

10 Giraffe Design Build

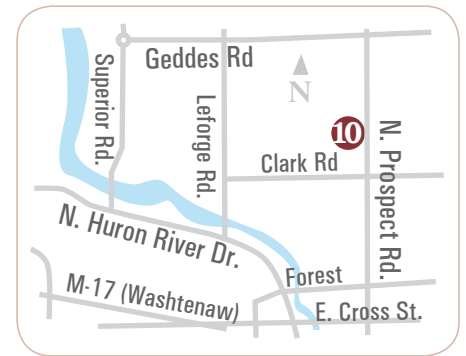
Photos by CJ South



1677 N. PROSPECT ROAD, YPSILANTI, MI 48198

The intent of this project was to build our clients a small, modern, passive solar, earth bermed homestead for their young family to grow into. Our clients had already selected a beautiful property and had begun preparing a perfect south facing slope. After some discussion and early exploration, we settled on a pair of forms, one 'public' and one 'private', offset from each other at an angle, in order to maximize the solar gain throughout the day, and with a continuous slope above allowing us sweeping views of the property and a gentle approach to the upper level. Our entry porch, and screened porch extend out from these soaring forms to scale back down to the site and provide a welcome invitation as you approach.

From a performance standpoint, we were careful to maximize solar gain onto the insulated concrete floors during the winter months, utilizing the thermal mass of the concrete to store heat in addition to the high efficiency wood stove. In the summer months, that same concrete mass will remain shaded and help keep things cool along with the earth bermed north wall. A dual split heat pump provides extra heat in the winter, and cooling in the summer, while an ERV circulates the air and keeps temperatures even throughout the year. In addition to carefully planning the passive solar elements of the home and the mechanical systems, we developed an assembly and detailing to allow us to wrap the entire structure in a boundary of insulation with no thermal bridging at all connection points for the tightest possible envelope.



Off Prospect Road north of East Clark Road and south of Geddes Road. Turn west onto dirt drive marked by Giraffe Design Build signs.



Giraffe

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GiraffeDesignBuild.com

