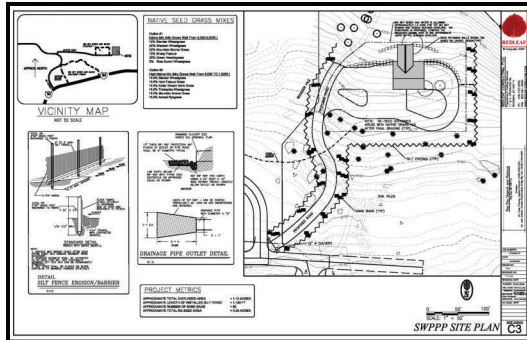


## Mission

We strive to create high quality, timely, environmentally conscious and cost-effective engineering solutions.

## Civil Services

- Land Development
- Subdivisions
- Storm Water
- Septic
- Flood Studies—HEC RAS
- Survey Coordination
- Erosion Control
- Sanitary Review
- Roads
- Site Plans
- Grading and Drainage
- Utilities



Storm Water Pollution Prevention Plan  
Big Sky Search and Rescue Building

## Facilities

The Redleaf Consulting, PLLC office is located on the 2nd floor of the Health and Fitness Building in Big Sky, MT. This building was recently completed and awarded LEED Gold Certification! Redleaf Consulting, PLLC performed the whole building energy simulation and the Heating, Ventilation, and Air Conditioning design for this building. Heating and cooling are provided via ground source heat pumps that capture free energy from the Big Sky Sewer and Water District treatment plant ponds. The simulations show that this building's energy cost/consumption is 45.8% less annually than a standard baseline building! Please stop by anytime and we'd be happy to give you a tour.



**Redleaf Consulting, PLLC**

32 Market Place, Ste 4  
P.O. Box 161085  
Big Sky, MT 59716-1085

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Fax: 800-521-4840  
E-mail: [philipk@redleaf-consulting.com](mailto:philipk@redleaf-consulting.com)  
[www.redleaf-consulting.com](http://www.redleaf-consulting.com)

## Civil Engineering Design Services



Before



During



After



**Tel: 406-995-2996**



# Civil Engineering Design Services

## Site Work

**Redleaf** has experience with site design and construction staking. An Engineer at Redleaf will create your site plan using the latest AutoDesk Civil three dimensional software. This software is used for grading and drainage, road plan/profile, utility layout/conflict analysis, cut/fill calculations, etc. Output files are then generated for entry into survey grade global positioning system (GPS) equipment and/or total stations for construction staking at the site.



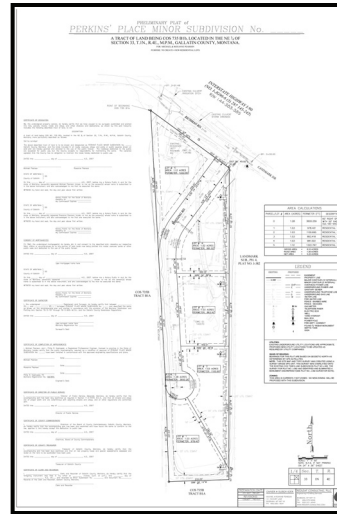
Utility Trench



Road Construction

## Development

**Redleaf** works with developers and city/county planners to design lot layouts and infrastructure upgrades for proposed land development projects. As part of the subdivision process, Redleaf has experience with sanitation act review submittals to the Montana Dept. of Environmental Quality.



Five Lot Minor Subdivision

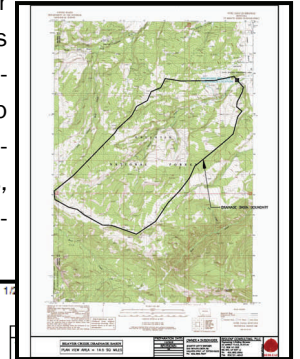
**Redleaf** aids developers by coordinating with other professionals employed on development projects including professional land surveyors, environmental consultants, geotechnical engineers, weed management consultants, contractors, and lawyers.



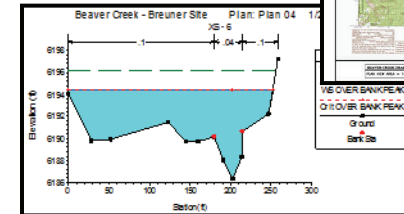
**Proud Member**  
American Council of  
Engineering Companies  
Montana Chapter

## Hydrologic & Hydraulic Studies

**Redleaf** provides storm water runoff calculations for grading and drainage design, as well as, detention basin sizing. In addition, Redleaf performs flood studies in accordance with county, state, and federal regulations. Flood studies identify the water boundary along creeks and rivers during the 100yr peak flood event. This 100yr flood plain delineation is used to determine safe locations for structures, sanitary sewers, utilities, etc.



Drainage Basin  
Determination



HEC-RAS Overbank Flow Simulation

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