

TABLE OF CONTENTS



Architectural Floorplan	8
Building Section	14
Concept	4
Construction Analysis	29
Construction Detailing	16
Construction Estimates	30
Construction Schedule	31
Elevations	9
Exterior Rendered	20
Furniture Plan	22
Interior Rendered	24
Leed	32
Lighting	26
Signage & Wayfinding	18
Site Plan	6
Site Logistics	7
Text	19

CONCEPTS



AIME, FEARING, GRANTHAM, KEIFER, KELLUM THOMAS, STROHM.

OFESSORS: GINES, GREGORY, HERRMANN, MILLER, & POWNE

Sweetgum Brewing Co. is looking to plant its roots in Starkville, MS by creating their first microbrewery location. A microbrewery focuses on the art of creating craft brews that concentrate on guality and flavor. The brewing technique begins with the natural ingredients, such as barley, and then through a series of transformations and manipulations is shaped into a signature brew. This transformation of rough raw ingredients into a refined liquid requires extensive energy and skill. To capitalize on this transformation, the exterior of the building will be in stark contrast to the interior, leading consumers through the natural established exterior into the manipulated interior. The material selection will be based upon this natural to refined idea. By using raw copper, rough wood and concrete, a transition will be created from the rough, weathered outside into the polished refined materials reflected in the machinery. Through the space plan and the interesting design details the space can be used for day to day brew operations, tours, and also rented out for events. This provides the owner with an additional source of income to offset the initial costs of start up.

Design Goals:

- -To create a Sustainable Design
- -Create a Buzz among the People of Starkville.
- -Make customers feel connected to brewing process and become invested in Sweetgum.
- -Create strong branding and have a clear mission.
- -Become involved in local events.
- -Serve as an event center and a place for brewery tours and production to maximize profitability.



SITE LOGISTICS









7

ARCHITECTURAL FLOOR PLAN





ELEVATIONS



North Elevation Scale 1/16" = 1'



Scale 1/16" = 1'



ELEVATIONS

West Elevation Scale 1/16" = 1'

BUILDING SECTION

Section A

14

AIME, FEARING, GRANTHAM, KEIFER, KELLUM THOMAS, STROHM. MICROBREWERY. 8.26.2015. PROFESSORS: GINES, GREGORY, HERRMANN, MILLER, & POWNE`

Scale 1/16" = 1'

BRASFIELD & GORRIE STUDENT DESIGN COMPETITION. FALL 201

CONSTRUCTION DETAILS

Wall Section 1

Wood and Brick Wall Detail

16

.

Scale 1/16" = 1'

Wall Section 2

SIGNAGE & WAYFINDING

TEXT

EXTERIOR RENDERED

Dark gray aluminum
White walnut
Steel
Unilock turfstone
Columbus Brick Company: Weathered Brick
Original brick

FLOOR PLANS

Bar Area allows for direct viewing into the brewing equipment space and is also a free standing piece that can be moved and disconnected if needed.

Tasting room, lounge seating, restrooms, and the office can all be sectioned off by glass garage doors to prevent attendees of different events from wandering

to the factory area and potentially harming themselves or others.

Receptionist desk in entry built as three separate pieces on casters to allow for optimal move ability and functionality. **Tasting Room** tables created as smaller pieces that can be pushed together to hold up to 6 people or pulled apart to accommodate any event. **Gallery** wall allows for interchangeable graphics like the history of microbreweries and how Sweetgum and Starkville are a part of that.

Modular lounge

seating acts as a waiting area or if the space is rented out for an event it can be moved to accommodate multiple configuration options.

Loewenstein Stainless Square Base and Square Top

Loewenstein Tiffany Chair

Cable and Rod Shelving System

INTERIOR RENDERED

Concrete rendered receptionist desk:Mobile wood structure with thin layer of concrete applied.-Walnut wood with tobacco pacific stain above receptionist desk.-

Ceaserstone quartz jet black countertop.

- Lounge seating upholstery: Momentum brand

LIGHTING

CONSTRUCTION ANALYSIS

For this renovation we originally designed a bump out addition that would serve as the tasting room. This addition would have required the north CMU wall to be demolished and then framed with steel adding unnecessary cost and complications. Using value engineering, our team decided to veto the addition, but keep the raised ceiling it offered for the brewing equipment. By not adding the extension, we saved \$84,000. The original floor plan was 6,120 SF, as opposed to the new floor plans 5,900 SF and implements LEAN strategies such as prefabricated assemblies fabricated offsite that ensure quality and accuracy. The wood sheathing veneer located on the north elevation will be fabricated offsite and then brought on using just-in-time delivery.

CONSTRUCTION BUDGET

TOTAL		PRICE
SF		PER SF
5,900SF		\$70.26/sf
	General	46,117
	Conditions	
S	itework	37,513
	Concrete	22,790
	Masonry	37,151
S	teel	15,991
W	ood and	10,209
	Plastics	
	Thermal and	23,205
	Moisture	
	Protection	07.007
	Doors and	27,227
F	windows	10.462
F	Inishes	19,463
	Specialties	5,056
	Equipment	5,000
33%	MEP	88,252
6%	Architect Fee	16,045
7%	O&P	18,720
1%	Engineer Fee	2,674
3%	Mechanical & 8	,022
	Electrical	
	Engineer Fee	
5%	Contingency	13,371
	Grand Total	414,520

SCHEDULE

LEED ANALYSIS

This design for a microbrewery on the corner of Lampkin and Jackson in Starkville, MS uses a wide variety of methods to contribute to the health and safety of the environment, while developing and improving its property for an increase in community use. The design limits the disruption of the undeveloped land and preserves existing green space and vegetation.

The site is in close proximity to many community amenities, as well as a residential area. The site is also within a quarter of a mile to a bus stop that provides transportation to the community of Starkville and Mississippi State University. Parking areas onsite are limited to the minimum required by code, therefore encouraging carpooling and the use of public transit. A large pecan tree shades most of the open green space, as well as the parking area. An outdoor sitting area is provided on open grid pavement, making a transition between the concrete sidewalk and the open green space. Storm water and run-off is re-routed from original site conditions to provide irrigation for the landscaping.

All structural elements on the interior of the building are retained. Additional structure is added to the roof in the north side, however, none is subtracted. The north side is opened in order to allow light into the interior, as well as provide visibility from the street of the interior public spaces. Non-structural wood elements found in the interior of the existing building are used on various interior and exterior wood veneer walls. The building's lighting plan provides efficient fixtures that allow for maximum control and minimize light pollution. Specified furniture, fixtures and materials have the minimum required recycled content and emit the least amount of VOCs. that are acceptable. Specified interior fixtures use and promote wastewater efficiency in the restroom areas. The utilization of these strategies as well as several others can be employed to achieve LEED Silver Certification.

LEED CHECKLIST

Project Checklist

LEED 2009 for New Construction and Major Renovations

SWEETGUM MICROBREWERY

1 to 2

21	Sustai	nable Sites Possible F	Points: 26		Materi	als and Resources, Continued
Y ? N	I			Y ? N		
Y	Prereq 1	Construction Activity Pollution Prevention		2	Credit 4	Recycled Content
1	Credit 1	Site Selection	1	2	Credit 5	Regional Materials
5	Credit 2	Development Density and Community Connectivity	5	1	Credit 6	Rapidly Renewable Materials
	Credit 3	Brownfield Redevelopment	1	1	Credit 7	Certified Wood
6	Credit 4.1	Alternative Transportation—Public Transportation Access	6			
1	Credit 4.2	Alternative Transportation—Bicycle Storage and Changing R	ooms 1	10	Indoor	Environmental Quality
	Credit 4.3	Alternative Transportation-Low-Emitting and Fuel-Efficient	t Vehicles 3			
2	Credit 4.4	Alternative Transportation—Parking Capacity	2	Y	Prereq 1	Minimum Indoor Air Quality Performa
1	Credit 5.1	Site Development-Protect or Restore Habitat	1	Y	Prereq 2	Environmental Tobacco Smoke (ETS)
1	Credit 5.2	Site Development-Maximize Open Space	1		Credit 1	Outdoor Air Delivery Monitoring
1	Credit 6.1	Stormwater Design—Quantity Control	1	1	Credit 2	Increased Ventilation
1	Credit 6.2	Stormwater Design—Quality Control	1	1	Credit 3.1	Construction IAQ Management Plan-E
1	Credit 7.1	Heat Island Effect—Non-roof	1	1	Credit 3.2	Construction IAQ Management Plan-E
	Credit 7.2	Heat Island Effect—Roof	1	1	Credit 4.1	Low-Emitting Materials-Adhesives an
1	Credit 8	Light Pollution Reduction	1	1	Credit 4.2	Low-Emitting Materials-Paints and Co
				1	Credit 4.3	Low-Emitting Materials—Flooring Syste
7	Water	Efficiency Possible F	Points: 10		Credit 4.4	Low-Emitting Materials-Composite W
					Credit 5	Indoor Chemical and Pollutant Source
Y	Prereq 1	Water Use Reduction-20% Reduction		1	Credit 6.1	Controllability of Systems-Lighting
3	Credit 1	Water Efficient Landscaping	2 to 4	1	Credit 6.2	Controllability of Systems-Thermal C
2	Credit 2	Innovative Wastewater Technologies	2	1	Credit 7.1	Thermal Comfort–Design
2	Credit 3	Water Use Reduction	2 to 4	1	Credit 7.2	Thermal Comfort–Verification
	_				Credit 8.1	Daylight and Views—Daylight
4	Energy	v and Atmosphere Possible F	Points: 35		Credit 8.2	Daylight and Views-Views
V	Dreves 1	Fundamental Commissioning of Building Energy Systems			Innova	tion and Dosign Process
V	Dreven 2	Minimum Energy Performance			IIIIOva	cion and Design Frocess
T V	Prereq 2	Fundamental Defrigerant Management			Cradit 1 1	Innovation in Design: Specific Title
T	Frereq 3	Optimize Epergy Performance	1 to 10		Credit 1.1	Innovation in Design: Specific Title
4	Credit 1	On Site Denewable Energy	1 to 19		Credit 1.2	Innovation in Design. Specific Title
	Credit 2	Changed Commissioning	1 10 7		Credit 1.3	Innovation in Design: Specific Title
	Credit S	Enhanced Commissioning	2		Credit 1.4	Innovation in Design: Specific Title
	Credit 4	Lindiced Reingerand Maridgement	2		Credit 1.5	Innovation in Design. Specific fille
	Credit 5		3		Credit 2	LEED ACCredited Professional
	Credit 6	Green Power	2		Region	al Priority Credits
13	Materi	als and Resources Possible P	Points: 14		Region	
15	maceri		0111(3, 14		Credit 1.1	Regional Priority: Specific Credit
Y	Prereg 1	Storage and Collection of Recyclables			Credit 1.2	Regional Priority: Specific Credit
3	Credit 1 1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3		Credit 1 3	Regional Priority: Specific Credit
1	Credit 1.2	Building Reuse_Maintain 50% of Interior Non-Structural Flor	nonts 1		Credit 1 4	Regional Priority: Specific Credit
1	Credit 2	Construction Waste Management	1 to ?		c.cuit 1.4	Regional Honey. Specific cledit
2	Credit 3	Materials Reuse	1 to 2	55	Total	
-		materials neade	1 to 2	33	Certified	40 to 49 points Silver 50 to 59 points Gold 60
					Jerendu	

aterials 1 to 2 newable Materials 1 /ood 1 ental Quality Possible Points: 15 door Air Quality Performance ntal Tobacco Smoke (ETS) Control Delivery Monitoring 1 entilation/ 1 n IAQ Management Plan-During Construction 1 n IAQ Management Plan-Before Occupancy 1 ng Materials—Adhesives and Sealants 1 ng Materials-Paints and Coatings ng Materials—Flooring Systems ng Materials-Composite Wood and Agrifiber Products 1 mical and Pollutant Source Control lity of Systems-Lighting lity of Systems-Thermal Comfort omfort–Design omfort-Verification nd Views–Daylight 1 nd Views–Views 1 Design Process Possible Points: 6 in Design: Specific Title 1 dited Professional 1 / Credits Possible Points: 4 iority: Specific Credit 1 iority: Specific Credit 1 iority: Specific Credit 1 iority: Specific Credit 1

Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Possible Points: 110

