



TOWN OF PORTOLA VALLEY
Geological Safety Committee Meeting
Tuesday January 23, 2023
10:30 am

Chet Wrucke, Chair
Nan Shostak, Vice Chair
Patricia McCrory, Secretary
Garv Ernst, Member

SPECIAL HYBRID MEETING - HISTORIC SCHOOLHOUSE
775 PORTOLA RD. – PORTOLA VALLEY, CA

REMOTE MEETING COVID-19 MEETING ADVISORY: On September 16, 2021, the Governor signed AB 361, amending the Ralph M. Brown Act (Brown Act) to allow legislative bodies to continue to meet virtually during the present public health emergency. AB 361 is an urgency bill which goes into effect on October 1, 2021. The bill extends the teleconference procedures authorized in Executive Order N-29-20, which expired on September 30, 2021, during the current COVID-19 pandemic and allows future teleconference procedures under limited circumstances defined in the bill.

ASSISTANCE FOR PEOPLE WITH DISABILITIES

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Town Clerk at (650) 851-1700 or by email at mthurman@portolavalley.net 48 hours prior to the meeting start time. Notification 48 hours prior to the meeting will enable the Town to make reasonable arrangements to ensure accessibility to this meeting.

VIRTUAL PARTICIPATION VIA ZOOM

To access the meeting by computer:

<https://us06web.zoom.us/j/87074070276?pwd=VldBc1M3N0RNbHA5USfEZ2x2Y1ZtZz09>

Webinar ID: 870 7407 0276

Passcode: 809470

To access the meeting by phone:

1-669-900-6833 or

1-888-788-0099 (toll-free)

*Mute/Unmute – Press *6 / Raise Hand – Press *9*

- 1. CALL TO ORDER & ROLL CALL**
- 2. ORAL COMMUNICATIONS FOR ITEMS NOT ON THE AGENDA**
Speakers' time is limited to three minutes.
- 3. APPROVAL OF MINUTES:**
 - a. November 29, 2022
- 4. NEW BUSINESS:**
 - a. Discuss and comment on questions on the Draft Safety Element that were submitted to the Geologic Safety Committee during the last meeting.
 - b. Discuss and comment on the town's Draft Safety Element FAQ.
 - c. Decide on time and date of next meeting.
- 5. ADJOURNMENT**
This body does not have a regular meeting schedule and meets on an as-needed basis

The Town of Portola Valley acknowledges the colonial history of this land we dwell upon—the unceded territory of the Ramaytush (rah-my-toosh) Ohlone, Tamien Nation, and Muwekma (mah-WEK-mah) Ohlone, who endured a human and cultural genocide that included removal from their lands and their sacred relationship to the land. Portola Valley recognizes that we profit from the commodification of land seized from indigenous peoples and now bear the ecological consequences. We seek to understand the impact of these legacies on all beings and to find ways to make repair.

SPECIAL GEOLOGIC SAFETY COMMITTEE MEETING
TOWN OF PORTOLA VALLEY
29 November 2022

[via Zoom; this meeting was recorded]

Chairman Chester Wrucke called the meeting to order at 10:42.

Committee Members present [via Zoom]:

Chester Wrucke
Gary Ernst
Pat McCrory
Nan Shostak

Town Staff present:

Jeff Aalfs [council liaison]

Also present [at various times during the Zoom; list not complete]:

Bob Wrucke
Dale Pfau
Karen
Peter Lipman
Kristi Corley
Leslie Kriese
Rita Comes
Danna Breen
Geoff Baldwin
Rusty Day
Rita Comes Whitney
Gene Chaput
Edith Collin

Purpose of Meeting:

The committee met to hear a presentation by members, Nan Shostak and Pat McCrory, on proposed GSC questions to be submitted to the town regarding the geologic, seismic, land-sliding, and flooding hazards components of the draft Town of Portola Valley Safety Element.

Old Business:

- Minutes of the meeting of the Geologic Safety Committee on 11 May 2022 were approved—as is—by the committee at 10:43.
- Chet opened meeting at 10:45 to anyone who wanted to address the committee regarding items not on the agenda.
- Rita thanked the committee for scheduling a meeting to discuss this topic.

New Business:

- Chet explained the focus of the meeting is the draft Safety Element and opened the meeting to public questions and comments at 10:48.
- Rusty Day noted that comments to the town regarding the Housing Element close today.
- Gary Ernst noted the need for more information regarding the Alpine Road corridor.
- Nan Shostak began the PowerPoint presentation with general questions at 11:07. Chet agreed with Question #7; Gary noted the need for specific local knowledge studies prior to new development. Nan mentioned the importance of local knowledge with an example from the Blue Oaks trench report. Chet noted that the GSC should be involved in future discussions about new developments. Nan requested peer review of reports before building applications are approved. Gary noted that 'more eyes' balances limited data.
- Pat McCrory began the **Faulting** portion of the presentation at 11:18.
- Jeff Aalfs commented that lifelines (infrastructure) are the responsibility of the relevant utility companies at 11:22.
- Nan began the **Landslide** portion of the presentation at 11:30. Chet noted that landslides in the town need to be mapped and classified, but acknowledged that determining the areal extent of ancient landslides is a difficult problem to quantify. Chet also commented that Brown Act does not serve the town well by hampering GSC's ability to work as a team at 11:38. Jeff countered that the committee can meet at the town center.
- Pat began the **Flooding** portion of the presentation at 11:41. Kristi expressed concern about the adequacy of current flood control with respect to existing culverts and pipes at 11:52. Howard (?) mentioned that as paved area increases, infiltration decreases, adding to the runoff concerns. Rita noted recurrent flooding along Alpine and Arastradero Roads and the possibility of such flooding blocking emergency evacuation routes at 11:54.
- Rusty thanked the GSC for its leadership and guidance in upholding and strengthening town traditions at 11:55 and encouraged the panel to take responsibility for defining safety element topics and framing. He also requested the committee reinforce and reinvigorate the public's education about the most profound hazards facing the town including wildfires, earthquakes, and wildfires triggered by earthquakes. Rusty urged the committee to seek grants and public funds as needed. He disagreed with the housing element being approved before acceptance of the safety element and encouraged the committee to add new members. Chet thanked Rusty for urging renewal of the committee at 12:03.
- Danna noted that roads with no curbs allow water to infiltrate and that capturing runoff in the storm drain system restricts the availability of water for the trees.

Concluding Comments:

Chairman Chester Wrucke adjourns the meeting at 12:10.

Questions to the Geologic Safety Committee and town responses in the Town of Portola Valley’s “DRAFT SAFETY ELEMENT FAQ”, December 23, 2022

GENERAL QUESTIONS

Comment Number	Question	Town FAQ Response
GSC-G1	Where and when will all questions from all the safety committees be publicly available, whether or not they received written responses from the Town?	This document includes responses to all questions the Town received from the EPC, Geologic Safety Committee, Sustainability Committee and WPC. It is posted on the Town website and has been emailed to members of the four committees.
GSC-G2	Where on the town website are all the safety committee comments that were submitted last spring posted?	The comments received in meetings when the Committees reviewed the memos were not compiled into a document and were therefore not posted on the Town website.
GSC-G3	<p>Questions on the Safety Element approval process:</p> <ul style="list-style-type: none"> a. Who will write the detailed final content of the Safety Element? b. Can specific Town Committees which have relevant knowledge and responsibility be included in the process to determine the final content? 	The content provided is considered the draft Safety Element. Based on comments and feedback provided, Town Staff and the Town’s consultant will make the necessary revisions and provide a final element for review and approval by the Planning Commission and Town Council. Sharing the element with the commission in October 2022 is part of the process to determine the final content. Feedback and input from responding committees will help in determining the final content of the element that is adopted by the Town.
GSC-G4	Should we pause initiating major housing projects until the Safety Element and the Housing Element are both approved?	The use of a moratorium is a process that would have to be enacted by the Town Council and approved by the State. A moratorium requires specific findings to place a pause on development activities. This type of action is under the purview of the Town Council and not a decision that staff can make on their own.

Comment Number	Question	Town FAQ Response
GSC-G5	<p>What is the best way to include in the Safety Element a policy that requires all geologic/geotechnical mapping, data, and reports, both existing and future, be: (1) regularly indexed (by year, location, and type of report), (2) readily available to the public in digital form (i.e., scanned), and (3) incorporated into the Town’s Geographic Information System database and maps?</p>	<p>Action A11-1 addresses some of these requirements. The Town will review this action and make the necessary revisions to address this concern. If all requested revisions cannot be made due to lack of funding or staff capabilities, Town staff can develop a recommendation to present to Town Council for their review and concurrence.</p>
GSC-G6	<p>What is the best way to add new policies and actions to the Safety Element for development and implementation of strategies to manage multiple, simultaneous hazards (e.g., major earthquake accompanied by severe ground shaking—causing structural damage, broken utility lines and water pipes, and broken pavement on evacuation routes—followed by residential fires and slope failure)?</p>	<p>Cascading hazards are a major concern for all Town departments. The development of policies and actions typically focus on key ways to prevent specific hazard conditions. If the GSC has a specific policy to address cascading hazards and interactions, Town staff would be happy to review this. While this is not common practice in a General Plan Safety Element, Committees are welcome to provide suggestions about how this can be done and how to assess the likelihood of whether and where this would occur. This type of analysis is typically included in the Town’s Emergency Operations Plan.</p>
GSC-G7	<p>For Safety Element references to the 2017 Portola Valley Geologic Map and 2017 Ground Movement Potential Map:</p> <ol style="list-style-type: none"> a. Shouldn’t the Safety Element refer to the most recent and best available maps instead of the static 2017 maps? b. Shouldn’t both maps be evaluated annually for potential revisions and updated maps be readily accessible on the Town’s website? 	<p>The 2017 maps are the latest adopted versions of these maps, with periodic, site specific amendments when new information becomes available and individual property owners go through a Map Modification application. The Town Geologist keeps track of these amendments and incorporates them into future analysis and recommendations. Until an updated version has been adopted by the Town, this is the best available information.</p> <p>The decision to annually evaluate and update the maps requires Town Council approval since it affects annual budgeting and staff capacity. This feedback will be provided to Town Council to make an informed decision and the timing and frequency of this activity by Town staff. The Geologic Safety Committee has the ability to make annual evaluation of maps part of its annual work plan and to make recommendations to the Town Council.</p>

Comment Number	Question	Town FAQ Response
GSC-G8	Do all the policies and actions that pertain to “development” or “proposed development” also include major additions to existing structures?	Typically, major remodels would be covered under these policies if the proposed action meets the Town’s definition for this type of activity. For example, the Town has a definition of when major additions and remodels are required to comply with Chapter 7A (Wildland Urban Interface) building code requirements.
GSC-G9	Define the term “qualifying subdivision”, which is only used in Policy P-3, p. 13.	<p>The Municipal Code defines a subdivision as follows: 17.08.110 - Subdivision.</p> <p>The provisions of this title shall apply to the subdivision or other division of land for any purpose whatsoever within the town. For the purposes of this title, the division of land shall mean the division of any parcel or portion thereof into two or more lots, plots, sites or parcels for the purpose, whether immediate or future, of sale, transfer, lease, of all or any part thereof or for building development. It includes subdivision and resubdivision and other divisions of land and, when appropriate to the context, relates to the process of dividing land or to the land or territory divided. (Ord. 1967-71 § 1 (7621.2), 1967)</p> <p>This is the definition that is applied to policy P-3.</p>

QUESTIONS ON SPECIFIC POLICIES OR ACTIONS

Comment Number	Question	Town FAQ Response
GSC-P1	<p>Referring to Policy P-1, p. 13: “Consider all faults shown on the Town’s Geologic Map and Ground Movement Potential Map, adopted by Resolution 2746-2017 during the review of development applications. Required setbacks for buildings for human occupancy illustrated on the Ground Movement Potential Map (Figure 3) should be adhered to and reflected in the Town’s zoning ordinance.”</p> <p>a. Shouldn’t this policy refer not only to the 2017 maps but also to future revisions superseding the 2017 maps, as approved by the Town Council?</p>	<p>The Town may opt to add language to the policy including all future map revision or upon the adoption of a new map, the Safety Element policy can be updated with the appropriate map name and date.</p>
GSC-P2	<p>Referring to Policy P- 3, p. 13: “Qualifying subdivisions, including structures for human occupancy and other critical structures within an Earthquake Fault Zone shown on current maps published by the California Geological Survey, ...should prepare a site-specific fault investigation report by a certified engineering geologist for Town review and approval. Also, any proposed new living space within a fault setback (consistent with the Pf Zone illustrated on the Town Movement Potential Map) should be supported by a fault investigation....”</p> <p>a. What oversight is triggered if an entity that is not building a qualifying subdivision applies for new construction or substantial remodeling in the Pf Z one (Pf = primary fault rupture zone)?</p>	<p>As written policy P-3 applies to any construction that includes structures for human occupancy or other critical structures. The way the language is written there is very little if any construction that would not have some form of oversight by the Town.</p>

Comment Number	Question	Town FAQ Response
GSC-P3	<p>Referring to Policy P-3, p. 13 (above) with Actions A-3-1 through A-3-5: “Design and construct new Town and utility infrastructure (either public or private) that cross [es] active fault traces in a manner which recognizes the hazard of fault movement...”, “Equip water, gas, and electric lines that cross active fault traces with shut-off devices and flexibility which utilize the best available technology for quick shutoff...”, “Develop a Utilities Resilience Program that examines all existing utility lines that cross active fault traces...”, “Encourage utility companies to institute an orderly program for installing shutoff devices on these lines...”, and “In consultation with Cal Water and WFPD, establish and maintain adequate emergency water supplies in areas served by water lines that cross active fault traces.”</p> <p>This critically important section on the safety of structures and resilience of infrastructure is currently applied only to “qualifying subdivisions.” [Under the current Draft Housing Element, these provisions will apply only to the proposed housing sites at the Sequoias and Christ Church.]</p> <ol style="list-style-type: none"> a. Shouldn’t this section apply to all proposed development, including major additions to existing buildings, and to all infrastructure, existing and proposed? b. What is the best way to add policies and actions for these protections to the Safety Element so they apply universally within the Town? 	<p>The language written applies to the subdivision of land (which may not include immediate construction of structures), the construction of structures for human occupancy and other critical structures where human occupancy may not occur. As written the policy applies to new and existing structures, properties proposed for subdivision, and the placement of infrastructure.</p> <p>Staff welcomes recommendations about how it could be revised to be more direct in what it applies to.</p>

Comment Number	Question	Town FAQ Response
GSC-P4	<p>Referring to p. 17: "... the California Geological Survey (see Figure 5) has mapped areas based on their potential for earthquake-induced landslides, which may require further investigation prior to development."</p> <ol style="list-style-type: none"> a. What data sources beside the California Geological Survey map were used to construct the landslide susceptibility map (Figure 5, p. 18) and the choice of eight landslide susceptibility classes? b. The California Geological Survey map delineates zones of required investigation. Why is the sentence quoted above phrased "may require further investigation" instead of "shall require further investigation"? <p>How are the eight classes of landslide susceptibility in Figure 5 linked to the risk classifications for structures, occupancies, and land uses in Table 3?</p>	<p>Figure 5 Landslide Susceptibility Map</p> <ol style="list-style-type: none"> a. The data for this map comes directly from the California Geologic Survey. CGS identified the landslide susceptibility categories based on the methodology established when the mapping was completed. For more information, refer to the following: https://www.conservation.ca.gov/cgs/publications/ms58 b. Figure 5 does not identify zones of required investigation. According to the CGS the map "is intended to provide infrastructure owners, emergency planners and the public with a general overview of where landslides are more likely. The map does not include information on landslide triggering events, such as rainstorms or earthquake shaking, nor does it address susceptibility to shallow landslides such as debris flows. This map is not appropriate for evaluation of landslide potential at any specific site. c. They are not related. The landslide susceptibility classes indicate that based on the data reviewed by CGS there is the potential for a deep-seated landslide of varying degrees within the State. The higher the susceptibility the greater the need to analyze site conditions to determine the potential risk. While Table 3 identifies the varying risk categories based on use types and risk tolerances. The presence of a landslide would be a factor in determining the level of acceptable risk for a project. <p>By using this map, the Town can quickly determine if certain properties need to take a closer look at site conditions to determine if landslide hazards exist or could exist based on the project proposed.</p>

Comment Number	Question	Town FAQ Response
GSC-P5	<p>For the eight classes of landslide susceptibility used on the map in Figure 5 (p. 18):</p> <ol style="list-style-type: none"> a. Which ones trigger geotechnical investigation? b. How do they correspond to the California Geological Survey’s landslide zones of required investigation? c. How do they correspond to the Town’s categories for areas with significant potential for downslope movement on the Ground Movement Potential map? 	<p>Figure 5 is intended to identify if a location has certain indicators that lead to landslide susceptibility and does not indicate if a geotechnical investigation is required. The requirement for investigation will be based on information from the Town’s Ground Movement Potential Map and adherence to policies P-10 and P-11.</p> <p>The zones identified in Figure 5 do not correspond to CGS zones of required investigation for earthquake induced landslides.</p> <p>The landslide susceptibility zones in Figure 5 may overlap with locations identified in the Town’s Ground Movement Potential Map, however the Town’s map provides and greater amount of detail and will play a key role in determining which locations in the Town will be required to investigate landslide hazards.</p> <p>For additional information, refer to the response to GSC P4</p>
GSC-P6	<p>Referring to Policy P-11, p. 17: “Require geologic and soil reports for all new development in areas of identified landslides or other zones of geologic hazard susceptibility, or when deemed necessary by the town geologist.”</p> <ol style="list-style-type: none"> a. Doesn’t this policy apply to all parcels proposed for development, not just those on landslides? b. Why is this policy only listed under the Land sliding topic? 	<p>All developments are already required to provide geotechnical investigations under the California Building Code and this policy is intended to highlight the additional scrutiny required regarding landslides and other geologic instability conditions within the Town. This policy may be applied to other geologic hazards. The placement of the policy in this section was intended to connect the use of Figure 4 – Ground Movement Potential Map and the necessity to analyze site conditions associated with this map together.</p>
GSC-P7	<p>For Action A-11 -1, p. 17: “Continue to file, reference, and index geologic/geotechnical mapping and data within the Town’s Geographic Information System.”</p> <ol style="list-style-type: none"> a. Shouldn’t all geologic/geotechnical mapping, data, and reports be readily available to the public in digital (i.e., scanned) form, through the Town’s website? b. Why is this action only listed under the Landsliding topic? 	<p>The Town has geotechnical reports for projects that are made available to the public upon request. Mapping is maintained by the Town Geologist. To make all geologic mapping/data/reports readily available to the public in digital form is a policy decision that requires Town Council review and approval due to budgetary and staff capacity considerations.</p>

Comment Number	Question	Town FAQ Response
GSC-P8	<p>Referring to Policies P-12 and P-13, p. 17: “Locate structures for human habitation and most public utilities so as to minimize disturbances from potential landslides...”, and “Where roads or utility lines are proposed to cross landslide areas..., they should be permitted only if special design and construction techniques can be employed to assure that acceptable risk levels will be met.”</p> <ol style="list-style-type: none"> a. What is the best way to include these policies in the Safety Element so they can apply universally within Town, to existing as well as to new construction? b. Why are these policies only listed under the Land sliding topic? 	<p>Policies P-12 and P-13 can be modified to address existing and new construction. Typically, these policies would apply when a new development or major remodel is proposed by an applicant. For existing development, the Town would need to identify areas where these conditions occur, determine the priority for improvement, assess the costs for improvement and identify how the improvements would be paid for. An action can be created under these policies to undertake this effort if desired.</p> <p>Policies are listed under landsliding as it seemed the most appropriate location. Wording can be incorporated to expand on the types of hazards these policies would apply to.</p>
GSC-P9	<p>Referring to Footnote 18: Jones-Tillson & Associates, “Master Storm Drainage Report for the Town of Portola Valley,” unpublished report, Town Hall, Town of Portola Valley, Portola Valley, California, 1970:</p> <ol style="list-style-type: none"> a. Have the drainage inadequacies identified in the 1970 Master Storm Drainage Report been remedied? b. Has this report been updated in the last 50 years? 	<p>Steps have been taken to correct some of the drainage issues within the Town, especially as new development occurs. However, the Town has not updated this plan since its original preparation.</p> <p>To better address flooding issues within the Town the following was added to the element:</p> <ul style="list-style-type: none"> • Policy P-19 Minimize injury, loss of life, property damage, and economic and social disruption caused by flooding and inundation hazards • Action A-19-1 Evaluate the Portola Valley Master Storm Drainage Report to identify areas of the Town’s drainage system that may require update or modification. <p>This policy and action are intended to prioritize greater understanding of drainage issues and identify solutions to reduce or eliminate flood hazards in parts of the community.</p>