DESIGN Ρ O R T F O L I O





Hello Viewer.

I would like to start by thanking you for taking the time to look at my undergraduate work. Through these projects I have learned and gained a lot of experience. Each project brought a different challenge and forced me to expand on my design skills and thought process. I may find things now that I may have done differently but I love to see the growth I have made. I am proud to share these works and hope you enjoy them as well!

Sincerely, Wendy Flores

- Intro 1
- Museum of Art and Design 4
- 8 **Biophilic Patterns**
- **12 Perspective: Memorial to Peace and Justice Continuation**
- 16 Public Transit Center
- **20** Urban Farming Exploration Museum
- 26 Delaware County Courthouse
- 34 Thesis: Healing Pods mountainous locations in Honduras?

Table of Contents

Institution for the Study and Application of

How can a portable architecture model provide emergency healthcare to remote



Columbus, Indiana does a great job of incorporating architecture that compliments each other. The design focuses on natural light and plains. Surrounding architecture shows a consistent commonality in the element of plains. There are four light wells that allow for diffused lighting throughout the building. These light wells also function

as green spaces and circulation stairwells. The outermost walls are provided to shelter the gallery spaces from ultraviolet rays. Incorporated in the building is a timber column and truss structural system. The building sits inside of the site to give a sense of human scale. In plan the built landscape follows the path from the light wells. Exterior

walls are composed of logs to allow for the use of any kind of wood and breathable material. These allow for passive cooling to filter into the light wells to potentially be disbursed throughout the structure. The design incorporates wood in various ways to showcase its versatility and is composed of a simple concept to complement its surrounding architecture.







Site Plan



Model Views





Institution for the Study and **Application of Biophilic Patterns**

Biophilia has a multitude of properties from which I have decided to incorporate visual connection with nature, dynamic diffused lighting, mystery, presence of water, and vivid experience into my design. I wanted to take from nature and incorporate it into the general form of the structure which is derived from the idea of stacked leaves.

The skin system was designed to enclose the space around the leaves. A Structural system was created with contour lines to make up a grid system that varies in location to filter and control natural light. The main colonnade branches out to **mimic trees** and holds up the Largest leaf. The interior organization is broken into two areas, the main body

and residential. Then it is split into main body to provide energy for the building. water will be collected, recycled, and repurposed throughout floors and sub floors for residential functions. Mystery is incorporated into the design through the building. My hopes for this design is that a series of **unsuspected conditions** that with further iteration it could become a net zero the form allows. The presence of water is complex. exemplified using a series of watermills and a water entrapment system. These features are designed into the plan to help contribute to the buildings sustainability. The watermills will help



| Sustainable | Generative |
|--|---|
| (Balance of Flow) | (Exports) |
| Water collection and reuse | Watermill power source |
| Water is collected to reuse throughout building in water entrapment system | watermills will power the building and excess power can be transmitted to a main plant to be distributed into the community |
| Water will be recycled | This should help the |
| throughout the building | institute make back the |
| saving on water | money they've invested |
| consumption | into this system |



Perspective: Memorial to Peace and Justice Continuation

On this site in 1930 two young African American men; J. Thomas Smith and Abraham S. Smith, were lynched. James Cameron escaped and lived to share the tale. The night prior they were convicted of robbing and murdering a school mate and raping his girlfriend. A mob broke into the jail to beat and drag their bodies to hang on display in front

of the courthouse. This scene resulted in the infamous lynching photo that inspired the writings of "Strange Fruit." The proposed design is a continuation of the "National Memorial for Peace and Justice," Designed by Mass Design Group. This space will hold a memorial pillar identical to the other projects. The memorial sinks into the ground plane to

seperate it from the ongoing city atmosphere that surrounds it and to preserve the sites presence. The Principle Idea is that at the base of the memorial you will get a perspective view of a fountain that has its **veins molded out** of a tree. Representing the tree, they were hung from. On the back wall of the perspective you will see an etching of the people from the famous photo. From this forced perspective you

can see that any bystanders become part of the visual. The idea was derived from the notion that racial inequality is a continued narrative that can be altered by your perspective.



HERE IS A STRANGE AND BITTER CROP





Public Transit Center

The following transit center incorporates various methods of steel usage. It embraces different forms of steel structure and materiality. Steel paneling is largely used as it is the main export from the Gary steel mill. **The** green roof pays homage to the original sand dune landscape of the site. The addition of this transit center offers the

opportunity for community growth in Gary. For that reason, I included the **addition** of an urban farm and a community center. The urban farm can provide access to locally grown produce and employment opportunity. The community center will include a computer lab and class rooms to host trade lessons or after school programming. They are connected

to the transit center with the use of an expanded truss bridge which holds a restaurant that will benefit from the fresh produce. With the design of this transit center comes opportunity to improve the state of living in the Gary Community.





Urban Farming Exploration Museum

This facility's focus will be the discovery and research of urban farming development. Our goals for the building are to create localized economic opportunities, promote innovation in food supply, and to reintroduce the stockyards as a resource and cultural landscape. With this facility we hope to enrich our community with a constant

supply of fresh produce. It also has programmed space incorporated for workshops classes, a farmer's market plaza, and open gallery museum exhibits. These exhibits will display new innovations in the industry and technology. The building highlights the systems and color coordinates them, so that they can be used as teaching

tools. The building systems include a renewable energy plan, ground source heating and cooling, and a water recycling system. This building is geared towards shaping the minds of our youth to be forward thinkers for tomorrow and educate them on sustainable practices.



Cross Section



Food Resources
Building System Components
Urban Farming Components
Offices
Labs
Gender Neutral Restrooms
Circulation

22













Delaware County Courthouse

When redesigning the existing Delaware County Courthouse building, **the main** goal is to bring focus on how it can better serve the community and its employees. This design should draw in the community and function as a **civic** gathering place that engages the **community**. The new plan will include multipurpose spaces for various events,

26

a greenhouse, green roof, daycare for ages K-8, and a plaza space. It will incorporate the existing building structure and footprint. The form was inspired by the idea of a fallen tower and creating a design from the aftermath. It focuses on highlighting movement through pronounced visual planes. It has been programmed for sustainable design through passive and active systems with a water recycling system to support the green roof and green house. It also, incorporates a large solar array and solar shading devices. This design draws attention to the courthouse and attracts the community with its programming, so that it may better serve the county.









5th Year

Programs Used: Revit ArcGIS Photoshop illustrator

2019





Thesis: Healing Pods -How can a portable architecture model provide emergency healthcare to remote mountainous locations in Honduras?

Through this thesis we explore the possibilities of an all-terrain clinical model. I have chosen to base my study in Honduras because it has a difficult terrain to navigate in much of the country. It poses different design considerations to withstand the terrain and elements. It is also in need of this service to better the lives of its inhabitants. There is a clear distinction of class where the underprivileged could possibly never receive the medical attention they need to live long healthy lives. Proper care can be very difficult to acquire in much of the country's mountainous remote areas. In order to resolve this issue, I propose an all-terrain clinic vehicular model

self-sustainable clinics. This concept could help to save lives of those suffering from a lack of access to professional care in this country. These pods are intended to be mobile in order to constantly serve where they are most needed.

it is broken apart into four separate units. The units are designed similar to expandable trailers that can be easily hauled by its built in hitch. This heavily reduces the manufacturing price and maintenance requirements which makes it generally more accessible.



Solar Array



















Contact Me

Email: wendifuldesign@gmail.com Phone: (317)652-5042 Instagram: @wendiful_design Scan or visit website at: https://www.wendifuldesign.com/

