MAYOR Shirley Sessions

CITY COUNCIL Barry Brown, Mayor Pro Tem Brian West Jay Burke Nancy DeVetter Spec Hosti Monty Parks



CITY OF TYBEE ISLAND

CITY MANAGER Dr. Shawn Gillen

CLERK OF COUNCIL Jan LeViner

CITY ATTORNEY Edward M. Hughes

A G E N D A REGULAR MEETING OF TYBEE ISLAND CITY COUNCIL May 11, 2023 at 6:30 PM

Please silence all cell phones during Council Meetings

Opening Ceremonies Call to Order Invocation Pledge of Allegiance

Announcements

Executive Session Discuss litigation, personnel and real estate

Call to Order

Consideration of Items for Consent Agenda

Recognitions and Proclamations

1. UGA Announcement of Tybee Natural Infrastructure Master Plan: FOR INFORMATION ONLY

<u>Reports of Staff, Boards, Standing Committees and/or Invited Guest.</u> Limit reports to 10 minutes.

2. Kathleen Holliday, TIMA, Oyster Recycling Program on Tybee

<u>Citizens to be Heard: Please limit comments to 3 minutes.</u> Maximum allowable times of 5 minutes.

3. Pat Leiby and Sarah Jones: Black History Trail

If there is anyone wishing to speak to anything on the agenda other than the Public Hearings, please come forward. Please limit comments to 3-5 minutes.

Consideration of Approval of Consent Agenda



P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749 (866) 786-4573 – FAX (866) 786-5737 www.cityoftybee.org Public Hearings

- 4. Site Plan Approval 1601 Butler Avenue, Add brick fence around property, Walt Freeman petitioner
- 5. Site Plan Approval, 104 17th Street, Addition of three (3) Townhomes to Existing Property/Structure, Walt Freeman petitioner
- 6. Site Plan Approval, 115 and 1109 East US Highway 80, Increase Parking via adjacent lot, Chris Smith, Zunzibar
- 7. Site Plan Approval, 301 1st Street, Adding character statues in front of ice cream and golf cart/bicycle rental shop. Liran Portal Petitioner
- 8. First Reading, 2023-13, Text Amendment, Ability to apply for an STR permit for applicants holding a building permit at time of adoption of Moratorium
- 9. First Reading 2023-14, Ability to apply for an STR permit for applicants holding a building permit at the time of moratorium after public hearings
- <u>10.</u> First Reading, 2023-15A, Ability to obtain an STR permit for applicants holding a building permit for new construction or extensive renovations at the time of adoption of the moratorium without public hearings
- 11. First Reading, 2023-15B, Ability to obtain an STR permit for applicants holding a building permit for new construction at the time of the moratorium
- 12. First Reading 2023-16, Ability to obtain an STR permit for applicants who did not own property or have a building permit with public hearing
- <u>13.</u> First Reading, 2023-17, Ability to obtain an STR permit for applicants who did not own property or have a building permit before moratorium without public hearings

Consideration of Local Requests & Applications – Funding, Special Events, Alcohol License

- <u>14.</u> 2023-772 Resilience Plan Consultant Recommend SLR International Corporation
- <u>15.</u> Agenda Request: Entertainment License: Mi Vida, 1315 Butler Ave, Unit B, Acoustic Guitar No Amplifier
- <u>16.</u> Agenda Request: Tybee Market Enterprise- Alcohol License Request: Beer/Wine-Package Sales; Sunday Sales. (Formerly Tybee Market Inc dba IGA).

Consideration of Bids, Contracts, Agreements and Expenditures

<u>17.</u> Budget Amendment: Purchase additional safety and protective gear for all police officer and fire/ems personnel

Consideration of Ordinances, Resolutions

- 18. Resolution, 2023-07, Public Safety Emergencies relating to Events
- 19. Second Reading, 2023-09, Section 3-090. Elevator Requirements
- 20. Second Reading: 2023-10, Sec 2-010, Change of Setback Definition to Allow for Elevators
- 21. Second Reading: 2023-21, Sec 58-179, Fees
- 22. Second Reading: 2023-22, GMEBS-R: City of Tybee Island Defined Benefit Retirement Plan Amendment Ordinance with Adoption

Council, Officials and City Attorney Considerations and Comments

23. Jay Burke, Performance/Status of City Manager

Minutes of Boards and Committees

P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749 (866) 786-4573 – FAX (866) 786-5737 www.cityoftybee.org



24. Planning Commission Minutes-4/17/2023

Executive Session

Discuss litigation, personnel and real estate

Possible vote on litigation, personnel and real estate discussed in executive session

<u>Adjournment</u>

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact Jan LeViner at 912.472.5080 promptly to allow the City to make reasonable accommodations for those persons.

***PLEASE NOTE:** Citizens wishing to speak on items listed on the agenda, other than public hearings, should do so during the citizens to be heard section. Citizens wishing to place items on the council meeting agenda must submit an agenda request form to the City Clerk's office by Thursday at 5:00PM prior to the next scheduled meeting. Agenda request forms are available outside the Clerk's office at City Hall and at <u>www.cityoftybee.org</u>.

THE VISION OF THE CITY OF TYBEE ISLAND

"is to make Tybee Island the premier beach community in which to live, work, and play."

THE MISSION OF THE CITY OF TYBEE ISLAND

"is to provide a safe, secure and sustainable environment by delivering superior services through responsible planning, preservation of our natural and historic resources, and partnership with our community to ensure economic opportunity, a vibrant quality of life, and a thriving future."



File Attachments for Item:

1. UGA Announcement of Tybee Natural Infrastructure Master Plan: FOR INFORMATION ONLY

Tybee Island Uses Nature to Reduce Flooding

By Sophia Milazzo, University of Georgia

April 28, 2023



Aerial view of Tybee Island's marsh shoreline

Tybee Island continues leadership in coastal resilience through the publication of The Tybee Island Natural Infrastructure Master Plan in collaboration with the University of Georgia.

Developed with funding from the National Fish and Wildlife Foundation (NFWF) and Georgia Department of Community Affairs, the Tybee Island Natural Infrastructure Master Plan provides recommendations on natural and nature-based features to help the island better absorb and recover from more frequent storms and flooding caused by rising seas. It was created through a community-centered design process that engaged over 525 residents and local partners, 83 college students, and 120 volunteers. The plan assesses flood risks and solutions, focusing on areas that border Tybee Island's marsh shoreline. The assessment also considers the risks of doing nothing and the subsequent impact on natural habitats, properties, and vital infrastructure. The plan recommends the implementation of several natural and nature-based features, including rain gardens, living shorelines, and permeable pavers. These recommendations would capture and filter 21 percent of the total stormwater runoff that otherwise would have drained into the marsh as well as reduce flooding for Tybee Island residents.

"This is a natural next step to improve our coastal resilience," said City of Tybee Island Mayor Shirley Sessions. "We are so pleased with the work done by researchers at the University of Georgia, the Marine Extension and Georgia Sea Grant, and the Skidaway Institute of Oceanography, many of whom have been partners with the City on coastal resilience issues for many years. Just as we did back in 2016 with the adoption of the State's first Sea Level Rise Adaptation Plan, Tybee again leads the State in considering the use of nature-based infrastructure in meeting the challenge of rising seas."

Since 1935, a National Oceanic and Atmospheric Administration (NOAA) tide gauge has been in place just over two miles from Tybee Island at the Fort Pulaski National Monument. Long-term data from the gauge shows a steady increase in water heights and flooding around Tybee Island. From 2016 to 2021, the rate of flooding events increased by 30 percent, largely due to sea-level rise. Using this data, it is estimated that sea levels around Tybee Island may rise an additional 1.39 feet by 2050.

The Tybee Island Natural Infrastructure Master Plan was created alongside the community's Stormwater Master Plan, which was completed by the engineering firm Thomas & Hutton in late 2022. Both project teams worked closely with a technical advisory group composed of local, state, and federal partners and a resident advisory group made up of home and business owners and local leaders. Through meetings, site visits, workshops, and design charrette exercises, these groups explored how natural and nature-based features could increase stormwater storage and capacity, while also treating rainfall-runoff, reducing vulnerability to flooding, expanding the biodiversity of green spaces, and offering leisure opportunities for residents and visitors.

"I am particularly grateful for the active engagement of so many residents and County, State, and Federal agencies," Sessions said. "They are the ones that make sure our plans are grounded and have public support when we go to the execution of projects."



Jon Calabria and Emily Dolatowski (UGA College of Environment and Design) assess design options for the Tybee Island Natural Infrastructure Plan. Photo courtesy of Emily Kenworthy.

In addition to these advisory groups, researchers administered the Coastal Empire Adaptation Survey to assess individual preferences for gray, natural, and hybrid infrastructure designs for shoreline protection. These results showed that Tybee residents, which made up 41 percent of the responses, preferred natural and hybrid infrastructure options compared to traditional gray infrastructure options. While gray infrastructure design may provide greater levels of protection against extreme flooding, they tend to do poorly in providing wildlife habitat, promoting the health of coastal saltmarshes, enhancing recreation opportunities, and enabling adaptation to environmental change. The survey also evaluated how much households would be willing to pay to implement gray, hybrid, and natural infrastructure. Wildlife habitat, recreation benefits, and flood protection were found to be the most important ecosystem services provided by shoreline protection, while reductions in nuisance flooding were less relevant.

The Tybee Island Natural Infrastructure plan was created by the City of Tybee Island in collaboration with the University of Georgia's College of Agricultural and Environmental Sciences, College of Engineering, College of Environment and Design, Institute for Resilient Infrastructure Systems, Marine Extension and Georgia Sea Grant and Skidaway Institute of Oceanography.

TYBEE ISLAND NATURAL INSFRASTRUCTURE MASTER PLAN

동가에 이미가 당한 가지를 위하는 것을 그 아르지 않는 것 : 2014년

TYBEE ISLAND NATURAL INSFRASTRUCTURE MASTER PLAN

FINAL REPORT FOR THE

NFWF TYBEE ISLAND COASTAL MARSH AND COMMUNITY RESILIENCE ADAPTATION PROJECT

JANUARY 30, 2023





PROJECT TEAM

Alan Robertson

Principal, AWR Strategic Consulting (Project Manager)

Jill Gambill

Coastal Resilience Specialist and Public Service Associate, Marine Extension and Georgia Sea Grant, University of Georgia (UGA PI)

Clark Alexander

Director and Professor, Skidaway Institute of Oceanography, University of Georgia

Brian Bledsoe

UGA Athletic Association Professor and Director of the Institute Resilient Infrastructure Systems, College of Engineering, University of Georgia

John Calabria

Associate Professor, College of Environment & Design, University of Georgia

Craig Landry

Professor, Agricultural and Applied Economics, College of Agricultural and Environmental Sciences, University of Georgia

Felix Santiago Collazo

Assistant Professor, Institute for Resilient Infrastructure Systems, College of Engineering, University of Georgia

Alison Smith

Associate Professor, College of Environment and Design, University of Georgia

Alfie Vick

Professor, Director of Environmental Ethics Certificate, College of Environment and Design, University of Georgia

STUDENT CONTRIBUTORS

Nicholas Bradley, Daniel Buhr, Matt Chambers, Haley Selsor

ACKNOWLEDGEMENTS

Sincere thanks to Mayor Shirley Sessions, Shawn Gillen, Pete Gulbronson, George Shaw and Brent Levy from the City of Tybee Island, as well as to the entire CIty Council. Without your support and assistance this endeavor would not have been possible. Additional gratitude to Emily Dolatowski, Emily Kenworthy, Trey Cooper, Sophia Milazzo, Yasmine Callan, Grace Dusenbury, Charlotte James, Mary Lee McQuigg, Emilie Dolatowski, William Spivey, Lauren Sullivan, Bailey Williams, the Tybee Island Engineering Capstone Team and students in Alison Smith's Spring and Fall 2021 Landscape Architecture Design Studio classes. This project was funded by the National Fish and Wildlife Foundation and Georgia Department of Community Affairs.

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government or the National Fish and Wildlife Foundation and its funding sources. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government, or the NationalFish and Wildlife Foundation or its funding sources.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	7
SECTION I: INTRODUCTION	21
SECTION II: FLOOD HAZARDS ON TYBEE ISLAND	23
SECTION III: PLANNING PROCESS	26
SECTION IV: COASTAL EMPIRE ADAPTION SURVEY	36
SECTION V: NATURAL INFRASTRUCTURE DESIGNS	51
SECTION VI: NATURAL INFRASTRUCTURE PERFORMANCE	73
SECTION VII: CONCLUSION	81
REFERENCES	84
APPENDIX A: PROJECT METRICS	86
APPENDIX B: PUBLICATIONS AND MEDIA	88
APPENDIX C: DESIGN CHARETTE RENDERINGS	92
APPENDIX D: COASTAL EMPIRE ADAPTATION SURVEY	94
APPENDIX E: NATURAL INFRASTRUCTURE ASSESSMENT	105
APPENDIX F: MULTI CRITERIA DECISION ANALYSIS (MCDA) DETAILS	114

ltem #1.

EXECUTIVE SUMMARY

The Tybee Island Natural Infrastructure Master Plan provides recommendations on integrated nature-based features to help the island better absorb and recover from more frequent storms and flooding caused by rising, warming seas. Developed in collaboration with the University of Georgia and numerous local, state and federal partners, the plan assesses flood risks and adaptation solutions, with particular focus on areas near the tidal marsh that borders Tybee Island's marsh shoreline. This project was made possible with funding from the National Fish and Wildlife Foundation (NFWF) and Georgia Department of Community Affairs.

The Tybee Island Natural Infrastructure Master Plan includes an array of prioritized design options, available for implementation independently and in combination, for consideration by Tybee Island City Council. The preliminary designs meet the 50–60 percent design criteria required by the conditions of the NFWF grant. The plan also considers the risks of doing nothing and the subsequent impact on natural habitats, properties and vital infrastructure.

What is Natural Infrastructure?

As community growth and a changing climate strain transportation, stormwater and other infrastructure systems, local governments look to more sustainable management and engineering practices to ensure health and wellbeing. Natural infrastructure uses landscapes, waterways and natural processes to reduce flooding, improve water quality, stabilize shorelines, restore wetlands, protect property and meet other needs. They are actively managed to provide multiple environmental, economic, and social benefits. Gray infrastructure refers to traditional urban systems that are often constructed with concrete or steel (e.g. pipes, storm drains, seawalls, etc.). However, unlike these features, natural infrastructure can grow and adapt to changing conditions. Hybrid infrastructure is when nature-based solutions are integrated with gray infrastructure to strengthen the resilience of communities and ecosystems.

Flood Hazards on Tybee Island

Since 1935, a National Oceanic and Atmospheric Administration (NOAA) tide gauge has been in place just over two miles from Tybee Island at the Fort Pulaski National Monument. Measuring water levels every six minutes, the long-term data from the gauge shows a steady increase in water heights and flooding around Tybee Island. From 2016 to 2021, the rate of flooding events increased by 30 percent, largely due to sea-level rise. In 2022, a federal interagency task force released a technical report that statistically extrapolated these observations, estimating that sea levels around Tybee Island may rise an additional 1.39 feet by 2050. This could very likely result in at least 50 days of flooding per year by 2040.

Planning Process

The Tybee Island Natural Infrastructure Master Plan was developed through a community-centered

design process that blended natural and traditional infrastructure and adaptation measures to:

- · Provide increased resilience to flooding on Tybee Island
- Preserve and restore fish and wildlife habitat
- · Improve connectivity throughout the island
- Align with community values
- · Consider cost and time to implement
- · Recognize regulatory requirements and constraints

Strategies were rigorously assessed to determine if they were well suited to the unique culture and interests of those who live, work, and recreate on Tybee Island. The project's education and outreach efforts reached over **525 people through virtual and in-person events** during 2021–2022. More than **120 volunteers** were actively engaged in the project, including residents, professionals representing interested governmental entities, non-profit agencies, and private industry.

The Tybee Island Natural Infrastructure Master Plan was created in conjunction with the community's Stormwater Master Plan, which was completed by the engineering firm Thomas & Hutton in late 2022. Using coordinating models, scenarios, and software, the two teams determined that the frequency of flood events on Tybee Island has increased steadily during this century. This is mainly due to climate change-induced sea-level rise and aging stormwater infrastructure.

The teams worked closely with a **technical advisory group** composed of local, state and federal partners and a **resident advisory group** made up of home and business owners and local leaders. Through meetings, site visits, workshops, and design charrette exercises, these groups worked with the engineers and scientists to explore how nature-based features like rain gardens, bioswales, pocket parks and permeable pavement in the interior of the island could increase stormwater storage and drainage capacity, while also treating rainfall-runoff, expanding the biodiversity of green spaces and offering leisure opportunities for residents and visitors.

The boards additionally examined how coastal elements, such as berms and living shorelines, could help prevent rising tides from eroding or overtopping Tybee Island's marsh front, while also enhancing marsh connectivity and migration. The project team met frequently with CIty staff and hosted three workshops for Tybee Island City Council to keep them abreast of progress and gain feedback on emerging ideas.

Approximately, **83 undergraduate and graduate students** worked on this project through UGA's College of Engineering, College of Environment and Design, and Marine Extension and Georgia Sea Grant. The students and researchers utilized insights gained through extensive stakeholder engagement to (1.) prepare conceptual project designs, (2.) assess potential project sites, (3.) evaluate risk reduction benefits, and (4.) begin preliminary engagement with permitting agencies.



Figure 1. Project members Alan Robertson and Alfie Vick inspect drainage near critical infrastructure.

The team then modeled a subset of these preliminary design alternatives under different weather and climate scenarios to determine their performance. Baseline data collected from water level sensors, marsh cores, rain gauges, and eight groundwater wells installed specifically for this project helped to inform the preliminary designs by providing information on hydrodynamic, infiltration and marsh accretion processes.

Public Perceptions and Observations

To further understand public perceptions and preferences, the University of Georgia project team launched the **Tybee Island Geosurvey**, which allowed residents to identify locations on the island that have issues with flooding, erosion, marsh die off and marine debris. In addition to crowdsourcing these hotspots, residents submitted photos and videos of flooding to use in education, outreach and planning.

The team also administered the **Coastal Empire Adaptation Survey**, which sampled residents in ZIP codes along the Savannah River and Atlantic Ocean in Chatham County (zip codes 31328, 31410, 31404, 31411, 31419). Of the 176 completed survey responses, 41 percent were located in the Tybee Island zip code (31328).

The majority of respondents expect rising sea levels in the future (76 percent) and a worsening of flooding (79 percent), erosion (79 percent), and coastal storms (68 percent). The majority also agreed that coastal infrastructure will need to be fortified against climate change (84 percent) and that some parts of the coast will need to embrace a retreat adaptation strategy (68 percent).

However, there was considerable uncertainty about individual flood risk. Almost 12 percent of

9

respondents were not sure if they live in a flood zone. For those that recognized they are in a flood zone, the majority were not sure which zone they are in.

The survey instrument included a stated preference "choice experiment" that was designed to assess preferences for gray, natural, and hybrid infrastructure designs for shoreline protection (relative to a do-nothing status quo option). Based on existing scientific literature, each of the designs were ascribed different values as to how well they would limit storm and high tide flooding and provide wildlife habitat. The natural and hybrid infrastructure options were chosen as the desired options 45 percent and 33 percent of the time, respectively. Traditional gray infrastructure was chosen only 18 percent of the time.

The survey also evaluated how much households would be willing to pay to reduce the risk of severe flooding in low lying areas. Table 1 shows the high preference respondents showed for supporting projects that benefit wildlife habitat.

SERVICE	WILLINGNESS TO PAY (PER YEAR FOR 10 YEARS)	95% CONFIDENCE INTERVAL
Reduce risk of severe flooding over 30 years by 1%	\$10.21	\$3.85 - \$16.57
Reduce annual nuisance flooding by 1 day	\$3.17	-\$0.33 - \$6.68
Improve wildlife habitat from poor to good	\$658	\$271 — \$1050
Improve wildlife habitat from poor to best	\$814	\$375 - \$1250

Table 1. Annual household marginal willingness to pay for infrastructure services

Recommendations

The Coastal Empire Adaptation Survey informed the development of a **multi-criteria decision approach (MCDA)**, where different combinations of natural infrastructure were assessed using a weighted system that aligned with public values. These scenarios included doing nothing, relying solely on the proposed gray infrastructure from the Stormwater Master Plan, and enhancing the proposed gray infrastructure with different arrangements of natural infrastructure. The performance of each alternative was then tested across various rainfall depths, tides, and a future projection for sea-level rise. Based on the advisory board input, public survey results, observations, data collection, modeling, and multi-criterion decision analysis, the most impactful and desirable portfolio of natural infrastructure interventions is listed in **Table 2**.

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-1	Venetian Drive (Venetian Dr. from Aj's to 12th St.)	 Create a horizontal levee or berm with a naturalized shoreline along Venetian Dr. Raise road elevation by 1 ft. Construct living shoreline around the levee toe. Reroute 13th St. stormwater outfall along 6th St. to connect to 14th St. outfall Implement one-way traffic. Create a bike / pedestrian path. Provide dock access from the updated shoreline. 	 Provide pathway for marsh migration Enhance marsh habitat Improve water quality Control erosion
NI-2	6th Street (6th St. from Lewis Ave. to Miller Ave.)	 Replace and enlarge culvert under the bridge that lies between Lewis and Miller Ave. Construct a living shoreline. 	 Enhance marsh connectivity Improve water quality Control erosion Improve wildlife crossing
NI-3	Lewis Avenue	 Add a submerged culvert to connect marshes on both sides of the road. Extend Sally Pearce Trail. 	Enhance marsh connectivity
NI-4	US HWY 80 / Butler Avenue (US HWY 80 from Lazaretto Creek to Tybrisa St.)	 As GDOT makes roadway improvements, implement curb cut rain gardens to reduce runoff along sidewalks and right-of- ways. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution

Table 2. Project recommendations from the Tybee Island Natural Infrastructure Master Plan

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-5	14th Street (14th St. from Butler to Chatham Avenues)	 Demarcate right-of-way with stakes/flags. Utilize permeable pavers on the road. Use the right-of-way to create a swale on the shoulder or place a median in the middle of the road. Consider implementing a one-way traffic pattern. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-6	Stormwater Inlet Rain Gardens (13th, 14th and 15th Streets from Butler Avenue to Chatham and Venetian Avenues)	 Relocate storm grates out of the roadway. Create rain gardens at 19 stormwater inlets. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-7	Rainwater Storage (Parcels located along 13th, 14th and 15th Streets between Butler Avenue and Chatham or Venetian Avenues)	 Encourage residents and businesses to start rainwater harvesting from building roofs. Implement rain storage on all public buildings, such as Town Hall, Fire House, etc. Implement UGA's Coastal Georgia Rain Garden program. Reuse harvested rain to maintain green infrastructure. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Provide habitat for pollinators and increase biodiversity
NI-8	South Beach Pocket Park (Unused lot at the intersection of 15th Street and Butler Avenue)	 Engage Hotel Tybee in planning the use of the unused go-kart track. Replace current use with green space-replacing soil, creating a grassy berm, and installing permeable pavers. Integrate natural infrastructure into a Green Space Network. Put the parcel under a conservation easement. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Increase green space near the tourism hub of South Beach

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-9	Permeable Pavers (Island-wide)	 Install permeable pavers on public domains (parking lots and on- street parking), with a special emphasis on the South Beach area. Conduct outreach to commercial properties to encourage use of permeable pavers. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-10	Urban Tree Canopy (Island-wide)	 Identify vacant lots. Integrate urban tree canopy into natural infrastructure model. Conduct community outreach on the benefits of native urban trees. 	 Improves shade, air and soil filtration, and wildlife habitat Serves as a shelter and resting place for birds within the Atlantic Flyway
NI-11	Elevating Homes (Island-wide)	 As homeowners continue to elevate homes, educate homeowners on green infrastructure best practices, like permeable pavers, rain gardens, and native plants. Apply for additional FEMA Hazard Mitigation Funding to continue to offset out-of-pocket expenses for homeowners wanting to elevate their home. Consider adopting a plant ordinance where a certain percent of the lot has to be kept green. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Provide habitat for pollinators and increase biodiversity
NI-12	Right-of-Ways (Island-wide)	 Map right-of-ways and identify green infrastructure opportunities. Demarcate right-of-ways in high priority areas. Utilize right-of-ways to create a Green Space Network. 	 Provide habitat for pollinators and increase biodiversity Increase connectivity of green spaces

NI-1: VENETIAN DRIVE

Marshes provide critical services to both humans and wildlife by improving water quality, protecting against storm surges, reducing erosion, and supplying critical habitat. NOAA estimates that 15 feet of marsh can reduce incoming wave energy by as much as 50 percent (NOAA Office of Coastal Management, 2023). Marshes are facing threats to their long-term sustainability, most importantly

from rapid sea-level rise, but also from contaminant-laden runoff from land. As sea levels rise, the marsh will naturally retreat onto the upland to remain in the intertidal zone. However, if it reaches a vertical structure, like a revetment or bulkhead, it cannot retreat landward any further, and a process called coastal squeeze occurs, wherein the marsh eventually drowns and is converted to open water. Nature-based solutions at the upland-marsh interface can stabilize the shoreline while still providing a pathway for marsh migration. Berms and levees are raised embankments that protect against flooding and slow or divert stormwater runoff from entering the marsh. Living shorelines are a method of stabilizing embankments with natural materials such as sand, rock, and plants. They reduce erosion, improve water quality and provide valuable habitat for birds, aquatic life, and other wildlife.

NI-2: 6TH STREET

The culvert under 6th St. between Lewis and Miller Avenues is currently too small for the volume of water attempting to travel through it, resulting in the pooling of saltwater on either side of the road. Additionally, the existing culvert does not allow safe passage for animals attempting to traverse the creek. Enlarging the culvert would equilibrate the water flux to the marsh pond north of 6th St. while reducing inundation in the surrounding areas. Shoreline analysis conducted on Tybee Island indicates that 78 percent of the land that borders open water is currently armored. This means that a manmade structure, such as a seawall, revetment, or bulkhead, has been erected where the land meets the open water to prevent erosion. However, only 8 percent of the land that borders the marsh on Tybee Island is armored. This presents a key opportunity to implement natural infrastructure and strengthen the resilience of the marsh and corresponding habitat.

NI-3: LEWIS AVENUE

Lewis Avenue is a residential street built upon manmade land between two marshes. Because of its location, residents on this street experience some of the worst flooding on the island. The plan proposes installing a cross-culvert that will run under Lewis Avenue to connect the two sections of the marsh the street is situated between. The placement of the culvert is based on historical images that show where the marsh was originally connected, and the implementation of this culvert will restore part of the marsh back to its original condition. To integrate Lewis Avenue into the Green Space Network designs, the plan also includes designs to extend the Sally Pearce Trail. This would improve connectivity and public access to the marsh to support ecotourism and recreational opportunities.

NI-4: US HWY 80 / BUTLER AVENUE

Several roads present critical opportunities for natural infrastructure, either due to being central conduits for stormwater runoff or having low elevation. US HWY 80/Butler is one of the high-impact areas where nature-based solutions would provide the most benefit. The Georgia Department of Transportation (GDOT) is currently replacing the Bull River and Lazaretto Creek Bridges on the stretch of US80 that connects Tybee Island to the mainland. In the coming years, GDOT will begin working on the portion of US HWY 80 on the island, starting at the base of Lazaretto Bridge, curving to become

Butler Ave., and stretching along the beachfront shoreline. As improvements are made to this main thoroughfare, there are opportunities to augment traditional stormwater features with curb-cut rain gardens.

NI-5: 14TH STREET

The lowest elevation on the island occurs along 14th St., which makes it a natural recipient and conveyor of water. However, the street is already at peak capacity for stormwater infrastructure with large pipes running along both sides of the road. As such, the Stormwater Master Plan calls for adding another large pipe along 15th St. to transport drainage from the 14th St. beachfront parking areas to the 14th St. outfall. Natural infrastructure can increase the capacity of 14th St. to absorb rainfall and runoff that naturally flows into that depression. Adding a bioswale along the length of the road in the right-of-way would provide a channel for the water to flow through and be stored. It should be planted with native vegetation that provides habitat and infiltrates rainfall. The design calls for converting the two-way, asphalt road into a one-way road, replacing the asphalt with permeable pavers, and adding a bike lane.

NI-6: STORMWATER INLET RAIN GARDENS

The area of 13th, 14th, and 15th Streets between Butler, Chatham, and Venetian Avenues has been termed 'The Bowl' by Tybee Island residents because it is a localized low spot where frequent ponding occurs on the streets and around homes. Drainage in the 'The Bowl' needs to be improved, and so this location is a critical focus of the Natural Infrastructure Master Plan. Currently, 19 storm grades are located within the intersection of these streets. Most of these grates are located out of the roadway and placed at the corners of intersections so rain gardens can be planted in the right-of-way around these inlets. Inlets within the roadway should be considered to be moved toward the grass right-of-way within the intersections. Rain gardens function similarly to bioswales, as they are shallow, excavated areas of land replaced with mixed engineered soil and native vegetation. This aesthetically pleasing and sustainable system uses the natural processes of infiltration and evapotranspiration to control stormwater. These natural infrastructure features will improve connectivity and provide a network of habitats for wildlife, such as pollinators.

NI-7: RAINWATER STORAGE

Another aspect of the design for 'The Bowl' is a voluntary, residential rainfall capture program. In this initiative, residents will be supported by professionals in implementing either rain harvesting or a rain garden on their property. Planting native vegetation, such as sea oxeye daisy, saltmeadow cordgrass, and saw palmetto, can help capture initial rainfall and filter out suspended solids in the runoff. Both the rain harvesting and rain gardens will reduce the volume of stormwater and pollutant loading to the surrounding marsh systems while also delaying flood peaks via retaining and rerouting processes. The plan targets houses in "The Bowl" due to its high impact on this region, but these features can be implemented island-wide if desired. Based on the MCDA, the most impactful combination of rainwater storage entails 50 percent implementation on residential properties in the Bowl area (201 parcels) and 100 percent implementation on public buildings.

NI-8: SOUTH BEACH POCKET PARK

There is a lot currently owned by Hotel Tybee located at the intersection of 15th Street and Butler Avenue that is partially grassed with an unused go-kart track. In recent years, it has been used for parking and for hosting community events. This lot provides an opportunity for intentionally enhancing green space through the creation of a pocket park. The proposed park includes removing the go-kart track and planting natural vegetation and trees to provide habitat and improve the urban canopy cover. With agreement from the parcel owners, the city could also get an easement to maintain the lot as green space and prevent future development. The lot is adjacent to the new stormwater pipe that will transect the island along 15th Street. By replacing soil, creating a grassy berm, and installing permeable pavers, the lot will improve the performance of the gray infrastructure by reducing the volume of water. Having permeable pavers on a portion of the lot will allow the owners to use it for parking still when desired.

NI-9: PERMEABLE PAVERS

Leveraging the Stormwater Master Plan, natural infrastructure should be incorporated into Phase 1 of the 14th Street Parking Area/15th Street Outfall capital improvement project. This portion of the project involves constructing an underground stormwater detention system and repaving the beach parking area between 14th and 15th Streets. Stormwater runoff from the parking areas will be pumped to the new storm main that will be installed on 15th Street and discharged at the 14th Street outfall into the marsh. Rather than repaving these parking lots with impermeable asphalt, permeable pavers should be utilized to reduce flooding near the beach and relieve pressure on the stormwater system. This intervention is also suitable for on-street parking lanes and commercial parking lots in the area, as well as homeowner driveways, which have been implemented before on the island.

NI-10: URBAN CANOPY COVER

Urban canopy cover is a natural infrastructure feature that involves planting trees in order to intercept rainfall, reduce rainfall runoff, and combat flooding during rain events. Urban canopy cover improves infiltration and hosts other benefits such as shade, air and soil filtration, wildlife habitat, and aesthetic appeal. For example, these trees can serve as a shelter and resting place for birds within the Atlantic Flyway, which is one of four major flyways for migratory birds in the Americas. Data from the National Audubon Society has tracked over 255 unique bird species that have visited Tybee Island, of which some are classified as Near Threatened based on the International Union for Conservation of Nature (IUCN) Red List Category. These trees can be implemented on vacant lots and publicly owned property across the island, such as right-of-ways and public parks.

NI-11: ELEVATING HOMES

Tybee Island has been awarded two Hazard Mitigation Grants through the Federal Emergency Management Agency (FEMA) to support home elevations. Both grants were related to the damage from Hurricane Irma in 2017. The grant pays for 85 percent of the cost, meaning that the homeowners are responsible for 15 percent plus any overruns. To be lifted out of the flood hazard area, homes on Tybee Island must be elevated at least one foot above base flood elevation (BFE). For those elevating their homes and those considering this investment, there is an opportunity to provide education on natural infrastructure best practices, like permeable pavers, native plants, and living shorelines. When homes are raised, landscaping often needs to be redone, offering the chance to change designs, materials, and plant species. Best practices could be encouraged through an incentive program or a plant ordinance where a certain percentage of the lot has to be kept green.

NI-12: RIGHT-OF-WAYS

Much of Tybee Island is developed, and most of the area bordering the marsh is privately owned. This limits the City's ability to implement natural infrastructures. One innovative approach that emerged from the planning process was to use public right-of-way for natural infrastructure. Street right-of-ways are land adjacent to the road that is typically used for water/sewer lines, drainage, and transportation infrastructure. Many communities are reclaiming that valuable space to implement natural infrastructure. On Tybee Island, it is first necessary to determine where the right-of-way is located. Demarcating it with flags or other markers in high priority areas for natural infrastructure could help educate residents on ownership and potential uses for this land.

Conclusion

The Tybee Island Natural Infrastructure Master Plan was designed to be integrated with the community's new Comprehensive Stormwater Master Plan. While upgrading gray stormwater infrastructure will be critical for reducing flood impacts on the island, the models used by the University of Georgia and Thomas & Hutton show that enlarging and densifying conduits alone will not be sufficient to manage the volume of water poised to inundate the island in the decades to come. As heavy rain events are increasingly compounded and exacerbated by higher tides, integrated hybrid infrastructure will be needed. The hybrid natural infrastructure features recommended in this plan can capture and retain up to 21 percent (115,556 gallons) of the total freshwater rainfall-runoff volume that drains into the marsh. This can prolong the service life of these new gray infrastructure investments by reducing flooding stress while conserving wildlife habitats and wetlands.

Next Steps: Final Design and Permitting

This project produced preliminary design and feasibility assessments so that Tybee Island City Council can decide which activities to pursue in the short, medium and long term. Should Tybee Island City Council approve these initial concepts and authorize pursuit of more detailed site designs, the next steps for the project team will be to conduct education and outreach activities as described above and apply for the next phase of NFWF National Coastal Resilience Funding, which are for 3 year projects with a maximum budget of \$1 million. Non-federal match is encouraged but not required to demonstrate broad support for the project. Larger match ratios and matching fund contributions from a diversity of partners will make the application more competitive according to past instructions.

Next Steps: Public Engagement and Outreach

There is strong public support for natural infrastructure on Tybee Island and in surrounding areas, particularly when it promotes healthy wildlife habitat. However, it will be critical to educate residents, particularly those adjacent to natural infrastructure features, about their benefits to increase understanding and collective will. Specific outreach recommendations are to:

- Demarcate the right-of-way on 14th and 15th St. to educate residents about the right-of-way and provide visual guidance for discussing natural infrastructure along these corridors.
- Collaborate with partners to host workshops for residents on rain storage, such as a rain barrel workshop in partnership with the Georgia Department of Natural Resources Coastal Resources Division or a rain garden workshop in partnership with UGA Marine Extension and Georgia Sea Grant.
- Provide training on the design and function of swales so they are properly maintained. Currently, there are several swales on the island where sediment has built up preventing water from accessing the swale (e.g. 7th St. and Miller Ave.).
- Seek funding to incentivize the adoption of rain storage practices on residential properties, such as implementing the Coastal Rain Garden Program. These efforts should prioritize 13th, 14th, and 15th Streets between Butler Avenue and Venetian Drive/Chatham Avenue.
- Engage residents who live on Venetian Drive to share options for protecting their properties and preserving the marsh.
- Conduct community outreach on the benefits of native urban trees.

Next Steps: Research

Next steps needed for research and data collection are to:

- Adapt the proposed gray infrastructure in the Comprehensive Stormwater Master Plan to align better with recommended natural infrastructure.
- Integrate urban tree canopy into the natural infrastructure model.
- Assess the functionality of adding control features on proposed 6th St. and Lewis Ave. culverts, in order to ascertain potential impacts on the marsh and net ecological lift.
- Analyze optimal locations for buyouts of repetitive loss properties (FEMA Hazard Mitigation Grant) to enhance natural infrastructure.

Next Steps: Funding

In order to advance the preliminary designs in this plan and implement recommendations, additional funding will be needed. Listed are suggestions for securing this support:

- Apply for NFWF Phase 3 grant to further work on design and permitting.
- Investigate creative options for securing matching funds for project proposals, such as the Department of Defense's REPI Program.
- Leverage this plan to access state, federal, and private sector funding. Having concepts packaged in a plan and approved by City Council will strengthen proposals, helping to attract funders and financial opportunities.
- Continue dialogue with permitting/regulatory agencies on proposed activities.
- Integrate natural infrastructure into current and future planning, transportation, and public works projects. This includes both Phase 1 and 2 of the stormwater capital improvement project involving 14th Street Parking Area/15th Street Outfall and improvements by the Georgia Department of Transportation to US Hwy 80 / Butler Avenue.



Figure 2. Locations of project recommendations in the Tybee Island Natural Infrastructure Master Plan.

19



Figure 1.1. Signage on Tybee Island after Hurricane Irma.

SECTION I: INTRODUCTION

Tybee Island is a barrier island located off the coast of Savannah, Georgia. Spanning less than three square miles, the island has a year-round population of roughly 3,000. During the summer, the island welcomes upwards of one million visitors.

The salt marshes that stretch between Tybee Island and the mainland are one of the most biologically productive natural systems on Earth. They also help reduce wave erosion along the coast by acting as buffers to decrease the effects of storms. The waters and wetlands surrounding Tybee Island serve as habitats and nurseries for many fish and shellfish, as well as diverse bird, reptile, and mammal species.

Sea Level Rise Adaptation Plan

In 2016, Tybee Island became the first community in Georgia to adopt a municipal sea-level rise adaptation plan, assessing exposure to sea-level rise and flooding over the next 50 years The plan examined the vulnerability of existing infrastructure and developed recommendations for immediate and long-term adaptation actions.

As a result of this planning, and in the wake of Hurricanes Matthew (2016) and Irma (2017), Tybee Island stood ready to access the subsequent funding made available by these back-to-back 100-year storm events. Having established a shared understanding of flood vulnerabilities and desired adaptation actions, the City

The **Tybee Island Sea Level Rise** Adaptation Plan created a nationally recognized framework for sea level rise planning and public engagement on coastal hazards.

utilized this state and federal funding to execute almost every recommendation in its sea-level rise plan. This included renourishing the island's beach, restoring its dune systems, raising beach access pathways, retrofitting its stormwater system, elevating homes, and lifting critical infrastructure.

The City also quickly sought out partnerships to address emerging challenges, such as the inundation of residential neighborhoods near the marsh. While Tybee Island's sea-level rise plan broke new ground for coastal Georgia, it focused primarily on reducing risks to public assets and infrastructure. It intentionally stopped short of assessing how flooding from sea-level rise might affect private properties, local businesses, and ecosystems on the island. Recent hurricanes, including Hurricanes Mathew in 2016, Irma in 2017, and Michael and Florence in 2018, and high tide events have shown that these vulnerabilities greatly impact the community's overall resilience.

Securing support from the National Fish and Wildlife Foundation (NFWF) and the Georgia Department of Community Affairs, the City of Tybee Island collaborated with an multidisciplinary research team at the University of Georgia to further fill these critical gaps in current planning. The project utilized an innovative approach that reconsidered the totality of the Tybee Island's built, natural,, and social systems. The project team drew on methodologies and tools from engineering, ecology, landscape architecture, planning, geology, economics, and geography. Continuing to leverage the assistance and engagement of the numerous partners already in place, a participatory framework was used to co-produce, assess, and prioritize strategies that increase the island's resilience to storm and flood events.

The resulting **Tybee Island Natural Infrastructure Master Plan** outlines this proposed integrated and community-centered system, which utilizes natural elements to provide increased resilience to flooding while protecting natural habitat and enhancing the quality of life.

What is Natural Infrastructure?

In coastal regions throughout the country, community growth and climate change are straining transportation, stormwater, and other infrastructure systems. In response, local governments are looking to more sustainable management and engineering practices to ensure health and wellbeing. **Natural infrastructure** uses landscapes, waterways, and natural processes to reduce flooding, improve water quality, stabilize shorelines, restore wetlands, protect property, and meet other needs. They are actively managed to provide multiple environmental, economic, and social benefits. **Gray infrastructure** refers to traditional urban systems that are often constructed with concrete or steel (e.g. pipes, storm drains, seawalls, etc.). However, unlike these features, natural infrastructure can grow and adapt to changing conditions. Natural infrastructure offers numerous co-benefits, such as improving air and water quality, beautifying streets, and providing habitat for birds, fish, and other wildlife. While traditional stormwater pipes or concrete seawalls provide functional value under certain conditions, natural infrastructure supplies services continuously. **Hybrid infrastructure** is when nature-based solutions are integrated with gray infrastructure to strengthen the resilience of communities and ecosystems.

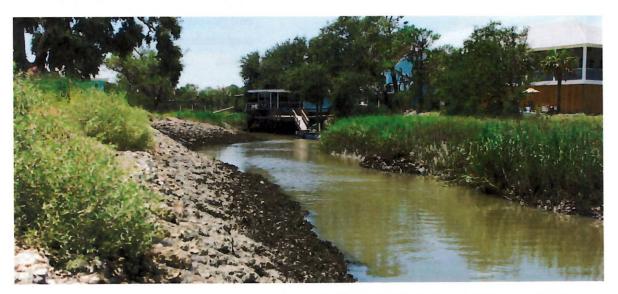


Figure 1.2. An example of natural infrastructure is the living shoreline located at the UGA Burton 4-H Center on Tybee Island.

SECTION II: FLOOD HAZARDS ON TYBEE ISLAND

Coastal communities around the world have seen an increase in flood events over recent decades. Data from the long-term National Oceanic and Atmospheric Administration (NOAA) at the Fort Pulaski National Monument shows a steady increase in these annual flood events around Tybee Island (**Figure 2.1**) for both minor flood thresholds. The year with the most flood events under the previous flood threshold (9.2 ft above mean lower-low water) was 2019, with 42 events, while for the current flood threshold (9.5 ft above mean lower-low water) is 2020, with 15 events. Similar findings have been reported by Evan et al. (2016). However, from 2016 to 2021, the rate that these events occurred increased by approximately 30 percent for both flood thresholds.

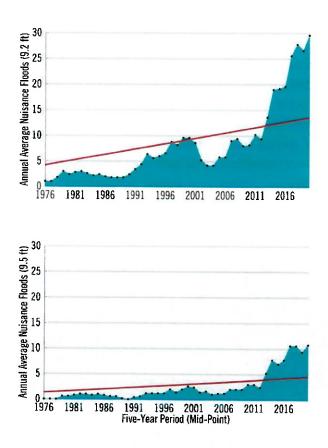


Figure 2.1. Nuisance flooding on Tybee Island from 1935-2022. The values represent the annualized average of tide events that exceeded 9.2 feet (before 5/1/2020; top panel) or 9.5 feet (after 5/1/2020; bottom panel) above mean lower-low water over a rolling five-year period at NOAA's Fort Pulaski tide gauge. Listed years represent the mid-point of a given five-year period.

Sea Level Rise

Rising sea levels around Tybee Island are not only increasing the frequency of flooding, but also the potential for damaging storm surge and compound flooding from rain. In the near term, the main contributing factors for this relative sea-level rise are processes like subsidence (vertical land motion) and changes in the ocean's circulation, temperature, and salinity. However, over time, processes like melting land ice, particularly in Antarctica and Greenland, will increasingly affect the rate and magnitude of sea-level rise near Tybee Island.

The Fort Pulaski tide gauge has measured over 12 inches of sea-level rise since 1935. This rate is expected to accelerate dramatically along the South Atlantic coast in the future. In 2022, the federal government released an interagency technical report on sea-level rise scenarios for the United States written by scientists from NOAA, the National Aeronautics and Space Administration (NASA), Environmental Protection Agency (EPA), U.S. Geological Survey (USDS), U.S. Army Corps of Engineers, and academic partners. The report estimated an additional 1.39 feet of sea-level rise for Tybee Island by 2050, based on statistically extrapolating observations from the Fort Pulaski tide gauge (*Sweet et al*, 2022). There is a 98 percent chance that this would result in at least 50 flooding days per year by 2040 (*Thompson*, 2023). The model-based intermediate scenario indicates 3.91 feet of sea-level rise for the Georgia coast by the end of the century.

Higher water levels can compromise the safety and functioning of instructure like stormwater and wastewater systems, roads, and bridges. For example, Tybee Island's current stormwater system becomes overwhelmed during small storm events (e.g., 4.5 to 6 inches of rain in 24 hours). When this coincides with high tides events, performance can be even more compromised with saltwater filling stormwater pipes and limiting their storage capacity. During a November 2021 perigean spring tide, street flooding primarily occurred by saltwater traveling backwards through the stormwater system to the island's interior and overflowing onto streets. This event consisted of a 10.44 ft. tide above mean lower-low water (MLLW) at the Fort Pulaski tide gauge and two inches of rainfall. Imagine now if a storm generating 7.5 inches of rain occurs simultaneously with a high tide event like a spring tides (occuring once every 14 days) and perigean spring tides (occurring 6 to 8 times per year). The water infrastructure would fail even more dramatically. Severe flooding could be expected along multiple streets (e.g., 14th St., Chatham Ave., 5th St., Miller Ave., Alley St.) with maximum depths greater than 1 feet (Figure 2.2 A).

Projected sea-level rise will exacerbate flooding conditions even further. For instance, an intermediate sea-level rise scenario for 2050 could increase the flood depths during a spring tide event compared to current climate conditions (Figure 2.2). Flooding differences of more than 1 ft .of depth can be in many locations, meaning that more frequent events will have a bigger impact under climate change projections.

Item #1.



Figure 2.2. Flood hazard conditions at Tybee Island under current conditions (A) and future projections (B). The maximum flood depth was obtained from a spring tide plus a 7.5 in rainfall event to assess the current flood conditions, while the future conditions are based on the same environmental drivers with the additions of the intermediate sea-level rise scenario for 2050.

SECTION III: PLANNING PROCESS

The Tybee Island Natural Infrastructure Master Plan was co-produced by researchers, community members, and a diverse group of coastal partners by integrating local and technical knowledge through a collaborative approach to protect the people, environments, and livelihoods of Tybee Island. The experiences and perspectives of the Tybee Island community were critical in identifying a vision for Tybee Island's future.

Building upon Tybee Island's nationally recognized planning framework, this project continued to advance a inclusive model for community engagement by (1) soliciting input from local stakeholders, (2) educating policymakers and residents on the risks of coastal hazards and benefits of building community resilience, and (3) building support for climate adaptation alternatives. This included sustained iterative discussions about trade-offs and uncertainties of options being considered, balancing cost and time and environmental and social impacts. The project's education and outreach efforts reached over 525 people through virtual and in-person events during 2021-2022. More than 120 volunteers were actively engaged in the project, including residents, professionals representing interested governmental entities, non-profit agencies, and private industry.

PROJECT GOAL

To design an integrated, community-centered system that:

- Increases resilience to flooding on Tybee Island
- Protects and improves fish and wildlife habitat
- Acknowledges community values
- Considers cost and time to implement
- Recognizes regulatory requirements and constraints

PROJECT VISION

To utilize green, gray, and blue infrastructure and adaptation measures to provide increased resilience to flooding, preserve natural habitat and improve connectivity throughout the island.

Advisory Groups

The project was advised by professionals and residents who provided both technical expertise and local knowledge, informing the project's methods, analyses, and findings.



Figure 3.1.. Technical Advisory group members Michael Blakely (Chatham County) and Kevin Smith (Thomas & Hutton) discuss student renderings based on the design charrette.

Technical Advisory Group

Federal: U.S. Army Corps of Engineers, NFWF, NOAA, Rep. Buddy Carter's Savannah Office State: Georgia Department of Natural Resources Coastal Resources Division, Georgia Emergency Management Agency

Local: Chatham County-Savannah Metropolitan Planning Commission, Chatham Emergency Management Agency, Chatham County, City of Savannah, City of Tybee Island NGOs: Georgia Conservancy, One Hundred Miles Private sector: Goodwyn, Mills and Cawood, Thomas & Hutton Academia: University of Georgia, Georgia Institute of Technology

Resident Advisory Group

Tybee Island residents Tybee Island business leaders (real estate, vacation rentals) Tybee Island Planning Commission Tybee Island Beach Task Force City of Tybee Island staff

Design Charette

In March 2021, a 2-part (5 hours total) virtual design charette was hosted to identify strategies for creating an integrated, community-centered system that increases resilience to flooding on Tybee Island, protects ecosystem health, and addresses the priorities of community members. A design charette is an intensive participatory planning process where participants collaborate through hands-on activities to achieve a shared vision for a project.

The design charette was attended by members of the technical and resident advisory groups. Beforehand, the project team held a one-hour introductory webinar to show participants how to use the mapping resources and collaborative design tool (Mural) that were to be utilized in the workshop. In the charette itself, participants prioritized project objectives, engaged in role playing activities and created integrated site designs that brought together perspectives of environmental health, quality of life, economic interests, and regional planning. The designs developed in the charette focused on different areas of the island and included policy recommendations, green, gray, and hybrid infrastructure strategies and land use modifications to better capture, hold, and absorb flood water (See Appendix C).

Please indicate the importance of these goals for the successful adoption and implementation of this plan.



Figure 3.2. Live poll administered during the design charette ranking project goals

Item #1.

DESIGN CHARETTE ROLES

- Environmental / Climate Advocate Prioritized nature (maximize nature and biodiversity)
- People of the Place Prioritized wellbeing of residents who are affected in this area
- Developer / Investor Maximized value of individual private and commercial properties
- Regional Planning / Regulator
 Prioritized regional interests

DESIGN CHARETTE PROCESS

REFINE

Focus groups refined combined concepts

- EVALUATE Assessment of refined concepts based on goals
- NEGOTIATE Discussion to determine priorities moving forward
- INTEGRATED SITE DESIGN
 Development of site designs by combining and integrating concepts.

Figure 3.3. Role-playing characters and process of the design charrette

Student Engagement

Undergraduate and graduate students were instrumental in developing the ideas and recommendations put forth in this report. Approximately, **83 undergraduate and graduate students** worked on this project through UGA's College of Engineering, College of Environment and Design, and Marine Extension and Georgia Sea Grant.

Over the course of the Spring and Fall 2021 semesters, 30 students enrolled in a UGA landscape design studio helped to organize and host a virtual design charrette and developed renderings for targeted spots within the study area. The integrative, crossdisciplinary effort also involved four undergraduate engineering students who spent the academic year developing hybrid green and gray infrastructure designs to help mitigate flooding, utilizing strategies such as a horizontal levee, elevated bike path, living shoreline, and thin layer placement in the marsh. This student work was integrated and built upon as the project team developed a suite of adaptation options for the City of Tybee Island to consider.

Interns with UGA Marine Extension and Georgia Sea Grant also assisted with the project, developing an ArcGIS StoryMap Collection and Resilient Tybee website. Students in a graduate course at Emory University on the health impacts of climate change assisted with the health summaries within these resources.



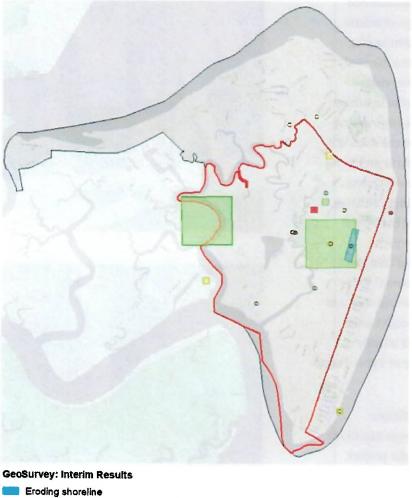


Figure 3.4. and 3.5 Project team members assess student renderings.

Surveying Public Perceptions and Observations

Tybee Island Geosurvey

The Tybee Island GeoSurvey was an online instrument developed specifically for this project using Geoforage.io geographic data collection software. Promoted through news media and City emails, Tybee Island stakeholders were invited to help identify locations that experience flooding, erosion, marsh die off, and marine debris. Residents also submitted photos and videos of flooding to use in education, outreach, and planning.





- Erosion that is causing the shoreline to move and may be threatening buildings or infrastructure
- Flooded during recent hurricanes
 - Flooding during high tides
- Marsh that is moving inland, encroaching upon yards or developed area
- Stormwater drainage issue
- Water encroaching beyond typical high tide line onto yards, roads or other assets

Figure 3.6. Map of results from the Tybee Island Geoforager.

Coastal Empire Adaptation Survey

The Coastal Empire Adaptation Survey was administered in early 2022 to assess the experiences, knowledge, risk perceptions, and adaptation preferences of residents who live near the Savannah River or Atlantic Ocean in Chatham County. Of the 176 completed survey responses, 41 percent were located in the Tybee Island zip code (31328 zip code). More information on the methodology and results can be found in Section IV.

Education and Outreach

This project launched in March 2020 at the start of the COVID-19 pandemic, which resulted in several initial outreach events being canceled and numerous delays in field work and site visits. The project team quickly shifted to virtual platforms to share information and collaborate, and postponed work that required in-person observations and site assessments. The virtual Design Charette, Tybee Island GeoSurvey and Coastal Empire Adaptation Survey were developed as alternatives to in-person engagement. As COVID rates declined, in-person events resumed.



Figure 3.7. Project member Clark Alexander conducts outreach to Tybee Island City Council

From 2021–2022, the following education and outreach efforts reached over 525 people:

- The project team hosted **3 Tybee Island City Council Workshops**, presenting on project progress and seeking feedback on emerging ideas.
- The project team conducted **4** in-person site visits, meeting with residents and walking properties to gain on-the-ground knowledge applicable to the place-based designs. On one of these visits, a UGA Landscape Architecture Studio class visited Tybee Island along with a group of UGA engineering graduate students and an Emory University public health graduate student. They met with City leaders and gained valuable first-hand knowledge of the island's vulnerability to flooding.

- The project team met 8 times with the technical and residents advisory groups.
- Tybee Island Mayor Shirley Sessions, City Manager Shawn Gillen, and Project Manager Alan Robertson visited Athens twice, presenting in a UGA Environmental Ethics Seminar, Marine Policy class, and Public Administration Seminar.
- Project members hosted and presented in a 2-hour webinar on "Building a Resilient Georgia: Funding Opportunities" in December 2021 and a full-day workshop on "Building a Resilient Georgia: Partnerships and Funding" in August 2022.
- Project members participated in a NASA Sea Level Summit and hosted a field trip to Tybee Island for 32 members of the NASA Sea Level Change Science Team.
- Project members hosted a field trip to Tybee Island for 25 practitioners from throughout the U.S. as part of the National Extension Tourism Conference.



Figure 3.8. Project member Alan Robertson presents to Tybee Island City Council.

To further expand the reach of the project, the following onlinere sources were developed to spread awareness of Tybee Island's vulnerabilities to flooding and adaptation efforts in response:

- Building Flood Resilience on Tybee Island is an Esri ArcGIS StoryMap Collection that provides an
 overview of the threats, impacts, and solutions to flooding, storm surge, and sea-level rise on
 Tybee Island. Detailing past, current, and future flood risks, the StoryMap collection describes how
 the island is building flood resilience within its beaches, marshes, infrastructure systems, private
 properties, and wildlife.
- The <u>Resilient Tybee</u> website shares information on how the island is increasing its resilience to climate change, extreme weather events, and other threats. It serves as a clearinghouse for resilience-related projects and news stories and provides a central location to recognize Tybee Island's partners and successes.

• The video on <u>"Restoring Dunes to Protect Coastal Communities</u>" is part of the Faces of Resiliency video series, highlighting how communities are increasing their resilience to sea-level rise, storm surge, and flooding.

A list of these publications and a sample of the extensive media coverage this project received is included in Appendix B.

As Tybee Island strives to adapt to and mitigate climate change, the project team felt that connecting with peer communities could help build capacity and knowledge of best practices. During this project, Tybee Island joined the **Southeastern Sustainability Directors Network**, a collaborative of local government sustainability professionals from cities and counties in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. It also joined the **Coastal Empire Resilience Network**, which brings together regional community partners, municipal staff, and policymakers to coordinate strategies for addressing the physical, economic, and social challenges that coastal Georgia faces due to a changing climate. Local Tybee Island leaders additionally met with representatives of the **Athens-Clarke County Unified Government** to discuss shared challenges and experiences related to climate impacts.

Data Collection

As part of this project eight groundwater wells were established around the community (See Figure 3.9) with the purpose of monitoring and understanding the subsurface hydrodynamics. By knowing in more detail the subsurface hydrodynamics, the natural infrastructure features that use the infiltration process as their main technique can be properly designed. These wells include pressure transducer gauges to continuously monitor groundwater levels and help determine the amount of underground storage for the rainfall-runoff through the infiltration-based natural infrastructure. Four rain gauges with a capacity to hold six inches of rainfall were distributed to augment the groundwater wells with hyper localized weather data.

To understand the current marsh conditions at Horsepen Creek, cores were collected through the west region of the island (See Figure 3.9). These cores facilitate the computation of current accumulation rates and determine the likelihood of the marsh to survive in future conditions. The project team also utilized water level monitoring data provided by the Georgia Institute of Technology from two ultrasonic sensors and one pressure transducer. These instruments measure the depth of the water along the tidal creeks and located on bridges or piers to facilitate the access to continuous wetted regions (See Figure 3.9).

Synthesizing Designs

The Tybee Island Natural Infrastructure Master Plan was created in conjunction with the community's Comprehensive Stormwater Master Plan, which was completed by the engineering firm Thomas & Hutton in late 2022. Using coordinating models, scenarios, and software, the two teams collaborated closely through frequent meetings and shared stakeholder outreach.

The project team utilized insights gained through extensive stakeholder engagement (Design Charette, advisory board meetings, City Council Workshops, Geosurvey, and Coastal Empire Adaptation Survey) to:

- 1. Prepare preliminary project designs
- 2. Assess potential project sites
- 3. Evaluate risk reduction benefits
- 4. Begin preliminary engagement with permitting agencies.

Stakeholder engagement also informed the development of a multi-criteria decision approach (MCDA), where different combinations of natural infrastructure were assessed using a weighted system that aligned with public values. The performance of each alternative was tested across various combinations of rainfall depths, tides, and a future projection for sea-level rise. These weather and climate scenarios were consistent with the stressors used by Thomas & Hutton in the Stormwater Master Plan. Baseline data collected from water level sensors, rain gauges, marsh cores, and groundwater wells helped to inform the preliminary designs by providing information on hydrodynamic, infiltration, and marsh accretion processes.



Figure 3.9. Location of data collection sites based on the different types of monitoring.

SECTION IV: COASTAL EMPIRE ADAPTATION SURVEY

The University of Georgia contracted with M/A/R/C/Online Sampling Solutions to sample residents in ZIP codes located along the Savannah River and adjacent to the Atlantic Ocean in Chatham County (zip codes 31328, 31410, 31404, 31411, 31419); in addition, the team engaged in "snowball sampling" initiated by the Mayor and City Council on Tybee Island, as well as other people in leadership positions in Chatham County. This multi-mode approach resulted in 176 survey completes for the relevant zip codes (though the total dataset is larger). Of these, 41 percent were located in the Tybee Island zip code (31328).

The survey questionnaire was designed to assess expectations of future economic and environmental changes on the coast, perceptions of coastal risk, insurance, and risk mitigation behaviors, flood experience, and preferences for green infrastructure investments to reduce flood risk and provide for environmental benefits. Expectations of change are measured using Likert-scale responses (i.e., "strongly agree" to "strongly disagree") to statements about future economic and environmental conditions. Risk is assessed using the likelihood (i.e., probability) and consequence (e.g., financial/ social/psychological impact) framework; recognizing that people often have a difficult time assessing probability, the researchers used a range of instruments to assess likelihood of various negative events (e.g., hurricanes, floods, etc.). Taking account of likelihood and consequence, one can model *Risk = ProbabilityConsequence*; in this framework, a risk will be considered severe if probability and/ or consequence are relatively large. On the other hand, if probability and consequence are perceived as low, the risk would be considered mild. This formulation also plays a role in economic theories of decision-making under risk (*e.g., Expected Utility and Prospect Theory*).

Two sections of the survey instrument are expressly focused on adaptation to coastal risks. To reduce the risk of repeated flood damages and facilitate coastal retreat, some levels of government have explored buyouts to remove private property in high-risk areas. There is very little research on homeowners' willingness to accept (WTA) buyouts, how much they need to be compensated, and determinants of the potential magnitude of buyout payments. Researchers used a stated preference approach to assess WTA buyouts in Chatham County; this entails creating a buyout scenario, assessing buyout magnitude, and priming the respondent to answer truthfully (permitting rejection of the buyout offer and uncertain responses). In addition, they explored the potential for a rentback program, which would pay homeowners' full market value for their property and allow them to rent the property back from the government until the property is sufficiently damaged due to storms/ climate change, or some other provision is triggered (Keeler, et al. 2022).

The stated preference approach is also used to assess preferences for risk management infrastructure investments along riverbanks in Chatham County. A "choice experiment" is designed to evaluate preferences for traditional gray, green, or hybrid infrastructure investments that would lower flood risk, reduce nuisance flooding, and provide for improved wildlife habitat. Potential projects are to be funded by a Special Purpose Local Option Sales Tax (SPLOST) referendum, lending credibility to the valuation scenarios. The results are used to estimate household willingness to pay (WTP) for risk reduction and environmental quality.

Data

Descriptive statistics for demographic factors are indicated in Appendix Table D.1. The average respondent is 58 years old (median age 63), with an average (median) household income of just over \$115,000 (\$88,000). The most common level of educational attainment is graduate school (29 percent), followed by college graduate (28 percent), "some college" (16 percent), high-school graduate (11 percent), professional degree (10 percent), associated degree (4 percent), and vocational school (2 percent). The simple majority of the sample is retired (44 percent). Thirty-five percent of the sample is employed full-time, while 13 percent is employed part-time. The majority of the sample is white (76 percent), but there is a significant proportion of African-American respondents (12 percent), as well as Hispanic (3 percent), Native American, Indian-American, Japanese, Korean, Vietnamese, and "Other Asian" (1 percent each). Eighty-nine percent of respondents are registered to vote. The most common political affiliation is moderate (28 percent), followed by conservative (20 percent), and liberal (17 percent). The least common political affiliations were in the tails (very conservative at 15 percent and very liberal at 11 percent).

Property Ownership and Expectations

Appendix Table D.2 presents descriptive statistics for residency and property ownership. Ninety-four percent of respondents claim their Chatham County property as their primary residence and have been living on the coast (generally defined) for about 19 years (median = 15 years) (Note: coastal residency top-coded at 35 years). The data are 20 percent renters, 76 percent owners with clear title (46 percent), and 3 percent heirs' property distinction (without clear title, which complicates adaptation decisions involving private property). Seventy-eight percent of respondents own their residence (either mortgaged or out-right), while 3 percent respond affirmative to "own business", 5 percent "own property leased to others", and 3 percent "own other property". The average respondent spends about 47 weeks per year in Chatham County (median = 50 weeks). Ninety-four percent consider themselves full-time residents; five percent consider themselves part-time residents, and (despite best efforts) 1 percent percent do not consider themselves residents. Average time living in Chatham (as opposed to the coast, in general) is 17.5 years (median = 15 years). Regarding attachment to place, the project team assesses prospective moving plans; ten percent (7 percent) indicate they have plans to move out of Coastal Empire in the next 5 years (10 years), with an additional 2 percent indicating plans to move over a longer time horizon. Eighty percent indicate no plans to move away in the future.

Figures 4.1-4.3 present Likert scale responses for expectations of environmental change, economic change, and future risk management interventions. The majority of respondents "Agree" or "Strongly Agree" that the sea level will rise (Statement 1 in blue in **4.1**), flooding problems will get worse (Statement 2 in Magenta), erosion problems will get worse (Statement 3 in Green), and coastal storms will get worse (Statement 4 in Purple), but a significant proportion were "Neutral" in response to these statements. Very few (less than 6 percent) "Disagreed" or "Strongly Disagreed" with these statements. Using regression analysis, the project team find that being a self-identified

"conservative" reduces the likelihood of agreeing with statements about sea-level rise and worsening of flooding problems and coastal storms (controlling for education, wealth, income, and understanding of statistical independence in storm occurrence), but conservative political ideology is not correlated with expectations of erosion. Nonetheless, most of the households sampled perceive future environmental change that will make coastal resilience and sustainable development more difficult to achieve.

There was greater consensus on economic change, with the overwhelming majority "Agreeing" or "Strongly Agreeing" that housing prices (Statement 5 in blue in 4.2), insurance prices (Statement 5 in magenta), and property taxes (Statement 7 in green) will increase. This is evidence of expectations of future economic hardship for coastal residents. Such expectations may serve to push people away from the coast, particularly when combined with expectations of environmental change. Given the lack of variation in expectations of economic change, they find no evidence of correlation with household level factors (like education, income, wealth, or political ideology).

Turning to risk management strategies, most subjects "Agree" or "Strongly Agreed" that expanded investment in flood control measures will be necessary (Statement 8 in blue in 4.3) and that infrastructure needed to be fortified against sea-level rise and storms (Statement 10 in green). There was less consensus on moving or demolishing building to avoid flood and erosion risk (Statement 9 in magenta). Using regression analysis, the project team finds that individuals that understand independence of storm occurrence as well as those that think the occurrence of storms makes future storms more likely (which this project classifies as falling prey to the "availability heuristic" – more on this below) are more likely to agree that retreat will be necessary in some areas (controlling for education, income, wealth, and political ideology).

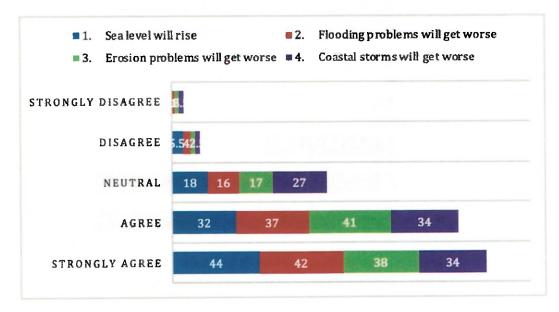


Figure 4.1. Likert Scale Responses for Expectations of Environmental Change



Figure 4.2. Likert Scale Responses for Expectations of Economic Change

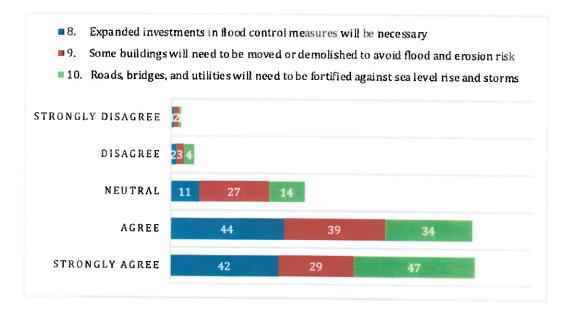


Figure 4.3. Likert Scale Responses for Environmental Risk Management

Insurance

Focusing on property owners (Table 4.1), the average (reported) property value is \$572,000, with a minimum of \$40,000 and a maximum of \$2.25 million. Ninety-one percent of property owners have homeowner's insurance; forty-nine percent indicate that wind insurance is included in their homeowner's policy, while 9 percent have a separate windstorm policy (presumably because they are in a high storm-risk area). Seventy-six percent have flood insurance, and 11 percent indicate they have other insurance coverage (perhaps for their business). The average deductibles for each type of insurance are around \$2500 but range from \$500 to \$10,000.

Preliminary regression analysis of flood and wind insurance holdings indicate that households with higher education tend to have wind insurance and self-identified "conservatives" are less likely to have flood insurance. (See **Appendix Table D.3.**) Likelihood of flood insurance is increasing in income but decreasing in a proxy variable for household wealth (suggesting that wealthy household may forego flood insurance, opting to "self-insure"). There is a positive correlation among holding flood and wind insurance. Since there is little variation in homeowner's insurance, the researchers do not analyze likelihood of holding this type of coverage. Future research will take a deeper dive into determinants of insurance holding, attempting to address issues of endogeneity and measurement error (briefly discussed in **Appendix D**).

	N	MEAN/PROP.	MEDIAN	SD
prop_value	140	572.57	475.00	405.73
h_ins	140	.91	1.00	.28
w_ins_inc	140	.49	.00	.50
w_ins_sep	140	.09	.00	.28
f_ins	140	.76	1.00	.43
o_ins	140	.11	.00	.31
h_ded	90	2288.89	2000.00	1556.03
w_ded	40	2703.50	2000.00	2089.43
f_ded	62	2387.10	2000.00	1630.70

Table 4.1. Descriptive Statistics - Property Owners

Table 4.2 presents descriptive statistics for renters. Fifty-eight percent of renters have renter's insurance, with an average coverage level of \$49,000 and a deductible of \$696. Only 19 percent of renters have flood insurance to cover the contents of their home, with an average coverage level of \$52,000 and an average deductible of \$917. Forty-seven percent also indicate that they have other insurance coverage (which could include life insurance or other types of products). Due to the small sample size, the project does not attempt further analysis of the renter data.

aller stransenut	N	MEAN/PROP.	MEDIAN	SD
r_ins	36	.58	1.00	.50
f_insr	36	.19	.00	.40
o_insr	36	.47	.00	.51
r_cov	17	48.97	37.50	41.86
f_covr	6	51.67	28.75	61.03
r_ded	14	696.43	500.00	440.48
f_dedr	6	916.67	500.00	1020.62

Table 4.2. Descriptive Statistics - Renters

Natural Hazard Risk Perceptions

Under theories of planned behavior, perceptions of risk are important determinants of location choice, insurance purchase, and mitigation decisions. Figure 4.4 depicts flood zone perceptions. Almost 12 percent of respondents are not sure if they are in a flood zone, whereas 14 percent believe they are outside of the flood zone. (Note, these proportions are significantly lower than the larger sample that covers Chatham, Liberty, and Bryan counties; this suggests that households that face greater flood risk are more cognizant of their formal risk classifications.) For those that recognize they are in a flood zone (74 percent), the majority are not sure which zone they are in (almost 26 percent). Seventeen percent are in the X Zone (500-year flood zone); twenty-three percent are in the A Zone (Special Flood Hazard Area (SFHA), 100-year flood zone), and 8.5 percent are in the V Zone (SFHA with additional risk due to storm surge).

The survey instrument included several risk-perception measures, designed to capture the likelihood and consequence of coastal hazards. Such perceptual measures are notoriously difficult to assess, so the project team employs a number of instruments to provide multiple measures. **Appendix Table D.4** presents the four questions that were used to assess likelihood of natural hazards. The questions vary in time frame (ranging from 12 months to 50 years) and format (e.g., open-ended response v. multiple choice). **Table 3** presents the descriptive statistics for the resulting hazard likelihood measures.

The first five rows of **table 4.3** present estimates of the likelihood of coastal hazards. The average probability of flooding over the next 12 months (open-ended, fractional response) is 15 percent (median 5 percent), with a large standard deviation of 20 percent, a minimum of 0 percent, and a maximum of 100 percent. Thus, taken at face value, some respondents think flooding is virtually impossible over the next 12 months, while others think flooding is inevitable. (See **Table D.4** for precise language of the question.) It is possible that the extremes represent a misunderstanding of the question, but it is also possible that some owners of elevated property do not foresee their house flooding and some property owners live in locations that flood frequently. The probability of a Category 3 (or greater) hurricane striking within 60 miles of Chatham County in the next year (multiple choice format) exhibits an average of 16 percent (median of 9 percent), with a standard deviation of 15 percent, a minimum of 0 percent, and a maximum of 50 percent (top-coded most likely occurrence choice). These measures of subjective probability assessment are relevant for analyzing individual/household insurance and mitigation choices over a short time horizon.

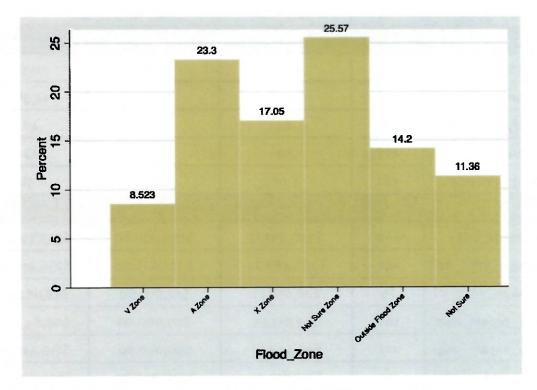


Figure 4.4. Flood Zone Perceptions

Turning attention to longer time horizons, the next two questions focused on i) the likelihood of flooding (from any source) over the next 25 years using a Likert scale, and ii) the number of expected major hurricanes (Cat 3 or greater) over a 50-year time horizon (open-ended count). (Again, see **Table D.4** for the scenario descriptions and response formats.) Sixty-four percent of respondents considered flooding over the next 25 years "somewhat likely", "likely", or "very likely", while 8.5 percent responded "Don't Know". The average hurricane count over 50 years is 5, and the median is 3. This metric is transformed into an annual average probability by dividing by 50. The annual probability of a Category 3 hurricane (or greater) over the next 50 years striking within 60 miles of the Chatham County was 10 percent (median = 6 percent), with a minimum of 0 percent and a maximum of 100 percent. These measures of subjective probability assessment are relevant for analyzing individual/household location and investment choices, as well as support for long-lived infrastructure investments.

Appendix Table D.5 presents results of a fractional regression model that can be used to decompose determinants of risk perceptions. For this example, the model examines the determinants of annual flood risk (floodp_12). It finds annual flood risk perceptions to be greater for those located in the v-zone and a-zone (as expected), but also greater perceptions of risk for those that do not know their flood zone. The number of past floods is correlated with greater risk perception, as one might expect. It also finds those that fall prey to the availability heuristic (in which recent occurrence of hazards increase perceived likelihood) to have greater flood risk perceptions, while self-described "liberals" have lower risk perceptions.

	N	MEAN/PROP.	MEDIAN	SD
LIKELIHOOD		State of Alastanian		
floodp_12	176	15.07	5.00	20.33
hurrp_12	176	15.66	9.00	14.58
likely_flood25	176	.64	1.00	.48
hurrp_50	176	.10	.06	.17
hurr_count50	176	5.01	3.00	8.40
CONSEQUENCE	A PROVIDE NO			STREETS IN
damage_cat3	169	\$220,991.12	\$150,000.00	\$233,794.21
damage_cat3_po	140	\$262,489.29	\$201,625.00	\$236,410.76
damage_cat3_r	29	\$20,655.17	\$12,500.00	\$18,052.06
flood_repair_min	109	\$45,913.55	\$20,000.00	\$69,647.64
flood_repair_avg	117	\$93,407.33	\$50,000.00	\$119,435.75
flood_repair_max	114	\$212,631.32	\$100,000.00	\$221,084.75

Table 4.3. Descriptive Statistics for Risk Perception

Flood Experience and Risk Tolerance

Table 4.4 presents descriptive statistics for flood experience. The average household has experienced flooding near their property 3.64 times (median=1; minimum = 0; maximum = 150), but only 44 percent of households have experienced flood-related damage to their property. The average amount of property damage from flooding is \$17,718 (median = \$2,720), with a minimum \$30 of and a maximum of \$150,000. Year of latest flooding occurrence (n=40) ranges from 1900 to 2021, with a mean of 2013 and median of 2017. Fifty percent of respondents indicate that they received a flood insurance claim for damage, but the average household was displaced for an average of 8.3 days (minimum = 0; maximum = 200).

	N	MEAN/PROP.	MEDIAN	SD
past_floods	176	3.64	1.00	11.70
past_floods_damage	176	.44	.00	1.01
past_flood_amt	36	\$17,718	\$2,750	\$31,474
past_flood_year	40	2013	2017	19
past_flood_claim	36	.50	.50	.51
displace_days	40	8.30	.00	31.74

Table 4.4. Descriptive Statistics - Flood Experience

To complement models of decision-making under risk, a series of questions were focused on statistical numeracy, insurance understanding, and risk tolerance across various behavioral domains (e.g., career, health, driving, sports). To assess understanding of the statistical independence of flooding events, a question assesses whether respondents perceive flooding as more likely (akin with the psychological phenomenon known as "availability heuristic"), less likely (known as the "gambler's fallacy"), or about equally likely (which is statistically correct) to occur in year immediately following a flood. Fifty-six percent of respondents correctly assessed the likelihood as "about the same"; twenty percent expressed beliefs consistent with the availability heuristic, while 10 percent claimed flooding would be less likely (consistent with gambler's fallacy). The remaining respondents (5 percent) were not sure whether flooding would be more or less likely, or about as likely. (See Table 4.5.)

	N	MEAN/PROP.	MEDIAN	SD
ind_risk	176	.56	1.00	.50
avail_heur	176	.20	.00	.40
gamble_fal	176	.10	.00	.30
deduct_understand	176	.61	1.00	.49
rt_health	176	2.93	2.00	1.97
rt_fam_health	176	2.57	2.00	1.94
rt_finance	176	3.28	3.00	1.61
rt_driving	176	2.89	3.00	1.87
rt_sports	176	3.41	4.00	1.77
rt_career	176	3.45	4.00	1.83

Table 4.5. Descriptive Statistics - Statistical Numeracy and Risk

A survey question was designed to assess the respondent's understanding of insurance; the question asked whether a higher deductible would lower the insurance premiums (which is true). Sixty-one percent responded affirmative to this query. To assess risk tolerance (without invoking a monetary experiment – which is standard in the field), professed tolerance of risk is measured on Likert scales (1="Not Very Willing"; 7="Very Willing" to take risks) across the domains of individual health, family health, financial decisions, automobile driving, sport/leisure activities, and career decisions. While stated tolerance of risk is not the "gold standard" in empirical research, these measures have been shown to be valid in analysis of risky decision making (Dohman, et al. 2018). Sports and career exhibit the greatest degree of risk tolerance (median of 4), while personal and family health garner the least risk tolerance (median of 2). Finance and driving are in between, each with a median of 3.

Adaptation: Buyouts and Rentbacks

A series of questions that are relevant for assessment of adaptation decisions relate to willingness to accept (WTA) a buyout and willingness to pay (WTP) for a rentback after selling to a government agency that will retain ownership but allow habitation while the property is deemed "safe" under

environmental/risk standards. Among property owners, the mean WTA for a buyout was 98 percent of property value (median = 100 percent), with a minimum of 10 percent and a maximum of 200 percent. Eleven percent of respondents indicated that they would not accept a buyout; eighteen percent indicated that they did not know how to respond to a buyout question. For those respondents that would accept a buyout, the average payment (calculated as buyout percentage multiplied by property value) was \$576,000 (median = \$535,500), with a minimum of \$12,500 and a maximum of \$2.2 million.

	N	MEAN/PROP.	MEDIAN	SD
buyout_perc	99	97.95	100.00	39-53
no_buyout	140	.11	.00	.32
dk_buyout	140	.18	.00	.38
buyout	99	\$576,356	\$535,500	\$416,002
rentback	59	\$1,980	\$2,000	\$994
no_rentback	140	.35	.00	.48
dk_rentback	140	.23	.00	.42

Table 4.6. Descriptive Statistics - Adaptation Measures

For rentbacks, the average monthly WTP was \$1,980 (median = \$2,000), with a minimum of \$200 and a maximum of \$6000 (which were the limits of the payment card). Thirty-five percent of respondents indicated that they were not willing to engage in a rentback contract, whereas 23 percent were not sure. Regression analysis can be used to assess the determinants and correlation across buyouts and rent-backs.

Adaptation: Willingness to Pay for Risk Management Infrastructure Investments

The survey instrument included a stated preference "choice experiment" that was designed to assess preferences for gray, green, and hybrid river protection infrastructure designs that would limit storm flooding, nuisance flooding, and provide riverine wildlife habitat. The choice experiment was a branded design, and it limited amenity provision in ways that are consistent with realities of infrastructure design. The choice experiment defined the options of gray/hybrid/green along a spectrum of adaptability to environmental change, ranging from low to high.

Table 4.7 summarizes the infrastructure services and levels by "brand" (i.e., gray/hybrid/green). To accord with actual performance of the different infrastructure types, the attribute levels were restricted such that "Green" infrastructure could not provide the highest levels of flood protection and "gray" could not provide the highest level of coastal habitat (as evidenced by the attribute levels listed in the first 3 rows). Hybrid was able to provide the entire array. The status quo situation was described as consistent with coastal trends for the next 30 percent: 90 percent chance of severe flooding in low-lying areas; 150-200 days of standing water in low-lying areas each year; poor riverbank wildlife habitat; \$0 additional cost to households.

An efficient design algorithm was used to select among attribute levels (ecosystem services and TSPLOST costs) resulting in choice set designs that permitted respondents to choose among different types of infrastructure investments, at different costs, or "opt-out" for the status quo (last column in Table 4.7). To be clear, each choice task included only one of the attribute levels (e.g., gray storm flood risk was either 10 percent, 30 percent, or 50 percent chance of severe flooding in low-lying areas over the next 30 years) for each service and "brand". The payment vehicle for the choice experiment was a special purpose local option sales tax (SPLOST), which is routinely on the ballet in Georgia (providing some measure of construct validity). To personalize the SPLOST payment, the survey also inquired about household size (mean = 2.3) and income category (1=low; 2=mid; 3=high; mean =2.13). Each respondent saw three choice sets and was allowed to make three selections for infrastructure investments, opting for gray investment strategy, hybrid, green, or status quo.

ATTRIBUTES	GRAY	HYBRID	GREEN	STATUS QUO
Storm Flood Risk "chance of severe flooding over 30 years"	10%, 30%, 50%	10%, 30%, 50%, 70%	30%, 50%, 70%	90%
High Tide / Nuisance Flooding "days of standing water in low-lying areas/year"	10-20, 40-60, 65-90	10-20, 40-60, 65-90, 100-130	40-60, 65- 90, 100-130	150-200
Coastal Habitat "improving fish and wildlife habitat along riverbanks – biodiversity and migration corridors for wildlife"	Good, Poor	Best, Good, Poor	Best, Good	Poor
SPLOST Cost "Annual household cost for each of 10 years" LOW INCOME HOUSEHOLDS		\$10, \$50, \$150, \$300		\$o

ATTRIBUTES	GRAY	HYBRID	GREEN	STATUS QUO
SPLOST Cost "Annual household cost for each of 10 years" MEDIUM INCOME HOUSEHOLDS		\$20, \$90, \$200, \$500		\$o
SPLOST Cost "Annual household cost for each of 10 years" HIGH INCOME HOUSEHOLDS		\$30, \$150, \$350, \$900		\$o

Table 4.7. Choice Experiment Design

Table 4.8 presents descriptive statistics associated with the choice experiment. Forty-nine percent of respondents claim to have heard of green infrastructure prior to the survey. The importance of the attributes of infrastructure projects was measured on a 5-point Likert scale; the highest (on average) was storm flood risk reduction and the lowest (on average) was nuisance flooding reduction. Lastly, the survey measured individual confidence in ability to provide information on infrastructure investments for public policy purposes (average of 1.10, where 1 = confident; 2 = not confident; 3 = not sure). Figure 4 presents the choice frequencies for the four options in the choice experiment.

	MEAN/PROP.	MEDIAN	SD
heardof_GI	.49	.00	.50
impstormfloodrisk	4.51	5.00	.80
imp_nuisanceflood	4.30	5.00	.85
imp_hab	4.36	5.00	.87
imp_cost	4.11	4.00	.94
Hhsize	2.30	2.00	1.08
inc_category*	2.13	2.00	.76
conf_CE	1.10	1.00	.37

N=176, except for income_cateogory (n=175)

Table 4.8. Descriptive Statistics - Choice Experiment

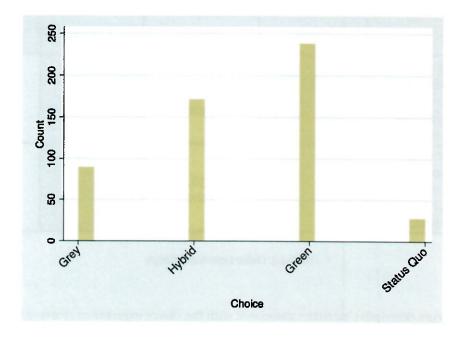
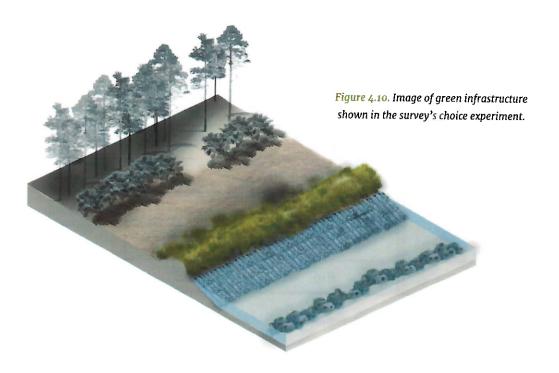


Table 4.8. Descriptive Statistics - Choice Experiment

The Random Utility Model (RUM) provides the empirical basis for discrete choice analysis (as is standard in the economics literature). Details are provided in **Appendix D**. In general, green infrastructure was preferred to the status quo and gray investment strategy, followed by hybrid. Household marginal Willingness to Pay (WTP) for infrastructure services from the preferred model are presented in **Table 4.9**.



SERVICE	WILLINGNESS TO PAY	95% CONFIDENCE INTERVAL
Reduce Risk of Severe Flooding over 30 years by 1%	\$10.21	\$3.85 - \$16.57
Reduce Annual Nuisance Flooding by 1 day	\$3.17	-\$0.33 - \$6.68
Improve Wildlife Habitat from Poor to Good	\$658	\$271 – \$1050
Improve Wildlife Habitat from Poor to Best	\$814	\$375 - \$1250

Table 4.9. Annual Household Marginal Willingness to Pay for Infrastructure Services

The TSPLOST costs were incurred annually over 10 years, so the estimates in **Table 4.9** represent annual household WTP over the course of 10 years. The average household is WTP \$10.21 to reduce risk of severe flooding over 30 years by 1 percent. The 95 percent confidence interval (produced via the "Delta Method") is \$3.85 - \$16.57. To utilize these numbers in project assessment, the analyst would need to scale up by the number of households in the relevant zip codes and apply the estimate to the project change in flood risk. For example, if flood risk were to change by 10 percentage points (i.e. from 90 percent to 80 percent), the WTP estimate would be \$102.10, which would need to be scaled by the number of households.

WTP for reducing nuisance flooding by one day annually is \$3.17 (95 percent confidence interval -\$0.33 - \$6.68); the negative lower bound of the confidence interval is due to the relatively large standard error on the coefficient estimates (p-value =0.07). Wildlife habitat is measured in 3 qualitative intervals: Poor (weak support of ecosystem – low biodiversity; limited migration corridors for wildlife), Good (limited support of ecosystem – medium biodiversity; some migration corridors for wildlife), Best (strong support of healthy ecosystem – high biodiversity; extensive migration corridors for wildlife). Estimated household WTP to move from Poor to Good is \$658 per year (95 percent confidence interval \$271 – \$1050), and WTP to move from Poor to Best is \$814 per year (95 percent confidence interval \$375 – \$1250). The choice experiment data can also be used to estimate Total WTP for a particular infrastructure investment (e.g., hybrid investment that provides particular levels of services).

To utilize these numbers in project assessment, the analyst would need to estimate willingness to pay for the desired impact and scale up by the number of households in the community. For example, if severe flood risk were decreased by 10 percent, the WTP estimate would be \$102.10, which would then need to be scaled by the 1,463 households on the Tybee Island—leading to total WTP of almost \$150,000 per year. Tybee Island households would be willing to pay a total of \$962,654 per year (good) to \$1.19 million per year (best) to improve degraded wildlife habitat.

SECTION V: NATURAL INFRASTRUCTURE DESIGNS

The Tybee Island Natural Infrastructure Master Plan seeks strategies that provide co-benefits of enhancing natural features and protections to support fish and wildlife populations while mitigating impacts of flooding to community property and critical infrastructure. The suite of preliminary designs developed through this project meet the 50–60 percent design criteria and aim to reduce risks to both the local population and the ecosystem, thereby increasing the resilience of the overall socio-environmental system.

Marsh Conditions

The large contiguous tract of Tybee Island's marsh front provides protection and buffering from coastal storms, sea-level rise, inundation, and coastal erosion. As water levels rise, however, this valuable habitat and open space is at risk of being squeezed out. The island's marsh shoreline is where the first and worst impacts of inundation from sea-level rise are being experienced. As noted in Figure 2.2, flooding will disproportionately affect this side of the island.

The marsh is home to diverse wildlife, including fish, crabs, birds, and shrimp. The NFWF Regional Coastal Assessment for the Savannah River Watershed identified Tybee Island's estuarine shoreline as having the **highest possible risk rating** in the:

- Aquatic Index (5 on a 1-5 scale) prevalence of priority aquatic species and their habitats
- Threat Index (10 on 1–10 scale) risk of storm surge and flooding potential
- Community Exposure Index (10 on 1-10 scale) exposure community assets to flooding threats

NFWF's Resilience Hub index measures areas of open lands and protected space that are most suitable for resilience-building efforts. The marsh side of Tybee Island is rated as a 7 on a 1-10 scale.

The interface between the marsh and upland terrain provides a critical opportunity for reducing tidal and storm surge flooding. However, creative solutions are required to provide future resilience, maintain or enhance habitat, and work within the constraints of city prerogatives and private ownership. These solutions must be implemented for a variety of environments and types of interfaces. Within the study area, there are almost 2,000 hectares of upland, 128 hectares of marsh and 22 hectares of open water and intertidal channels (**Table 5.1**).

AREA CLASSIFICATION	AREA (M ²)	AREA (HECTARES)
Upland	19,387,373	1,939
Marsh	1,274,746	128
Water/channels	223,609	22
Impoundment	43,700	0.4

Table 5.1. Types of ecosystems within the project study area

The boundary between upland and wetlands is long and sinuous (just over 30,000 m; **Table 5.2**), reflecting the island's beach-ridge origins and subsequent tidal channel erosion between ridges. This boundary consists of upland-beach, upland-water, and upland-marsh interfaces, with upland-marsh interfaces predominant (88 percent of total, Table 5.2).

UPLAND INTERFACE TYPE	LENGTH (M)	% OF TOTAL	% ARMORED
All types	31,310	100.0	11.3
Beach	1,206	3.9	35.2
Marsh	27,658	88.3	8.0
Water	1,275	4.1	78.3
Impoundment	1,171	3.7	0.0

Table 5.2. Length of upland interface and percent that is armored

The dominance of upland-marsh interfaces provides an important opportunity for natural infrastructure, as many of the solutions proposed in this plan are those that maintain and enhance salt marsh habitat, and little of that shoreline is currently armored (8 percent, **Table 5.2**). Conversely, 35 percent and 78 percent of beach and water interfaces, respectively, have already been armored, providing less opportunity to implement solutions.

Looking to the future, modeling for this project found that potentially 100 acres of upland area could be impacted by sea-level rise by 2050 under NOAA's intermediate-high scenario (19,387,373 m2 of upland in 2020 and 18,987,373 m2 in 2050). Much of the area under threat is not currently armored. As the marsh migrates and flooding impacts increase, homeowners will face pressure to implement mitigation.

STRUCTURE	TOTAL LENGTH 2018 (M)	CHANGE 2006- 2018 (%)	ADDED LENGTH (M)	PROJECTED TOTAL LENGTH 2050 (m)
Bulkhead	1,908	29	553	2,461
Revetment	1,411	22	310	1,721
Bulkhead + Revetment	153	47	72	225
Total	3,472	33	935	4,407

Table 5.3. Type of armoring on Tybee Island with past and future changes



Tybee Island Study Area Armored Shoreline Upland impacted - 2tt SLR

Map Created 4/18/2022 Alexander Lab - Skdaway Institute of Oceanography University of Georgia Background Imagery: Chatham County 2020

Figure 5.1. Current armoring along the upland boundary on Tybee Island.

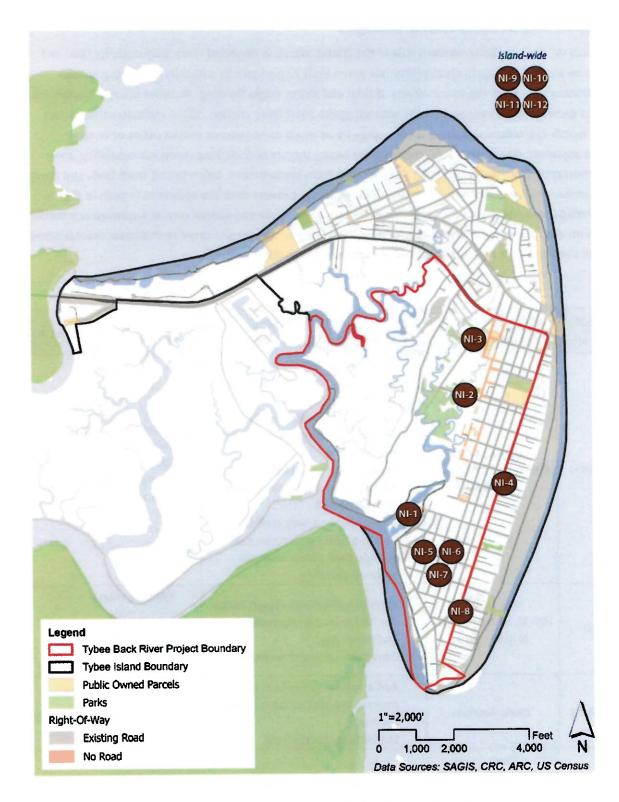


Figure 5.2. Locations of preliminary designs developed in the planning phase.

Coastal Natural Infrastructure Strategies

Focus on the low-lying western side of the island, which is impacted more frequently by tidal and storm surge flooding, is also appropriate given their importance in naturally protecting upland environments from the worst effects of tidal and storm surge flooding. Marshes absorb floodwaters and decrease wave energy, thereby protecting the coast from erosion. NOAA estimates that 15 feet of marsh can reduce incoming wave energy by as much as 50 percent (NOAA Office of Coastal Management, 2023). However, marshes are facing threats to their long-term sustainability, most importantly from rapid sea-level rise, but also from contaminant-laden runoff from land, and coastal squeeze, a process wherein a marsh, which naturally retreats onto the upland to remain in the intertidal zone as sea levels rise, reaches a vertical structure and cannot retreat landward any further, eventually drowning. Many of the proposed solutions in this project serve to minimize coastal squeeze and maximize the marsh's ability to remain viable into the future.

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-1	Venetian Drive (Venetian Dr. from Aj's to 12th St.)	 Create a horizontal levee or berm with a naturalized shoreline along Venetian Dr. Raise road elevation by 1 ft. Construct living shoreline around the levee toe. Reroute 13th St. stormwater outfall along 6th St. to connect to 14th St. outfall Implement one-way traffic. Create a bike / pedestrian path. Provide dock access from the updated shoreline. 	 Provide pathway for marsh migration Enhance marsh habitat Improve water quality Control erosion
NI-2	6th Street (6th St. from Lewis Ave. to Miller Ave.)	 Replace and enlarge culvert under the bridge that lies between Lewis and Miller Ave. Construct a living shoreline. 	 Enhance marsh connectivity Improve water quality Control erosion Improve wildlife crossing
NI-3	Lewis Avenue	 Add a submerged culvert to connect marshes on both sides of the road. Extend Sally Pearce Trail. 	Enhance marsh connectivity

Table 5.4. Coastal natural infrastructure strategies.

NI-1: VENETIAN DRIVE

Venetian Drive is a critical location for both habitat and flooding on the island. Near the outlet of Horsepen Creek, sediment in the marsh is rapidly accumulating due to accelerated infilling after developers dredged that area in the early 1900, using the deposits to fortify adjacent land. Initial, limited radiochemical data suggest that salt marshes along Horsepen Creek are accreting at rates approaching 0.39 inches per year (1 cm/y), which are not realistically sustainable over the long term. These high rates suggest that these sites were disturbed by natural and anthropogenic processes. Further up the creek, channel migration has produced an extensive reworking of the upper few meters of marsh, which then rapidly infills. Based on an examination of aerial photography from 1938 to 2018, little intact marsh remains in the Horsepen Creek drainage area on 100-year timescales. Most of the marsh bordering Tybee Island has been reworked by channel meandering or human activities like dredging and dumping.

Cores collected in July 2022 from the one small patch of intact marsh that could be identified in Horsepen Creek and from three other marshes directly adjacent and west of Tybee Island exhibit accumulation rates of approximately .08 inches per year (0.2 cm/y), similar to those observed in other salt marshes in Georgia. This rate of accretion is not keeping up with the current sea-level rise, which is 0.135 inches per year (0.34 cm/y) at Fort Pulaski over the past 87 years. This suggests that marshes in this area could benefit from natural infrastructure and green engineering solutions that provide elevation enhancement in the future.

There is a section of marsh sandwiched between the high spot of Venetian Drive and the low spot of the Horsepen Creek channel that is at risk of "coastal squeeze" due to sea-level rise. Coastal squeeze occurs when the marsh does not have room to migrate because of a constricting high spot, so it drowns under sea-level rise. In order to provide space for marsh migration and flood protection, a horizontal levee is included in the plan. A horizontal levee differs from a standard levee by using a shallow slope, allowing the marsh to migrate up over time. The chosen design uses a slope that balances both the marsh and flood protection while minimizing the impact on the current landscape. Residents report that there is frequent overtopping on Venetian Drive, as well as ponding rainfall. To provide additional flood protection, the plan includes raising Venetian Drive by 1 ft.

The Tybee Island Stormwater Master Plan currently calls for dramatically increasing the size of the 13th St. outfall at Horsepen Creek to reduce inundation in the vicinity. This would be incompatible with the horizontal levee, creating erosion issues at the site. Modeling from the UGA team indicates that a similar level of service can be achieved by rerouting the 13th St. stormwater line along 6th St. to connect with the 14th St. outfall. Initial estimates show that this would save the City approximately \$500,000.

To prevent erosion, a living shoreline should be implemented at the toe of the levee. Living shorelines are a method of stabilizing embankments with natural materials such as sand, rock, and plants. They reduce erosion, improve water quality, and provide valuable habitat for birds, aquatic life, and other wildlife. A 2016 study by Northeast University found that hard armoring structures support 23 percent lower biodiversity and 45 percent fewer organisms than natural shorelines (Gittman, 2016). Unlike bulkheads and other hard infrastructure, living coastlines grow over time. Evidence also shows that living shorelines perform better against large storms and are more cost-effective than armored shorelines (Jacobsen, 2019).

Tybee Island would be a very receptive location for the implementation of living shorelines. Important qualities that lead to the greatest levels of success are low slopes, low fetch, strong marsh presence, and distance from an erosion hot spot. There are several locations that fit these criteria across the island, while there are other different areas with successful oyster populations. Further design specifications are included in **Appendix E**.

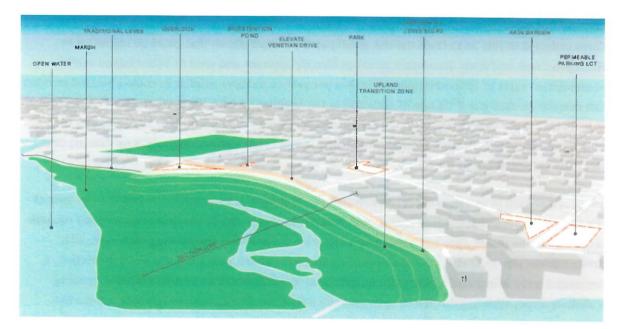


Figure 5.3. Conceptual renderings of the horizontal level



Figure 5.4. The UGA Burton 4-H Center on Tybee Island is stabilizing the shoreline and providing habitat.

NI-2: 6TH STREET

Currently, there is an undersized culvert that runs under 6th street to connect two sections of marsh located on the north and south side of the road. Aerial images have shown the fragmented conditions of the marsh upstream of the culvert, and residents have reported that creatures, such as manatees, have been stuck in the pipe culvert while navigating through the tidal waterway. The existing culvert acts as a bottleneck, inhibiting the flow of water in and out of the marsh and constraining flora and fauna in that area. The plan proposes expanding the culvert to enhance hydrologic connectivity, improve marsh health, and improve habitat and migration. Enlarging the culvert would equilibrate the water flux to the marsh pond north of 6th Street, flushing the marsh more effectively. It would also increase the speed of drainage, reducing inundation in the surrounding areas. A living shoreline should be implemented in eroding areas along 6th Street to stabilize the shoreline and restore the degraded marsh. Further design specifications are included in **Appendix E**.

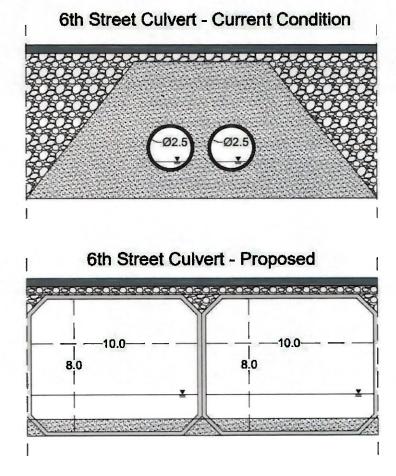
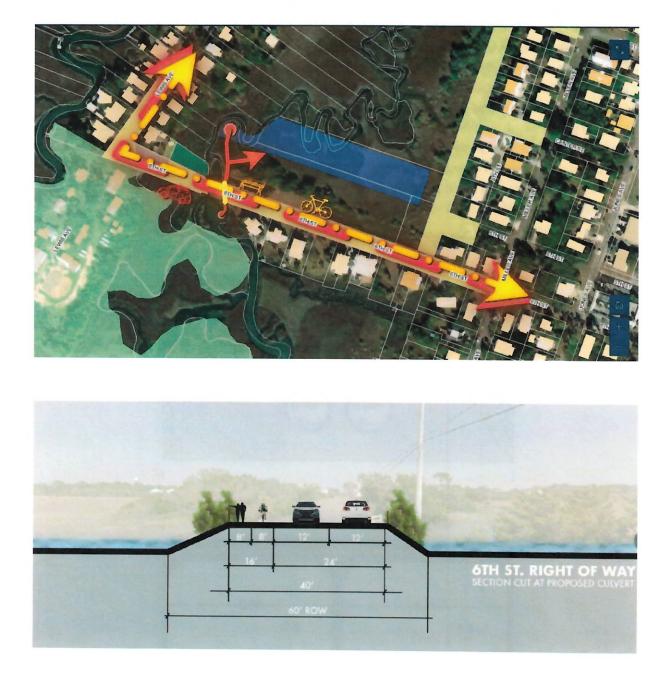


Figure 5.5. Cross-section of the existing and the proposed culvert at 6th Street. Dimensions shown are in feet.



Figures 5.6 and 5.7. Conceptual renderings of the 6th Street culvert improvements

NI-3: LEWIS AVENUE

Lewis Avenue is a residential street built upon manmade land between two marshes. Because of its location, residents on this street experience some of the worst flooding on the island. In response, many residents on Lewis Avenue have applied for and received grants from FEMA/GEMA to elevate their homes. To supplement the efforts of the residents, the plan proposes installing a cross-culvert that will run under Lewis Avenue to connect the two sections of the marsh the street is situated between. The addition of a culvert under Lewis Ave. could balance the flow between the two marshes, which translates into healthier and improved conditions for habitat and wildlife. The placement of the culvert is based on historical images that show where the marsh was originally connected, and the implementation of this culvert will restore part of the marsh back to its original condition.

To integrate Lewis Avenue into the Green Space Network, the plan proposes extending the Sally Pearce Trail. This would improve connectivity and public access to the marsh to support ecotourism and recreational opportunities. Possible components of the trail could include a marsh boardwalk, educational signage about the marsh to increase conservation and stewardship, a bird and wildlife viewing station and privacy screenings where the trail draws near to private property.

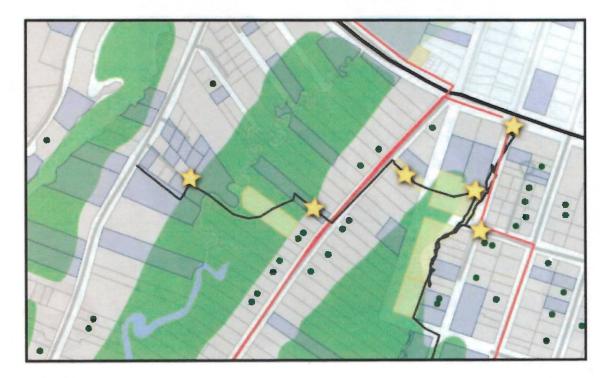


Figure 5.8. Conceptual rendering of the Sally Pearce Trail extension

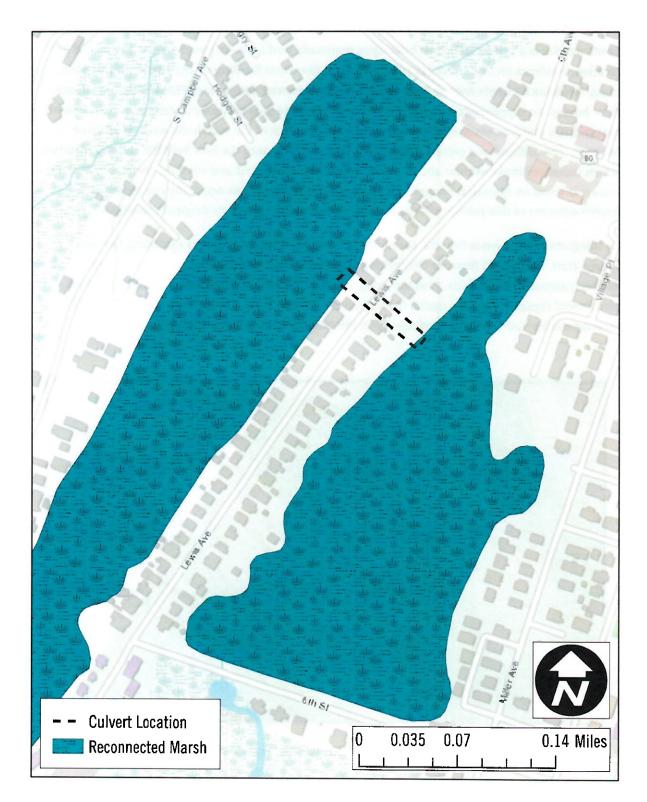


Figure 5.9. Potential location of the underground culvert to reconnect both marshes around Lewis St.

Inland Place-Based Natural Infrastructure Strategies

The Tybee Island Natural Infrastructure Master Plan describes a network of connected features and green space distributed throughout the island. In addition to specific place-based features, the plan also provides recommendations for island-wide strategies. Together, the proposed features and strategies will improve the resilience of Tybee Island through increasing the presence of habitat on the inland areas of the island, expanding the capacity of the stormwater system, cooling and cleaning runoff before it reaches the marsh, and protecting residents from flood damages. In addition to the direct benefits to the ecosystem and residents of Tybee, the proposed plan will also provide indirect benefits through the improvement of the island's aesthetics and highlighting the natural marsh resources on the island, which draw tourists. Overall, the goal of these proposed inland natural infrastructure features is to make Tybee Island a more climate resilient and beautiful place to live.

The following place-based features were developed based on strategic locations across the island identified by a high frequency of nuisance flooding and proximity to habitat. These areas were designed to include natural infrastructure features that best fit the specific location context.

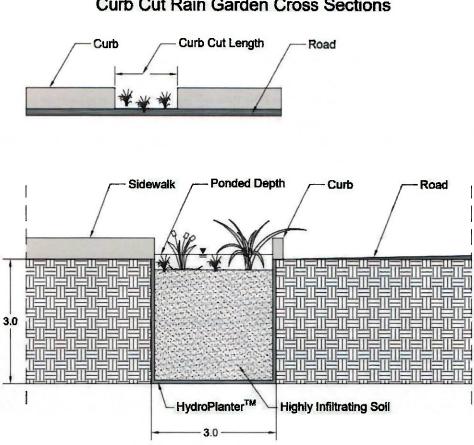
SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-4	US HWY 80 / Butler Avenue (US HWY 80 from Lazaretto Creek to Tybrisa St.)	 As GDOT makes roadway improvements, implement curb cut rain gardens to reduce runoff along sidewalks and right-of- ways. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-5	14th Street (14th St. from Butler to Chatham Avenues)	 Demarcate right-of-way with stakes/flags. Utilize permeable pavers on the road. Use the right-of-way to create a swale on the shoulder or place a median in the middle of the road. Consider implementing a one-way traffic pattern. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-6	Stormwater Inlet Rain Gardens (13th, 14th and 15th Streets from Butler Avenue to Chatham and Venetian Avenues)	 Relocate storm grates out of the roadway. Create rain gardens at 19 stormwater inlets. Integrate natural infrastructure into a Green Space Network. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-7	Rainwater Storage (Parcels located along 13th, 14th and 15th Streets between Butler Avenue and Chatham or Venetian Avenues)	 Encourage residents and businesses to start rainwater harvesting from building roofs. Implement rain storage on all public buildings, such as Town Hall, Fire House, etc. Implement UGA's Coastal Georgia Rain Garden program. Reuse harvested rain to maintain green infrastructure. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Provide habitat for pollinators and increase biodiversity
NI-8	South Beach Pocket Park (Unused lot at the intersection of 15th Street and Butler Avenue)	 Engage Hotel Tybee in planning the use of the unused go-kart track. Replace current use with green space-replacing soil, creating a grassy berm, and installing permeable pavers. Integrate natural infrastructure into a Green Space Network. Put the parcel under a conservation easement. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Increase green space near the tourism hub of South Beach

Table 5.5. Summary of place-based strategies

NI-4: US HWY 80 / BUTLER AVENUE

U.S. Highway 80/Butler Avenue is the sole entrance road onto Tybee Island and runs the length of the island. It is also the only road on Tybee Island with curb inlets to the stormwater system. The Georgia Department of Transportation (GDOT) is currently replacing the Bull River and Lazaretto Creek Bridges on the stretch of US80 that connects Tybee Island to the mainland. will be adding a bike lane, middle turn lane, safety island, and roundabout at Tybrisa Street. In the coming years, GDOT will begin working on the portion of US HWY 80 on the island, starting at the base of Lazaretto Bridge, curving to become Butler Ave., and stretching along the beachfront shoreline. As improvements are made to this main thoroughfare, the City should utilize the construction process to convert the space between the sidewalk and the road into curb-cut rain gardens. The 'first flush' (initial highest pollution concentration) of pollutants from road runoff will be captured in the rain garden instead of entering the stormwater system and ending up in the marsh. The curb-cut rain gardens should be planted with native vegetation, providing connected habitat from the north end to the south end of the island. Further design specifications are included in Appendix E.



Curb Cut Rain Garden Cross Sections

Figure 5.10. Cross section details for the curb cut rain gardens. Dimensions shown are in feet.

NI-5: 14TH STREET

The first capital improvement project presented in the Tybee Island Stormwater Master Plan is the 14th Street Parking Area/15th Street Outfall. Phase 2 of the project calls for a new storm main to be installed on 15th Street to convey stormwater runoff from Butler Avenue to the existing 14th Street outfall, which is located by A.J.s Dockside restaurant on the back river. The installation of the stormwater piping will take place along 15th Street in the southern edge of the right-of-way. During the construction process, natural infrastructure should be added to the corridor, allowing for additional stormwater filtration and storage.

The Natural Infrastructure Master Plan offers an innovative redesign of 14th Street, which is the lowest elevation on the island. The street is already at peak capacity for stormwater infrastructure with large pipes running along both sides of the road. As such, the Stormwater Master Plan calls for installing a new storm main on 15th Street to convey stormwater runoff from the 14th St. beachfront parking lots to the existing 14th Street outfall, which is located by A.J.s Dockside restaurant on the back river.

Natural infrastructure can increase the capacity of 14th St. to absorb the rainfall and runoff that naturally flows into that depression. Adding a bioswale along the length of the road in the right-of-way would provide a channel for the water to flow through and be stored. It should be planted with native vegetation that provides habitat and infiltrates rainfall. The design also calls for converting the two-way, asphalt road into a one-way road (a traffic calming technique), replacing the asphalt with permeable pavers and adding a bike lane. The bike lane improves connectivity across the island for pedestrians and tourists.



Figure 5.11. Conceptual rendering of a swale in the right-of-way

NI-6: STORMWATER INLET RAIN GARDENS

The area of 13th, 14th, and 15th Streets between Butler, Chatham, and Venetian Avenues has been termed 'The Bowl' by Tybee Island residents because it is a localized low spot where frequent ponding on the streets and around homes occurs. Drainage in the 'The Bowl' needs to be improved, and so this location is a critical focus of the Natural Infrastructure Master Plan. Currently, 19 storm grades are located in the roadway of these streets. These grates should be relocated out of the roadway and, when possible placed at the corners of intersections so that rain gardens can be planted in the right-of-way around these inlets. Rain gardens function similarly to bioswales, as they are shallow, excavated areas of land replaced with mixed soil and native vegetation. This aesthetically pleasing and sustainable system uses the natural processes of infiltration and evapotranspiration to control stormwater. These natural infrastructure features will improve connectivity and provide a network of habitat for wildlife. Further design specifications are included in **Appendix E**.

NI-7: RAINWATER STORAGE

Another aspect of the design for 'The Bowl' is a voluntary, residential rainfall capture program. In this initiative, residents will be supported by professionals in implementing either rain harvesting or a rain garden on their property. Planting native vegetation, such as sea oxeye daisy, saltmeadow cordgrass, and saw palmetto, can help capture initial rainfall and filter out suspended solids in the runoff. Both rain harvesting and rain gardens will reduce the volume of stormwater and pollutant loading to the surrounding marsh systems while also delaying flood peaks via retaining and re-routing processes. The plan targets houses in the bowl due to its high impact on these regions, but these features can be implemented island-wide if desired.



Figure 5.12. Example of native plants that can be used in a rain garden.

ltem #1.

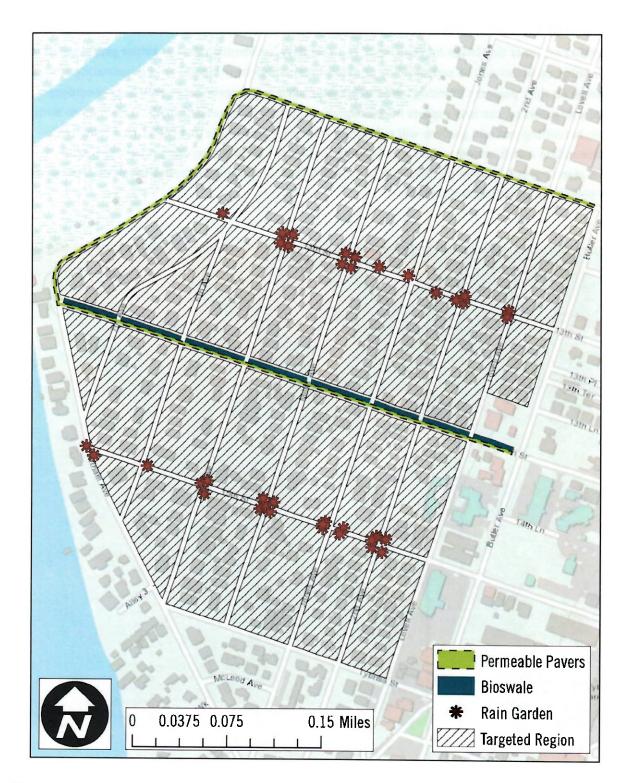


Figure 5.13. Location of proposed permeable pavers, rain storage (rain harvesting and rain gardens), and bioswale along "The Bowl."

NI-8: SOUTH BEACH POCKET PARK

There is a lot currently owned by Hotel Tybee located at the intersection of 15th Street and Butler Avenue that is partially grassed with an unused go-kart track. In recent years, it has been used for parking and for hosting community events. This lot provides an opportunity for intentionally enhancing green space through the creation of a pocket park. The proposed park includes removing the go-kart track and planting natural vegetation and trees to provide habitat and improve the urban canopy cover. With agreement from the parcel owners, the city could also get an easement to maintain the lot as green space and prevent future development. The lot is adjacent to the new stormwater pipe that will transect the island along 15th Street. By replacing soil, creating a grassy berm, and installing permeable pavers, the lot will improve the performance of the gray infrastructure by reducing the volume of water. Having permeable pavers on a portion of the lot will allow the owners to still use it for parking when desired.

Island-Wide Natural Infrastructure Strategies

The proposed island-wide strategies include both structural and nonstructural recommendations. The structural recommendations include natural infrastructure features that perform best when distributed across the island, creating an integrated Green Space Network.

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-9	Permeable Pavers (Island-wide)	 Install permeable pavers on public domains (parking lots and on-street parking), with a special emphasis on the South Beach area. Conduct outreach to commercial properties to encourage use of permeable pavers. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution
NI-10	Urban Tree Canopy (Island-wide)	 Identify vacant lots. Integrate urban tree canopy into natural infrastructure model. Conduct community outreach on the benefits of native urban trees. 	 Improves shade, air and soil filtration, and wildlife habitat Serves as a shelter and resting place for birds within the Atlantic Flyway

Item #1.

SITE ID	PROJECT NAME / LOCATION	ACTION ITEM (PROJECT DURATION)	HABITAT IMPROVEMENTS
NI-11	Elevating Homes (Island-wide)	 As homeowners continue to elevate homes, educate homeowners on green infrastructure best practices, like permeable pavers, rain gardens, and native plants. Apply for additional FEMA Hazard Mitigation Funding to continue to offset out-of-pocket expenses for homeowners wanting to elevate their home. Consider adopting a plant ordinance where a certain percent of the lot has to be kept green. 	 Reduce stormwater inputs into the marsh to benefit habitat Capture the initial rainfall runoff, which contains the highest pollution Provide habitat for pollinators and increase biodiversity
NI-12	Right-of-Ways (Island-wide)	 Map right-of-ways and identify green infrastructure opportunities. Demarcate right-of-ways in high priority areas. Utilize right-of-ways to create a Green Space Network. 	 Provide habitat for pollinators and increase biodiversity Increase connectivity of green spaces

Table 5.6. Island-wide strategies

NI-9: PERMEABLE PAVERS

There are several large, public-owned parking lots on Tybee Island, including beach parking at the south end of the island and on-street parking. The plan proposes replacing the asphalt in these parking areas with permeable pavers. Permeable pavers have space between them that allows rainwater to infiltrate through to an underlying gravel layer to reach the ground. This infiltration improves the quality of water by capturing the 'first flush' (initial highest concentration of pollutant) of contaminants that have been transported by rainfall runoff. Due to this area's proximity to the beach, permeable pavers are recommended over permeable pavement, which has smaller pores that would get clogged with sand. Further design specifications are included in **Appendix E**.





Figure 5.14. Examples of permeable pavers.



Figure 5.15. Proposed permeable paver locations that include both commercial and public property.

ltem #1.

NI-10: URBAN CANOPY COVER

Urban Canopy Cover is a natural infrastructure feature that involves planting trees in order to intercept rainfall, reduce rainfall runoff, and combat flooding during rain events. Urban Canopy Cover improves infiltration and hosts other benefits such as shade, air and soil filtration, wildlife habitat, and aesthetic appeal. For example, these trees can serve as a shelter and resting place for birds within the Atlantic Flyway, which is one of four major flyways for migratory birds in the Americas. Data from the National Audubon Society has tracked over 255 unique bird species that have visited Tybee Island, of which some are classified as Near Threatened based on the International Union for Conservation of Nature (IUCN) Red List Category. Table E.4 in the appendix highlights the bird species with greater ecological concerns. These trees can be implemented on vacant lots and publicly owned property across the island, such as right-of-ways and public parks. A table (**Table E.3**) has been included in the appendix as an example of the native tree options that could be used for this purpose on Tybee Island.

NI-11: ELEVATING HOMES

Tybee Island has been awarded two Hazard Mitigation Grants through the Federal Emergency Management Agency (FEMA) to support home elevations. Both grants were related to the damage from Hurricane Irma in 2017. The grant pays for 85 percent of the cost, meaning that the homeowners are responsible for 15 percent plus any overruns. To be lifted out of the flood hazard area, homes on Tybee Island must be elevated at least one foot above base flood elevation (BFE). The process involves emptying the homes of all contents, running steel beams either through or beneath the home, and slowing lifting using multiple hydraulic jacks. Once the home is lifted, new foundation piers are built. In some cases, a new floor structure is built, and then the home is lowered back down and attached to the new foundation. For those elevating their homes and those considering this investment, there is an opportunity to provide education on natural infrastructure best practices, like permeable pavers, native plants, and living shorelines. When homes are raised, landscaping often needs to be redone, offering the chance to change designs, materials, and plant species. Best practices could be encouraged through an incentive program or a plant ordinance where a certain percentage of the lot has to be kept green.

NI-12: RIGHT-OF-WAY

Much of Tybee Island is developed, and most of the area bordering the marsh is privately owned. This limits the City's ability to implement the natural infrastructure. One innovative approach that emerged from the planning process was to use public right-of-ways for nature-based features. Street right-of-ways are land adjacent to the road that is typically used for water/sewer lines, drainage, and transportation infrastructure. Many communities are reclaiming that valuable space to implement the natural infrastructure. On Tybee Island, it is first necessary to determine where the right-of-way is located. Demarcating it with flags or other markers in high-priority areas for natural infrastructure could help educate residents on ownership rights and potential uses for this land. Some homeowners have erected structures or invested in the landscape in the right-of-way, so significant outreach will be needed before utilizing this asset.

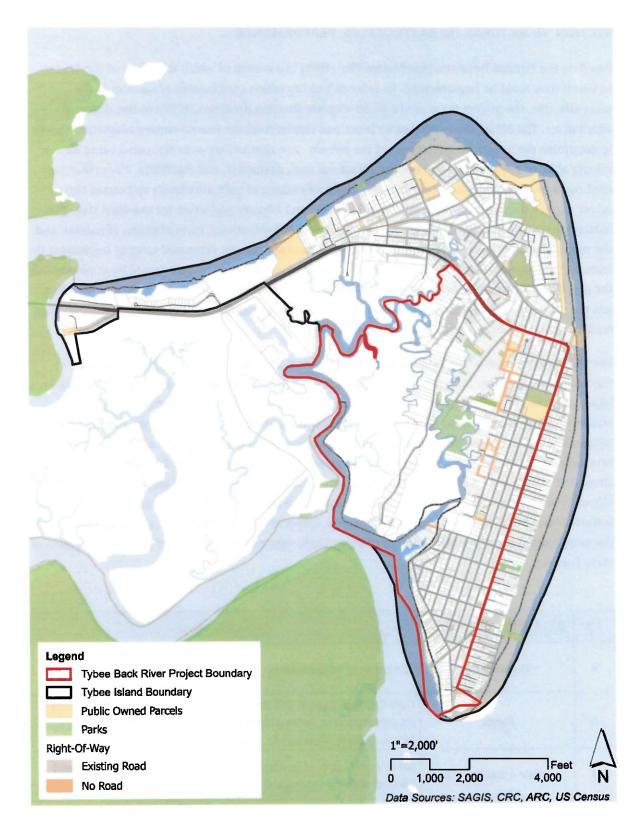


Figure 5.16. Identified right-of-ways on Tybee Island

SECTION VI: NATURAL INFRASTRUCTURE PERFORMANCE

Based on the Natural Infrastructure Master Plan, there is a variety of which features and the degree to which they could be implemented. In order to identify which combination of features is the most effective, the project team used a Multi-Criteria Decision Analysis (MCDA) to test different alternatives. The MCDA uses stakeholder input and results from the coastal empire adaptation survey to determine the weight or importance of the criteria. The alternatives were compared based on the criteria of flood performance, habitat improvement, cost, aesthetics, and feasibility. The researchers used numerical modeling to determine the flood performance of each alternative and tested them across various combinations of rainfall depths, tides, and a future projection for sea-level rise. The habitat improvement score considers the improvement in connectivity, diversification of habitat, and the total freshwater towards the marsh. The cost score was based on estimated costs to implement the features. The aesthetics score was based on the resulting appearance changes caused by implementing the proposed features. The feasibility scores are based on the cost and likelihood of implementation and the property type considered in each scenario. Additional details of the numerical model and the environmental forcings tested can be found in **Appendix F**.

The tested alternatives are hybrid infrastructure systems, as they encompass gray and natural infrastructure. The gray infrastructure is part of the Stormwater Master Plan of the City of Tybee Island, and thus it will not be discussed in detail in this report. However, the proposed hybrid infrastructure system adopted the most suitable gray infrastructure from that study. For the natural infrastructure, four different configurations were considered for this study. The alternatives are summarized in **Table 6.1** and are named by the owner of the feature location. For example, the alternative named Public has all of the natural infrastructure features located on land owned by the City of Tybee Island or the State of Georgia. Similarly, the label Residential and Commercial represents features located in private and commercial parcels, respectively. Note that these alternatives involve the same natural infrastructure between them and only vary on the amount and placement location of these features.

ID	ALTERNATIVE NAME	DESCRIPTION
x	Do Nothing	Current gray infrastructure
Α	Public	Curb Cut Rain Garden (US 80/Butler), Swale (14th St.), Rain Storage on public parcels, Permeable Pavers on public domains (parking lots), 6th St. culvert, Venetian Dr. levee
В	Public + Residential	Same as A + 50% of residential parcels (201 parcels or ~10% total parcels) with rain storage at the "Bowl" region

ID	ALTERNATIVE NAME	DESCRIPTION
с	Public + Commercial	Same as A + 50% commercial parcels (47 parcels) with rain storage & permeable pavers at the "Bowl" region
D	Public + Residential + Commercial	Same as B + same as C
E	Only Gray	Proposed gray infrastructure improvements

Table 6.1. Proposed alternatives with their description.

The hybrid infrastructure alternatives (A to D) include the same coastal natural infrastructure features, which are the Venetian Drive horizontal levee and 6th street culvert expansion, as well as the proposed gray infrastructure from the Stormwater Master Plan. The Do Nothing alternative (Labled 'X') includes the current gray infrastructure, while the Only Gray alternative (Labled 'E') only considers the proposed gray infrastructure, which includes larger pipes and backflow prevention on most outfalls. The following is a detailed description of the proposed hybrid infrastructure alternatives.

A: PUBLIC

This scenario includes four features: rain storage (rain harvesting and/or rain gardens), permeable pavers, curb cut rain gardens, and the 14th Street swale. Rain harvesting was applied to all buildings on public property. This includes the Tybee Island Branch Library, Tybee Island City Hall, Tybee Island YMCA, Tybee Island Fire Department, the Tybee Island Police Department, and the Tybee Shell Recycling Center. The permeable pavers are located at the large public beach parking lots between 14th and 18th street and in the parallel parking spots on the roads perpendicular to Butler on the east side. The permeable pavers placed at the 14th Street public parking lots can address the experienced nuisance of flooding. The pavers are an alternative to the proposed gray solution of incorporating a pump to drain water to the west side of the island. To accommodate the swale along 14th Street, 14th Street, Venetian Dr., and 12th Street on the west side of Butler are converted to one-way streets with permeable pavers. The curb-cut rain gardens run along Butler Avenue within the city of Tybee's right-of-way.

B: PUBLIC + RESIDENTIAL

In addition to the public features described in Alternative A, Alternative B includes residential rain storage. While the Natural Infrastructure Master Plan included either rain harvesting, a rain garden, or both on the residential parcels around the "Bowl" region, the researchers only accounted for rain harvesting in the numerical modeling. However, depending on the design, rain gardens can provide storage as the modeled rain harvesting. Rain harvesting was placed using a random sampling technique within the location prone to inundation, which is the low-lying residential area between 15th St and 12th St (See Figure 6.1). A total of 201 residential parcels were selected for this effort, which totals 50 percent of the parcels in this region and almost 10 percent of the total parcels in the city.

C: PUBLIC + COMMERCIAL

In addition to the public features described in Alternative A, Alternative C includes rain storage and permeable pavers on commercial properties. A random selection of 50 percent of the commercial parcels was assigned rain harvesting, while the rain gardens were not evaluated for this report. The large commercial parking lots that were asphalt were replaced with permeable pavers. This alternative also includes the pocket park at Butler and 15th street.

D: PUBLIC + RESIDENTIAL + COMMERCIAL

Alternative D includes all of the natural infrastructure features used in the previous alternatives.

75

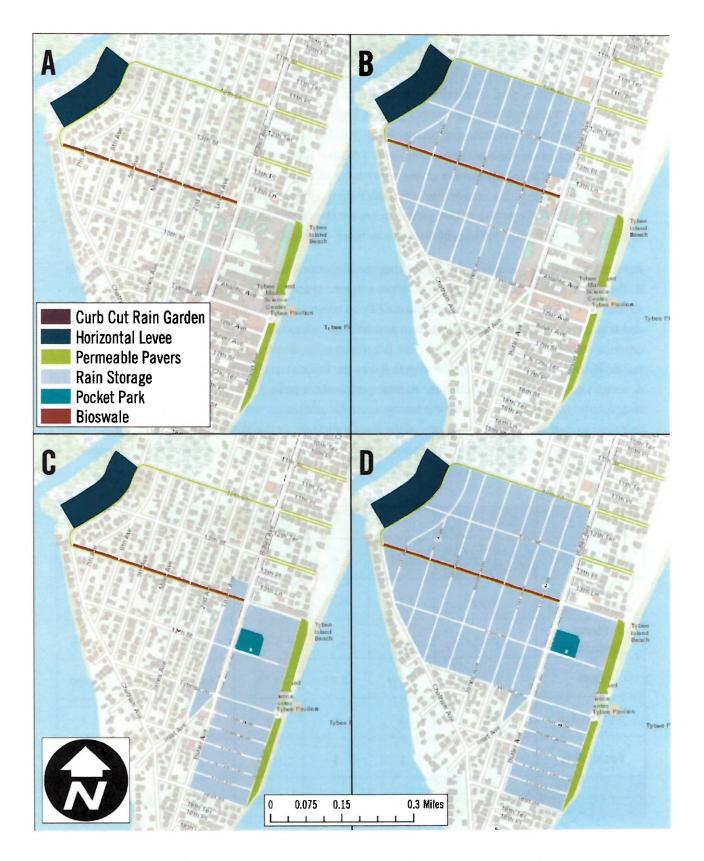


Figure 6.1. Location of the natural infrastructure features over the south end of Tybee Island for the proposed alternative A, B, C, and D.

Island-Wide Natural Infrastructure Strategies

The Multi-Criteria Decision Analysis (MCDA) was based on five main criteria: flood performance, habitat performance, cost, aesthetics, and feasibility. The most important parameter in the MCDA was the habitat performance criterion, with a relative importance of 0.35. It follows the flood performance and cost criteria with a relative importance of 0.25 and 0.2, respectively. Lastly, the feasibility and aesthetics criteria are the least important, with a relative importance of 0.1 for both. The selection of these criteria was based on surveys of the community and inputs from stakeholders, including the Coastal Empire Adaptation survey. However, additional surveys, town halls, and workshops would be conducted beyond the period of this project to ensure the correct weight of each criterion in the MCDA approach. The following subsection describes in more detail each criterion.

Results from the MCDA approach suggest that the tentatively selected alternative (TSA) is alternative B, the hybrid infrastructure system with green infrastructure on public and residential parcels. This alternative offered the optimal combination of flood reduction, habitat performance, cost, aesthetics, and feasibility (Table 6.2). Flood reduction and habitat performance were the most heavily-weighted criterion in the MCDA, and only alternative D had better flood reduction than B, but the cost and feasibility of D were prohibitive. Alternative B was the most cost-effective hybrid design besides A, which showed poor flood reduction. Habitat performance among the four hybrid systems was comparable. Alternative B received the lowest score for aesthetics due to adding rainwater harvesting to buildings, but this criterion was one of the least important in the MCDA. The feasibility of alternative B was moderate, considering both the city and homeowners would have to install green infrastructure.

- States		ALTERNATIVES					
CRITERION	RELATIVE IMPORTANCE	x	A	В	с	D	E
Habitat improvement	0.35	1.30	4.28	4.40	4.17	4.12	2.58
Flood Reduction	0.25	2.00	2.11	3.49	2.63	4.04	1.85
Cost	0.20	5.00	2.23	2.16	1.07	1.00	5.00
Aesthetics	0.1	2	4	3	5	4	1
Feasibility	0.1	1	5	3	3	2	4
	TOTAL SCORE	2.26	3.37	3.44	3.13	3.25	2.87

 Table 6.2. : MCDA results for the various alternatives, including the "no action" alternative (X), four hybrid infrastructure alternatives (A through D), and a gray infrastructure alternative (E). Note that results for alternative E are not directly comparable to others because no future projections of floods were assessed.

Overall Performance

The natural infrastructure in hybrid alternative B provided substantial reductions in the total number of buildings inundated, but the relative importance of natural infrastructure depended on the storm size (Figure 6.2). Contrary to most findings, the project team found that natural infrastructure provided more benefits during larger storm events. For the 3-inch storm, the gray infrastructure drained much of the stormwater and thus provided a greater proportion of flood protection. The importance of natural infrastructure increased during the intermediate storms, peaking with the reduction of 73 buildings (3.5 percent improvement island-wide; 87 percent of the total reduction) during the 6-inch storm. For larger storms, the overall flood benefits were diminished, but natural infrastructure continued to substantially enhance the gray infrastructure, which offered little flood reduction for the 9-inch storm. This suggests that the proposed hybrid infrastructure system can improve flood conditions across a range of rainfall depths, with gray infrastructure being most important for small storms and natural infrastructure being most important for intermediate and larger storms.

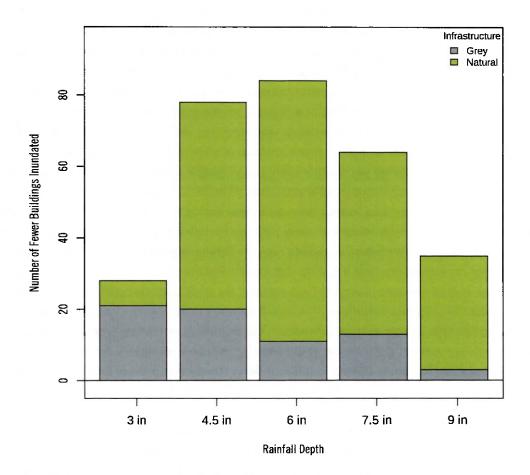


Figure 6.2. The number of fewer buildings inundated for the various storm depths, with mean tide conditions, for alternative B relative to existing conditions (alternative X). The total number of fewer buildings inundated is broken down into contributions from gray infrastructure (gray bars) and natural infrastructure (green bars).

78

Item #1.

The TSA, alternative B, provided benefits for flood depth and duration when compared to the existing condition, alternative X (Figure F.2). The greatest reduction in the number of buildings flooded occurred for buildings with up to 0.5 inches of maximum inundation and up to one hour of inundation duration. For maximum inundation depth, flood benefits were greatest during the 6 inch storm, with 70 fewer buildings (4.1 percent improvement above the base condition) inundated less than 0.5 inches (Figure F.2a). Alternative B was most beneficial for flood duration during the 9 inch storm, reducing the number of buildings inundated 0.5 to 1.5 inches for up to an hour by 48 (7.2 percent improvement; Figure F.2c). Among all tidal conditions, hybrid infrastructure in alternative B was most beneficial in sea-level rise scenarios (Figure A5.4b,d). Most of the flood improvements occurred in buildings on the southern portion of the island (Figure F.3), west of Butler Ave. and between 12th St. and Inlet Ave. These results illustrate the potential efficacy of hybrid infrastructure because the southern end of the island is where flooding is most prevalent and where most hybrid infrastructure was implemented. More detailed results are discussed in the appendix.

Culvert Example

As previously mentioned, two metrics were explored to quantify the habitat performance due to the hybrid infrastructure system. First, the marsh connectivity across 6th St was evaluated using the amount of flow passing through the culvert. The flow rate for both the existing (alternative X) and proposed (alternative B) scenarios are summarized in Figure 6.3 for a complete 4 tidal cycles. It is shown that during the flood tide (i.e., positive values of tidal amplitude), a larger amount of water enters (i.e., negative flow rate values) the marsh pond for the proposed conditions whereas for the current conditions remains than for the existing one, especially during the peak tidal amplitude. Similarly, the existing conditions have a greater amount of water leaving the marsh pond (i.e., positive flow rate values) during the ebb tide event (i.e., negative tidal amplitude values) than the current one, especially before the peak tidal amplitude. Therefore, the proposed culvert is enhancing the amount of water entering and leaving the marsh pond during tidal conditions. To further assess the marsh connectivity, the net volume of water passing through the culvert was computed for both the existing and proposed conditions at various tidal conditions (Figure F.4). Results highlighted that the current conditions promote a system that loses water even at high events, such as spring tides, meaning that more water is leaving than entering the system upstream of the 6th St. culvert. However, under the proposed conditions, this marsh system equilibrates the volume of water on each side. For example, during average tide events, the amount of water that enters the system is practically the same amount that leaving, thus providing favorable conditions for the flora. Despite this improvement, under future climatic conditions, both alternatives provide a system that will be greatly flooded, meaning that the sea-level rise will produce a failure of this infrastructure.

Second, the freshwater from the rainfall-runoff that was discharged into the marsh surrounding Horsepen Creek was quantified for each alternative. The implementation of the hybrid infrastructure can decrease the amount of freshwater reaching the marsh by up to 21 percent (115,556 gallons) compared to the current conditions (alternative X). However, the inland green infrastructure features are capable of retaining up to 5 percent of the freshwater that otherwise will go into the marsh system when compared to the proposed gray infrastructure plan only (Scenario E).

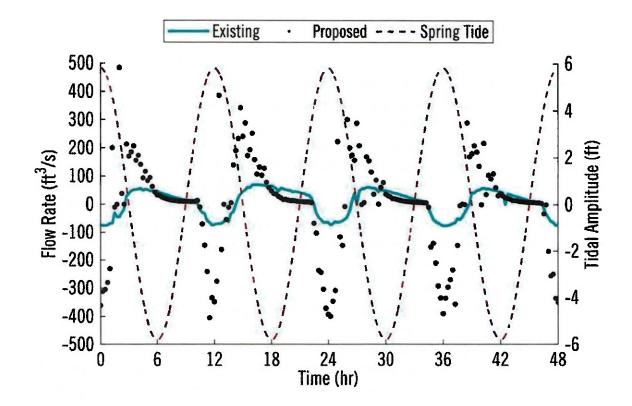


Figure 6.3. Amount of flow going through the 6th St culvert for the existing (blue solid line) and proposed (black dots) conditions. Negative flow rate values correspond to water entering the marsh pond (north of 6th St), while positive values are for water leaving the system. The spring tide amplitude value is shown as a red dashed line.

Item #1.

SECTION VII: CONCLUSION

The Tybee Island Natural Infrastructure Master Plan was designed to be integrated with the community's new Comprehensive Stormwater Master Plan. While upgrading gray stormwater infrastructure will be critical for reducing flood impacts on the island, the models used by the University of Georgia and Thomas & Hutton show that enlarging and densifying conduits alone will not be sufficient to manage the volume of water poised to inundate the island in the decades to come. As heavy rain events are increasingly compounded and exacerbated by higher tides, integrated hybrid infrastructure will be needed. The hybrid natural infrastructure features recommended in this plan can **capture and retain up to 21 percent (115,556 gallons)** of the total freshwater rainfall-runoff volume that drains into the marsh. This can prolong the service life of these new gray infrastructure investments by reducing flooding stress while conserving wildlife habitats and wetlands.

Final Design and Permitting

This project produced preliminary design and feasibility assessments so that Tybee Island City Council can decide which activities to pursue in the short, medium, and long term. Should Tybee Island City Council approve these initial concepts and authorize pursuit of more detailed site designs, the next steps for the project team will be to conduct education and outreach activities as described above and apply for the next phase of NFWF National Coastal Resilience Funding, which are for 3 year projects with a maximum budget of \$1 million.

Projects in the next phase of NFWF funding advance preliminary designs into final designs and engineering plans with detailed cost estimates. They should result in 90-100 percent design completion. By the end of this phase, projects should demonstrate readiness to meeting regulatory and permitting requirements. NFWF states that proposals for larger, more comprehensive projects are likely to be more competitive. According to past guidance, larger match ratios and matching fund contributions from a diversity of partners will make the application more competitive. Proposals should also include sustained stakeholder engagement and efforts to transfer the planning and design approach to other communities in the state or region. Non-federal match is encouraged but not required to demonstrate broad support for the project.

Next Steps

Public Engagement and Outreach

There is strong public support for natural infrastructure on Tybee Island and in surrounding areas, particularly when it promotes healthy wildlife habitat. However, it will be critical to educate residents, particularly those adjacent to natural infrastructure features, about their benefits to increase understanding and collective will. Specific outreach recommendations are to:

• Demarcate the right-of-way on 14th and 15th St. to educate residents about the right-of-way and provide visual guidance for discussing natural infrastructure along these corridors.

- Collaborate with partners to host workshops for residents about rain storage, such as a rain barrel workshop in partnership with the Georgia Department of Natural Resources Coastal Resources Division or a rain garden workshop in partnership with UGA Marine Extension and Georgia Sea Grant.
- Provide training on the design and function of sales so they are properly maintained. Currently, there are several swales on the island where sediment has built up preventing water from accessing the swale (e.g. 7th St. and Miller Ave.).
- Seek funding to incentivize the adoption of rain storage practices on residential properties, such as implementing the Coastal Rain Garden Program. These efforts should prioritize 13th, 14th, and 15th Streets between Butler Avenue and Venetian Drive/Chatham Avenue.
- Engage residents who live on Venetian Drive to share options for protecting their properties and preserving the marsh.



Research

Next steps needed for research and data collection are to:

• Update modeling with proposed improvements in the Comprehensive Stormwater Master Plan.

Figure 7.1. The Coastal Rain Garden Program supports residents or small businesses interested in installing rain gardens in coastal communities

- Assess functionality of adding control features on proposed 6th St. and Lewis Ave. culverts, in order to ascertain potential impacts on the marsh and net ecological lift.
- Analyze optimal locations for buy outs of repetitive loss properties (FEMA Hazard Mitigation Grant) to enhance natural infrastructure.

Funding

In order to advance the preliminary designs in this plan and implement recommendations, additional funding will be needed. Listed are suggestions for securing this support:

- Apply for NFWF Phase 3 grant to further work on design and permitting.
- Investigate creative options for securing matching funds for project proposals, such as the Department of Defense's REPI Program.
- Leverage this plan to access state, federal, and private sector funding. Having concepts approved by CIty Council will strengthen proposals and help the designs appear more shovel-ready.
- Continue dialogue with permitting/regulatory agencies on proposed activities.
- Integrate natural infrastructure into current and future planning, transportation and public works projects. This includes both Phase 1 and 2 of the stormwater capital improvement project involving 14th Street Parking Area/15th Street Outfall and improvements by the Georgia Department of Transportation to US Hwy 80 / Butler Avenue.

ltem #1.

REFERENCES

ACF Environmental. (2022). *PowerBLOCK - Permeable Paver*. ACF ENVIRONMENTAL powered by FERGUSON. https://acfenvironmental.com/products/stormwater-management/permeable-porous-paving/powerblock/

Atlanta Regional Commission. (2016). GEORGIA STORMWATER MANAGEMENT MANUAL VOLUME 2: TECHNICAL HANDBOOK. ().Atlanta Regional Commission. https://cdn.atlantaregional.org/wp-content/uploads/gsmm-2016edition-final-v2.pdf

CTC & Associates LLC, & WisDOT Research & Library Unit. (2012). Comparison of Permeable Pavement Types: Hydrology, Design, Installation, Maintenance and Cost. ().WisDOT Southeast Region. http://www.uni-groupusa.org/PDF/TSR-2011-permeable-pavements.pdf9

Davies JL (1964) A morphogenetic approach to world shorelines. Z Geomorphol 8:127-142.

Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2018). On the relationship between cognitive ability and risk preference. *Journal of Economic Perspectives*, 32(2), 115–34.

Evans, J.M., Gambill, J., & Hopkinson, C. (2016). Tybee Island Sea-Level Rise Adaptation Plan. National Sea Grant College Program.

Gittman, R. K., Scyphers, S. B., Smith, C. S., Neylan, I. P., & Grabowski, J. H. (2016). Ecological Consequences of Shoreline Hardening: A Meta–Analysis. Bioscience, 66(9), 763–773. Retrieved Dec. 1. 2020 from https://doi.org/10.1093/biosci/biw091.

GreenBlue Urban Limited. (2021). *HydroPlanter*. GreenBlue URBAN. https://greenblue.com/gb/products/ hydroplanter/

Haubner, S., Reese, A., Brown, T., Claytor, R., & Debo, T. (2001). Georgia Stormwater Management Manual Volume 2 Technical Handbook. ().Atlanta Regional Commission. https://www.lex-co.com/Departments/PublicWorks/ GSMMVol2.pdf

Jacobsen, R. (2019). Rebuilt Wetlands Can Protect Shorelines Better Than Walls. Scientific American. Retrieved on March 4, 2021 from https://www.scientificamerican.com/article/rebuilt-wetlands-can-protect-shorelines-better-than-walls .

Keeler, A. G., Mullin, M., McNamara, D. E., & Smith, M. D. (2022). Buyouts with rentbacks: a policy proposal for managing coastal retreat. *Journal of Environmental Studies and Sciences*, 1–6.

Koetse, M. J. (2017). Effects of payment vehicle non-attendance in choice experiments on value estimates and the WTA-WTP disparity. *Journal of Environmental Economics and Policy*, 6(3), 225–245.

Lloyd-Smith, P., Schram, C., Adamowicz, W., & Dupont, D. (2018). Endogeneity of risk perceptions in averting behavior models. *Environmental and Resource Economics*, 69(2), 217–246

National Oceanic and Atmospheric Administration (NOAA). (2022). NOAA Atlas 14 Point Precipitation Frequency Estimates. https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html

National Tank Outlet. (2022). *PLASTIC VERTICAL WATER STORAGE TANKS. NATIONAL TANK OUTLET.* https://www.ntotank.com/vertical-water-tanks

Nordman, E. E., Isely, E., Isely, P., & Denning, R. (2018). Benefit-cost analysis of stormwater green infrastructure practices for Grand Rapids, Michigan, USA. *Journal of Cleaner Production*, 200, 501–510. 10.1016/j.jclepro.2018.07.152

Pugh, D., Woodworth, P., 2014. Tidal analysis and prediction, in: Sea-Level Science: Understanding Tides, Surges, Tsunamis and Mean Sea-Level Changes. Cambridge University Press, Cambridge, UK, pp. 60–96. https://doi.org/10.1017/CB09781139235778

Sweet, W.V., B.D. Hamlington, R.E. Kopp, C.P. Weaver, P.L. Barnard, D. Bekaert, W. Brooks, M. Craghan, G. Dusek, T. Frederikse, G. Garner, A.S. Genz, J.P. Krasting, E. Larour, D. Marcy, J.J. Marra, J. Obeysekera, M. Osler, M. Pendleton, D. Roman, L. Schmied, W. Veatch, K.D. White, and C. Zuzak, 2022: Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines. NOAA Technical Report NOS 01. National Oceanic and Atmospheric Administration, National Ocean Service, Silver Spring, MD, 111 pp. https://oceanservice.noaa.gov/hazards/sealevelrise/noaa-nostechrpt01-global-regional-SLR-scenarios-US.pdf

USACE (2000) Hydrologic Modeling System HEC-HMS User's Manual. Hydrologic Engineering Center, Davis, CA.

USDA FOREST SERVICE NORTHERN REGION ENGINEERING. (2020). Cost Estimating Guide for Road Construction. ().USDA Forest Service

APPENDIX A: PROJECT METRICS

NFWF METRICS	TARGETED	ACHIEVED
Critical facilities and infrastructure benefiting from the project (those necessary or ensuring public health and safety such as, hospitals, shelters, emergency and evacuation routes, fire and police stations, etc. as well as critical infrastructure – wastewater treatment facilities, power plants, etc.)	50%	50% (8 critical facilities)
(Island wide) Properties with enhanced protection		
(Commercial or residential properties within the radius of enhanced protection) (study area - bowl region)	50%	52% (231 properties)
Outreach/ Education/ Technical Assistance (Number of municipalities, local, state, and federal government entities participating in the project)	5	27
Volunteer participation (number of volunteers participating in projects)	15	121

Outreach, Education and Technical Assistance partners:

Chatham County-Savannah Metropolitan Planning Commission Chatham Emergency Management Agency	Thomas & Hutton Georgia Department of Natural Resources Coastal Resources Division	
Chatham County	Georgia Emergency Management Agency	
City of Savannah	University of Georgia Carl Vinson Institute of	
Georgia Conservancy	Government	
One Hundred Miles	University of Georgia Department of Public	
Goodwyn, Mills and Cawood	Administration	

- University of Georgia Department of Marine Sciences Georgia Institute of Technology Georgia Southern University Emory University NASA Jet Propulsion Laboratory California Institute of Technology U.S. Army Corps of Engineers
- NFWF NOAA Rep. Buddy Carter's Savannah Office, District 1 National Sea Grant Network Southeast Sustainability Directors Network Climate Mayors Center for Sea Rise Solutions Athens-Clarke County Unified Government

Volunteers Participating

Abby Sterling **Adrienne Hines** Ajay Walther Alessandria Schumacher Alex Muir Alexander Keaton Alondra Ramirez Amy Gaster **Annaliese** Poliner Anthony DAguillo Arielle Mion Audrey Long **Bailey Kainalu Bailev** Peak Bailev Williams Beth Williams Bill Garbett Binyu Yang Brent Levy **Caitlin Duffy** Caroline Petithomme Cathy Lewis Cathy Sakas Charles McMillan **Charlotte James** Christa Ishimwe Clare McCarthy Cole Allison Corey Kemp **Courtney Reich** Dania Hussain David McNaughton Deb Barreiro **Demery Bishop** Drew Lonker **Elaine McGruder** Emanuele Di Lorenzo Emilie Saksvig **Emily Wortman** Emma Hite Erica Kahn

Ethan Li George Shaw Gina Zheng Grace Dusenbury Grace Morris Harvey Ferrell Helen Downing Ian Rossiter Isabella Martin Jack Alperstein Jackie Jackson Jan Mackinnon Jared Lopes Jaylan Holman Jennifer Kline Joe Richardson Kait Morano Kate Burns Kathryn Williams Keith Gay Ken Burns Kevin Nastasi **Kevin Smith** Kim Cobb Kim Garvey Kiran Topiwala Laura Williams Lauren Farrington Lauren Sullivan Lindy Betzhold Lisa Vandiver Madeline Holodnik Margarett Mcintosh Marie Gooding Marisa Wong Mark Padgett Mary Lee McQuigg Matthew Bilskie Matthew Wirth Maya Bliss Mayuri Makan

Meg McAloon Melissa Turner Michael Blakely Michael Foran Michael Hans Michael Horneribler Michaela DiGiovanni Michelle Owens Monzur Patwary Morgan Hodgkinson Nick Deffley Norah McKinley Patricia Stupp Paul Coote Paul Vila Perry Taylor Peter Gulbronson **Randall Mathews Robertus Rioputra Rory Granros Russ Clark** Sam Adams Sam Goldsmith Sana Nag Scott Pippin Shahreen Hussain Shana Iones Shawn Gillen Shihui Deng Sipeng Zhang Sophia Milazzo Stephan A Durham Surovi Nimmi Susan Bentley Susan Hill Tammie Riddles Tsedenya Bizani Will Spivey Yazmine Callan

APPENDIX B: PUBLICATIONS AND MEDIA

Online Resources

Resilient Tybee Website

Gambill, J., Milazzo,S. & Robertson, A. (2022). <u>Resilient Tybee website</u>. City of Tybee Island and My Agency Savannah.

Building Flood Resilience on Tybee Island StoryMap Collection

Gambill, J., Callan, Y., DiGiovanni, M., Dusenbury, G., James, C., McQuigg, M.L., Saksvig, E., Spivey, W., Sullivan, L., & Williams, B. (2022). <u>Building Flood Resilience on Tybee Island</u>. Esri ArcGIS StoryMap Collection. University of Georgia Marine Extension and Georgia Sea Grant.

Faces of Resilience Video Series

Gambill, J., Lindsay, A., & Kenworthy, E. "<u>Restoring Dunes to Protect Coastal Communities</u>." Faces of Resiliency video series. University of Georgia Marine Extension and Georgia Sea Grant.



Tybee Island is a barrier island lacaeed 11 miles east of Savarwah in Chatham County, Georgia. It belongs to a series of barrier islands that stretch along the Atlants coast from North Carolina to Florida. The island is bounded to the north by the Savansah River, to the east by the Atlantic Ocean and to the south and west by Tybee Creek and a vast tidal marsh system.



Why it Matters

Specialized is a popular summer beach rever. Thursg usek hubby websited, the population can go from 5,000 fail time resident to specific at 50,000 visitors. Tourism provides a critical backbore for Per island's economy while generating unique challenges for the community's natural resource transportation and websites transmission.

Typer haund is also have to an environmentally fragile ensystem. It is a following protected neighbor application of the sector and application protection theories and three protected neighbors application of the sector application of the protected neighbors application of the protected neighbors application of the protected neighbors application of the sector application of South American be been set tools application of the sector applica Figure B.1. The Resilient Tybee website was created through this project



Callection **Building Flood Resilience on Tybee** Island

A history of the threats, impacts and solutions to flooding, storm surge and sea level rise on Tybee Island, Georgia.







Figure B.2. The "Building Flood Resilience on Tybee Island" StoryMap Collection was developed through this project.

Recorded Presentations

Local and Regional Policy Efforts for Equitable Sea Level Rise Adaptation. Environmental Ethics Seminar. University of Georgia Environmental Ethics Certificate Program.

Building a Resilient Georgia: Funding Opportunities Webinar. UGA Marine Extension and Georgia Sea Grant Youtube Channel.

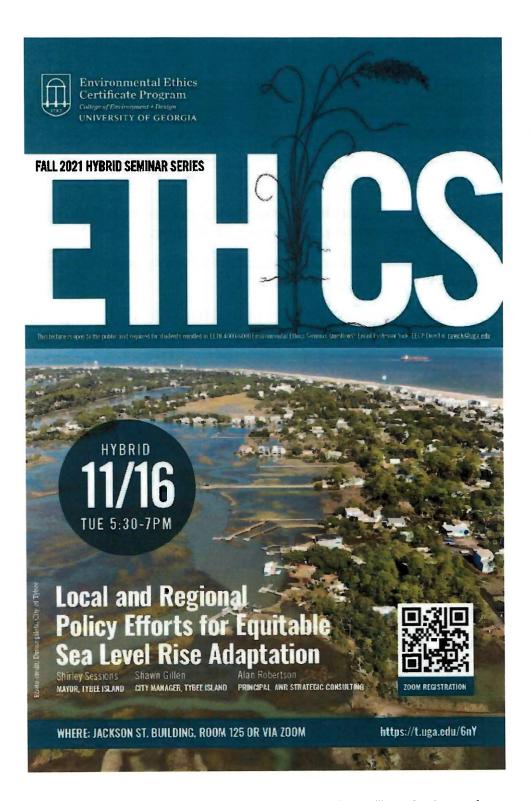


Figure B.3. Tybee Island Mayor Shirley Sessions, City Manager Shawn Gillen and project member Alan Robertson presented in the University of Georgia Environmental Ethics Seminar.

Sample Media Coverage

Brennan, P. In Savannah, a Sea Level Summit. NASA Sea Level Portal. Dec. 21, 2022.

Buckleitner, S. <u>Tybee Island Natural Infrastructure Plan</u>. University of Georgia Institute for Resilient Infrastructure Systems. Nov. 15, 2022.

Mecke, M. <u>Tybee prepares for long-term solutions to climate change, erosion, storms</u>. Savannah Morning News. June 10, 2022.

Guan, N. <u>Rising waters: Tybee's Back River neighborhood is ground zero for flooding, sea-level rise</u> (viewable to subscribers only). Savannah Morning News. March 15, 2022.

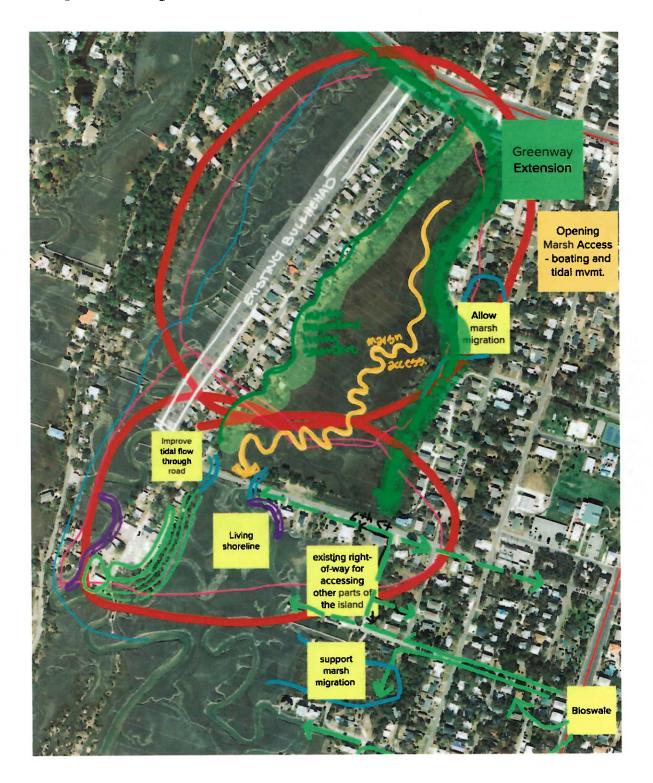
<u>Tybee Island residents see more flooding as sea levels rise</u>. Yale Climate Connections radio series. Yale University. February 7, 2022.

Pomerleau, L. <u>UGA Project Profile: Flood Resilience for the City of Tybee Island</u> University of Georgia College of Environment and Design. August 16, 2021.

91

APPENDIX C: DESIGN CHARRETTE RENDERINGS

Examples from Design Charrette Mural Boards



ltem #1.



93

APPENDIX D: COASTAL EMPIRE ADAPTATION SURVEY

	MEAN/PROP.	MEDIAN	SD
age	57.62	63.00	16.60
female	.55	1.00	.50
highschool	.11	.00	.31
vocation	.02	.00	.15
some_college	.16	.00	.37
assoc_degree	.04	.00	.20
college_grad	.28	.00	.45
prof_degree	.10	.00	.30
grad_school	.29	.00	.45
empft	.35	.00	.48
emp_pt	.13	.00	.33
work_in_home	.01	.00	.08
not_emp	.05	.00	.21
retired	.44	.00	.50
student	.01	.00	.11
white	.76	1.00	.43
hispanic	.03	.00	.17
black	.12	.00	.33
native_am	.01	.00	.08
pac_isl	.00	.00	.00
indian	.01	.00	.08

	MEAN/PROP.	MEDIAN	SD
chinese	.00	.00	.00
filipino	.00	.00	.00
japanese	.01	.00	.08
korean	.01	.00	.08
vietnamese	.01	.00	.08
asian_other	.01	.00	.08
Income*	114.85	87.50	87.83
reg_voter	.89	1.00	.31
conserv_very	.15	.00	.36
conserv	.20	.00	.40
moderate	.28	.00	.45
liberal	.17	.00	.38
liberalvery	.11	.00	.32
tybee	.41	.00	.49

N=176, except for income_cateogory (n=175)

Table D.1. Descriptive Statistics - Demographics

	MEAN/PROP.	MEDIAN	SD
coast_reside	18.96	15.00	12.71
primary_res	.94	1.00	.23
clear_title	.76	1.00	.43
heirsprop	.03	.00	.18
renter	.20	.00	.40
own_residence	.78	1.00	.42
own_biz	.03	.00	.18
own_leasep	.05	.00	.22
own_other	.03	.00	.18
county_time	47.09	50.00	10.19
ft_res	.94	1.00	.24
pt_res	.05	.00	.22
not_res	.01	.00	.11
length_res	17.59	15.00	12.45
planmove5	.10	.00	.30
plan_move10	.07	.00	.26
planmove20	.02	.00	.15
plan_moveno	.80	1.00	.40

N=176

Table D.2. Descriptive Statistics - Residency and Property Ownership

	FLOOD_INS	WIND_INS
higher_edu	0.3808	1.3609***
	(0.4247)	(0.3605)
conservative	-0.8487**	0.2838
	(0.3952)	(0.3232)
gamble_fal	0.2192	0.4269
	(0.5162)	(0.4767)
avail_heur	-0.3300	0.0706
	(0.4740)	(0.3581)
deduct_understand	-0.1996	-0.0083
	(0.3976)	(0.3223)
charity_grant	-0.6075	0.5879**
	(0.3779)	(0.2970)
inc	0.0177**	0.0088
	(0.0086)	(0.0069)
Ln(wealth)	-0.5637*	0.1843
	(0.3144)	(0.2287)
zip=31404	-2.7937***	-1.7422**
	(0.7926)	(0.7971)
zip=31410	-0.7050	0.0183
	(0.6151)	(0.4837)
zip=31411	-0.1663	-0.8426**
	(0.6280)	(0.3983)

	FLOOD_INS	WIND_INS	
zip=31419	-1.8881***	-0.3662	
	(0.5029)	(0.3949)	
Constant	8.4457**	-4.2174	
	(4.1446)	(3.0333)	
athrho	1.0031**		
	(0.4114)		
Observations	115		

* p<0.10; ** p<0.05; *** p<0.01

Standard errors in parentheses

Table D.3. Flood and Wind Insurance Bivariate Probit

TIME FRAME	FORMAT	INSTRUMENT
12 Months	Open~ended, percentage	In the next 12 months, what do you think the percentage chance is that your home will flood from any weather related event (for example, rain, storm surge, hurricane, etc.).
12 Months	Multiple Choice	In the next 12 months, what do you think the chances are that a major hurricane (Category 3 or greater, with winds of 111 mph or greater, possibility of tornadoes, and storm surge of at least 10-12 feet) will pass within 60 miles of Chatham County? a) 0% - 5% chance b) 6% - 10% chance c) 11% - 20% chance d) 21% - 50% chance
25 Years	Likert Scale	 e) greater than 50% chance In general, how likely is it that your property/current home will be flooded over the next 25 years? a) Very likely b) Likely c) Somewhat likely d) Somewhat unlikely e) Unlikely f) Very unlikely g) Don't know
50 Years	Open-ended, count	How many major hurricanes (Category 3 or greater, with winds of 111 mph or greater, possibility of tornadoes, and storm surge of at least 10–12 feet) do you expect to pass within 60 miles of Chatham County over the next 50 years? Minimum On Average Maximum

Table D.4. Risk Perception Instruments

FLOOD_PROB	COEFF	S.E.
vzone	0.4881*	(0.2514)
azone	0.4895***	(0.1854)
xzone	0.0330	(0.1697)
dk_fzone	0.4402**	(0.2035)
higher_edu	0.2162	(0.1444)
Conservative	0.0068	(0.1589)
liberal	-0.3850**	(0.1588)
gamble_fal	~0.0129	(0.2462)
avail_heur	0.5002***	(0.1584)
deduct_understand	-0.0591	(0.1349)
pastfloods	0.0112**	(0.0045)
d_days	0.0012	(0.0015)
Constant	-1.4558***	(0.1933)
Observations	176	

*p<0.10; **p<0.05; ***p<0.01

Table D.5. Perception of Flood Risk Over next 12 Months

100

ltem #1.

Random Utility Model

Consider the satisfaction (or utility, U) that an individual gets from public investments in riverine flood management infrastructure:

$$U_{nht} = V_{nht} + \epsilon_{nht} \tag{1}$$

where $V_{nht} = \alpha_{nht} + \beta_{nh-sf} x_{sf} + \beta_{nh-nf} x_{nf} + \beta_{nh-hab} x_{hab} + \gamma_n (y - cost_{nh})$ is the deterministic portion of utility (where x_{sf} = the level of storm flooding risk, x_{nf} = the level of nuisance flooding, x_{hab} = the level of coastal habitat, and *cost_{nh}* is the associated SPLOST cost for the project), with infrastructure fixed effects α_h (reflecting the utility associated with "brands" h = "Gray", "Hybrid", and "Green" relative to the "Status Quo"), utility parameters β that reflect the relative importance of project features, and marginal utility of income γ (where γ is household income). Utility varies across respondents (n), infrastructure project type (h), and choice occasion (t). The random variable ϵ_{nht} is assumed to follow a type I extreme value distribution (McFadden 1974). Since the random error is unobserved by the researcher, the plan specifies the probability of a particular choice in the data as:

$$Pr(choice = h) = Pr(V_{nht} + \epsilon_{nht} > V_{nkt} + \epsilon_{njk}) \text{ for } \forall k \neq h$$

$$Pr(choice = h) = Pr(\epsilon_{nkt} - \epsilon_{nht} < V_{nht} - V_{nkt}) \text{ for } \forall k \neq h$$
(2)

The difference in Type I extreme random variants is distributed logistic, so the logit model can be used to estimate this probability. Ignoring the panel dimension of the data (repeated choices by each respondent), the researchers can recover representative parameters for the utilities in (1) by estimating the standard conditional logit model:

$$\Pr(\text{choice} \frac{\exp(x'_{nht}\theta)}{\exp(x'_{nht}\theta)'_{k\in\mathbb{C}}}$$
(3)

where $\theta = [\alpha'\beta'\gamma]$ is a vector of model parameter estimates. Model estimation of equation (3) permits exploration of basic parameters of riverine infrastructure choice, but does not incorporate individual heterogeneity and imposes potentially unrealistic substitution effects (known as "Independence of Irrelevant Alternatives"). The researchers use estimates from (3) as a baseline for further modeling decisions.

Introducing preference heterogeneity, the project employs the Mixed Multinomial Logit (MMNL) model which provides a flexible specification for parameters for population moments as:

$$\theta_{nj} = \theta_j \pm \psi_j q_n, \tag{4}$$

where $\underline{\theta_j}$ represents the mean parameter for project attribute *j*, ψ_j represents the spread of the distribution around the mean, and q_n represents random draws from a pre-determined distribution for each respondent *n*. When ψ_j is either not specified or not statistically significant, one interprets preferences as fixed parameters. To estimate MNNL, it is necessary to simulate the integral for the distribution of random preferences:

$$P_{nht} = Pr(choice = h) = \int_{\blacksquare}^{\blacksquare} \blacksquare \underbrace{\frac{exp(x_{nht}\theta)}{exp\Sigma(x'_{nkt}\theta)}}_{\substack{k \in C}} g(\theta) d(\theta)$$
(3')

The integral of random preferences is simulated using Halton draws. Given the panel structure, loglikelihood function for the choice experiment data is:

$$\log E(L) = \sum_{n=1}^{N} \log E(P_n^*)$$
(5)

with

$$P_n^* = \prod_{h \in \mathbf{1}}^H \blacksquare \prod_{t \in \mathbf{1}}^T \blacksquare (P_{nht})^{y_{nht}}$$
(6)

where P_{nht} is probability of individual *n* choosing option *h* at time *t*.

	MODEL (1)		MODEL (2)	
CHOICE			the register of the	
gray	-0.1352	(0.5087)	-0.1352	(0.4249)
hybrid	0.5539	(0.4923)	0.5539	(0.4039)
green	0.7162	(0.4828)	0.7162*	(0.3966)
storm_flood	n_flood -0.0121***		-0.0121***	(0.0033)
nflood_days	-0.0033	(0.0023)	-0.0033*	(0.0020)
good_hab	_hab 0.6886***		0.6886***	(0.1542)
oest_hab 0.9095***		(0.2231)	0.9095***	(0.2010)
splost_cost	t_cost -0.0009***		-0.0009***	(0.0003)
Clustered SE	YES		NO	
Observations	2112		2112	

* p<0.10; ** p<0.05; *** p<0.01

Standard errors in parentheses

Table D.6. Conditional Logit Models for Riverine Infrastructure

Table D.6 presents results for the basic logit model (equation 3). Model (1) clusters standard errors at the individual level (to permit correlation among error term), while Model (2) employs robust standard error estimates. In both models, "Hybrid" design has the highest utility (relative to "Status Quo" – omitted category) followed by "Green" (which is statistically significant in model (2)). "Gray" is positive (relative to "Status Quo)), but much smaller in magnitude (and not statistically significant). Increasing flood risk probability has a significant and negative effect, while the influence of nuisance flooding is negative, but not significant. "Good" and "Best" habitat provision coefficients are positive (relative to "Poor" – excluded category) and statistically significant. The SPLOT cost parameter is negative and statistically significant.

To provide a quick snapshot of WTP, the researchers can calculate the marginal rate of substitution among risk reduction, habitat provision, and money. This provides the following results:

$MWTP_{storm_{flood}} = = \13.38	[95% C.I.: \$4.44 – \$22.33]
$MWTP_{nuisance_flood} = = 3.68	[95% C.I.: -\$0.61 – \$7.98]
$MWTP_{good_hab} = - = 761	[95% C.I.: \$249 - \$1270]
$MWTP_{best hab} = - = 1010	[95% C.I.: \$400 – \$1610]

On average, subjects are willing-to-pay \$10.63 to reduce the risk of storm-flooding in low-lying areas over the next 30 years by 1%., whereas infrastructure projects that provide for good (best) coastal habitat (relative to poor) are worth \$676 (\$701), on average, per household. Confidence intervals for MWTP are estimated using the Delta Method (2nd order approximation using Taylor series expansion). WTP for a particular infrastructure design can be estimated using the ln-SUM procedure (TBD). Table D.7 presents estimates for the mixed logit model (which allows the coefficients for "Gray", "Hybrid", and "Green" to vary within the sample of respondents and estimates a 33 variance-covariance matrix for these parameters – thus also permitting correlation).

	MODEL (1)		MODEL (2)	
MEAN				
storm_flood	-0.0170***	(0.0053)	-0.0170***	(0.0049)
nflood_days	-0.0053*	(0.0031)	-0.0053*	(0.0030)
good_hab	1.0951***	(0.2574)	1.0951***	(0.2287)
best_hab	1.3540***	(0.3350)	1.3540***	(0.2988)
splost_cost	-0.0017***	(0.0004)	-0.0017***	(0.0004)
gray	2.1156	(1.4420)	2.1156	(1.3672)
hybrid	3.4356***	(1.2557)	3.4356***	(1.2306)
green	3.5492***	(1.2414)	3.5492***	(1.2100)
Clustered SE	YES		NO	
111	一方子の下 同時の のうちい	mentil the second	and the loop of the second	
Constant	4.8239***	(0.9265)	4.8239***	(0.8152)
21	The second second		the work handling the set	
Constant	3.9438***	(0.7137)	3.9438***	(0.7884)
I 31			a straight the support	States - La Perso

	MODEL (1)		MODEL (2)	
MEAN				and the second
Constant	3.2181***	(0.6349)	3.2181***	(0.7430)
122				
Constant	-1.5992***	(0.3540)	-1.5992***	(0.3682)
132				
Constant	-1.0129***	(0.3693)	-1.0129*	(0.5230)
133				See Street
Constant	2.3357***	(0.3831)	2.3357***	(0.3721)
Observations	2112		2112	

* p<0.10; ** p<0.05; *** p<0.01

Standard errors in parentheses

Table D.7. Mixed Logit Models for Riverine Infrastructure

Preliminary results for marginal WTP from the mixed logit models are:

$MWTP_{storm_{flood}} = = 10.21	[95% C.I.: \$3.85 - \$16.57]
$MWTP_{nuisance_flood} = = 3.17	[95% C.I.: -\$0.33 - \$6.68]
MWTP _{good_hab} =- = \$658	[95% C.I.: \$271 - \$1050]
$MWTP_{best_{hab}} = - = \814	[95% C.I.: \$375 - \$1250]

APPENDIX E: NATURAL INFRASTRUCTURE ASSESSMENT

Natural Infrastructure Design Details:

1. Permeable Pavers: The plan suggests using the PowerBlock® Pervious Paver from ACF Environmental. This permeable paver is designed with 0.25 in gaps between the pavers that can still infiltrate water even when clogged. This is important on Tybee where sand from the beach might fill the gaps in the pavers. Permeable pavers are distributed across the island in parking areas based on the different scenarios.

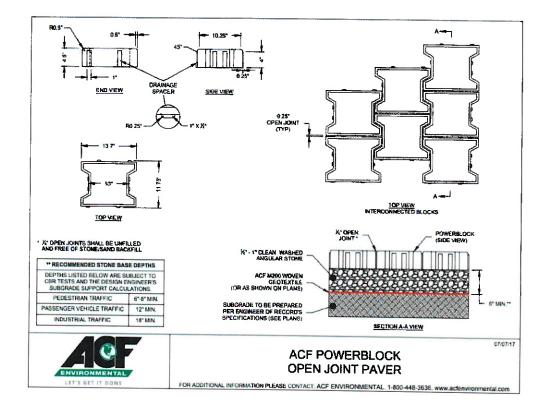
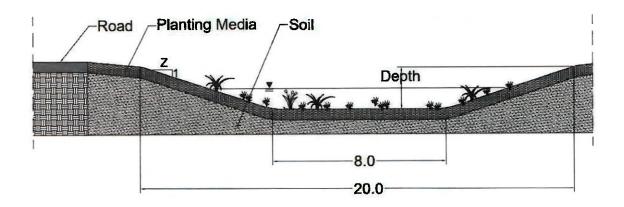


Figure E.1. Design details of the recommended permeable paver from ACF Environmental (ACF Environmental, 2022).

2. 14th Street Bioswale: The swale along 14th street was designed based on recommendations from the Georgia Stormwater Management Manual and the constraints of available space (Atlanta Regional Commission, 2016). The swale is trapezoidal and segmented into 8 sections along 14th Street to accommodate for the connecting roads. The depth of the swale varies according to the depth of the existing stormwater pipes and ranges from 0.8 to 2 ft. The top width was designed based on the available space in the Tybee-owned right-of-way and is 20 ft. The side slopes of the swale segments range from 1:3 to 1:7.5 due to the varying depths.

SECTION	DEPTH	SIDE SLOPE
1	2	1:3
2	0.8	1:7.5
3	1.5	1:4
4	1.5	1:4
5	1	1:6
6	1.5	1:4
7	2	1:3
8	2	1:3

Table E.1. The depths and side slopes of the different sections of the 14th Street Swale.



14th Street Swale Cross Section

Figure E.2. The depths and side slopes of the different sections of the 14th Street Swale.

3. Curb cut rain garden Design Specifications: The project team has designed rain gardens along both sides of Butler Avenue from 1st Street to Tybrisa Street. The rain gardens are flush with the ground with cuts in the curb that act as inlets that allow flow to enter the area and infiltrate. The curb cut rain gardens provide storage in the form of infiltration, and they can reduce flow velocities by increasing roughness by including vegetation. The plan recommends using modular, prefab HydroPlanter[™] rain gardens from GreenBlue Urban. These modular rain gardens are 28 ft. 3 in. size with a three-foot width which is the available space between the sidewalk and road (GreenBlue Urban Limited, 2021). The curb cuts are sized based on the Georgia Stormwater Management Manual Technical Handbook sizing procedures for a curb-opening inlet (Haubner et al., 2001). Each section of the rain garden has a recommended curb cut length to accommodate the 1-yr flow based on location in **Table A.2**

LOCATION (STREET NAME)	CURB CUT LENGTH (FEET)
Tybrisa to 15th	4
15th to 14th	5
14th to 13th	6
13th to 12th	5
12th to 11th	4
11th to 10th	3
10th to 9th	3
9th to 8th	3
8th to 7th	3
7th to 6th	4
6th to Center St.	4.5
Center St. to 4th	4
4th to 1st	4

Table E.2. The length of curb cut for each section of curb cut rain garden based on location to accommodate the 1-year flow.

4. Horizontal Levee Design specifications: The horizontal levee along Venetian Drive is designed for the purposes of marsh migration and flood protection. The levee begins 20 ft past the outfall at AJ's so that the outfalls were not impaired by the levee. It extends along the road until Venetian turns into 12th Street. In the design, Venetian has raised 1 ft and crowned, and the levee extends approximately 300 ft into the marsh from the edge of Venetian. It impacts 284,874 square feet of the marsh. For horizontal levees, steeper slopes provide more flood protection, but shallow slopes are better for marsh migration. The team opted to use a slope of 1:50 to balance both the flood and marsh protection. **Figure A.3** show the changes to a select cross-section and the extents of the levee.

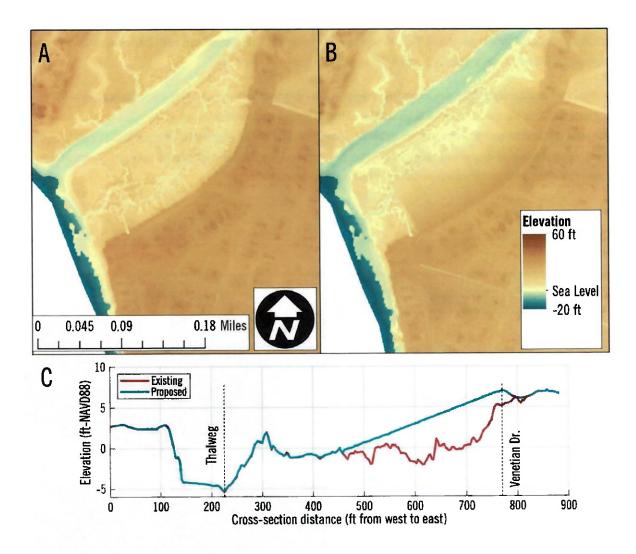


Figure E.3. Aerial view of the marsh under current conditions and with the horizontal levee with the corresponding changes to the drawn cross-section.

5. 6th street culvert Design: The plan proposes increasing the sizes of the current culverts at 6th Street that connects both marsh regions of Horsepen Creek. It would increase the size from two 30-in-diameter pipe culverts to two rectangular box culverts with dimensions of 8 ft height by 10 ft wide.

6. Rain harvesting design details: For rain harvesting, the plan recommends storage to accommodate a 0.25 in of rainfall that falls on each building. Based on the average residential roof area, this comes to an average storage amount of 36 cubic feet, corresponding to 5 of 55-gallon containers. For the commercial buildings, the 0.25 in of storage corresponds to 1,300 gallons of storage. For the public buildings, the 0.25 in of storage corresponds to 1,518 gallons of storage. Rain harvesting is distributed

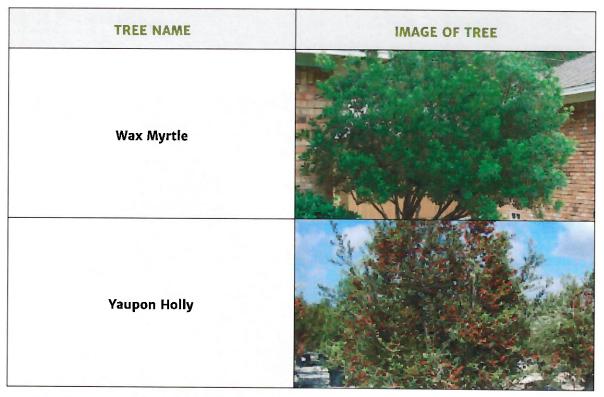
across the island based on the different scenarios. However, the residential rain harvesting is centered around 14th Street since this is a low spot prone to nuisance flooding.

7. Pocket Park Design: The pocket park is a location-specific feature and not a distributed one like the others. It is located near the intersection of 15th Street and Butler Avenue. This lot has an unused go-kart track that the plan proposes to be removed, and the land converted to a park that can include local vegetation and increased tree cover. The park is designed to be concave so that any precipitation that falls on it will not flow elsewhere. It has a slope of 0.0015.

TREE NAME	IMAGE OF TREE
Cabbage Palm	
Live Oak	
Longleaf Pine	

Urban Canopy Cover

TREE NAME	IMAGE OF TREE
Southern Red Cedar	
Spanish Moss	
Southern Magnolia	
Sparkleberry	



From https://www.tybeemarinescience.org/portfolio_category/plants/

Table E.3. Examples Of Native Trees That Can Be Implemented In Urban Canopy Cover

Bird Species that travel through Tybee as part of migration

From this, try and look into calculations of % endangered population compared to all birds visited.

As of Nov. 27, in a list with all birds, 255 unique species were tracked to have visited Tybee Island. This table is tracking those which are of ecological concern

COMMON BIRD NAME	SCIENTIELC NAME		IUCN RED LIST CATEGORY
Black Rail	Laterallus jamaicensis	Red Watch List	Near Threatened
Black Scoter	Melanitta americana		Near Threatened
Black-legged Kittiwake	Rissa tridactyla		Vulnerable
Blackpoll Warbler	Setophaga striata	Common Birds in Steep Decline	Near Threatened

COMMON BIRD NAME	SCIENTIFIC NAME	ENTIFIC NAME CONTINENTAL IMPORTANCE		
Buff-breasted Sandpiper	Calidris subruficollis		Near Threatened	
Chimney Swift	Chaetura pelagica	Yellow Watch List D	Vulnerable	
Chuck-will's-widow	Antrostomus carolinensis	Common Birds in Steep Decline	Near Threatened	
Common Eider	Somateria mollissima		Near Threatened	
Common Grackle	Quiscalus quiscula	Common Birds in Steep Decline	Near Threatened	
Eastern Meadowlark	Sturnella magna	Common Birds in Steep Decline	Near Threatened	
Golden-winged Warbler	Vermivora chrysoptera	Red Watch List	Near Threatened	
Horned Grebe	Podiceps auritus		Vulnerable	
King Rail	Rallus elegans	Yellow Watch List D	Near Threatened	
Loggerhead Shrike	Lanius ludovicianus	Common Birds in Steep Decline	Near Threatened	
Long-tailed Duck Clangula hyemalis		Common Birds in Steep Decline	Vuinerable	
Piping Plover	Charadrius melodus	Red Watch List	Near Threatened	
Red Knot	Calidris canutus	Yellow Watch List D	Near Threatened	
Reddish Egret	Egretta rufescens	Yellow Watch List R	Near Threatened	
Rufous Hummingbird	Selasphorus rufus	Yellow Watch List D	Near Threatened	
Rusty Blackbird	Euphagus carolinus	Common Birds in Steep Decline	Vulnerable	
Saltmarsh Sparrow	Ammospiza caudacuta	Red Watch List	Endangered	
Semipalmated Sandpiper	Calidris pusilla	Yellow Watch List D	Near Threatened	
Wood Thrush	Hylocichla mustelina	Yellow Watch List D	Near Threatened	

From https://www.tybeemarinescience.org/portfolio_category/plants/

Table E.4. Bird Species that travel through Tybee as part of migration

Note: This list only includes the birds whose IUCN Red List Categories exceed those of Least Concern

With that being said, many birds listed as Least Concern may also show high Climate Vulnerability and/ or have notes on Continental Importance

Statistics:

23/255 birds (9%) of the birds that pass through Tybee Island are listed in the International Union for Conservation of Nature's Red List of Threatened Species. This is a marker of a decline in biodiversity, and the need for wide-scale action to protect these species.

This does not include birds considered "Least Concern" but were listed on the National Audubon Society's database as "Climate Vulnerable" or threatened as on the Partners in Flight Avian Conservation Assessment Database. Therefore, the number of birds that are of concern is much greater.

APPENDIX F: MULTI CRITERIA DECISION ANALYSIS (MCDA) DETAILS

Flood Performance

Flood conditions for the different alternatives were evaluated at each building for the various hydroclimatic combinations. Weights were assigned to each combination based on its frequency of occurrence (e.g., the mean tide with 3 inches of rain was given a much larger weight than the king tide with 7.5 inches of rain). A performance index was calculated by multiplying the maximum depth of inundation and the duration of inundation at each building, then averaging across all buildings. The total percentage of buildings that were inundated was also calculated. These calculations were repeated for each hydroclimatic combination, weighted as described above, and summed for all combinations. Performance indices were computed for both current and projected (those with sealevel rise) conditions. Calculations were repeated to assess flood conditions at critical infrastructure, which included essential public properties such as the police and fire stations, city hall, the public works department, YMCA, 4-H club, and more. Within the relative importance of 0.25 for flood reduction in the entire MCDA, normalized weights were assigned to each of the above sub-criteria as follows: 0.25 each for the performance index and percent of all buildings flooded under current conditions, 0.1 each for the performance index and percent of critical infrastructure flooded under current conditions, and 0.1 and 0.05 for the same sub-criteria, respectively, under future climate conditions.

Habitat Performance

The habitat performance score considers the improvement in connectivity, diversification of habitat, and the total freshwater towards the marsh. The alternatives were assigned a value of 1 if connectivity is worse and a value of 3 if connectivity is better. Alternatives A-D improved connectivity because of the 6th street culvert and were assigned scores of 3 while the X and E alternatives did not improve connectivity and were assigned values of 1. Diversification scores were based on the inclusion of additional habitat for the alternatives and these scores ranged from 1 to 5 where 1 is 'Bad,' 2 is 'Fair,' 3 is 'Good,' 4 is 'Very Good,' and 5 is 'Excellent.' The X alternative was assigned a score of Fair based on current conditions. The A-D scenarios were all assigned a value of Excellent because the features that provide habitat, 14th Street swale and curb cut rain gardens, are included in each of these four alternatives. The E alternative was assigned a score of Fair because there is no increase in habitat with improvement only the gray features. The freshwater towards the marsh criterion quantifies the amount of rainfall-runoff that enters the marsh system during a rainfall event. The outflow from 14 different stormwater outfalls was considered for the different alternatives using the various rainfall events and mean tidal conditions. These outfalls are located on the back end of the island going from Venetian Dr. to Butler Ave. Scores closer to 1 represent that the alternative delivers the most freshwater to the marsh ecosystem, thus altering the health of the system by potentially introducing inland pollutants, such as oil, debris, and waste. Conversely, scores closer to 5 represent that the alternative delivers less rainfall-runoff to the marsh system.

Cost

For the MCDA approach, the same coastal features and gray infrastructure improvements were included in each alternative. Therefore, the project team estimated the cost to implement the inland natural infrastructure for the MCDA since this is what changed among the scenarios. For the cost of rain harvesting, the project team used the average rainfall storage volume to determine the number and size of rain barrels required. For the residential area, this came to five 55 gallon containers which cost \$160 per barrel (National Tank Outlet, 2022). For the public and commercial areas, the project team used just one large storage container which cost \$1,500 and \$1,400 respectively (National Tank Outlet, 2022). For the cost of implementing the pocket park and the swale, the project team estimated the cost to excavate the land to provide the additional surface storage. The project team used a cost value of \$2.33/ft3 of earth moved (USDA FOREST SERVICE NORTHERN REGION ENGINEERING, 2020). To estimate the cost of permeable pavers, the project team considered the cost of excavation, permeable pavers, and underlying aggregate. These costs were calculated per square foot and were \$1/ ft2, \$7.5/ft2, and \$3.67/ft2, respectively (CTC & Associates LLC & WisDOT Research & Library Unit, 2012). To calculate the cost of implementing the curb cut rain gardens, the project team researched the average costs of rain gardens in the literature. They found a cost of \$1.09/ft3 for installation and operation and maintenance (Nordman et al., 2018). They applied a factor of 1.4 to account for the cost of modifying the curbs and sidewalks in construction. These cost estimates are preliminary and were used as a comparison in the MCDA approach. The specific costs associated with each scenario are expected to change as the designs become more detailed in future phases of the project.

Aesthetics

The improvement to aesthetics from the features in each alternative was scored from 1 to 5 where 1 is 'Bad,' 2 is 'Fair,' 3 is 'Good,' 4 is 'Very Good,' and 5 is 'Excellent.' The do nothing alternative (X) was given a score of Fair based on current conditions. The A alternative was assigned a score of Very Good because it includes the swale and permeable pavers along 14th Street and the curb cut rain gardens down Butler which include vegetation that would improve the aesthetics. The B alternative was assigned a score of Good because while the features in A are included and would improve aesthetics, the rain barrels required for rain harvesting would reduce the aesthetics of the residential area. The C alternative was given a score of Excellent because the commercial harvesting would only be on a few buildings and the addition of permeable pavers in commercial parking lots would be an aesthetic improvement from the asphalt in addition to the features in the A alternative. The D alternative also has a score of Very Good because it includes the residential rain harvesting barrels. The E alternative was given a score of Bad because the proposed gray includes an exposed pump on 14th St that would be visible to residents.

Feasibility

The feasibility scores are based on the cost of implementation and the property type considered in each scenario. Feasibility scores range from 1 to 5 where 1 is 'Unlikely,' 2 is 'Less Likely,' 3 is

'Somewhat Likely,' 4 is 'Likely,' and 5 is 'Very Likely.' The X alternative was assigned a score of 'Unlikely' because the City of Tybee is committed to protecting the island and its residents from the threat of flooding and sea-level rise. The A alternative scored Very Likely because all of the inland green infrastructure features are on public-owned property where there are few barriers to implementation. The B and C alternatives scored Somewhat Likely because both scenarios involve persuading property owners, either residents or owners of commercial property, to implement inland features. The D alternative scored Less Likely because convincing both residents and owners of commercial properties to implement the inland features will be more difficult. The E scenario scored Likely because the proposed gray improvements are likely to occur as a part of Tybee's Stormwater Master Plan.

Modeling Description:

Environmental Conditions

Alternatives were tested across various combinations of rainfall depths, tides, and a future projection for sea-level rise (Table A3). Rainfall depths included 3, 4.5, 6, 7.5, and 9 inches and were applied as 24-hour, SCS Type-III storms, consistent with typical conditions along the Georgia coast (USACE, 2000). These storms correspond to approximately >100%, 100%, 20%, 10%, and 4% annual exceedance probabilities, respectively, under current conditions (NOAA, 2017). Four different tidal conditions were considered: neap, average, spring, and perigean spring tides (a.k.a., king tides). The mean tide condition represents the average tidal amplitude within a 14-day tidal period. The spring and neap tidal conditions are related to the new or full mone once every 14 days, with the spring tide being the highest tidal amplitude and the neap the lowest, while the perigean spring tides occurs when the moon is either new or full and closest to Earth. Mean and spring tides (amplitudes 3.85 and 5.81 feet, respectively) were simulated for all storm depths, with peak tide and rainfall occurring simultaneously. Neap and perigean spring tidestides (amplitudes 2.77 and 6.63 feet, respectively) were simulated for the 7.5 inch storm to investigate marsh connectivity across a broader range of tides. The perigean spring tide value was obtained from the most recent event at the Ft. Pulaski tide gauge (November 4-6, 2021). Sea-level rise was applied to select mean and spring tidal conditions using the intermediate projection for the Southeast US in 2050 (1.18 feet; Sweet et al., 2022). Figure F.1 summarizes all the coastal boundary conditions utilized in this study.

116

RAINFALL DEPTH (IN.)	TIDES				SEA LEVEL RISE	
	NEAP TIDE	MEAN TIDE	SPRING TIDE	PERIGEAN SPRING TIDE	MEAN + SLR	SPRING + SLR
3	an training in	x	x	A Soft all room here	x	
4.5		x	x		x	- A Contract (Con-
6		x	x		x	
7.5	x	x	x	x	x	x
9		x	x		x	x

 Table F.1.
 Summary of rainfall and coastal conditions that were simulated for the existing infrastructure system and each selected alternative

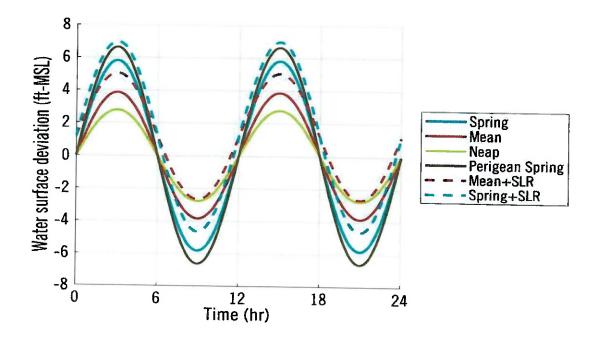


Figure F.1. Graphical illustrations of the coastal forcings employed at the hydrodynamic model.

Hydrodynamic Model

Hydrodynamic models for each of the described alternatives were prepared with the computer software Interconnected Channel and Pond Routing (ICPR). ICPR is a parameterized and integrated hydraulic and hydrologic modeling software capable of simulating compound flooding from rainfall and tidal forcing conditions. Rainfall was spatially invariant throughout the domain and tidal flux was applied at model boundaries. Models include a 2D overland flow region with mesh of the island and marsh topography parameterized by land use and soil conditions. Stormwater sewers are integrated into the overland mesh with link-node networks. Models also include a 2D groundwater region with meshes for a bedrock confining layer and water table. Infiltration was modeled with the Green-Ampt equation and the conservative assumption of no leakage through a bedrock confining layer.

Two different sets of initial conditions were applied depending on whether or not sea-level rise was considered. In the case of current environmental conditions, models were initialized with a mean sea level stage in the marsh, groundwater table, soil hydraulic conductivity, and soil porosity index. All of which change dynamically with space and time during a simulation. Sea-level rise simulations differ with a higher initial stage in the marsh; however, the water table elevations and soil properties were not updated with different initial conditions.

All simulations can be divided into pre-rainfall, rainfall, and post-rainfall time periods. The prerainfall time period allows for multiple tidal cycles and the post rainfall time period allows for extended hydrologic response times. In total, each simulation lasts for eighty-seven hours or 3.625 days. Twenty-seven hours of tides moved through the system before rainfall began to establish antecedent conditions. Rainfall occurred for 24 hours, then the simulation continued for 36 hours after the end of rainfall. Model data are recorded at 15-minute intervals throughout a simulation.

The coastal processes were imposed into the hydrodynamic model by a time-varying water level boundary condition. To simplify the complex behavior of the tides, a sinusoidal tide was created with a constant-amplitude, single-frequency signal. This was achieved by using a tidal resynthesis analysis of observed data from a complete tidal cycle (e.g., approximately 14 days) at the NOAA Fort Pulaski tidal gauge. This technique recreates the water surface elevation due to the amplitude, phase, and speed of several (e.g., 37) harmonic tidal constituents (Pugh and Woodworth, 2014). Tidal amplitudes were computed as one-half of the daily tide range (i.e., maximum daily level minus minimum daily level). The amplitude and diurnal tide behavior typify conditions of the Southeastern and Georgia coast, respectively (Davies, 1964).

Modeling Results

Alternative B improved flood protection over the existing stormwater infrastructure, which the project team quantified as the number of fewer houses flooded. They subset results by inundation depth and duration and focused on the first 1.5 inches of flooding. For maximum inundation depth, minor improvements (up to 15 buildings, 4.8% improvement from base flooding) occurred for buildings with

minor improvements (up to 15 buildings, 4.8% improvement from base flooding) occurred for buildings with 0.5 to 1.5 inches of inundation. Compared to the base scenario, the number of buildings with up to 0.5 inches and 0.5 to 1.5 inches of inundation was reduced by 130 and 51 (8.0% and 13.8% improvement), respectively, during a spring tide with sea-level rise. However, there was a reciprocal increase in the number of buildings with more than three inches of inundation, indicating that the spring tide with sea-level rise may have overwhelmed the hybrid stormwater infrastructure, exacerbating flooding at some locations (Figure F.2b). For flooding duration, the number of buildings flooded for up to one hour during a mean tide with sea-level rise was reduced by 70 (13.3% improvement; Figure F.2d). Most of the flood improvements occurred in buildings on the southern portion of the island, with 63 fewer buildings (20.3% improvement in that portion) inundated up to 0.5 inches during a 6 inch storm (Figure F.3). The flooding improvements in the southern portion accounted for 90% of island-wide benefits for that scenario. This indicates potential promise for flood protection since most hybrid infrastructure was implemented in the southern portion of Tybee Island to target flood-prone areas. Some buildings did experience increased flood duration in the mean tide and sea-level rise scenario, as evidenced by the negative bars in the other duration classes (Figure F.2c,d). However, these were often fewer than the improvements to flooding up to one hour, meaning alternative B provided a net reduction in the number of flooded houses. Future modeling will use locations of the buildings with worsened flooding to integrate additional natural infrastructure to mitigate these impacts.

The previous results have discussed flood improvements for the hybrid alternative B, not isolating the individual effects of natural infrastructure. Compared to the gray infrastructure (alternative X), alternative B provided similar trends in improvements as to the base condition, with the greatest benefits occurring for buildings inundated up to one inch or for up to one hour. The hybrid system was most beneficial for maximum depth during the 6 inch storm (75 fewer houses with up to 1 inch inundation; 3.9% improvement) and for flood duration during the 7.5 inch storm (113 fewer hours with up to an hour inundation; 8.3% improvement). Alternative B provided similar benefits among all tidal conditions, reducing the number of buildings inundated up to 1 inch by about 50 (2.5% improvement) and the number of buildings flooded up to one hour by 105–114 (8.1–8.8% improvement). Similar to the prior comparisons to the base condition, some buildings did experience increased flood duration, although these were fewer and in the more extreme classes. These buildings will be identified as target locations for subsequent modeling and refinement of natural infrastructure.

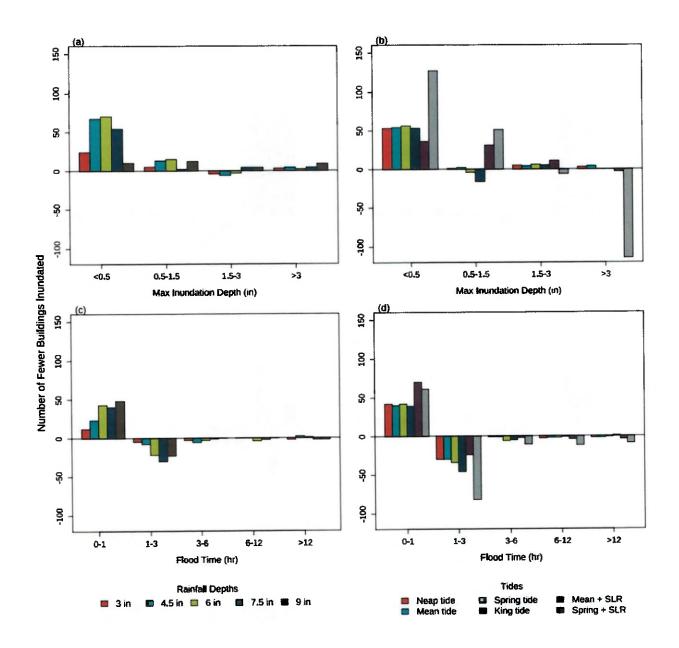


Figure F.2. Flood performance of alternative B compared to the base condition X, as the number of fewer buildings inundated in each class of flood depth (a-b) and flood duration (c-d). Panels (a) and (c) show results for the mean tide at various rainfall depths, while panels (b) and (d) show results across the different tidal conditions for 7.5 inch storms. Flood duration was counted only for buildings with 0.5 to 1.5 inch of inundation. Negative values indicate an increase in the number of buildings inundated.

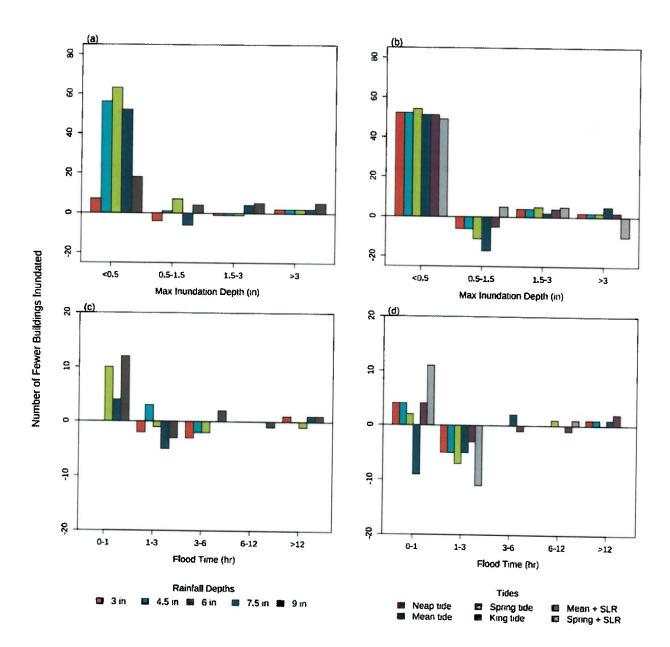


Figure F.3. Flood performance of alternative B compared to the base condition (X) for the southern portion of the island, as the reduction in the number of buildings in each class of flood depth (a-b) and flood duration (c-d). els (a) and (c) show results for the mean tide at various rainfall depths, while panels (b) and (d) show results across the different tidal conditions for 7.5 inch storms. Flood duration was counted only for buildings with 0.5 to 1.5 inch of inundation. Negative values indicate an increase in the number of buildings inundated.

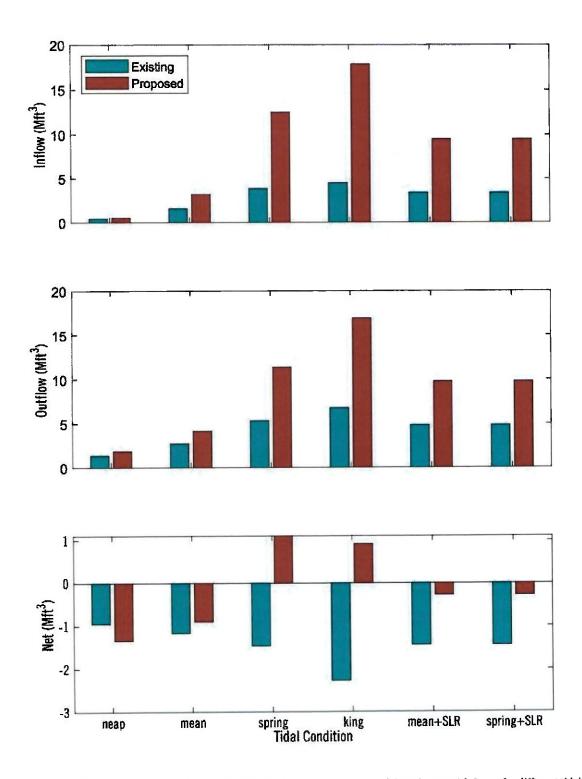
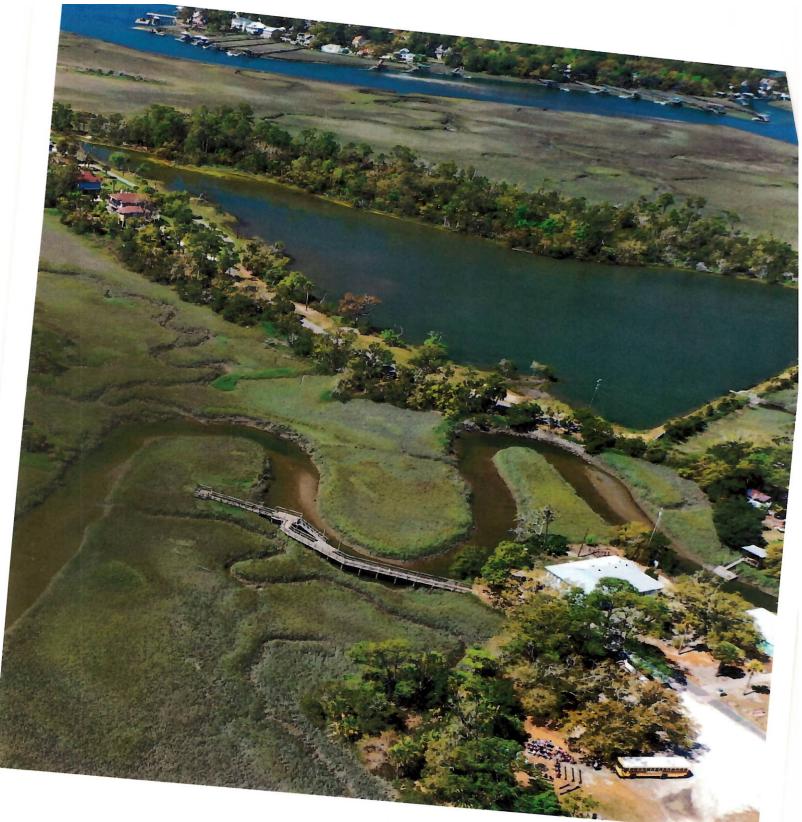


Figure F.4. Average net volume through the downstream and upstream end of the culvert at 6th Street for different tidal conditions using a 7.5 inch rainfall event. The different color bars represent the different alternatives. A negative net volume represents that water is moving out of the system, while a positive that water is moving into the system.

122

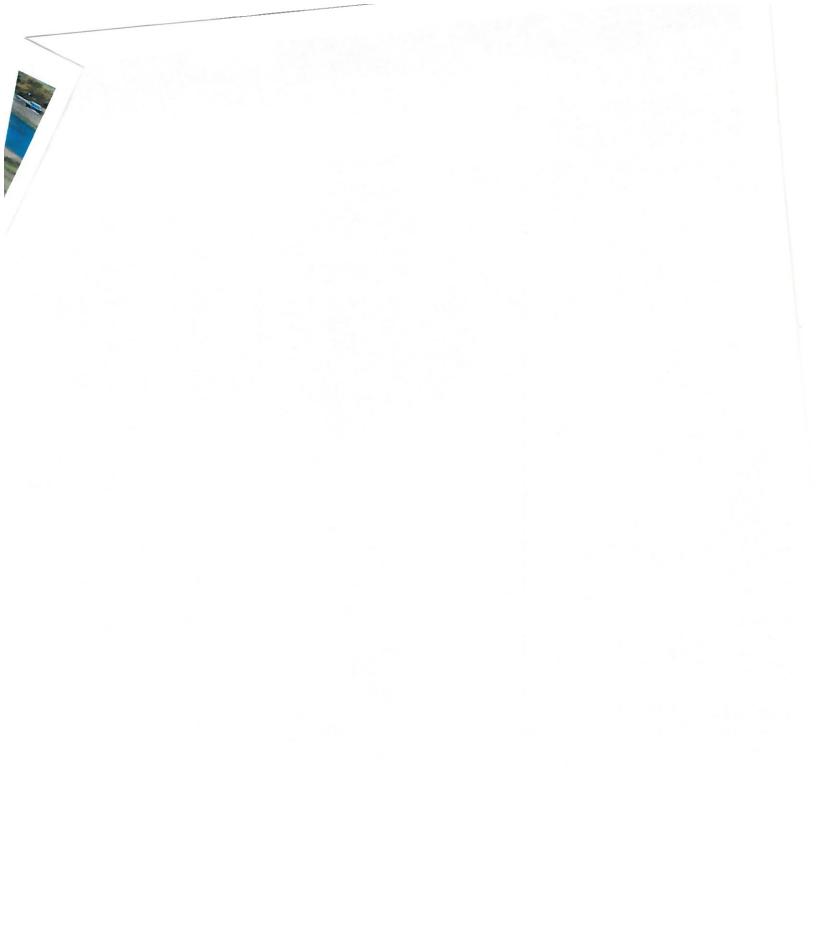








- Page 131 -



File Attachments for Item:

3. Pat Leiby and Sarah Jones: Black History Trail

MAYOR Shirley Sessions

CITY COUNCIL Barry Brown, Mayor Pro Tem John Branigin Jay Burke Nancy DeVetter Spec Hosti Monty Parks



CITY MANAGER Shawn Gillen

CLERK OF COUNCIL Janet LeViner

CITY ATTORNEY Edward M. Hughes

City Council Agenda Item Request

Agenda Item Requests and supporting documentation must be submitted to the Clerk of Council by 4:00PM on the Thursday prior to the next scheduled Council meeting. If this form is received after the deadline, the item will be listed on the next scheduled agenda.

Council Meeting Date for Request: 5/11/2023

Item: Official introduction of the Tybee Island Black History Trail

Explanation: Pat Leiby, Tybee MLK Human Rights Organization and Sarah Jones, Tybee Island Historical

Society will announce Trail and Ribbon Cutting.

Paper Work: _____ Attached*

Audio/Video Presentation**

- * Electronic submissions are requested by not required. Please email to <u>ileviner@cityoftybee.org</u>.
- ** Audio/video presentations *must* be submitted to the IT department at City Hall by 4:00PM on the Thursday prior to the scheduled meeting.

NOTE: Request will be postponed if necessary information is not provided.

Submitted by: Pat Leiby, Tybee MLK Human Rights Organization

Phone / Email: <u>301.305.6502; pat@southmountaintitle.com</u>

Comments:

Date given to Clerk of Council: 4/25/2023



P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749 (866) 786-4573 – FAX (866) 786-5737 www.cityoftybee.org

File Attachments for Item:

4. Site Plan Approval 1601 Butler Avenue, Add brick fence around property, Walt Freeman petitioner



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Applicant wants to change use from restaurant to office/restaurant and add decorative wall around front of property

Vote on site plan

ATTACHMENTS 4.SITE PLAN-1601 BUTLER AVE.pdf



ltem #4.

CITY OF TYBEE ISLAND SITE PLAN APPROVAL APPLICATION

Applicant's Name	Walt Freeman	
Address and location	of subject property	1601 Butler Ave Tybee Island Ga
PIN 40008 18004		Applicant's Telephone Number 9125081711
Applicant's Mailing A	Address 1801 Cha	tham Ave Tybee Island Ga
		activity and use of the land thereafter to take place on the property:
Add Brick Fence around Property on Property	Line Leaving Current All Current Entrances	Open with Iron Horizontal Detail Like Attached Photo and Change Use from Restaurant to Restaurant/Office
Property Owner's Na	me Walt Freeman	Telephone Number 9125081711`
Property Owner's Ad	dress 1801 Chatha	am Ave Tybee Island Ga
		X YesNo
If Applicant is the Pro	operty Owner, Proof	Fof Ownership is attached:Yes
		Owner, a signed affidavit from the Property Owner granting the d development is attached hereto Yes
Current Zoning of Pro	operty C1	Current Use Restaurant
Names and addresses	of all adjacent prop	erty owners are attached: Yes
Applicant has made	campaign contributi per of the Planning C	eding the filing of the Applicant's application for a zoning action, the ons aggregating to more than \$250 to the Mayor and any member of Commission, the Applicant and the Attorney representing the Applicant
 a. The name of t b. The dollar am during the two the date of eac c. An enumerati the local gov 	he local government ount of each campa o (2) years immedia ch contribution; on and description of	t official to whom the campaign contribution or gift was made; ign contribution made by the applicant to the local government official ately preceding the filing of the application for this zoning action, and of each gift having a value of \$250 or more made by the Applicant to luring the two (2) years immediately preceding the filing of the
Walter	Freeman	3/31/2023
Signature of Applican		Date
NC	OTE: Other specific	data is required for each type of Site Plan Approval.
Fee Amount \$	Check Num	ber Date
City Official		
n #4.		- Page 137

NOTE: This application must be accompanied by following information:

- \mathbf{X} \$ copy, no smaller than 11 x 17, of the proposed site plan and architectural renderings.
- \mathbf{X} 1 copy, no smaller than 24 x 36, of the engineered drainage and infrastructure plan.



8 copy, no smaller than 11 x 17, of the existing tree survey and the tree removal and landscaping plan.

Disclosure of Campaign Contributions

The Planning Commission may require elevations or other engineering or architectural drawings covering the proposed development.

The Mayor and Council will not act upon a zoning decision that requires a site plan until the site plan has met the approval of the City's engineering consultant. (Note: Section 5-080 (A) requires, "Once the engineer has submitted comments to the zoning administrator, a public hearing shall be scheduled.")

The Applicant certifies that he/she has read the requirements for Site Plan Approval and has provided the required information to the best of his/her ability in a truthful and honest manner.

Walter Freeman

Signature of Applicant

3/31/2023 Date



CITY OF TYBEE ISLAND

CONFLICT OF INTEREST IN ZONING ACTIONS DISCLOSURE OF CAMPAIGN CONTRIBUTIONS

Have you within the past two (2) years made campaign contributions or gave gifts having an aggregate value of \$250.00 or more to a member of the City of Tybee Island Planning Commission, or Mayor and Council or any local government official who will be considering the rezoning application?

YES NO X

IF YES, PLEASE COMPLETE THE FOLLOWING SECTION:

NAME OF GOVERNMENT OFFICIAL	CONTRIBUTIONS OF \$250.00 OR MORE	GIFTS OF \$250.00 OR MORE	DATE OF CONTRIBUTION

IF YOU WISH TO SPEAK CONCERNING THE ATTACHED REZONING APPLICATION, THIS FORM MUST BE FILED WITH THE ZONING ADMINISTRATOR FIVE (5) DAYS PRIOR TO PLANNING COMMISSION MEETING IF CAMPAIGN CONTRIBUTIONS OR GIFTS IN EXCESS OF \$250.00 HAVE BEEN MADE TO ANY MEMBER OF THE PLANNING COMMISSION OR MAYOR AND COUNCIL.

Signature Walter Freeman

Printed Name Walt Freeman

Date 3/31/2023

ltem #4.

PARID: 40008 18004 VIOLA E BUFORD FAMILY LIMITED PARTNERSHI

1601 BUTLER AVE

Most Current Owner

Current Owner	Co- Care Owner Of Mailing Address
VIOLA E BUFORD FAMILY LIMITED PARTNERSHI	P PO BOX 1201 CORDELE GA 31010
Digest Owner (January 1)	
Owner	Co- Address 1 Address City State Zip
VIOLA E BUFORD FAMILY LIMITED PARTNERSHI	P PO BOX 1201 CORDELE GA 31010
Parcel	
Status	ACTIVE
Parcel ID	40008 18004
Category Code	349 - Fast Food Restaurant
Bill#	2962460
Address Unit # / Suite	1601 BUTLER AVE
City	TYBEE ISLAND
Zip Code	31328-
Neighborhood	20500.00 - T500 TYBEE TO BULL R
Total Units	
Zoning	C-1/SE
Class	C3 - Commercial Lots
Appeal Status	APPEAL RESOLVED
Legal Description	n an ann an A
Legal Description	LOT 1 WARD 5 TYBEE ISLAND SAVANN AH BEACH 196 X 102
Deed Book	285R
Deed Page	0599
Permits	
Permit # Permit Date Stat	us Type Amount
180528-11 07/19/2018 Com	nplete RN - RENOVATIONS \$85,000.00
170858-10 11/06/2017 Com	nplete CM - COMMERCIAL \$20,000.00
170467-9 06/01/2017 Com	nplete RF - ROOF \$25,000.00
120660-8 12/14/2012 Com	nplete GM - GENERAL MAINT. \$2,500.00
.7 10/13/2011 Com	nplete CM - COMMERCIAL \$2,200.00

Inspection

Reviewer ID
JCRAWFORD
JCRAWFORD
VMMCCUEN
LKWOMACK
PSMILLER

Appraised Values

	29.2	nçanize		
Tax Year	Land	Building	Appraised Total	Reason
2022	0	515,000	515,000	APPEAL DECISION
2021	0	515,000	515,000	APPEAL DECISION
2020	0	515,000	515,000	APPEAL DECISION
2019	0	515,000	515,000	APPEAL DECISION
2018	429,700	41,600	471,300	
2017	327,200	44,400	371,600	
2016	327,200	44,400	371,600	
2015	327,200	44,400	371,600	
2014	327,200	46,200	373,400	

Sales

11/15/2001 43,360 U QC 229C - 592 WHITE & WAY WILLIAM LOTH O'DELL PHILLIP 01/29/1991 320,000 U WD 148J - 445 O'DELL PHILLIP W WSE,INC 01/29/1991 234,000 U WD 148J - 450 WSE, INC WHITE & WAY WILLIAM LOTH								
11/15/2001 43,360 U QC 229C - 592 WHITE & WAY WILLIAM LOTH O'DELL PHILLIP 01/29/1991 320,000 U WD 148J - 445 O'DELL PHILLIP W WSE,INC 01/29/1991 234,000 U WD 148J - 450 WSE, INC WHITE & WAY WILLIAM LOTH 12/31/1986 6,700 U WD 132X - 451 TIDELANDS O'DELL,PHILLIP	Sale Date			Instrument	Book - Page	Grantor	Grantee	
WILLIAM LOTH 01/29/1991 320,000 U WD 148J - 445 O'DELL PHILLIP W WSE,INC 01/29/1991 234,000 U WD 148J - 450 WSE, INC WHITE & WAY WILLIAM LOTH 12/31/1986 6,700 U WD 132X - 451 TIDELANDS O'DELL,PHILLIP	04/04/2005	550,000	Q	WD	285R - 0599	ODELL PHILLIP W	VIOLA E BUFORD FAMILY LIM	
01/29/1991 234,000 U WD 148J - 450 WSE, INC WHITE & WAY 12/31/1986 6,700 U WD 132X - 451 TIDELANDS O'DELL,PHILLIP	11/15/2001	43,360	U	QC	229C - 592		O'DELL PHILLIP W	
12/31/1986 6,700 WD 132X - 451 TIDELANDS O'DELL,PHILLIP	01/29/1991	320,000	U	WD	148J - 445	O'DELL PHILLIP W	WSE,INC	
	01/29/1991	234,000	U	WD	148J - 450	WSE, INC		
	12/31/1986	6,700	U	WD	132X - 451		O'DELL,PHILLIP W.	

Land

	 	and the second		
Line Number	1			
Land Type	S - SQU/	ARE FOOT		
Land Code		NERAL COMMERCIAL 1		
Square Feet	7,345	CN COMMERCIAL		
Acres	1686			
Influence Factor 1				
Item #4. e Reason 1				- Page 141 -

Influence Factor 2

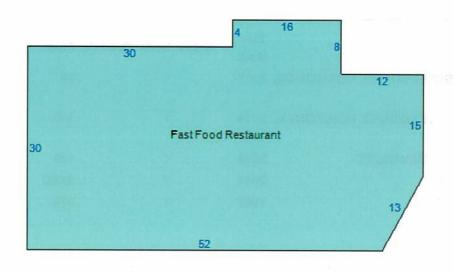
Influence Reason 2

OBY

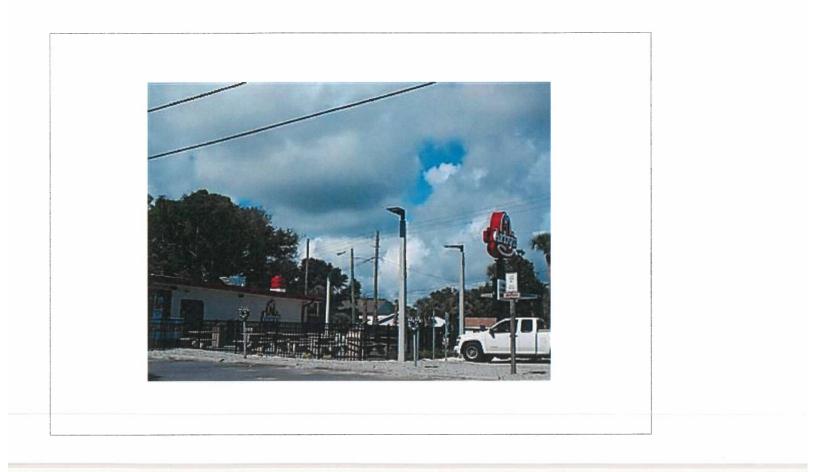
Card #	Description	Year Built:	Grade: Units: Over	ride: Area:
1	6603 : WOOD FENCE, 6' SOLID BOARD, HORIZONTAL OR VERTICAL	2018	1	39
1	6603 : WOOD FENCE, 6' SOLID BOARD, HORIZONTAL OR VERTICAL	2018	1	140
1	6601 : CHAIN LINK FENCE, GALVANIZED	2018	1	132
1	9105 : PAVING, CONCRETE	2018	1	2,080
1	9105 : PAVING, CONCRETE	1997	1	400

Commercial Building

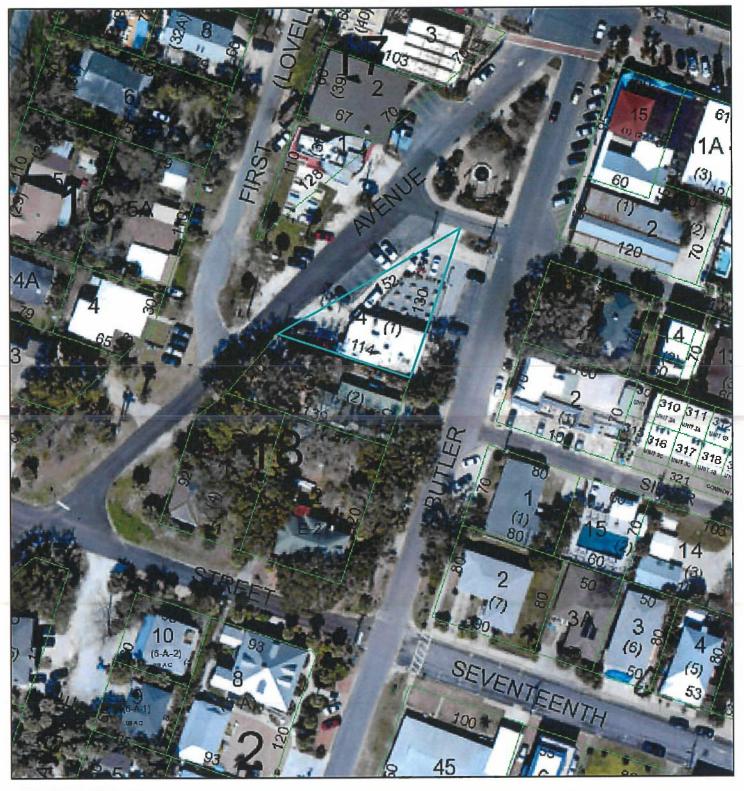
Card	1
Actual Year Built	1962
Effective Year Built	2000
Percent Complete	100
Main Occupancy	349 : Fast Food Restaurant
Quality / Condition	2 / A-AVERAGE
Units	
Total Area	1,723
Basement Area	
Finished Basement Area	No



Item	Area
Fast Food Restaurant - 349:Fast Food Restaurant	1723
- 6603:WOOD FENCE, 6' SOLID BOARD, HORIZONTAL OR VERTICAL	39
- 6603:WOOD FENCE, 6' SOLID BOARD, HORIZONTAL OR VERTICAL	140
- 9105:PAVING, CONCRETE	400
- 9105:PAVING, CONCRETE	2080
- 6601:CHAIN LINK FENCE, GALVANIZED	132



SAGIS Map Viewer



 4/3/2023, 11:33:16 AM
 1:1,128

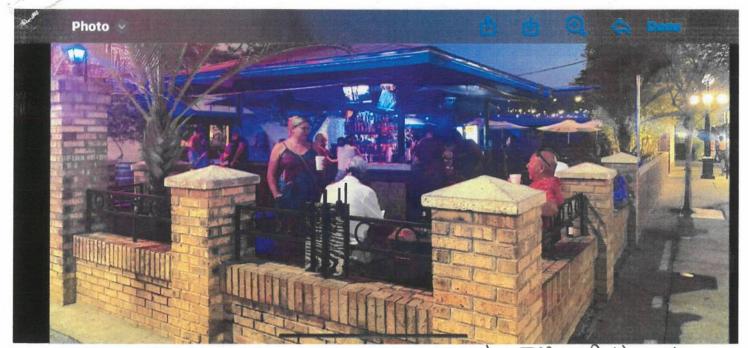
 0
 0.01
 0.03 mi

 Image: Property Boundaries (Parcels)
 Image: Property Boundaries (Parcels)
 0
 0.01
 0.03
 0.05 km

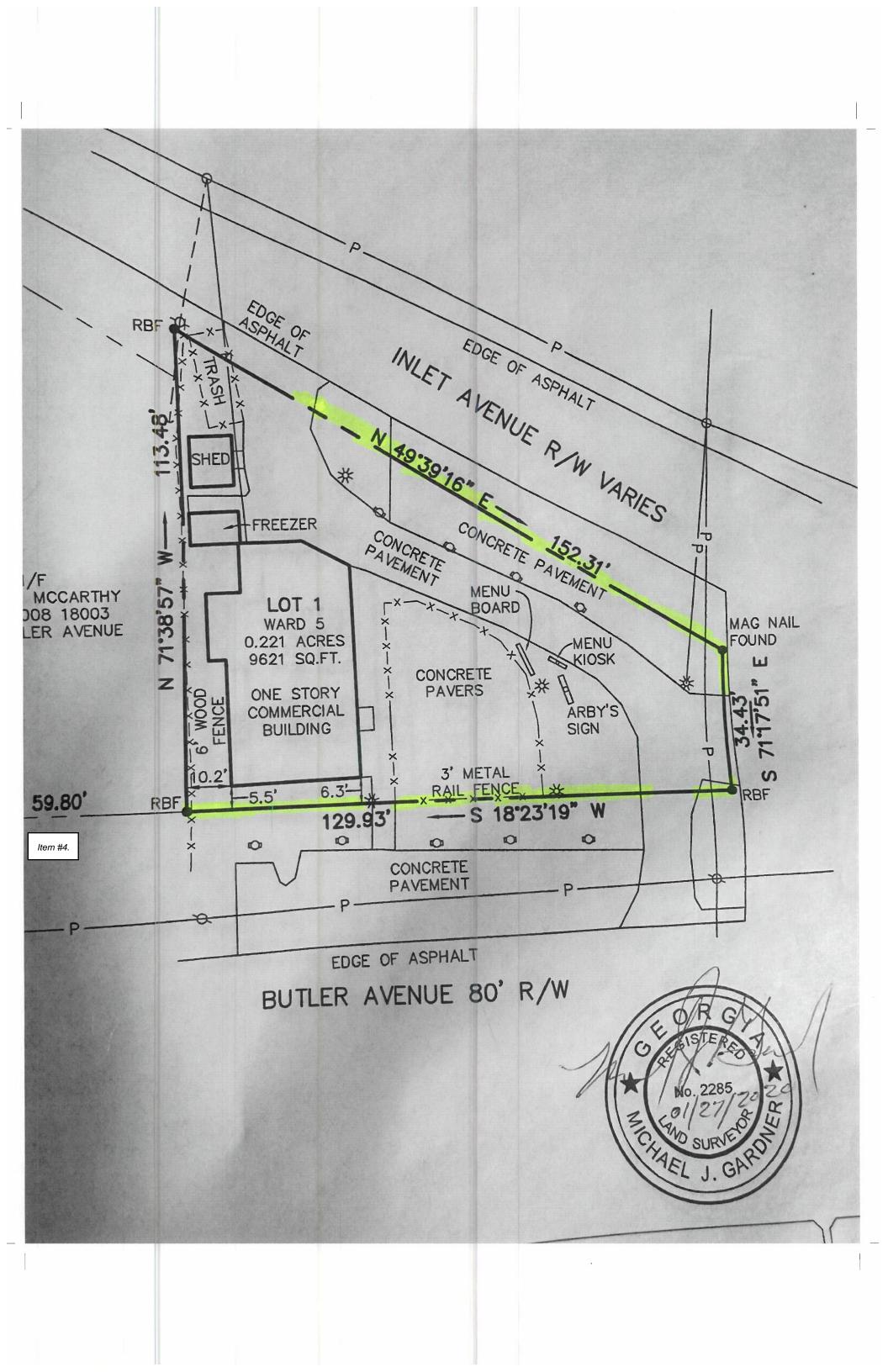
SAGIS

- Page 145 -

Mail - kendall southernbellevr.com - Outlook



Example of Brick force with IRON Railing to by builtone the





PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: requesting to change use of property from Restaurant to Restaurant/Office -1601 Butler Ave. -40008 18004 -Zone C-1 -Walt Freeman.

Action Requested: Site plan approval

AppealSpecial ReviewSite Plan ApprovalX	Subdivision: Sketch Plan Approval Preliminary Plan Approval	Conceptual
Variance Map Amendment	Final Plat Approval	-
Text Amendment	Minor Subdivision	Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

Continued The Planning Commission Motion on Petition: X Approval Denial

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR MOTION
Nooney	X		
Matkowski	X		
Livingston	X		
Rodriguez	X		SECOND

Planning Commission Chair:
Planning & Zoning Manager:

Date: $\frac{4}{19}$ $\frac{13}{23}$ Date: $\frac{4}{8}$ $\frac{23}{23}$

File Attachments for Item:

5. Site Plan Approval, 104 17th Street, Addition of three (3) Townhomes to Existing Property/Structure, Walt Freeman petitioner



CITY OF TYBEE ISLAND SITE PLAN APPROVAL APPLICATION

Applicant's Name Walt Freeman			
Address and location of subject pro	perty 104 17th St Tyb	ee Island Ga	
PIN 40008 18001	Applican	t's Telephone Number	9125081711
Applicant's Mailing Address	1 Chatham Ave Tybee	Island Ga	
Brief description of the land develo	pment activity and use of	of the land thereafter to	take place on the property:
Addition of 3 Townhomes to Existi	ng Property/Structure		
Property Owner's Name Walt Fre	eman	Telephone Number	9125081711
Property Owner's Address 1801	Chatham Ave Tybee Isla	and Ga	
Is Applicant the Property Owner?	X Yes	No	
If Applicant is the Property Owner,	Proof of Ownership is a	attached:Y	/es
If Applicant is other than the Pr Applicant permission to conduct su			
Current Zoning of Property <u>C1</u>	Current Use	Freestanding Home	
Names and addresses of all adjacer	t property owners are at	tached:Yes	
If within two (2) years immediatel Applicant has made campaign con Council or any member of the Plan must disclose the following:	tributions aggregating t	o more than \$250 to th	e Mayor and any member of
 a. The name of the local gover b. The dollar amount of each of during the two (2) years in the date of each contribution c. An enumeration and descri 	campaign contribution n mediately preceding then n; ption of each gift havin cial during the two (hade by the applicant to e filing of the application g a value of \$250 or m	
Walter Freeman		3/31/2023	
Signature of Applicant		Date	
NOTE: Other sp	pecific data is required for	or each type of Site Plar	n Approval.
Fee Amount \$ Chec	k Number	Date	
City Official			

NOTE: This application must be accompanied by following information:

- \mathbf{X} \$ copy, no smaller than 11 x 17, of the proposed site plan and architectural renderings.
- \mathbf{X} 1 copy, no smaller than 24 x 36, of the engineered drainage and infrastructure plan.
- 8 copy, no smaller than 11 x 17, of the existing tree survey and the tree removal and landscaping plan.
- Disclosure of Campaign Contributions

The Planning Commission may require elevations or other engineering or architectural drawings covering the proposed development.

The Mayor and Council will not act upon a zoning decision that requires a site plan until the site plan has met the approval of the City's engineering consultant. (Note: Section 5-080 (A) requires, "Once the engineer has submitted comments to the zoning administrator, a public hearing shall be scheduled.")

The Applicant certifies that he/she has read the requirements for Site Plan Approval and has provided the required information to the best of his/her ability in a truthful and honest manner.

Walter Freeman

Signature of Applicant

3/31/2023 Date



CITY OF TYBEE ISLAND

CONFLICT OF INTEREST IN ZONING ACTIONS DISCLOSURE OF CAMPAIGN CONTRIBUTIONS

Have you within the past two (2) years made campaign contributions or gave gifts having an aggregate value of \$250.00 or more to a member of the City of Tybee Island Planning Commission, or Mayor and Council or any local government official who will be considering the rezoning application?

YES _____ NO X

IF YES, PLEASE COMPLETE THE FOLLOWING SECTION:

NAME OF GOVERNMENT OFFICIAL	CONTRIBUTIONS OF \$250.00 OR MORE	GIFTS OF \$250.00 OR MORE	DATE OF CONTRIBUTION	
		······		

IF YOU WISH TO SPEAK CONCERNING THE ATTACHED REZONING APPLICATION, THIS FORM MUST BE FILED WITH THE ZONING ADMINISTRATOR FIVE (5) DAYS PRIOR TO PLANNING COMMISSION MEETING IF CAMPAIGN CONTRIBUTIONS OR GIFTS IN EXCESS OF \$250.00 HAVE BEEN MADE TO ANY MEMBER OF THE PLANNING COMMISSION OR MAYOR AND COUNCIL.

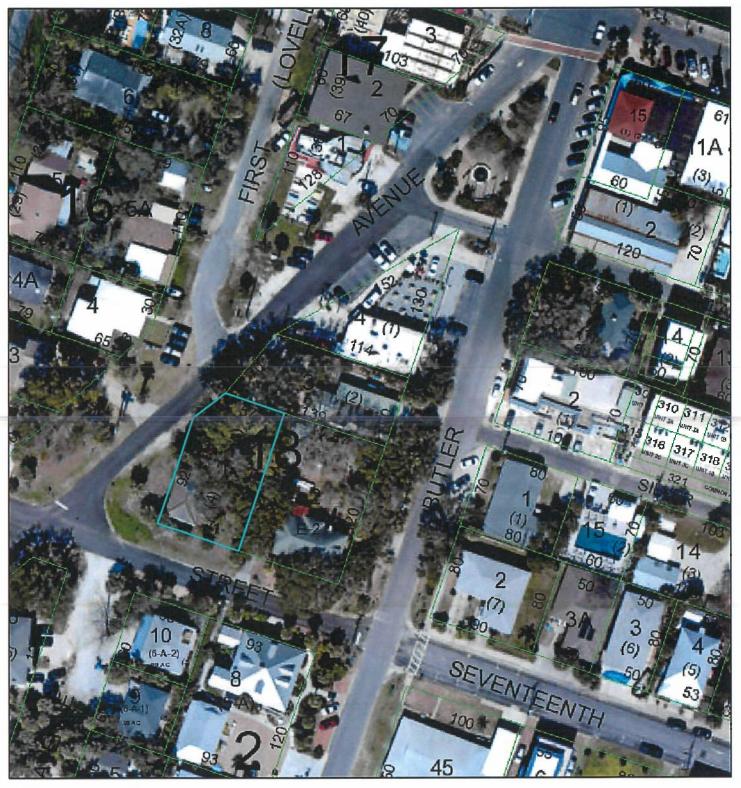
Signature Walter Freeman

Printed Name Walt Freeman

Date 3/31/2023

Item #5.

SAGIS Map Viewer



 4/3/2023, 11:35:06 AM
 1:1,128

 0
 0.01
 0.03 mi

 Image: Property Boundaries (Parcels)
 Image: Property Boundaries (Parcels)
 Image: Property Boundaries (Parcels)

 0
 0.01
 0.03
 0.05 km

- Page 153 -

PARID: 40008 18001 SOUTHERN BELLE RENTALS, LLC

Most Current Owner

Current Owner	Co-Owner Care Of Mailin	-			
SOUTHERN BELLE RENTALS, LLC	331 7	ATTNALL STREET	SAVANNAH GA	31401	
Digest Owner (January 1)					
Owner	Co-Owner Address 1	Address 2	City Stat	e Zip	
SOUTHERN BELLE RENTALS, LLC	331 TATTNALL	STREET	SAVANNAH GA	31401	
Parcel					
Status	ACTIVE				
Parcel ID	40008 18001				
Category Code	RES - Residential				
Bill #	2961304				
Address	104 17TH ST				
Unit # / Suite					
City	TYBEE ISLAND				
Zip Code	31328-				
Neighborhood Tatal Units	20275.00 - T275 TY	BEE INNERSOUT			
Total Units	C-1				
Zoning Class	R3 - Residential Lots				
Appeal Status	R3 - Residential Lots)			
Legal Description					
Legal Description	WEST PART OF LO ISLAND	T 3 AND PART OF	L OT 4 WARD 5 T	YBEE	
Deed Book	2412				
Deed Page	0111				
Inspection				ganin' sin	
Inspection Date	Revie	wer ID			
02/02/2021	RKR	ZAK			
04/02/2019	KMM	ORENO			
03/11/2015	MWT	HOMAS			
06/11/2007	TLWF	IITFI			
Appraised Values					
Tay Year Land	Building Apprais	sed Total	Reason		
ltem #5.	2				- Page 154 -

2022	481,300	30,200	511,500
2021	282,100	26,500	308,600
2020	282,100	43,100	325,200
2019	282,100	41,000	323,100
2018	282,100	40,900	323,000
2017	282,100	29,500	311,600
2016	282,100	30,000	312,100
2015	281,400	31,300	312,700
2014	281,400	30,200	311,600

Sales

Sale Date	Sale Price	Sale Validity	Instrument	Book - Page	Grantor	Grantee	
06/15/2021	0	U	LD	2412 - 0111	FREEMAN WALTER J.	SOUTHERN BELLE RENTALS, LLC	
11/05/2020	470,000	Q	LD	2132 - 0536	LEON JOHN MICHEL, III, WALTER EUGENE CRA	FREEMAN WALTER J.	
02/22/2007	0	U	NA	321N - 500	LOGAN MARGARET MARY	THOMAS JOSEPHINE MICHEL	
07/27/2002	0	U	NA	239U - 665	MICHEL JOSPEHINE U/W	LOGAN MARGARET ET AL	

Land

Line Number	1	
Land Type	U - UNIT	
Land Code	01 - SINGLE FAMILY RES	
Square Feet	0	
Acres	.19	
Influence Factor 1	75	
Influence Reason 1		
Influence Factor 2		
Influence Reason 2		

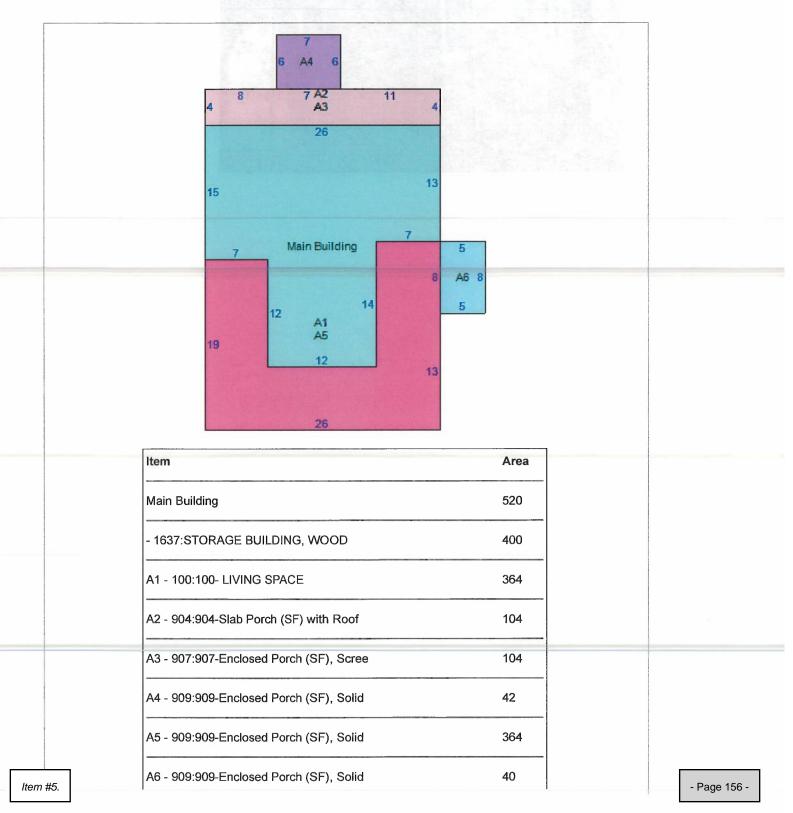
Residential Building

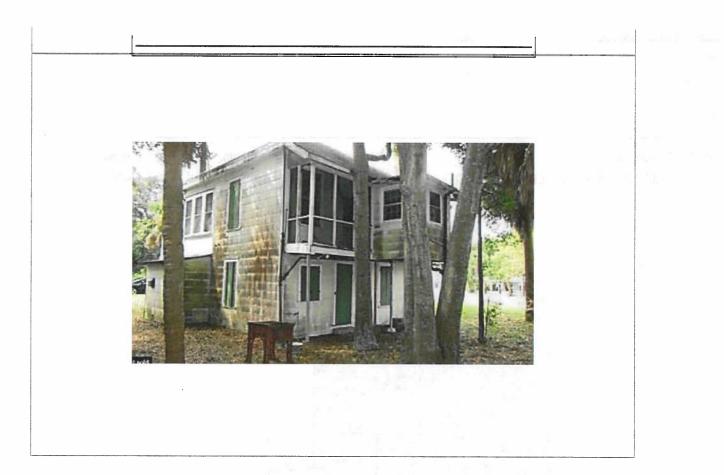
Card #	1 CIT TOWNER AND	
Actual Year Built	1930	
Effective Year Built	1960	
Туре	1 - Single Family Residence	
Style/Stories	2 - TWO STORY	
Percent Complete	100 15 THREE	
Quality	300	
Condition	AV - AVERAGE	
Living Area	1,404	
Basement Area	Guilding Appressed Total 0	15.18 ¹
Item #5.		- Page 155 -

Finished Basement Area	No
Bedrooms	2
Full / Half Baths	3/0

OBY

Card #	Description	Year Built:	Grade:	Units:	Override:	Area:
1	1637 : STORAGE BUILDING, WOOD	1970	С	1		400





Lisa Schaaf

From: Sent: To: Cc: Subject: Downer Davis <dkdjr071419@yahoo.com> Wednesday, April 5, 2023 8:09 AM George Shaw Lisa Schaaf 104 17th St.

I have reviewed the drainage plan concept for this project and find it to be appropriate.

The plans I looked at were for a higher density project with slightly more impervious area with it's larger building footprint. The proposed limits of the multifamily building are completely within the outer walls of the plans I reviewed.

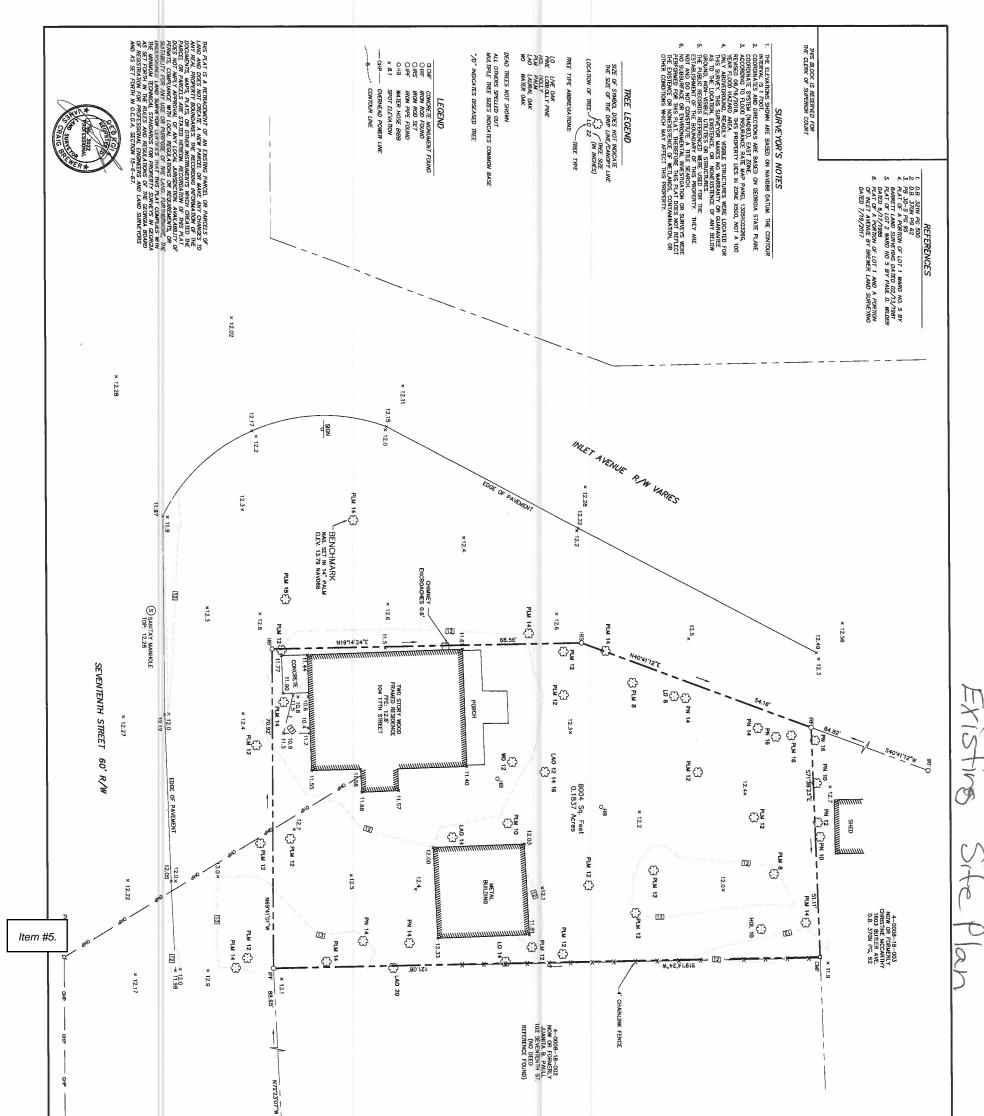
I have reviewed and concurred with very similar designs by this Engineer that also used subsurface detention. The design layout is similar to the buried stormwater storage modules used a both phases of the Brass Rail, which were first installed at least 15 years ago and have operated with no apparent problems.

I do not foresee any issues that would prevent the Engineer with submitting a design acceptable to me.

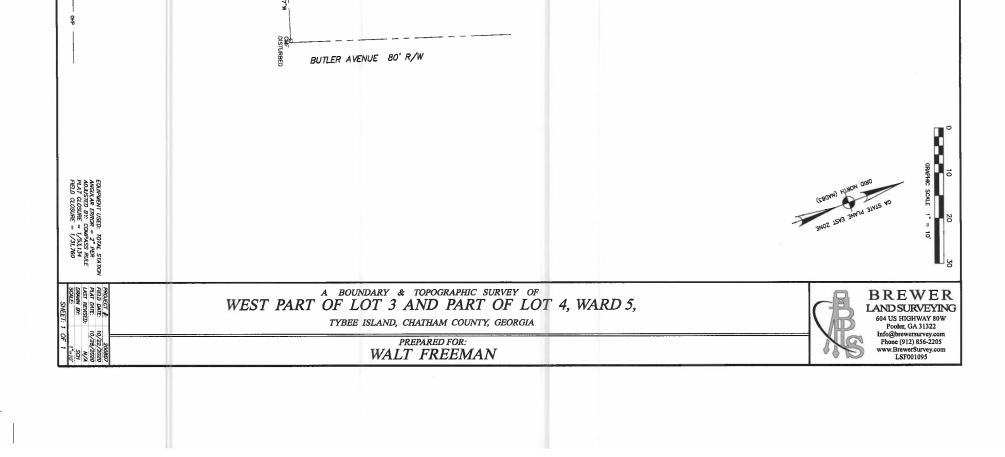
Downer



		TREE DENSITY CALCULATION A 8004 S.F / 4500 = 1.778 3 = 5.336 MIN. TREE REQUIRED NG TREES TO REMAIN = 8	AL REQUIRE CONDITION FROM A LIFROM A LIFROM A LIFRONT A LIFRONT A LIFRONT A LIFRONT A REALITY	TENSPACE CALC TBACK AREA ST80 F SETBACK AREA 2451
SH DATE 03-31-23	W CONSTRUCTION FOR WAI 17th ST TYBEE ISLAND GA.	T FREEMAN		FRED WASSON RESIDENTIAL DESIGNER (912) 220-5394 wassonf@yahoo.com



į.





PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: requesting to add 3 townhomes while keeping existing structure -104 17th St. -40008 18001 -Zone C-1 -Walt Freeman.

Action Requested: Site plan approval

Appeal	G 1 1: · ·	
Special Review	Subdivision:	Concentral
Site Plan Approval X	Sketch Plan Approval Preliminary Plan Approval	Conceptual
Variance	Final Plat Approval	
Map Amendment	Minor Subdivision	Major Subdivision
Text Amendment		

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR MOTION
Nooney	X		
Matkowski	X		
Livingston	X		
Rodriguez	X		SECOND

Planning Commission Chair:

Planning & Zoning Manager:

Date: 419/23

Date: <u>4 - 19 - 7023</u>

File Attachments for Item:

6. Site Plan Approval, 115 and 1109 East US Highway 80, Increase Parking via adjacent lot, Chris Smith, Zunzibar



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Applicant requests site plan approval to include adjoining lot

Vote on site plan

ATTACHMENTS 2.SITE PLAN-1115&1109 E HWY 80.pdf

CITY OF TYBEE ISLAND <u>SITE PLAN APPROVAL</u> <u>APPLICATIO</u>	<u>DN</u>
Applicant's Name Robert Portman, Barnard Architects	
Address and location of subject property 115 & 1109 EAST US Highway 80	
PIN 40026 03021 & 40026 03022 Applicant's Telephone Number 912-232	-6173
Applicant's Mailing Address 220 East Hall Street, Savannah 31401	
Brief description of the land development activity and use of the land thereafter to take plac Refer to attached Letter	ce on the property:
Explain the requested varianceNo variance request	
Explain the hardship	
Property Owner's Name Chris Smith Telephone Number 407-34	0-8585
Property Owner's Address PO Box 8007, Savannah, Ga. 31412	
Is Applicant the Property Owner?YesX_No	<u>Site Plan Fee</u> Commercial \$500
If Applicant is the Property Owner, Proof of Ownership is attached: X Yes	Variance Fee Commercial \$500
If Applicant is other than the Property Owner, a signed affidavit from the Property Owner granting the Applicant permission to conduct such land development is attached her	eto. X Yes
Current Zoning of Property <u>C-2</u> Current Use <u>Commercial Business: Resta</u>	urant
Names and addresses of all adjacent property owners are attached: <u>x</u> Yes	
If within two (2) years immediately preceding the filing of the Applicant's application for a Applicant has made campaign contributions aggregating to more than \$250 to the Mayor a Council or any member of the Planning Commission, the Applicant and the Attorney represented the following: a. The name of the local government official to whom the campaign contribution or gifts. The dollar amount of each campaign contribution made by the applicant to the official during the two (2) years immediately preceding the filing of the application, and the date of each contribution; c. An enumeration and description of each gift having a value of \$250 or more made the local government official during the two (2) years immediately preceding a value of \$250 or more made the local government official during the two (2) years immediately preceding a value of \$250 or more made the local government official during the two (2) years immediately preceding the filing of the application of each gift having a value of \$250 or more made the local government official during the two (2) years immediately preceding application for this zoning action.	and any member of enting the Applicant it was made; e local government tion for this zoning by the Applicant to
Signature of Applicant Jate	>
Signature of Applicant Date NOTE: Other specific data is required for each type of Site Plan Approval with V	/ariance.
Fee Amount \$ 500.00 Check Number 0799 Date 2/21/23	
City Official	
tem #6.	- Page 164 -

NOTE: This application must be accompanied by additional documentation, including drawings that include or illustrate the information outlined below.

- _____ 3 copies, no smaller than 24 x 36, of the engineered drainage and infrastructure plan.
- $_$ 1 copy, no smaller than 11 x 17, of the existing tree survey and the tree removal and landscaping plan.
- _____ Disclosure of Campaign Contributions
- X Site plan and/or architectural rendering of the proposed development depicting the location of lot restrictions. *1 copy, no smaller than 11 x 17, of the proposed site plan and architectural renderings.* Section 5-040 (D)(1)
- X A survey of the property signed and stamped by a State of Georgia certified land surveyor. Section 5-040 (D)(2)
- <u>na</u> Provide attachments illustrating conditions on the subject and surrounding properties indicating that there are unique physical circumstances or conditions including:
 - _____irregularity,
 - _____narrowness, or,
 - _____shallowness of the lot size or shape, or,
 - exceptional topographical or other physical conditions peculiar to the particular property

That because of such physical circumstances or conditions, the property cannot be developed in strict conformity with the provisions of the Land Development Code, without undue hardship to the property. Sections 5-090 (A)(1) and 5-090 (A)(2).

na

_ If this variance application is for a Height Variance, in addition to other requirements, the petitioner shall be required to:

_____Add two feet to each side yard setback for each one foot above 35 feet in height, and,

- _____Have safeguards consisting of sprinkler systems, smoke detectors and other fire
- protection equipment deemed necessary at the time by the Mayor and Council, and,
- _____Where a rear yard abuts a side yard of the adjacent lot, the petitioner shall be required to add two feet to the rear setback for each foot above 35 feet height.

Section 5-090 (B)

The Planning Commission may require elevations or other engineering or architectural drawings covering the proposed development.

The Mayor and Council will not act upon a zoning decision that requires a site plan until the site plan has met the approval of the City's engineering consultant. (Note: Section 5-080 (A) requires, "Once the engineer has submitted comments to the zoning administrator, a public hearing shall be scheduled.")

The Applicant certifies that he/she has read the requirements for Site Plan Approval with Variance and has provided the required information to the best of his/her ability in a truthful and honest manner.

Signature of Applican



CITY OF TYBEE ISLAND

CONFLICT OF INTEREST IN ZONING ACTIONS DISCLOSURE OF CAMPAIGN CONTRIBUTIONS

Have you within the past two (2) years made campaign contributions or gave gifts having an aggregate value of \$250.00 or more to a member of the City of Tybee Island Planning Commission, or Mayor and Council or any local government official who will be considering the rezoning application?

YES _____

NO

IF YES, PLEASE COMPLETE THE FOLLOWING SECTION:

NAME OF GOVERNMENT OFFICIAL	CONTRIBUTIONS OF \$250.00 OR MORE	GIFTS OF \$250.00 OR MORE	DATE OF CONTRIBUTION
		9	

IF YOU WISH TO SPEAK CONCERNING THE ATTACHED REZONING APPLICATION, THIS FORM MUST BE FILED WITH THE ZONING ADMINISTRATOR FIVE (5) DAYS PRIOR TO PLANNING COMMISSION MEETING IF CAMPAIGN CONTRIBUTIONS OR GIFTS IN EXCESS OF \$250.00 HAVE BEEN MADE TO ANY MEMBER OF THE PLANNING COMMISSION OR MAYOR AND COUNCIL.

Signature _

Printed Name Chris Smith

Date 2/18/23



March 31, 2023

Project Description

Zunibar 1115 Highway 80 Tybee Island, Ga

On behalf of Chris Smith, owner of Zunibar, Barnard Architects has prepared the attached drawing exhibits, this description letter and application.

Project Description:

In this submission we are respectively requesting temporary approval to add 80 outdoor seats and increase the parking via the adjacent lot at 1109 East US Highway 80. Refer to sheet SITE -T. The existing vehicular circulation will remain. In order to access the adjacent lot and place a dumpster enclosure, four parking spaces will be removed.

We have also attached a Final Site Plan for approval consideration by Staff, Planning and Zoning Committee and City Council. This final site changes the direction of incoming vehicles from one direction to two directions allowing for an outdoor dining experience along Highway 80 covered with shade sails. Per this phase we are also widening the entrance from McKenzie street into the property allowing for the two way traffic as well as, maneuvering out of the handicap parking space back onto McKenzie. Also shown is a new curb cut at Highway 80.

Thank you,

Robert Portman Barnard Architects 220 East Hall Street 912-232-6163. Robert@barnardarchitects.com

Affidavit for Applicant

City of Tybee,

Please accept this letter as permission for Robert Portman with Barnard Architects to conduct business for my property at 1115 US Hwy 80, PIN 40026 03021. Please contact me at 912-414-7155 with any questions or concerns.

-DocuSigned by: Jenny Rutherford -84AFE55C8C304A5... **Jenny Rutherford**

PARID: 40026 03021 SCHANTZ GERALD L

Most Current Owner

Current Owner	(Co-Owner	Care Of Mail	ing Address		
1115 US HWY 80, LI GEORGIA LIMITED		ABILITY COMPANY		2-B US HIGHWAY AND GA 31328	80 TYBEE	
Digest Owner (Janı	ary 1)					
Owner SCHANTZ GERALD		Address 1 P.O. BOX 1095	Address 2	City TYBEE ISLAND	State Zip GA 31328	
Parcel						
Status Parcel ID Category Code Bill # Address		ACTIVE 40026 03021 350 - Restaura 2937668 1115 US HIGH				
Jnit # / Suite			008.888	006.01	008,71	
City Zin Codo		TYBEE ISLAN 31328-	U			
Zip Code		20500.00 - T50				
Neighborhood Total Units		20000.00 - 150		J BULL K		
Zoning		C-2				
Zoning Class		C-2 C3 - Commerc	ial Lote			
Appeal Status			iai LUI3			
Legal Description						
Legal Description	5	LOTS 10, 11 & AC	12 BLOCK	10 GARDEN WD F	RB 29P 2 .31	
Deed Book		275K				
Deed Page		0281				
Permits						
Permit # Per	rmit Date S	tatus Type		A	nount	
190085 12/	'16/2019 C		ERT OF OC	CUP		
190449 08/			COMMERCIA	AL \$1	1,500.00	
		-	COMMERCIA		00,000.00	
			LECTRIC		2,000.00	
	•		LECTRIC	· -		

Inspection

Inspection Date	Reviewer ID	
05/26/2021	JCRAWFORD	
01/05/2017	ALCUMMIN	
09/19/2013	AYONCE	
12/16/2011	PSMILLER	
11/23/2010	LALOWRIM	

Appraised Values

				and the second		
Tax Year	Land	Building	Appraised Total		Reason	
2022	363,800	8,700	372,500			
2021	363,800	8,100	371,900			
2020	363,800	16,100	379,900			
2019	363,800	16,100	379,900			
2018	363,800	14,500	378,300			
2017	363,800	14,500	378,300			
2016	371,300	14,500	385,800			
2015	371,300	14,500	385,800			
2014	371,300	14,500	385,800			
2013	371,300	14,500	385,800			

Sales

Sale Date Sale Price	Sale Validity	strument Book - Pa	age Grantor	Grantee	
07/28/2022 1,150,00	0Q LD	0 2876 - 01	129 SCHANTZ GERALD L.	1115 US HWY 80, LLC, A GEORGIA LIMITED L	
08/31/2004 450,000	Q WE	D 275K - 02	281 CERVERA ZAVIER	SHANTZ GERALD L	
04/29/2003 265,000	Q WE	D 250U - 00	084 WILLIAMS TRAVIS S& IRIS	CERVERA XAVIER	
05/15/1998 0	U QC	C 193O - 0	144 WILLIAMS TRAVIS S	WILLIAMS TRAVIS S & LISA	
03/28/1997 0	U NA	A 184Z - 50	08 FRANKLIN D. KOHEL	TRAVIS S. WILLIAMS	

Land					
Line Number	 1 90	CO - CERT OF OOC	Complete	12/18/2019	
Land Type	S - SQUAR	E FOOT			
Land Code	V2 - VACAI	NT COMMERCIAL 2			
Square Feet	13,500				
Acres	.3099				
Influence Factor 1	-30				
Item #6. e Reason 1					- Page 1

Influence Factor 2 Influence Reason 2

OBY

Card #	Description	Year Built:	Grade: Units: Override: A	rea:
1	1243 : CANOPY, WOOD FRAME, LIGHT FALSE MANSARD	2010	1 8	40

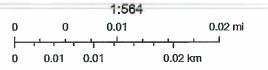


SAGIS Map Viewer



4/3/2023, 2:20:41 PM

Property Boundaries (Parcels)



SAGIS

ltem #6.

- Page 172 -

LEASE AGREEMENT

This LEASE AGREEMENT is made as of ______, 2023, by and between RLH HOLDINGS, LLC, a Georgia limited liability company ("Landlord"), and ZUNZIS OPERATIONS, LLC, a Georgia limited liability company ("Tenark" and, together with Landlord, the "Parties").

FOR AND IN CONSIDERATION of the mutual covenants contained herein, ten and no/100ths dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **PREMISES**. Landlord, in consideration of the lease payments provided in this Lease, hereby leases to Tenant (i) certain real property located at 1109 US Highway 80 East, Tybee Island, Georgia 31328, being a portion of that real property more particularly described on **Exhibit A** attached hereto (the "<u>Real Property</u>"), (ii) all non-fixture personal property described in **Exhibit B** attached hereto (the "<u>Personal Property</u>"), and (iii) all other improvements (including fixtures) located on the Real Property (collectively, the "<u>Premises</u>").

2. TERM AND RENEWAL TERM.

a) <u>Initial Term</u>. The term of this Lease shall commence on March 24, 2023 (the "<u>Effective Date</u>") and shall terminate at 11:59 p.m. Five (5) years thereafter on January 31, 2027 (such five year term, the "<u>Initial Term</u>"), unless terminated prior thereto pursuant to the terms hereof. The Initial Term and, if applicable, the Renewal Term (as defined below) may be referred to herein as the "<u>Term</u>".

b) <u>Renewal Option</u>. As long as this Lease is in full force and effect, and Tenant is not in default in the performance of its covenants under this Lease beyond any applicable cure period, and subject to the conditions hereinafter set forth, Tenant is hereby granted one (1) option (the "<u>Renewal Option</u>") to renew the Lease for five (5) additional year(s) (the "<u>Renewal Term</u>"), on the following terms:

(i) In order to exercise the Renewal Option, Tenant must deliver to Landlord

written notice of such exercise (an "<u>Exercise Notice</u>") no later than one hundred eighty (180) days prior to the expiration of the Initial Term (the "<u>Exercise Deadline</u>").

(ii) Once Tenant has timely delivered an Exercise Notice to Landlord, Tenant

shall have irrevocably exercised the Renewal Option, and may not withdraw the same.

(iii) The Renewal Term shall begin the day immediately following

the

expiration of the Initial Term.

(iv) If Tenant fails to deliver an Exercise Notice by the Exercise Deadline, Tenant's Renewal Option shall automatically terminate, and the Lease



shall terminate upon the expiration of the Initial Term; provided, that in the event Tenant holds over with Landlord's consent after the expiration of the Initial Term, the Lease shall automatically become a month to month lease with Base Rent payable at \$4,500 per month.

(v) Tenant may exercise the Renewal Option by delivering written notice of

such exercise to Landlord at least one hundred eighty (180) days prior to the expiration of the Initial Term (the "**Exercise Deadline**"). Once Tenant has delivered notice of such exercise to Landlord, Tenant shall have irrevocably exercised the Renewal Option, and may not withdraw the same. (vi) Tenant's Renewal Option is non-transferable, and Tenant may not assign

its Renewal Option to any sublessee of the Premises or assignee of Tenant's rights under this Lease without the prior written consent of Landlord.

c) <u>Renewal Term</u>. The renewal of this Lease shall be upon the same terms and conditions of this Lease, except that: (i) Base Rent (hereinafter defined) shall be the continued yearly increase of \$100 a month, a year, (ii) Tenant shall pay, as such amounts come due, any increases in real property taxes and insurance paid by Landlord in excess of such amounts incurred during the first twelve-month year during the Initial Term, (iii) the Premises will be provided in their then-existing condition (on an "as is" basis in the broadest sense of the term) at the time the Renewal Term commences; (iv) there shall not be any rent abatement period, and (v) Tenant shall not be entitled to any cash payment or allowance of any nature or amount whatsoever.

c) <u>Buy Out Option</u>. Tenant in agreement with Landlord reserves the right to Buy Out lease at the end of the first year of the initial 5 year lease. Buy Out Option is in the amount of \$7500. Tenant must inform Landlord of intentions to exercise Buy Out Option on or before January 15, 2024. When Buy Out Option is exercised tenant agrees to vacate property on or before April 1, 2024.

d) <u>Lease Void Option</u>. The lease can be voided immediately if at no fault of the tenant the City of Tybee rejects/disapproves parking lot permit.

3. LEASE PAYMENTS.

a) <u>Rent</u>. The term "<u>Rent</u>" shall mean all Base Rent and Additional Rent as those terms are hereinafter defined.

"Base Rent" shall mean the payments set forth in Section 3(b) hereof.

"<u>Additional Rent</u>" shall mean all other payments other than Base Rent required to be paid by Tenant to Landlord under this Lease.

Rent shall be due, in advance, on the FIRST day of each month commencing on the Effective Date. All payments of Rent due under this Lease shall be made to Landlord at:

P.O. Box 99

2



Tybee Island, Georgia 31328

or such address as may be changed from time to time by Landlord.

b) <u>Base Rent</u>. From and after the Effective Date, Tenant shall pay Base Rent to Landlord, without demand, deduction or setoff, according to the following schedule:

Time Period	Monthly Base Rent	Annualized Base Rent
Year 1 (4/1/23 – 12/31/23)	\$2,500.00	\$30,000.00
Year 2 (1/1/24 – 12/31/24)	\$2,600.00	\$31,200.00
Year 3 (1/1/25 – 12/31/25)	\$2,700.00	\$32,400.00
Year 4 (1/1/26 – 12/31/26)	\$2,800.00	\$33,600.00
Year 5 (1/1/27 – 12/31/27)	\$2,900.00	\$34,800.00

c) <u>Real Property Taxes</u>. Landlord shall pay all property taxes assessed on the Premises during the Term.

d) <u>Insurance</u>. Insurance premiums for the Premises shall be paid as described in <u>Section 11</u> hereof during the Term.

e) <u>Personal Property Taxes</u>. Tenant shall pay all taxes assessed on Tenant's personal

property on the Premises. If Landlord has paid any such tax in the first instance, as required by the applicable taxing authority, then Tenant shall pay Landlord Tenant's share of such taxes allocable to Tenant's personal property within thirty (30) days after Landlord submits to Tenant copies of said tax bills for the applicable tax year.

f) <u>Utilities</u>. Tenant shall secure the provision of all utilities serving the Premises (and

shall put all such utilities in its name) and shall pay all utility bills, including but not limited to water, sewer, gas, electricity, fuel, garbage collection and other sanitary services provided to the Leased Premises. If Tenant fails to pay any of said utility bills, Landlord may pay the same and such payment may be added as Additional Rent to be payable with the Rent payment next due.

4. **LATE CHARGE**. Tenant shall pay a late charge of \$75.00 for each monthly Rent payment that is not received within five (5) days after the due date of such payment.

5. <u>SECURITY DEPOSIT</u>. Upon execution and delivery of this Lease, Tenant shall pay to Landlord a security deposit in the amount of Two Thousand Five Hundred and No/100 Dollars (\$2,500.00) (the "<u>Security Deposit</u>"). Upon an Event of Default which remains uncured by Tenant past any applicable notice and/or cure period, Landlord may, at its option, apply all or any part of the Security Deposit to cure the default. Upon the termination of this Lease, provided that Tenant is not in default hereunder, Landlord shall refund to Tenant the remaining balance of the Security Deposit.

6. **POSSESSION**. Tenant shall be entitled to possession of the Premises commencing on the Effective Date. Tenant shall yield possession to Landlord on midnight of the last day of the Term, unless otherwise agreed by both parties in writing.

por

- Page 175

3

a) <u>Removal of Fixtures</u>. Upon the expiration of the Term: (i) Landlord shall have the

right to require Tenant to remove any or all fixtures and equipment installed by or for Tenant on the Premises; and (ii) if Tenant is not in default hereunder, Tenant may, at its sole expense, remove all fixtures and equipment which it has placed in the Premises during the Term, provided that Tenant restores the Premises to its condition prior to the installation of such fixtures and/or equipment. All fixtures and equipment not so removed shall become the property of Landlord upon the termination or expiration of this Lease.

b) <u>Surrender of Premises</u>. Upon the expiration of the Term, Tenant shall surrender to Landlord the Premises and the keys thereto, in the same condition as at commencement of the Term, excepting only normal wear and tear and improvements approved by Landlord.

7. <u>USE OF PREMISES AND OCCUPANCY</u>. Tenant shall use the Premises as a Parking Lot, subject to the restrictions described in <u>Section 7(a)</u> hereof. The Premises may not be used for any other purpose without the prior written consent of Landlord. The Premises shall not be used for any illegal purposes or in violation of any valid regulation of any governmental body having jurisdiction over the Premises, nor in any manner to create any nuisance or trespass, nor in any manner to vitiate the insurance or increase the rate of insurance on the Premises.

a) <u>Use Restrictions</u>. Tenant shall not be permitted to use the Premises for the following purposes:

(i) to build any structure to facilitate more dinning capabilities or

(ii) to prepare, sell or distribute food of any kind that will be delivered for consumption off-Premises, including food that will be delivered by Tenant or by any third party delivery service such as Uber Eats, DoorDash, or Grubhub.

8. <u>COMPLIANCE WITH LAWS</u>. Tenant shall comply, at its sole expense, with all statutes, regulations, rules, ordinances and orders of any governmental body or any department or agency thereof, which apply to or result from Tenant's use or occupancy of the Premises. In addition to the foregoing, Tenant shall not cause any Hazardous Materials (as defined below) to be generated, treated, stored, used, installed or disposed of in, on, under or about the Premises or permit any Hazardous Materials to be generated, treated, stored, used, installed or disposed of in or on the Premises, except to the extent consistent with customary and reasonable business practices of typical tenants for uses of the Premises and provided Tenant complies with all legal requirements applicable to such Hazardous Materials. Tenant shall not suffer or permit the Premises, or any part thereof, to be used in any manner, or anything to be done therein, or suffer or permit anything to be brought into or kept therein, which would in any way (a) violate any of the provisions of any mortgage to which this Lease is subordinate, (b) violate any legal requirements of any governmental authority, (c) make void or voidable any fire or liability insurance policy then in force

4

NA TO

with respect to the Premises, (d) make unobtainable from reputable insurance companies authorized to do business in the state where the Premises are located at standard rates any fire insurance with extended coverage or liability or other insurance normally carried with respect to the listed use and required to be furnished by Landlord under the terms of any mortgage to which this Lease is subordinate, (e) cause or, in Landlord's reasonable opinion, be likely to cause physical damage to the Premises or any part thereof, (f) constitute a public or private nuisance, (g) impair, in Landlord's reasonable opinion, the appearance, character or reputation of the Premises, or (h) cause Tenant to default in any of its other obligations under this Lease. For the purposes hereof, "Hazardous Materials" shall mean asbestos, oil, petroleum, petroleum products, lead paint, or other hydrocarbons, urea formaldehyde, PCBs, hazardous or nuclear waste, toxic chemicals and substances, or other hazardous materials, as defined in applicable environmental laws.

9. MAINTENANCE.

Tenant's Repairs. Tenant shall be responsible for all maintenance and repairs to a) the Premises. Without limiting the foregoing, Tenant shall maintain all grounds in a presentable manor keeping the lot free and clear of debris. Including but not limited to trash, limbs and leaves.

Liens. Each party hereto shall promptly pay when due the entire cost of all work b) done by it to the Premises and shall keep the Premises free of liens for labor or materials. Should mechanics', materialmen's or other liens be filed against the Premises by reason of the acts of either party hereto, such party shall cause the lien to be canceled and discharged of record by bond or otherwise within thirty (30) days of receiving actual notice of such lien.

> Acceptance of Premises. Tenant accepts the Premises in their present condition c)

> > as

suited for the use intended by Tenant. All improvements to the Premises made by Tenant shall be approved by Landlord prior to commencement as provided above.

ACCESS BY LANDLORD TO PREMISES. Representatives of Landlord shall have the 10. right to enter the Premises to make inspections, make repairs, provide necessary services, or show the unit to prospective buyers, mortgagees, tenants or workmen during normal business hours and after reasonable notice to Tenant. Landlord may place and maintain "For Sale" signs on the Premises at any time and "For Rent" signs during the last one hundred twenty (120) days of the Term. Notwithstanding the foregoing, as provided by law, in the case of an emergency, Landlord may enter the Premises without Tenant's consent.

11. PROPERTY INSURANCE.

a)

Tenant's Insurance. Throughout the Term, Tenant shall, at its own

expense,

provide or cause to be provided and kept in force commercial general liability insurance (including liquor liability insurance, if liquor is sold on the Premises) against claims of personal injury or death and property damage caused by an occurrence upon, in or about the Premises, and shall afford protection to the limit of not less than Two Million and No/100 Dollars (\$2,000,000.00) in respect of personal injury or death to any one person and in respect of injury or death to any number of persons arising out of any one accident, and such insurance against property damage in respect of any instance of property damage. On the Effective Date or as soon as practicable thereafter, Tenant shall deliver to Landlord a certificate of the insurance required to be carried hereunder listing Landlord as an additional insured.

b)

Landlord's Insurance. Landlord will procure and maintain

physical damage

insurance covering all real and personal property, excluding Tenant's personal property, located on or in, or constituting a part of, the Premises in an amount equal to one hundred percent (100%) of the replacement value of all such property excluding foundations: Such insurance shall afford coverage for damages resulting from (i) perils covered by what is commonly referred to as "all risk" coverage insurance, (ii) machinery coverage as appropriate for apparatus located on the Premises, and (iii) flood insurance.

c) <u>Insurance Certificates</u>. All of the insurance policies required to be carried by Tenant pursuant to this Section shall be written with companies licensed to do business in the state in which the Premises are located and shall provide that Landlord shall be given a minimum of thirty (30) days' written notice by any such insurance company prior to the cancellation, termination or alteration of the terms or limits of such coverage. Tenant shall deliver to Landlord the foregoing insurance policies or certificates thereof prior to the tender of possession of the Premises to Tenant and evidence of all renewals or replacements of same not less than ten (10) days prior to the expiration date of such policies.

d) <u>Waiver of Subrogation</u>. Landlord and Tenant each waive any and all rights to

recover against the other, or against the officers, directors, shareholders, partners, joint ventures, employees, agents, customers, invitees or business visitors of such other party, for any loss or damage to such waiving party arising from any cause covered by any property insurance required to be carried pursuant to this Lease or any other property insurance actually carried by such party. Landlord and Tenant, from time to time, will cause their respective insurers to issue appropriate waiver of subrogation rights endorsements to all property insurance policies carried in connection with the Premises or the contents of either.

e) <u>Indemnity Regarding Use of Premises</u>. Tenant agrees to indemnify, hold harmless, and defend Landlord from and against any and all losses, claims, liabilities, and expenses, including

reasonable attorneys' fees, if any, which Landlord may suffer or incur in connection with Tenant's use of the Premises.

12. **DESTRUCTION OF PREMISES.** If the leased Premises are partially destroyed in a manner that prevents the conducting of Tenant's use of the Premises in a normal business manner, and if the damage is reasonably repairable within sixty (60) days after the occurrence of the destruction, and if the cost of repair is less than \$25,000.00 and is covered by Tenant's or Landlord's insurance, Landlord shall repair the Premises and Rent shall abate during the period of repair. However, if the damage is not repairable within sixty (60) days, or if the cost of repair is \$25,000.00 or more, or is not covered by insurance, or if Landlord is prevented from repairing the damage by forces beyond Landlord's control, or if the property is condemned, this Lease shall terminate upon twenty (20) days' written notice of such event or condition by either party.

13. <u>MECHANICS LIENS</u>. Neither Tenant nor anyone claiming through Tenant shall have the right to file mechanics liens or any other kind of lien on the Premises. Further, Tenant agrees to give

roquind to be carried herengeler listing Landock as an additional freeze

Pot Z - Page 178 -

actual advance notice to any contractors, subcontractors or suppliers of goods, labor, or services that such liens will not be valid.

14. **DEFAULTS**.

a) <u>Events of Default</u>. The occurrence of any of the following shall constitute an "<u>Event of Default</u>" under this Lease by Tenant:

> (i) The Rent or other sum due under this Lease is not paid within ten (10) days of the date when due

(hereinafter referred to as a "Monetary Default");

(ii) Tenant fails to fulfill or perform, or violates any other material obligation or term of this Lease (hereinafter referred to as a "Nonmonetary Default").

b) <u>Remedies</u>. Upon the occurrence of an Event of Default, if such Event of Default is not cured within ten (10) days (for a Monetary Default) or thirty (30) days (for a Nonmonetary Default) after written notice of such Event of Default by Landlord to Tenant, Tenant shall be in default under this Lease and Landlord shall have the option to do and perform any one or more of the following in addition to, and not in limitation of, any other remedy or right permitted by law or in equity:

(i) Landlord may take possession of the Premises without further notice, and

without prejudicing Landlord's right to seek damages.

(ii) Landlord may elect to cure any Event of Default, with the cost of such

action to be added to Tenant's financial obligations under this Lease.

(iii) Landlord may terminate this Lease and collect all Rent owed for the period

prior to such termination.

(iv) Without terminating the Lease, Landlord may enter upon and rent the Premises or any part thereof at the best price obtainable by reasonable effort, without advertisement and by private negotiations, and for any term Landlord deems proper. Tenant shall be liable to Landlord for the deficiency, if any, between Tenant's Rent due hereunder and the price obtained by Landlord on reletting.

7

(v) Landlord shall have all other rights and remedies available at law

equity.

c) <u>Costs of Default</u>. Tenant shall pay all reasonable costs, damages and expenses

po t - Page 179

or in

suffered by Landlord by reason of Tenant's uncured Event(s) of Default. Notwithstanding the other provisions of this lease, the landlord shall of the duty to mitigate its damages in the event of a Tenant default.

d) <u>Landlord's Default</u>. In the event that Landlord fails to perform or violates any obligation or term of this Lease and fails to cure said default within thirty (30) days after its receipt of written notice of such default from Tenant, Landlord shall be in default under this Lease and Tenant shall have all rights and remedies available at law or in equity. Notwithstanding the foregoing, in the event any non-monetary default cannot with reasonable diligence be cured within such thirty (30) days to cure such default as long as Landlord commences such cure within the initial thirty (30) day period and diligently pursues in good faith such cure to completion.

15. <u>CUMULATIVE RIGHTS</u>. The rights of the parties under this Lease are cumulative, and shall not be construed as exclusive unless otherwise required by law.

16. **ASSIGNABILITY/SUBLETTING.** Tenant may not assign or sublease any interest in the Premises or permit the use of Premises by any party other than Tenant without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned, or delayed. If Tenant is an entity, any conveyance of any ownership interest in Tenant shall be considered an assignment of an interest in the Premises hereunder. Consent to one assignment or sublease shall not destroy or waive this provision, and all later assignments and subleases shall likewise be made only upon prior written consent of Landlord. Subtenants or assignees shall become liable directly to Landlord for all obligations of Tenant hereunder, without relieving Tenant's continued liability therefor.

17. **NOTICE**. Any notices, requests, or other communications required or permitted to be given hereunder shall be in writing and shall be delivered personally, or sent by registered, certified, or Express United States mail, postage prepaid, or by FedEx or similar nationally recognized delivery service requiring a receipt. The date of receipt of such notice, election, demand or request shall be the earliest of (i) the date of actual receipt, (ii) three (3) business days after the date of mailing by registered or certified mail, (iii) one (1) business day after the date of sending via overnight delivery by Express Mail, FedEx or another similar service requiring a receipt, or (iv) the date of personal delivery (or refusal by or on behalf of the addressee upon presentation for delivery of a properly addressed notice). Any such notice, demand or request shall be sent to the respective addresses set forth below, or at such other address as any party may designate in writing as provided herein:

As to Landlord:

RLH Holdings, LLC Attn: Rich Hammons P.O. Box 99 Tybee Island, Georgia 31328 As to Tenant:

Zunzis Operations LLC Attn: Chris Smith P.O. Box 8007 Savannah, Georgia 31412

18. **ENTIRE AGREEMENT/AMENDMENT**. This Lease contains the entire agreement of the parties, and there are no other promises or conditions in any other agreement whether oral or written. The Lease may be modified or amended in writing, if the writing is signed by the party obligated under the amendment.

8

pt & - Page 180 -

19. **FAILURE TO EXERCISE A POWER GRANTED**. This lease contains the entire agreement of the parties and no representations, inducements, promises or agreements, oral or otherwise, between the parties not embodied herein shall be of any force or effect. No failure of Landlord to exercise any power give Landlord hereunder, or to insist upon strict compliance by Tenant of any obligation hereunder, and no custom or practice of the parties at variance with the terms hereof shall constitute a waiver of Landlord's right to demand exact compliance with the terms hereof.

20. <u>SEVERABILITY</u>. If any portion of this Lease shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of this Lease is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

21. SUBORDINATION AND ESTOPPEL.

a) <u>Subordination</u>. This Lease and all rights of Tenant hereunder are and shall be subject and subordinate to the lien of any mortgage, or other instrument encumbering the fee title of the Premises (each such instrument is hereinafter referred to as a "<u>Mortgage</u>"), and to any modifications, renewals, consolidations, extensions, or replacements thereof. This subordination shall be self-operative, and no further instrument of subordination shall be required by the holder of any such Mortgage affecting or encumbering the fee title of the Premises. In confirmation of such subordination, Tenant shall, upon request at any time or times, execute, acknowledge, and deliver to Landlord or the holder of any such Mortgage, without expense, any and all instruments that may be requested by Landlord or such holder to evidence the subordination of this Lease and all rights hereunder to the lien of any such Mortgage, and each such renewal, modification, consolidation, replacement, and extension thereof.

b) Estoppel Certificate. At any time and from time to time, Tenant, on or before the date specified in a request therefor made by Landlord, which date shall not be earlier than ten (10) days after Landlord's making of such request, shall execute, acknowledge and deliver to Landlord a certificate evidencing whether or not (i) this Lease is in full force and effect, (ii) this Lease has been amended in any way and attaching a copy of any such instrument of amendment, (iii) there are any existing events of default on the part of Landlord hereunder to the knowledge of Tenant and specifying with particularity the nature of such events of default, if any, and (iv) Rent, and other amounts due hereunder, if any, have been paid, and certifying to such other facts as Landlord may reasonably require.

22. <u>ATTORNEY'S FEES AND HOMESTEAD</u>. If any rent owing under this Lease is collected by or through an attorney at law, Tenant agrees to pay reasonable attorneys' fees and expenses. Tenant waives all homestead rights and exemptions which it may have under any law as against any obligation owing under this Lease. Tenant hereby assigns to Landlord its homestead and exemption.

23. <u>TIME OF ESSENCE</u>. Time is of the essence of this Lease.

24. **DAMAGE OR THEFT OF PERSONAL PROPERTY**. Tenant agrees that all personal property brought into the Premises shall be at the risk of Tenant only and that Landlord shall not be liable for theft thereof or any damages thereto occasioned from any act or omission of Landlord, its employees or

Pot 2 - Page 181 -

patrons, or other occupants of the Premises or any other person related to the operation and maintenance of the Premises.

25. **EMINENT DOMAIN CLAUSE**. It is mutually agreed that if the whole or any substantial part of the demised Premises shall be taken by Federal, State, County or City authority for public use, or under any statute, or by right of eminent domain or if such taking shall unreasonably impair the normal operation of Tenant's business, then when possession shall be taken thereunder for said Premises, or any part thereof, the term hereby granted and all rights of Tenant hereunder shall immediately cease and terminate. It is expressly agreed that Tenant shall not have any right or claim to any part of any award made to or received by Landlord for such taking, provided, however that Tenant may separately claim and receive from the condemning authority, if legally payable, compensation for Tenant's removal and relocation costs and for Tenant's loss of business and/or business interruption, provided such award does not reduce the compensation or award payable to Landlord.

26. <u>GOVERNING LAW</u>. This Lease shall be governed by and construed according to the law of the State of Georgia. Both parties hereby submit to the jurisdiction of the applicable local court in the county where the Premises is located.

27. **EXCULPATION**. Tenant agrees that it shall look solely to Landlord's interest in the Premises for the satisfaction of any claim, judgment, decree, decision or ruling lawfully requiring the payment of money by Landlord, and no other real or personal property or assets of Landlord, its members, officers, directors, agents, employees, partners, owners, successors, assigns, or legal representatives shall be subject to satisfaction of any of the foregoing nor liable for any claim against or obligation of Landlord.

28. **FORCE MAJEURE**. Notwithstanding any provision in this Lease to the contrary, Landlord and Tenant shall each be excused for the period of any delay and shall not be deemed in default with respect to the performance of any of the terms, covenants and conditions of this Lease, when prevented from so doing by causes beyond their respective control, which shall include, but not be limited to, all labor disputes, governmental regulations or controls, fire or other casualty, inability to obtain any material or services, or acts of God.

29. <u>COMMISSIONS</u>. Landlord and Tenant represent and warrant each to the other that they have not discussed this Lease or the subject matter hereof with, and have not engaged in any fashion or any connection with this transaction the services of, any real estate or other broker, agent or salesman, so as to create any legal right in any such broker, agent or salesman to claim a commission or similar fee with respect to the lease of the Premises. Landlord and Tenant each hereby indemnifies the other against and agrees to hold harmless the other from any and all claims for real estate commissions or similar fees arising out of or in any way connected with any claimed agency relationship with the indemnitor and relating to the lease of the Premises contemplated hereby. The provisions of this Section shall survive the term of this Lease or any termination thereof.

30. <u>SPECIAL STIPULATION</u>. Tenant shall be responsible for obtaining all licensing, health department approvals, and any other governmental approvals and permits required to operate its business at the Premises.

IN WITNESS WHEREOF, the Parties have executed this Lease Agreement to be effective as of the date first shown above.

Pet - Page 182 -

LANDLORD:

RLH HOLDINGS, LLC, a Georgia limited liability company

By: (SEAL)

Name: Richard L. Hammons Its: Manager

TENANT:

ZUNZIS OPERATIONS LLC,

a Georgia limited liability company,

(SEAL) By: Smith Jangar Kenber Name: Onris Smith Its: **EXHIBIT A**

REAL PROPERTY

EXHIBIT B

PERSONAL PROPERTY

HO & - Page 183 -



April 5th, 2023

George Shaw Planning & Zoning Manager City of Tybee Island

Re: Zunzibar, Lot addresses 1315 & 1109 East US Highway 80

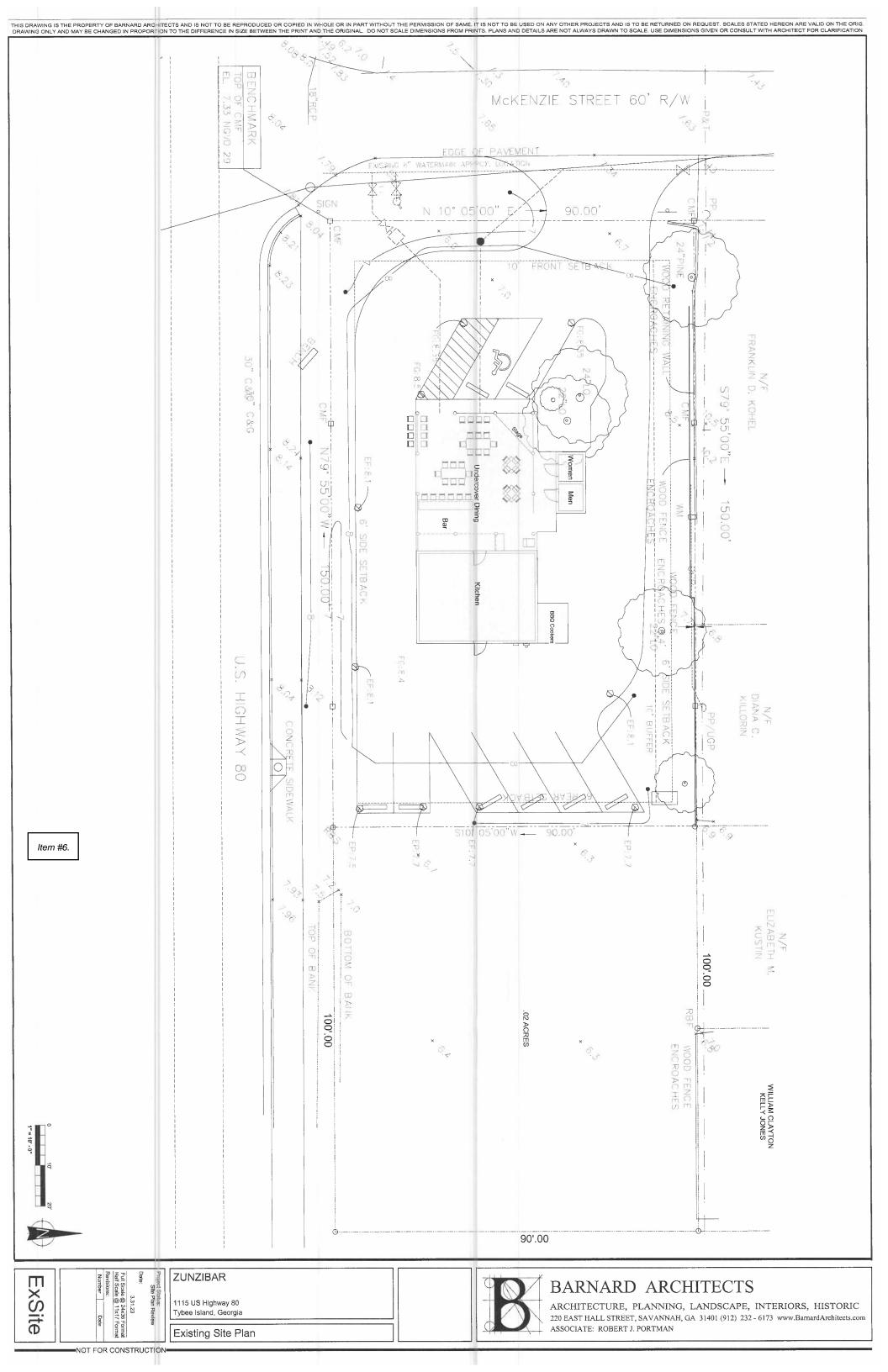
George,

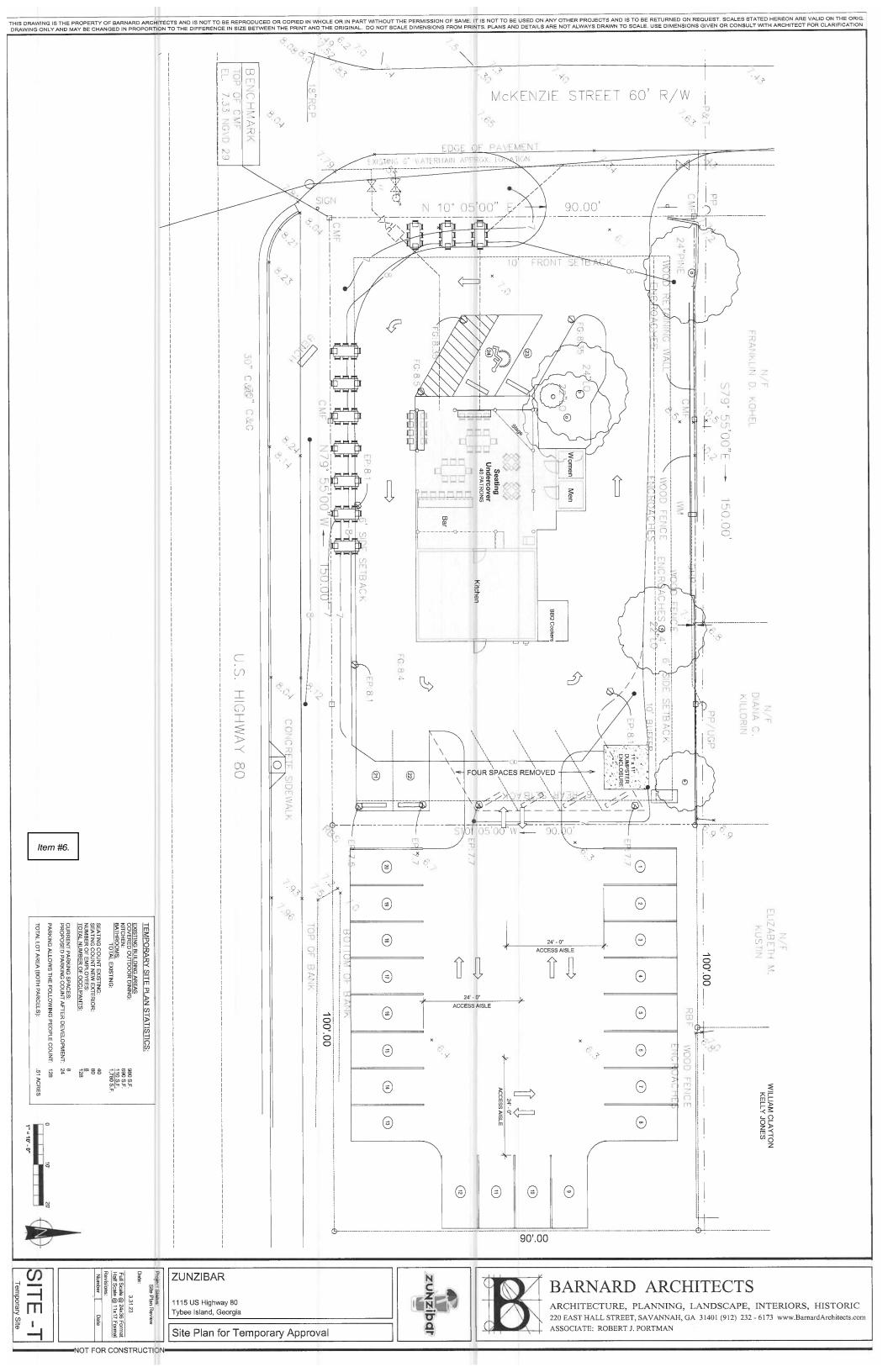
Our March 31st 2023 site plan submission did not include any engineered drainage and infrastructure plans since the Zunzibar owner is not making external changes to the property which in our opinion will not create stormwater run-off to the adjacent neighbors.

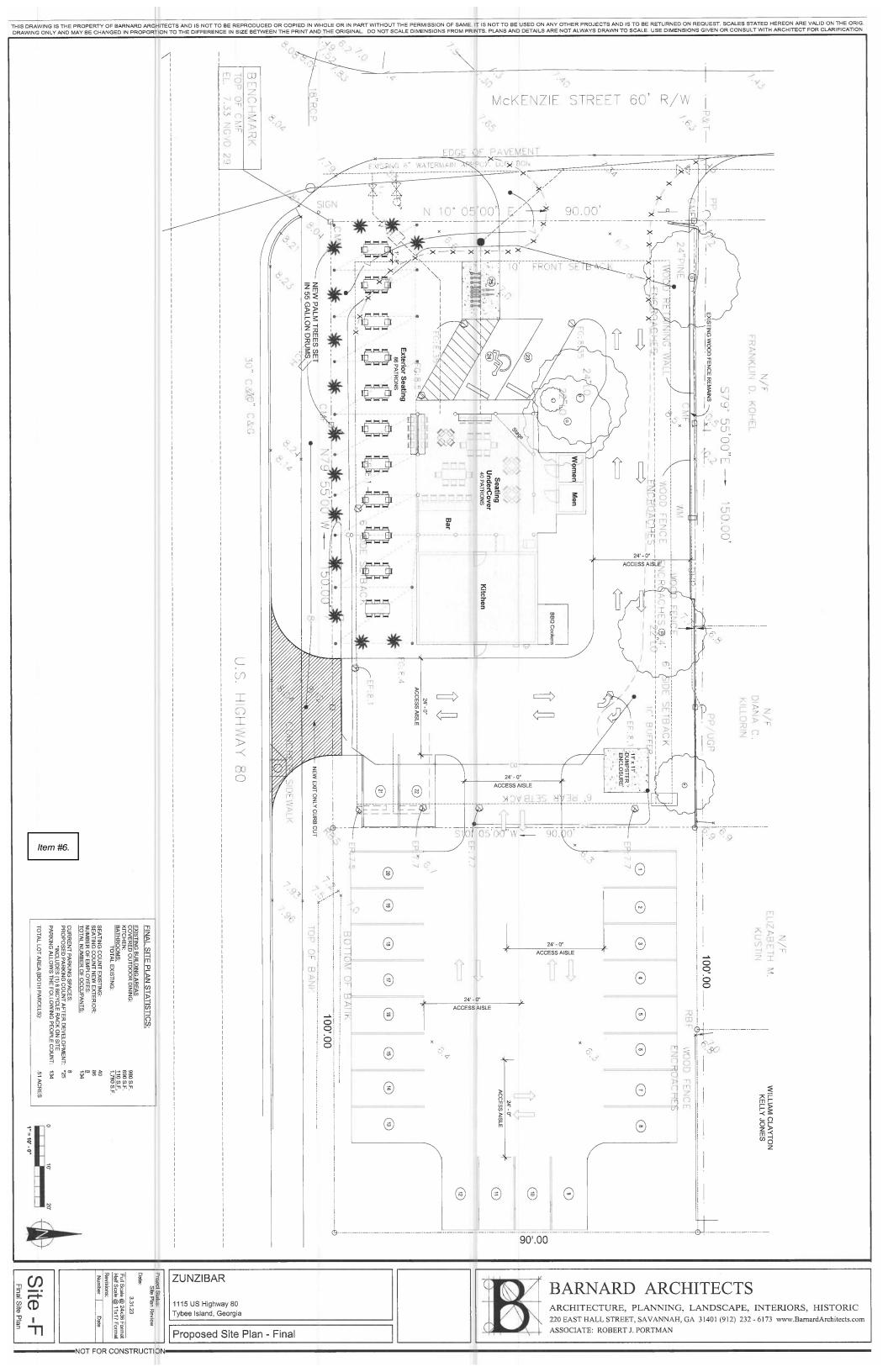
Please let us know if you should need any additional information.

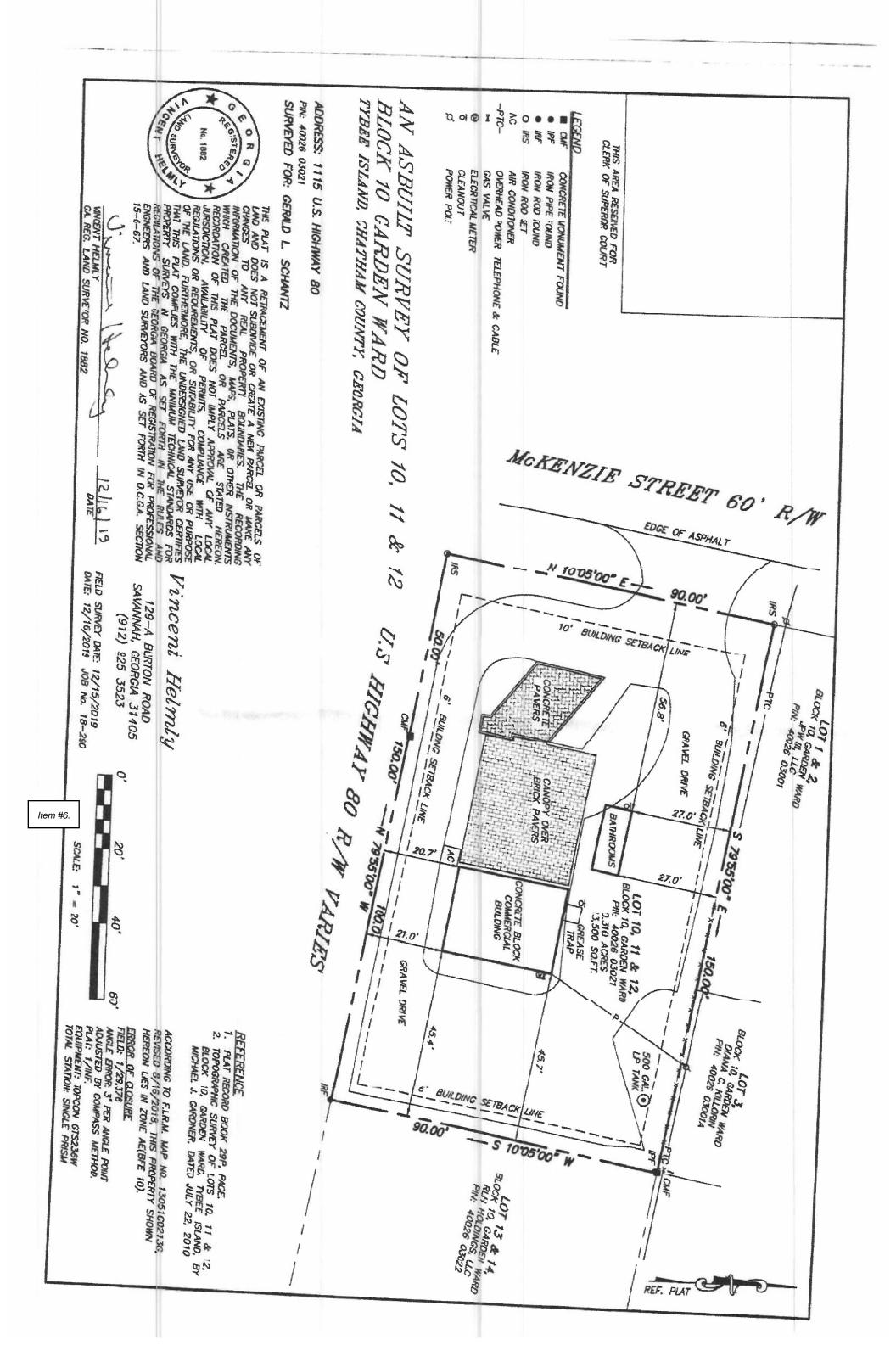
Thank you,

Robert J. Portman Cc: Chris Smith, Zunzibar











PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: requesting to add seating and increase parking – 1115 & 1109 E US Hwy 80 -40026 03021&40026 03022 -Zone C-2 -Chris Smith.

Action Requested: Site plan approval

AppealSpecial ReviewSite Plan ApprovalXVariance	Subdivision: Sketch Plan Approval Preliminary Plan Approval	Conceptual		
Map Amendment Text Amendment	Final Plat Approval Minor Subdivision	Major Subdivision		

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval Denial Continued Approval with no left turn on Butler Avenue

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR SECOND
Nooney	Х		
Matkowski	X		
Livingston	X	5	
Rodriguez	X		MOTION

Planning Commission Chair:

Planning & Zoning Manager:

Date:

Date: 4-18

File Attachments for Item:

7. Site Plan Approval, 301 1st Street, Adding character statues in front of ice cream and golf cart/bicycle rental shop. Liran Portal Petitioner



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Applicant wishes to add large sculptures to site plan

Vote on site plan

ATTACHMENTS 1.SITE PLAN-301 FIRST ST.pdf



CITY OF TYBEE ISLAND SITE PLAN APPROVAL APPLICATION

Applicant's Name Coast to Coast Rentals Tybee, LLC / Liran Portal Owner					
Address and location of subject property 301 1st St, Tybee Island, GA 31328					
PIN 40003 15001 Applicant's Telephone Number (361) 696-1758					
Applicant's Mailing Address 10514 S. Padre Island Dr. #G3 Corpus Christi, TX 78418					
Brief description of the land development activity and use of the land thereafter to take place on the property: Adding character statues in front of ice cream and golf cart/bicycle rental shop					
Property Owner's Name Liran Portal 954 310 1096 Telephone Number (361) 696-1758					
Property Owner's Address10514 S. Padre Island Dr. #G3 Corpus Christi, TX 78418					
Is Applicant the Property Owner? <u>X</u> Yes <u>No</u>					
If Applicant is the Property Owner, Proof of Ownership is attached: X Yes					
If Applicant is other than the Property Owner, a signed affidavit from the Property Owner granting the Applicant permission to conduct such land development is attached hereto Yes					
Current Zoning of Property <u>C-2</u> Current Use <u>Ice cream Parlor & Residential</u>					
Names and addresses of all adjacent property owners are attached: X Yes					
If within two (2) years immediately preceding the filing of the Applicant's application for a zoning action the					

Applicant has made campaign contributions aggregating to more than \$250 to the Mayor and any member of Council or any member of the Planning Commission, the Applicant and the Attorney representing the Applicant must disclose the following:

- a. The name of the local government official to whom the campaign contribution or gift was made;
- b. The dollar amount of each campaign contribution made by the applicant to the local government official during the two (2) years immediately preceding the filing of the application for this zoning action, and the date of each contribution;
- c. An enumeration and description of each gift having a value of \$250 or more made by the Applicant to the local government official during the two (2) years immediately preceding the filing of the application for this zoning action.

LIBAN PORTAL 03/27/23 Signature of Applicant NOTE: Other specific data is required for each type of Site Plan Approval. Fee Amount \$ 500,00 Check Number 1277 Date 3/30/2 City Official

NOTE: This application must be accompanied by following information:

X 1 copy, no smaller than 11 x 17, of the proposed site plan and architectural renderings.

1 copy, no smaller than 24 x 36, of the engineered drainage and infrastructure plan.

- Х 1 copy, no smaller than 11 x 17, of the existing tree survey and the tree removal and landscaping plan.
- X **Disclosure of Campaign Contributions**

The Planning Commission may require elevations or other engineering or architectural drawings covering the proposed development.

The Mayor and Council will not act upon a zoning decision that requires a site plan until the site plan has met the approval of the City's engineering consultant. (Note: Section 5-080 (A) requires, "Once the engineer has submitted comments to the zoning administrator, a public hearing shall be scheduled.")

The Applicant certifies that he/she has read the requirements for Site Plan Approval and has provided the required information to the best of his/her ability in a truthful and honest manner.

LIRAN PORTAL

Signature of Applicant

03/27/23 Date



CITY OF TYBEE ISLAND

CONFLICT OF INTEREST IN ZONING ACTIONS DISCLOSURE OF CAMPAIGN CONTRIBUTIONS

Have you within the past two (2) years made campaign contributions or gave gifts having an aggregate value of \$250.00 or more to a member of the City of Tybee Island Planning Commission, or Mayor and Council or any local government official who will be considering the rezoning application?

YES _____ NO X

IF YES, PLEASE COMPLETE THE FOLLOWING SECTION:

NAME OF GOVERNMENT OFFICIAL	CONTRIBUTIONS OF \$250.00 OR MORE	GIFTS OF \$250.00 OR MORE	DATE OF CONTRIBUTION

IF YOU WISH TO SPEAK CONCERNING THE ATTACHED REZONING APPLICATION, THIS FORM MUST BE FILED WITH THE ZONING ADMINISTRATOR FIVE (5) DAYS PRIOR TO PLANNING COMMISSION MEETING IF CAMPAIGN CONTRIBUTIONS OR GIFTS IN EXCESS OF \$250.00 HAVE BEEN MADE TO ANY MEMBER OF THE PLANNING COMMISSION OR MAYOR AND COUNCIL.

Signature	
Printed Name	LIBAN PORTAL
Date 03 27	23



March 29, 2023

City of Tybee Island, Georgia Planning & Zoning Attn: George Shaw, Planning & Zoning Manager

Re: 301 First Street, Tybee Island

Dear Mr. Shaw,

Lominack Kolman Smith Architects is submitting herewith a Site Plan Approval Application for an amendment to the Site Plan for the above referenced that was approved by the Tybee City Council at Regular Meeting on October 13, 2022. The amendment is to add four "character statues" in the existing raised planter beds. The proposed locations and images are shown on the Site Plan accompanying this Application. No other changes to the approved site plan are proposed by this Application.

Respectfully submitted,

T. Jerry Lominack, FAIA

Post Office Box 1587 | Savannah, Georgia 31402

301 West Broughton Street, Suite 301 | www.lksarchitects.com | [912] 232 5561 | fax [912] 232 55

- Page 195 -

GENERAL AFFIDAVIT

STATE OF TEXAS COUNTY OF NUECES

PERSONALLY, came and appeared before me, the undersigned Notary, the within named <u>Liran Portal</u>, who is a resident of Nueces County, State of Texas, and makes this his statement and General Affidavit upon oath and affirmation of belief and personal knowledge that the following matters, facts and things set forth are true and correct to the best of his knowledge:

I, Liran Portal, am the sole owner of the Property at

301 1st St. Tybee Island, GA 31328

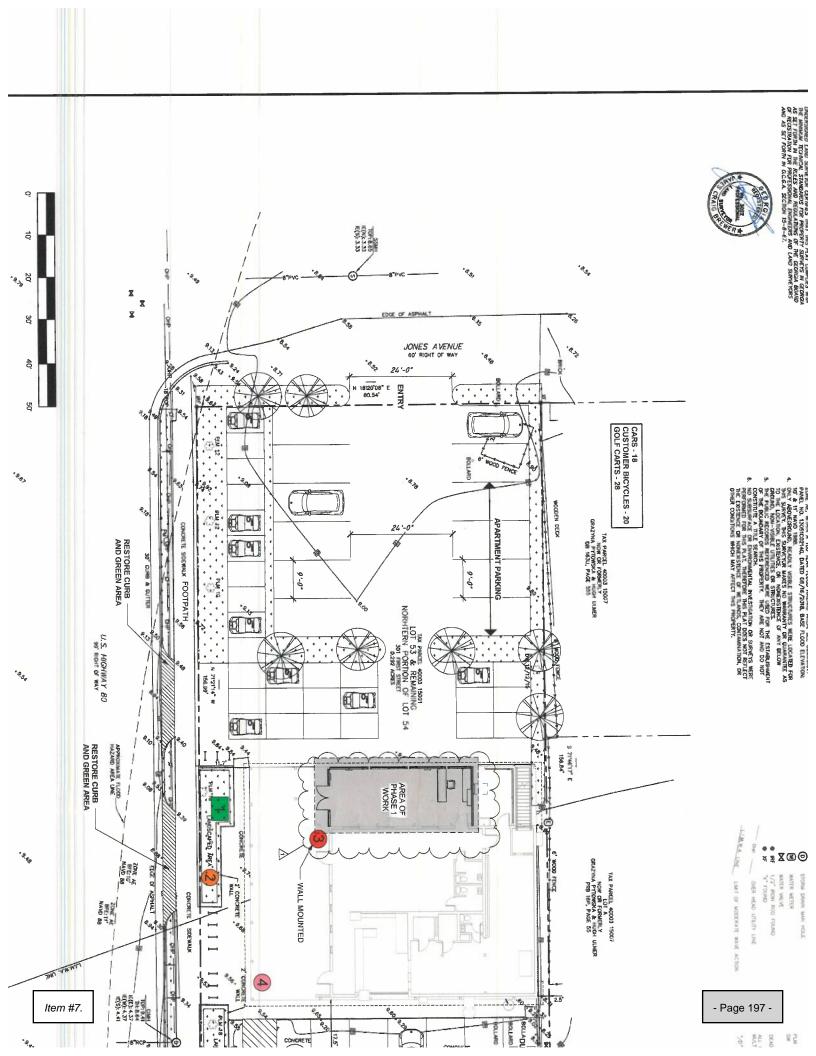
I own this property under the following LLC

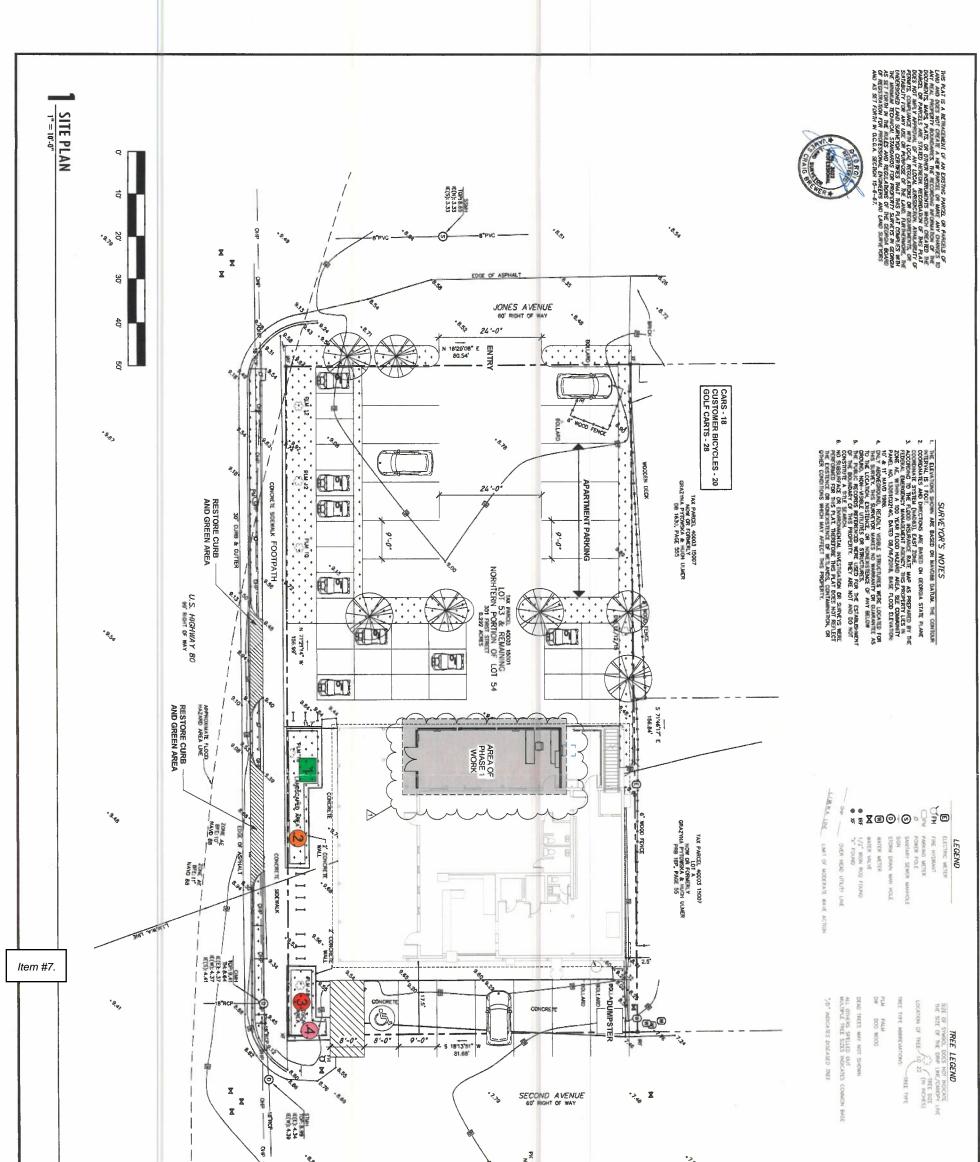
301 1st Tybee, LLC

I, Liran Portal, am the sole owner of the following company that will do business at 301 1st Street Tybee Island, GA 31328

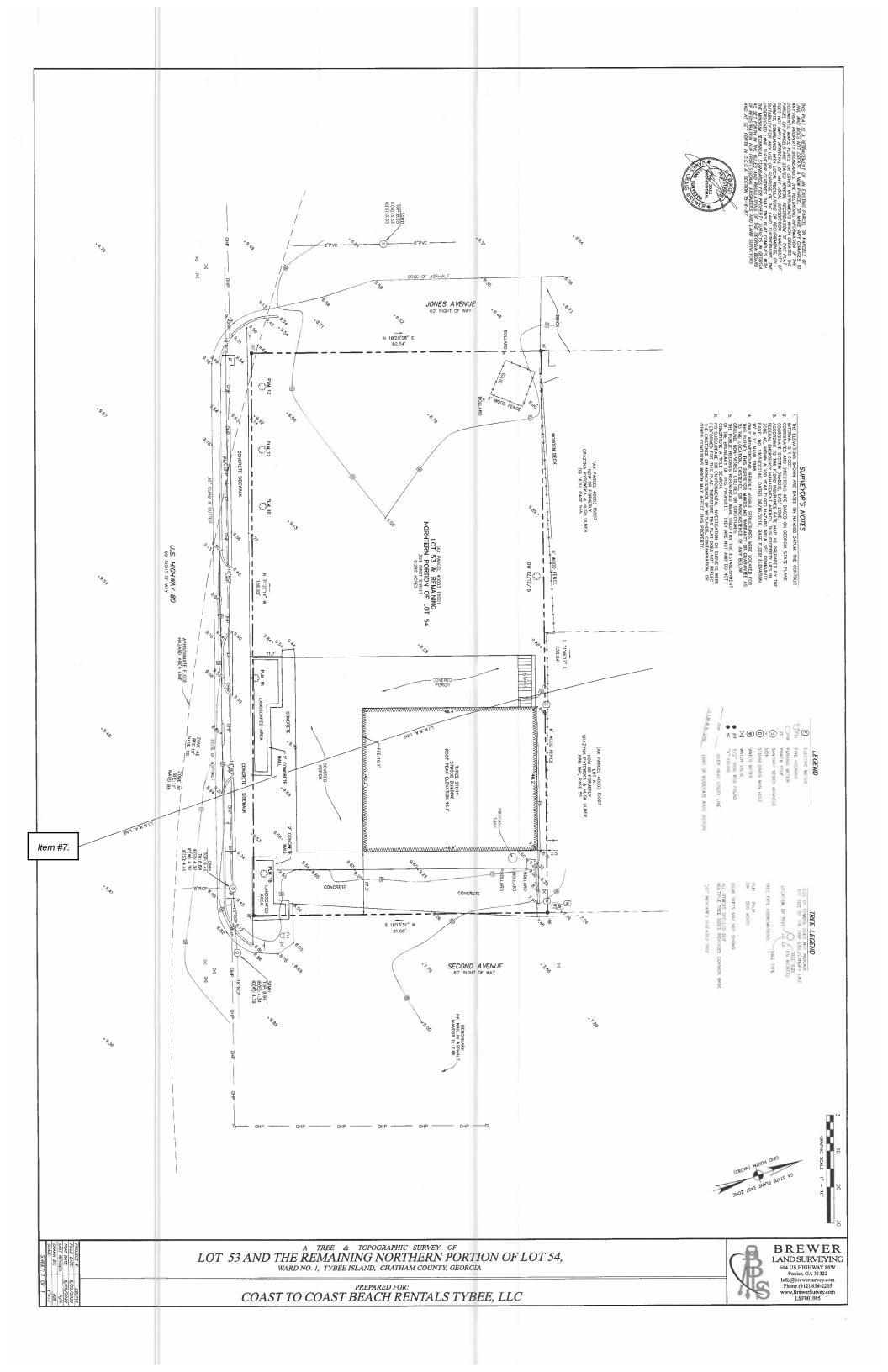
Coast to Coast Rentals Tybee, LLC

Autorist 120 20	
Signature of Affiant	
day of August 20 22	
XM	
NOTARY PUBLIC	_
KAREN CREEDY	
	Signature of Affiant day of <u>Augus</u> , 20 22





·ee	C+ 	BENCHMARK MMAR H LYRAL MMODE LYRAL	**	
4. L: 7.6' W: H: 6.7'	3. H: 4.3'	2. L: 6.1' W: 1	1. L: 5.6' H:8.	HUNON GIND
	重器数(WW, WHA)	Revision Date Description		3NUE MAN BUILS NO
the back and annihis the property of separated rear optic In above or in your while the written constant of Linear/AdvanceMark. derawn by: ELF checked by: TJL SITE PLAM SITE PLAM	SUGAR SHACK ALTERATION PHASE 2 301 1st St, Tybee Island, GA 31328	1 1/18/23 EXTERIOR WALL REVISED	isuliants:	OMINACK SMITH T c h i t c t % Postoffice Box 1587 Sarvanach, Georgia, 31402 (912)232-3561





PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: requesting to add character statues in front of Sugar Shack -301 1st St. -40003 15001 -Zone C-2 -Liran Portal.

Action Requested: Site plan approval

AppealSpecial ReviewSite Plan ApprovalX	Subdivision: Sketch Plan Approval Preliminary Plan Approval	Conceptual
Variance Map Amendment Text Amendment	Final Plat Approval Minor Subdivision	Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval X Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR MOTION
Nooney	Х		
Matkowski	Х		SECOND
Livingston	X		
Rodriguez	Х		

Ush Ald-Planning Commission Chair: Planning & Zoning Manager:

Date: 4/19/23 Date: 4.18.23

File Attachments for Item:

8. First Reading, 2023-13, Text Amendment, Ability to apply for an STR permit for applicants holding a building permit at time of adoption of Moratorium



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to apply for an STR permit for applicants holding a building permit at time of adoption of moratorium

Vote on text amendment

ATTACHMENTS 5.TEXT AMEND-#13.pdf

OWNERSHIP AND BLDG PERMIT PRIOR TO MORATORIUM WITHOUT PUBLIC HEARINGS

ORDINANCE NO. 2023-____ ENTITLED: AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY AND OBTAIN FOR A SHORT-TERM RENTAL PERMIT FOR APPLICANTS HOLDING A BUILDING PERMIT AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, at the time of adoption of the moratorium certain persons had obtained building permits for either new construction or extensive renovations to existing properties which were to be ultimately used as STR properties; and

WHEREAS, these persons who obtained their building permits prior to the moratorium being entered had expectations of being able to obtain an STR permit under the rules and ordinances then in place; however, since the properties were under construction and/or improvements to the extent they were not eligible for certificate of occupancy and therefore unable to apply for a STR permit; and WHEREAS, an inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address any such result,

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Building Permit Holders Ability to Obtain STR Permit.

As of the time the moratorium resolution addressing short-term rentals was adopted on August 26, 2021, any person holding a valid building permit for construction or renovation of a property intended to be used as a STR may apply for an STR permit. Such applicant must establish eligibility for an STR permit under all applicable codes and regulations and must submit their application for an STR permit within six months of the issuance of the Certificate of Occupancy or other official notification that the construction and/or renovations have been completed and passed all applicable required inspections, or within six months of the adoption of this ordinance. In order to be considered for a permit, the applicant must show: 1) the building permit was in place prior to August 26, 2021; 2) the construction and/or renovation was such that no certificate of occupancy for the location could be secured and not certificate of occupancy in fact was not possible due to the renovations; and, 3) the applicant demonstrates by a preponderance of the evidence that the intention was to use the property for a STR by way of records or documents including contracts with agents or Market Place Innkeepers for anticipated rentals intended upon completion of the repairs or construction, or any other evidence the applicant contends supports the intention to establish a STR at the location.

City staff will investigate any such application to determine the existence and nature of the building permit and confirm that such complies with the above requirements to be able to apply for an STR permit.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

 This	Ordinance, 2023.	shall	become	effective	on		day	of	
ADO	PTED THIS	I	DAY OF _			, 2023.			

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: ______ ENACTED: ______

572.582 Ownership and Bldg Permit Prior to Moratorium W-O Public Hearings 2/15/2023
572.582 Equitable Considerations – Building Permit Without Public Hearings
572.582 Equitable Considerations – Public Hearings 2/9/2023
572.582 Equitable Considerations – 1/4/2023



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: Text amendment #13: Sec. ? - To allow for property owners holding a building permit at the time of the moratorium to apply for an STR permit.

Action Requested: Site plan approval

Appeal Special Review Site Plan Approval Variance Map Amendment	Subdivision: Sketch Plan Approval Conceptual Preliminary Plan Approval Final Plat Approval Minor Subdivision Major Subdivision
Text Amendment X	

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

Continued The Planning Commission Motion on Petition: Approval Denial

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR SECOND
Nooney	X		
Matkowski	X		MOTION
Livingston	X		
Rodriguez	X		

Planning Commission Chair.

Planning & Zoning Manager:

Date: $\frac{4 1972}{9-18-23}$

File Attachments for Item:

9. First Reading 2023-14, Ability to apply for an STR permit for applicants holding a building permit at the time of moratorium after public hearings



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to apply for an STR permit for applicants holding a building permit at the time of moratorium after public hearings

Vote on text amendment

ATTACHMENTS 6.TEXT AMEND-#14.pdf

OWNERSHIP AND BUILDING PERMIT WITH PUBLIC HEARINGS

ORDINANCE NO. 2023-

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY AND OBTAIN FOR A SHORT-TERM RENTAL PERMIT FOR APPLICANTS HOLDING A BUILDING PERMIT AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR SUCH RELIEF, INCLUDING PUBLIC HEARINGS AND TO ADDRESS OCCUPANCY, PARKING AND RELATED ISSUES, AND TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, at the time of adoption of the moratorium certain persons had obtained building permits for either new construction or extensive renovations to existing properties which were to be ultimately used as STR properties; and

WHEREAS, these persons who obtained their building permits prior to the moratorium being entered had expectations of being able to obtain an STR permit under the rules and ordinances then in place; however, since the properties were under construction and/or improvements to the extent they were not eligible for certificate of occupancy and therefore unable to apply for a STR permit; and

WHEREAS, an inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address any such result,

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Building Permit Holders Ability to Obtain STR Permit.

As of the time the moratorium resolution addressing short-term rentals was adopted on August 26, 2021, any person holding a valid building permit for construction or renovation of a property intended to be used as a STR may apply for an STR permit. Such applicant must establish eligibility for an STR permit under all applicable codes and regulations and must submit their application for an STR permit within six months of the issuance of the Certificate of Occupancy or other official notification that the construction and/or renovations have been completed and passed all applicable required inspections, or within six months of the adoption of this ordinance. In order to be considered for a permit, the applicant must show: 1) the building permit was in place prior to August 26, 2021; 2) the construction and/or renovation was such that no certificate of occupancy for the location could be secured and not certificate of occupancy in fact was not possible due to the renovations; and, 3) the applicant demonstrates by a preponderance of the evidence that the intention was to use the property for a STR by way of records or documents including contracts with agents or Market Place Innkeepers for anticipated rentals intended upon completion of the repairs or construction, or any other evidence the applicant contends supports the intention to establish a STR at the location.

City staff will investigate any such application to determine the existence and nature of the building permit and confirm that such complies with the above requirements to be able to apply for an STR permit.

Required Public Hearings

In order to secure an STR permit under the terms of this ordinance, based upon a building permit having been in place prior to the moratorium, the application shall proceed to the public hearing process which shall address the following issues for consideration:

- 1. The maximum occupancy of the premises.
- 2. Whether the owner, or an agent of the owner, plans to live on the premises and agrees to make available proof of residency.
- 3. That no less than one vehicle parking place per rental unit and a minimum of two vehicle parking spaces for the owner, if residing on the property. And handicapped parking shall be provided as required by O.C.G.A. Title 30, Accessibility Code.
- 4. A buffer is required with a minimum height of six feet within each of the side and rear yard setbacks.
- 5. A site plan is provided to show the number and location of guest rooms, the parking plan, and the proposed design for the buffer, which must be submitted along with the valid current survey of the property.
- 6. No special events are permitted on the property and no event shall exceed 20 guests except upon completion of an application to include standards and restrictions to hours for any event or gathering of more than 10 people.
- 7. The applicant shall address requirements with respect to lighting, parking, signage and buffering so as not to unreasonably interfere with the residential uses of abutting properties. During any special event, permitted or not permitted, the total number of guests on the property shall not exceed _______ people, including all occupants of rental units and non-occupants attending the event. Regardless of an intention to shuttle people to the property, additional parking spaces on the property for four vehicles are required for special events. These four spaces are in addition to the off-street parking spaces required hereunder and handicapped parking shall be provided as required by O.C.G.A Title 30, Accessibility Code.
- 8. A public hearing before the Mayor and Council is required. The permit is only valid as long as all conditions specified are met and any permitted use must adhere to the approved standards, restrictions, parking plans, and any other conditions imposed by the Mayor and Council.
- 9. The parking required hereunder is not to include any right-of-way parking, but, rather, is only allowable to designated parking on the premises of the applicant as addressed by the application and approved by the Mayor and Council.

10. The applicant must provide: the date of acquisition of the property; evidence of the extent of any improvements to the property following acquisition; any evidence applicant contends demonstrates the intention to use the locations as an STR.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

This Ordinance shall become effective on _____ day of , 2023.

ADOPTED THIS _____ DAY OF _____, 2023.

ATTEST:

MAYOR

CLERK OF COUNCIL

572.582 Ownership and Building Permit With Public Hearings 2/15/2023 572.582 Equitable Considerations – Building Permit With Public Hearings 2/13/2023 572.582 Equitable Considerations – Public Hearings 2/9/2023 572.582 Equitable Considerations – 1/4/2023



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: <u>Text amendment #14: Sec. ?-To allow property owners holding a</u> building permit at the time of the moratorium to apply for an STR permit after a public hearings.

Action Requested: Text Amendment

Appeal Special Review Site Plan Approval	Subdivision:ConceptualSketch Plan ApprovalConceptualPreliminary Plan ApprovalFinal Plat ApprovalFinal Plat ApprovalMajor Subdivision	Conceptual
Variance Map Amendment Text Amendment X		Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval X Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR
Nooney	Х		
Matkowski	Х		SECOND
Livingston	X		MOTION
Rodriguez	Х		

Planning Commission Chair:

Planning & Zoning Manager:

MDate: why Date: 4-18-23

File Attachments for Item:

10. First Reading, 2023-15A, Ability to obtain an STR permit for applicants holding a building permit for new construction or extensive renovations at the time of adoption of the moratorium without public hearings



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to obtain an STR permit for applicants holding a building permit for new construction or extensive renovations at the time of adoption of the moratorium without public hearings

Vote on amendment

ATTACHMENTS 7.TEXT AMEND-#15A.pdf



OWNERSHIP AND BLDG PERMIT PRIOR TO MORATORIUM WITHOUT PUBLIC HEARINGS INCLUDE EXTENSIVE RENOVATIONS

ORDINANCE NO. 2023-____ ENTITLED: AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY AND OBTAIN FOR A SHORT-TERM RENTAL PERMIT FOR APPLICANTS HOLDING A BUILDING PERMIT FOR NEW CONSTRUCTION OR EXTENSIVE RENOVATIONS AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, at the time of adoption of the moratorium certain persons or entities had obtained building permits for either new construction or extensive renovations to existing properties which were to be ultimately used as STR properties; and

WHEREAS, these persons or entities who obtained their building permits prior to the moratorium being entered and who had expectations of being able to obtain an STR permit under the rules and ordinances then in place; however, since the properties were under construction and/or improvements to the extent they were not eligible for certificate of occupancy or for other reasons were unable to apply for a STR permit; and

WHEREAS, an inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address such possible result where circumstances warrant relief;

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Building Permit Holders Ability to Obtain STR Permit.

As of the time the moratorium resolution addressing short-term rentals was adopted on August 26, 2021, any person holding a valid building permit for construction or renovation of a property in R-1, R-1-B, or R-2 district intended to be used as a STR may apply for an STR permit. Such applicant must establish eligibility for an STR permit under all applicable codes and regulations and must submit their application for an STR permit within six months of the issuance of the Certificate of Occupancy or other official notification that the construction and/or renovations have been completed and passed all applicable required inspections, or within six months of the adoption of this ordinance. In order to be considered for a permit, the applicant must show: 1) the building permit was in place prior to August 26, 2021; 2) the construction and/or renovation was such that no certificate of occupancy for the location could be secured and no certificate of occupancy in fact was possible due to the renovations; and, 3) the applicant demonstrates by a preponderance of the evidence that the intention was to use the property for a STR by way of records or documents including contracts with agents or Market Place Innkeepers for anticipated rentals intended upon completion of the repairs or construction, or any other evidence the applicant contends supports the intention to establish a STR at the location.

City staff will investigate any such application to determine the existence and nature of the building permit and confirm that such complies with the above requirements to be able to apply for an STR permit.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

This	Ordinance	shall	become	effective	on	day	of
	, 2023.						

ADOPTED THIS _____ DAY OF _____, 2023.

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: _____ ENACTED:

572.582 Ownership and Bldg Permit Prior to Moratorium W-O Public Hearings 2/15/2023
572.582 Equitable Considerations – Building Permit Without Public Hearings
572.582 Equitable Considerations – Public Hearings 2/9/2023
572.582 Equitable Considerations – 1/4/2023

Item #10.

- Page 219 -



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: <u>Text amendment #15A : Sec. ?-To allow property owners holding a</u> building permit at the time of the moratorium to apply for an STR permit.

Action Requested: Text Amendment

Appeal Special Review Site Plan Approval	Subdivision: Sketch Plan Approval Preliminary Plan Approval
Variance Map Amendment Text Amendment X	Final Plat Approval Minor Subdivision Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	Х		VICE CHAIR SECOND
Nooney	X		
Matkowski	X		MOTION
Livingston	X		
Rodriguez	X		

Planning Commission Chair:

Planning & Zoning Manager:

Date: 4/19/22

Date: 4-18-23

File Attachments for Item:

11. First Reading, 2023-15B, Ability to obtain an STR permit for applicants holding a building permit for new construction at the time of the moratorium



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to obtain an STR permit for applicants holding a building permit for new construction at the time of the moratorium

Vote on amendment

ATTACHMENTS 8.TEXT AMEND-#15B.pdf



OWNERSHIP AND BLDG PERMIT PRIOR TO MORATORIUM WITHOUT PUBLIC HEARINGS NEW CONSTRUCTION

ORDINANCE NO. 2023-____ ENTITLED: AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY AND OBTAIN FOR A SHORT-TERM RENTAL PERMIT FOR APPLICANTS HOLDING A BUILDING PERMIT FOR <u>NEW CONSTRUCTION</u> AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, at the time of adoption of the moratorium certain persons and <u>entities</u> had obtained building permits for either new construction or extensive renovations to existing properties which were to be ultimately used as STR properties; and

WHEREAS, these persons <u>or entities</u> who obtained their building permits prior to the moratorium being entered <u>and who</u> had expectations of being able to

obtain an STR permit under the rules and ordinances then in place; however, since the properties were under construction and/or improvements to the extent they were not eligible for certificate of occupancy, or for other reasons were and therefore unable to apply for a STR permit; and

WHEREAS, an inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address any such possible result where circumstances warrant relief,

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Building Permit Holders Ability to Obtain STR Permit.

As of the time the moratorium resolution addressing short-term rentals was adopted on August 26, 2021, any person holding a valid building permit for construction or renovation of on a property intended to be used as a STR may apply for an STR permit. Such applicant must establish eligibility for an STR permit under all applicable codes and regulations and must submit their application for an STR permit within six months of the issuance of thea Certificate of Occupancy or other official notification that the construction and/or renovations have has been completed and passed all applicable required inspections, or within six months of the adoption of this ordinance. In order to be considered for a permit, the applicant must show: 1) the building permit was in place prior to August 26, 2021; 2) the construction and/or renovation was such that no certificate of occupancy for the location could be secured and not certificate of occupancy in fact was not possible due to the renovations; and, 3) the applicant demonstrates by a preponderance of the evidence that the intention was to use the property for a STR by way of records or documents including contracts with agents or Market Place Innkeepers for anticipated rentals intended upon completion of the repairs or construction, or any other evidence the applicant contends supports the intention to establish a STR at the location.

City staff will investigate any such application to determine the existence and nature of the building permit and confirm that such complies with the above requirements for eligibility to be able to apply for an STR permit.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

This Ordinance shall become effective on _____ day of _____, 2023.

ADOPTED THIS _____ DAY OF _____, 2023.

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: ______ ENACTED: ______ 572.582 Ownership and Bldg Permit Prior to Moratorium W-O Public Hearings 2/15/2023
572.582 Equitable Considerations – Building Permit Without Public Hearings
572.582 Equitable Considerations – Public Hearings 2/9/2023
572.582 Equitable Considerations – 1/4/2023

OWNERSHIP AND BLDG PERMIT PRIOR TO MORATORIUM WITHOUT PUBLIC HEARINGS NEW CONSTRUCTION,

ORDINANCE NO. 2023-____ ENTITLED: AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY AND OBTAIN FOR A SHORT-TERM RENTAL PERMIT FOR APPLICANTS HOLDING A BUILDING PERMIT FOR NEW CONSTRUCTION AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, at the time of adoption of the moratorium certain persons and entities had obtained building permits for new construction to existing properties which were to be ultimately used as STR properties; and

WHEREAS, these persons or entities who obtained their building permits prior to the moratorium being entered and who had expectations of being able to obtain an STR permit under the rules and ordinances then in place; however, since the properties were under construction and/or improvements to the extent they were not eligible for certificate of occupancy, or for other reasons were unable to apply for a STR permit; and

WHEREAS, an inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address such possible result where circumstances warrant relief

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Building Permit Holders Ability to Obtain STR Permit.

As of the time the moratorium resolution addressing short-term rentals was adopted on August 26, 2021, any person holding a valid building permit for construction on a property intended to be used as a STR may apply for an STR Such applicant must establish eligibility for an STR permit under all permit. applicable codes and regulations and must submit their application for an STR permit within six months of the issuance of a Certificate of Occupancy or other official notification that the construction has been completed and passed all applicable required inspections, or within six months of the adoption of this ordinance. In order to be considered for a permit, the applicant must show: 1) the building permit was in place prior to August 26, 2021; 2) the construction was such that no certificate of occupancy for the location could be secured and no certificate of occupancy in fact was possible and, 3) the applicant demonstrates by a preponderance of the evidence that the intention was to use the property for a STR by way of records or documents including contracts with agents or Market Place Innkeepers for anticipated rentals intended upon completion of the construction, or any other evidence the applicant contends supports the intention to establish a STR at the location.

City staff will investigate any such application to determine the existence and nature of the building permit and confirm that such complies with the above requirements for eligibility to apply for an STR permit.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

This	Ordinance	shall	become	effective	on	 day	of
	, 2023.						

ADOPTED THIS _____ DAY OF _____, 2023.

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: ______ ENACTED: ______

572.582 Ownership and Bldg Permit Prior to Moratorium W-O Public Hearings 2/15/2023
572.582 Equitable Considerations – Building Permit Without Public Hearings
572.582 Equitable Considerations – Public Hearings 2/9/2023
572.582 Equitable Considerations – 1/4/2023



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: <u>Text amendment #15B : Sec. ?-To allow property owners holding a</u> building permit at the time of the moratorium to apply for an STR permit.

Action Requested: Text Amendment

Appeal Special Review Site Plan Approval	Subdivision: Sketch Plan Approval Preliminary Plan Approval	Conceptual
Variance Map Amendment Text Amendment X	Final Plat Approval Minor Subdivision	Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR
Nooney		X	
Matkowski	X		MOTION
Livingston	X		SECOND
Rodriguez	X		

Planning Commission Chair:

Planning & Zoning Manager:

1: W/4

Date: 9/19/23 Date: 4-18-23

File Attachments for Item:

12. First Reading 2023-16, Ability to obtain an STR permit for applicants who did not own property or have a building permit with public hearing



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to obtain an STR permit for applicants who did not own property or have a building permit with public hearing

Vote on amendment

ATTACHMENTS 9.TEXT AMEND-#16.pdf NO OWNERSHIP OR BLDG PERMIT PRIORTO MORATORIUM WITH PUBLIC HEARING

ORDINANCE NO. 2023-

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY FOR AND OBTAIN A SHORT-TERM RENTAL PERMIT FOR APPLICANTS WHO HAD NOT OBTAINED A BUILDING PERMIT OR ACQUIRED PROPERTY AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, INCLUDING PUBLIC HEARINGS AND TO ADDRESS OCCUPANCY, PARKING AND RELATED ISSUES, AND TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, claimed inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address such an effort; and WHEREAS, individuals or entities that acquired properties in the residential zoning districts prior to or during the moratorium with an intention of establishing an STR operation or securing an STR permit at the location; and

WHEREAS, on October 3, 2022, Council adopted an ordinance prohibiting the issuance of any new STR permits thereafter; and

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Property Owners May Apply to Obtain a STR Permit.

In the event a purchaser acquired property with the intention of operating as a Short-Term Rental between the time of the adoption of the moratorium on August months prior to August 26, 2021, and the final adoption 26, 2021, or within of the ordinance restricting further permits on October 13, 2022, such purchaser or agent on behalf of the purchaser may apply for a STR permit on such property in the event the applicant makes a showing of the intention to operate as an STR and having preserved all rights to contend that a STR would be operated at the location acquired and shows that the location is suitable for the operation of a STR and submits an application for relief under this section within 30 days of adoption of this ordinance. Those claiming entitlement to proceed under this ordinance must notify the City in writing within 30 days of the adoption of this ordinance of their intention to apply for a STR at the location and must identify their physical residential address, the address of the property at issue, aspects of the property, the plan for occupancy, and a parking plan. The application must be filed within 45 days of the applicant receiving permission to apply.

Required Public Hearings

In order to secure an STR permit under the terms of this ordinance, the application shall proceed to the public hearing process which shall address the following issues for consideration:

- 1. The maximum occupancy of the premises.
- 2. Whether the owner, or an agent of the owner, plans to live on the premises and agrees to make available proof of residency.

- 3. That no less than one vehicle parking place per rental unit and a minimum of two vehicle parking spaces for the owner, if residing on the property. And handicapped parking shall be provided as required by O.C.G.A. Title 30, Accessibility Code.
- 4. A buffer is required with a minimum height of six feet within each of the side and rear yard setbacks.
- 5. A site plan is provided to show the number and location of guest rooms, the parking plan, and the proposed design for the buffer, which must be submitted along with the valid current survey of the property.
- 6. No special events are permitted on the property and no event shall exceed 20 guests except upon completion of an application to include standards and restrictions to hours for any event or gathering of more than 10 people.
- 8. A public hearing before the Mayor and Council is required. The permit is only valid as long as all conditions specified are met and any permitted use must adhere to the approved standards, restrictions, parking plans, and any other conditions imposed by the Mayor and Council.
- 9. The parking required hereunder is not to include any right-of-way parking, but, rather, is only allowable to designated parking on the premises of the applicant as addressed by the application and approved by the Mayor and Council.
- 10. The applicant must provide: the date of acquisition of the property; evidence of the extent of any improvements to the property following acquisition; any evidence applicant contends demonstrates the intention to use the locations as an STR.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

Tł	nis	Ordinance , 2023	shall	become	effective	on		day	of	
A	DOF	PTED THIS	I	DAY OF _			, 2023.			

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: ______ ENACTED: ______

572.582 No Ownership or Bldg Permit Prior to Moratorium With Public Hearing 2/15/2023 572.582 Equitable Considerations – No Permit Before Moratorium With Public Hearing 2/13/2023

572.582 Equitable Considerations -1/4/2023



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: <u>Text amendment #16: Sec. ?-To allow property owners who acquired</u> property at the time of the moratorium to apply for an STR permit after a public hearings.

Action Requested: Text Amendment

Appeal Special Review Site Plan Approval Variance	Subdivision: Sketch Plan Approval Conceptual Preliminary Plan Approval
Map Amendment Text Amendment X	Final Plat Approval Minor Subdivision Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval Denial Continued

Action on Motion:	_		
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	X		VICE CHAIR MOTION
Nooney	Х		
Matkowski	X		
Livingston	Х		SECOND
Rodriguez	X		

Planning Commission Chair:

Planning & Zoning Manager:

Lifty 1 eh

Date: $\frac{4}{19/23}$ Date: $\frac{4-18-23}{2}$

File Attachments for Item:

13. First Reading, 2023-17, Ability to obtain an STR permit for applicants who did not own property or have a building permit before moratorium without public hearings



AGENDA ITEM

CITY COUNCIL MEETING: May 11

Ability to obtain an STR permit for applicants who did not own property or have a building permit before moratorium without public hearings

Vote on amendment

ATTACHMENTS 10.TEXT AMEND-#17.pdf

NO OWNERSHIP OR BLDG PERMIT BEFORE MORATORIUM WITHOUT PUBLIC HEARINGS

ORDINANCE NO. 2023-____

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES RELATING TO ABILITY TO APPLY FOR AND OBTAIN A SHORT-TERM RENTAL PERMIT FOR APPLICANTS WHO HAD NOT OBTAINED A BUILDING PERMIT OR ACQUIRED PROPERTY AT THE TIME OF ADOPTION OF THE MORATORIUM AND TO PROVIDE FOR PROCEDURES FOR ADDRESSING REQUESTS FOR POSSIBLE RELIEF, AND TO REPEAL CONFLICTING OR INCONSISTENT ORDINANCES AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, Council adopted a moratorium resolution on August 26, 2021 which resolution prohibited the issuance of any new Short-Term Rental ("STR") permits; and

WHEREAS, such resolution was thereafter modified to only apply to properties in R-1, R-1-B and R-2 Zoning Districts; and

WHEREAS, claimed inequitable result could potentially occur if these persons were not permitted to apply for an STR permit and it is the intention of the Mayor and Council to address such an effort; and

WHEREAS, individuals or entities that acquired properties in the residential zoning districts prior to or during the moratorium with an intention of establishing an STR operation or securing an STR permit at the location; and WHEREAS, on October 3, 2022, Council adopted an ordinance prohibiting the issuance of any new STR permits thereafter; and

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as to create a new code section so as to provide as follows:

SECTION 1

Certain Property Owners May Apply to Obtain a STR Permit.

In the event a purchaser acquired property with the intention of operating as a Short-Term Rental between the time of the adoption of the moratorium on August months prior to August 26, 2021, and the final adoption 26, 2021, or within of the ordinance restricting further permits on October 13, 2022, such purchaser or agent on behalf of the purchaser may apply for a STR permit on such property in the event the applicant makes a showing of the intention to operate as an STR and having preserved all rights to contend that a STR would be operated at the location acquired and shows that the location is suitable for the operation of a STR and submits an application for relief under this section within 30 days of adoption of this ordinance. Those claiming entitlement to proceed under this ordinance must notify the City in writing within 30 days of the adoption of this ordinance of their intention to apply for a STR at the location and must identify their physical residential address, the address of the property at issue, aspects of the property, the plan for occupancy, and a parking plan. The application must be filed within 45 days of the applicant receiving permission to apply.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to the code of the City of Tybee Island, Georgia.

FIRST READING: ______ SECOND READING: ______ ENACTED: ______

572.582 No Ownership or Bldg Permit Before Moratorium W-O Public Hearings 2/15/2023 572.582 Equitable Considerations – No Permit Before Moratorium Without Required Public Hearing 2/13/2023 572.582 Equitable Considerations – 1/4/2023



PLANNING COMMISSION NOTICE OF DETERMINATION

Meeting date: April 17, 2023

Project Name/Description: <u>Text amendment #17: Sec. ?-To allow for persons who acquired</u> property before or during the moratorium to apply for an STR permit.

Action Requested: Text Amendment

Appeal Special Review Site Plan Approval	Subdivision: Sketch Plan Approval Preliminary Plan Approval	Conceptual
Variance Map Amendment Text Amendment X	Final Plat Approval Minor Subdivision	Major Subdivision

Petitioner has met all documentation requirements, all external approval requirements, and all code requirements, except for the following:

The Planning Commission Motion on Petition: Approval

Denial Continued

Action on Motion:			
COMMISSIONER	FOR	AGAINST	COMMENTS
Reynolds			CHAIR
McGruder	Х		VICE CHAIR MOTION
Nooney	Х		
Matkowski	Х		SECOND
Livingston	Х		
Rodriguez	X		

Planning Commission Chair:		Λ	Date:	
Planning & Zoning Manager:	Ag	bl	Date:	4-25-23
3.	0			- Page 243 -

File Attachments for Item:

14. 2023-772 Resilience Plan Consultant - Recommend SLR International Corporation

<u>2023-772</u>

	-		
Resilience Plan Consultant		GMC	Notes
Criteria	Possible Points		
Demonstration of experience with resiliency planning	25	20	Experience reflected in references and noted projects but not reflected in project plan, specific deliverables, or timetable.
Demonstration of experience with plan review and development	25	20	Experience not reflected in specific plan, deliverables, or timetable
Demonstration of experience with community outreach and education	20	15	Experience not reflected in specific plan, deliverables, or timetable
Quality of, and response from, references	15	15	No comment
Cost of Services	15	15	Amount of bid suggests didn't understand scope or timing of deliverable. Not confident they could do it for this fee.
τοται		85	

SLR	Notes			
25	Experience demonstrated in very specific deliverables and clear timetable			
25	Experience demonstrated in very specific deliverables and clear timetable			
20	Experience demonstrated in very specific deliverables and clear timetable, as well as evidence of Local, County, and State experience.			
15	No comment			
10	Fee seems reasonable for the project deliverables and timing. Fee is within budget			
95				

File Attachments for Item:

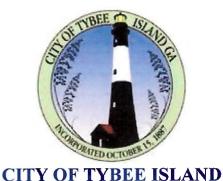
15. Agenda Request: Entertainment License: Mi Vida

1315 Butler Ave, Unit B

Acoustic Guitar - No Amplifier

MAYOR Shirley Sessions

CITY COUNCIL Barry Brown, Mayor Pro Tem John Branigin Jay Burke Nancy DeVetter Michael "Spec" Hosti Monty Parks



CITY MANAGER Shawn Gillen

CLERK OF COUNCIL Janet LeViner

CITY ATTORNEY Edward M. Hughes

Council Meeting Date for Request: <u>May 11, 2023</u>

Item: Entertainment License Request

Explanation: Mi Vida

1315 Butler Ave Unit B

Acoustic Guitar-no amplifier.

Budget Line Item Number (if applicable):

Paper Work:

X Attached*

Audio/Video Presentation**

- * Electronic submissions are requested but not required. Please email to jleviner@cityoftybee.org.
- ** Audio/video presentations *must* be submitted to the IT department at City Hall by 4:00PM on the Thursday prior to the scheduled meeting.

Submitted by: Sharon S. Shaver

Phone / Email: 472-5072 / sshaver@cityoftybee.org

Comments:

Date given to Clerk of Council May 4, 2023



P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749 (866) 786-4573 – FAX (866) 786-5737 www.cityoftybee.org



CITY OF TYBEE ISLAND ENTERTAINMENT LICENSE APPLICATION

Fee \$50

A late penalty of 10% shall be assessed for a renewal payment made after March 31.

Business Name	Vida					
Business Location	2.1	Avr.		2		
Mailing Address PO	BOX 1814					
Business Phone Q (2				e amail.lon		
Federal ID# 86-2-	10806	State Sales Tax ID#202	68388692	NAICS CO	de Stanza 1	22513
Business Type (circle one		r Partnership Corporation	(LG Non-	Profit ()ther:	
		es and home addresses of Owners,	Partners or Corpor	rate Officers	;	
Name		Home Address		City, Stat		Title
Frank Becci	-	3 Wheter Tope	B TY	bee (r	31328	owner2
Maria Jose 4	om z montens	3 Wheter	li			ownerz
1.6/19						
The patient of any and -	li commercial activiti	es conducted at the location:				······
Restauran	+					
Proposed hours of open	ation:	/				
7:30 - 1	pn		.1			
Describe any efforts to	mitigate impacts on	neighbors or occupants of nearby pr	operties:			
acurate Guil	er a no	amplifien				
		manager or contact person av	lable huesty f	hur hours	a day for any on	erational issues.
Contact information	for the designated ust notify the City	of Tybee Island immediately of	any change to	this design	aleu contact m	formation.
Name- Tremle Ber	1 PT	3 Willmenter Rich				82947
Has this business or any Rule or Regulation of the (If YES, list details below	State Revenue Com	his business been cited or charged missioner or any Rule or Regulation	with any violation of the City or Co	of Georgia unty within	Law, Federal Law, the past 12 mont	, Local Ordinance, or a hs? <i>(ande ane)</i> YES or
Applicant Signature _	14			Dat	<u>eS-Y-Z</u>	3
Printed Name	inte Bucc					
	law	Sellicum		Da	te5]_	4/2023
	APPROVE or DENY	SIGNATURE		DATE	RECOMMENDED R	ESTRICTIONS/CONDITIO
ROUTE						
ROUTE City Manager						
City Manager						1 to applicant:

403 Butler Avenue, P.O. Box 2749, Tybee Island, Georgia 31328-2749 (912) 786-4573 FAX (912) 786-5832 www.cityoftybee.org

File Attachments for Item:

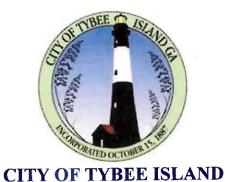
16. Tybee Market Enterprise (Formerly Tybee Market Inc dba IGA)

1111 Butler Ave

Agenda Request: Alcohol License: Beer/Wine Package Sales-Sunday Sales

MAYOR Shirley Sessions

CITY COUNCIL Barry Brown, Mayor Pro Tem Jay Burke Nancy DeVetter Michael "Spec" Hosti Monty Parks Brian West



CITY MANAGER Shawn Gillen

CLERK OF COUNCIL Janet LeViner

CITY ATTORNEY Edward M. Hughes

Council Meeting Date for Request:	<u>May 11, 2023</u>
-----------------------------------	---------------------

Item: Alcohol License Request: Beer/Wine- Package Sales; Sunday Sales

Explanation:	Tybee Market Enterprise (Formerly Tybee Market Inc dba IGA)
	1111 Butler Ave
Paper Work:	X_Attached*
	Audio/Video Presentation**
* ** Submitted by:	Electronic submissions are requested but not required. Please email to <u>jleviner@cityoftybee.org</u> . Audio/video presentations <i>must</i> be submitted to the IT department at City Hall by 4:00PM on the Thursday prior to the scheduled meeting.
•	
	1:472-5072 / sshaver@cityoftybee.org
	Date given to Clerk of Council May 11, 2023

P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749

(866) 786-4573 - FAX (866) 786-5737

www.cityoftybee.org



CITY OF TYBEE ISLAND BUSINESS AND ALCOHOL LICENSE APPLICATION



Application is hereby made for a license to do business within the City of Tybee Island as a dealer in alcoholic beverages as indicated below:

LICENSE CLASSIFICATION	FEE	CHECK	Notice: The applicant			
Retail Beer/Wine – Package Sales Only, Consumption on Premises Prohibited	1110.	V	for a license shall be a			
Retail Beer/Wine – Package Sales Only, Consumption on Premises Prohibited	945.		citizen of the United			
Retail Beer/Wine – Sale by Drink for Consumption on Premises Prohibited	1410.		States, a resident of Chatham County, and			
Retail Liquor – Sale by Proceeding, Consumption on Premises Only	1950.		owner of the business or			
Retail Liquor – Sale by Package & Drink both in One Building under One Ownership	2,000		if a corporation,			
Sunday Sales – Sale by Drink for Consumption on Premises Only	150		partnership or other			
Sunday Sales – Package Sales Only	50	V	legal entity is the owner,			
Wholesale Beer	765		a substantial and major stockholder or the			
Wholesale Liquor	1,500	1000 Barris	stockholder or the applicant may be the			
Wholesale Wine	300		manager of the business			
Distiller, Brewer, or Manufacturer of Alcoholic Beverages	50		charged with the regular			
Special Event – Public or Private Property - Beer, Wine (no current license) per event Special Event – Public or Private Property - Beer, Wine (no current license) 3 days	100		operation of said			
Special Event – Public or Private Property - Beer, Wine (no current license) per event Special Event – Public or Private Property - Beer, Wine (holding current license) per event	10		business on the			
Special Event - Pablic of Private Property Boost, while (neming dentational) particular	AHCO		premises for which the			
		1.5.2	license is issued.			
SALLS SALLS SALLS	2		2-04-011			
Business Name Typec Market ENTERPRISE	7					
Mailing Address PO BOX 2171, Typec Island, GA	31328	No V	110 110			
	ybeen		- com			
Federal ID#: 92 - 2463139 Sales Tax ID: 20284673908	NAICS CO	de: 44	f5 [10			
Business Type(Circle One): Sole Proprietor Partnership Corporation(State)Date:	(LLC) No	on-Profit	Other:			
Names and Home Addresses of Owners, Partners or Corporate Officers with Ten	Percent (10	%) Interest	in Business			
Names (attach additional pages if necessary) Date of Birth Home Addresses	City, State		Social Security #			
Markus Hille 1 102 Holborn Lane Savannah, GA 400						
Melissa Hille 402 Holborn Lane Savannah, GA 31410						
Security Assistance Plan	last G	a lin				
What measures are taken to mitigate/control underage drinking?	way					
Please state whether you will be using Security Guards: NO_ If so, how many?How of	often / Seaso	nal dates?_				
	Durin	a ladi	day bradlande			
Do you use off-duty police officers to provide security?		y viol li	day weekenas			
			<u> </u>			
Per City Ordinance (6-2021) All licensees are required to have proof of their employ	ees, those	serving or	pouring alcohol, current			
certificates of completion from an alcohol server training progr	am on me	with incens	366.			
Is the building capacity notice clearly posted? Where?						
How is occupancy load enforced?						
International Fire Code 2018 ed: [BE] 1004.9 Posting of occupant load. Every ro	om or enac	e that is a	n assembly occupancy			
International Fire Code 2018 ed: [BE] 1004.9 Posting of occupant load. Every for	the main 4	xit or exit	access doorway from the			
shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space, for the intended configurations. Posted signs shall be of an approved legible permanent design and shall be						
maintained by the owner or the owner's authorized agent.						
maintained by the owner of the owner's authorized agent.						
If special event, date(s) of eventName of event:Name of event:N						
			Phone			
Names of landlord of the business location			1 100100 <u></u>			

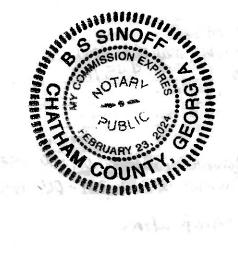
What other business is conducted at this location?______

Has	applicant, any person connected with, or any person having an interest in this business:
0	ever been convicted of any violation of law other than for a traffic violation?
	time in prices or other correctional institution?
0	had an elected by any license suspended or revoked at any time in any location?
fif -	normer is ves give details)
If th	his application is for RENEWAL of an existing license, enter License Number of existing license NO
If b	usiness is an eating establishment, are SUNDAY sales of alcoholic beverages contemplated?

o Proof of liquor liability insurance: Please attach the current declaration page or certificate of insurance showing the required liquor liability insurance coverage.

ALL OF THE FOREGOING INFORMATION IS HEREBY GIVEN AND ALL OF THE FOREGOING STATEMENTS ARE HEREBY MADE ON TS AND ARE HEREBY SWORN TO ME TO BE TRUE UNDER

OATH WILLFULLY, KNOWINGLY, AND ABSOLUTELY, AND THE SAME AS AND AND A			
	Approval	Signature	Date
Applicant SignatureDateDate	City Manager Zoning		
Sworn to and subscribed before me this 271- day of March, 2023			
Brenda S. Singf Bonneff Notary	Public		
S. 1. 1. 2. 2. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	. B. G. M.		



rache grade to



BACKGROUND CHECK REQUIREMENTS FOR ALCOHOL LICENSE

PRIOR TO OR AT THE TIME OF SUBMITTING AN APPLICATION, THE APPLICANT FOR A LICENSE OR PERMIT ISSUED UNDER THE TERMS OF THIS ARTICLE AND THE OWNER OF THE PROPOSED BUSINESS OR A PRINCIPAL OFFICER OR MEMBER, THEREOF, AND /OR A MANAGER OF SUCH BUSINESS DESIGNATED BY SUCH OFFICER OR MEMBER, SHALL SUBMIT THEMSELVES FOR FINGERPRINTING AS PROVIDED BY LAW AND IN ACCORDANCE WITH CITY PROCEDURES AS DIRECTED BY THE CITY MANAGER.

ORDINANCE NO. 6-2019, Sec. 6-5. - Reporting to City/Police - Licensee.

BE IT FURTHER UNDERSTOOD THAT THE PURPOSE OF OBTAINING THIS INFORMATION IS TO SATISFY THE REQUIREMENTS SET FORTH BY THE MAYOR AND COUNCIL OF THE CITY OF TYBEE ISLAND, REGARDING AN ALCOHOL LICENSE APPLICATION.

_ _ _ _ _

Applicant: Markus Hille

Business/Event Name: Tybee Market Enterprise

Date

Return approved/denied form:

Sharon S. Shaver **City Licensing Coordinator**

File Attachments for Item:

17. Budget Amendment: Purchase additional safety and protective gear for all police officer and fire/ems personnel



AGENDA ITEM

CITY COUNCIL MEETING: May 11

As a result of recent activity on the Island, Public Safety are requesting funding to purchase additional safety and protective gear for all police officers and fire/ems personnel.

Approve Budget Amendment

ATTACHMENTS PS Budget Amendment.pdf

BUDGET LINE ITEM TRANSFER REQUEST FORM	CITY OF TYBEE ISLAND, GEORGIA
EQUEST	EORGIA
FORM	

BUCGET LINE ITEM TRANSFER REQUEST FORM Determent Date Date Received by Finance: Date SJ/2023 Purpose: To increase Police, IT and Fire equipment budgets to purchase and fire personnel Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Requested Determent Account Number Current Budget Balance Determent Adjusted Oppartment Account Number Current Budget Balance DECREASE 000 0.00 0.00 Oppartment Adjusted Account Number Current Budget Budget Balance DECREASE 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <th colsp<="" th=""><th></th><th>XX</th><th>-</th><th>TEM DECREASES: \$</th><th>SUBTOTAL LINE ITE</th><th>S</th><th></th><th></th><th></th></th>	<th></th> <th>XX</th> <th>-</th> <th>TEM DECREASES: \$</th> <th>SUBTOTAL LINE ITE</th> <th>S</th> <th></th> <th></th> <th></th>		XX	-	TEM DECREASES: \$	SUBTOTAL LINE ITE	S			
BUJGET LINE TI EMITRANSFER REQUEST FORM Date Received by Finance: PD, Fire PD, Fire ant BJ/2023 PD, Fire State Received by Finance: additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Budget Balance Requested Budget Adjustment Account Description Account Number LINE TIEM DECREASES 0.00 0.00 Account Description Account Number LINE TIEM DECREASES 0.00 0.00 0.000 0.00 0.00 0.00 0.00 0.00	22			0.00						
BUDGET LINE ITEM TRANSFER REQUESTION Date Received by Finance: PD, Fire PD, Fire Account Syl2023 Syl2023 Syl2023 To increase Police, IT and Fire equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Budget Adjustment Account Description Account Number Current Budget LINE TIEM DECREASES Budget Balance DECREASE Account Description Account Number LINE TIEM DECREASES 0.00 0.00 0.00 DECREASE 0.00 DECREASE 0.00 DIM				0.00						
BUDGET LINE ITEM TRANSFER REQUEST FORM Date Received by Finance: Date Received by Finance: Stell Date Received by Finance: Stell Differe equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Budget Adjustment Account Description Account Number Current Budget LINE ITEM DECREASES DecREASE Output Decrets adjustment Account Description Account Number DECREASES DOUG DECREASE Account Description Account Number DECREASES DOUG DECREASE DOUG Account Aumber Current Budget DECREASE DOUG DECREASE DOUG Account Number DECREASE DOUG DECREASE DOUG Account Number DECREASES DOUG DOUG DOUG	-			0.00						
BUDGET LINE ITEM TRANSPER REQUEST FORM Date Received by Finance: PD, Fire Date Received by Finance: ant: 5/3/2023 To increase Police, IT and Fire equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Budget Adjustment Account Description Account Number Current Budget DECREASES DECREASES Account Description Account Number LINE ITEM DECREASES Budget Balance DECREASE additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Budget Adjustment Budget Balance DECREASES Account Description Account Mumber Current Budget Budget Balance DECREASES 0.000				0.00						
By: JRA Date Received by Finance: ant: PD, Fire ant: S/3/2023 ace: 5/3/2023 ace: To increase Police, IT and Fire equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Requested Budget Adjustment Account Description Account Number Current Budget Expanditures) Budget Balance DECREASE Account Description Account Number LINE ITEM DECREASES 0.00 0.00				0.00						
By: JRA Date Received by Finance: ant: PD, Fire see: 5/3/2023 additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball gurs. Account Description Account Mumber LINE ITEM DECREASES 0.00				0.00						
By: JRA Date Received by Finance: ant: PD, Fire 5/3/2023 ate: 5/3/2023 ate Received by Finance: ate: 5/3/2023 budgets to purchase ate: 5/3/2023 ate Received by Finance: Including rifles, slings, carriers, higher hevel armor, helmets, ate Received by Requested technology and pepperball guns. Requested Account Description Account Number Current Budget LINE ITEM DECREASES budget Balance DECREASE				0.00						
By: JRA Date Received by Finance: ant PD, Fire Date Received by Finance: ant S3/2023 Sate Sate Received by Finance: ate: S3/2023 Sate Received by Finance: Sate Received by Finance: ate: S3/2023 Sate Received by Finance: Sate Received by Finance: ate: S3/2023 Sate Received by Finance: Sate Received by Finance: ate: S3/2023 Sate Received by Finance: Sate Received by Finance: ate: Sate Received by Finance: Sate Received by Finance: Sate Received by Finance: ate: Sate Received by Finance: Sate Received by Finance: Sate Received by Finance: ate: Sate Received by Finance: Sate Received by Finance: Sate Received by Finance: including rifles, slings, carriers, higher hevel armor, helmets, Sate Received by Finance: Sate Received by Finance: Account Description Account Number Current Budget Sate Received by Finance: Sate Received by Finance:					ECREASES	LINE ITEM D				
JRA Date Received by Finance: PD, Fire 5/3/2023 To increase Police, IT and Fire equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles, slings, carriers, higher hevel armor, helmets, technology and pepperball guns. Date Received by Finance:	Bud	:	DECREASE	Budget Balance	(Expenditures)	Current Budget	Account Number	Account Description	Department	
JRA PD, Fire 5/3/2023 To increase Police, IT and Fire equipment budgets to purchase additional body protective gear for all police officers and fire personnel. Including rifles slings carriers, higher hevel armor, helmets.		sted ustment	Reque: Budget Adj			-	ns.	technology and pepperball gu		
JRA PD, Fire 5/3/2023 S/3/2023 To increase Police, IT and Fire equipment budgets to purchase						and fire personnel.	r for all police officers higher hevel armor. h	additional body protective gea		
JRA PD, Fire 5/3/2023					A ADD TO GUNNA	o purchase	equipment budgets t	To increase Police, IT and Fire	Purpose:	
PD, Fire					Bir Bir				Date:	
					ANA TANA				Department:	
BUUGET LINE ITEM TRANSFER REQUEST FORM			ceived by Finance:	Date Rec	A OF THREE A AND				Submitted By:	
			I		NOTER REQUE		ворег			

					1	Date 515125	CKH	Signature :
\$ (315,000.00)	\$ 315,000.00 \$ (315,000.00	-	Net Change \$			1,51		
	\$ 315,000.00	xx \$	LINE ITEM INCREASES:	SUBTOTAL LINE IT	(0			
0.00			0.00					
0.00			0.00					
0.00			0.00					
157,500.00	157,500.00		0.00			100-00-34-5416	Parking Revenue	General
22,299.00	20,000.00		2,299.00	57,701.00	60,000.00	100-1535-53-1600	Equipment	Ħ
144,719.00	88,875.00		55,844.00	55,825.00	111,669.00	100-3210-53-1600	Equipment	PD
55,861.00	48,625.00		7,236.00	42,764.00	50,000.00	100-3510-53-1600	Equipment	Fire
				ICREASES	LINE ITEM INCREASES			
Budget Balance	INCREASE	1	Budget Balance	(Expenditures)	Current Budget	Account Number	Account Description	Department
		and the second se						

Was the Budget Amendment Request approved by the City Council?

Signature of Finance Employee who Processed the Request:

Date:

Approved by:

. Date:

File Attachments for Item:

18. Resolution, 2023-07, Public Safety Emergencies relating to Events

RESOLUTION NO. 2023-_07____

A RESOLUTION OF THE CITY OF TYBEE ISLAND, GEORGIA TO ENCOURAGE THE PARTICIPATION AND COOPERATION OF ELECTED OFFICIALS, INCLUDING REPRESENTATIVES OF CHATHAM COUNTY, THE GEORGIA HOUSE OF REPRESENTATIVES, GEORGIA STATE SENATORS, UNITED STATES REPRESENTATIVES, AND ADMINISTRATIVE OFFICIALS OF EACH GOVERNMENT AGENCY TO COOPERATE WITH THE CITY OF TYBEE ISLAND IN CONNECTION WITH PUBLIC SAFETY EMERGENCIES RELATING TO EVENTS WHICH OVERWHELM THE CAPACITY OF THE CITY AND/OR THE CONNECTING HIGHWAY 80, THE SOLE MOTOR VEHICLE ROUTE WITH ACCESS TO AND FROM THE CITY

WHEREAS, the City of Tybee Island (City) is a small island community consisting of a barrier island with the year-round population of under 3,500 people; and

WHEREAS, the City includes a public beach of approximately three miles in length which is available to the public for recreational purposes subject to certain reasonable restrictions; and

WHEREAS, the City has under 3,000 public parking places available on the island within the City; and

WHEREAS, the City and therefore the beach is only accessible for motor vehicles by U.S. Highway 80, which has less than four travel lanes for traffic over its access bridges and over causeways many miles long; and

WHEREAS, emergency vehicles are restricted and/or unable to reach or leave the City in times of heavy traffic associated with certain events; and

WHEREAS, the City has been the site of unpermitted events over many years, which on many occasions have resulted in significant risk to public safety by generating gun fire, injuries, at least one fatality, a recent shooting victim, physical assaults, property damage and utter disregard of all rules and ordinances of the City and laws of the state of Georgia; and

WHEREAS, the City has a small force of police officers and first responders available for public emergencies and has frequently had to seek the assistance of other agencies with respect to efforts to maintain crowd and traffic control and to reduce the risk to the public and event participants; and

WHEREAS, unpermitted events have significantly burdened City resources with regard to unlawful behavior, including open use of illegal substances requiring immediate administration of overdose reversing drugs, gun fire, unlawful traffic activities, including reckless driving, speeding, unlawful disruptive parking, drag racing, litter and trash, and intentional damages to City and private property; and

WHEREAS, the City has cooperated with the United States Department of Justice in response to Concerned Citizens' complaints of alleged inappropriate City handling of certain unpermitted events on claimed discriminatory grounds, which the City has always denied; and

WHEREAS, the City is in need of the expansion of emergency powers and enforcement opportunities to invoke protections in the event a local declaration of emergency is authorized and adopted so as to recruit additional law and other enforcement agencies to protect the citizens, public and private property, police officers, group participants, first responders and others; and

WHEREAS, a recent unpermitted event resulted in an excess of 40,000 to 50,000 participants/attendees overwhelmed Highway 80 and overburdened traffic controls and disrupted traffic into multiple areas within Chatham County creating public safety hazards and traffic jams in a large part of unincorporated Chatham County; and

WHEREAS, law enforcement agencies have been and continue to be understaffed as a result of matters beyond their control, including the decline in interest in law enforcement positions, thus further increasing the risk for participants in the events, citizens of Chatham County and citizens of Tybee Island, as well as that of the safety of the officers and agents that are available; and

WHEREAS, a regional approach amongst all impacted agencies is necessary in planning for events in advance of a potential occurrence so as to ensure that all impacted are protected to the fullest extent possible; and WHEREAS, the City needs legislative assistance in order to increase the potential penalties for ordinance violations during such events as existing limitations are inadequate to provide deterrence;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Tybee Island duly assembled that the City Attorney, City Manager, Assistant City Manager, Police Chief, Mayor and all designees thereof are authorized and encouraged to communicate with other local, state, and federal elected and appointed officials in order to develop available methods, including, but not limited to, the adoption of laws and/or regulations authorizing additional powers and expanded penalties where necessary and the recruitment of qualified personnel to ensure the presence of adequate planning, reaction, and authorization to respond to potential, threatened, current, emergency threats to public safety and to take steps in response thereto in order to protect individuals, participants, and property with regard to such events; and

BE IT FURTHER RESOLVED, that the appropriate federal, elected, and administrative officials, as well as those at the state and local levels are respectfully requested to work with elected officials, staff, and representatives of the City of Tybee Island, including, but not limited to, management, the City Attorney or their designees with regard to actions that may be taken to adopt appropriate changes in state laws and/or local ordinances or regulations in order to preserve and protect the citizens impacted, their property, as well as participants in events, specifically to work together to achieve any legal modifications necessary to make emergency actions appropriate for public safety purposes to include potential closing of Highway 80 or restricting access to Highway 80 in certain areas in order to prevent the overburdening of county and city resources and infrastructure and to protect the citizens of every impacted community and city within Chatham County and beyond.

SO RESOLVED, this _____ day of ______, 2023.

ATTEST:

CITY OF TYBEE ISLAND, GEORGIA

By:

By: _

Shirley Sessions, Mayor

Jan LeViner, MMC Clerk of Council

Resolution - Cooperation During Events Causing Overwhelming Emergency Situations 5-4-2023

File Attachments for Item:

19. Second Reading, 2023-09, Section 3-090. Elevator Requirements

ORDINANCE NO. 2023-9 ENTITLED: ELEVATOR SETBACK EXCEPTIONS AND AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF TYBEE ISLAND, GEORGIA, TO AMEND SECTION 3-090 TO ADD A SUBSECTION 3 ON THE SCHEDULE OF DEVELOPMENT REGULATIONS

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, (the "City") is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, the hardship requirement is not well-suited to the circumstances for a variance in instances where hardships may exist to occupants of a residence where access is needed but difficult to obtain to higher floors; and

WHEREAS, an exemption is appropriate to remove elevator shafts from the setback requirements in residential construction to the extent necessary to accommodate standard elevator properties; and

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended as follows:

SECTION 1

Section 3-090, Section 3:

An encroachment to permit one elevator is permissible on an existing elevated home to accommodate an elevator into a side or rear setback but only to the extent necessary to accommodate the elevator and the appropriate shaft and the encroachment shall be no larger than 6 feet x 6 feet within the setback and no component or part shall protrude more than 6 feet into the setback upon approval of the building official.

SECTION 2

If any section, subsection, clause, or provision of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance which is not invalid or unconstitutional. Where the provisions of this ordinance are in conflict with other ordinances, the most restrictive provision shall be enforced.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

It is the intention of the governing body, and it is hereby ordained, that the provisions of this ordinance shall become effective and be made a part of the Code of Ordinances, City of Tybee Island, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

SECTION 5

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to The Code of the City of Tybee Island, Georgia.

This Ordinance shall become effective on _____ day of _____, 2023.

ADOPTED THIS __ DAY OF _____, 2023.

ATTEST:

MAYOR

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: _____ ENACTED: _____

572-1 Ordinances 2023 – 2023-9 Section 3-909 Elevator Requirements 4-18-2023 572-1 Ordinances 2023 – Section 3-090 Elevator Requirements 3-9-2023 572-1 Ordinances 2023 – Section 3-090 Elevator Requirements 2-1-2023

File Attachments for Item:

20. Second Reading: 2023-10, Sec 2-010, Change of Setback Definition to Allow for Elevators

ORDINANCE NO. 2023-10 ENTITLED: SETBACK DEFINITION AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF TYBEE ISLAND, GEORGIA, TO AMEND THE DEFINITION OF "SETBACK" IN ORDER TO EXEMPT FROM SETBACK REQUIREMENTS THE INSTALLATION AND MAINTENANCE OF ELEVATORS FOR ACCESS TO PORTIONS OF A RESIDENTIAL PROPERTY

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, (the "City") is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinances to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, the hardship requirement is not well-suited to the circumstances for a variance in instances where hardships may exist to occupants of a residence where access is needed but difficult to obtain to higher floors; and

WHEREAS, in the Land Development Code, Article 2, Definitions, Section 2-010, the section concerning the definition of "Setback" should be revised to correct a typographical error, which has apparently developed over various printings; and

WHEREAS, an exemption is appropriate to remove elevator and shafts from the setback requirements in residential construction upon approval of the building official to the extent necessary to accommodate standard elevator construction; and

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island that the Code of Ordinances will be amended so as revise the definition of "Setback" as follows:

SECTION 1

Land Development Code, Article 2, Definitions, Section 2-010:

Setback means the minimum horizontal distance between the front, rear, or side lot lines and the existing or proposed edges of the structure. The term "required setback" means a line beyond which a building is not permitted to extend under the provisions set forth in this Land Development Code establishing minimum depth and width of yards. Eaves not exceeding 24 inches are exempt from setback requirements. Eaves in excess of 24 inches are not exempt from setback requirements to the extent they exceed 24 inches. On existing structures, one elevator facility and elevator shaft is exempt from side and/or rear yard setback requirements upon approval of the building official, but only to the extent necessary in order to accommodate the installation and maintenance of an elevator and the appropriate shaft and the encroachment shall be no larger than 6 feet x 6 feet within the setback and no component or part shall protrude more than 6 feet into the setback. *See*, Section 3-090(3).

SECTION 2

If any section, clause, sentence or phrase of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this ordinance. It is hereby declared as the intent of the City of Tybee Island Mayor and Council that this ordinance would have been adopted had such invalid or unconstitutional portion not been included herein.

SECTION 3

All ordinances and parts of ordinances in conflict herewith are expressly repealed.

SECTION 4

It is the intention of the governing body, and it is hereby ordained, that the provisions of this ordinance shall become effective and be made a part of the Code of Ordinances, City of Tybee Island, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

SECTION 5

This ordinance shall be effective upon its adoption by the Mayor and Council pursuant to The Code of the City of Tybee Island, Georgia.

This Ordinance shall become effective on _____ day of _____, 2023.

ADOPTED THIS __ DAY OF _____, 2023.

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING: ______ SECOND READING: _____ ENACTED: _____

572-1 Ordinances 2023 - 2023-10 Setback – Elevator Requirements 4-18-2023 572-1 Ordinances 2023 – Setback – Elevator Requirements 3-9-2023 572-1 Ordinances 2023 - Setback – Elevator Requirements 2-1-2023

File Attachments for Item:

21. Second Reading: 2023-21, Sec 58-179, Fees

ORDINANCE NO. 2023-21

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE CITY OF TYBEE ISLAND SO AS TO UPDATE THE DESCRIPTION OF CERTAIN SERVICES FOR THE PURPOSE OF _____AND TO ESTABLISH AN EFFECTIVE DATE

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is authorized under Article 9, Section 2, Paragraph 3 of the Constitution of the State of Georgia to adopt reasonable ordinance to protect and improve the public health, safety, and welfare of the citizens of Tybee Island, Georgia, and

WHEREAS, the duly elected governing authority for the City of Tybee Island, Georgia, is the Mayor and Council thereof; and

WHEREAS, the governing authority desires to adopt ordinances under its police and home rule powers; and

WHEREAS, it is desirable to update the description for certain vendors providing massage therapy services to reflect the title now commonly used for such providers.

NOW THEREFORE, it is hereby ordained by the governing authority of the City of Tybee Island duly assembled as follows:

SECTION I

Existing Tybee Code Section 58-179 is amended as follows:

Any business of the type listed below operating within the city shall pay a regulatory fee, even if such business has paid a business tax in Savannah, Tybee Island or another jurisdiction, and regulatory fees as defined in section 58-154(b) are established for those businesses operating within the corporate limits of the city, according to the following schedules:

SIC	License Classification	Fee
5813	Retail beer/wine - sale by package only; consumption on premises prohibited	\$730.00
5839	Retail beer/wine - sale by drink for consumption on premises only	\$760.00
5815	Retail liquor - sale by package only; consumption on premises prohibited	\$1,130.00
5816	Retail liquor - sale by drink for consumption on premises only	\$1,600.00
5818	Retail liquor - sale by package and drink both in one building under one ownership	\$2,000.00
5881	Wholesale beer	\$765.00
5183	Wholesale liquor	\$1,500.00
5182	Wholesale wine	\$150.00
2080	Distiller, brewer, or manufacturer of alcoholic beverages	\$300.00
	Special event - beer, wine, liquor; special event - beer, wine, liquor (establishments not holding current license)	\$50.00 per day; \$100.00, three-day

Alcoholic Beverages For 2022

Special event - beer, wine, liquor (establishments holding current license)	\$10.00
	per event
Sunday sales for package only, in addition to all other regulatory fees and taxes	\$50.00
Sunday sales - sale by drink for consumption on premises, in addition to all other regulatory fees and taxes	\$150.00

SIC	License Classification	Fee
5813	Retail beer/wine - sale by package only; consumption on premises prohibited	\$1,110.00
5839	Retail beer/wine - sale by drink for consumption on premises only	\$945.00
5815	Retail liquor - sale by package only; consumption on premises prohibited	\$1,410.00
5816	Retail liquor - sale by drink for consumption on premises only	\$1,950.00
5818	Retail liquor - sale by package and drink both in one building under one ownership	\$2,000.00
5881	Wholesale beer	\$765.00
5183	Wholesale liquor	\$1,500.00
5182	Wholesale wine	\$150.00
2080	Distiller, brewer, or manufacturer of alcoholic beverages	\$300.00
	Special event - beer, wine, liquor; special event - beer, wine, liquor	\$50.00
	(establishments not holding current license)	per day; \$100.00, three-day
	Special event - beer, wine, liquor (establishments holding current license)	\$10.00 per event
	Sunday sales for package only, in addition to all other regulatory fees and taxes	\$50.00
	Sunday sales - sale by drink for consumption on premises, in addition to all other regulatory fees and taxes	\$150.00

Alcoholic Beverages For 2023

Alcoholic Beverages For 2024

SIC	License Classification	Fee
5813	Retail beer/wine - sale by package only; consumption on premises prohibited	\$1,490.00
5839	Retail beer/wine - sale by drink for consumption on premises only	\$1,130.00
5815	Retail liquor - sale by package only; consumption on premises prohibited	\$1,690.00
5816	Retail liquor - sale by drink for consumption on premises only	\$2,300.00
5818	Retail liquor - sale by package and drink both in one building under one ownership	\$2,000.00
5881	Wholesale beer	\$765.00
5183	Wholesale liquor	\$1,500.00
5182	Wholesale wine	\$150.00
2080	Distiller, brewer, or manufacturer of alcoholic beverages	\$300.00
	Special event - beer, wine, liquor; special event - beer, wine, liquor (establishments not holding current license)	\$50.00 per day; \$100.00, three-day
	Special event - beer, wine, liquor (establishments holding current license)	\$10.00 per event

Sunday sales for package only, in addition to all other regulatory fees and taxes	\$50.00
Sunday sales - sale by drink for consumption on premises, in addition to all other regulatory fees and taxes	\$150.00

Alcoholic Beverages For 2025

SIC	License Classification	Fee
5813	Retail beer/wine - sale by package only; consumption on premises prohibited	\$1,870.00
5839	Retail beer/wine - sale by drink for consumption on premises only	\$1,315.00
5815	Retail liquor - sale by package only; consumption on premises prohibited	\$1,970.00
5816	Retail liquor - sale by drink for consumption on premises only	\$2,650.00
5818	Retail liquor - sale by package and drink both in one building under one ownership	\$2,000.00
5881	Wholesale beer	\$765.00
5183	Wholesale liquor	\$1,500.00
5182	Wholesale wine	\$150.00
2080	Distiller, brewer, or manufacturer of alcoholic beverages	\$300.00
	Special event - beer, wine, liquor; special event - beer, wine, liquor (establishments not holding current license)	\$50.00 per day; \$100.00, three-day
	Special event - beer, wine, liquor (establishments holding current license)	\$10.00 per event
	Sunday sales for package only, in addition to all other regulatory fees and taxes	\$50.00
	Sunday sales - sale by drink for consumption on premises, in addition to all other regulatory fees and taxes	\$150.00

Alcoholic Beverages For 2026

SIC	License Classification	Fee
5813	Retail beer/wine - sale by package only; consumption on premises prohibited	\$2,250.00
5839	Retail beer/wine - sale by drink for consumption on premises only	\$1,500.00
5815	Retail liquor - sale by package only; consumption on premises prohibited	\$2,250.00
5816	Retail liquor - sale by drink for consumption on premises only	\$3,000.00
5818	Retail liquor - sale by package and drink both in one building under one ownership	\$2,000.00
5881	Wholesale beer	\$765.00
5183	Wholesale liquor	\$1,500.00
5182	Wholesale wine	\$150.00
2080	Distiller, brewer, or manufacturer of alcoholic beverages	\$300.00
	Special event - beer, wine, liquor; special event - beer, wine, liquor (establishments not holding current license)	\$50.00 per day; \$100.00, three-day
	Special event - beer, wine, liquor (establishments holding current license)	\$10.00 per event
	Sunday sales for package only, in addition to all other regulatory fees and taxes	\$50.00

Sunday sales - sale by drink for consumption on premises, in addition to	\$150.00
all other regulatory fees and taxes	

Miscellaneous

License Classification	Fee
Advertising, off-premises (billboards) TIC Sec. 8-4-24:	
-32 square feet (4'×8')	\$50.00
—128 square feet (8'×16')	\$75.00
—192 square feet (12'×16')	\$100.00
-288 square feet (12'×24')	\$125.00
Amusements, itinerant (circus, carnival) TIC 7-1-1/7-1-4	\$75.00 per day; \$600.00 maximum
Beach equipment, beach vehicle, and watercraft rental, per site TIC 9-3-30/9-3-36	\$300.00
Book and magazine canvasser; registration fee	\$45.00
Building and construction contractors, subcontractors and tradesmen, licensed in another jurisdiction; registration fee	\$20.00
Escort	\$500.00
Live entertainment	\$50.00
Massage Therapist	\$250.00
Private parking lots	
Residentially zoned	1.00
Commercial	\$200.00
Promoter—special events, pageants, festivals, exhibitions, sporting events, shows, etc.	
—Per single event TIC 7-1-1/-4	\$50.00
—Transient merchant TIC 9-1-20	\$75.00 per day
Short term vacation rentals	\$100.00 per STVR unit as provided in section 34- 256 et seq.
Transient rentals; registration fee	\$45.00
Vendor, festival hawker	\$25.00 per day
Vendor, arts and crafts	\$25.00 per event

Notwithstanding any other provision of this section, a business that is already licensed and paying an occupation tax to Tybee shall not have to pay a regulatory fee in connection with vending activities as long as such activities are limited to the same line of product or service covered by the occupational tax paid.

SECTION II

All ordinance and parts of ordinances in conflict herewith are expressly repealed.

SECTION III

It is the intention of the governing body, and it is hereby ordained, that the provisions of this ordinance shall become effective and be made a part of the Code of Ordinance, City of Tybee Island, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

This Ordinance shall become effective on _____ day of _____, 2023.

ADOPTED THIS _____ DAY OF _____ 2023.

MAYOR

ATTEST:

CLERK OF COUNCIL

FIRST READING:

SECOND READING:

ENACTED:

File Attachments for Item:

22. Second Reading: 2023-22, GMEBS-R: City of Tybee Island Defined Benefit Retirement Plan Amendment Ordinance with Adoption



RISK MANAGEMENT AND EMPLOYEE BENEFIT SERVICES BOARD OF TRUSTEES

Chairman W. D. Palmer, III Councilmember, Camilla

Vice Chairman Rebecca L. Tydings City Attorney, Centerville

Secretary-Treasurer Larry H. Hanson Executive Director

Trustees:

Shelly Berryhill Councilmember, Hawkinsville

Linda Blechinger Mayor, Auburn

Ronald Feldner City Manager, Garden City

Marcia Hampton City Manager, Douglasville

Meg Kelsey City Manager, LaGrange

Sam Norton Mayor, Dahlonega

David Nunn City Manager, Madison

James F. Palmer Mayor, Calhoun

John Reid Mayor, Eatonton

Kenneth L. Usry Mayor, Thomson

Clemontine Washington Mayor Pro Tem, Midway

Donna Whitener

Vince Williams Mayor, Union City TRANSMITTED VIA E-MAIL

(jaime.spear@cityoftybee.org)

Ms. Jaime Spear Human Resources Administrator City of Tybee Island P.O. Box 2749 Tybee Island, Georgia 31328-2749

RE: <u>City of Tybee Island GMEBS Defined Benefit Retirement Plan; Amendment to</u> <u>Increase Benefit for Elected Officials and Change Vesting Requirement</u>

April 19, 2023

Dear Ms. Spear:

Per the City's request, enclosed please find a draft amended Adoption Agreement and a draft amended General Addendum for the City of Tybee Island's Georgia Municipal Employees Benefit System ("GMEBS") Defined Benefit Retirement Plan ("Plan"). The amendment to the Plan increases the monthly benefit for elected officials to \$25 a month per year of service as an elected official (see Adoption Agreement, p. 24) and changes the vesting requirement from 10-year graduated vesting to a 5-year cliff vesting schedule for employees who terminate on or after May 11, 2023 (see Adoption Agreement, p. 29).

The Adoption Agreement provides that the amendment will become effective on May 11, 2023. Please note that per O.C.G.A. § 47-5-40, the Adoption Agreement has been drafted in the form of an ordinance.

If the draft Adoption Agreement and General Addendum are acceptable as drafted, please have the designated representatives execute, sign and date each document where indicated. Once the documents are executed, please scan and email each document to Gina Gresham at <u>rgresham@gacities.com</u>. We will then countersign the documents and return an electronic copy to you. Please note that GMEBS will not execute plan documents that have been edited by the city. If the documents require revisions, please let us know before adopting them.

If you have any questions about the information provided in this letter or require further information, please feel free to contact me at (678) 686-6236 or <u>kjeselnik@gacities.com</u>.

Sincerely, Kevin Jeselnik

Kevin H. Jeselnik Assistant General Counsel

Encl.

C: Mr. Edward Hughes, City Attorney, City of Tybee Island (w/ encl.) Ms. Marinetty Bienvenu, Director, Employee Benefit Services (w/o encl.) Ms. Michelle Warner, Director, Retirement Field Services and DC Program (w/o encl.) Ms. Gwin Hall, Senior Associate General Counsel (w/o encl.)

Item #22.

GENERAL ADDENDUM TO THE GEORGIA MUNICIPAL EMPLOYEES BENEFIT SYSTEM DEFINED BENEFIT RETIREMENT PLAN ADOPTION AGREEMENT

This is an Addendum to the Adoption Agreement completed by the City of Tybee Island, Georgia as follows (complete one or more sections, as applicable):

*** Items (1) through (11) of General Addendum – Not Applicable ***

(12) <u>Minimum and Maximum Limits on Normal Retirement Benefit Amount</u> for Regular Employees.

Check one or more as applicable:

□ (a) The <u>minimum</u> monthly normal retirement benefit amount shall
 be: □ \$_____% of the Participant's Final Average
 Earnings (specify minimum monthly amount or percentage).

The minimum benefit amount elected above shall apply to (check one):

- □ All Participants who are Regular Employees.
- □ Only the following Participants (must specify)
- (b) The <u>maximum</u> monthly normal retirement benefit amount shall be: □ \$____, ⊠ 100% (specify maximum monthly amount or percentage) of: ⊠ the highest monthly earnings used to calculate the Participant's Final Average Earnings, □ the Participant's Final Average Earnings. This maximum benefit limit shall apply in addition to and not in lieu of any applicable limits under Internal Revenue Code Section 415.

The maximum benefit amount elected above shall apply to (check one):

- ☑ All Participants who are Regular Employees.
- □ Only the following Participants (must specify)

<u>Note</u>: The minimum or maximum limit elected above shall apply to the standard form of payment. If the Participant elects a different form of benefit payment, the limit shall be actuarially adjusted based on the form of benefit payment elected.

*** Items (13) through (16) of General Addendum – Not Applicable ***

The terms of the foregoing Addendum to the Adoption Agreement are approved by the Mayor and Council of the City of Tybee Island, Georgia this _____ day of _____, 20___.

Attest:

CITY OF TYBEE ISLAND, GEORGIA

City Clerk

Mayor

(SEAL)

Approved:

City Attorney

The terms of the foregoing Addendum are approved by the Board of Trustees of the Georgia Municipal Employees Benefit System.

IN WITNESS WHEREOF, the Board of Trustees of the Georgia Municipal Employees Benefit System has caused its Seal and the signatures of its duly authorized officers to be affixed this _____ day of ______, 20___.

> Board of Trustees Georgia Municipal Employees Benefit System

(SEAL)

Secretary

<u>GEORGIA MUNICIPAL EMPLOYEES</u> <u>BENEFIT SYSTEM</u>

DEFINED BENEFIT RETIREMENT PLAN

AN ORDINANCE and ADOPTION AGREEMENT for

City of Tybee Island

Form Volume Submitter Adoption Agreement Amended and Restated as of January 1, 2013 (With Amendments Taking Effect on or Before January 1, 2017)

TABLE OF CONTENTS

AN ORDI	NANC	ЪЕ	1
GMEBS I	DEFIN	IED BENEFIT RETIREMENT PLAN	
		AGREEMENT	2
1.		/INISTRATOR	
2.		OPTING EMPLOYER	
3.	GOV	/ERNING AUTHORITY	2
4.	PLA	N REPRESENTATIVE	2
5.	PEN	SION COMMITTEE	3
6.	TYP	E OF ADOPTION	3
7.	EFFI	ECTIVE DATE	4
8.	PLA	N YEAR	5
9.	CLA	SSES OF ELIGIBLE EMPLOYEES	5
	A.	Eligible Regular Employees	
	B.	Elected or Appointed Members of the Governing Authority	
10.	ELIC	GIBILITY CONDITIONS	
	A.	Hours Per Week (Regular Employees)	
	В.	Months Per Year (Regular Employees)	
11.		ITING PERIOD	
12.	ESTABLISHING PARTICIPATION IN THE PLAN		
13.		DITED SERVICE	
	А.	Credited Past Service with Adopting Employer	
	В.	Prior Military Service	
	C.	Prior Governmental Service	11
	D.	Leave Conversion for Unused Paid Time Off (e.g., Sick,	10
		Vacation, or Personal Leave)	
14.		IREMENT ELIGIBILITY	
	A.	Early Retirement Qualifications	
	B.	Normal Retirement Qualifications	
	C.	Alternative Normal Retirement Qualifications	
1.5	D.	Disability Benefit Qualifications	
15.		IREMENT BENEFIT COMPUTATION	
	A.	Maximum Total Credited Service	
	B.	Monthly Normal Retirement Benefit Amount	
	C.	Monthly Early Retirement Benefit Amount	
	D. E	Monthly Late Retirement Benefit Amount (check one):	
	E. E	Monthly Disability Benefit Amount Minimum/Maximum Benefit For Elected Officials	
16	F.		20
16.		PENSION OF BENEFITS FOLLOWING BONA FIDE	77
	SEL	ARATION OF SERVICE; COLA	

I.

II.

	А.	Re-Employment as Eligible Employee After Normal,	
		Alternative Normal, or Early Retirement and Following	
		Bona Fide Separation of Service (see Master Plan Section	
		6.06(c) Regarding Re-Employment as an Ineligible	
		Employee and Master Plan Section 6.06(e) and (f)	
		Regarding Re-Employment After Disability Retirement)	27
	В.	Cost Of Living Adjustment	
17.	TER	MINATION OF EMPLOYMENT BEFORE RETIREMENT;	
	VES	TING	29
	А.	Eligible Regular Employees	29
	В.	Elected or Appointed Members of the Governing Authority	29
18.	PRE	RETIREMENT DEATH BENEFITS	30
	А.	In-Service Death Benefit	30
	В.	Terminated Vested Death Benefit	32
19.	EMP	LOYEE CONTRIBUTIONS	32
20.	MOI	DIFICATION OF THE TERMS OF THE ADOPTION	
	AGR	EEMENT	
21.	TER	MINATION OF THE ADOPTION AGREEMENT	34
22.	EMP	LOYER ADOPTION AND AUTHORIZATION FOR	
	AME	ENDMENTS	34

I. <u>AN ORDINANCE</u>

An Ordinance to amend and restate the Retirement Plan for the Employees of the City of Tybee Island, Georgia in accordance with and subject to the terms and conditions set forth in the attached Adoption Agreement, any Addendum to the Adoption Agreement, the Georgia Municipal Employees Benefit System (GMEBS) Master Plan Document, and the GMEBS Trust Agreement. When accepted by the authorized officers of the City and GMEBS, the foregoing shall constitute a Contract between the City and GMEBS, all as authorized and provided by O.C.G.A. § 47-5-1 et seq.

BE IT ORDAINED by the Mayor and Council of the City of Tybee Island, Georgia, and it is hereby ordained by the authority thereof:

<u>Section 1</u>. The Retirement Plan for the Employees of the City of Tybee Island, Georgia is hereby amended and restated as set forth in and subject to the terms and conditions stated in the following Adoption Agreement, any Addendum to the Adoption Agreement, the Georgia Municipal Employees Benefit System (GMEBS) Master Plan Document, and the GMEBS Trust Agreement.

Ordinance continued on page 37

II. <u>GMEBS DEFINED BENEFIT RETIREMENT PLAN</u> <u>ADOPTION AGREEMENT</u>

1. ADMINISTRATOR

Georgia Municipal Employees Benefit System 201 Pryor Street, SW Atlanta, Georgia 30303 Telephone: 404-688-0472 Facsimile: 404-577-6663

2. ADOPTING EMPLOYER

Name: City of Tybee Island, Georgia

3. GOVERNING AUTHORITY

Name: Mayor and Council Address: P.O. Box 2749, Tybee Island, GA 31328-2749 Phone: (912) 472-5080 Facsimile: (912) 786-5737

4. PLAN REPRESENTATIVE

[To represent Governing Authority in all communications with GMEBS and Employees] (See Section 2.49 of Master Plan)

Name: City Manager Address: P.O. Box 2749, Tybee Island, GA 31328-2749 Phone: (912) 472-5080 Facsimile: (912) 786-5737

Item #22. City of Tybee Island (Amended Effective May 11, 2023)

5. PENSION COMMITTEE

[Please designate members by position. If not, members of Pension Committee shall be determined in accordance with Article XIV of Master Plan]

Position: Clerk of Council (City Clerk)
Position: City Manager
Position: Finance Officer of the City
Position: One (1) active City Employee appointed by the Mayor and Council
Position: One (1) active City Employee appointed by the Mayor and Council
Position: One (1) member of the Mayor and Council designated by the Mayor and Council

In the event the title of a position on the Pension Committee should change, an amendment to the Adoption Agreement shall not be necessary; rather, such position shall be held and filled by the individual with the most similar job description.

Pension Committee Secretary: Human Resources Administrator Address: P.O. Box 2749, Tybee Island, GA 31328-2749 Phone: (912) 472-5029 Facsimile: (912) 786-5737

6. TYPE OF ADOPTION

This Adoption Agreement is for the following purpose (check one):

- □ This is a new defined benefit plan adopted by the Adopting Employer for its Employees. This plan does not replace or restate an existing defined benefit plan.
- □ This is an amendment and restatement of the Adopting Employer's preexisting non-GMEBS defined benefit plan.
- This is an amendment and restatement of the Adoption Agreement previously adopted by the Employer, as follows (check one or more as applicable):
 - To update the Plan to comply with PPA, HEART, WRERA, and other applicable federal laws and guidance.
 - ☑ To make the following amendments to the Adoption Agreement (must specify below revisions made in this Adoption Agreement; all provisions must be completed in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): This is an amendment to: 1) increase the monthly Normal Retirement benefit for elected or appointed members of the Governing Authority in such positions on or after May 11, 2023, to \$25.00 a month per year of Service as an elected or appointed member of the Governing Authority (see Adoption Agreement, p. 24); and 2) reduce the Vesting requirement from 10-year graduated Vesting to 5-year cliff

<u>Vesting for Eligible Regular Employees who Terminate on or after May 11,</u> 2023 (see Adoption Agreement, p. 29).

7. EFFECTIVE DATE

NOTE: This Adoption Agreement and any Addendum, with the accompanying Master Plan Document, is designed to comply with Internal Revenue Code Section 401(a), as applicable to a governmental qualified defined benefit plan, and is part of the GMEBS Defined Benefit Retirement Plan. Plan provisions designed to comply with certain provisions of the Pension Protection Act of 2006 ("PPA"); the Heroes Earnings Assistance and Relief Tax Act of 2008 ("HEART"); and the Worker, Retiree, and Employer Recovery Act of 2008 ("WRERA"); and Plan provisions designed to comply with certain provisions of additional changes in federal law and guidance from the Internal Revenue Service under Internal Revenue Service Notice 2012-76 (the 2012 Cumulative List) are effective as of the applicable effective dates set forth in the Adoption Agreement and Master Plan Document, the Adopting Employer is adopting a plan document intended to comply with Internal Revenue Code Section 401(a), as updated by PPA, HEART, WRERA, and the 2012 Cumulative List with the applicable effective dates.

(1) Complete this item (1) only if this is a new defined benefit plan which does not replace or restate an existing defined benefit plan.

The effective date of this Plan is _____. (insert effective date of this Adoption Agreement not earlier than January 1, 2013).

(2) Complete this item (2) only if this Plan is being adopted to replace a non-GMEBS defined benefit plan.

Except as otherwise specifically provided in the Master Document or in this Adoption Agreement, the effective date of this restatement shall be the ______(insert effective date of this Adoption Agreement not earlier than January 1, 2013). This Plan is intended to replace and serve as an amendment and restatement of the Employer's preexisting plan, which became effective on ______(insert original effective date of preexisting plan).

(3) Complete this item (3) only if this is an amendment and complete restatement of the Adopting Employer's existing GMEBS defined benefit plan.

Except as otherwise specifically provided in the Master Document or in this Adoption Agreement, the effective date of this restatement shall be <u>May 11, 2023</u> (insert effective date of this Adoption Agreement not earlier than January 1, 2013).

This Plan is adopted as an amendment and restatement of the Employer's preexisting GMEBS Adoption Agreement, which became effective on <u>October 22, 2020</u> (insert effective date of most recent Adoption Agreement preceding this Adoption Agreement).

The Employer's first Adoption Agreement became effective <u>July 1, 2003</u> (insert effective date of Employer's first GMEBS Adoption Agreement). The Employer's GMEBS Plan was originally effective <u>May 1, 1987</u> (insert effective date of Employer's original GMEBS

Plan). (If the Employer's Plan was originally a non-GMEBS Plan, then the Employer's non-GMEBS Plan was originally effective _____ (if applicable, insert effective date of Employer's original non-GMEBS Plan).)

8. PLAN YEAR

Plan Year means (check one):

- □ Calendar Year
- Employer Fiscal Year commencing

Other (must specify month and day commencing): <u>May 1.</u>

9. CLASSES OF ELIGIBLE EMPLOYEES

Only Employees of the Adopting Employer who meet the Master Plan's definition of "Employee" may be covered under the Adoption Agreement. Eligible Employees shall not include non-governmental employees, independent contractors, leased employees, nonresident aliens, or any other ineligible individuals, and this Section 9 must not be completed in a manner that violates the "exclusive benefit rule" of Internal Revenue Code Section 401(a)(2).

A. <u>Eligible Regular Employees</u>

Regular Employees include Employees, other than elected or appointed members of the Governing Authority or Municipal Legal Officers, who are regularly employed in the services of the Adopting Employer. Subject to the other conditions of the Master Plan and the Adoption Agreement, the following Regular Employees are eligible to participate in the Plan (check one):

- □ ALL All Regular Employees, provided they satisfy the minimum hour and other requirements specified under "Eligibility Conditions" below.
- ALL REGULAR EMPLOYEES <u>EXCEPT</u> for the following employees (must specify; specific positions are permissible; specific individuals may not be named): Any City Manager who agrees in his or her employment contract with the City not to participate in this Plan shall be ineligible to participate in this Plan with respect to such employment. In the event that a City Manager agrees in his or her employment contract with the City not to participate in this Plan, the City shall provide GMEBS with written notice of such contract provision(s) within 180 days after the City Manager becomes employed with the City in such position; provided, however, that notwithstanding any provision in this Adoption Agreement or the Master Plan to the contrary, the failure of the City to provide such written notice to GMEBS shall not make such a City Manager eligible to participate in this Plan (see Adoption Agreement pp. 7-8 concerning participation in the Plan by City Managers).

B. <u>Elected or Appointed Members of the Governing Authority</u>

An Adopting Employer may elect to permit participation in the Plan by elected or appointed members of the Governing Authority and/or Municipal Legal Officers, provided they otherwise meet the Master Plan's definition of "Employee" and provided they satisfy any other requirements specified by the Adopting Employer. Municipal Legal Officers to be covered must be specifically

identified by position. Subject to the above conditions, the Employer hereby elects the following treatment for elected and appointed officials:

(1) <u>Elected or Appointed Members of the Governing Authority (check one)</u>:

- □ ARE NOT eligible to participate in the Plan.
- \boxtimes **ARE** eligible to participate in the Plan.

Please specify any limitations on eligibility to participate here (e.g., service on or after certain date, or special waiting period provision): <u>Each elected or appointed member of the Governing</u> <u>Authority who holds an office of the Employer on July 1, 2003, shall be qualified to</u> <u>participate in the Plan on such date. Each other elected or appointed member of the</u> <u>Governing Authority who holds an office subsequent to July 1, 2003 shall be qualified to</u> <u>participate in the Plan on the first day of the month immediately following or coinciding with</u> <u>the first date after July 1, 2003, that he or she occupies any elective office of the Governing</u> <u>Authority (see Adoption Agreement pp. 7-8 regarding participation in the Plan). In</u> <u>accordance with Section 4.03(b) of the Master Plan, an elected or appointed member of the</u> <u>Governing Authority who initially takes office or returns to office on or after January 1,</u> <u>2015, shall be qualified to participate in the Plan on the Plan on the Plan on the date he or she initially takes such</u> <u>office or returns to office.</u>

- (2) <u>Municipal Legal Officers (check one)</u>:
- ARE NOT eligible to participate in the Plan.
- □ ARE eligible to participate in the Plan. The term "Municipal Legal Officer" shall include only the following positions (must specify specific positions are permissible; specific individuals may not be named): _____.

Please specify any limitations on eligibility to participate here (e.g., service on or after certain date) (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i): ______.

10. ELIGIBILITY CONDITIONS

A. Hours Per Week (Regular Employees)

The Adopting Employer may specify a minimum number of work hours per week which are required to be scheduled by Regular Employees in order for them to become and remain "Eligible Regular Employees" under the Plan. It is the responsibility of the Adopting Employer to determine whether these requirements are and continue to be satisfied. The Employer hereby elects the following minimum hour requirement for Regular Employees:

- □ No minimum
- □ 20 hours/week (regularly scheduled)
- \Box 30 hours/week (regularly scheduled)
- Other: <u>35 hours/week</u> (must not exceed 40 hours/week regularly scheduled)

Exceptions: If a different minimum hour requirement applies to a particular class or classes of Regular Employees, please specify below the classes to whom the different requirement applies and indicate the minimum hour requirement applicable to them.

Class(es) of Regular Employees to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named): <u>Eligible Regular Employees employed</u> on or before October 10, 1996, provided they are not Terminated and reemployed after such date.

Minimum hour requirement applicable to excepted Regular Employees:

- □ No minimum
- ≥ 20 hours/week (regularly scheduled)
- □ 30 hours/week (regularly scheduled)
- □ Other: _____ (must not exceed 40 hours/week regularly scheduled)

B. <u>Months Per Year (Regular Employees)</u>

The Adopting Employer may specify a minimum number of work months per year which are required to be scheduled by Regular Employees in order for them to become and remain "Eligible Employees" under the Plan. It is the responsibility of the Adopting Employer to determine whether these requirements are and continue to be satisfied. The Employer hereby elects the following minimum requirement for Regular Employees:

- □ No minimum
- \boxtimes At least <u>5</u> months per year (regularly scheduled)

Exceptions: If different months per year requirements apply to a particular class or classes of Regular Employees, the Employer must specify below the classes to whom the different requirements apply and indicate below the requirements applicable to them.

Regular Employees to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

The months to year requirement for excepted class(es) are:

- □ No minimum
- \Box At least months per year (regularly scheduled)

11. WAITING PERIOD

Except as otherwise provided in Section 4.02(b) of the Master Plan, Eligible Regular Employees shall not have a waiting period before participating in the Plan. Likewise, elected or appointed members of the Governing Authority and Municipal Legal Officers, if eligible to participate in the Plan, shall not have a waiting period before participating in the Plan.

12. ESTABLISHING PARTICIPATION IN THE PLAN

Participation in the Plan is considered mandatory for all Eligible Employees who satisfy the eligibility conditions specified in the Adoption Agreement, except as provided in Section 4.03(e) of the Master Plan. However, the Employer may specify below that participation is optional for certain classes of Eligible Employees, including Regular Employees, elected or appointed members of the Governing Authority, Municipal Legal Officers, City Managers, and/or Department Heads. If participation is optional for an Eligible Employee, then in order to become a Participant, he must make a written election to participate within 120 days after employment, election or appointment to office, or if later, the date he first becomes eligible to participate in the Plan. The election is irrevocable, and the failure to make the election within the 120 day time limit shall be deemed an irrevocable election not to participate in the Plan.

Classes for whom participation is optional (check one):

- □ None (Participation is mandatory for all Eligible Employees except as provided in Section 4.03(e) of the Master Plan).
- ☑ Participation is optional for the following Eligible Employees (must specify specific positions are permissible; specific individuals may not be named; all positions or classes specified must be Eligible Employees): If a former City Manager or other Employee has previously waived or declined participation in the Plan prior to July 1, 2003, said City Manager or Employee shall not receive credit for any service with the City prior to July 1, 2003. Notwithstanding any provision to the contrary, since July 1, 2003, the City's Plan has operated and will continue to operate as follows with respect to participation in the Plan by the City Manager and by elected or appointed members of the Governing Authority. The City Manager is required to participate in the Plan, provided he or she meets the eligibility requirements for participation that are applicable to other Regular Employees; however, a City Manager who affirmatively agrees in his or her employment contract with the City not to participate in this Plan is ineligible to participate in the Plan (see p. 5 relating to Eligible Regular Employees). Each elected or appointed member of the Governing Authority automatically participates in the Plan unless he or she irrevocable elects in writing not to participate in the Plan within 120 days following the date on which he or she first takes such office or returns to office, as applicable, and such election is submitted to the Pension Committee Secretary in the form and manner required by the City within said 120 day period.

13. CREDITED SERVICE

In addition to Current Credited Service the Adopting Employer may include as Credited Service the following types of service:

A. <u>Credited Past Service with Adopting Employer</u>

Credited Past Service means the number of years and complete months of Service with the Adopting Employer prior to the date an Eligible Employee becomes a Participant which are treated as credited service under the Plan.

(1) Eligible Employees Employed on Original Effective Date of GMEBS Plan. With respect to Eligible Employees who are employed by the Adopting Employer on the original Effective Date of the Employer's GMEBS Plan, Service with the Adopting Employer prior to the date the Eligible Employee becomes a Participant (including any Service prior to the Effective Date of the Plan) shall be treated as follows (check one):

- All Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service).
- □ All Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service), except for Service rendered prior to ______(insert date).
- □ All Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service), except as follows (must specify other limitation in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.
- □ No Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service).

(2) Previously Employed, Returning to Service after Original Effective Date. If an Eligible Employee is not employed on the original Effective Date of the Employer's GMEBS Plan, but he returns to Service with the Adopting Employer sometime after the Effective Date, his Service prior to the date he becomes a Participant (including any Service prior the Effective Date) shall be treated as follows (check one):

- All Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service), subject to any limitations imposed above with respect to Eligible Employees employed on the Effective Date.
- All Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service), provided that after his return to employment, the Eligible Employee performs Service equal to the period of the break in Service or one (1) year, whichever is less. Any limitations imposed above with respect to Eligible Employees employed on the Effective Date shall also apply.
- □ No Service prior to the date the Eligible Employee becomes a Participant shall be credited (as Credited Past Service).

Other limitation(s) on Recognition of Credited Past Service (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): Notwithstanding any other provision, Credited Past Service shall not include any tenure of office as an elected or appointed member of the Governing Authority unless the Participant was serving as an elected or appointed member of the Governing Authority or Eligible Regular Employee on July 1, 2003.

(3) Eligible Employees Initially Employed After Effective Date. If an Eligible Employee's initial employment date is after the original Effective Date of the Employer's GMEBS Plan, his Credited Past Service shall include only the number of years and complete months of Service from his initial employment date to the date he becomes a Participant in the Plan.

(4) Newly Eligible Classes of Employees. If a previously ineligible class of Employees becomes eligible to participate in the Plan, the Employer must specify in an addendum to this Adoption Agreement whether and to what extent said Employees' prior service with the Employer shall be treated as Credited Past Service under the Plan.

B. <u>Prior Military Service</u>

<u>Note</u>: This Section does not concern military service required to be credited under USERRA – See Section 3.02 of the Master Plan for rules on the crediting of USERRA Military Service.

(1) Credit for Prior Military Service.

The Adopting Employer may elect to treat military service rendered prior to a Participant's initial employment date or reemployment date as Credited Service under the Plan. Unless otherwise specified by the Employer under "Other Conditions" below, the term "Military Service" shall be as defined in the Master Plan. Except as otherwise required by federal or state law or under "Other Conditions" below, Military Service shall not include service which is credited under any other local, state, or federal retirement or pension plan.

Military Service credited under this Section shall not include any service which is otherwise required to be credited under the Plan by federal or state law. Prior Military Service shall be treated as follows (check one):

- Prior Military Service is not creditable under the Plan (if checked, skip to Section 13.C. Prior Governmental Service).
- □ Prior Military Service shall be counted as Credited Service for the following purposes (check one or more as applicable):
 - □ Computing amount of benefits payable.
 - □ Meeting minimum service requirements for vesting.
 - ☐ Meeting minimum service requirements for benefit eligibility.

(2) Maximum Credit for Prior Military Service.

Credit for Prior Military Service shall be limited to a maximum of _____ years (insert number).

(3) Rate of Accrual for Prior Military Service.

Credit for Prior Military Service shall accrue at the following rate (check one):

□ One month of military service credit for every _____ month(s) (insert number) of Credited Service with the Adopting Employer.

- □ One year of military service credit for every _____ year(s) (insert number) of Credited Service with the Adopting Employer.
- ☐ All military service shall be creditable (subject to any caps imposed above) after the Participant has completed _____ years (insert number) of Credited Service with the Employer.
- □ Other requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.
- (4) Payment for Prior Military Service Credit(check one):
- □ Participants shall **not** be required to pay for military service credit.
- □ Participants shall be required to pay for military service credit as follows:
 - □ The Participant must pay ____% of the actuarial cost of the service credit (as defined below).
 - □ The Participant must pay an amount equal to (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

Other Conditions for Award of Prior Military Service Credit (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

(5) Limitations on Service Credit Purchases. Unless otherwise specified in an Addendum to the Adoption Agreement, for purposes of this Section and Section 13.C. concerning prior governmental service credit, the term "actuarial cost of service credit" is defined as set forth in the Service Credit Purchase Addendum. In the case of a service credit purchase, the Participant shall be required to comply with any rules and regulations established by the GMEBS Board of Trustees concerning said purchases.

C. <u>Prior Governmental Service</u>

<u>Note</u>: A Participant's prior service with other GMEBS employers shall be credited for purposes of satisfying the minimum service requirements for Vesting and eligibility for Retirement and pre-retirement death benefits as provided under Section 9.05 of the Master Plan, relating to portability service. This Section 13(C) does not need to be completed in order for Participants to receive this portability service credit pursuant to Section 9.05 of the Master Plan.

(1) Credit for Prior Governmental Service.

The Adopting Employer may elect to treat governmental service rendered prior to a Participant's initial employment date or reemployment date as creditable service under the Plan. Subject to any limitations imposed by law, the term "prior governmental service" shall be as defined by the

Adopting Employer below. The Employer elects to treat prior governmental service as follows (check one):

- Prior governmental service is **not** creditable under the Plan (**if checked**, **skip to Section 13.D. – Unused Sick/Vacation Leave**).
- Prior governmental service shall be counted as Credited Service for the following purposes under the Plan (check one or more as applicable):
 - \Box Computing amount of benefits payable.
 - □ Meeting minimum service requirements for vesting.
 - □ Meeting minimum service requirements for benefit eligibility.

(2) Definition of Prior Governmental Service.

Prior governmental service shall be defined as follows: (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

Unless otherwise specified above, prior governmental service shall include only full-time service (minimum hour requirement same as that applicable to Eligible Regular Employees).

(3) Maximum Credit for Prior Governmental Service.

Credit for prior governmental service shall be limited to a maximum of ______ years (insert number).

(4) Rate of Accrual for Prior Governmental Service Credit.

Credit for prior governmental service shall accrue at the following rate (check one):

- □ One month of prior governmental service credit for every _____ month(s) (insert number) of Credited Service with the Adopting Employer.
- □ One year of prior governmental service credit for every _____ year(s) (insert number) of Credited Service with the Adopting Employer.
- All prior governmental service shall be creditable (subject to any caps imposed above) after the Participant has completed _____ years (insert number) of Credited Service with the Adopting Employer.
- □ Other requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.
- (5) Payment for Prior Governmental Service Credit.
- □ Participants shall **not** be required to pay for governmental service credit.
- \square Participants shall be required to pay for governmental service credit as follows:

- \Box The Participant must pay ____% of the actuarial cost of the service credit.
- □ The Participant must pay an amount equal to (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

Other Conditions for Award of Prior Governmental Service Credit (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

D. Leave Conversion for Unused Paid Time Off (e.g., Sick, Vacation, or Personal Leave)

(1) Credit for Unused Paid Time Off.

Subject to the limitations in Section 3.01 of the Master Plan, an Adopting Employer may elect to treat accumulated days of unused paid time off for a terminated Participant, for which the Participant is not paid, as Credited Service. The only type of leave permitted to be credited under this provision is leave from a paid time off plan which qualifies as a bona fide sick and vacation leave plan (which may include sick, vacation or personal leave) and which the Participant may take as paid leave without regard to whether the leave is due to illness or incapacity. The Credited Service applied toward the accrual of a normal retirement benefit under the Plan. The Pension Committee shall be responsible to certify to GMEBS the total amount of unused paid time off that is creditable hereunder.

Important Note: Leave cannot be converted to Credited Service in lieu of receiving a cash payment. If the Employer elects treating unused paid time off as Credited Service, the conversion to Credited Service will be automatic, and the Participant cannot request a cash payment for the unused paid time off.

The Employer elects the following treatment of unused paid time off:

- ☑ Unused paid time off shall not be treated as Credited Service (if checked, skip to Section 14 Retirement Eligibility).
- □ The following types of unused paid time off for which the Participant is not paid shall be treated as Credited Service under the Plan (check one or more as applicable):
 - \Box Unused sick leave
 - $\hfill\square$ Unused vacation leave
 - □ Unused personal leave
 - □ Other paid time off (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i): ______.

(2) Minimum Service Requirement.

In order to receive credit for unused paid time off, a Participant must meet the following requirement at termination (check one):

- \Box The Participant must be 100% vested in a normal retirement benefit.
- □ The Participant must have at least _____ years (insert number) of Total Credited Service (not including leave otherwise creditable under this Section).
- □ Other (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

(3) Use of Unused Paid Time Off Credit. Unused paid time off for which the Participant is not paid shall count as Credited Service for the following purposes under the Plan (check one or more as applicable):

- □ Computing amount of benefits payable.
- □ Meeting minimum service requirements for vesting.
- □ Meeting minimum service requirements for benefit eligibility.

(4) Maximum Credit for Unused Paid Time Off.

Credit for unused paid time off for which the Participant is not paid shall be limited to a maximum of _____ months (insert number).

(5) Computation of Unused Paid Time Off.

Unless otherwise specified by the Adopting Employer under "Other Conditions" below, each twenty (20) days of creditable unused paid time off shall constitute one (1) complete month of Credited Service under the Plan. Partial months shall not be credited.

(6) Other Conditions (please specify, subject to limitations in Section 3.01 of Master Plan; must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

14. RETIREMENT ELIGIBILITY

A. <u>Early Retirement Qualifications</u>

Early retirement qualifications are (check one or more as applicable):

- Attainment of age <u>55</u> (insert number)
- \boxtimes Completion of <u>10</u> years (insert number) of Total Credited Service

Exceptions: If different early retirement eligibility requirements apply to a particular class or classes of Eligible Employees, the Employer must specify below the classes to whom the different requirements apply and indicate below the requirements applicable to them.

Eligible Employees to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

Early retirement qualifications for excepted class(es) are (check one or more as applicable):

- □ Attainment of age _____ (insert number)
- Completion of _____ years (insert number) of Total Credited Service

B. <u>Normal Retirement Qualifications</u>

<u>Note</u>: Please complete this Section and also list "Alternative" Normal Retirement Qualifications, if any, in Section 14.C.

(1) <u>Regular Employees</u>

Normal retirement qualifications for Regular Employees are (check one or more as applicable):

- \boxtimes Attainment of age <u>65</u> (insert number)
- \boxtimes Completion of <u>5</u> years (insert number) of Total Credited Service
- □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if Participant meets minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at reretirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify specific positions are permissible; specific individuals may not be named): ______.

Exceptions: If different normal retirement qualifications apply to a particular class or classes of Regular Employees, the Employer must specify below the classes to whom the different requirements apply and indicate below the requirements applicable to them.

Class(es) of Regular Employees to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named):

Normal retirement qualifications for excepted class(es) are (check one or more as applicable):

- □ Attainment of age (insert number)
- Completion of _____ years (insert number) of Total Credited Service
- □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if Participant meets minimum age and service requirements specified immediately above and is at least age 62

(unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at reretirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): \Box all Participants \Box only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named):

(2) <u>Elected or Appointed Members of Governing Authority</u>

Complete this Section only if elected or appointed members of the Governing Authority or Municipal Legal Officers are permitted to participate in the Plan. Normal retirement qualifications for this class are (check one or more as applicable):

- Attainment of age <u>65</u> (insert number)
- □ Completion of _____ years (insert number) of Total Credited Service
- □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if Participant meets minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at reretirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify specific positions are permissible; specific individuals may not be named): _______

Exceptions: If different normal retirement qualifications apply to particular elected or appointed members of the Governing Authority or Municipal Legal Officers, the Employer must specify below to whom the different requirements apply and indicate below the requirements applicable to them.

Particular elected or appointed members of the Governing Authority or Municipal Legal Officers to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

Normal retirement qualifications for excepted elected or appointed members of the Governing Authority or Municipal Legal Officers are (check one or more as applicable):

- □ Attainment of age _____ (insert number)
- Completion of _____ years (insert number) of Total Credited Service
- □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if Participant meets minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject

to applicable Plan provisions concerning recalculation and offset applied at reretirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): \Box all Participants \Box only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named):_____.

C. <u>Alternative Normal Retirement Qualifications</u>

The Employer may elect to permit Participants to retire with unreduced benefits after they satisfy service and/or age requirements other than the regular normal retirement qualifications specified above. The Employer hereby adopts the following alternative normal retirement qualifications:

Alternative Normal Retirement Qualifications (check one or more, as applicable):

- (1) \Box Not applicable (the Adopting Employer does not offer alternative normal retirement benefits under the Plan).
- - □ Attainment of age _____ (insert number)
 - □ Completion of _____ years (insert number) of Total Credited Service
 - □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if Participant meets minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at re-retirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named): _______

This alternative normal retirement benefit is available to:

- □ All Participants who qualify.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.

A Participant (check one): \Box is required \Box is not required to be in the service of the Employer at the time he satisfies the above qualifications in order to qualify for this alternative normal retirement benefit.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the

To qualify for this alternative normal retirement benefit, the Participant (check one or more items below, as applicable):

- □ Must have attained at least age _____ (insert number)
- □ Must not satisfy any minimum age requirement
- □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if the Participant meets the minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at re-retirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named): ______.

This alternative normal retirement benefit is available to:

- □ All Participants who qualify.
- Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.

A Participant (check one): \Box is required \Box is not required to be in the service of the Employer at the time he satisfies the Rule in order to qualify for this alternative normal retirement benefit.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

- - □ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if the

Participant meets the minimum service requirement specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at re-retirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): \Box all Participants \Box only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named):

This alternative normal retirement benefit is available to:

- □ All Participants who qualify.
- Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.

A Participant (check one): \Box is required \Box is not required to be in the service of the Employer at the time he satisfies the qualifications for this alternative normal retirement benefit.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

(5) D Other Alternative Normal Retirement Benefit.

Must specify qualifications (in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

□ In-Service Distribution to Eligible Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if the Participant meets minimum age and service requirements specified immediately above and is at least age 62 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at re-retirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named):_

This alternative normal retirement benefit is available to:

- □ All Participants who qualify.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.

A Participant (check one): \Box is required \Box is not required to be in the service of the Employer at the time he satisfies the qualifications for this alternative normal retirement benefit.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

(6) \boxtimes Other Alternative Normal Retirement Benefit <u>for Public Safety</u> <u>Employees Only</u>.

Must specify qualifications (in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): Attainment of age 55 and completion of 20 years of Total Credited Service.

□ In-Service Distribution to Eligible Employees who are Public Safety Employees permitted (<u>i.e.</u>, a qualifying Participant may commence receiving retirement benefits while in service without first incurring a Bona Fide Separation from Service), if the Participant meets minimum age and service requirements specified immediately above and is at least age 50 (unless a lower safe-harbor age is permitted under applicable federal law), subject to applicable Plan provisions concerning recalculation and offset applied at re-retirement to account for the value of benefits received prior to re-retirement. This rule shall apply to (check one): □ all Participants □ only the following class(es) of Participants (must specify - specific positions are permissible; specific individuals may not be named):_____.

This alternative normal retirement benefit is available to:

- □ All public safety employee Participants who qualify.
- Only the following public safety employee Participants (must specify specific positions are permissible; specific individuals may not be named): Firefighters and Police Officers, as defined in Section 2.34 and 2.51 of the Master Plan, respectively.

A public safety employee Participant (check one): \Box is required \boxtimes is not required to be in the service of the Employer at the time he satisfies the qualifications for this alternative normal retirement benefit.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

Note: "Public safety employees" are defined under the Internal Revenue Code for this purpose as employees of a State or political subdivision of a State who provide police

protection, firefighting services, or emergency medical services for any area within the jurisdiction of such State or political subdivision.

D. <u>Disability Benefit Qualifications</u>

Subject to the other terms and conditions of the Master Plan and except as otherwise provided in an Addendum to this Adoption Agreement, disability retirement qualifications are based upon Social Security Administration award criteria or as otherwise provided under Section 2.23 of the Master Plan. The Disability Retirement benefit shall commence as of the Participant's Disability Retirement Date under Section 2.24 of the Master Plan.

To qualify for a disability benefit, a Participant must have the following minimum number of years of Total Credited Service (check one):

- □ Not applicable (the Adopting Employer does not offer disability retirement benefits under the Plan).
- ⊠ No minimum.
- □ _____ years (insert number) of Total Credited Service.

Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i): ______.

15. RETIREMENT BENEFIT COMPUTATION

A. <u>Maximum Total Credited Service</u>

The number of years of Total Credited Service which may be used to calculate a benefit is (check one or all that apply):

- \boxtimes not limited.
- □ limited to _____ years for all Participants.
- □ limited to ______ years for the following classes of Eligible Regular Employees:
 - □ All Eligible Regular Employees.
 - □ Only the following Eligible Regular Employees: ______.
- □ limited to _____ years as an elected or appointed member of the Governing Authority.
- □ limited to _____ years as a Municipal Legal Officer.

□ Other (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

B. Monthly Normal Retirement Benefit Amount

(1) <u>Regular Employee Formula</u>

The monthly normal retirement benefit for Eligible Regular Employees shall be 1/12 of (check and complete one or more as applicable):

□ (a) Flat Percentage Formula. ____% (insert percentage) of Final Average Earnings multiplied by years of Total Credited Service as an Eligible Regular Employee.

This formula applies to:

- □ All Participants who are Regular Employees.
- Only the following Participants (must specify specific positions are permissible; specific individuals may not be named):
- □ (b) Alternative Flat Percentage Formula. ____% (insert percentage) of Final Average Earnings multiplied by years of Total Credited Service as an Eligible Regular Employee. This formula applies to the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.
- (c) Split Final Average Earnings Formula. <u>1.5</u>% (insert percentage) of Final Average Earnings up to the amount of Covered Compensation (see subsection (2) below for definition of Covered Compensation), plus <u>2.0</u>% (insert percentage) of Final Average Earnings in excess of said Covered Compensation, multiplied by years of Total Credited Service as an Eligible Regular Employee.

This formula applies to:

- All Participants who are Regular Employees.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named):_____.
- □ (d) Alternative Split Final Average Earnings Formula. ______% (insert percentage) of Final Average Earnings up to the amount of Covered Compensation (see subsection (2) below for definition of Covered Compensation), plus _____% (insert percentage) of Final Average Earnings in excess of said Covered Compensation, multiplied by years of Total Credited Service as an Eligible Regular Employee.

This formula applies to:

- □ All Participants.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.

[Repeat above subsections as necessary for each applicable benefit formula and Participant class covered under the Plan.]

(2) <u>Covered Compensation (complete only if Split Formula(s) is checked above):</u>

Covered Compensation is defined as (check one or more as applicable):

- (a) **A.I.M.E. Covered Compensation** as defined in Section 2.18 of the Master Plan. This definition of Covered Compensation shall apply to (check one):
 - □ All Participants who are Regular Employees.

□ Only the following Participants (must specify - specific positions are permissible; specific individuals may not be named):

- (b) Dynamic Break Point Covered Compensation as defined in Section 2.19 of the Master Plan. This definition of Covered Compensation shall apply to (check one):
 - All Participants who are Regular Employees.
 - □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): _____.
- □ (c) **Table Break Point** Covered Compensation as defined in Section 2.20 of the Master Plan. This definition of Covered Compensation shall apply to (check one):
 - □ All Participants who are Regular Employees.
 - Only the following class(es) of Participants (must specify specific positions are permissible; specific individuals may not be named):
- □ (d) Covered Compensation shall mean a Participant's annual Earnings that do not exceed \$______ (specify amount). This definition shall apply to (check one):
 - □ All Participants who are Regular Employees.
 - □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named):_____.

(3) <u>Final Average Earnings</u>

Unless otherwise specified in an Addendum to the Adoption Agreement, Final Average Earnings is defined as the monthly average of Earnings paid to a Participant by the Adopting Employer for the <u>60</u> (insert number not to exceed 60) consecutive months of Credited Service preceding the Participant's most recent Termination in which the Participant's Earnings were the highest, multiplied by 12. Note: GMEBS has prescribed forms for calculation of Final Average Earnings that must be used for this purpose.

This definition of Final Average Earnings applies to:

- All Participants who are Regular Employees.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named): ______.

[Repeat above subsection as necessary for each applicable definition and Participant class covered under the Plan.]

(4) Formula for Elected or Appointed Members of the Governing Authority

The monthly normal retirement benefit for members of this class shall be as follows (check one):

- □ Not applicable (elected or appointed members of the Governing Authority or Municipal Legal Officers are not permitted to participate in the Plan).
- \boxtimes \$25.00 (insert dollar amount) per month for each year of Total Credited Service as an elected or appointed member of the Governing Authority or Municipal Legal Officer or major fraction thereof (6 months and 1 day).

This formula applies to:

- All elected or appointed members of the Governing Authority or Municipal Legal Officers eligible to participate.
- Only the following elected or appointed members of the Governing Authority or Municipal Legal Officers eligible to participate (must specify - specific positions are permissible; specific individuals may not be named): ______.

[Repeat above subsection as necessary for each applicable formula for classes of elected or appointed members covered under the Plan.]

C. Monthly Early Retirement Benefit Amount

Check and complete one or more as applicable:

- (1) Standard Early Retirement Reduction Table. The monthly Early Retirement benefit shall be computed in the same manner as the monthly Normal Retirement benefit, but the benefit shall be reduced on an Actuarially Equivalent basis in accordance with Section 12.01 of the Master Plan to account for early commencement of benefits. This provision shall apply to:
 - ⊠ All Participants.
 - □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named):_____.
- □ (2) Alternative Early Retirement Reduction Table. The monthly Early Retirement benefit shall be computed in the same manner as the monthly Normal Retirement benefit, but the benefit shall be reduced to account for early commencement of benefits based on the following table. This table shall apply to:

- □ All Participants.
- □ Only the following Participants (must specify specific positions are permissible; specific individuals may not be named):_____.

Alternative Early Retirement Reduction Table

Number of Years Before[Age (Insert NormalRetirement Age)](check as applicable)	<u>Percentage of</u> <u>Normal Retirement Benefit*</u> (complete as applicable)
	1.000
\Box 1	0
\square 2	0
	0
□ 4	0
	0
	0
□ 7	0 0
	0
□ 9	0
□ 10	0 0
□ 11	0
□ 12	0
□ 13	0
□ 14	0
□ 15	0.

*Interpolate for whole months

D. <u>Monthly Late Retirement Benefit Amount (check one):</u>

- (1) The monthly Late Retirement benefit shall be computed in the same manner as the Normal Retirement Benefit, based upon the Participant's Accrued Benefit as of his Late Retirement Date.
- □ (2) The monthly Late Retirement benefit shall be the greater of: (1) the monthly retirement benefit accrued as of the Participant's Normal Retirement Date, actuarially increased in accordance with the actuarial table contained in Section 12.05 of the Master Plan; or (2) the monthly retirement benefit accrued as of the Participant's Late Retirement Date, without further actuarial adjustment under Section 12.06 of the Master Plan.

E. Monthly Disability Benefit Amount

The amount of the monthly Disability Benefit shall be computed in the same manner as the Normal Retirement benefit, based upon the Participant's Accrued Benefit as of his Disability Retirement Date.

Minimum Disability Benefit. The Adopting Employer may set a minimum Disability Benefit. The Employer elects the following minimum Disability benefit (check one):

- □ Not applicable (the Adopting Employer does not offer disability retirement benefits under the Plan).
- \Box No minimum is established.
- No less than (check one): ≥ 20% □ 10% □ ___% (if other than 20% or 10% insert percentage amount) of the Participant's average monthly Earnings for the 12 calendar month period (excluding any period of unpaid leave of absence) immediately preceding his Termination of Employment as a result of a Disability. (Unless otherwise specified in an Addendum to the Adoption Agreement, no minimum will apply to elected or appointed members of the Governing Authority or Municipal Legal Officers.)
- □ No less than (check one): □ 66 2/3 % □ ____% (if other than 66 2/3%, insert percentage amount) of the Participant's average monthly Earnings for the 12 calendar month period (excluding any period of unpaid leave of absence) immediately preceding his Termination of Employment as a result of a Disability, less any monthly benefits paid from federal Social Security benefits as a result of disability as reported by the Employer. (Unless otherwise specified in an Addendum to the Adoption Agreement, no minimum will apply to elected or appointed members of the Governing Authority or Municipal Legal Officers.)
- **Note:** The Adopting Employer is responsible for reporting to GMEBS any amounts to be used in an offset.

F. <u>Minimum/Maximum Benefit For Elected Officials</u>

In addition to any other limitations imposed by federal or state law, the Employer may impose a cap on the monthly benefit amount that may be received by elected or appointed members of the Governing Authority. The Employer elects (check one):

- □ Not applicable (elected or appointed members of the Governing Authority do not participate in the Plan).
- \Box No minimum or maximum applies.
- Monthly benefit for Service as an elected or appointed member of the Governing Authority may not exceed 100% of the Participant's final salary as an elected or appointed member of the Governing Authority.
- □ Other minimum or maximum (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

16. SUSPENSION OF BENEFITS FOLLOWING BONA FIDE SEPARATION OF SERVICE; COLA

A. <u>Re-Employment as Eligible Employee After Normal, Alternative Normal, or Early</u> <u>Retirement and Following Bona Fide Separation of Service (see Master Plan Section</u> <u>6.06(c) Regarding Re-Employment as an Ineligible Employee and Master Plan</u> <u>Section 6.06(e) and (f) Regarding Re-Employment After Disability Retirement)</u>

(1) Reemployment After Normal or Alternative Normal Retirement. In the event that a Retired Participant 1) is reemployed with the Employer as an Eligible Employee (as defined in the Plan) after his Normal or Alternative Normal Retirement Date and after a Bona Fide Separation from Service, or 2) is reemployed with the Employer in an Ineligible Employee class, and subsequently again becomes an Eligible Employee (as defined in the Plan) due to the addition of such class to the Plan after his Normal or Alternative Normal Retirement Date, the following rule shall apply (check one):

- \boxtimes (a) The Participant's benefit shall be suspended in accordance with Section 6.06(a)(1) of the Master Plan for as long as the Participant remains employed.
- □ (b) The Participant may continue to receive his retirement benefit in accordance with Section 6.06(b) of the Master Plan. This rule shall apply to (check one): □ all Retired Participants □ only the following classes of Retired Participants (must specify (specific positions are permissible; specific individuals may not be named) benefits of those Retired Participants not listed shall be suspended in accordance with Section 6.06(a) of the Master Plan if they return to work with the Employer): _____.

(2) Reemployment After Early Retirement. In the event a Participant Retires with an Early Retirement benefit after a Bona Fide Separation from Service 1) is reemployed with the Employer as an Eligible Employee before his Normal Retirement Date; or 2) is reemployed with the Employer in an Ineligible Employee class, and subsequently again becomes an Eligible Employee (as defined in the Plan) before his Normal Retirement Date due to the addition of such class to the Plan, the following rule shall apply (check one or more as applicable):

(a) \square The Participant's Early Retirement benefit shall be suspended in accordance with Section 6.06(a)(1) of the Master Plan for as long as the Participant remains employed.

This rule shall apply to (check one): \boxtimes all Retired Participants; \square only the following classes of Retired Participants (must specify - specific positions are permissible; specific individuals may not be named): _____.

(b) □ The Participant's Early Retirement benefit shall be suspended in accordance with Section 6.06(a)(1) of the Master Plan. However, the Participant may begin receiving benefits after he satisfies the qualifications for Normal Retirement or Alternative Normal Retirement, as applicable,

and after satisfying the minimum age parameters of Section 6.06(a)(3) of the Master Plan, in accordance with Section 6.06(b)(2)(B)(i) of the Master Plan.

This rule shall apply to (check one): \Box all Retired Participants; \Box only the following classes of Retired Participants (must specify - specific positions are permissible; specific individuals may not be named): ______.

(c) \Box The Participant's Early Retirement benefit shall continue in accordance with Section 6.06(b)(2)(B)(ii) of the Master Plan.

This rule shall apply to (check one): \Box all Retired Participants; \Box only the following classes of Retired Participants (must specify - specific positions are permissible; specific individuals may not be named): ______.

B. Cost Of Living Adjustment

The Employer may elect to provide for an annual cost-of-living adjustment (COLA) in the amount of benefits being received by Retired Participants and Beneficiaries, which shall be calculated and paid in accordance with the terms of the Master Plan. The Employer hereby elects the following **(check one)**:

- \Box (1) No cost-of-living adjustment.
- \boxtimes (2) Variable Annual cost-of-living adjustment not to exceed <u>3.0</u>% (insert percentage).
- \square (3) Fixed annual cost-of-living adjustment equal to ____% (insert percentage).

The above cost-of-living adjustment shall apply with respect to the following Participants (and their Beneficiaries) (check one):

- □ All Participants (and their Beneficiaries).
- Participants (and their Beneficiaries) who terminate employment on or after June 1, 1999 (insert date).
- □ Other (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)); specific positions are permissible; specific individuals may not be named):

The Adjustment Date for the above cost-of-living adjustment shall be (if not specified, the Adjustment Date shall be January 1): ______.

17. TERMINATION OF EMPLOYMENT BEFORE RETIREMENT; VESTING

A. <u>Eligible Regular Employees</u>

Subject to the terms and conditions of the Master Plan, a Participant who is an Eligible Regular Employee and whose employment is terminated for any reason other than death or retirement shall earn a vested right in his accrued retirement benefit in accordance with the following schedule **(check one):**

- □ No vesting schedule (immediate vesting).
- ☑ Cliff Vesting Schedule. Benefits shall be 100% vested after the Participant has a minimum of <u>5</u> years (insert number not to exceed 10) of Total Credited Service. Benefits remain 0% vested until the Participant satisfies this minimum.
- Graduated Vesting Schedule. Benefits shall become vested in accordance with the following schedule (insert percentages):

<u>COMPLETED YEARS</u> OF TOTAL CREDITED SERVICE	VESTED PERCENTAGE
1	%
2	%
3	%
4	%
5	%
6	%
7	%
8	%
9	%
10	%

Exceptions: If a vesting schedule other than that specified above applies to a special class(es) of Regular Employees, the Employer must specify the different vesting schedule below and the class(es) to whom the different vesting schedule applies.

Regular Employees to whom exception applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

Vesting Schedule for excepted class (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _______.

B. <u>Elected or Appointed Members of the Governing Authority</u>

Subject to the terms and conditions of the Master Plan, a Participant who is an elected or appointed member of the Governing Authority or a Municipal Legal Officer shall earn a vested right in his accrued retirement benefit for Credited Service in such capacity in accordance with the following schedule (check one):

- □ Not applicable (elected or appointed members of the Governing Authority are not permitted to participate in the Plan).
- \Box No vesting schedule (immediate vesting).
- Other vesting schedule (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): Benefits shall be 100% Vested after the Participant has a minimum of 4 years of Total Credited Service. Benefits remain 0% Vested until the Participant satisfies this minimum. If the Participant holds office as an elected or appointed member of the Governing Authority or is employed as an Eligible Regular Employee on July 1, 2003, then Service with the City prior to July 1, 2003, will be taken into account in determining whether the Participant has satisfied the 4-year Vesting requirement. Otherwise, service prior to July 1, 2003, will not be taken into account.

18. PRE-RETIREMENT DEATH BENEFITS

A. <u>In-Service Death Benefit</u>

Subject to the terms and conditions of the Master Plan, the Employer hereby elects the following in-service death benefit, to be payable in the event that an eligible Participant's employment with the Employer is terminated by reason of the Participant's death prior to Retirement (check and complete one):

- (1) □ Auto A Death Benefit. A monthly benefit payable to the Participant's Pre-Retirement Beneficiary, equal to the decreased monthly retirement benefit that would have otherwise been payable to the Participant, had he elected a 100% joint and survivor benefit under Section 7.03 of the Master Plan. In order to be eligible for this benefit, a Participant must meet the following requirements (check one):
 - \Box The Participant must be vested in a normal retirement benefit.
 - □ The Participant must have _____ years (insert number) of Total Credited Service.
 - □ The Participant must be eligible for Early or Normal Retirement.
 - □ Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.
- (2) Actuarial Reserve Death Benefit. A monthly benefit payable to the Participant's Pre-Retirement Beneficiary, actuarially equivalent to the reserve required for the Participant's anticipated Normal Retirement benefit, provided the Participant meets the following eligibility conditions (check one):

- The Participant shall be eligible upon satisfying the eligibility requirements of Section 8.02(c) of the Master Plan.
- □ The Participant must have _____ years (insert number) of Total Credited Service.
- □ Other eligibility requirement (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

Imputed Service. For purposes of computing the actuarial reserve death benefit, the Participant's Total Credited Service shall include **(check one)**:

- Total Credited Service accrued prior to the date of the Participant's death.
- □ Total Credited Service accrued prior to the date of the Participant's death, plus (check one): □ one-half (½) □ _____ (insert other fraction) of the Service between such date of death and what would otherwise have been the Participant's Normal Retirement Date. (See Master Plan Section 8.02(b) regarding 10-year cap on additional Credited Service.)

Minimum In-Service Death Benefit for Vested Employees Equal to Terminated Vested Death Benefit. Unless otherwise specified under "Exceptions" below, if a Participant's employment is terminated by reason of the Participant's death prior to Retirement, and if as of the date of death the Participant is vested but he does not qualify for the in-service death benefit, then the Auto A Death Benefit will be payable, provided the Auto A Death Benefit is made available to terminated vested employees under the Adoption Agreement (see "Terminated Vested Death Benefit" below).

(3) <u>Exceptions</u>: If an in-service death benefit other than that specified above applies to one or more classes of Participants, the Employer must specify below the death benefit payable, the class(es) to whom the different death benefit applies, and the eligibility conditions for said death benefit.

Alternative Death Benefit (must specify formula that satisfies the definite written program and definitely determinable requirements of Treasury Regulations Sections 1.401-1(a)(2) and 1.401-1(b)(1)(i) and does not violate limits applicable to governmental plans under Code Sections 401(a)(17) and 415):

Participants to whom alternative death benefit applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

Eligibility conditions for alternative death benefit (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): ______.

B. <u>Terminated Vested Death Benefit</u>

(1) Complete this Section only if the Employer offers a terminated vested death benefit. The Employer may elect to provide a terminated vested death benefit, to be payable in the event that a Participant who is vested dies after termination of employment but before Retirement benefits commence. Subject to the terms and conditions of the Master Plan, the Employer hereby elects the following terminated vested death benefit (check one):

- Auto A Death Benefit. A monthly benefit payable to the Participant's Pre-Retirement Beneficiary, equal to the decreased monthly retirement benefit that would have otherwise been payable to the Participant had he elected a 100% joint and survivor benefit under Section 7.03 of the Master Plan.
- □ Accrued Retirement Benefit. A monthly benefit payable to the Participant's Pre-Retirement Beneficiary which shall be actuarially equivalent to the Participant's Accrued Normal Retirement Benefit determined as of the date of death.

(2) <u>Exceptions</u>: If a terminated vested death benefit other than that specified above applies to one or more classes of Participants, the Employer must specify below the death benefit payable, the class(es) to whom the different death benefit applies, and the eligibility conditions for said death benefit.

Alternative Death Benefit (must specify formula that satisfies the definite written program and definitely determinable requirements of Treasury Regulations Sections 1.401-1(a)(2) and 1.401-1(b)(1)(i) and does not violate limits applicable to governmental plans under Code Sections 401(a)(17) and 415): ______.

Participants to whom alternative death benefit applies (must specify - specific positions are permissible; specific individuals may not be named): ______.

Eligibility conditions for alternative death benefit (must specify in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)): _____.

19. EMPLOYEE CONTRIBUTIONS

- (1) Employee contributions (check one):
- \boxtimes Are not required.
- □ Are required in the amount of ____% (insert percentage) of Earnings for all Participants.
- □ Are required in the amount of ____% (insert percentage) of Earnings for Participants in the following classes (must specify - specific positions are permissible; specific individuals may not be named): _____.

[Repeat above subsection as necessary if more than one contribution rate applies.]

(2) **Pre-Tax Treatment of Employee Contributions.** If Employee Contributions are required in Subsection (1) above, an Adopting Employer may elect to "pick up" Employee Contributions to the Plan in accordance with IRC Section 414(h). In such case, Employee Contributions shall be made on a pre-tax rather than a post-tax basis, provided the requirements of IRC Section 414(h) are met. If the Employer elects to pick up Employee Contributions, it is the Employer's responsibility to ensure that Employee Contributions are paid and reported in accordance with IRC Section 414(h). The Adopting Employer must not report picked up contributions as wages subject to federal income tax withholding.

The Employer hereby elects (check one):

- To pick up Employee Contributions. By electing to pick up Employee Contributions, the Adopting Employer specifies that the contributions, although designated as Employee Contributions, are being paid by the Employer in lieu of Employee Contributions. The Adopting Employer confirms that the executor of this Adoption Agreement is duly authorized to take this action as required to pick up contributions. This pick-up of contributions applies prospectively, and it is evidenced by this contemporaneous written document. On and after the date of the pick-up of contributions, a Participant does not have a cash or deferred election right (within the meaning of Treasury Regulation Section 1.401(k)-1(a)(3)) with respect to the designated Employee Contributions, which includes not having the option of receiving the amounts directly instead of having them paid to the Plan.
- □ Not to pick up Employee Contributions.

(3) Interest on Employee Contributions. The Adopting Employer may elect to pay interest on any refund of Employee Contributions.

- \Box Interest shall not be paid.
- □ Interest shall be paid on a refund of Employee Contributions at a rate established by GMEBS from time to time.
- □ Other rate of interest (must specify rate in a manner that satisfies the definite written program requirement of Treasury Regulation 1.401-1(a)(2) and the definitely determinable requirement of Treasury Regulation 1.401-1(b)(1)(i)):

20. MODIFICATION OF THE TERMS OF THE ADOPTION AGREEMENT

If an Adopting Employer desires to amend any of its elections contained in this Adoption Agreement (or any Addendum), the Governing Authority by official action must adopt an amendment of the Adoption Agreement (or any Addendum) or a new Adoption Agreement (or Addendum) must be adopted and forwarded to the Board for approval. The amendment of the new Adoption Agreement (or Addendum) is not effective until approved by the Board and other procedures required by the Plan have been implemented.

The Administrator will timely inform the Adopting Employer of any amendments made by the Board to the Plan.

21. TERMINATION OF THE ADOPTION AGREEMENT

This Adoption Agreement (and any Addendum) may be terminated only in accordance with the Plan. The Administrator will inform the Adopting Employer in the event the Board should decide to discontinue this volume submitter program.

22. EMPLOYER ADOPTION AND AUTHORIZATION FOR AMENDMENTS

Adoption. The Adopting Employer hereby adopts the terms of the Adoption Agreement and any Addendum, which is attached hereto and made a part of this ordinance. The Adoption Agreement (and, if applicable, the Addendum) sets forth the Employees to be covered by the Plan, the benefits to be provided by the Adopting Employer under the Plan, and any conditions imposed by the Adopting Employer with respect to, but not inconsistent with, the Plan. The Adopting Employer reserves the right to amend its elections under the Adoption Agreement and any Addendum, so long as the amendment is not inconsistent with the Plan or the Internal Revenue Code or other applicable law and is approved by the Board of Trustees of GMEBS. The Adopting Employer acknowledges that it may not be able to rely on the volume submitter advisory letter if it makes certain elections under the Addendum.

The Adopting Employer hereby agrees to abide by the Master Plan, Trust Agreement, and rules and regulations adopted by the Board of Trustees of GMEBS, as each may be amended from time to time, in all matters pertaining to the operation and administration of the Plan. It is intended that the Act creating the Board of Trustees of GMEBS, this Plan, and the rules and regulations of the Board are to be construed in harmony with each other. In the event of a conflict between the provisions of any of the foregoing, they shall govern in the following order:

- (1) The Act creating the Board of Trustees of The Georgia Municipal Employees' Benefit System, O.C.G.A. Section 47-5-1 *et seq*. (a copy of which is included in the Appendix to the Master Defined Benefit Plan Document) and any other applicable provisions of O.C.G.A. Title 47;
- (2) The Master Defined Benefit Plan Document and Trust Agreement;
- (3) This Ordinance and Adoption Agreement (and any Addendum); and
- (4) The rules and regulations of the Board.

In the event that any section, subsection, sentence, clause or phrase of this Plan shall be declared or adjudged invalid or unconstitutional, such adjudication shall in no manner affect the previously existing provisions or the other section or sections, subsections, sentences, clauses or phrases of this Plan, which shall remain in full force and effect, as if the section, subsection, sentence, clause or phrase so declared or adjudicated invalid or unconstitutional were not originally a part hereof. The Governing Authority hereby declares that it would have passed the remaining parts of this Plan or retained the previously existing provisions if it had known that such part or parts hereof would be declared or adjudicated invalid or unconstitutional.

This Adoption Agreement (and any Addendum) may only be used in conjunction with Georgia Municipal Employees Benefit System Master Defined Benefit Retirement Plan Document approved by the Internal Revenue Service under advisory letter J501718a dated March 30, 2018. The Adopting Employer understands that failure to properly complete this Adoption Agreement (or any Addendum), or to operate and maintain the Plan and Trust in accordance with the terms of the completed Adoption Agreement (and any Addendum), Master Plan Document and Trust, may result in disqualification of the Adopting Employer's Plan under the Internal Revenue Code. Inquiries regarding the adoption of the Plan, the meaning of Plan provisions, or the effect of the IRS advisory letter should be directed to the Administrator. The Administrator is Georgia Municipal Employees Benefit System, with its primary business offices located at: 201 Pryor Street, SW, Atlanta, Georgia, 30303. The business telephone number is: (404) 688-0472. The primary person to contact is: GMEBS Legal Counsel.

Authorization for Amendments. Effective on and after February 17, 2005, the Adopting Employer hereby authorizes the volume submitter practitioner who sponsors the Plan on behalf of GMEBS to prepare amendments to the Plan, for approval by the Board, on its behalf as provided under Revenue Procedure 2005-16, as superseded by Revenue Procedure 2015-36, Revenue Procedure 2011-49, and Announcement 2005-37. Effective January 1, 2013, Georgia Municipal Association, Inc., serves as the volume submitter practitioner for the Plan. Employer notice and signature requirements were met for the Adopting Employer before the effective date of February 17, 2005. The Adopting Employer understands that the implementing amendment reads as follows:

On and after February 17, 2005, the Board delegates to the Practitioner the authority to advise and prepare amendments to the Plan, for approval by the Board, on behalf of all Adopting Employers, including those Adopting Employers who have adopted the Plan prior to the January 1, 2013, restatement of the Plan, for changes in the Code, the regulations thereunder, revenue rulings, other statements published by Internal Revenue Service, including model, sample, or other required good faith amendments (but only if their adoption will not cause such Plan to be individually designed), and for corrections of prior approved plans. These amendments shall be applied to all Adopting Employers. Employer notice and signature requirements have been met for all Adopting Employers before the effective date of February 17, 2005. In any event, any amendment prepared by the Practitioner and approved by the Board will be provided by the Administrator to Adopting Employers.

Notwithstanding the foregoing paragraph, no amendment to the Plan shall be prepared on behalf of any Adopting Employer as of either:

• the date the Internal Revenue Service requires the Adopting Employer to file Form 5300 as an individually designed plan as a result of an amendment by the Adopting Employer to incorporate a type of Plan not allowable in a volume submitter plan as described in Revenue Procedure 2015-36; or

• as of the date the Plan is otherwise considered an individually designed plan due to the nature and extent of the amendments.

If the Adopting Employer is required to obtain a determination letter for any reason in order to maintain reliance on the advisory letter, the Practitioner's authority to amend the Plan on behalf of the Adopting Employer is conditioned on the Plan receiving a favorable determination letter.

The Adopting Employer further understands that, if it does not give its authorization hereunder or, in the alternative, adopt another pre-approved plan, its Plan will become an individually designed plan and will not be able to rely on the volume submitter advisory letter.

AN ORDINANCE (continued from page 1)

<u>Section 2</u>. Except as otherwise specifically required by law or by the terms of the Master Plan or Adoption Agreement (or any Addendum), the rights and obligations under the Plan with respect to persons whose employment with the City was terminated or who vacated his office with the City for any reason whatsoever prior to the effective date of this Ordinance are fixed and shall be governed by such Plan, if any, as it existed and was in effect at the time of such termination.

Section 3. The effective date of this Ordinance shall be May 11, 2023.

<u>Section 4</u>. All Ordinances and parts of ordinances in conflict herewith are expressly repealed.

Approved by the Mayor and Council of the City of Tybee Island, Georgia this _____ day of _____, 20____.

Attest:

CITY OF TYBEE ISLAND, GEORGIA

Mayor

City Clerk

(SEAL)

Approved:

City Attorney

The terms of the foregoing Adoption Agreement are approved by the Board of Trustees of Georgia Municipal Employees Benefit System.

IN WITNESS WHEREOF, the Board of Trustees of Georgia Municipal Employees Benefit System has caused its Seal and the signatures of its duly authorized officers to be affixed this _____ day of ______, 20____.

Board of Trustees Georgia Municipal Employees Benefit System

(SEAL)

Secretary

File Attachments for Item:

24. PLANNING COMMISSION MINUTES-4/17/2023

PLANNING COMMISSION Julie A. Livingston Robert J. Matkowski Elaine McGruder S. Michelle Nooney Whitley Reynolds Marie Rodriguez



CITY MANAGER Shawn Gillen

COMMUNITY DEVELOPMEN DIRECTOR George Shaw

> **CITY ATTORNEY** Edward M. Hughes

Planning Commission Meeting MINUTES April 17, 2023

Chair Whitley Reynolds called the April 17, 2023, Tybee Island Planning Commission meeting to order. Commissioners present were **Marie Rodriguez, Elaine McGruder, Julie Livingston, Robert Matkowski** and **Michelle Nooney.**

Consideration of Minutes:

Chair Whitley Reynolds asked for consideration of the March 20, 2023, meeting minutes. **Elaine McGruder** made a motion to approve. **Marie Rodriguez** seconded. The vote was unanimous.

<u>Disclosures/Recusals:</u> Chair Whitley Reynolds asked if there were any Disclosures or Recusals.

<u>Old Business:</u> Chair Whitley Reynolds asked if there was any old business. There were none.

<u>New Business:</u> <u>Site Plan: requesting to add character statues in front of Sugar Shack -301 1st St. -40003 15001 -</u> Zone C-2 -Liran Portal.

Elaine McGruder made a motion to approve. **Robert Matkowski** seconded. The vote to deny was unanimous.

<u>Site Plan: requesting to add seating and increase parking – 1115 & 1109 E US Hwy 80 -40026</u> 03021&40026 03022 -Zone C-2 -Chris Smith.

Marie Rodriguez made a motion to approve. **Elaine McGruder** seconded. The vote to approve was unanimous.

<u>Site Plan: requesting to add 3 townhomes while keeping existing structure -104 17th St. -40008 18001 -</u> <u>Zone C-1 -Walt Freeman.</u>

Elaine McGruder made a motion to approve. **Marie Rodriguez** seconded. Vote to approve was unanimous.

Site Plan: requesting to change use of property from Restaurant to Restaurant/Office -1601 Butler Ave. -40008 18004 -Zone C-1 -Walt Freeman.

Elaine McGruder made a motion to approve. **Marie Rodriguez** seconded. The vote to approve was unanimous.

<u>Text amendment #13: Sec. ? - To allow for property owners holding a building permit at the time of the moratorium to apply for an STR permit.</u>

Dee Matkowski, 20 Pulaski St. spoke against text amendment. **Dawn Shay**, 4 Billfish Ln. spoke against text amendment.

Robert Matkowski made a motion to approve. **Elaine McGruder** seconded. The vote to deny was unanimous.

<u>Text amendment #14: Sec. ?-To allow property owners holding a building permit at the time of the</u> <u>moratorium to apply for an STR permit after a public hearings.</u>

Dee Matkowski, 20 Pulaski St. spoke against text amendment. **Dawn Shay**, 4 Billfish Ln. spoke against text amendment.

Julie Livingston made a motion to approve. **Robert Matkowski** seconded. The vote to deny was unanimous.

<u>Text amendment #15A: Sec. ?-To allow property owners holding a building permit at the time of the moratorium to apply for an STR permit.</u>

Dee Matkowski, 20 Pulaski St. spoke against text amendment. **Dawn Shay**, 4 Billfish Ln. spoke against text amendment.

Robert Matkowski made a motion to approve. **Elaine McGruder** seconded. The vote to deny was unanimous.

<u>Text amendment #15B:</u> Sec. ?-To allow property owners holding a building permit at the time of the moratorium to apply for an STR permit.

Nick Sears, 1304 Venetian Dr. spoke against text amendment. Dee Matkowski, 20 Pulaski St. spoke against text amendment. Dawn Shay, 4 Billfish Ln. spoke against text amendment.

Robert Matkowski made a motion to approve. **Julie Livingston** seconded. The vote to deny was four to two in favor of the denial. **Michelle Nooney** voted against the denial.

<u>Text amendment #16: Sec. ?-To allow property owners who acquired property at the time of the</u> moratorium to apply for an STR permit after a public hearings.

Dee Matkowski, 20 Pulaski St. spoke against text amendment. **Dawn Shay**, 4 Billfish Ln. spoke against text amendment.

Elaine McGruder made a motion to approve. **Julie Livingston** seconded. The vote to deny was unanimous.

<u>Text amendment #17: Sec. ?-To allow for persons who acquired property before or during the</u> <u>moratorium to apply for an STR permit.</u>

Dee Matkowski, 20 Pulaski St. spoke against text amendment. **Dawn Shay**, 4 Billfish Ln. spoke against text amendment.

Elaine McGruder made a motion to approve. **Robert Matkowski** seconded. The vote to deny was unanimous.

Adjournment: Lisa L. Schaaf