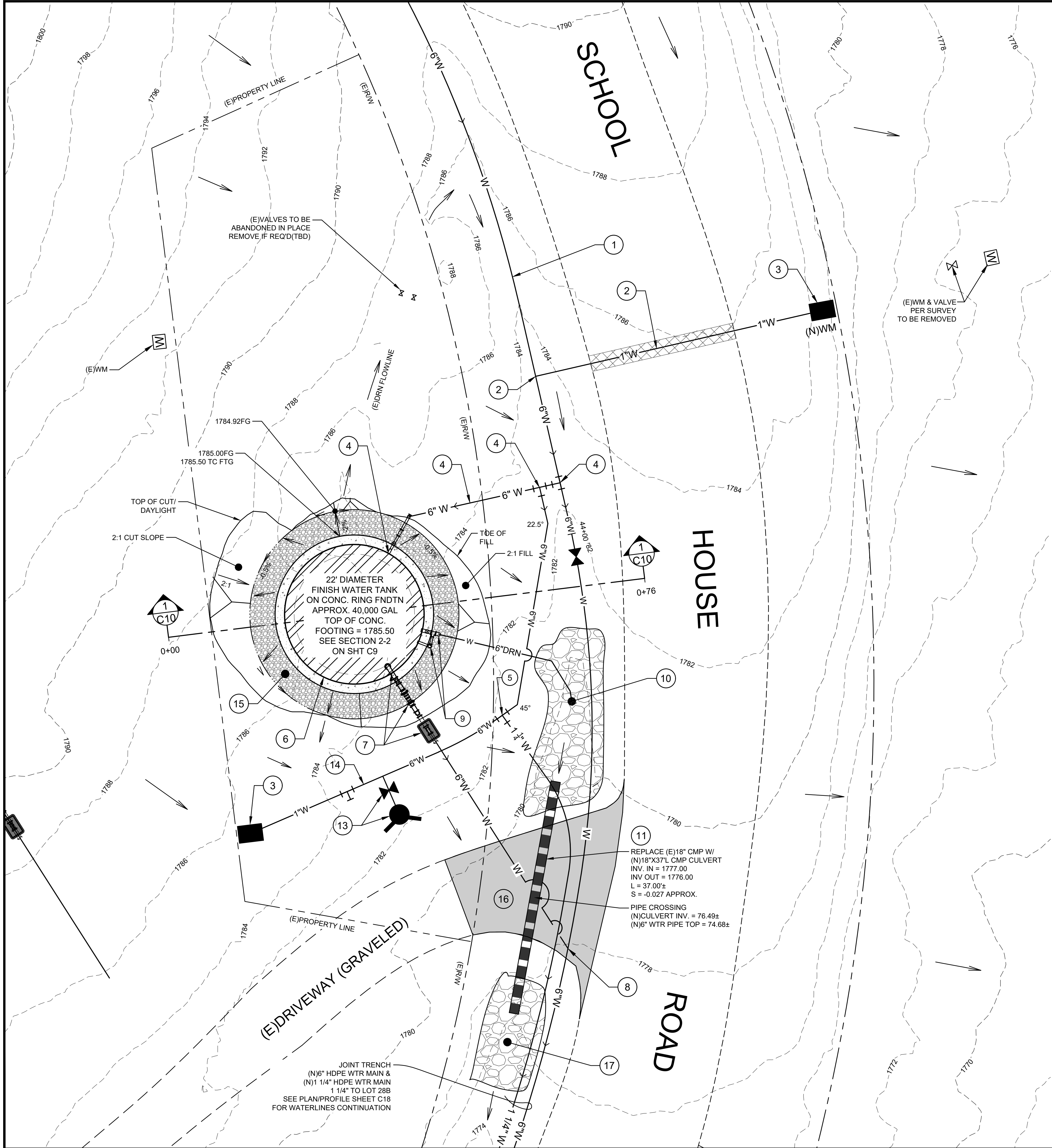
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SCALE: 1" = 10'

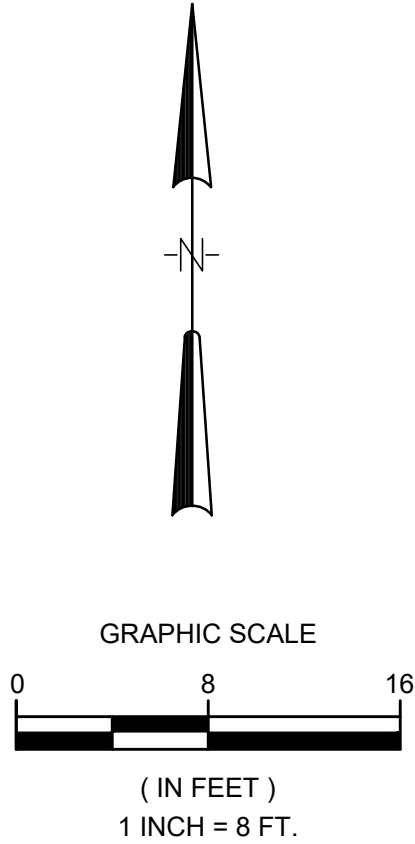
PROJECT NO: 1754

C7

C:\TVC\PROJECTS\BURNT RANCH WATER\DWG\C8 PROPOSED CONDITIONS LOWER SITE.DWG



LOWER SITE	
ITEM NO.	DESCRIPTION
1	(N)6" HDPE WATER MAIN FROM UPPER TANK INSTALL PER TRENCH DETAIL 1/C29
2	(N)WATER SERVICE CONNECTION - 1" HDPE WATER LINE TO (N)WATER METER PER DETAIL 4/C28 REPAIR/REPLACE (E)ASPHALT PER DETAIL 2/C29
3	(N)1" WATER METER PER DETAIL 4/C28
4	(N)6"x6"x6" HDPE TEE BRANCH FROM UPPER TANK TO (N)LOWER TANK INLET SEE TANK INLET PIPING DETAILS ON SHEET C25 & 26
5	(N)6"x 1 1/4" HDPE TEE BRANCH TO LOT 28B SEE SHEET C18 FOR WTR LINE EXTENSION TO LOT28B
6	(N)40,000 GALLON STEEL WATER STORAGE TANK ON CONC. RING FOUNDATION SEE GRADING SECTION 1-1 ON SHEET C9, SEE TANK DETAILS ON SHEETS C25 THRU C27
7	6" TANK OUTLET - SEE DETAIL 2/C26
8	6"x6"x6" HDPE 45° WYE CONNECTION - SEE WATER LINE RUN #1 PROFILE STA 44+47.96 FOR INVERT. WATER MAIN INVERT ELEV. = 1774.01
9	TANK DRAIN & OVERFLOW SEE DETAIL 4/C26
10	(N)TANK DRAIN OUTLET AT (E)ROADSIDE DITCH - CONSTRUCT ROCK DISSIPATOR FROM OUTLET TO (N)SD CULVERT - 7-YD OF 3-INCH TO 8-INCH ROCK OVER GEOTEXTILE FABRIC
11	REPLACE (E)18" CMP W/ (N)18" CMP CULVERT - LOCATE AS SHOWN TO AVOID (N)WATERLINE INSTALL
12	(N)6" HDPE WATER LINE & INSTALL VALVE & FIRE HYDRANT - SEE FIRE HYDRANT DETAIL 3/C29
13	(N)6" HDPE WATER LINE & INSTALL VALVE & FIRE HYDRANT - SEE FIRE HYDRANT DETAIL 3/C29
14	WATER LINE TO (N)METER REDUCE FROM 6" HDPE TO 1" HDPE BEYOND FH CONNECTION
15	ROCK ARMOR AROUND NEW TANK FOOTING - 1" CRUSHED ROCK 6" THICK OVER GEOTXTILE FABRIC ALL AROUND TANK FOOTING
16	EXCAVATE EXISTING DRIVEWAY 4" DEEP AT AREA SHOWN, COMPACT (E)GROUND PER ENGINEER & BACKFILL WITH (N)CLASS 2 AGG. BASE COMPACTED TO 90% TO MATCH (E)GROUND, PLACE APPROX. 445 SQ. FT. OF (N)2" THICK HMA PAVING OVER PREPARED SUBGRADE & GRAVEL BASE
17	(N)18" CULVERT OUTLET CONSTRUCT ROCK OUTLET PROTECTION - 2 CU. YD. OF 3-INCH TO 8-INCH ROCK OVER GEOTEXTILE FABRIC



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MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED CONDITIONS
LOWER TANK SITE

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

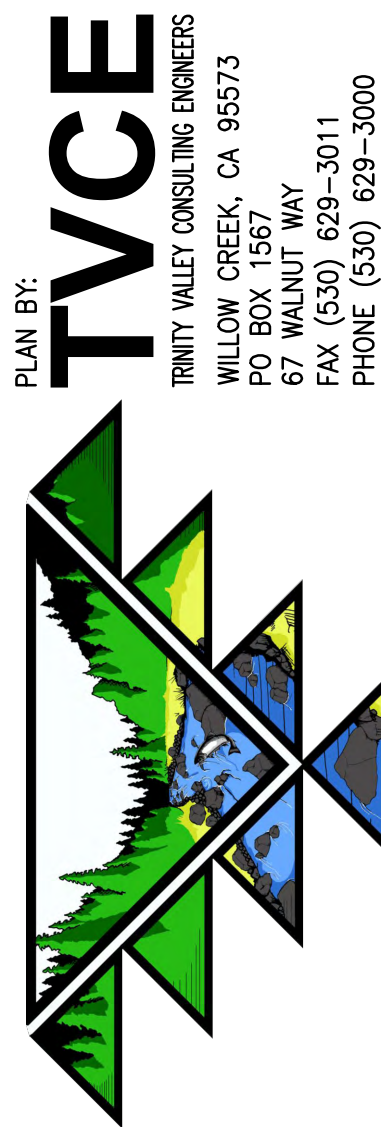
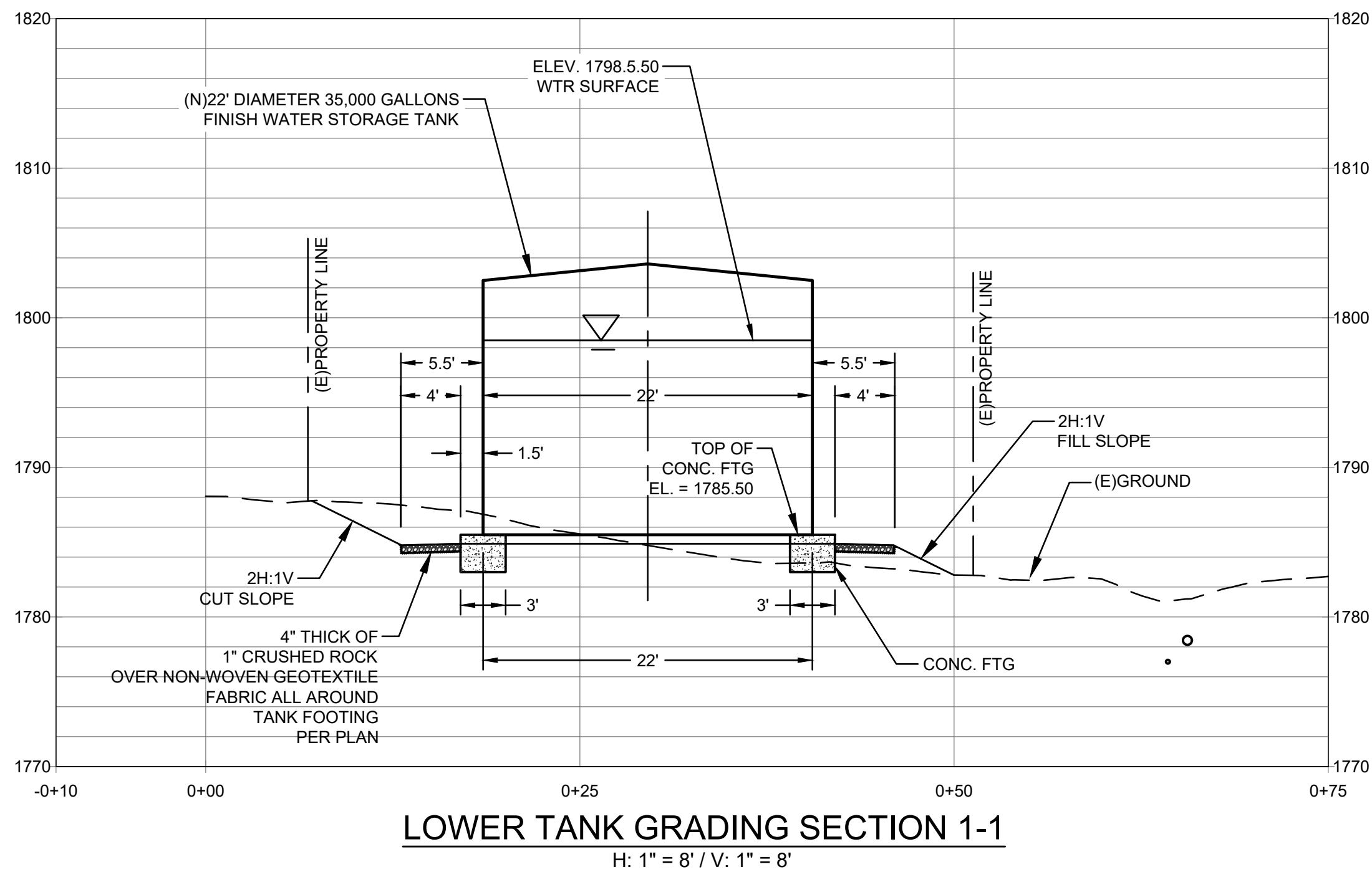
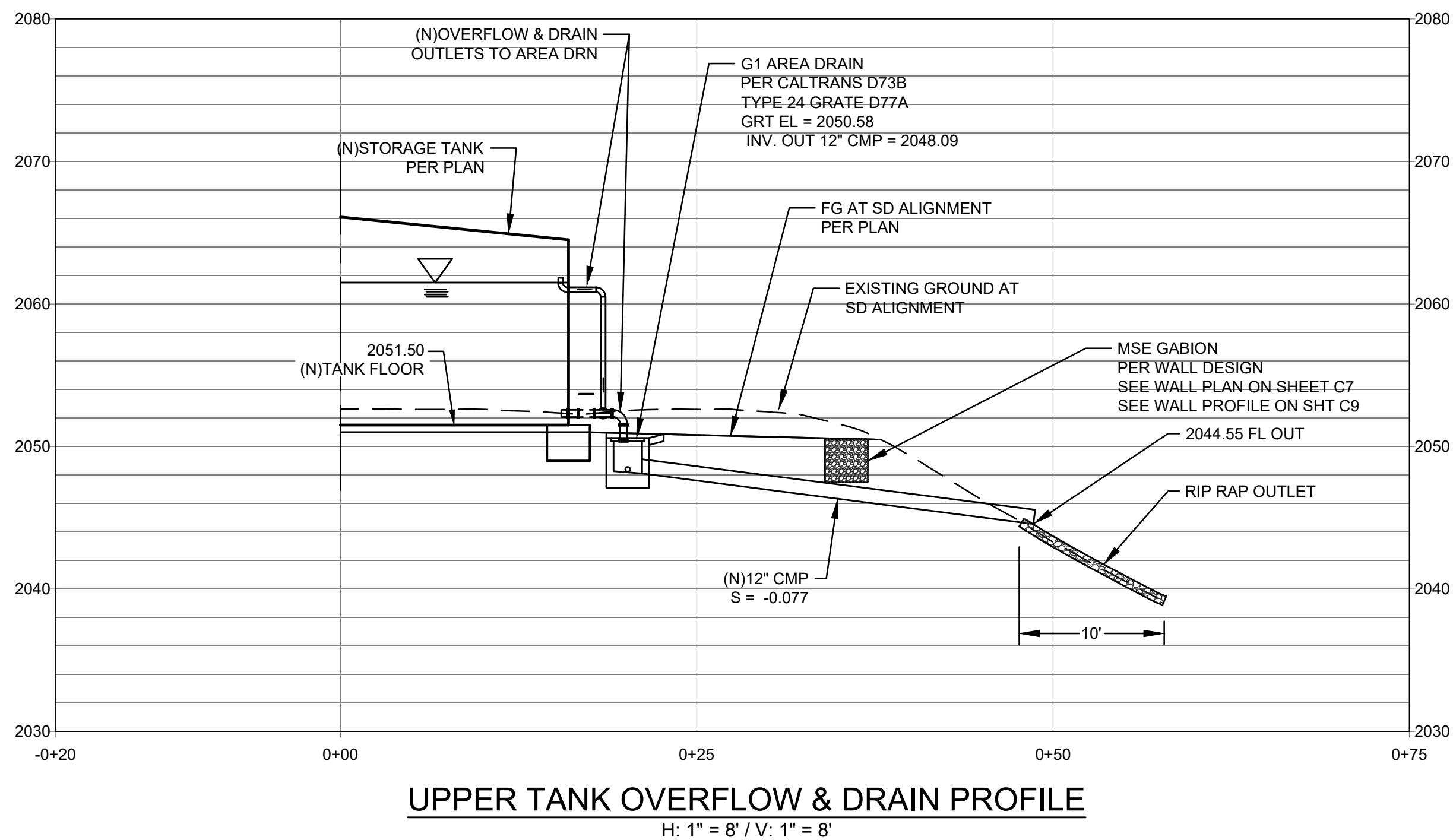
DATE: 10/2/2023

SCALE: 1" = 8'

PROJECT NO: 1754

C8

C:\TVCE PROJECTS\BURN RANCH WATER\DWG\C10 GRADING PROFILES.DWG



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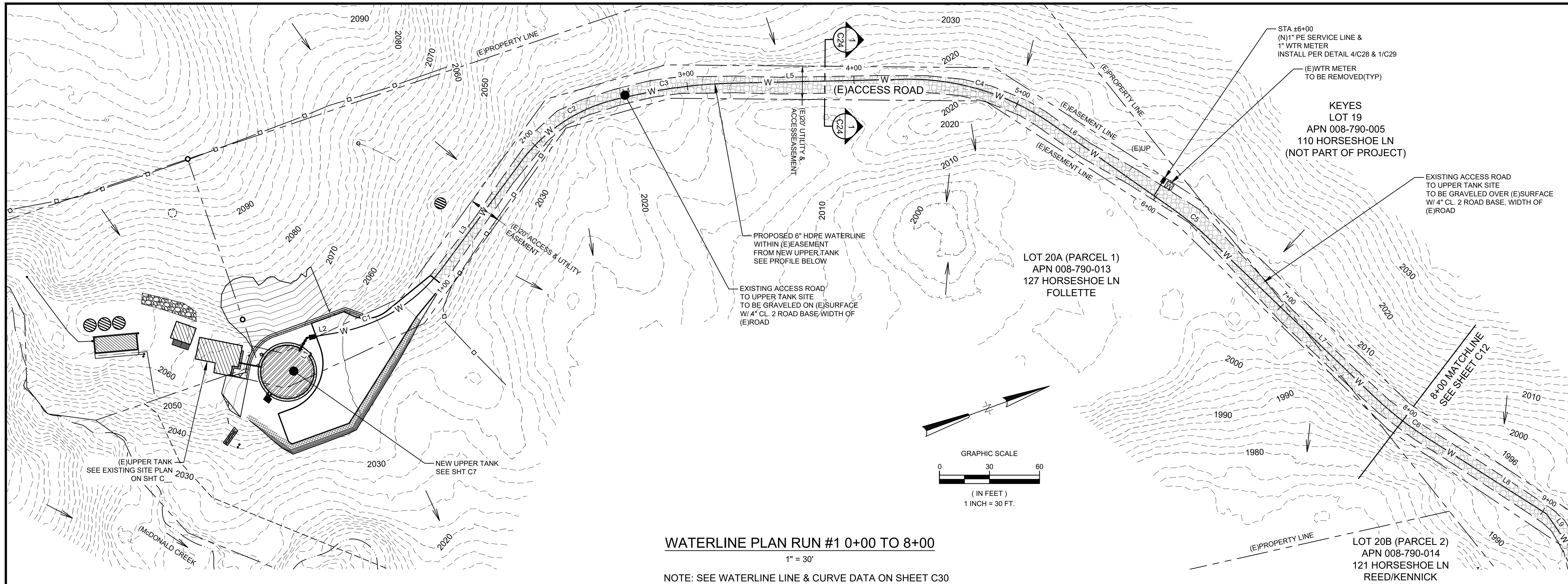
BURN RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURN RANCH MUTUAL
WATER COMPANY
PO BOX 102
BURN RANCH, CA 95527

GRADING PROFILES

DESIGN BY: EK
DRAWN BY: SG
CHECKED BY: EK
DATE: 3/26/2024
SCALE: AS SHOWN
PROJECT NO: 1754

C10

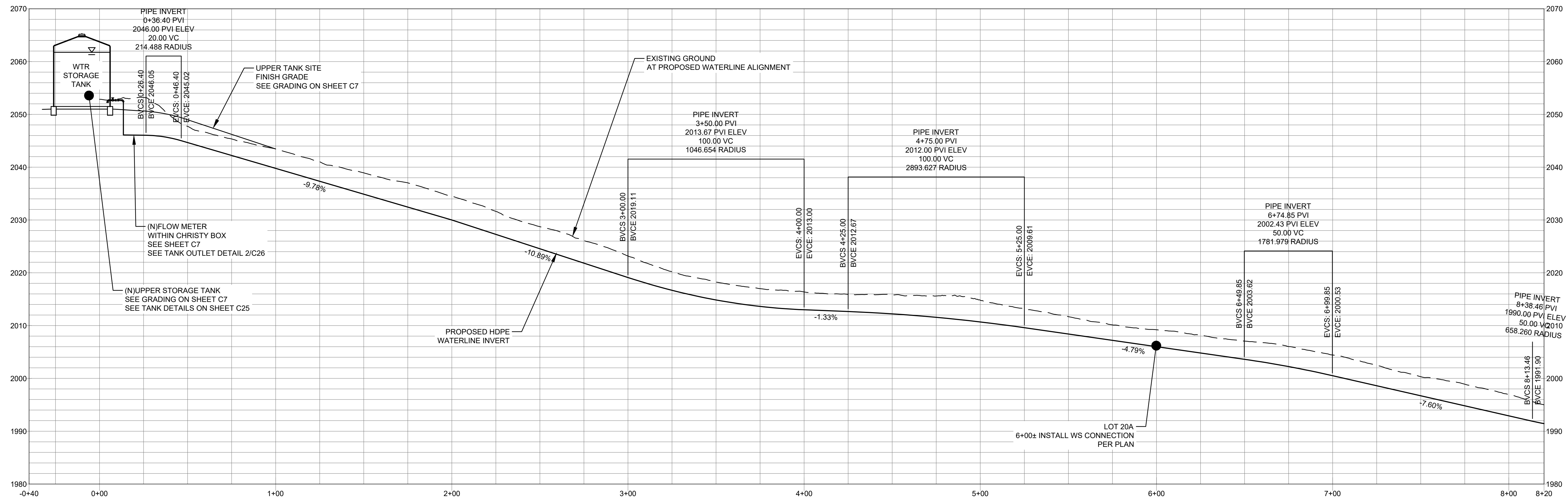
C:\TVC\PROJECTS\BURNT RANCH WATER\DWG\C11 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 0+00 TO 8+00

1" = 30'

NOTE: SEE WATERLINE LINE & CURVE DATA ON SHEET C30



WATERLINE PROFILE RUN #1 0+00 - 8+00

H: 1" = 30' / V: 1" = 10'



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PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
8+00 TO 16+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

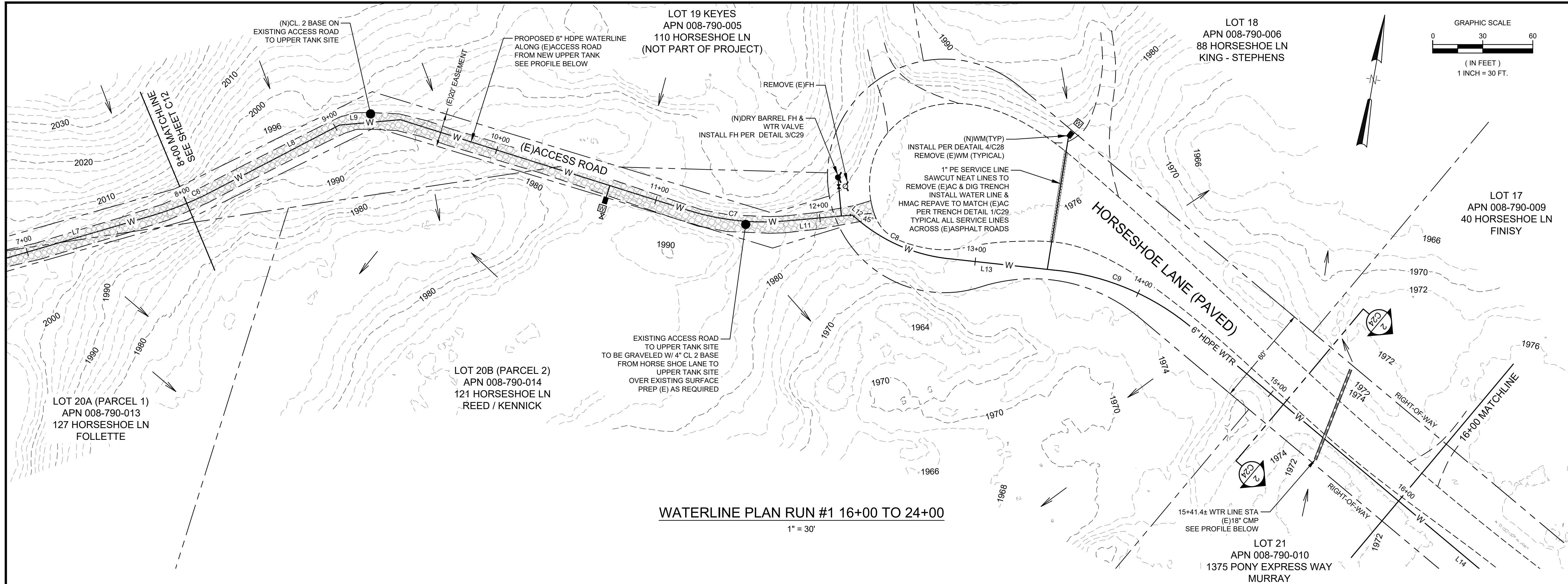
4/2/2024

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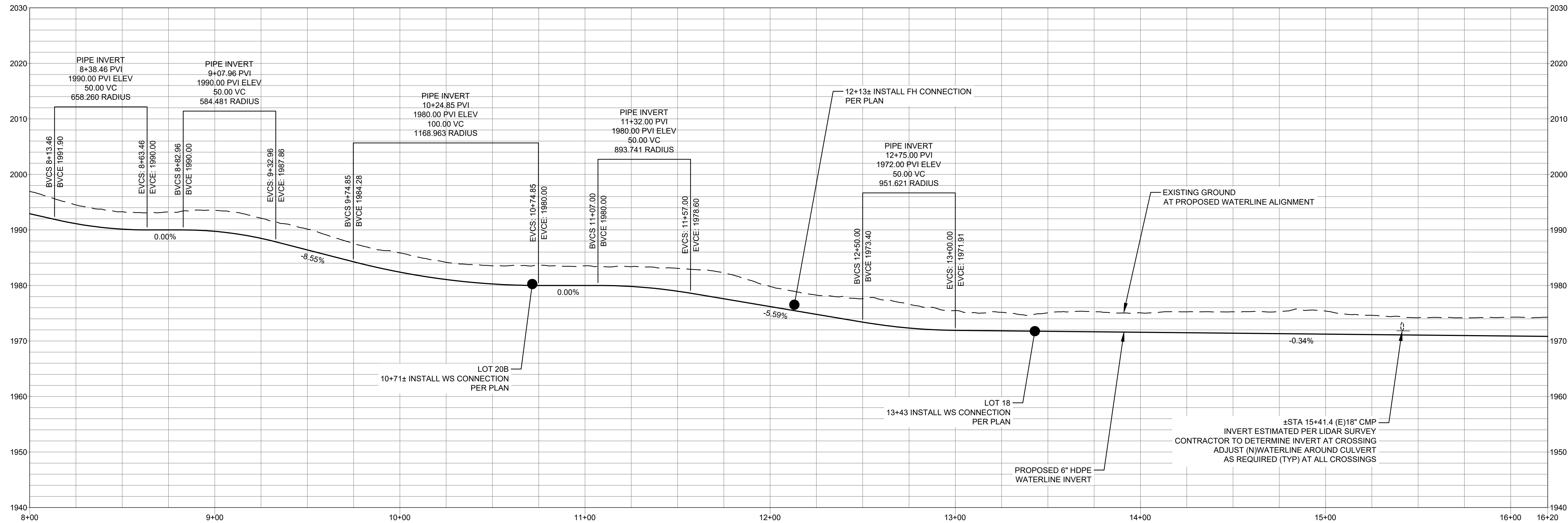
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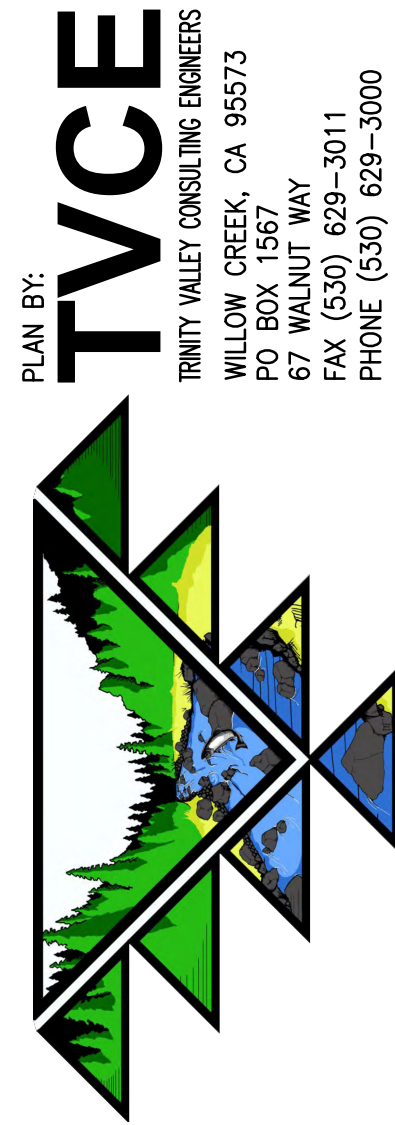
C:\TVC\PROJECTS\BURNT RANCH\WATER\DWG\C12 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 16+00 TO 24+00
1" = 30'



WATERLINE PROFILE RUN #1 8+00 - 16+00
H: 1" = 30' / V: 1" = 10'



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PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
16+00 TO 24+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

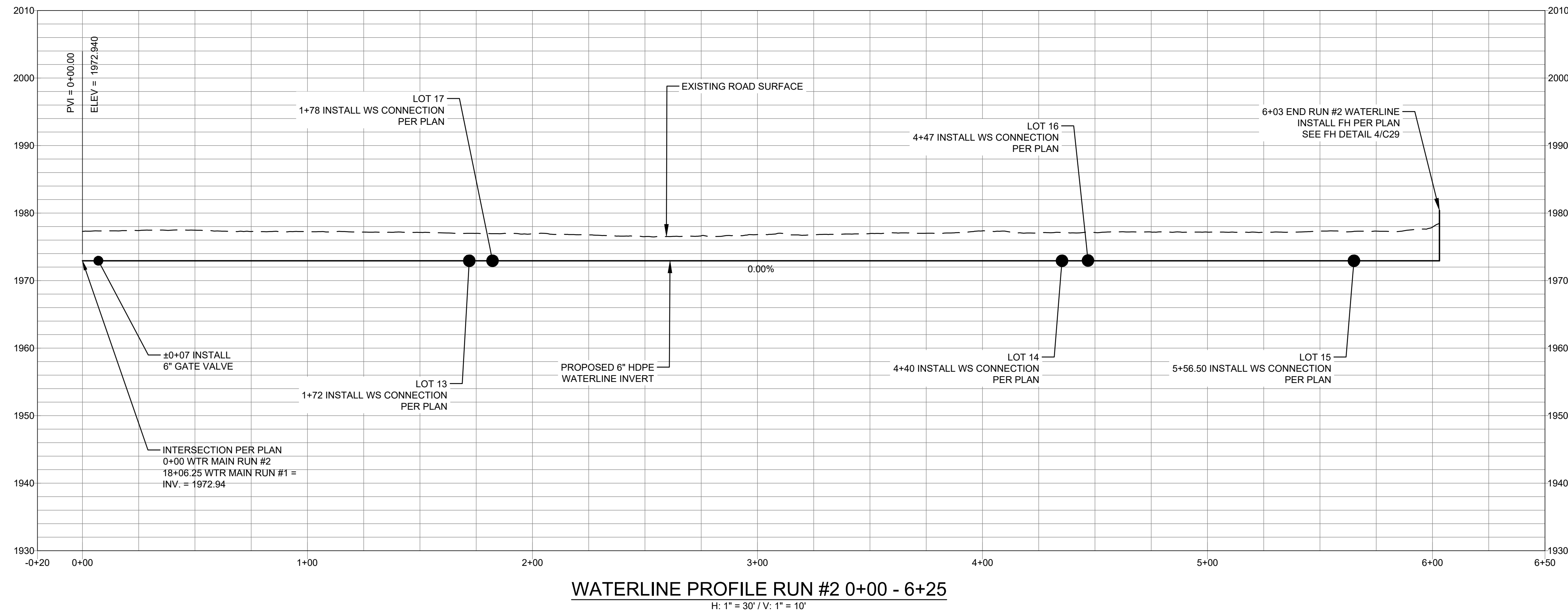
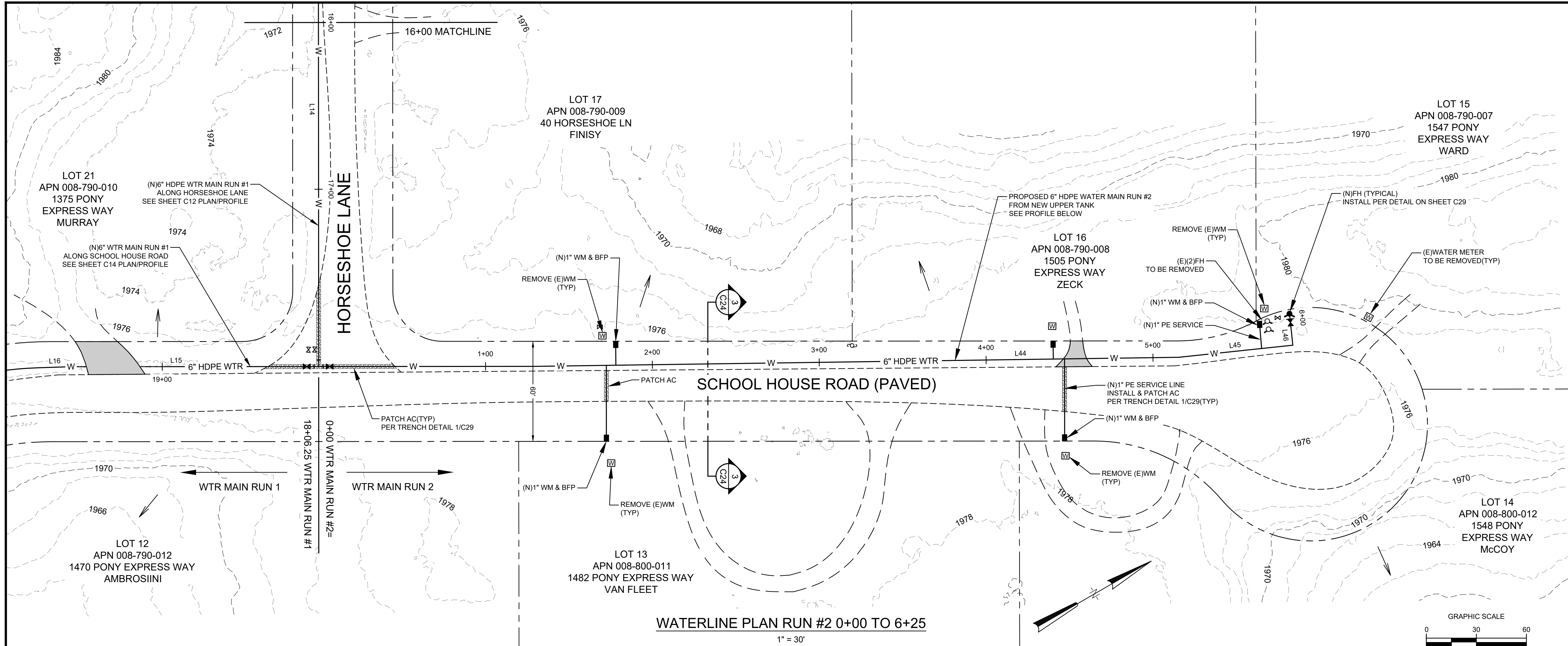
DATE: 3/28/2024

SCALE: 1" = 30'

PROJECT NO: 1754

C12

C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C13 PROPOSED WATERLINE PLAN & PROFILE.DWG



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DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #2
PLAN & PROFILE
0+00 TO 6+24

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

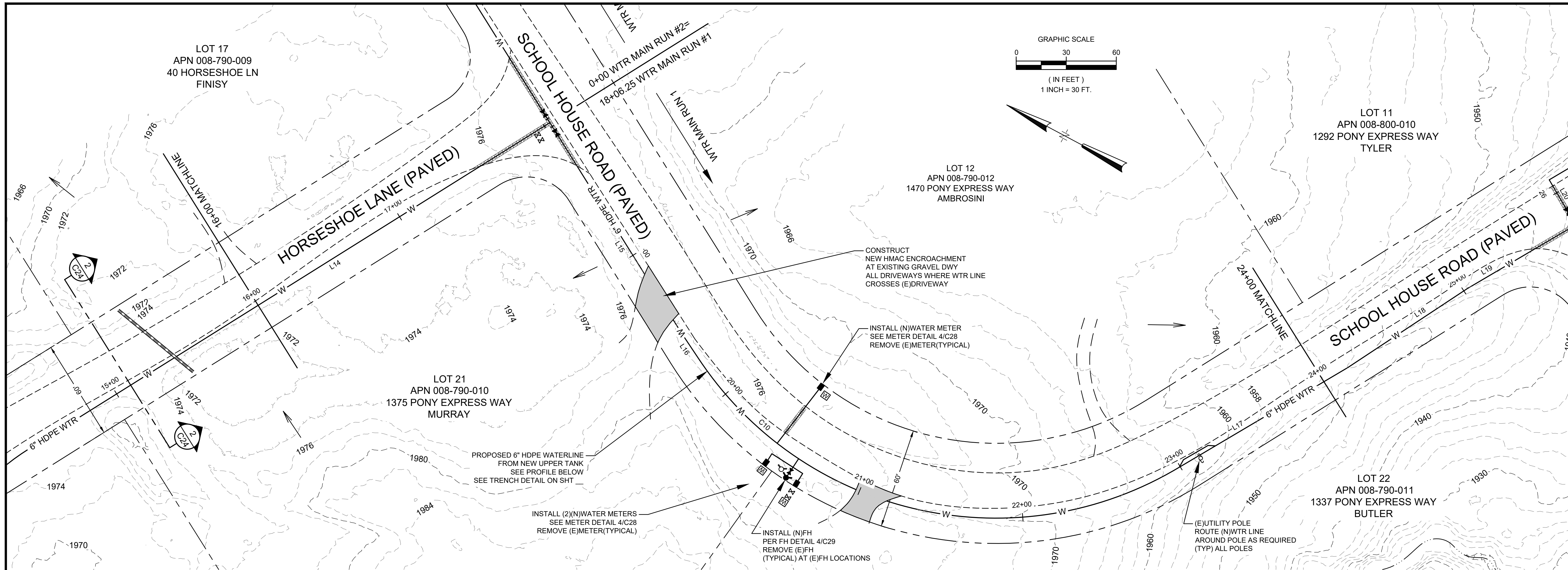
3/26/2024

SCALE: 1" = 30'

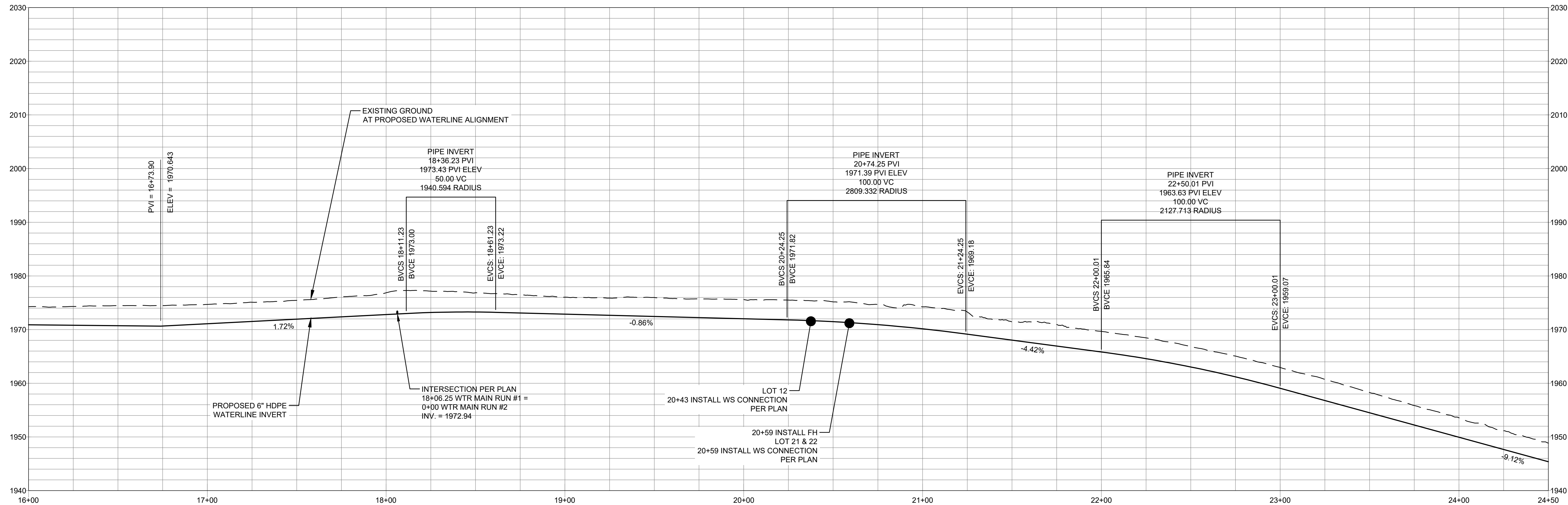
PROJECT NO: 1754

C13

C:\TVC\PROJECTS\BURNT RANCH WATER\DWG\C14 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 16+00 TO 24+00
1" = 30'



WATERLINE PROFILE RUN #1 16+00 - 24+00
H: 1" = 30' / V: 1" = 10'



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MUTUAL WATER COMPANY
PO BOX 102
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PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
16+00 TO 24+00

DESIGN BY: EK

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CHECKED BY: EK

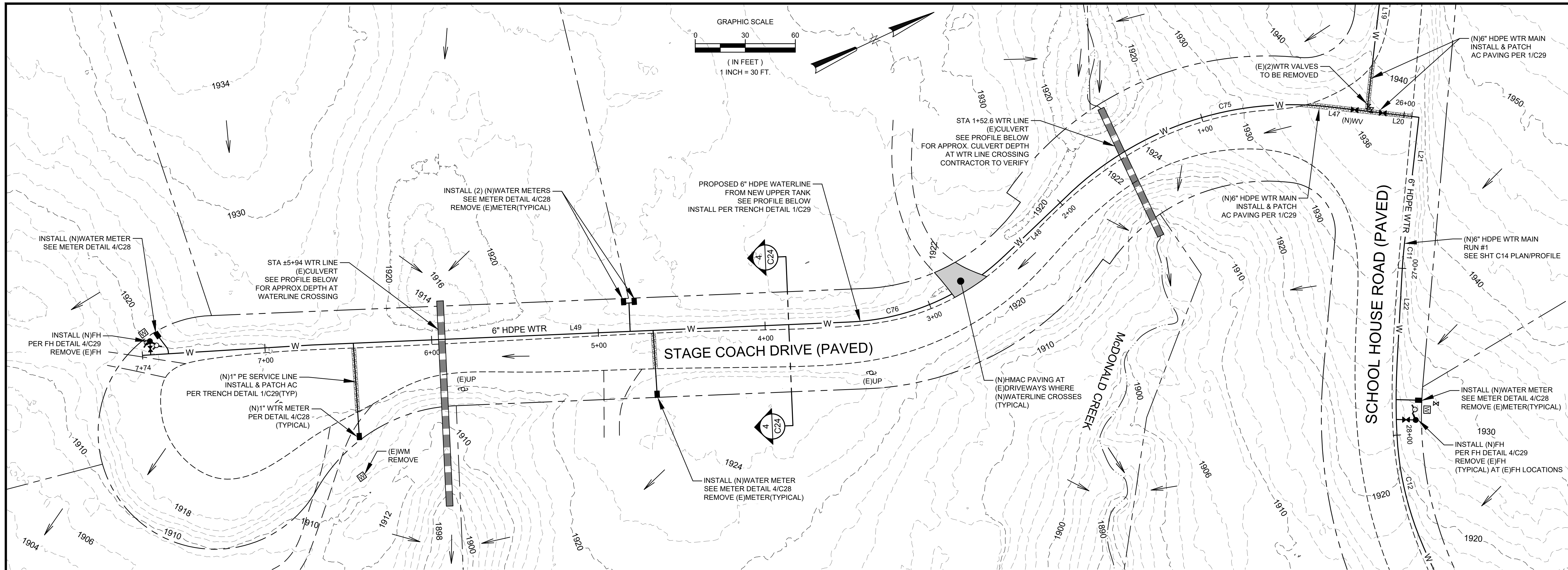
DATE: 4/2/2024

SCALE: 1" = 30'

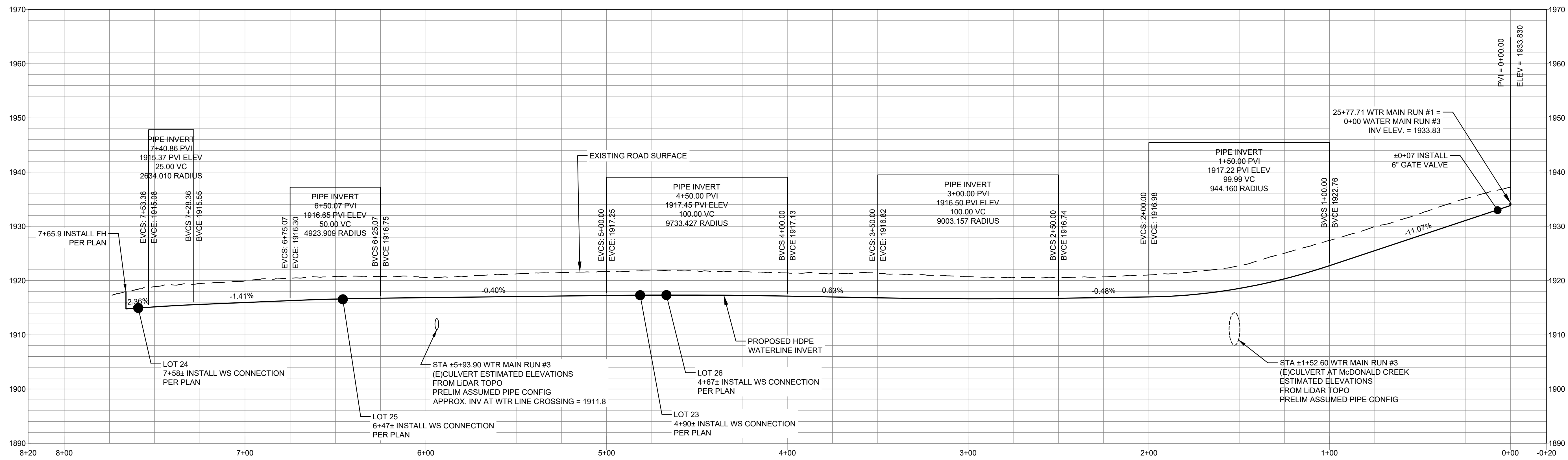
PROJECT NO: 1754

C14

C:\TYCE PROJECTS\BURNT RANCH WATER\DWG\C15 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #3 0+00 TO 7+75
1" = 30'



WATERLINE PROFILE RUN #3 0+00 - 7+75
H: 1" = 30' / V: 1" = 10'



PLAN BY:
TVCE
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PRELIMINARY

REVISIONS

BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #3
PLAN & PROFILE
0+00 TO 7+83

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

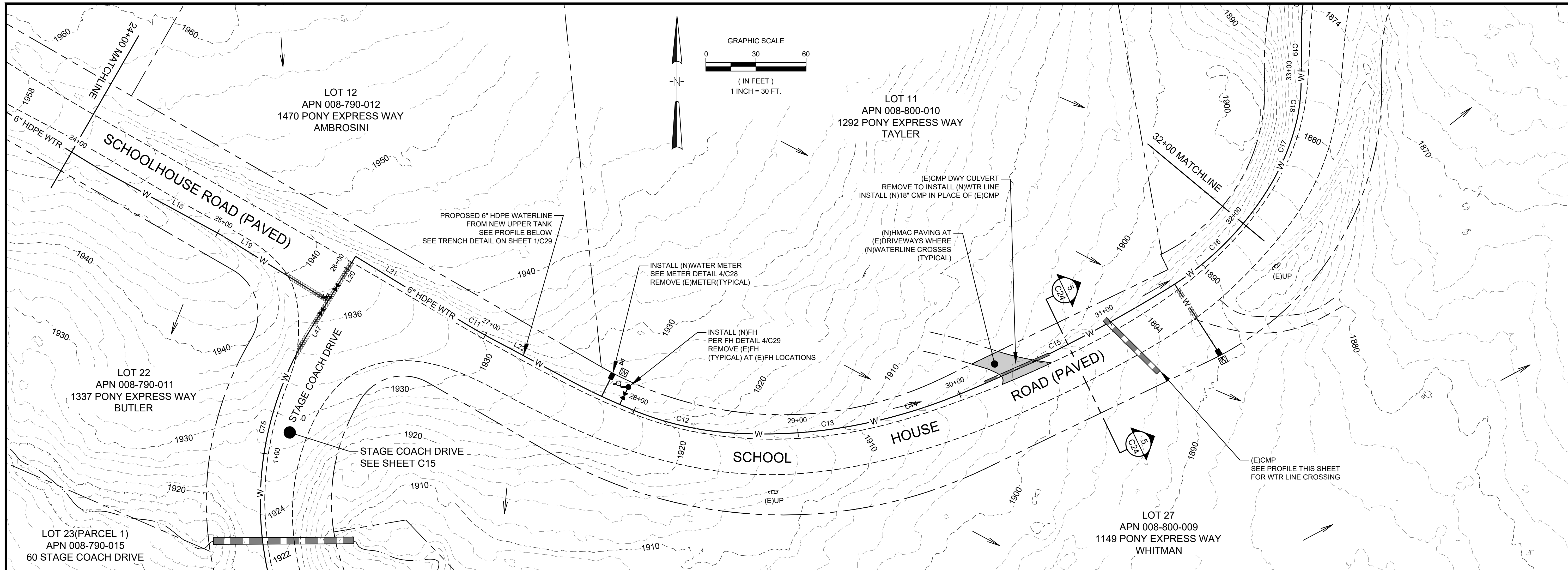
DATE: 4/2/2024

SCALE: 1" = 30'

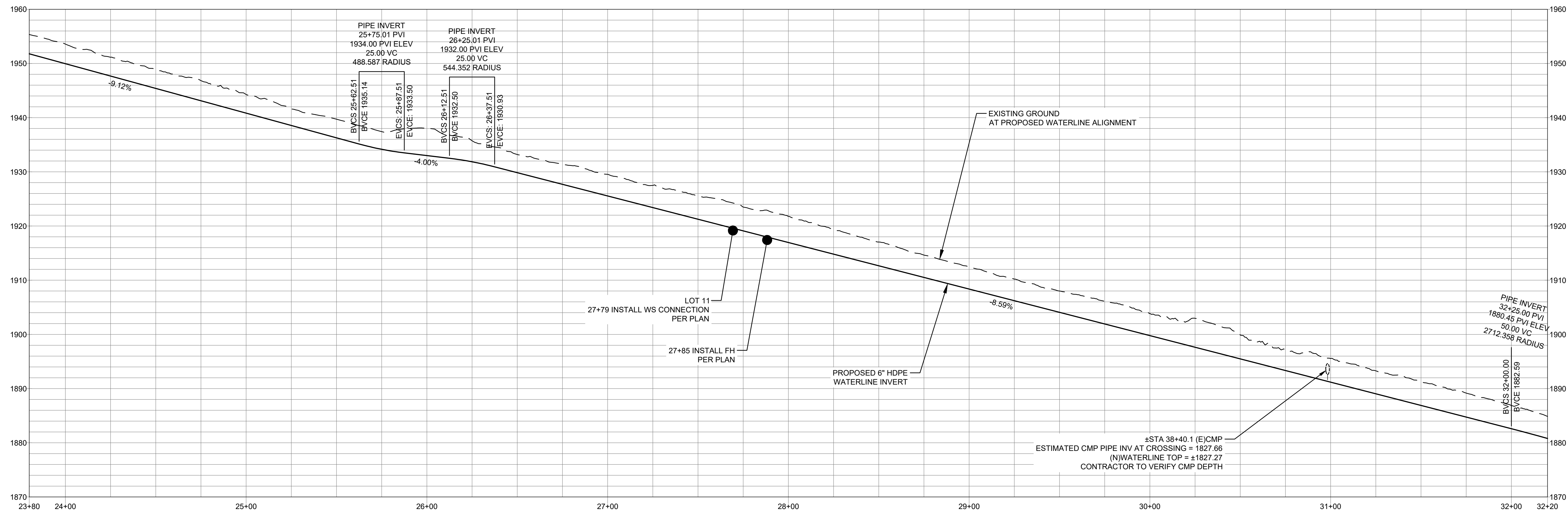
PROJECT NO: 1754

C15

C:\TCE PROJECTS\BURNT RANCH WATER\DWG\C16 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 24+00 TO 32+00
1" = 30'



WATERLINE PROFILE RUN #1 24+00 - 32+00
H: 1" = 30' / V: 1" = 10'



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BURNT RANCH ESTATES
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FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
24+00 TO 32+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

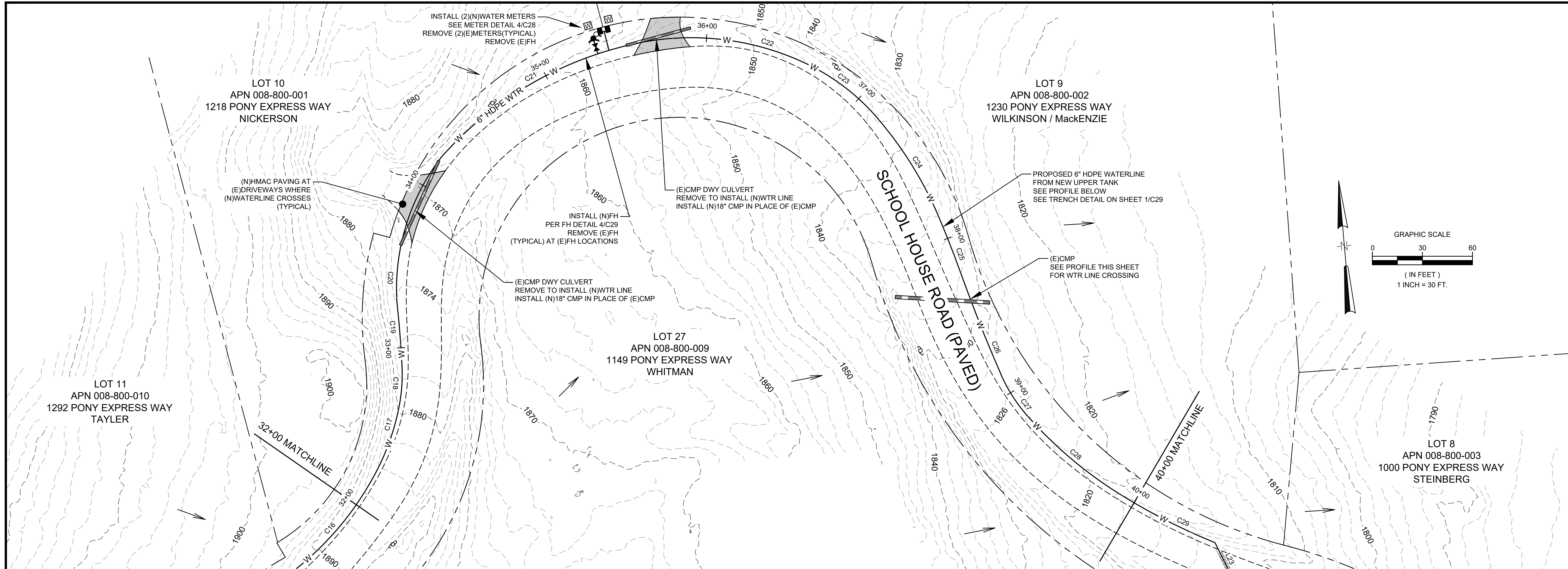
DATE: 3/26/2024

SCALE: 1" = 30'

PROJECT NO: 1754

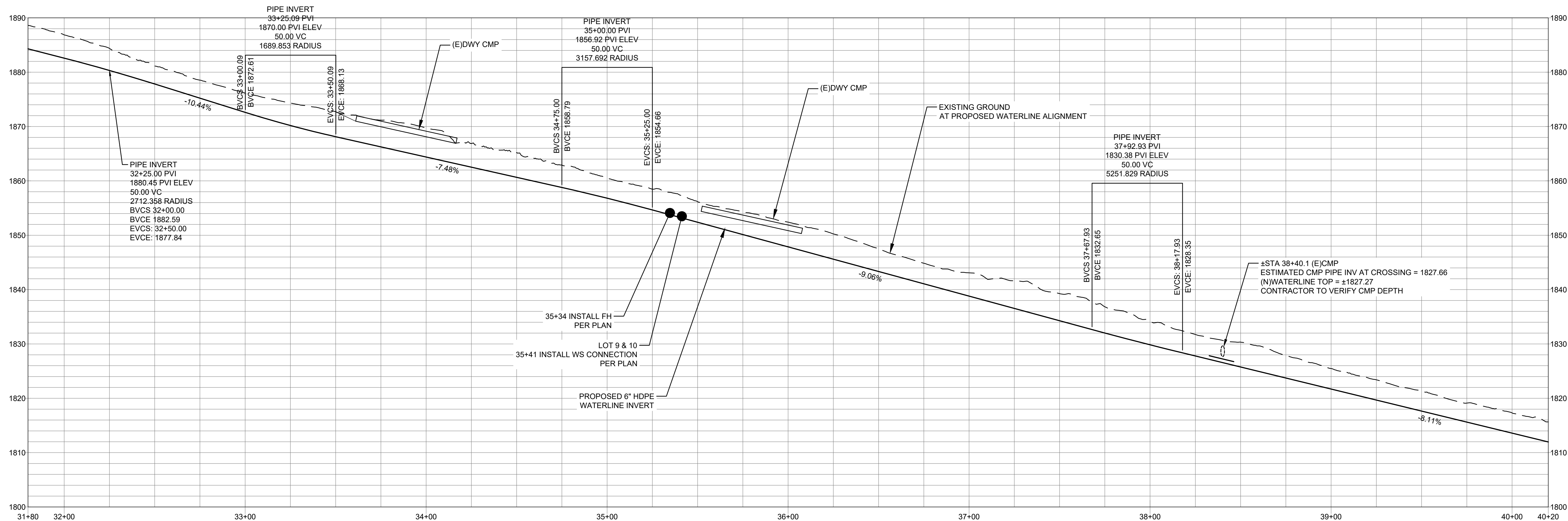
C16

C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\17 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 32+00 TO 40+00

1" = 30'



WATERLINE PROFILE RUN #1 32+00 - 40+00

H: 1" = 30' / V: 1" = 10'



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DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
32+00 TO 40+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

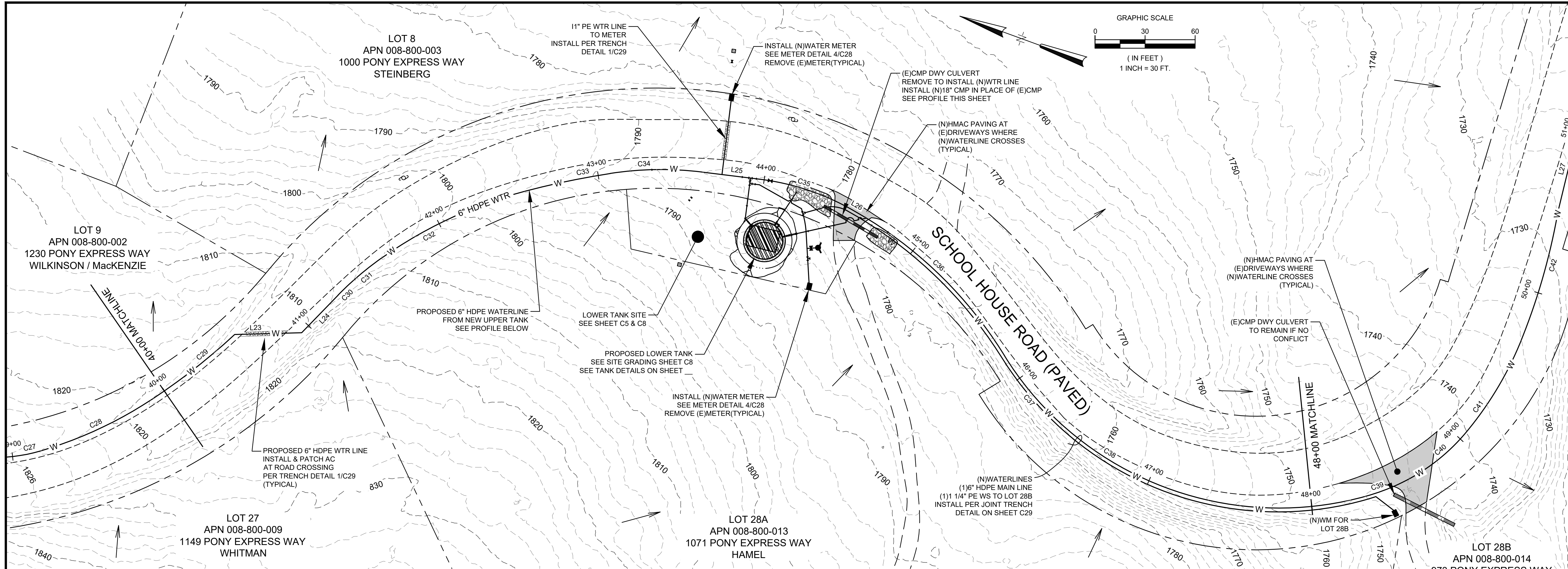
DATE: 3/26/2024

SCALE: 1" = 30'

PROJECT NO: 1754

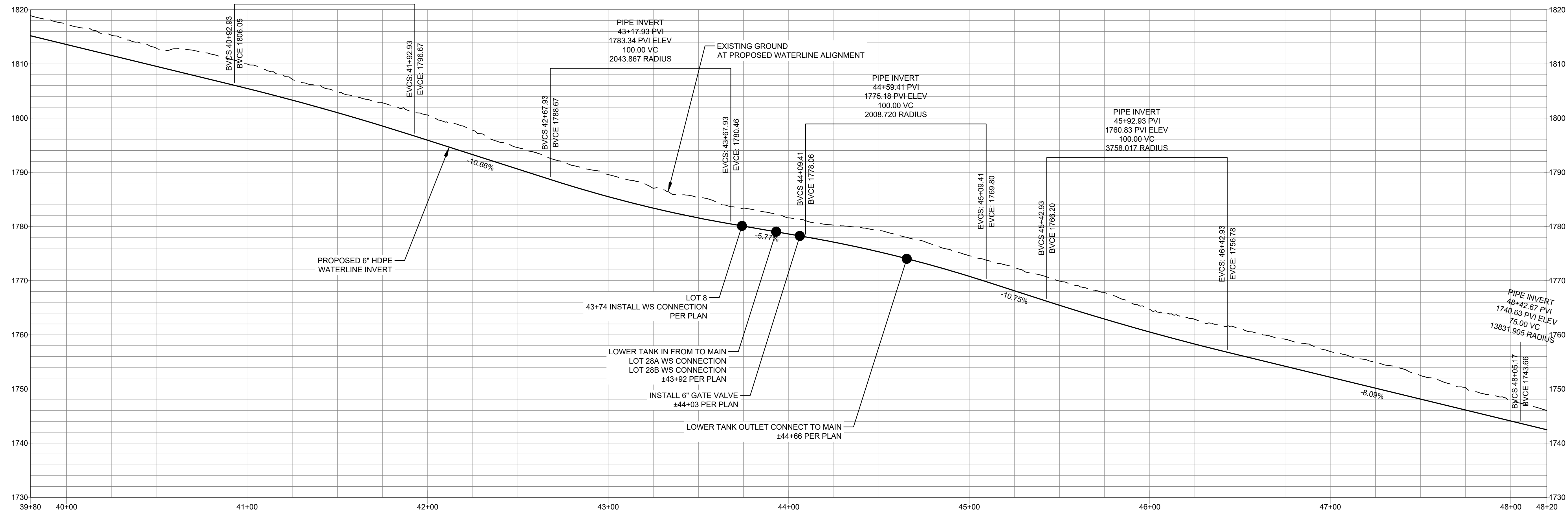
C17

C:\TVC\PROJECTS\BURNT RANCH WATER\DWG\C18 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 40+00 TO 48+00

1" = 30'



WATERLINE PROFILE RUN #1 40+00 - 48+00

H: 1" = 30' / V: 1" = 10'



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BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
40+00 TO 48+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

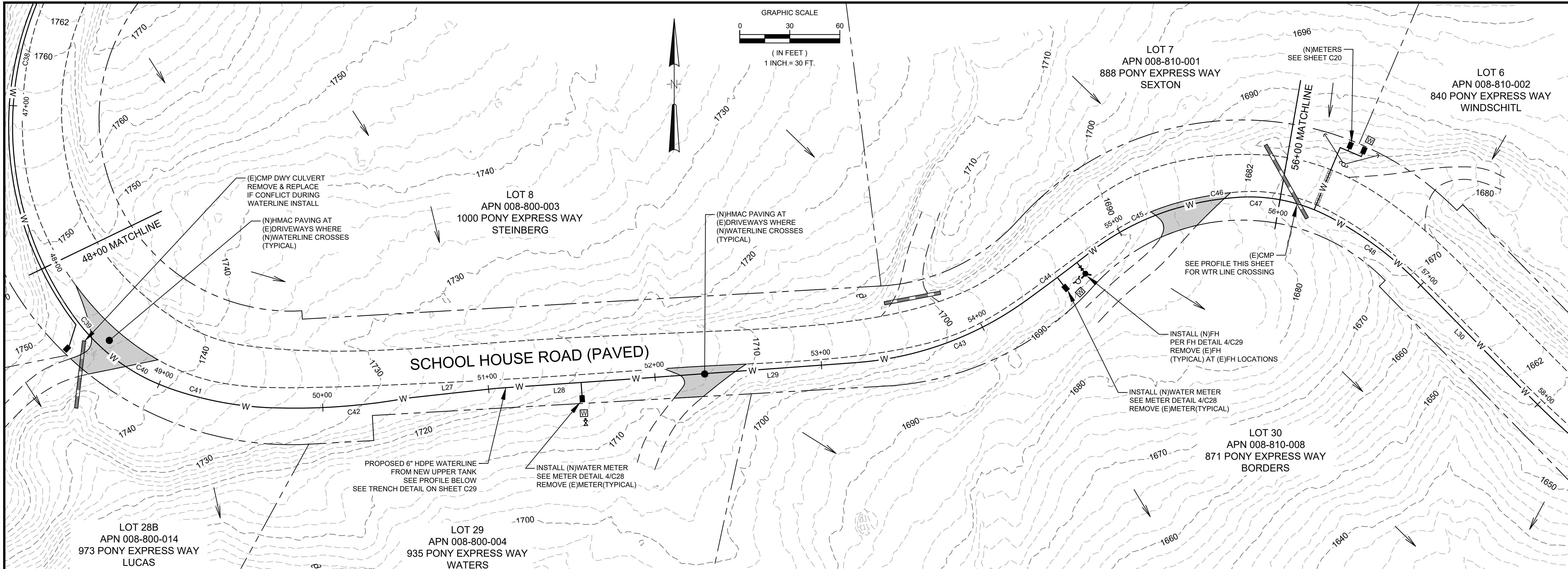
3/28/2024

SCALE: 1" = 30'

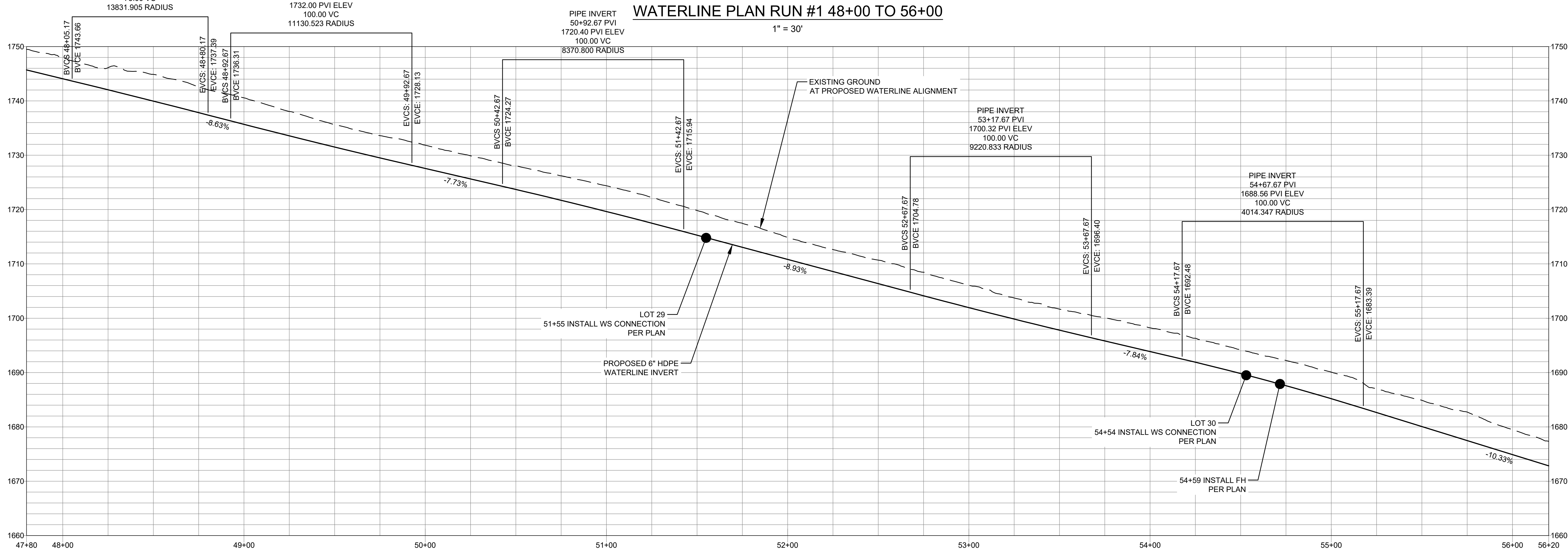
PROJECT NO: 1754

C18

C:\TVC\PROJECTS\BURNT RANCH\WATER\DWG\C19 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 48+00 TO 56+00



WATERLINE PROFILE RUN #1 48+00 - 56+00

H: 1" = 30' / V: 1" = 10'

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BURNT RANCH ESTATES
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MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
48+00 TO 56+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

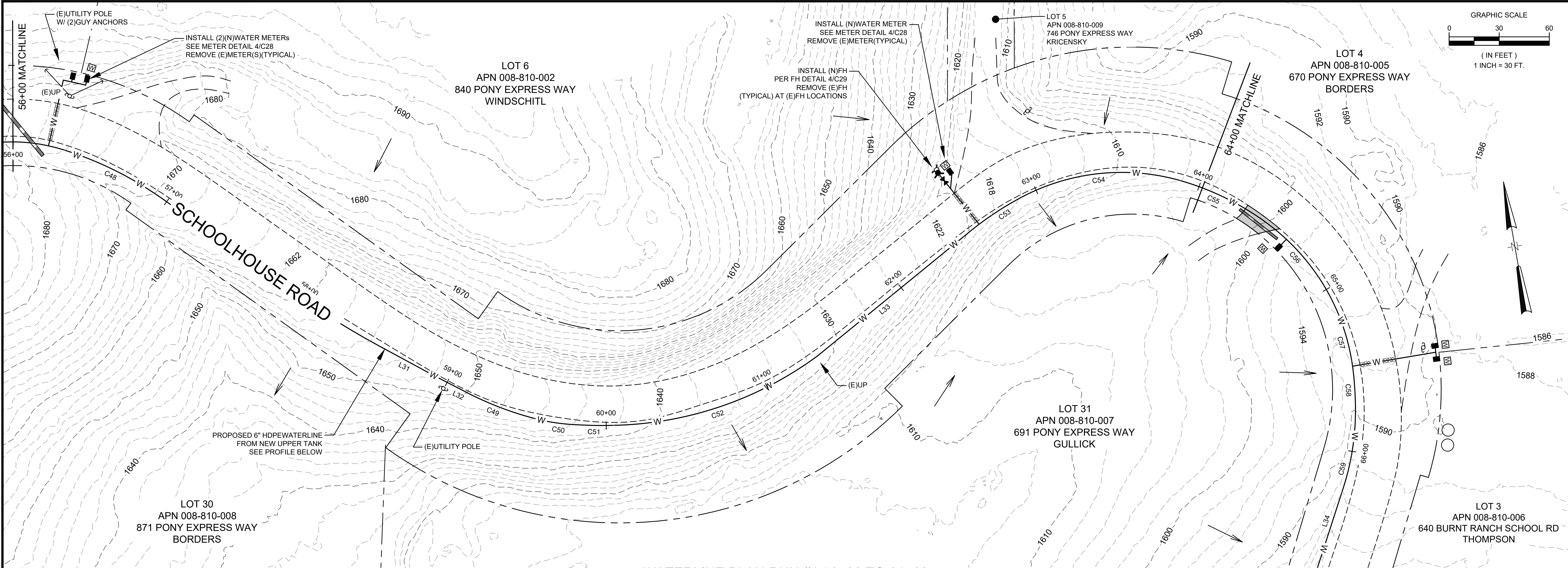
DATE: 3/28/2024

SCALE: 1" = 30'

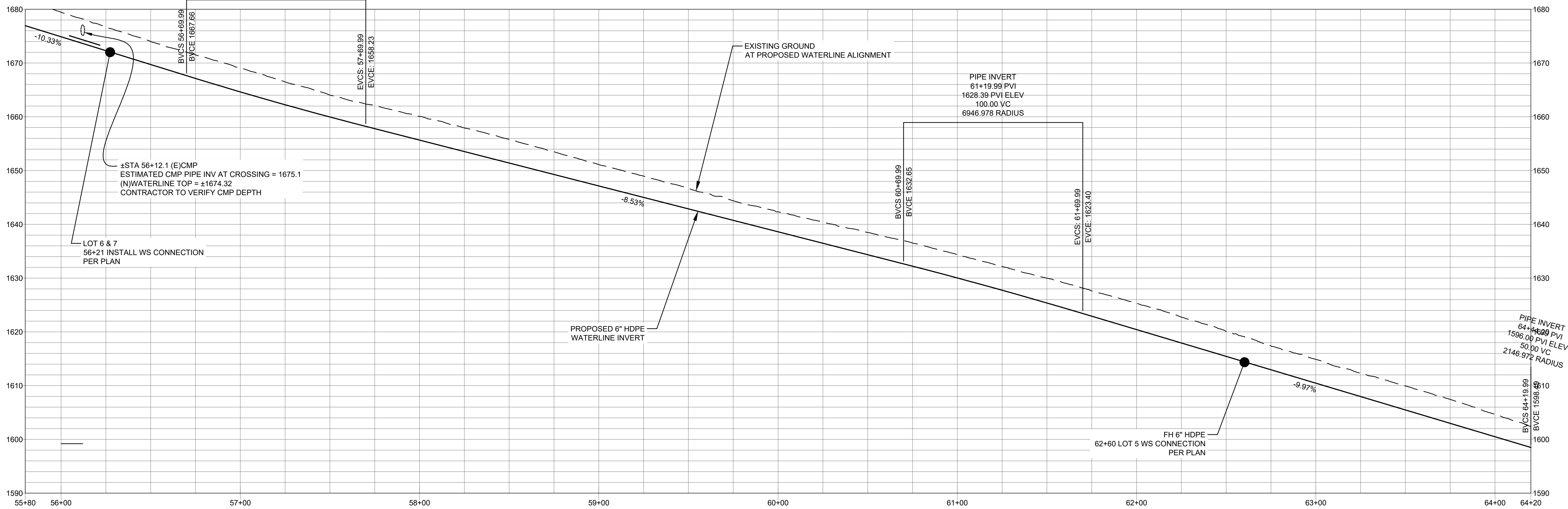
PROJECT NO: 1754

C19

C:\TVC\PROJECTS\BURNED RANCH WATER\DWG\C20 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 56+00 TO 64+00
1" = 30'



WATERLINE PROFILE RUN #1 56+00 - 64+00
H: 1" = 30' / V: 1" = 10'

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REVISIONS

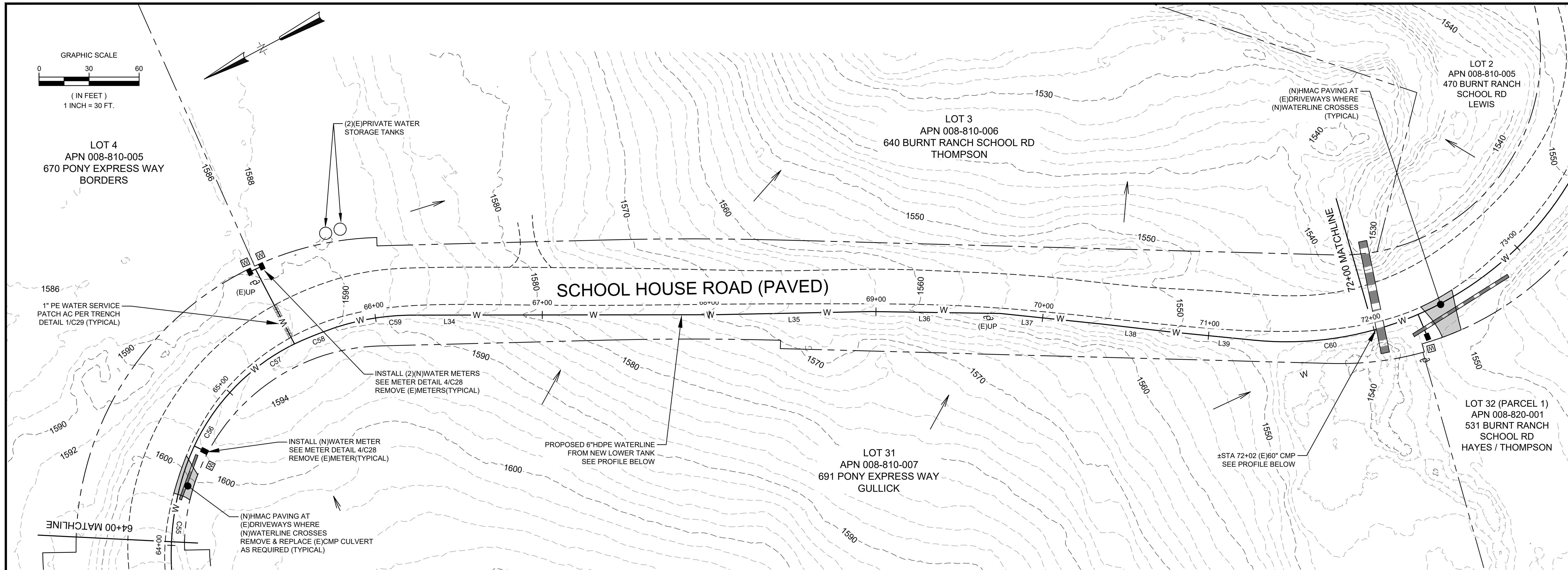
BURNED RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNED RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNED RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
56+00 TO 64+00

DESIGN BY: EK
DRAWN BY: SG
CHECKED BY: EK
DATE: 3/28/2024
SCALE: 1" = 30'
PROJECT NO: 1754

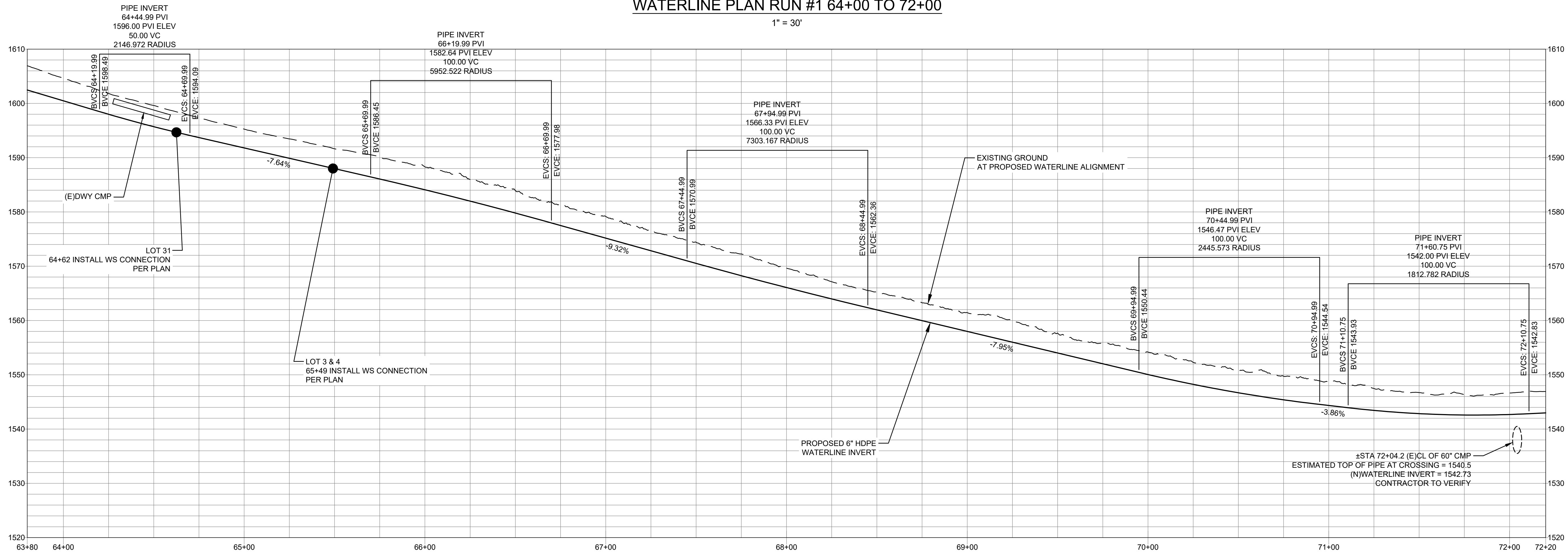
C20

C:\TYCE PROJECTS\BURNT RANCH WATER\DWG\C21 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN RUN #1 64+00 TO 72+00

1" = 30'



WATERLINE PROFILE RUN #1 64+00 - 72+00

H: 1" = 30' / V: 1" = 10'



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DROUGHT RESILIENCE PROJECT
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MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
64+00 TO 72+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

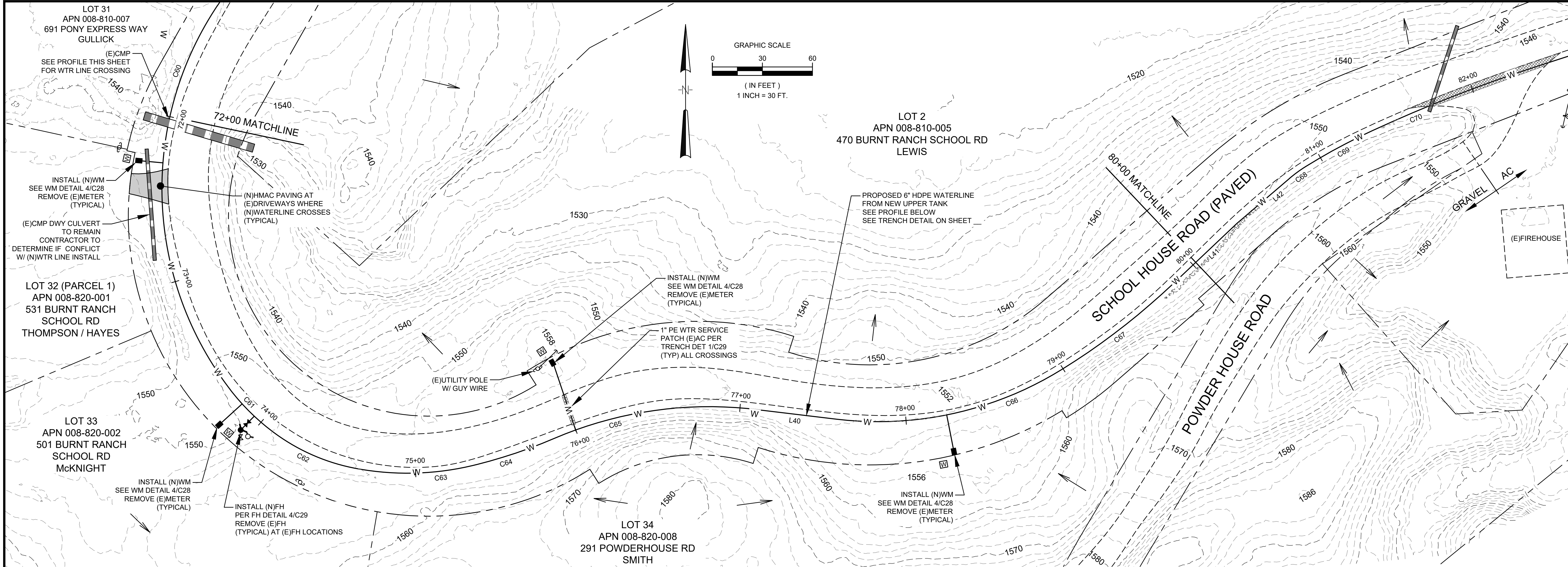
3/28/2024

SCALE: 1" = 30'

PROJECT NO: 1754

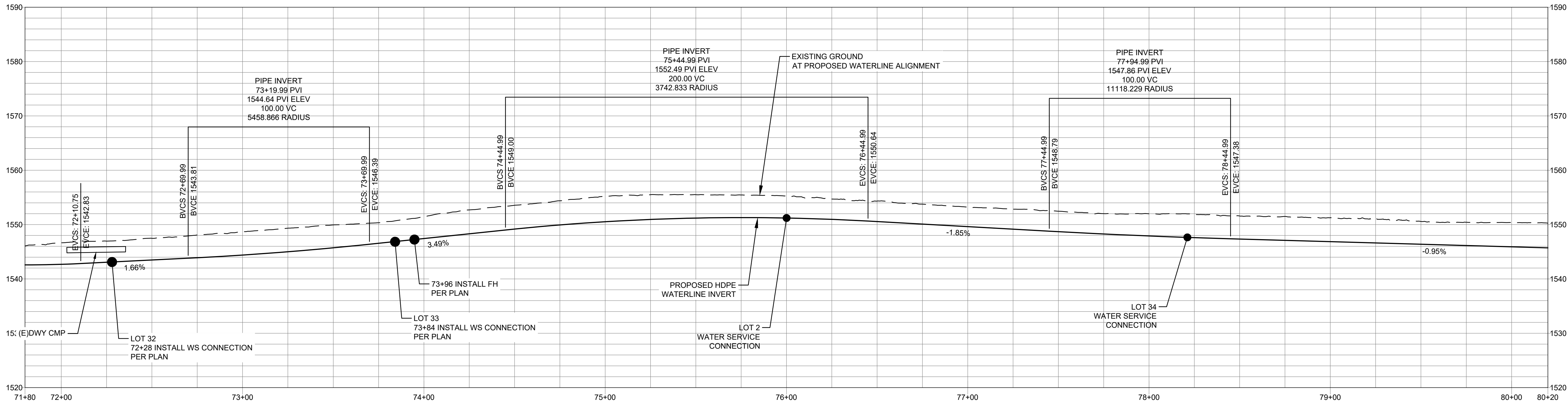
C21

C:\TYCE PROJECTS\BURNT RANCH WATER\DWG\C22 PROPOSED WATERLINE PLAN & PROFILE.DWG



WATERLINE PLAN 72+00 TO 80+00

1" = 30'



WATERLINE PROFILE RUN #1 72+00 - 80+00

H: 1" = 30' / V: 1" = 10'



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PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
72+00 TO 80+00

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

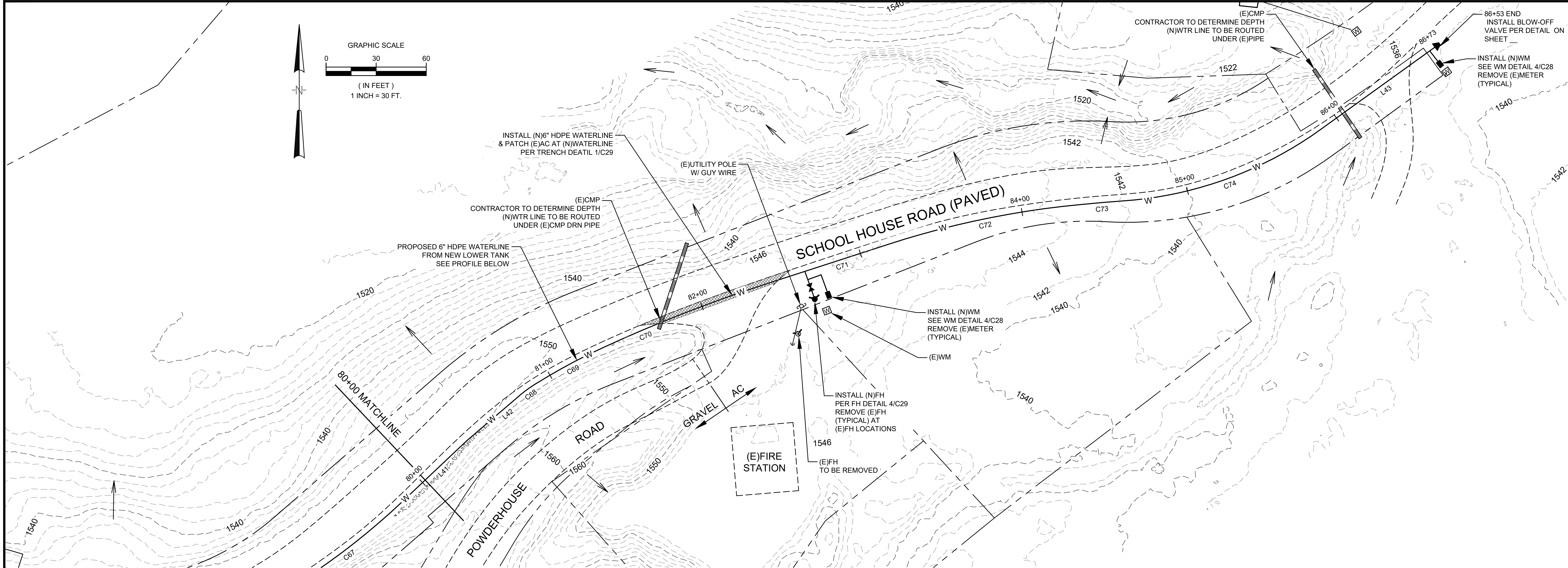
DATE: 3/28/2024

SCALE: 1" = 30'

PROJECT NO: 1754

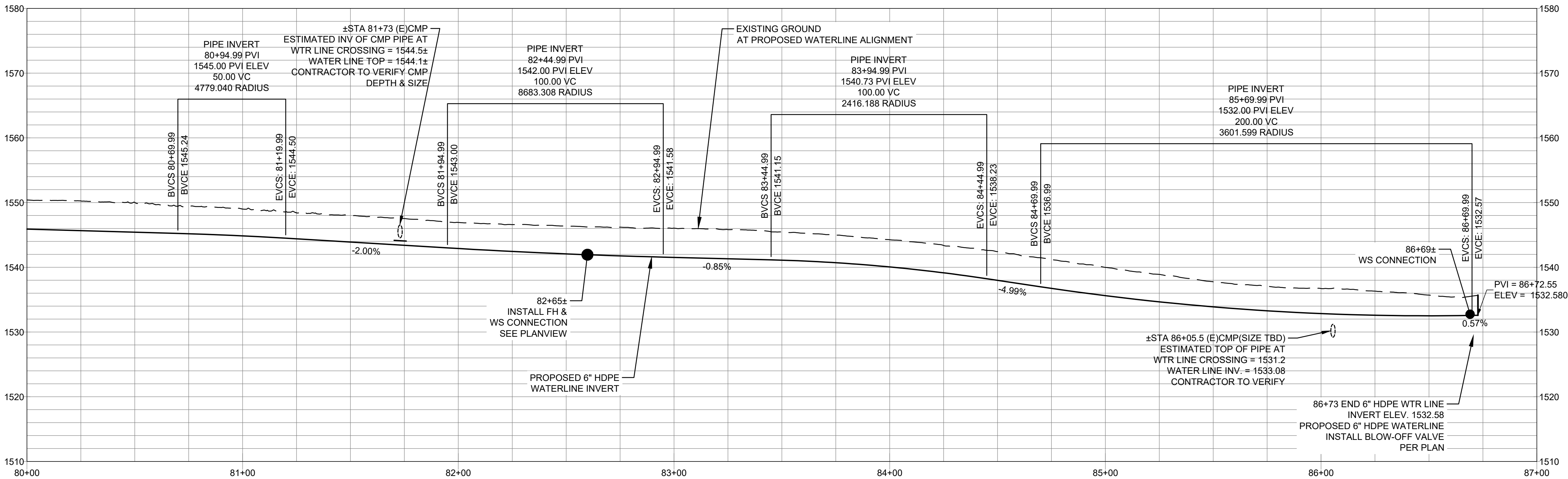
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C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C23 PROPOSED WATERLINE PLAN & PROFILE.DWG



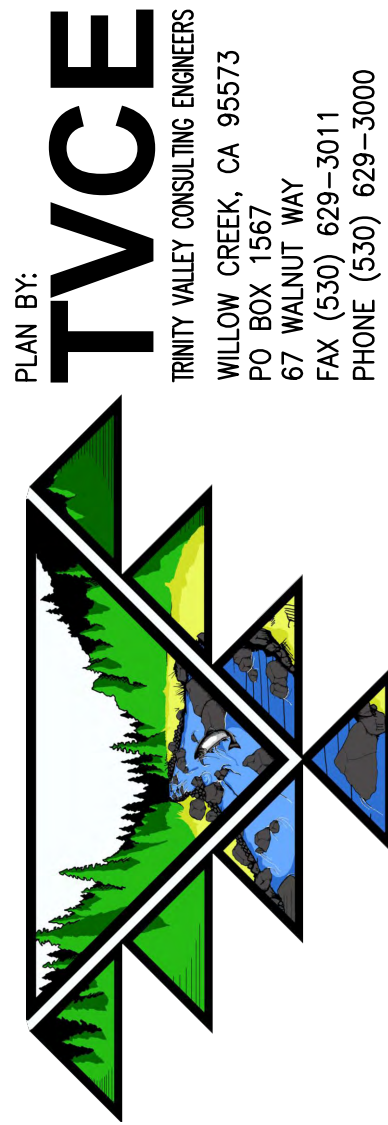
WATERLINE PLAN RUN #1 80+00 TO 86+53

1" = 30'



WATERLINE PROFILE RUN #1 80+00 - 86+00

H: 1" = 30' / V: 1" = 10'



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MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

PROPOSED
WATERLINE RUN #1
PLAN & PROFILE
80+00 TO 86+53

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

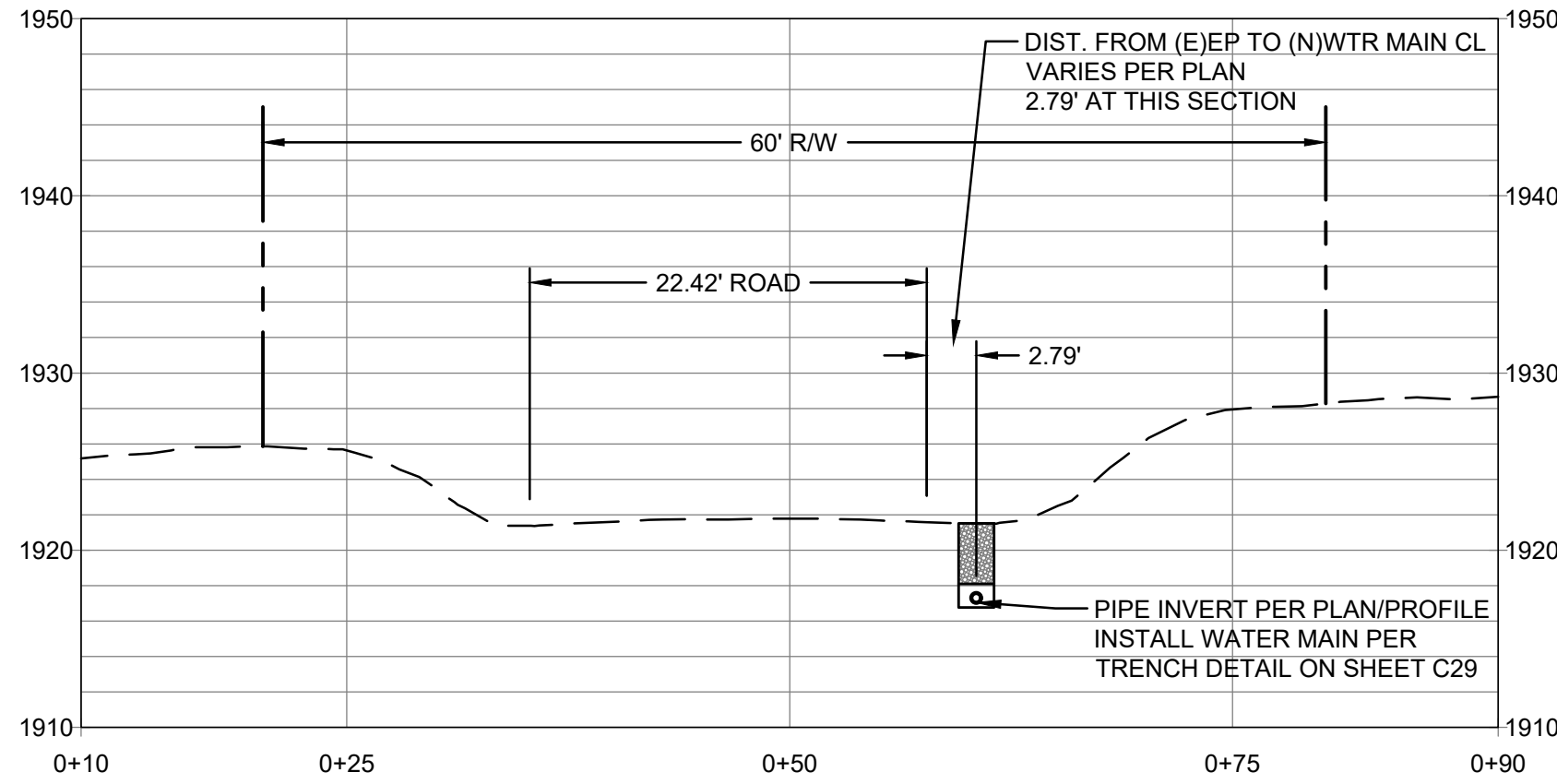
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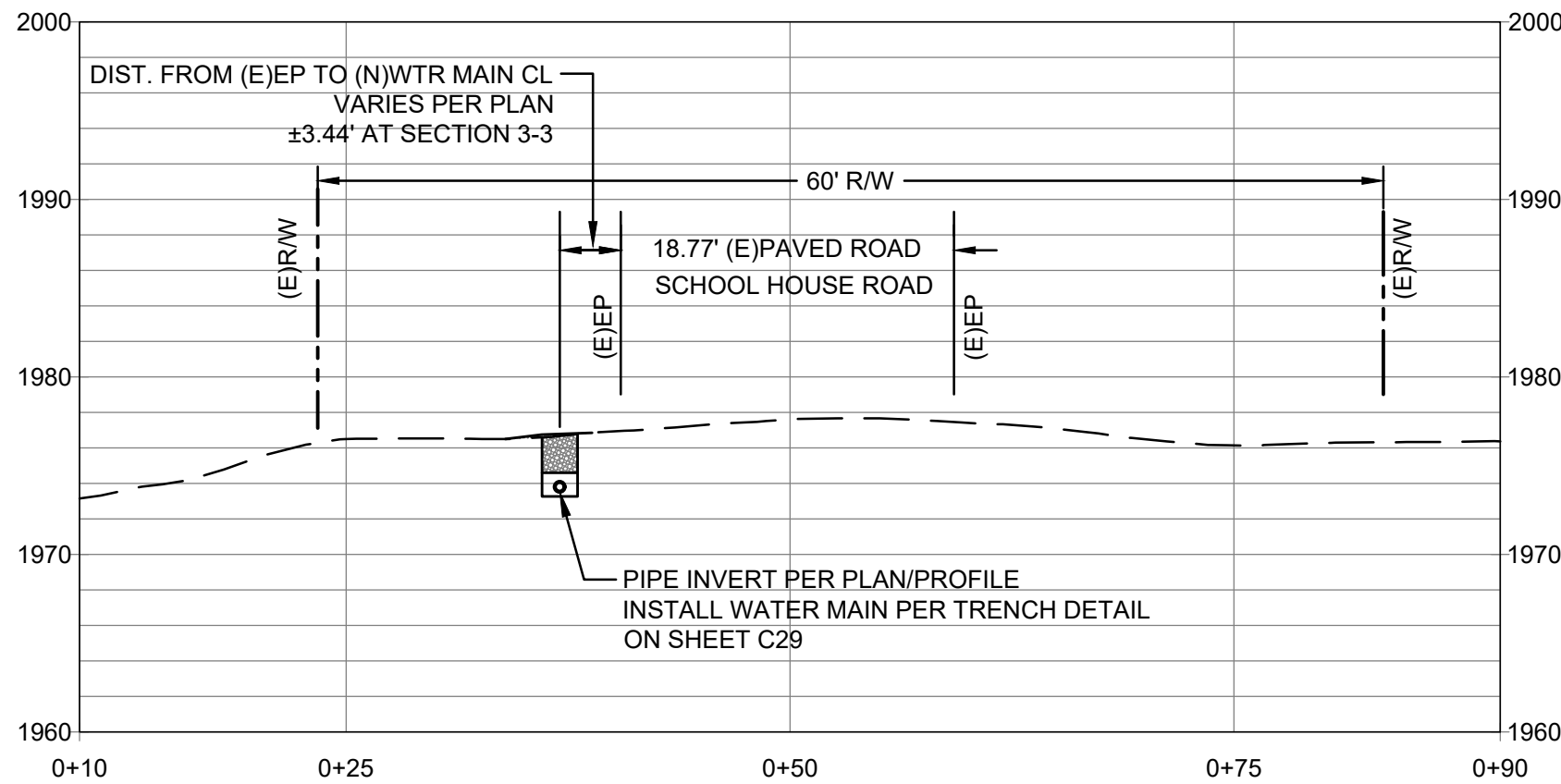
PROJECT NO: 1754

C23

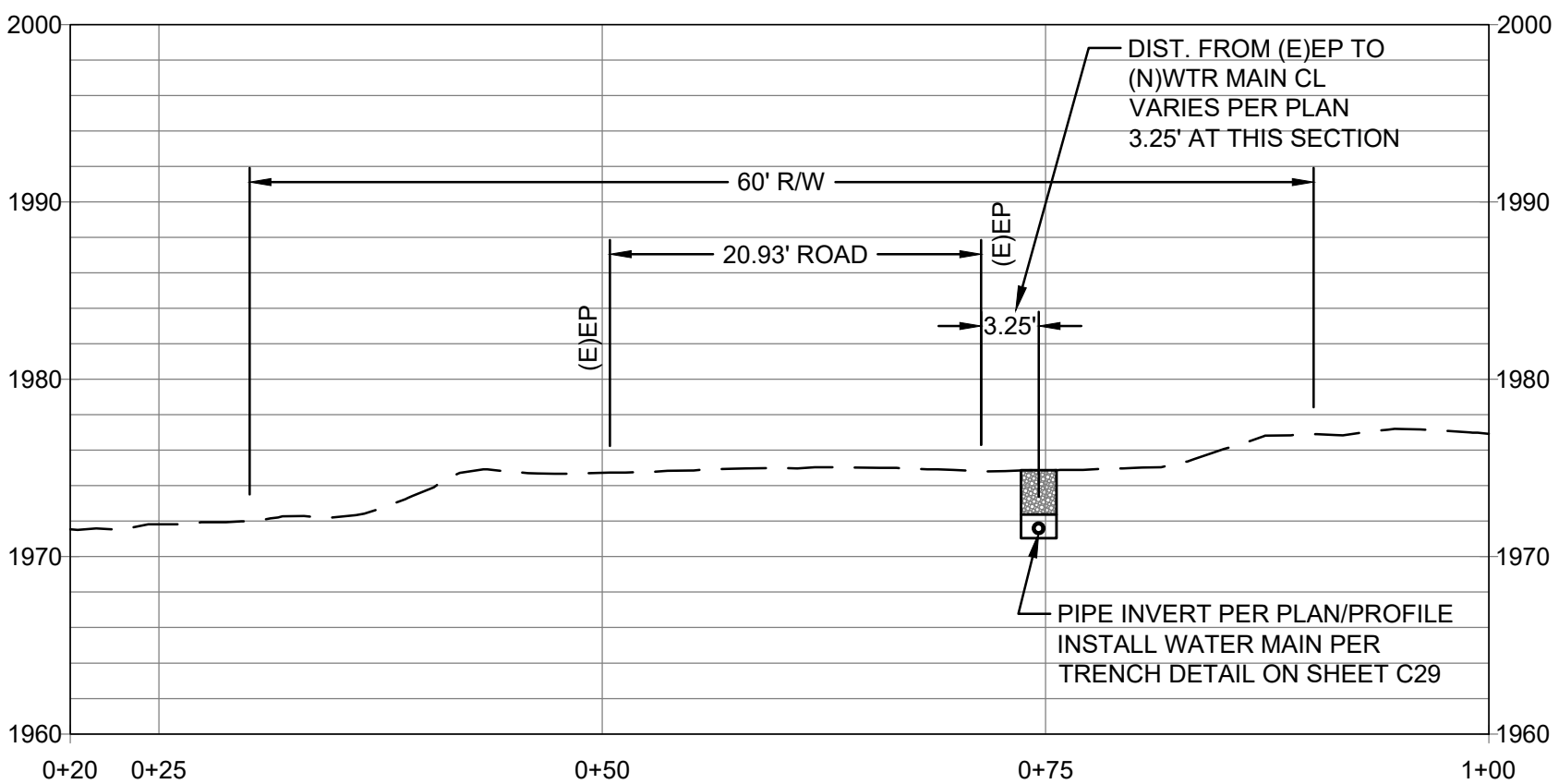
C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C24 CROSS SECTIONS.DWG



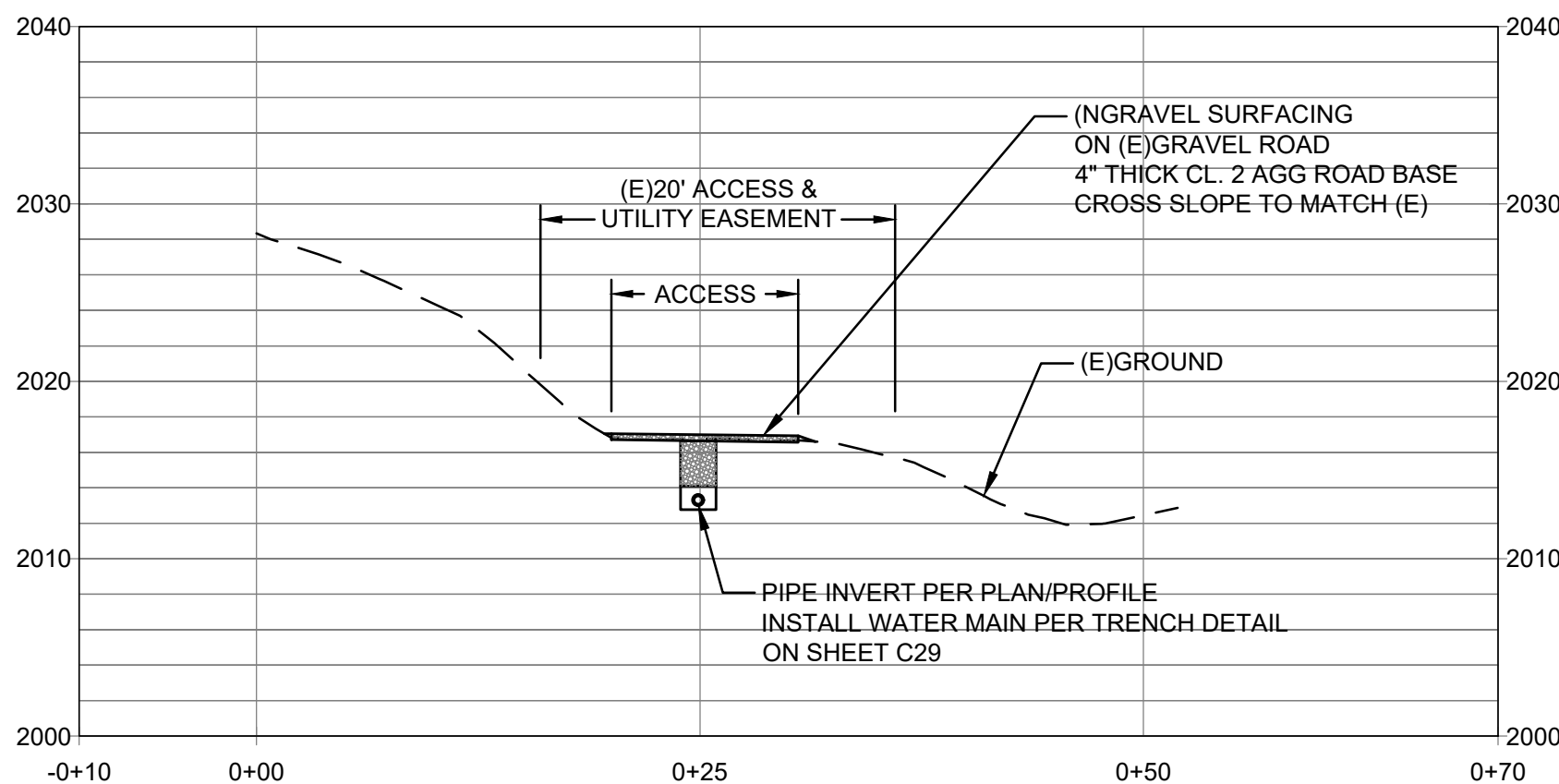
WATER MAIN RUN #3 SECTION DETAIL 4 C24
H: 1" = 10' / V: 1" = 10'



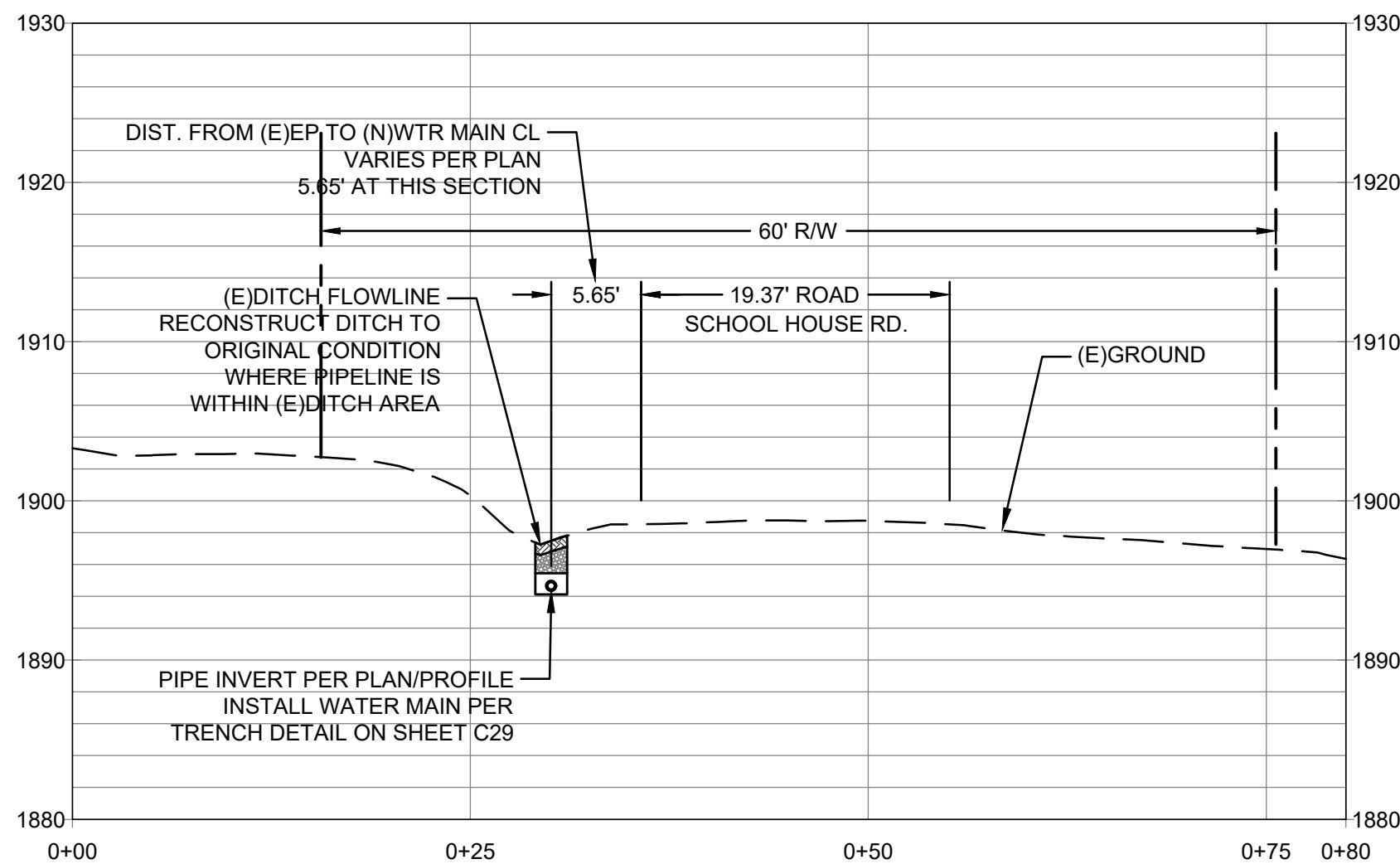
WATER MAIN RUN #1 SECTION DETAIL 3 C24
H: 1" = 10' / V: 1" = 10'



WATER MAIN RUN #1 SECTION DETAIL 2 C24
H: 1" = 10' / V: 1" = 10'



WATER MAIN RUN #1 SECTION DETAIL 1 C24
H: 1" = 10' / V: 1" = 10'



WATER MAIN RUN #1 SECTION DETAIL 5 C24
H: 1" = 10' / V: 1" = 10'



PRELIMINARY

REVISIONS

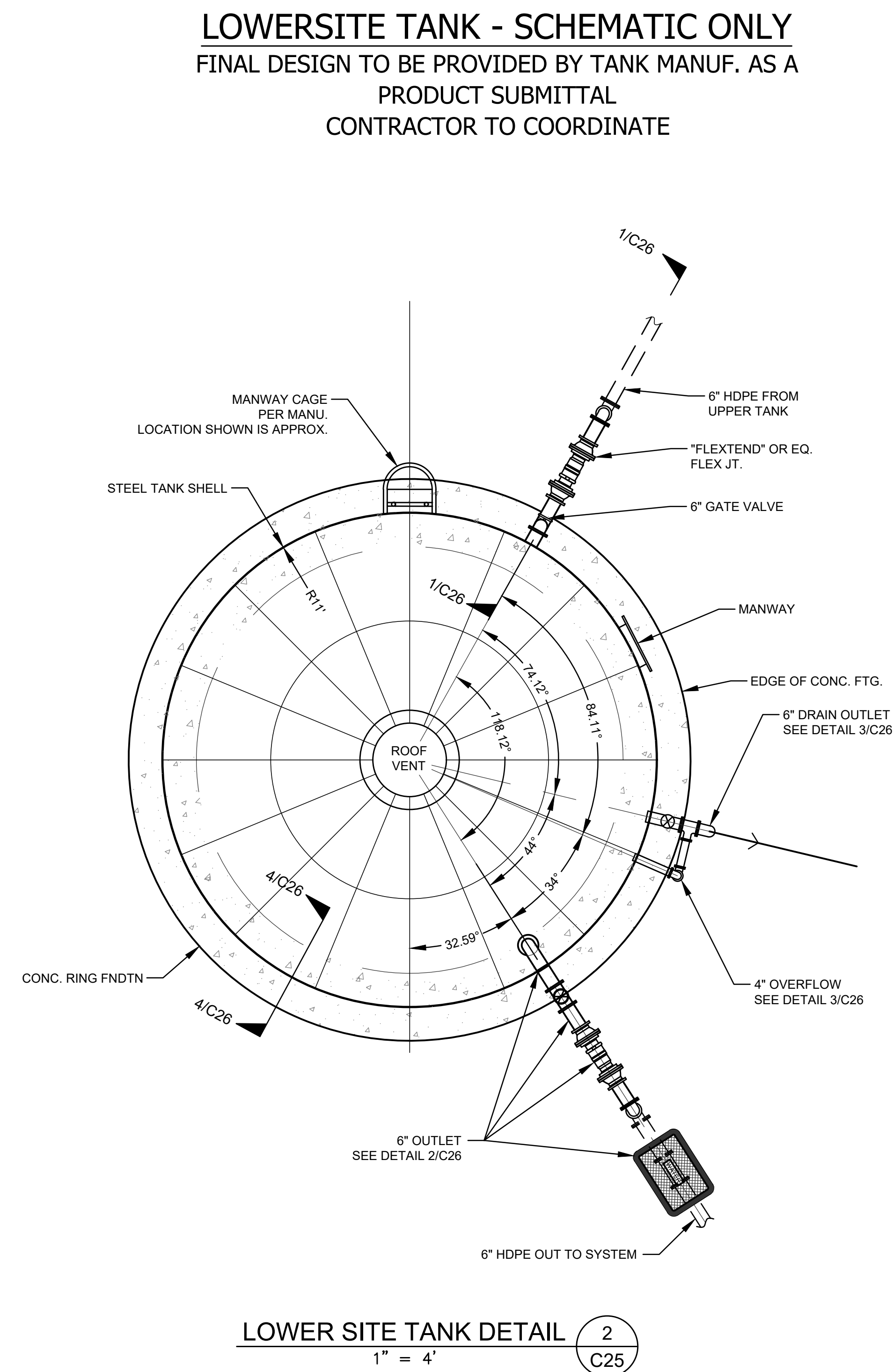
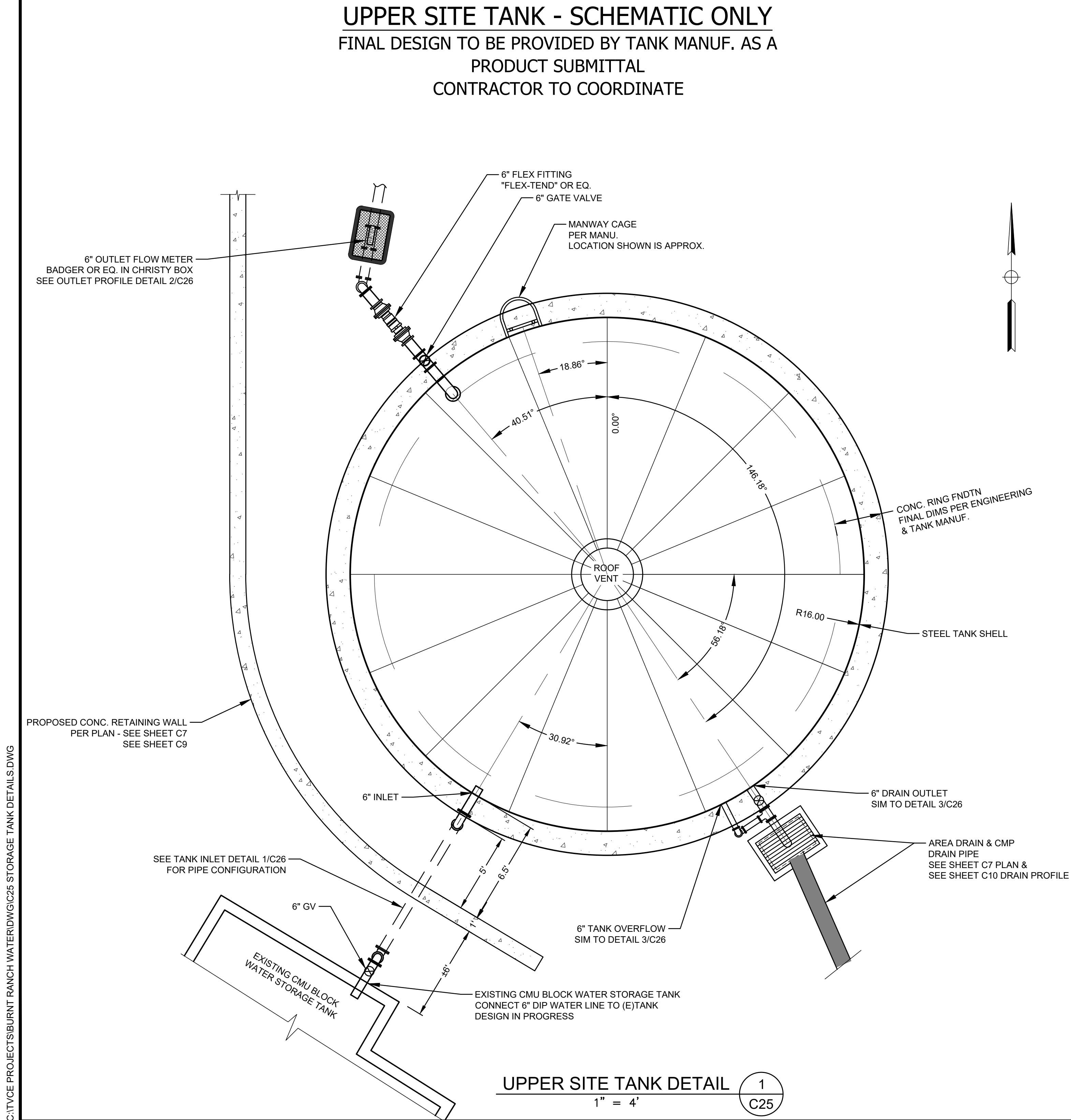
BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

CROSS SECTIONS

DESIGN BY: EK
DRAWN BY: SG
CHECKED BY: EK
DATE: 3/30/2024
SCALE: AS SHOWN
PROJECT NO: 1754

C24

C:\TVCE PROJECTS\BURN RANCH WATER\DWG\C25 STORAGE TANK DETAILS.DWG



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FOR BURN RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURN RANCH, CA 95527

WATER STORAGE TANKS
DETAILS

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

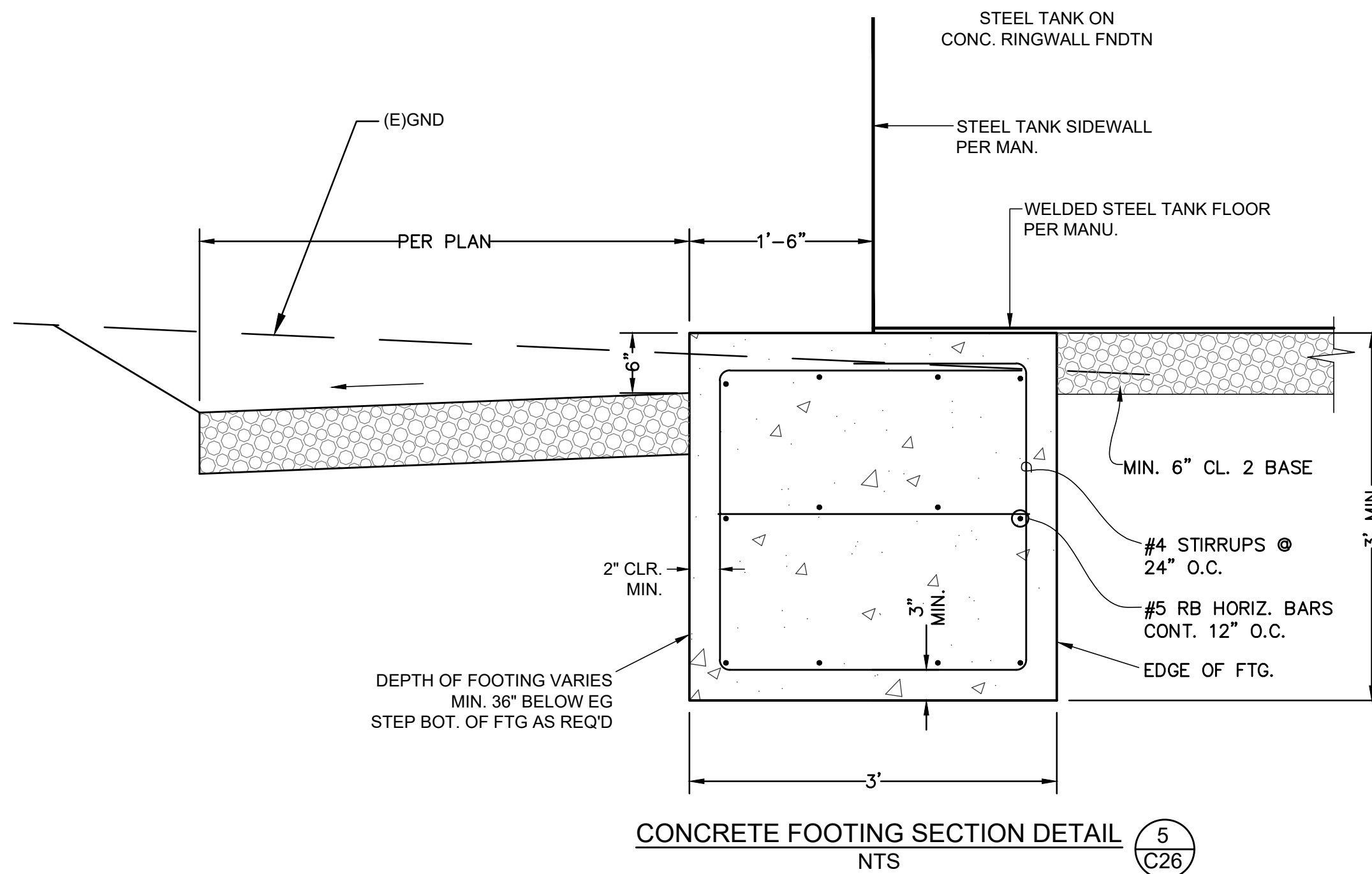
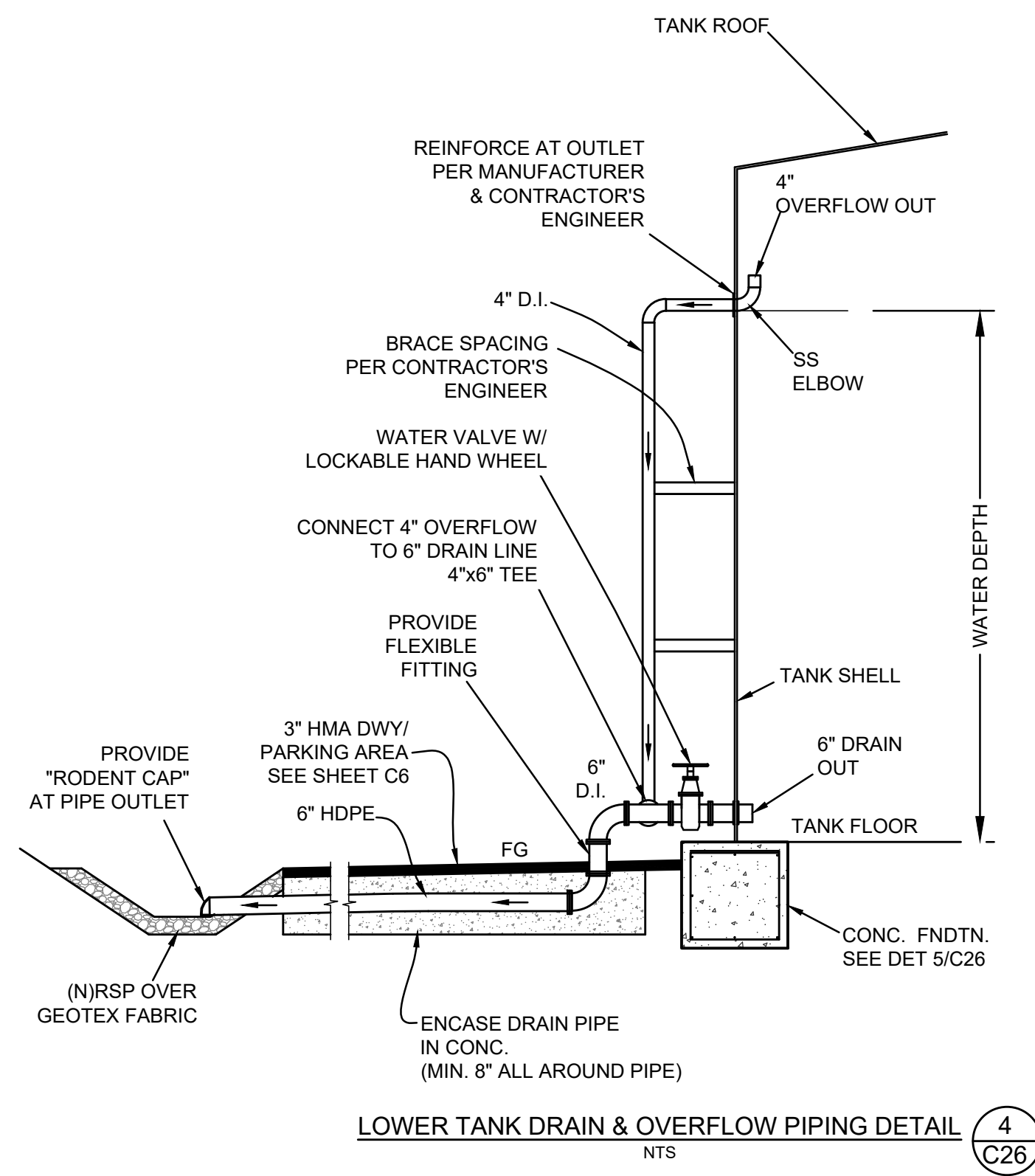
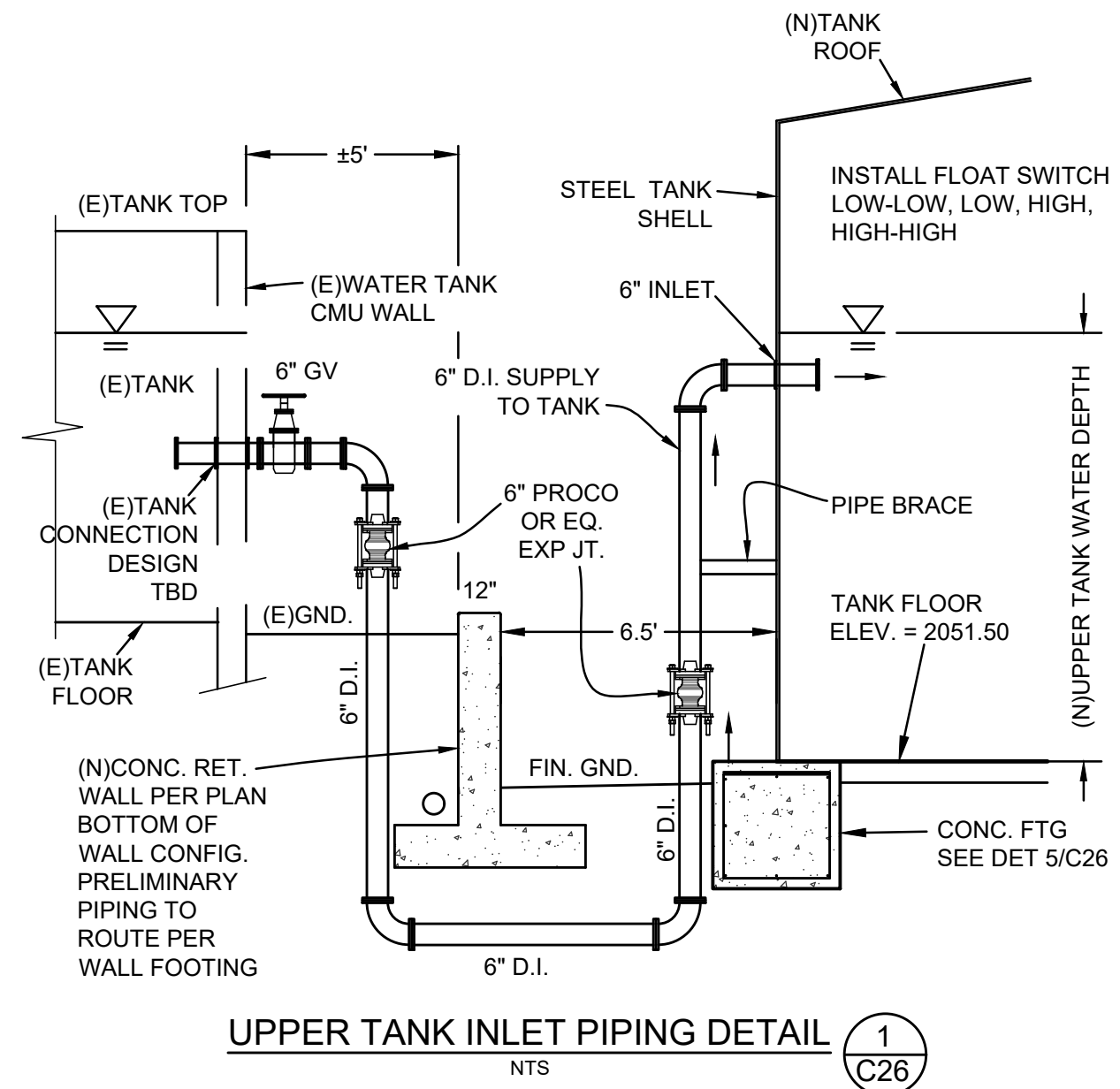
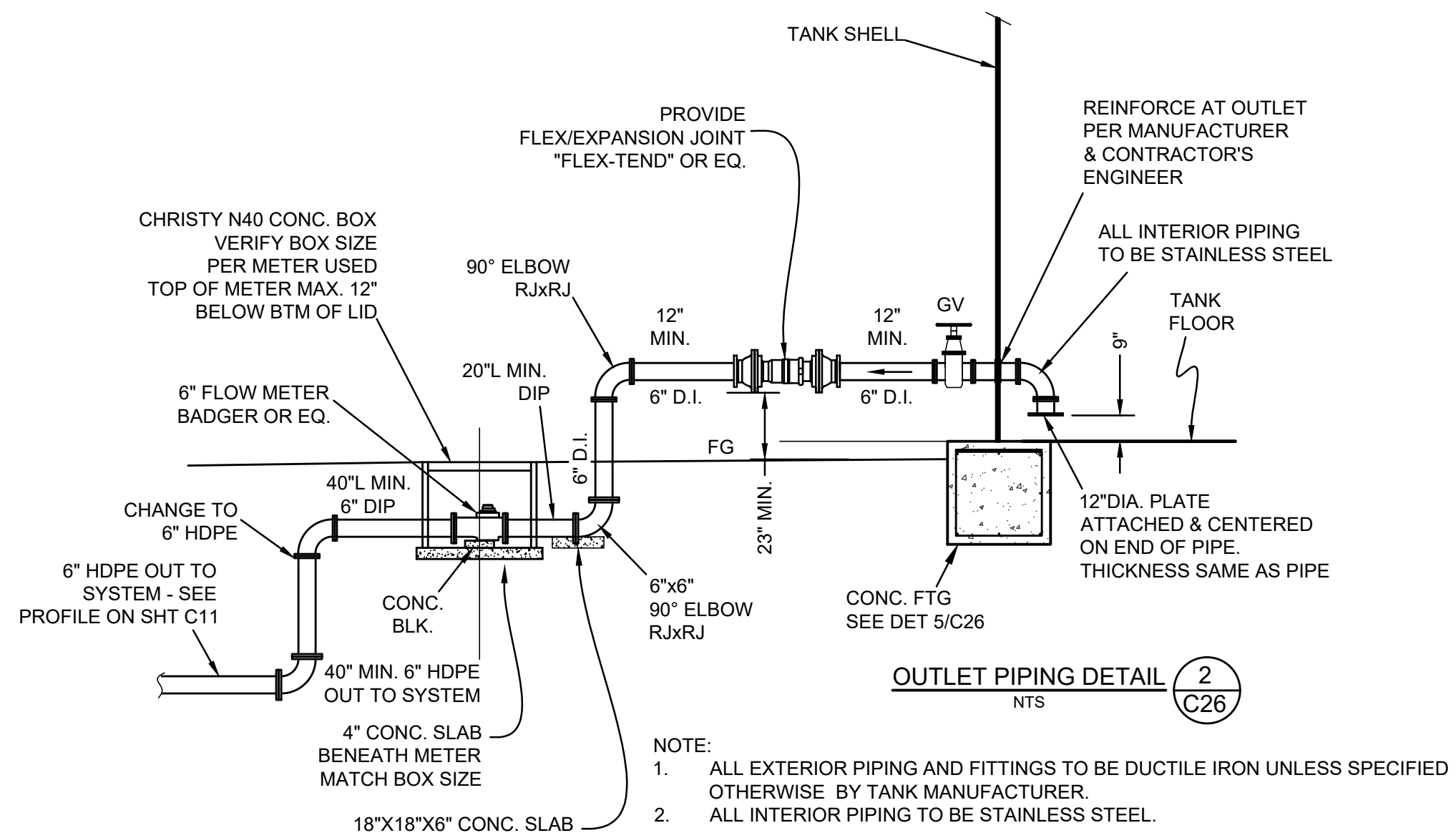
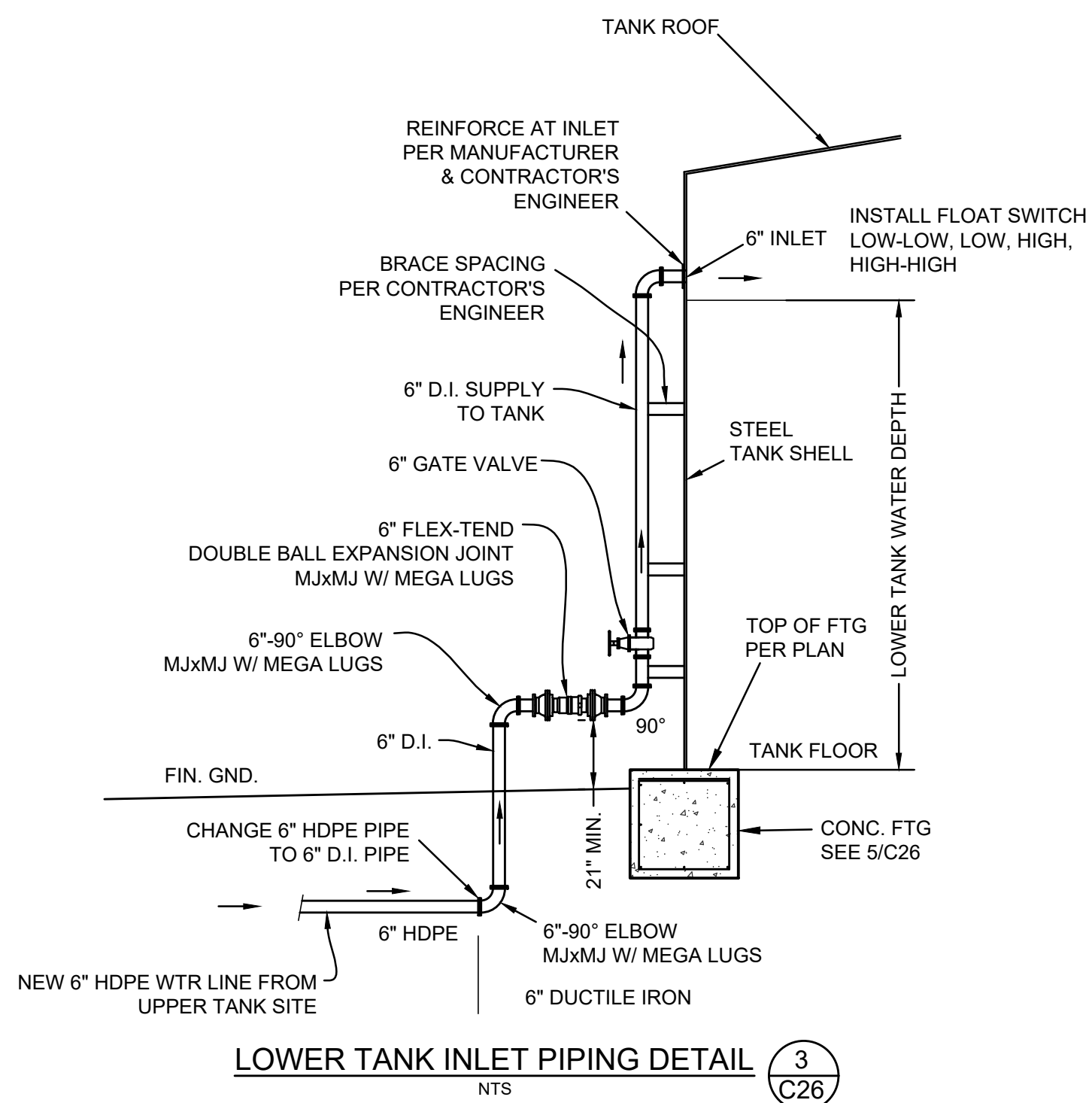
4/2/24

SCALE: AS SHOWN

PROJECT NO: 1754

C25

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FINAL DESIGN TO BE PROVIDED BY TANK
MANUF. AS A PRODUCT SUBMITTAL
CONTRACTOR TO COORDINATE



NOTE: APPROX.DIMENSIONS SHOWN
FINAL DESIGN TO BE PROVIDED BY
ENGR. OF RECORD ONCE TANK SUBMITTAL IS APPROVED



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TVCE

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DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

WATER STORAGE TANKS DETAILS

DESIGN BY: EK

DRAWN BY: SG

DATE:

SCALE: AS SHOWN

PROJECT NO: 1754

.....

C26

C:\TVCE PROJECTS\BURNT RANCH WATER\DWG\C27 STORAGE TANK DETAILS.DWG

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BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH MUTUAL
WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

STORAGE TANK
DETAILS

DESIGN BY:	EK
DRAWN BY:	SG
CHECKED BY:	EK
DATE:	3/4/24
SCALE:	AS SHOWN
PROJECT NO:	1754

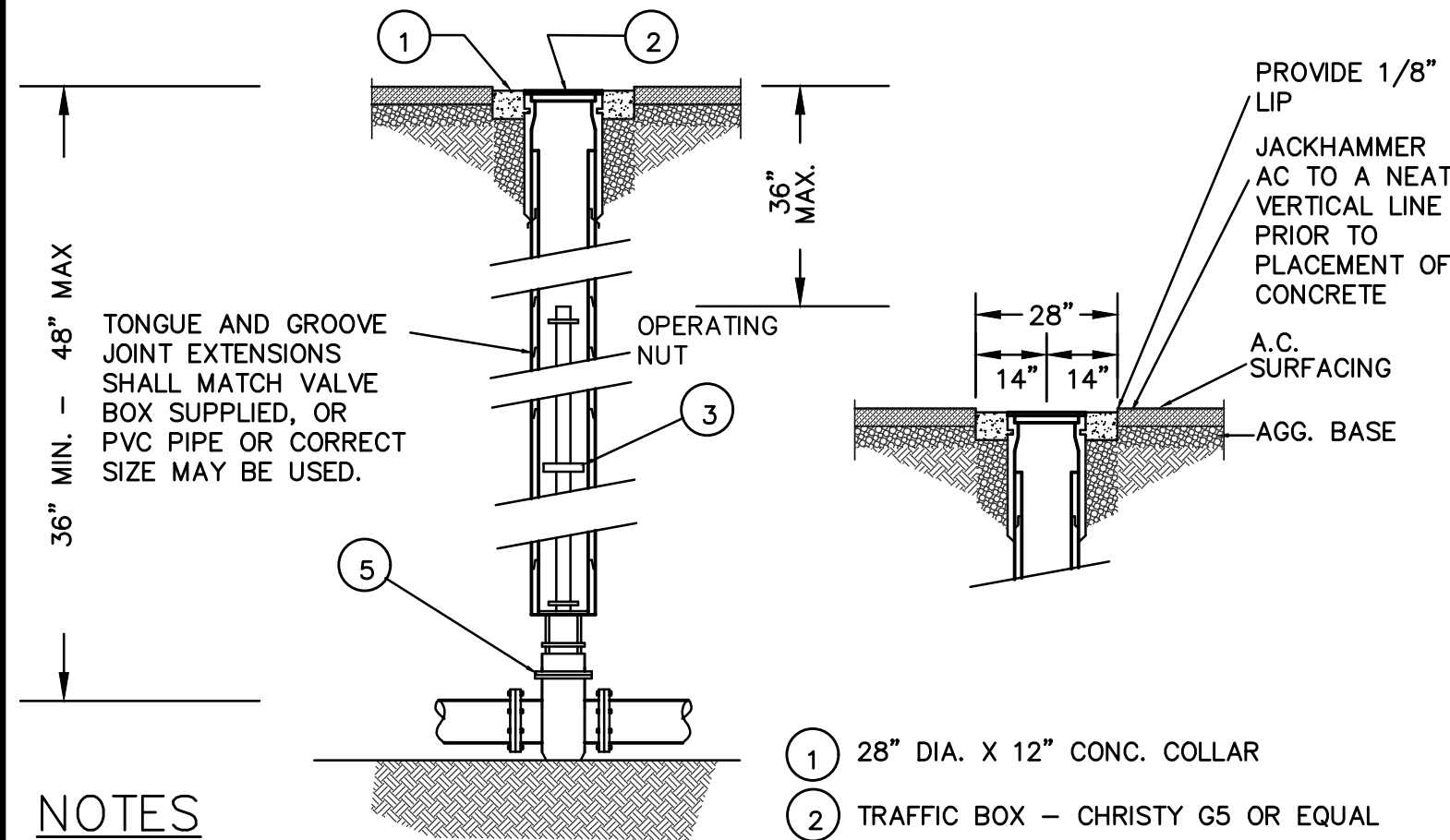
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PLAN BY:

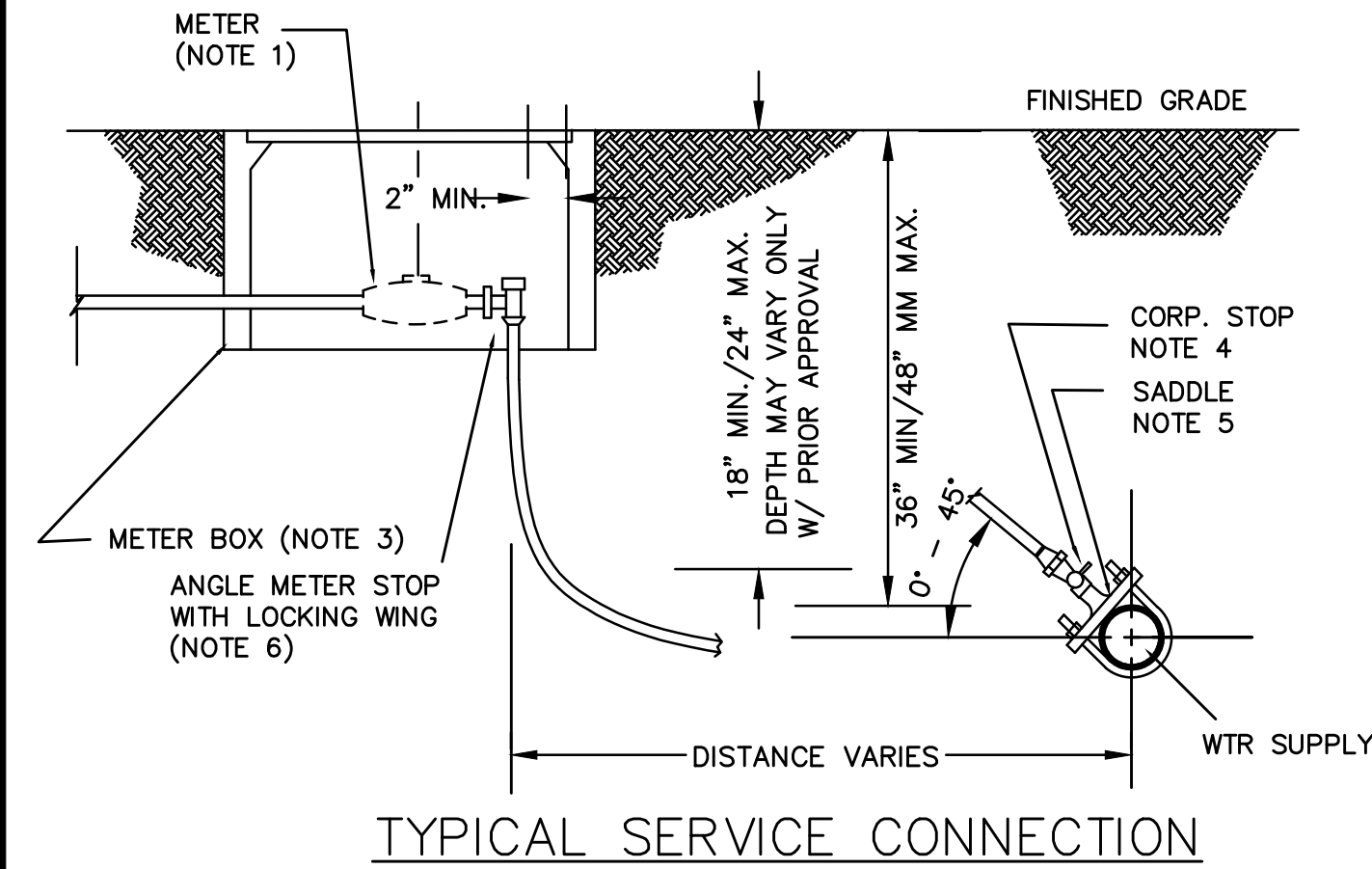
TVCE

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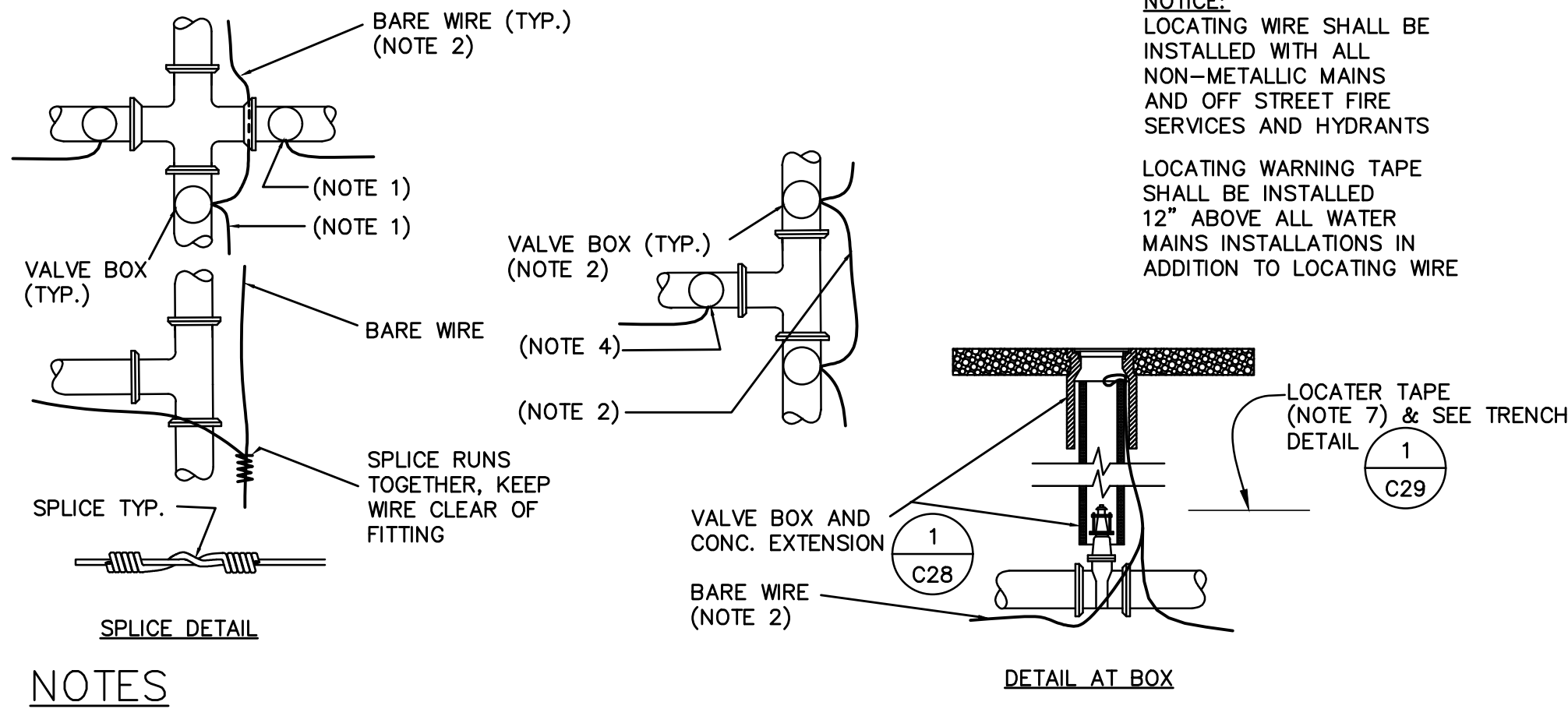
- NOTES**
- ③ OPERATING NUT EXTENSION W/ 6" PLATE WASHER WELDED TO EXTENSION AT MID POINT OF ROD (MIN. LENGTH OF ROD SHALL BE 24" WHERE REQUIRED)
 - ④ NO OPERATING NUT EXTENSION REQUIRED WHERE DISTANCE BETWEEN FINISHED GRADE AND TOP OF VALVE OPERATION NUT IS LESS THAN 36".
 - ⑤ RESILIENT WEDGE (RW) GATE VALVES 2" THROUGH 8", 125 POUND, FULLY ENCAPSULATED WEDGE IN SYNTHETIC RUBBER, NON-RISING STEM (NRS) AND OPEN TO LEFT. EXPOSED VALVES SHALL BE HAND WHEEL OPERATED AND BURIED VALVES SHALL HAVE 2" SQ. OPERATING NUT. VALVES SHALL BE AWWA C509-87, WATEROUS, OR APPROVED EQUAL. WELLS, PUMPING STATIONS, AND BACKFLOW DEVICES MAY REQUIRE HAND WHEEL OPERATED VALVES W/ OUTSIDE SCREW AND YOLK (OS&Y) RISING STEM VALVES.
 - ⑥ PROVIDE LOCATING WIRE AND TAPE PER DETAIL

1
C28 **WATER VALVE DETAILS**
NTS



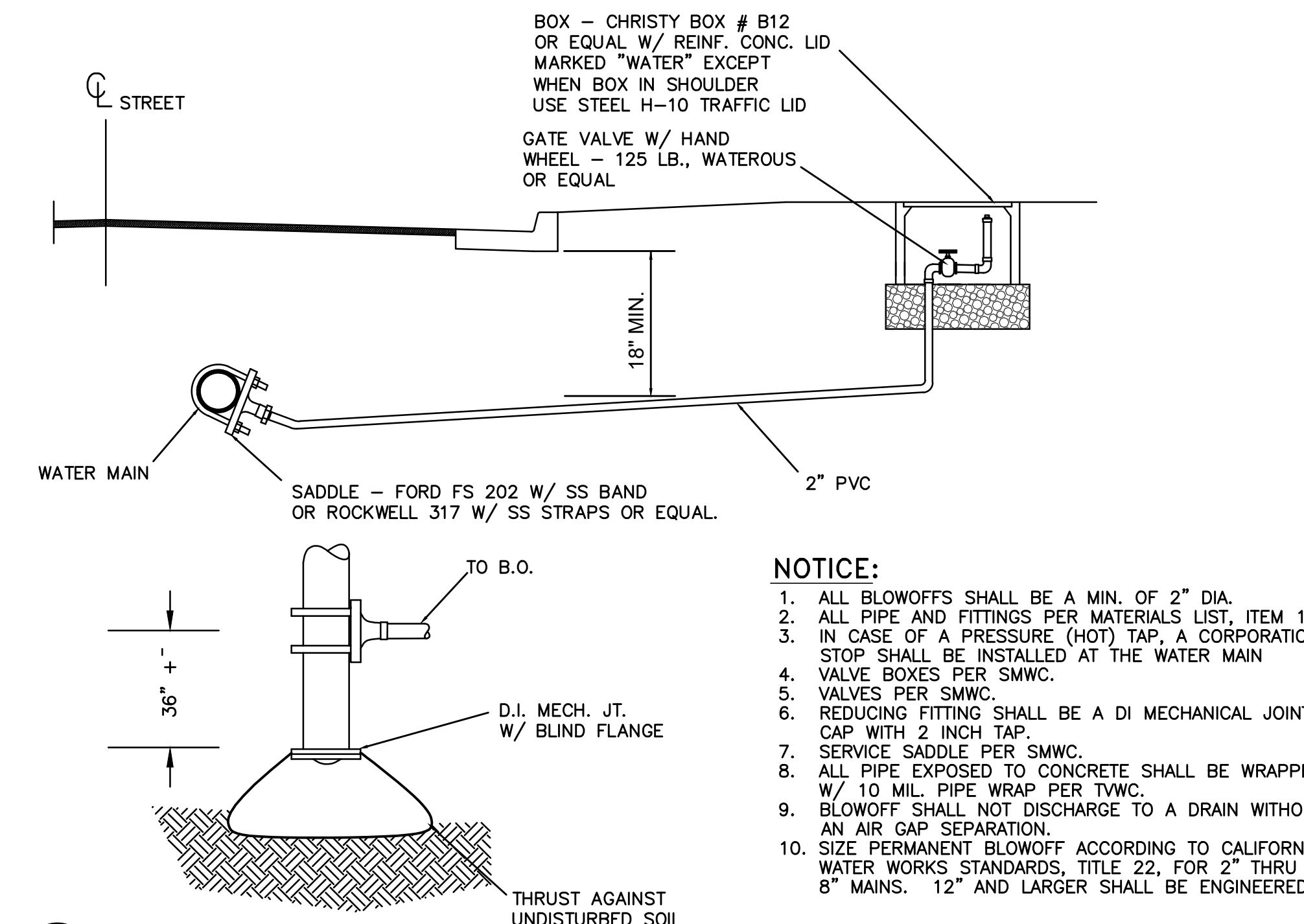
- NOTES**
- ① METER SIZE SHALL BE 3/4" X 5/8".
 - ② SERVICE PIPE - 3/4" & 1" - SOFT COPPER TYPE "K".
 - ③ METER BOXES - CHRISTY B9 OR APPROVED EQUAL.
 - ④ CORPORATION STOPS - FORD, JONES, OR MUELLER.
 - ⑤ SADDLES - FORD FS 202 WITH SS BAND.
 - ⑥ ANGLE METER STOP VALVE SHALL BE POSITIONED IN METER BOX SO THAT METER REGISTER WILL BE CENTERED UNDER LID.
 - ⑦ METER BOXES AND SERVICE PIPING SHALL BE INSTALLED WITH A MINIMUM OF 2 1/2' CLEARANCE FROM ALL ELECTRICAL TRANSFORMERS, LIGHT STANDARDS, AND OTHER UTILITY BOXES OR VAULTS.

4
C28 **TYPICAL WATER SERVICE DETAILS**
NTS

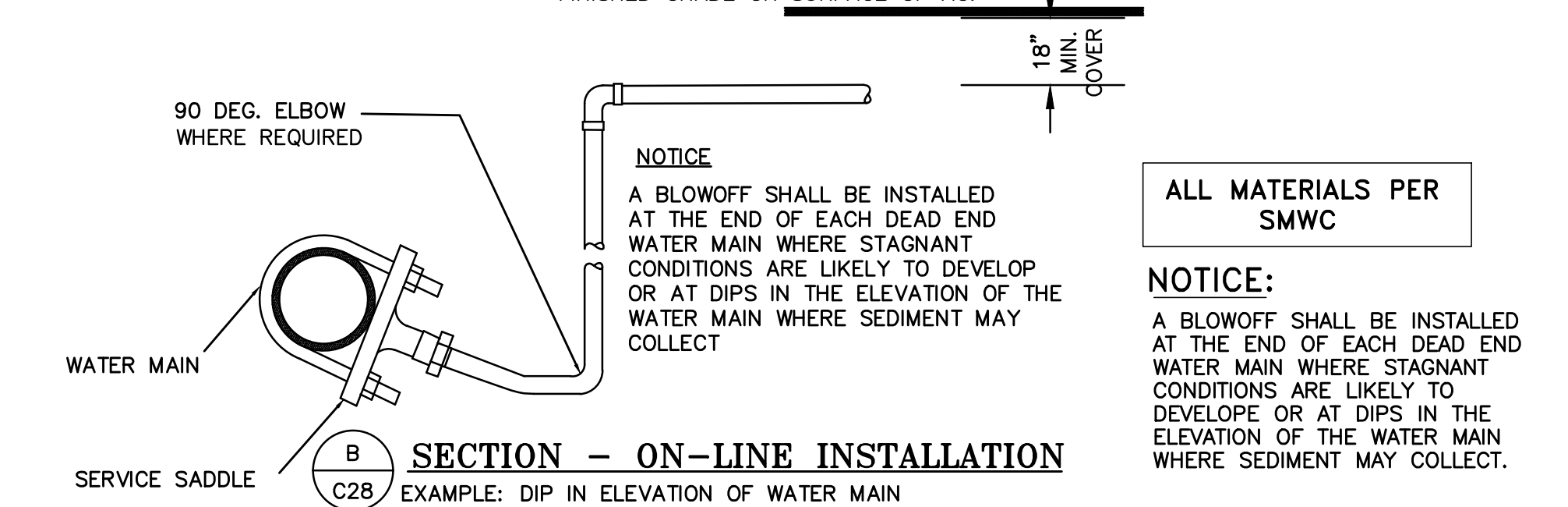


- NOTES**
- ① WIRE SHALL BE CONTINUOUS BETWEEN VALVE BOXES, EXCEPT WHERE BOXES ARE WITHIN TEN (10) FEET OF PIPE INTERSECTION.
 - ② BARE WIRE SHALL NOT TOUCH VALVE OR FITTING.
 - ③ LOCATING WIRE SHALL BE PLACED AT BOTTOM OF TRENCH, NEXT TO PIPE. (DO NOT ATTACH WIRE TO PIPE)
 - ④ IF WIRE ENDS AT A VALVE, A SINGLE INSULATED WIRE SHALL EXTEND UP TO WITHIN 12 INCHES OF BOX COVER.
 - ⑤ ALL VALVES, INCLUDING FIRE HYDRANT VALVES, SHALL HAVE LOCATING WIRES.
 - ⑥ LOCATING WIRE SHALL BE BARE #6 AWG SOLID COPPER, SOFT DRAWN WIRE. WIRE SHALL BE INSTALLED WITH ALL NON-METALLIC MAINS AND SERVICES.
 - ⑦ WARNING TAPE SHALL BE A DETECTABLE METALLIZED 2" WIDE WARNING TAPE, BLUE COLOR CODED, IMPRINTED WITH "CAUTION-BURIED WATER LINE BELOW" SHALL BE INSTALLED 12" ABOVE ALL WATER MAINS IN OFF ROAD INSTALLATIONS. LINEGUARD DETECTABLE MARKING TAPE, TYPE III OR APPROVED EQUAL.

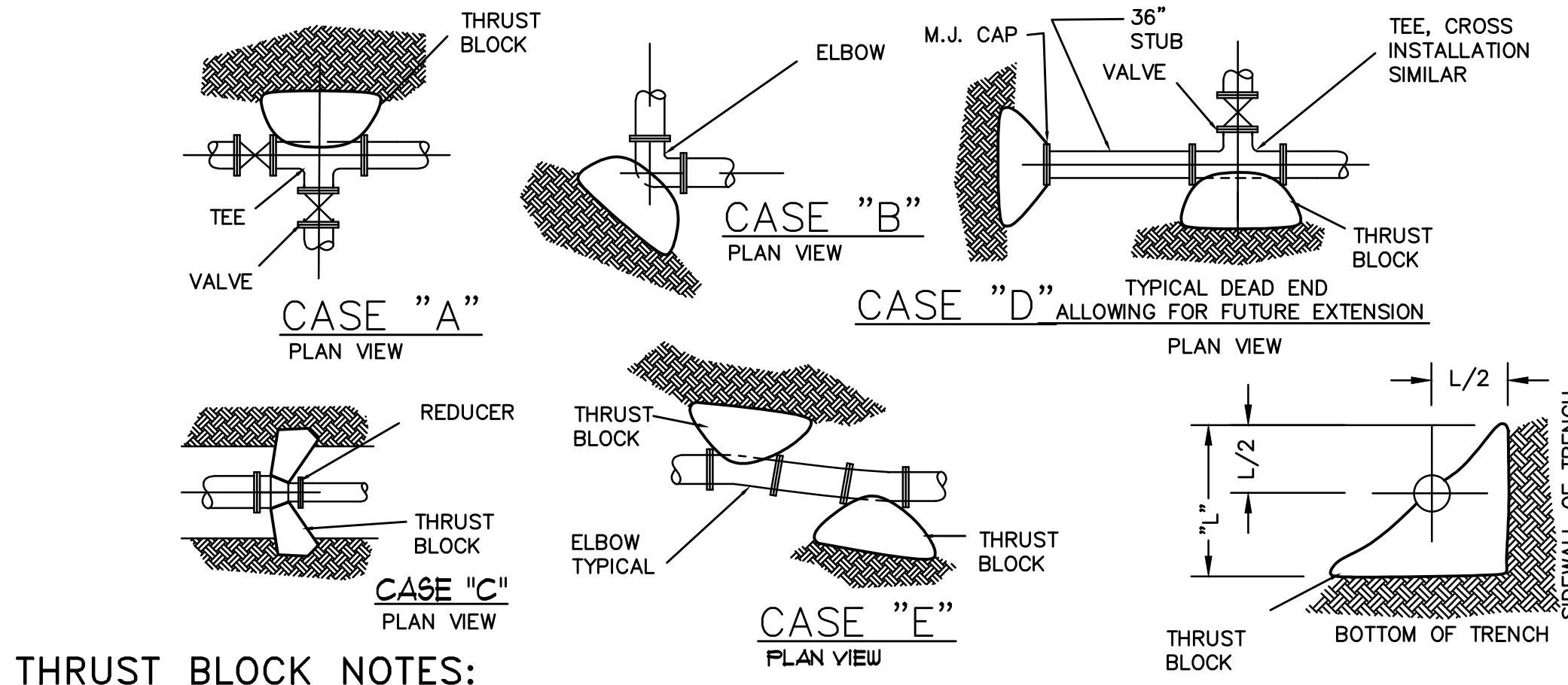
2
C28 **LOCATING WIRE AND WARNING TAPE**
NTS



A
C28 **PLAN - TYPICAL END INSTALLATION**



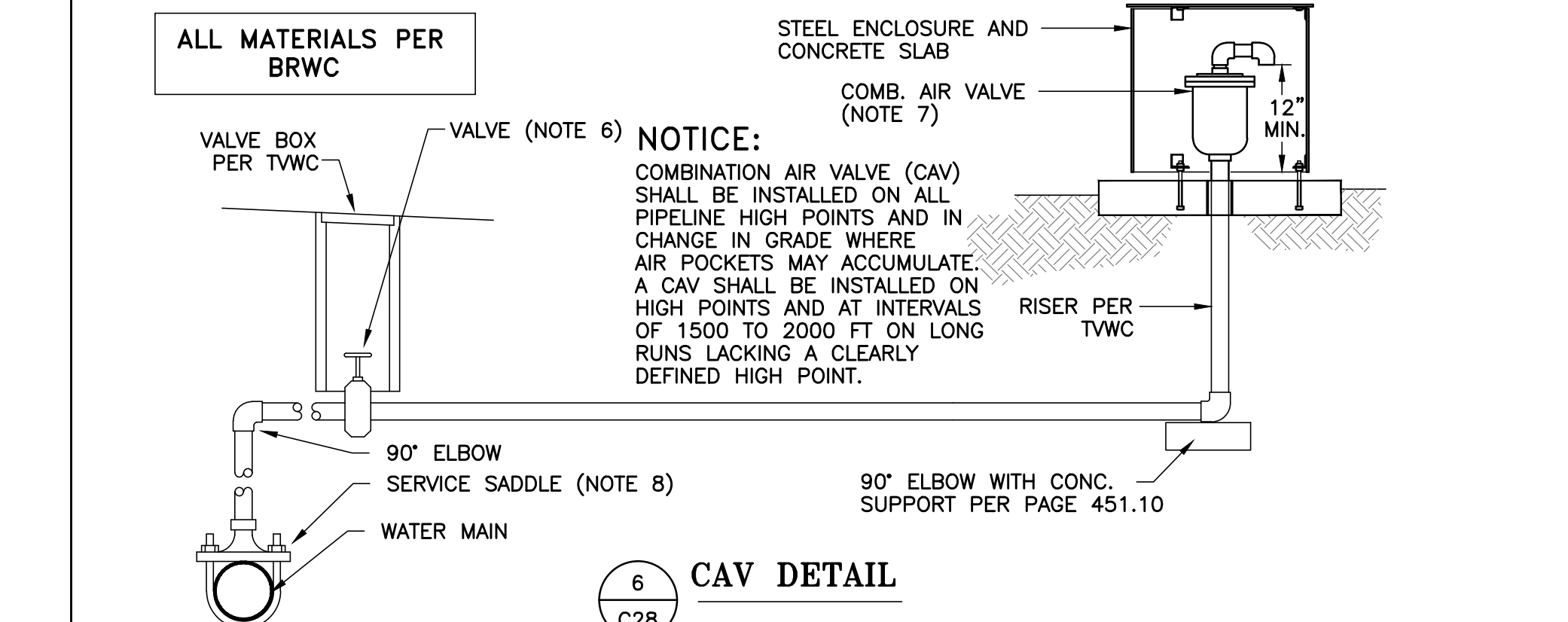
5
C28 **TYPICAL BLOWOFF INSTALLATION**
NTS



- THRUST BLOCK NOTES:**
- 1. THRUST BLOCKS SHALL BE CONSTRUCTED SO THAT MAJOR BEARING SURFACE IS IN DIRECT LINE WITH THE MAJOR FORCE CREATED BY THE PIPE OR FITTINGS.
 - 2. ALL CONCRETE SHALL BE CLASS 470-C-2500 PER "GREENBOOK".
 - 3. CONCRETE SHALL BE FLUID ENOUGH SO THAT IT MAY BE WORKED AROUND THE FITTINGS. A DOUBLE LAYER OF 6 MIL POLYETHYLENE FILM SHALL BE PLACED BETWEEN CONCRETE AND METAL FITTING.
 - 4. CONCRETE SHALL BE KEPT BEHIND THE BELL OF THE FITTING.
 - 5. THE THRUST BLOCK BEARING SURFACE SHALL BE PLACED AGAINST UNDISTURBED EARTH AND SHALL HAVE A MIN BEARING AREA OF 4 SF. FOR 4" & 6" DIA., 7 SF. FOR 8" DIA., 15 SF. FOR 12" DIA OR AS DIRECTED.
 - 6. ALL THRUST BLOCKS FOR PIPE LARGER THAN 12" SHALL BE ENGINEERED.
 - 7. A CONCRETE PAD SHALL BE PLACED UNDER ALL VALVES 12 INCHES AND LARGER FOR SUPPORT.
 - 8. ALL ANCHOR BLOCKS SHALL BE CONSTRUCTED WITH A MINIMUM OF (2) #4 REBAR STRAPS.

3
C28 **TYPICAL THRUST BLOCKS**
NTS

- NOTES:**
- 1. CALIFORNIA WATERWORKS STANDARDS, TITLE 22, FOR AIR AND VACUUM RELIEF VALVES STATES THE FOLLOWING:
 - (A) VENT OPENINGS FOR AIR AND VACUUM RELIEF AND AIR RELEASE VALVES SHALL BE
 - (1) EXTENDED AT LEAST (1) ONE FOOT (0.3m) ABOVE GRADE AND ABOVE MAXIMUM RECORDED HIGH WATER LEVEL. (CASE 1)
 - (2) DOWNWARD FACING AND SCREENED.
 - (B) WHERE THE REQUIREMENTS OF (A)(1) CANNOT BE PRACTICABLY MET, VENT OPENINGS MAY BE LOCATED IN A SUBSURFACE CHAMBER OR PIT (CASE 2) UNDER THE FOLLOWING CONDITIONS:
 - (1) PIT IS ADEQUATELY DRAINED. (METHOD TO BE APPROVED BY THE COUNTY ENGINEER)
 - (2) THE PIT DRAIN IS NOT CONNECTED BY PIPE OR OTHER CLOSED CONDUIT TO A SEWER OR STORM DRAIN WITHOUT AN AIR SEPARATION.
 - 2. PIPE AND FITTINGS PER SMWC.
 - 3. IN THE CASE OF PRESSURE (HOT) TAP, A CORPORATION STOP SHALL BE INSTALLED PER SMWC.
 - 4. VALVE BOX PER SMWC.
 - 5. VALVE BOX LID PER SMWC.
 - 6. VALVES PER SMWC.
 - 7. COMBINATION AIR VALVES : PER SMWC.
 - 8. SERVICE SADDLES PER SMWC.
 - 9. THE MINIMUM ACCEPTABLE SIZE COMBINATION AIR VALVE SHALL BE 2 INCH. SIZE OF CAV SHALL BE ENGINEERED TO MANUFACTURERS SPECIFICATIONS.



6
C28 **CAV DETAIL**



PRELIMINARY

REVISIONS

BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH MUTUAL
WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

WATER DETAILS

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

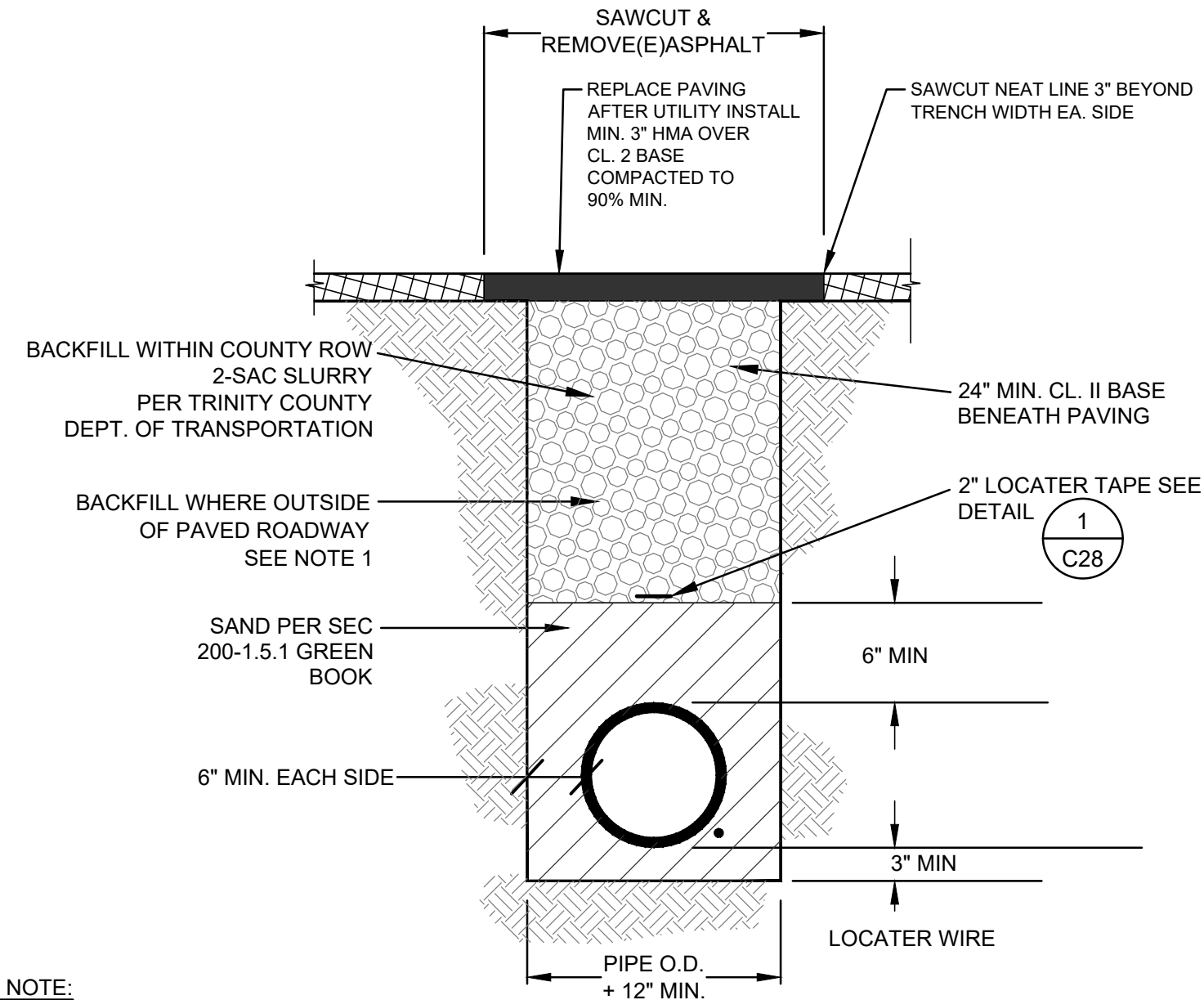
2/11/24

SCALE: -

PROJECT NO: 1754

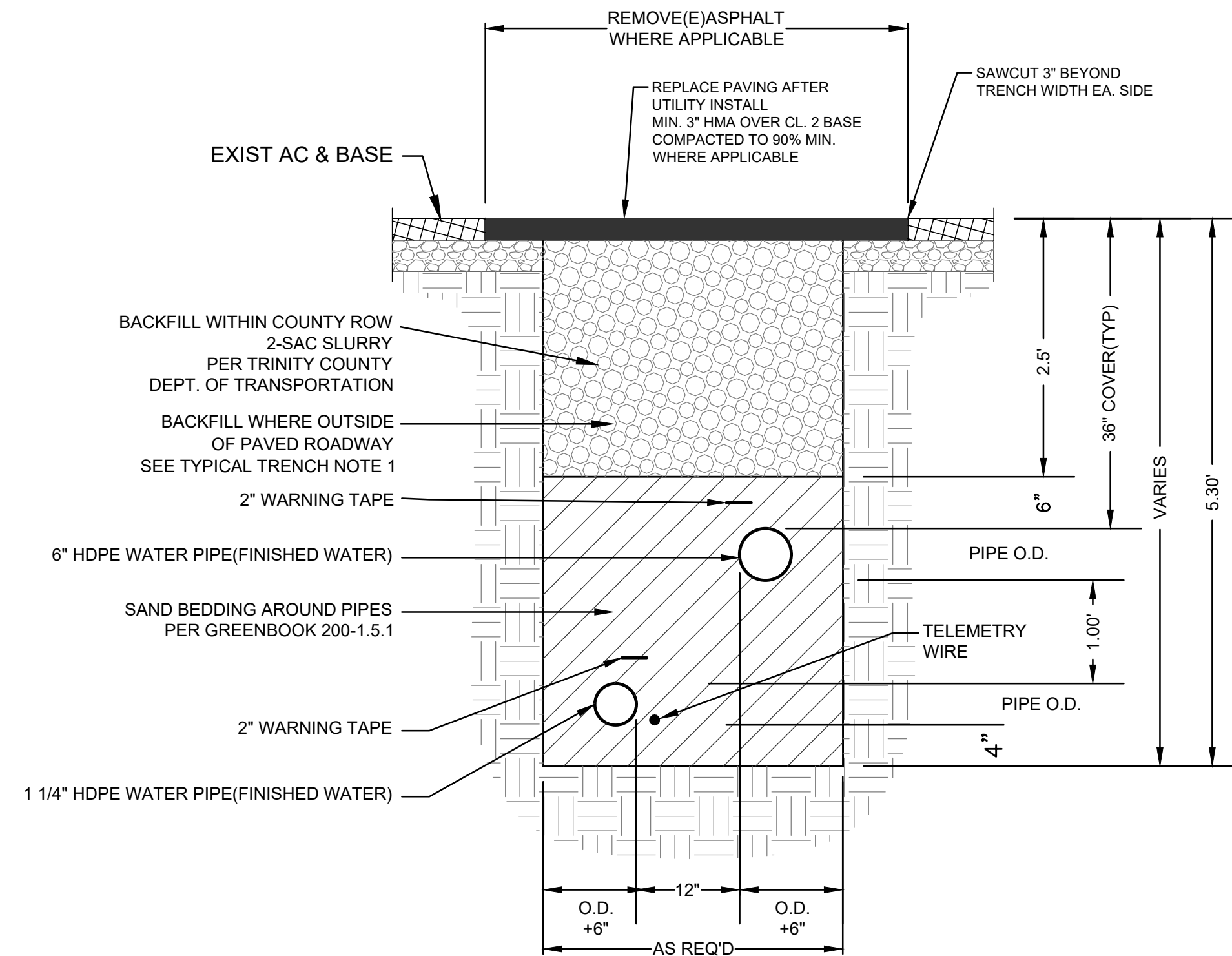
C28

C:\TYCE PROJECTS\BURNT RANCH WATER\DWG\C29 WATER DETAILS.DWG



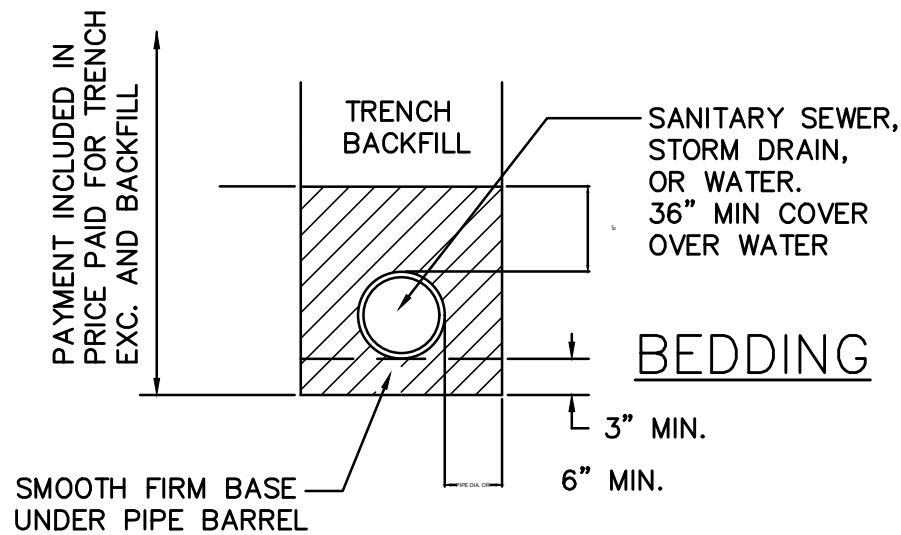
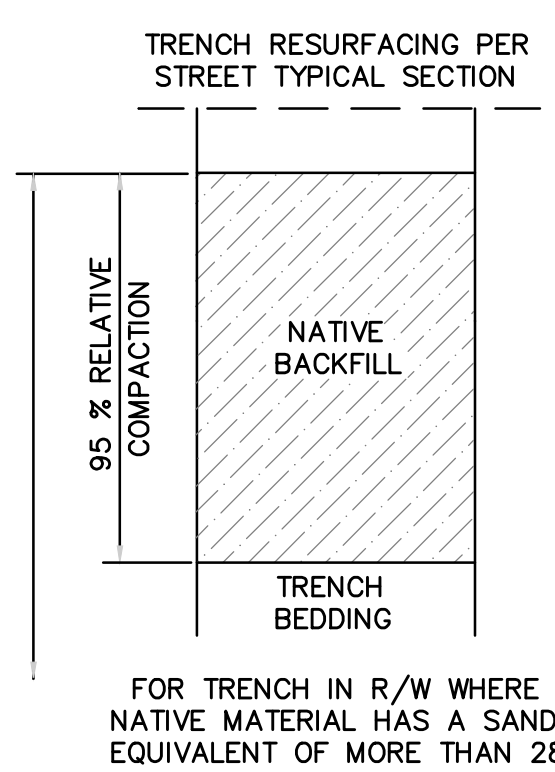
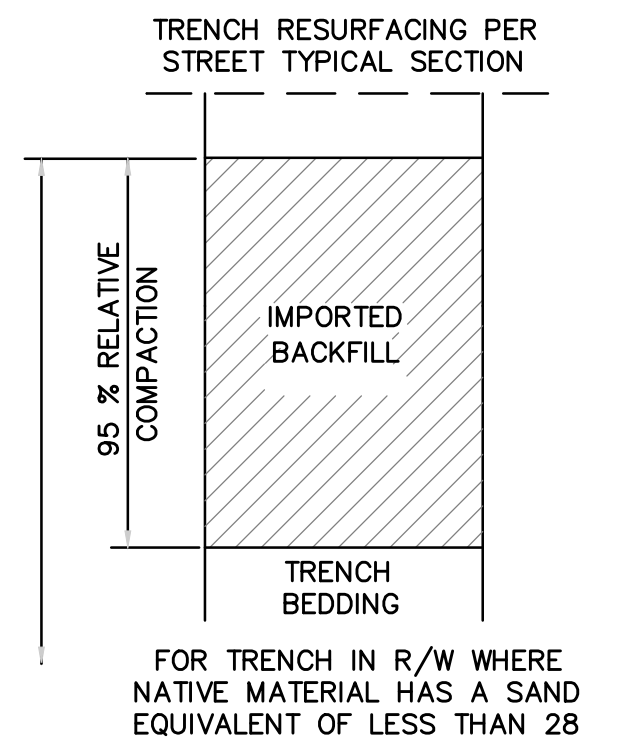
- NOTE:
- INTERMEDIATE BACKFILL SHALL BE ANY SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL. RELATIVE COMPACTION SHALL BE AT LEAST 90%

TYPICAL TRENCH DETAIL 1
NTS



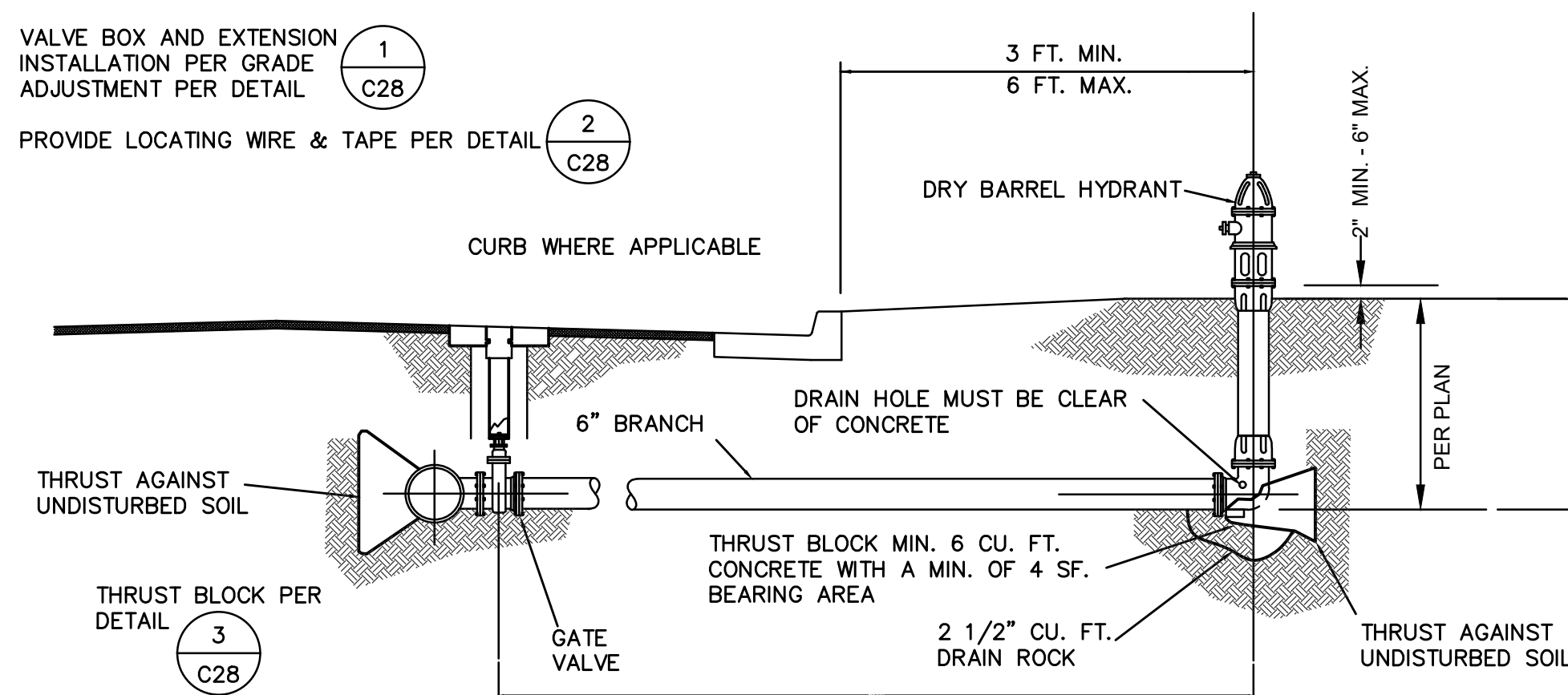
NOTE: TRENCHING OCCURS WITHIN & OUTSIDE STREET SECTION PER PLANS
MATCH NEW PAVING TO EXISTING PAVEMENT W/ SMOOTH TRANSITION
BUILD UP WHEN OUTSIDE OF STREET SECTION PER DETAIL 3 THIS SHEET

JOINT TRENCH DETAIL 2
C29



- TRENCH BEDDING & BACKFILL NOTES:
- BACKFILL BY HAND, COMPACT OR CONSOLIDATE TO PROVIDE SOLID BEDDING UNDER AND AROUND PIPE.
 - JETTING WILL NOT BE ALLOWED.
 - TRENCH BACKFILL WITHIN ROADWAY PER ENGINEER

TRENCH BEDDING & BACKFILL DETAIL 3
C29



NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK, LATEST EDITION)
- FOR ALLOWABLE FIRE HYDRANTS, VALVES, PIPE, AND FITTINGS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF AWWA C502-05, "STANDARDS FOR DRY BARREL FIRE HYDRANTS".
MUELLER SUPER CENTURION 200.
KENNEDY GUARDIAN K-81A.
WATEROUS PACER WB-67.

FIRE HYDRANT DETAIL 4
NTS



PRELIMINARY

REVISIONS

BURNT RANCH ESTATES
DROUGHT RESILIENCE PROJECT
FOR BURNT RANCH ESTATES
MUTUAL WATER COMPANY
PO BOX 102
BURNT RANCH, CA 95527

WATER DETAILS

DESIGN BY: EK

DRAWN BY: SG

CHECKED BY: EK

DATE:

3/19/24

SCALE: NO SCALE

PROJECT NO: 1754

C29

C:\T\PROJECTS\BURNT RANCH WATER\DWG\C30 WATERLINE ALIGNMENT DATA.DWG

LINE TABLE - WATERLINE ALIGNMENT RUN #1				
Line #	Length	Direction	Start Point	End Point
L1	13.555	N40° 29' 37.22"W	(6146877.6809,2182969.2876)	(6146868.8788,2182979.5959)
L2	18.153	N10° 17' 32.65"E	(6146868.8788,2182979.5959)	(6146872.1222,2182997.4565)
L3	78.531	N33° 27' 48.23"W	(6146857.1551,2183070.4641)	(6146813.8528,2183135.9777)
L4	10.601	N07° 27' 45.52"E	(6146798.1236,2183204.1061)	(6146799.5005,2183214.6171)
L5	101.949	N18° 42' 45.52"E	(6146812.8175,2183271.8998)	(6146845.5249,2183368.4592)
L6	86.783	N55° 01' 25.60"E	(6146901.6103,2183443.2444)	(6146972.7193,2183492.9915)
L7	136.054	N63° 42' 45.52"E	(6146998.7919,2183508.4303)	(6147120.7759,2183568.6851)
L8	85.811	N52° 27' 45.52"E	(6147154.0569,2183589.4107)	(6147222.1015,2183641.6936)
L9	36.668	N74° 57' 37.28"E	(6147222.1015,2183641.6936)	(6147257.5130,2183651.2084)
L10	181.115	S82° 32' 21.44"E	(6147257.5130,2183651.2084)	(6147437.0950,2183627.6912)
L11	40.077	N74° 57' 27.72"E	(6147495.5018,2183631.5612)	(6147534.2051,2183641.9623)
L12	5.175	S60° 02' 32.28"E	(6147534.2051,2183641.9623)	(6147538.6884,2183639.3783)
L13	66.137	N86° 12' 27.72"E	(6147595.2385,2183626.2366)	(6147661.2311,2183630.6110)
L14	368.090	S80° 02' 14.48"E	(6147746.0674,2183610.8921)	(6148064.9624,2183427.0551)
L15	148.425	S29° 57' 45.52"W	(6148064.9624,2183427.0551)	(6147990.8335,2183298.4665)
L16	19.846	S28° 06' 48.13"W	(6147990.8335,2183298.4665)	(6147981.4819,2183280.9624)
L17	118.898	S58° 34' 29.02"E	(6148058.4990,2182997.9559)	(6148159.9573,2182935.9641)
L18	85.599	S61° 28' 01.83"E	(6148159.9573,2182935.9641)	(6148235.1595,2182895.0768)
L19	75.453	S58° 26' 16.88"E	(6148235.1595,2182895.0768)	(6148299.4507,2182855.5834)
L20	31.290	N31° 43' 35.62"E	(6148299.4507,2182855.5834)	(6148315.9048,2182882.1973)
L21	76.429	S58° 29' 55.70"E	(6148315.9048,2182882.1973)	(6148381.0703,2182842.2620)
L22	54.030	S61° 53' 16.96"E	(6148396.4664,2182833.4422)	(6148444.1226,2182807.9834)
L23	40.135	S21° 30' 13.11"E	(6149358.5257,2182834.3819)	(6149373.2377,2182797.0402)
L24	31.418	S65° 47' 29.99"E	(6149373.2377,2182797.0402)	(6149401.8929,2182784.1570)
L25	34.711	S12° 56' 13.58"E	(6149545.7321,2182604.3516)	(6149553.5032,2182570.5219)
L26	1.906	S09° 35' 50.63"W	(6149555.2113,2182511.9311)	(6149554.8936,2182510.0519)
L27	53.130	N83° 41' 51.79"E	(6149699.7757,2182114.4691)	(6149752.5843,2182120.3013)
L28	85.873	N86° 01' 24.19"E	(6149752.5843,2182120.3013)	(6149838.2504,2182126.2566)
L29	130.725	N85° 50' 31.36"E	(6149838.2504,2182126.2566)	(6149968.6317,2182135.7350)
L30	95.798	S44° 25' 45.57"E	(6150304.4956,2182184.6037)	(6150371.5568,2182116.1932)
L31	36.377	S51° 35' 21.95"E	(6150417.9679,2182074.4182)	(6150446.4723,2182051.8173)
L32	22.549	S52° 46' 56.02"E	(6150446.4723,2182051.8173)	(6150464.4292,2182038.1785)
L33	117.813	N60° 46' 46.51"E	(6150674.2772,2182023.2890)	(6150777.0980,2182080.8017)
L34	180.748	S27° 55' 04.76"W	(6150970.9505,2181891.1075)	(6150886.3228,2181731.3950)
L35	94.359	S26° 50' 13.85"W	(6150886.3228,2181731.3950)	(6150843.7237,2181647.1990)
L36	76.976	S28° 51' 50.58"W	(6150843.7237,2181647.1990)	(6150806.5651,2181579.7863)
L37	62.126	S33° 56' 29.37"W	(6150806.5651,2181579.7863)	(6150771.8774,2181528.2463)
L38	38.434	S34° 36' 19.67"W	(6150771.8774,2181528.2463)	(6150750.0499,2181496.6119)
L39	52.267	S33° 39' 17.37"W	(6150750.0499,2181496.6119)	(6150721.0844,2181453.1056)
L40	54.061	S83° 11' 01.88"E	(6151038.7339,2181211.7044)	(6151092.4131,2181205.2882)
L41	52.948	N46° 36' 23.52"E	(6151293.7383,2181286.3743)	(6151332.2131,2181322.7498)
L42	41.383	N49° 26' 39.60"E	(6151332.2131,2181322.7498)	(6151363.6547,2181349.6563)
L43	84.256	N54° 14' 28.37"E	(6151843.5987,2181509.2069)	(6151911.9712,2181558.4440)

CURVE TABLE: WATERLINE ALIGNMENT - RUN #1					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	100.000	76.368	N11° 35' 07.79"W	(6146872.1222,2182997.4565)	(6146857.1551,2183070.4641)
C2	100.000	71.429	N13° 00' 01.36"W	(6146813.8528,2183135.9777)	(6146798.1236,2183204.1061)
C3	300.000	58.905	N13° 05' 15.52"E	(6146799.5005,2183214.6171)	(6146812.8175,2183271.8998)
C4	150.000	95.062	N36° 52' 05.56"E	(6146845.5249,2183368.4592)	(6146901.6103,2183443.2444)
C5	200.000	30.330	N59° 22' 05.56"E	(6146972.7193,2183492.9915)	(6146998.7919,2183508.4303)
C6	200.000	39.270	N58° 05' 15.52"E	(6147120.7759,2183568.6851)	(6147154.0569,2183589.4107)
C7	150.000	58.913	N86° 12' 33.14"E	(6147437.0950,2183627.6912)	(6147495.5018,2183631.5612)
C8	100.000	58.905	S76° 55' 02.28"E	(6147538.6884,2183639.3783)	(6147595.2385,2183626.2366)
C9	150.000	88.370	S76° 54' 53.38"E	(6147661.2311,2183630.6110)	(6147746.0674,2183610.8921)
C10	213.685	323.251	S15° 13' 25.46"E	(6147981.4819,2183280.9624)	(6148058.4990,2182997.9559)
C11	300.000	17.746	S60° 11' 36.33"E	(6148381.0703,2182842.2620)	(6148396.4664,2182833.4422)
C12	188.745	61.331	S77° 21' 10.38"E	(6148483.3222,2182789.6760)	(6148542.9026,2182776.3067)
C13	296.011	69.017	N86° 39' 31.51"E	(6148542.9026,2182776.3067)	(6148611.6462,2182780.3201)
C14	317.275	67.075	N73° 55' 22.16"E	(6148611.6462,2182780.3201)	(6148675.9783,2182798.8608)
C15	865.612	143.289	N63° 07' 26.85"E	(6148675.9783,2182798.8608)	(6148803.6442,2182863.5618)
C16	181.266	86.599	N44° 41' 43.75"E	(6148803.6442,2182863.5618)	(6148863.9751,2182924.5375)
C17	139.442	38.038	N23° 11' 39.23"E	(6148863.9751,2182924.5375)	(6148878.9100,2182959.3929)
C18	100.000	23.019	N08° 47' 05.89"E	(6148878.9100,2182959.3929)	(6148882.4179,2182982.0916)
C19	632.676	37.997	N00° 28' 12.01"E	(6148882.4179,2182982.0916)	(6148882.7295,2183020.0819)
C20	129.331	92.831	N21° 48' 23.38"E	(6148882.7295,2183020.0819)	(6148916.4784,2183104.4324)
C21	216.028	135.615	N64° 22' 07.54"E	(6148916.4784,2183104.4324)	(6149036.7509,2183162.1379)
C22	161.005	105.988	S78° 47' 18.31"E	(6149036.7509,2183162.1379)	(6149138.8493,2183141.9005)
C23	129.422	54.607	S47° 50' 32.52"E	(6149138.8493,2183141.9005)	(6149179.0300,2183105.5210)
C24	227.085	69.911	S26° 56' 07.42"E	(6149179.0300,2183105.5210)	(6149210.5735,2183043.4403)
C25	601.728	36.306	S16° 23' 14.46"E	(6149210.5735,2183043.4403)	(6149220.8149,2183008.6148)
C26	935.019	65.252	S16° 39' 29.20"E	(6149220.8149,2183008.6148)	(6149239.5163,2182946.1138)
C27	96.250	29.758	S27° 30' 52.69"E	(6149239.5163,2182946.1138)	(6149253.2092,2182919.8263)
C28	249.433	73.875	S44° 51' 23.85"E	(6149253.2092,2182919.8263)	(6149305.1257,2182867.6493)
C29	380.976	62.987	S58° 04' 39.62"E	(6149305.1257,2182867.6493)	(6149358.5257,2182834.3819)
C30	180.252	9.951	S64° 12' 36.51"E	(6149401.8929,2182784.1570)	(6149410.8515,2182779.8282)
C31	187.697	24.544	S58° 52' 57.01"E	(6149410.8515,2182779.8282)	(6149431.8490,2182767.1530)
C32	267.049	95.048	S44° 56' 24.27"E	(6149431.8490,2182767.1530)	(6149498.6337,2182700.2284)
C33	502.220	52.156	S31° 46' 07.16"E	(6149498.6337,2182700.2284)	(6149526.0810,2182655.9063)
C34	200.000	55.349	S20° 51' 55.17"E	(6149526.0810,2182655.9063)	(6149545.7321,2182604.3516)
C35	150.000	58.995	S01° 40' 11.47"E	(6149553.5032,2182570.5219)	(6149555.2113,2182511.9311)
C36	250.000	125.526	S23° 58' 53.86"W	(6149554.8936,2182510.0519)	(6149504.4085,2182396.5627)
C37	189.012	52.545	S30° 24' 06.71"W	(6149504.4085,2182396.5627)	(6149477.9033,2182351.3890)
C38	194.502	196.705	S06° 32' 03.96"E	(6149477.9033,2182351.3890)	(6149499.3465,2182164.1845)
C39	127.468	21.375	S40° 18' 38.15"E	(6149499.3465,2182164.1845)	(6149513.1582,2182147.9044)
C40	116.530	50.832	S57° 36' 39.92"E	(6149513.1582,2182147.9044)	(6149555.7429,2182120.8909)
C41	206.939	64.771	S79° 04' 27.91"E	(6149555.7429,2182120.8909)	(6149619.0808,2182108.6646)
C42	382.348	81.055	N85° 53' 08.68"E	(6149619.0808,2182108.6646)	(6149699.7757,2182114.4691)
C43	198.208	109.938	N69° 57' 07.77"E	(6149988.6317,2182135.7350)	(6150070.5898,2182172.9411)
C44	1338.894	47.151	N53° 03' 12.21"E	(6150070.5898,2182172.9411)	(6150108.2709,2182201.2809)
C45	157.277	57.329	N62° 29' 13.32"E	(6150108.2709,2182201.2809)	(6150158.8357,2182227.6178)
C46	169.834	39.384	N79° 34' 22.20"E	(6150158.8357,2182227.6178)	(6150197.4822,2182234.7297)
C47	102.733	55.485	S78° 18' 41.33"E	(6150197.4822,2182234.7297)	(6150251.1587,2182223.6250)
C48	210.572	66.361	S53° 48' 38.79"E	(6150251.1587,2182223.6250)	(6150304.4956,2182184.6037)
C49	196.396	43.585	S59° 08' 23.49"E	(6150464.4292,2182038.1785)	(6150501.7666,2182015.8678)
C50	115.948	21.471	S70° 48' 08.81"E	(6150501.7666,2182015.8678)	(6150522.0147,2182008.8176)
C51	285.742	26.668	S78° 46' 52.05"E	(6150522.0147,2182008.8176)	(6150548.1640,2182003.6310)
C52	213.351	129.620	N81° 08' 24.94"E	(6150548.1640,2182003.6310)	(6150674.2772,2182023.2890)
C53	191.663	36.618	N66° 15' 10.26"E	(6150777.0980,2182080.8017)	(6150810.5645,2182095.5253)
C54	128.356	99.845	S85° 59' 21.98"E	(6150810.5645,2182095.5253)	(6150907.6724,2182088.7169)
C55	163.323	56.468	S53° 48' 00.54"E	(6150907.6724,2182088.7169)	(6150953.0133,2182055.5325)
C56	130.028	45.442	S33° 53' 00.21"E	(6150953.0133,2182055.5325)	(6150978.2189,2182017.9992)
C57	127.571	62.676	S09° 47' 47.94"E	(6150978.2189,2182017.9992)	(6150988.7765,2181956.8563)
C58	230.245	19.383	S06° 41' 23.76"W	(6150988.7765,2181956.8563)	(6150986.5190,2181937.6105)
C59	150.000	49.261	S18° 30' 35.43"W	(6150986.5190,2181937.6105)	(6150970.9505,2181891.1075)
C60	197.781	245.591	S01° 55' 05.31"E	(6150721.0844,2181453.1056)	(6150728.7867,2181223.1201)

LINE TABLE - WATERLINE RUN #2				
Line #	Length	Direction	Start Point	End Point
L44	386.284	N29° 11' 41.41"E	(6148129.5286,2183539.0556)	(6148317.9507,2183876.2687)
L45	68.680	N23° 55' 55.97"E	(6148317.9507,2183876.2687)	(6148345.8113,2183939.0442)
L46	18.968	N66° 04' 04.03"W	(6148345.8113,2183939.0442)	(6148328.4742,2183946.7386)

LINE TABLE - WATERLINE RUN #3				
Line #	Length	Direction	Start Point	End Point
L47	22.949	S31° 33' 43.12"W	(6148299.4507,2182855.5834)	(6148287.4385,2182836.0288)
L48	54.135	S18° 40' 11.24"E	(6148268.9904,2182672.7461)	(6148286.3196,2182621.4602)
L49	323.053	S22° 33' 03.93"W	(6148282.9308,2182521.4484)	(6148159.0376,2182223.0965)

CURVE TABLE: WATERLINE ALIGNMENT - RUN #3		
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