

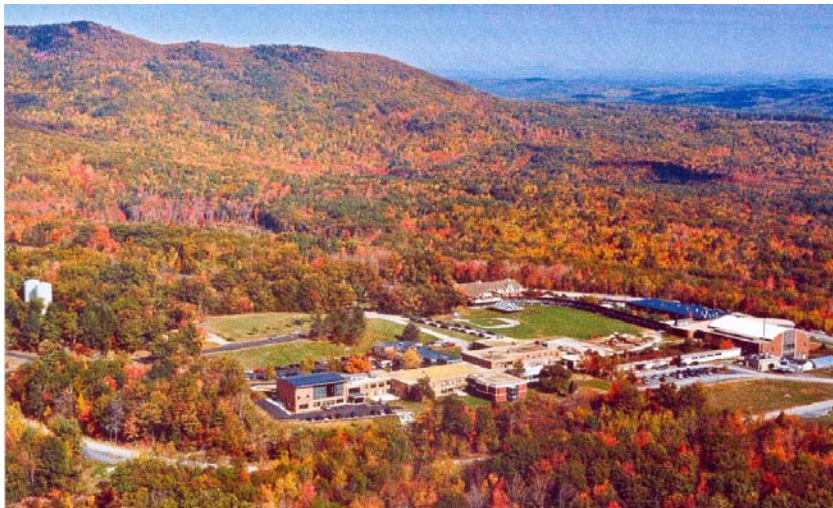
**Crotched Mountain Foundation
Campus Master Plan
Greenfield, NH**

Completed 2004

*Walter Cudnohufsky Associates, Inc.
Ashfield, MA*

in collaboration with

Coldham Architects, LLC



The forested mountainside and spectacular off-site views provide a unique healing environment for multiply-disabled clients at Crotched Mountain.

Located on 1400 acres of biologically diverse woodlands on a south-facing mountainside in southern New Hampshire, the Crotched Mountain Foundation has provided educational, medical, and residential services for multiply handicapped children for fifty years. In the five decades since its inception, the Crotched Mountain Rehabilitation Center has undergone tremendous growth while adapting to changing clientele as needs have dictated. Currently, the Foundation provides services to more than 2,000 people annually, including 122 students at the Crotched Mountain School, 31 adult clients in the Brain Injury Unit, and more than 1000 clients through the Out Patient Clinic. An early childhood program, Wonderworks, serves 70 preschoolers. More than 700 staff are employed by the Foundation.

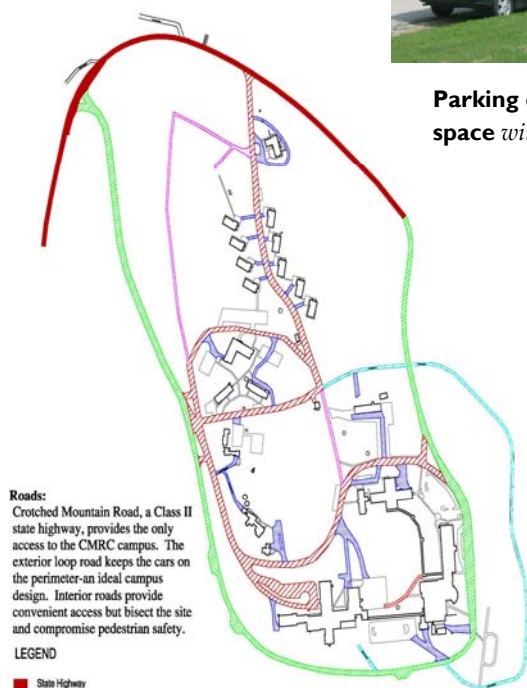


Buildings set into the hillside keep a low profile, so views aren't blocked from within the campus.



Parking claims prime pedestrian space within the inner campus.

Because growth has been incremental, the 114-acre core campus faces a number of dilemmas. The school, rehabilitated from earlier uses, is cramped and inadequate for current needs. Circulation among the various buildings and programs is hindered by multiple floor elevations. Cars intrude into the innermost core of the campus, and delivery vehicles idle outside medical facilities. Despite recent renovations, many entries are exposed to the mountain's mighty winds. The utility infrastructure is beginning to fail.



Roads:
Crotched Mountain Road, a Class II state highway, provides the only access to the CMRC campus. The exterior loop road keeps the cars on the perimeter—an ideal campus design. Interior roads provide convenient access but bisect the site and compromise pedestrian safety.

- LEGEND**
- State Highway
 - Peripheral Loop Road
 - Interior Paved Roads
 - Gravel Roads
 - Service Drives & Access
 - Emergency Access & Pedestrian Way

CMF directors and management framed these challenges as opportunities, and established a Strategic Plan that would enhance educational and medical services, build safe and supportive residential communities, and protect vital natural resources. They then hired WCA Inc. and Coldham Architects LLC to prepare a campus master plan that would translate these lofty goals into physical reality.

A complex weave of roadways has evolved over time, providing good access to all facilities, but asserting the priority of cars over pedestrians on site.



Multiple meetings with CMRC staff engaged a diverse spectrum of the community, and provided critical information on needs and priorities which was then incorporated in the campus master plan.

New buildings (shown in the darker tone) extend and link services with a continuous internal corridor. Densely clustered residential neighborhoods are linked to the campus core by a primarily pedestrian "Main Street." Heavy traffic uses peripheral loop road. Access to diverse open spaces is barrier free.



Crotched Mountain Rehabilitation Center, continued

The planning team held meetings and design charrettes, engaging a broad spectrum of the CMRC community. WCA studied soils, slopes, drainage, circulation, parking, as well as exploring the best relationship of the various program facilities to the site. WCA produced a comprehensive base map of the site, including the complex array of underground utilities. Bruce Coldham assessed existing buildings—their construction, condition and current uses—and developed a complex tabulation of future space needs based on conversations with department representatives. Marc Rosenbaum of Energysmiths studied existing energy loads, and worked with BVH Integrated Systems to propose a more efficient system using renewable resources.

The schematic master plan dedicates 1000 acres for permanent conservation, and creates an integrated and cohesive campus, linking 125 dwelling units in the "upper" campus with 130,000 square feet of new programmatic facilities in the "inner" or southern half of the campus.

At the same time,

- cars are removed from a pedestrian core;
- deliveries stay on the perimeter;
- buildings are linked by a continuous internal corridor;
- day-lighted ramps provide vertical circulation and double as atriums;
- a new school enjoys a premium, south-facing site;
- green spaces within the core campus are linked;
- medical units are better integrated;
- a new campus center provides a community gathering place;
- central receiving and fuel deliveries are concentrated for efficiency and low impact;
- energy systems are looped for greater efficiency;
- and all buildings retain a low profile to preserve off-campus views of the surrounding mountain ranges.

Attention throughout the plan is given to using renewable resources, minimizing environmental impact, and in multiple ways making this a sustainable, "green" campus master plan.

The result is a cohesive and tight-knit community of care within a spectacular and healing natural environment.