Mobile Maritime Center

Kristina Hamill Arch 493 Master's Studio



Project Summary

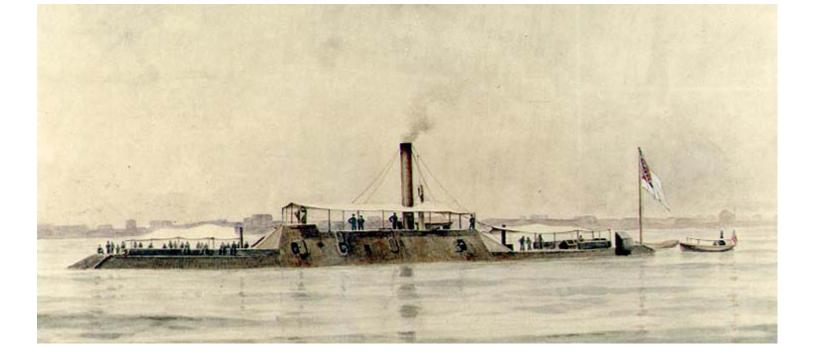
I'm a Yankee. I lived in Mobile, Alabama for three and half years before moving to Chicago and now that I'm here all I hear is how Southerners are so friendly, so hospitable, so open. But they aren't very open because they don't discuss their private lives with just anybody. This includes unfortunate or disgraceful events as part of things not to be discussed, such as the American Civil War. As a result, the contributions of Mobile's shipyards during the war have not been considered to the extent that they should be because ironclad construction is too closely tied to the Civil War. Mobile has built ships since its foundation but the need for ironclads during the Civil War sparked a level of interest in naval ship design that has continued to this day. The various Civil War battles have been recorded and preserved thoroughly but the construction of ironclads in the shipyards of Mobile has not. So I designed the Mobile Maritime Center to become a hub for information on ironclads constructed in Mobile.

One of the best means of education is through experiencing something as opposed to simply reading about it so the Maritime Center has a docked recreation of the CSS Tennessee for visitors to go aboard and see the interior. The Tennessee is an example of the typical ironclad built in Mobile but it was also the flagship of the ironclad fleet that defended Mobile in the Battle of Mobile Bay. Inside the center, is a large model of the exterior of the CSS Baltic, one of the sailing ships in Mobile that was converted to an ironclad early in the war. This model is large enough to allow people stand on it, examine the details of its construction, and imagine what sailing the ship might have been like.

The Maritime Center has also provided space to allow the H.L. Hunley which is currently in Charleston, South Carolina to return to Mobile. During the Civil War, the team of Horace Hunley, James McClintock, and Baxter Watson built three successfully operating submarines pairing up with the machine shop Park and Lyons to build the second sub and the Hunley. Although the shop no longer exists, the site of the shop is only three blocks north of the maritime center. Of the three subs built, the Hunley was the only sub to see combat, succussfully sinking an enemy ship. Although very small and cramped, the Hunley was considered a marvel of engineering at the time. Despite using a different source of power from the Hunley, modern subs use many of the same design elements as the Hunley such as adjustable diving plances, balanced water ballast tanks, a cigar-shapped hull, and movable snorkel tubes that bring fresh air to the sub while it is underwater.

The Maritime Center offers flexible space for exhibits to reveal the activities of Mobile's shipyards and ironclads. The displays will include maps, plans, models, films, and other media as determined by the center's director.

Due to the hot and humid climate of Mobile, the building itself is constructed of durable materials: a concrete frame and interior finishes with an exterior aluminum cladding. Since Mobile is on the Gulf of Mexico, the building often will need to endure the side effects of hurricanes particularly flooding from storm surges with minimal repairs.



Α.	Ships

1.00	Ships	Qty.	Length (ft)	Beam (ft)	Draft (ft)	Note	S
1.0	1 H.L. Hunley	1	39.5	3.8	3.8	restored original	
1.0	2 CSS Tennessee	1	209.0	48.0	14.0	recreated full size	
1.0	3 CSS Baltic	1	186.0	38.0	6.4	large, scaled model	
1.0	4 HMS Warrior	1	418.0	58.3	26.0	type #1 - ironclad frigate	small, scaled model
1.0	5 USS Galena	1	210.0	36.0	11.0	type #2 - ironclad sloop	small, scaled model
1.0	6 HMS Wivern	1	224.5	42.3	15.5	type #3 - ironclad turret ship	small, scaled model
1.0	7 USS New Ironsides	1	230.0	57.5	15.7	type #4 - broadside ironclad	small, scaled model
1.0	8 CSS Manassas	1	143.0	33.0	17.0	type #5 - ironclad ram	small, scaled model
1.0	9 CSS Nashville	1	271.0	62.5	10.8	type #6 - ironclad sidewheel ram	small, scaled model
1.1	0 CSS Virginia	1	275.0	38.6	22.0	type #7 - ironclad casement ram	small, scaled model
1.1	1 CSS Georgia	1	250.0	60.0		type #8 - ironclad floating battery	small, scaled model
1.1		1	175.0	51.2	6.0	type #9 - ironclad river gunboat	small, scaled model
1.1	3 USS Glide	1	160.0			type #10 - tinclad	small, scaled model
1.1	4 USS Tyler	1	180.0	45.3	6.0	type #11 - timberclad	small, scaled model
1.1	5 CSS Governor Moore	1	236.0	38.0	7.0	type #12 - cottonclad	small, scaled model
1.1	6 USS Winona	1	158.7	28.0	10.5	type #13 - mortar boat	small, scaled model

В.	Spa

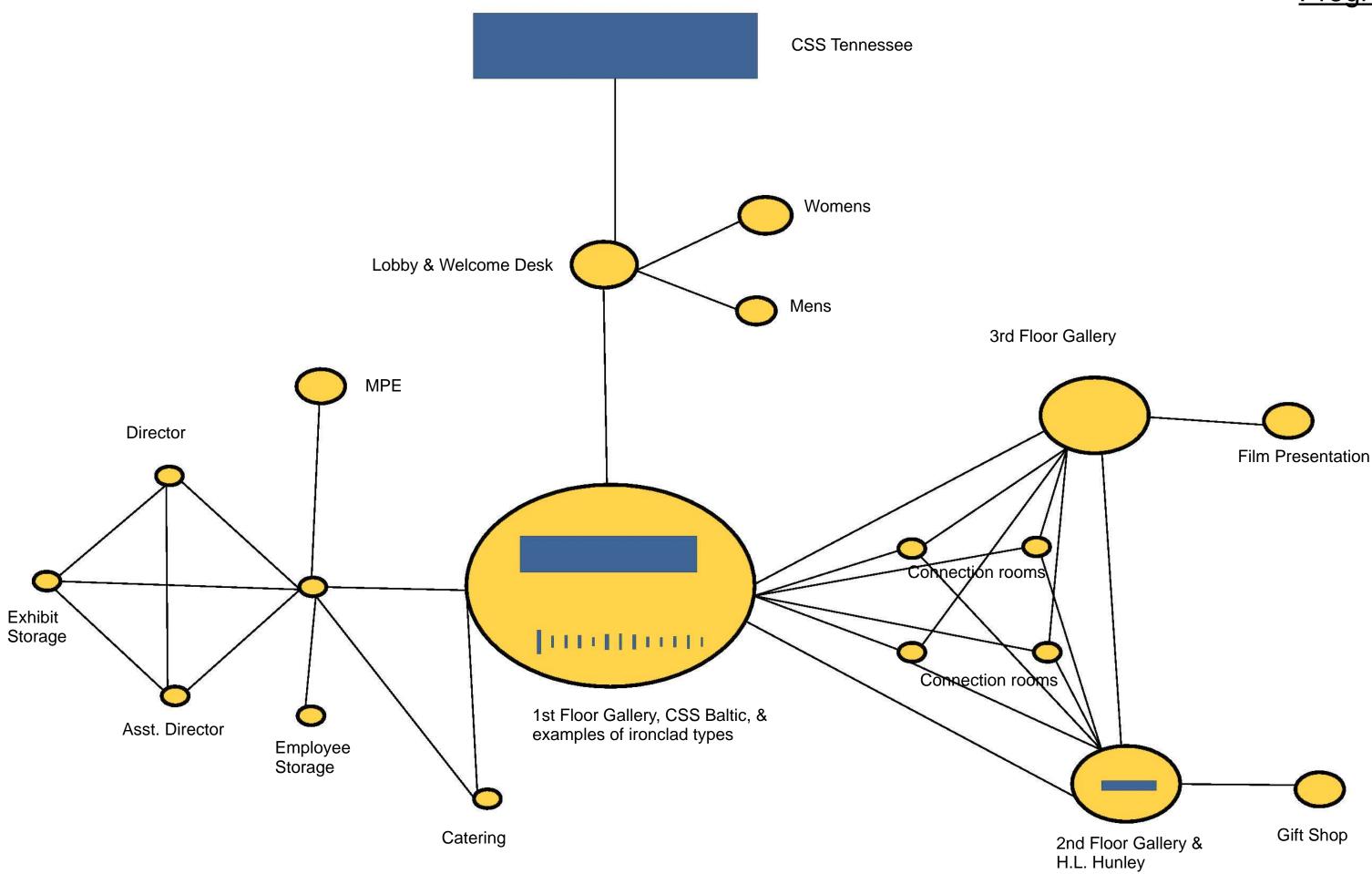
Spaces	8					
2.00 0	Sallery	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
	First floor gallery Second floor gallery Third Floor Film presentation Connections	1 1 1 1 4	23,390 3,216 3,216 644 198	23,390 3,216 3,216 644 792	1,559 214 214 43 113	H.L. Hunley location
				31,258	2,144	
3.00 V	isitor Services	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
3.03	Lobby & welcome desk Men's room Women's room Gift shop	1 1 1 1	1,116 391 758 644	1,116 391 758 644 2,909	159 0 11 170	13 stalls 25 stalls
1.00 A	Administration	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
4.03 4.04 4.05	Director's office Assistant's office Secretary Employee storage Exhibit storage Catering	1 1 1 1 1	200 136 193 62 226 90	200 136 193 193 226 90	2 1 2 2 1	reception, xerox machine, storage files large item display storage catering - refrigerator, sink
				1038	8	
5.00 E	Building Support	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
	MPE Custodial	1	627 49	627 49	6 0	air handlers, hot water heater janitor
				676	7	
				Total Net S.F.	Capacity	
	NET AREA TOTAL					
	REA TOTAL		-	35,881	2,330	
NET A	REA TOTAL		-	35,881 1.25	2,330	

Spaces						
2.00 Ga	illery	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
2.02 2.03 2.04	First floor gallery Second floor gallery Third Floor Film presentation Connections	1 1 1 1 4	23,390 3,216 3,216 644 198	23,390 3,216 3,216 644 792	1,559 214 214 43 113	H.L. Hunley location
				31,258	2,144	
3.00 Vi	sitor Services	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
3.02 3.03	Lobby & welcome desk Men's room Women's room Gift shop	1 1 1 1	1,116 391 758 644	1,116 391 758 644	159 0 0 11	13 stalls 25 stalls
				2,909	170	
1.00 Ad	Iministration	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
4.02 4.03 4.04 4.05	Director's office Assistant's office Secretary Employee storage Exhibit storage Catering	1 1 1 1 1	200 136 193 62 226 90	200 136 193 193 226 90	2 1 2 2 1	reception, xerox machine, storage files large item display storage catering - refrigerator, sink
			0011044	1038	8	
5.00 Bu	ilding Support	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
	MPE Custodial	1	627 49	627 49	6 0	air handlers, hot water heater janitor
				676	7	
				Total Net S.F.	Capacity	
NET AR	EA TOTAL			35,881	2,330	
				1.25		
GROSS	AREA ESTIMATE			44,851		

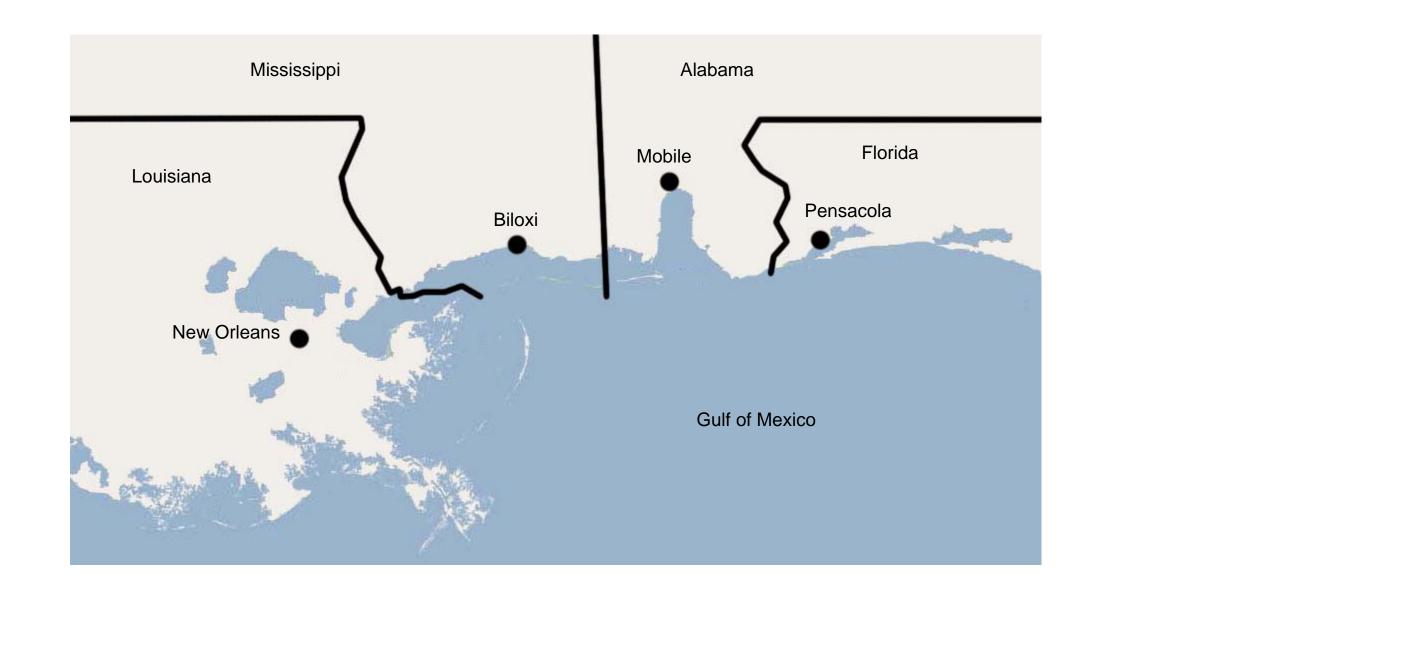
Spaces						
2.00 G	allery	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
2.03 2.04	First floor gallery Second floor gallery Third Floor Film presentation Connections	1 1 1 1 4	23,390 3,216 3,216 644 198	23,390 3,216 3,216 644 792	1,559 214 214 43 113	H.L. Hunley location
				31,258	2,144	
3.00 V	isitor Services	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
3.03	Lobby & welcome desk Men's room Women's room Gift shop	1 1 1 1	1,116 391 758 644	1,116 391 758 644	159 0 0 11	13 stalls 25 stalls
				2,909	170	
4.00 A	dministration	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
4.03 4.04 4.05	Director's office Assistant's office Secretary Employee storage Exhibit storage Catering	1 1 1 1 1	200 136 193 62 226 90	200 136 193 193 226 90	2 1 2 2 1	reception, xerox machine, storage files large item display storage catering - refrigerator, sink
Part of said of s				1038	8	
5.00 B	uilding Support	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
5.01 5.02	MPE Custodial	1	627 49	627 49	6 0	air handlers, hot water heater janitor
				676	7	
				Total Net S.F.	Capacity	
NET AREA TOTAL			-	35,881	2,330	
				1.25		
GROSS	AREA ESTIMATE			44,851		

Spaces					
2.00 Gallery	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
2.01 First floor gallery2.02 Second floor gallery2.03 Third Floor2.04 Film presentation2.05 Connections	1 1 1 1 4	23,390 3,216 3,216 644 198	23,390 3,216 3,216 644 792	1,559 214 214 43 113	H.L. Hunley location
			31,258	2,144	
3.00 Visitor Services	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
3.01 Lobby & welcome desk 3.02 Men's room 3.03 Women's room 3.04 Gift shop	1 1 1 1	1,116 391 758 644	1,116 391 758 644	159 0 0 11	13 stalls 25 stalls
			2,909	170	
4.00 Administration	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
 4.01 Director's office 4.02 Assistant's office 4.03 Secretary 4.04 Employee storage 4.05 Exhibit storage 4.06 Catering 	1 1 1 1 1	200 136 193 62 226 90	200 136 193 193 226 90	2 1 2 2 1	reception, xerox machine, storage files large item display storage catering - refrigerator, sink
			1038	8	
5.00 Building Support	Qty.	Net S.F.	Total Net S.F.	Capacity	Notes
5.01 MPE 5.02 Custodial	1 1	627 49	627 49	6 0	air handlers, hot water heater janitor
			676	7	
NET AREA TOTAL		-	Total Net S.F. 35,881	Capacity 2,330	
			1.25	2,000	
GROSS AREA ESTIMATE			44.851		

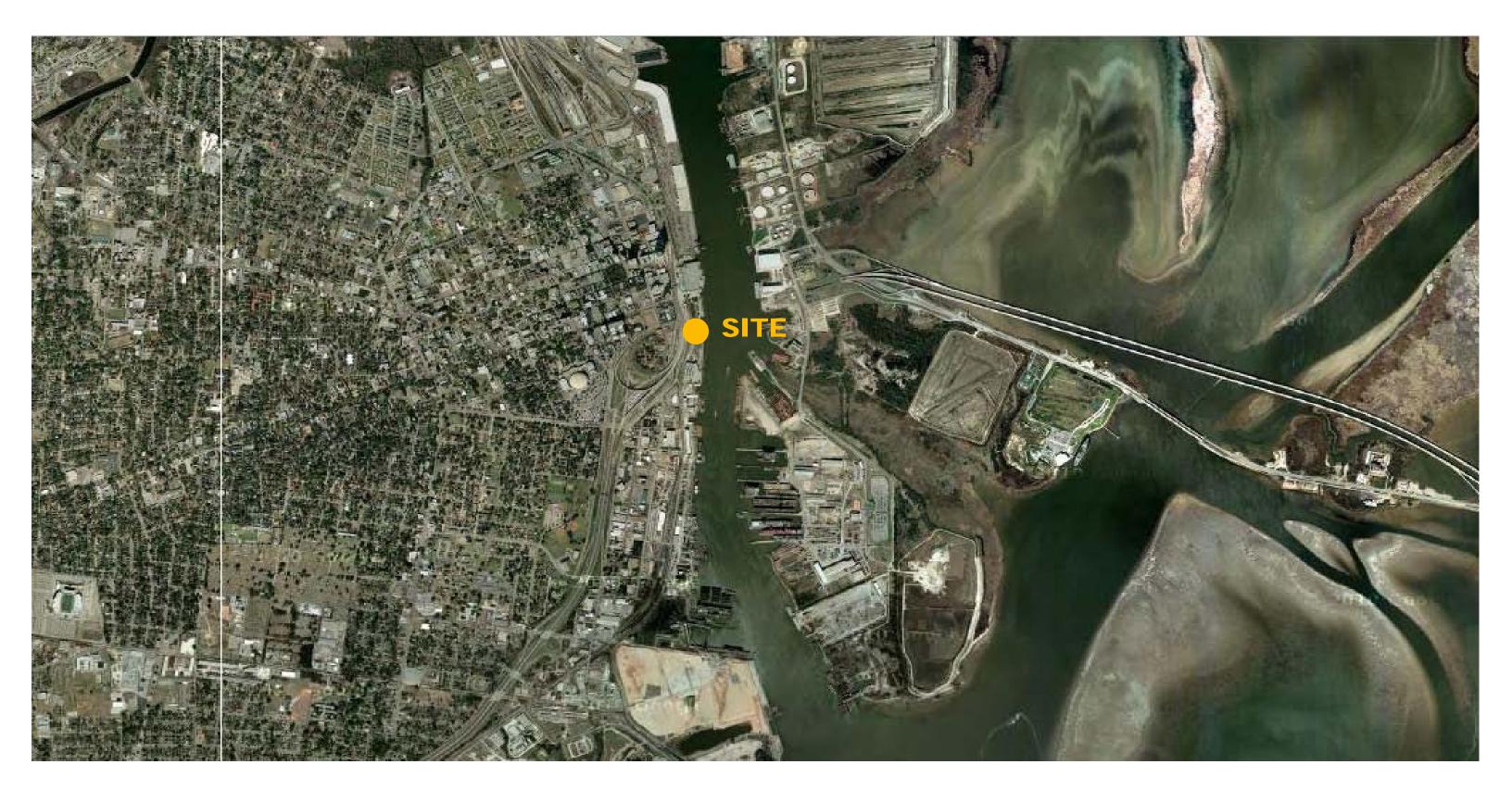
<u>Program</u>



<u>Program</u>



<u>Region</u>



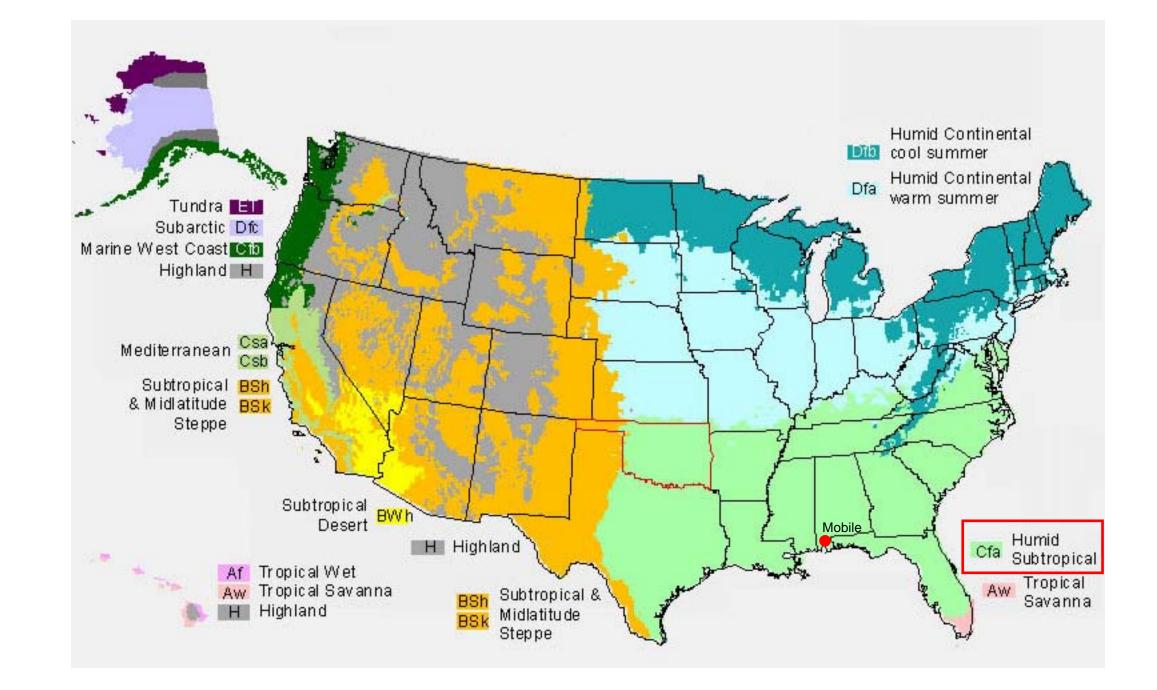
<u>Region</u>

Temperatures:

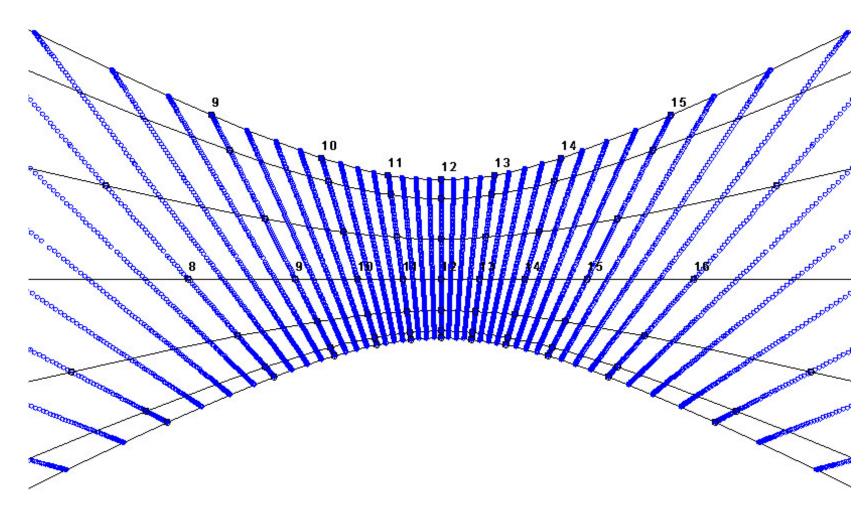
Average Low: 40 deg. F Average High: 93 deg. F

Humidity

Average RH: 65% Typical High: 90%



Climate Data



Climate Data

Winter

Summer

Location

Average Rainfall (in)

1. Mobile, AL	66.9
2. Pensacola, FL	64.6
3. New Orleans, LA	63.9
4. West Palm Beach, FL	62.5
5. Lafayette, LA	61.8
6. Baton Rouge, LA	61.7
7. Miami, FL	61.5
8. Port Arthur, TX	60.8
9. Tallahassee, FL	60.5
10. Lake Charles, LA	58.2

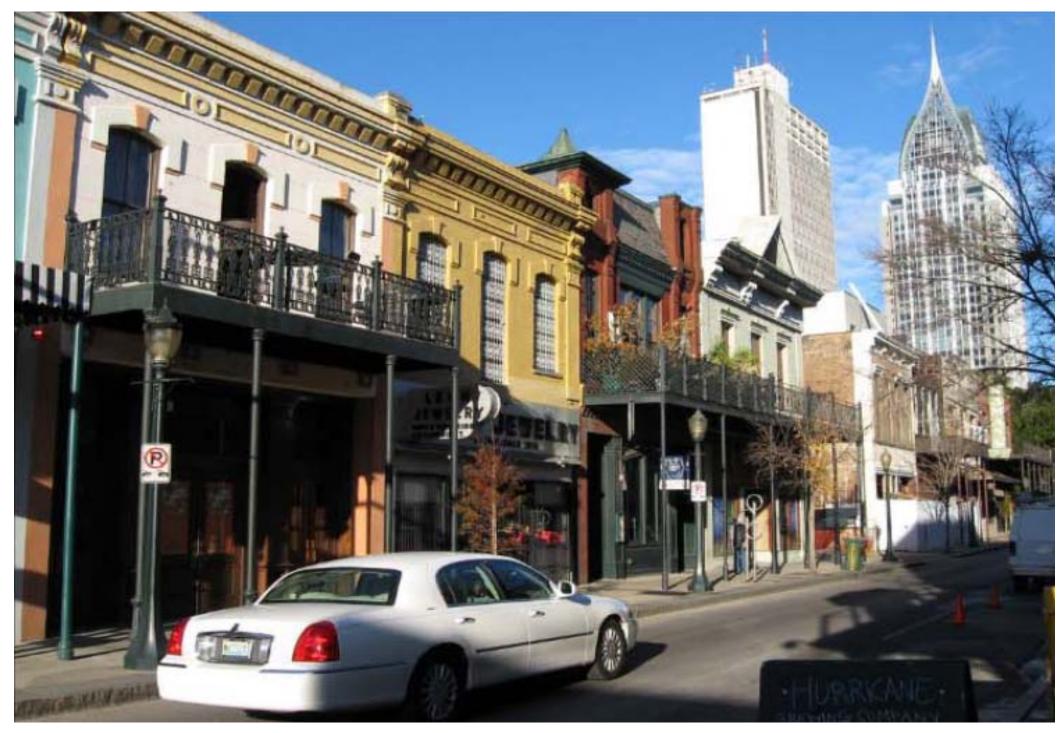
Climate Data



Beal-Gaillard House Style: Creole Cottage Built: 1836



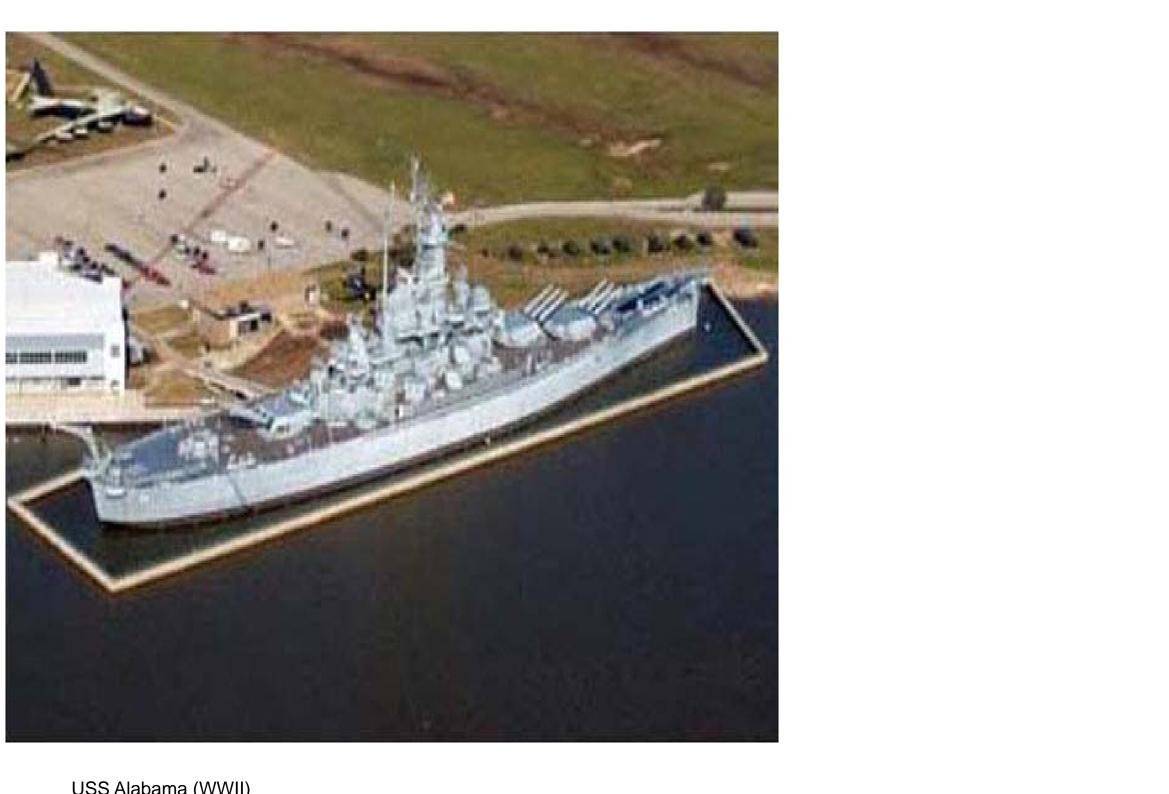
Bragg-Mitchell Mansion Style: reek Revival (antebellum) Built: 1855



Dauphin St. Historical Downtown Mobile



Mobile City Hospital Style: Greek Revival Built: 1830



USS Alabama (WWII) Battleship Alabama Memorial Park

RSA Battlehouse Tower





<u>Context</u>

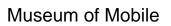
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Gulf Coast Exploreum







Fort Conde





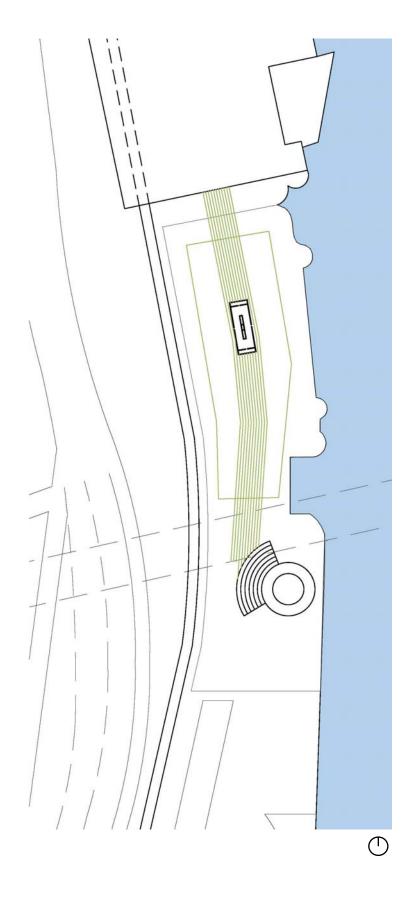


Austal



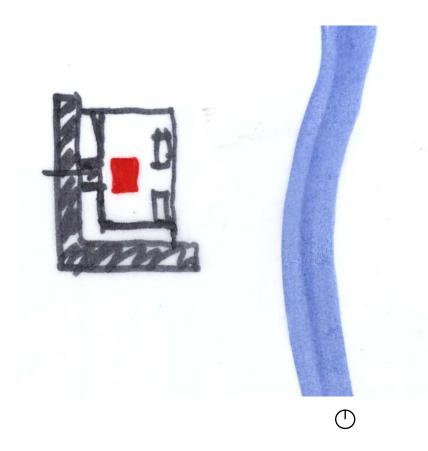






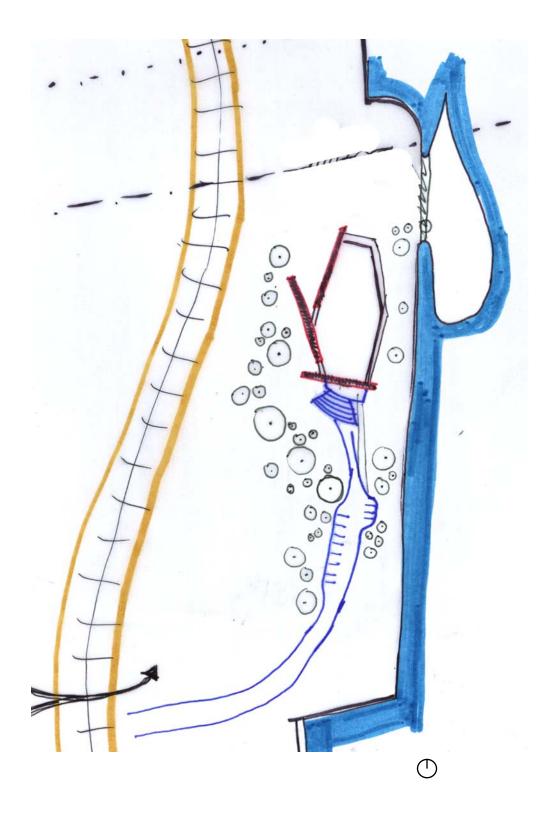
Open view to river





Open view to river Block unpleasant views to west and south Block hot light from west and south

<u>Workshop</u>



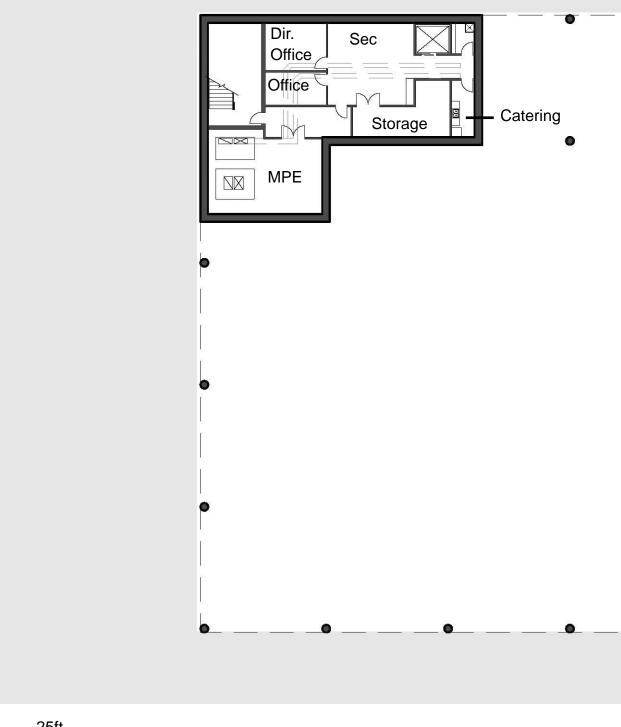
Open view to river Block unpleasant views to west and south Block hot light from west and south Shade west and south walls Allow select views through west wall





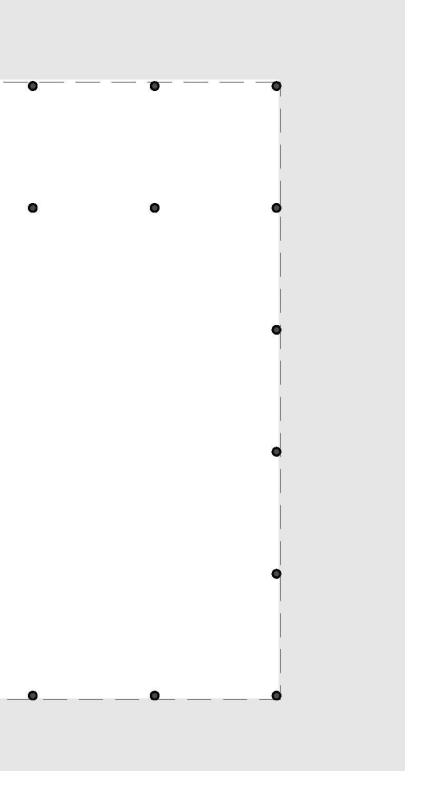


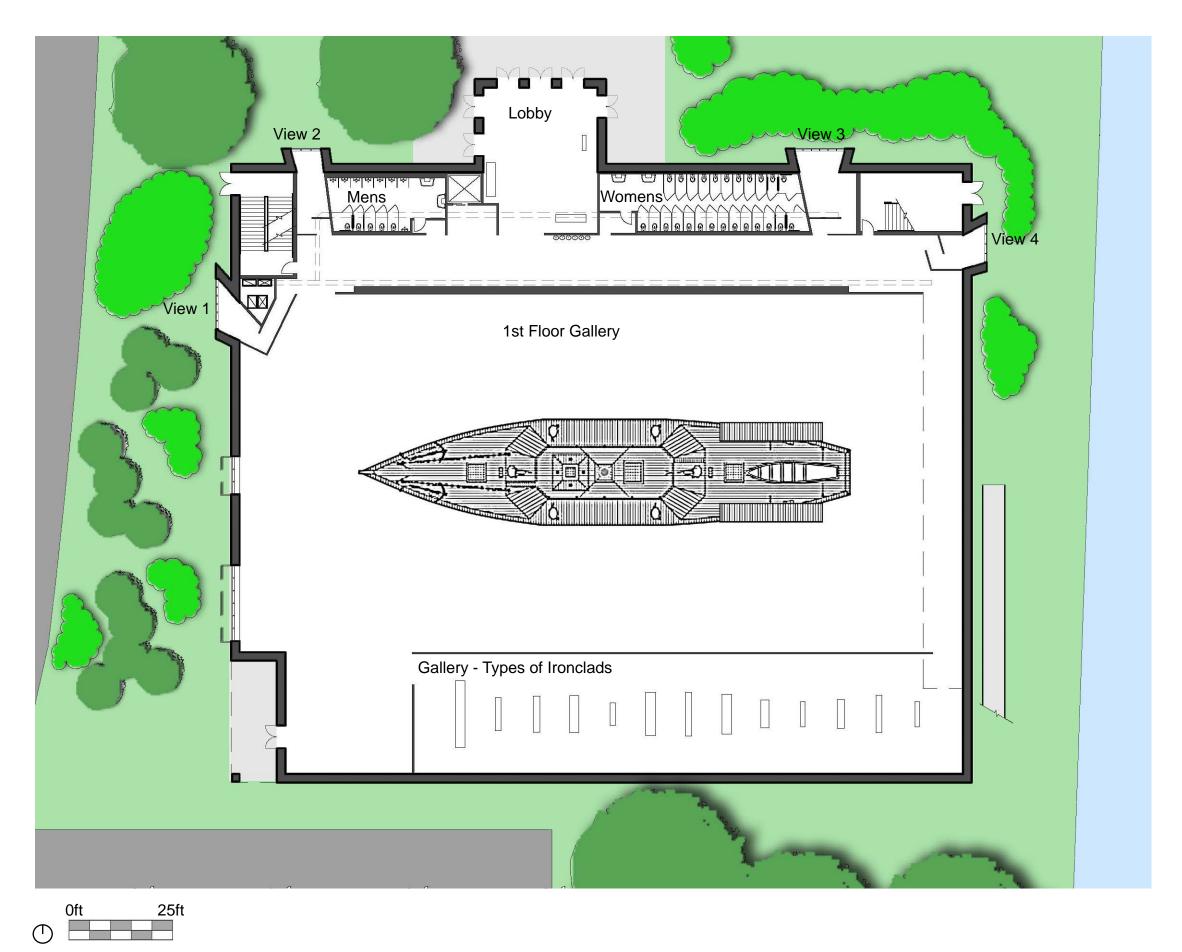
<u>Site Plan</u>



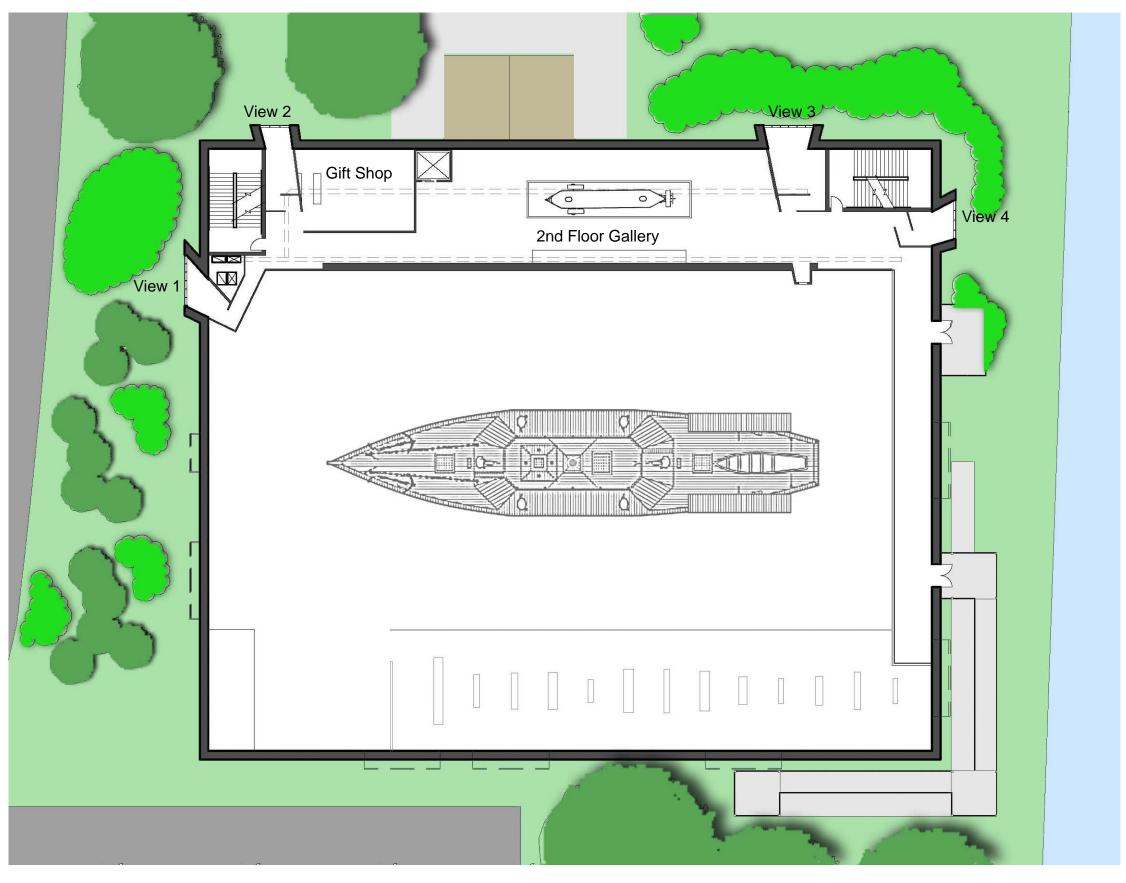


Basement Floor Plan



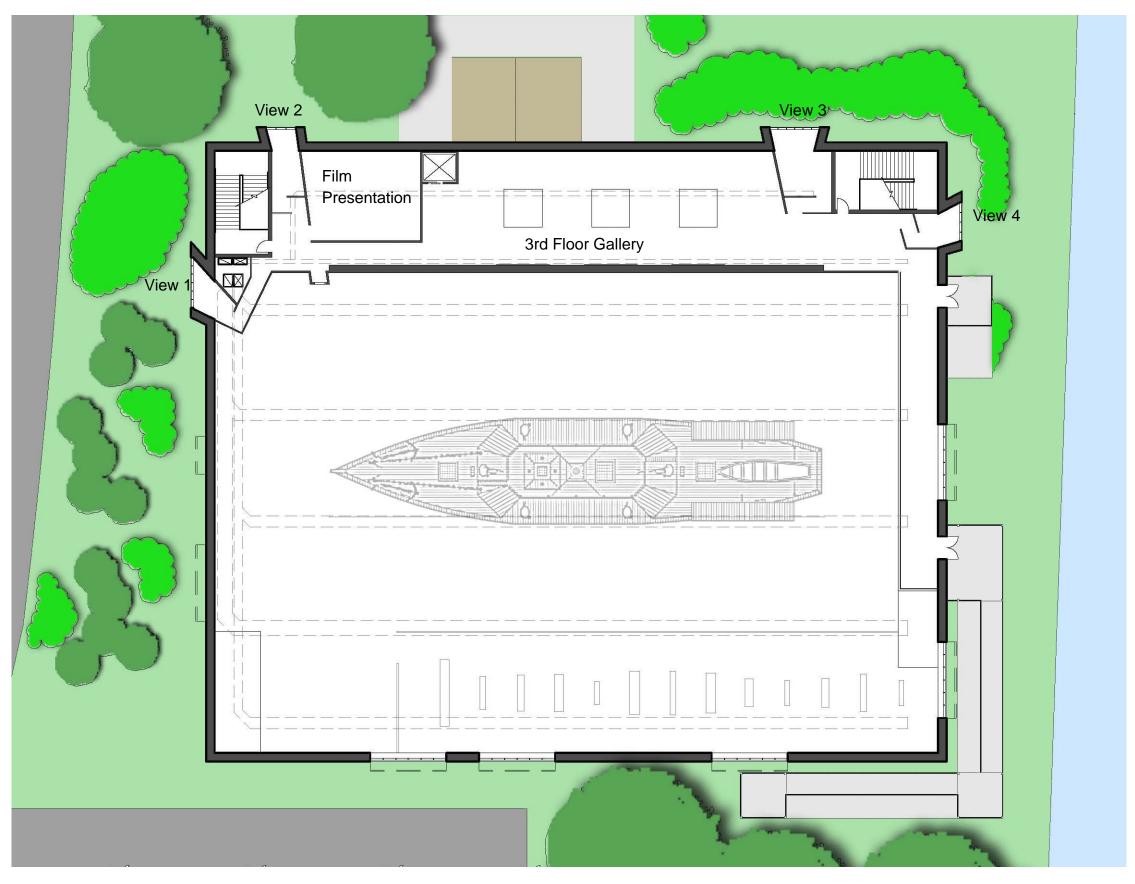


First Floor Plan



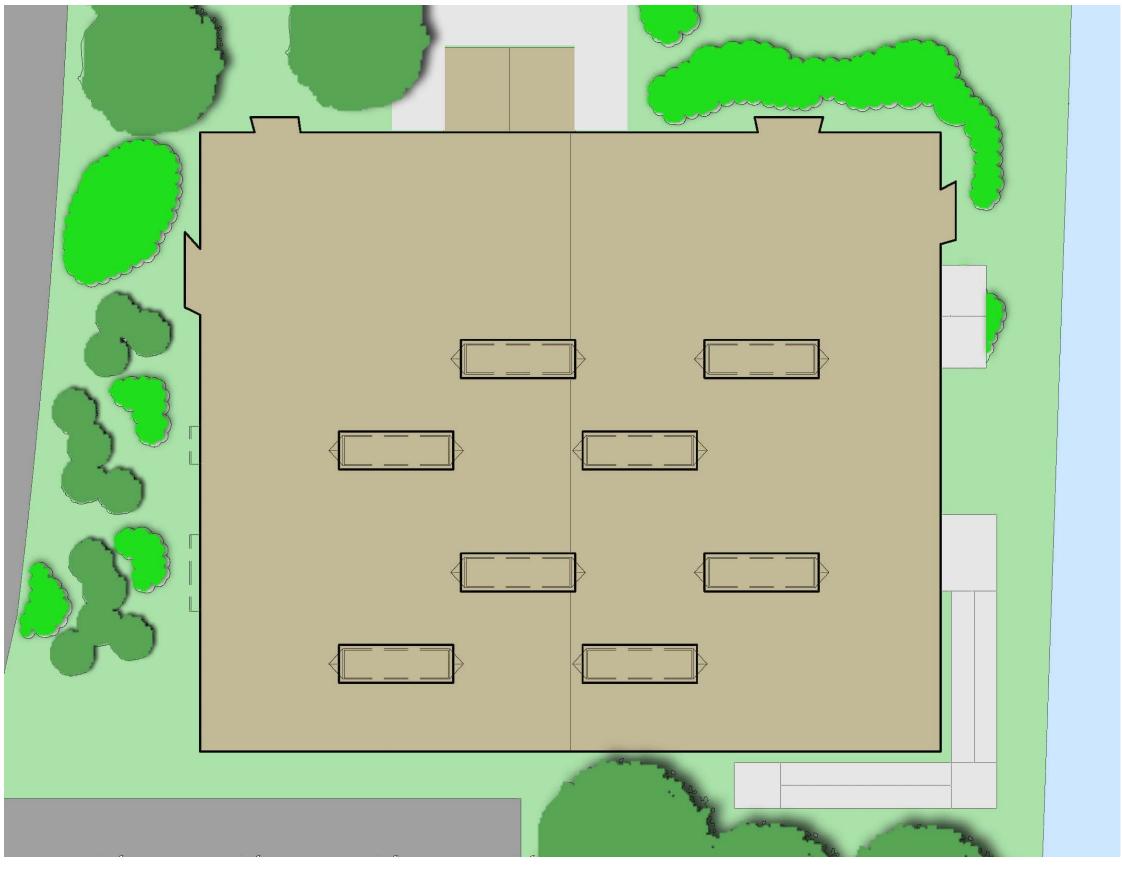


Second Floor Plan



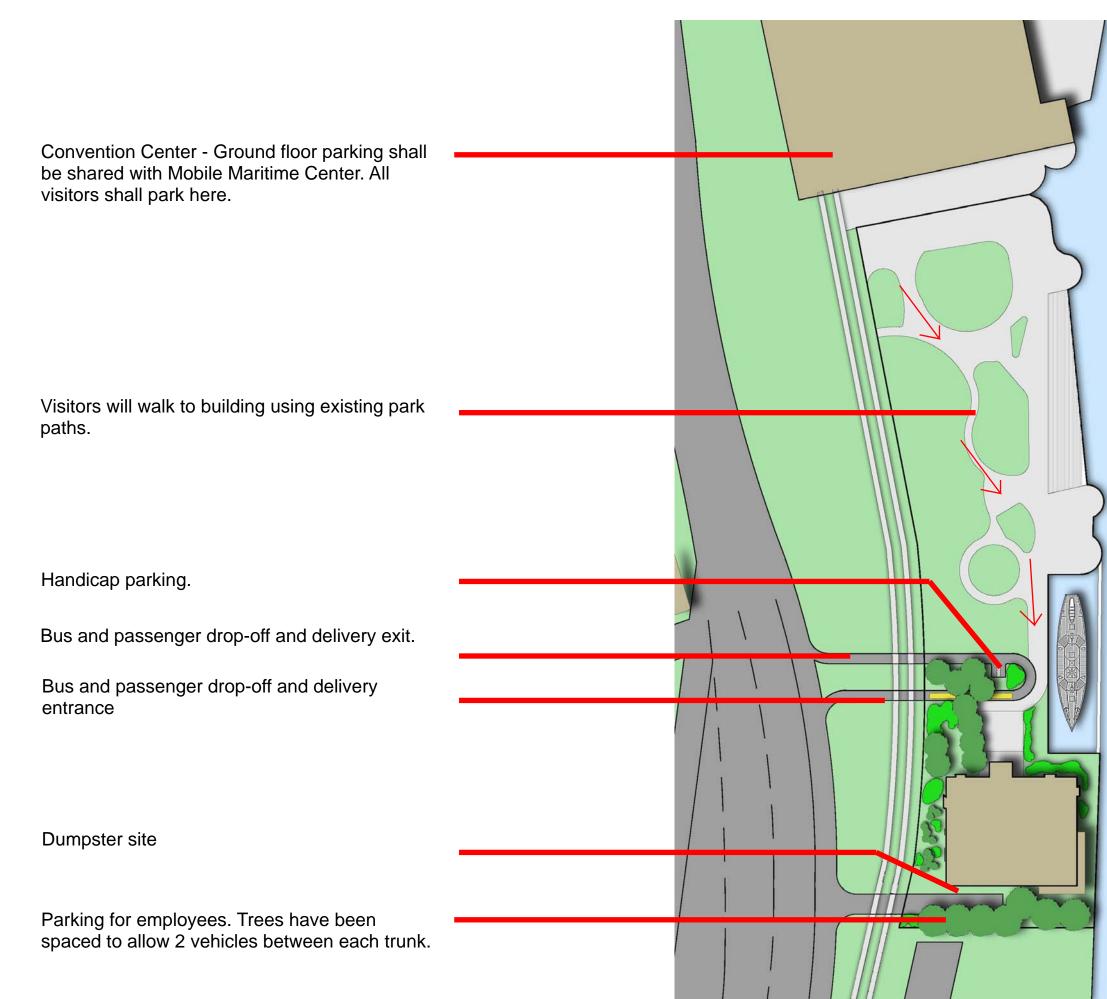
Oft 25ft

Third Floor Plan

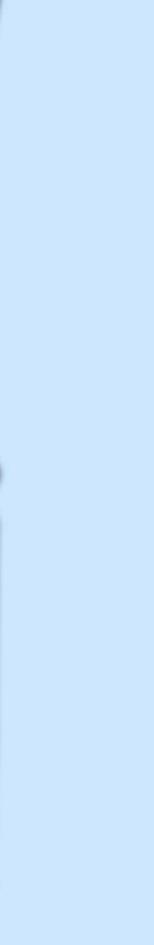


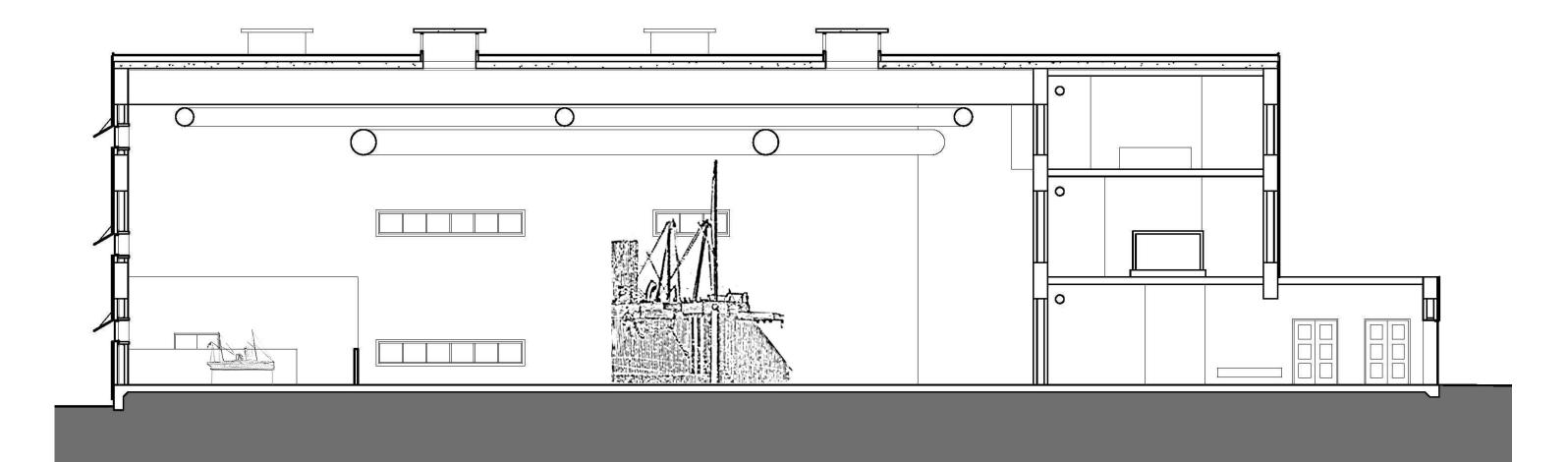






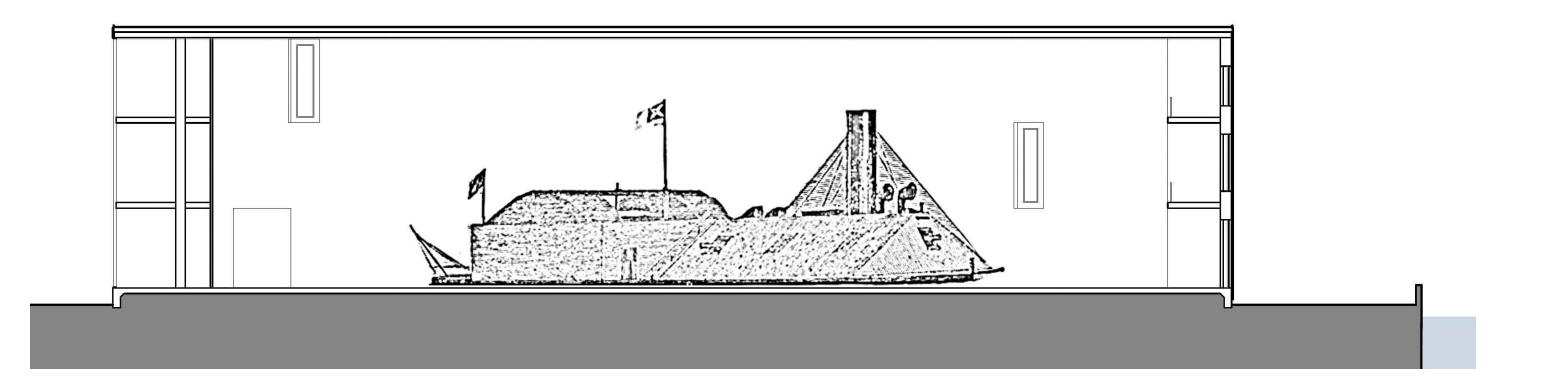
Site Diagram





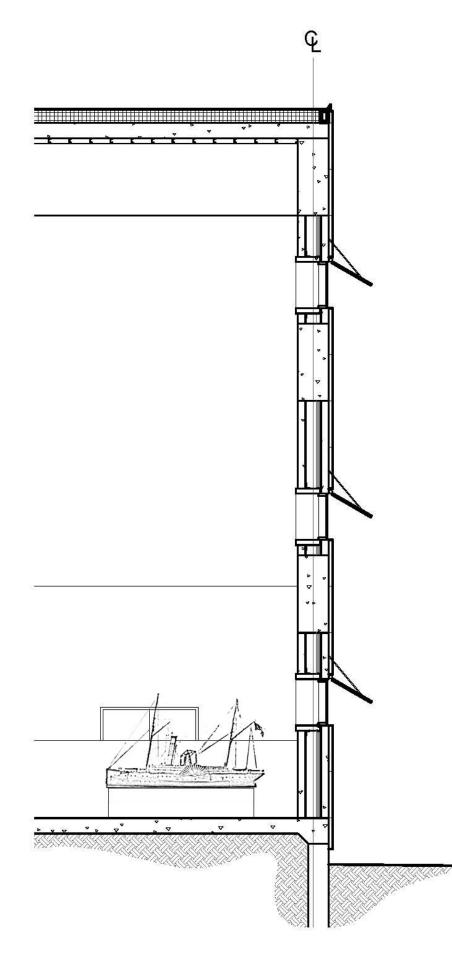


Building Section



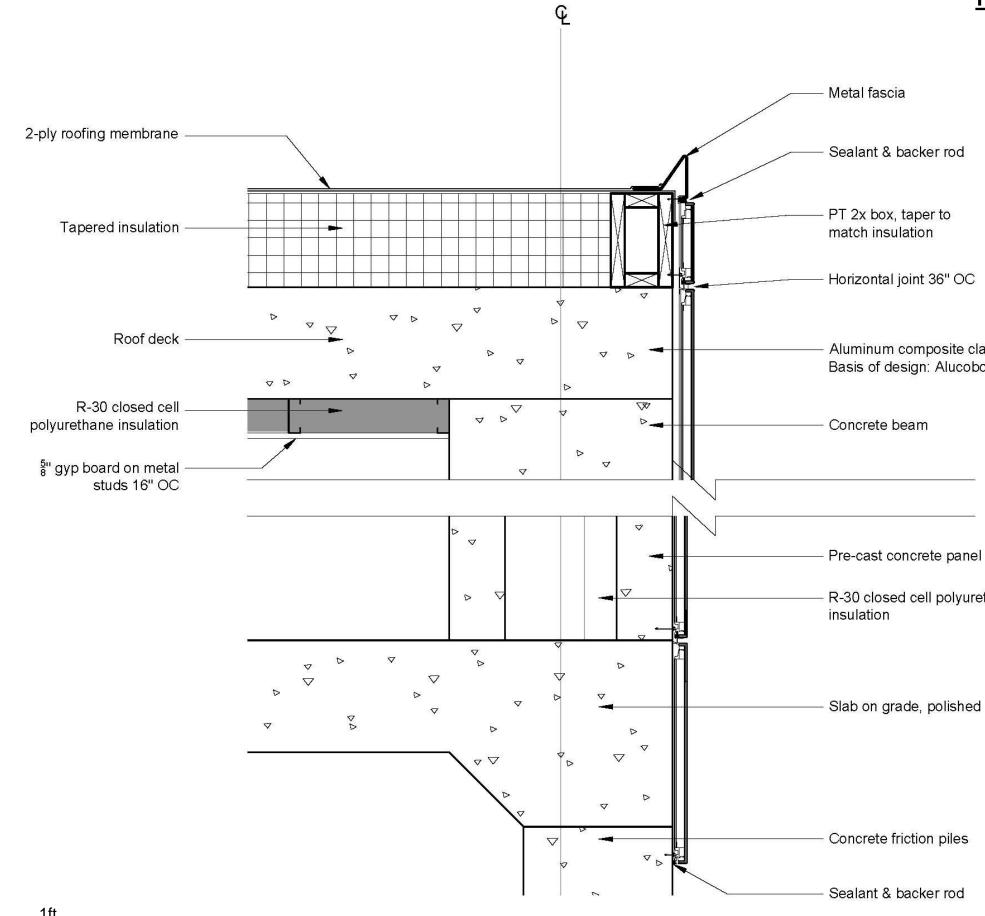


Building Section





Wall Section



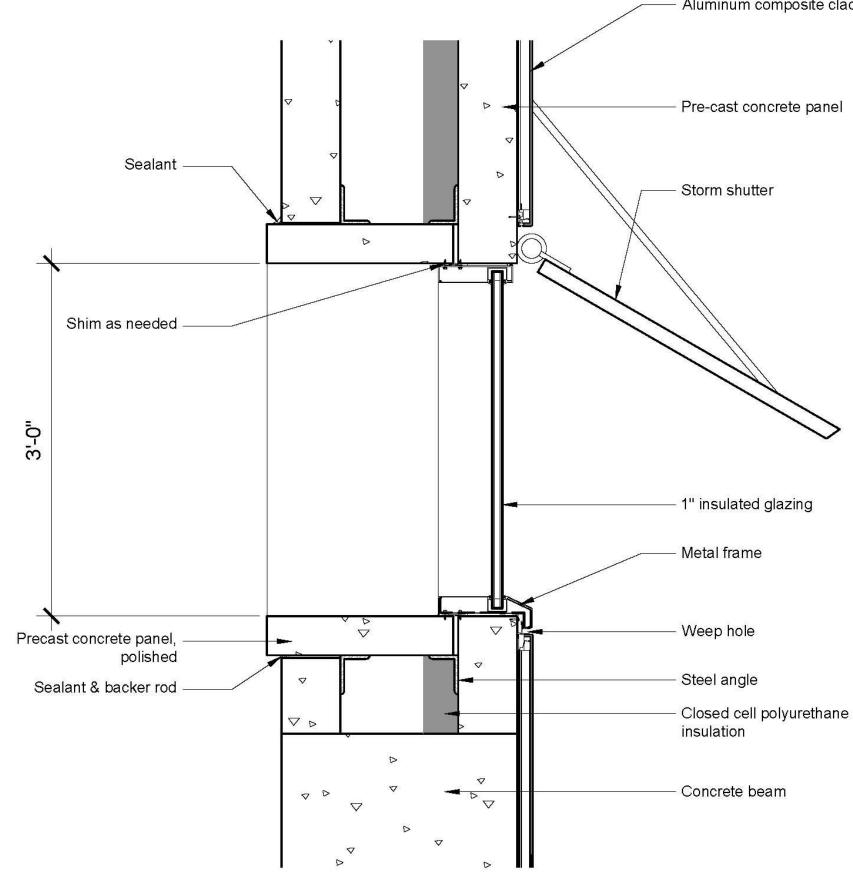


Parapet and Sill Detail

Aluminum composite cladding, Basis of design: Alucobond dry seal

R-30 closed cell polyurethane

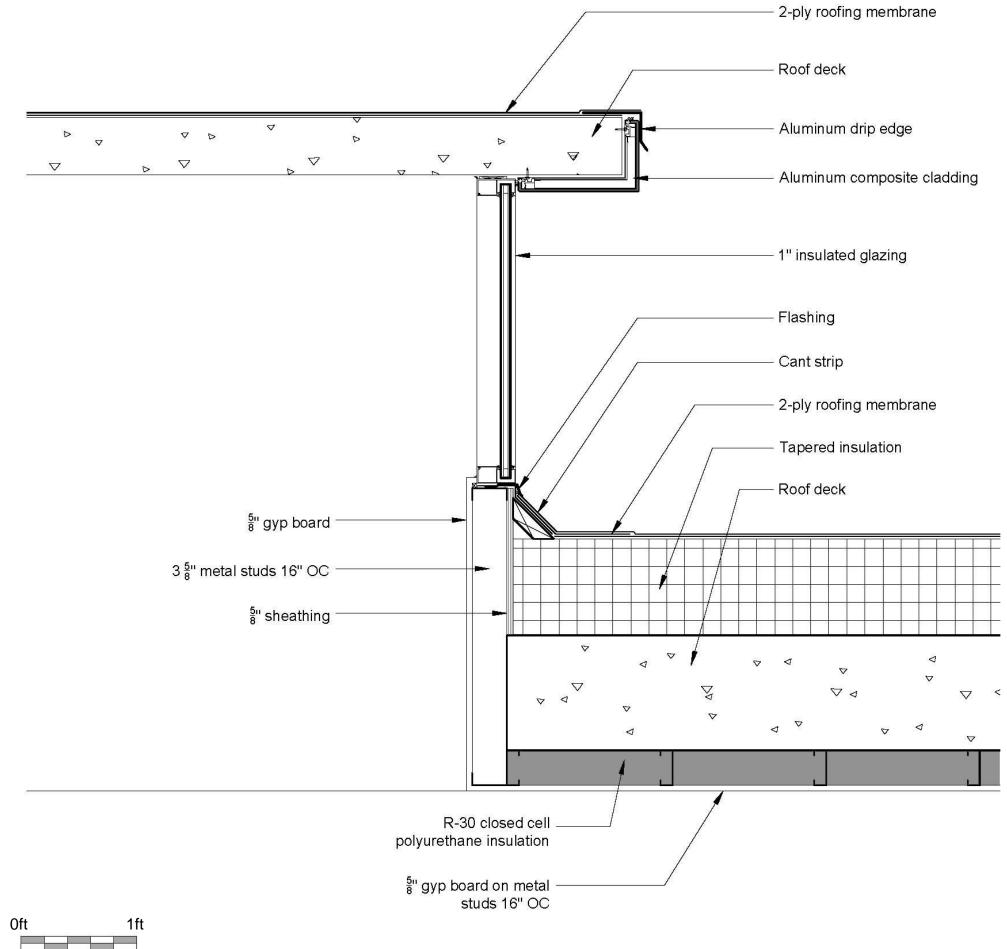
Slab on grade, polished finish



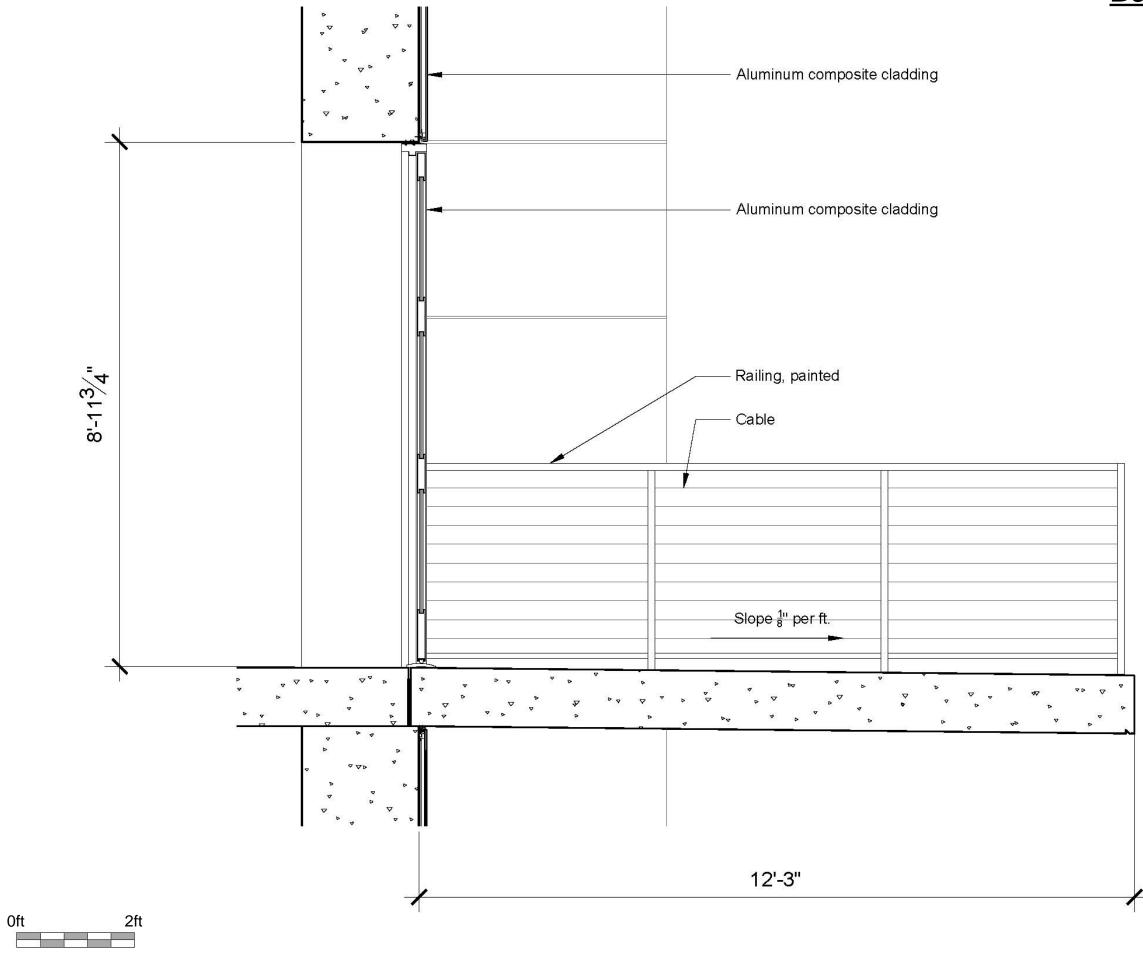


Aluminum composite cladding

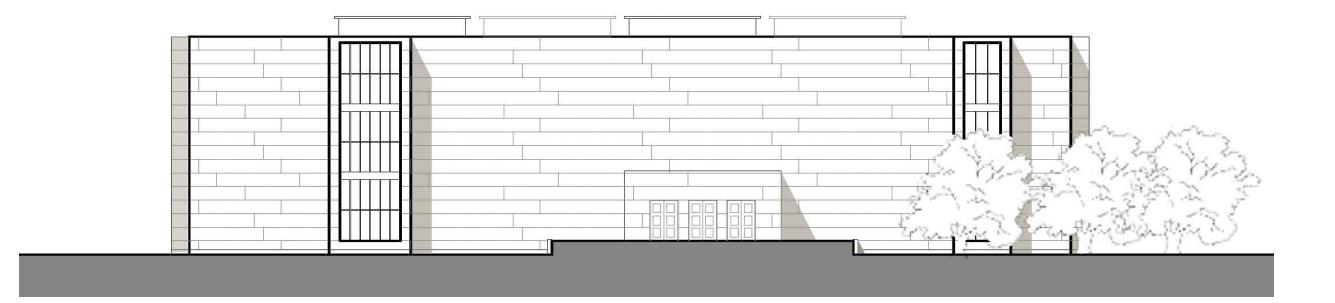
Window Detail



Skylight Detail

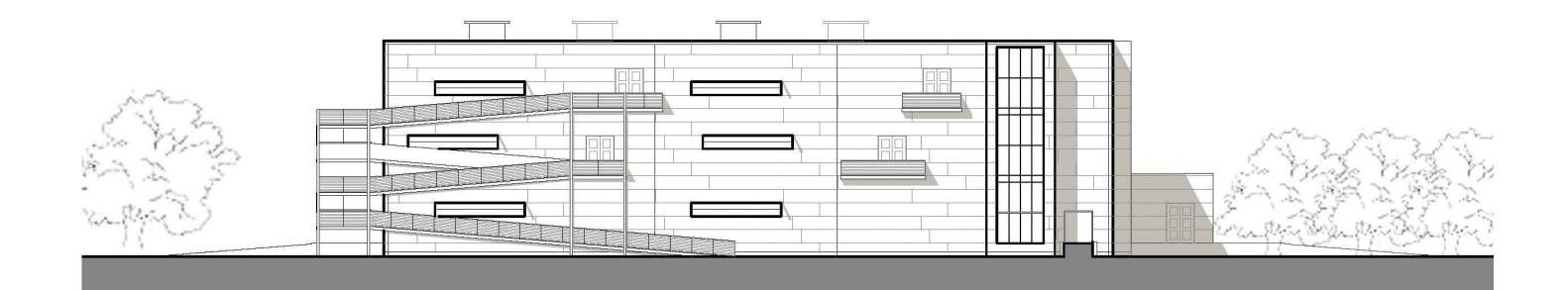


Balcony Section



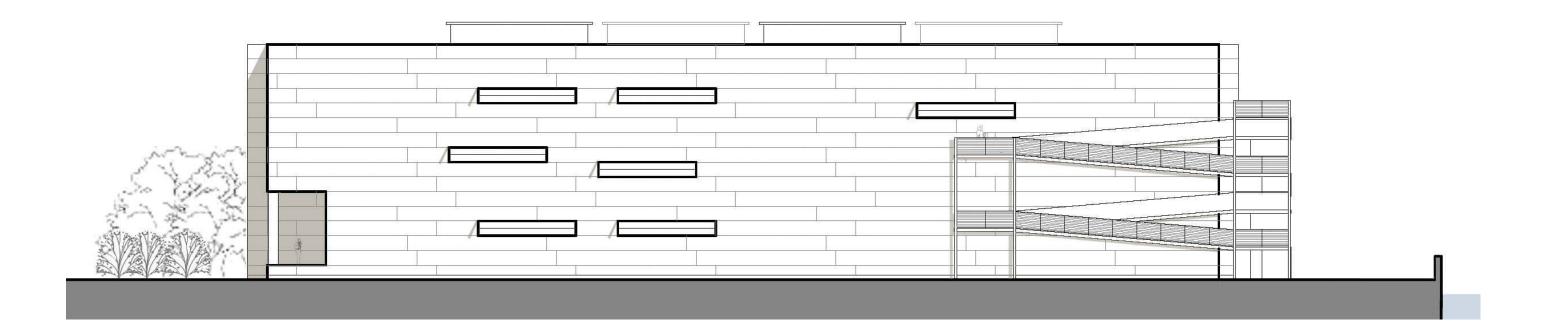


North Elevation



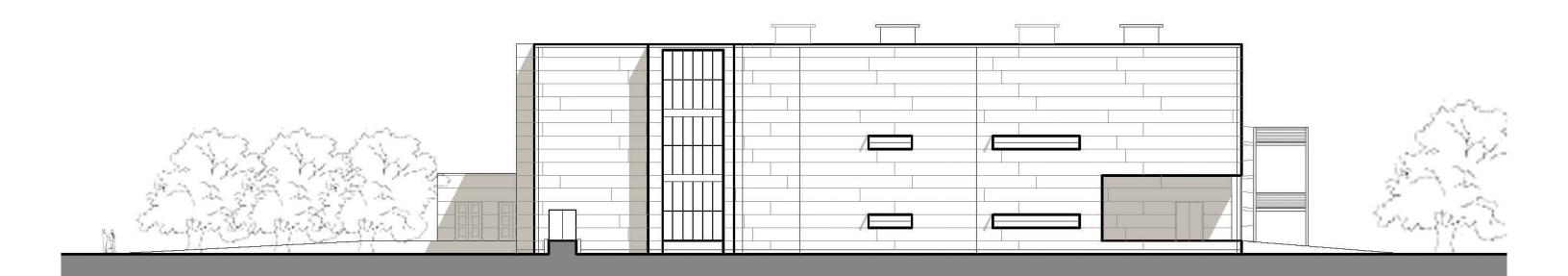


East Elevation



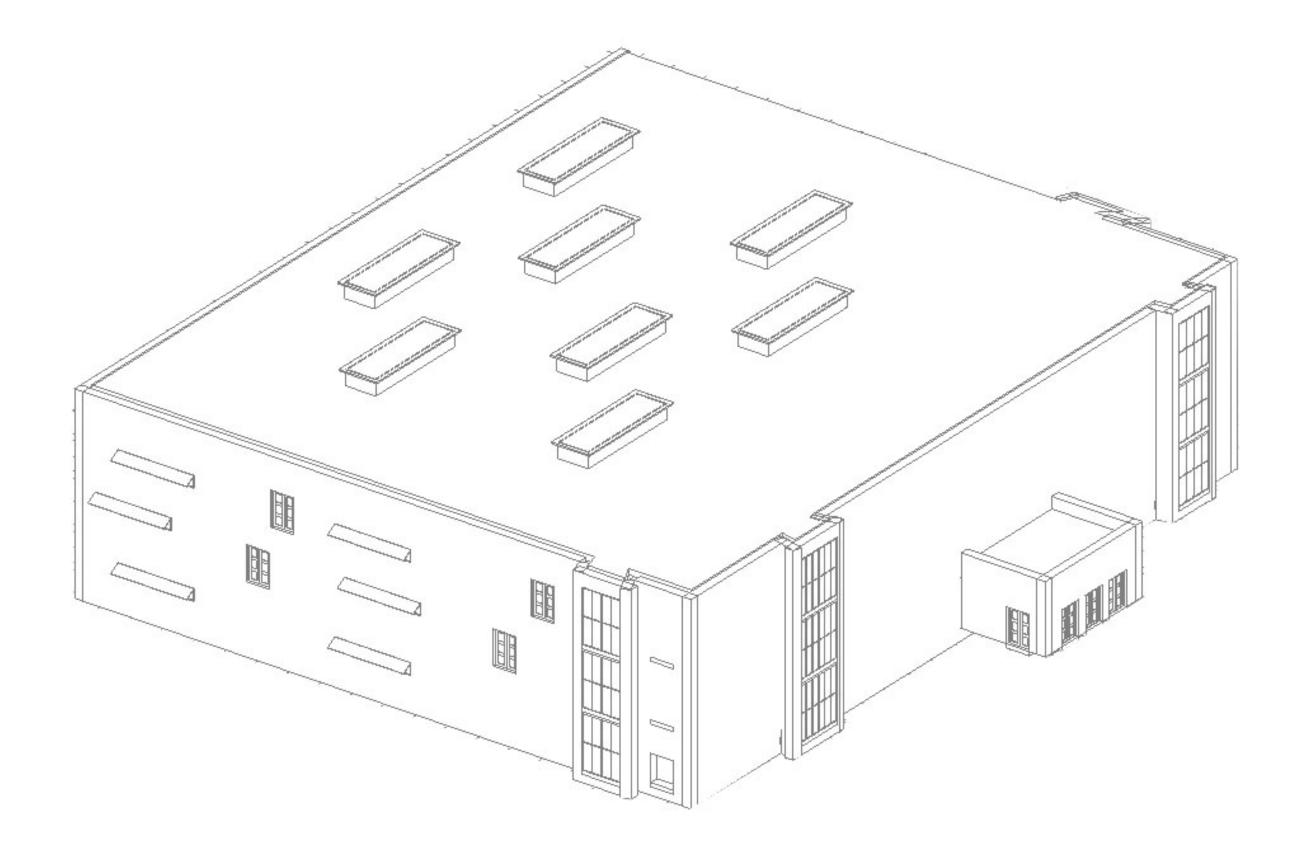


South Elevation

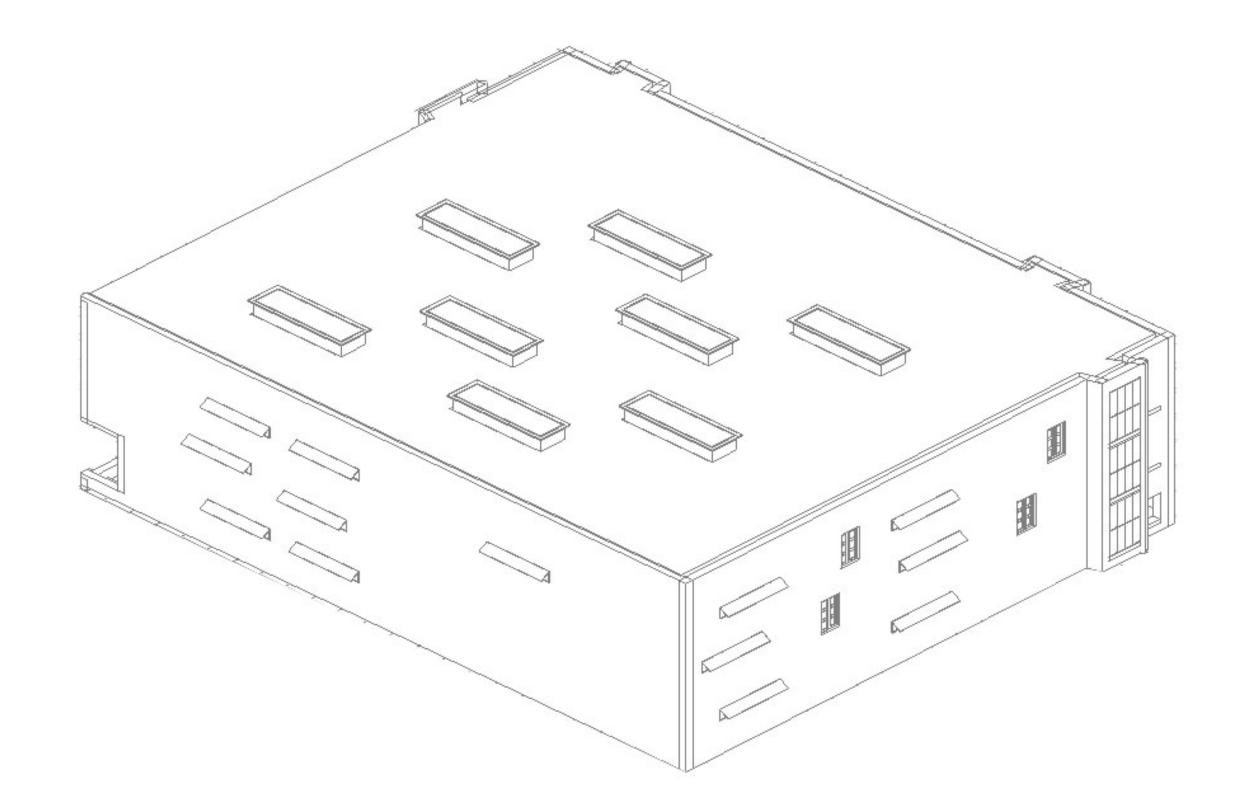




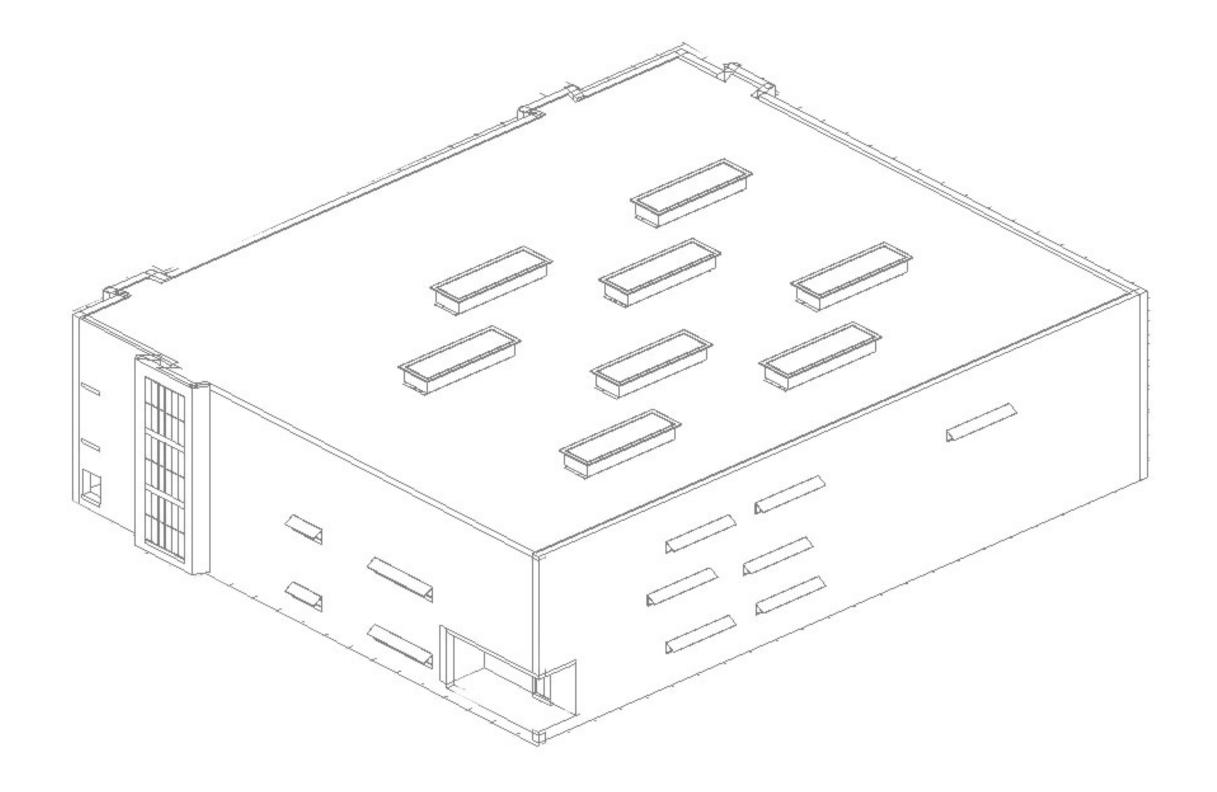
West Elevation



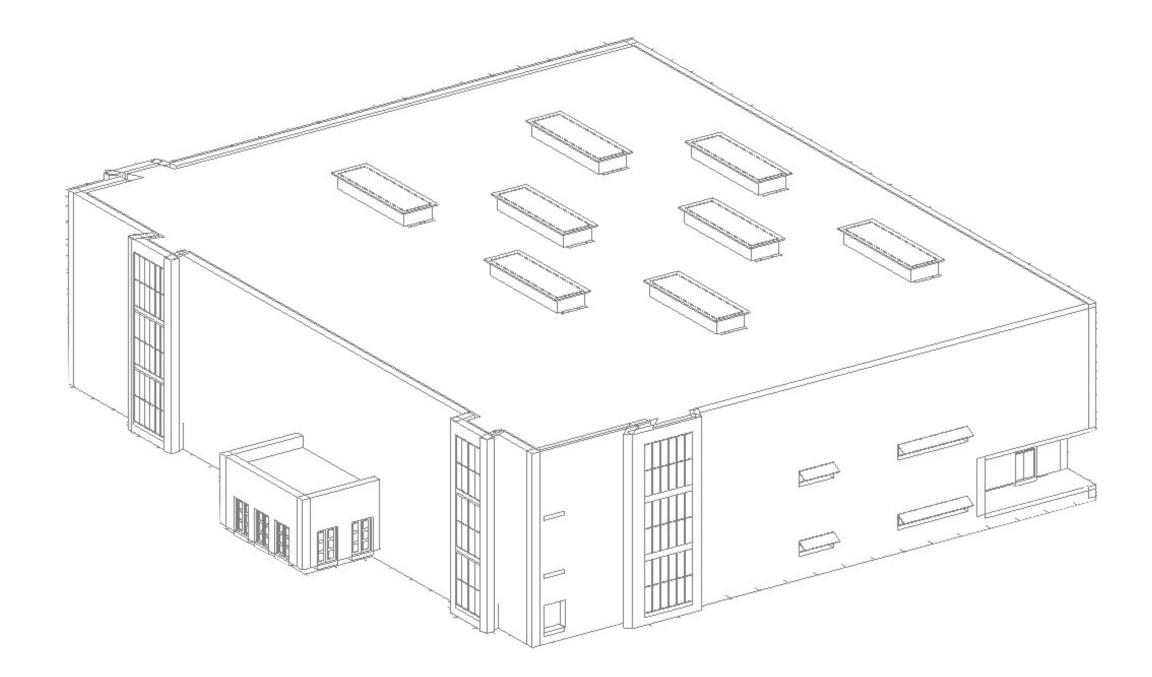
<u>NE View</u>



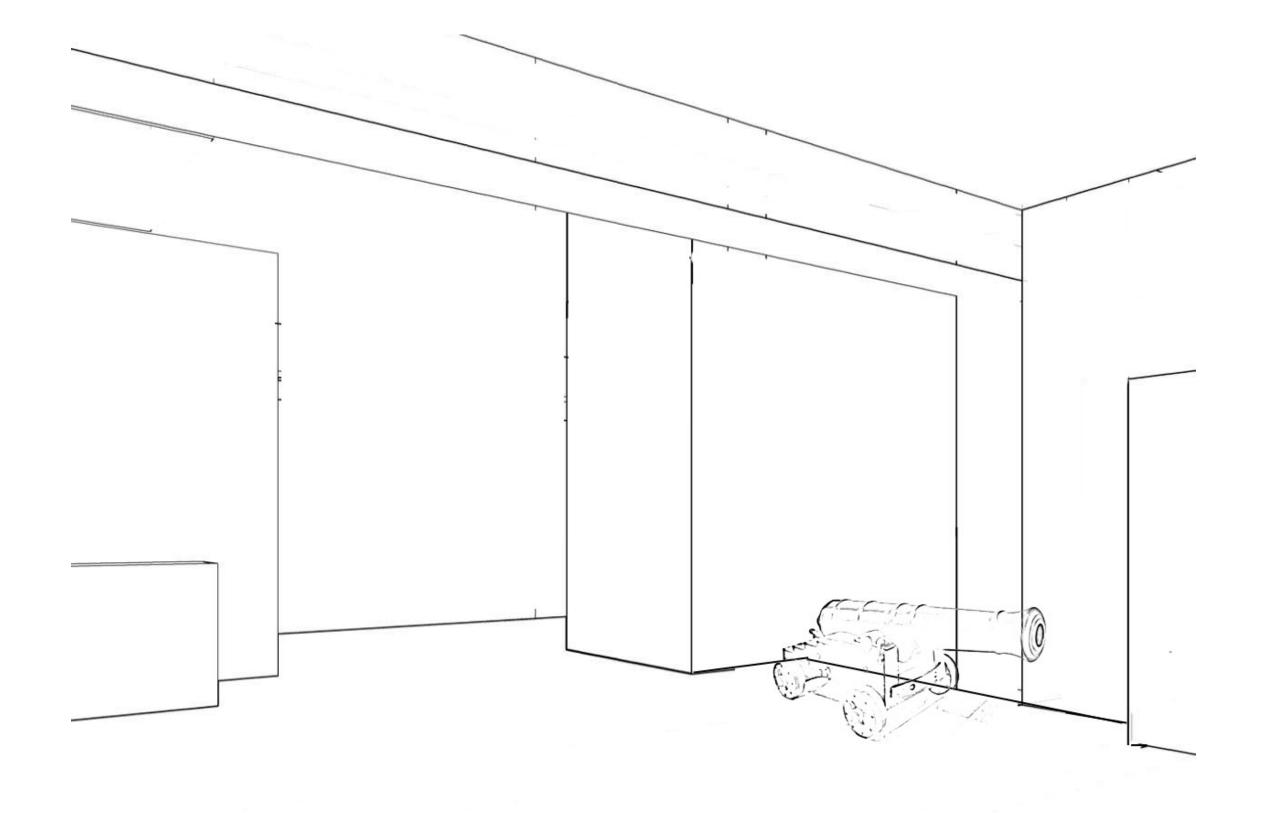
<u>SE View</u>



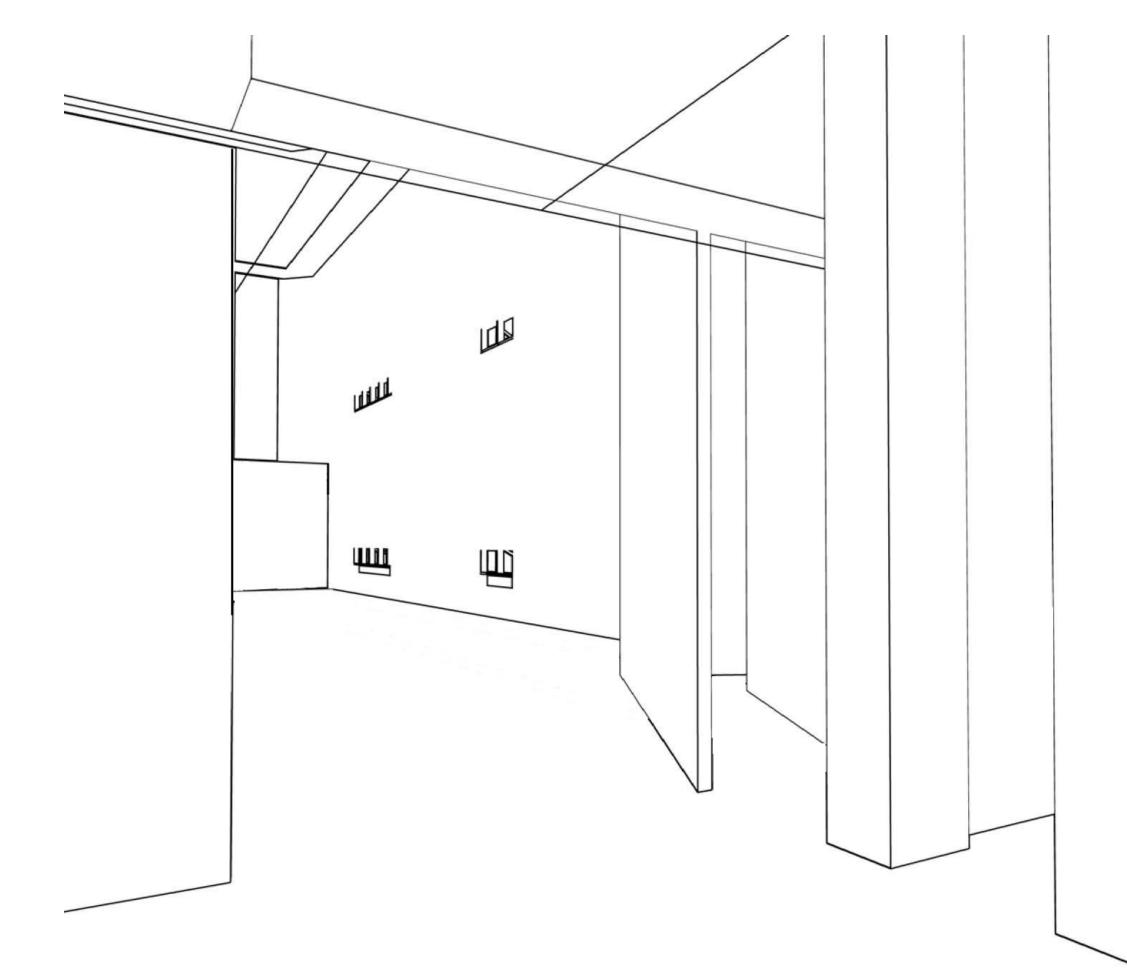




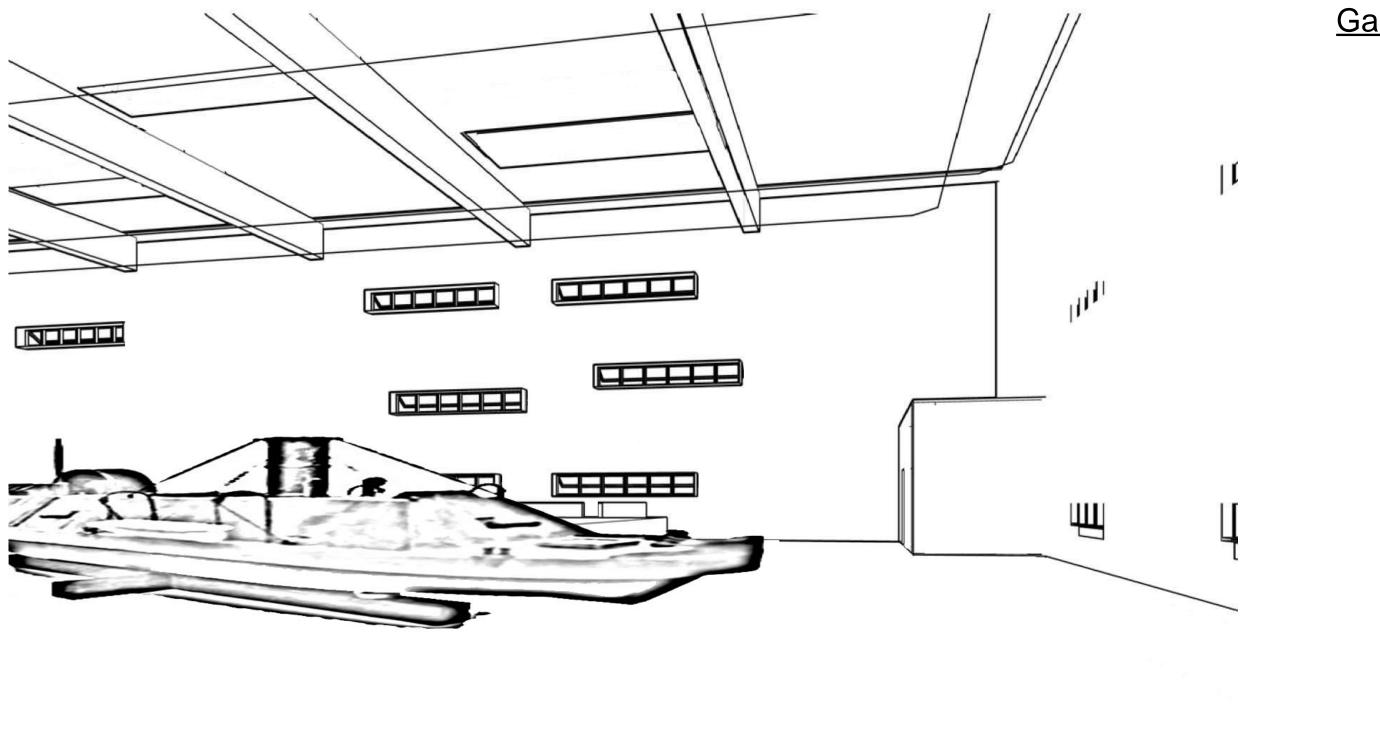
<u>NE View</u>



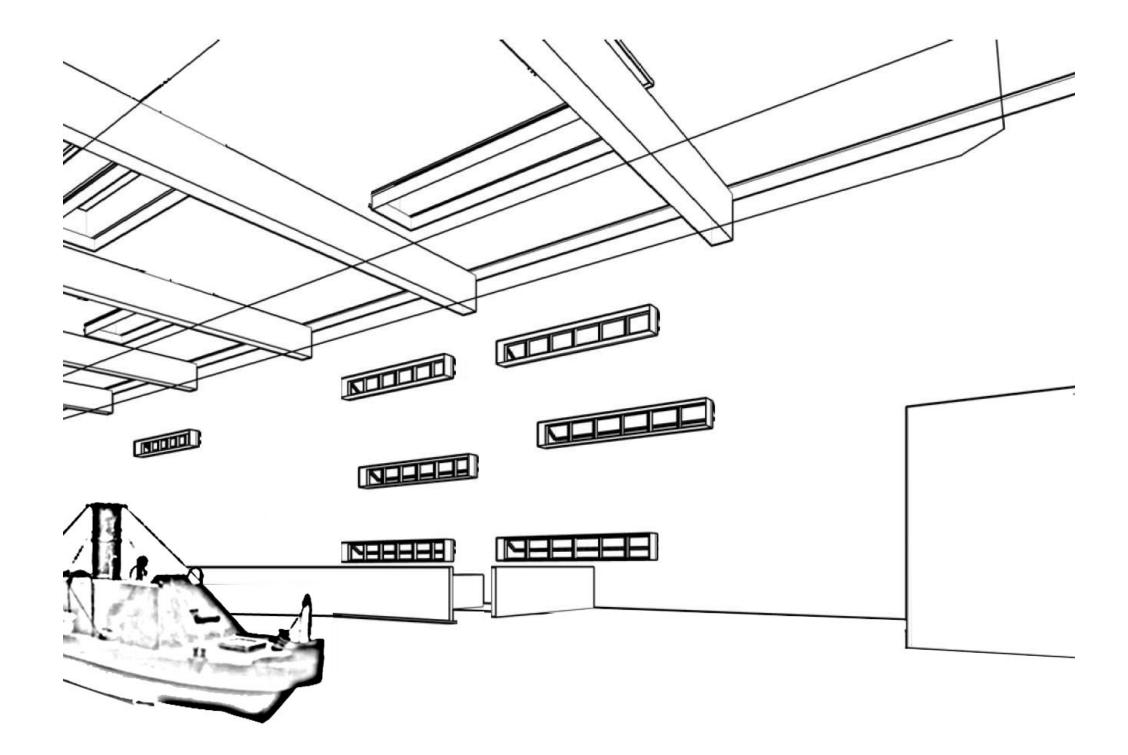
<u>Lobby</u>



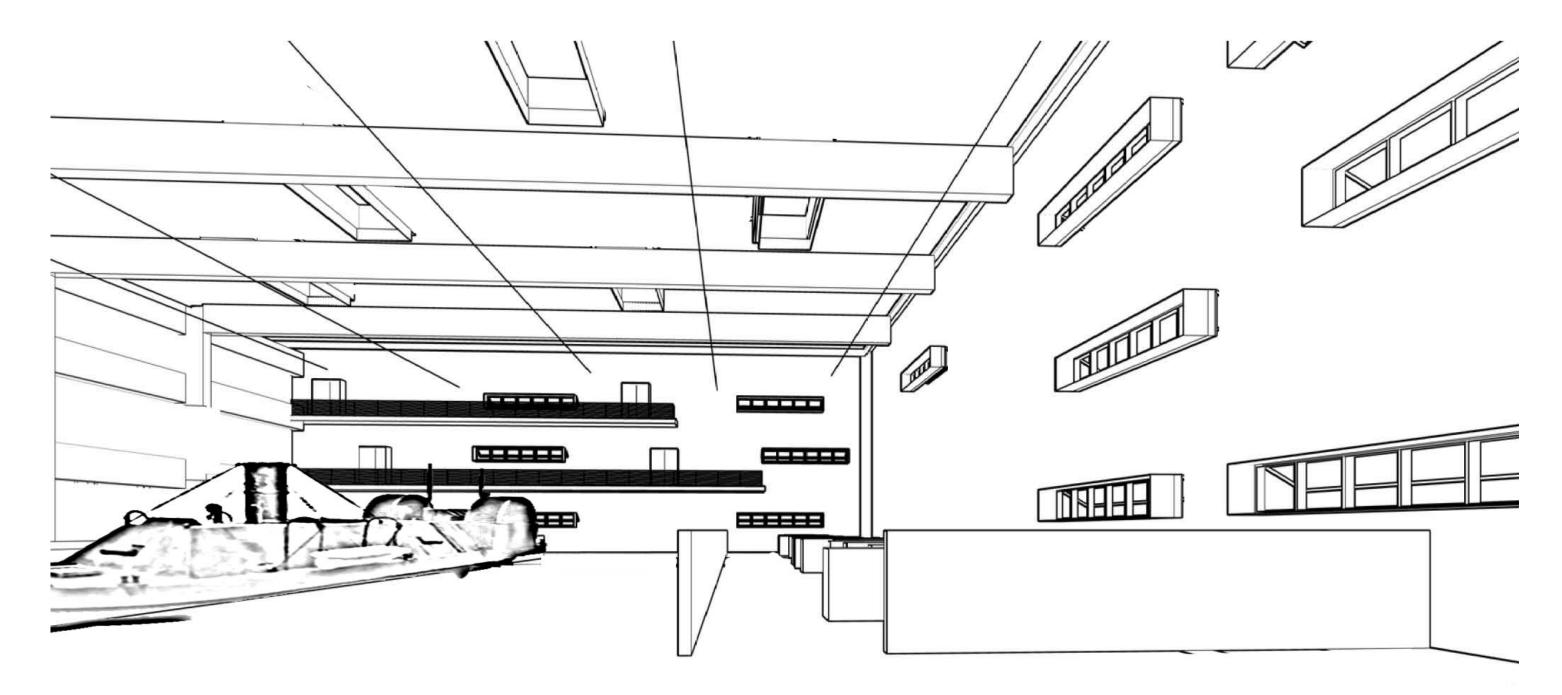
View into gallery



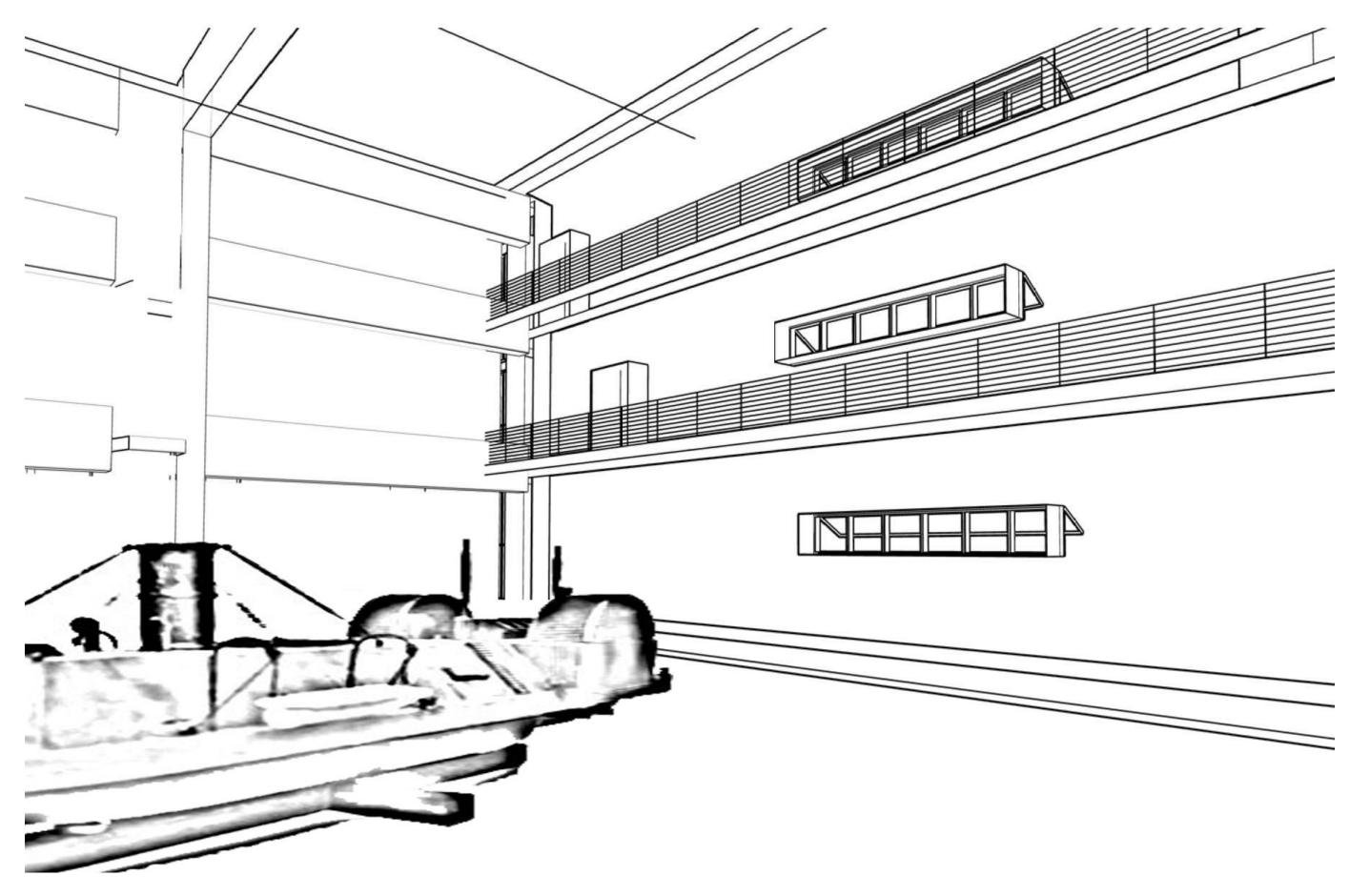
<u>Gallery</u>



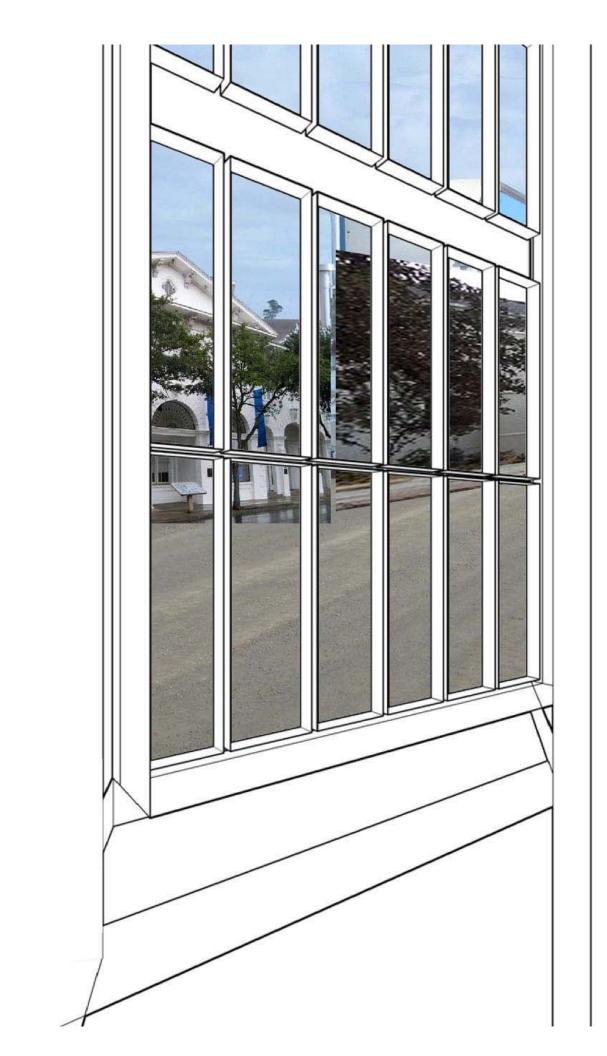
<u>Gallery</u>



<u>Gallery</u>



Gallery - NE corner

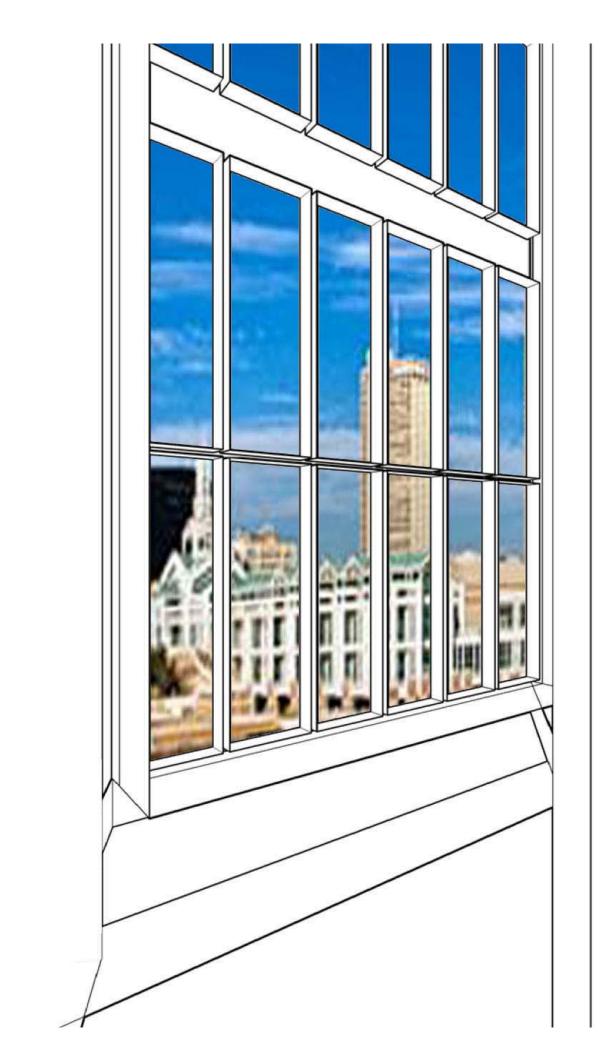


View 1 to Museum of Mobile and Gulf Coast Exploreum





View 2 to RSA Battlehouse Tower



View 3 to Arthur R. Outlaw Convention Center



View 4 to Austal shipbuilding



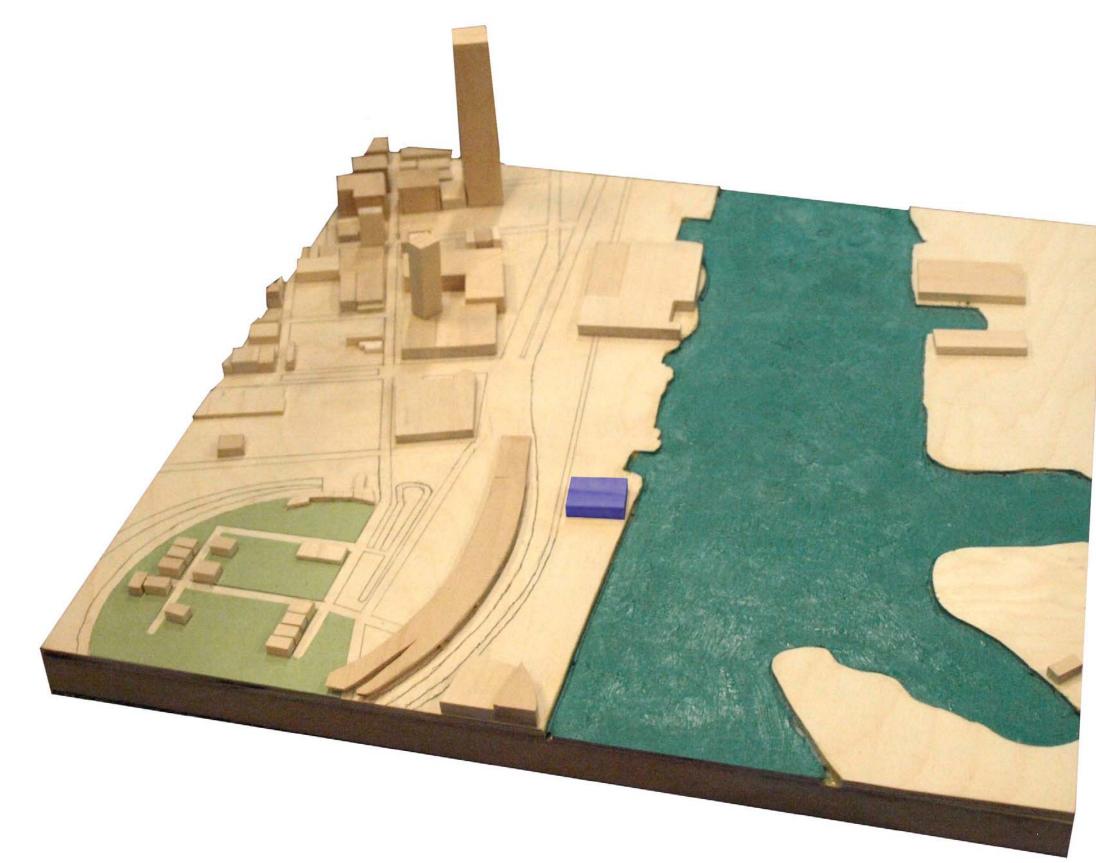
View to Gallery



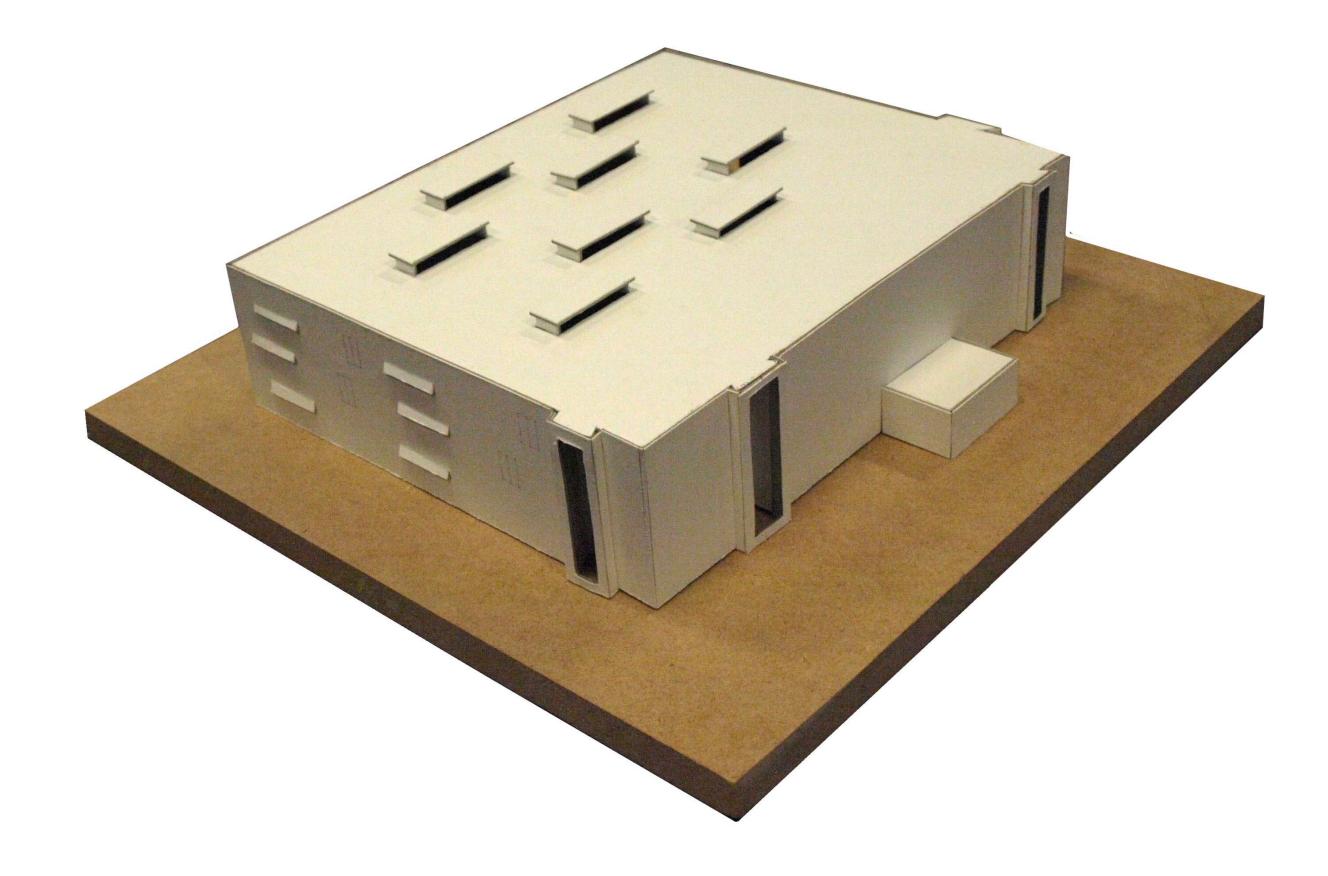
View to Gallery



H.L. Hunley



Addendum - Site Model



Addendum - Building Model