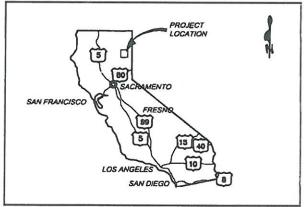
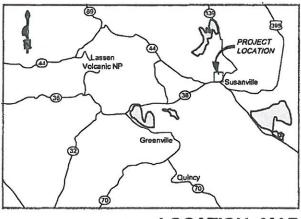
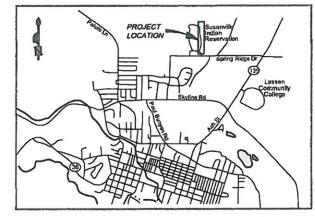
# SUSANVILLE INDIAN RANCHERIA SUSANVILLE, CA **CONSTRUCTION DRAWINGS** UPPER RANCHERIA WATER MAIN, CA23-J49 **MAY 2025**



CALIFORNIA VICINITY MAP NOTTO SCALE



LOCATION MAP

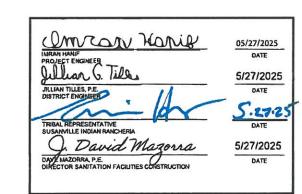


PROJECT LOCATION
NOT TO SCALE

	SHEET INDEX						
NO.	SHEET	SUBJECT					
1 2 3 4 5 6 7 8	G101 G102 C101 C102 C103 C104 C105 C106	COVER SHEET & LOCATION MAP GENERAL NOTES & LEGEND OVERALL SITE MAP PLAN AND PROFILE SITE IMPROVEMENTS DETAILS DETAILS DETAILS					

SUSANVILLE INDIAN RANCHERIA 745 JOAQUÍN ST. SUSANVILLE, CA 96130

THIS PROJECT DESIGNED TO COMPLY WITH THE
REQUIREMENTS OF THE U.B.C.
U.P.C., U.M.C., & N.E.C (CURRENT
EDITIONS).





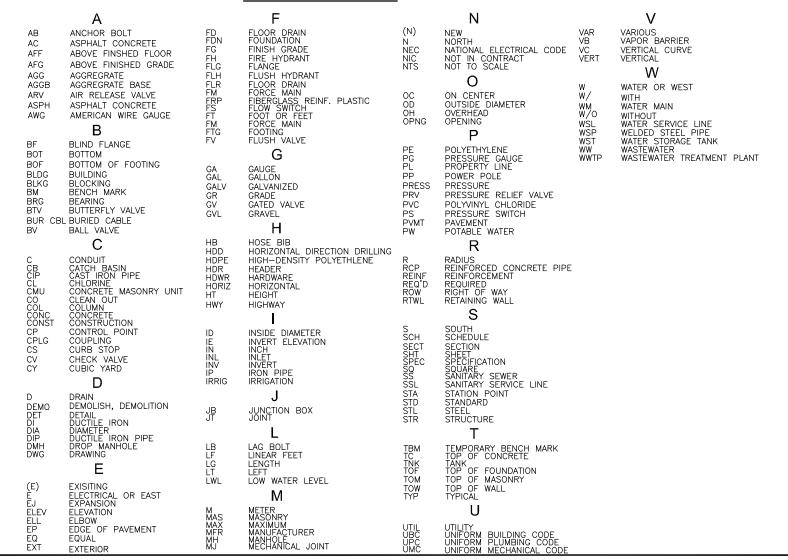


CHECKED BY: J. TILES LAYOUT NAME: GIO!	WHIE IN PANCHE IN CAZ

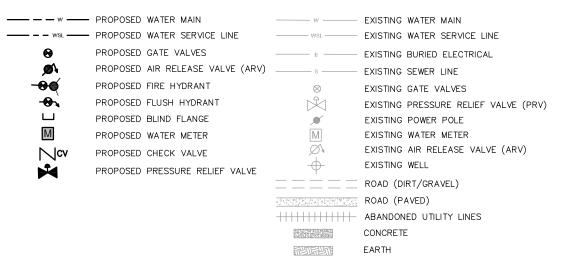
### GENERAL NOTES

- 1. THE TYPES, LOCATIONS, SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM AVAILABLE RECORDS. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES; HOWEVER, THE OWNER AND THE ENGINEER ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF THOSE UTILITIES SHOWN AND ANY THAT MAY EXIST AND ARE NOT SHOWN PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO OR THAT ARE IN THE PATH OF THE PROPOSED IMPROVEMENTS FOR VERIFICATION OF LOCATION AND ELEVATION PRIOR TO COMMENCING CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ALERT (U.S.A.) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES. (PHONE: 800-227-2600)
- 2. THE CONTRACTOR SHALL PERFORM WORK WITH A MINIMAL DISRUPTION OF SERVICES, AND SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS IN ADVANCE OF ANY PLANNED SHUTDOWN OF POTABLE WATER FACILITIES.
- 3. THE PIPELINE PROFILE SHOWN IS SCHEMATIC ONLY. PROVIDE 3' MIN BURY DEPTH (COVER) UNLESS SPECIFIED OTHERWISE. SLOPE PIPELINE CONTINUOUSLY DOWNHILL TO BLOWOFF VALVE ASSYS AND CONTINUOUSLY UPHILL TO ARV ASSYS. SEE SPECIFICATIONS FOR LIMITATIONS ON DEFLECTION OF JOINTS AND LONGITUDINAL BENDING OF PIPE.
- 4. PROVIDE SERVICE SADDLES, ALIGNED VERTICALLY, ADJACENT TO VALVES OR AT OTHER LOCATIONS AS NECESSARY, FOR PRESSURE TESTING AND /OR DISINFECTION OF PRESSURE PIPELINES. SADDLE SHALL BE AT LEAST 3 FEET FROM A PIPE JOINT, FITTING OR VALVE
- 5. PROVIDE 6' MIN. HORIZ DISTANCE BETWEEN (E) POWER POLES AND (N) PIPELINE, MEASURED CENTERLINE TO CENTERLINE.
- 6. PROVIDE 1' MIN CLEARANCE BETWEEN (E) CULVERTS AND (N) PIPELINE; CENTER FULL LENGTH OF PIPE AT CULVERT. PROVIDE MIN CLASS 200 PIPE WHERE PIPELINE IS BELOW CULVERT.
- 7. THE CONTRACTOR SHALL RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED.
- 8. THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
- 9. PROTECT PIPING AGAINST THRUST BY USE OF THRUST BLOCK OR RESTRAINED JOINTS.
- 10. RECORD DRAWINGS SHALL INCLUDE THE LOCATION OF INSTALLED OR RECONNECTED WATER SERVICES.

### **ABBREVIATIONS**



### LEGEND



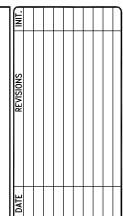
## REFERENCE SYMBOLS



### CONTACTS

ENGINEERING: INDIAN HEALTH SERVICE 1900 CHURN CREEK ROAD, STE. 210 REDDING, CA 96002 TELE: 530-246-5339 FAX: 530-246-5210

SUSANVILLE INDIAN RANCHERIA 745 JOAQUIN ST SUSANVILLE, CA 96130 TELE: 530-257-6264





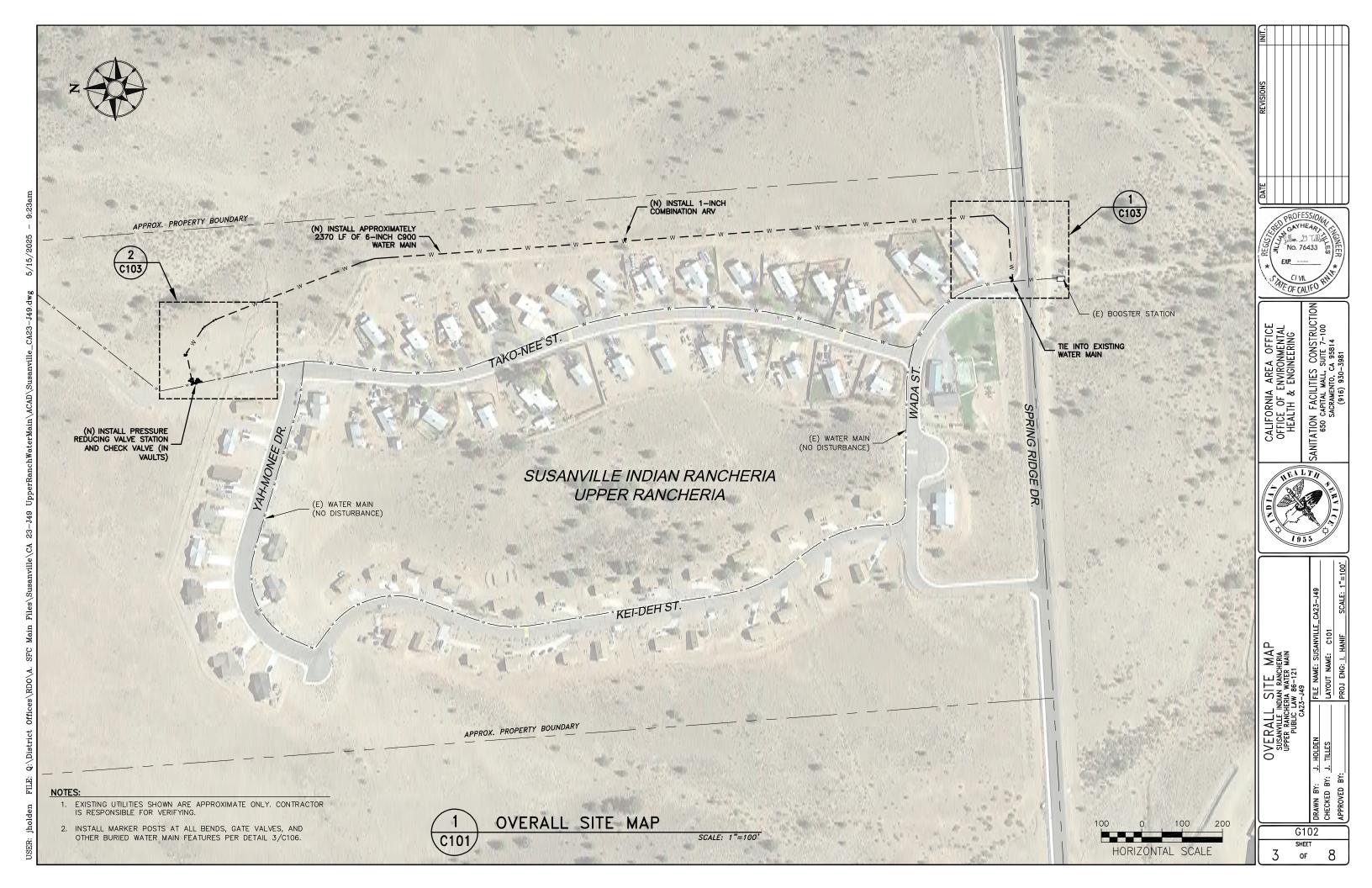
CONSTRUCT SUITE 7-100 SA 95814 -3981 CALIFORNIA AREA OFFICE OFFICE OF ENVIRONMENTAL HEALTH & ENGINEERING SANITATION FACILITIES (
650 CAPITAL MALL, SI
SAORAMENTO, CA
(916) 930-33

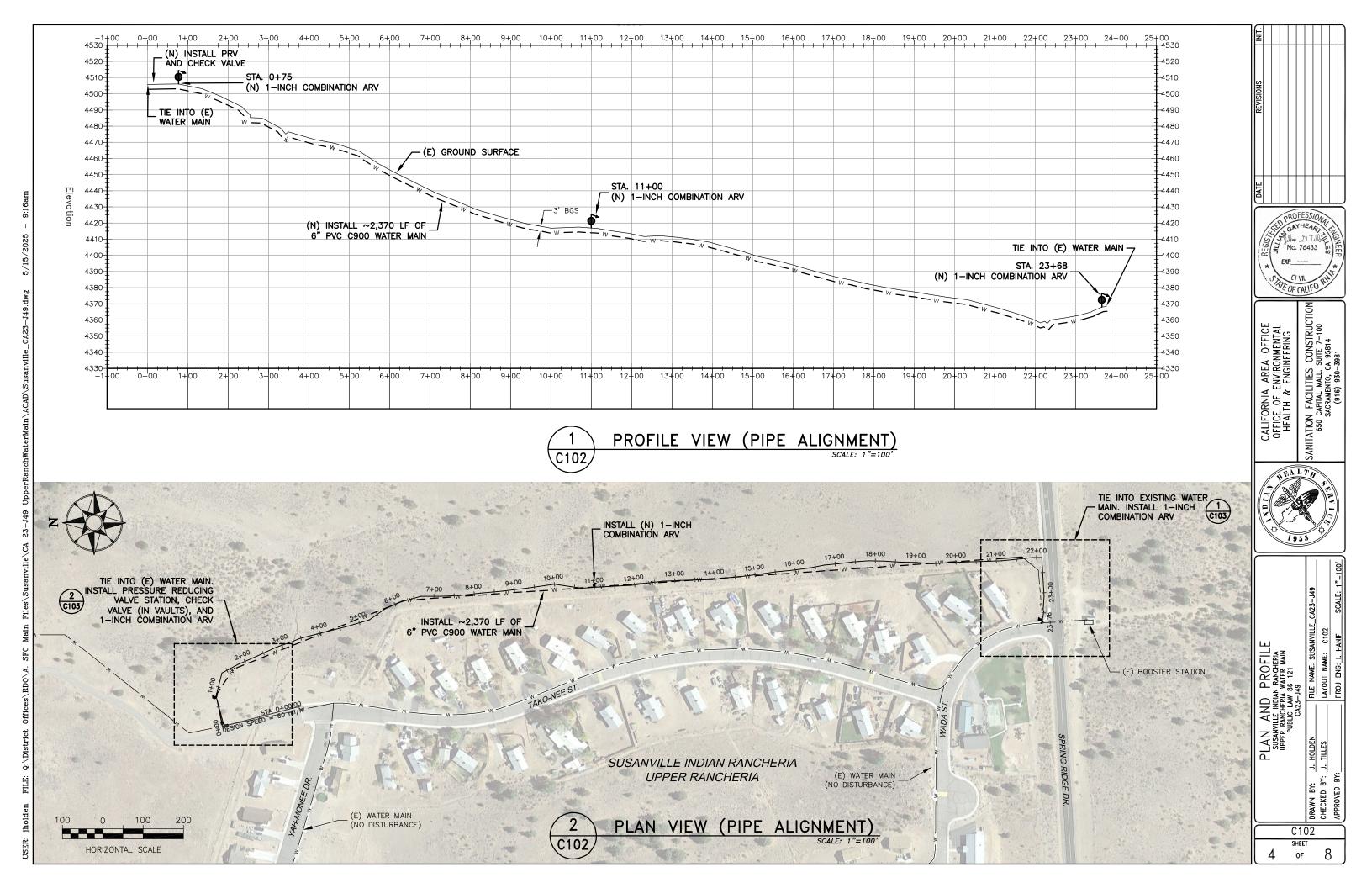


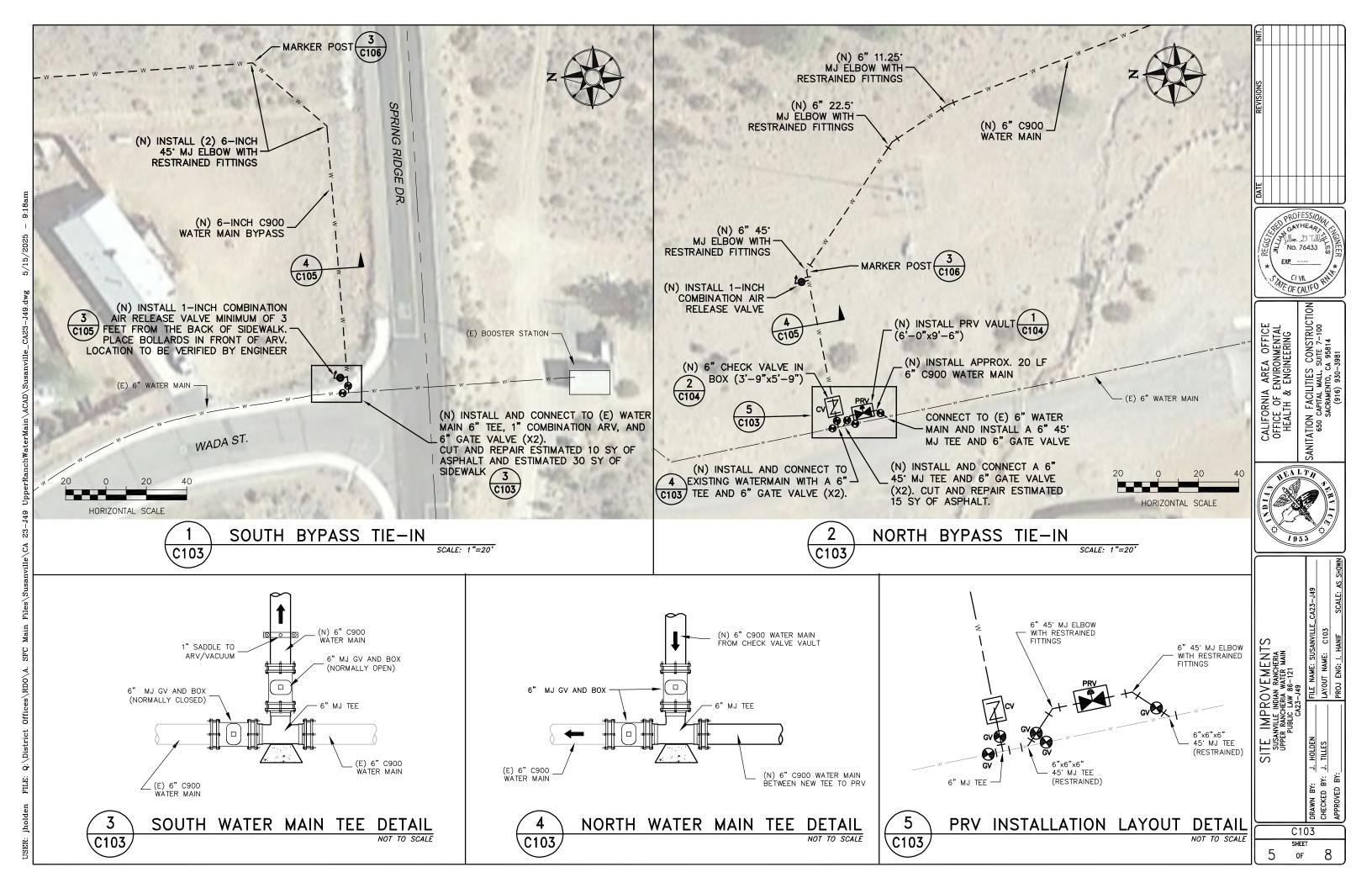
 $\frac{1}{8}$ <u>N</u> & LOCATI( INDIAN RANCHERIA CHERIA WATER MAIN ILAW 86-121 A23-J49 SHEET SUSANVILLE UPPER RANCI PUBLIC  $\simeq$ COVE

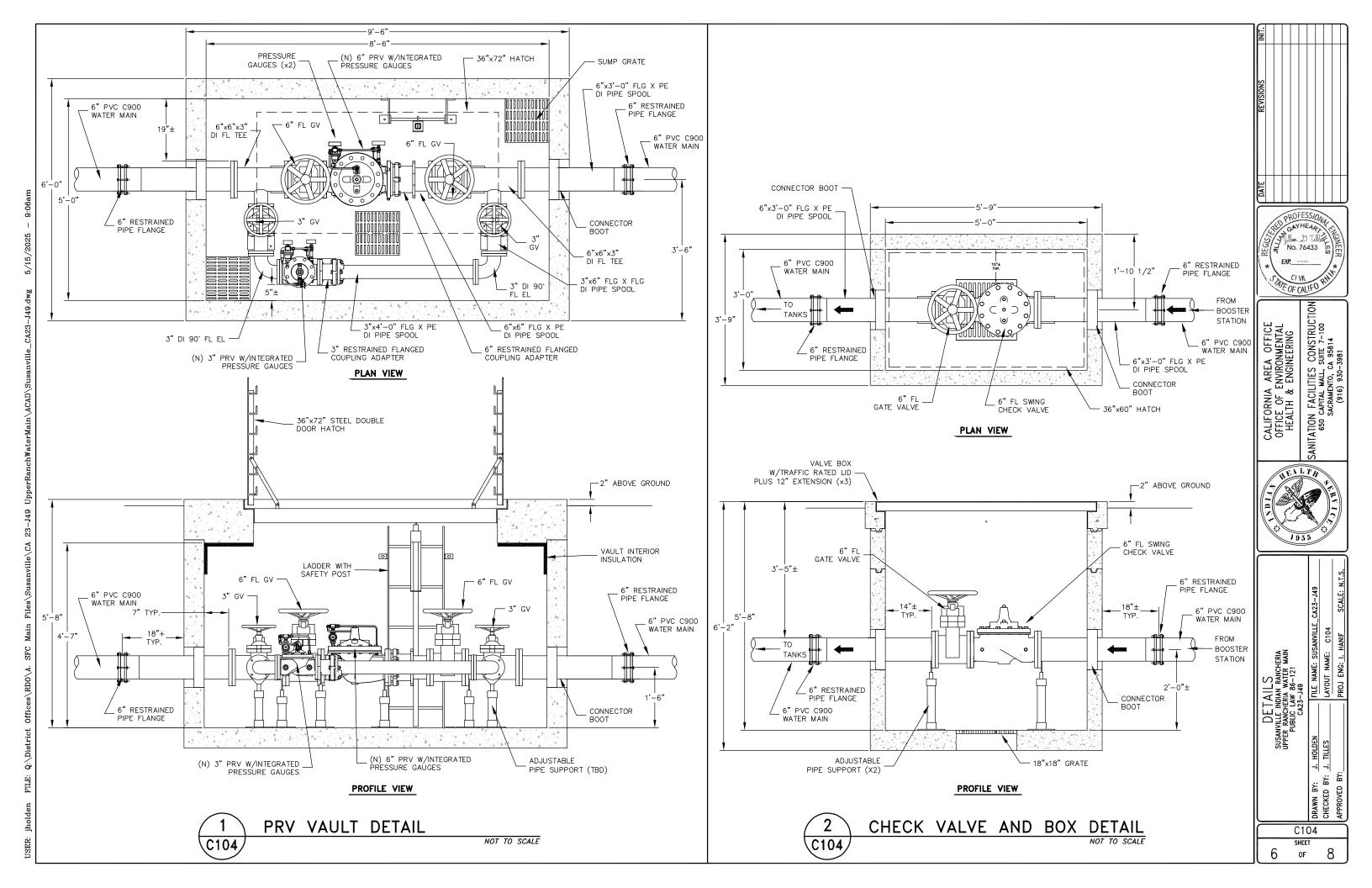
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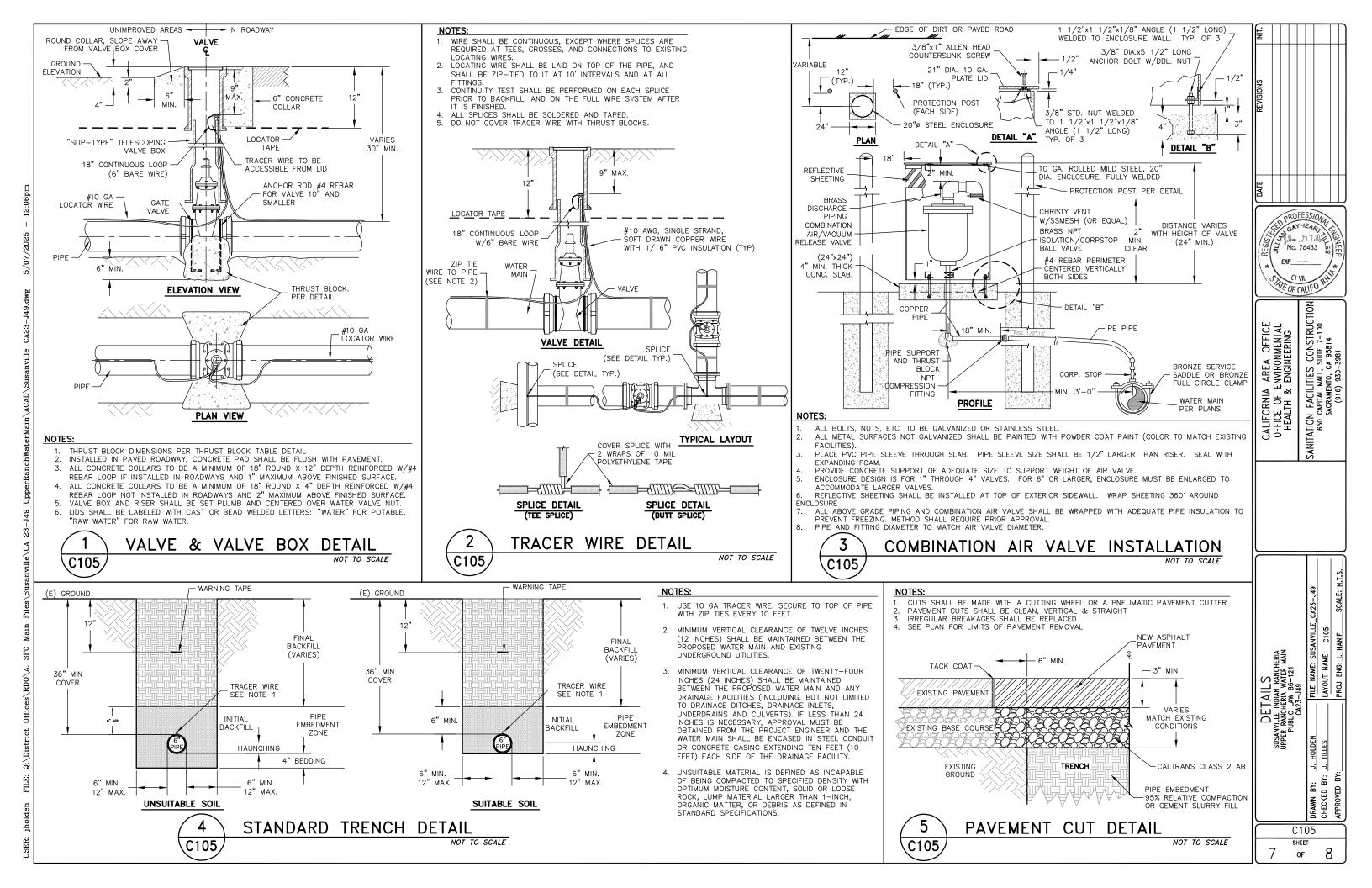
G102 SHEET 8 OF







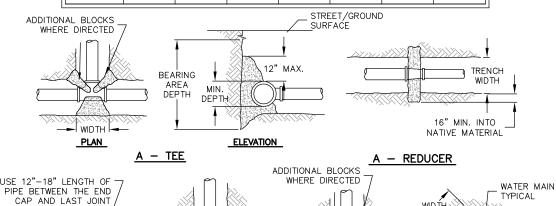


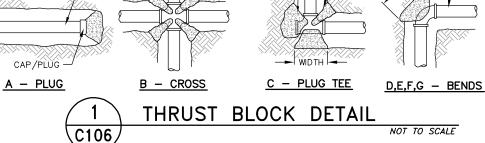


#### NOTES:

- ALL VALUES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 200 PSI AND 2,000 PSF SOIL BEARING CAPACITY.
- CONCRETE SHALL PASS 4,000 PSI CYLINDER TEST PRIOR TO WATER LINE PRESSURE TEST.
- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
- 4. JOINTS AND FACE OF PIPE PLUGS SHALL BE KEPT CLEAR OF CONCRETE.
  5. REQUIRED THRUST BLOCK SURFACE AREA SHALL BE MET BY CONSTRUCTING BLOCKS WITH REQUIRED HEIGHT AND WIDTH
- WHILE MAINTAINING REQUIRED THICKNESS. 6. MIN. SOIL COVER SHALL BE 30" (GENERAL)

	SIZE OF THRUST FACE (DIMS IN INCHES)									
PIPE	A	В	C	D	E	F	G			
NOM. SIZE	TEE, PLUG, OR 60' BEND	CROSS (EACH)	PLUG. TEE (EACH)	90.	45 <sup>.</sup> BEND	22-1/2° BEND	11-1/4 <sup>.</sup> BEND			
2"	9 × 9	8 x 8	9 x 9	10 x 10	8 x 8	6 x 6	4 × 4			
4"	17 x 17	15 x 15	17 x 17	20 x 20	15 x 15	11 x 11	8 x 8			
6"	25 x 25	22 x 22	25 x 25	30 x 30	22 x 22	16 x 16	11 x 11			
8"	33 x 33	29 x 29	33 x 33	40 x 40	29 x 29	21 x 21	15 x 15			
10"	42 x 42	36 x 36	42 x 42	49 x 49	37 x 37	26 x 26	19 x 19			
12"	50 x 50	43 x 43	50 x 50	59 x 59	44 × 44	31 × 31	22 x 22			
14"	58 x 58	50 x 50	58 x 58	69 x 69	51 x 51	37 × 37	26 x 26			
16"	66 x 66	57 x 57	66 x 66	79 x 79	58 x 58	42 x 42	30 x 30			
18"	75 x 75	64 x 64	75 x 75	89 x 89	65 x 65	47 × 47	33 x 33			



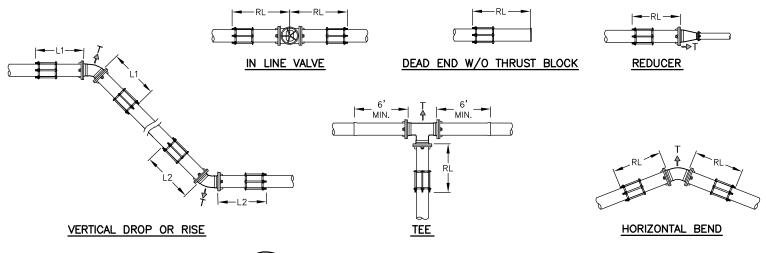


#### NOTES:

- RESTRAINED LENGTHS SHOWN IN DRAWINGS SUPERSEDE THIS TABLE. USE THIS TABLE WHEN RESTRAINED LENGTHS ARE NOT OTHERWISE PROVIDED.
- ALL RESTRAINED LENGTHS IN TABLE ABOVE ARE BASED ON 200 PSI TEST PRESSURE, 30 INCH BURY DEPTH, FINE SILT SOIL, AND A SAFETY FACTOR OF 1.5. CONTRACTOR MAY SUBMIT ALTERNATE RESTRAINED LENGTH CALCULATIONS FOR APPROVAL FOR CONDITIONS SUBSTANTIALLY DIFFERENT FROM THESE.
- ALL JOINTS WITHIN THE RESTRAINED LENGTH SHALL BE RESTRAINED. NO JOINTS WITHIN 6 FEET OF FITTING ARE
- PERMITTED, UNLESS OTHERWISE SPECIFIED.
  RESTRAINED LENGTHS FOR TEES ARE ALONG THE BRANCH LINE. TEE FITTINGS MUST BE FULLY RESTRAINED, BUT NO OTHER RESTRAINTS REQUIRED ON RUN LINE, PROVIDED THERE ARE NO JOINTS ALONG RUN LINE WITHIN 6 FEET OF TEE FITTING. FOR DEAD ENDS AND HORIZONTAL BENDS ONLY: IF A THRUST
- BLOCK IS INSTALLED BEHIND THE FITTING IN ACCORDANCE WITH THRUST BLOCK DETAIL DRAWING, RESTRAINED JOINTS NOT REQUIRED UNLESS OTHERWISE SPECIFIED.
- RESTRAINED LENGTHS OR THRUST BLOCKS ARE REQUIRED AT CROSSES, WYES, AND OTHER FITTINGS NOT LISTED ABOVE.
- PROVIDE RESTRAINED LENGTH CALCULATIONS FOR APPROVAL. NO BURIED FLANGE FITTINGS USE MECHANICAL JOINTS.

		Ductile Iron				PVC					
		4"	6"	8"	10"	12"	4"	6"	8"	10"	12"
90° Horizontal Bend		20	28	36	43	50	24	34	44	52	60
45° Horizontal Be	end	9	12	15	18	21	10	14	18	22	25
22.5° Horizontal Bend		6	6	8	9	10	6	7	9	11	12
11.25° Horizontal Be	nd	6	6	6	6	6	6	6	6	6	6
Dead End or In-Line Va	lve	42	58	76	91	106	66	92	120	144	169
45° Vertical Offset	L1	18	25	32	38	44	28	39	50	60	70
45 Vertical Offset	L2	6	9	11	14	16	8	11	14	16	19
22.5° Vertical Offset	L1	9	12	16	18	22	14	19	24	29	34
22.5 Vertical Offset	L2	6	6	6	7	8	6	6	7	8	9
11.25° Vertical Offset	L1	6	6	8	9	11	7	10	12	15	17
11.25 Vertical Offset	L2	6	6	6	6	6	6	6	6	6	6
Reducer to 4"		*	30	55	74	92	*	48	87	117	147
Reducer to 6"		*	*	32	56	77	*	*	51	88	123
Reducer to	8"	*	*	*	31	57	*	*	*	49	90
Reducer to 1	10"	*	*	*	*	31	*	*	*	*	50
Tee to 4" Line (see Note 4)		22	12	6	6	6	35	19	6	6	6
Tee to 6" Line (see Note 4)		45	38	32	24	17	71	61	50	38	27
Tee to 8" Line (see Note	4)	66	61	56	50	45	104	96	88	79	71
Tee to 10" Line (see Note	4)	83	79	75	70	66	131	125	118	11	104
Tee to 12" Line (see Note 4)		100	96	93	89	86	158	153	148	142	136

#### RESTRAINED LENGTH (IN FEET)



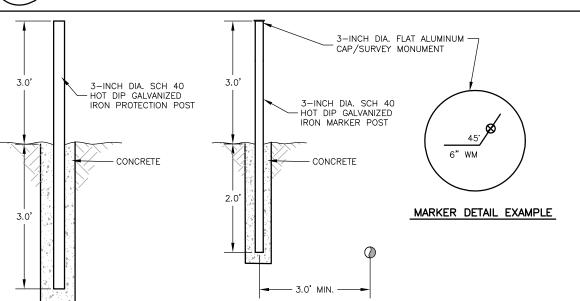
RESTRAINED FITTINGS DETAIL C106

#### PROTECTION POST:

- HOT DIP GALVANIZED PIPE, 3 INCHES DIAMETER, SCHEDULE 40, 6.0 FEET LONG, BURIED 3.0 FEET.
- 2. THE EXTERIOR OF THE ABOVE GROUND METAL SHALL BE FIELD PAINTED YELLOW WITH TWO COATS OF PAINT, RUST-OLEUM SAFETY
- 3. POST TO BE FILLED WITH CONCRETE.

#### MARKER POST:

- 1. HOT DIP GALVANIZED PIPE, 3 INCHES DIAMETER, SCHEDULE 40 MARKER POST WITH STAMPABLE CAP, 5.0 FEET LONG, BURIED 2.0 FEET.
- 2. THE EXTERIOR OF THE ABOVE GROUND METAL SHALL BE FIELD PAINTED YELLOW WITH TWO COATS OF PAINT, RUST-OLEUM SAFETY YELLOW.
- 3. POST TO BE FILLED WITH CONCRETE.
- 4. MARKER POST TO BE STAMPED BY THE CONTRACTOR.



3 MARKER POST DETAIL NOT TO SCALE C106



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DETAILS
SUSANVILLE INDIAN RANCHERIA
UPPER RANCHERIA WATER MAIN
CASA-049 DRAWN BY: CHECKED B

C106 SHEET OF