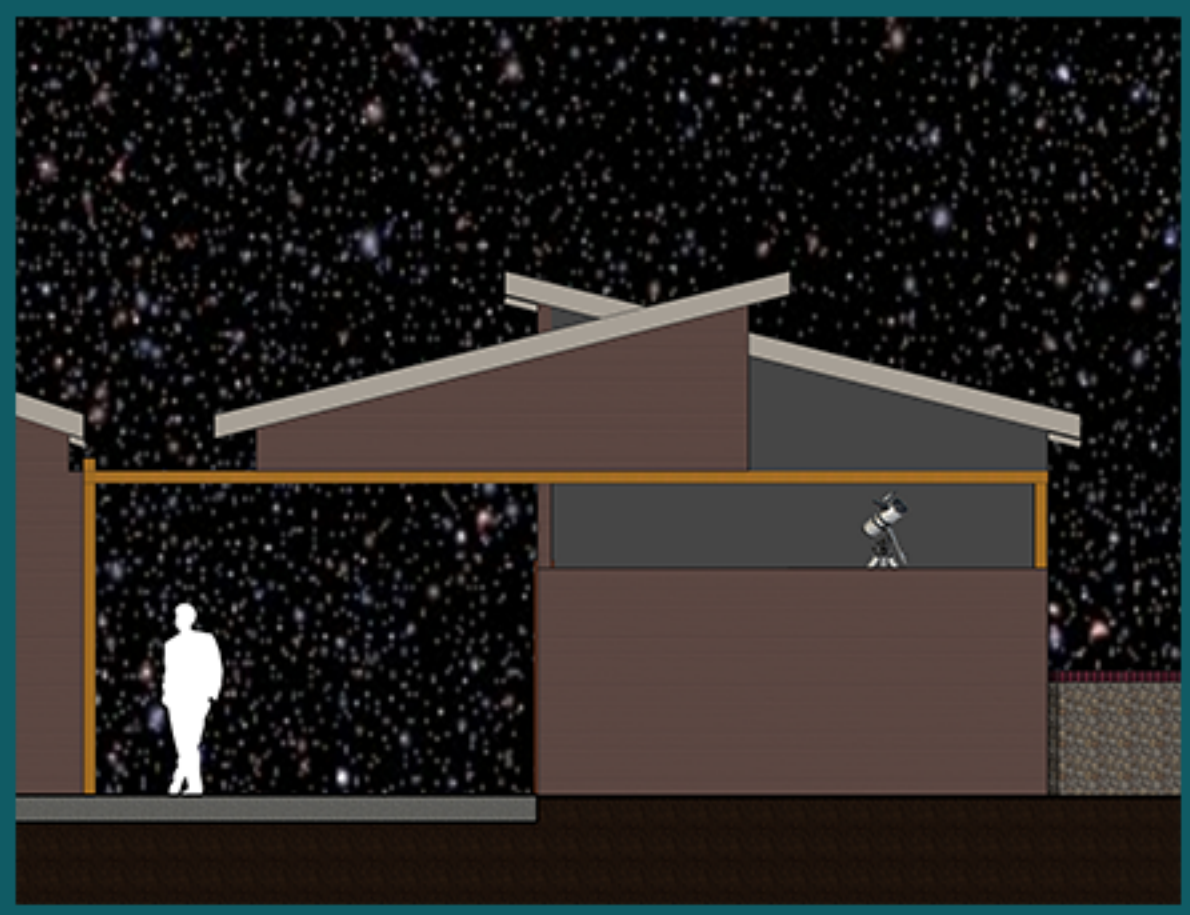


OVERVIEW

The total solar eclipse venue will be held in Carbondale and will host Dark Site observations for PHYS 103, on-site as well as remote. The Society of Physics Students and the Saluki Astronomy Association observations and workshops will be held here as well as AASI (Astronomical Association of Southern Illinois) club observations. The Site will support citizen science on the eclipse such as the Citizen CATE (Continental American Telescope Experiment). The Dark Site will also provide special observations for other campus classes as well as public observations, star parties, daytime solar observations, workshops, and special events. It will serve to educate the general public and potential observers leading up to the eclipse and will be used on eclipse day for conducting solar observations

SIU DARK SITE OBSERVATORY

PHASE I



ROLL-OFF ROOF OBSERVATORY The roof rolls off to the north providing exceptional views to the west and south. The flap down walls allow for the scope to protrude above the wall height in order to properly view the night sky. When the roof is rolled off, it cantilevers over the main access providing a covered seating area and interest to the design.



THE OUTDOOR EXPERIENCE Through the specific design chosen, this site provides outdoor amenities which enhance the experience of being outdoors. Through design elements such as landscaping, pavement, and materials the

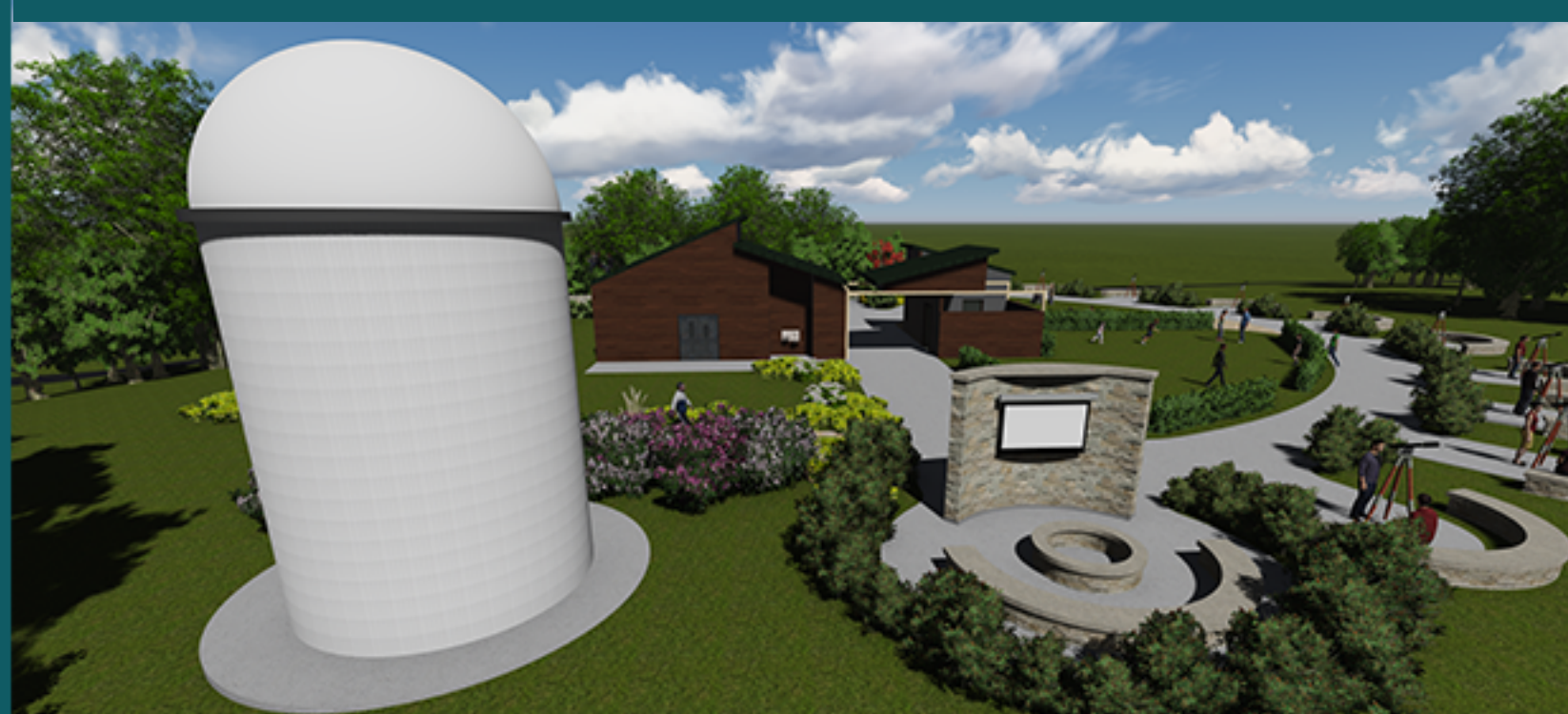
PHASE II



OUTDOOR CLASSROOM The outdoor classroom is an area where individuals can gather to discuss what is happening in the sky. There could be small presentations there and during the day, can be used as a picnic pavilion.



USER FRIENDLY Every decision made for this program was made with the user in mind. The space caters to the needs of the patrons while also contributing to the overall sense of connectivity. The design is meant to be outdoors as much as possible so as to fully take advantage of the wonderful night sky. The site itself is easy to navigate and the structures are as well. Having an open outdoor area is ideal for the user, which in this case is the casual star gazer.



PHASE III

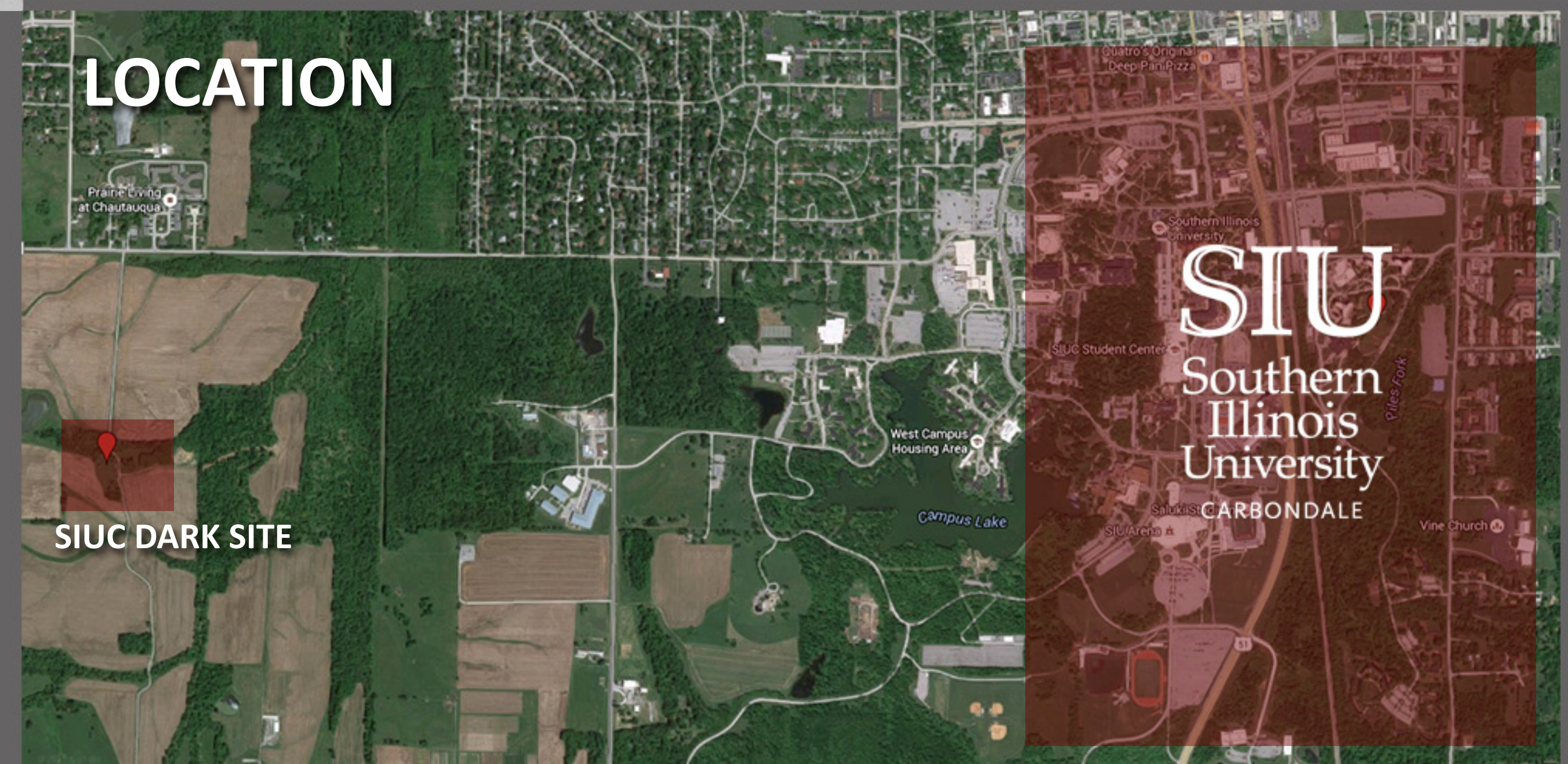


PLANETARIUM SEATING The angled seating the planetarium gives the patrons a comfortable view of the domed planetarium projection area. The seats are positioned at 35° which provides exceptional back support and blood circulation.



CONNECTIVITY The site is designed to keep things connected but also to have a sense of defined spaces for specific functions. The radial, linear, and circular design keeps things flowing and serves as a functional means of circulation. All the phases are built off each other but also work well as standalone structures. The site is designed to provide easy access to everything on the site.

LOCATION

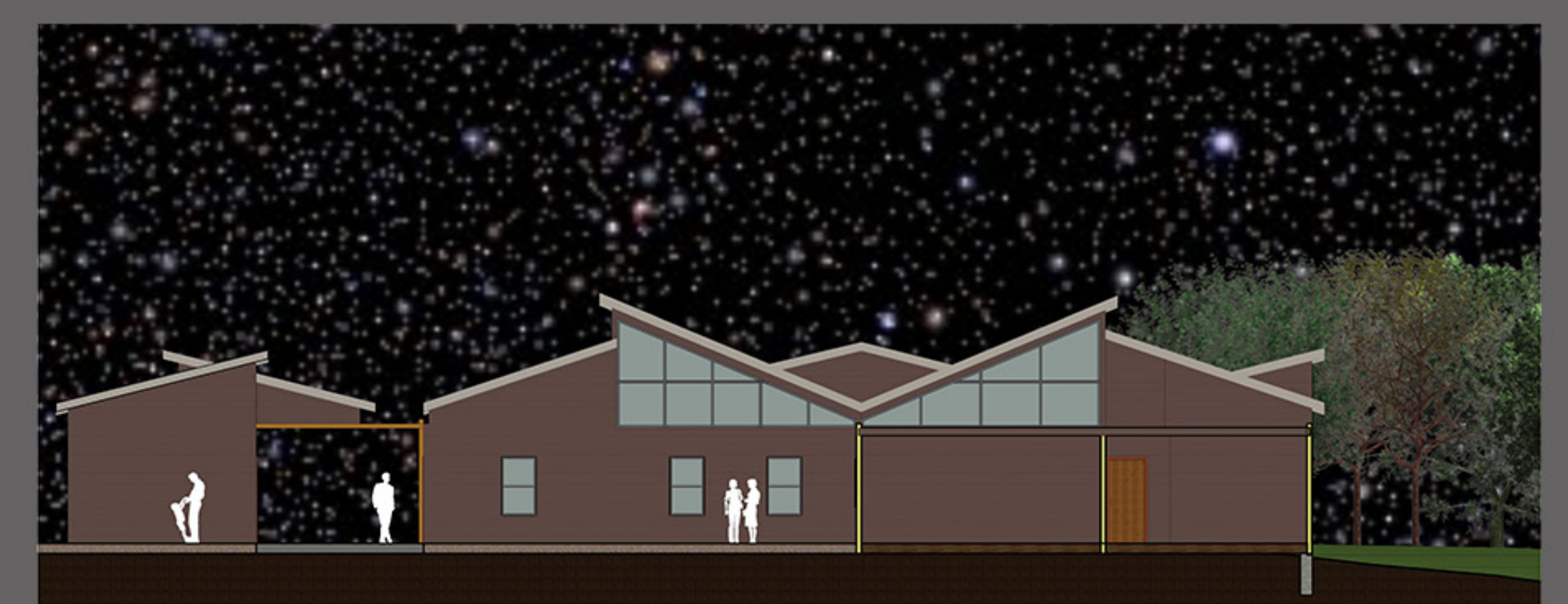


The Dark Site Observatory is conveniently located just west of SIU's main campus. A shuttle from SIU to the Dark Site is anticipated in order to reduce the amount of light pollution from vehicle headlights. The image to the left shows the proposed Dark Site with an old house that was previously located on the site.

CONCEPTS



THE POINTED ROOF PITCH Drawing from a five-pointed star, I have designed a roof pitch scheme which represents a shape recognized by all. This feature pulls the site together to form a cohesive unified facility. With each passing phase, the facility grows thus adding on the linear layout of the site and completing the pointed-star shaped footprint.



OUTDOOR PROJECTION AREA Recycled concrete from the site is used for the projection wall as well as the benches throughout the site. Using repurposed concrete saves money that can then be used for other add-ons.



ROOFTOP VIEWING PATIO & RAIN GARDEN The rooftop viewing patio is adjacent to the rain garden and together they create a space that is private yet open because of the bird's-eye view of the site. The purpose of the rain garden is to drain the runoff from the roofs into a functional site component.

