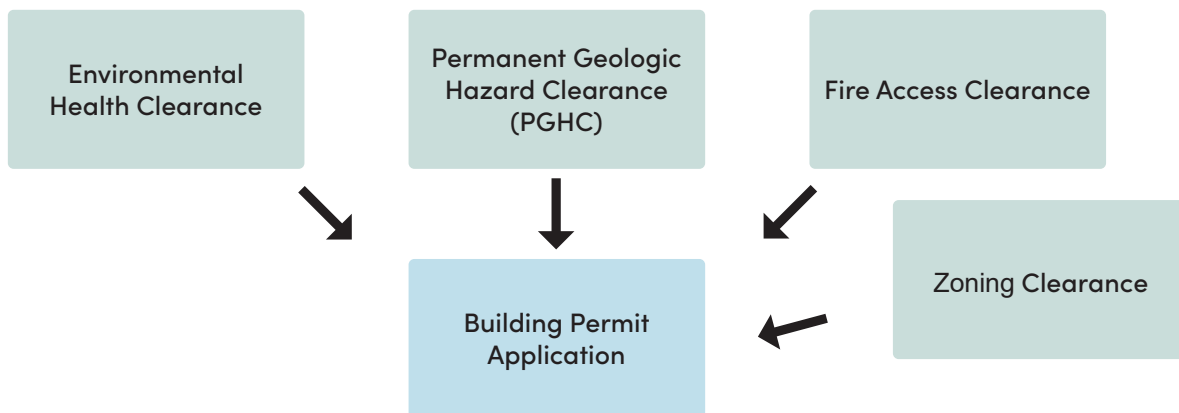


## Permanent Geologic Hazard Clearance (PGHC) Instructional Brochure

### PURPOSE

The CZU Complex Fire burn area is within a geologically complex region of the County, subject to hazards such as mapped earthquake fault zones, debris flows, steep and/or unstable slopes, active erosion, and landslides. The Permanent Geologic Hazard Clearance (PGHC) is a pre-application evaluation of potential geologic hazards that may affect a rebuild proposal. The purpose is to identify potential hazards and determine whether mitigations are required to protect the proposed development. The evaluation will be completed by County geologic staff or licensed consultants assisting the County. If geologic hazards are identified that require further investigation in the form of a geologic report, such reports must be completed and accepted prior to issuance of the clearance. Implementation of the recommendations of licensed professionals to mitigate the life safety risk posed by the hazards may be required.

The PGHC evaluates a specific site plan, and therefore if the site plan changes or is updated a new PGHC application may be required.



### “IN-KIND” PROJECT CONSIDERATIONS

County geologic staff recognize that “in-kind” replacement structures of similar size and location on the site are generally subject to similar levels of overall geologic risk as the original structure. As such, if an applicant proposes “in-kind” replacement of a structure destroyed by the CZU Complex Fire, County geologic staff will tailor geologic reporting requirements to focus on those hazards that pose an “imminent” or “near-term” threat to life safety. The term “In-kind” replacement, for the purposes of geologic review only, is defined by structures meeting all of the following criteria:

- Habitable square footage of the replacement structure can be up to 50% larger than the permitted habitable square footage of the burned structure (for example, if burned structure was 1200 square feet, then a new structure up to 1800 square feet would be considered “in-kind”); and
- Habitable replacement structure is substantially in the same location, defined as at least 50% of the new structure footprint being within the original building envelope, unless relocation results in a safer location with respect to geologic hazards as determined by a licensed geologist or geotechnical (soils) engineer.



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## OVERVIEW OF THE PGHC PROCESS

The PGHC process is designed to match the level of review to the geologic situation on the property. Some applications will only require in-office review, while others may require field investigation by a staff County geologist or preparation of a geologic report by a private consulting geologist to fully evaluate the site. A flow chart illustrating the process is at the end of this brochure.

### PHASE 1: Apply for a PGHC. In-office Review – County Geologic Staff

County geologic staff perform an in-office review of maps, records and reports to determine whether geologic hazards exist on the subject parcel and the level of geologic review necessary to address the potential hazards. If enough information exists at this point to determine that there is a low potential for geologic hazards to impact the proposed development, the PGHC is issued in PHASE 1.

### PHASE 2: Additional Information Required. Apply for Geologic Hazard Assessment (GHA) or Report

If the in-office review by County geologic staff identifies that additional investigations are required, a copy of the PGHC evaluation will be sent to the applicant with a request for additional investigation. The request will either be for the property owner to arrange for a Geologic Hazard Assessment (GHA), or a full geologic report.

A GHA is an assessment, including a site visit, that may be prepared by County staff for a fee or, alternatively, the GHA may be prepared by a private geologist. If prepared by a private consulting geologist, the GHA will be peer reviewed by the County. A GHA is less detailed than a full report and does not include subsurface investigation.

### PHASE 3: PGHC Issuance with Conditions

Once GHAs or technical reports have been reviewed and accepted by County staff, the PGHC will be issued, likely with conditions to ensure implementation of any mitigation recommendations contained in the reports. Standard conditions include: the professional geologist of record must review the project plans before submittal for a building permit, conduct construction observations, and provide final approval of the constructed project.

### PGHC Submittal Documents

- PGHC Application (Pages 1 & 2 completed by Applicant, pages 3 & 4 are completed by County staff)
- Site Plan (see Pre-Clearance Site Plan Requirements)

## PGHC APPLICATION INSTRUCTIONS

Application for a PGHC may be made at the Recovery Permit Center (RPC) by appointment. Please call (831) 454-5323 or email [RPC@santacruzcounty.us](mailto:RPC@santacruzcounty.us).

### PGHC APPLICATION INSTRUCTIONS (CONT.)

PAGE 1 of the application is to be completed by the applicant as follows:

**1. Site Location:** Provide the address and Assessor's Parcel Number (APN) of the site on which the permanent structures will be located. Check the box if a site plan has previously been considered under an earlier PGHC application.



**2. Original and Replacement Structure Attributes:** Provide the latitude and longitude of the burned and replacement habitable structures (taken at approximate center of building footprint), along with information regarding the size of the original and replacement structures and whether the replacement structures are intended to be in-kind construction. See definition of “in-kind” for the purposes of geology review, above. All habitable structures must be labeled on the site plan using the corresponding Building Numbers on the PGHC form.

- **Latitude/Longitude:** Geographic Positioning System (GPS) coordinate information can be obtained by hiring a Professional Surveyor or more approximate data can be generated using your cell phone (see instructions below) or a stand-alone GPS receiver. Either source of latitude/longitude coordinates is acceptable for the purposes of the PGHC. Include both “original” and “proposed” latitude/longitude coordinates for replacement structures.

## LATITUDE/LONGITUDE COORDINATES USING A CELLULAR PHONE

To obtain latitude/longitude coordinates for your temporary residence using Google Maps on your smart phone, visit the site, position yourself in the estimated center of the temporary residence footprint and follow these instructions:

### IPHONE:

1. On your iPhone or iPad, open the Google Maps app.
2. Zoom all the way in on your position (a blue dot). Touch and hold the blue dot marker that shows your location on the map. A red pin will appear.
3. At the bottom, tap “Dropped pin” (you might need to scroll down.) The coordinates will look something like this: (37.0783179, -121.9802743)

### ANDROID:

1. On your phone or tablet, open the Google Maps app.
2. Zoom all the way in on your position. Touch and hold on the blue dot marking your position. A red pin will appear.
3. Coordinates appear in the search box at the top. They will look something like this: 37.0783179, -121.9802743

- **Size of Structures:** Provide the habitable floor area (in square feet) of previously permitted structures and proposed replacement structures. Where a new structure is proposed (not a replacement), leave the “original” size field blank.
- **Intended “in-kind” Replacement:** Check the box if the replacement structure is intended to meet the “in-kind” criteria provided in the “IN-KIND” PROJECT CONSIDERATIONS section of the PGHC Instructional Brochure. If the location of the replacement structure has been moved to a safer location based on the recommendation of a licensed geologist or geotechnical engineer, provide a supporting letter from the professional as an attachment under PAGE 2 Section 7: Attachments.

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**3. Project Components:** Check the boxes for other features to be constructed as part of the overall project. Further details regarding project components are given below; if the response to any question is unclear, contact a design professional for assistance and/or consult with Recovery Permit Center staff.

- **Grading activities** require a permit pursuant to Chapter 16.20.050 SCCC if the project includes any of the following:
  - Cut or fill volumes greater than 100 cubic yards (larger of the cut or fill volumes);
  - Cut greater than 5 feet deep;
  - Fill greater than 2 feet deep;
  - Fill that supports a structure;
  - Fill of any depth that is placed on natural terrain steeper than 20% (5 horizontal to 1 vertical);
  - Fill that alters or obstructs a drainage course.
- A **“new access road”** refers to any newly constructed road or driveway or any improvement to an existing road bed which requires more than 100 cubic yards grading in any 500-foot segment in order to meet the design standards.
- **Retaining walls that require a building permit** are distinguished by retaining more than 4 feet of material or retaining any height of material when supporting a steep slope (greater than 2 horizontal to 1 vertical), or supporting additional loads posed by vehicles (i.e., driveways and parking areas) or structures above.

**4. Owner Information:** Provide current contact information for the owner of the site listed in the “Site Location” section.

PAGE 2 of the application is to be completed by the applicant as follows:

**5. Applicant Information:** Provide current contact information for the person applying for the PGHC, if different from the property owner.

**6. Site Plan:** A site plan that includes the items listed in the “Pre-Clearance Site Plan Requirements” information sheet is required to process the PGHC. The site plan submitted for the PGHC -must be identical to the site plan submitted for the two other pre-application clearances. If submitting electronically, the site plan may be uploaded as a .pdf attachment. Please check the “Attached” box, to confirm that the site plan .pdf has been provided. RPC staff will review your application and site plan submitted. **Note: Any subsequent changes to the submitted site plan may require a new PGHC application.**

**7. Attachments:** This section is optional for submittal of information pertinent to the review of geologic conditions on the site. Specific items that should be submitted, if available, include:

- **Geologic Report Update:** If a geologic report for the property was previously reviewed and accepted by County staff, please provide a copy of the Geologic Report update letter for review.
- **Professional Correspondence:** If the location of the replacement structure has been moved to a safer location based on the recommendation of a licensed geologist or geotechnical engineer, provide a supporting letter from the professional as an attachment. Note: This item is only necessary if the replacement structure is intended to be “in-kind” replacement.

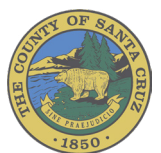
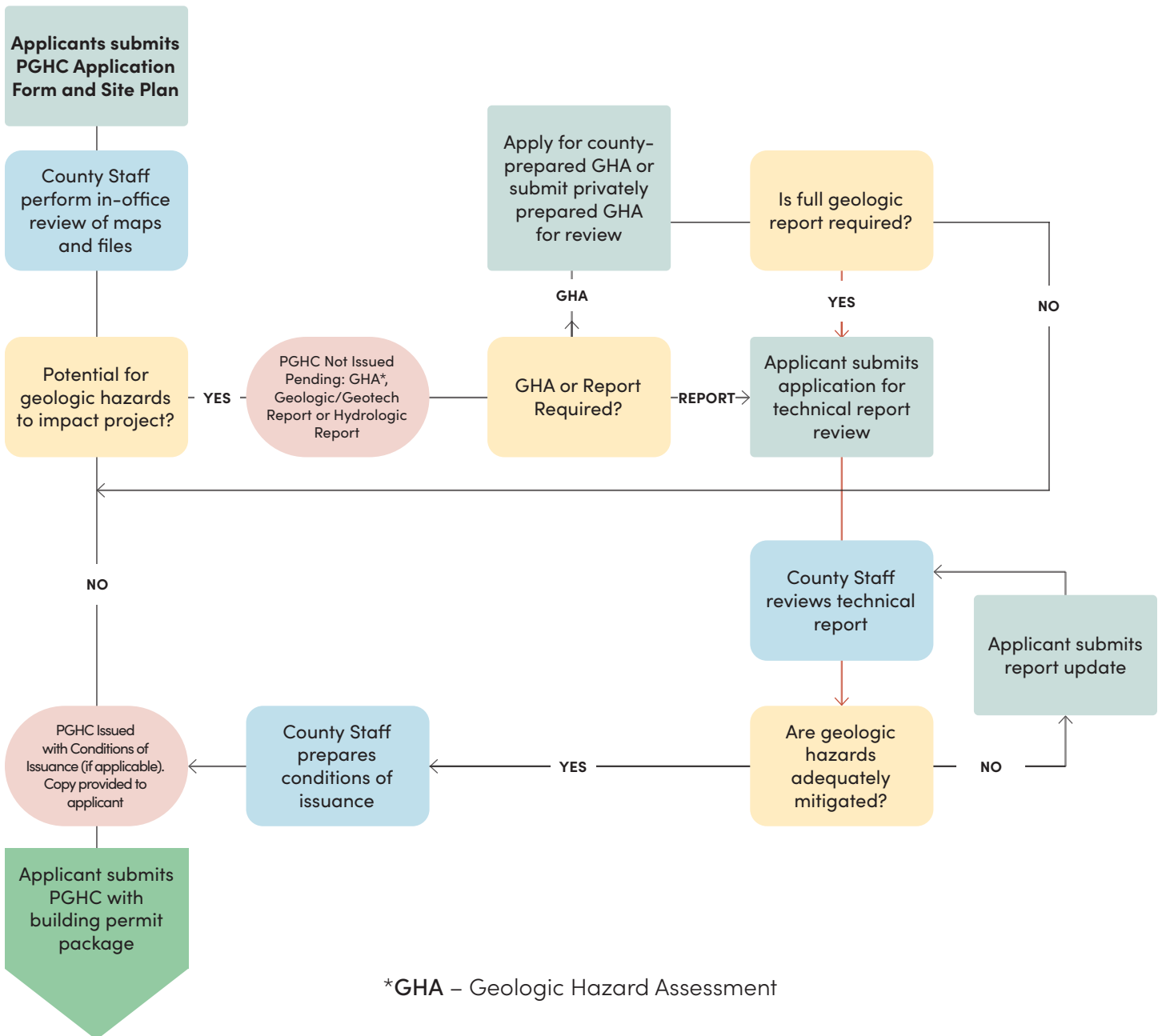
For report updates or professional correspondence, cite the title, author and date of materials in “Section 8: Notes to Reviewer”.



**8. Notes to Reviewer:** This optional section is for relaying information about geologic conditions on the site, and to provide a citation (title, author, date) for attachments submitted under Section 7: Attachments.

**9. Applicant Signature:** Applicants must sign, acknowledging that the information provided in the application and site plan is true and accurate to the best of their knowledge.

## PERMANENT GEOLOGIC HAZARD CLEARANCE (PGHC) PROCESS



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## Fire Access Standards

The purpose of this document is to provide guidance for rebuilding where homes and outbuildings were damaged or destroyed in the CZU Lightning Complex fires in August 2020. This guidance covers access roads, residential driveways, and requirements for new residential construction in the State Responsibility Area (SRA).

It has been identified that several critical life safety components were not in place or had not been maintained throughout the CZU Lightning Complex fire area. The lack of proper access road(s), clearance along access road(s) and defensive space around residential structures were all components that hindered firefighting efforts. In the rebuilding process fire agencies will be considering minimum standards for all these safety components.

To speed up the recovery process and identify potential hurdles to the recovery process, the Santa Cruz County Fire Marshal's Office in conjunction with the Fire Protection Districts of Boulder Creek, Ben Lomond, and Felton have collaborated to provide the public with this quick reference sheet on the basics of rebuilding a residential structure after a disaster.

For properties that had residential structures that were legally permitted prior to August 15th, 2020 and which were damaged or destroyed in the CZU Lightning Complex fires of 2020, the minimum access standards will apply to replacement buildings. If the minimum standard cannot be attained, then an alternate means may be allowed on a case by case basis as determined by the authority having jurisdiction (AHJ). The standard new building construction requirements apply to all new residential construction as highlighted below. Commercial buildings are not addressed in this fact sheet.

For properties that had residential structures that did not have permits and which were damaged or destroyed in the CZU Lightning Complex fires of 2020, the minimum access standards will also apply to all replacement buildings. The standard new building construction requirements apply to all new residential construction as highlighted below.

Access road, water storage, and hydrant installations are required to be in place prior to rough framing and will be verified by County Building and Fire inspectors.

### MINIMUM ACCESS ROAD STANDARDS

**Width:** Twelve feet (12') wide drivable surface for roads and driveways For roads serving 3 or more residential structures eighteen feet (18') wide as determined by the AHJ.

**Surface:** Based on the slope of the road. Also see Fire Prevention Standard FPO-012.

**0%-5%** - Six inches (6") ninety-five percent (95%) compacted base rock (or equivalent).

**5%-15%** - Six inches (6") of ninety-five percent (95%) compacted base rock (or equivalent) plus oil and screen surface.



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**15%-20%** - Six inches (6") ninety-five percent (95%) compacted base rock (or equivalent) plus two inches (2") asphaltic concrete (AC) surface.

**Maximum grade:** Twenty percent (20%).

**Minimum turn radii:** Thirty-five-foot (35') centerline radius.

**Turnouts:** Required every five hundred feet (500') if the road or driveway is twelve feet (12') in width and greater than one thousand feet (1000') in length. See Fire Prevention Standard FPO-013 for dimensions.

**Turnarounds:** Required if the road or driveway serving the house is dead-end and greater in length than one hundred and fifty feet (150'). See Fire Prevention Standard FPO-015 for dimensions.

**Vegetation clearance along roads and driveways:** Ten feet (10') from the edge of the road and thirteen feet six inches (13'-6") vertical clearance is required. See Fire Prevention Standard FPO-012.

## NEW RESIDENTIAL BUILDING CONSTRUCTION REQUIREMENTS

**Fire Sprinklers:** Are required for all new residences. This is a deferred submittal permit (separate from a building permit). See Fire Prevention Standard FPO-005.

**Areas served by a water purveyor:** A hydrant within six hundred feet (600') of the fire sprinklered residence, as determined by the AHJ.

**Areas not served by a water purveyor:** Ten thousand (10,000) gallons of stored water and a wharf head style hydrant are required. This is a deferred submittal permit (separate from a building permit). See Fire Prevention Standard FPO-007.

**2019 California Building Code Chapter 7A and Residential Code R302:** The home hardening features found in Chapter 7A and/or R302 are required for all newly constructed homes in the State Responsibility Areas (SRA).

**Defensible Space:** Defensible space as outlined in Public Resource Code Sections (PRC) 4290 and 4291 is required for all buildings in the SRA.

**Addressing:** Address numbers are required on the front of the residence visible from the street, four inches (4") tall and a contrasting color to the background (white reflective numbers on a green background). See Fire Prevention Standard FPO-016.

**Street signs:** Road naming signs are required for all named roads. They should be reflective with white letters on green background.

**Smoke and carbon monoxide alarms:** Smoke and carbon monoxide alarms are required in every bedroom, in the hallway outside the bedrooms and one per floor. They are required to be hardwired, with battery backup and interconnected.

