

SITE CONSTRAINTS

The portions of the Laboratory site where development would be avoided to the extent feasible have been identified and are generally characterized by two different kinds of constraints: fixed and easement/setback. Beyond these constraints, there are a host of other conditions such as steep slopes found in portions of the site that affect facility siting and design. These constraints will be considered when selecting suitable sites for specific buildings.

FIXED CONSTRAINTS

Fixed constraints include areas afforded special status or protection prescribed by law or policy.

Protected Habitats

Lee's Micro-Blind Harvestman (Microcina Leei) is listed as threatened under both federal and state law. This arachnid was first identified on the main site in the 1960s and again in the 1980s. An area of the Laboratory on the south-facing slope of Blackberry Canyon has been identified as the type of locality where the species occurs. This area consists of a dense canopy of oak-bay woodland with undisturbed sandstone rocks that are embedded in the soil and have moist conditions underneath.

Alameda Whipsnake. This snake species (*Masticophis lateralis euryxanthus*) is listed as threatened under both federal and state law and is found in open-canopied shrub communities, including coastal scrub and chaparral, and adjacent habitats including oak woodland/savanna and grassland areas. One area of potential Whipsnake habitat is shown on the Fixed Constraints Plan at the easternmost portion of the site.

Riparian and Wetland Habitat. A number of drainages exist on the main site; some are ephemeral or intermittent, and others like the North Fork of Strawberry Creek, Chicken Creek, and their tributaries are considered “jurisdictional” under the Clean Water Act and thus warrant special attention. According to the California Department of Fish and Game these jurisdictional drainages along with four freshwater seeps support riparian habitat. These areas are indicated on the Fixed Constraints Plan as Riparian Habitat.

Hayward Fault Zone.

The Hayward Fault, at the western edge of the main site, near the Blackberry Gate, is a part of the active San Andreas Fault system that developed as the Berkeley Hills were uplifted.

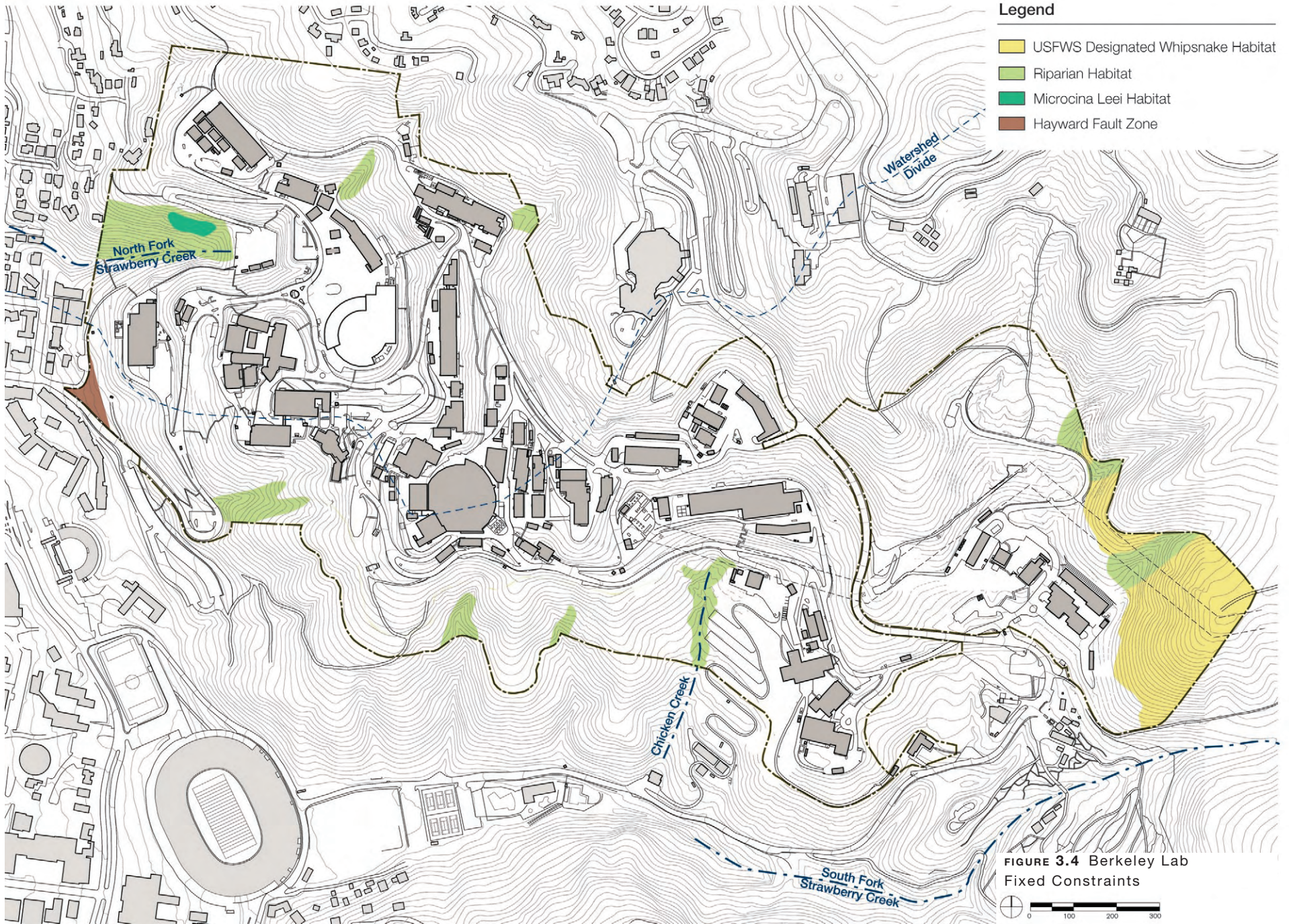


FIGURE 3.4 Berkeley Lab
Fixed Constraints

EASEMENT/SETBACK CONSTRAINTS

Additional constraints include those areas that preserve or enhance views, and maintain adequate distance from the Laboratory boundary or major utilities. These include:

Major Utilities Lines or Easements

A Pacific Gas and Electric (PG&E) easement passes through the eastern portion of the main site corresponding to the alignment of a 115,000 volt overhead power transmission system. Since the effort and cost to relocate this easement would be significant, this corridor has been identified as a constraint to development. Future facilities will not be sited within the easement, nor will they be located in such a way that would limit access or maintenance operations.

Setbacks

Two zone types have been identified as appropriate places to impose development setbacks. These setbacks will:

- Protect the visual character of the hillside landscape that figures prominently in the wooded, grassy hillside image of the Laboratory and East Bay region (Viewshed Reserve).
- Ensure that Laboratory buildings are set back appropriately from adjoining residential neighborhoods (Neighborhood Setback).