

The PRMD Newsletter

SPRING/SUMMER 2009

COMMENTS FROM THE BUILDING OFFICIAL

GREEN BUILDING

BY DEWAYNE STARNES

As I mentioned in the last news letter, we are moving toward a Green Building Program for the county. The Board of Supervisors passed a Resolution setting policy direction for the staff in the drafting of a Green Building Ordinance. The Resolution directed staff to draft a mandatory Green Building Ordinance to be presented for Board consideration in July 2009. The ordinance will use Build It Green (BIG) guidelines for new residential and multi-family residential construction and the Leadership in Energy and Environmental Design (LEED) green building rating system for new commercial building projects. We are working with our General Services Department and the County Architect to comply with the Board direction to investigate compliance thresholds with the LEED green building rating system for the construction of all permanent county government buildings and renovation projects. This will take the form of a "Green Building Policy" and is intended to lead the industry by example.

Check out the PRMD website under the "What's New" link for green building. Currently, we are completing the drafting of the Green Building Ordinance, Energy Efficiency Ordinance and have a consultant providing our energy analysis. This entire package will have to be sent to the California Energy Commission (CEC) for approval after the Board has held a public hearing on the ordinances. We are currently scheduling the public hearing for July 21, followed by adoption in August. The new Building Energy Efficiency Standards (Energy Code) becomes effective August 1, 2009 and will be the basis for our Green Building Program. Also scheduled August 1, 2009 to become effective, is the new California Green Building Code. This code has provisions for residential and commercial construction, but the provisions are voluntary until July 2010 when the residential provisions will become mandatory. The State Code is meant to work in conjunction with other locally adopted green building programs. We will

be holding public outreach meetings for anyone interested in learning more or providing any comments.

As always, your input on this proposed ordinance is welcome, you may contact me for more information, or to find out when our next outreach meeting will be held, at vstarnes@sonoma-county.org.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

BY DEWAYNE STARNES

This act was first issued in December of 1973 as the Alquist-Priolo Special Studies Zones Act and has been updated 11 times since, with the name changing in 1994 to the Alquist-Priolo Earthquake Fault Zoning Act. The latest revision was in 2007. Also, known as Special Publication 42, it is a little difficult to find on the California Department of Conservation website, so I've included it here for your ease in locating it:

<http://www.conservation.ca.gov/smgb/regulations>.

The purpose of the Act is to regulate development near active faults so as to mitigate the hazard of surface fault rupture. Under the Act, the State Geologist is required to delineate Earthquake Fault Zones, known as EFZ, along known active faults in California. Cities and Counties are required to regulate certain development projects within the zones. Permits cannot be issued in these zones until geologic investigations demonstrate that the site or sites are not threatened by surface displacement from future faulting. Sonoma County adopted G zone districts which include all properties within the Alquist-Priolo zones. County zoning required geologic reports for all habitable structures that address the proximity of the structure to fault traces, and describes potential hazards and mitigation measures. Although the State Alquist-Priolo Zone exempts single family homes from the requirement, the county ordinance does not include the exemption for single family homes.

No structure intended for human occupancy or otherwise defined as a project in the Alquist-Priolo Earthquake Zoning Act, is permitted to be placed across the trace of an active fault or within fifty feet of the surface trace of any fault. The County therefore requires geologic reports for all development including minor subdivisions, zoning permits and building permits in the G zone districts. For more information regarding the G zoning designation, check out the Sonoma County Code at http://municipalcodes.lexisnexis.com/codes/sonomaco/ DATA/TITLE26/Article_7 . G Geologic Hazard .html

EXPANDED SOILS REPORT REQUIREMENT

BY JOHN DECOURCY, BUILDING DIVISION MANAGER

The technical bulletin “When is a Soils Investigation Required?” (available on our web site at <http://www.sonoma-county.org/prmd/docs/techbulletin/b-28.pdf>)

Included the following requirement:

1. New or replacement other than Occupancy Group R 3 or U (Groups A, B, E, F, H, I, M, R 1, R 2 and S Occupancies) soils investigation required
 - a. Trash enclosures, storage buildings, and other accessory structures to such buildings which are not occupied by human beings, not required

Despite this requirement, it has been our practice to take in applications for new commercial buildings without requiring a soils report at the time of submittal. This practice had the effect of ultimately delaying the project, since the plan review could not be done without the soils report and the design parameters for the foundation, which in turn might affect the design of the structure. For this reason we are modifying the requirements for plan submittal for these commercial structures. As of July 1, 2009, a soils investigation report will be required to be included in the plan submittal for all commercial structures as described in the policy.

ENERGY CODE UPDATE

BY KEVIN BERGER, SENIOR ENGINEER, SUPERVISOR,
BUILDING DIVISION, PLAN CHECK SECTION

On August 1, 2009, the California 2008 Building Energy Efficiency Standards (also known as Title 24, Part 6) will take effect. As can be expected, there are many significant changes, too many to mention in this article. I am including a couple of changes in the residential standards which serve as good illustrations of the increased requirements.

The first example is in Section 4.6.4. The new residential standard requires that each kitchen and bathroom have a local exhaust system installed. Most designers of residential structures will likely choose installing an exhaust fan

although systems which provide exhaust from multiple rooms are allowed. The standard defines kitchens as any room containing cooking appliances. Bathrooms are rooms that contain a bathtub, shower, spa, or other similar source of moisture. A room containing only a toilet is not required by the energy standard to have a mechanical exhaust; it assumes that there will be an adjacent bathroom which will have a local exhaust. However, Chapter 4 of the California Mechanical Code does prescribe a minimum exhaust fan rate of 50 cfm/unit (if the fan is not continuous system operation) for toilet rooms it is important to note that few bath fans have the appropriated UL rating for use in certain kitchen applications; the design professional and builder will need to ensure the appropriate fans are used in the appropriate locations.

The second example is taken from Section 5.3.4 Pipe Insulation Below Grade. It is a prescriptive requirement that all hot water pipes that run below grade be insulated and be installed in a waterproof and non-crushable casing or sleeve that allows for the installation, removal, and replacement of the enclosed pipe and insulation. Examples of acceptable casing materials includes PVC & ABS pipe. Allowing for pipe removal implies the use of flexible water piping such as PEX and copper tubing. It also implies the use of electrical conduit or other piping material that has sweeping bends rather than elbows such as those found in water piping for the transition from horizontal to vertical. It will be difficult producing a detail of the casing material rising out of a perimeter or interior stem wall that is code compliant because of rein forcing and concrete depth requirements; the builder will likely find it easier running the hot water pipes overhead in most applications. All proposed hot water pipes below grade in addition to the transition from below grade to above grade will be required to be detailed in the plans to ensure the installation allows for the installation, removal and replacement of the enclosed pipe and insulation.

As usual with all code updates, it is important for building industry professionals to keep current with the new energy standards. This will minimize unnecessary delays in the permitting process and avoid conflict during the construction process. More information on training in the new 2008 Building Energy Efficiency Standards can be found at <http://www.energy.ca.gov/title24>.