Important GIS Layers

The Humboldt County Geographical Information System (GIS) is used by the building division to determine what jurisdictions, hazards, natural resources are associated with the proposed building site. Below are some important jurisdictional and geologic features to consider. To learn more about how to use the GIS, read the Web GIS Guide.

Wildfire Responsibility

The Wildfire Responsibility layer shows which parcels are in the state responsibility area (SRA), local responsibility area (LRA), and the federal responsibility area (FRA). If the proposed development is in the SRA and falls within the scope described by HCC 3111-3 the project may need to comply with the counties Fire Safe Regulations (also summarized in the SRA Fire Safe Regulations Checklist). Furthermore, the project may have to comply with the Wildland Urban Interface building regulations if the proposed development falls within the scope of CBC 701A.3. To access the Wildfire Responsibility layer, check the following GIS layer list boxes to the right.

Community Services District

The community services district layer shows which parcels are served by potable water and sewer services. This layer is significant to the building division because if your parcel is not within a community service district you will be allowed to apply for an alternate-owner builder permit (AOB permit) described in the counties Alternative-Owner Builders Ordinance. Commercial buildings will not be able to go AOB as the AOB ordinance is intended for residential uses. To access the Community Services District layer, check the following GIS layer list boxes to the right.
FEMA Flood Zones

The FEMA Flood Zone layer shows the different flood zones. If the proposed development is in a flood zone (excluding 500 year zone x) and falls within the scope of HCC 335-5(a)(3) the project will have to comply the Flood Damage Prevention chapter of the county ordinance. If the proposed development is in a floodway the project will also have to comply with HCC 335-6. To access the FEMA Flood Zone layer, check the following GIS layer list boxes to the right.

Slope Less Than 15%

The slope less than 15% layer will tell you if the construction site is likely to have a slope over 15%. Having a slope over 15% is considered an unusual hazard and may require a soils report for new construction. All grading on a slope over 15% will require an engineered grading plan per the grading designation, a soils report per the engineered grading application requirements, and final reports per completion of work. To access the Slope Less Than 15% layer, check the following GIS layer list boxes to the right.
Seismic Safety

The seismic safety layer shows relative stability of your construction site. A moderate or high instability is considered an unusual hazard and may require a soils report and/or engineered grading for grading and new construction. Grading 50 cubic yards or more on sites with moderate or high instability will require an engineered grading plan per the grading designation, a soils report per the engineered grading application requirements, and final reports per completion of work. You will notice the GIS lists seismic safety from 0 to 3 while the geologic matrix lists seismic safety from 1 to 4. In this case 0 matches with 1, 1 matches with 2, and so on. To access the Seismic Safety layer, check the following GIS layer list boxes to the right.

Area of Potential Liquefaction

The area of potential liquefaction layer shows areas where the stiffness of the soil has a potential to temporarily behave like a liquid during an earthquake. An area of potential liquefaction is considered an unusual hazard and may require a soils report and/or engineered grading. To access the Area of Potential Liquefaction layer, check the following GIS layer list boxes to the right.
Streamside Management Area (SMA)

The Streamside Management Area (SMA) layer shows class 1 and class 2 streams. Development in the SMA will need to comply with the Streamside Management and Wetland Areas Ordinance of the county code and will require a special permit from the planning department. To dispute the biological impact of your development you can submit a biological determination from a qualified biologist. Any grading over 50 cubic yards in the SMA will need to be engineered. To access the SMA layer, check the following GIS layer list boxes to the right.

Wetlands

The Wetlands layer shows all wetlands. They are differentiated by type on the GIS, but the building department treats construction in any of these areas the same. Development in a wetland will need to comply with the Streamside Management and Wetland Areas Ordinance of the county code and will require a special permit from the planning department. To dispute the biological impact of your development you can submit a biological determination from a qualified biologist. Any grading over 50 cubic yards in the SMA will need to be engineered. To access the SMA layer, check the following layer GIS list boxes to the right.
Low Impact Development Area (MS4)

The MS4 layer shows areas subject to the State Water Quality Control Board’s requirements for storm water systems. For more information on what the MS4 is and what documentation is required refer to the MS4 Stormwater Manual. If your parcel is less than 1-acre then you may apply for less restrictive requirements with the MS4 Small Construction form. To access the MS4 layer, check the following GIS layer list boxes to the right.