

TO: Brisbane Planning Commission  
FROM: Dana Dillworth  
RE: MK Pipelines various Use and Excavation Permits  
August 24, 2023

I am concerned about the conclusions of these documents and the degree to which you are circumventing the intent of the laws you cite.

If it is your intent to

A. "give due regard to the nature and condition of **all adjacent uses and structures**" and B." Determine whether or not the establishment, maintenance or operation of the use applied for will, under the circumstances of the particular case, **be detrimental to the health, safety, comfort and general welfare of the persons residing or working in the neighborhood** of such proposed use, or whether it will be injurious or detrimental to property and improvements in the neighborhood or the general welfare of the city" you have failed.

You have failed to inform the residents, the neighbors, who happen to be 70 and 210 feet outside the 400-ft zone to receive notice. By the way, what does Caltrans think?

With no mention of prior landslides in the area, you have failed to properly characterize the environment, categorical exemptions or not.

In USGS's "The Landslide Handbook - A Guide to Understanding Landslides"(Appendix C pages 76-81) it is clear that you don't dig into the toe of a hillside without reducing some of the weight at the top or increase mass at the bottom... Since I have observed how building on a wet clay hillside is different than when the clay dries and retracts, I want to know more about this property in relationship to the hillside, the proposed season of construction, not just an assurance from an engineer's sign-off on the 15 acres mentioned.

Absent acknowledgement from USGS, which has mapped the slide in this area for years, you are failing to protect the public of a catastrophic mudslide as 6-foot high retaining walls may not be adequate—from this as well as prior Use Permits.

If it is the intention of the HCP to protect, restore, and improve a % of habitat, please provide the statistics for this area that this mitigation effort is true and effective. The lands along Guadalupe and North Hill Drive are noted as restored habitat- once acres of *viola pedunculata* are now hillsides of Scotch broom and fennel. Restoration may be hard, but NO Effort? You have thirty years of monitory mitigation measures, please ask the city to provide **an independent assessment** of the efficacy of the HCP program you are using.

As stated in Wild California's words for Spotted Owl habitat, the HCP is "flawed strategy which contribute[s] to the decline rather than the stability, let alone recovery of [the endangered species.] In practice, HCPs undermine the strategy of the Endangered Species Act and do irreversible damage to endangered species habitat without mitigation to truly outweigh the damage."

CEQA, where's the discussion of alternatives? Where's the discussion of a hybrid plan where the upslope acres are to be cleared of brush AND planted with natives to support the prior efforts AND the much needed funds contributed in order to monitor future slope weeding, maintenance, and stability?

I ask that you return this to the Planning Department. Properly notice and inform the Public of the true risks. Require advice from USGS and please provide direction to the Planning Department to meet the intent of the law which is to improve the environment, not dismiss it.

Thank you.

*Dana Dillworth*  
*with attachments*

## Part 1. Earth Slope Stabilization/Mitigation

Some of the stabilization techniques that are currently available in North America are illustrated in this discussion. We highlight simple methods that can be used safely in the absence of detailed soil or bedrock analysis or in low-risk situations. Some stabilization methods are very expensive and require significant time to implement. This is an overview of stabilization methods; many other methods are in use around the world. Professional advice is essential before, during, and after implementation (where possible), as is further literature consultation.

The stability of any slope will be improved if certain actions are carried out. To be effective, first one must identify the most important controlling process that is affecting the stability of the slope; second, one must determine the appropriate technique to be sufficiently applied to reduce the influence of that process. The mitigative prescription must be designed to fit the condition of the specific slope under study. For example, installation of drainage pipes into a slope that has very little ground water is pointless. Slope stabilization efforts take place during construction or when stability problems develop unexpectedly following construction. Most slope engineering techniques require a detailed analysis of soil properties and a sound knowledge of the underlying soil and rock mechanics.

*In any high-risk situation, where a landslide may endanger lives or adversely affect property, a professional landslide expert such as a geotechnical or civil engineer should always be consulted before any stabilizing work is undertaken.*

The following sections provide a general introduction to techniques that can be used to increase slope stability.

### Excavation

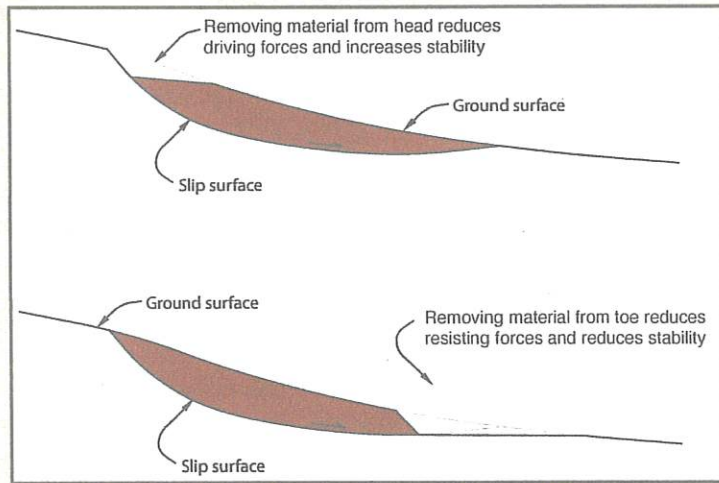
Figures C1, C2, and C3 provide a cross-sectional view, in schematic form, of general principles for slope excavation, showing the effects and consequences of where on a slope the excavation takes place. These graphics are general in nature, and a geotechnical engineer or other professional should always be consulted if possible.

### Removal of soil from the head of a slide

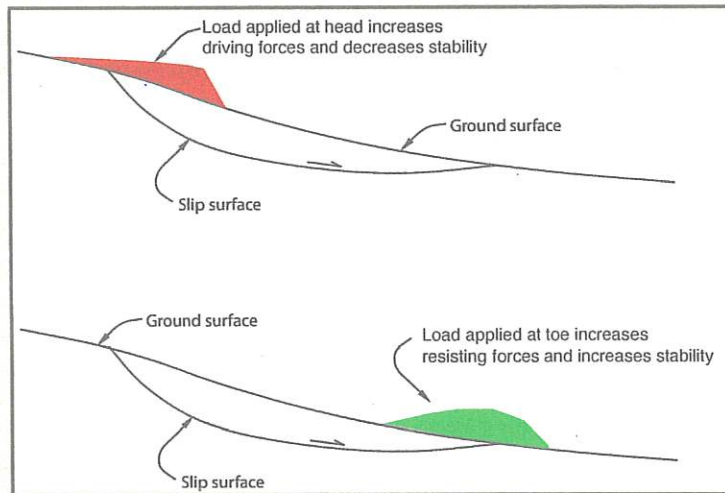
This method reduces the driving force and thereby improves stability. This method is suitable only for cuts into deep soil where rotational landslides (see “Basic Landslide Types” in Section I) may occur. It is ineffective on translational failures on long, uniform or planar slopes or on flow-type landslides.

### Reducing the height of the slope

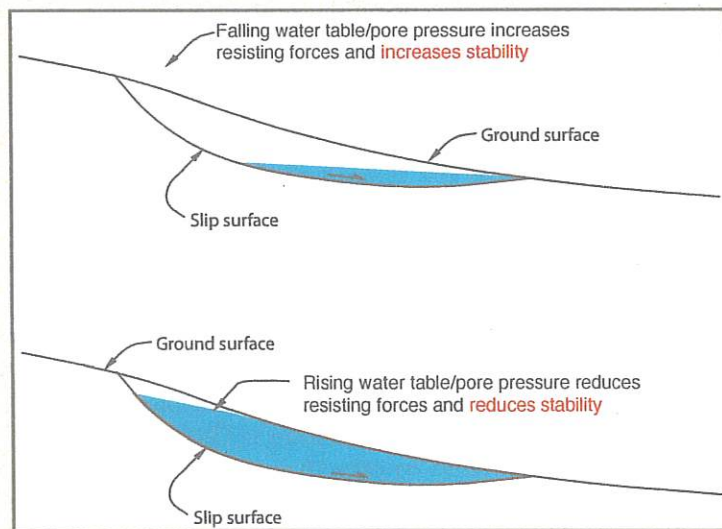
Reducing the height of a cut bank reduces the driving force on the failure plane by reducing the weight of the soil mass and commonly involves the creation of an access road above the main road and the forming of a lower slope by excavation. Also, it is possible to excavate deeply and lower the main road surface if the right-of-way crosses the upper part of a landslide. This method is only moderately efficient in increasing stability, and a complete solution may involve additional modification of the land. According to Chatwin (Reference 11), it usually increases the Factor of Safety by only 10 or 15 percent. (“Factor of Safety” in its simple definition is the ratio of the maximum strength of a piece of material or a part to the probable maximum load to be applied to it.)



**Figure C1.** Illustration of the differences in stability resulting in excavation at the head and toe surfaces of a slope. (Graphic by Rex Baum, U.S. Geological Survey.)



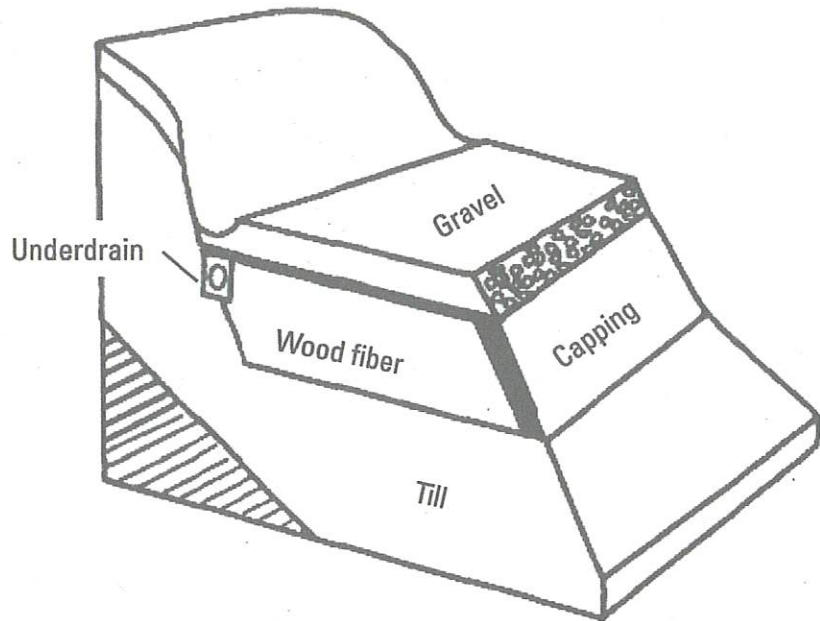
**Figure C2.** Illustration of the difference in stability of loading either the head or the toe of a slope. (Graphic by Rex Baum, U.S. Geological Survey.)



**Figure C3.** Illustration of the importance of water in the stability of a slope. (Graphic by Rex Baum, U.S. Geological Survey.)

## Backfilling with lightweight material

A technique related to height reduction is to excavate the upper soil and replace it with a lightweight backfill material such as woodchips or logging slash. Then, covered with a thin layer of coarse aggregate, the backfilled material can form a foundation for limited-use traffic (fig. C4).



**Figure C4.** Schematic and photograph of a lightweight backfill. There has been an increased growth in the use of recycled tire shreds in civil engineering applications. Highway applications include using shredded tires as lightweight fill over weak soils in bridge embankments and retaining wall reinforcements or, in very cold climates, as insulation of the road base to resist frost heaves and as a high-permeability medium for edge drains. (Graphic from reference 11, photograph from U.S. Department of Transportation, Federal Highway Administration.)

## Benches

Benches are a series of "steps" cut into a deep soil or rock face for the purpose of reducing the driving forces. They are mainly effective in reducing the incidence of shallow failures but generally are not very efficient in improving the overall slope stability for which other methods are recommended. Benches are useful in providing protection structures beneath rockfall-prone cliffs, for controlling surface drainage, or for providing a work area for installing drainpipe or other structures.

Please see figure C12 for a photo of benches cut into a slope.

## Flattening or reducing slope angle, or other slope modification

This reduces the weight of material and reduces the possibility of stream/river undercutting or construction loading.

## When not to excavate a slide mass

In some situations, removing the entire slide mass is an effective and economic solution. Generally, however, it is only practical on small slumps or small rotational failures. Large-scale excavation of larger landslide areas is usually not recommended for several reasons:

Excavation is not always effective—for large planar failures, excavation may not cause movement to stop and may allow the landslide to expand.



Excavation may *trigger a larger landslide* by removing the support provided by the toe of the landslide.



Excavation may actually *destabilize* the ground farther upslope by undercutting, which weakens the slope.

*In deeper soils*, especially soft clays, where there are two potential failure surfaces, one deep and one shallow, excavating down to the first failure surface might trigger a sudden slippage on the deeper failure surface. A stability analysis using soil strength data is advised and most always necessary for any major excavation project in deep clay soils.

Seasonal heave and collapse?

## Strengthening Slopes

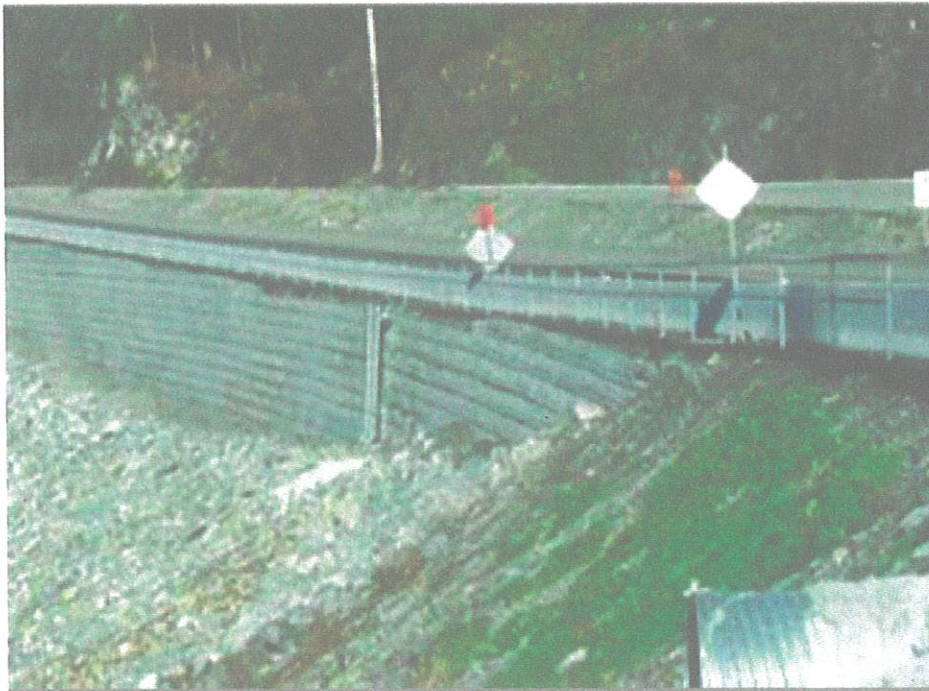
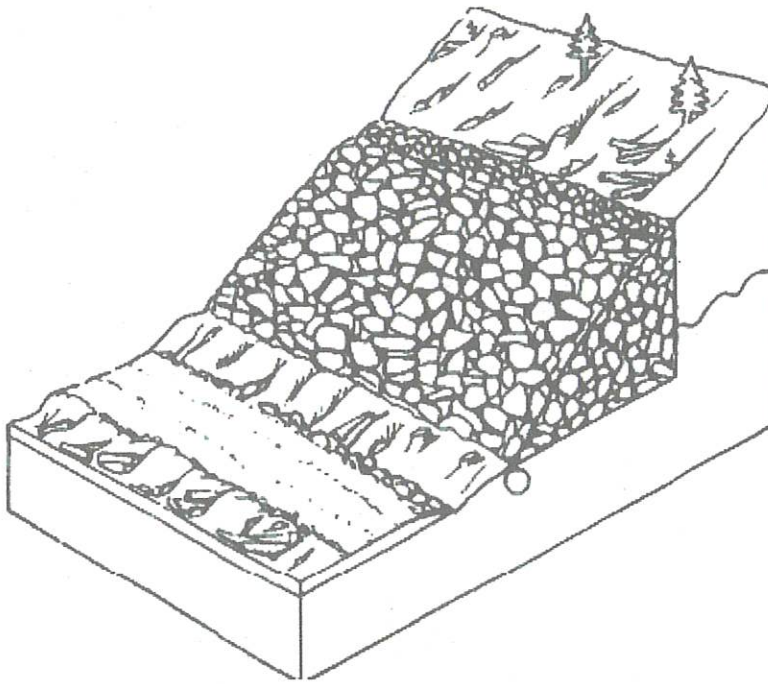
### Plastic mesh reinforcement

There are numerous synthetic soil reinforcement materials on the market, and one example is a reinforcement material of plastic polymer stretched to form a lightweight, high-tensile-strength grid. The grid acts similarly to reinforcing mesh in concrete, adding strength to the shear strength of the soil.

These types of materials have been used to reduce the amount of ballast needed over soft ground by increasing the bearing capacity of the subsoil. These types of grids also have a number of possible applications in slope stabilization, including soil strength reinforcement, soil drainage improvement, and retaining-wall construction.

### Rock-fill buttresses

A simple method to increase slope stability is to increase the weight of the material at the toe, which creates a counterforce that resists failure (fig. C5). A berm or buttress of earthfill can be easily dumped onto the toe of a slope. Broken rock or riprap instead of soil is preferable, however, because it has a greater frictional resistance to shear forces and is also free draining, which reduces the problem of impeding ground-water flow.

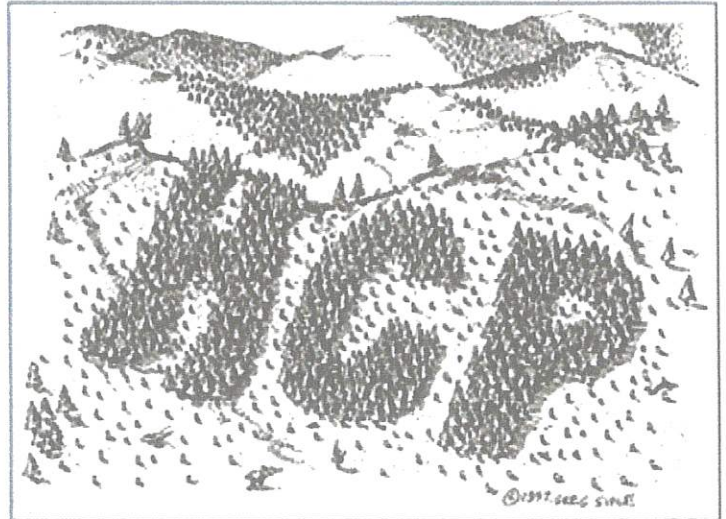


**Figure C5.** Schematic and photograph of a rockfill buttress in Canada. (Graphic is from Reference 11.)

# Habitat Conservation Plan: Too Good To Be True?

→ Updated: Mar 24

Habitat Conservation Plans (HCPs) are a method via the Endangered Species Act whereby landowners can obtain Incidental Take Permits (ITP) for a listed species. ITPs allow what are considered 'lawful activities' i.e. logging, to result in "incidental take" i.e., habitat modification, harm, harassment, or take of a listed species. In exchange, mitigations are proposed, such as set-aside areas. Despite the name, an HCP is more like a habitat modification strategy.



EPIC contends in its scoping comments on the new Green Diamond HCP that if HCPs actually functioned to recover species, we would be the first in line to advocate for them. Our experience with Green Diamond's first HCP and the Pacific Lumber HCP has been that they are a flawed strategy which contribute to decline rather than stability, let alone any recovery, of Northern Spotted Owls. In practice, HCPs undermine the strategy of the Endangered Species Act and do irreversible damage to endangered species habitat without mitigation to truly outweigh the damage. It is our contention that the US Fish and Wildlife Service should enforce the Endangered Species Act, not provide "work-arounds".

The original Green Diamond Northern Spotted Owl HCP is littered with inadequacies. The habitat standards, definitions, and home-range size utilized under the old HCP have all proven to be inadequate to facilitate anything other than owl take. EPIC believes that issuing Green Diamond another ITP is inappropriate given the amount of take that has already occurred without any tangible benefit to the public or the owls.

The alternatives available under the current notice would likely result in more of the same as we've seen under the old HCP. EPIC has proposed additional options, including an alternative to manage for landscape restoration and owl recovery.

Any proposed new Northern Spotted Owl HCP must be based on the premise of survival and recovery for the species, and not on allowing more take using the same old habitat definitions, retention standards, home-range size, and survey methods. The quality and quantity of owl habitat on Green Diamond lands has diminished over the life of the current HCP, and take has not been offset by recolonization of emerging habitats. Any new HCP must therefore focus on retention and recruitment of actual habitat that provides authentic benefits to the owls in the immediate and over time, in order to promote long-term survival and recovery of the species on Green Diamond lands.