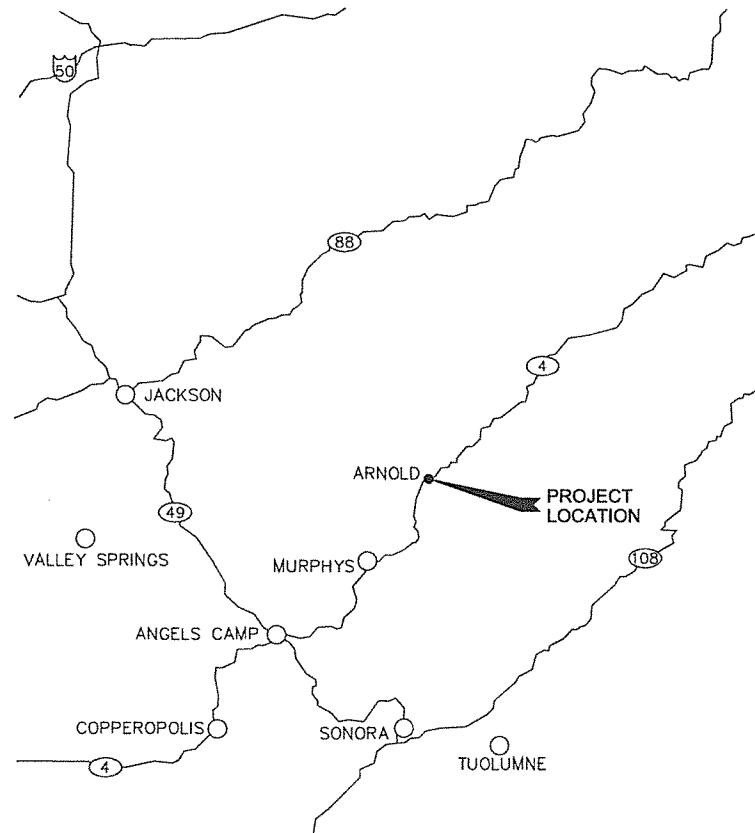
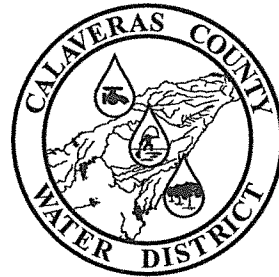


EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE REPLACEMENT PROJECT

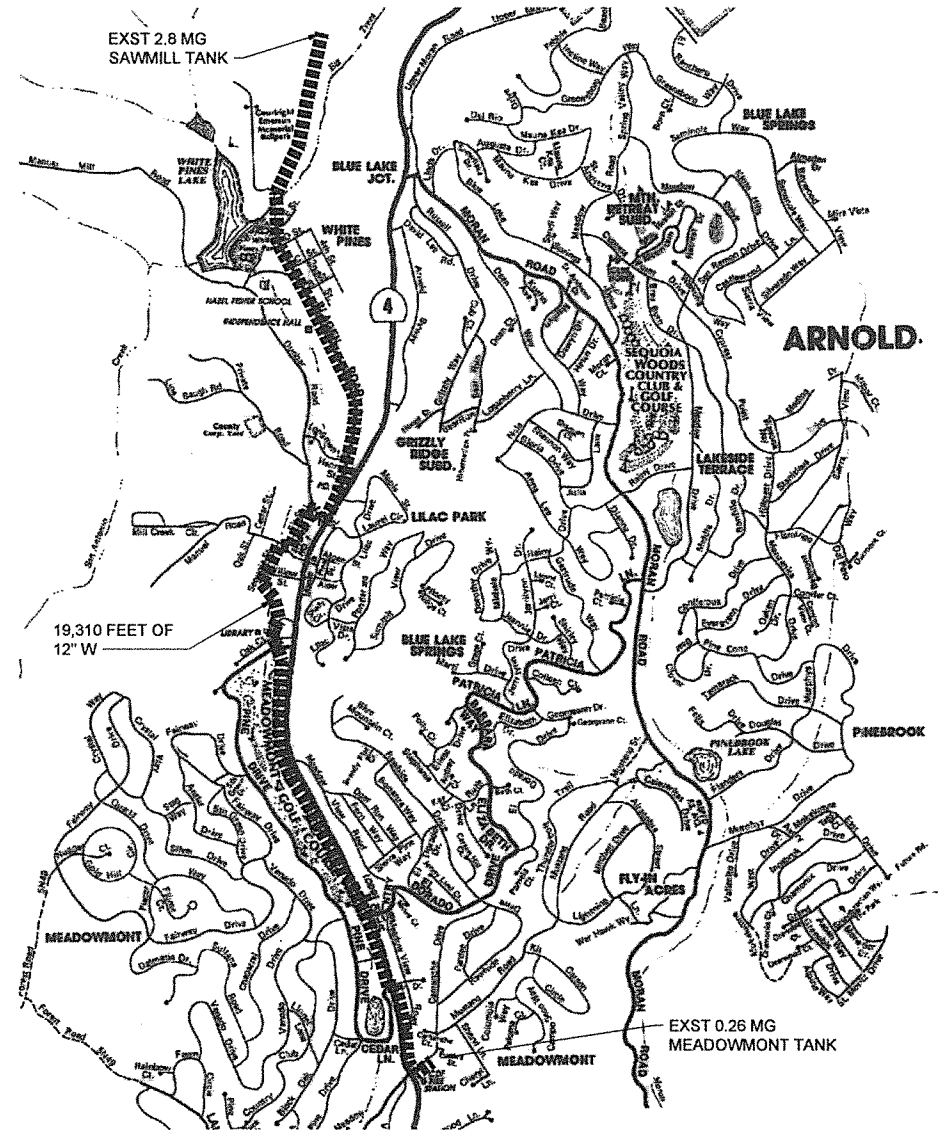
VOLUME 2 - CONTRACT DRAWINGS

BID SET

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT
POST OFFICE BOX 846
SAN ANDREAS, CA 95249
(209) 754-3543



VICINITY MAP
NTS



LOCATION MAP
NTS



RECORD DRAWINGS NOTE

ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY, OR UNDER DIRECTION OF, THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED AND/OR INFORMATION RECEIVED FROM THE PROJECT OWNER, PROJECT CONTRACTORS, AND PUBLIC AGENCIES WHEN THE ENGINEER IS ADVISED IN WRITING OF SUCH CHANGE. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, CHANGES TO THESE PLANS NOT AUTHORIZED BY THE ENGINEER.

DATE _____ ENGINEER SIGNATURE
(STAMP OR SEAL)

OCTOBER 2015



APPROVED FOR CONSTRUCTION BY:

DATE _____ SIGNATURE _____

CALAVERAS COUNTY WATER DISTRICT
MR. CHARLES PALMER, P.E. - DISTRICT ENGINEER

DRAWING INDEX

SHEET NUMBER	DRAWING NUMBER	TITLE
GENERAL		
1	G-001	COVER
2	G-002	DRAWING INDEX AND KEY MAP
3	G-003	ABBREVIATIONS, LEGEND, AND STANDARD DESIGNATIONS
4	G-004	GENERAL CONSTRUCTION NOTES
5	G-005	HORIZONTAL CONTROL PLANS 1
6	G-006	HORIZONTAL CONTROL PLANS 2
7	G-007	HORIZONTAL CONTROL PLANS 3
8	G-008	HORIZONTAL CONTROL PLANS 4
9	G-009	HORIZONTAL CONTROL PLANS 5

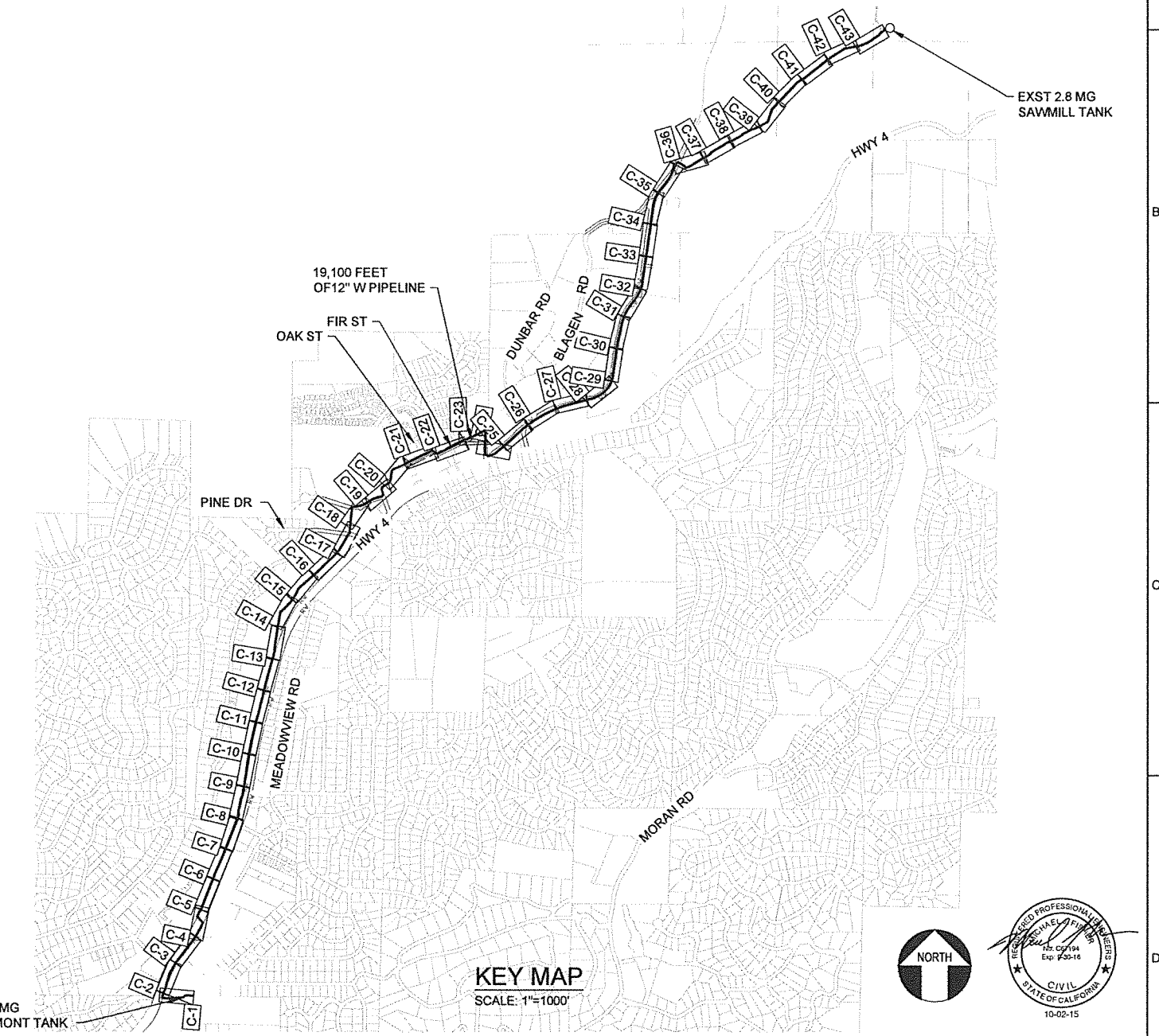
CIVIL

10	C-1	PLAN AND PROFILE 10+00 TO 14+50
11	C-2	PLAN AND PROFILE 14+50 TO 19+00
12	C-3	PLAN AND PROFILE 19+00 TO 23+50
13	C-4	PLAN AND PROFILE 23+50 TO 28+00
14	C-5	PLAN AND PROFILE 28+00 TO 32+50
15	C-6	PLAN AND PROFILE 32+50 TO 37+00
16	C-7	PLAN AND PROFILE 37+00 TO 41+50
17	C-8	PLAN AND PROFILE 41+50 TO 46+00
18	C-9	PLAN AND PROFILE 46+00 TO 50+50
19	C-10	PLAN AND PROFILE 50+50 TO 55+00
20	C-11	PLAN AND PROFILE 55+00 TO 59+50
21	C-12	PLAN AND PROFILE 59+50 TO 64+00
22	C-13	PLAN AND PROFILE 64+00 TO 68+50
23	C-14	PLAN AND PROFILE 68+50 TO 73+00
24	C-15	PLAN AND PROFILE 73+00 TO 77+50
25	C-16	PLAN AND PROFILE 77+50 TO 82+00
26	C-17	PLAN AND PROFILE 82+00 TO 86+50
27	C-18	PLAN AND PROFILE 86+50 TO 91+00
28	C-19	PLAN AND PROFILE 91+00 TO 95+50
29	C-20	PLAN AND PROFILE 95+50 TO 100+00
30	C-21	PLAN AND PROFILE 100+00 TO 104+50
31	C-22	PLAN AND PROFILE 104+50 TO 109+00
32	C-23	PLAN AND PROFILE 109+00 TO 113+50
33	C-24	PLAN AND PROFILE 113+50 TO 118+00
34	C-25	PLAN AND PROFILE 118+00 TO 122+50
35	C-26	PLAN AND PROFILE 122+50 TO 127+00
36	C-27	PLAN AND PROFILE 127+00 TO 131+50
37	C-28	PLAN AND PROFILE 131+50 TO 136+00
38	C-29	PLAN AND PROFILE 136+00 TO 140+50
39	C-30	PLAN AND PROFILE 140+50 TO 145+00
40	C-31	PLAN AND PROFILE 145+00 TO 149+50
41	C-32	PLAN AND PROFILE 149+50 TO 154+00
42	C-33	PLAN AND PROFILE 154+00 TO 158+50
43	C-34	PLAN AND PROFILE 158+50 TO 163+00
44	C-35	PLAN AND PROFILE 163+00 TO 167+50
45	C-36	PLAN AND PROFILE 167+50 TO 172+00
46	C-37	PLAN AND PROFILE 172+00 TO 176+50
47	C-38	PLAN AND PROFILE 176+50 TO 181+00
48	C-39	PLAN AND PROFILE 181+00 TO 185+50
49	C-40	PLAN AND PROFILE 185+50 TO 194+50
50	C-41	PLAN AND PROFILE 190+00 TO 194+50
51	C-42	PLAN AND PROFILE 194+50 TO 199+00
52	C-43	PLAN AND PROFILE 199+00 TO 203+10
53	C-44	BORE AND JACK DETAIL 1
54	C-45	BORE AND JACK DETAIL 2

DRAWING INDEX CONT.

SHEET NUMBER	DRAWING NUMBER	TITLE
YARD PIPING		
55	Y-1	MEADOWMONT TANK SITE
56	Y-2	SAWMILL TANK SITE
DETAILS		
57	C-301	PRV CONNECTION DETAILS 1
58	C-302	PRV CONNECTION DETAILS 2
59	C-303	PRV CONNECTION DETAILS 3
60	C-310	PROJECT SPECIFIC DETAILS 1
61	C-311	PROJECT SPECIFIC DETAILS 2
62	C-312	PROJECT SPECIFIC DETAILS 3

AGENCY/COMPANY	CONTACT	UTILITY TYPE	ADDRESS	PHONE	EMAIL
BLUE LAKE SPRINGS WATER	DAVE HICKS	WATER	PO 712 ARNOLD, CA 95223	(916) 817-4700	ADMIN@BLSMWC.COM
CALAVERAS COUNTY WATER DISTRICT	CHARLES PALMER	WATER	PO BOX 846, 120 TOMA COURT, SAN ANDREAS, CA 95249	(209) 754-3174	CHARLESP@CCWD.ORG
COUNTY PUBLIC WORKS	GEORGE LONG	ROADS	891 MOUNTAIN RANCH ROAD, SAN ANDREAS, CA 95249	(209) 754-6402	GLONG@CO.CALAVERAS.CA.US
COMCAST	GREG WILLIAMS	CABLE	5340 BRISA STREET, LIVERMORE, CA 94550	(925) 271-2919	GWILLIAMS@SEFNCO.COM
KAMPS PROPANE #9	JEFF PILGRIM	GAS	1915 MOFFAT BLVD., MANTECA, CA 95336	(209) 823-8924	JPILGRIM@KAMPSPROPANE.COM
PACIFIC BELL	JANICE COMANSKEY	PHONE	870 N. MCCARTHY BLVD, MILPITAS, CA 95035	(408) 635-8781	JC4636@ATT.COM
PG&E	ROBERT DAY	GAS & ELECTRIC	4040 WEST LANE, STOCKTON, CA 95204	(209) 942-1784	RJDR@PGE.COM
CALTRANS	ROBERT HOFFMAN	HIGHWAY	P.O. BOX 2048, STOCKTON, CA 95201	(209) 736-4653	ROBERT.HOFFMAN@DOT.CA.GOV



K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G002.DWG

NO.	DATE	REVISION	BY	APVD	APPROVED

DESIGN	BENCH MARK	ELEV. <u>3845.47</u>
DRAWN	DESCRIPTION	
CHECKED	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	
APPROVED		
M FISHER		

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

CALAVERAS COUNTY WATER DISTRICT

CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

DRAWING INDEX & KEY MAP

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	G-002
SHEET	02 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.

JOB NUMBER: 13-051 FILENAME: 1372D-G002.DWG PLOT DATE: 02-Oct-15 PLOT TIME: 12:20:05
K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES

ABBREVIATIONS

#	POUNDS, NUMBER	DL	DEAD LOAD	OC	ON CENTER	VERT	VERTICAL
@	AT	DR	DRAIN	OD	OUTSIDE DIAMETER	W/	WITH
AB	AGGREGATE BASE	DS	DOWN SPOUT	OG	ORIGINAL GROUND	W	WATER
AC	ASPHALT CONCRETE	DWG	DRAWING	OH	OVERHEAD	WAS	WASTE ACTIVATED SLUDGE
ACP	ASBESTOS CEMENT PIPE	DWY	DRIVEWAY	OHW	OVERHEAD WIRE (ELEC & TEL)	WL	WETLAND
ADA	AMERICAN DISABILITIES ACT OF 1990	E, EXST	EXISTING	OSA	OUT SIDE AIR	WM	WATER METER
AFF	ABOVE FINISH FLOOR	E	ELECTRIC	P&P	PLAN AND PROFILE	WS	WATER SERVICE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	EA	EACH	PC	PROPERTY CORNER	WV	WATER VALVE
AWWA	AMERICAN WATER WORKS ASSOCIATION	EC	END OF CURVE	PCC	PORTLAND CEMENT CONCRETE	WWE	WATER WORKS ENGINEERS
BO	BLOW OFF	EG	EDGE OF GUTTER	PE	POLYETHYLENE, PERMANENT EASEMENT		
BV	BALL VALVE	EL	ELEVATION	PG&E	PACIFIC GAS & ELECTRIC		
BFD	BACKFLOW DEVICE	ELB	ELBOW	PL	PLATE (METAL), PROPERTY LINE		
BFV	BUTTERFLY VALVE	EN	EDGE NAIL	PP	POWER POLE		
BC	BEGINNING OF CURVE	EP	EDGE OF PAVEMENT	PRV	PRESSURE REDUCING VALVE STATION		
BD	BOARD	EXC	EXCAVATION	PSE	PUBLIC SERVICE EASEMENT		
BDRY	BOUNDARY	EXST	EXISTING	PSI	POUNDS PER SQUARE INCH		
BF	BOTTOM OF FOOTING, BLIND FLANGE	EXT	EXTERIOR	PVC	POLYVINYL CHLORIDE		
BLK	BLOCK	FB	FLUSHING BRANCH	R	RADIUS		
BM	BENCH MARK	FF	FINISHED FLOOR	RW, ROW	RIGHT OF WAY		
BOC	BACK OF CURB	FG	FINISHED GRADE	RC	RELATIVE COMPACTION		
CAL-OSHA	CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	FH	FIRE HYDRANT	RED, RDCR	REDUCER		
CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION	FL	FLOW LINE	REINF	REINFORCED OR REINFORCEMENT		
C	CHANNEL	FLG	FLANGE	RG	RETAINER GLAND		
CAV	COMBINATION AIR VALVE	FMJA	FLANGE MECHANICAL JOINT ADAPTER	S	SLOPE		
C&G	CURB AND GUTTER	FND	FOUNDATION	S&P	SHELF AND POLE		
CB	CATCH BASIN	FOB	FACE OF BLOCK	SD	STORM DRAIN		
CCO	CONTRACT CHANGE ORDER	FOC	FACE OF CURB	SF	SQUARE FOOT		
CCWD	CALAVERAS COUNTY WATER DISTRICT	FRP	FIBER REINFORCED PLASTIC	SIM	SIMILAR		
CDPH	CALIFORNIA DEPARTMENT OF PUBLIC HEALTH	FT	FOOT, FEET	SPK	SPIKE		
CMUTCD	CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	FTG	FOOTING	SQ	SQUARE		
CCR	CALIFORNIA CODE OF REGULATIONS	G	GAS	SS	SANITARY SEWER		
CCS	CEMENT COATED STEEL	GA	GAUGE	SSMH	SANITARY SEWER MANHOLE		
CF	CURB FACE, CUBIC FOOT	GALV	GALVANIZED	STA	STATION		
CL	CENTERLINE, CLEARANCE	GM	GAS METER	STD	STANDARD		
CLF	CHAIN LINK FENCE	GP	GUY POLE	STL	STEEL		
CLR	CLEAR	GR	GRADE	STRUCT	STRUCTURAL OR STRUCTURE		
CMU	CONCRETE MASONRY UNIT	GV	GATE VALVE	SVC	SERVICE		
CO	CLEANOUT (SEWER)	GYP	GYP SUM	SW	SIDEWALK		
COL	COLUMN	HB	HOSE BIB	SY	SQUARE YARD		
CONC	CONCRETE	HC	HANDICAP	T	TELEPHONE		
CONN	CONNECTION	HDR	HEADER	T&B	TOP AND BOTTOM		
CONST	CONSTRUCTION	HORIZ	HORIZONTAL	TB	TOP OF BANK		
CONT	CONTINUOUS	HPW	HIGH PRESSURE WATER	TBR	TO BE REMOVED		
CONTR	CONTRACTOR	HT	HEIGHT	TC	TOP OF CURB		
COORD	COORDINATE	ID	INSIDE DIAMETER	TCE	TEMPORARY CONSTRUCTION EASEMENT		
COUNTY	CALAVERAS COUNTY	INV	INVERT	TL	TRIM LINE		
CP	CONTROL POINT	JP	JOINT POLE	TW	TOP OF WALL		
CPLG	COUPLING	JT	JOINT	TYP	TYPICAL		
CRN	CROWN	L	LEFT, LENGTH	UG	UNDERGROUND		
CSP	CORRUGATED STEEL PIPE	LB	POUND	USA	UNDERGROUND SERVICE ALERT		
CY	CUBIC YARD	LF	LINEAR FOOT	UTIL	UTILITY		
DE	DRAINAGE EASEMENT	LOC	LIMITS OF CONSTRUCTION	VB	VALVE BOX		
D, DEG	DEGREE	LS	LUMP SUM, LIFT STATION	VCP	VITRIFIED CLAY PIPE		
DF	DOUGLAS FIR	MAX	MAXIMUM				
DI	DRAIN INLET	MH	MANHOLE				
DIA	DIAMETER	MIN	MINIMUM				
DIP	DUCTILE IRON PIPE	MISC	MISCELLANEOUS				
		MJ	MECHANICAL JOINT				
		MKR	MARKER				
		MON	MONUMENT				
		MS	MOTION SENSOR				
		N	NEW				
		NG	NATURAL GRADE				
		NTS	NOT TO SCALE				

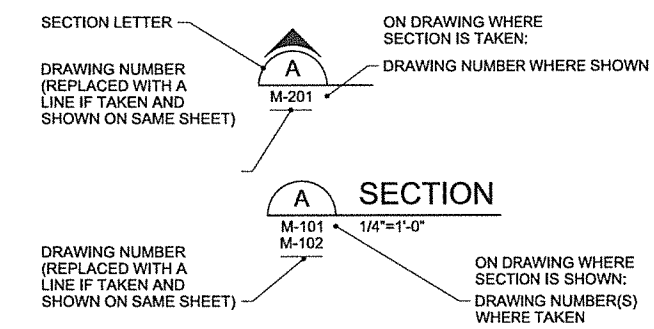
EXISTING		LEGEND		NEW	

- NOTES:**
- CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED.
 - EXISTING PIPING, EQUIPMENT, AND TOPOGRAPHY IS SHOWN SCREENED AND/OR LIGHT-LINED. NEW PIPING, EQUIPMENT, STRUCTURE, AND FINISHED GRADE IS SHOWN HEAVY-LINED.
 - THIS IS A STANDARD LEGEND SHEET. THEREFORE, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND MAY NOT BE UTILIZED ON THIS PROJECT.

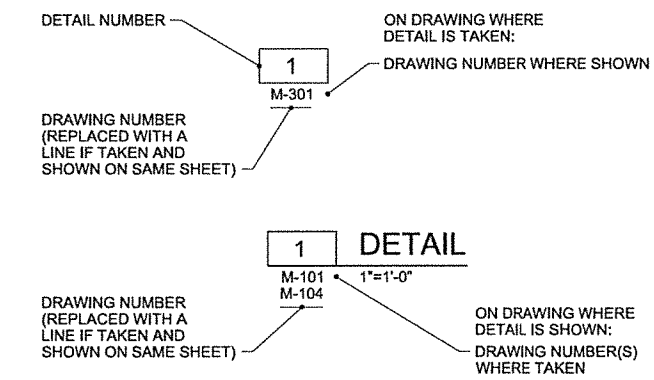
DISCIPLINE

LETTER	DISCIPLINE
G	GENERAL
C	SITE CIVIL
D	DEMOLITION
SD	STANDARD DETAIL

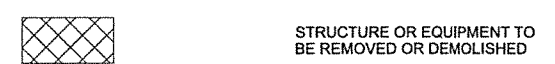
SECTION



DETAIL



GENERAL SYMBOLOGY



K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G003.DWG

	DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	 WATERWORKS ENGINEERS 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113	 CALAVERAS COUNTY WATER DISTRICT	CALAVERAS COUNTY WATER DISTRICT EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT	GENERAL ABBREVIATIONS, LEGEND, AND STANDARD DESIGNATIONS	DATE OCT 2015 PROJECT NUMBER 13-072 DRAWING NUMBER G-003 SHEET 03 - 62
--	---------------------------	---	---	--	--	---	---

GENERAL CONSTRUCTION NOTES:

- THRUST RESTRAINT:** ALL NEW WATER LINES, FITTINGS, VALVES AND APPURTENANCES ARE TO BE FULLY MECHANICALLY RESTRAINED; THRUST BLOCKS ARE REQUIRED AS SHOWN ON THE PROJECT DRAWINGS AND WHERE MAKING TIE-IN CONNECTIONS TO EXISTING PIPING.
- UTILITY LOCATING:** CONTRACTOR SHALL MARK ALL EXCAVATIONS AND NOTIFY UNDERGROUND SERVICE ALERT / USA NORTH (PHONE: 1-800-227-2600) NOT LESS THAN 48-HRS AND TWO FULL BUSINESS DAYS BEFORE DIGGING AND FOLLOW ALL OTHER PROVISIONS OF CALIFORNIA GOVERNMENT CODE SECTIONS 4216 THROUGH 4216.9. CONTRACTOR SHALL MAINTAIN AN ACTIVE USA NORTH TICKET NUMBER FOR THE ENTIRE DURATION OF THE EXCAVATION.
- TOLERANCE ZONE:** LOCATE MARKINGS ARE APPROXIMATE LOCATIONS DEFINED BY CALIFORNIA GOVERNMENT CODE 4216(A) WITH TOLERANCE ZONE OF 24-INCHES TO EACH SIDE PLUS ADDING UTILITY WIDTH/DIAMETER; WITHIN THIS ZONE CONTRACTOR SHALL POthOLE UTILITY BY HAND TOOLS TO DETERMINE EXACT LOCATION OF UTILITIES IN CONFLICT WITH EXCAVATION BEFORE USING ANY POWER-OPERATED OR POWER-DRIVEN EXCAVATING OR BORING EQUIPMENT.
- CASTINGS/COVERS:** LIDS FOR WATER FACILITIES SHALL BE MARKED "WATER". ALL CASTINGS, COVERS, HATCHES AND CONCRETE COLLARS IN ROADWAY SHALL BE DEPRESSED 1/4-INCH BELOW FINISHED LEVEL OF PAVEMENT SURFACE TO ALLOW FOR SNOW PLOWING EQUIPMENT.
- WATER/SEWER SERVICES:** CONTRACTOR SHALL VERIFY LOCATION OF WATER AND SEWER SERVICES TO PRIVATE PROPERTY PRIOR TO TRENCHING; NEW WATER SERVICES AND/OR OTHER FACILITIES SHALL NOT BE INSTALLED WITHIN OR IN FRONT OF DRIVEWAYS OR OTHER PROPERTY ENTRANCES OR OTHERWISE WHERE IT MAY BE READILY HIT OR BE DAMAGED BY VEHICLES. SERVICES AND OTHER APPURTENANCES SHALL BE PLACED AT THE PROPERTY LINE OR AS FAR AS PRACTICAL AND POSSIBLE TOWARD THE FARTHEST EDGE OF THE PUBLIC RIGHT-OF-WAY.
- TIE-IN CONNECTIONS:** OPERATION OF ANY EXISTING WATER SYSTEM VALVES OR OTHER EXISTING FACILITIES SHALL ONLY OCCUR UNDER THE DIRECT OBSERVATION AND PRIOR APPROVAL OF CCWD PERSONNEL. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AT LEAST TWO (2) WEEKS IN ADVANCE OF ANY NECESSARY SHUTDOWN AND/OR TIE-IN CONNECTION AND EACH INDIVIDUAL EVENT SHALL BE IDENTIFIED ON CONTRACTOR'S THREE (3) WEEK LOOK AHEAD SCHEDULE AS SUBMITTED WEEKLY TO THE DISTRICT. SHUTDOWNS AND TIE-INS SHALL NOT BE SCHEDULED ON FRIDAYS, WEEKENDS OR HOLIDAYS, EXCEPT FOR SCHOOLS IN WHICH CASE WORK MUST BE PERFORMED WHEN THE SCHOOL IS OUT OF SESSION OR OTHERWISE UNOCCUPIED. CONTRACTOR SHALL COMPLETE TIE-INS IN THE SHORTEST POSSIBLE TIME AND IN NO CASE SHALL ANY CUSTOMER BE WITHOUT WATER SERVICE FOR MORE THAN 8-HR PERIOD; ONCE SHUTDOWN OCCURS AND WORK ON THE TIE-IN BEGINS, THE CONTRACTOR SHALL NOT STOP WORK UNTIL TIE-IN IS COMPLETED AND WATER SERVICE IS RESTORED TO ALL EVERY CUSTOMER. ALL PREPARATORY WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE DISTRICT PRIOR TO INITIATING SHUTDOWN AND STARTING WORK ON THE TIE-IN. CONTRACTOR SHALL POthOLE TO VERIFY CONNECTION POINT AND PIPE MATERIAL IN ADVANCE AND HAVE ALL PIPE, FITTINGS, VALVES, HARDWARE, GASKETS AND OTHER MATERIALS READY ON-SITE INCLUDING CHLORINE FOR DISINFECTION; PIPING SHALL BE PRE-ASSEMBLED ABOVE GROUND TO EXTENT FEASIBLE.
- VERTICAL & HORIZONTAL SEPARATION:** UNLESS OTHERWISE NOTED ON PLANS OR APPROVED BY CCWD, CONTRACTOR SHALL MAINTAIN VERTICAL AND HORIZONTAL SEPARATIONS FOR PARALLEL SEWERS AND STORM DRAINS IN ACCORDANCE WITH CALIFORNIA WATERWORKS STANDARDS; MINIMUM 1-FT ABOVE AND 10-FT HORIZONTAL FROM SEWERS; 1-FT ABOVE AND 4-FT HORIZONTAL FROM STORM DRAINS. WATER MAINS SHALL CROSS AT LEAST 1-FT ABOVE AND 45-DEGREE ANGLE TO SEWERS AND STORM DRAINS WITH NO JOINTS PLACED WITHIN 8-FT HORIZONTAL. FOR LOCATIONS NOT MEETING THESE STANDARDS, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED INCLUDING STEEL CASINGS, CONCRETE ENCASEMENT, SLURRY BACKFILL AND CONTROLLED PLACEMENT OF JOINTS AS NOTED ON THE DRAWING OR OTHERWISE DIRECTED BY THE DISTRICT ENGINEER.
- SHUTDOWNS:** CONTRACTOR SHALL NOT CAUSE ANY SERVICE INTERRUPTIONS (SEWER, ELECTRICAL, TELEPHONE, CABLE, ETC.) AND SHALL MAKE EVERY EFFORT TO MINIMIZE LENGTH OF ANY NECESSARY WATER SERVICE INTERRUPTIONS. ANY / EACH SHUTDOWN OF EXISTING WATER SYSTEM SHALL BE INDIVIDUALLY PLANNED AND SCHEDULED AT LEAST TWO (2) WEEKS IN ADVANCE OF WORK. CONTRACTOR SHALL PERFORM EACH SHUTDOWNS DURING TIME AND DAY (EITHER DAY, NIGHT OR WEEKEND) WHEN IT CAUSES LEAST INCONVENIENCE AND INTERRUPTION TO THE EFFECTED RESIDENTS, BUSINESSES, SCHOOLS, AND OTHER CUSTOMERS.
- TAKING PRV STATIONS OUT-OF-SERVICE:** CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE THE TIME BETWEEN REMOVING AN EXISTING PRESSURE REGULATING (PRV) STATION FROM SERVICE, COMPLETING REPLACEMENT AND RETURNING IT TO SERVICE. TRENCH AND PIPELINE CONSTRUCTION SHALL NOT ADVANCE BEYOND THE POINT OF EACH PRV STATION UNTIL THE NEW STATION IS FULLY COMPLETED, TESTED AND READY FOR SERVICE PENDING BACTERIOLOGICAL TEST RESULTS. TIME ALLOWED FOR EACH PRV STATION REMOVAL AND REPLACEMENT IS LISTED IN THE SEQUENCE OF WORK. EXCEPT FOR SCHEDULED SHUTDOWNS LASTING A FEW HOURS, WATER SERVICE SHALL OTHERWISE BE MAINTAINED CONTINUOUSLY AS NOTED IN THE SEQUENCE OF WORK BY PROVIDING TEMPORARY PRV'S AND BYPASS PIPING TO SUPPLY CONSUMPTIVE USES.
- FIRE DEPARTMENT NOTIFICATION:** PRESSURE AND FLOW TO FIRE HYDRANTS AND FIRE SUPPRESSION SYSTEMS MAY BE DECREASED WHEN PRV STATIONS ARE REMOVED FROM SERVICE AND DURING SHUTDOWNS, THE LOCAL FIRE DEPARTMENT SHALL BE REGULARLY NOTIFIED AT LEAST TWO (2) WEEKS IN ADVANCE INFORMING THEM OF THE TIME, DATED, LOCATION AND DURATION OF EACH EVENT.
- IMPACTS TO COMMUNITY:** CONTRACTOR SHALL MAKE EVERY EFFORT MINIMIZE CONSTRUCTION IMPACTS TO COMMUNITY, RESIDENCES, BUSINESSES AND SCHOOLS SHALL BE NOTIFIED BY MAIL AND OTHER MEANS AT LEAST TWO (2) WEEKS IN ADVANCE OF LOCALIZED CONSTRUCTION ACTIVITIES, TRAFFIC IMPACTS, ROAD CLOSURES, WATER SYSTEM SHUTDOWNS OR CHANGED CONDITIONS; NOTIFICATIONS SHALL PROVIDE LOCATIONS WORK IS SCHEDULED TO OCCUR INCLUDING SPECIFIC DATES AND STREET NAMES; UPDATED NOTIFICATIONS MADE AS SCHEDULE CHANGES. ALL ROADS SHALL BE OPEN DURING OVERNIGHT HOURS, WEEKENDS AND HOLIDAYS AND TRAFFIC CONTROLS AND DETOURS THROUGH AND AROUND THE CONSTRUCTION ZONE. PROVIDE ACCESS TO RESIDENCES, BUSINESSES, PARKS, SCHOOLS AND OTHER OCCUPIED PROPERTIES; DO NOT WORK IN SCHOOL ZONES WHEN CHILDREN ARE ARRIVING/PRESENT IN RIGHT-OF-WAY. CREW TRUCKS, HAULING TRUCKS, AND PERSONNEL VEHICLES SHALL DRIVE 25-MPH WITHIN CONSTRUCTION ZONES AND OTHERWISE OBSERVE POSTED SPEED LIMITS.
- CONDITION OF RIGHT-OF-WAY:** PUBLIC RIGHT-OF-WAY, PRIVATE PROPERTY, EASEMENTS AND OTHER WORK AREAS SHALL BE KEPT IN A CLEAN AND NEAT CONDITION BY THE CLOSE OF EACH WORK DAY. FUGATIVE DUST SHALL BE MINIMIZED TO THE GREATEST EXTENT PRACTICABLE DURING EARTH MOVING OPERATIONS BY SPRAYING AND APPLYING WATER DURING TRENCHING AND LOADING/UNLOADING ACTIVITIES. MUD TRACKING SHALL BE CONTROLLED BY STABILIZED CONSTRUCTION ENTRANCES AND ANY MUD TRACKING ON TO STREETS SHALL BE REMOVED BY END OF EACH WORK DAY. STREETS AND HIGHWAYS WITHIN THE CONSTRUCTION ZONE SHALL BE SWEEPED DAILY AND AT LEAST TWICE WEEKLY WITH A REGENERATIVE AIR SWEEPER TRUCK.
- SHEETING, SHORING & BRACING:** IN ACCORDANCE WITH CALIFORNIA LABOR CODE AND DEPARTMENT OF INDUSTRIAL RELATIONS REQUIREMENTS, THIS ITEM REQUIRES THE CONTRACTOR TO FURNISH AND INSTALL SHEETING, SHORING AND BRACING OF ALL EXCAVATIONS AND TRENCHES FIVE (5) FEET OR DEEPER AND INTO WHICH A PERSON IS REQUIRED TO DESCEND; SAFETY PLAN(S) SHALL MEET MINIMUM REQUIREMENTS OF THE CONSTRUCTION SAFETY ORDERS, SECTIONS 1539 TO 1543. REFER TO GEOTECHNICAL REPORT FOR DIFFERENT SOIL TYPES.

- COMPACTION TESTS:** THE DISTRICT WILL RETAIN A QUALIFIED SOILS LAB TO PERFORM MATERIALS TESTING AND SOIL COMPACTION DENSITY TESTS AS PART OF THE DISTRICT'S INSPECTION EFFORT; CONTRACTOR SHALL NOTIFY DISTRICT'S INSPECTOR AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF TIME AND DATE THAT CONTRACTOR WILL BE READY FOR THE COMPACTION TESTS; IF EXCESSIVE NUMBER OF FAILED TESTS CONTINUE TO OCCUR WITHOUT CONTRACTOR PROMPTLY MODIFYING METHODS AND MATERIALS TO RESOLVE AN ON-GOING PROBLEM, THEN CONTRACTOR SHALL REIMBURSE DISTRICT FOR ALL FAILING TESTS.
- CLEARING TREES AND VEGETATION:** NOT ALL TREES ARE SURVEYED AND SHOWN ON THE DRAWINGS. PRIOR TO SUBMITTING A BID, CONTRACTOR SHALL FIELD INSPECT PIPELINE ROUTE AND OTHER AREAS OF PROJECT TO ASSESS CLEARING OF TREES, SAPLINGS, BRUSH AND OTHER VEGETATION. PLANS SHOW SPECIFIC TREES IN CONFLICT WITH PROPOSED WORK THAT ARE TO BE REMOVED (WITH STUMPS AND ROOTS), BUT DOES NOT CONSIDER CLEARING FOR HEAVY EQUIPMENT ACCESS. CONTRACTOR SHALL REMOVE TREES, SAPLINGS, BRUSH AND OTHER VEGETATION NOMINAL 6-INCH AND SMALLER AND CAREFULLY TRIM AND REMOVE LOWER BRANCHES FROM LARGER TREES. BEFORE CUTTING DOWN AND REMOVING TREES 6-INCH AND LARGER, EACH TREE SHALL FIRST BE INDIVIDUALLY MARKED TWO (2) WEEKS IN ADVANCE AND APPROVAL OBTAINED FROM DISTRICT ENGINEER. UNLESS OTHERWISE MARKED ON THE PLANS, TREES 12-INCH DIAMETER AND LARGER ARE NOT TO BE REMOVED AND EVERY EFFORT SHALL BE MADE TO PROTECT AND MINIMIZE DAMAGE TO MAIN BRANCHES AND ROOT SYSTEMS. ALL WASTE VEGETATION FROM CLEARING AND GRUBBING SHALL BE REMOVED AND DISPOSED OF AT APPROVED WASTE FACILITY; BURNING SHALL NOT BE ALLOWED UNLESS BY PERMIT FROM EBBETTS PASS FIRE DEPARTMENT OR CAL-FIRE. BRANCHES, BARK OR MAIN ROOTS ON TREES TO REMAIN SHALL NOT BE DAMAGED BY CARELESS USE OF HEAVY EQUIPMENT.
- SALVAGING OF EXISTING PRV STATION VALVES:** DURING DEMOLITION OF OLD PRESSURE REDUCING STATIONS, CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING PRESSURE REDUCING VALVES WITHOUT CAUSING UNNECESSARY DAMAGE AND DELIVER TO CCWD'S MAINTENANCE BARN/FACILITY IN WHITE PINES; CONTRACTOR SHALL OTHERWISE REMOVE AND DISPOSE AND/OR RECYCLE ALL OTHER DAMAGED, CORRODED AND NON-USABLE VALVES AND WASTE PIPING MATERIALS; NO SALVAGED ITEMS SHALL BE RE-INCORPORATED INTO THE NEW WORK, UNLESS SO DIRECTED BY THE DISTRICT.
- STAGING AREAS:** THE DISTRICT CAN PROVIDE LIMITED STAGING AND STORAGE AREAS AT MEADOWMONT AND SAWMILL TANK SITES AND THE WHITE PINES MAINTENANCE BARN; A LARGER STAGING AREA IS AVAILABLE AT WHITE PINES PARK. CONTRACTOR SHALL NOT STAGE MATERIALS OR EQUIPMENT OR VEHICLES IN THE RIGHT-OF-WAY EXCEPT AS USED DAILY FOR CONSTRUCTION. NO EQUIPMENT OR MATERIALS SHALL BE TEMPORARILY STAGED OR STORED OVERNIGHT WITHIN THE HIGHWAY RIGHT-OF-WAY. THE CONTRACTOR SHALL NOT STAGE ANY EQUIPMENT OR MATERIALS OR PARK VEHICLES WHERE IT VIOLATES ANY ORDINANCE, BLOCKS DRIVEWAYS, ENTRANCES OR OTHERWISE PREVENTS NORMAL ACCESS TO PROPERTY, OR INTERFERES WITH TRAFFIC, EMERGENCY VEHICLES, PEDESTRIANS, PUBLIC SAFETY OR NORMAL USE OF THE RIGHT-OF-WAY. BEFORE STAGING MATERIALS OR EQUIPMENT OR PARKING VEHICLES ON PRIVATE PROPERTY, CONTRACTOR SHALL OBTAIN PERMISSION FROM THE PROPERTY OWNER. THE CONTRACTOR SHALL SECURE THE SITE WHEN NOT PRESENT TO AVOID THEFT AND ELIMINATE SITE HAZARDS AND MAINTAIN PUBLIC SAFETY. CONTRACTOR SHALL STEEL PLATE OPEN EXCAVATIONS AND PROVIDE TEMPORARY SECURITY FENCING AROUND WORK AREAS AND SAFETY HAZARDS. THE CONTRACTOR SHALL SECURE THE CONSTRUCTION AREA, STAGING AND STORAGE AREAS, WORK, MATERIALS AND EQUIPMENT AGAINST ATTRACTIVE NUISANCE, THEFT AND/OR VANDALISM.
- SANITARY FACILITIES:** A PUBLIC TOILET IS AVAILABLE AT THE WHITE PINES PARKING LOT. IN ADDITION, FOR THE DURATION OF THE PROJECT, THE CONTRACTOR IS REQUIRED TO FURNISH AND REGULARLY MAINTAIN AT LEAST ONE ADDITIONAL TEMPORARY SANITARY FACILITY FOR WORKERS USE IN THE PROJECT AREA.
- CONSTRUCTION WATER:** CCWD SHALL FURNISH CONSTRUCTION WATER FOR USE ON THE PROJECT. ALL CONSTRUCTION WATER SHALL BE METERED THROUGH HYDRANT METERS FOR CCWD'S RECORD KEEPING PURPOSES AS TO NOT CONTRIBUTE TO UNACCOUNTED WATER IN THE SYSTEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH ALL EQUIPMENT, LABOR AND MATERIALS NEEDED TO TRANSPORT AND CONVEY THE WATER FOR USE IN CONSTRUCTION. DIRECT CONNECTIONS SHALL NOT BE ALLOWED BETWEEN THE EXISTING SYSTEM AND NEW CONSTRUCTION UNTIL IT HAS BEEN TESTED, DISINFECTED AND PASSES BACTERIOLOGICAL TESTS; AN APPROPRIATELY SIZED AND CERTIFIED REDUCED PRESSURE BACKFLOW DEVICES SHALL BE USED FOR ANY CONNECTIONS NEEDED FOR FILLING AND FLUSHING THE PIPELINE. DAILY WATER USE SHOULD NOT EXCEED 100,000-GPD WHEN FLUSHING THE WATER MAINS AND WATER SHOULD NOT BE DISCHARGED UNATTENDED DURING OVERNIGHT HOURS. WATER DISCHARGED FROM PIPELINES FROM FLUSHING MUST BE DECHLORINATED AND DISCHARGED UNDER A GENERAL LOW THREAT DISCHARGE PERMIT ISSUED BY THE REGIONAL WATER QUALITY CONTROL BOARD.
- PRESERVATION OF PROPERTY:** PRIVATE AND PUBLIC PROPERTY, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, WALLS, LANDSCAPING, PAVING, ROADS, DRIVEWAYS, SIDEWALKS, MAIL BOXES, POLES, FENCES, SIGNS, SURVEY MONUMENTS, BUILDINGS, STRUCTURES, VEHICLES, DRAINS, CULVERTS, CONDUITS, UTILITIES AND OTHER SUCH ITEMS SHALL BE PROTECTED DURING CONSTRUCTION AND, IF DAMAGED OR INJURED, SHALL BE REPLACED AND/OR RESTORED BY CONTRACTOR TO CONDITION AS GOOD, OR BETTER, AS WHEN ENTERING UPON THE WORK TO THE SATISFACTION OF THE DISTRICT ENGINEER. EXISTING VEGETATION OUTSIDE OF APPROVED/VERIFIED CLEARING LIMITS SHALL BE PROTECTED FROM DAMAGE.
- ACCESS TO WORKING AREAS:** THE NEW TRANSMISSION MAIN AND ALL CONSTRUCTED FACILITIES SHALL BE LOCATED AND CONSTRUCTED WITHIN PUBLIC RIGHT-OF-WAY, PUBLIC UTILITY EASEMENTS, AND/OR DEDICATED EASEMENTS. UNLESS OTHERWISE APPROVED, CONTRACTOR'S OPERATIONS SHALL BE CONDUCTED WITHIN PUBLIC RIGHT-OF-WAY BY ENCROACHMENT PERMIT, WITHIN UTILITY EASEMENTS AND/OR TEMPORARY CONSTRUCTION EASEMENTS. CONTRACTOR SHALL ACCESS WORK AREAS THROUGH PUBLIC RIGHT-OF-WAY OR DESIGNATED ACCESS POINTS CAUSING LEAST DAMAGE, DISRUPTION AND INTERFERENCE WITH NORMAL USE AND BUSINESS OF THE PROPERTY. CONTRACTOR SHALL NOT ARBITRARILY OR NEEDLESSLY ENTER OR ENCROACH INTO UNAUTHORIZED AREAS OF PRIVATE PROPERTY WITHOUT FIRST NOTIFYING THE DISTRICT AND OBTAINING THE OWNER'S PERMISSION.
- ENCROACHMENT PERMITS:** CONTRACTOR SHALL PREPARE AND FILE ALL PAPERWORK TO COMPLETE ENCROACHMENT PERMITS. CONTRACTOR SHALL PERFORM ALL WORK AND COORDINATION TO NECESSARY TO SECURE AND COMPLY WITH PERMIT CONDITIONS AS ISSUED BY CALTRANS AND COUNTY PUBLIC WORKS FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAYS. CCWD WILL SUBMIT PRELIMINARY PERMIT APPLICATIONS TO RESPECTIVE AGENCIES AS "OWNER" AND PAY PERMIT AND INSPECTION FEES DIRECTLY INVOICED BY CALTRANS AND COUNTY. COUNTY OF CALAVERAS SHALL BE LISTED AS A CO-OBLIGEE ON PERFORMANCE BOND OR ADDED VIA A DUAL OBLIGEE RIDER. CONTRACTOR SHALL PREPARE AND SUBMIT SPECIFIC TRAFFIC CONTROL PLANS MEETING REQUIREMENTS AND APPROVAL OF AGENCIES, AND FULLY SUPPORT AND IMPLEMENT TRAFFIC CONTROL PLANS INCLUDING ALL NECESSARY SIGNAGE, FLAGGERS, BARRICADES, K-RAIL, SAFETY DEVICES, ETC. TRAFFIC CONTROL PLANS SHALL BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2014 EDITION AND, AS APPLICABLE, THE STATE STANDARD PLANS. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING CALTRANS AND COUNTY OF ALL HIGHWAY AND ROAD LANE CLOSURES AND OTHER ENCROACHMENTS WITHIN RIGHT OF WAY. FOR PERMITTED ACTIVITIES WITHIN HIGHWAY, CONTRACTOR SHALL NOTIFY CALTRANS PERMIT OFFICER TWO WEEKS IN ADVANCE OF WORK TO OBTAIN CLOSURE NUMBERS AND THEN REPORT DAILY STATUS VIA TRANSPORTATION MANAGEMENT CENTER (TMC) AT (209) 948-7556 BOTH AT BEGINNING OF TRAFFIC CONTROL AND AGAIN WHEN DONE AT END OF DAY; IF LANE CLOSURE IS SCHEDULED BUT NOT USED, CONTRACTOR IS OBLIGATED TO CALL IN TO THE TMC AND CANCEL IT FOR EACH DAY.
- CONSTRUCTION STAKING:** CCWD WILL PROVIDE ONE (1) SET OF CONSTRUCTION STAKES AND MARKS TO ESTABLISH LINE AND GRADE FOR THE PROJECT; THE OVERALL LENGTH OF THE PROJECT SHALL BE SPLIT INTO FOUR (4) SEPARATE REQUESTS TO BE COORDINATED AS WORK PROGRESSES ALONG THE ALIGNMENT; EACH DETAILED REQUEST SHALL BE SUBMITTED TO DISTRICT AT LEAST THREE (3) WEEKS IN ADVANCE OF WORK. CONTRACTOR SHALL PAY FOR SURVEYOR, IF NECESSARY TO RESET STAKES THAT ARE CARELESSLY OR INADVERTENTLY DESTROYED, DAMAGED OR LOST.

- STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND BEST MANAGEMENT PRACTICES (BMP'S):** CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT TO DEVELOP, FURNISH, INSTALL AND MAINTAIN A PROJECT SPECIFIC SWPPP AND BMP'S TO COMPLY WITH CONSTRUCTION GENERAL PERMIT (CGP) ORDER NO.2012-0006-DWQ. SWPPP SHALL BE FILED WITH THE STORM WATER MONITORING AND REPORT TRACKING SYSTEM (SMARTS), PREPARED BY A QUALIFIED SWPPP DEVELOPER (QSD) AND FURNISHED, INSTALLED AND MAINTAINED BY A QUALIFIED SWPPP PRACTITIONER (QSP) LICENSED BY CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA). ALL WORK SHALL BE IN ACCORDANCE WITH THE CALTRANS STORMWATER QUALITY HANDBOOKS, PROJECT PLANNING AND DESIGN GUIDE, STORMWATER POLLUTION PREVENTIONS PLAN (SWPPP) AND WATER POLLUTION CONTROL PROGRAM (WPCP) PREPARATION MANUAL, CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (BMP'S) REFERENCE MANUAL (CTS-WRT-11-255.08.01). BMP'S SHALL BE PROVIDED FOR TEMPORARY RUN-ON CONTROL, SOIL STABILIZATION AND EROSION CONTROL, SEDIMENT CONTROL, TRACKING CONTROL, WIND EROSION CONTROL, MATERIAL POLLUTION PREVENTION, AND WASTE MANAGEMENT. TRENCHING, EXCAVATING, AND BACKFILLING OPERATIONS SHALL BE CONDUCTED TO PRESERVE EXISTING VEGETATION NOT IN THE IMMEDIATE CONSTRUCTION ZONE AND NOT CONDUCTED BY METHOD/MANNER THAT ALLOWS SOIL OR BACKFILL MATERIALS TO DIRECTLY ENTER INTO ANY CREEKS, STREAM, DRAINAGE OR ROADSIDE DITCH (EXCEPT IN COMPLIANCE WITH ISSUED SECTION 404/401 PERMITS). ALL DISTURBED SOIL SHALL BE STABILIZED BY APPROPRIATE BMP'S; WETLANDS AND GOLF COURSE AREA SHALL BE RESEED WITH NATIVE GRASSES.
- ENVIRONMENTAL MITIGATION MEASURES:** THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS TO COMPLY WITH ADOPTED INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION (ISMND) AND MITIGATION MONITORING AND REPORTING PLAN (MMRP). THE DISTRICT WILL RETAIN A BIRD SPECIALIST, BIOLOGIST, ARCHEOLOGIST, CULTURAL RESOURCES MONITOR, AND WETLANDS SCIENTIST AS NEEDED TO ASSIST IN CONDUCTING ENVIRONMENTAL SURVEYS AND FIELD MONITORING. MITIGATION MEASURES ARE DESCRIBED IN THE MMRP AND LISTED BELOW:
 - MITIGATION AQ-1: MITIGATE FUGITIVE DUST AND SUBMIT CONTROL PLAN TO CALAVERAS COUNTY AIR POLLUTION CONTROL DISTRICT (CCAPCD).
 - MITIGATION AQ-2: MITIGATE CONSTRUCTION RELATED HEAVY EQUIPMENT AND VEHICLE EXHAUST EMISSIONS.
 - MITIGATION BR-1: AVOID DISTURBANCE TO SMALL'S SOUTHERN CLARKIA, A SPECIAL STATUS PLANT.
 - MITIGATION BR-2: SCHEDULE CONSTRUCTION IN NORTHERN PROJECT AREA OUTSIDE NESTING SEASON.
 - MITIGATION BR-3: CONDUCT PRE-CONSTRUCTION NESTING BIRD (OSPREY AND SPOTTED OWL) SURVEYS AND PROTECT ACTIVE NESTS.
 - MITIGATION BR-4: MINIMIZE IMPACTS TO WETLANDS AND STREAMS AND COMPLY WITH TERMS OF CLEAN WATER ACT AND FISH AND WILDLIFE CODE AUTHORIZATIONS.
 - MITIGATION CR-1: PROTECT CULTURAL RESOURCES UNCOVERED BY GROUND DISTURBING ACTIVITIES.
 - MITIGATION CR-2: PROTECT HUMAN REMAINS UNCOVERED BY GROUND DISTURBING ACTIVITIES.
 - MITIGATION HHM-1: IMPLEMENT A HAZARDOUS MATERIALS SPILL PREVENTION AND RESPONSE PLAN.
 - MITIGATION HHM-2: IMPLEMENT A FIRE SAFETY PLAN.
 - MITIGATION HWQ-1: IMPLEMENT A CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP) EMPLOYING AND DEPLOYING APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S).
 - MITIGATION HWQ-2: PROTECT WATERBODIES (STREAMS, CREEKS, DRAINAGES, AND WETLANDS) FROM CONSTRUCTION RELATED ACTIVITIES.
 - MITIGATION NO-1: MAINTAIN NOISE CONTROL, MUFFLERS AND OTHER DEVICES ON HEAVY EQUIPMENT, RESTRICT WORK HOURS, AND IMPLEMENT ADDITIONAL MEASURES TO LIMIT CONSTRUCTION RELATED NOISE.
 - MITIGATION NO-2: NOTIFY RESIDENCES IN ADVANCE OF CONSTRUCTION ACTIVITIES AND NOISE.
 - MITIGATION TT-1: PREPARE AND IMPLEMENT REQUIRED TRAFFIC CONTROL PLANS
- THE PROJECT CROSSES THROUGH SEVERAL SMALL WETLANDS AS SHOWN ON THE PROJECT DRAWINGS AND ENVIRONMENTAL MAPS. WORK WITHIN WETLANDS IS ONLY ALLOWED BY PERMITS: 1) USACE SECTION 404, NWP 12 - UTILITY LINE ACTIVITIES (SPK-2014-00828), 2) REGIONAL BOARD, SECTION 401, WATER QUALITY CERTIFICATION, AND 3) CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, SECTION 1600, NOTIFICATION OF LAKE OR STREAMBED ALTERATION. CONTRACTOR IS REQUIRED TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS AS NECESSARY TO ACHIEVE COMPLIANCE WITH TERMS AND CONDITIONS OF EACH PERMIT AS HEREIN INCORPORATED BY REFERENCE. COPIES OF PERMITS ARE AVAILABLE AT CCWD'S MAIN OFFICE AT 120 TOMA CT., SAN ANDREAS, CA 95249. IF CONTRACTOR FAILS TO MEET ALL TERMS AND CONDITIONS OF SUBJECT PERMITS (E.G. FAILING TO SUBMIT A REQUIRED PLAN, MAKE NOTIFICATIONS, RESERVE/RESTORE WETLANDS TOPSOIL AND NATIVE VEGETATION, ETC.), THE DISTRICT MAY STOP WORK. ALSO, THE CONTRACTOR SHALL BE CONSTRAINED BY ALL NOTIFICATIONS REQUIREMENTS STATED IN THE PERMITS (E.G. A PLAN FOR DISPOSAL AND STOCKPILE OF EXCAVATED MATERIALS FROM WETLANDS MUST BE SUBMITTED TO USACE FOR REVIEW AND APPROVAL A MINIMUM OF 30-DAYS PRIOR TO STARTING WORK WITHIN WETLANDS). THE DISTRICT WILL PAY ALL APPLICABLE PERMIT FEES DIRECTLY CHARGED BY REGULATORY AGENCIES, RETAIN A WETLANDS SCIENTIST TO MONITOR WORK WITHIN WETLANDS, CORRESPOND BETWEEN REGULATORY AGENCIES AND CONTRACTOR, AND COLLECT MANDATED WATER QUALITY SAMPLES.

CONSTRUCTION WITHIN WETLANDS IS ONLY ALLOWED BY PERMIT AT LOCATIONS LISTED BELOW:

 - WETLAND 1 (SP11) / FROM STA 43+80 TO STA 44+40
 - WETLAND 2 (SP15) / MEADOWMONT BRANCH LINE (5' TRENCH LENGTH, OFF MAIN ALIGNMENT)
 - WETLAND 3 (SP14) / MEADOWMONT BRANCH LINE (45' TRENCH LENGTH, OFF MAIN ALIGNMENT)
 - WETLAND 4 (SP1A) / FROM STA 59+00 TO STA 60+05
 - WETLAND 5 (SP2A) / FROM STA 63+40 TO STA 64+15
- THE PROJECT HAS SEVERAL SMALL CREEK, DRAINAGE CROSSINGS AS SHOWN ON THE PROJECT DRAWINGS AND ENVIRONMENTAL MAPS. THIS IN-STREAM WORK IS ONLY ALLOWED BY APPLICABLE PERMITS: USACE SECTION 404, NWP 12 - UTILITY LINE ACTIVITIES (SPK-2014-00828); REGIONAL BOARD, SECTION 401, WATER QUALITY CERTIFICATION; AND CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, SECTION 1600, NOTIFICATION OF LAKE OR STREAMBED ALTERATION. THE CONTRACTOR IS REQUIRED TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS AS NECESSARY TO ACHIEVE COMPLIANCE WITH THE TERMS AND CONDITIONS OF EACH PERMIT AS HEREIN INCORPORATED BY REFERENCE. COPIES OF PERMITS ARE AVAILABLE AT CCWD'S MAIN OFFICE AT 120 TOMA CT., SAN ANDREAS, CA 95249. IF CONTRACTOR FAILS TO MEET ALL TERMS AND CONDITIONS OF SUBJECT PERMITS (E.G. FAILING TO SUBMIT A REQUIRED PLAN, MAKE NOTIFICATIONS, IMPLEMENT DEWATERING PLAN, EXCEEDING ALLOWABLE TURBIDITY LIMITS, RESTORE STREAMBEDS, ETC.), THE DISTRICT MAY STOP WORK. ALSO, CONTRACTOR SHALL BE CONSTRAINED TO ALL NOTIFICATIONS REQUIREMENTS STATED IN THE PERMITS (E.G. NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN STANDING OR FLOWING WATERS, AND A PLAN FOR DEWATERING THE WORK AREA MUST BE SUBMITTED TO USACE FOR REVIEW AND APPROVAL A MINIMUM OF 30-DAYS PRIOR TO STARTING WORK). THE DISTRICT WILL PAY ALL APPLICABLE PERMIT FEES, INSPECT/OBSERVE IN-STREAM WORK, CORRESPOND BETWEEN REGULATORY AGENCIES AND CONTRACTOR, AND COLLECT MANDATED WATER QUALITY SAMPLES. PAYMENT WILL BE FOR EACH OPEN CUT STREAMBED CROSSINGS MADE IN ACCORDANCE WITH PERMITS AND WITH REINFORCED CONCRETE ENCASEMENT FURNISHED AND INSTALLED PER DETAIL G11.

OPEN CUT TRENCH CONSTRUCTION WITHIN STREAMBEDS IS ONLY ALLOWED BY PERMIT AT LOCATIONS LISTED BELOW:

 - STREAM A / FROM STA 42+35 TO STA 42+55 (1-CY MAX, 5' CONCRETE ENCASED PER DETAIL G11)
 - STREAM B / FROM STA 44+82.8 TO PRV37R (1-CY MAX, 5' CONCRETE ENCASED PER DETAIL G11)
 - STREAM C / MEADOWMONT BRANCH LINE (OFF MAIN ALIGNMENT, 2-CY MAX., 10' ENCASED PER DETAIL G11)
 - STREAM D / FROM STA 87+65 TO STA 87+80 (ENCASE SEWER PIPE)
 - STREAM E / FROM STA 95+75 TO STA 95+85 (1-CY MAX, 5' CONCRETE ENCASED PER DETAIL G11)

K:\PROJECTS\13-072 CCWD WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G004-DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. 3845.47 DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS

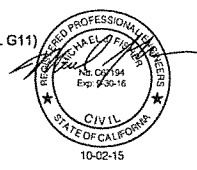
ENGINEERS

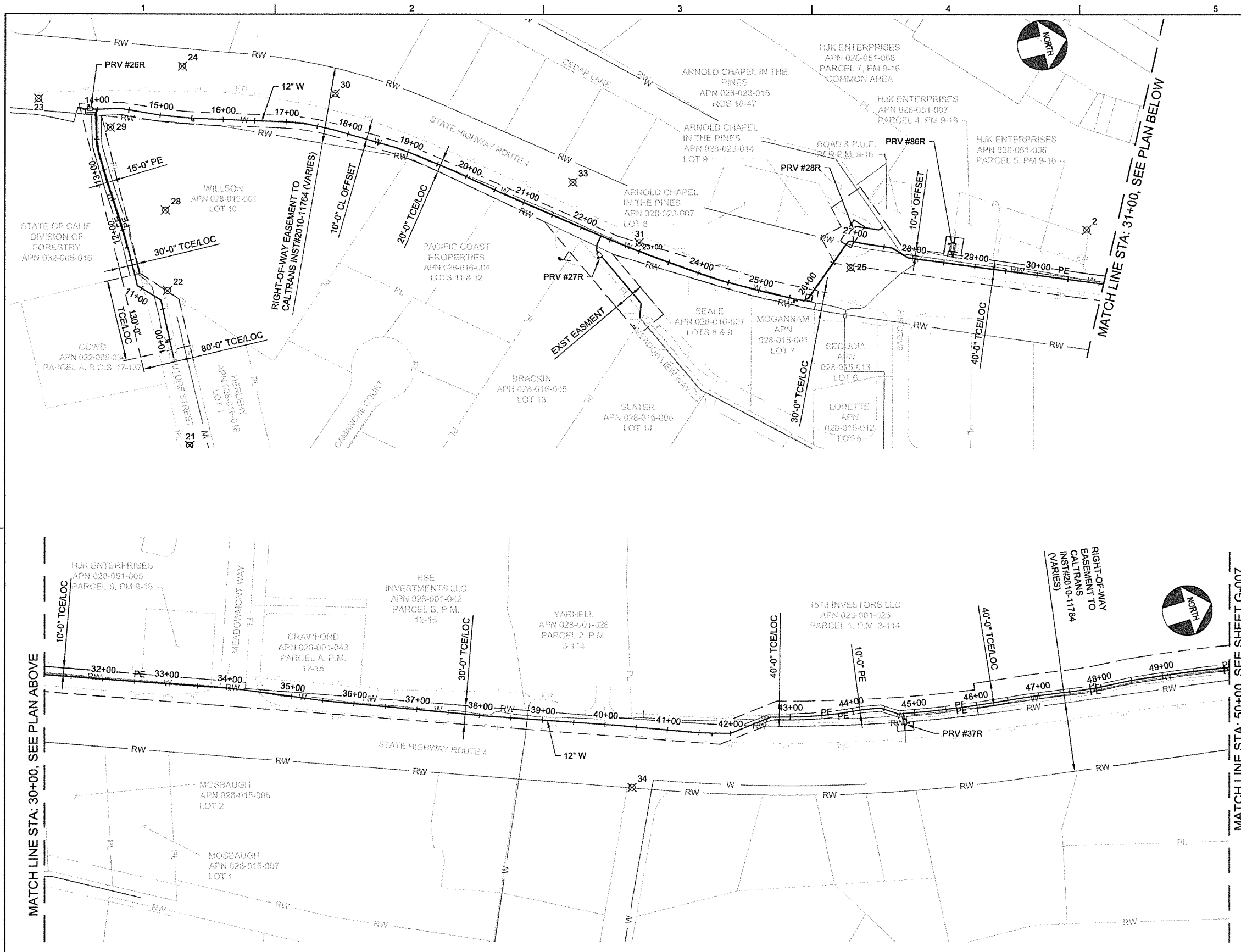
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

**CALAVERAS COUNTY
WATER DISTRICT**
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

GENERAL
GENERAL CONSTRUCTION NOTES

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER G-004
SHEET 04 - 62

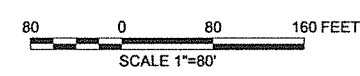




SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	2274012.58	6601063.45	3845.47	REB&CAPPARKLOTISLAND
21	2272545.83	6601065.90	3969.07	SET-SPK&CAP
22	2272569.24	6600818.16	3946.07	SET-SPK&CAP*TANK
23	2272441.96	6600473.43	3877.73	SET-MAGN&W
24	2272674.96	6600475.56	3879.76	SET-SPK&CAP
25	2273632.89	6601034.17	3853.76	SET-MAGN&W
28	2272595.58	6600692.78	3926.27	SPIKE&CAP
29	2272541.45	6600544.08	3896.06	SPIKE&CAP
30	2272900.22	6600574.52	3877.46	SPIKE&CAP
31	2273314.93	6600917.66	3867.81	SPIKE&CAP
33	2273234.68	6600799.27	3868.48	SPIKE&CAP
34	2274858.19	6601597.04	3876.13	SET-SPIKE&CAP

SURVEY CONTROL BENCHMARK TABLE	
LABEL	DESCRIPTION
POINT#1	PINWHEEL & WASHER IN THE PAVEMENT OF THE ELY PARKING STALL OF THE COURTRIGHT EMERSON MEMORIAL BALLPARK AT THE NLY END OF BLAGEN ROAD. N 2,285,517.63 E 6,607,796.85 ELEV = 3884.62
POINT#2	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. N 2,274,008.04 E 6,601,050.25 ELEV = 3845.47
POINT#3	PINWHEEL & WASHER IN THE PAVEMENT OF THE ABANDONED PARKING LOT ADJACENT TO WILLOW ST. AT THE INTERSECTION OF HIGHWAY 4 IN ARNOLD. N 2,279,502.39 E 6,603,891.48 ELEV=3986.42

NOTES:
 1. ELEVATIONS CONFORM TO THE NAVD 88 DATUM AND WERE ESTABLISHED BY GPS STATIC METHODS AND WERE DERIVED BY NGS OPUS STATIC SOLUTIONS FROM THREE NGS PRIMARY CORS STATIONS.
 2. BEARINGS AND COORDINATES CONFORM TO THE NAD 83 CALIFORNIA COORDINATE SYSTEM, ZONE 3. THE SURVEY CONTROL WAS ESTABLISHED BY GPS STATIC METHODS WITH NGS OPUS STATIC SOLUTIONS FROM THREE NGS PRIMARY CORS STATIONS. THE COMBINATION GRID FACTOR IS 0.9997813. MULTIPLY BY 1.0002187 TO DERIVE GROUND LEVEL DISTANCES.
 3. 3 PRIMARY STATIC OPUS DERIVED SURVEY CONTROL STATIONS WERE ESTABLISHED FOR THIS SURVEY.

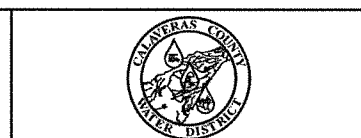


K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G005.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. <u>3845.47</u> DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

GENERAL
HORIZONTAL CONTROL PLANS 1

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER G-005
SHEET 05 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATERWORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATERWORKS ENGINEERS, LLC.

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
26	2278499.13	6602700.30	3924.27	SET-SPK&CAP
27	2278807.13	6602863.98	3936.70	SET-REB&CAP
35	2275923.72	6601818.33	3891.34	SET-SPIKE&CAP
36	2276214.04	6601889.64	3894.36	SET-MAGN&S
37	2277073.73	6602098.16	3909.26	SET-SPK&CAP

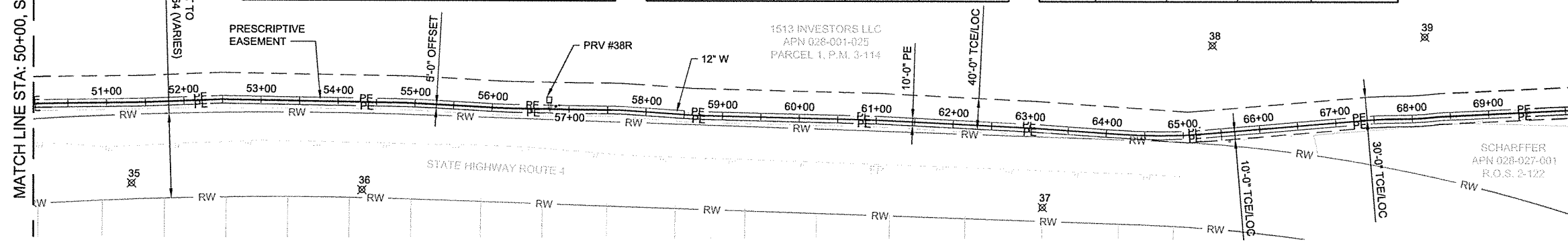
SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
38	2277335.06	6601938.80	3903.78	SET-SPK&CAP
39	2277608.18	6601986.36	3904.56	SET-SPK&CAP
40	2278001.22	6602244.72	3925.12	SET-SPK&CAP
41	2278350.74	6602489.39	3920.21	SET-SPK&CAP
42	2278759.31	6602910.74	3933.41	SPK&CAP

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
47	2278929.26	6603118.13	3940.09	MAGN&S
48	2279243.56	6603118.61	3948.71	SPIKE&CAP
49	2279438.72	6603146.44	3948.60	SPIKE&CAP
50	2279022.20	6603134.49	3942.09	SET-MAGN&S
77	2279130.32	6603292.11	3954.25	SPIKE&CAP



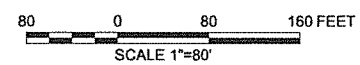
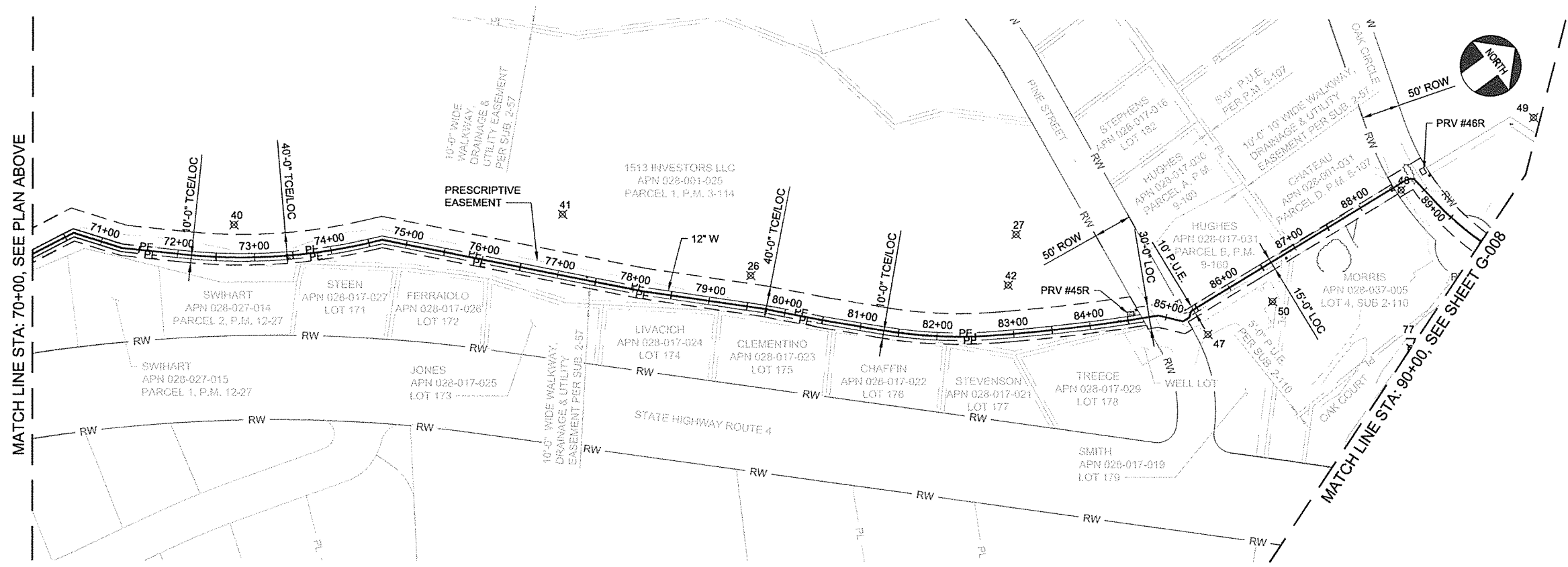
MATCH LINE STA: 50+00, SEE SHEET G-006

MATCH LINE STA: 70+00, SEE PLAN BELOW



MATCH LINE STA: 70+00, SEE PLAN ABOVE

MATCH LINE STA: 90+00, SEE SHEET G-008



K:\PROJECTS\13-072 CWWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-G006.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	



WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

GENERAL
HORIZONTAL CONTROL PLANS 2

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	G-006
SHEET	06 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.

JOB NUMBER: 13-051 FILENAME: 1372D-G006.DWG PLOT DATE: 02-Oct-15 PLOT TIME: 15:24:13

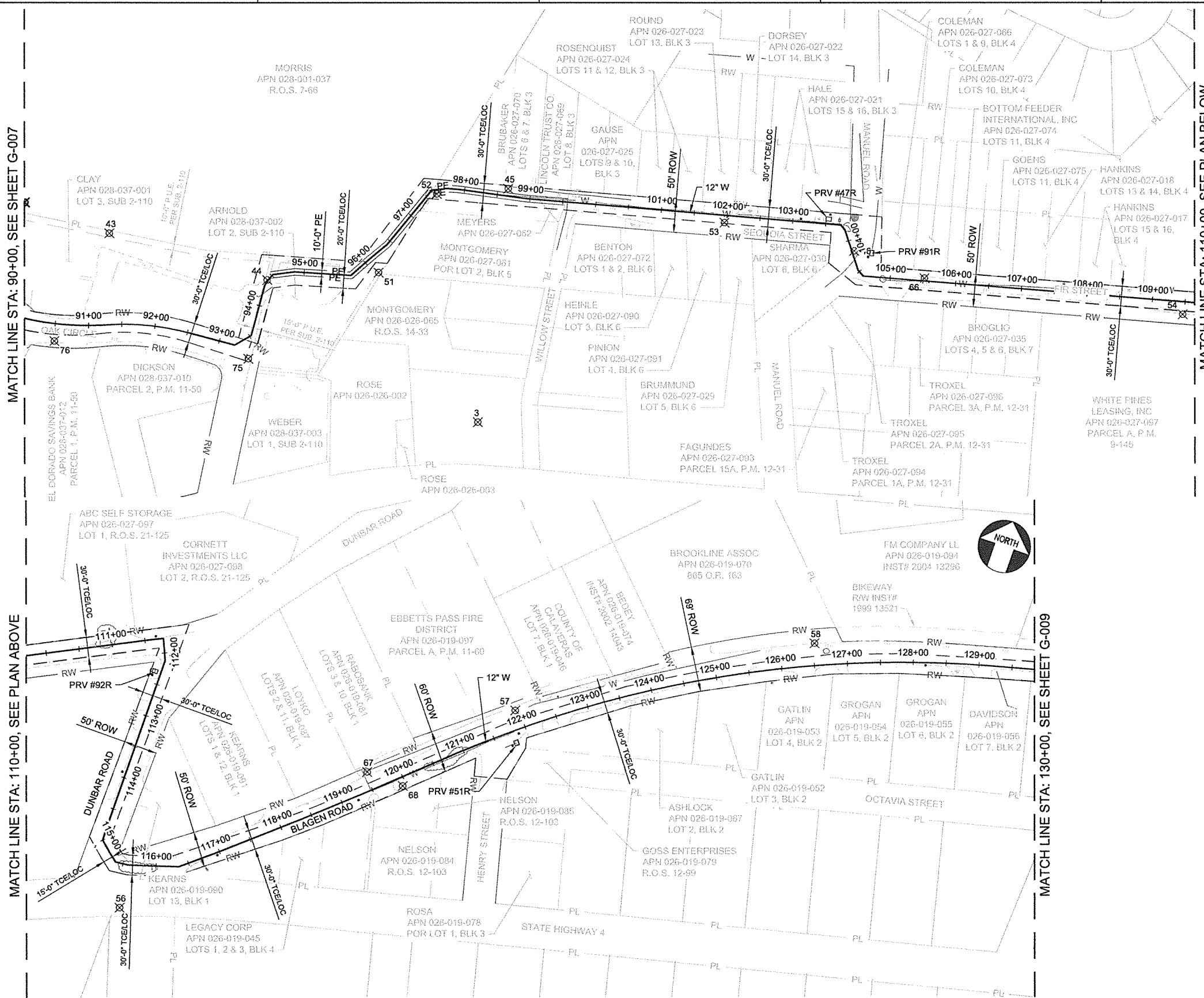


MATCH LINE STA: 90+00, SEE SHEET G-007

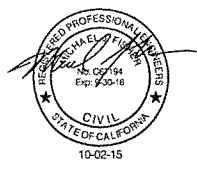
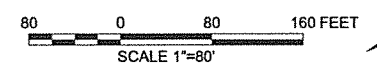
MATCH LINE STA: 110+00, SEE PLAN ABOVE

MATCH LINE STA: 110+00, SEE PLAN BELOW

MATCH LINE STA: 130+00, SEE SHEET G-009



SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
3	2279506.95	6603904.69	3986.42	PINWHEEL&WASHER
43	2279464.65	6603279.61	3957.73	SET-SPK&CAP
44	2279526.91	6603520.04	3961.87	SET-SPK&CAP
45	2279834.71	6603760.43	3984.88	SET-SPK&CAP
46	2280025.06	6604258.36	4001.02	SET-SPK&CAP
51	2279623.93	6603658.64	3966.68	SPIKE&CAP
52	2279771.68	6603671.94	3978.33	SPIKE&CAP
53	2279960.06	6604067.78	3993.83	MAGN&S
54	2280200.61	6604735.77	4017.32	SET-MAGN&S
55	2280294.81	6604959.61	4024.75	SET-MAGN&S
56	2279912.21	6605005.22	4026.48	SET-MAGN&S
57	2280392.03	6605472.27	4025.03	SPIKE&CAP
58	2280637.82	6605867.13	4005.24	SPIKE&CAP
66	2280044.69	6604371.32	4004.33	SPIKE&CAP
67	2280230.24	6605291.45	4028.96	SPIKE&CAP
68	2280227.77	6605349.14	4029.87	MAGN&S
75	2279409.66	6603557.37	3965.49	SET-MAGN&S
76	2279281.53	6603293.52	3953.20	MAGN&S



K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G007.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN
K ALACON

DRAWN
P WEBSTER

CHECKED
M FISHER

APPROVED
M FISHER

BENCH MARK
ELEV. 3845.47

DESCRIPTION
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

GENERAL
HORIZONTAL CONTROL PLANS 3

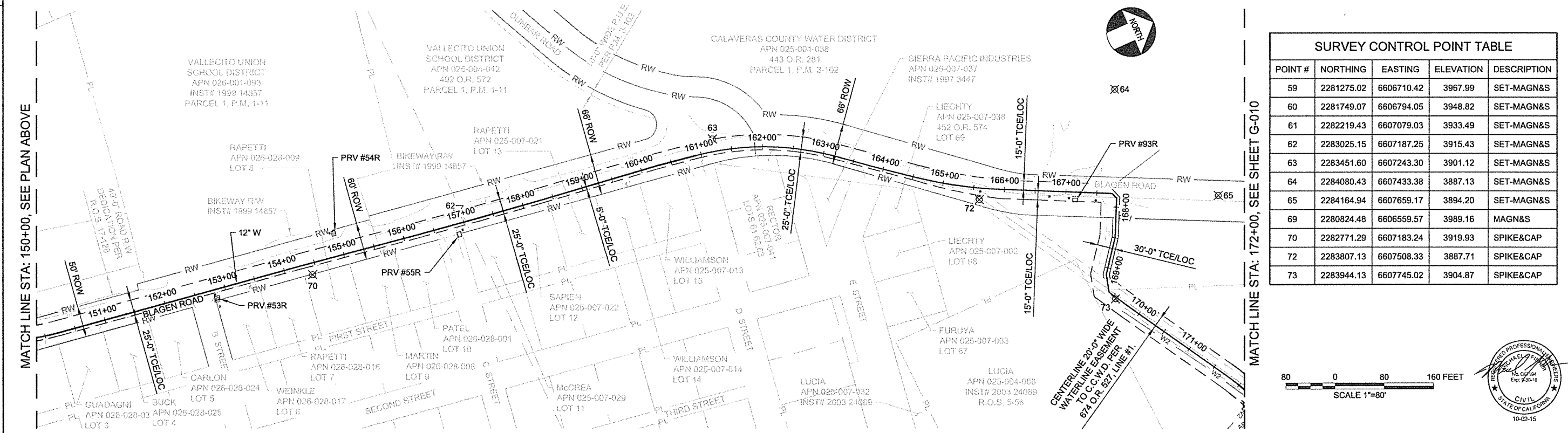
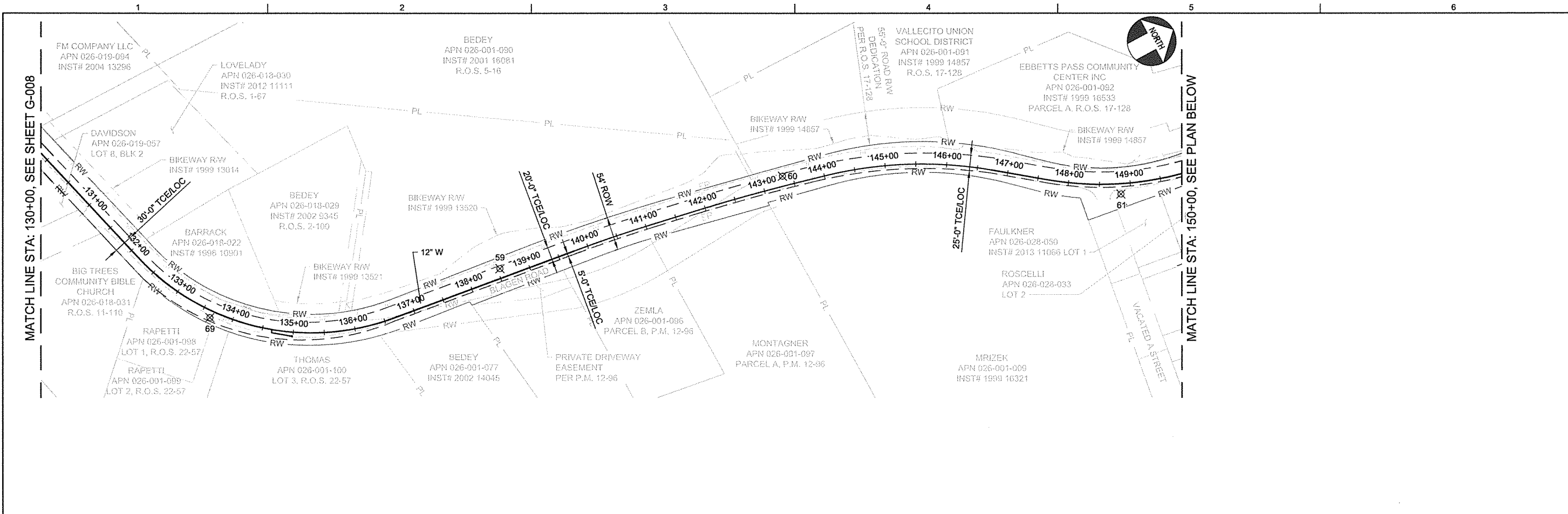
DATE
OCT 2015

PROJECT NUMBER
13-072

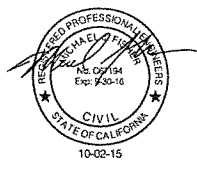
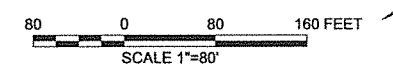
DRAWING NUMBER
G-007

SHEET 07 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATERWORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATERWORKS ENGINEERS, LLC.



SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
59	2281275.02	6606710.42	3967.99	SET-MAGN&S
60	2281749.07	6606794.05	3948.82	SET-MAGN&S
61	2282219.43	6607079.03	3933.49	SET-MAGN&S
62	2283025.15	6607187.25	3915.43	SET-MAGN&S
63	2283451.60	6607243.30	3901.12	SET-MAGN&S
64	2284080.43	6607433.38	3887.13	SET-MAGN&S
65	2284164.94	6607659.17	3894.20	SET-MAGN&S
69	2280824.48	6606559.57	3989.16	MAGN&S
70	2282771.29	6607183.24	3919.93	SPIKE&CAP
72	2283807.13	6607508.33	3887.71	SPIKE&CAP
73	2283944.13	6607745.02	3904.87	SPIKE&CAP



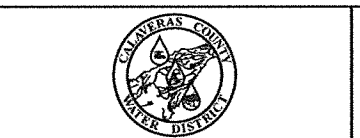
K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-G008.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. <u>3845.47</u> DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS

1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

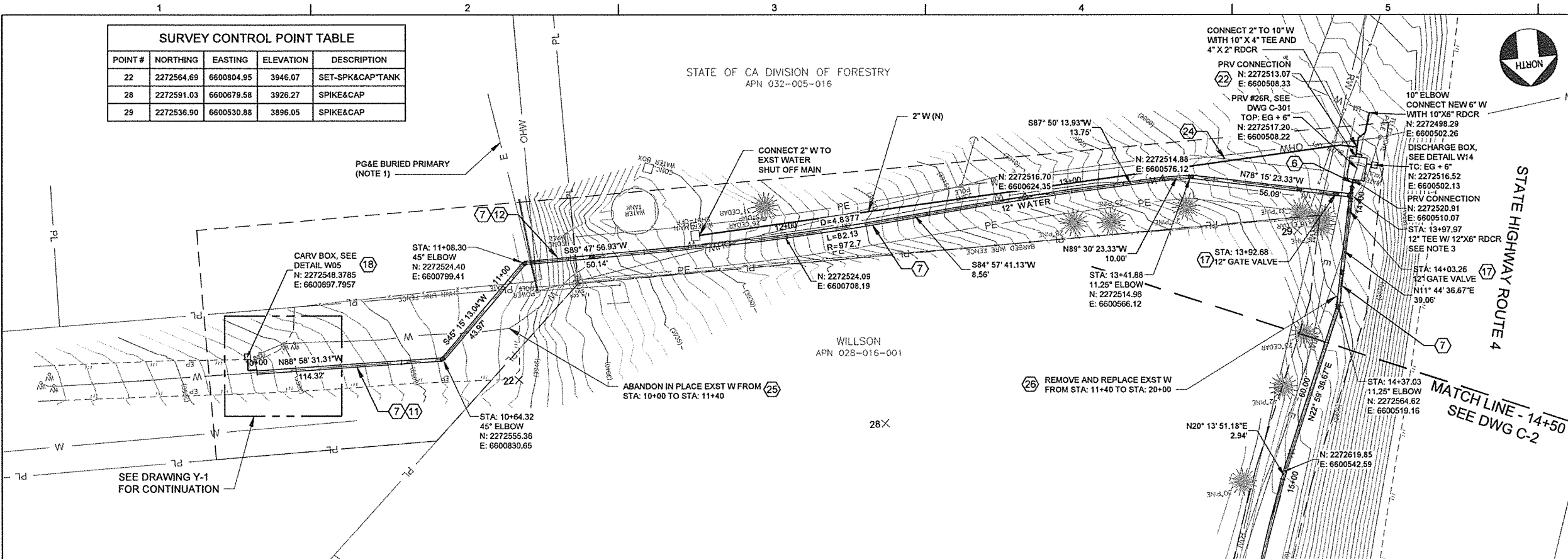


CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

GENERAL
HORIZONTAL CONTROL PLANS 4

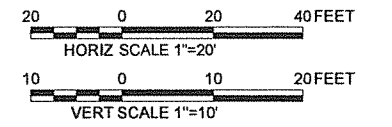
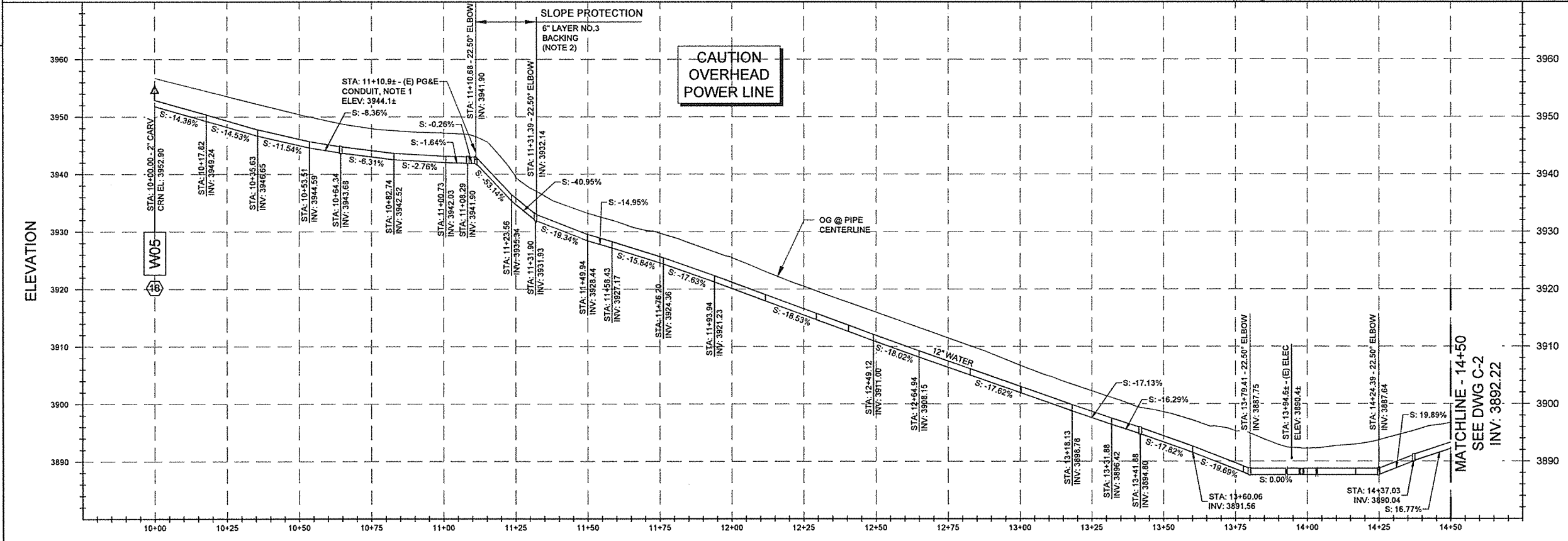
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER G-008
SHEET 08 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
22	2272564.69	6600804.95	3946.07	SET-SPK&CAP TANK
28	2272591.03	6600679.58	3926.27	SPIKE&CAP
29	2272536.90	6600530.88	3896.05	SPIKE&CAP



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
12	SLOPE PROTECTION
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
22	PRV STATION - W/O ANTI-CARV TRIM
24	WATER SERVICE LINE
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

- NOTES:
- USE EXTREME CAUTION TO POTHOLE EXACT LOCATION AND DEPTH OF BURIED HIGH VOLTAGE PRIMARY ELECTRICAL LINES WHERE POTENTIALLY IN CONFLICT WITH TRENCHES AND EXCAVATIONS.
 - STABILIZE DISTURBED AREAS OF SLOPE FROM TOP TO TOE AND MINIMUM 7.5 FEET EACH SIDE OF TRENCH WITH NO.3 BACKING, METHOD 'B' ROCK SLOPE PROTECTION PER 72 OF CALTRANS SPECIFICATIONS.
 - CONTRACTOR TO LOCATE, DEMOLISH AND RECONSTRUCT EXISTING THRUST BLOCK AS NECESSARY TO CONSTRUCT NEW PRV STATION AND NEW WATER MAIN.
 - NEW 12" W AND 2" W SERVICE TO BE IN SEPARATE TRENCHES WITH AT LEAST 3' HORIZONTAL SEPARATION.



K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C101.DWG

NO.	DATE	REVISION	BY	APVD

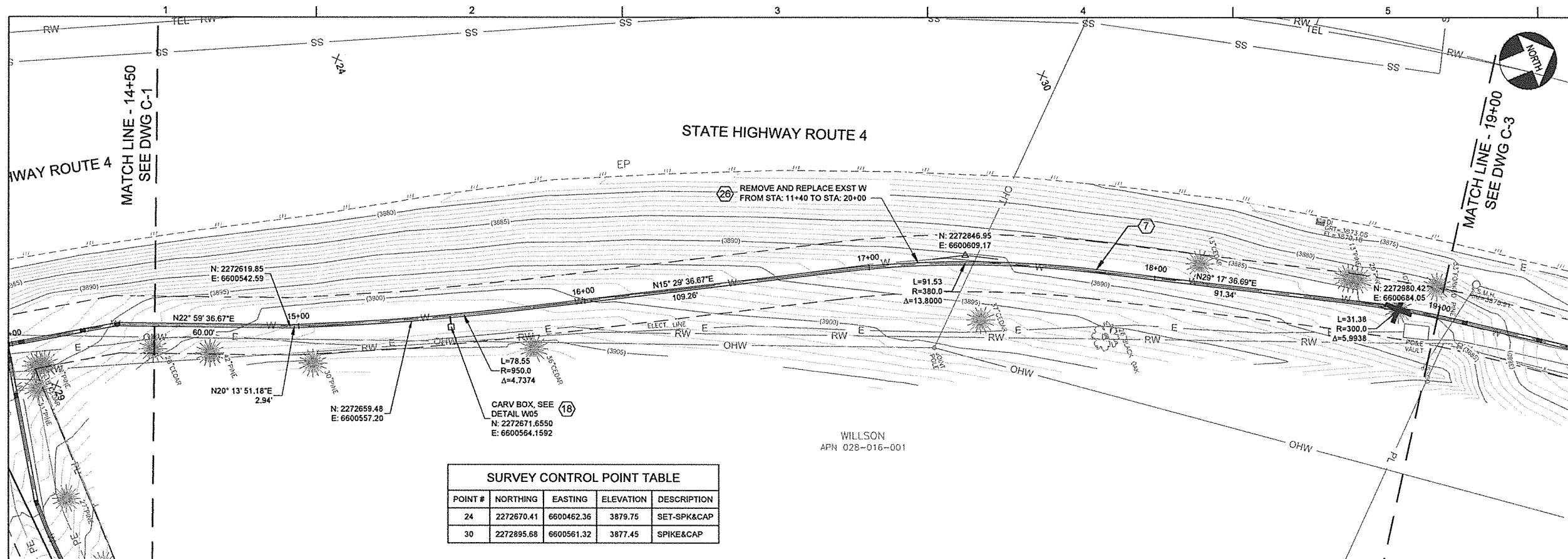
DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	



CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
10+00 TO 14+50

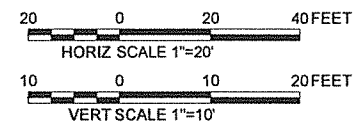
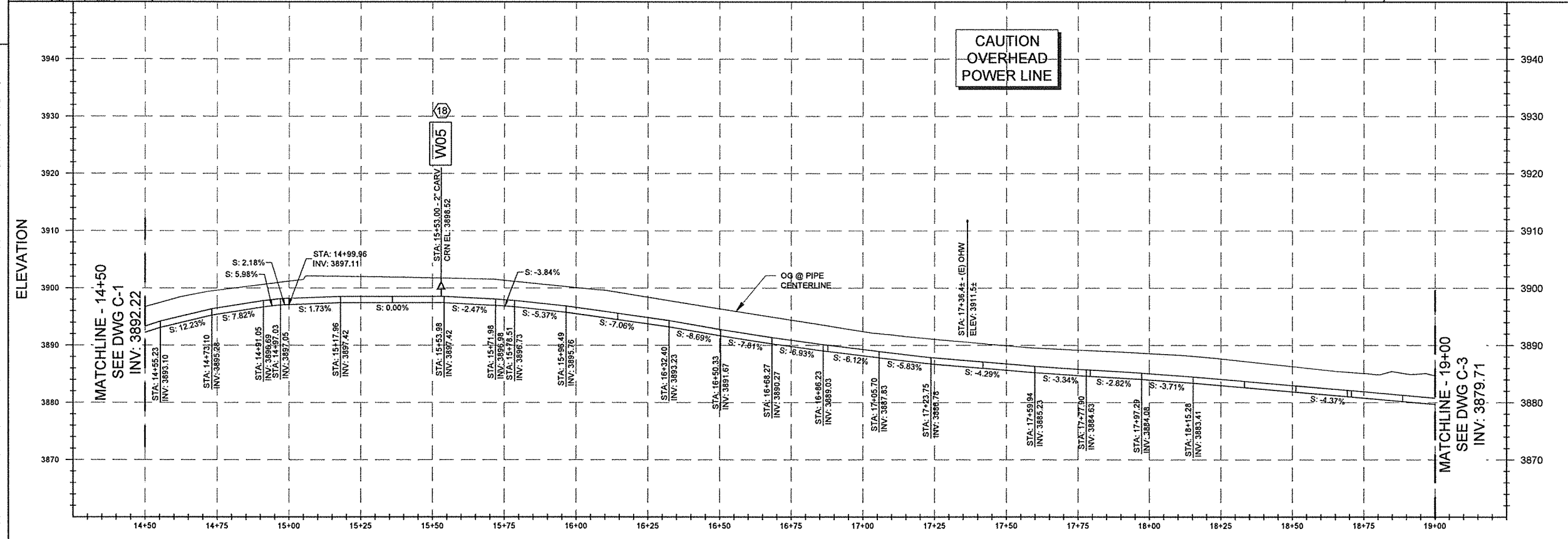
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-1
SHEET 10 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
26	REMOVE EXISTING WATER LINE

NOTES:
 1. USE EXTREME CAUTION TO POTHOLE EXACT LOCATION AND DEPTH OF BURIED HIGH VOLTAGE PRIMARY ELECTRICAL LINES WHERE POTENTIALLY IN CONFLICT WITH TRENCHES AND EXCAVATIONS.

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
24	2272670.41	6600462.36	3879.75	SET-SPK&CAP
30	2272895.68	6600561.32	3877.45	SPIKE&CAP



NO.	DATE	REVISION	BY	APVD

DESIGN	ELEV.
K ALALACON	3845.47
DRAWN	
P WEBSTER	
CHECKED	
M FISHER	
APPROVED	
M FISHER	

BENCH MARK
 DESCRIPTION
 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.



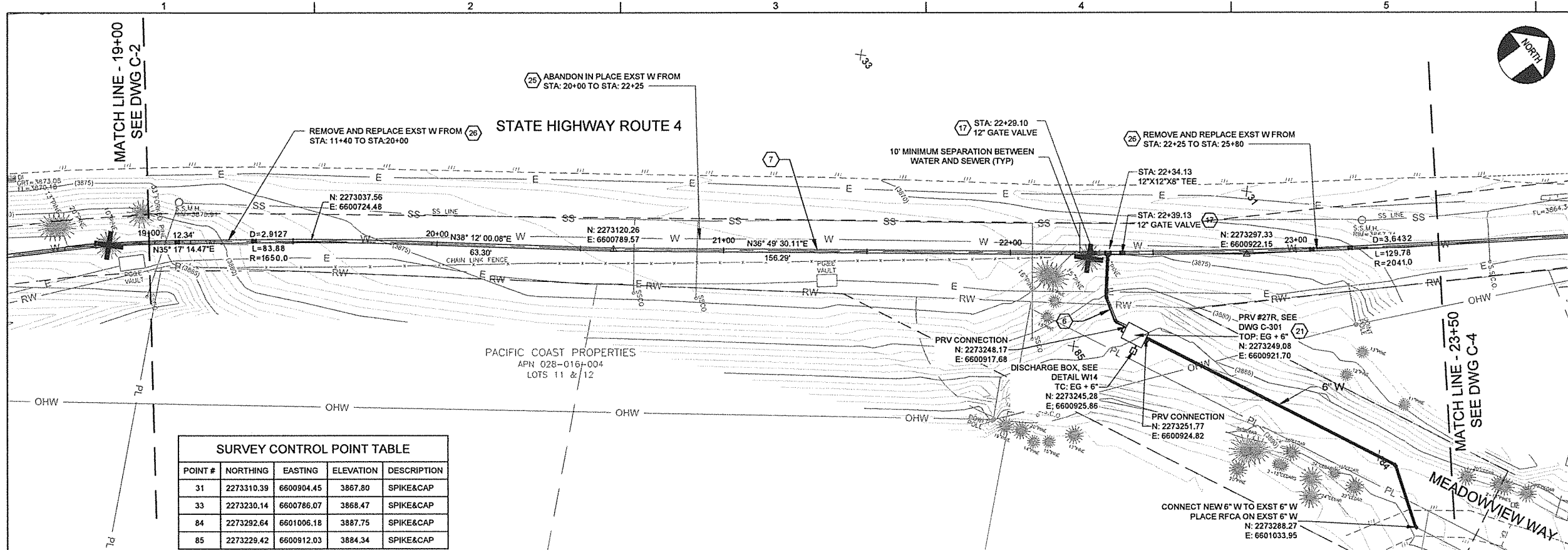
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 14+50 TO 19+00

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-2
SHEET	11 - 62



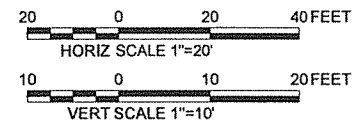
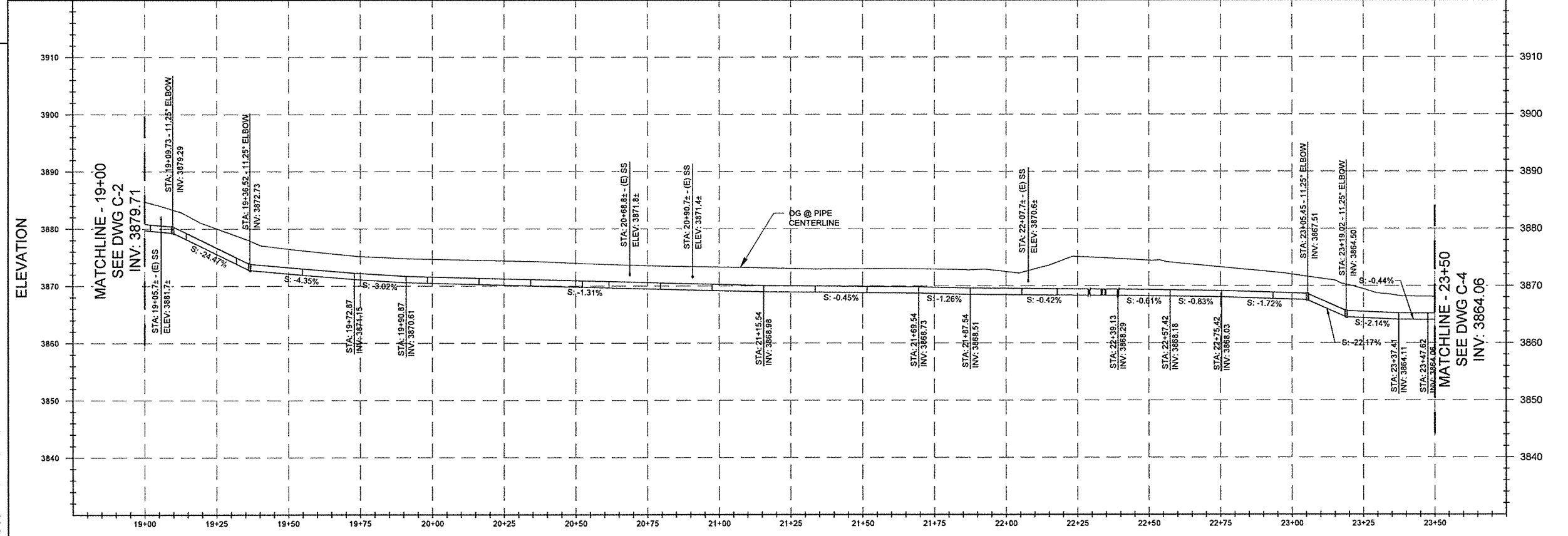
SURVEY CONTROL POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
31	2273310.39	6600904.45	3867.80	SPIKE&CAP
33	2273230.14	6600786.07	3868.47	SPIKE&CAP
84	2273292.64	6601006.18	3887.75	SPIKE&CAP
85	2273229.42	6600912.03	3884.34	SPIKE&CAP

CONSTRUCTION ITEM TABLE

6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
17	12-INCH GATE VALVE
21	PRV STATION - W/ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

- NOTE:**
- USE EXTREME CAUTION TO POTHOLE EXACT LOCATION AND DEPTH OF BURIED HIGH VOLTAGE PRIMARY ELECTRICAL LINES WHERE POTENTIALLY IN CONFLICT WITH TRENCHES AND EXCAVATIONS.
 - STABILIZE DISTURBED AREAS OF SLOPE FROM TOP TO TOE AND MINIMUM 7.5 FEET EACH SIDE OF TRENCH WITH NO.3 BACKING, METHOD 'B' ROCK SLOPE PROTECTION PER 72 OF CALTRANS SPECIFICATIONS.
 3. CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1'-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.

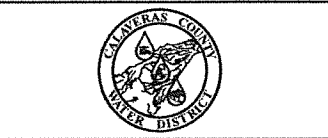


NO.	DATE	REVISION	BY	APVD

BENCH MARK ELEV. 3845.47

DESCRIPTION
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

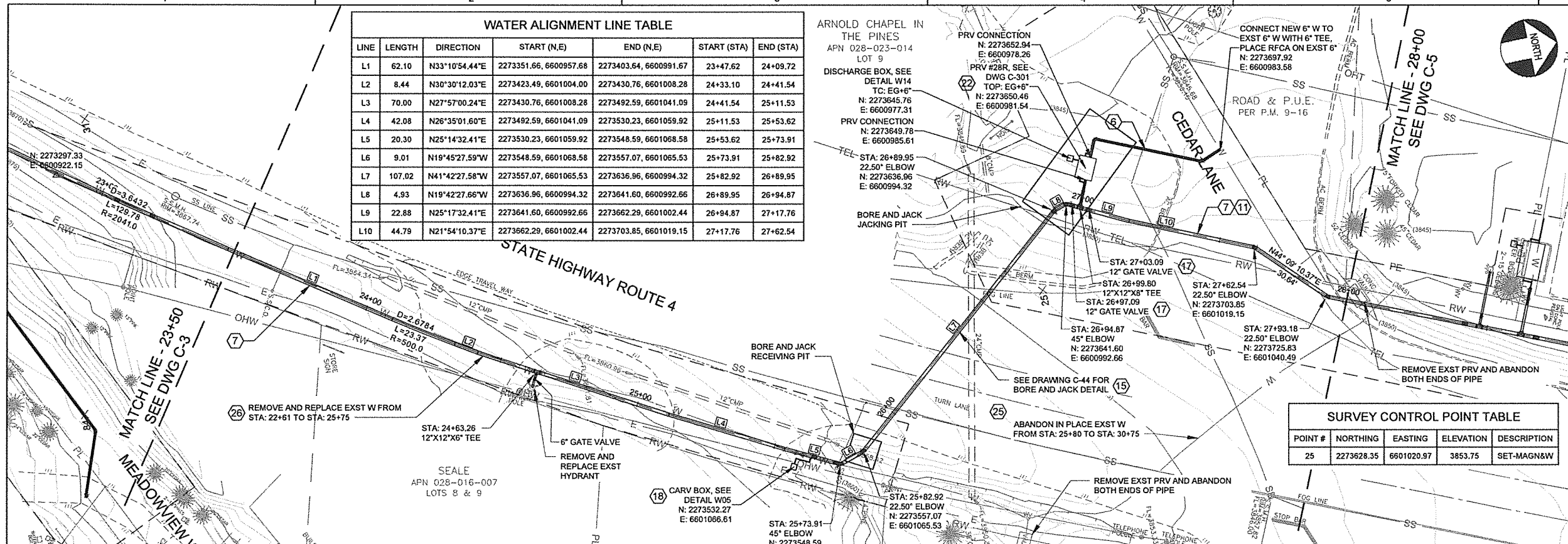
CIVIL
PLAN AND PROFILE
19+00 TO 23+50

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-3
SHEET	12 - 62

WATER ALIGNMENT LINE TABLE						
LINE	LENGTH	DIRECTION	START (N,E)	END (N,E)	START (STA)	END (STA)
L1	62.10	N33°10'54.44"E	2273351.66, 6600957.68	2273403.64, 6600991.67	23+47.62	24+09.72
L2	8.44	N30°30'12.03"E	2273423.49, 6601004.00	2273430.76, 6601008.28	24+33.10	24+41.54
L3	70.00	N27°57'00.24"E	2273430.76, 6601008.28	2273492.59, 6601041.09	24+41.54	25+11.53
L4	42.08	N26°35'01.60"E	2273492.59, 6601041.09	2273530.23, 6601059.92	25+11.53	25+53.62
L5	20.30	N25°14'32.41"E	2273530.23, 6601059.92	2273548.59, 6601068.58	25+53.62	25+73.91
L6	9.01	N19°45'27.59"W	2273548.59, 6601068.58	2273557.07, 6601065.53	25+73.91	25+82.92
L7	107.02	N41°42'27.56"W	2273557.07, 6601065.53	2273636.96, 6600994.32	25+82.92	26+89.95
L8	4.93	N19°42'27.66"W	2273636.96, 6600994.32	2273641.60, 6600992.66	26+89.95	26+94.87
L9	22.88	N25°17'32.41"E	2273641.60, 6600992.66	2273662.29, 6601002.44	26+94.87	27+17.76
L10	44.79	N21°54'10.37"E	2273662.29, 6601002.44	2273703.85, 6601019.15	27+17.76	27+62.54

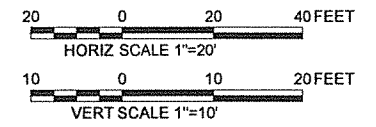
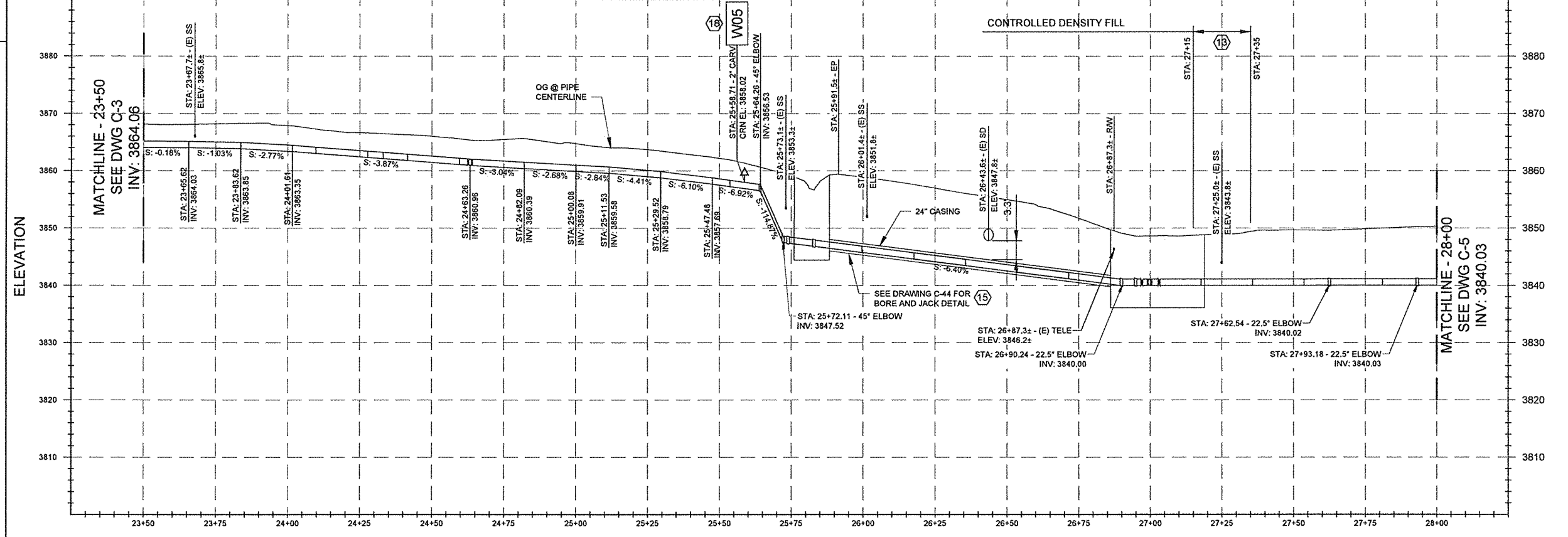
ARNOLD CHAPEL IN THE PINES
 APN 028-023-014
 LOT 9
 DISCHARGE BOX, SEE DETAIL W14 TO: EG+6"
 N: 2273645.76
 E: 6600977.31
 PRV CONNECTION N: 2273649.78
 E: 6600985.61
 STA: 26+89.95
 22.50" ELBOW
 N: 2273636.96
 E: 6600994.32

CONNECT NEW 6" W TO EXST 6" W WITH 6" TEE. PLACE RFCA ON EXST 6" N: 2273697.92
 E: 6600983.58
 ROAD & P.U.E. PER P.M. 9-16



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
15	BORE AND JACK @ HIGHWAY 4 CROSSING
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
22	PRV STATION - W/O ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

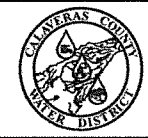
SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
25	2273628.35	6601020.97	3853.75	SET-MAGN&W



K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C104.DWG

NO.	DATE	REVISION	BY	APVD

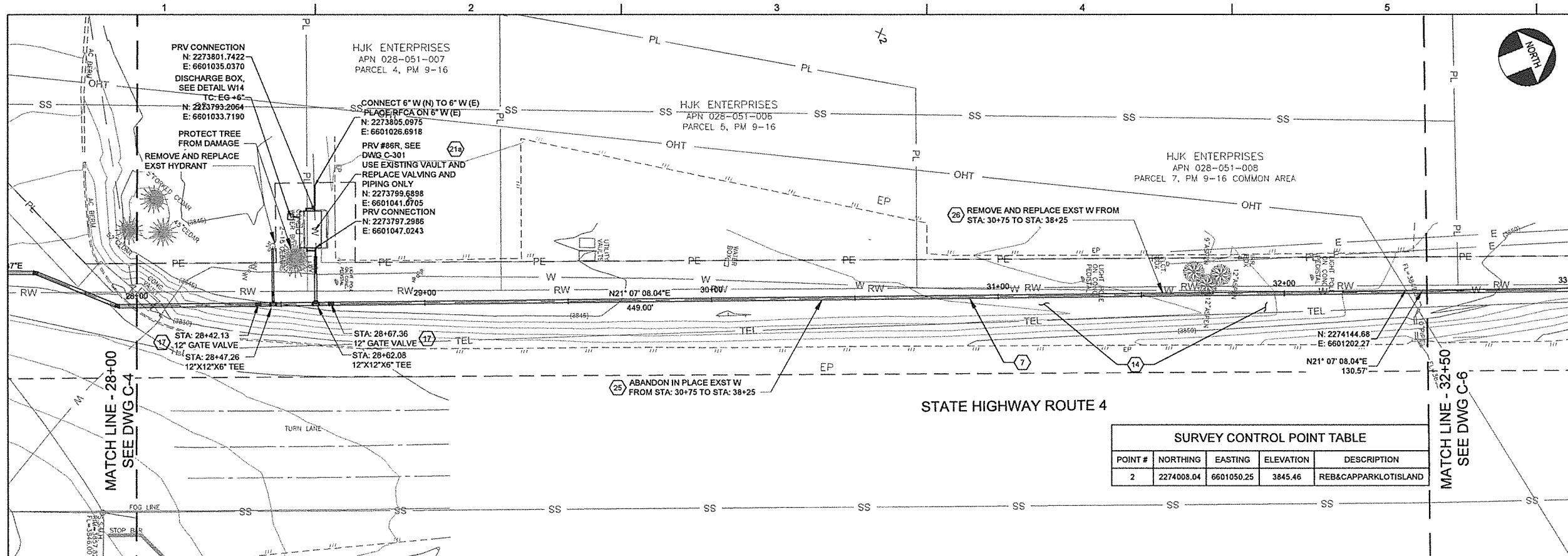
DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

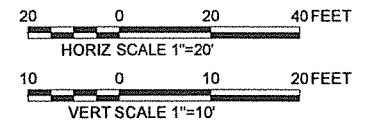
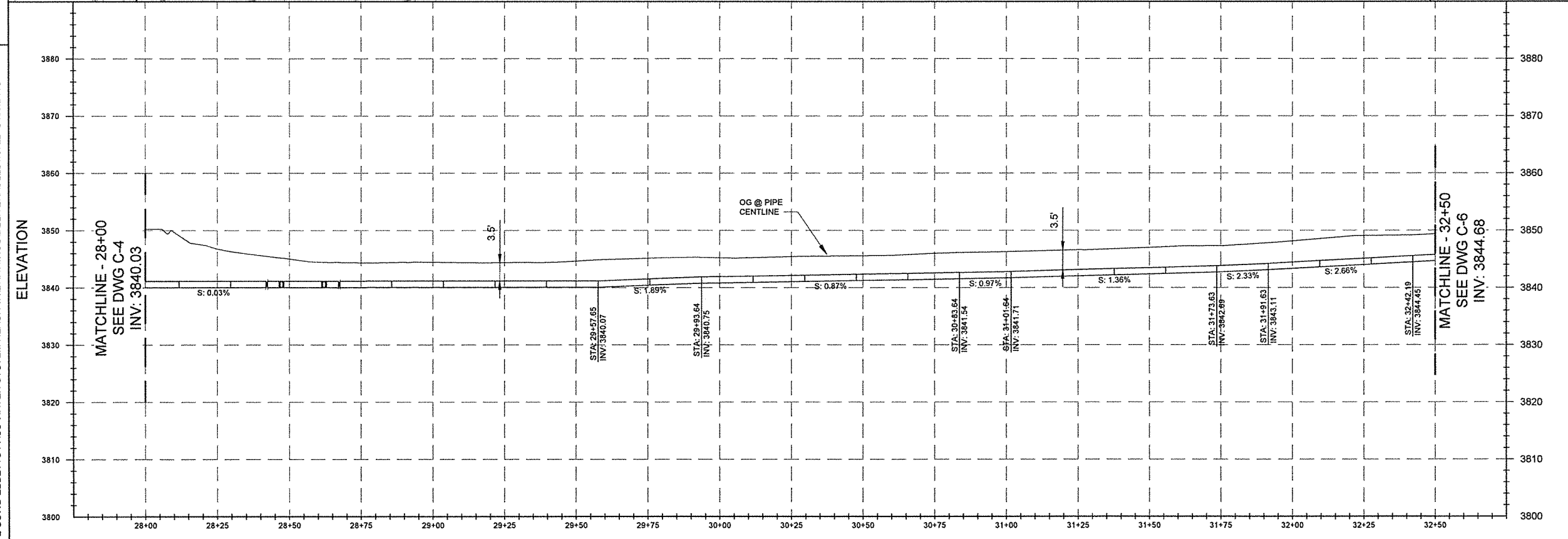
CIVIL
 PLAN AND PROFILE
 23+50 TO 28+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-4
SHEET 13 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
14	PRIVATE PROPERTY LANDSCAPING
17	12-INCH GATE VALVE
21a	PRV STATION - W/ANTI-CARV TRIM (NO NEW VAULT)
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	2274008.04	6601050.25	3845.46	REB&CAPPARKLOTISLAND



NO.	DATE	REVISION	BY	APVD

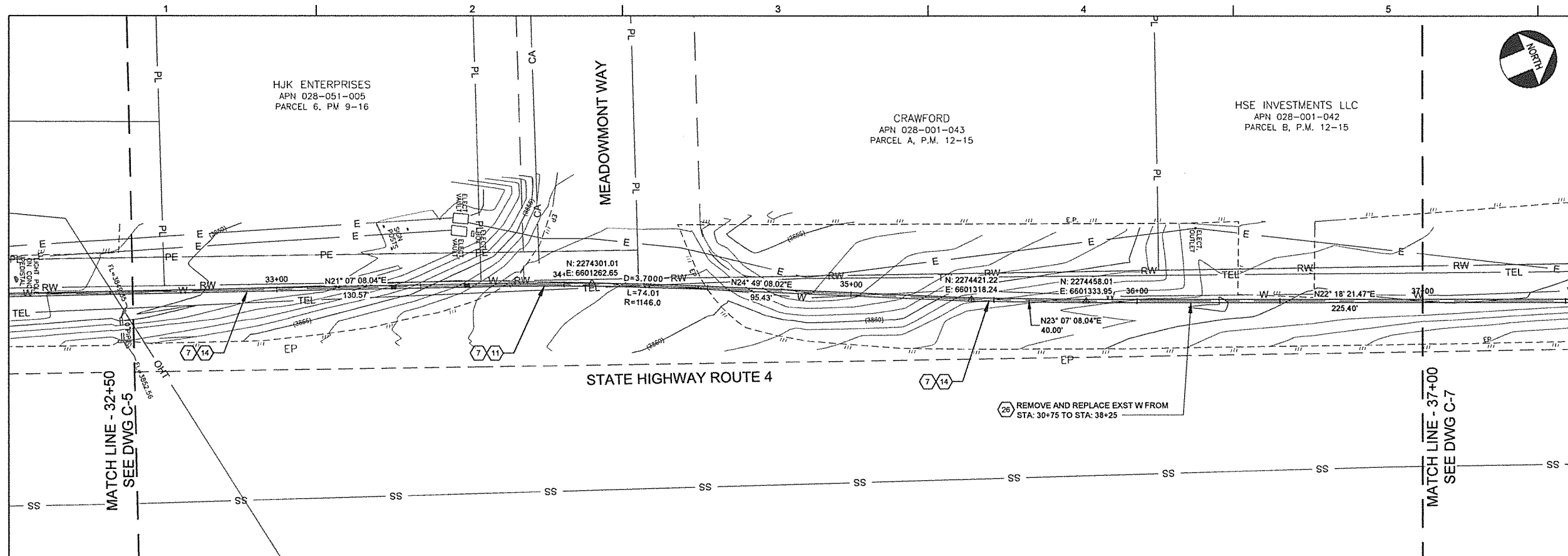
DESIGN	BENCH MARK
KALACON	ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION
CHECKED M FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
APPROVED M FISHER	



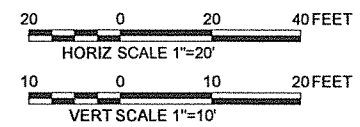
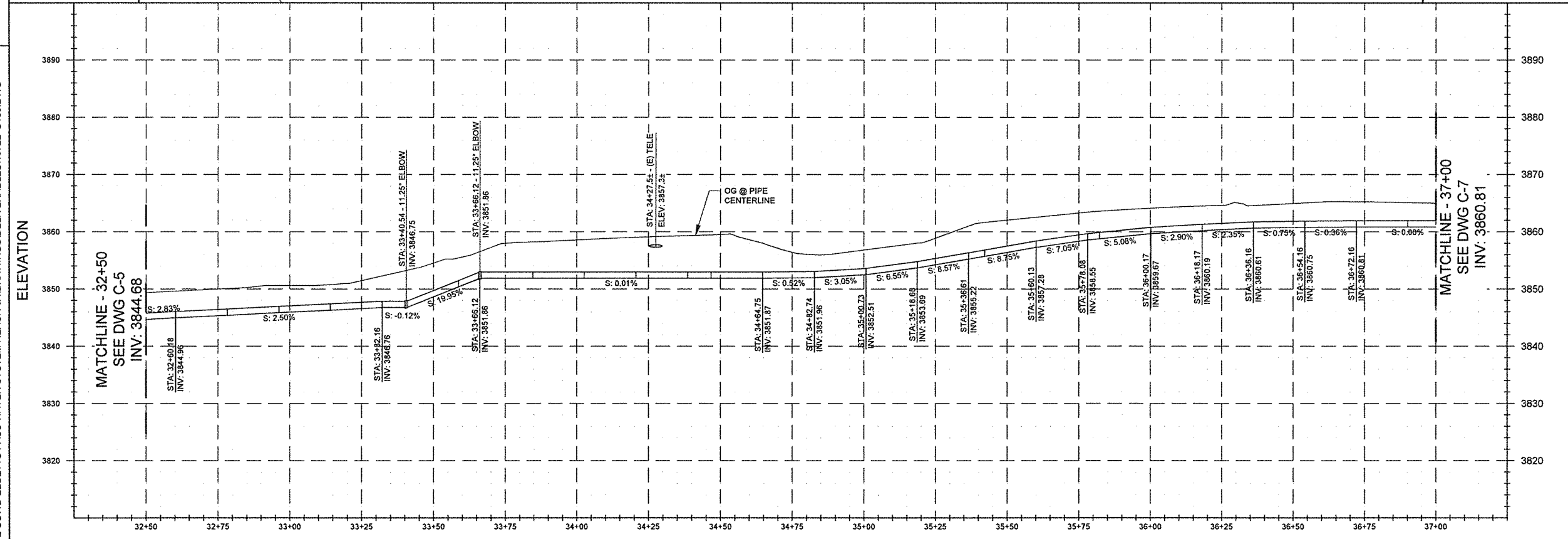
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
28+00 TO 32+50

DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-5
SHEET
14 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
14	PRIVATE PROPERTY LANDSCAPING
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

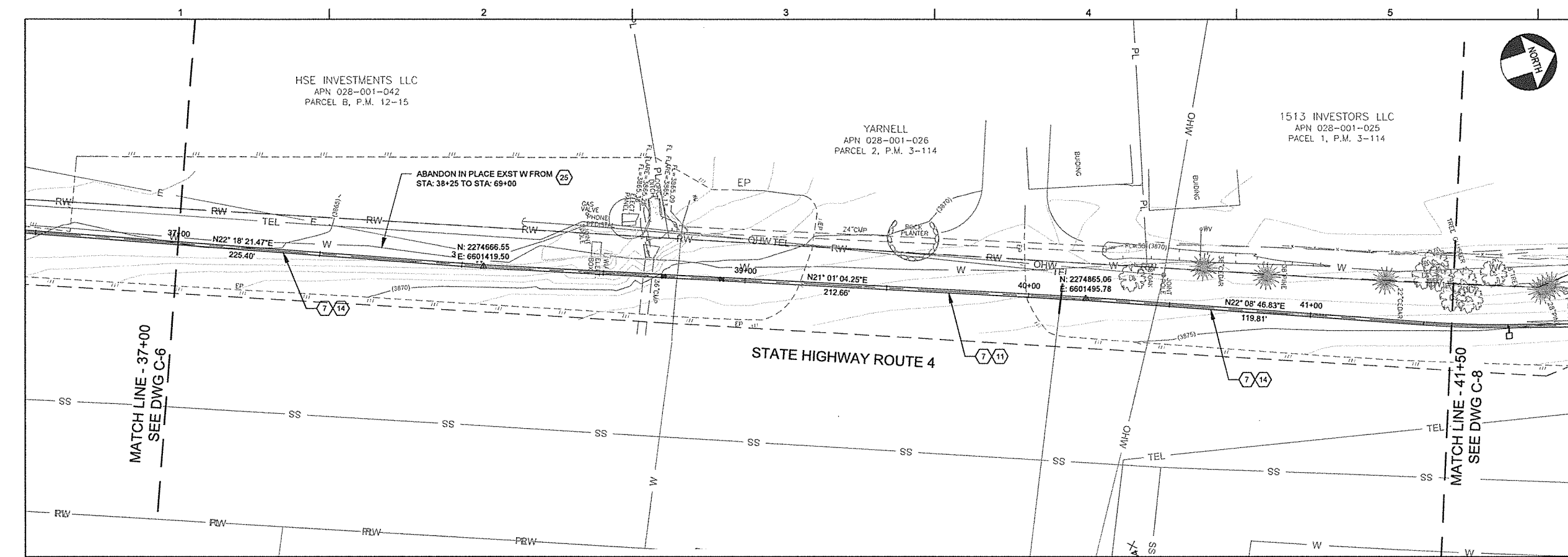
DESIGN KALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	APPROVED M FISHER



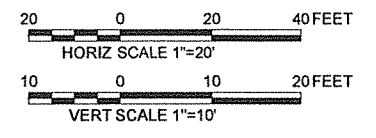
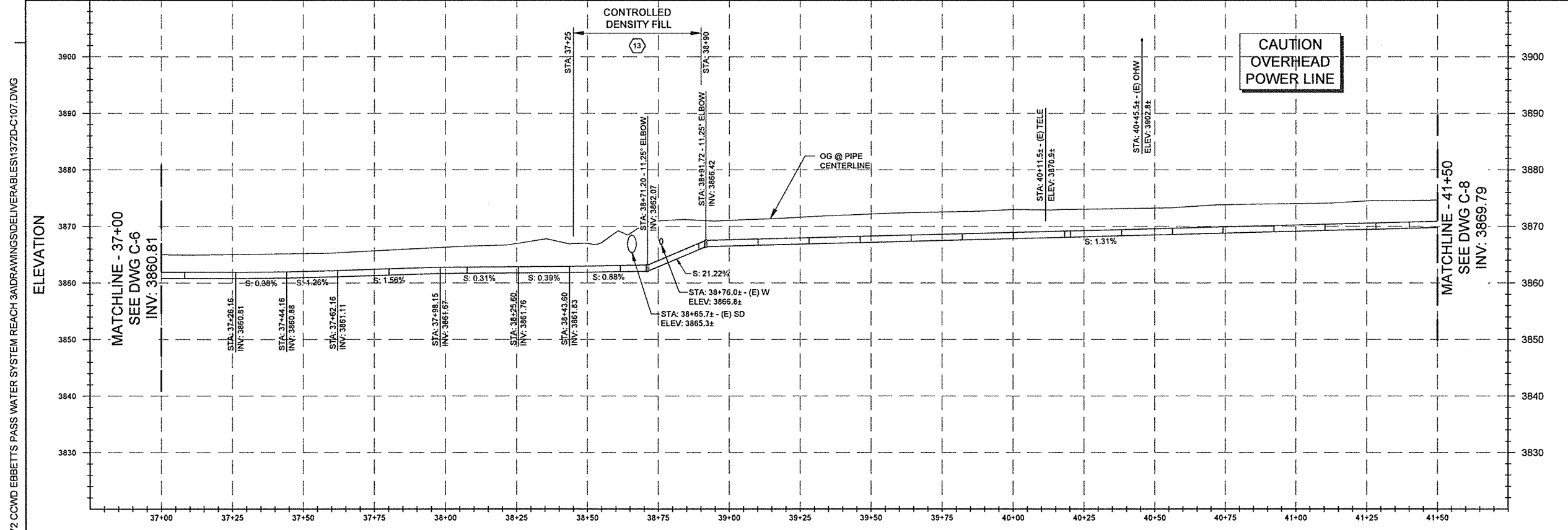
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
32+50 TO 37+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-6
SHEET 15 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL
14	PRIVATE PROPERTY LANDSCAPING
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN KALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

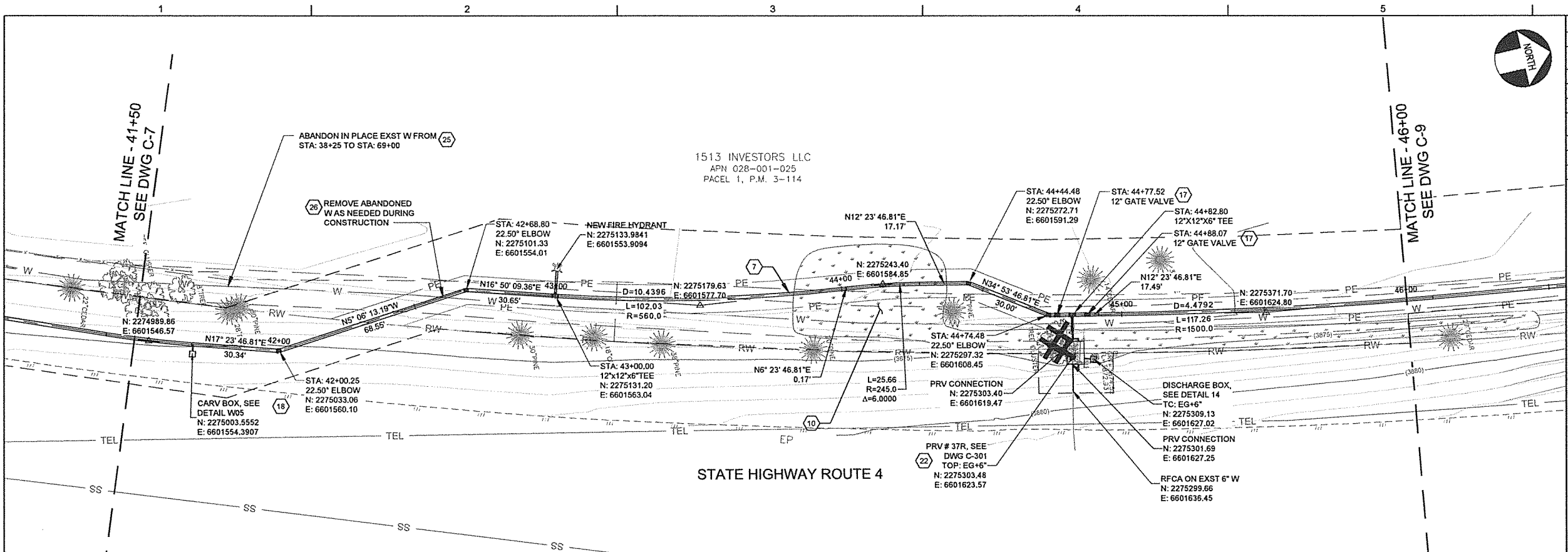
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



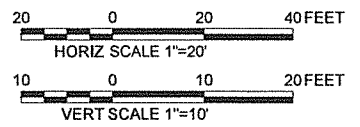
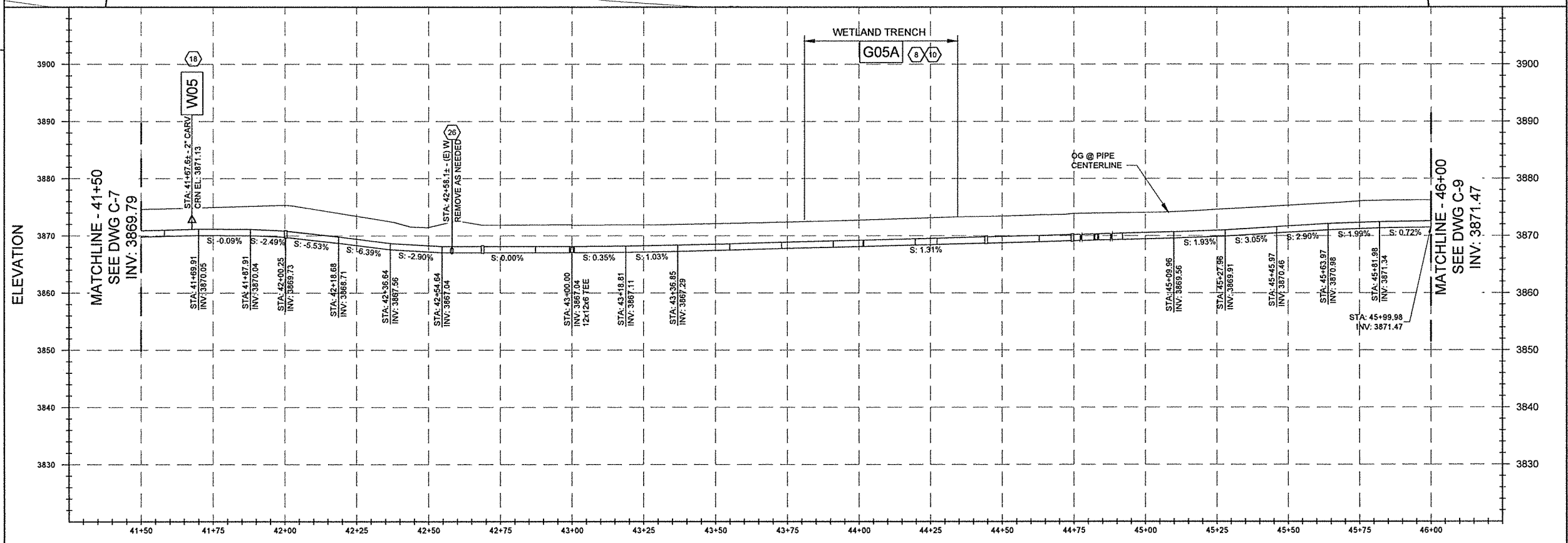
CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
 37+00 TO 41+50

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-7
SHEET 16 - 62



BID ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
8	12" WATERLINE - WETLANDS AREA
10	UNSTABLE SUBGRADE TRENCH SECTION
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
22	PRV STATION - W/O ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

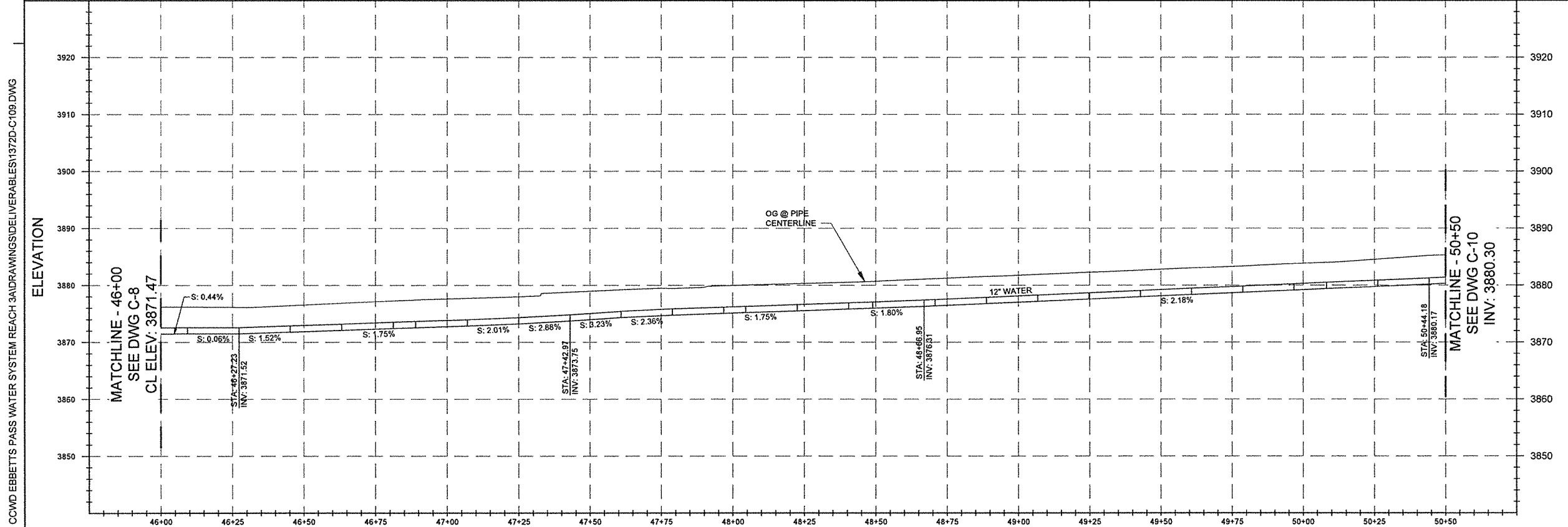
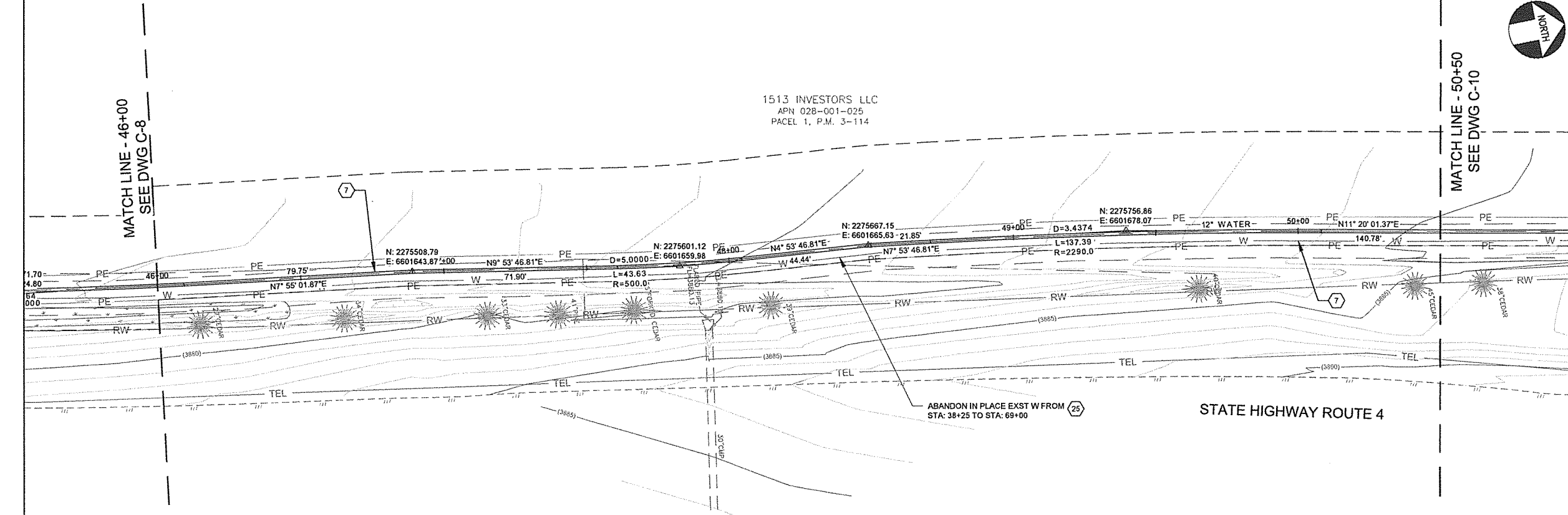
DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Water Avenue, Suite A • Redding, CA 96002 • 530-243-2113

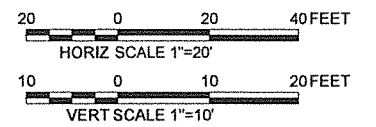


CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-8
SHEET 17 - 62



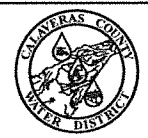
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

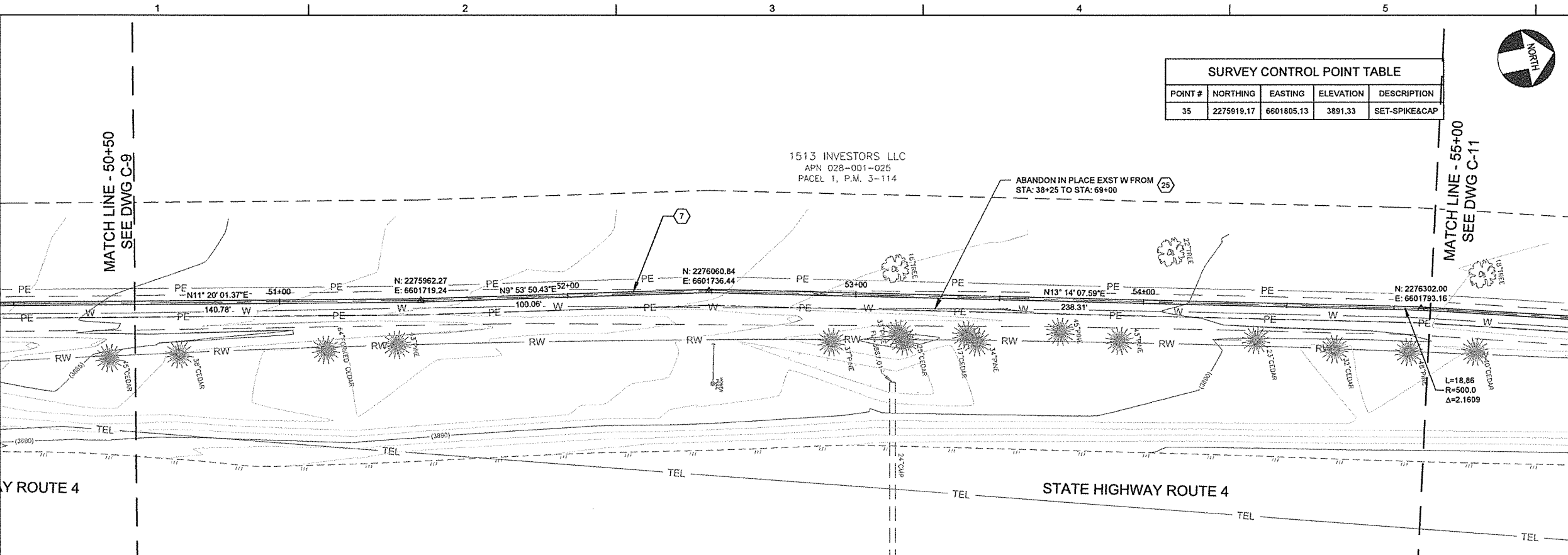
DESIGN	BENCHMARK
K. KALACON	ELEV. 3845.47
DRAWN P. WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M. FISHER	
APPROVED M. FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

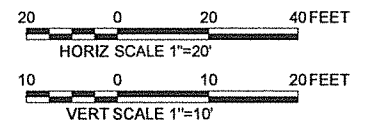
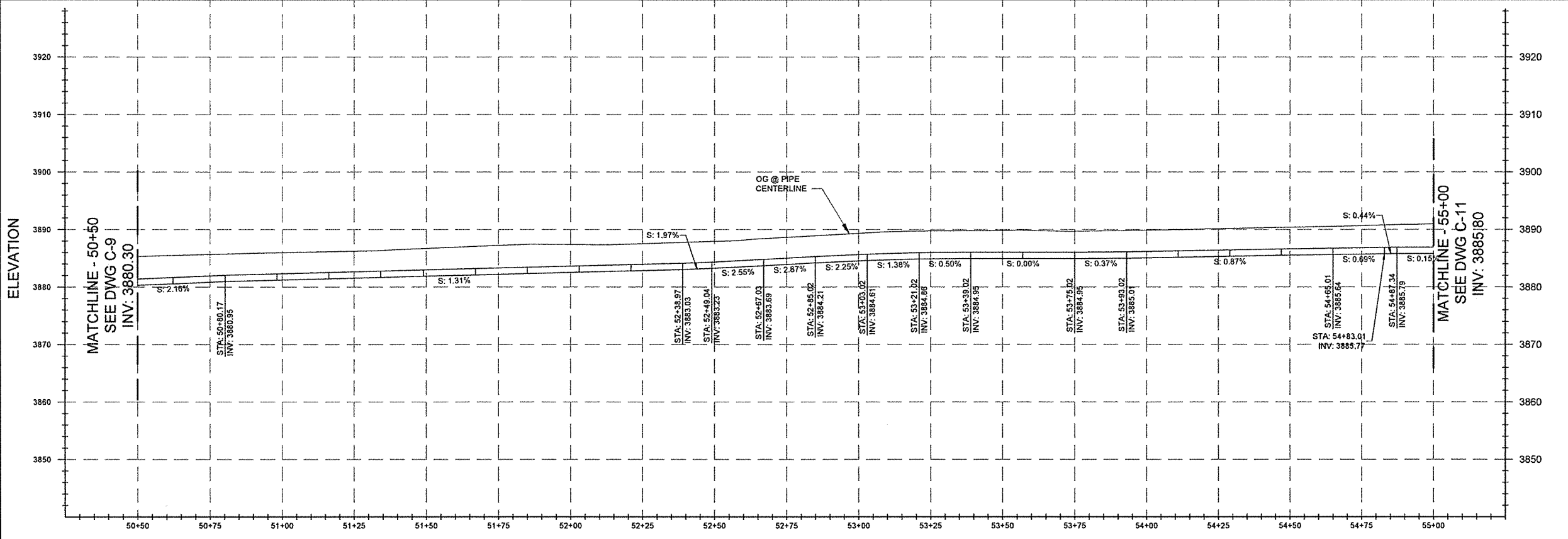
CIVIL	DATE OCT 2015
PLAN AND PROFILE 46+00 TO 50+50	PROJECT NUMBER 13-072
	DRAWING NUMBER C-9
	SHEET 18 - 62



POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
35	2275919.17	6601805.13	3891.33	SET-SPIKE&CAP



NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
25	ABANDON EXISTING WATER LINE

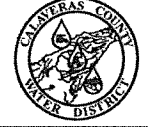


NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	



WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

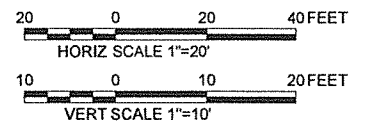
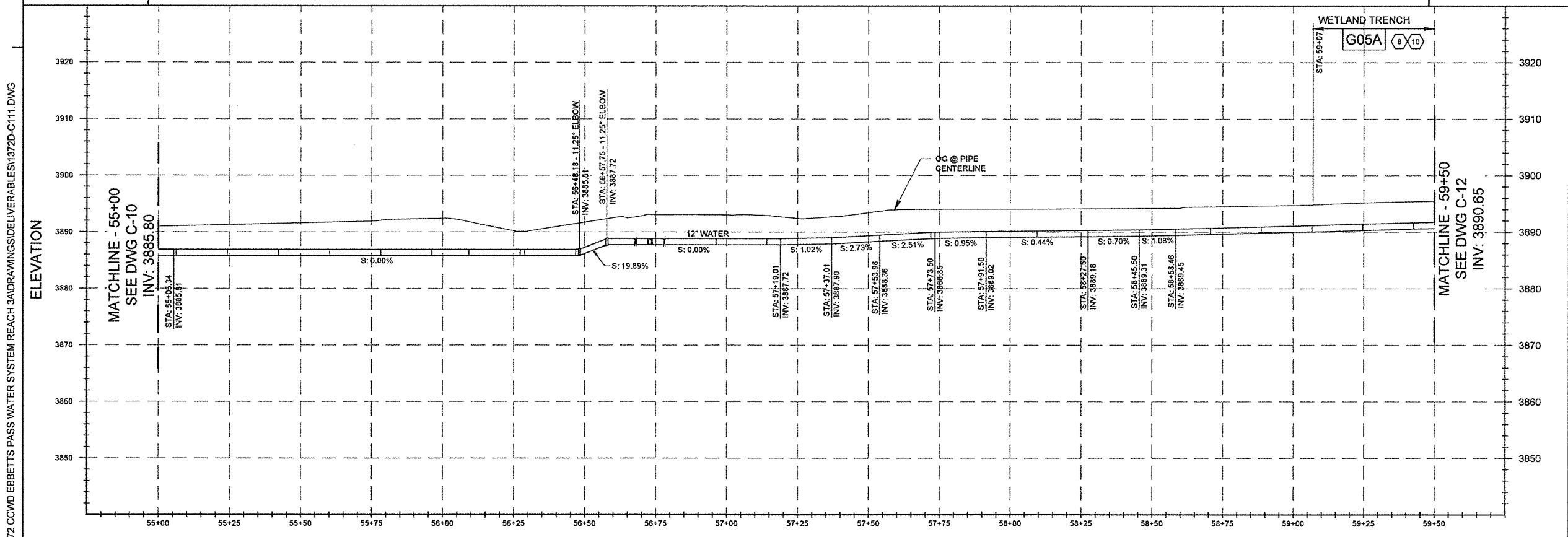
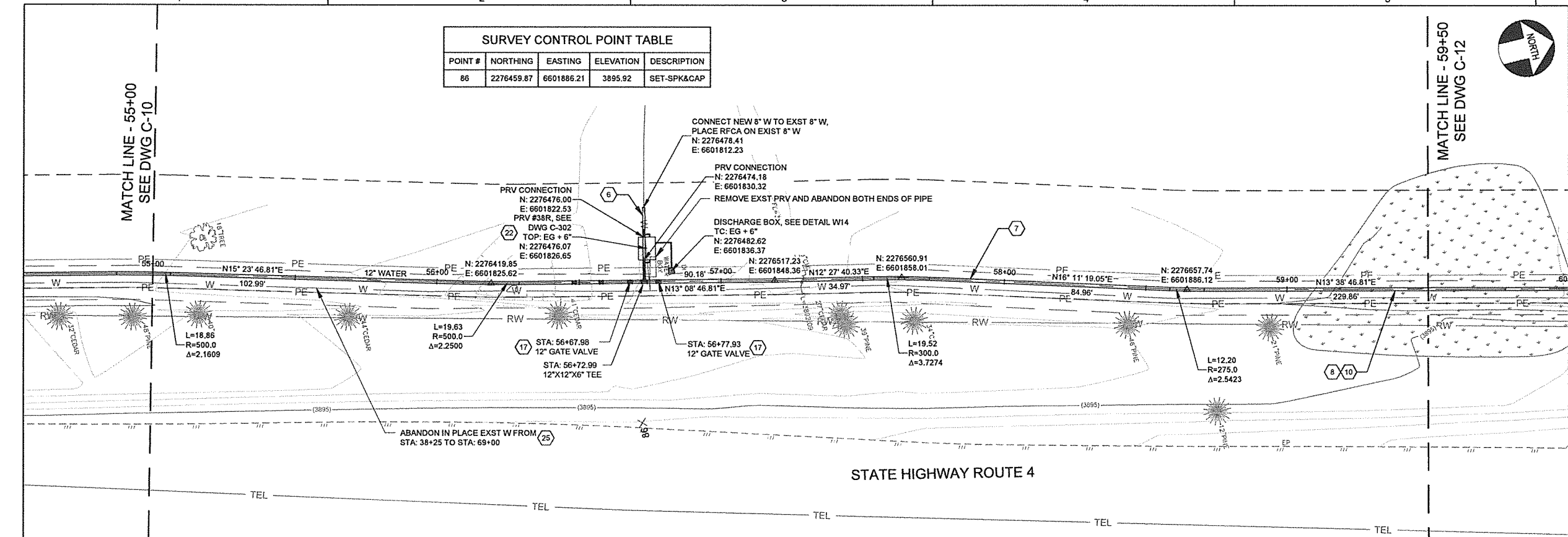
CIVIL
PLAN AND PROFILE
 50+50 TO 55+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-10
SHEET 19 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C110.DWG

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
86	2276459.87	6601886.21	3895.92	SET-SPK&CAP

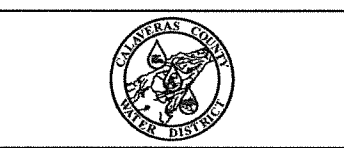
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
8	12" WATERLINE - WETLANDS AREA
10	UNSTABLE SUBGRADE TRENCH SECTION
17	12-INCH GATE VALVE
22	PRV STATION - W/O ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
K ALACON	ELEV. 3845.47
P WEBSTER	DESCRIPTION
M FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

WATERWORKS ENGINEERS
 1405 Victoria Avenue, Suite A • Redding, CA 96002 • 530-243-2113



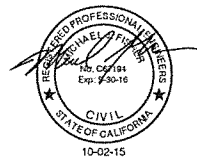
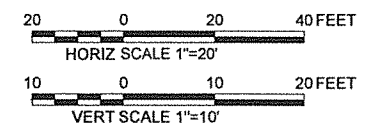
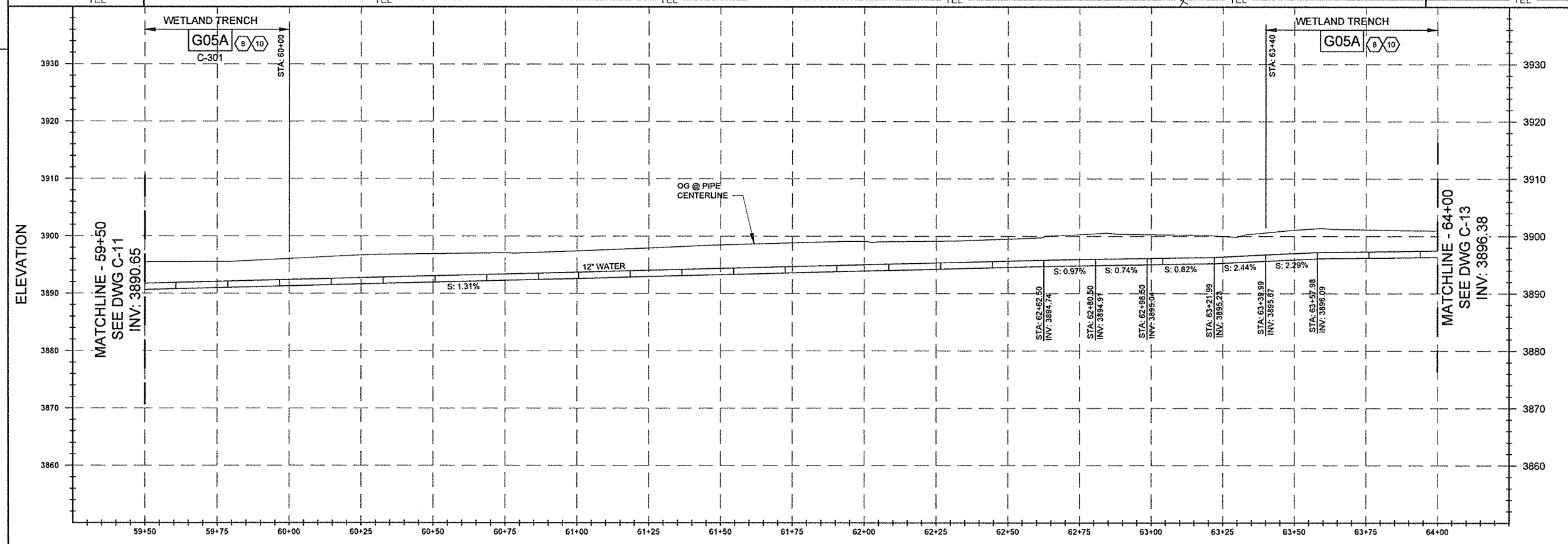
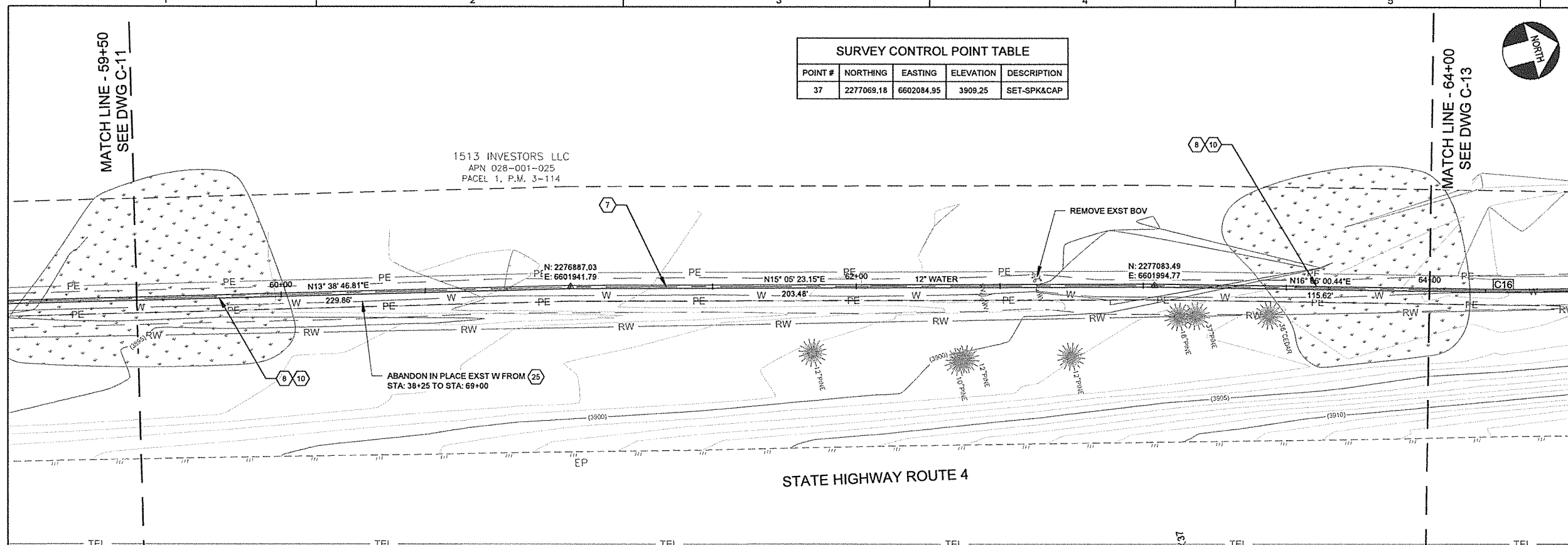
CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 55+00 TO 59+50

DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-11
SHEET
20 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
37	2277069.18	6602084.95	3909.25	SET-SPK&CAP

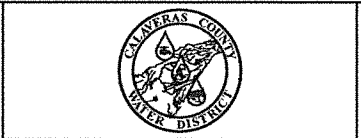
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
8	12" WATERLINE - WETLANDS AREA
10	UNSTABLE SUBGRADE TRENCH SECTION
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

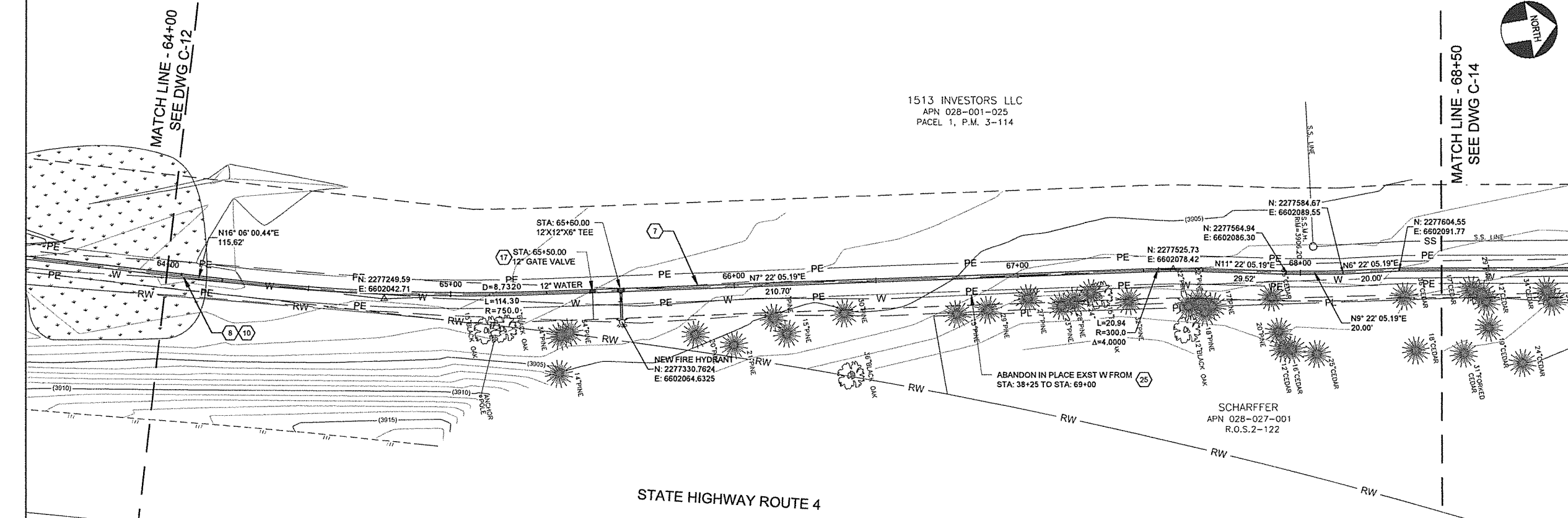
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
59+50 TO 64+00

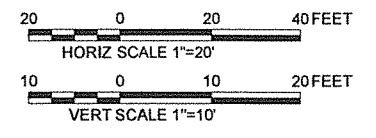
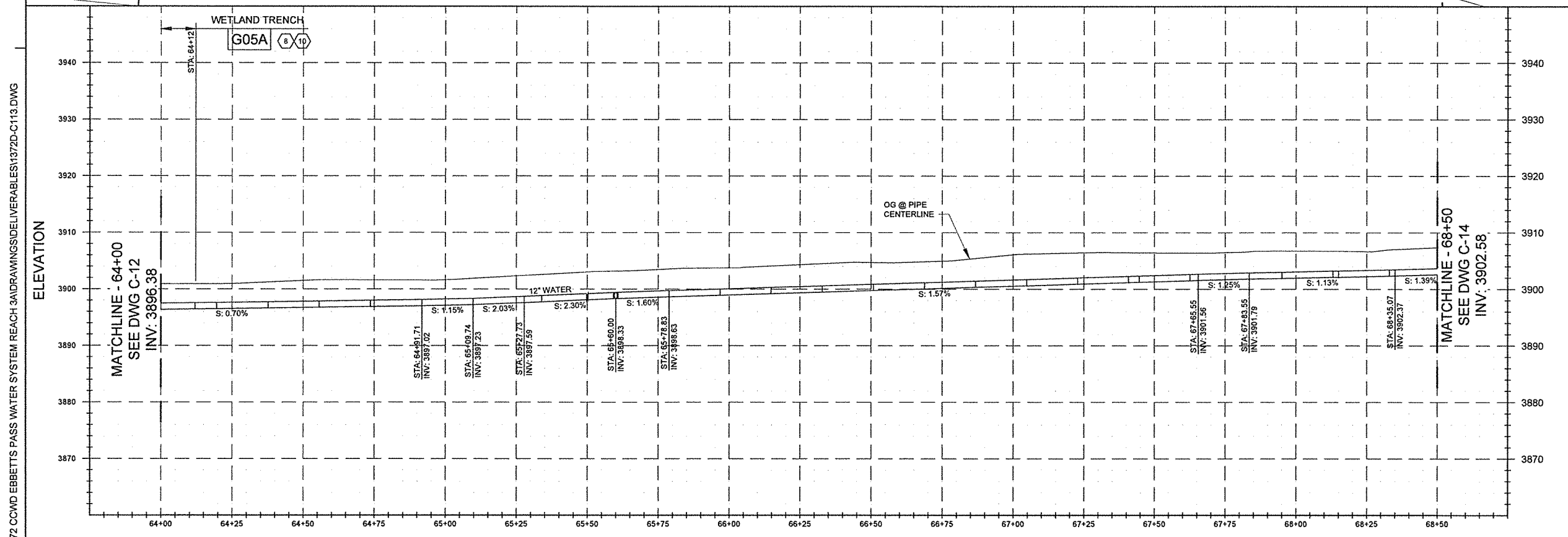
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-12
SHEET 21 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
8	12" WATERLINE - WETLANDS AREA
10	UNSTABLE SUBGRADE TRENCH SECTION
17	12" GATE VALVE
25	ABANDON EXISTING WATER LINE

NOTES:

- FROM STA 65+00 TO STA 70+00 CONTRACTOR SHALL TRIM ALL LOWER TREE LIMBS AND CLEAR TREES AND VEGETATION UP TO 12" DIAMETER TO ACCOMMODATE TRENCH EXCAVATION. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTE MATERIAL. TREE TRIMMING AND REMOVAL SHALL BE PERFORMED BY A QUALIFIED COMPANY USING CHAIN SAW AND OTHER HAND TOOLS.



NO.	DATE	REVISION	BY	APVD

DESIGN K KALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

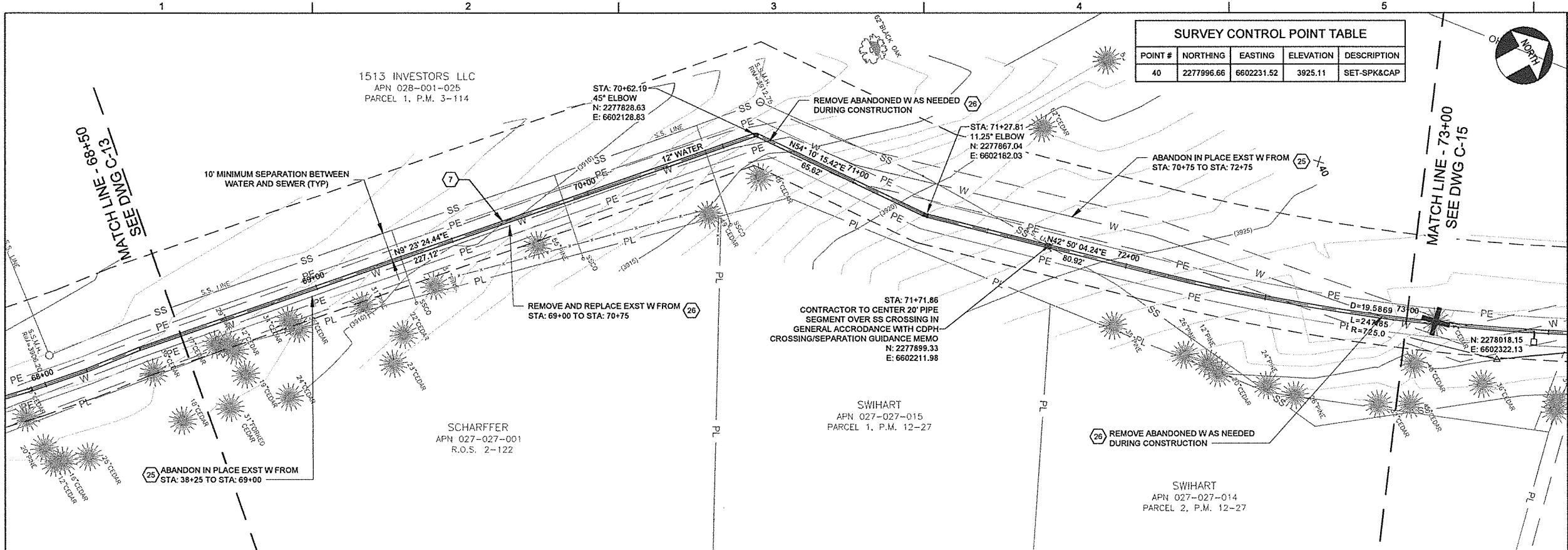
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
64+00 TO 68+50

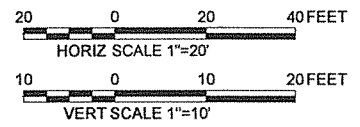
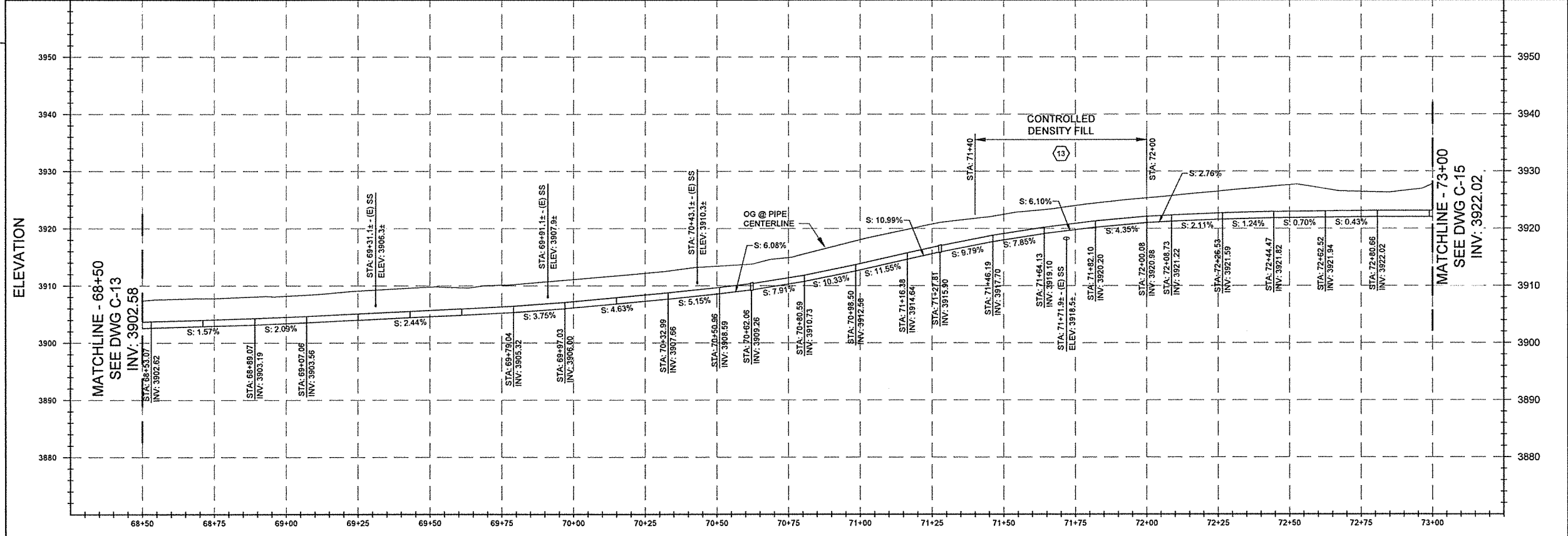
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-13
SHEET 22 - 62



SURVEY CONTROL POINT TABLE			
POINT #	NORTHING	EASTING	ELEVATION
40	2277996.66	6602231.52	3925.11
			SET-SPK&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
13	CONTROLLED DENSITY FILL
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

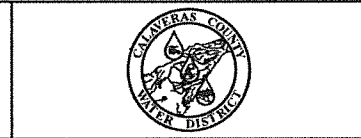
- NOTES:
- FROM STA 65+00 TO STA 70+00 CONTRACTOR SHALL TRIM ALL LOWER TREE LIMBS AND CLEAR TREES AND VEGETATION UP TO 12" DIAMETER TO ACCOMMODATE TRENCH EXCAVATION. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTE MATERIAL. TREE TRIMMING AND REMOVAL SHALL BE PERFORMED BY A QUALIFIED COMPANY USING CHAIN SAW AND OTHER HAND TOOLS.
 - CENTER FULL PIPE STICK UNDER SEWER MAIN LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER; PROVIDE MINIMUM 1-FT VERTICAL CLEARANCE BETWEEN WATER AND SEWER; BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) UNTIL REACHING 10-FT HORIZONTAL SEPARATION.



NO.	DATE	REVISION	BY	APVD	APPROVED
					M FISHER

DESIGN	DESCRIPTION	ELEV.
K ALACON	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	3845.47

WATERWORKS ENGINEERS
 1405 Vista Avenue, Suite A • Redding, CA 96002 • 530-243-2113



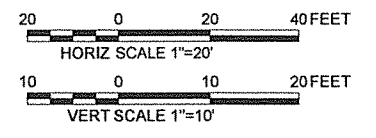
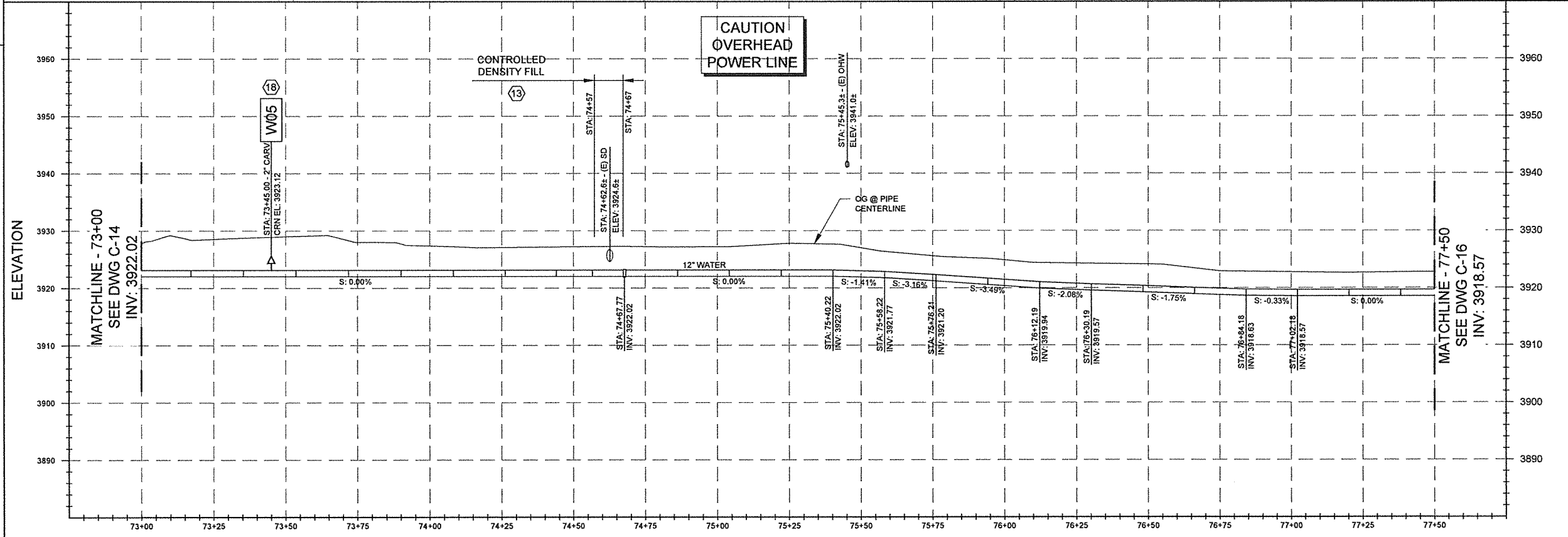
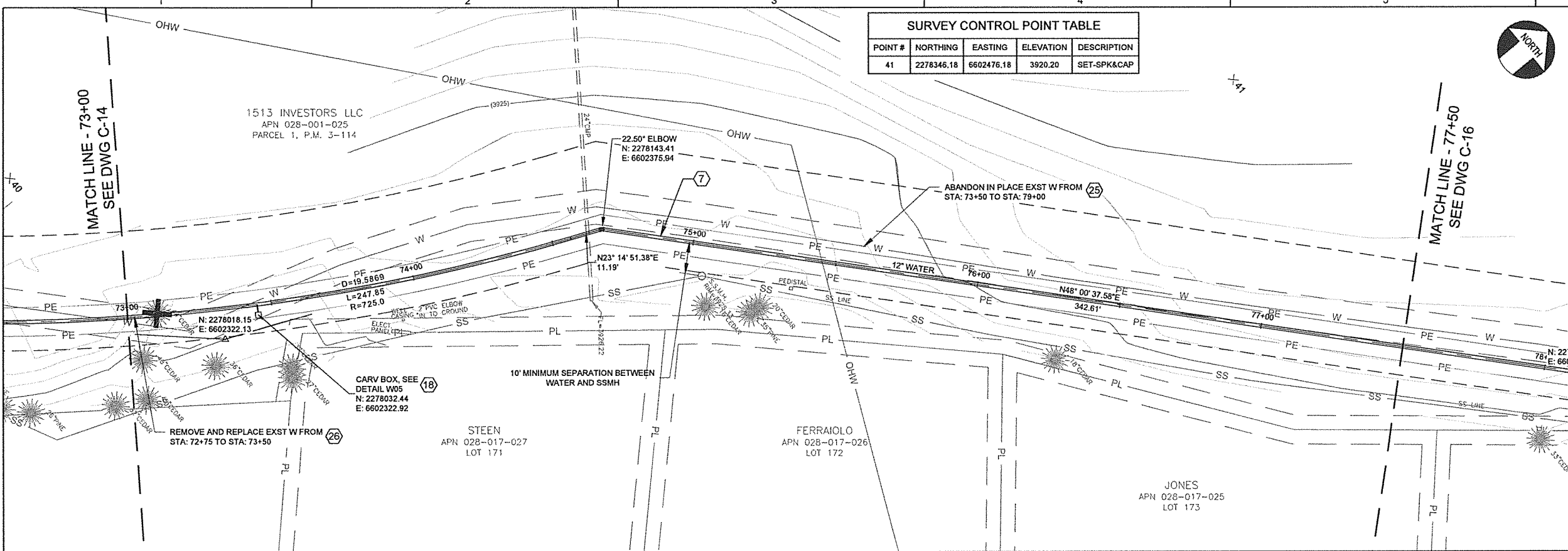
CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 68+50 TO 73+00

DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-14
SHEET
23 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
41	2278346.18	6602476.18	3920.20	SET-SPK&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	



WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
73+00 TO 77+50

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-15
SHEET 24 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C115.DWG

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.

JOB NUMBER: 13-051

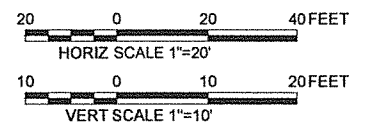
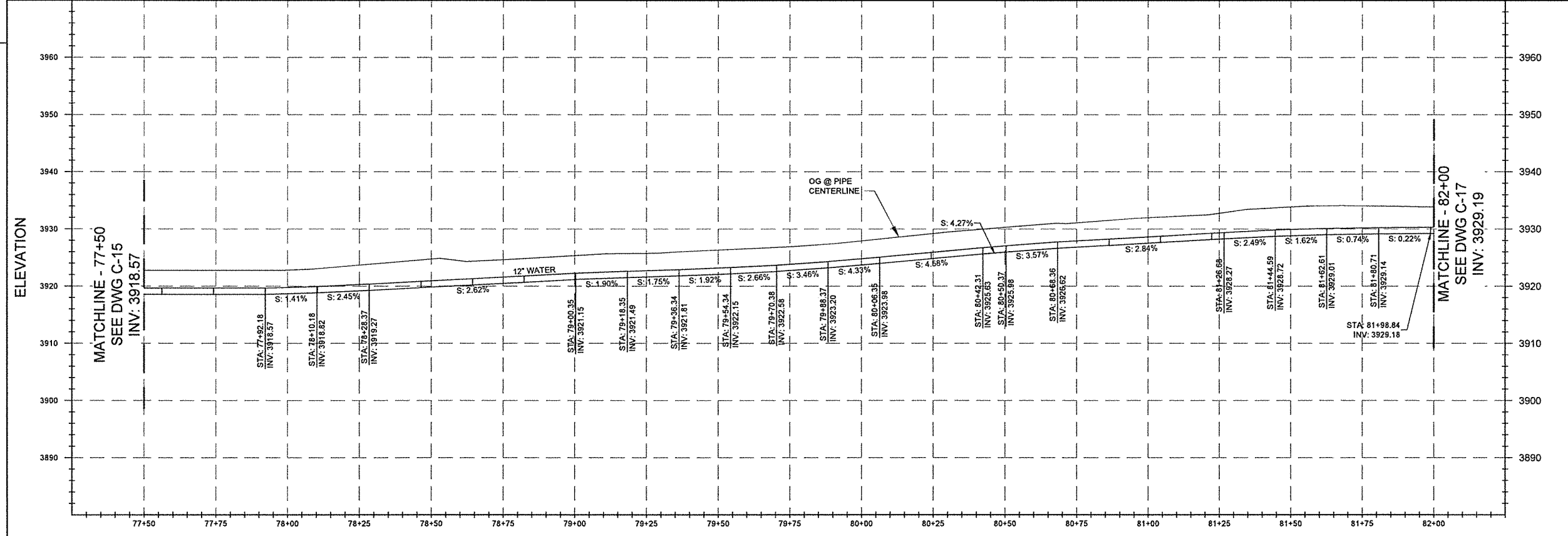
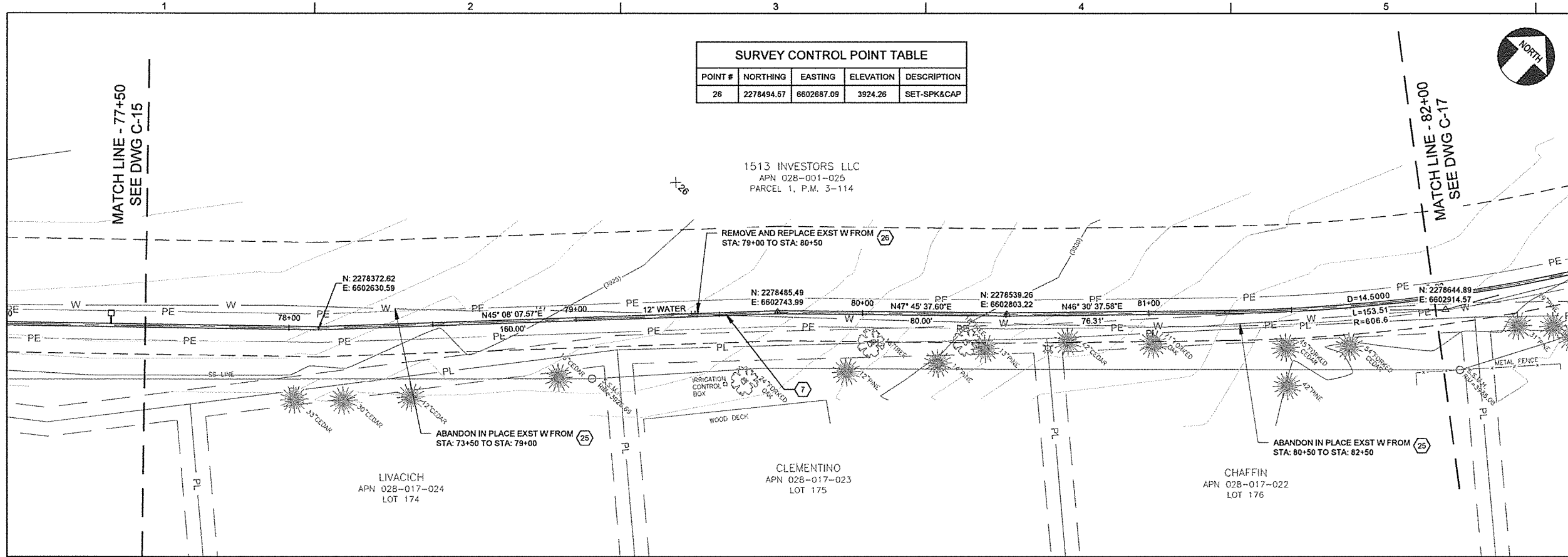
FILENAME: 1372D-C115.DWG

PLOT DATE: 03-Oct-15

PLOT TIME: 12:05:05

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
26	2278494.57	6602687.09	3924.26	SET-SPK&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD	APPROVED

DESIGN K ALACON	BENCH MARK ELEV. 3845.47 DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS

1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

**CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT**

CIVIL

**PLAN AND PROFILE
77+50 TO 82+00**

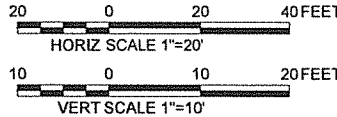
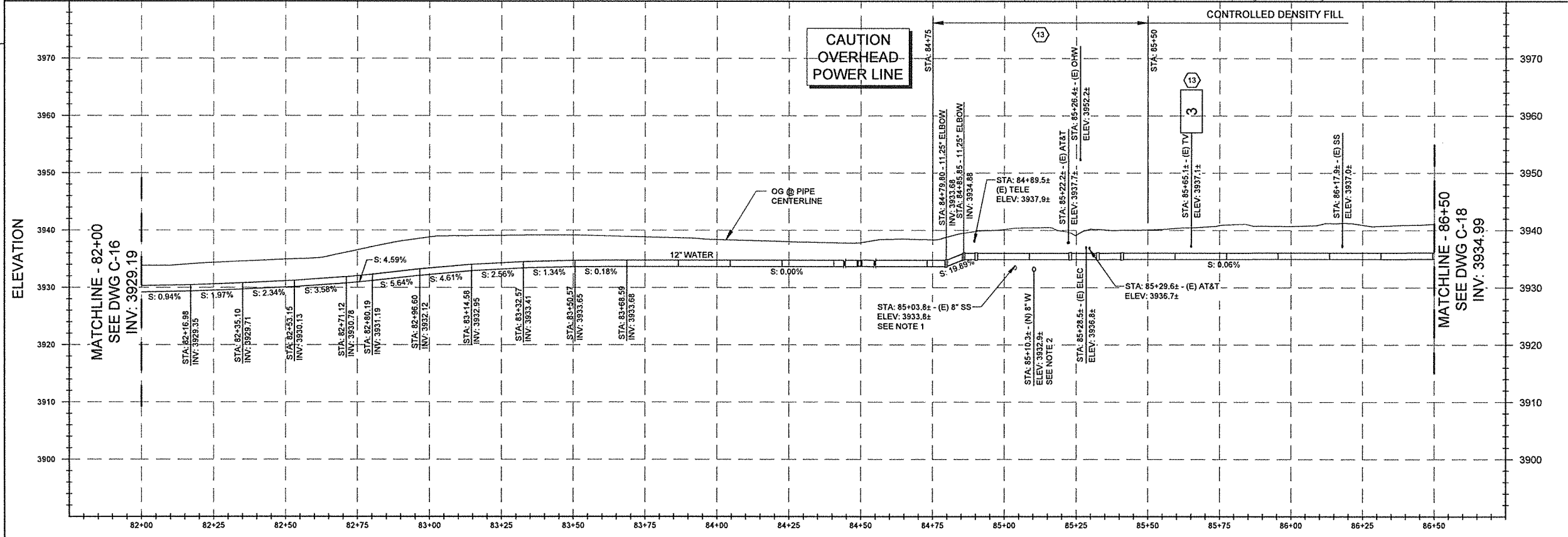
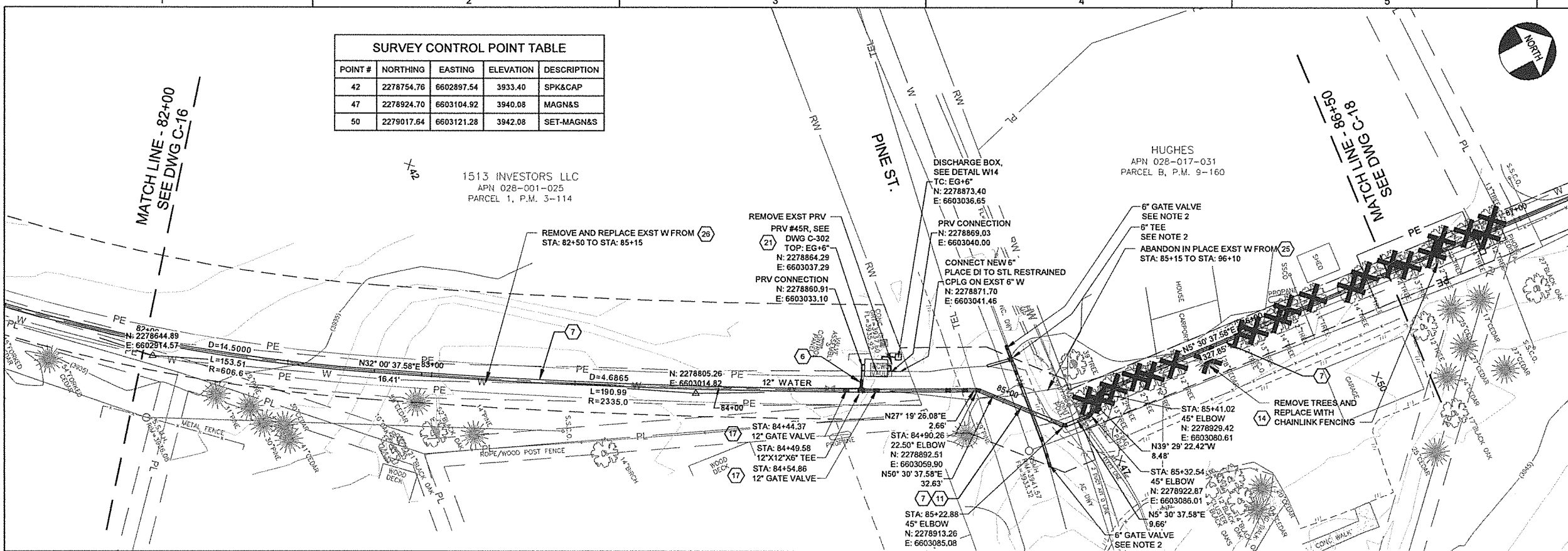
DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-16
SHEET	25 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
42	2278754.76	6602897.54	3933.40	SPK&CAP
47	2278924.70	6603104.92	3940.08	MAGN&S
50	2279017.64	6603121.28	3942.08	SET-MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
14	PRIVATE PROPERTY LANDSCAPING
21	12-INCH GATE VALVE
21	PRV STATION - W/ ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

NOTES:

1. WATER LINE TO BE MINIMUM 1-FT VERTICAL CLEARANCE ABOVE EXISTING SEWER MAIN; BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.
2. REMOVE AND RELOCATE EXISTING 6" WATER. CONTRACTOR TO INSTALL PIPING, FITTINGS AND APPURTENANCES AS REQUIRED TO ACHIEVE 1' VERTICAL SEPARATION.
3. CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.



NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
KALACON	ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION
CHECKED M FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
APPROVED M FISHER	



WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 82+00 TO 86+50

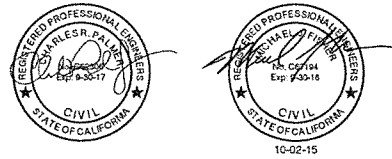
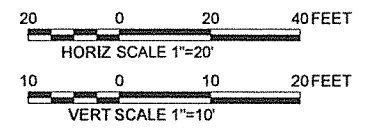
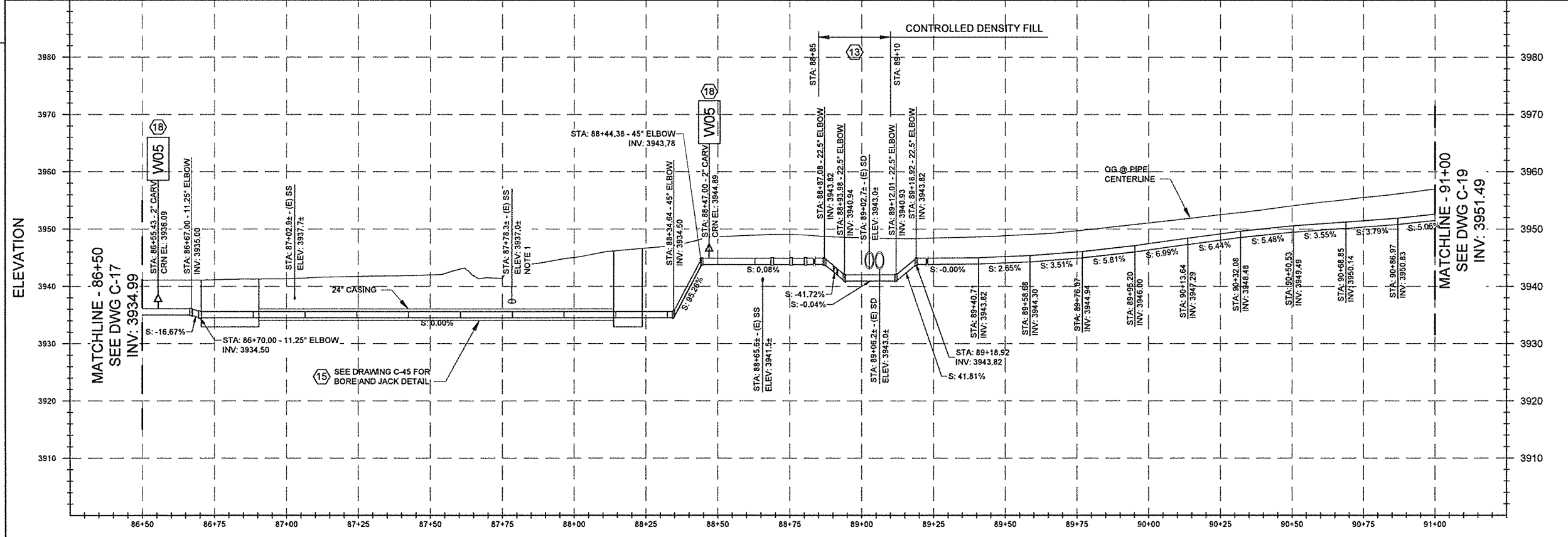
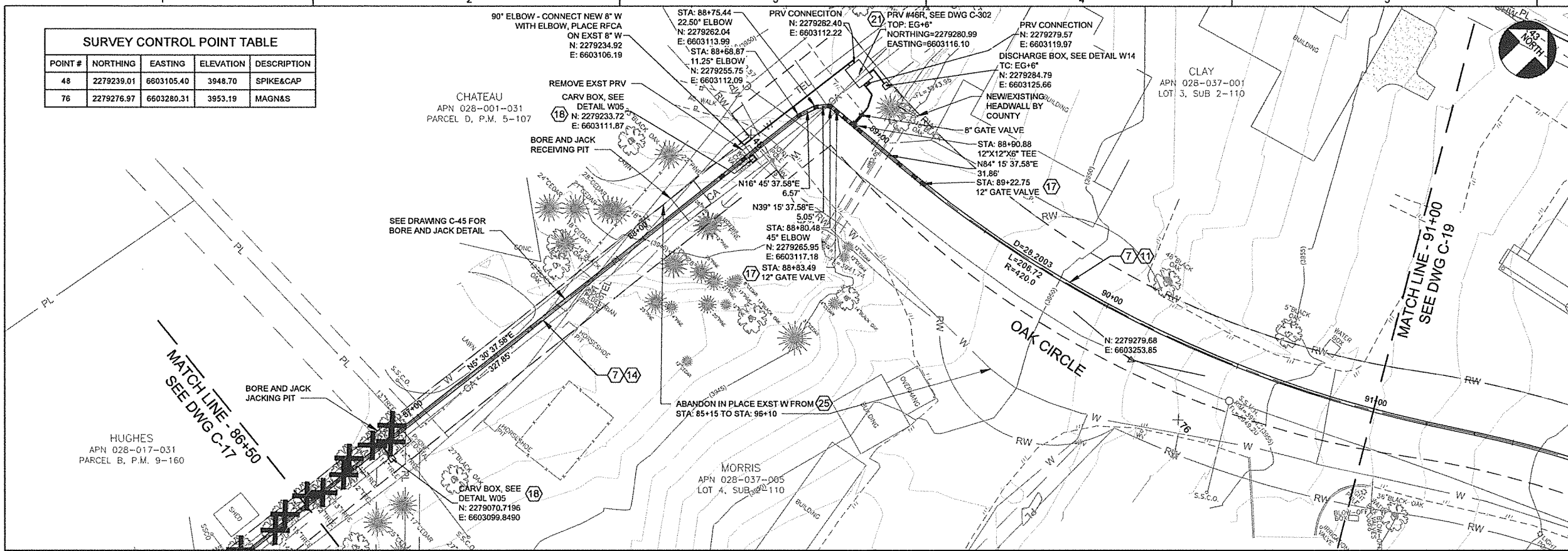
DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-17
SHEET
26 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C-117.DWG

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
48	2279239.01	6603105.40	3948.70	SPIKE&CAP
76	2279276.97	6603280.31	3953.19	MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
9	12" WATERLINE - CREEK CROSSING
11	SURFACE RESTORATION - PAVEMENT
14	PRIVATE PROPERTY LANDSCAPING
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
21	PRV STATION - W/ ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE

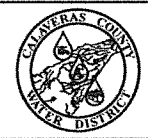
- NOTES:
- CONTRACTOR SHALL POTHOLE EXISTING 8" SS AND CONFIRM INVERT ELEVATIONS BEFORE STARTING BORE & JACK AND SHALL EXPOSE/OBSERVE 8" SS CROSSING DURING INSTALLATION OF CASING.
 - CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1'-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.



NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
KALACON	ELEV. 3845.47
DRAWN P. WEBSTER	DESCRIPTION
CHECKED M. FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
APPROVED M. FISHER	

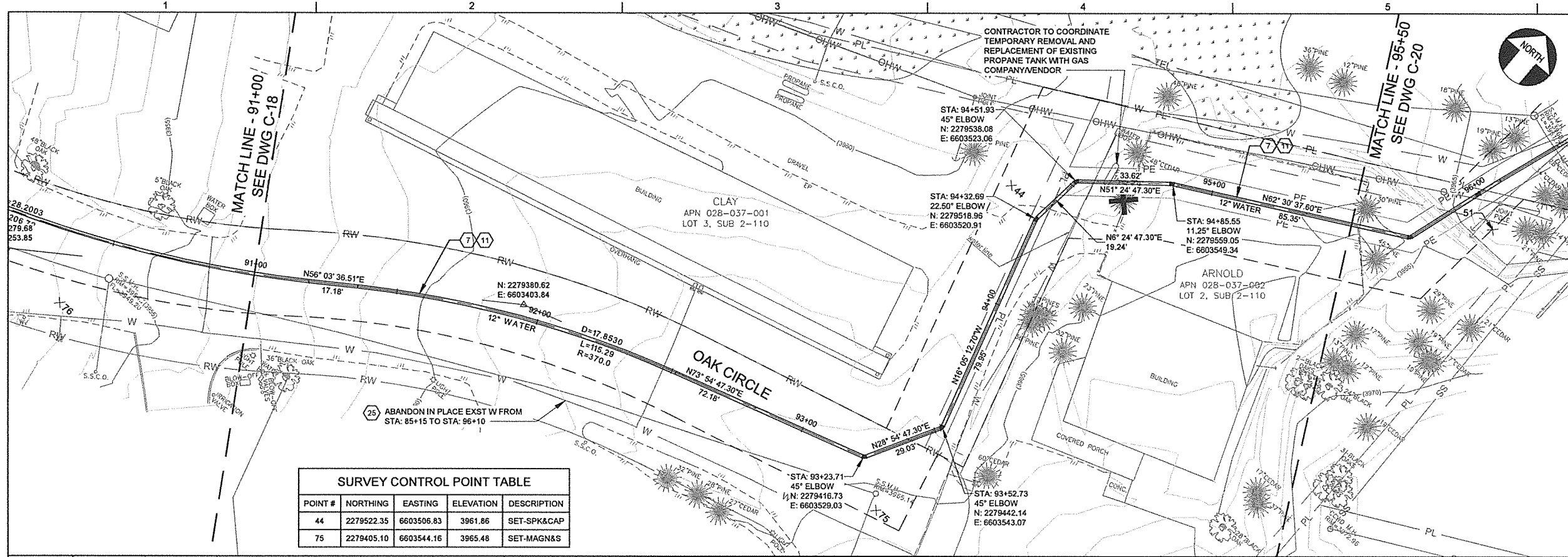
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
 86+50 TO 91+00

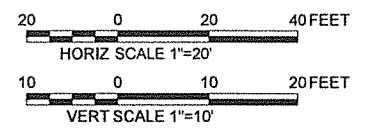
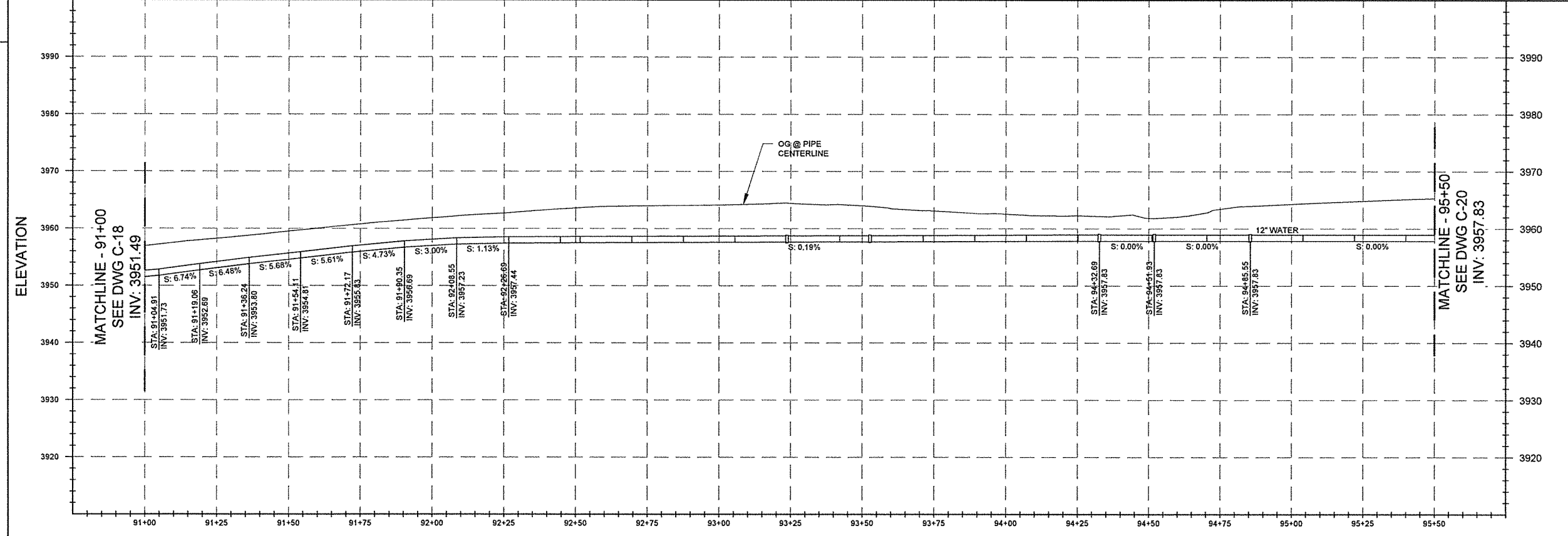
DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-18
SHEET
27 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
25	ABANDON EXISTING WATER LINE

- NOTES:
- CONTRACTOR TO REMOVE AND REPAIR EXISTING CHAINLINK FENCE AS NECESSARY FOR CONSTRUCTION.
 - CONTRACTOR TO COORDINATE TEMPORARY REMOVAL AND REPLACEMENT OF EXISTING PROPANE TANK WITH GAS COMPANY/VENDOR. GAS SERVICE SHALL NOT BE INTERRUPTED FOR MORE THAN AN 8-HOUR PERIOD WITHOUT OWNER APPROVAL.

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
44	2279522.35	6603506.83	3961.86	SET-SPK&CAP
75	2279405.10	6603544.16	3965.48	SET-MAGN&S



NO.	DATE	REVISION	BY	APVD

BENCH MARK	
DESCRIPTION	ELEV. 3845.47
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	



WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

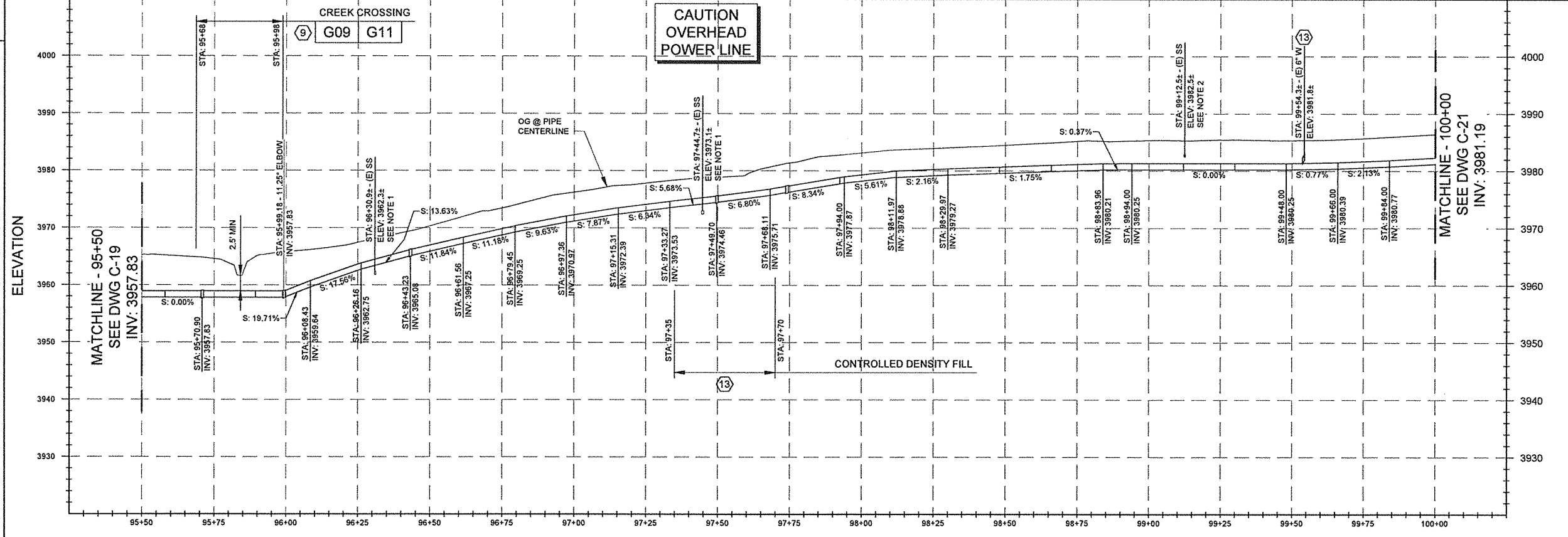
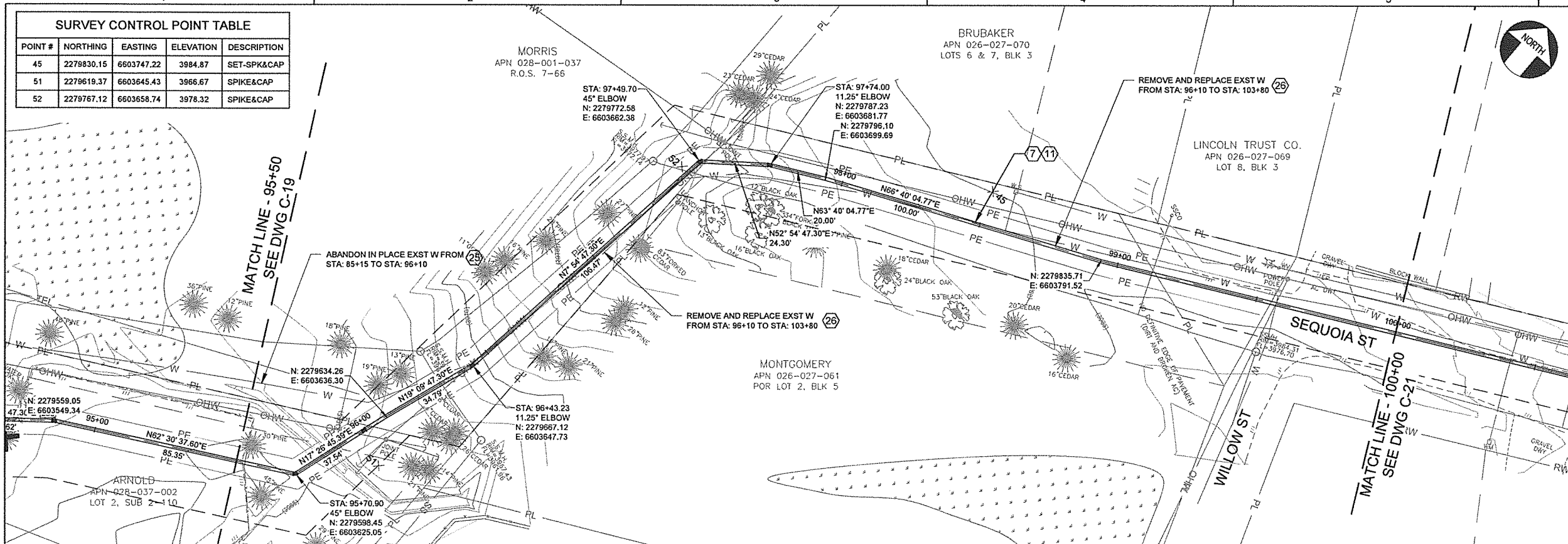
CIVIL
 PLAN AND PROFILE
 91+00 TO 95+50

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-19
SHEET	28 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
45	2279830.15	6603747.22	3984.87	SET-SPK&CAP
51	2279619.37	6603645.43	3966.67	SPIKE&CAP
52	2279767.12	6603658.74	3978.32	SPIKE&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
9	12" WATERLINE - CREEK CROSSING
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

- NOTES:
- PROVIDE MINIMUM 1-FT VERTICAL CLEARANCE BETWEEN WATER AND SEWER MAIN; BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.
 - CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.



NO.	DATE	REVISION	BY	APVD

DESIGN	ELEV.
K ALACON	3845.47
DRAWN	
P WEBSTER	
CHECKED	
M FISHER	
APPROVED	
M FISHER	

BENCH MARK
 DESCRIPTION: 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
 ELEV. 3845.47

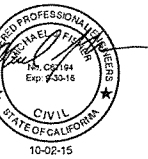


WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



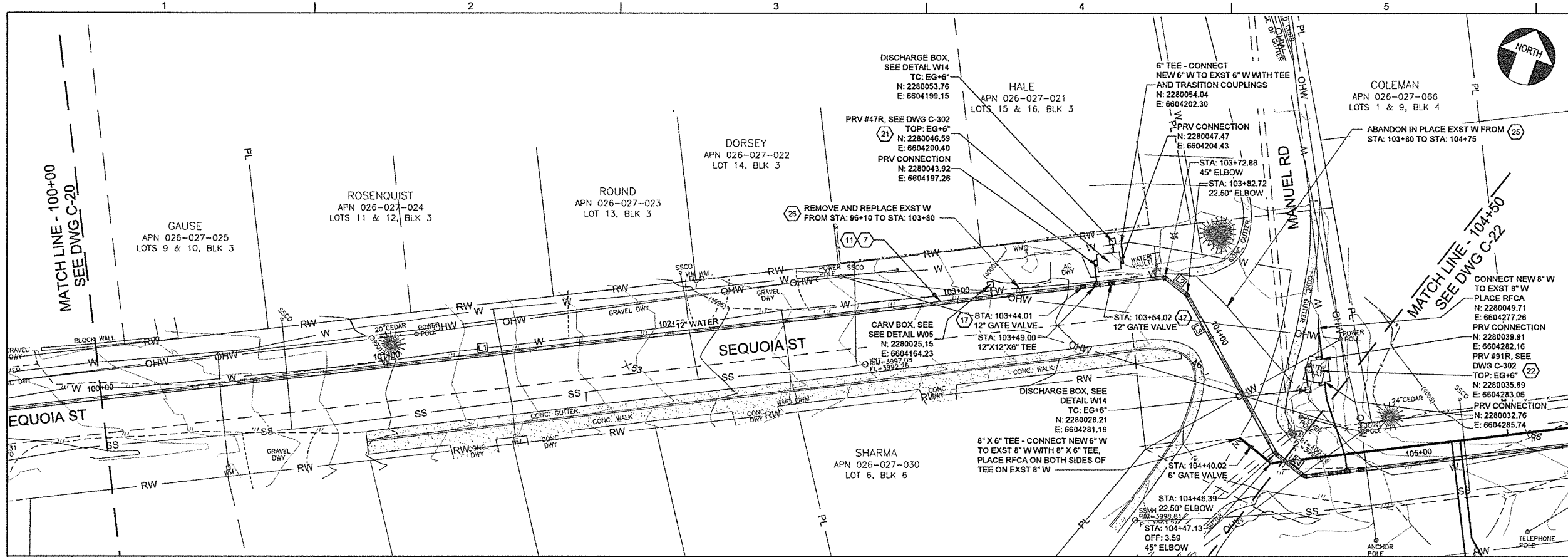
CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 95+50 TO 100+00



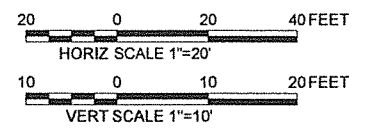
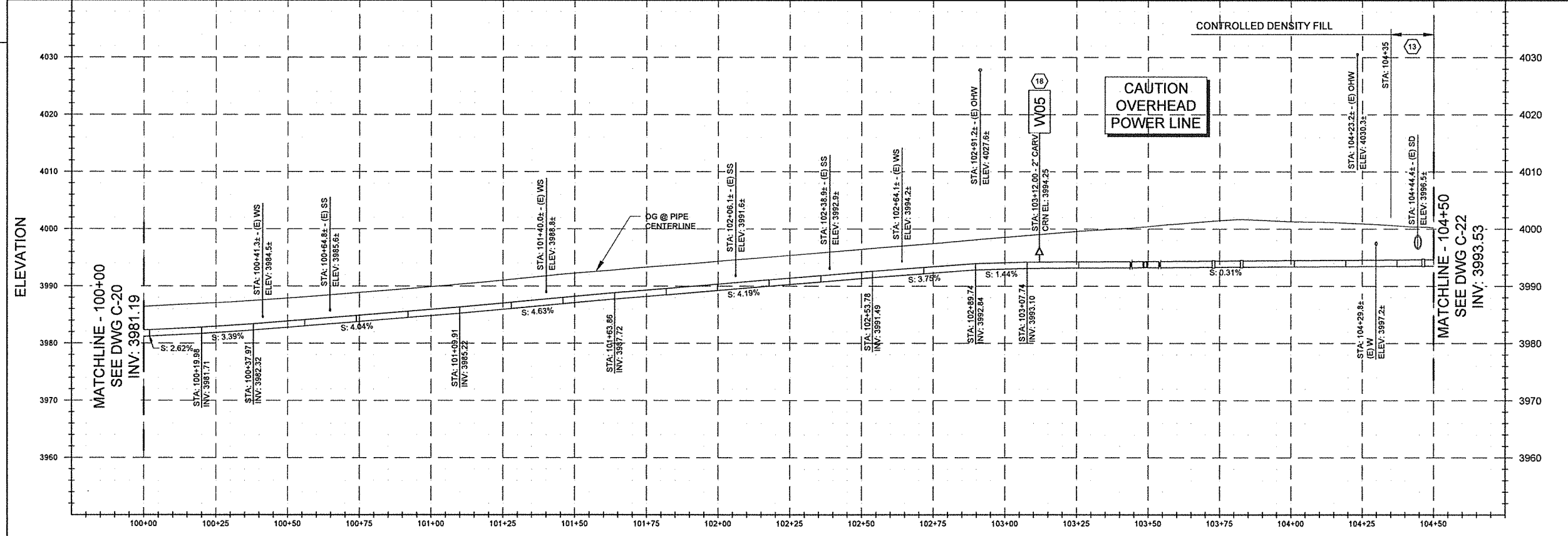
DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-20
SHEET
29 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C120.DWG



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
16	8-INCH GATE VALVE
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY WITH ANTI-SURGE
21	PRV STATION - W/ ANTI-CARV TRIM
22	PRV STATION - W/O ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

NOTES:
 1. CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.



NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
K. ALACON	ELEV. 3845.47
P. WEBSTER	DESCRIPTION
M. FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

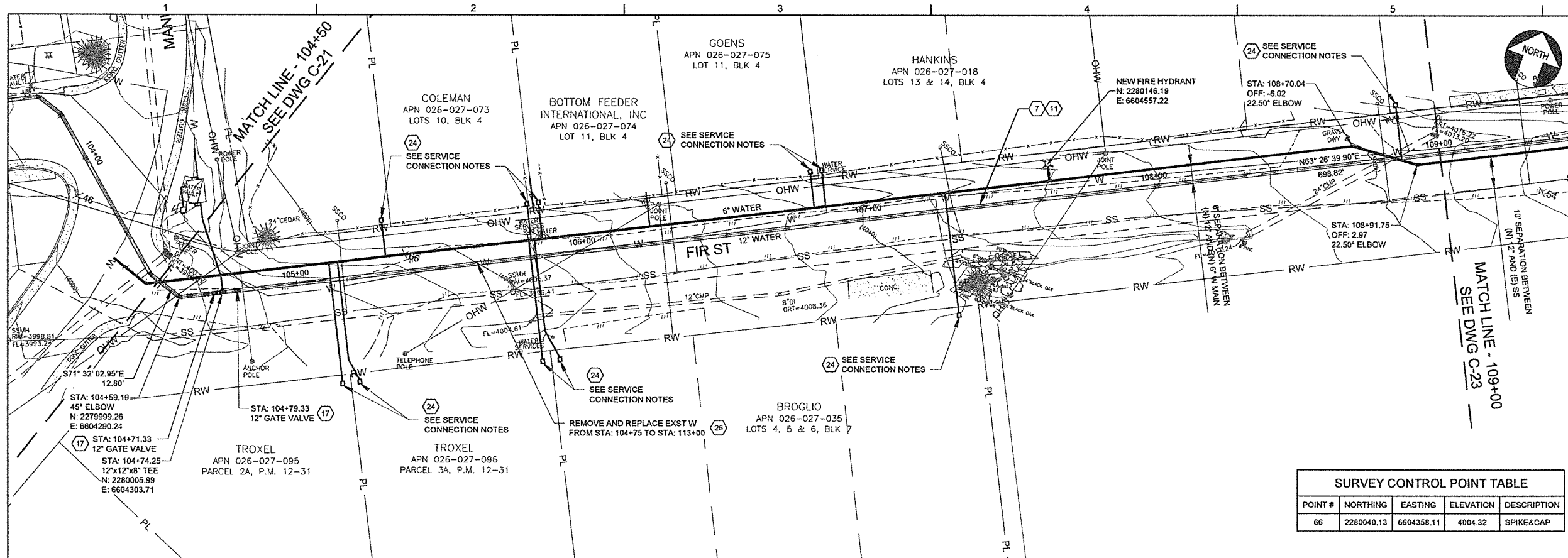
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 PLAN AND PROFILE
 100+00 TO 104+50

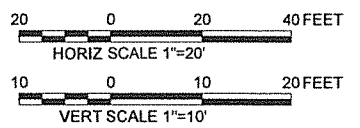
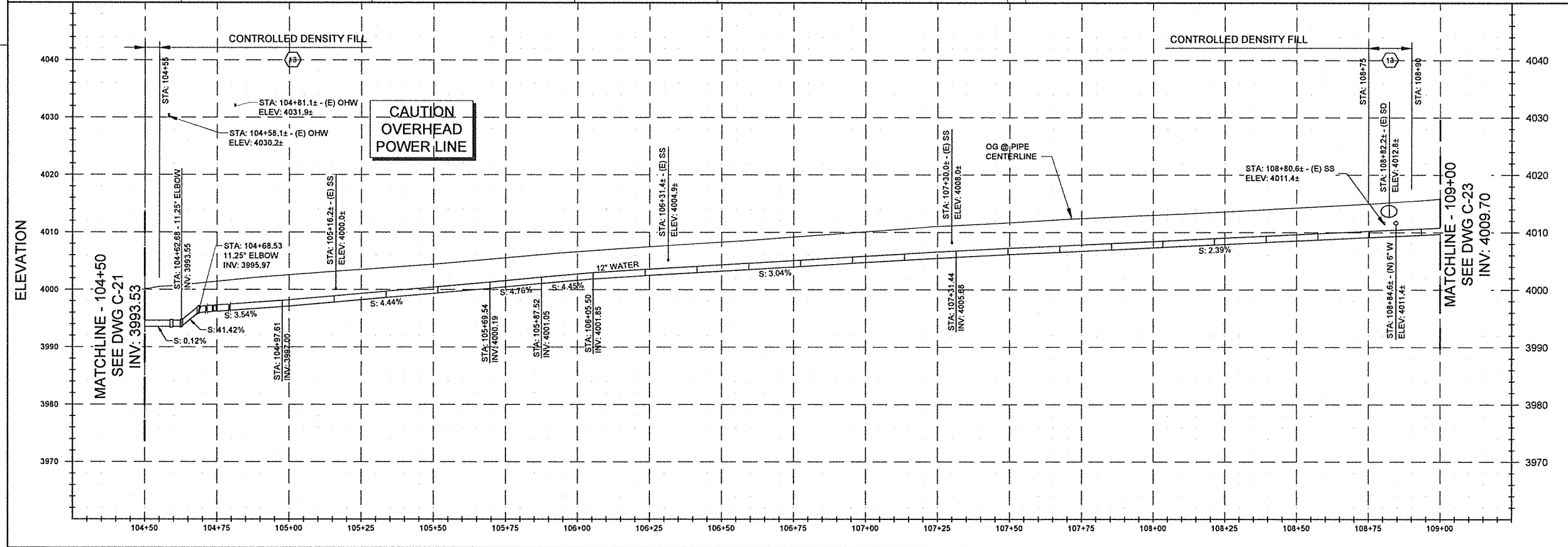
DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-21
SHEET
30 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
17	12-INCH GATE VALVE
24	1-INCH WATER SERVICE & METER
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

- SERVICE CONNECTION NOTES:**
- CONTRACTOR SHALL VERIFY LOCATION OF WATER SERVICE ON PRIVATE PROPERTY AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL CONNECT TO NEW WATER SERVICE PROVIDING FULLY FUNCTIONAL WATER SERVICE.
 - CONTRACTOR SHALL CONNECT NEW WATER SERVICE AND PLACE NEW WATER METER AT THE PROPERTY LINE OR EDGE OF RIGHT-OF-WAY.
 - 1" WATER SERVICE CONNECTION. SEE DETAIL W07 AND W07C ON DWG C-308, TYP.
 - CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN - LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER. WATER PIPE TO HAVE MINIMUM 1-FT VERTICAL CLEARANCE FROM EXISTING SEWER. BACKFILL TRENCH WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.

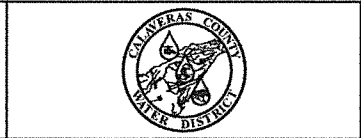
SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
66	2280040.13	6604358.11	4004.32	SPIKE&CAP



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	ELEV. 3845.47
DRAWN P WEBSTER		
CHECKED M FISHER		
APPROVED M FISHER		

WATERWORKS ENGINEERS
1405 Vector Avenue, Suite A • Redding, CA 96002 • 530-243-2113



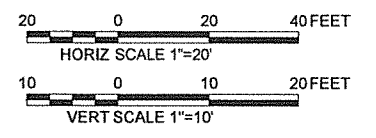
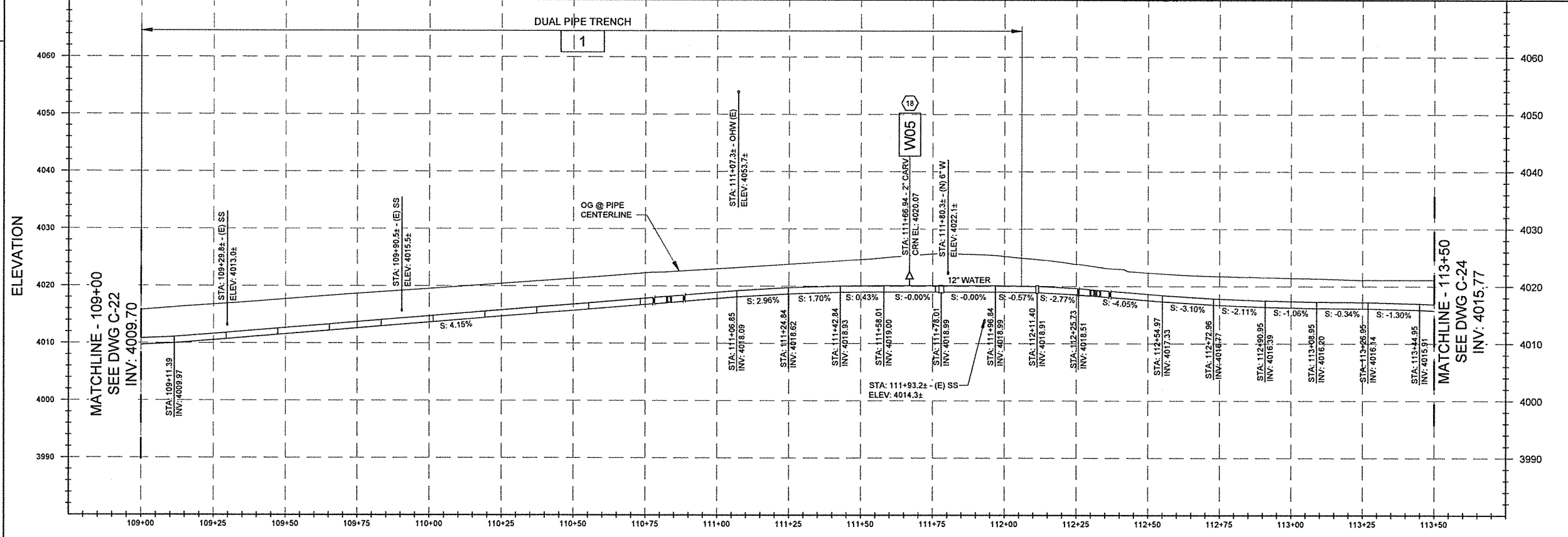
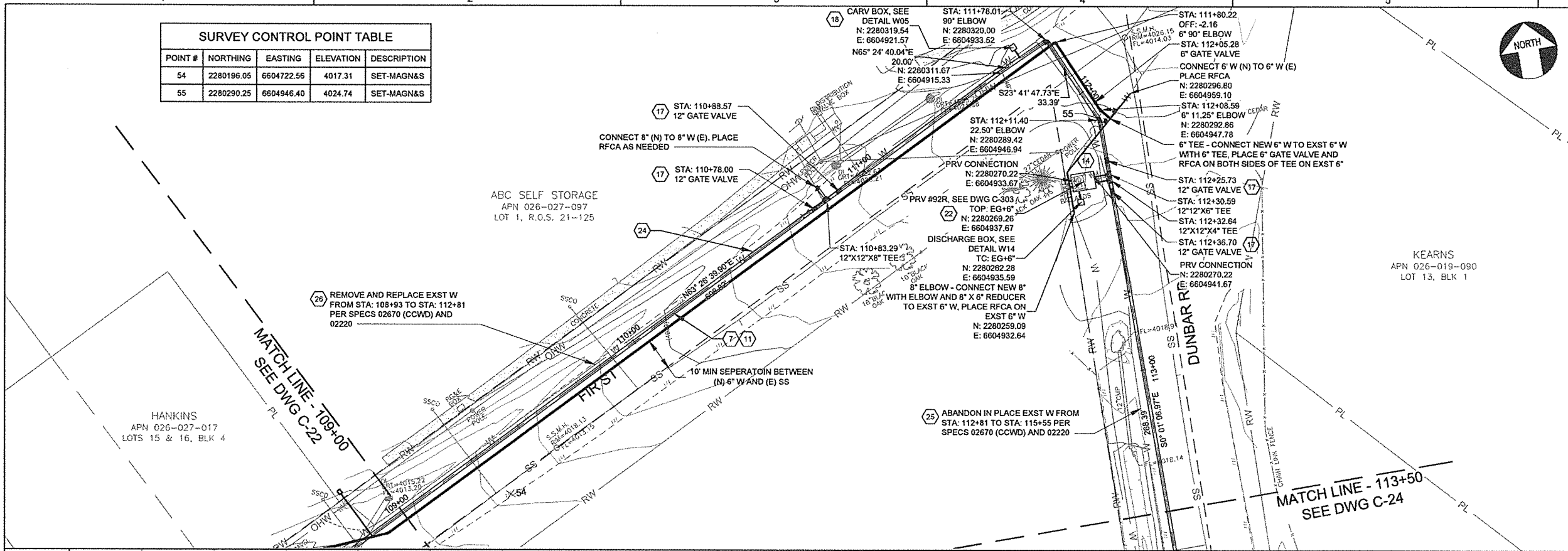
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
104+50 TO 109+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-22
SHEET 31 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
54	2280196.05	6604722.56	4017.31	SET-MAGN&S
55	2280290.25	6604946.40	4024.74	SET-MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
22	PRV STATION - W/O ANTI-CARV TRIM
24	WATER SERVICE LINE
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



K:\PROJECTS\113-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C123.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
K ALACON	ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION
CHECKED M FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
109+00 TO 113+50

DATE
OCT 2015
PROJECT NUMBER
13-072
DRAWING NUMBER
C-23
SHEET 32 - 62

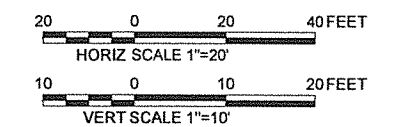
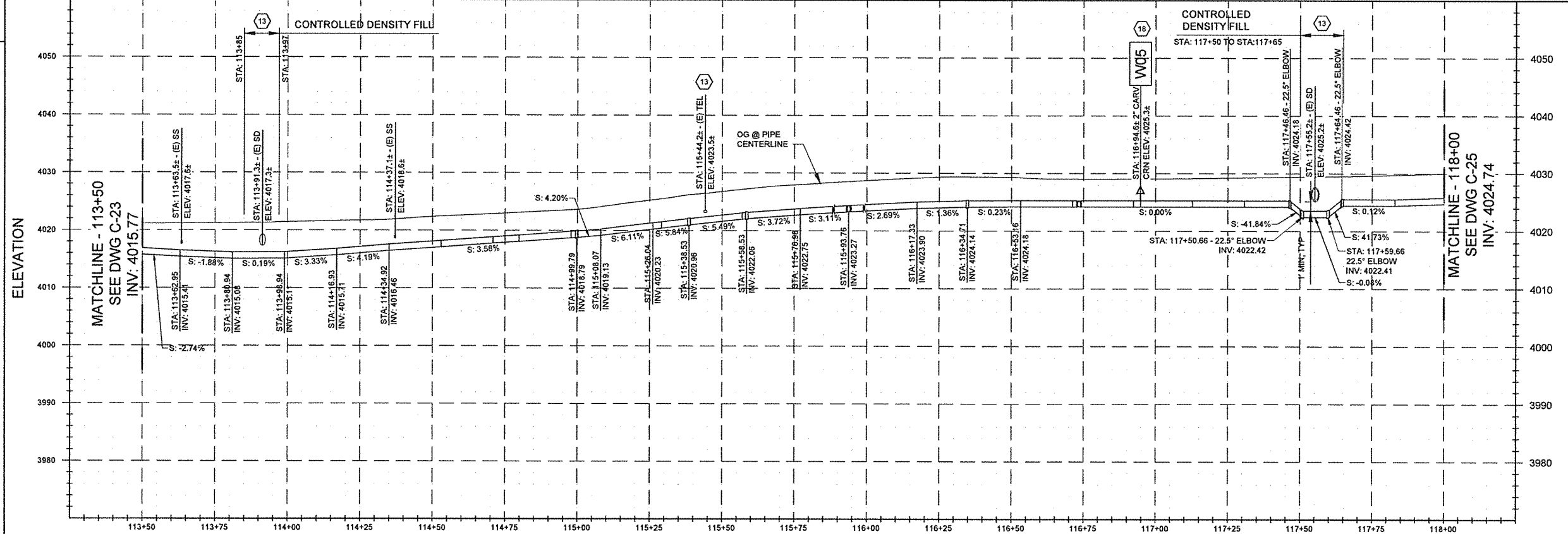
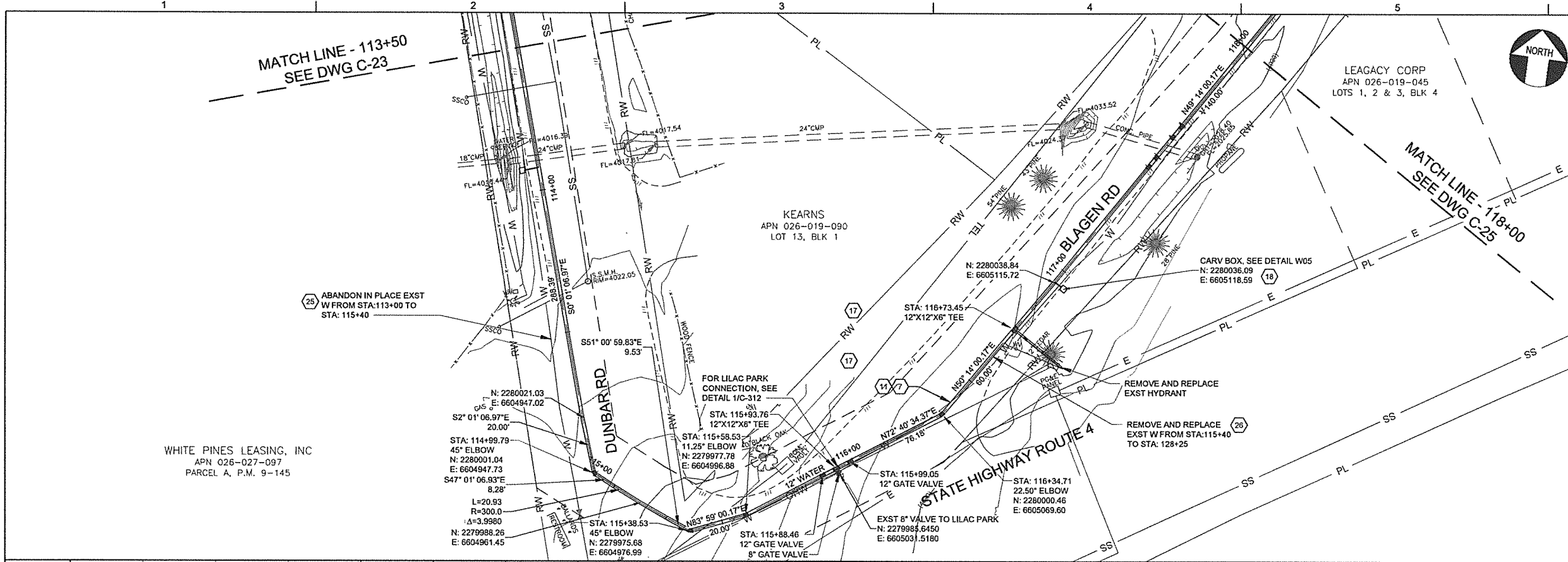
REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.

JOB NUMBER: 13-051 FILENAME: 1372D-C123.DWG PLOT DATE: 02-Oct-15 PLOT TIME: 22:15:37

MATCH LINE - 113+50
SEE DWG C-23

MATCH LINE - 118+00
SEE DWG C-25

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

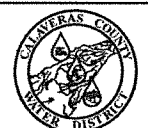


K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C124.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Valco Avenue, Suite A • Redding, CA 96002 • 530-243-2113



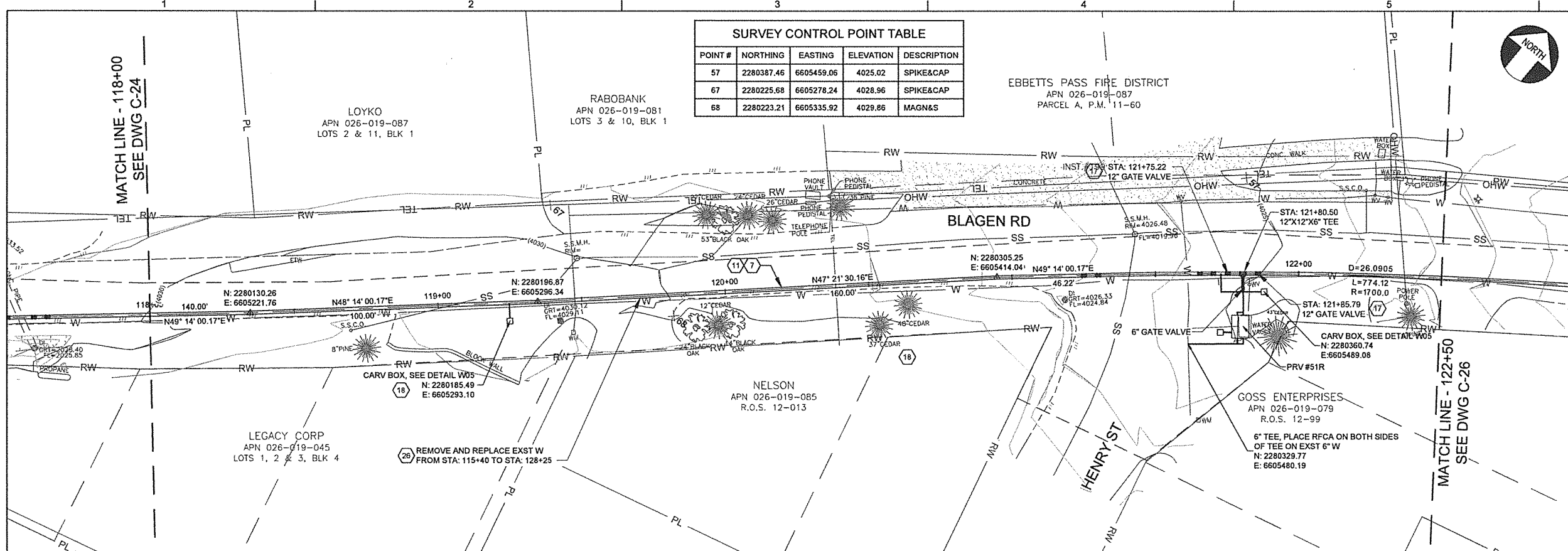
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
113+50 TO 118+00

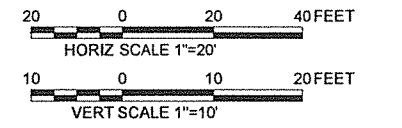
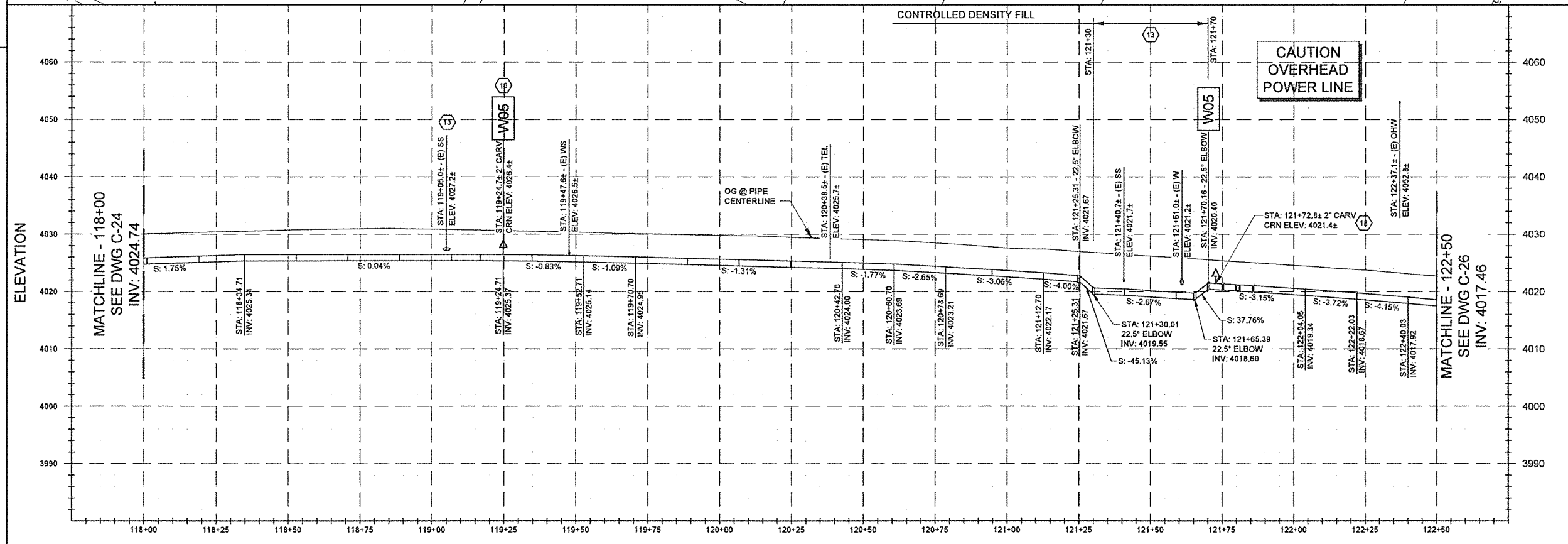
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-24
SHEET 33 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
57	2280387.46	6605459.06	4025.02	SPIKE&CAP
67	2280225.68	6605278.24	4028.96	SPIKE&CAP
68	2280223.21	6605335.92	4029.86	MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
17	12-INCH GATE VALVE
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
26	REMOVE EXISTING WATER LINE



NOTES:
 1. CENTER FULL PIPE STICK UNDER SEWER MAIN LOCATING JOINTS AS FAR AS POSSIBLE FROM SEWER; PROVIDE AT LEAST 1-FT VERTICAL CLEARANCE BETWEEN WATER AND SEWER; BACKFILL WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SLURRY) AS NOTED ON PROFILE.



K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C125.DWG

NO.	DATE	REVISION	BY	APVD

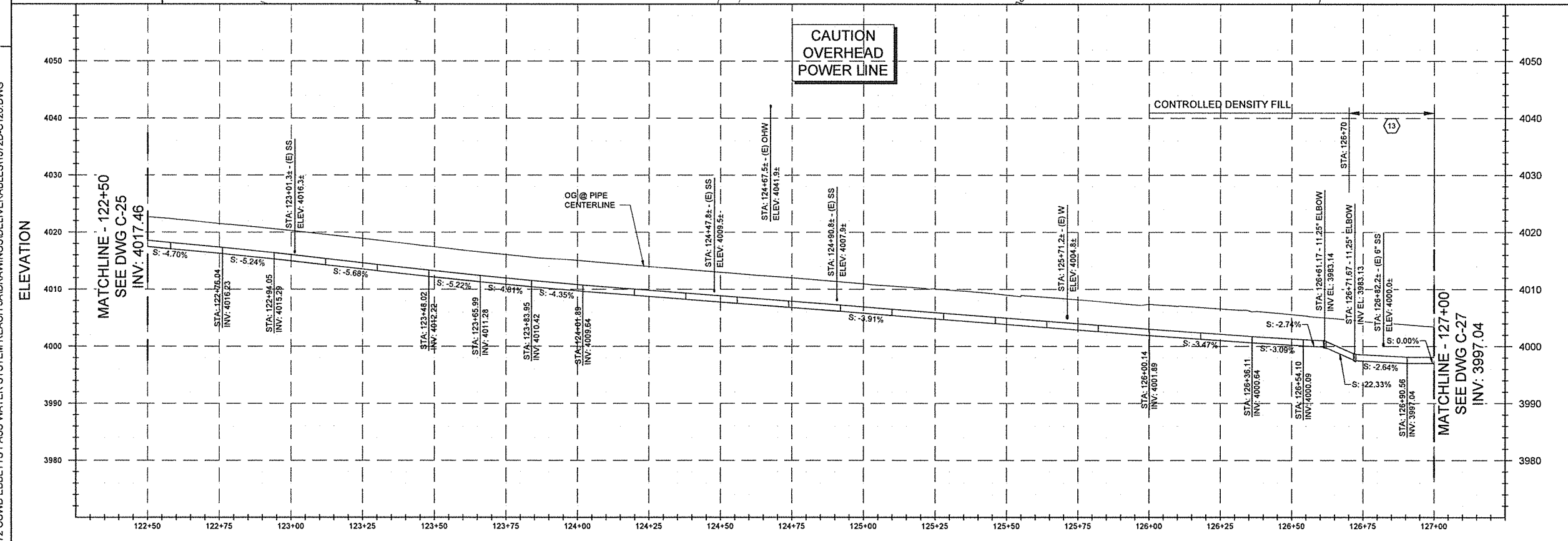
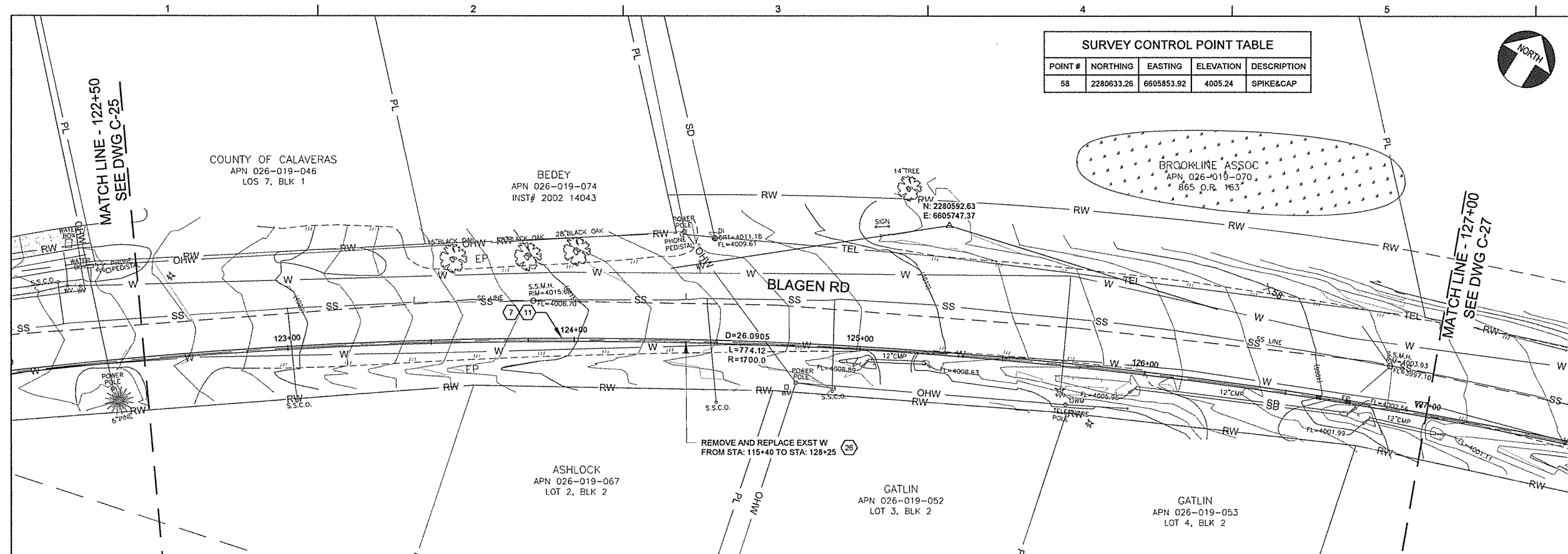
DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

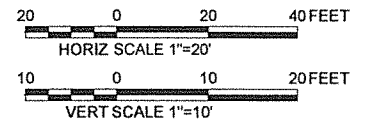
CIVIL	DATE OCT 2015
PLAN AND PROFILE 118+00 TO 122+50	PROJECT NUMBER 13-072
	DRAWING NUMBER C-25
	SHEET 34 - 62



SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
58	2280633.26	6605853.92	4005.24	SPIKE&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
14	PRIVATE PROPERTY LANDSCAPING
26	REMOVE EXISTING WATER LINE

NOTE:
 1. PROVIDE MINIMUM 1-FT VERTICAL CLEARANCE AND CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN AND BACKFILL WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SAND SLURRY) AS NOTED ON PROFILE.



K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C126.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

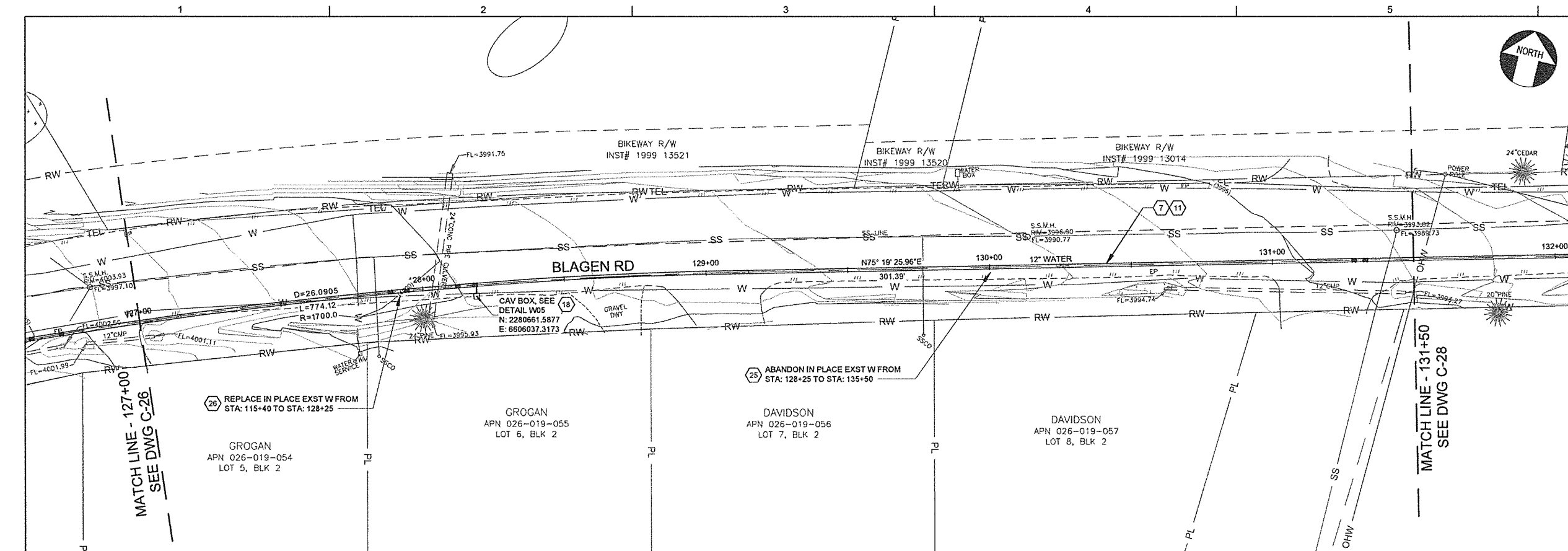
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

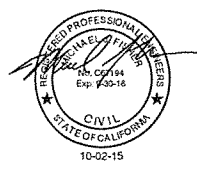
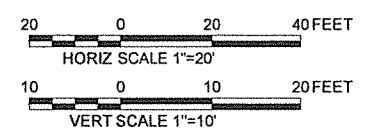
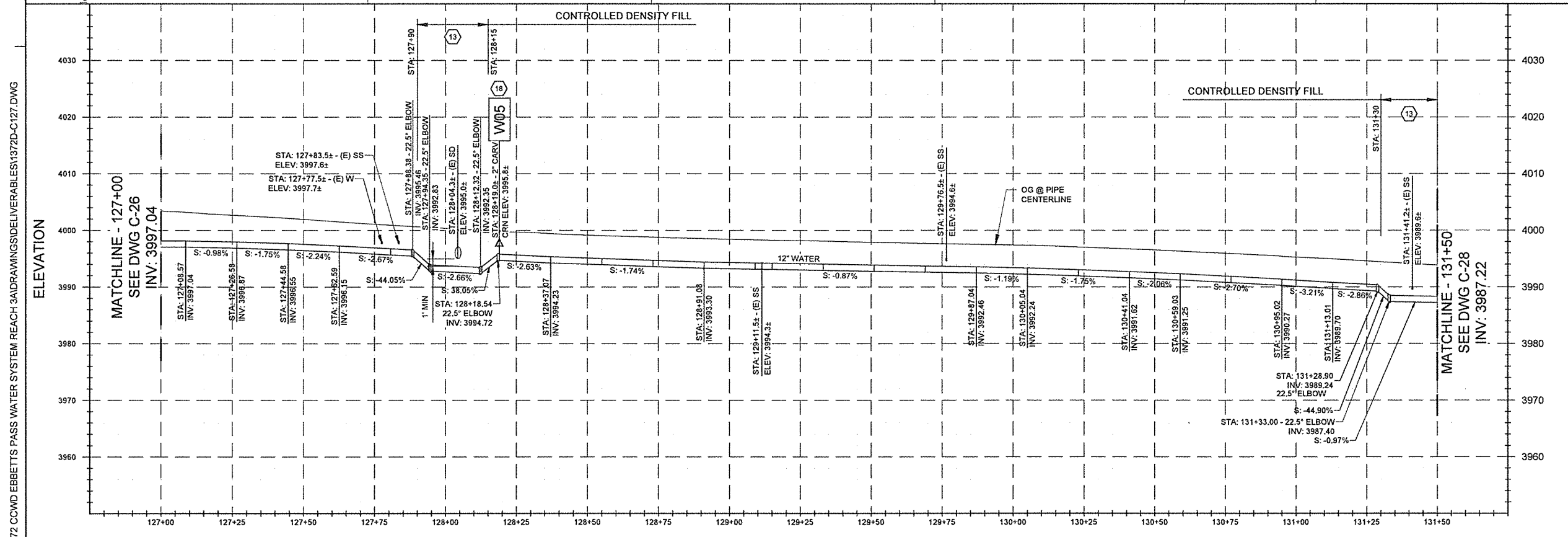
CIVIL
PLAN AND PROFILE
 122+50 TO 127+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-26
SHEET 35 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

NOTES:
 1. PROVIDE MINIMUM 1-FT VERTICAL CLEARANCE AND CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN AND BACKFILL WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SAND SLURRY) AS NOTED ON PROFILE.



NO.	DATE	REVISION	BY	APVD

DESIGN
KALACON
 DRAWN
P WEBSTER
 CHECKED
M FISHER
 APPROVED
M FISHER

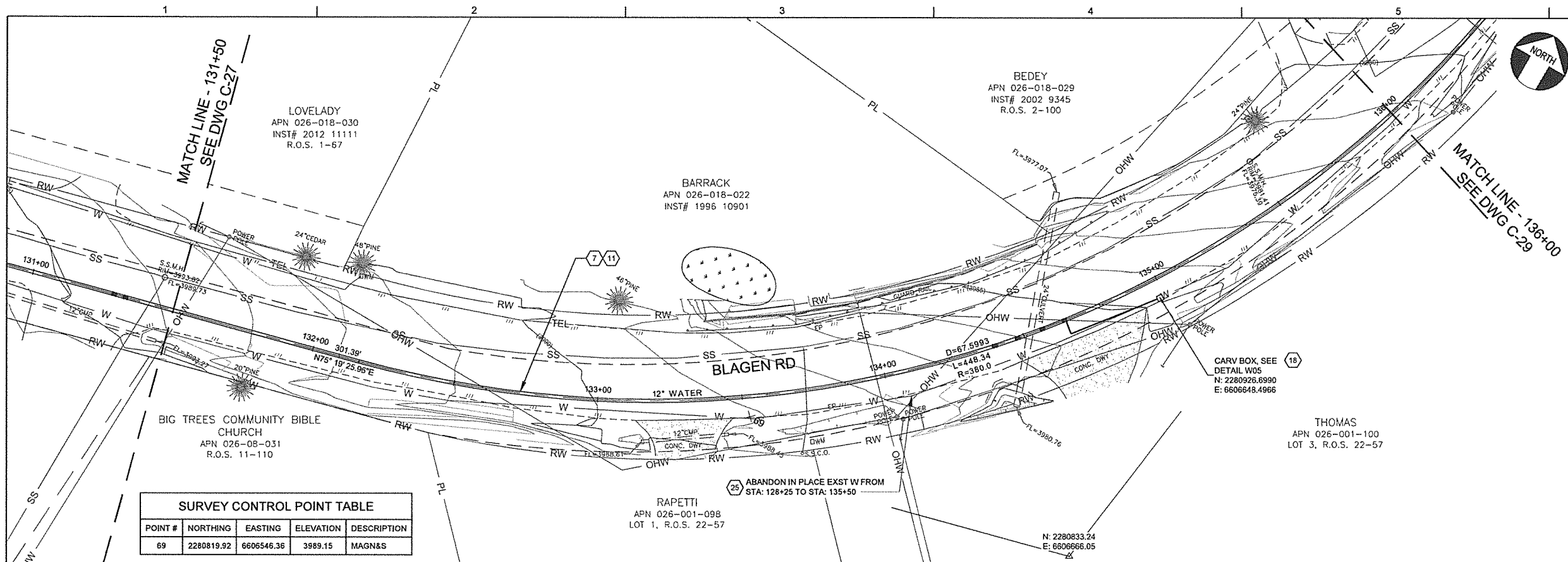
BENCH MARK ELEV. 3845.47
 DESCRIPTION
 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



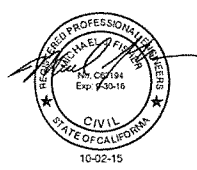
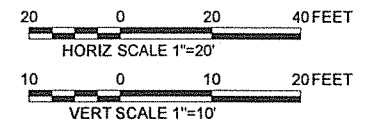
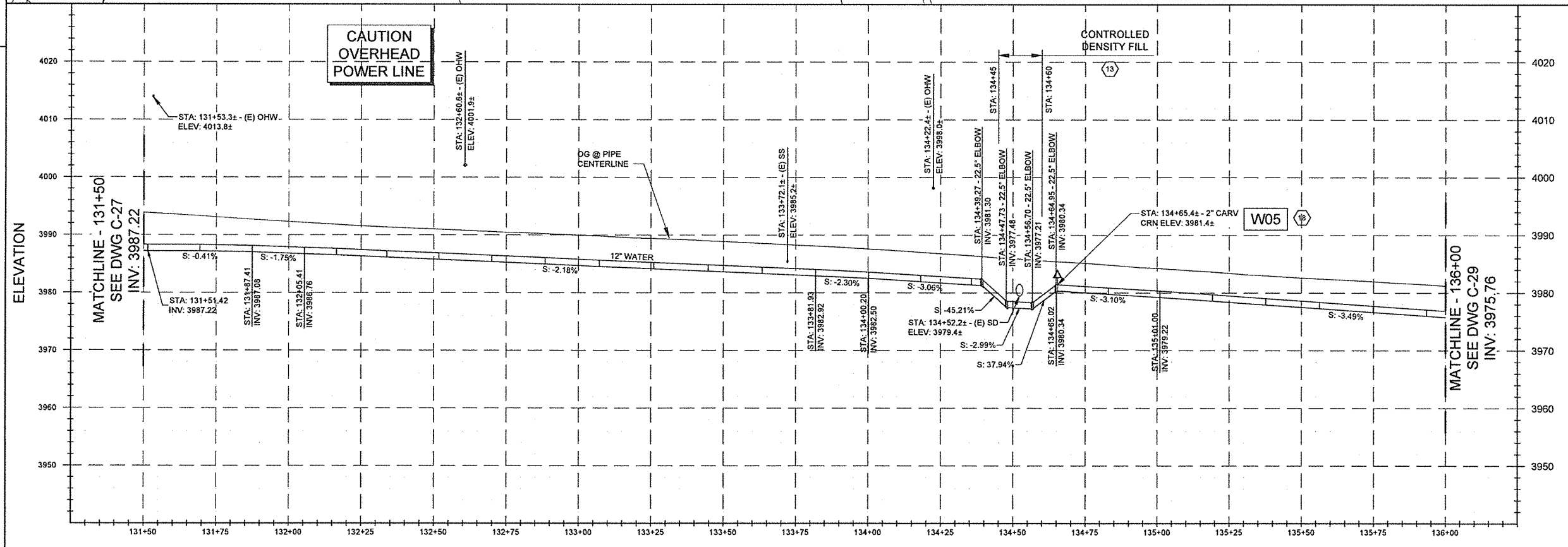
CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL	DATE OCT 2015
PLAN AND PROFILE 127+00 TO 131+50	PROJECT NUMBER 13-072
	DRAWING NUMBER C-27
	SHEET 36 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL - UTILITY CROSSING
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
69	2280819.92	6606546.36	3989.15	MAGN&S



NO.	DATE	REVISION	BY	APVD

DESIGN	BENCH MARK
K ALACON	ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION
CHECKED M FISHER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

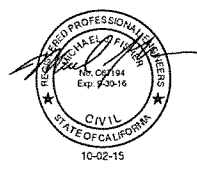
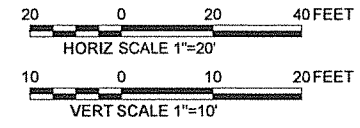
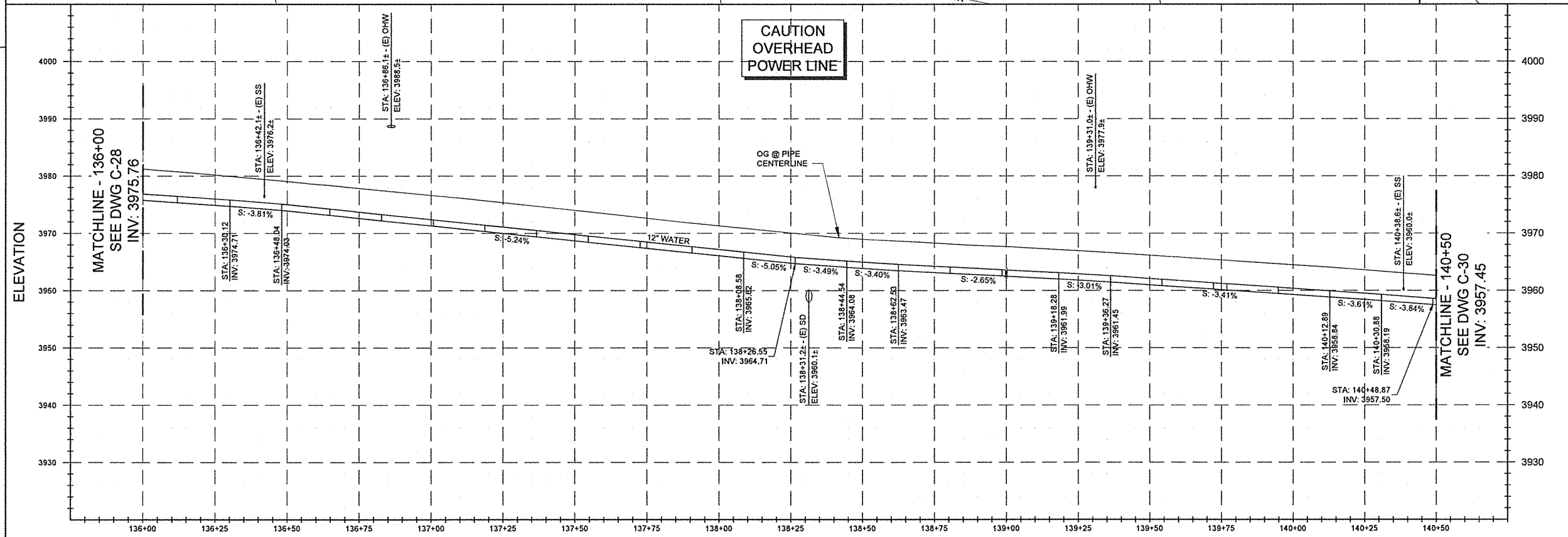
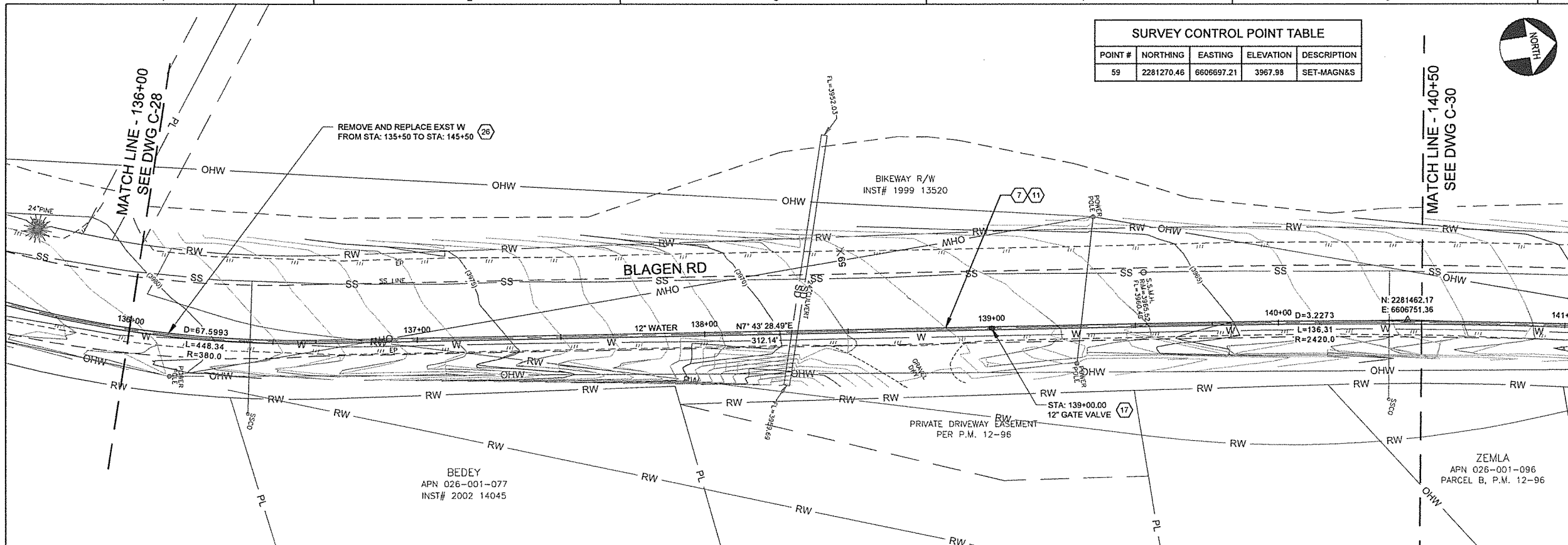
CIVIL
 PLAN AND PROFILE
 131+50 TO 136+00

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-28
SHEET	37 - 62

K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C128.DWG

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
59	2281270.46	6606597.21	3967.98	SET-MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
17	12-INCH GATE VALVE
26	REMOVE EXISTING WATER LINE



K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C129.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. <u>3945.47</u> DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

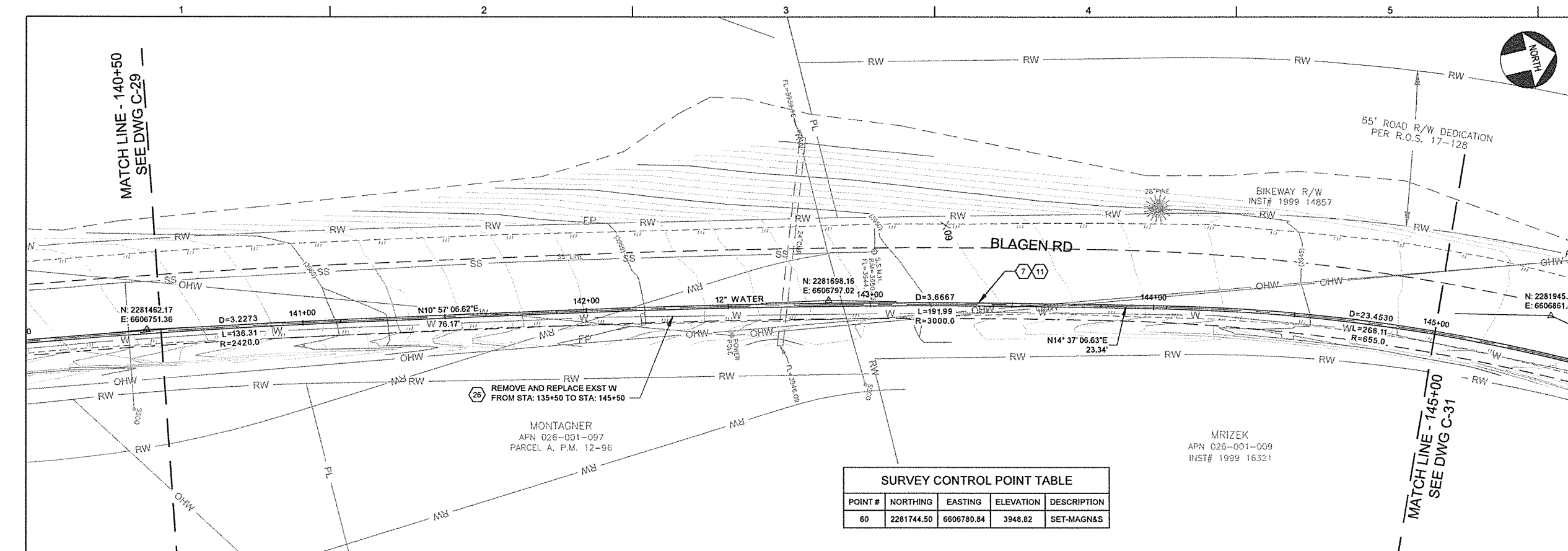


CALAVERAS COUNTY WATER DISTRICT
 EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
 136+00 TO 140+50

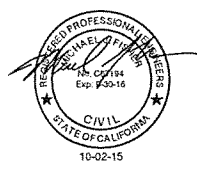
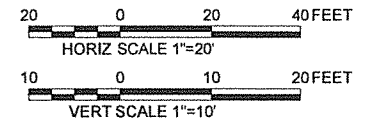
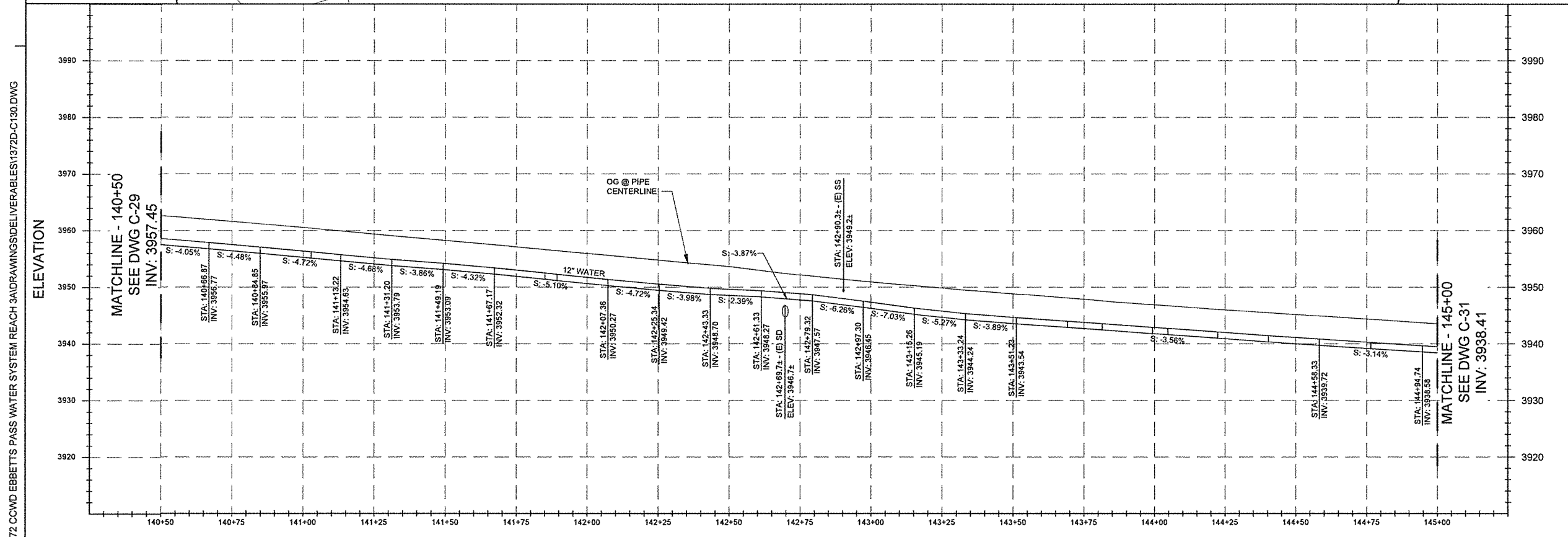
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-29
SHEET 38 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
26	REMOVE EXISTING WATER LINE

SURVEY CONTROL POINT TABLE			
POINT #	NORTHING	EASTING	ELEVATION
60	2281744.50	6606780.84	3948.82



NO.	DATE	REVISION	BY	APVD

DESIGN: K ALACON
 DRAWN: P WEBSTER
 CHECKED: M FISHER
 APPROVED: M FISHER

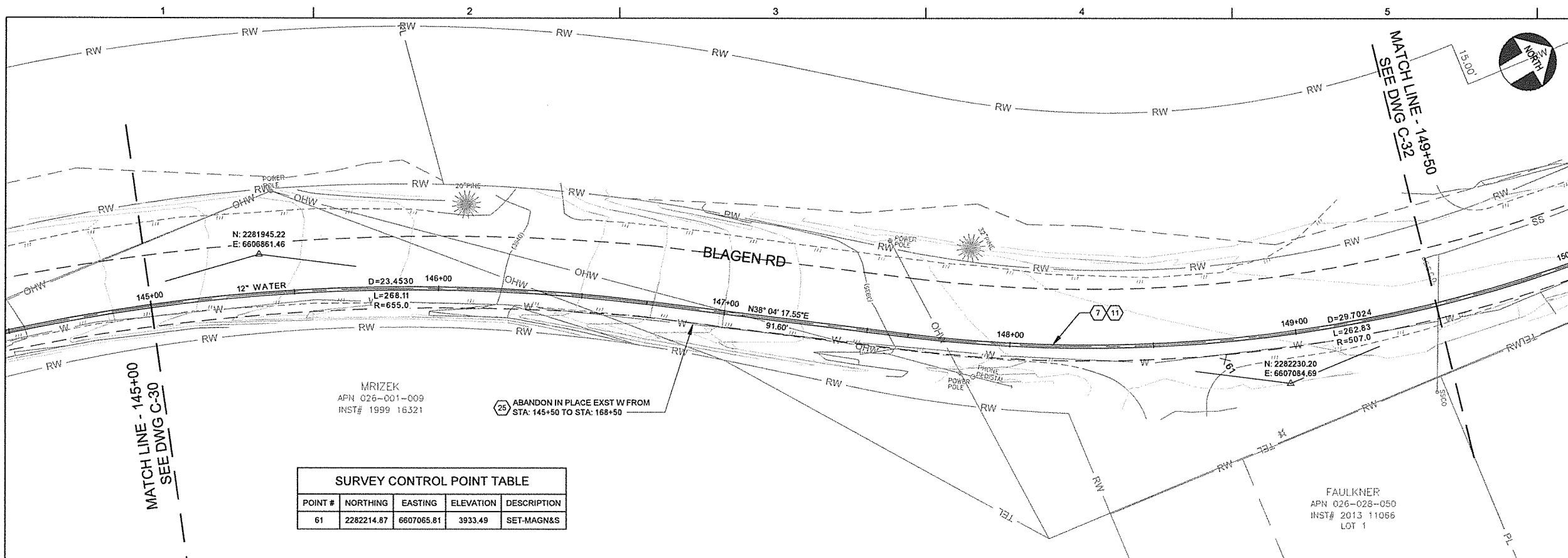
BENCH MARK: ELEV. 3845.47
 DESCRIPTION: 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

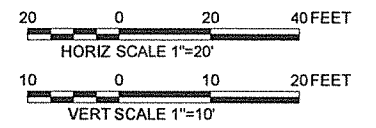
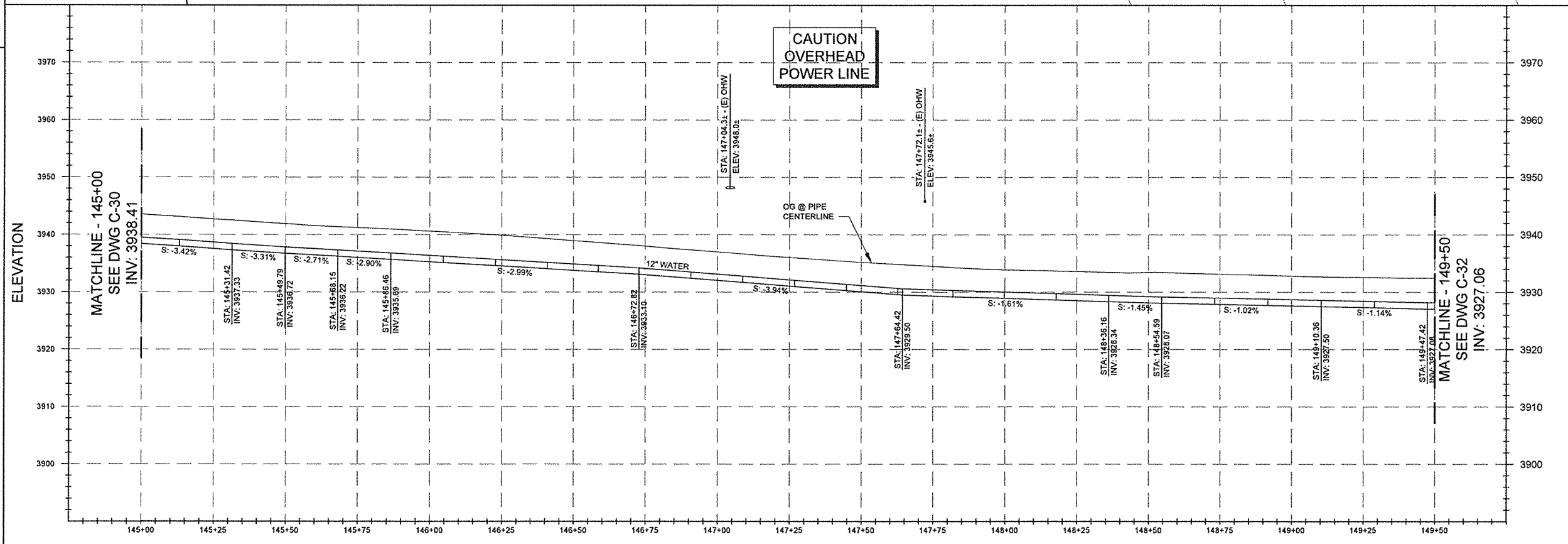
CIVIL

DATE: OCT 2015
 PROJECT NUMBER: 13-072
 DRAWING NUMBER: C-30
 SHEET: 39 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
25	ABANDON EXISTING WATER LINE

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
61	2282214.87	6607065.81	3933.49	SET-MAGN&S

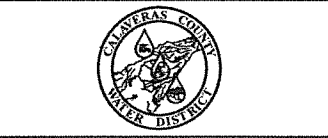


K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C131.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	

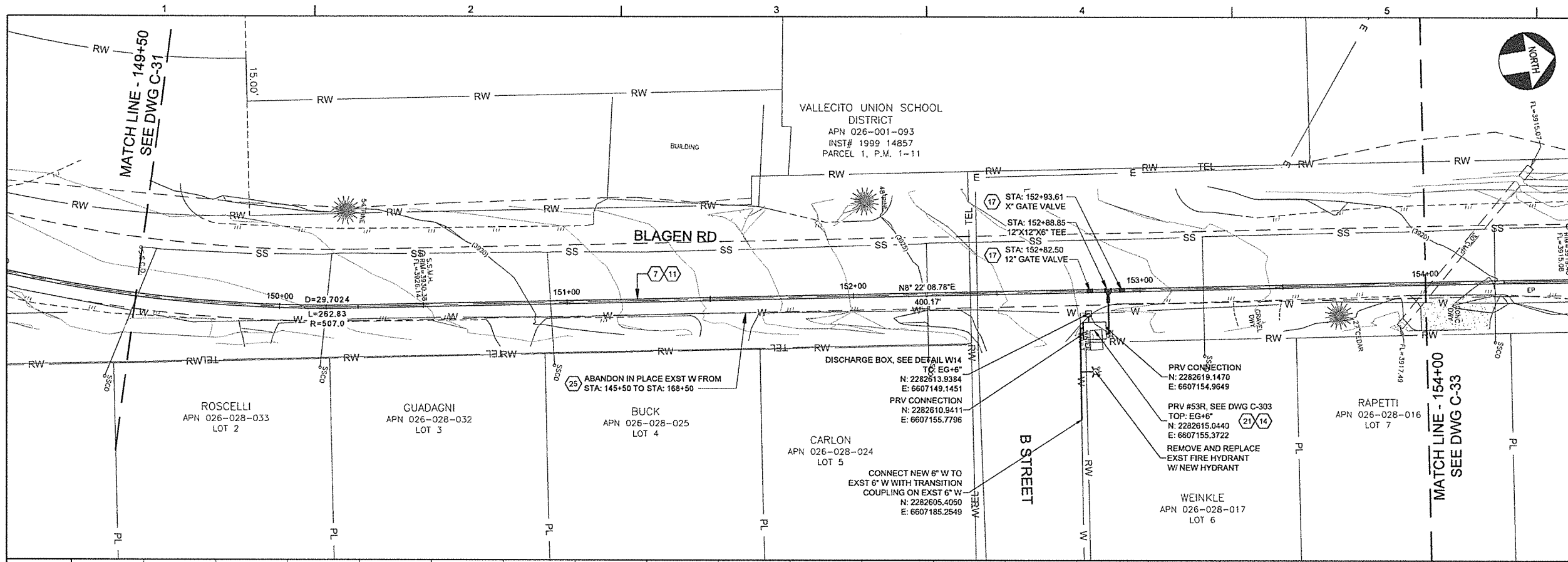
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



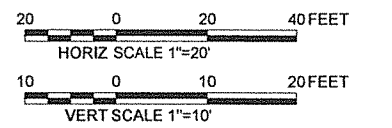
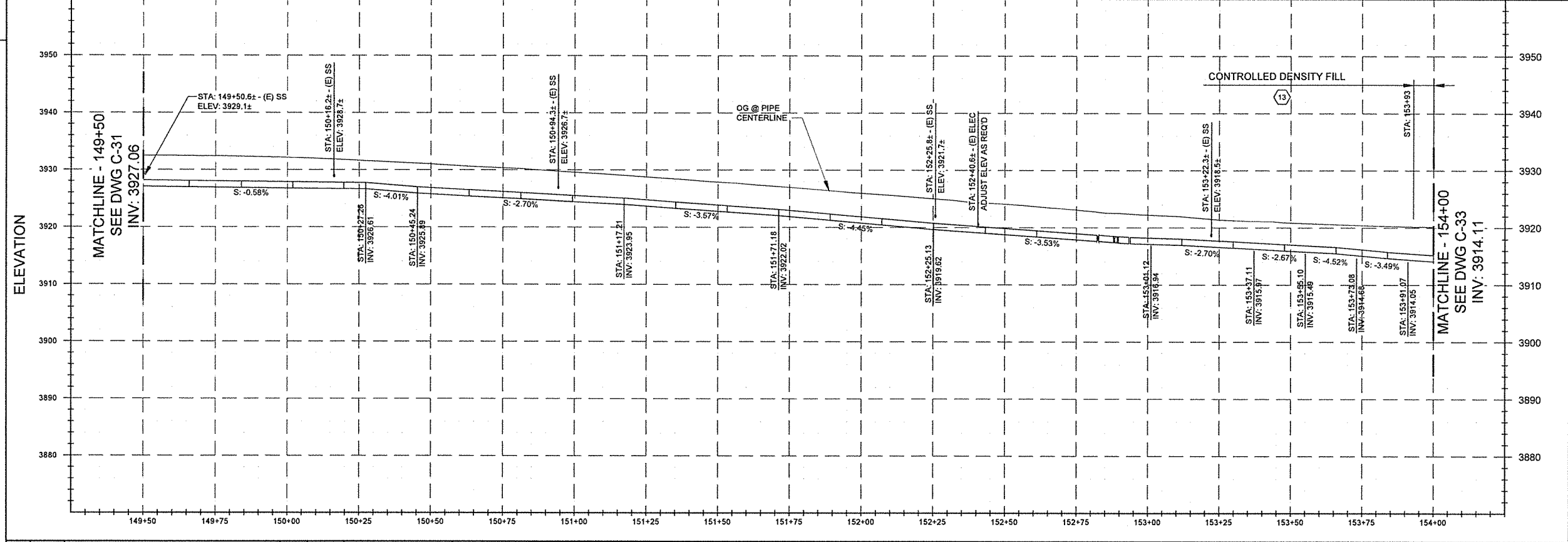
CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
145+00 TO 149+50

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-31
SHEET 40 - 62



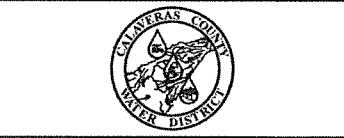
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
14	PRIVATE PROPERTY LANDSCAPING
17	12-INCH GATE VALVE
21	PRV STATION - W/ANTI-CARV TRIM
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

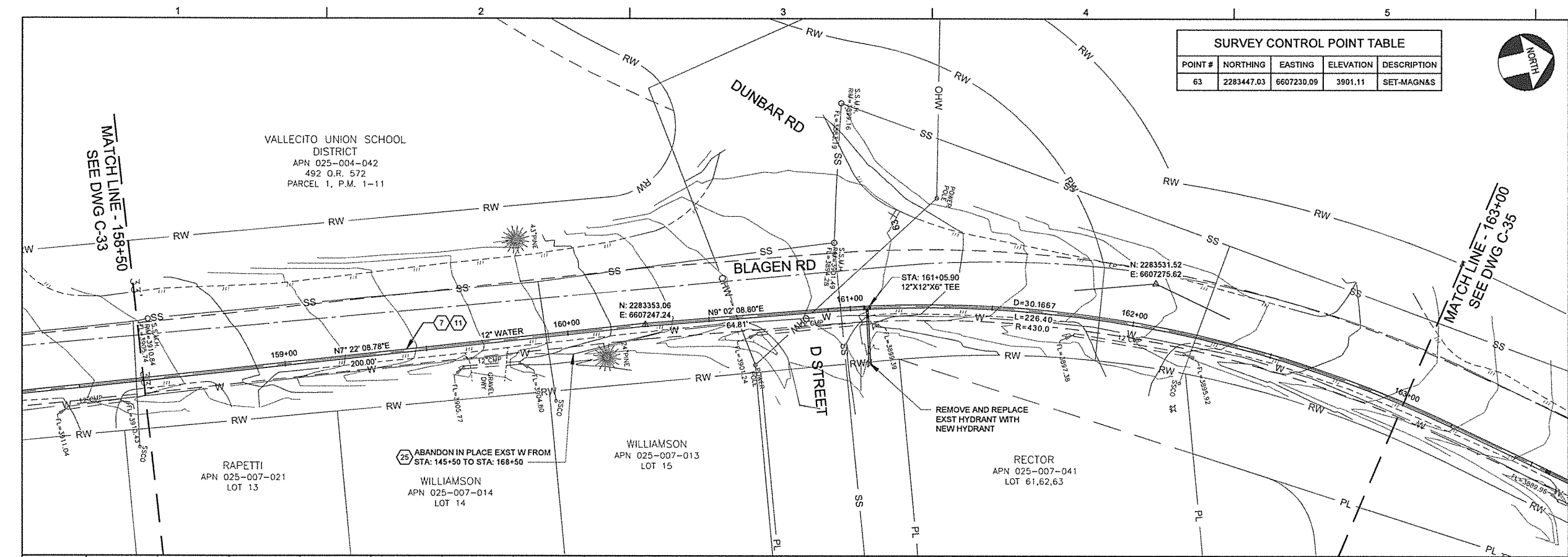
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



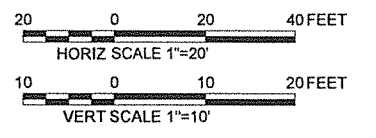
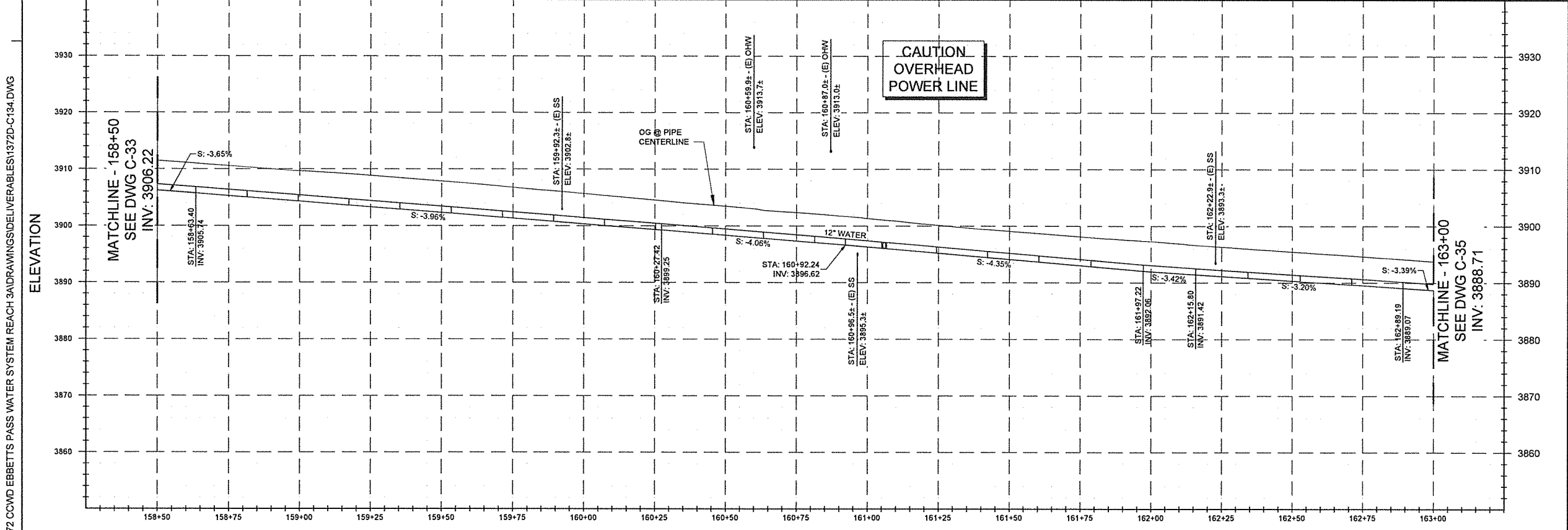
CALAVERAS COUNTY
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
149+50 TO 154+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-32
SHEET 41 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



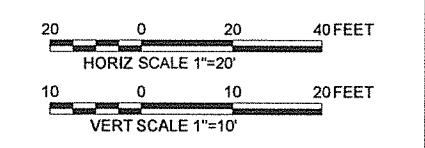
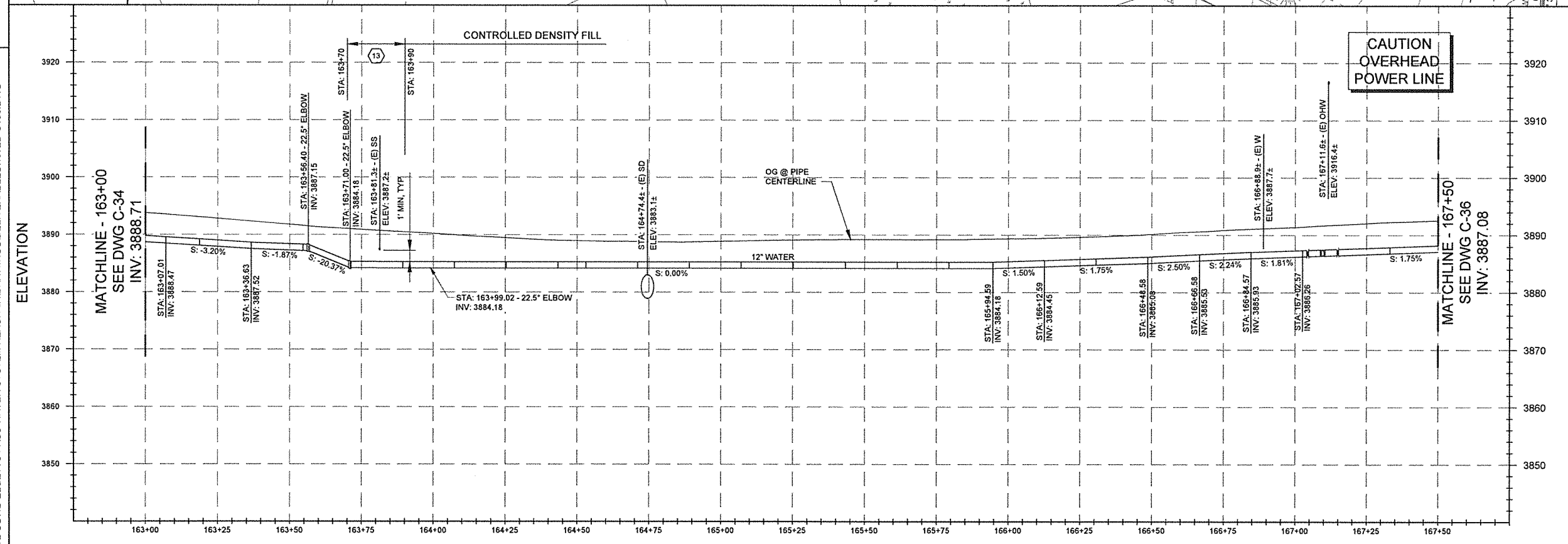
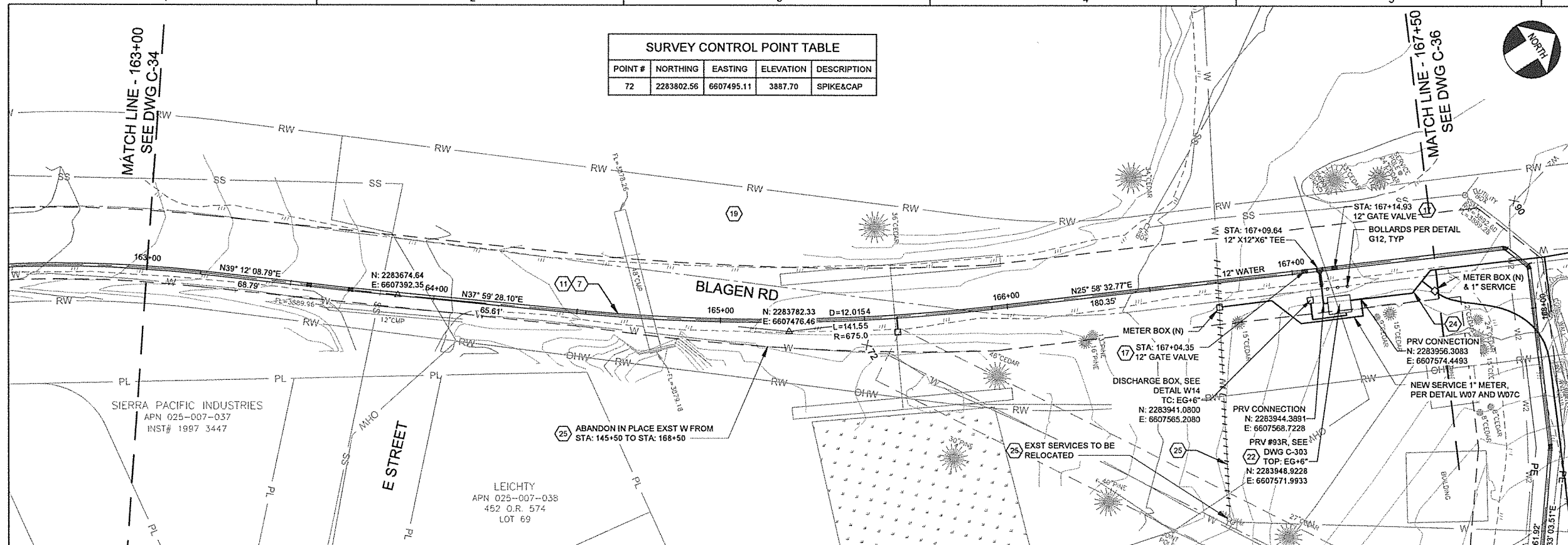
CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL
 DATE
 OCT 2015
 PROJECT NUMBER
 13-072
 DRAWING NUMBER
C-34
 SHEET 43 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
72	2283802.56	6607495.11	3887.70	SPIKE&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
13	CONTROLLED DENSITY FILL
17	12-INCH GATE VALVE
22	PRV STATION - W/ O ANTI-CARV TRIM
24	WATER SERVICE LINE
25	ABANDON EXISTING WATER LINE

NOTES:
 1. PROVIDE MINIMUM 1-FT VERTICAL CLEARANCE AND CENTER FULL STICK OF WATER PIPE UNDER SEWER MAIN AND BACKFILL WITH CONTROLLED DENSITY FILL (2-SACK CEMENT SAND SLURRY) AS NOTED ON PROFILE.

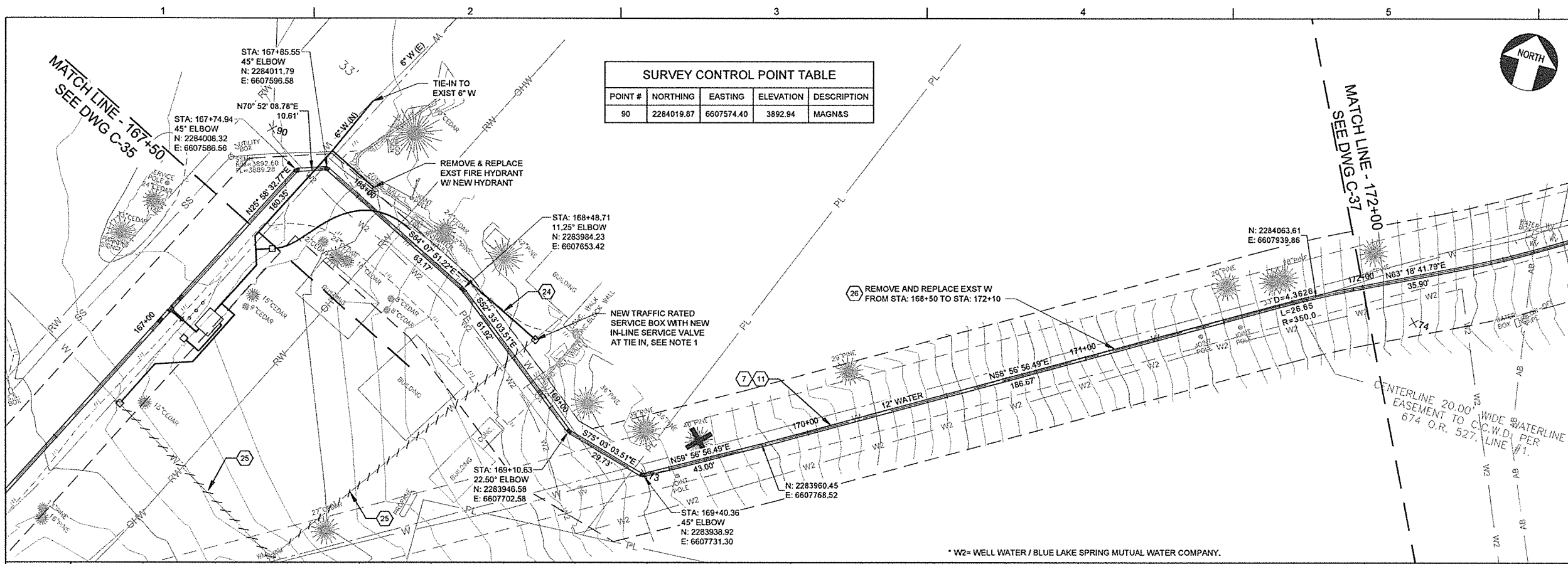


DESIGN K ALACON		BENCH MARK ELEV. 3845.47		 WATERWORKS ENGINEERS 1406 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113	 CALAVERAS COUNTY WATER DISTRICT CIVIL	DATE OCT 2015 PROJECT NUMBER 13-072 DRAWING NUMBER C-35 SHEET 44 - 62
NO.	DATE	REVISION	BY			

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATER WORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATER WORKS ENGINEERS, LLC.

K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C135.DWG

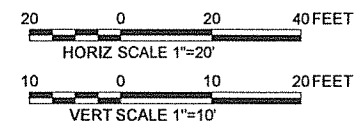
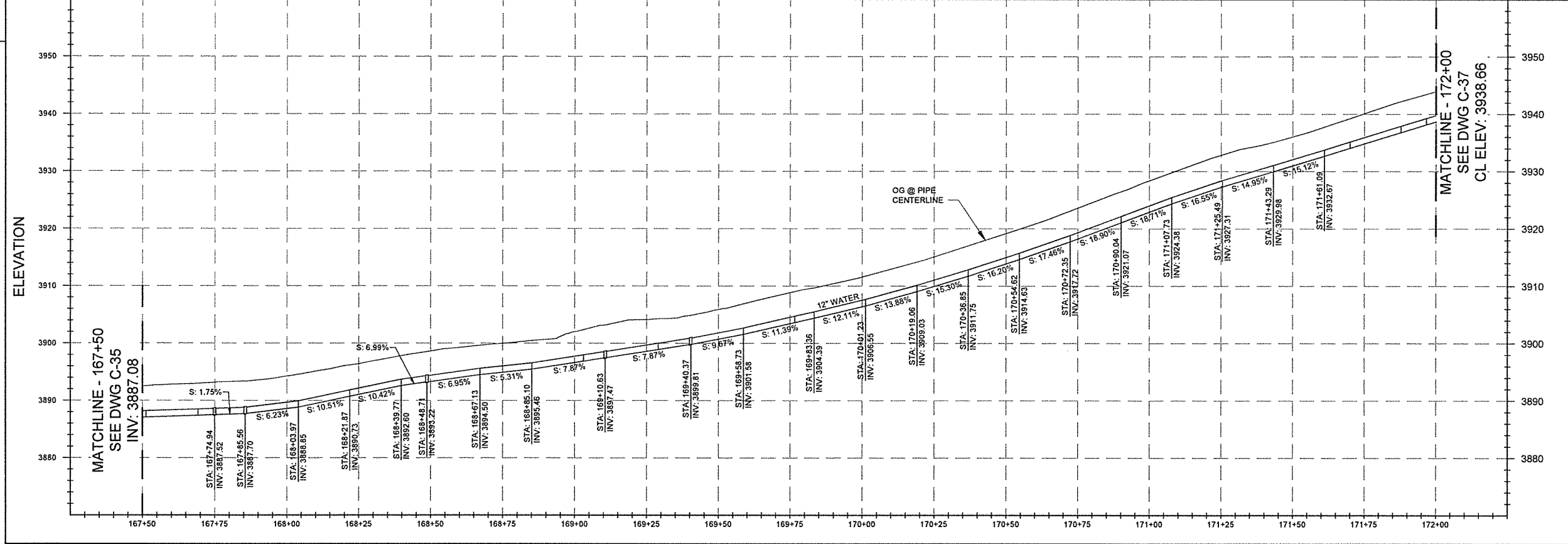
JOB NUMBER: 13-051 FILENAME: 1372D-C135.DWG PLOT DATE: 03-Oct-15 PLOT TIME: 10:49:20



SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
90	2284019.87	6607574.40	3892.94	MAGN&S

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
6	8" WATERLINE - PAVED AND UNPAVED AREA
7	12" WATERLINE - PAVED AND UNPAVED AREA
11	SURFACE RESTORATION - PAVEMENT
24	WATER SERVICE LINE
26	REMOVE EXISTING WATER LINE

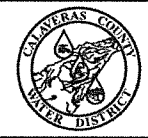
NOTES:
 1. CONTRACTOR TO LOCATE AND CONNECT TO EXISTING SERVICE LINE. SERVICE LINE SHOWN IN APPROXIMATE LOCATION.



NO.	DATE	REVISION	BY	APVD

DESIGN KALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

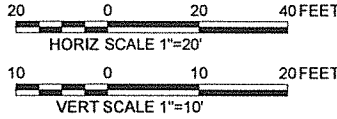
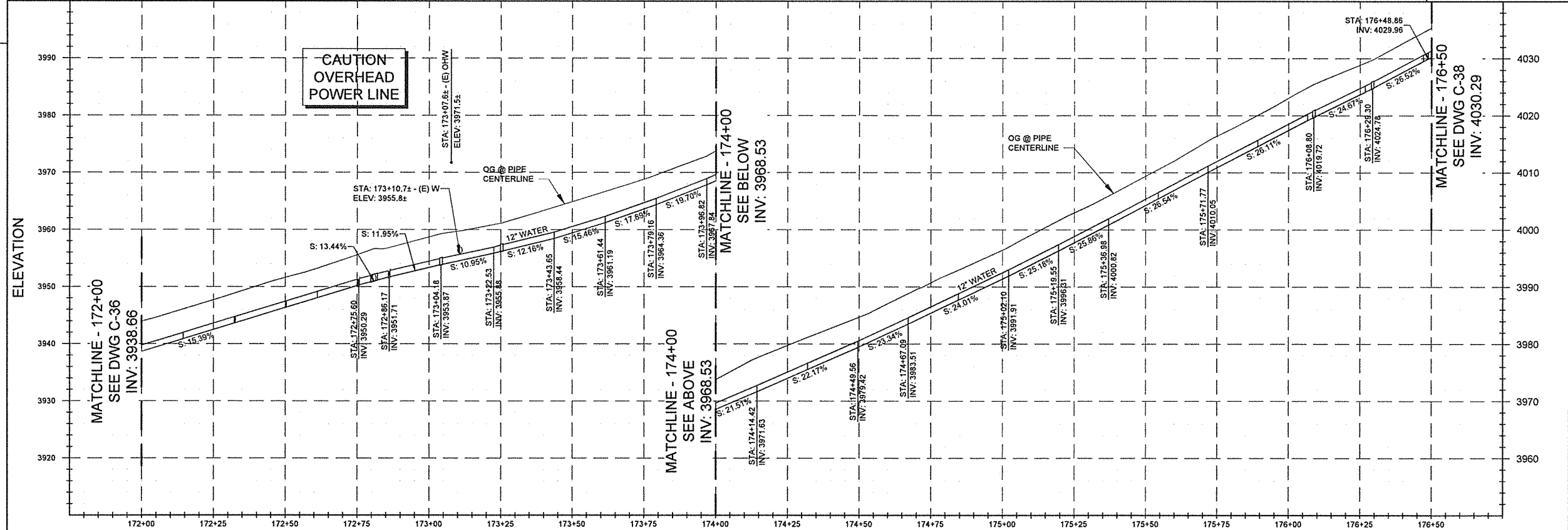
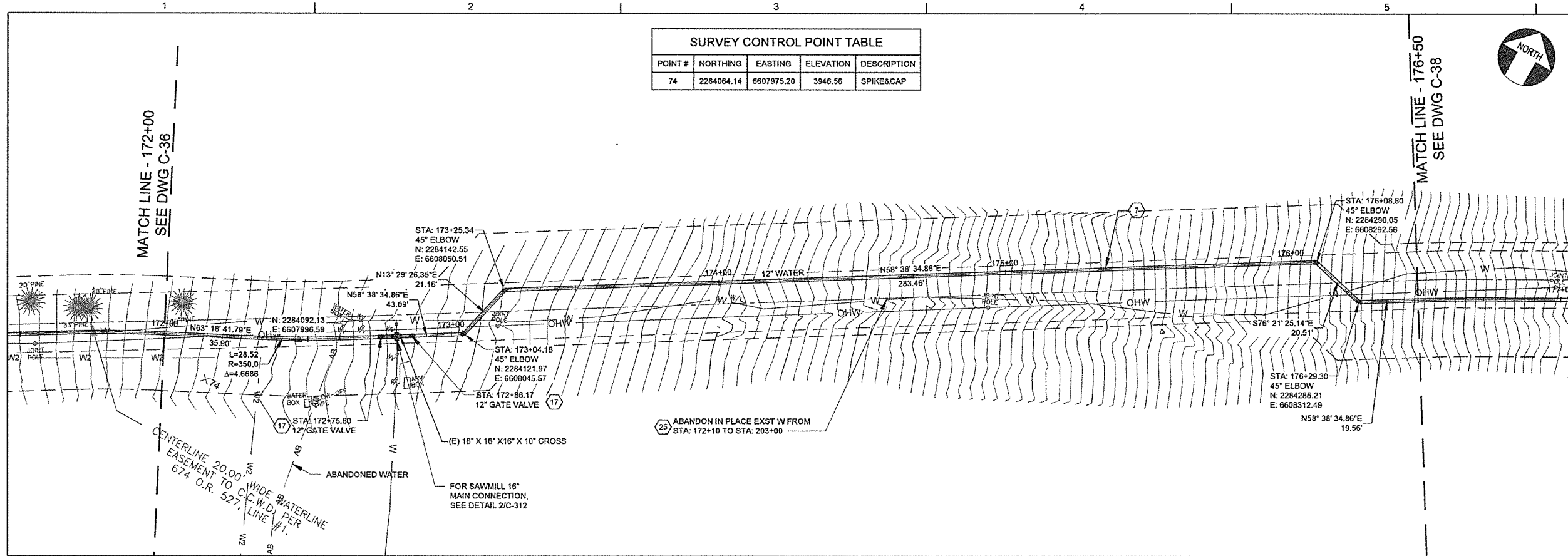


CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

CIVIL	DATE OCT 2015
PLAN AND PROFILE 167+50 TO 172+00	PROJECT NUMBER 13-072
	DRAWING NUMBER C-36
	SHEET 45 - 62

SURVEY CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
74	2284064.14	6607975.20	3946.56	SPIKE&CAP

CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
17	12-INCH GATE VALVE
25	ABANDON EXISTING WATER LINE



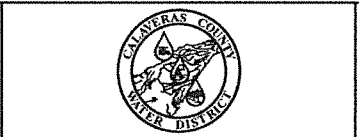
NO.	DATE	REVISION	BY	APVD

DESIGN	K ALACON
DRAWN	P WEBSTER
CHECKED	M FISHER
APPROVED	M FISHER

BENCH MARK ELEV. 3845.47

DESCRIPTION
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

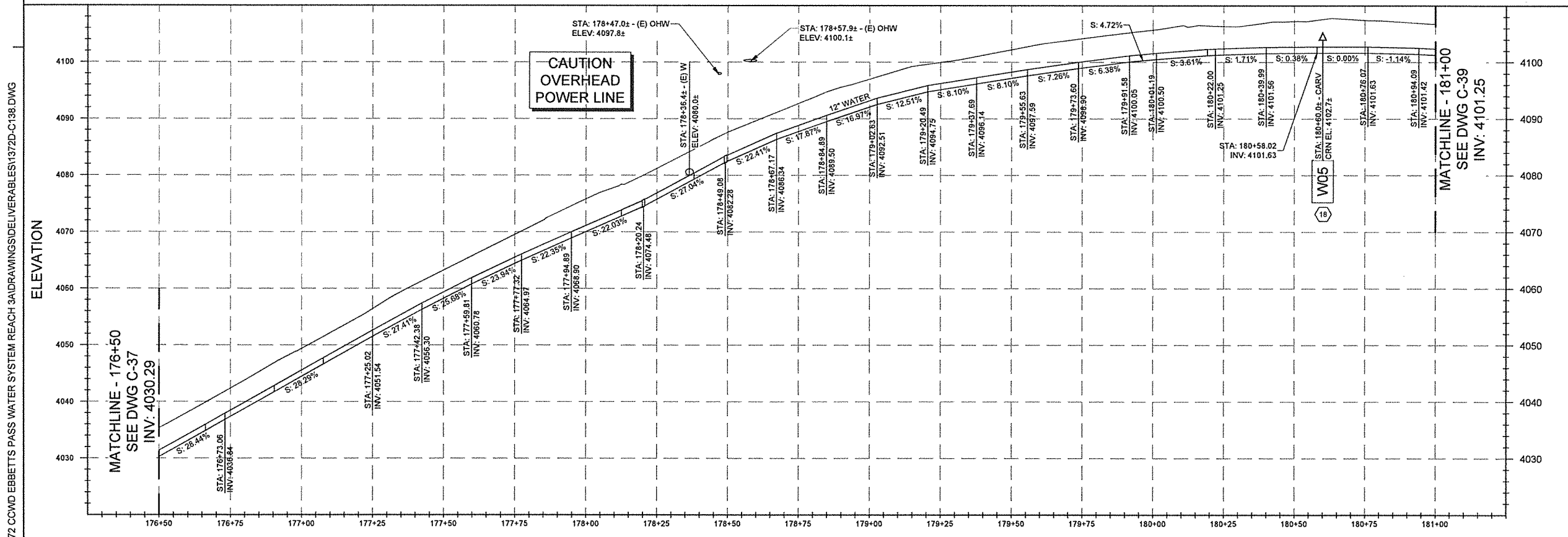
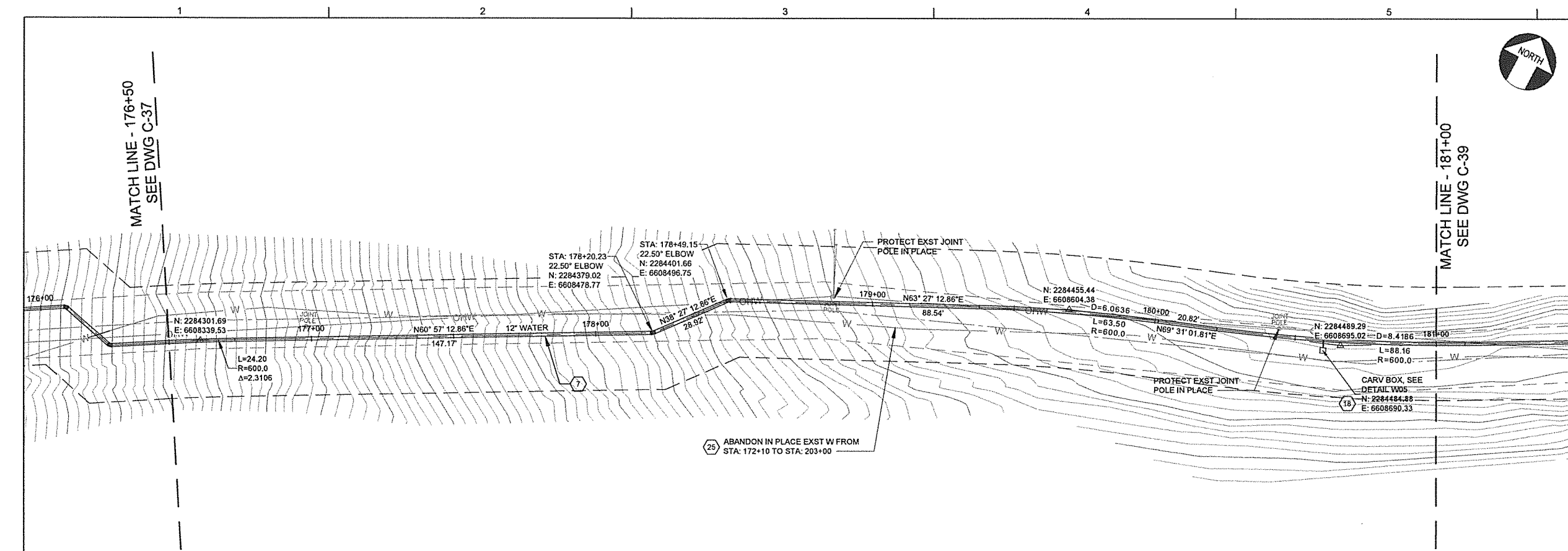
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



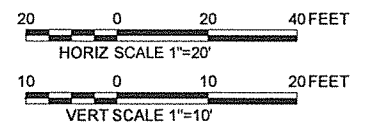
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
172+00 TO 176+50

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-37
SHEET	46 - 62



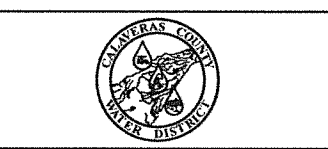
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

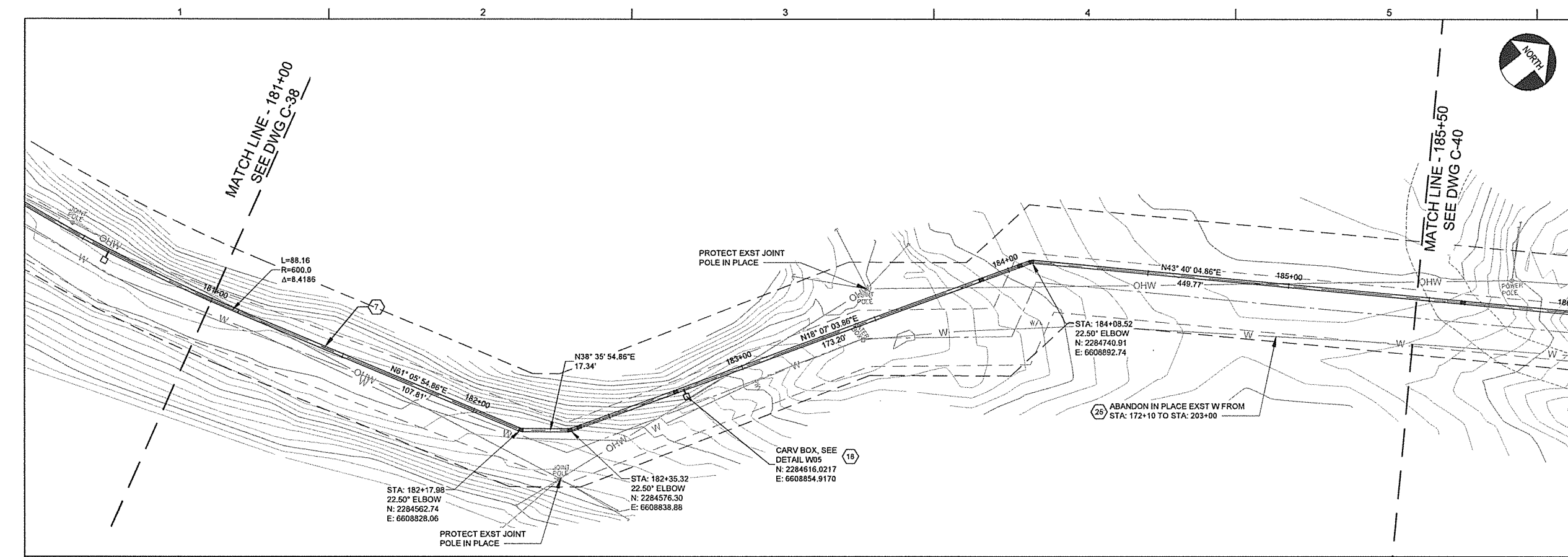
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



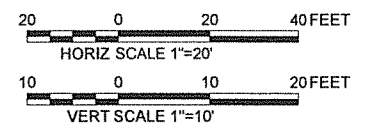
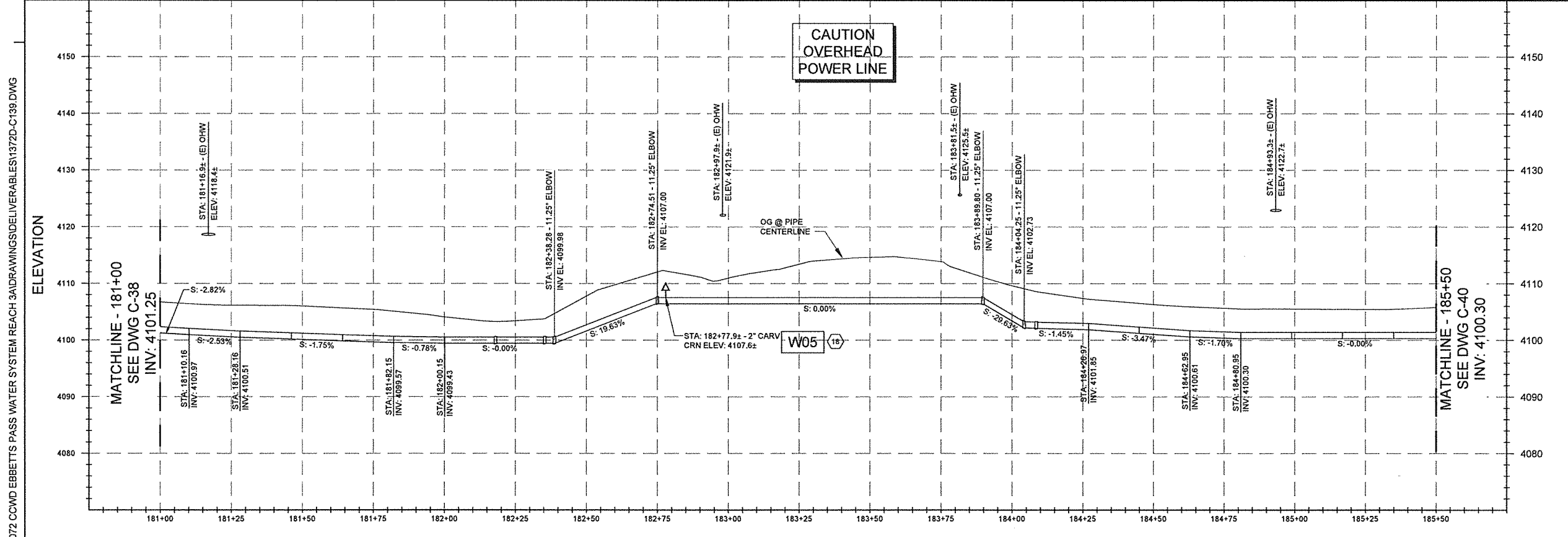
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
176+50 TO 181+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-38
SHEET 47 - 62



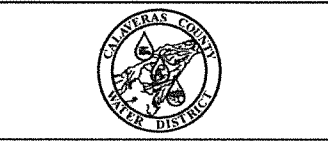
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

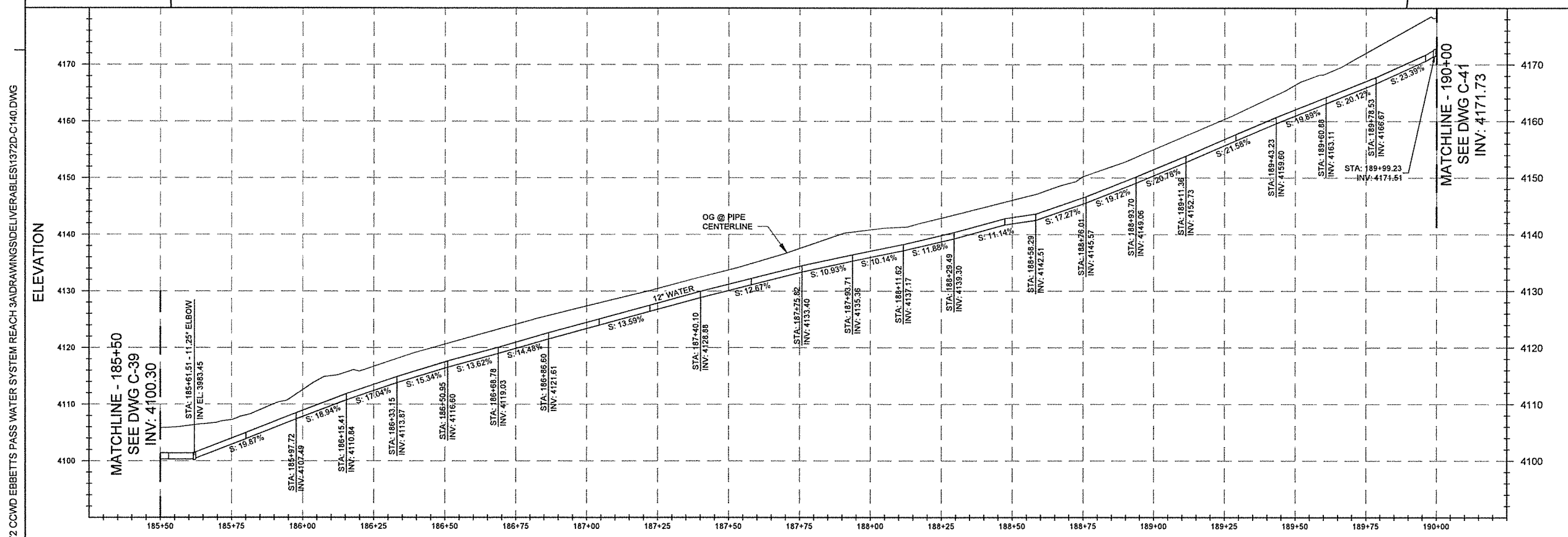
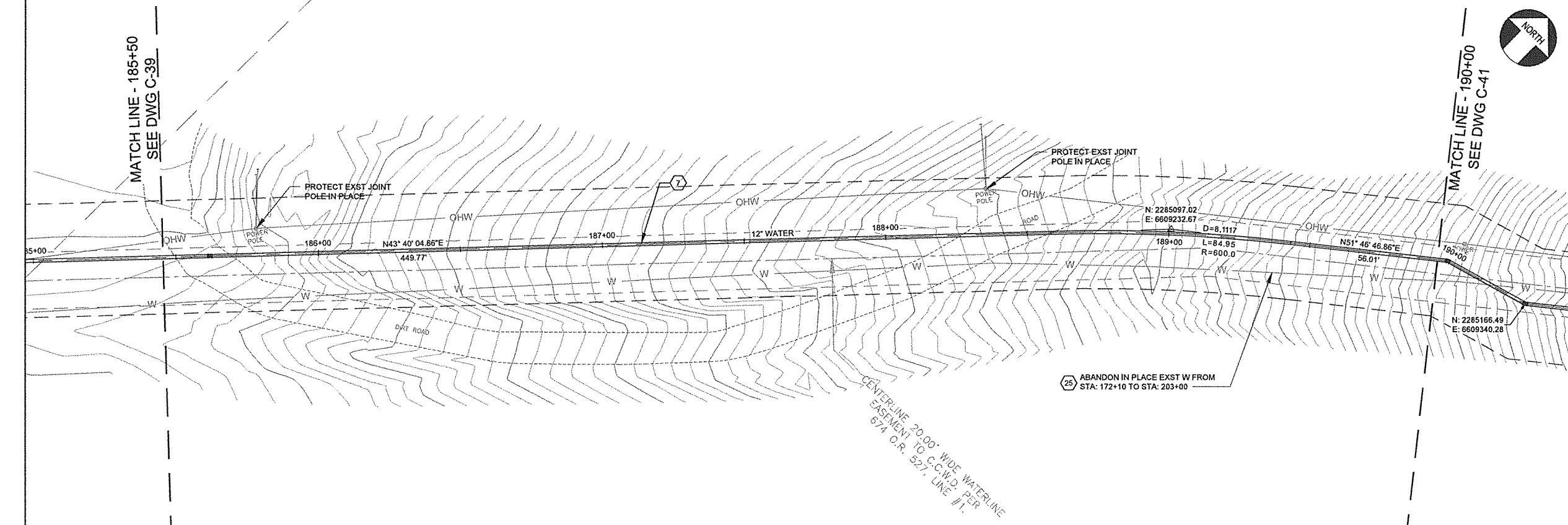
DESIGN K ALACON	BENCH MARK DESCRIPTION ELEV. 3845.47
DRAWN P WEBSTER	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

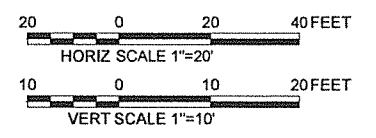


CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL	DATE OCT 2015
PLAN AND PROFILE 181+00 TO 185+50	PROJECT NUMBER 13-072
	DRAWING NUMBER C-39
	SHEET 48 - 62



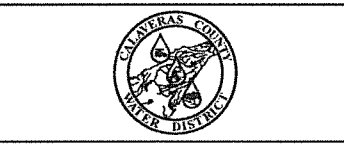
CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
25	ABANDON EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

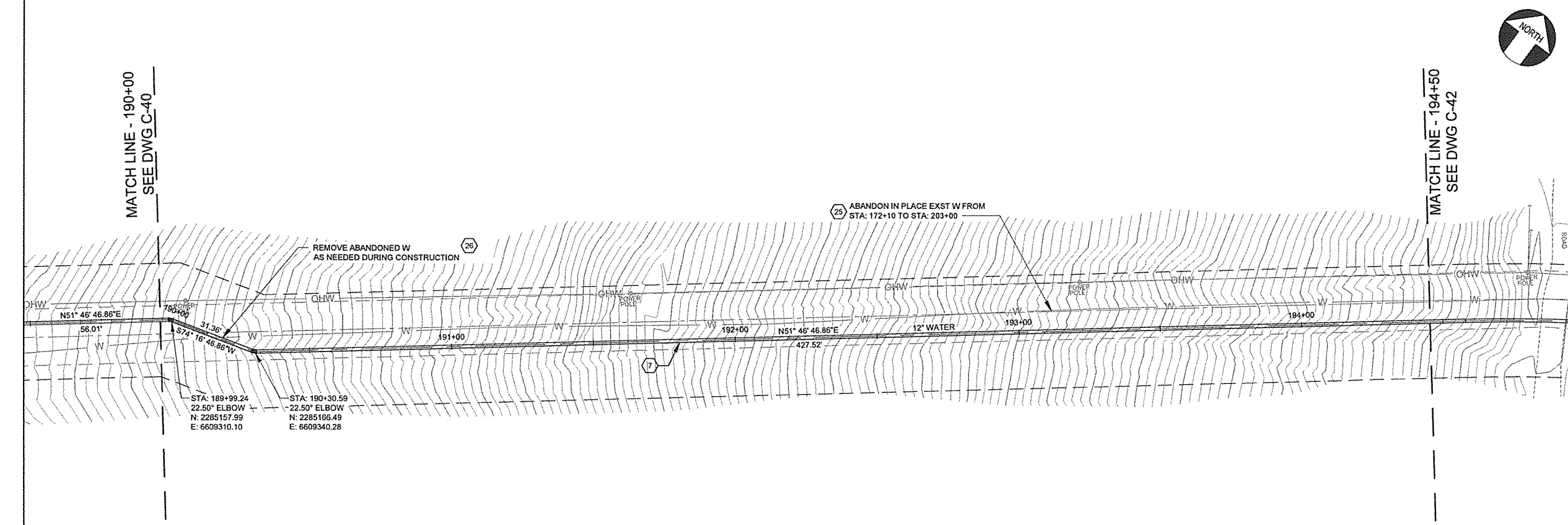
DESIGN K ALACON	BENCH MARK DESCRIPTION ELEV. 3845.47 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

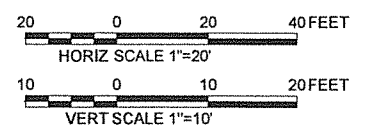
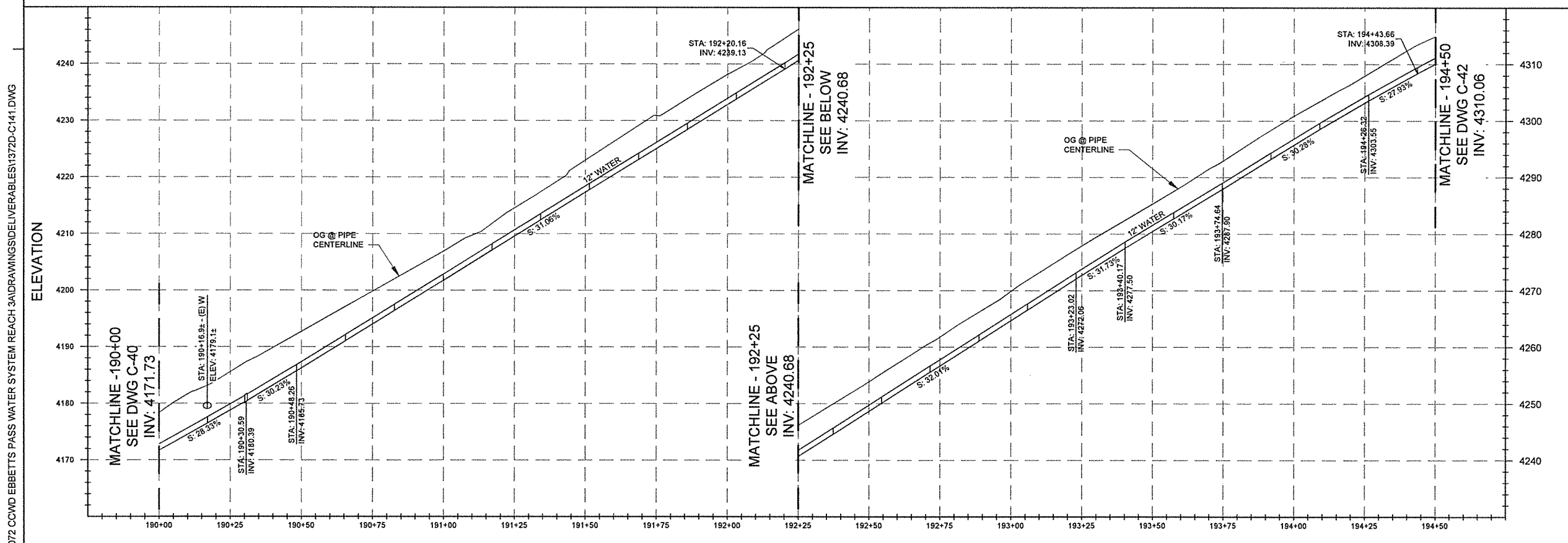


CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL	DATE OCT 2015
PLAN AND PROFILE 185+50 TO 194+50	PROJECT NUMBER 13-072
	DRAWING NUMBER C-40
	SHEET 49 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	



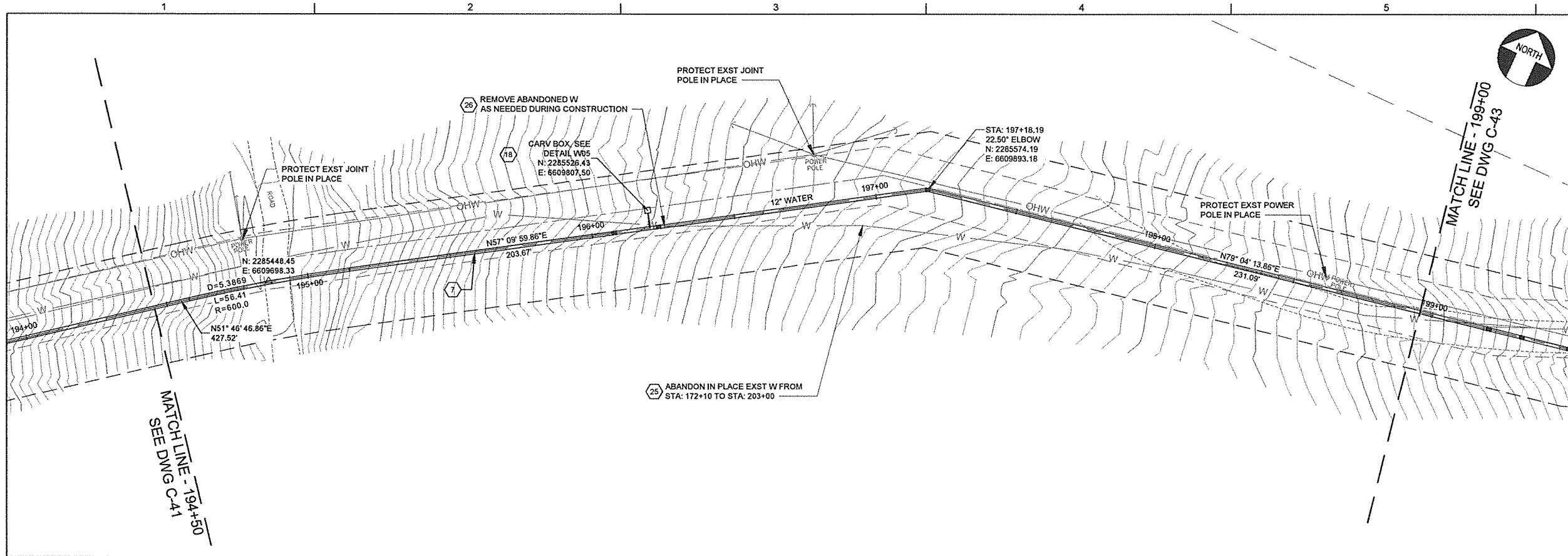
WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



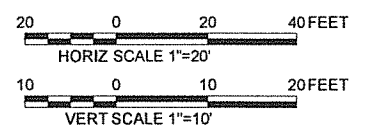
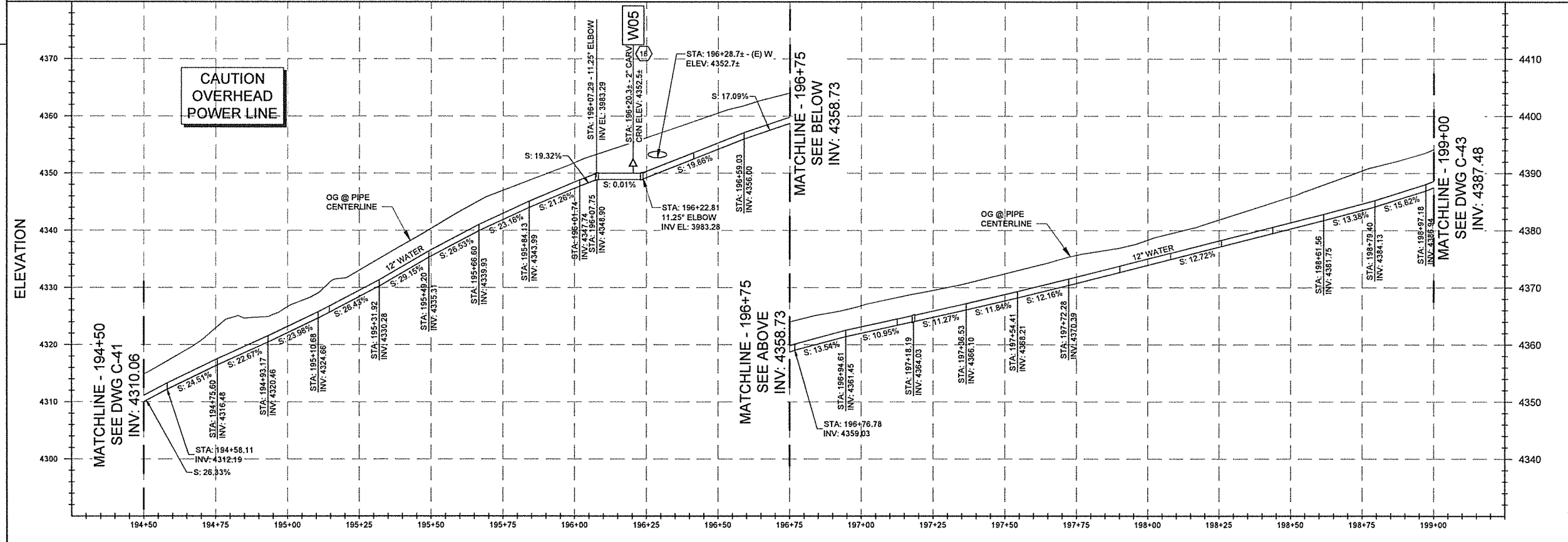
CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
190+00 TO 194+50

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-41
SHEET 50 - 62

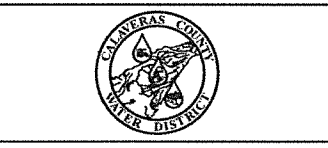


CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
18	2-INCH COMBINATION AIR RELEASE VALVE ASSEMBLY
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE



NO.	DATE	REVISION	BY	APVD

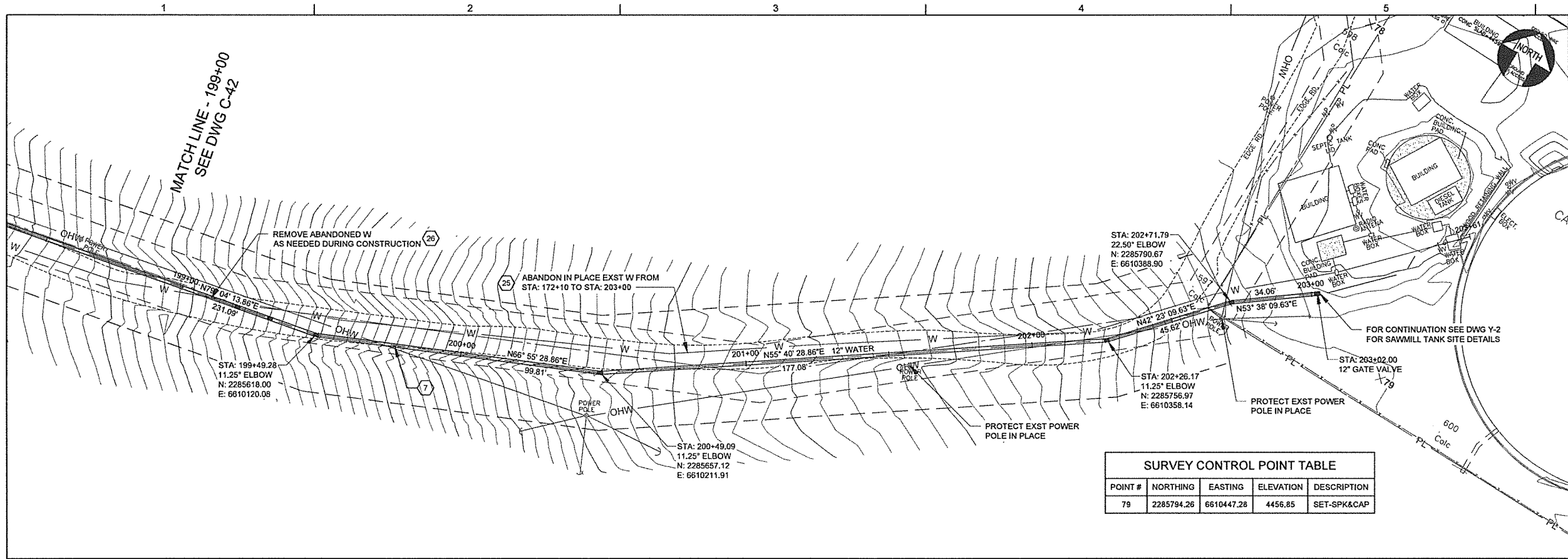
DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	



CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

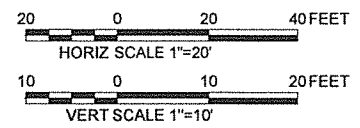
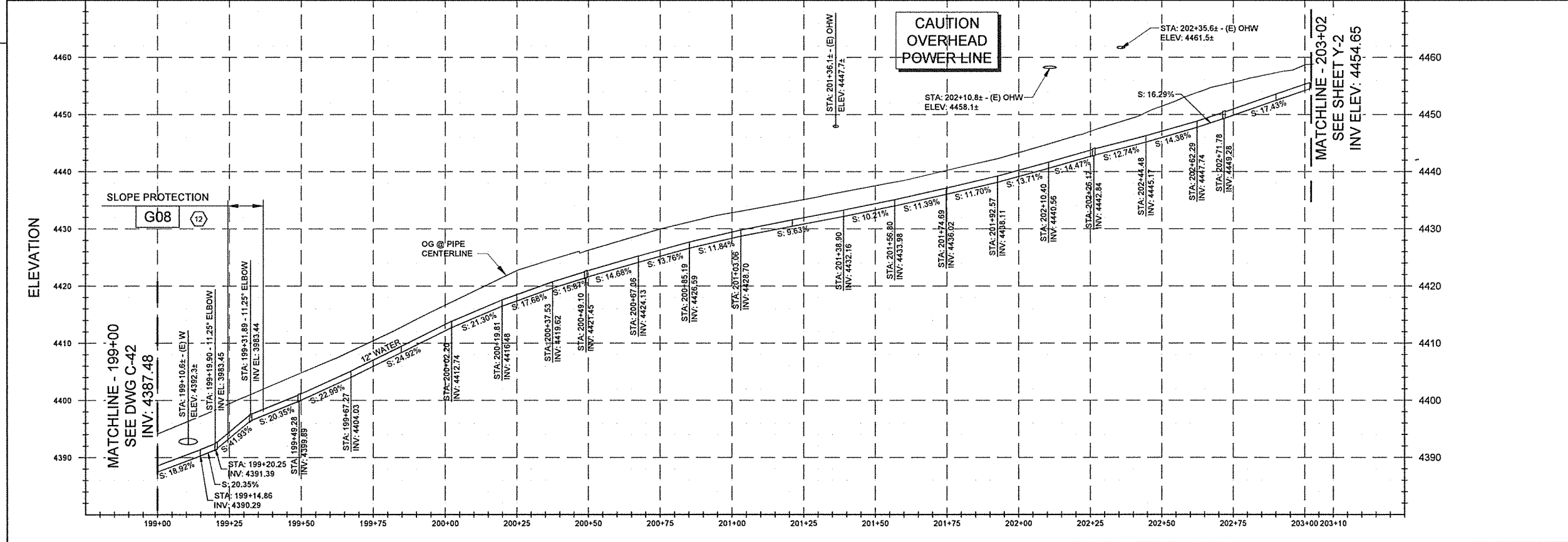
CIVIL
PLAN AND PROFILE
194+50 TO 199+00

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-42
SHEET 51 - 62



CONSTRUCTION ITEM TABLE	
NO.	DESCRIPTION
7	12" WATERLINE - PAVED AND UNPAVED AREA
12	SLOPE PROTECTION
25	ABANDON EXISTING WATER LINE
26	REMOVE EXISTING WATER LINE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
79	2285794.26	6610447.28	4456.85	SET-SPK&CAP



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION ELEV. 3845.47 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	

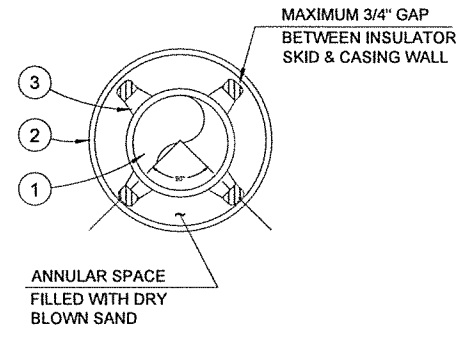
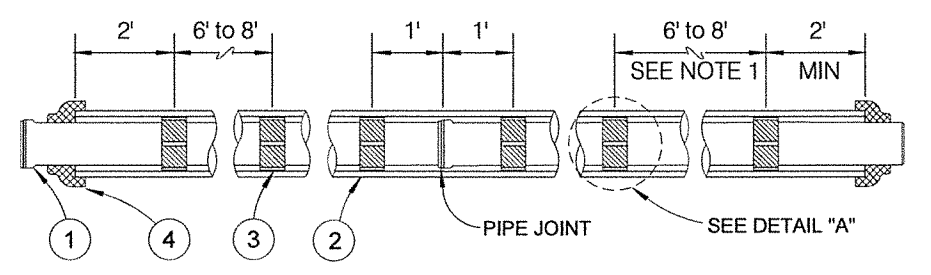
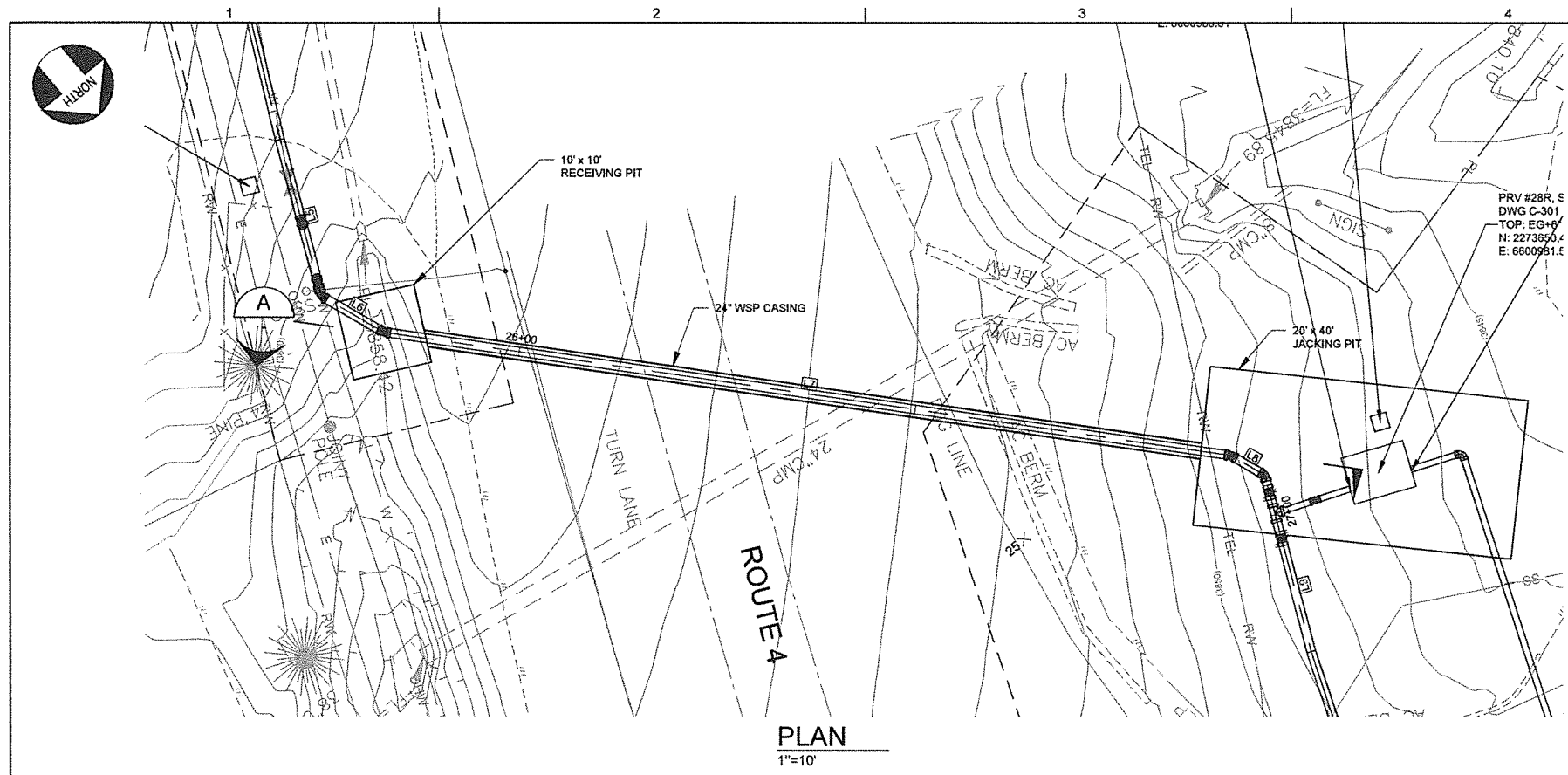
WATERWORKS ENGINEERS

1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

CIVIL
PLAN AND PROFILE
199+00 TO 203+10

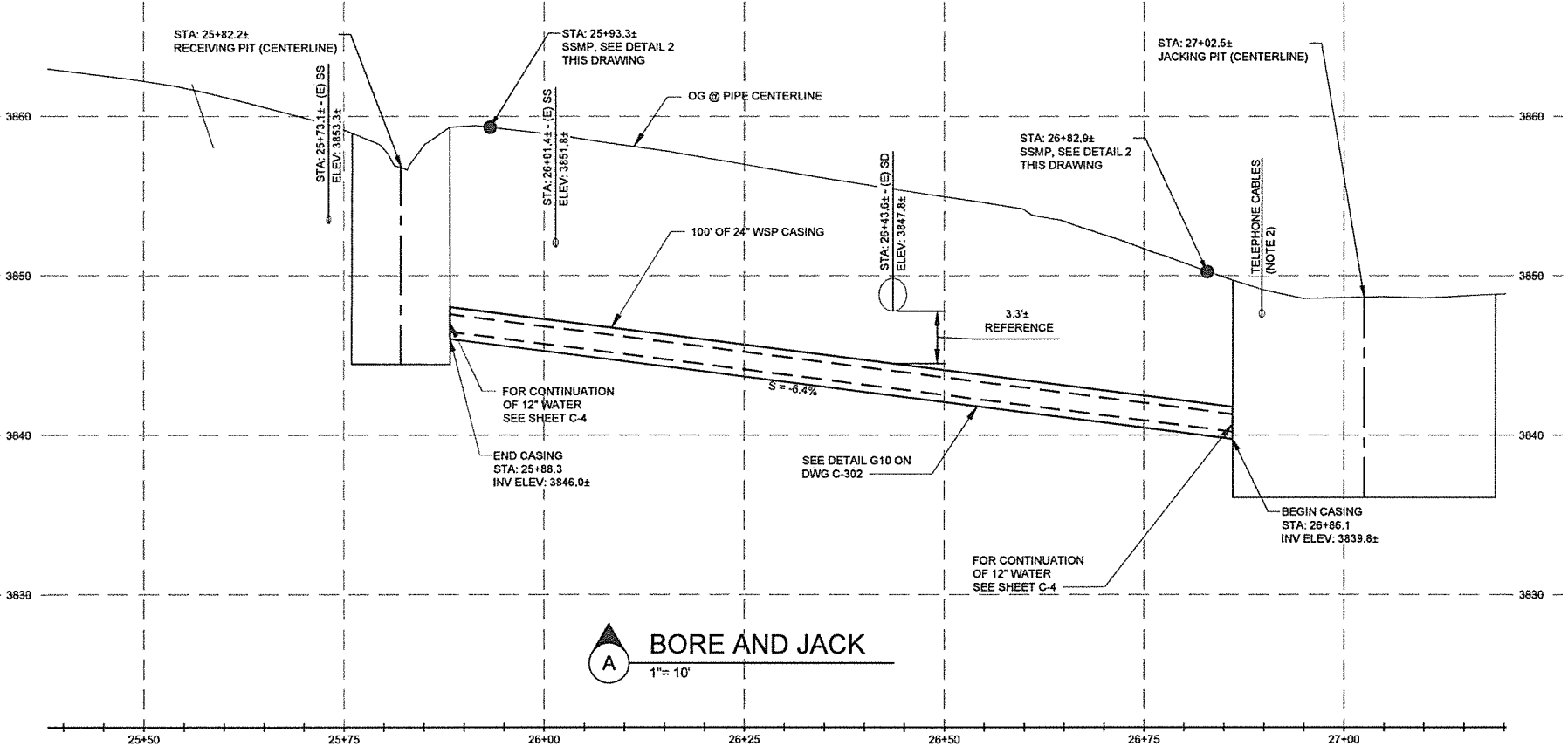
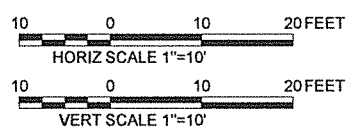
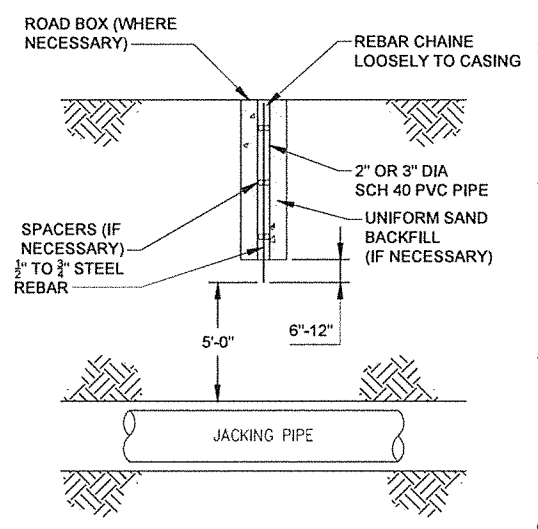
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-43
SHEET 52 - 62



1 CASING DETAIL
NTS

ITEM	DESCRIPTION
1	12-INCH CARRIER / WATER MAIN, CLASS 350 DUCTILE IRON PIPE WITH RESTRAINED JOINTS (U.S. PIPE TR-FLEX, AMERICAN FLEX-RING OR EQUAL)
2	24-INCH STEEL CASING PIPE WITH 0.25-INCH THICK WALL, AND ALL JOINTS FULLY BUTT WELDED
3	INSULATORS, 8-INCH WIDE VINYL COATED STEEL BAND, 2" WIDE RUNNERS, CENTERED AND RESTRAINED (CALPICO, GPT INDUSTRIES OR EQUAL)
4	END SEALS, SYNTHETIC RUBBER, WRAP AROUND WITH SELF-ADHERING SEAM OR SLIP-ON BOOT, STAINLESS STEEL BANDS (CALPICO, GPT INDUSTRIES OR EQUAL)

- NOTES:
- PROVIDE MINIMUM THREE SPACERS PER STANDARD LENGTH 18' TO 20' DUCTILE IRON PIPE AND PLACE TO SUPPORT EACH SIDE OF JOINTS AND CENTER MIDDLE INSULATOR EQUALLY FROM ENDS.
 - ALL WORK SHALL CONFORM TO REQUIREMENTS OF THE CAL-TRANS ENCROACHMENT PERMITS MANUAL SECTION 623.1, 623.1A AND 623.1B, AND SPECIFIC TERMS AND CONDITIONS OF THE ISSUED ENCROACHMENT PERMIT.
 - CONTRACTOR SHALL OBTAIN A PROJECT OR ANNUAL PERMIT FOR EXCAVATIONS FOR SUBJECT WORK IN CONFORMANCE WITH CAL-OSHA REGULATIONS. ALL PITS SHALL BE SHEETED, SHORED AND BRACED ACCORDING TO THE DIVISION OF INDUSTRIAL SAFETY, CONSTRUCTION SAFETY ORDERS, ARTICLE 6, EXCAVATIONS, SECTIONS 1539-1543.
 - BORE AND RECEIVING PITS SHALL CONFORM TO CAL-TRANS ENCROACHMENT PERMITS MANUAL, SECTION 623.1B AND ADEQUATELY SHORED TO ENSURE AGAINST GROUND MOVEMENT AND TO SAFEGUARD EXISTING SURFACE IMPROVEMENTS AND SUBSTRUCTURES. PITS SHALL NOT AFFECT STATE FACILITIES OR CREATE A HAZARD TO TRAVELING PUBLIC; DAMAGE TO STATE FACILITIES SHALL BE REPLACED IN-KIND OR REPAIRED TO ORIGINAL CONDITION.
 - ALL PITS SHALL BE FENCED AND TYPE-K BARRIER PLACED FOR PROTECTION; TYPE-K RAILING SHALL BE PLACED AT 20:1 TAPER OR AS OTHERWISE DIRECTED BY CAL-TRANS REPRESENTATIVE. PITS LEFT OPEN OVERNIGHT SHALL HAVE A 6-FT HIGH FENCE WITH PANEL SECTIONS SECURELY FASTENED TOGETHER FOR PEDESTRIAN SAFETY. REFLECTORS SHALL BE SECURED TO SIDES OF FENCE THAT FACE TRAFFIC.
 - SUBSURFACE MONITORING POINTS SHALL BE INSTALLED AND SURVEYED PRIOR TO STARTING WORK. POINTS SHALL BE MONITORED REGULARLY DURING BORE AND JACK OPERATIONS AND CAL-TRANS REPRESENTATIVE NOTIFIED IMMEDIATELY OF ANY GROUND MOVEMENT OR CHANGE IN ELEVATION.

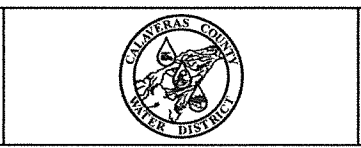


K:\PROJECTS\13-072 COWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C144.DWG

NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK ELEV. 3845.47
DRAWN P WEBSTER	DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED M FISHER	
APPROVED M FISHER	

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

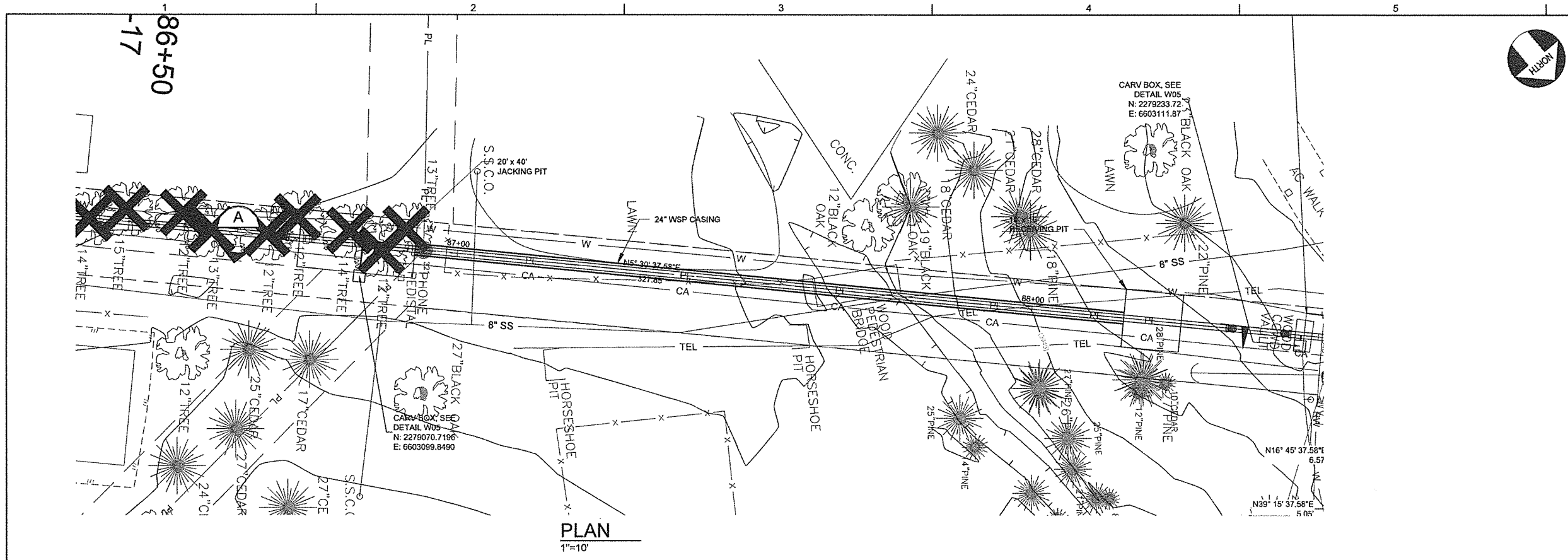


CALAVERAS COUNTY
WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

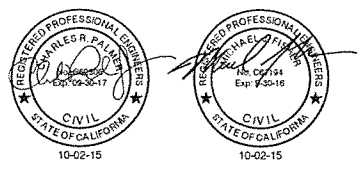
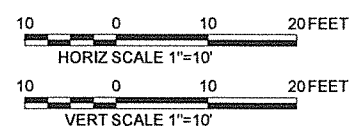
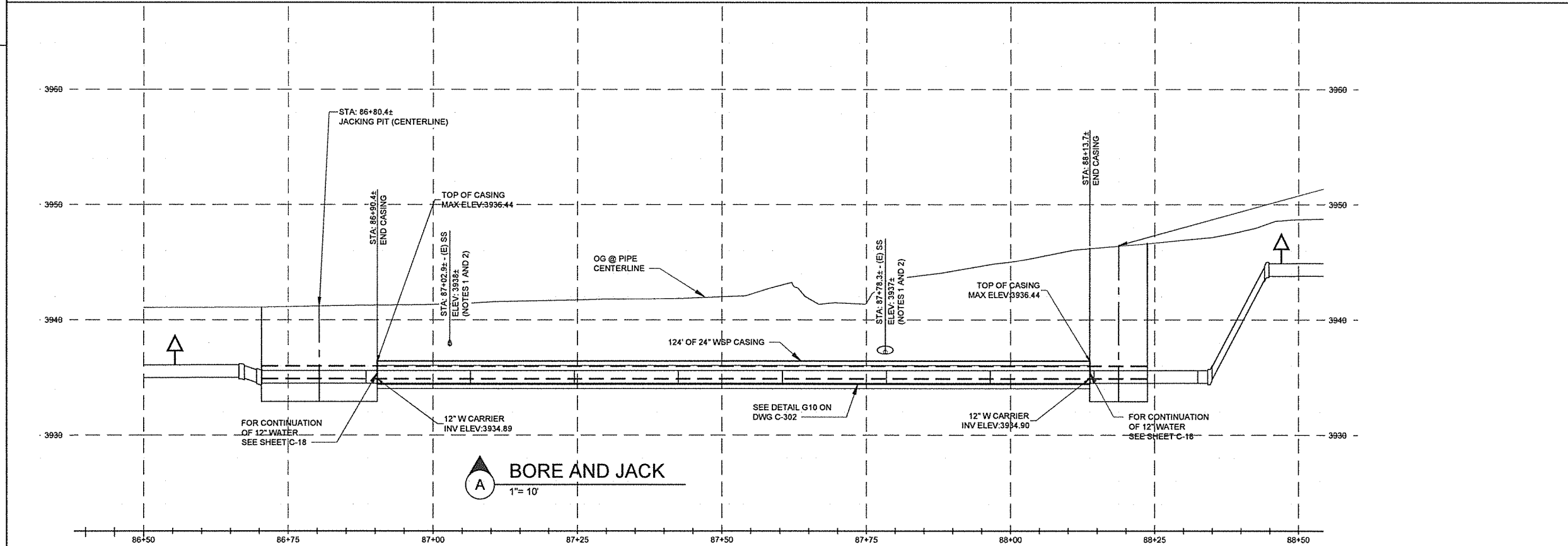
CIVIL
BORE AND JACK
DETAIL 1 1

DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-44
SHEET 53 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3\DRAWINGS\DELIVERABLES\1372D-C145.DWG



- NOTES:**
1. POTHOLE AND VERIFY INVERT OF EXISTING 8" SS AT LOCATION OF BORE AND JACK CROSSING.
 2. EXPOSE 8" SS DURING BORE AND JACK TO AVOID CONFLICT BETWEEN CASING AND 8" SS.
 3. DEWATER AND DIVERT STREAM FLOW AROUND WORK ZONE PER SECTION 401/404 AND SECTION 1600 PERMITS.



NO.	DATE	REVISION	BY	APVD

DESIGN	K ALACON
DRAWN	P WEBSTER
CHECKED	M FISHER
APPROVED	M FISHER

BENCHMARK ELEV. 3845.47

DESCRIPTION
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER



WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

CIVIL
BORE AND JACK
DETAIL 2 2

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-45
SHEET	54 - 62

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATERWORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATERWORKS ENGINEERS, LLC.

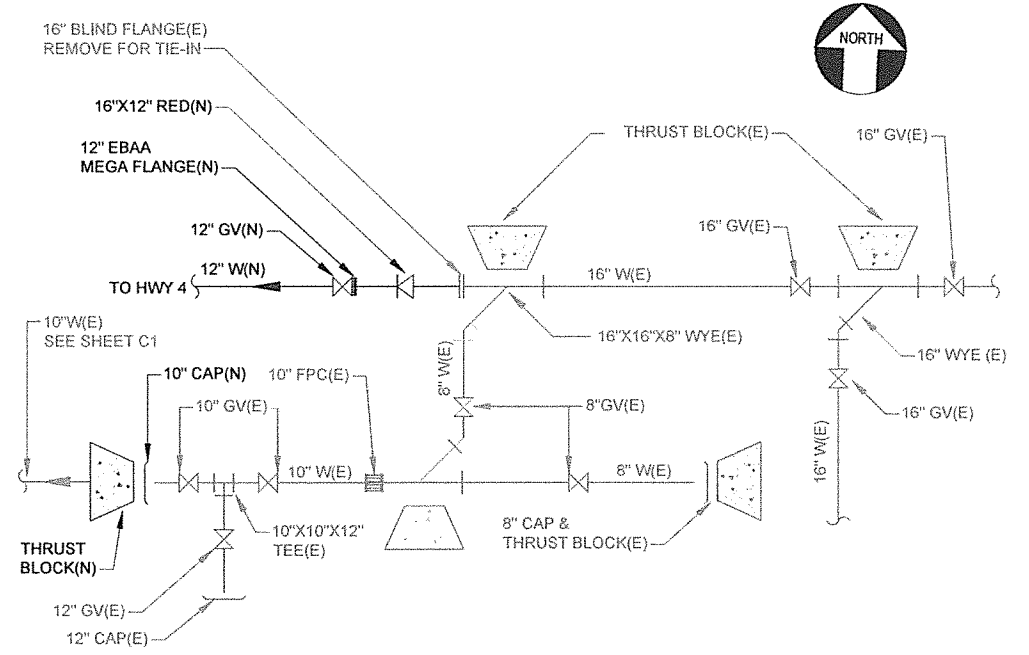
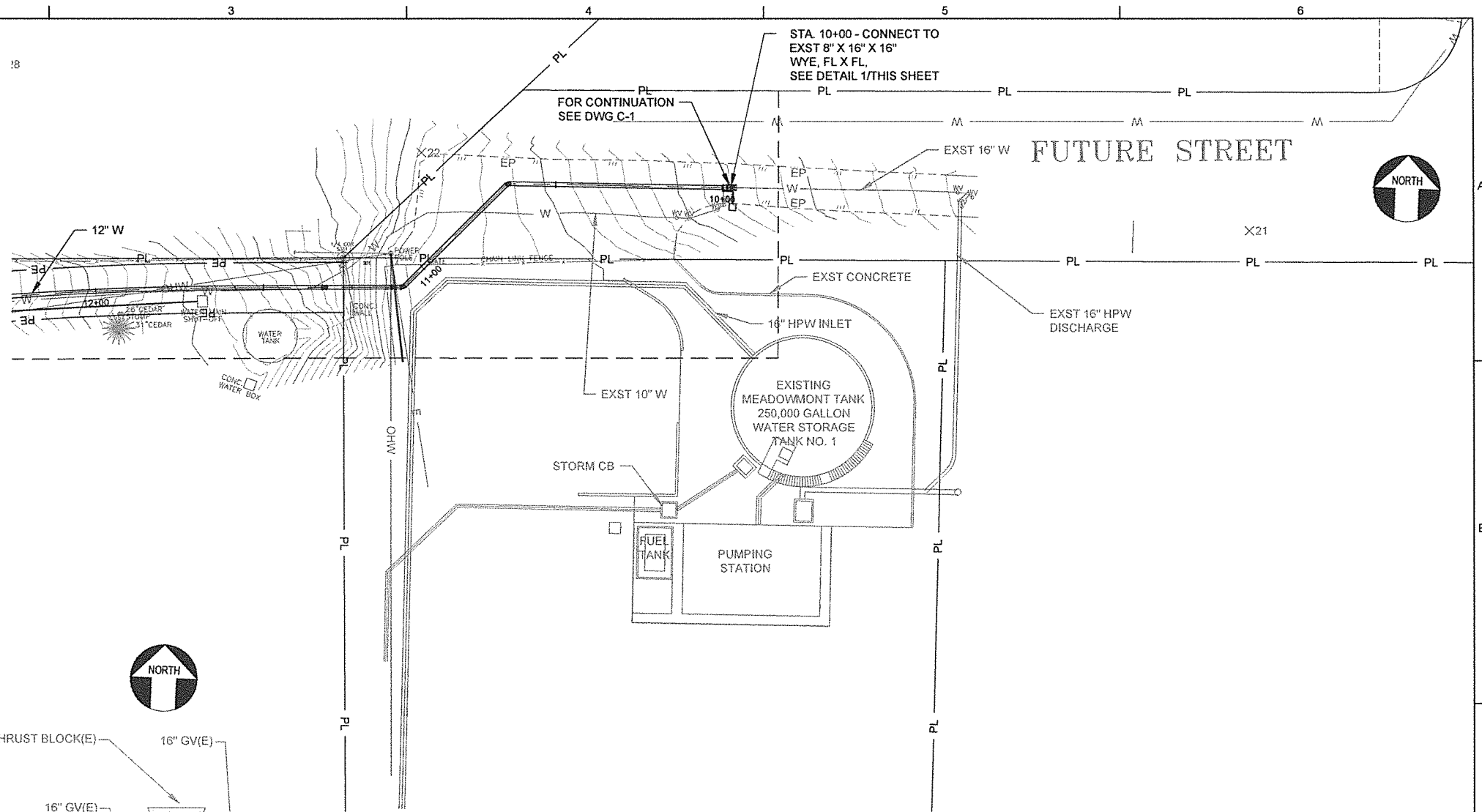
JOB NUMBER: 13-051

FILENAME: 1372D-C145.DWG

PLOT DATE: 02-Oct-15

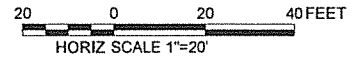
PLOT TIME: 22:53:20

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-Y-1.DWG



1 CONNECTION DETAIL
NTS

NOTE: REMOVE BF AT END OF EXIST WYE PRIOR TO INSTALLATION OF REDUCER



DESIGN	K ALACON
DRAWN	P WEBSTER
CHECKED	M FISHER
APPROVED	M FISHER

BENCHMARK	ELEV. 3845.47
DESCRIPTION	
5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.	

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

YARD PIPING
MEADOWMONT TANK SITE

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	Y-1
SHEET	55 - 62

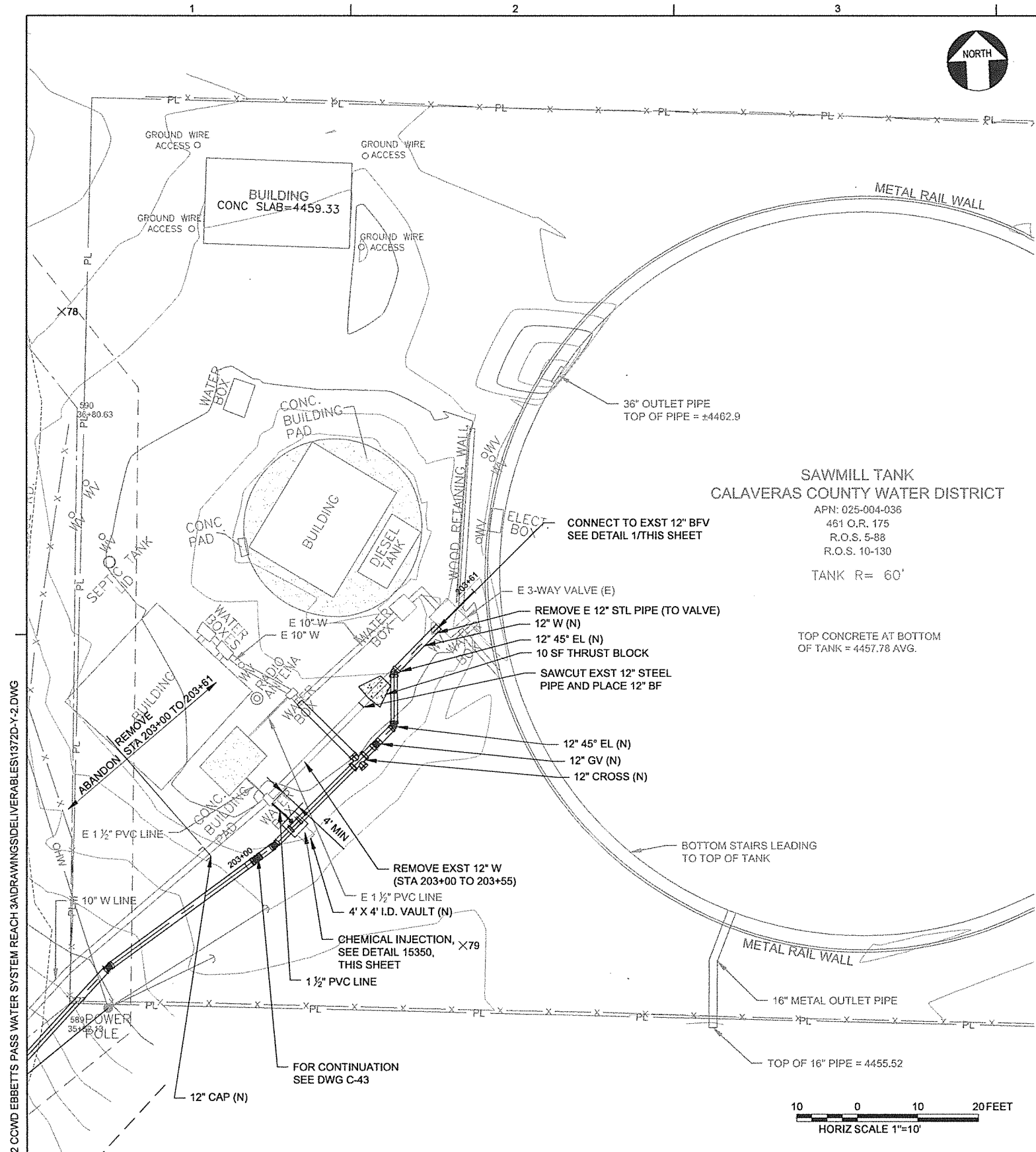
REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WATERWORKS ENGINEERS, LLC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATERWORKS ENGINEERS, LLC.

JOB NUMBER: 13-051

FILENAME: 1372D-Y-1.DWG

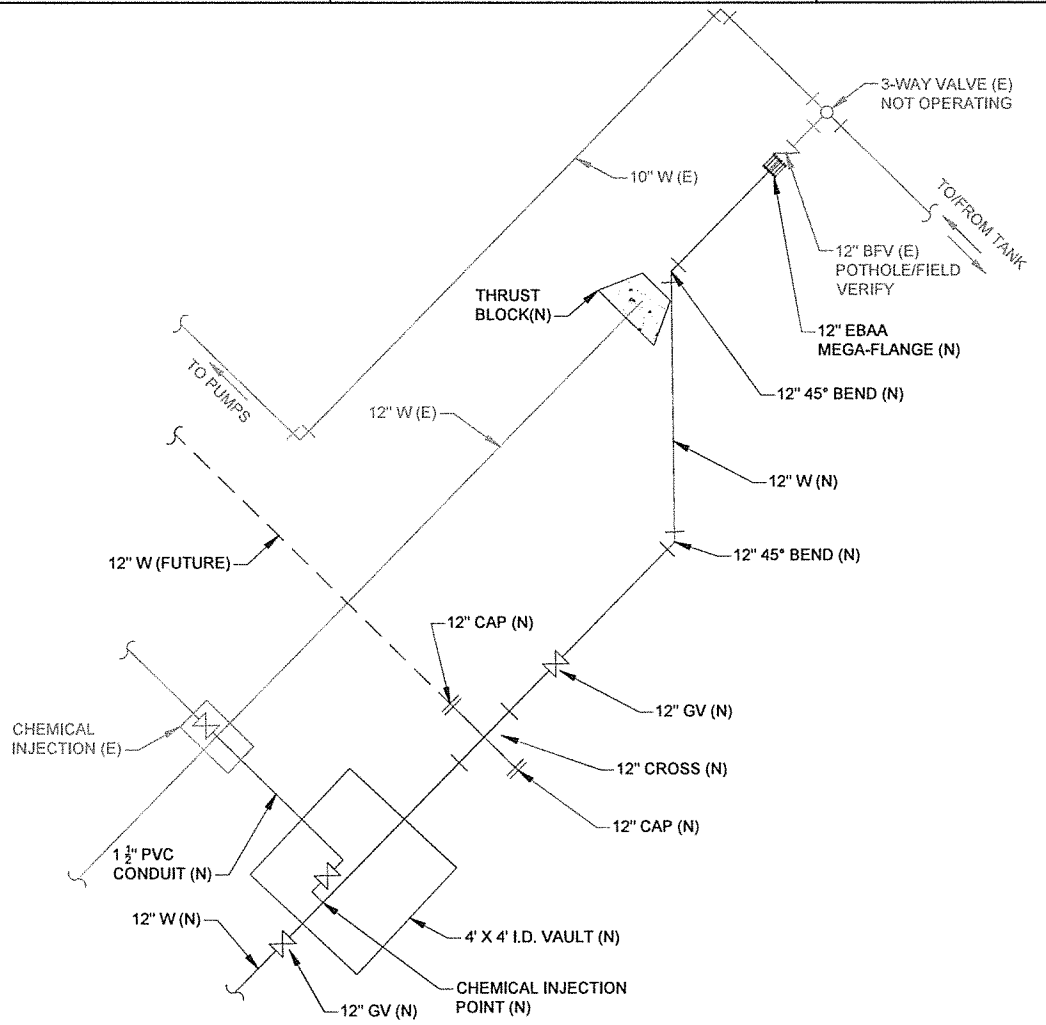
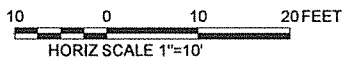
PLOT DATE: 03-Oct-15

PLOT TIME: 12:12:48

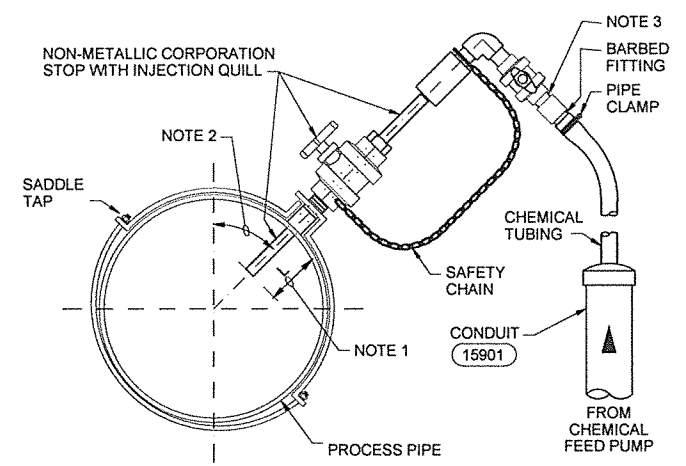


SAWMILL TANK
CALAVERAS COUNTY WATER DISTRICT
 APN: 025-004-036
 461 O.R. 175
 R.O.S. 5-88
 R.O.S. 10-130
 TANK R= 60'

TOP CONCRETE AT BOTTOM OF TANK = 4457.78 AVG.



1 CONNECTION DETAIL
 NTS



- NOTES:**
1. INJECTION QUILL SHALL EXTEND INTO PROCESS PIPE SUCH THAT "L" DIMENSION IS BETWEEN ONE-THIRD AND ONE-HALF OF PIPE DIAMETER. MINIMUM "L" DIMENSION SHALL BE 2-INCHES.
 2. LOCATE PIPE TAP ABOVE THE HORIZONTAL PLANE. ORIENT PIPE TAP / INJECTION QUILL AND PROVIDE FITTINGS AS REQUIRED TO ALLOW FOR ACCESS TO INJECTION POINT AND A STRAIGHT RUN OF CHEMICAL TUBING TO CONDUIT.
 3. CPVC PIPING, FITTINGS AND VALVES SHALL BE 1/2" UNLESS NOTED OTHERWISE. COORDINATE PIPE AND TUBING CONNECTION SIZES WITH INJECTION QUILL.

CHEMICAL INJECTION POINT
 NTS

15350



NO.	DATE	REVISION	BY	APVD

DESIGN	KALACON	BENCH MARK	ELEV. 3845.47
DRAWN	P WEBSTER	DESCRIPTION	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.
CHECKED	M FISHER		
APPROVED	M FISHER		

WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113

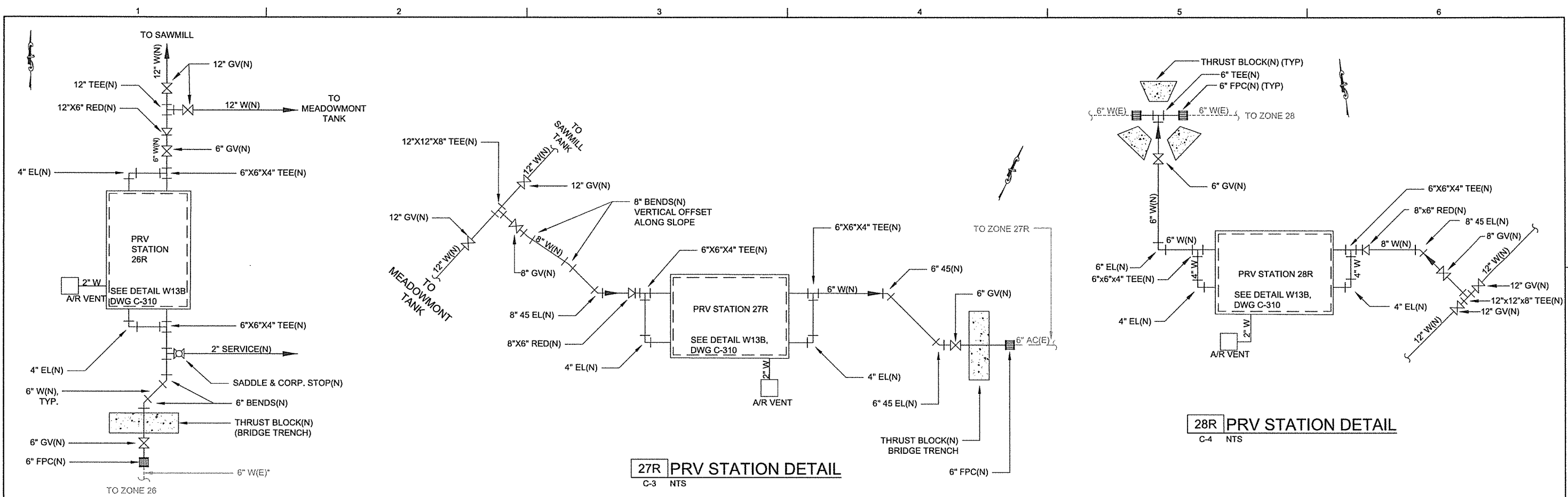


CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM
REACH 3A PIPELINE PROJECT

YARD PIPING
SAWMILL TANK SITE

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	Y-2
SHEET	56 - 62

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C301.DWG

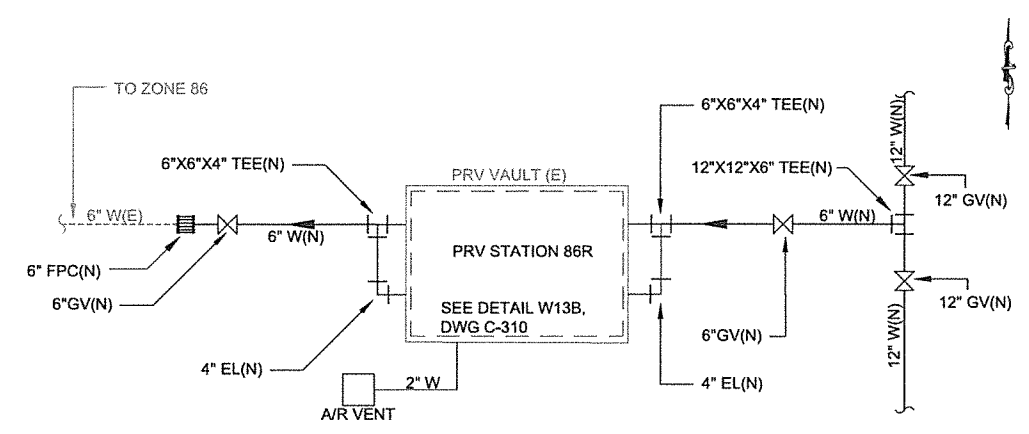


26R PRV STATION DETAIL
C-1 NTS

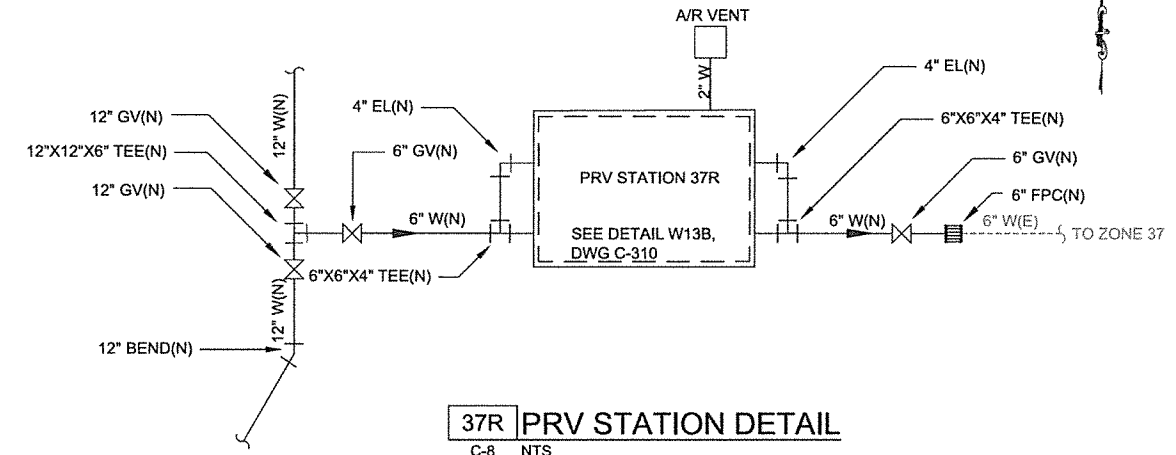
27R PRV STATION DETAIL
C-3 NTS

28R PRV STATION DETAIL
C-4 NTS

*VERIFY MATERIAL AND DIAMETER



86R PRV STATION DETAIL
C-5 NTS

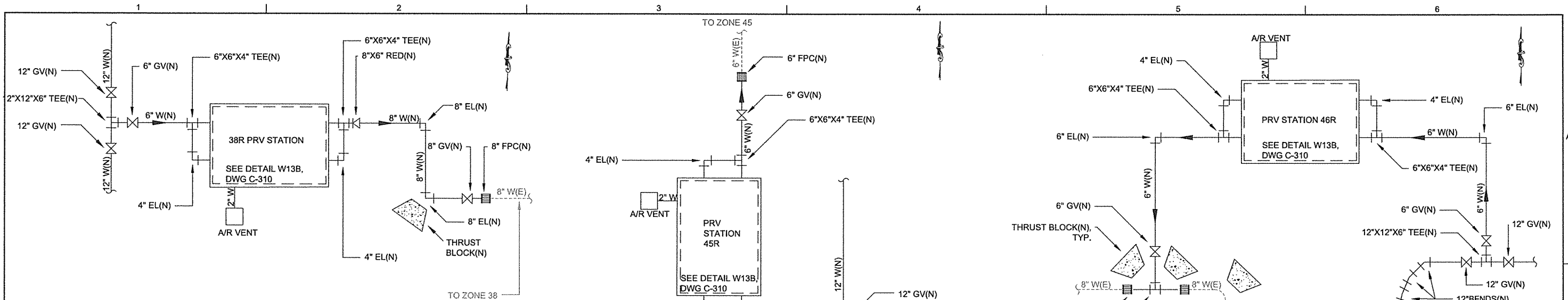


37R PRV STATION DETAIL
C-8 NTS



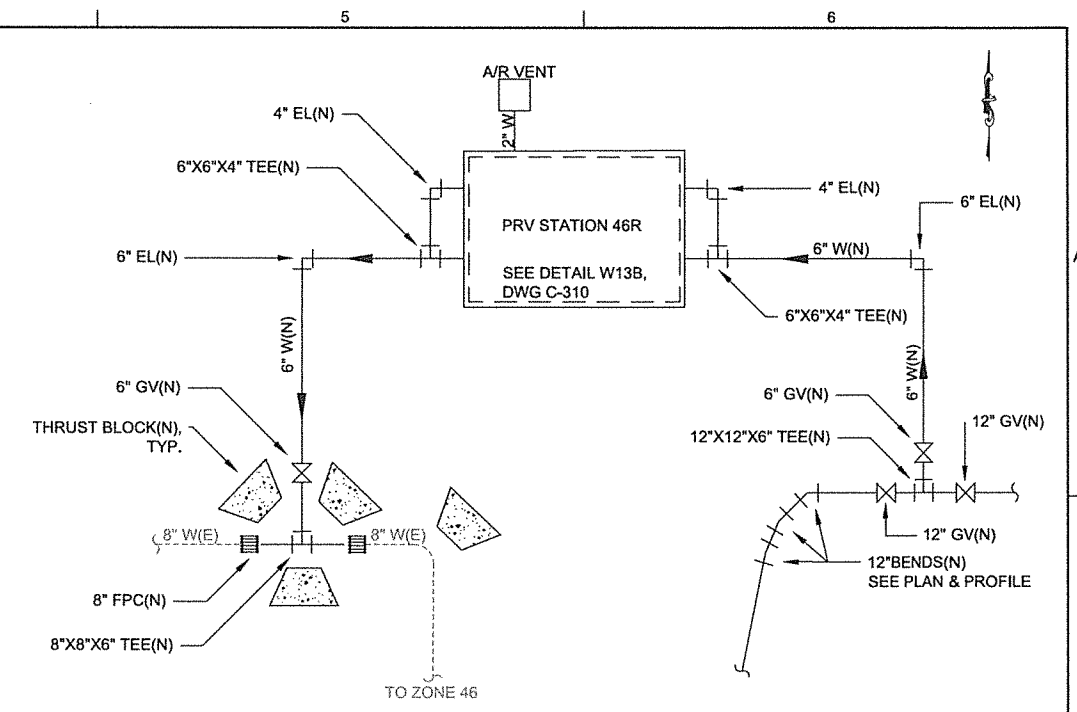
DESIGN K ALACON		BENCH MARK DESCRIPTION		ELEV. 3845.47		 WATERWORKS ENGINEERS 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113		CALAVERAS COUNTY WATER DISTRICT EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT		DETAILS PROJECT SPECIFIC DETAILS 1		DATE OCT 2015	
DRAWN P WEBSTER		5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.										PROJECT NUMBER 13-072	
CHECKED M FISHER										DRAWING NUMBER C-301			
APPROVED M FISHER										SHEET 57 - 62			

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C302.DWG

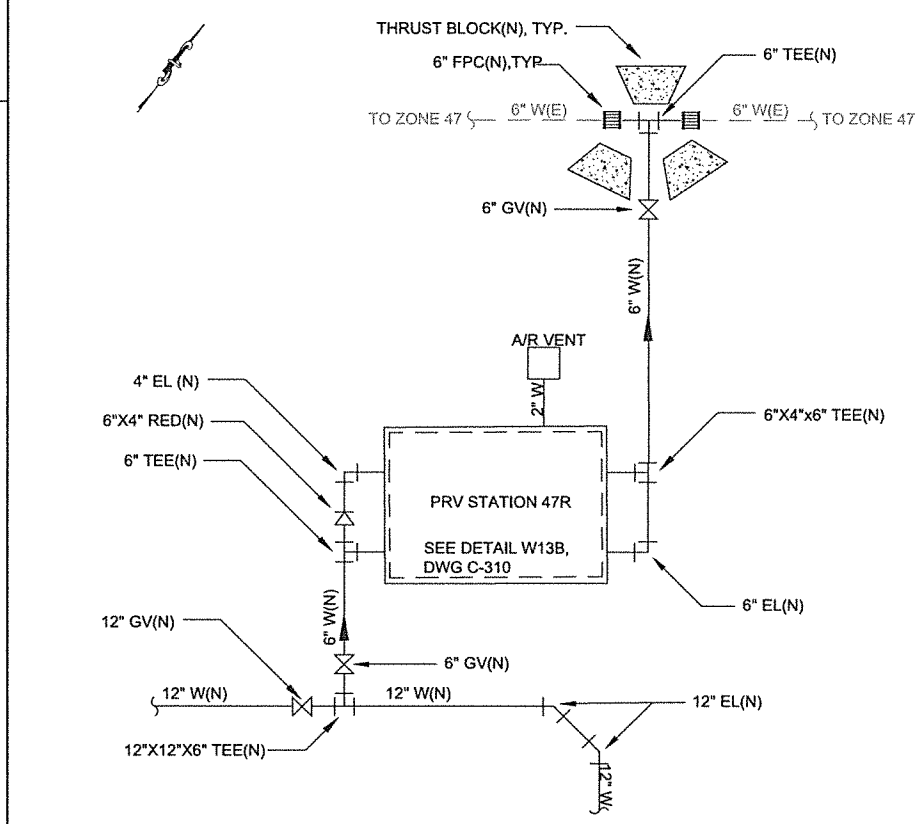


38R PRV STATION DETAIL
C-11 NTS

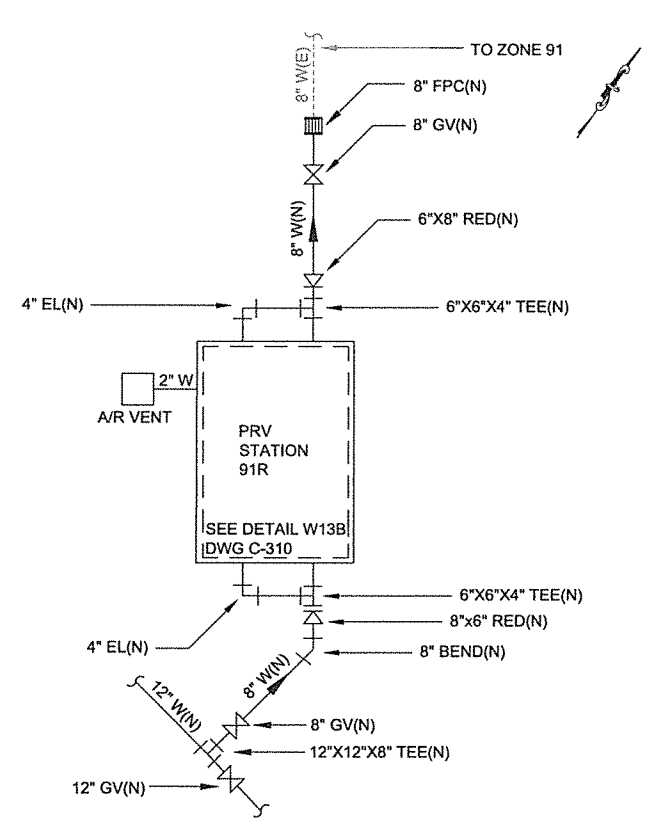
45R PRV STATION DETAIL
C-17 NTS



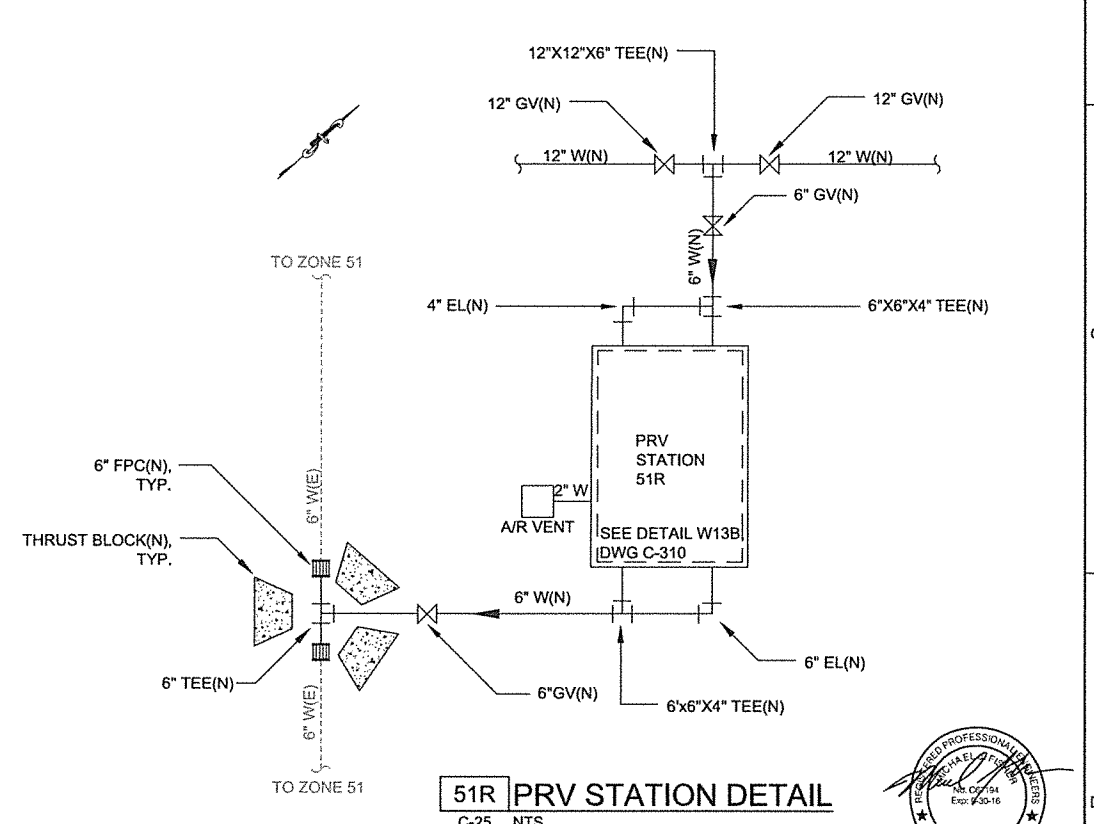
46R PRV STATION DETAIL
C-18 NTS



47R PRV STATION DETAIL
C-21 NTS



91R PRV STATION DETAIL
C-21 NTS

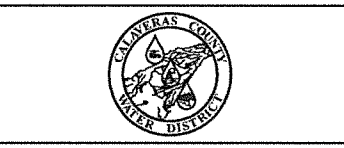


51R PRV STATION DETAIL
C-25 NTS



DESIGN	K ALACON
DRAWN	P WEBSTER
CHECKED	M FISHER
APPROVED	M FISHER

BENCH MARK ELEV. 3845.47
 DESCRIPTION
 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

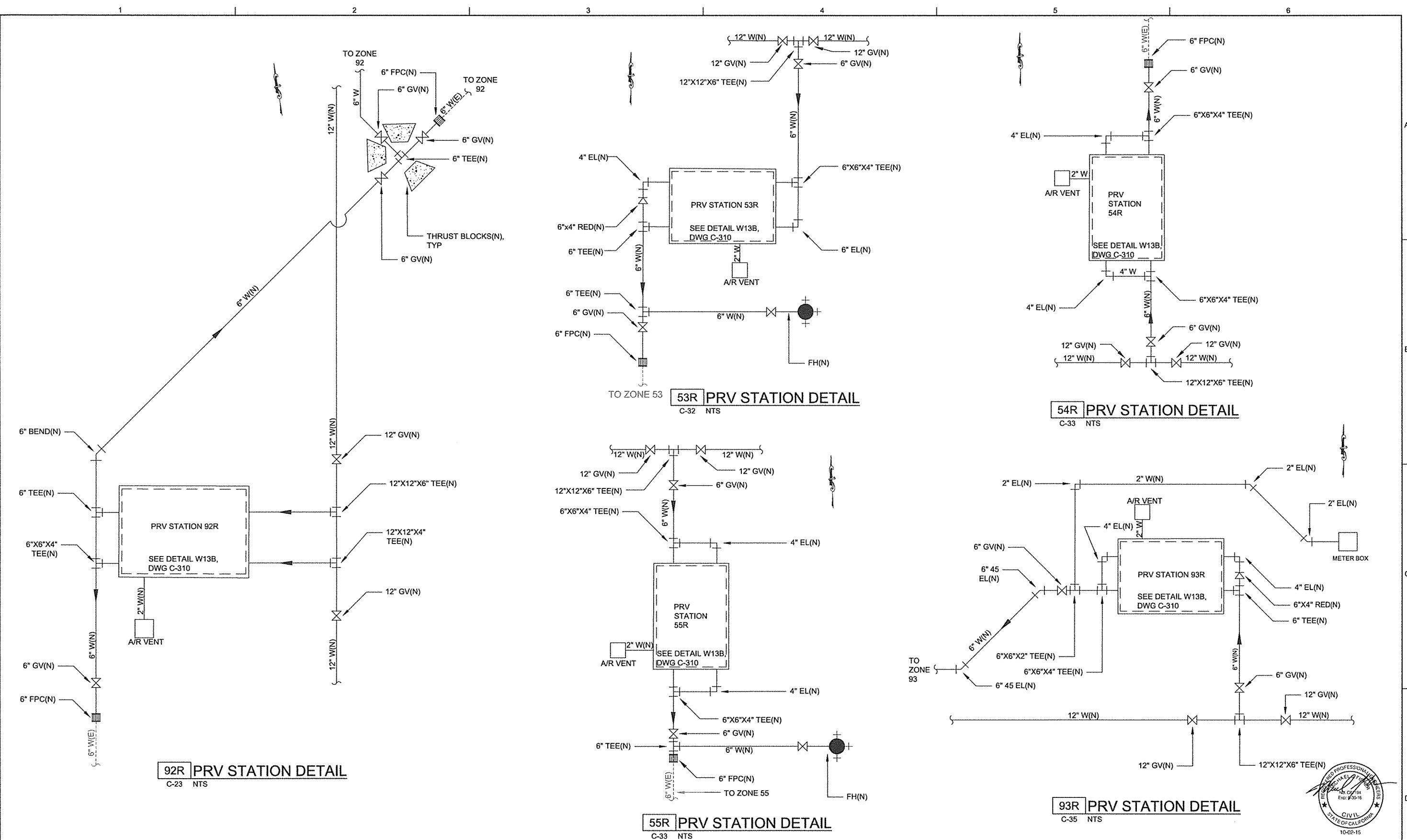


CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

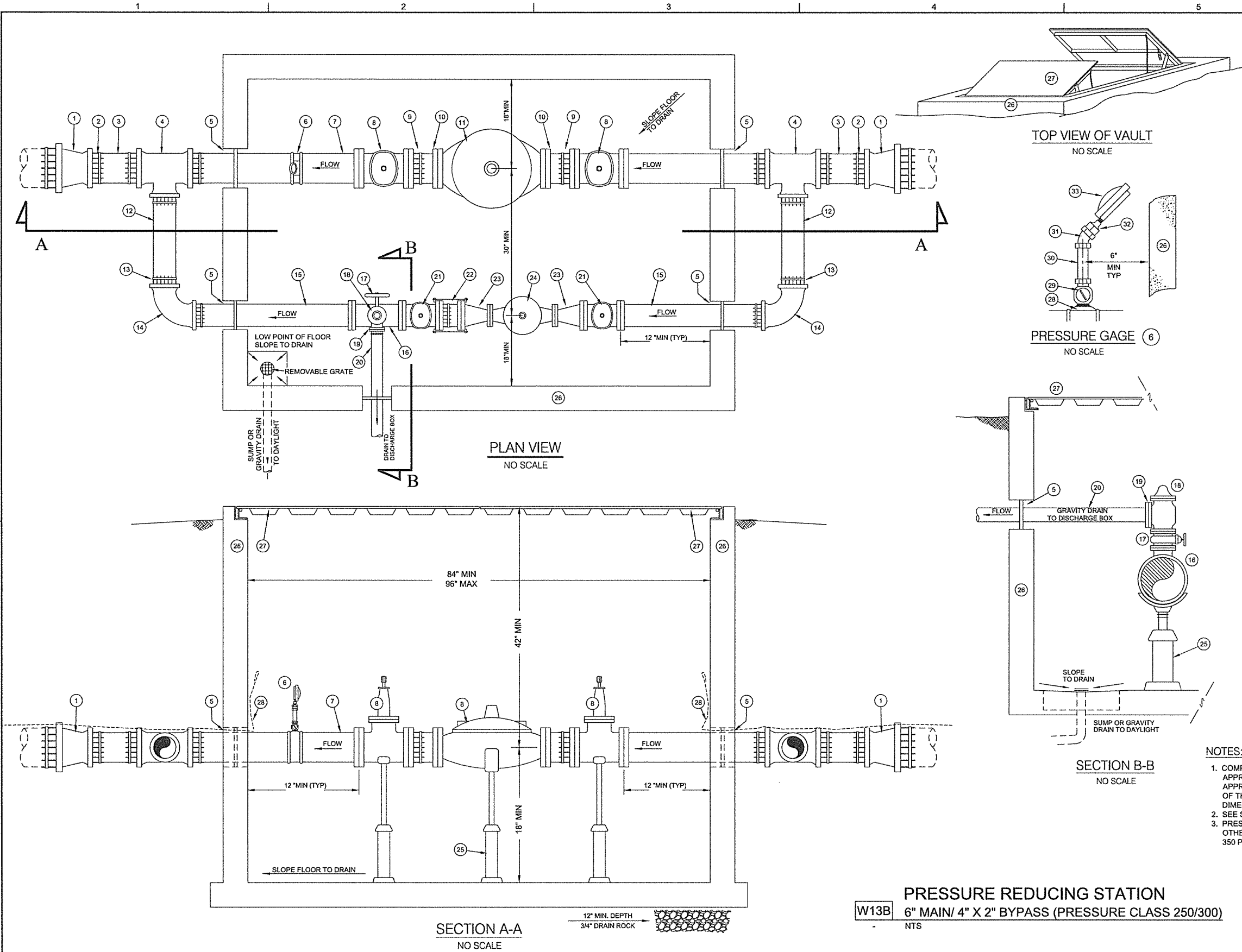
DETAILS
 PROJECT SPECIFIC DETAILS 2

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-302
SHEET	58 - 62

K:\PROJECTS\113-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3\DRAWINGS\DELIVERABLES\1372D-C303.DWG



DESIGN K ALACON		BENCH MARK ELEV. 3845.47		WATERWORKS ENGINEERS 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113	CALAVERAS COUNTY WATER DISTRICT	CALAVERAS COUNTY WATER DISTRICT EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT	DETAILS PROJECT SPECIFIC DETAILS 3	DATE OCT 2015
DRAWN P WEBSTER		DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.						PROJECT NUMBER 13-072
CHECKED M FISHER		APPROVED M FISHER				DRAWING NUMBER C-303		SHEET 59 - 62
NO.	DATE	REVISION	BY	APVD				



ITEM	DESCRIPTION
1	8" X 6" DUCTILE IRON REDUCER, MJ X MJ (IF REQUIRED)
2	MECHANICAL RESTRAINT GLAND (ROMAC GRIP RING, 350-PSI)
3	6" D.I.P. SPOOL, PLAIN ENDS
4	6" X 6" X 4" DUCTILE IRON TEE, MJ X MJ
5	CORE DRILL OR FORMED HOLES; FILL ANNULAR VOID WITH NON-SHRINK CONSTRUCTION GROUT, SAKRETE, SIKAGROUT, FIVE STAR, OR EQUAL
6	SADDLE, CORP STOP, PRESSURE GAGE ASSEMBLY (SEE DETAIL THIS SHEET)
7	6" D.I.P. SPOOL, FLANGE X PLAIN END, THICKNESS CLASS 53
8	6" AWWA C515 GATE VALVE, FL X FL, AWWA NUT OPERATORS, 350-PSI WORKING PRESSURE RATED, (MUELLER 350 A-2361)
9	6" RESTRAINED FLANGE ADAPTOR (EBAA 2100 MEGAFLANGE, 350-PSI)
10	6" D.I.P. SPOOL, CLASS 250 FLANGED END X PLAIN END
11	6" PRESSURE REDUCING VALVE, FL X FL (CLASS 300), SEE SPEC.
12	4" D.I.P. SPOOL, PLAIN ENDS
13	MECHANICAL RESTRAINT GLAND (ROMAC GRIP RING, 350-PSI)
14	4" 90-DEGREE BEND, MJ X MJ
15	4" D.I.P. SPOOL, FLANGE X PLAIN ENDS, THICKNESS CLASS 53
16	4" X 4" X 2" DUCTILE IRON TEE, FLANGED ENDS
17	2" AWWA C515, GATE VALVE, FLANGED, 250-PSI U/LFM RATED WORKING PRESSURE, 375-PSI SEAT TEST, 500-PSI SHELL TEST, HANDWHEEL OPERATOR
18	2" PRESSURE RELIEF VALVE, FL X FL (CLASS 150), SEE SPEC.
19	2" CLASS 150, ANSI B16.5, THREADED FLANGE, EPOXY COATED
20	2" SCH 40 STEEL PIPE, EXPOSED PIPE IN VAULT EPOXY PAINTED, PRIOR TO INSTALLING WRAP BURIED PIPE WITH CHASE TAPECOAT TR-GREEN OR EQUAL
21	4" AWWA C515 GATE VALVE, FL X FL, AWWA NUT OPERATOR, 350-PSIG WORKING PRESSURE RATED (MUELLER 350 A-2361)
22	4" DISMANTLING JOINT, FL X FL (AWWA CLASS E), ROMAC DJ400 (275-PSI)
23	2"x4" FABRICATED FLANGED REDUCER BUTTWELD FITTING, CARBON STEEL CLASS 150 (285-PSIG) X CLASS 300 (740 PSIG) RATED
24	2" PRESSURE REDUCING VALVE, FL X FL (CLASS 300), SEE SPEC
25	PIPE SUPPORT, HOT DIP GALVANIZED, PLACER WATERWORKS (PW/PS) WITH STANDARD (PW/SOL-S) AND EXTRA LARGE (PW/SOL-X) SADDLES
26	PRECAST CONCRETE VAULT, MINIMUM 6'-0" I.D. X 8'-0" I.D., H20 TRAFFIC
27	MINIMUM 72"x96" DOUBLE LEAF HATCH, HOT DIP GALVANIZED, 1/4" STEEL Z-BAR FRAME, 1/4" STEEL DIAMOND PLATE, STAINLESS STEEL HARDWARE AND SAFETY ARMS, TORSION ASSIST, FOUR 1/2" SECURITY BOLTS, H20 TRAFFIC RATED (OFF STREET) AND H25 TRAFFIC RATED (ON STREET) LOCATIONS.
28	SERVICE SADDLE (MUELLER DRZA, NYLON DUCTILE IRON, DOUBLE STRAP)
29	3/4" CORP. STOP BALL VALVE (MUELLER 300-PSI, F.I.P. OUTLET, AWWA C800)
30	3/4" THREADED PIPE NIPPLE (RED BRASS ASTM B43, SCHEDULE 40)
31	3/4" 45-DEGREE BRASS COUPLING, LEAD FREE, CLASS 250 (MINIMUM)
32	BRASS REDUCER BUSHING, 3/4" MALE TO 1/4" FEMALE NPT REDUCING BUSHINGS (SWAGelok 12-RB-4 OR EQUAL)
33	BOURDON TUBE PRES. GAGES (MIKA TYPE 213.53DW, LIQUID FILLED), DOWNSTREAM 0-300 PSI / UPSTREAM 0-400 PSI SCALE

- NOTES:**
- COMPONENTS, FITTINGS AND OTHER DETAILS SHOWN HEREON, HAVE BEEN DRAWN TO APPROXIMATE DIMENSIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL SHOW COMPLETE DETAILS OF THE INSTALLATION INCLUDING SIZE, LOCATION, MANUFACTURERS NAME, MODEL AND DIMENSIONAL AND ENGINEERING DATA OF ALL COMPONENTS.
 - SEE SITE PLAN FOR LOCATION OF ALIGNMENTS AND OUTLETS.
 - PRESSURE REDUCING VALVES AND ALL UPSTREAM PIPES, FITTINGS, AND VALVES AND OTHER APPURTENANCES SHALL HAVE WORKING PRESSURE RATING OF NOT LESS THAN 350 P.S.I. EXCEPT AS OTHERWISE NOTED.

W13B PRESSURE REDUCING STATION
 6" MAIN/ 4" X 2" BYPASS (PRESSURE CLASS 250/300)
 NTS



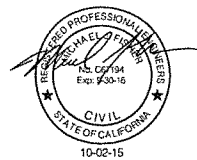
K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A DRAWINGS\DELIVERABLES\1372D-C310.DWG

DESIGN K ALACON		BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.		WATERWORKS ENGINEERS 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113	CALAVERAS COUNTY WATER DISTRICT CALAVERAS COUNTY WATER DISTRICT EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT	DETAILS PROJECT SPECIFIC DETAILS 1	DATE OCT 2015 PROJECT NUMBER 13-072 DRAWING NUMBER C-310 SHEET 61 - 62
DRAWN P WEBSTER		APPROVED M FISHER					
NO.	DATE	REVISION	BY	APVD			

PRV Design Criteria																		
Item #	Design Criteria	Units	26	27	28	86	37	38	45	46	47	91	92	51	53	54	55	93
1	UPSTREAM PRESSURE	psi	280	250	290	290	260	255	240	230	210	210	210	210	255	255	240	250
2	DOWNSTREAM PRESSURE - MAIN	psi	105	65	95	75	150	180	60	60	60	90	75	80	65	60	80	85
3	DOWNSTREAM PRESSURE - BYPASS	psi	110	70	100	80	155	185	65	65	65	95	80	85	70	65	85	
4	MIN DESIGN FLOW	gpm	100	3.8	14.3	20	24.7	94.9	14.2	5	3.8	13.8	3.5	4.8	8.3	10	8.3	1
5	MAX DESIGN FLOW	gpm	220	8.3	31.4	44	54.4	208.7	31.3	11	8.3	30.3	7.7	10.5	18.2	22	18.2	2.2
6	FIRE FLOW	gpm	1000	1000	1000	1500	1000	1000	1000	1500	1500	1000	1500	1500	1000	1500	1000	1000

PRV Design Detail - Material List and Description																		
Design Data	Units	26	27	28	86	37	38	45	46	47	91	92	51	53	54	55	93	
PRESSURE REDUCING VALVE W/PIPE SUPPORT & ANTI-CAV, CL 300, FL	in		6		6			6	6	6				6	6			
PRESSURE REDUCING VALVE W/PIPE SUPPORT, CL 300, FL	in	6		6		6	6				6	6	6			6	6	
PRESSURE RELIEF VALVE W/PIPE SUPPORT & FCA, FL	in	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PRESSURE REDUCING VALVE COMPANION FLANGE & ANTI CAV, CL 300, FL	in		2	2	2			2	2	2				2	2	2	2	
PRESSURE REDUCING VALVE COMPANION FLANGE, CL 300, FL	in	2				2	2				2	2	2					

K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C311.DWG



NO.	DATE	REVISION	BY	APVD

DESIGN K ALACON	BENCH MARK DESCRIPTION 5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER. ELEV. 3845.47
DRAWN P WEBSTER	
CHECKED M FISHER	
APPROVED M FISHER	



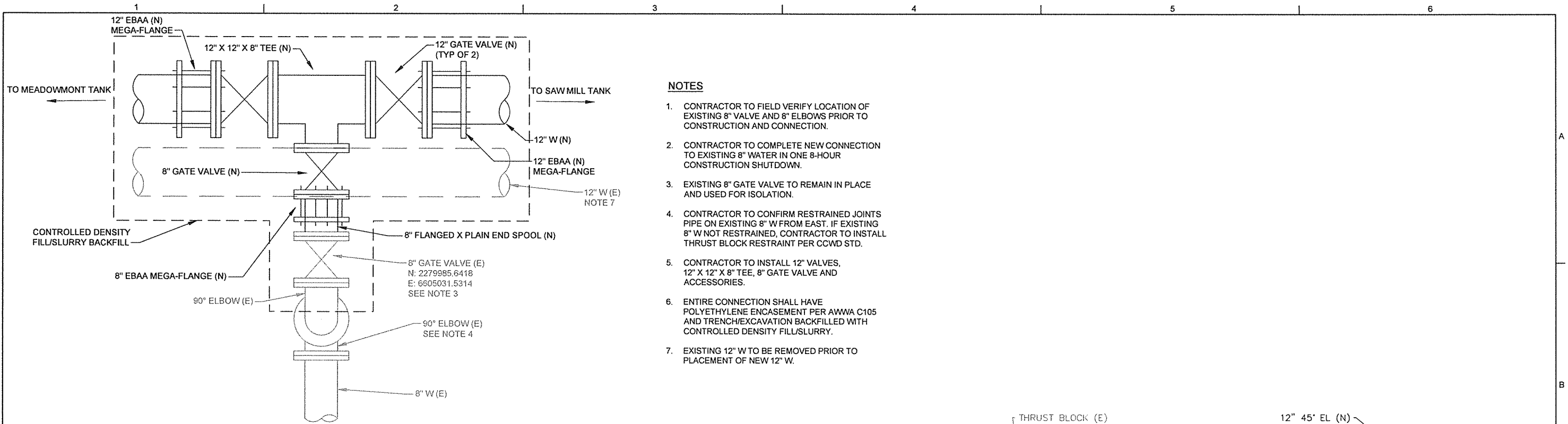
WATERWORKS ENGINEERS
 1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY
 WATER DISTRICT
 EBBETTS PASS WATER SYSTEM
 REACH 3A PIPELINE PROJECT

DETAILS
 PROJECT SPECIFIC DETAILS 11

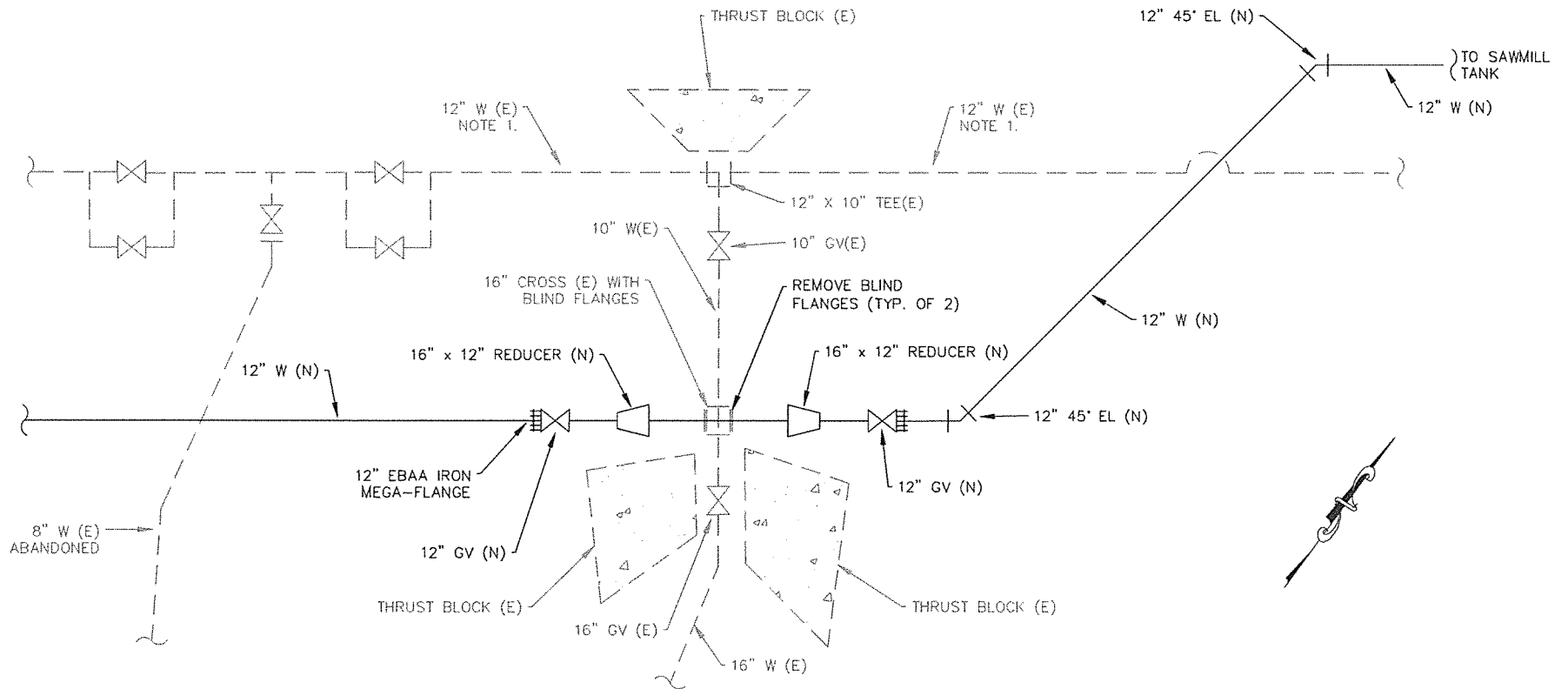
DATE OCT 2015
PROJECT NUMBER 13-072
DRAWING NUMBER C-311
SHEET 61 - 62



1
C-24 NTS
LILAC PARK CONNECTION DETAIL

NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING 8" VALVE AND 8" ELBOWS PRIOR TO CONSTRUCTION AND CONNECTION.
2. CONTRACTOR TO COMPLETE NEW CONNECTION TO EXISTING 8" WATER IN ONE 8-HOUR CONSTRUCTION SHUTDOWN.
3. EXISTING 8" GATE VALVE TO REMAIN IN PLACE AND USED FOR ISOLATION.
4. CONTRACTOR TO CONFIRM RESTRAINED JOINTS PIPE ON EXISTING 8" W FROM EAST. IF EXISTING 8" W NOT RESTRAINED, CONTRACTOR TO INSTALL THRUST BLOCK RESTRAINT PER CCWD STD.
5. CONTRACTOR TO INSTALL 12" VALVES, 12" X 12" X 8" TEE, 8" GATE VALVE AND ACCESSORIES.
6. ENTIRE CONNECTION SHALL HAVE POLYETHYLENE ENCASEMENT PER AWWA C105 AND TRENCH/EXCAVATION BACKFILLED WITH CONTROLLED DENSITY FILL/SLURRY.
7. EXISTING 12" W TO BE REMOVED PRIOR TO PLACEMENT OF NEW 12" W.



2
C-37 NTS
SAWMILL 16" MAIN TIE-IN CONNECTION DETAIL

NOTES:

1. ONCE NEW 12" TRANSMISSION MAIN IS COMPLETED AND PLACED INTO SERVICE UPSTREAM AND DOWNSTREAM OF NEW 16-INCH TIE-IN CONNECTION, CUT, CAP AND THRUST BLOCK EXISTING 12" STEEL TRANSMISSION MAIN TO EACH SIDE OF EXISTING 12"X10" TEE.

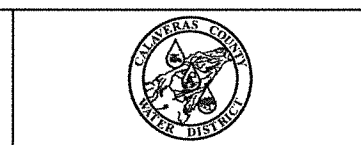


K:\PROJECTS\13-072 CCWD EBBETTS PASS WATER SYSTEM REACH 3A\DRAWINGS\DELIVERABLES\1372D-C312.DWG

DESIGN	K ALACON
DRAWN	P WEBSTER
CHECKED	M FISHER
APPROVED	M FISHER

BENCH MARK	ELEV. 3845.47
DESCRIPTION	5/8" REBAR & CAP IN A PARKING ISLAND IN THE PARKING LOT OF MEADOWMONT SHOPPING CENTER.

WATERWORKS ENGINEERS
1405 Victor Avenue, Suite A • Redding, CA 96002 • 530-243-2113



CALAVERAS COUNTY WATER DISTRICT
EBBETTS PASS WATER SYSTEM REACH 3A PIPELINE PROJECT

DETAILS
PROJECT SPECIFIC DETAILS 3

DATE	OCT 2015
PROJECT NUMBER	13-072
DRAWING NUMBER	C-312
SHEET	63 - 62