

"Bridging Time Through Nature"



Savannah College of Art and Design

Architectural Studio VII

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ARCH 707

Fall 2007

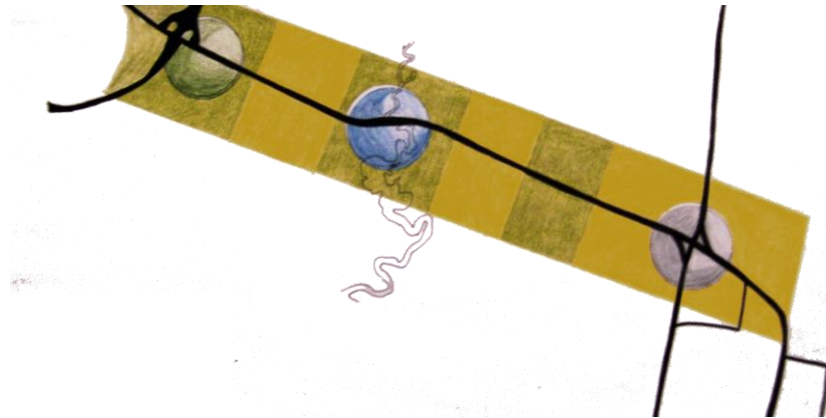
“Bridging Time Through Nature”

Concept Statement

2048 Master Plan for Midtown St. Marys: Bridging Time through Nature

The concept of the 2048 Master Plan for Midtown St. Marys focuses on the elements of Land, Water, and Air as the primary vehicles that drive St. Marys into the future. These three dimensions of St. Marys are emphasized and reinforced by a wide variety of features that are incorporated in present and future phases of the Master Plan.

As evidenced in the Master Plan, progression into the city of St. Marys closely mirrors that of Land, Water, and Air. The flow of these elements begins with the concept of Land, which is reinforced and enhanced with the Georgia Wild Flower program as well as elevated, bermed parking structures. Transition then moves into the abundant natural element of water, reflected in the marsh walk and aquatic expansion of Borrell's Landing. The progression culminates by emphasizing the element of air, which is integrated into the plan by a bird sanctuary, kinetic sculptures, and a redesign for St. Marys Airport. Ultimately the Master Plan focuses on the natural beauty of the city of St. Marys. It also seeks to further enhance it with Land, Water, and Air features that reinforce St. Marys bridge to 2048 and the future beyond.



Master Plan:

LEGEND

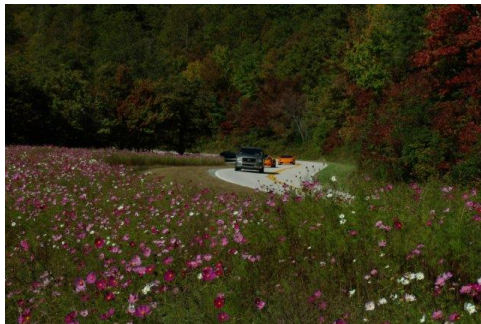
-  Residential
-  Commercial
-  Mixed Use
-  Civic/Educational
-  Water Body
-  Marsh
-  Wildflower
-  Parking Berms
-  Greenway trail
-  Marsh walk stop/Dock
-  Railway
-  Transit Stop: Train/Trolley
-  Trolley Stop



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Wild flowers:

The Georgia DOT Wildflower Program the planting and protection of colorful wildflowers on state routes. And to keep our wildflowers blooming on the roadsides each year, the Maintenance Department researches Georgia native species and use conservation techniques. This program is funded through Wildflower Auto Tag sales, its only guaranteed revenue source.



Visitor's Center:



Visitor's Center:



The St Marys and Cumberland Island Visitor Center is located under the overpass of St Marys Road, spanning the space between Highway 40 and the trolley tracks.

Moving the 1st destination for Cumberland Island tourists outside of midtown will afford St Marys the opportunity to inform them of the attractions in town before they head to their final destination.

A parking berm to the west of the Visitors Center will provide parking accommodations for tourists so that they may leave their vehicle and tour the city by trolley.

The Visitor Center will have a dual entrance to welcome visitors traveling from either direction on Highway 40, as well as those exiting from either direction off of St. Marys Road.

The Visitor Center will also house a Transport Hub and is contingent with the trolley tracks.

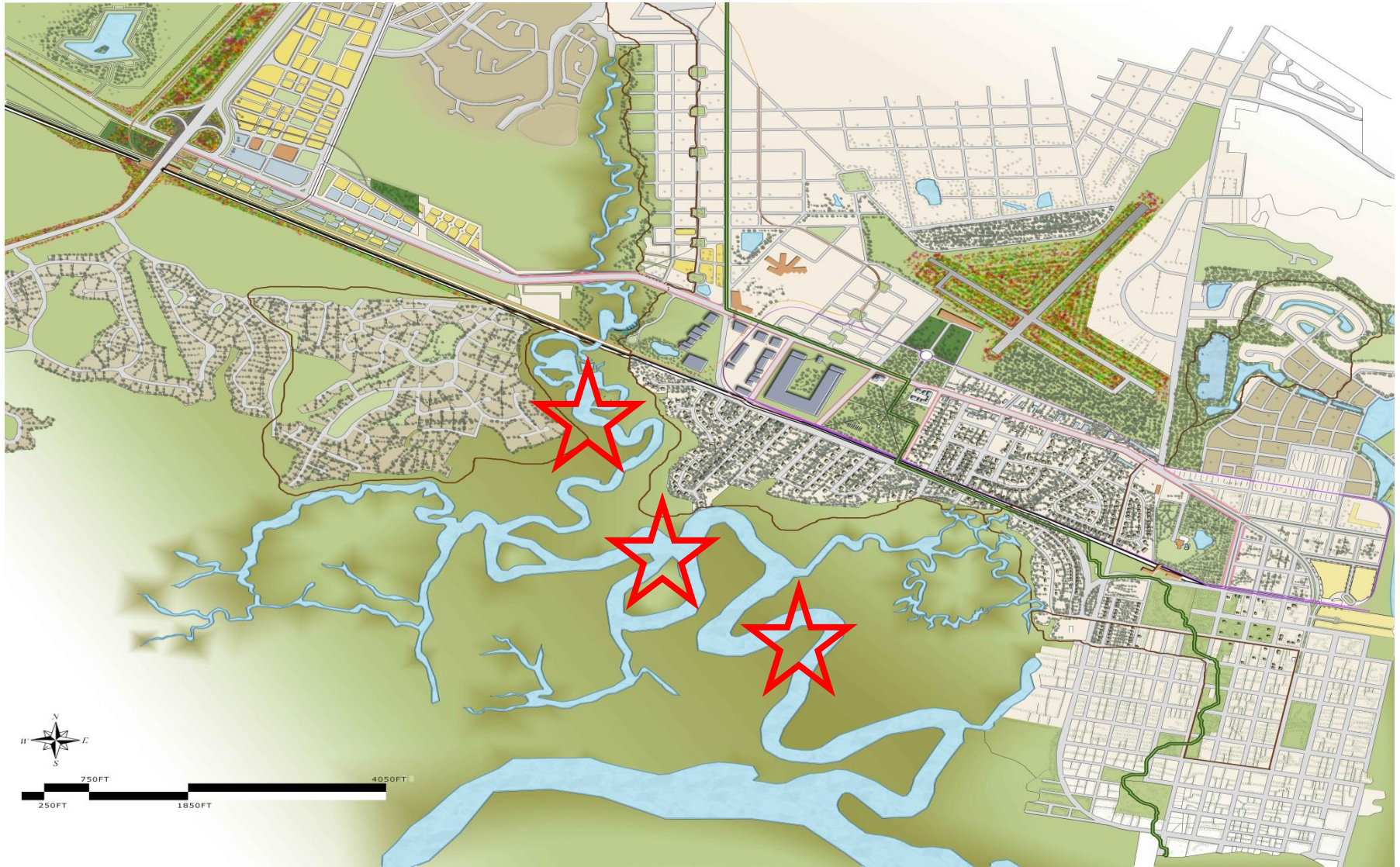
Building under an overpass is an innovative method of infill development, which will become crucial as St Marys expands to its physical boundaries.

In between the North and South bound lanes on St Marys road, the building structure will rise in between the lanes in an expression of steel and glass. This will signify to passersby of the important place below. They will feel compelled to take the exit and explore the building.

The steel ribs at each entrance of the Center can be fitted with colorful pennants during the warm seasons to provide shade and a cheerful expression to the city.



Marsh Walk:



Marsh Walk:



Marsh walks are the connecting element which is seen throughout the development of Mid-Town. The walks weave in and out of the surrounding neighborhoods creating loops which intersect at the Central Park. These paths are delineated by wooden planks or permeable materials according to location. Designed to accommodate pedestrian traffic, the community of St. Marys is encouraged to engage with the natural environment as they travel from home to marsh to other areas of interest.

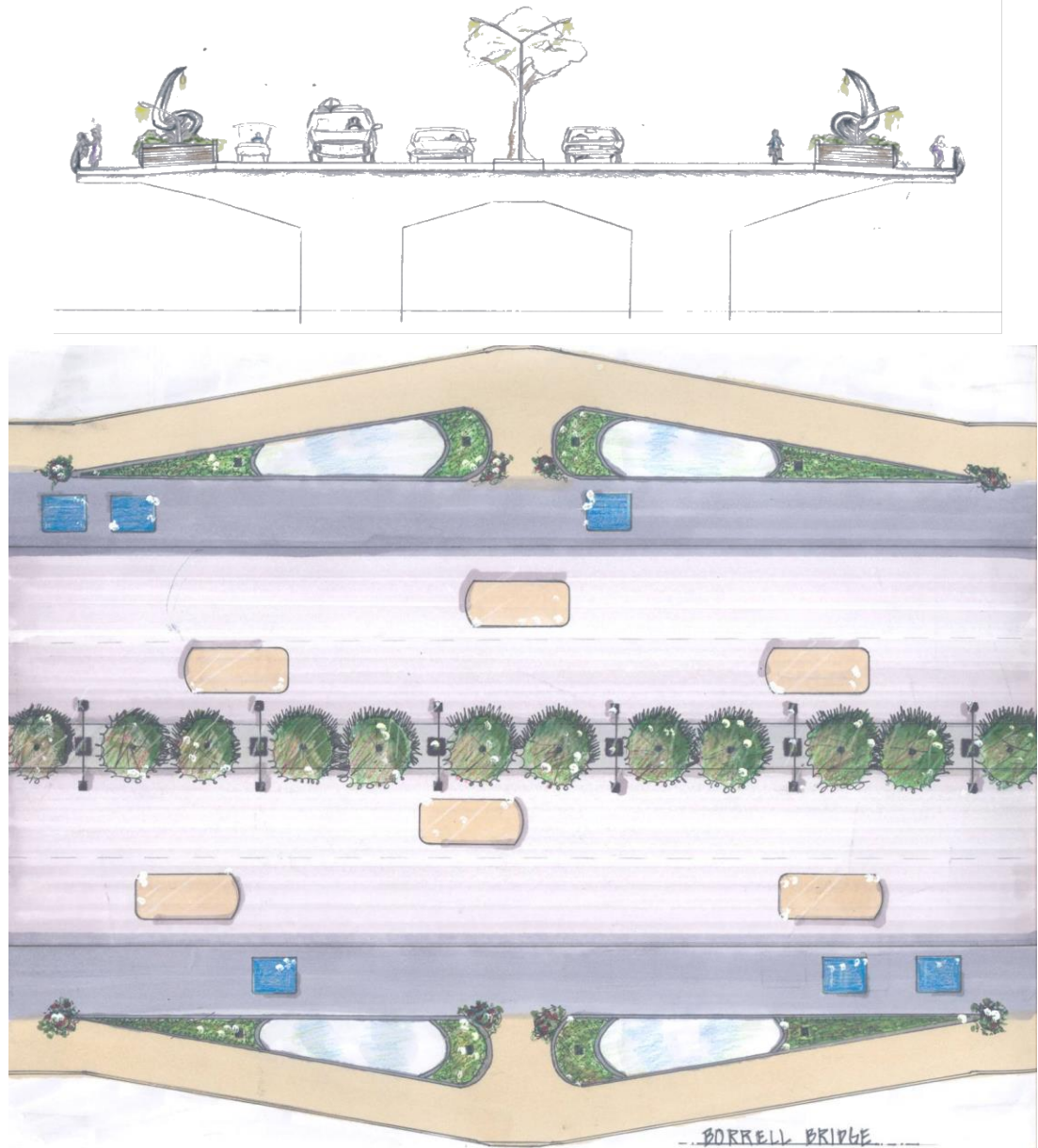
Borrell's Bridge:



Borrell's Bridge:

The bridge was created to provide a safer connection to all the high intensity activities that surround Hwy 40, such as the new town center, the school, the new Bock's building, and the airport. The new design provides an accessible, low scale pedestrian crossing, without overpowering the city scale. Furthermore, the lighting, the natural aspects and the material provide for a fun way for the children to interact with the bridge.

The lighting will emit a soft glow adding excitement to the night skyline of St. Marys, at the same time providing a safe passage at night.

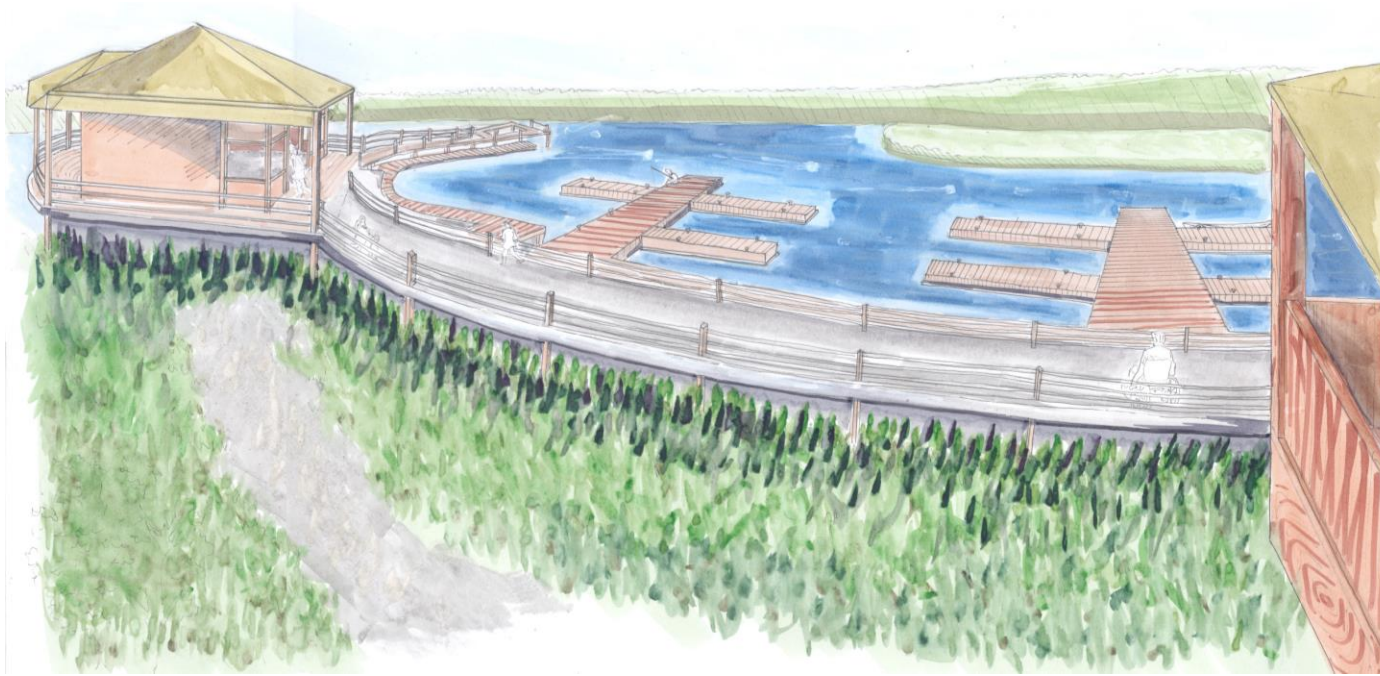


Borrell's Landing:



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Borrell's Landing:



Borrell's Restaurant:

The design for the restaurant implements all the elements that are represented throughout the master plan of St Marys. As one enters into the midtown, Borrell's restaurant is the first place that they would interact with.

This is a place where people can enjoy a nice leisurely meal, take a quiet stroll on the docks and enjoy some bird watching or the exciting creatures of the Aquatic life exhibit. For the most avid traveler, or outdoor person, there are kayak rentals and boat rentals that allow people to experience St.Marys through one of its most fundamental elements, its water. There are floating docks throughout the marshes where people can rest and partake on the marsh walks provided as well.

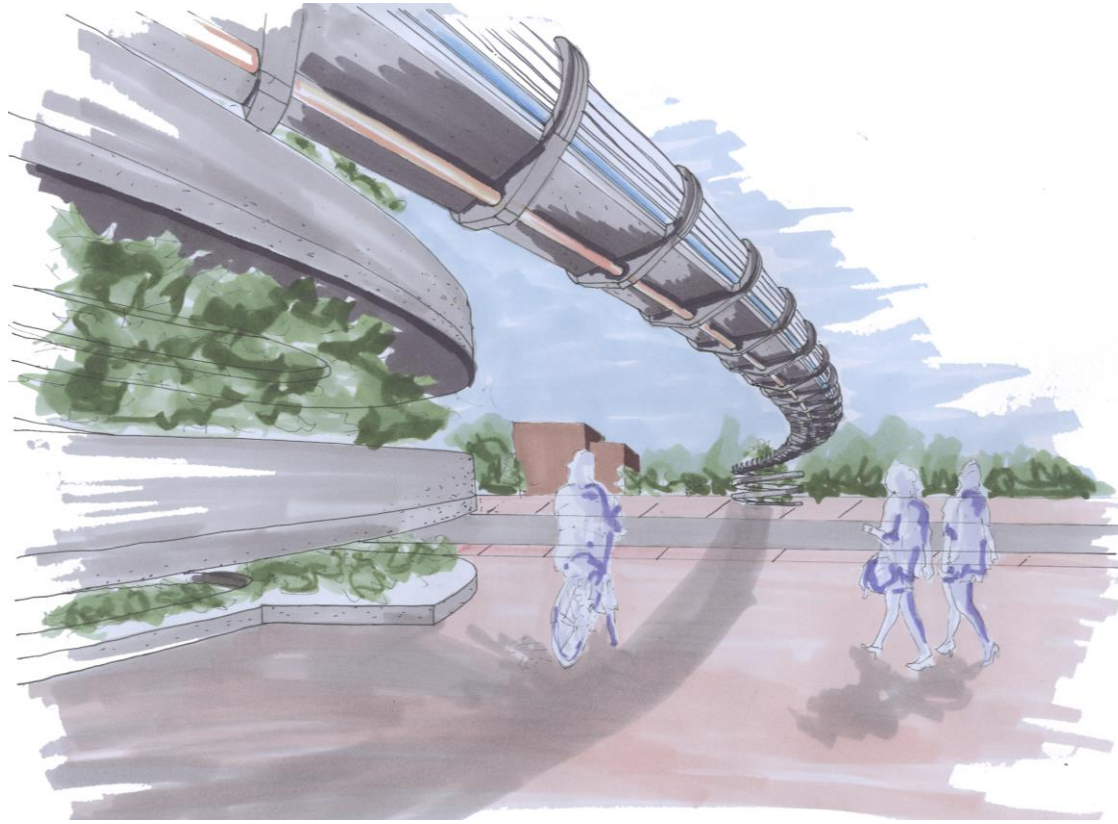
Borrell's is the threshold to midtown; it is where the journey begins as one drives along Hwy40/Osborne St. It creates a sense of entrance to the city that entices all the senses and sets the anticipation into St.Marys.



Pedestrian Bridge Schemes :

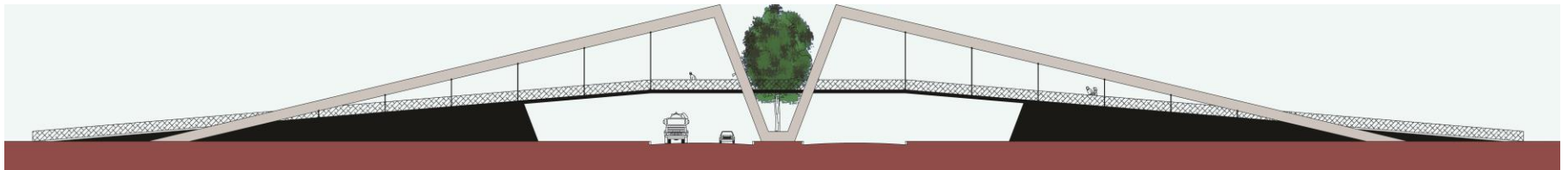
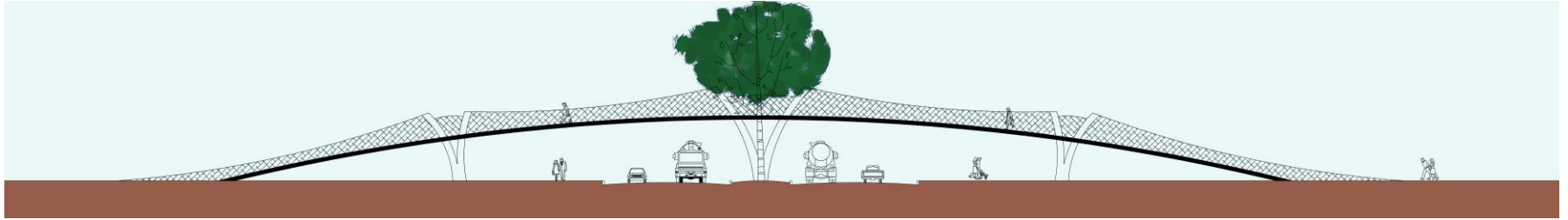


Pedestrian Bridge Scheme 1:



The bridge was created to provide a safer connection to all the high intensity activities that surround Hwy 40, such as the new town center, the school, the new Bock's building, and the airport. The new design provides an accessible, low scale pedestrian crossing, without overpowering the city scale. Furthermore, the lighting, the natural aspects and the material provide for a fun way for the children to interact with the bridge. The lighting will emit a soft glow adding excitement to the night skyline of St. Marys, at the same time providing a safe passage at night.

Pedestrian Bridge Scheme 2:



The bridge was created to provide a safer connection to all the high intensity activities that surround Hwy 40, such as the new town center, the school, the new Bock's building, and the airport. The new design provides an accessible, low scale pedestrian crossing, without overpowering the city scale. Furthermore, the lighting, the natural aspects and the material provide for a fun way for the children to interact with the bridge. The lighting will emit a soft glow adding excitement to the night skyline of St. Marys, at the same time providing a safe passage at night.

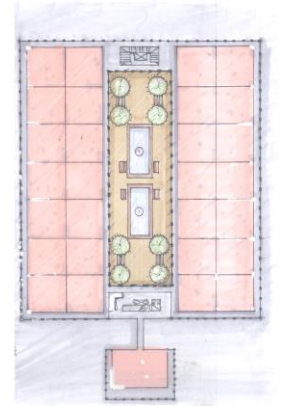
Bock's Factory:



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Bock's Factory:

Atrium space within the newly refurbished box factory. The first floor will be reserved for commercial space, while the second and third floors will house a new hotel. This view from within the atrium is looking north towards the airport.



Bock's Building

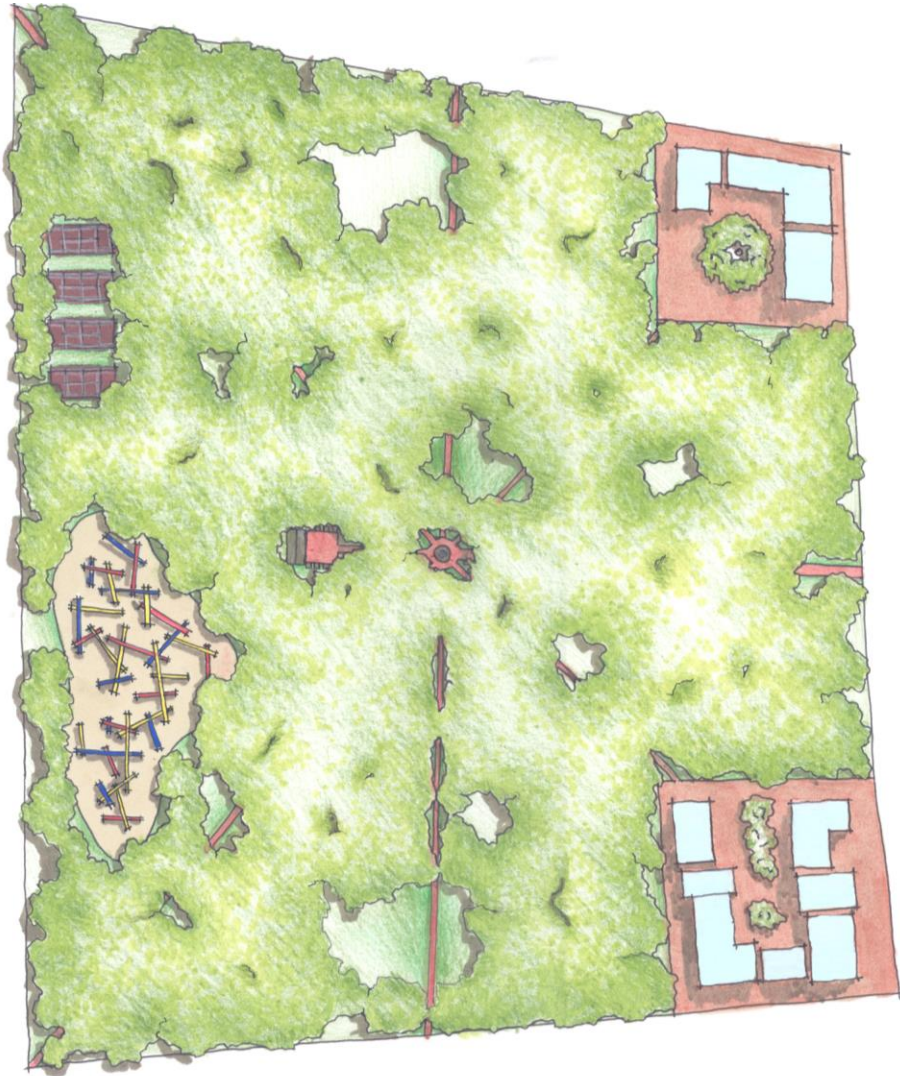
The Bocks Building has been transformed into a commercial facility with a second and third floor hotel. The open courtyard between the lower level commercial spaces allows visitors and residents an area to shop, socialize or relax in a safe environment. The first floor plan includes breaks in the structure that allow for pathways to the park, shopping center, and the trolley stop located on the south side behind the structure. The upper level hotel includes a small restaurant in the extended box structure above the front water element and balconies connected to each room that overlook the courtyard and exterior areas. At the roof of the second floor on the east side is a green roof that makes a visual connection to St. Marys central park



Park:



Park:



The park design was focused around a fountain in the middle of the park. The fountain design was influenced by the geographic location of St. Mary's in relation to other cities along the coast.

In the north corners the park buildings are to be used as commercial buildings and even house a museum. This will bring not only park enthusiasts to the location but also tourists visiting the local historical sites.

Directly south the fountain is a farmers market. These permanent structures can be rented out on a monthly basis to provide weekend markets for the community.

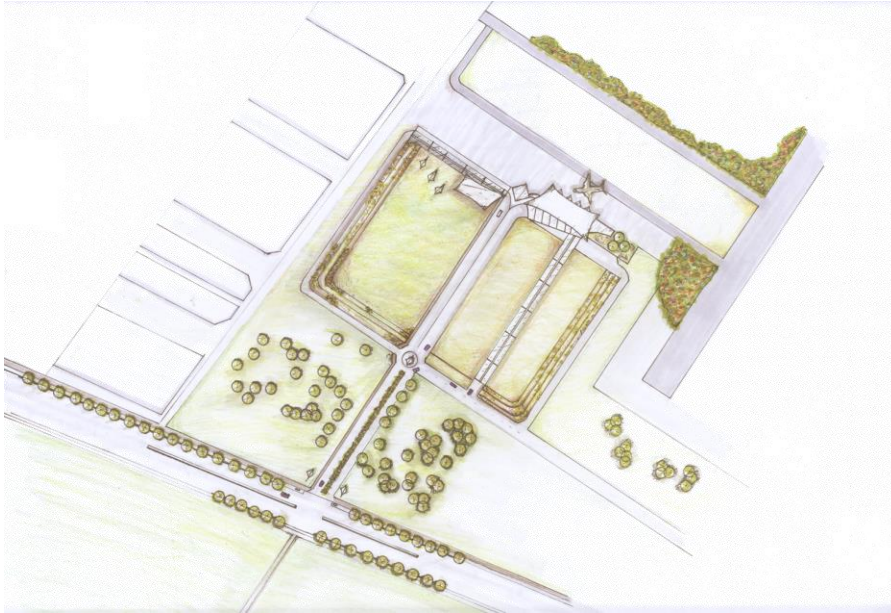
Tennis courts and playgrounds are located towards the south end of the park to bring the community together.

Trails act as connectors to the community and the fountain and provide a means of getting around the park.

Airport Schemes:



Airport Scheme 1:



The new vision for the St. Mary's Airport Terminal, incorporates the idea of motion through the use of tensile structures, which are designed in an upward motion, reaching towards the sky, yet grounded by the parking berms. The new terminal was designed to become an icon for the city of St. Mary's featuring the elements of land, water, and air. The wildflowers incorporated throughout the berms and the runway parallel the land element of the overall concept. The tensile structures used, emulate the air element, and finally the rain cistern incorporated in the middle of the roundabout, embodies the element of water, and a way of sustainably collecting its own rain water beneath the sculptural fountain.

The goal for this design is not only for the airport to be an iconic building for the city of St. Mary's, it also wants to take the elements of nature that are so strong throughout the city, and encase them in a meaningful space that will bring the airport into the year 2050.

Airport Scheme 2:

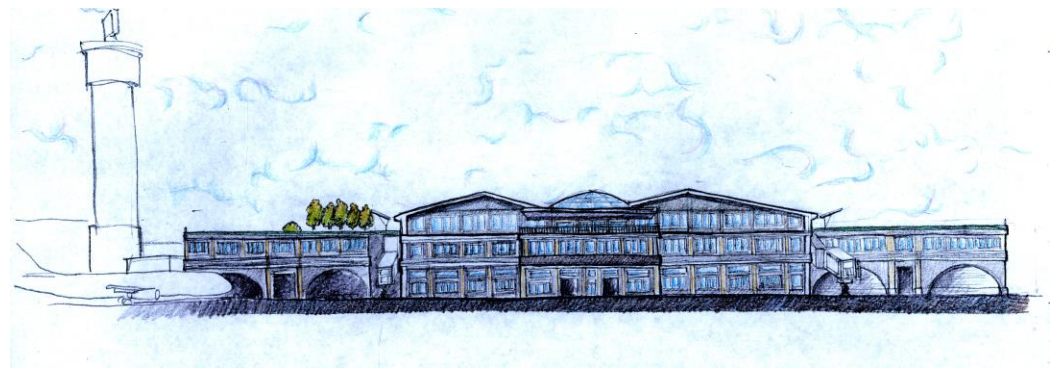


Airport Design:

The proposed St. Marys Airport would be an iconic structure defining the architecture of 21st century St. Marys. While the terminal looks to the future it respects the history of St. Marys. It is a small quaint terminal that utilizes local, historically significant materials such as tabby. The tabby roof seems to effortlessly raise the ground above the modern curtain wall. The structure houses the Terminal, airport offices and parking facilities. It also offers beautiful vistas and a great place for outdoor activities. Overall, it offers a tremendous airport experience.

Airport Scheme 3:

- Elevation (North facade) of the Airport Terminal
- "Grounding facade" on the North side.



- Orientation to the NW
- SW part of the Airport perimeter

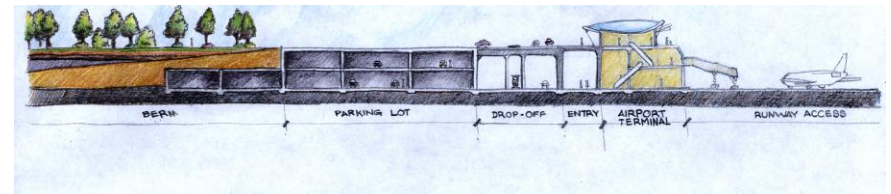
- Vehicular Entrance from HWY 40
 - Access to 1st and 3rd Level
 - Berms on both sides of the vehicular entrance
 - Parking Spaces underneath the berms
 - Trolley access on 1st level



- Perspective view of the Airport Terminal from the Runway looking to Highway 40
- "Grounding facade" on the North side.



- Perspective view from the vehicular entrance, Looking at the front facade of the airport Terminal
- "Lift-off facade" on the South side.

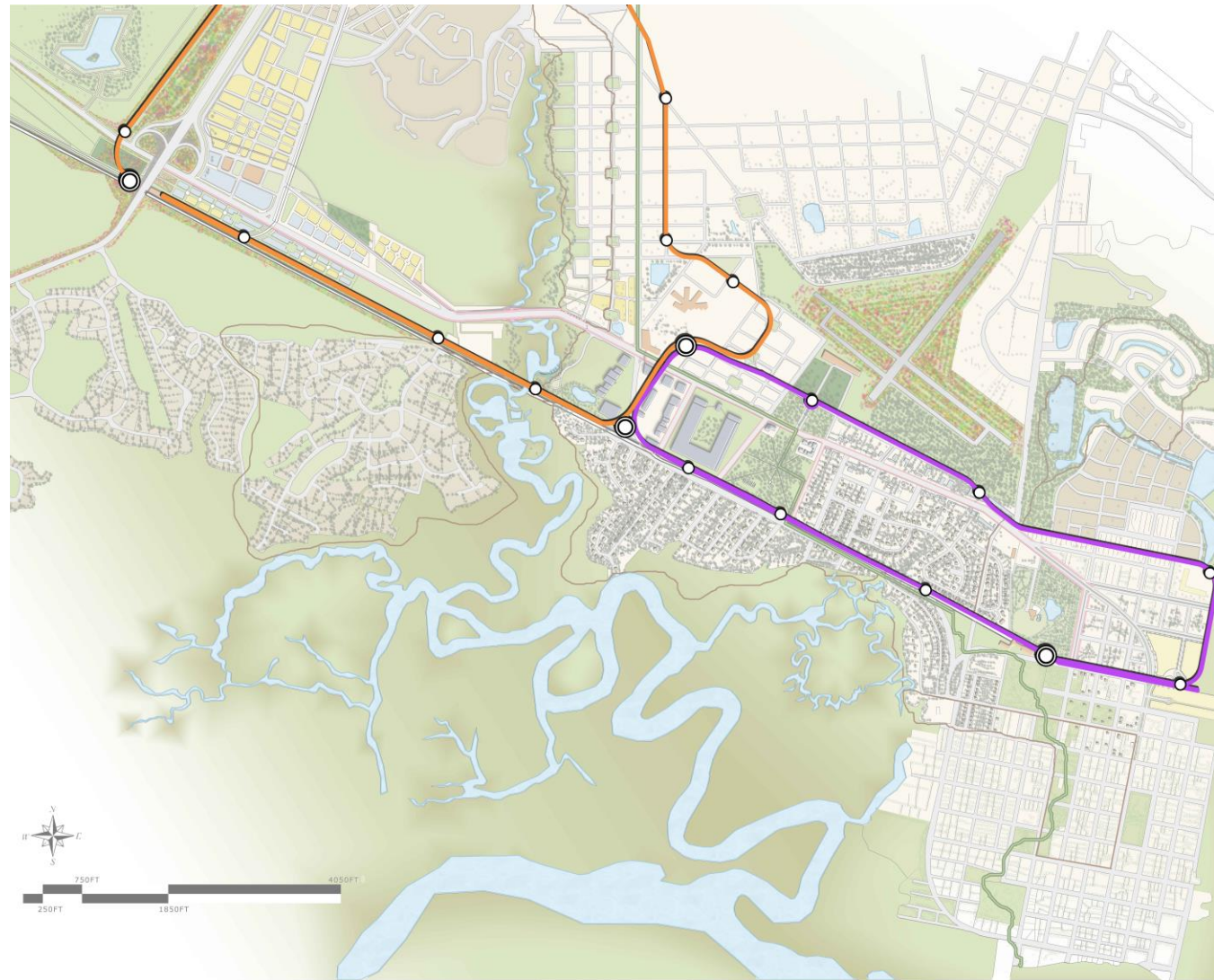


- Section view of the berm/parking lot and Airport Terminal (SE section)
- Departures and Arrivals divided on different levels
- Atrium on 3rd level

Transportation Diagram:

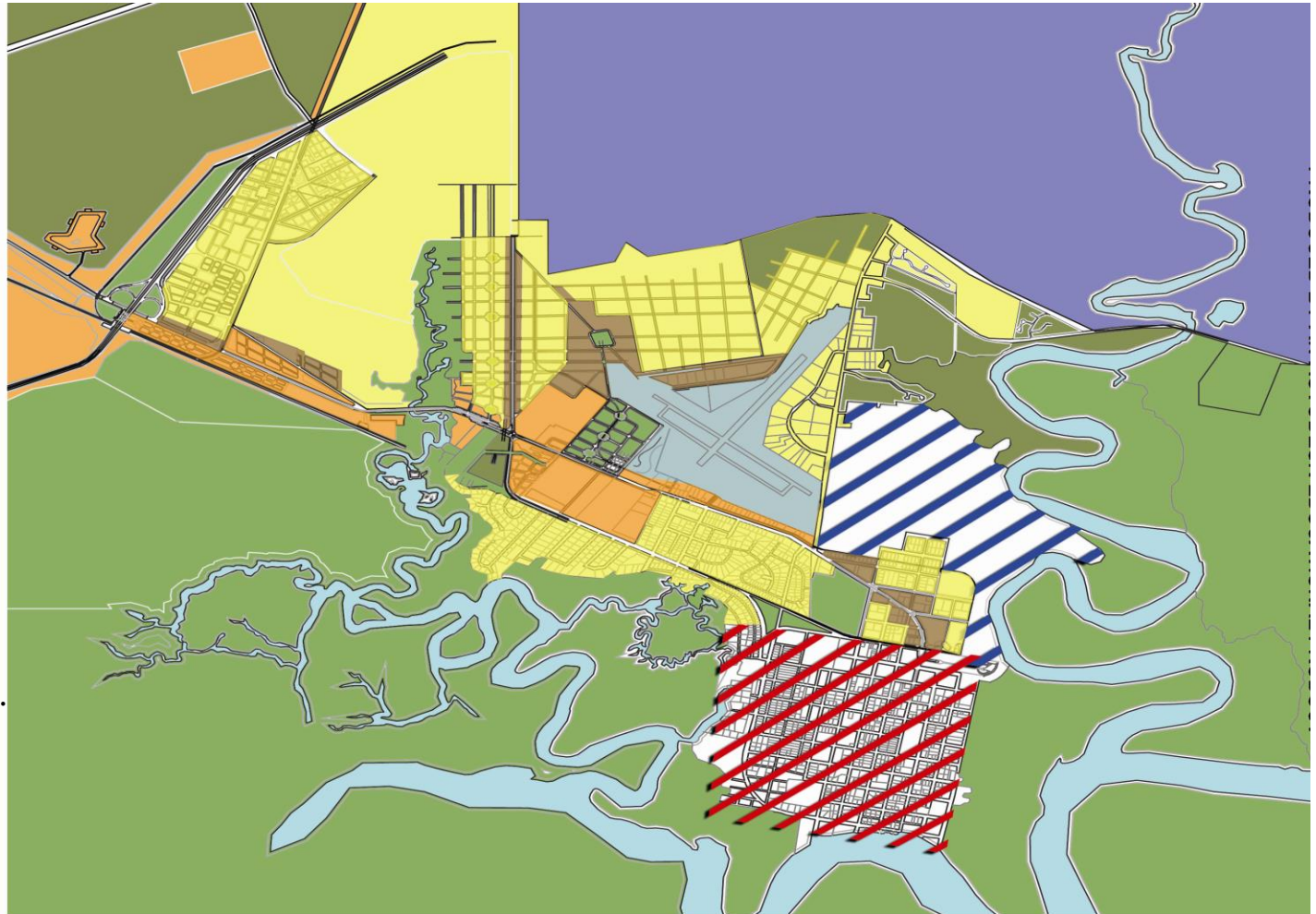
LEGEND

	Residential
	Commercial
	Mixed Use
	Civic/Educational
	Water Body
	Marsh
	Wildflower
	Parking Berms
	Greenway trail
	Marsh walk stop/Dock
	Railway
	Transit Stop:Train/Trolley
	Trolley Stop



Zoning & Phasing: 2012

- Naval Base
- Mixed Use
- Agriculture
- Commercial
- Residential
- Parks/
Conservation
- Historic
- Landmar Dev.



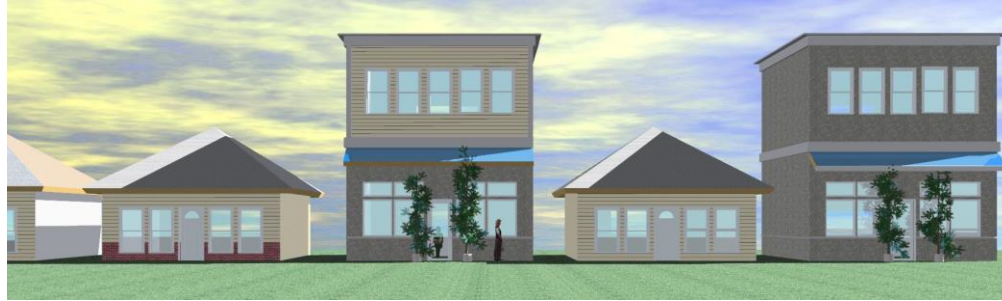
Zoning & Phasing: 2048



Amendments to Zoning Code:

Guidelines for Infill Structure Requirements:

Mixed use buildings may be implemented on existing residential and commercial lots as new or as replacement structures.



Guidelines for New Structure Requirements:

Mixed use buildings may be implemented on existing residential and commercial lots as new or as replacement structures.

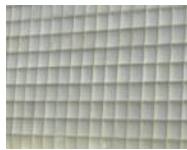


Amendments to Zoning Code:

Guidelines for Materials for new structures, additions and face lifts to existing structures:

New structures, additions and face lifts should be of vernacular/ local style. Materials can be used in anyway as long as the design is “of the time”.

Tabby, concrete masonry units, brick, river rock stone, stucco, horizontal wood cladding, and glass block



Guidelines for Architectural Style of Structure:

New structures, additions and face lifts should be designed by the architectural style of the period. No chain, franchise, or mass produced designs. New designs to be original to keep an identity of St. Marys.



Amendments to Zoning Code:

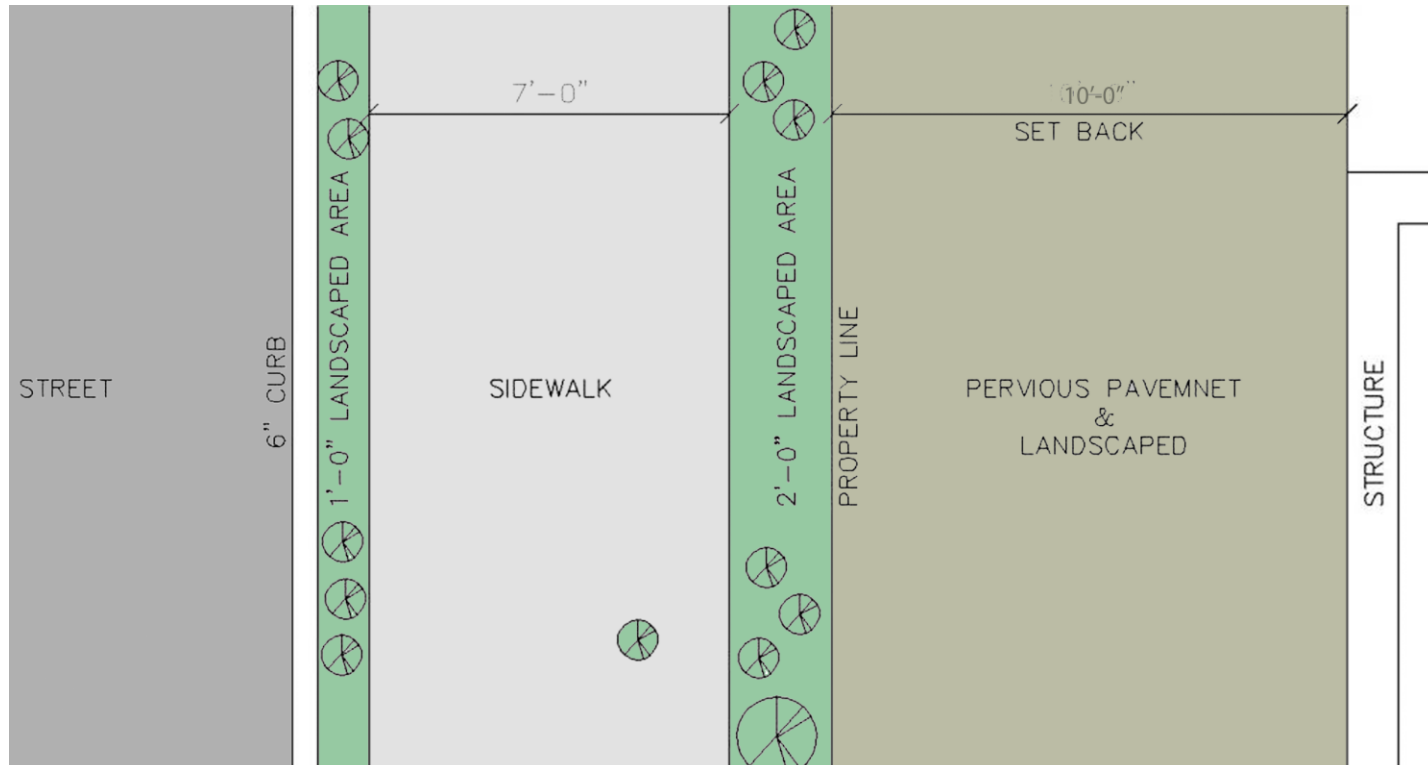
Guidelines Property Setbacks:

10'-0" front setbacks for all buildings from property line.

6'-0" side and rear for all buildings from property line.

Infill mixed use structures may obtain a variance for side setbacks and share common walls, but not to exceed 100'-0" of uninterrupted linear mass.

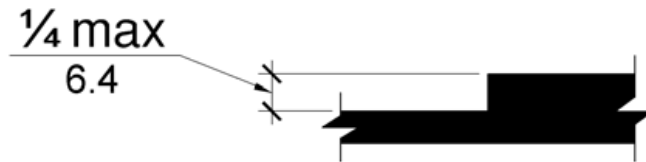
No parking in front of structure. All parking must be in rear or some on sides.



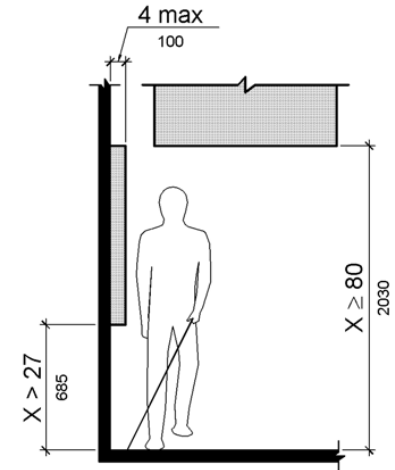
ADA Guidelines:

Level Changes & Protrusions

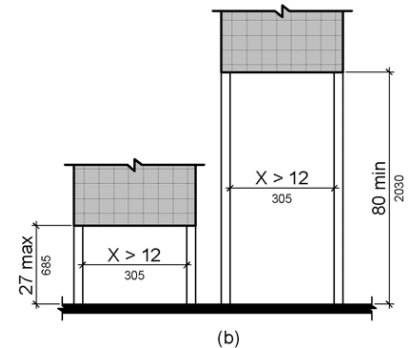
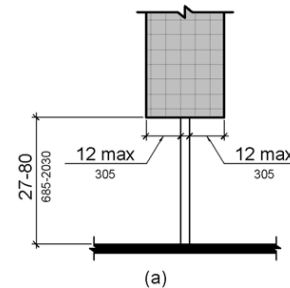
- **Changes in level** of ¼ inch high maximum shall be permitted to be vertical.



- **Protrusion Limits.** Objects with leading edges more than 27 inches and not more than 80 inches above the finish floor or ground shall protrude 4 inches maximum horizontally into the circulation path.



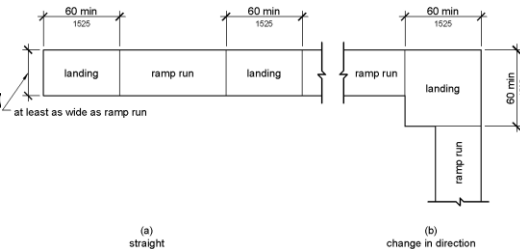
Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches maximum when located 27 inches minimum and 80 inches maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches, the lowest edge of such sign or obstruction shall be 27 inches maximum or 80 inches minimum above the finish floor or ground.



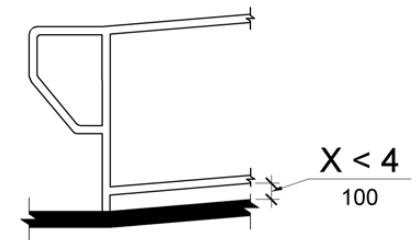
ADA Guidelines:

Ramps

- Landings.** Ramps shall have landings at the top and the bottom of each *ramp*.
- Rise.** The rise for any *ramp* run shall be 30 inches maximum.
- Slope.** Ramp runs shall have a *running slope* not steeper than 1:12.

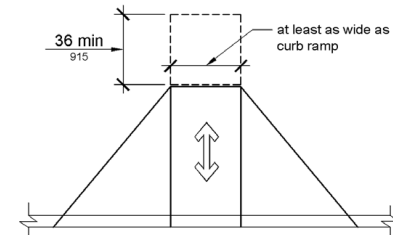
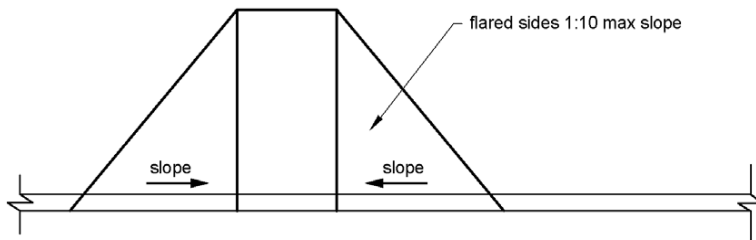


Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish floor or ground surface.



Sides of Curb Ramps. Where provided, *curb ramp* flares shall not be steeper than 1:10.

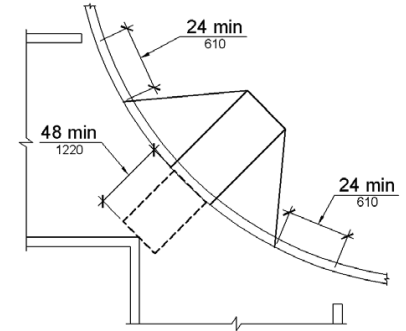
Landings. Landings shall be provided at the tops of *curb ramps*. The landing clear length shall be 36 inches minimum. The landing clear width shall be at least as wide as the *curb ramp*, excluding flared sides, leading to the landing.



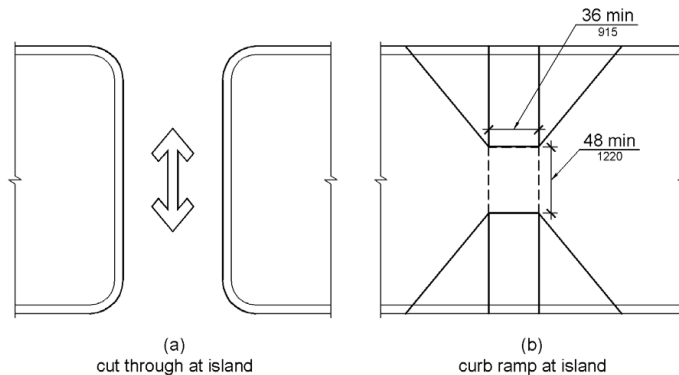
ADA Guidelines:

Curbs

Diagonal Curb Ramps. Diagonal or corner type *curb ramps* with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal *curb ramps* shall have a clear *space* 48 inches minimum outside active traffic lanes of the roadway. Diagonal *curb ramps* provided at *marked crossings* shall provide the 48 inches minimum clear *space* within the markings. Diagonal *curb ramps* with flared sides shall have a segment of curb 24 inches long minimum located on each side of the *curb ramp* and within the *marked crossing*.



Islands. Raised islands in crossings shall be cut through level with the street or have *curb ramps* at both sides. Each *curb ramp* shall have a level area 48 inches long minimum by 36 inches wide minimum at the top of the *curb ramp* in the part of the island intersected by the crossings. Each 48 inch minimum by 36 inch minimum area shall be oriented so that the 48 Inch minimum length is in the direction of the *running slope* of the *curb ramp* it serves. The 48 inch minimum by 36 inch minimum areas and the *accessible route* shall be permitted to overlap.



ADA Guidelines:

Parking

Vehicle Spaces. Car parking *spaces* shall be 96 inches wide minimum and van parking *spaces* shall be 132 inches wide minimum, shall be marked to define the width, and shall have an adjacent access aisle.

Access Aisle. Access aisles shall adjoin an *accessible* route. Two parking *spaces* shall be permitted to share a common access aisle.

Width. Access aisles serving car and van parking *spaces* shall be 60 inches wide minimum.

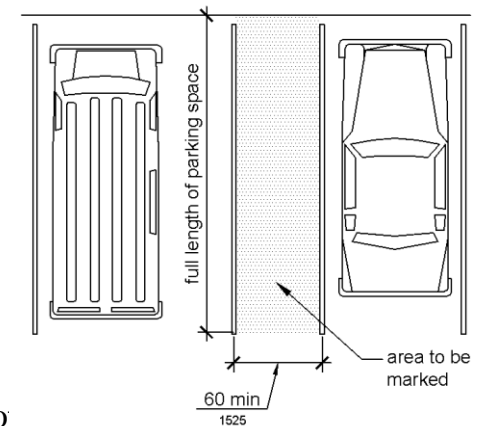
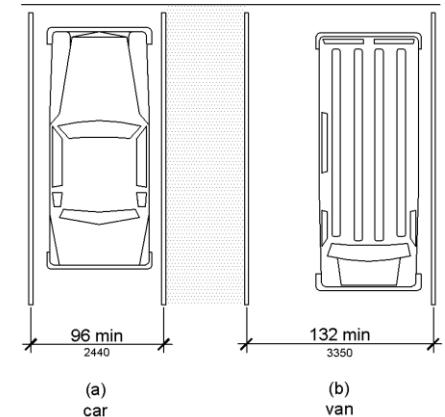
Length. Access aisles shall extend the full length of the parking *spaces* they serve.

Marking. Access aisles shall be marked so as to discourage parking in them.

Location. Access aisles shall not overlap the *vehicular way*. Access aisles shall be permitted to be placed on either side of the parking *space* except for angled van parking *spaces* which shall have access aisles located on the passenger side of the parking *spaces*.

Floor or Ground Surfaces. Access aisles shall be at the same level as the parking *spaces* they serve. Changes in level are not permitted.

Identification. Parking *space* identification signs shall include the International Symbol of *Accessibility*



ADA Guidelines:

Visually & Hearing Impaired

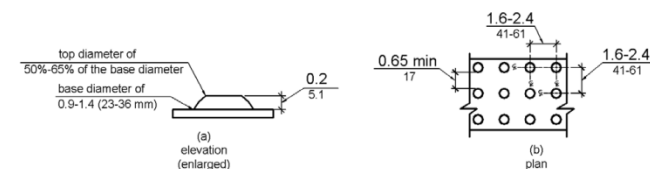
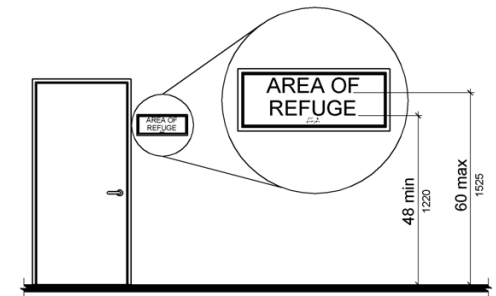
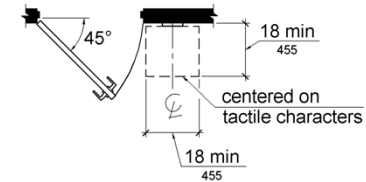
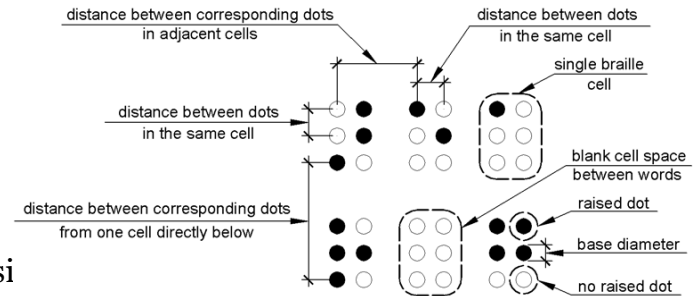
General. Signs shall comply with 703. Where both visual and *tactile characters* are required, either one sign with both visual and *tactile characters*, or two separate signs, one with visual, and one with *tactile characters*, shall be provided

Braille. Dimensions and Capitalization. Braille dots shall have a domed or rounded shape. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

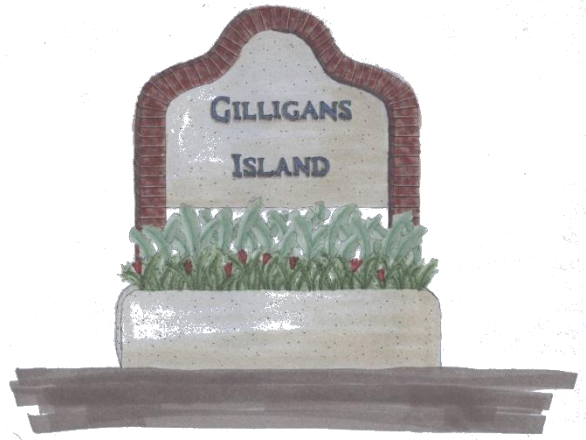
Location. Where a *tactile* sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a *tactile* sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a *tactile* sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door.

Installation Height and Location. Height Above Finish Floor or Ground. *Tactile characters* on signs shall be located 48 inches minimum above the finish floor or ground surface, measured from the baseline of the lowest *tactile character* and 60 inches maximum above the finish floor or ground surface, measured from the baseline of the highest *tactile character*

Contrast. *Detectable warning* surfaces shall contrast visually with adjacent



Signage:



This is an example of the type of sign that could be used in the place of any municipal sign such as:

Gilligan's Island
The Airport
Bordells Marina
The Bird Sanctuary
Marsh walks
Historic Downtown
Parking Berms
Trolley Stops
Central Park
The Library
Hospitals
City Offices
Visitor Center
Museums

This design can be used to clean up the sign clutter along the roads by consolidating multiple signs onto one.

The height can be adjusted to accommodate as many signs as needed in one given place.

Directional arrows can be added for way finding.

The key is to maintain the form and style for all civic signs so that they are easier to detect and read.

Master Plan:

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