



## **ATTENTION BUILDERS**

### **FIRE/LIFE SAFETY REQUIREMENTS PER. AMADOR COUNTY ORDINANCE # 1530**

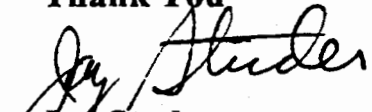
**BASED ON PUBLIC RESOURCES CODE 4290**

**Enclosed in this attachment package you will find a list of conditions that some or all apply to your project. The list includes driveway and roadway requirements, water and defensible space and other requirements.**

**When all the conditions that apply to your project are completed  
The Building Inspector will sign-off your green card.**

**Please call the Building Department at (209) 223-6422 if you have any  
questions concerning these requirements.**

**Thank You**

  
**Jay Studer**  
**Chief Building Official**

# LAND USE AGENCY

500 ARGONAUT LANE • JACKSON, CA 95642-9534 • (209) 223-6422



## AMADOR COUNTY APPLICATION FOR FIRE COMPLIANCE - ORDINANCE #~~1385~~ 1530

DATE \_\_\_\_\_ OWNERS NAME \_\_\_\_\_

PROJECT LOCATION \_\_\_\_\_ APN \_\_\_\_\_

ACREAGE \_\_\_\_\_ ELEVATION \_\_\_\_\_ WATER SUPPLY \_\_\_\_\_

SCOPE OF PROJECT \_\_\_\_\_

2500 GAL. WATER STORAGE \_\_\_\_\_ \$900.00 IN-LIEU FEE \_\_\_\_\_

DISTANCE TO NEAREST HYDRANT \_\_\_\_\_ FIRE FLOW/PRESSURE \_\_\_\_\_

THE FOLLOWING REQUIREMENTS APPLY TO NEW SINGLE-FAMILY DWELLINGS AND/OR TO INITIAL STRUCTURES BUILT ON THE PROPERTY.

1.  15.30.110 Premises Identification, minimum 3 in. letters with 3/8 in. stroke. letters reflectorized, contrasting background, visible at driveway and both directions where applicable. To be posted at start of construction. Multiple addresses to be mounted on single post.
2.  15.30.090 Defensible space setbacks. Removal of flammable vegetation and debris within 30 ft. of structures or property lines. Fuel modification required to a distance of ten (10) ft. on each side of driveways by reducing ground fuels to less than 18 inches in height.
3.  Driveway grades - Gravel surface, 16%. Hard surface (concrete, asphalt, 3" chip seal.) up to 20%. These requirements pertain to all driveway grades, regardless of length.
4.  15.30.130 All private driveways serving One (1) residence, shall provide a minimum ten (10) ft. traffic lane and unobstructed vertical clearance of 15 ft. along its entire length.
5.  Common driveways, serving 2 - 4 residences, shall provide a minimum 18 ft. traffic lane, and an unobstructed vertical clearance of 15 ft. along its entire length.
6.  Driveways exceeding 150 ft. but less than 800 ft. shall provide a midpoint turnout 10 ft. wide, 30 ft. long, with 25 ft. taper on each end. For driveways over 800 ft. turnouts shall be 400 ft. apart.

7.  15.30.130 A 6. Turnarounds: Turnaround may be designed as either a hammerhead /'T' or terminous bulb. The minimum turning radius shall be 40 ft. from the center line of the roadway. If a hammerhead/T is used, the top of the T shall be a minimum of 60 ft. in length.
8.  15.30.130 A. 3. All residences and commercial structures must be no further than 50 ft. from emergency equipment access. Surfaces of driveways shall be capable of supporting a 40,000 lb. load.
9.  Number of parcels served by driveways, zoning and size of parcels. Existing structures on parcels served.
10.  15.30.130 A. 8. Gates on driveways shall be at least two (2) ft. wider than the width of the traffic lane serving the gate. Where a one-way roadway with a single traffic lane provides access to a gated entrance, a forty foot turning radius shall be provided.
11.  15.30.090 All buildings on parcels 1 acre or larger shall have a minimum 30 ft. setback from all property lines and/or the center of the roadway, whichever is farther.
12.  15.30.140 I. The hydrant serving any building shall be not less than 50 ft. nor more than 1/2 mile by road to the building served, located at a turnout or turnaround, with one 2 1/2 in. male N.H.T. outlet and one 4 1/2 male N.H.T. outlet.
13.  15.30.160 Emergency Water requirements shall be met with a 2500 gal. tank installed on the property or a \$900.00 in-lieu of fee payable to the Amador Fire Protection District.
14.  Provide a scaled site-plan with the following information:
  - a. Driveways: length, width, dead-end, surface, compaction, slope or grade, vertical clearance, turnouts, turn-arounds, tee's, cuts and fills and radius of curves.
  - b. bridges: engineers certification for 40,000 lb. capacity, location, signage,(weight, number of lanes, vertical clearance)
  - c. existing and proposed structures: distance to property lines, distance to nearest hydrant, 50' to 2640'. (if applicable)
  - d. gates: location and width.
  - e. culverts: location, size, number of acres of drainage. minimum cover, (12" plus 3" gravel)
  - f. water tank: location, setup pad and fittings.

## STORAGE TANK REQUIREMENTS

COVERED ROOF VENT NOT LESS THAN  
10 Sq.In. - 3/8" RUST RESISTANT  
SCREEN.

AUTOMATIC FLOAT SWITCH, REFILL  
CAPABLE OF 100% RECOVERY WITH-  
IN 72 HOURS.

FIRE REQUIREMENT - MINIMUM OF  
2500 GAL. TANK \*

\* NOT INCLUDING DOMESTIC STORAGE

2 1/2" FULL FLOW DISCHARGE  
VALVE, WITH 2 1/2" N.H.T.  
MALE THREAD OUTLET AND CAP  
INSTALLED 18" FROM BOTTOM  
OF TANK.

6" CONCRETE OR 3" PEA GRAVEL BASE.  
NOT LESS THAN 2' LARGER THAN TANK  
DIAMETER. INSTALLED ON LEVEL GROUND.

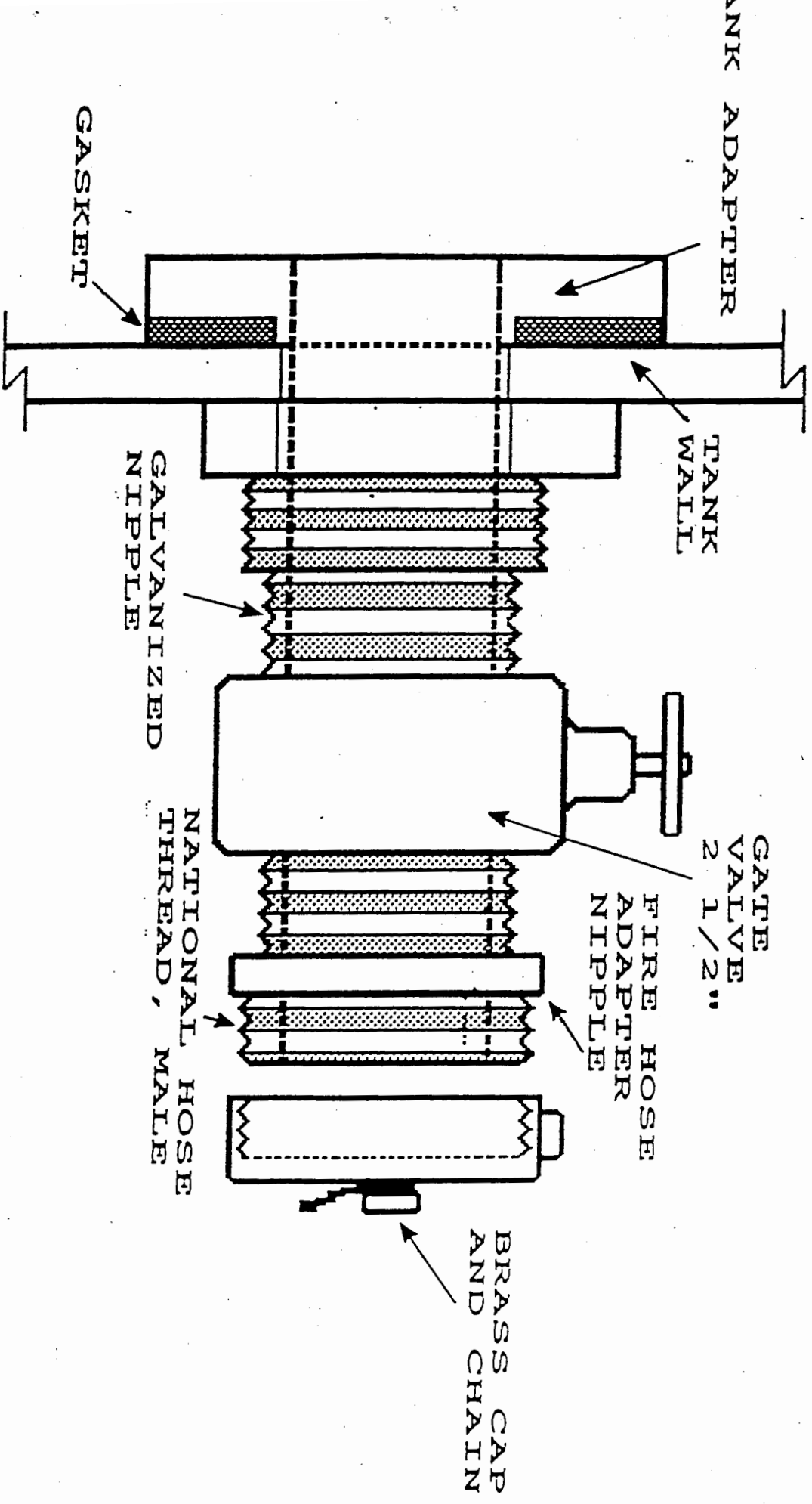
TANKS TO BE CONSTRUCTED OF MOLDED PLASTIC, FIBERGLASS, OR  
GALVANIZED STEEL, NOT LESS THAN 12 Ga.

LOCATION: TANK NOT LESS THAN 50' FROM STRUCTURE. NOT LESS  
THAN 4' NOR MORE THAN 12' FROM AN ALL-WEATHER  
DRIVING SURFACE, READILY ACCESSIBLE FOR FIRE  
APPARATUS.

TANK LOCATION IS SUBJECT TO THE APPROVAL OF THE  
BUILDING DEPARTMENT.

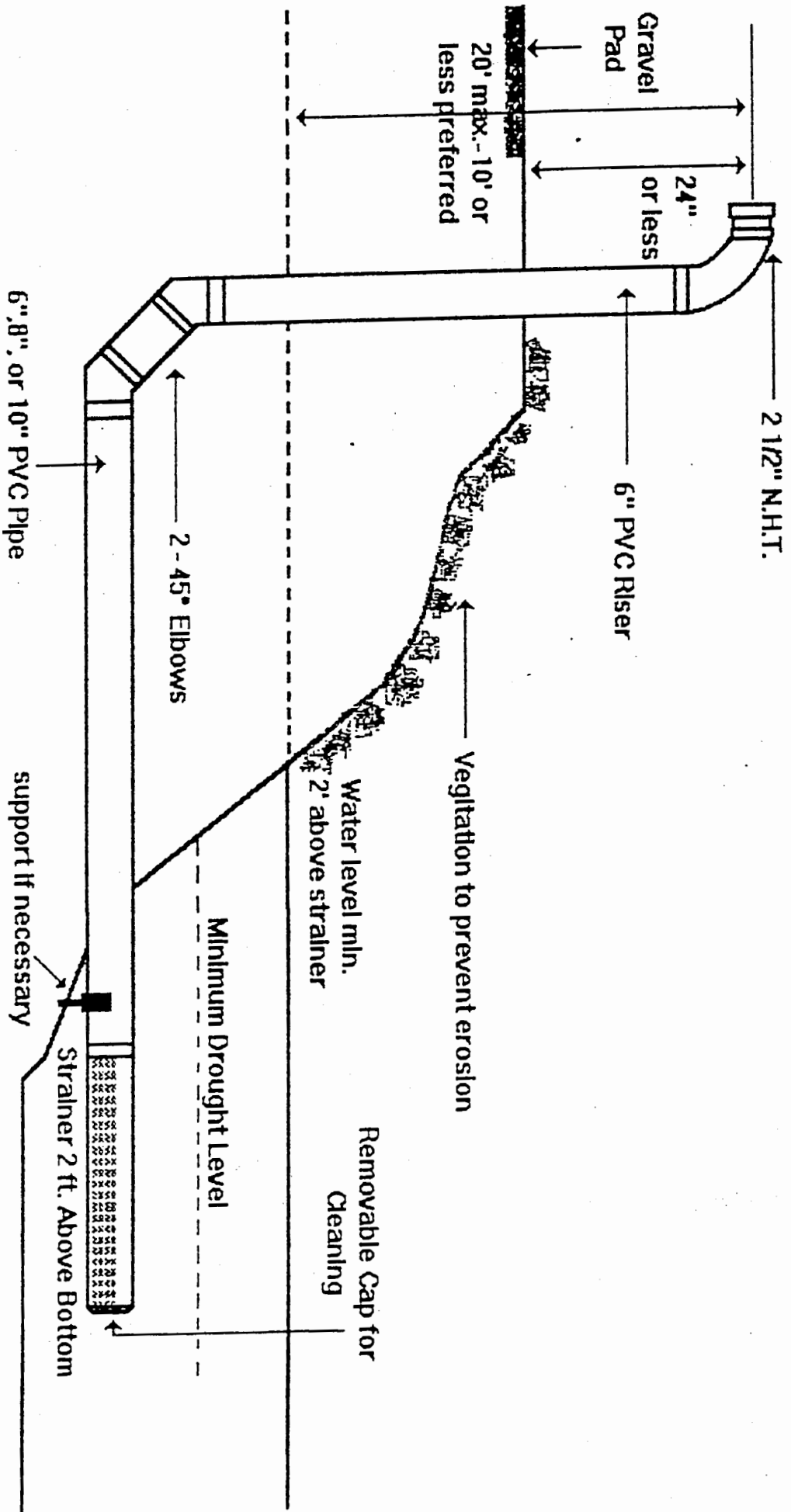
# WATER STORAGE TANK BRASS FIRE FITTING TO MEET FIRE REGULATIONS

(CDF 4290 & Amador County Ordinance #1385)

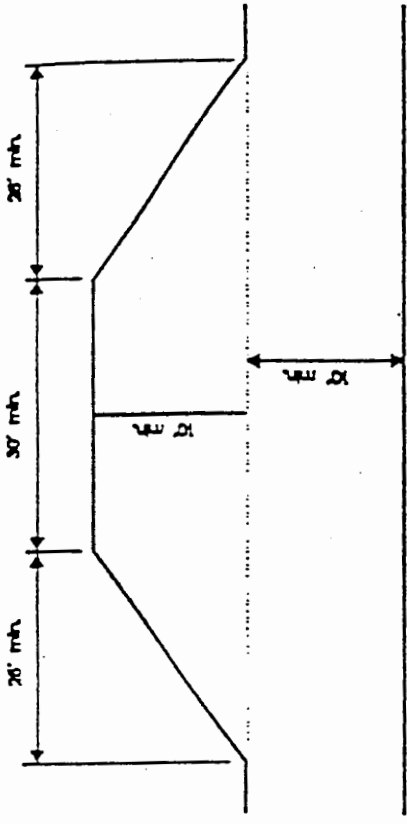




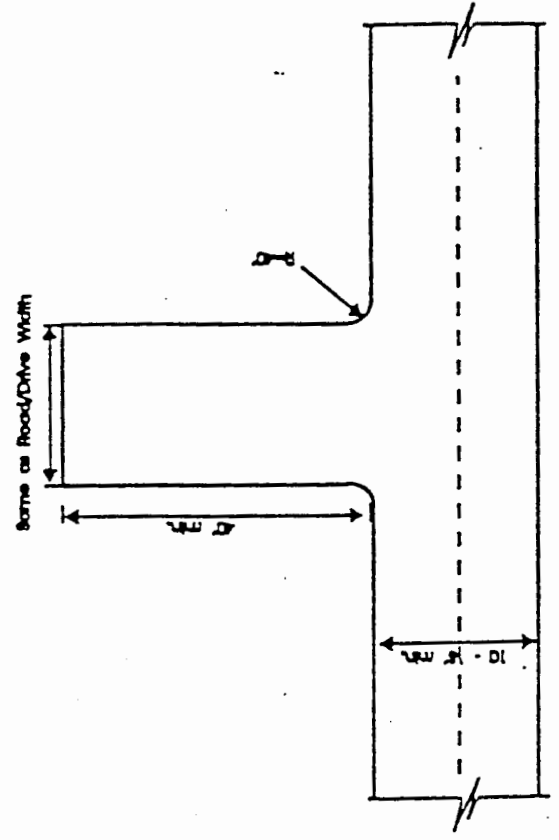
**DRY HYDRANT CONSTRUCTION**



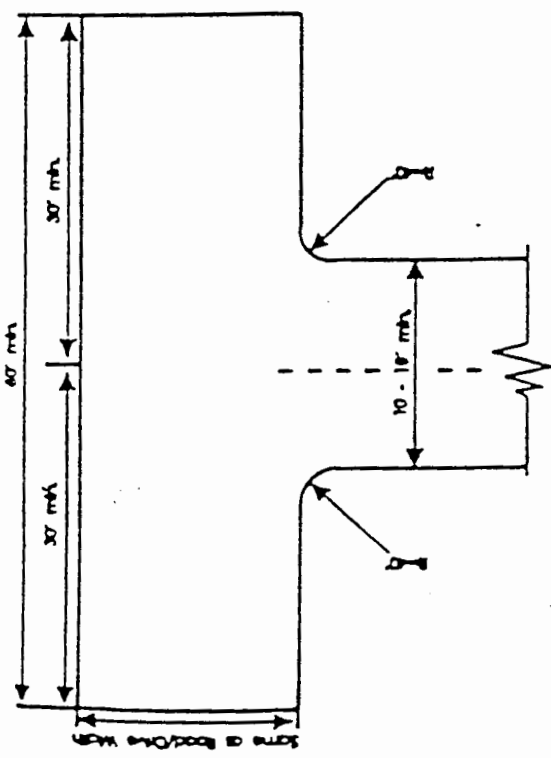
TURNOUT



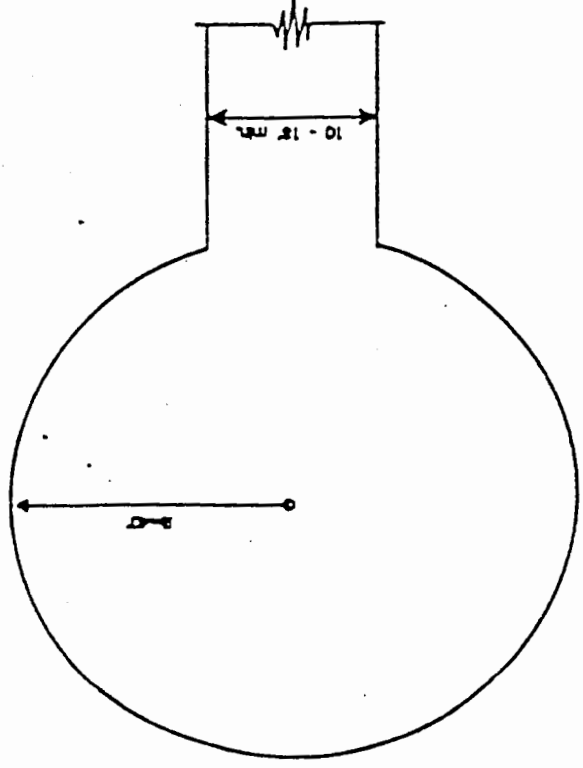
TURNAROUND



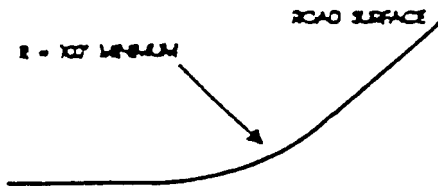
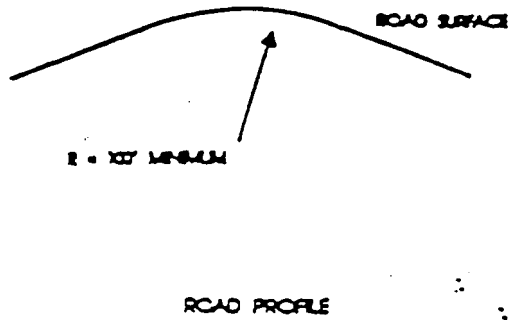
HAMMER-HEAD/T



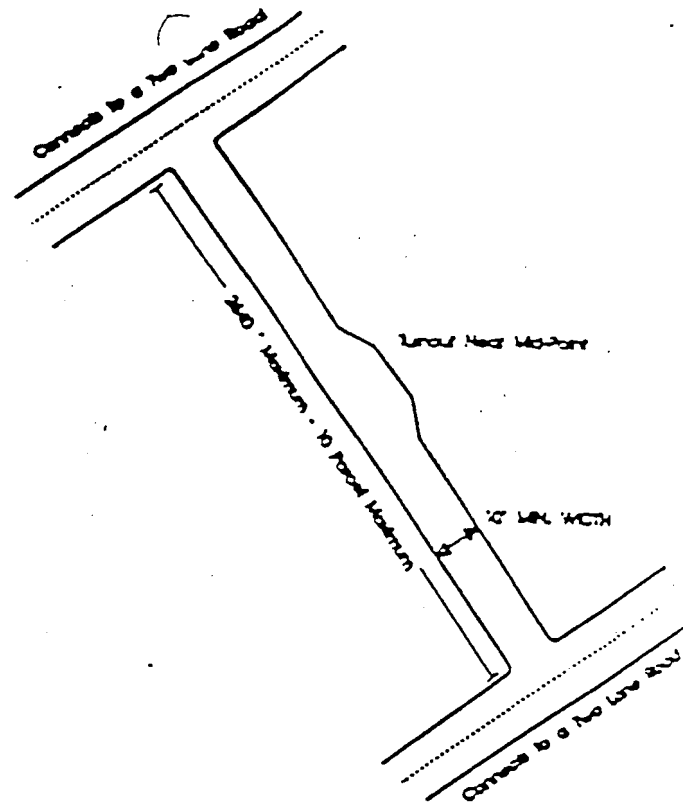
TURNAROUND



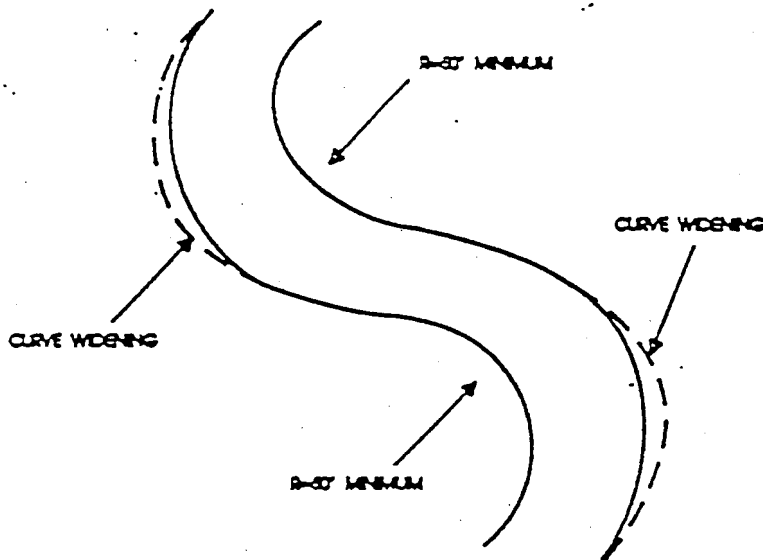




CHANGE OF GRADE (Vertical Curves)

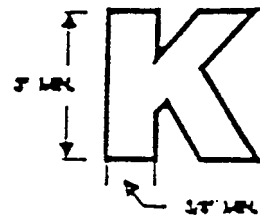
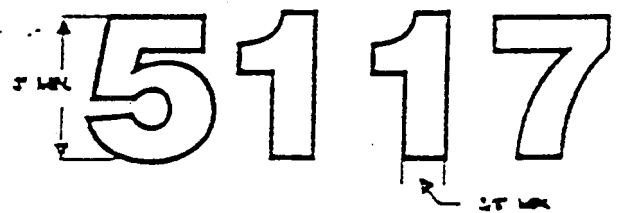


ONE-WAY ROAD

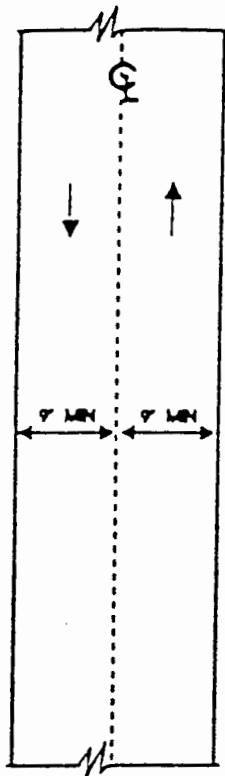


Curve Widening  
 Radius 50'-100' = Add 2' Width  
 Radius 100'-200' = Add 4' Width

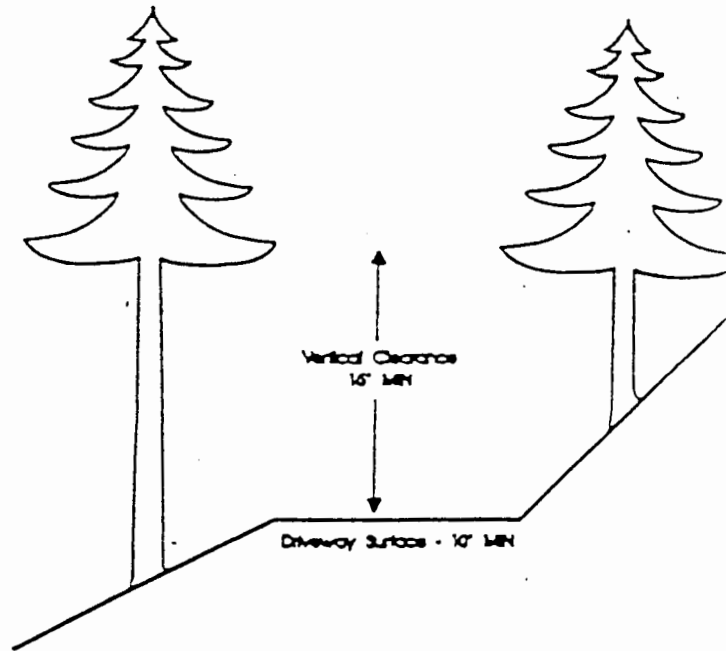
CURVES & CURVE WIDENING



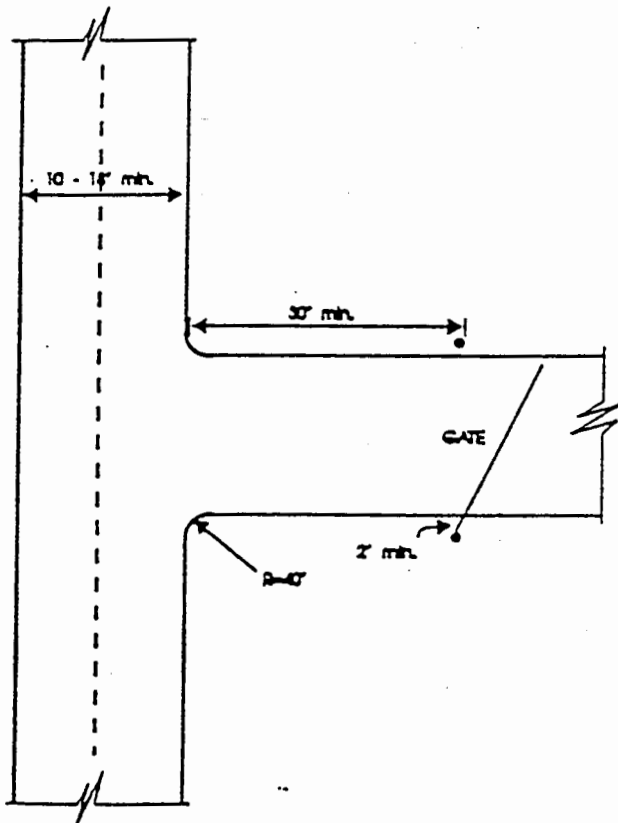
LETTERS & NUMBERS



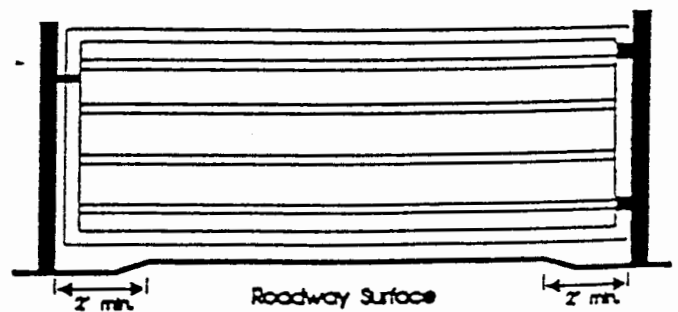
TWO-LANE ROAD



DRIVEWAY

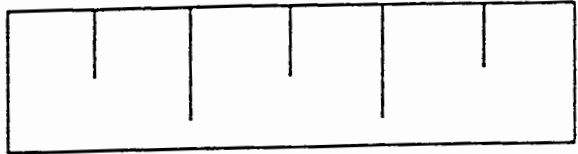


GATED ENTRANCES

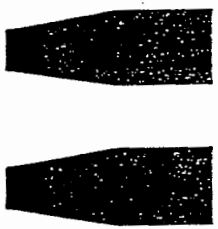


GATES

We cannot help you if we cannot



**3**



find you!

3 inch reflectorized address numbers against a contrasting background are what emergency services personnel prefer. Post your address number at the end of your driveway, or at any fork in the road.

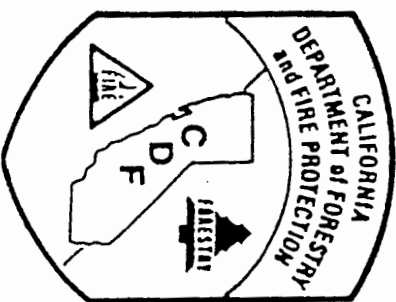
Help us help you

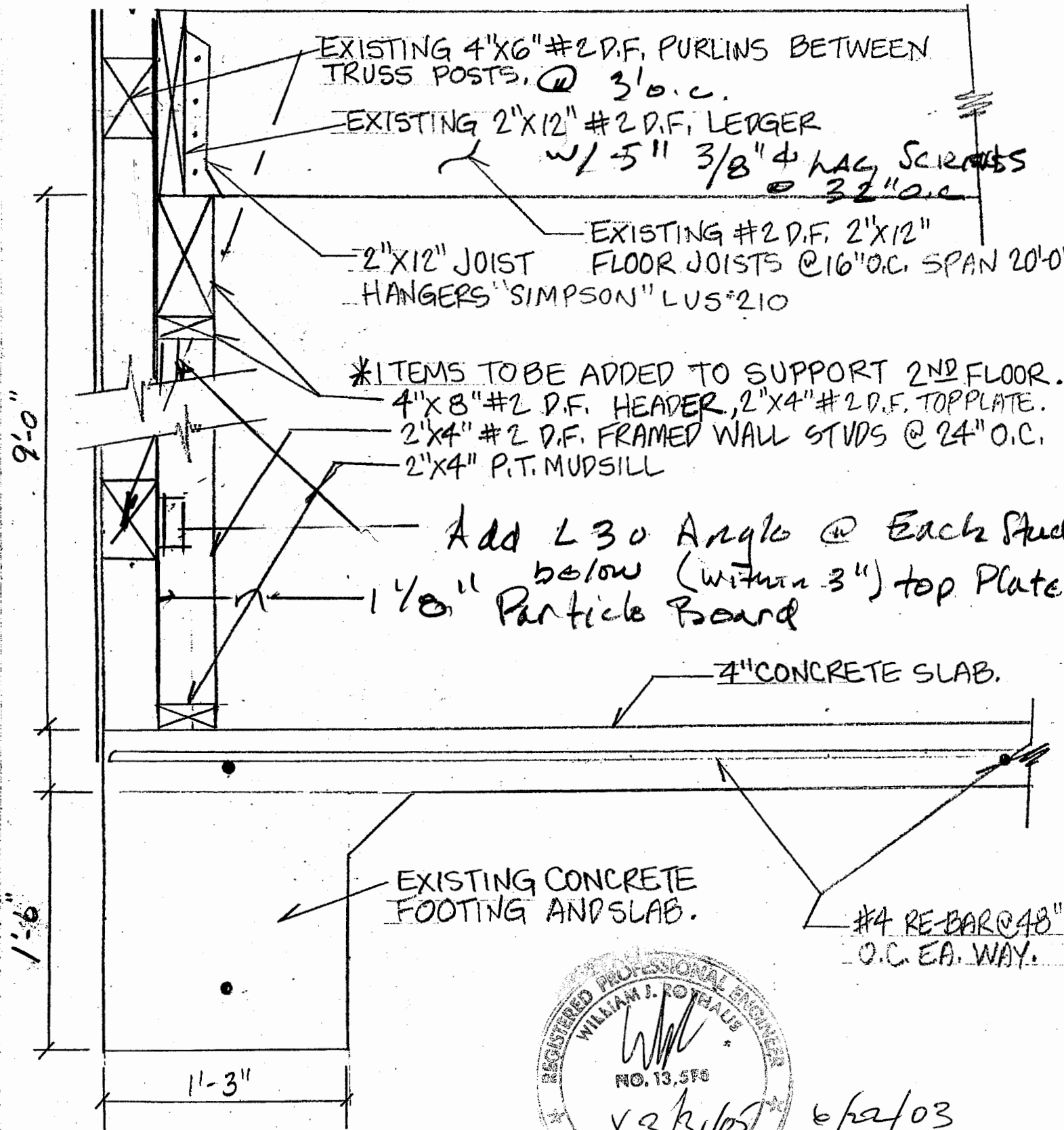
The California Department of Forestry and Fire Protection

Amador/El Dorado Ranger Unit

2840 Mt. Danaher Road, Camino, CA 95709

(916) 644-2345





EXISTING 4"X6" #2 D.F. PURLINS BETWEEN TRUSS POSTS, @ 3'0" O.C.

EXISTING 2"X12" #2 D.F. LEDGER w/ 5" 3/8"  $\phi$  HAG SCREWS @ 32" O.C.

EXISTING #2 D.F. 2"X12" FLOOR JOISTS @ 16" O.C. SPAN 20'-0" HANGERS "SIMPSON" LUS-210

\*ITEMS TO BE ADDED TO SUPPORT 2ND FLOOR.

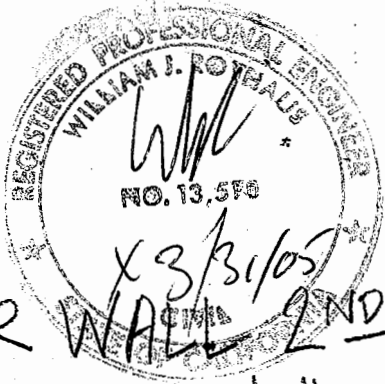
4"X8" #2 D.F. HEADER, 2"X4" #2 D.F. TOPPLATE. 2"X4" #2 D.F. FRAMED WALL STUDS @ 24" O.C. 2"X4" P.T. MUDSILL

Add L 30 Angle @ Each Stud 1/8" below (within 3") top Plate Particle Board

4" CONCRETE SLAB.

EXISTING CONCRETE FOOTING AND SLAB.

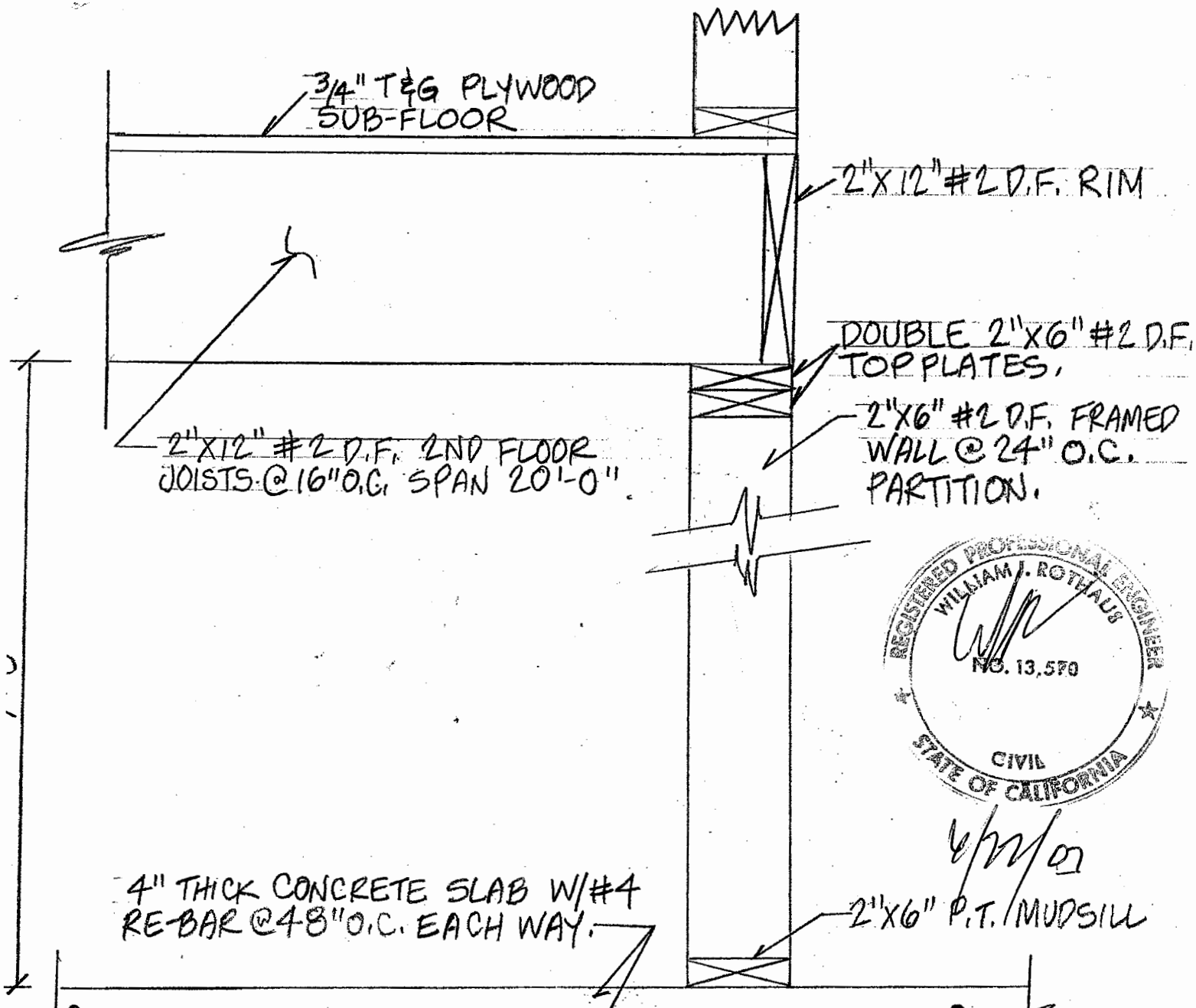
#4 RE-BAR @ 48" O.C. EA. WAY.



DETAIL PERIMETER WALL 2ND FLOOR SUPPORT SCALE 1 1/2" = 1'-0"

DETAIL FOR MCKINNEY SHOP BUILDING AT 9201 BLUE SKY DRIVE IONE, CA 95640

Living QTRS Add



*WJR*

\* NO FOOTING NECESSARY @ BEARING PARTITION WITH RE-INFORCED 4" CONC. SLAB.

FIRST FLOOR SLAB AND PARTITION, SUPPORT SECOND FLOOR DETAIL

SCALE 1 1/2" = 1'-0"

Living  
QTRS.  
Add.

DETAIL FOR MCKINNEY SHOP BUILDING AT  
9201 BLUESKY DRIVE IONE, CA 95640

Joists @ 16" o.c. 20' Span  
(40LL + 12 DL)

ALABAMA COUNTY  
BUILDING DEPT.

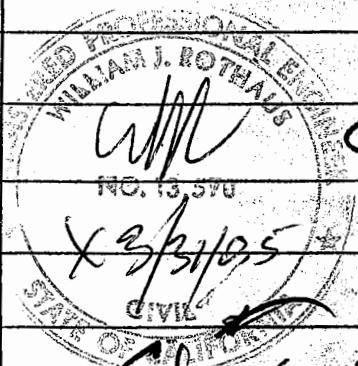
$$TL = 16/12 (52) = 70 \#$$

$$R = 20/2 (70) = 700 \#$$

$$A = \frac{1.5 (700)}{95} = 11 \text{ in}^2$$

$$S = \frac{70 (20)^2 (1.5)}{1005} = 16.7 \text{ in}^3$$

$$I = \frac{5 (70) (20)^3 (1728)}{384 (1.6 \times 10^6)} = 20 = 154 \text{ in}^4$$



Use D.I.F. # 2 - 2x12 @ 16" o.c.  
A = 16.82 in<sup>2</sup> S = 31 in<sup>3</sup> I = 177 in<sup>4</sup>

6/22/03

Check plate for 700 # @ middle  
of 24" span of Top Plate  
that consists of 2 - 2x6, D.I.F. # 2  
Top Plates

$$R = 700/2 = 350 \#$$

$$A = 1.5 (350) / 95 = 5.9 \text{ in}^2$$

$$S = \frac{700 (2) (12)}{4 (875)} = 4.8 \text{ in}^3$$

2x6  
Top  
Plate OK

Footings for Studs

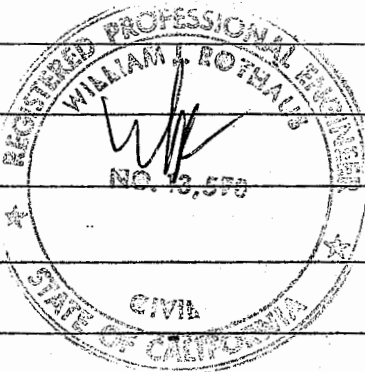
W/o Mudsill.

Minimum Load Area on Slab  
w/ 45° Angle Break

$$= 9\frac{1}{2}'' \times 10\frac{1}{2}'' = 0.69 \text{ FT}^2$$

Soil bottom than 1500<sup>#</sup>  
for weathered rock

$$\text{Area Required} = \frac{700}{1500} = 0.47 \text{ FT}^2 < 0.69$$



6/22/03

Slab without mudsill and  
reinforcement effects OK

Si. Footings OK

Check

Joist Connection for loads @  
Perimeter Wall.

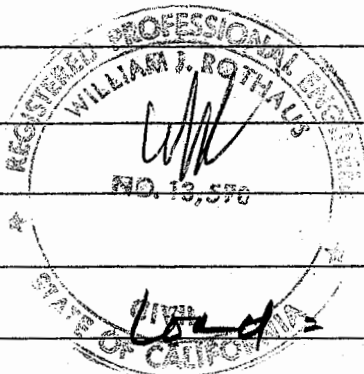
1. Note all vertical loads are supported by (calc sheets 1 & 2) larger members

Check on

2. Check seismic @ connection for joists @ 16' span 4x6 with hanger @ each end

Use L 90 Angle into stud & into Particle Board with 16d nails into

Particle Board & with #10 Nails into Studs



6/27/03

$$\text{Load} = 0.164 \times 20 \times 16 / 2 \times 20$$

$$= 525 \# < 555 \# \text{ OK}$$





## BUILDING PERMIT INFORMATION

Revised 11/01/2002

**Construction for your Amador County building permit shall conform to the following regulations.**

**1) Current Laws and ordinances**

- A. 1997 Uniform Administrative Code
- B. 2001 Calif. Title 24 (Building, Mechanical, Plumbing, Electrical and Energy Calculations, etc.)
- C. Reference codes; 2001 State Fire Code and the latest N.F.P.A.
- D. County ordinance code section 15

- 2) Owners and contractors are responsible for knowing the exact locations of all property lines and locating them prior to the foundation inspection. Location of boundaries shall be clearly shown on approved plans. If site information is suspect the building dept. may require a survey of the property.
- 3) *Approved Plans* and the *Inspection Record Card* (green card) are legal parts of the Building Permit. They both shall be available on site during each requested inspection. If these documents are left on site, care shall be taken to keep them in good condition.
- 4) If there are any changes to the construction beyond what the approved plans indicate they must be reviewed and approved prior to the changes being made. Submit the proposed changes along with the current approved plans for re-approval.
- 5) The *Inspection Record Card* identifies those items requiring inspection. Although the items are typically for dwelling construction they are similar for other types of construction. It is the responsibility of the owner or contractor to call for the appropriate inspections at least 24 hours prior to inspection. No work requiring inspection shall be covered until inspected and approved. If there are any questions please contact the Building Dept.
- 6) (A) The Building Permit requires that the work must progress in a timely manner to completion or the permit will expire and a new permit will be required. Work must commence within 180 days from issuance. Work under a permit shall be considered suspended or abandoned, and the permit subject to expiration if the builder does not

call for and pass one of the five (5) code required inspections as set forth in the Uniform Administrative Code section 303.4 within 180 days after the date the permit was issued, or the date of passing a prior required inspection, whichever date is later. The five (5) minimum inspections are for time limitation only.

1. FOUNDATION
2. UNDERFLOOR
3. FRAME (Includes Plumbing, Electrical, Mechanical, ETC)
4. SHEET ROCK
5. FINAL

- 6) (B) Note: In Amador County there are other required inspections as on "*Inspection record card*". These other inspections are not used in determining if the permit has expired or not. At final, clearances and final signoffs may be required from other agencies as Public Works, Septic/Sewer and Fire Dept.
- 7) During inspections correction notices may be issued which identify work that does not meet min. code requirements, no work shall continue until the corrections are made. Only with special authorization from the inspector shall additional work continue. Reinspection shall be called to verify and clear correction notices.
- 8) Questions with any code or inspection matters shall be addressed to the Building Dept. for explanation and resolution. If satisfactory resolution is not received, permit holders have the right to request to the Building Official for a determination if the item can be appealed to the Building Appeals Board.
- 9) The State Building Codes allow for alternative materials and methods of construction. Requests for use of alternative materials and methods of construction shall be made in writing to the Building Dept. and is the responsibility of the applicant to provide full documentation in support of the request. Appeals to the decisions of the Building Dept. concerning alternative materials and methods of construction can be made to the Chief Building Official (see # 8).
- 10) California Health and Safety Code, section 5416, requires that at least one (1) toilet be provided on each construction site. Although the chemical-type toilet is the one most commonly used various alternatives are available upon review and approval by the Amador County Environmental Health Dept. Non compliance with these state requirements is a violation of state law. If you have questions call Health Dept. @ 223-6439.
- 11) The State Water Resources Control Board @ (916) 322-4503 regulates all water resources in California, appropriation of water or alteration/diversion of any water course without proper clearance and approvals from the Resources Control Board is a violation of state law.
- 12) There are numerous underground utilities placed through out Amador County, owners and contractors are responsible for knowing of any and all utilities which may occur through or under construction sites. If there are questions concerning underground utilities please contact either.
  - A. Western Utilities Underground Alert Inc.  
(800) 424-DIGS
  - B. Underground Service Alert  
(800) 642-2444

# LAND USE AGENCY

- BUILDING DEPARTMENT
- ENVIRONMENTAL HEALTH DEPARTMENT
- PLANNING DEPARTMENT



500 ARGONAUT LANE • JACKSON, CA 95642-9534 • (209) 223-6422

FAX (209) 223-6637

24 HOUR INSPECTION REQUEST  
LINE IS (209) 223-6423

PLEASE READ THIS INFORMATION CAREFULLY IT CONTAINS IMPORTANT INFORMATION PERTINENT TO YOUR PROJECT. IF YOU DO NOT UNDERSTAND SOME OF THIS MATERIAL, PLEASE BRING IT TO THE ATTENTION OF THE INSPECTOR IN THE FIELD, HE/SHE WILL BE GLAD TO ANSWER, IN DETAIL, ANY QUESTIONS YOU MAY HAVE. YOU MAY ALSO CALL THE OFFICE FOR ANY INFORMATION YOU REQUIRE.

THE COUNTY OF AMADOR, BY THIS APPROVAL, DOES NOT ACCEPT ANY RESPONSIBILITY FOR OMISSIONS IN PLAN CHECKING, NOR DOES THIS RELIEVE THE CONTRACTOR OR BUILDER FROM COMPLIANCE WITH ALL CODES AND ORDINANCES.

**JAY STUDER**  
CHIEF BUILDING OFFICIAL

The Uniform Administrative Code requires that the areas or items to be inspected ***must be ready for that inspection, prior to the request for inspection, which is one day before the requested date.*** A reinspection fee may be charged. It is required that the approved set of plans and inspection record card (green card) be available to the building inspector during inspections. A reinspection fee may be charged for failure to have the inspection record card and approved plans available at the job site or if not ready for called inspection. (UAC 305)

## **GRADING AND SITE PREPARATION**

- Prepare building pad to assure 2% slope (1/4 in. Per. Foot) to 5 ft. away from structure. (UBC 1806.5.5 )
- Address cut slopes and fills on plot plan as per requirements of UBC Appendix Chapter 3312-13
- See Ordinance #1530 (attached), if required for road, driveway and setback requirements.

## **FOOTING AND FOUNDATIONS**

- 1/2" Re-bar, 3" from top & bottom, maximum 18" apart. (UBC1806.7.1 )
  - Remove all loose fill, debris, roots, etc. within 12" of surface, from footings and underfloor areas. (UBC 3302 )
  - All re-enforcing steel. UFER ground, and foundation and pier footings shall be completed prior to this inspection. (UBC 108.5.2)
  - Footings shall be dug 12" below undisturbed earth for single story, and 18" below undisturbed earth for 2 story (wood floored) structures. (UBC Table 18-1-C)
- 2/3 All rebar, foundation bolts, hold downs, etc. in place before inspection and approval. (UAC 305.5.(1))

## **GIRDERS, GROUND PLUMBING, FLOOR JOISTS, AND UNDERFLOOR**

- ALL water piping and DWV shall be installed and water/pressure tested. (UPC 712.1 & 105.5.3.3)
- ALL water piping (UPC 3-1), DWV (UPC Table 3-1), gas piping (UPS Table 12-2) and heating ductwork (UMC Table 6-E), shall be strapped properly.
- Underfloor framing shall be completed, girders spliced, joists blocked over all bearing. (UBC 2320.8-9)
- Cripple wall studs if less than 14" in length shall have solid blocking or plywood installed on both sides. (UBC 2320.11.5)
- Underfloor clearance. 12" to girders, 18" to joists. (UBC 2317.3)
- Foundation bolts to be installed 6' o/c, 12" from ends and joints of mudsill. (UBC 1806.6)
- Foundation bolts require 2 x 2 x 3/16 washers. (UBC 1806.6.1)
- Foundation ventilation shall be provided at the rate of 1 sq. ft. per 150 sq. ft. of underfloor area. (UBC 2306.7)
- Provide minimum 18" x 24" access to underfloor area, within 20' of building drain cleanouts. (UBC 2306.3)

## **ROOF SHEATHING AND NAIL INSPECTION**

- Nailing schedule for plywood sheathing shall be a minimum of 6" o/c on edges and 12" o/c in field. (UBC Table #23 11-B-2))
- Trusses shall be set and secured. Truss bracing shall be in accordance with Truss Manufacturers Specifications. (UBC 2304.4.1)
- Trusses at exterior bearing points attached with approved truss clips and Interior nonbearing trusses are not to be secured to top plates. (Truss Manufacturers Specifications)
- Roof diaphragm to be nailed at boundry of exterior wall of building @ 6" o/c.

(UBC 23 11-B-2)

- Comp. roofing w/slopes between 4 in 12 & 2 in 12 requires 2 layers Type 15 Felt. (UBC Table 15-B-1)
- ROOFING: Effective Nov.3 2000. Amador County has amended UBC 1504 to have the following roof covering requirements: (a) Roof covering on all new construction shall be listed 'CLASS A' per 1504.1 or metal, or other non-combustible material, installed over solid sheathing unless approved by Building Official. EXCEPTION: (Additions, alterations, and repairs) shall be as provided in UBC 3403, provided, however, when re-roofing or making additions to a building, the new roofing, or the additional roof area, accomplished in any 12 month period, exceeds 50% of the entire roof area, the entire roof shall comply with the provisions of this section. (b) Prior to final inspection, the installer and/or owner may be required to file a "certificate of compliance" with the Building Department, indicating the roof covering installed meets the requirements of a Class 'A' metal, or non-combustible material. © Above 5000 ft. elevation, metal roofing shall be applied over an underlayment of not less than 15 lb. felt. Fasteners shall be as specified by the manufacturer. Flashing for metal roofs shall be as specified in UBC 1508.3.

## FRAME

FRAMING INSPECTION: This inspection is to be called when roof covering is installed and building is weathertite, fire blocking, bracing, rough electrical, plumbing and vents, heating ducts and stove pipes shall be installed. (UAC 305.3)

- Nailing of **ALL** framing members (UBC Table #23-11-B-1)
- Residential landings, min. 36" x 36". Install at **ALL** exterior doors, regardless of door swing. (UBC 1003.3.1.7)
- Wood stove piping and masonry hearth and wall protection shall be installed to stove manuf. specifications. Unlisted stoves installed with 1" air space and brick protection from combustibles shall have 18" clearance, without approved wall protection is 36". ( Uniform Mechanical Code Table #3-A.)
- Minimum 22" x 30" attic access required. (UBC 1505.1)
- Notches and holes in framing members. (UBC 2320.11.9, 2320.11.10) and (2320.12.4)

- Frame Bracing (UBC 2320.11.3)
- Gable end attic vents must equal 1/150th of attic floor area or 1/300th of area if combined with eave vents. (UBC 1505.3)
- Residential stairways shall be minimum 36" finished width, have minimum 9" tread run, maximum 8" riser height, and minimum 6 ft. 8 in. clear headroom. Stairways with four (4) or more risers shall have handrails 34" to 38" above the nose of the treads, and be 1 1/4" to 2" wide, with newel posts or returns. (UBC 1003.3.3.6) Maximum spacing between less than 4" o/c @ guard and handrails. (UBC 509.3 & 1003.3.3.6 exmp. 3)
- Walls and soffits of enclosed spaces under stairways to be protected with 5/8" Type X sheetrock maximum 16" o/c (UBC Chapter 7) (UBC 1003.3.3.9)
- Unless the bedroom has an exterior door, at least one emergency egress window in a bedroom shall have a minimum net, clear openable area of 5.7 sq. ft., a minimum net height of 24", a minimum net width of 20" and a maximum sill height of 44" above the finished floor. (UBC 310.4)
- Wood stoves and fireplaces shall have approved spark arresters installed. (UMC 812.1)
- All firewalls secured @ maximum 16"o/c members. (UBC Chapter 7)

## ROUGH ELECTRICAL

- Electrical wiring and equipment shall be installed in a neat and workmanlike manner. (NEC 110-12)
- Romex shall be stapled within 12" of boxes (with internal clamps) 8" with out clamps. (NEC 336-15)
- Grounds shall have mechanical means of connection, stake-ons, wire nuts, soldering, etc. (NEC 110-14 (a) (250-8)
- 2 - 20 amp small appliance circuits required in kitchen area, such circuits, whether two or more are used, shall have no other outlets. (NEC 210-52 (B) (2)
- GFCI protection required on all counter top kitchen small appliance receptacles. [NEC 210-8-(A.6)].
- GFCI protection required on all U occupancy, garage, barn & shed receptacles.

[NEC 210-8 (a) (6)]

- 20 amp GFCI protection required on outlets in bathrooms. [NEC 210-8 (A) (2)]
- GFI protection required on all exterior outlets (with approved covers) (NEC 210-52-E)
- GFI protection required on all outlets below grade level or in unfinished basements. [NEC 210-8 (a) (4)].
- At least 6" of free conductor shall be left at each outlet, junction and switch point for splices, or the connection of fixtures, or devices. (NEC 300-14)
- Receptacle outlets shall be installed on any single wall space over 24" width in habitable areas. [NEC 210-52 (a)]
- Conductor protection is required within 6 ft. of attic access opening. [NEC 333-12 (a)]
- SMOKE DETECTORS - In dwelling units, smoke detectors shall be installed in each sleeping room, at a point centrally located in a corridor giving access to each sleeping area, and when the dwelling has more than one story and a basement, the smoke detector shall be installed on each story and the basement. See additional requirements in UPC 310.0.1.4.

## **ELECTRIC SERVICE REQUIREMENTS**

- All breakers in main and sub-panels shall be labeled. (NEC 110-22)
- All Conductors shall be color coded to identify their use. (NEC 310-12)
- All interior metal piping systems shall be bonded to the service ground. The bonding jumper shall be sized per Table 250-94. (NEC 250-80)
- Size of Service Grounding conductors: (100 Amp =#8 Copper)( 200 Amp =#4 Copper) (NEC Table 250-94)
- Bushings and clamps shall be installed in all knockout holes in service equipment boxes. (NEC 373-5)
- All unused knockouts shall be plugged. [NEC 373-4, 110-12 (a)]



- A separate ground rod shall be driven at detached structures served by a common service. (NEC 250-24)

## PLUMBING

- DWV shall be water tested with min. 10 ft. head or air pressure @ 5 lbs. at time of inspection. (UPC 712.2)
- Hot and cold water piping shall be tested at 50 p.s.i. air pressure or the working pressure under which it is to be used. (UPS 103.5.3.3)
- All DWV, water piping, and gas piping shall be protected from physical damage. (UPC 313-5)
- Island sink venting shall conform to UPC 909.0.
- Vent termination shall be not less than 6" above the roof. (UPC 906.0)
- All shower compartments, regardless of shape, shall be capable of encompassing a thirty (30) inch circle. The minimum required area (1,024 sq. in.) and dimensions shall be maintained to a point seventy (70) inches above the shower drain outlet with no protrusions other than the fixture valves, shower head and safety grab bars or rails. (UPC 412-7)
- Require that all new buildings constructed in California use water closets and associated flushometer valves which use no more than 1.6 gallons per flush. (HSC 17921.3 (b))
- Air gap devices shall be installed in-line on domestic dishwasher drains. (UPC 807.4)
- Cross connection control is required as part of all potable water systems. This includes backflow protection on irrigation and hose bibs. (UPC 602.4)
- Paint required on exterior black iron gas pipe. (UPC 1211.7)
- Showers and tub-shower combinations shall be provided with individual control valves of the pressure balance or the thermostatic mixing valve type. Gang showers, when supplied with a single tempered water supply pipe, may be controlled by a master thermostatic mixing valve in lieu of individually controlled pressure balance or thermostatic mixing valves. Handle position stops shall be provided on such valves and shall be adjusted per manufacturer's instructions to

deliver a maximum mixed water setting of 120°F (49°C). The water heater thermostat shall not be considered a suitable control for meeting this provision. (UPC 420)

## **MECHANICAL**

- Interior gas piping shall be tested at 10 p.s.i. Exterior piping shall be tested at 60 p.s.i. (UPC 1204.3.2)
- Duct systems shall conform to UMC Chapter 6.
- Underfloor installations of propane gas appliances shall be discouraged. Where approved by the Building Official they shall be installed in a pan with 3" deep sides and drained by a 1 ½" diameter pipe to the outside or other approved methods as approved by Building Official. (Amador Co. Ord. Sec. 15.04.022)
- Exhaust fan ducts shall terminate outside the structure. (UBC 609.10)

## **WATER HEATERS**

- A shut-off shall be installed on the cold water supply to the water heater. (UPC 605.3)
- Insulate hot and cold pipes within 5 ft. of water heater. (State Energy Regs.)
- Water Heater shall have min. R-12 insulation. (State Energy Regs.)
- Elevate gas appliances 18" in garage. (UPCV 510.1)
- Water heater pressure relief valve shall terminate outside the structure. No part of the piping system shall be trapped, and the terminal end of the pipe shall not be threaded. (UPC 608.5)
- Water heater over 42 gallons (400 lbs filled) requires special listed seismic support. (UBC 1632)