

PLANNING COMMISSION MEETING. TOWN OF PORTOLA VALLEY, MARCH 18, 2009, SCHOOLHOUSE, TOWN CENTER, 765 PORTOLA ROAD, PORTOLA VALLEY, CA 94028

Chair McKitterick called the meeting to order at 8:00 p.m. and called the roll:

Present: Commissioners Gilbert, McIntosh, Von Feldt and Zaffaroni, and Chair McKitterick
Absent: None
Staff Present: George Mader, Town Planner
Ted Sayre, Town Geologist's Office
Richard Merk, Town Council Liaison

ORAL COMMUNICATIONS

Commissioner Gilbert said the minutes for the joint Planning Commission and ASCC field meetings provided the roll for the ASCC but not for the Planning Commission. She said she would e-mail the names of those who attended to Ms. Lambert. There had not been a quorum for the second field meeting.

REGULAR AGENDA

- (1) Discussion of Proposed Revisions to Geologic and Ground Movement Potential Map and Related Zoning Provisions and Land Use Policies

Commissioner Gilbert said a portion of her parcel was rated "Pf," and she would recuse herself. She said she would participate as a member of the audience.

Town Planner Mader reviewed his memo of 3/12/09 on the changes made to the Geologic Map and Movement Potential Map. He said the maps had been fundamental to the growth of the Town. The Town had approved changes incrementally, but the changes to the fault setbacks had not yet been reviewed other than as applications came up. With the studies of the Town Center and identification of a new fault rupture characteristic, the maps had to be modified.

Responding to Chair McKitterick, Ted Sayre said the site-specific studies that were incorporated were ones where specific changes had been proposed for the Geology and Movement Potential Maps. Those had come before the Planning Commission and had been officially approved. Unless a map modification was processed, there was no attempt to do wholesale changes based on a wide collection of individual lot reports. There were five different categories of changes on the map: 1) approved geology and movement potential map modifications that had officially come through the Town; 2) changes in the understanding of geology from subdivision level investigation, such as Blue Oaks; 3) Town Center and immediate vicinity investigations; 4) scientific studies on fault rupture funded by various agencies, such as NEHPP; and 5) clarification of thrust faults in the Westridge areas, which were of unknown activity and were inactive.

Responding to Loverine Taylor, Naranja Way, Mr. Sayre said most of the Pf zone on the old map was arbitrarily 200' on either side of an active fault trace. This was not intended as a fault setback per se, but as a warning. In that 400' swath, it was anticipated that there would be some effects related to rupture on the San Andreas Fault. Those could be small scale secondary cracking of the ground or broad warping of the ground. On the new map, the width of the Pf zone would be pared down so that it reflected a fault setback; building should not be that close to an area subject to primary surface fault rupture. Where the location of the fault trace was well known, there was a 50' setback for both single-story and two-story structures. Where it was not known exactly where the fault was between known locations, a linear feature had been projected; there might be some surface evidence for it. Inferred fault traces had wider setbacks of 100' for new construction as did en echelon fault traces that had a certain width of their own that was wider than a through-going linear trace. Responding to Commissioner Von Feldt, he described en echelon faulting that generally occurred where the fault was covered by young, poorly consolidated sediment. The ground was not stiff enough to create a clean tear. He used the map to show where inferred and en echelon faults were

in relation to the Town Center and the meadow area. Responding to Commissioner Zaffaroni, he said there was a difference between a broad fan deposit that filled the base of valley floors and a narrow deposit of alluvial along an active stream channel.

Mr. Sayre said there was also a new category on the Movement Potential Map called a Pdf zone to reflect the potential for debris flows, which was a type of fast-moving landslide deposit. This category was identified during the study for the Blue Oaks subdivision. There had been a debris flow during the early development of that site that came down across Los Trancos Road. Mitigation for debris flows was installed as part of that project. There was a potential for debris flow in Town that had not previously been mapped; it was now mapped where there was data for its existence. Responding to Commissioner Zaffaroni, he said debris flow was a particular type of slope failure where there was a source area up high and a deposit failed like a normal slump. Typically they were shallow. It fluidized and flowed down a drainage channel. It might deposit many hundreds or thousands of cubic yards away from its source. It had a source area, flow tract, and depositional fan area associated with that sort of landslide. Responding to Commissioner Zaffaroni, he said prior to the new category, it was in the Pf category of potential shallow landslide area. Debris flows were relatively fast moving failures of 15-20 mph as they moved down these channels. It was a high density slurry of mud, rock and debris with a powerful momentum impact if it struck structures. Typically, deeper moving landslides moved inches or a few feet per day when they were active. Responding to Commissioner Von Feldt, he said there could be other situations that could spawn debris flows in Town. It was looked at for site specific geotechnical peer reviews for individual building permits. Mapping had not been completed throughout the entire Town to identify where it occurred.

As set forth in his e-mail of 3/11/09, Mr. Sayre said there were areas on the old map where old boundaries on the map were not closed. A Pd area could open up and merge into a Ps area with no line in between. An attempt had been made to determine what was most reasonable based on geomorphic evidence. These areas were mainly in the western hillsides. Responding to Chair McKitterick, he said most of the changes were relatively small. There was quite often a logical place where the boundaries could be closed. Responding to Commissioner McIntosh, he said now that the maps were computerized, it would be much easier to make changes. He added that there were a number of small changes that remained to be made to make the maps ever clearer by showing street boundaries and changing the colors so that houses, property boundaries and contour lines could be shown. He said he also received comments from the Geologic Safety Committee, and he was working with Town Planner Mader to tweak one of the Pf zones at the Ranch where there was additional data.

Responding to Commissioner Zaffaroni, he said the original title of one of the maps, "Movement Potential of Undisturbed Ground," was intended to show that it was an attempt to interpret the future behavior of natural earth materials—not an attempt to predict the behavior of fill prisms, cut slopes and other things that were not natural ground behavior. That could be explained in a note on the map indicating that this map related to future interpretations of probable ground behavior of natural ground—not engineered or modified ground. Commissioner Zaffaroni agreed that "Ground Movement Potential Map" was much easier to understand. The title was incorporated in other areas, and people might not understand that the category of already disturbed/graded ground was not what was intended. She felt a note on the map would be important. Town Planner Mader agreed "Ground Movement Potential Map" was simpler and easier to use. Chair McKitterick suggested the note be on the map and in the ordinance as well. Commissioner Zaffaroni concurred. She noted that the new name had been changed in the title of the Resolution but not in Table 1. Town Planner Mader confirmed that that should be changed as well.

Responding to Commissioner Von Feldt, Mr. Sayre said the location of the thrust faults were known in some areas. In general, the alignment of those traces was not nearly as well known as the San Andreas Fault. The intent was to make sure buildings were not astride those traces but not necessary to find them on properties. Those traces consistently occurred where different types of bedrock materials were juxtaposed by the thrust fault itself. In boring studies for foundations, they made sure that the footprint of the structure was not crossing different types of bedrock. If it was all on one type of bedrock, it was generally all on one side of the thrust fault. Where it was known, it could be indicated on the map. Referring to the map, he

discussed symbols used on the map. The triangles were a geologic symbol for the thrusting type of fault. They were called barbs and were typically on the leading edge of the thrust wedge. Town Planner Mader noted that those were shown on the maps that the Town had used for years. The Town Geologist had been administering development applications against those map traces even though they were not encapsulated in any of the Town's regulations. Those would be formalized a little more because it was a procedure that was followed. Responding to Chair McKitterick, he confirmed that the rules weren't changing; they were being formalized. Mr. Sayre noted that there was enough data on one of the fault traces in Westridge to indicate it was actually an inactive fault trace. That one fault trace had been removed from the new map. Responding to Chair McKitterick, he said he used the same definitions as the State for inactive and active fault traces. He discussed thrust faults shown on maps in other communities nearby that were probably part of the same system. Responding to Chair McKitterick, he said to the north, these faults had not been given that much due. South of Town, they were given the same sort of treatment as they were in Town. There was not a specific 50' setback, but structures should not be built across them. Some geologists felt these should be active faults, but that had never been proven scientifically. Responding to Chair McKitterick, he said in some cases, fault traces moved 50' when further study was done. Changes to the fault trace locations were only done after specific study. Fault traces were complex; some came up and truncated on faults that were going in other directions. Some of those had been revealed as a result of USGS work in the last 10 years or so. There were some changes from the initial Town map that were not based on site-specific studies. Responding to Chair McKitterick, Town Planner Mader said the old and new maps could be compared to see if any properties were affected by the USGS studies. Mr. Sayre confirmed that the USGS studies were used when considering projects; typically, when new construction was proposed within 200' of these fault traces, the boring logs were looked at to ensure the building would not occur across the traces. Responding to Commissioner Von Feldt, he said whether there were currently buildings astride these traces would need to be looked at.

Responding to Commissioner Zaffaroni, Mr. Sayre said there was a "Sun" category, which was unconsolidated sediments. One of the hazards in that category was potential liquefaction. There was a new State liquefaction hazard zone, which was different than the Sun zone. The State's zone was not portrayed on these maps. The State mapping was based on topographic data at a different scale, which was much less precise. The extent of liquefaction hazard had been over mapped such that they had a very good chance of capturing 90% or more of the liquefaction that might actually happen in the future. A good portion of the zone that they deemed as potentially liquefiable would probably not have liquefaction in it. Town Planner Mader added that the Town's maps were of a much higher quality, and he thought it was better to keep the State map separate. Mr. Sayre added that the State maps were used and pertained to subdivisions greater than 3-4 lots when the State required that the liquefaction zone designated be investigated. Responding to Commissioner Von Feldt, he said the Town had risk areas for liquefaction, which were within the Sun areas. Responding to Commissioner Zaffaroni, he re-iterated that the State's standard was broader and covered a lot more ground. Additionally, the liquefaction hazard was evaluated in detail for the Town Center using borings going down 50 feet. There had been several dozen studies in Town that had looked carefully for liquefaction hazards. They all came up with very negligible impacts to the design. It was not something he wanted to put undue emphasis on.

With respect to the new Pdf category, Town Planner Mader said his second memo dated 3/12/09 showed where it would be added to Table 1 in the Resolution. It would have similar treatment to a Pd zone because it was a significant, potentially life-threatening hazard. With that memo, Table 1A and Table 1B showed amendments to the zoning ordinance to include the classification of Pdf.

Responding to Chair McKitterick, Mr. Sayre said the changes to the boundaries were in the western hills areas where the density was very low. There were no areas where boundaries had been closed that made a large scale change in the movement potential category that would impact any existing houses. He had not carefully compared the coloring of the original map with the new map where boundaries had been closed. Chair McKitterick was concerned about changes that might adversely impact homeowners. Mr. Sayre said in higher density areas, most of these problems had come up through the years and had been looked at more carefully than in the western hills. He did not think there were any existing developed properties that

would be impacted by what was done.

Responding to Chair McKitterick, Mr. Sayre re-iterated that the intent was to have the Pf zone represent the fault setback requirement. Town Planner Mader added that he had been concerned about the fault impacting properties that had not been impacted before. That was complicated by the fact that the existing fault setback was old and hard to read. He took those and put them on an overlay over the proposed map to see where the differences were. In part of Blue Oaks, where there was no development, the boundary shifted 80 feet, plus or minus. In the Ranch, there was one shift of about 70 feet and a shift of 100 feet in undeveloped property. A lot of the rest of it was almost exactly the way it had been. There were properties within the fault zone now within the setbacks, and those would still be there. A lot of that development had been done with those maps available and conformed to the current setback requirements. Houses had been placed with respect to those setbacks, and those setbacks remained. With the revisions to the new map, you would be able to read the property lines and see where the houses and streets were. The impacts could be better evaluated. By and large, he felt the maps were consistent with a few places where there were some changes. Responding to Chair McKitterick, he said changes to faults that were made pertained to areas that were currently in the Pf zone.

Commissioner Von Feldt said she would like more information on how this impacted current structures/properties. Mr. Sayre said he would replace the purple color so all the property boundaries and houses could be seen clearly. Commissioner McIntosh said he endorsed all the changes discussed. Chair McKitterick asked for public comments on the map. Denise Gilbert said her concern was whether there were any structures that crossed the thrust fault in Westridge or structures that were legal with the setbacks before but because of a slight shift in the fault were now within the Pf zone. On the map, there were 2-3 houses in Westridge that seemed to cross the dotted line and 2-3 houses that partially went into the Pf zone. She did not know if that was a change from where setbacks were before. Town Planner Mader said the studies that the Town Geologist's office had done were scientific studies, and the best information available was being presented. It might affect some people, but the map was an accurate representation of the best judgment of geologists. Chair McKitterick said most people didn't know that other studies existed unless they came in for a building permit that the Geologist needed to look at. Town Planner Mader said a lot of people might want to come in to see the detailed maps to see their homes. The Town should notice those who looked like they might be impacted by a shift. When the maps were ready, Chair McKitterick suggested posting them on the Town website. People already had a general idea of where their properties were. If it was on the website, people could look at it. Mr. Sayre said that would be preferable because he quite often received requests for various city/town maps. If it was posted on the website, consultants who needed them could print them out.

Other than comments about the note and other minor changes, Chair McKitterick said the main concern was how to let people know that this was an issue that they should be paying attention to—for public notice or safety reasons. Commissioner Von Feldt said the question was how the Town should let people know what properties would become non-conforming in terms of setbacks. Responding, Town Planner Mader said these homes would be grandfathered in; the 50% rule would apply if someone wanted to rebuild/remodel.

Town Planner Mader said he felt all the dimensional setbacks should be in the zoning ordinance rather than relying on Resolution 500 (i.e., Resolution 2279-2006). Resolution 2279-2006 designated all of the uses permitted in the various unstable categories. All the setbacks would be in the zoning ordinance. The Ground Movement Potential Map and the Geologic Map were both referenced. That was a change. He reviewed changes to the Resolution as shown in the strikeout/underline version, including modification to the Land Use Policies for Potentially Active Faults section. As pointed out, the reference on Table-1 to the old map would be replaced and new category Pdf would be added after Pd.

With respect to the zoning ordinance, he reviewed the rewrite of Section 18.58.030. Responding to Chair McKitterick, Mr. Sayre said there was no statewide standard for setbacks from thrust faults. Most geologists would use somewhere between 100 and 200 feet. Responding to Commissioner Zaffaroni, Town Planner Mader confirmed that new Section 18.58.030.D.2 would also relate to replacement of buildings. Section

18.46.050.1.b required that if damage was caused by other than fault rupture, the building had to be located so as to not cross a fault designated as a Fault (other than the San Andreas Fault). In Section 18.46.050.2, if damage was caused by a fault rupture, the structure had to be rebuilt at least 50 feet from the fault rupture zone. Commissioner Von Feldt verified that that applied to the San Andreas Fault.

[End tape recording]

COMMISSION, STAFF, COMMITTEE REPORTS AND RECOMMENDATIONS

APPROVAL OF MINUTES

ADJOURNMENT: ____ p.m.

Nate McKitterick, Chair
Planning Commission

Leslie Lambert
Planning Manager