



Mitchell Branscombe
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aPAVILION

Washington Park Studio
Fall 2015
University of Wisconsin - Milwaukee

Arijit Sen

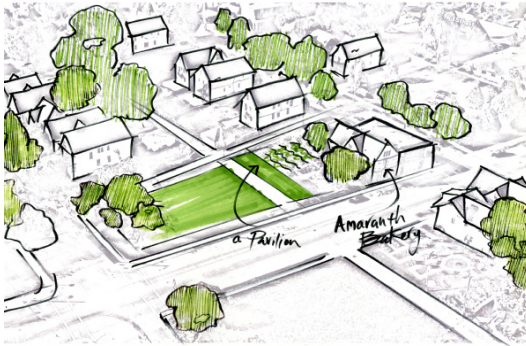
Professor | Advisor

School of Architecture + Urban Planning



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THESIS

Socially, economically and physically Milwaukee has underutilized assets in the form of land, material, and most importantly; in people. This project explores the process of building a pavilion in the community life of Washington Park. Through this we are looking for insight towards catalytic change, the attachment of place to community, and how these might lend themselves to redevelopment in this area.

The process was applied to the site of amaranth Cafe on Lisbon Ave, which will then be evaluated based on acceptance and contribution on a short term, and community engagement and development on a long term.

Community Collaborators

Dave



Muneer



Budget and Hours

.....Budget.....

Supplier	Price
Menards	\$17.97
	\$7.70
	\$116.85
	\$236.46
	\$120.11
	\$53.22

TOTAL: \$553.83

.....Hours.....

Date	Time	Job
Nov. 4th	5pm-8pm	Concrete Pour
Nov. 5th-6th	12pm-4pm	Material Aquisition
Nov. 7th	10am-5pm	Structure Set-up
Nov. 8th	9am-5pm	Roof Framing
Nov. 9th	10am-5pm	Roof OSB
Nov. 10th	9am-2pm	Roof Tin
Nov. 11th	10am-4pm	Roof Drip Edge

TOTAL: 40 Hours



CONCRETE POUR

NOV. 4th, 2015

Leveling and setting 4 (8'x4"x4") posts using 4 (80 lb.) bags of concrete. We poured the concrete into 5 gallon planter buckets, leveling, fixing, and then allowing to dry over 24 hours.

[REFLECTIONS]

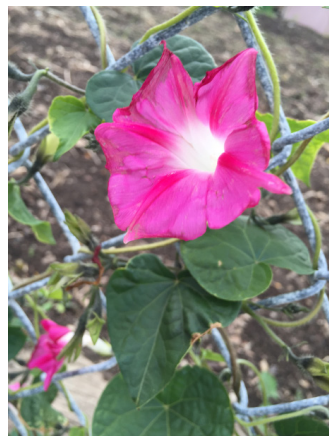
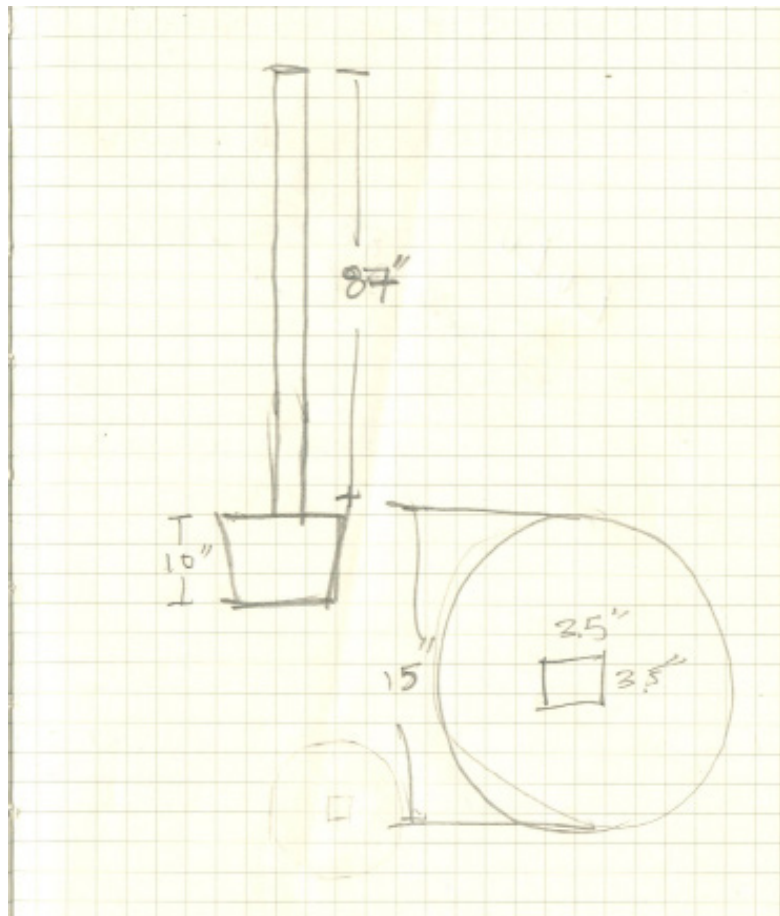
The first batch of concrete was mixed with too much water, it ended up extending the dry time of the concrete. The second mix had a better proportion of water.

[ANALYSES/FUTURE ACTION]

The exposed layer of concrete is too rough an aggregate to paint. A design iteration might include filling the remaining volume in the buckets with dirt and planting some kind of vegetation. (Talked to Dave, he enjoyed the idea and suggested "morning glory" a vine growth that would add aesthetic quality to the posts.)

[FUTURE ACTION]

Check concrete pour for dryness and possibly add extra protection for 4x4 post in contact with dirt.



MATERIAL

AQUISITION

NOV. 5-6th, 2015

Discussed design intent with Professor Arijit Sen, Chelsea Wait, and Nader. We concluded that our process of documentation (field notes) needs to be highly prioritized because of the design/build process. After studio we purchased 1 skid (400 sheets, 40x48", .030 thick) chipboard through UWM. We then drove to Pleasant Prairie to retrieve the skid. It is currently being stored in the SARUP woodshop.

28 (15'8") I-joists were picked up from the CG Shmidt lot in 3645 N. Richards Ave. and delivered them to the site using Mitch's Ford Ranger

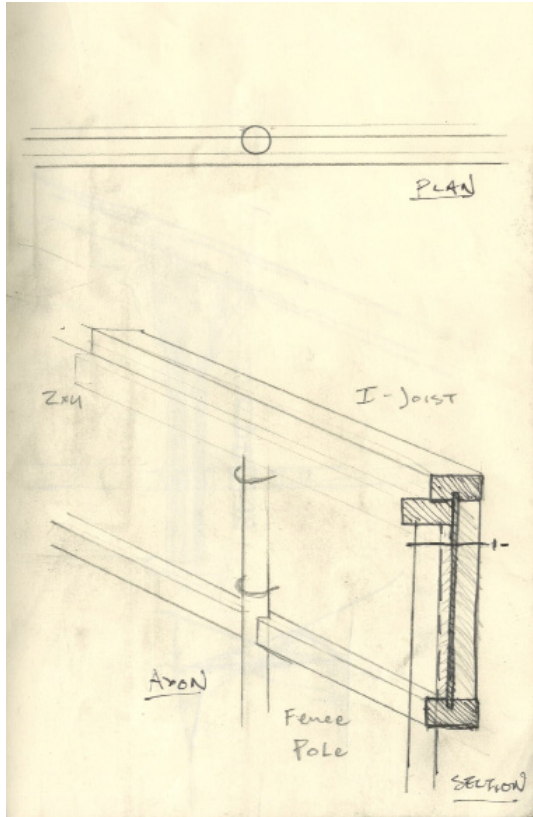
[REFLECTIONS]

The I-Joists, though a free resource, may not be economical beyond a scholastic setting. The time taken to resource, move, and break down into usable pices takes roughly 8 joists/hour for two people in a small truck.

[ANALYSES/FUTURE ACTION]

This highly recycled resource pavilion may have an interesting cost comparison to a typical contracted pavilion of this size and build.





SETTING STRUCTURE

NOV. 7th, 2015

The set poles in concrete were sighted 8' from the fence and 15' apart. They were then dug into the ground at the southern end of the sight to compensate for the 3 1/2" incline of the ground. Leveled off using a string from the top of the poles. Similarly the preexisting aluminum fence poles holding up the back of the structure were leveled. These poles, being 2ft deep, are a substantial structure but flex laterally. The I joists were fastened onto the back poles using 5" U-bolts 2x4's.

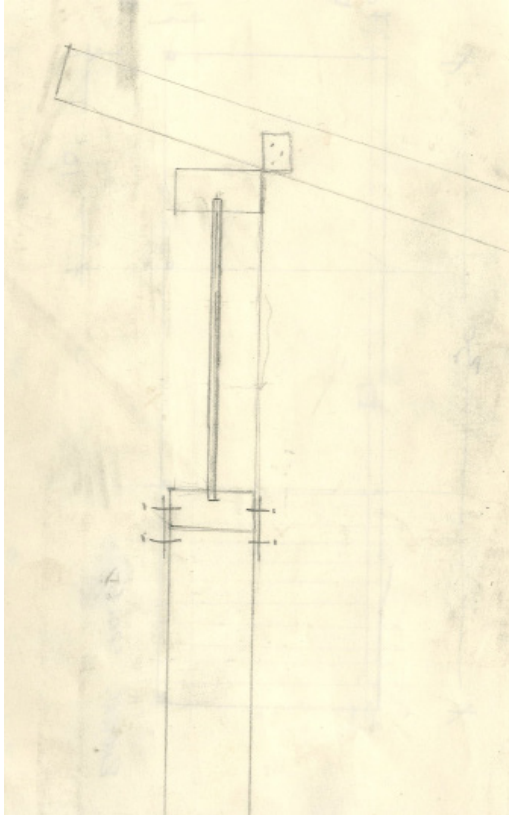
[REFLECTIONS]

For temperance and feasibility the front poles are "floating" meaning the poles are not very stable without being set into the ground a certain distance. The 2 ft. depth of the back poles is sufficient however the metal has flex. The structure then is allowed to "float" on top of the ground. Which might cause problems in the near future.

[ANALYSES/FUTURE ACTION]

Some sort of buried frame link or stall display tables might fix or weigh down the structure enough for added stability.





ROOF FRAMING

NOV. 8th, 2015

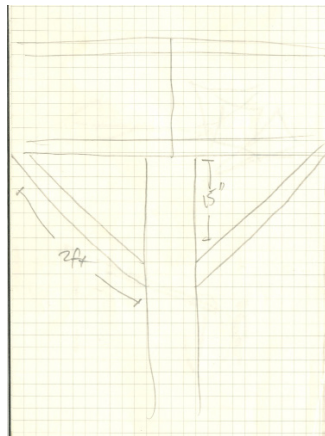
2x4" Rafters, cut to 9'8", were set upon the I-joist trusses 16" apart. This distance allows the 4x8' OSB sheet seam to be placed along a truss. The rafter overhang is 10" along the front edge and 2" off of the back. The front mider is cut at an angle of 22.5 degrees.

[REFLECTIONS]

Spacing the rafters at 16" aligns well with the OSB sheets but does not with the set pole distance of 15'. We made a decision to extend the rafter distance from 16" to 22" on the ends to make up for this. Maximizing the area for the vendors causes some minor inconsistencies in the design.

[ANALYSES/FUTURE ACTION]

Designed into the structure are elements for further extension of the pavilion to the north. Next spring or summer Dave and Muneer will extend the structure by one bay, or 15'.



ROOF OSB

NOV. 9th, 2015

Set the 4x8' OSB sheets onto rafters. Cut other 2' sections to extend the roof to 10'. The OSB overhangs 2" from top rafters and are flush with the bottom. Tacked on the ice and water roofing tarps. 3 strips were required with a 4" overlap. Trusses were played down on top of roof as a temporary overnight tactic to hold down the vapor seal and prevent it from blowing off/ ripping from any strong winds.

[REFLECTIONS]

The OSB sheets were difficult to square in relation to the rafters. Double checking measurements after each step from setting the foundations to laying the rafters to ensure squareness would have been helpful and time saving.

[ANALYSES/FUTURE ACTION]





ROOF TIN

NOV. 10th, 2015

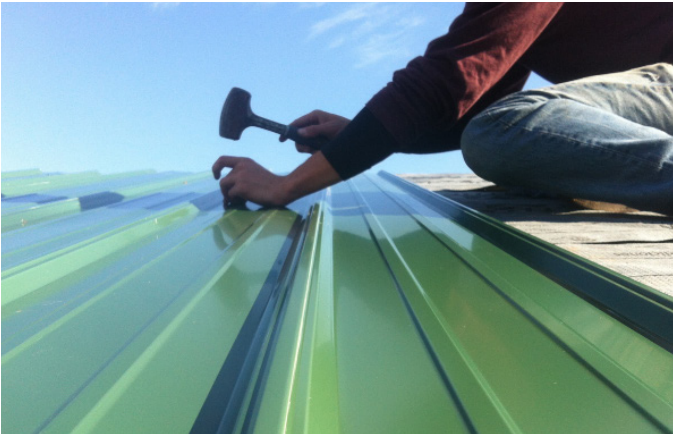
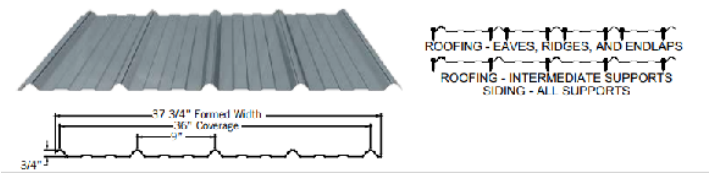
Trusses that were holding down the tarp of the roof were removed. Placed the bottom drip edge using liquid nail, and duct-tape for extra sealant. Then placed 3x10' tin corrugated roofing, fastening at critical points.

[REFLECTIONS]

Probably the easiest step in the roofing process. Application went well. We had a discussion with dave as to the fastening location.

[ANALYSES/FUTURE ACTION]

Future W



ROOF

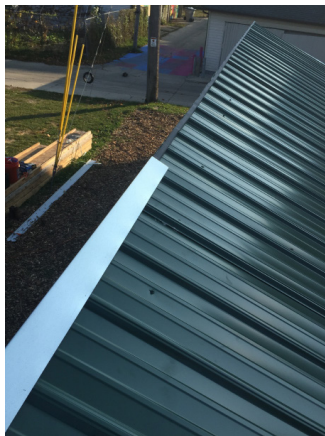
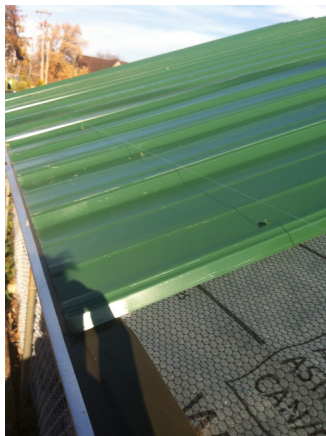
DRIP EDGE

NOV. 11th, 2015

The drip edge on the lower edge was placed the previous day, preceding the tin roofing. It was fastened using Liquid Nail and nails. From bottom to top it layers as such: OSB, Drip edge, water and ice, tin roofing. Along the top edge aluminum fascia was used and fastened with screws and a tin roofing edge seal. It layers as such: OSB, water and ice, tin roofing, edge seal, fascia.

Along the sides fascia was used in a similar fashion to the top. In order to create a better seal between the water and ice and the OSB we fastened a “fake rafter” or a rafter hanging in space. This screwed in to the OSB and pinches the water and ice between.

A storm is coming, high winds are projected to hit Milwaukee during the night so we added a rough I-joist weighting system and a makeshift buttress in order to prevent the pavilion from flying away.





MILK CRATES

NOV. 13th, 2015

Using a resource that is already available to us, to benefit the community by painting these milk crates that the user can claim and use for either a seat, a small table, a container or even children to play with. The idea is for the user to claim this mobile object and benefit from it, where it allows the user to interact with it closely, vs. the Pavilio (static object) that is shared.

[REFLECTIONS]

A concern we had that, what if these crates get taken, where someone could walk away with it and use it to plant something in their front yard.... or kids walk off with it because it's simply interesting. But even if these crates do walk away they will create nothing but a sense of unity in the neighborhood.

