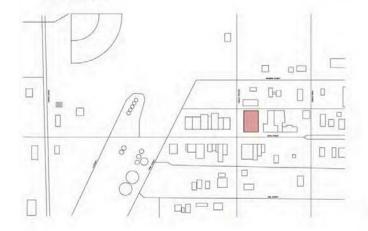
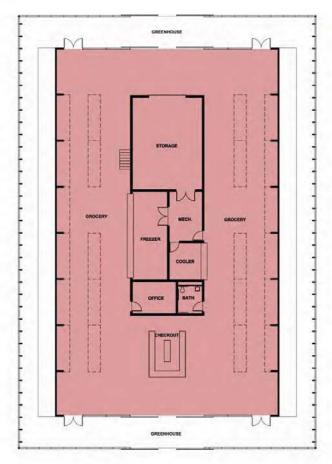
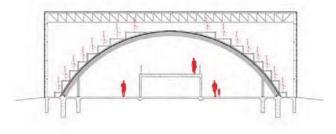
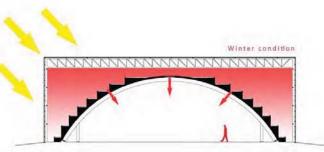
Ben Hovland LEED AP Despang ARCH 411 Spring '10

## the petersburg grocery SHED

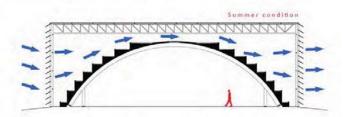








In the winter, the greenhouse will be completely sealed from the outside. The transparent greenhouse allows for the winter sun to heat the air in the space. This will keep the crops in a warm and sunny environment as well as heating the space in the Quonset hut which would greatly reduce the energy required to heat the building.



In the summer, the greenhouse would be opened to allow the cool breezes of the Nebraska plain to sweep across the exterior skin of the building. In this condition, it would feel as if the greenhouse did not exist. Since the skin of the Quonset hut is extremely thin, the warm air that usually builds within a building during the summer would be able to escape, requiring less energy towards cooling the



