From: Mike Stark
To: Melissa Jacobsen

Subject: 24-24 additional conditions

Date: Wednesday, June 5, 2024 8:40:09 PM

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Mike 907-299-6000

Begin forwarded message:

From: Jan Keiser < Jan.Keiser@kinneyeng.com>

Date: June 4, 2024 at 1:27:35 PM AKDT

To: mike@appaloosaics.com

Cc: Janette Keiser < jan@keisergroup.com

- A more detailed site plan be provided, showing landscaping plan, subject to city's review & approval.
- Said landscaping shall be kept in good condition with reasonable maintenance
- Area for garbage cans/dumpsters shall be established and screened
- No disabled vehicles or equipment or containers be stored on site. All current disabled vehicles, equipment, and containers be removed by completion of work
- Property shall not be used for storage of boats or RVs. Boats/RVs shall be considered vehicles for purposes of parking; that is, if boats/RVs are stored on the property, then extra parking needs to be provided
- Lower bottom elevation of cabins to be approved by planner
- Spaces between cabins be allocated for parking

Memorandum

To: City of Homer Planning Commission

From: Janette Keiser, PE

Date: June 19, 2024

RE: CUP 2024-09; 955 Sterling Highway

I am a resident of the City of Homer and am a registered professional civil engineer in the state of Alaska. I am also the former Public Works Director and City Engineer for the City of Homer and in those capacities have had the opportunity to study the geologic hazards related to the Sterling Highway Bluffs, upon which the subject property lies.

I have reviewed the materials for the subject CUP application and have the following comments:

- 1. This bluff is subject to multiple geologic hazards, which should be addressed if this CUP is allowed to go forward.
 - A. Geologically, this property, like all other properties on the Sterling Hwy bluff is built like a layer cake with layers of fine soils, coal seams and ground water that flows near the surface, say 2-3 feet below the surface, as well as more deeply. The near surface ground water freezes in the winter and thaws in the summer. When it thaws in the summer, it flows over the bluff, taking the fine soils with it. This is what causes much of the erosion you see all along the Sterling Highway bluffs. You see the Y-shaped erosion channels that are caused by this phenomenon on this property on page 80 of your packet.
 - B. The bluff is also subject to rotational slumping. Chunks of soil just fall away, primarily caused by saturated soil. This is not just speculation; it is a fairly common occurrence along this bluff.
 - C. John Bishop's draft drainage plan, shown on page 79 of your packet, tries to address the water issues. He is showing a curtain drain that runs along the east and southern sides of the property. This is a preliminary design, so we do not know how deep the curtain drain will be or how it will mitigate the risk of the rotational slumping or erosion caused by the freeze-thaw of the near surface ground water.
 - D. Currently, much of the property is covered by natural vegetation, which acts as a sponge, holding the surface and near-surface ground water in place, slowly releasing it to the bluff. This housing development is so dense that we can expect that all of this natural protective layer will be removed, thereby expediting the flow of water across the property and over the bluff, exacerbating erosion.

- E. There will be driveways, parking pads, house excavations, water and sewer service lines, roof drain lines and ditches crisscrossing this entire property. Every LF of excavation creates a pathway for soil saturation and erosion. We have seen this at Baycrest Subdivision and other places along the bluff.
- F. There are natural drainage channels flowing from the Sterling Hwy over the bluff. One of these is the outlet for the drainage system that collects much of the water from the Lillian Walli Subdivision, conveying it down Soundview, across the Sterling Highway and onto this property. I do not believe these drainage ways are correctly shown on either page 67 or 79 of your packet. There is a drainage channel shown on page 67, but I cannot tell if this is the channel emanating from the Soundview drainage system or not. The aerial view, page 80 of your packet, shows an erosion channel, which I think could be caused from the Soundview drainage system. It is more towards the center of the property than what is shown on page 67.
- 2. The Planning Commission is authorized to stipulate conditions that the proposed development must comply with. I recommend the following conditions to mitigate the geologic risks this property is prone to:
 - a. That a more complete Existing Conditions Map be provided, correctly showing the existing topography and drainage patterns on this lot.
 - b. That a Geologic Hazard Risk Assessment be prepared by a qualified professional and submitted to the Public Works for review.
 - c. That the Risk Assessment be recorded as a public document so future residents and owners of this property are informed about the risks.
 - d. That the Final Drainage Plan, showing details of the curtain drain and other drainage features be submitted to Public Works for review, particularly identifying how risks identified in the Geologic Hazard Risk Assessment will be mitigated.
 - e. That the site plan should be revised to minimize disturbance of the natural vegetation and concentrate construction close to the Sterling Hwy, as far away from the bluff as possible.
 - f. That a buffer of native vegetation be preserved for at least fifty feet on either side of the centerlines of any natural drainage channel.
 - g. That the setback from the bluff be increased, preferably concentrating construction along the Sterling Highway.
 - h. That a note be added to the site plan that the City is not the owner of, and is not responsible for the maintenance of, any infrastructure, water, sewer, roads, or drainage, etc., built on this lot.