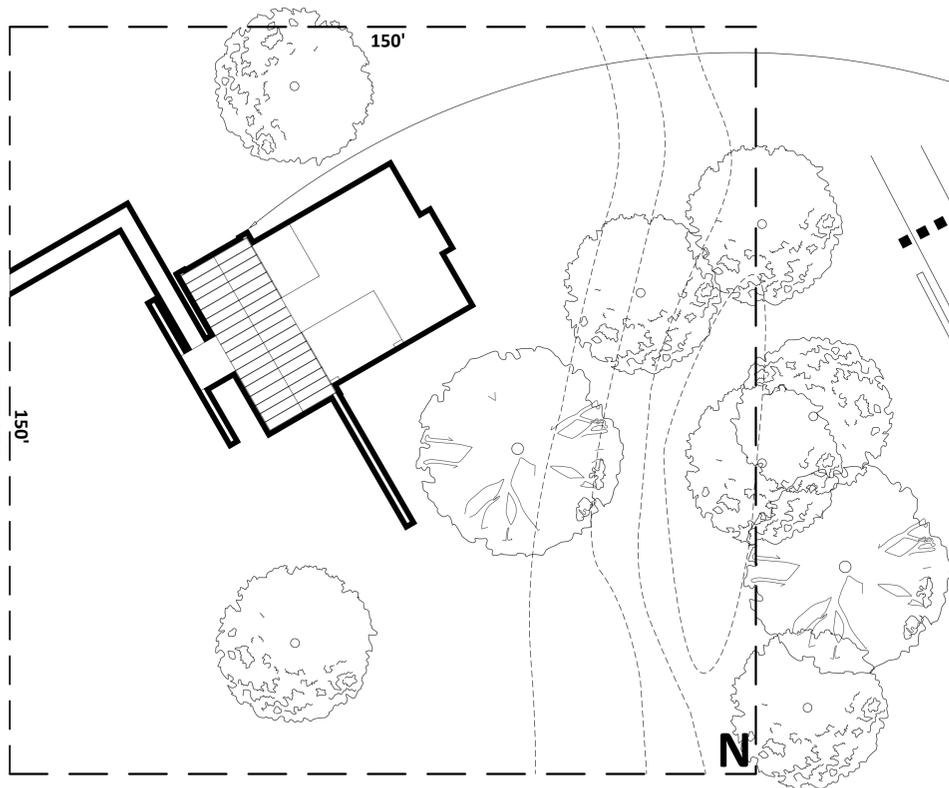


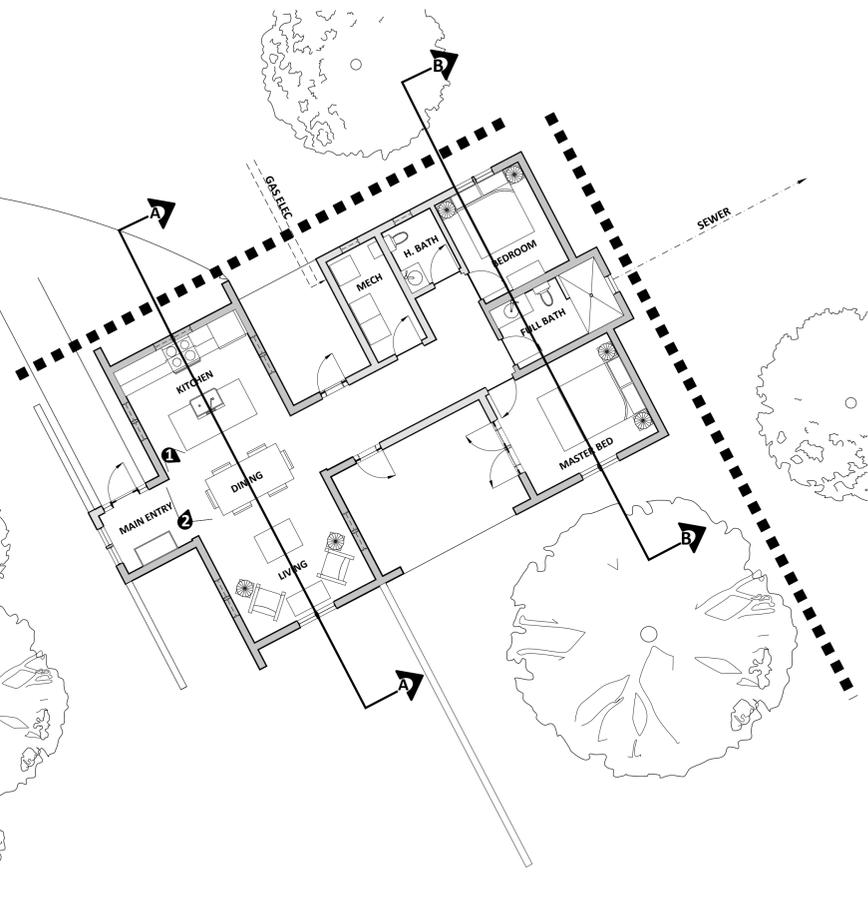
Site

The site is symbolic model of a 22000 square foot lot. Modeling and project goals need to be generalized site to create unbiased results. Performance modeling will use geographic data related to the location.



Plan

1/8"



Spaces

The home has a total of 1130.5 usable square feet, with a total construction cost of 67000 dollars. The home is all on one level, and is wheel chair ready. Although the home is smaller than the maximum allowable square footage by budget it has the functionality that is required at a lower cost. The smaller footprint also allows for the conservation of materials. This allows for better finishes and construction, resulting in longer product life.

The main living and kitchen are 423.6 square feet. This space offers a comfort from its quaintness and size. The space is centered around large dining table. This is a representational of the heart of the home and a gathering place for family and friends. The kitchen has appropriate storage for a family of three. The large kitchen island provides ease of serving.

The full bath is 78.3 square feet. The space is ADA ready and could easily be converted to full wheel chair use. The bathroom has a single sink and standard toilet. The focal point of the bathroom is the large roll in shower which fills the entire north wall of the bathroom. The space is optimized by placing all fixtures on a single wall.

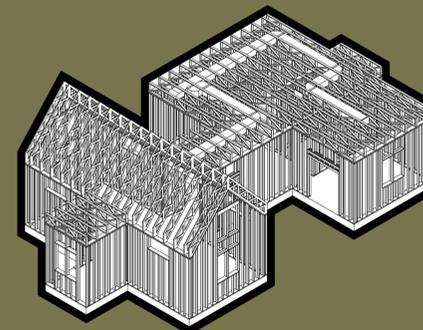
The half bath is 40.5 square feet. The space is wheel chair ready, accounting for needed swing radiuses. The space is at the minimum allowable square footage needed.

The smaller bedroom is 107.1 square feet, which is larger than the minimum set by the International Residential Building code at 70 square feet. The focal point of the bedroom is the cluster of windows on the western wall. These windows offer views of the setting sun and serves as a point of egress during emergency. The space is designed for minimal furnishing, with the use of built in storage as much as possible. The combination of space attributes offer as an optimal layout.

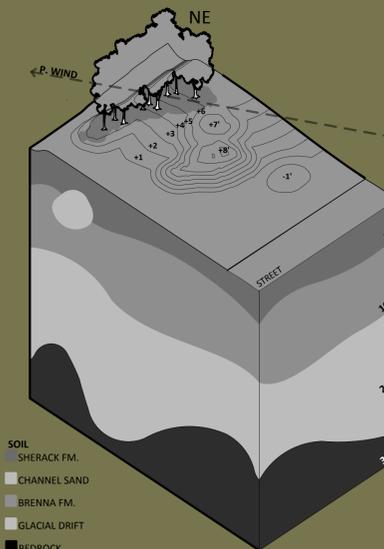
The mechanical room is 78.3 square feet. This space houses the environmental equipment. The layout also allows the addition of a laundry area. The location of the mechanical room allow for the hiding of services entering the home. The space is located as central as possible in the home. The space includes a gas fired instant water heater. This was done to conserve space and energy.

The master bedroom is 156.4 square feet. The focal point of the space is the French doors on the south wall entering out into a small courtyard. This feature, along with a cluster of windows on the east wall provide as a means of egress in case of emergency. The windows on the eastern wall also allow the bringing in of morning light. Furnishings in the bedroom are held at a minimum. The courtyard also would allow the addition of another bedroom in its place.

Structure



Base Site Model



1

Christopher Meyer ARCH Master Thesis 2018

Meyer



2

Meyer