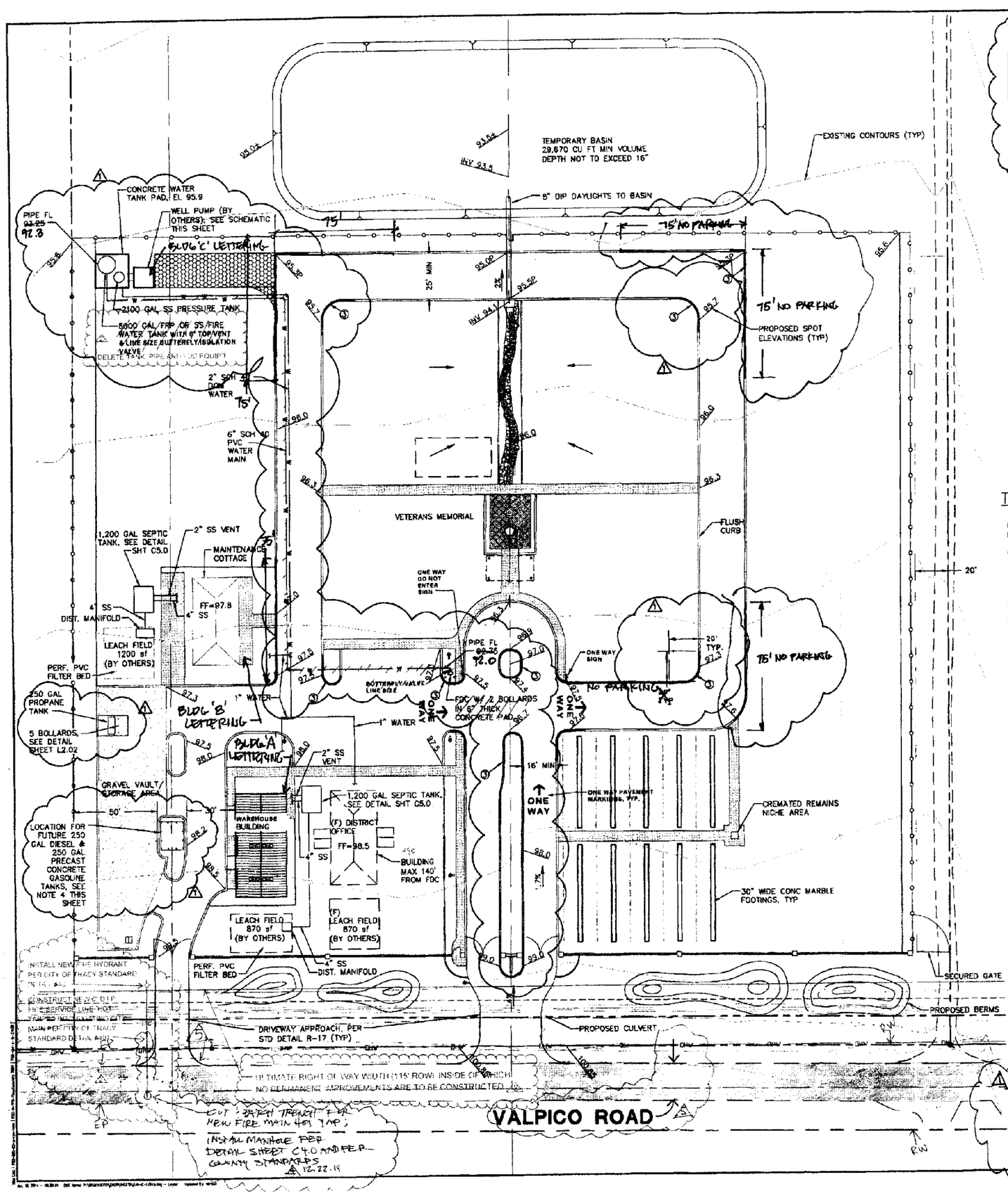

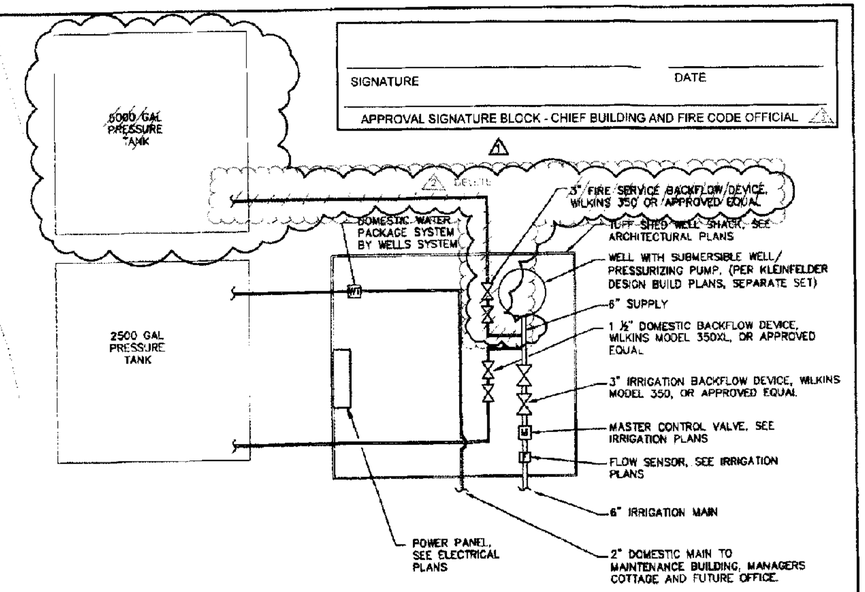

SIGNATURE DATE

APPROVAL SIGNATURE BLOCK - CHIEF BUILDING AND FIRE CODE OFFICIAL

WATER SERVICE SCHEMATIC

NTS

TEMPORARY BASIN CALCULATIONS

USING "FORMULA FOR CALCULATION OF A STORM DRAIN POND'S VOLUME"
REVISED 01-19-12

RUNOFF (FT) FOR ZONE #3 (TRACY), RURAL = 0.12

FORMULAS

SURFACE	AREA (SF)		COEFFICIENT		RUNOFF		CU FT NEEDED
POND BASIN	30,218	X	1.0	X	0.12	=	3,626
PAVING	48,054	X	0.95	X	0.12	=	5,478
ROOF	5,998	X	0.80	X	0.12	=	576
COMP. EARTH	13,293	X	0.75	X	0.12	=	1,196
LAWN & LANDSCAPE	165,331	X	0.20	X	0.12	=	3,968
					SUBTOTAL	=	14,835

THE NEEDED POND CAPACITY = SUBTOTAL X 2 = 29,670 CU. FT.

IMPROVEMENT STANDARDS FOR SAN JOAQUIN COUNTY, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS, REVISED MAY 1997

CHAPTER 3, STORM DRAINAGE DESIGN STANDARDS
SECTION 3.46 RETENTION PONDS, PART E.4

THE VOLUME OF RETENTION POND STORAGE REQUIRED IS:

$V = 2.0\ CAR / 12$

PAVEMENT AREA (C=0.95)	=	48,054 SF
ROOFS (C=0.80)	=	5,998 SF
GRAVEL (C=0.75)	=	13,293 SF
LAWNS & OPEN LANDS (C=0.20)	=	165,331 SF
C	=	0.40
TOTAL AREA, A	=	230,676 SF
	=	5.30 ACRES

R FOR 10 YEAR, 24 HR STORM (RURAL AREA)
USING STANDARD DRAWING NO. D-4

R = 1.39 INCHES

V_p = 2.0 * (0.4) * (5.30 ACRES) * (1.39 INCHES) / 12 INCHES PER FOOT

= 0.49 ACRE-FEET MIN VOLUME REQUIRED < 29,670 CU FT

* NOTE: ABOVE BASIN CALCS ARE FOR PHASE ONE GRADING ONLY (APPROX. 5 ACRES). THE REMAINING 15 ACRES WILL REMAIN AT EXISTING GRADES.

NOTE: CODE DEFINITION OF BUILDING A IS "WAREHOUSE", NO HAZARDOUS CHEMICALS ARE TO BE STORED IN BUILDING, AND NO VEHICLE MAINTENANCE TO TAKE PLACE INSIDE. FUEL STORAGE IS ALLOWED INSIDE BY CODE AND SHALL NOT EXCEED 60 GAL GASOLINE AND 30 GAL. DIESEL IN FIRE SAFE LOCKERS. BLDG IS FOR STORAGE OF VEHICLES, DUMP TRUCK, BACKHOE, MOWERS, CEMETERY EQUIPMENT, ARTISTICAL SUPPLIES, FURNITURE & THE LIKE

FIRE PREVENTION NOTES:

1. PROVIDE MINIMUM 5000 GALLON FRP OR S.S. WATER TANK WITH AUTOMATIC FILL SENSOR AND VALVE SYSTEM CONNECTION TO RELAY. PROVIDE 6" CONNECTION AT BOTTOM OF TANK WITH 4 1/2" MALE NST THREAD DRAFT CONNECTION POINT. SUPPLY ANTI-VORTEX PLATE, VENT, LEVEL INDICATOR AND COMPLIANCE WITH FIRE CODE ON ALL EQUIPMENT.
2. UPON BUILDING COMPLETION JUST PRIOR TO OCCUPANCY, PROVIDE RADIO SIGNAL DETECTION SERVICE BY PAUL NEIMAN (209) 686-1776 TO DETERMINE SIGNAL STRENGTH INSIDE MAINTENANCE BUILDING. IF SIGNAL IS TO WEAK, INSTALL ROOF-MOUNT ANTENNA AND ACTUATOR EQUIPMENT IN ORDER TO COMPLY WITH SECTION 510 CFC.
3. FIRE LANE TO BE CLEARLY MARKED WITH RED PAINTED CURBS STENCILED "NO PARKING FIRE LANE" IN 4" WHITE LETTERING AND SIGN PER DETAIL A, SHEET L1.01
4. FUEL STORAGE AREA: RAISED PAD AND CONTAINMENT SYSTEMS FOR FUTURE PRECAST CONCRETE FUEL TANKS, DEFERRED APPROVAL ITEM FOR 250 GALLON GASOLINE AND DIESEL TANKS.
5. LPG TANK SHALL BE INSTALLED TO MEET ALL NFPA 58 REQUIREMENTS INCLUDING BUT NOT LIMITED TO SEPARATION FROM BUILDINGS, PROPERTY LINES, ALL REQUIRED GAUGES, VALVES, SUPPORTS, SEISMIC RESTRAINTS, MANUFACTURER'S MARKING, "NO SMOKING", REQUIRED FIRE EXTINGUISHER AVAILABILITY, ETC. OWNER TO OBTAIN OPERATION PERMIT AS REQUIRED. MAINTAIN MINIMUM 10' SEPARATION BETWEEN SHRUBS AND TANK.

UNDERGROUND SERVICE ALERT
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TWO WORKING DAYS BEFORE YOU DIG

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TRACY CEMETERY

REGISTERED PROFESSIONAL ENGINEER
RICHARD RADOYCIS
No. C 45122
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA
06/03/14

REVISIONS	DATE
1 RESPONSE TO FIRE PLAN COMMENTS	7/25/14
2 CONSTRUCT FIRE HYDRANT IN LIEU OF TANK AND FDC	10/07/14
3 SIGN BLOCK & ROW COMMENTS	10/20/14
4 ADDED PARCEL	12.22.14

SHEET TITLE
GRADING AND UTILITY PLAN

JOB #	000-00
DESIGNED	S. KEMEN
DRAWN	C. BROWN
CHECKED	R. RADOYCIS
DATE	2/5/2014

SHEET
C-2.0
4 OF 50

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