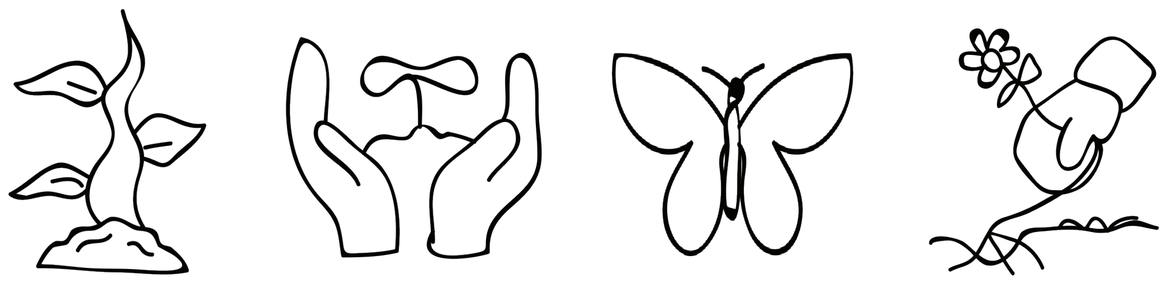
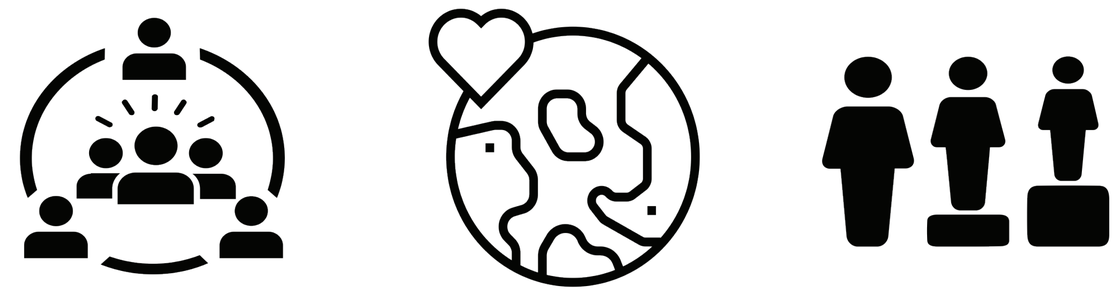


GARDENING FOR ALL



stakeholder analysis

Since submitting into the first phase, our group had two interviews with community stakeholders. Nancy and Peter from the Eddy Memorial Center were instrumental in helping us better understand the problem we were designing for.

Nancy shared that community members are already involved in balance and Tai Chi practices, and have small gardening committees for the potted balcony plants. She revealed that none of their members use wheelchairs and they have limited outdoor space to implement new gardening programs, although they are interested and planning to do so.

Peter reinforced the concept that utilizing nature as a rehabilitation tool is effective, and its positive impacts on residents currently. This is further explained in the storyboard layout at the bottom of the poster.

paradigms & reflexivity

The biggest question raised by the judges was 'How is your design accessible?" We realized we needed to better articulate this in our design, and wanted to clarify the framework we are working within.

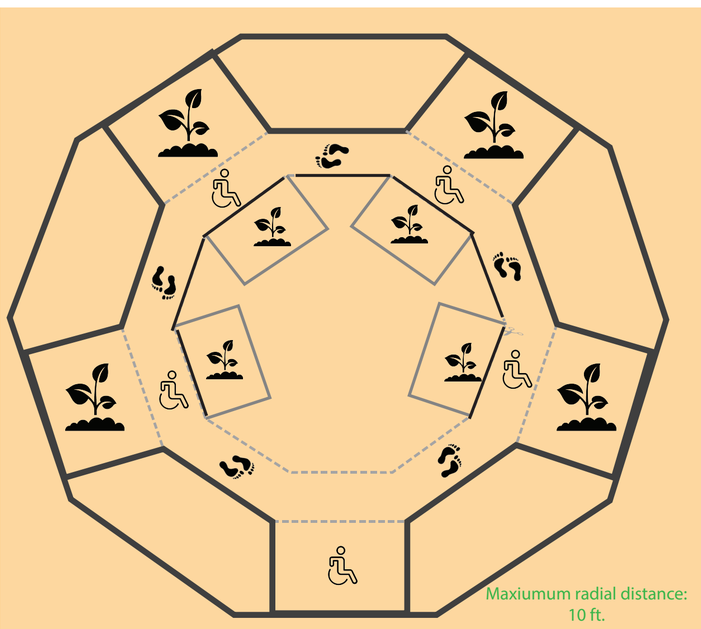
We are striving for **universal, equitable, and inclusive** design. We do this by not only designing tools to give new oppurtunities to the disadvantaged, but by also creating new environments which establish a sense of community and belonging and invites **all** to participate, regardless of ability. With this in mind, we allow for our design to be altered to eventually serve all demographics.

systems thinking

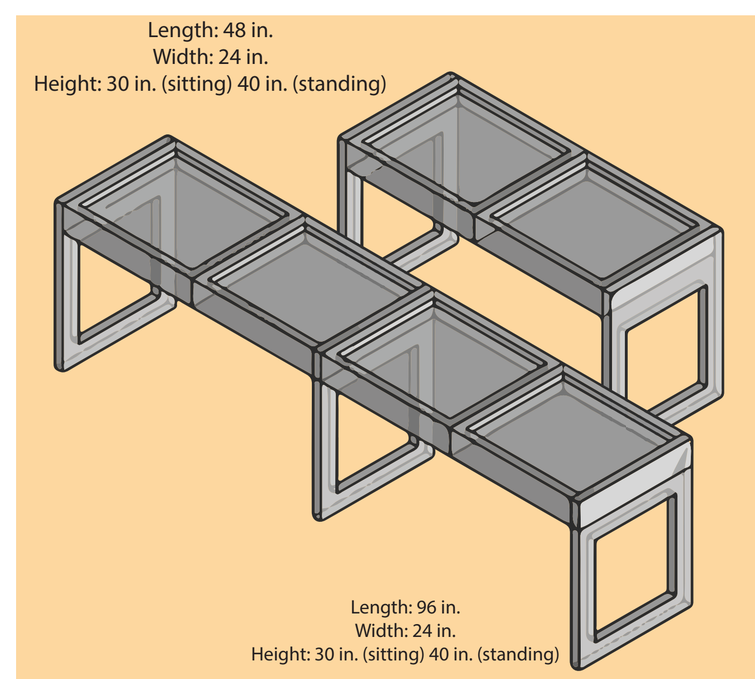
Our initial design proposal focused on the dome, its parts, and how they work together as a part of a larger system. Some features and functions are further explained, but our final solution focuses on the raised garden beds.

The beds themselves do not have the same parts of the dome, but a new system is created when people interact with the raised beds. It is also a part of a larger system, one of community, working towards equity

prototype visualization



Here, we show how the floor layout of the dome is intended to be used. The outlines boxes lining the perimeter and an inner radius are intended for gardening uses, and the path inbetween is designed to be wheelchair accessible and walkable. Although this will not be incorporated into our final design, we wanted to provide this clarification for the judges. The path must be at least **32 inches wide** at all times, as this is the comfortable width which a wheelchair can navigate through. This will also apply to the interior width of the raised gardening beds.

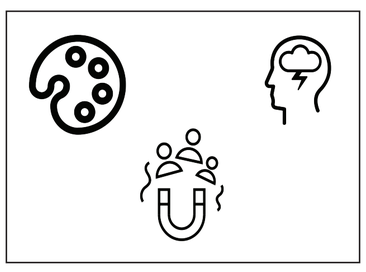


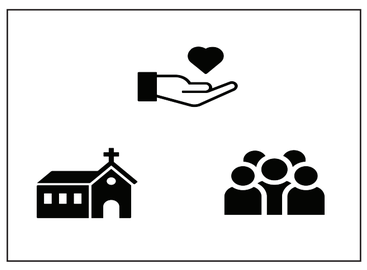
Judges also asked how temperature control, financial investment, and service maintianance were taken into consideration throughout this process. The intent is for this dome to be constructed with **recycled materials**, which is not only environmentally conscious, but generally comes at a discounted price for consumers. To ensure temperature regulation and air flow/ventilation, supporting dome panels can serve as windows. Additionally, we intend for at least one external panel to serve as a solar panel which would power a fan during periods of high heat. To protect the plants during colder times, the dome would utilize **thermal mass technology** to capture heat during the day and release it during the night, if needed.

Ultimately, our team decided the most feasible plan moving forward would be with the Eddy Memorial Center to design and build the accessible raised garden beds. We plan to use the 'dead space' near the bottom and sides as **storage** for tools for our users. Although these beds are only a part of the initial proposed solution, we believe it can create the same **impact**. Our hope is that the raised beds are used by the aging population, their peers, and family members; to create a larger sense of commuinty and understanding aimed towards **equity**.

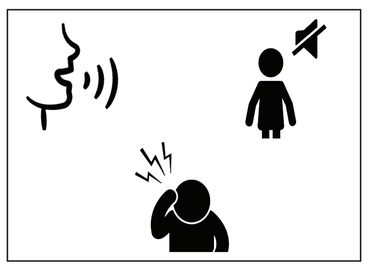
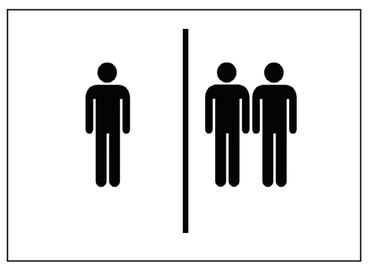
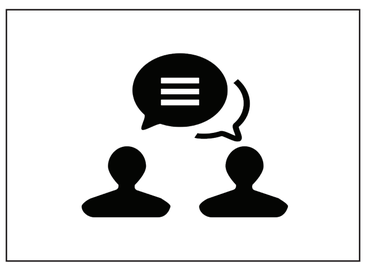
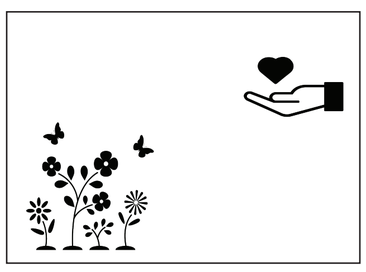
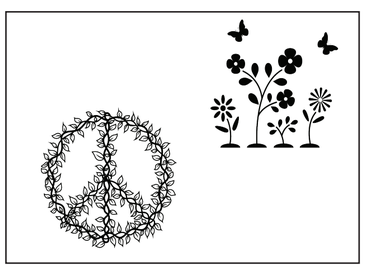
STORIES FROM PETER YOUNG:

At times, the staff of Eddy Memorial Center have difficulty engaging community members in activities. Staff found that connecting activities such ar gardening to a stronger sense of purpose and service for their community, helps to engage their members.





As commuinty members struggle with short term memorry loss and lack of effective communication, frustration often arises. From talking to Peter, we learned that even just running fingers through dirt can be extremely soothing for community members.



As family members move their loved ones into elderly care facilities, it can become increasinglydifficult to maintain communication and connection, which can create an overwhelming sense of loneliness. By providing an activity all family members can bond over and connect through, members of the aging population who live in these care centers, can still feel close to their loved ones.