



WHAT IS A CRITICAL ACCESS HOSPITAL?

Designation given to eligible rural hospitals designated to reduce the financial vulnerability of rural hospitals and improve access to healthcare by keeping essential services in rural communities.

Almost half of the Minnesota's occupants live in rural areas. There is the possibility that there are going to be critical conditions and rural areas have difficulty accessing the types of care that are needed away from urban areas. There is a need for high-quality healthcare that is aligned with community needs. By providing training and the building foot print with all necessary components and promote sustainable improvement in the rural healthcare system. In the last 17 years of the 181 rural hospitals that have been shut down 64 were designated as critical access hospitals. This is because of a new federal budget from the state of Minnesota.

The critical access program was created in 1997 after many rural hospitals were closing alarmingly fast. This program was to make sure Americans is rural and isolated areas to still have access to healthcare. There is a loophole within the requirements that consider many hospitals critical access when they are not meeting the requirements. It means losing affordable healthcare that are check points on the way to big trauma centers, check points that are important to the well-being of residents in Minnesota.

WHAT IS BIOPHILIC DESIGN?

The idea of biophilia is a fairly new concept that was configured to describe how society seeks to connect to nature in a modern built environment. Our species has evolved based on the response to the natural world, not artificial forces that we have created in place of it. On a similar note, the idea of shinrin-yoka which is a form of ecotherapy that has been adapted by the Japanese. Forest bathing (shinrin-yoka) provides the science to support that time spent immersed in nature is good for us mentally, physically and has been now a form of preventative care. Embracing these green spaces can reduce unnecessary stress and

The topic of healthcare is always going to be prominent in our society. With a forever aging society comes health problems and diseases that we cannot slow down. In a small rural town, there is a need for better healthcare facilities that also provide for the communities around it that are not big enough to maintain it. Allowing spaces to be workable for staff and the equipment used to care for patients is necessary within the design. Making rooms of exceptional quality because for most this is the last place they will call home until nature takes it course. This is the chance to design a campus that usually has negative connotations and turn it into a positive and stress - free process. Incorporating the main focus of biophillic design is done to help connect people with nature to support with healing psychological and physical health and

Rural Healthcare Facilities in Minnesota

Critical Access Hospital

Rural Health Clinic

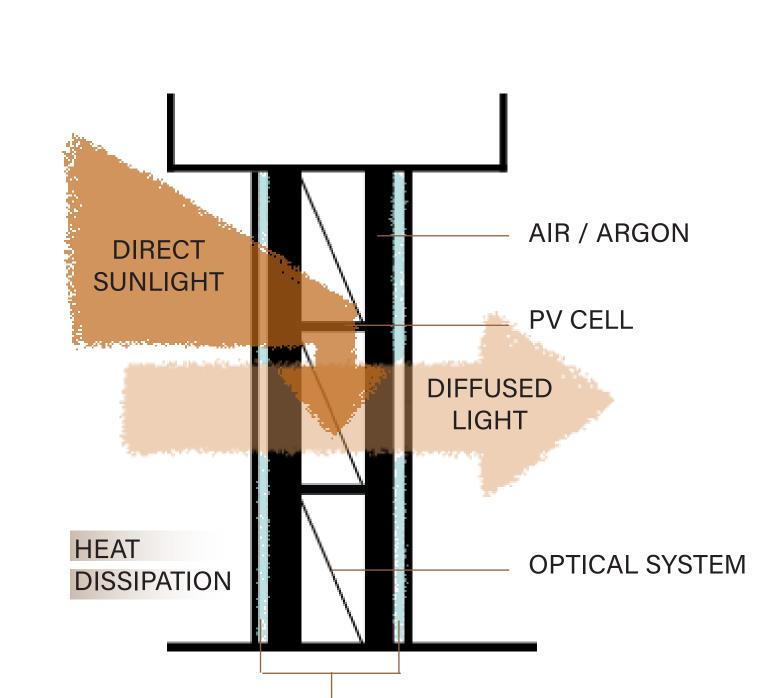




SUSTAINABLE SYSTEMS

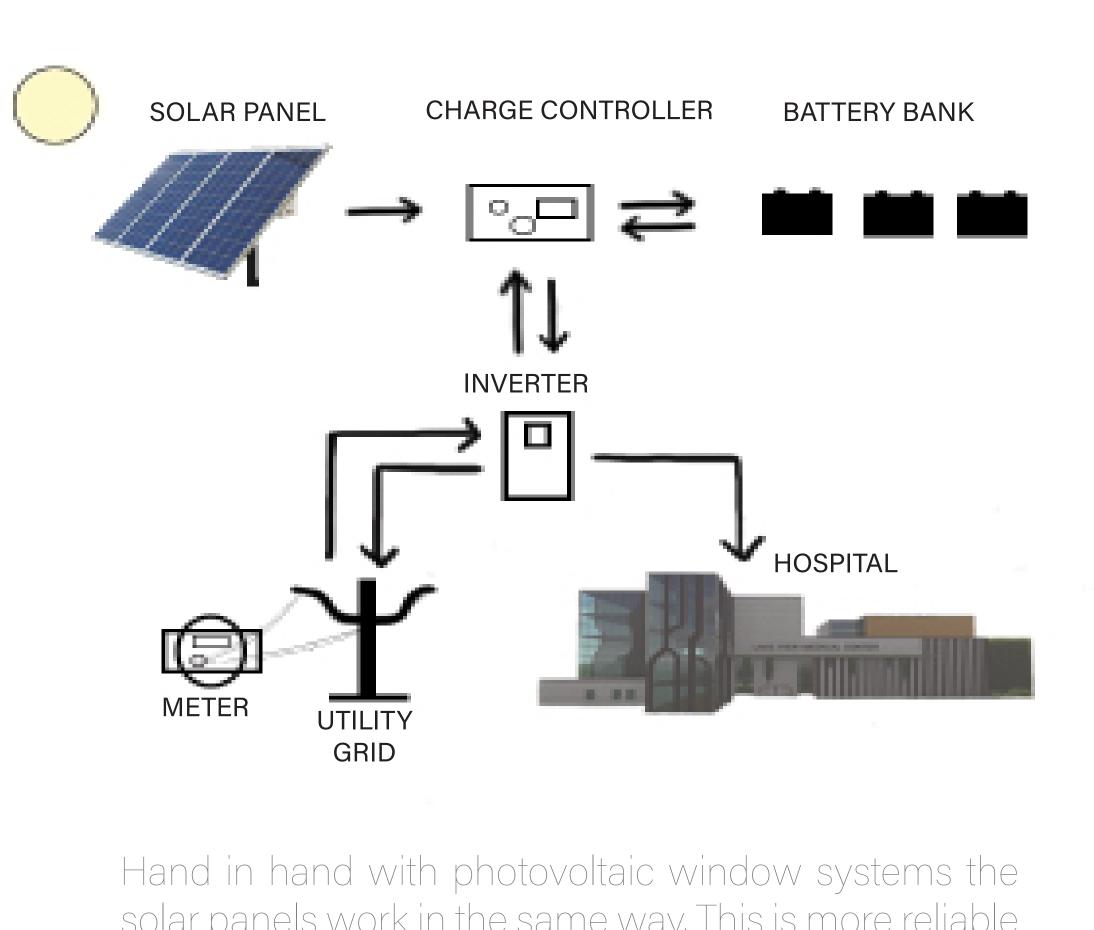
Healthcare systems are extremely expensive because of the twenty four seven care that hospitals provide. The objectives of sustainability are to reduce the release of non-renewable resources, minimize waste and create healthy environments. Another element of using sustainable systems is lowering costs over the life time of the building.

PHOTOVOLTAIC WINDOW SYSTEM



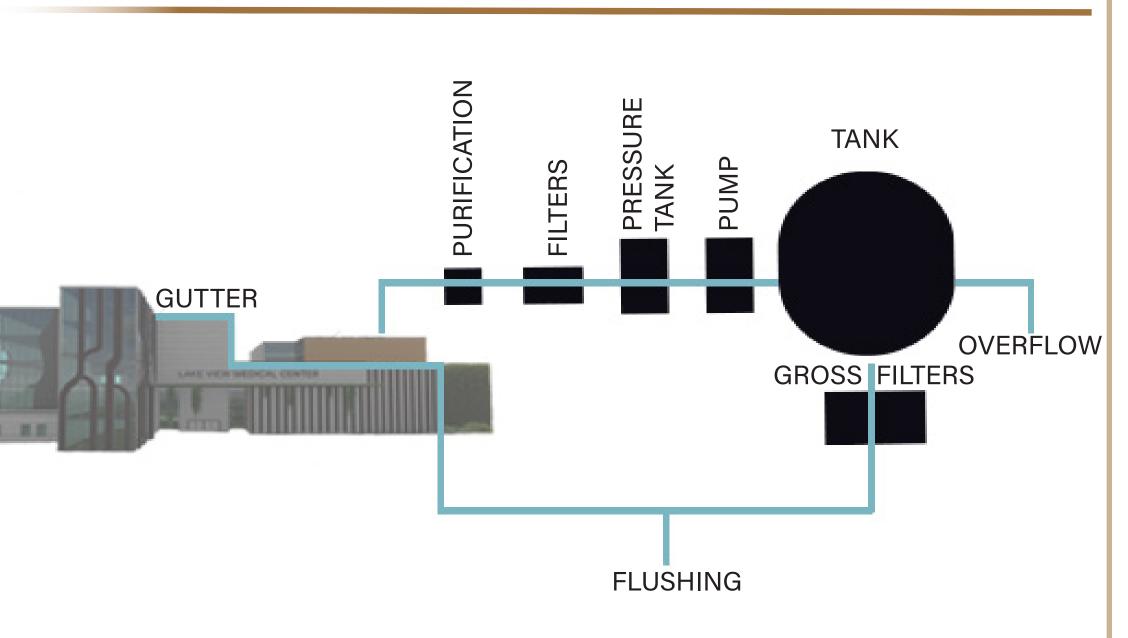
PV Glass generates free and clean electricity, turning buildings into vertical power generators. The glass allows natural light to pass through while providing thermal and sound insulation. The capacity to generate free clean electricity from the sun, it enables buildings to drastically improve their energy efficiency, decrease operation and maintenance costs, and reduce their carbon footprint.

SOLAR POWER ENERGY



solar panels work in the same way. This is more reliable on large scale projects and generate more back-up power or power outages that might happen. In relation to being on Lake Superior there is initiative to use hydro power to fuel electricity consistently from the movement of the lake.

RAINWATER HARVESTING SYSTEM



The function of rainwater harvesting cisterns provide an alternative water source to the facilities. It is not supplied as fresh water but as grey water for daily functions in the buildings. In the system shown above the rainwater is harvested from gutter systems, processed through filters and stored until it needs to be used.