Stone Bridge Reimagined

Community Partner:
The Town of Tiverton

Academic Partner:
The School of Architecture, Art and Historic Preservation

Summer 2014
The Roger Williams University Community Partnerships Center

The Roger Williams University (RWU) Community Partnerships Center (CPC) provides project-based assistance to non-profit organizations, government agencies and low- and moderate-income communities in Rhode Island andSoutheastern Massachusetts. Our mission is to undertake and complete projects that will benefit the local community while providing RWU students with experience in real-world projects that deepen their academic experiences.

CPC projects draw upon the skills and experience of students and faculty from RWU programs in areas such as:

- American Studies
- Architecture and Urban Design
- Business
- Community Development
- Education
- Engineering and Construction Management
- Environmental Science and Sustainability
- Finance
- Graphic Design
- Historic Preservation
- History
- Justice Studies
- Law
- Marketing and Communications
- Political Science
- Psychology
- Public Administration
- Public Relations
- Sustainable Studies
- Visual Arts and Digital Media
- Writing Studies

Community partnerships broaden and deepen the academic experiences of RWU students by allowing them to work on real-world projects, through curriculum-based and service-learning opportunities collaborating with non-profit and community leaders as they seek to achieve their missions. The services provided by the CPC would normally not be available to these organizations due to their cost and/or diverse needs.

CPC Project Disclaimer: The reader shall understand the following in regards to this project report:

1. The Project is being undertaken in the public interest.

2. The deliverables generated hereunder are intended to provide conceptual information only to assist design and planning and such are not intended, nor should they be used, for construction or other project implementation. Furthermore, professional and/or other services may be needed to ultimately implement the desired goals of the public in ownership of the project served.

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Group Participation: Tiverton Town Council | Tiverton Planning Board | Tiverton Economic Development Commission | Tiverton Conservation Commission | Tiverton Recreation Commission | Tiverton Harbor and Coastal Waters Management Commission

Students tour the Stone Bridge site with Tiverton town leaders.
Introduction

In the spring of 2014, the Town of Tiverton applied to the Community Partnerships Center (CPC) at Roger Williams University (RWU) for assistance in establishing scenarios for the redevelopment of the former Stone Bridge Gas Station parcel. Having recently purchased the Seaside Gas Station from the Cutillo Family Realty Trust, the Town needed to assess the feasibility of either repurposing the structure or demolishing it and reusing the parcel. This project would complement the Rhode Island Department of Transportation’s current plans to rehabilitate the adjacent bridge abutment.

During the summer of 2014, a multi-disciplinary group of RWU students enrolled in ARCH 530 Special Topics: Community Engaged Design Seminar through the School of Architecture, Art and Historic Preservation collaborated with Professor Arnold Robinson and Town Planner Kate Michaud. Together, they organized and hosted a community engaged workshop that would establish various scenarios for the redevelopment of the gas station and parcel.

Over the course of a two-day design charrette at Fort Barton School on July 18 and 19, students facilitated a conversation with community members. Looking at the Stone Bridge area, they considered how the Seaside Gas Station parcel fits into the Stone Bridge section of Tiverton and the proposed redevelopment of the area. Students took the information and ideas generated from the charrette and drafted conceptual designs based on the suggestions. The scenarios manifested in four mutually inclusive forms:

- Demolish the building for an open view of the Sakonnet River and Portsmouth.
- Build a new building for beach amenities or another purpose.
- Reuse the existing building as something else.
- Increase provisions for the local fisherman who frequent the site.
Methodology

Students working on the CPC project began their process by visiting the site and touring the surrounding area with local leaders on May 29. They met with Town Planner Kate Michaud, Town Council President Ed Roderick and Town Administrator Matt Wojcik to get a feel for the Town’s identity.

Next, students researched area demographics and performed a precedent study of other coastal recreation and fishing areas, some of which were conversions of existing structures. This information was used to construct plans and models for the site that would help generate discussion and design recommendations during the charrette.

In order to organize and prepare for the design charrette, students read *The Charrette Handbook: The Essential Guide for Accelerated Collaborative Community Planning by the National Charrette Institute*. Students also established an online presence to promote the event, including the creation of a website, a Facebook page and an online survey that would collect preliminary design suggestions from the community and be utilized at the charrette. Working with Kate Michaud, students booked a venue for the two-day event — The Fort Barton School — and began to generate and purchase materials for the design charrette.

The charrette was held over two days and three sessions between July 18 and 19. Students educated the public about the history of the Stone Bridge Village and the current situation. The community was able to share their opinions of how the parcel of land should be used.

With the suggestions and ideas gathered from these workshops, students were able to further develop conceptual designs for the proposed site. These were presented to the Town of Tiverton’s Planning Board in the fall of 2014.
Site Context

A coastal farming town along Rhode Island’s East Bay, Tiverton is considered a suburb of Fall River, Massachusetts. Tiverton and Little Compton (directly to the south) are disconnected from mainland Rhode Island. They share an eastern border with Westport, Massachusetts. Aquidneck Island stretches to its west across the Sakonnet River. Tiverton has four districts: Tiverton, North Tiverton, South Tiverton and Stone Bridge. According to the 2010 United States Census, Tiverton has a total area of 36.3 square miles and a population of 15,780 people. The median age is 46.

1. Aerial view of Tiverton and surrounding area.
2. Much of Tiverton is rural farming space.
Stone Bridge

The parcel of land of the former Seaside Gas Station is located on Main Road in Tiverton, next to Grinnell’s Beach, the Stone Bridge Abutment and Memorial Park. The parcel sits in the Stone Bridge section of Tiverton and is located near neighborhoods, restaurants and local businesses. The site is easily accessible via car, boat, foot and bicycle.
History

Stone Bridge History

Howland’s Ferry Service, established in 1640, was once the primary means of travel across the Sakonnet River from Tiverton to Portsmouth, according to Nancy Jensen Devin and Richard V. Simpson’s book, Images of America: Tiverton and Little Compton. In 1794 the Rhode Island Bridge Company bought the rights to the ferry and built a wooden toll bridge. This collapsed a number of times due to storm damage until 1810 when 280,000 tons of stone were used to establish the base of the abutments that remain to this day. A wooden drawbridge joined the two sides to allow access for boats. The connection to Aquidneck Island allowed the Stone Bridge Village in Tiverton to take root and grow. By 1864, a cluster of about twelve buildings included a blacksmith, a boot shop, a general store, a post office and a hotel.

In 1871, the towns of Portsmouth and Tiverton purchased the bridge from the company and donated it to the State, eliminating the toll for the bridge. In 1898, the development of railways in Newport and Fall River necessitated the wooden drawbridge be replaced by a steel structure capable of supporting 20 tons. In 1907, the new double-roller lift bridge was open to traffic.

The bridge was in constant need of repair. Storms and ships caused constant damage to the bridge from the time of its construction to the final tempest of its life in 1954 — Hurricane Carol.

Two years later in 1956, the Stone Bridge was decommissioned when the Sakonnet River Bridge opened.

163 years of being torn down by gales and swells as well as being battered by boats and debris left the two stone abutments isolated on either end of the river. During the years of wear, tear and erosion, sand formed and washed along the shore and this became the site of what is now Grinnell’s Beach.

The Acquisition of the Seaside Gas Station

In February of 2014, The Town of Tiverton purchased the former Seaside Gas Station from the Curillo Family Realty Trust. The Curillo family owned the site from the 1960s to 2009, when they sold it to an owner aiming to operate a gas station. Funding from the Department of Transportation, the Rhode Island Department of Environmental Management and the Tiverton Open Space Commission will provide for the removal (with or without replacement) of the building or the restoration of it for another purpose.

Abutment’s Renovation

The bridge abutment has received significant funding for repair from the Rhode Island Department of Transportation because of its purpose as a breakwater. Just to the north on the Sakonnet River are the Standish Boat Yard and the Pirate Cove Marina. The abutment serves as a barrier to quell ocean swells and to allow boats to rest peacefully in the harbor. A small portion of the budget will go to the reconfiguration of Memorial Park that stands between the abutment and Main Road. Work on this will start in 2015.
Existing Conditions

The Seaside Gas Station sits in front of Grinnell’s Beach on Main Road. Directly adjacent to the north is Memorial Park and extending from this into the Sakonnet River is the bridge abutment. Together, these four landmarks form an important recreational corner of the Stone Bridge District.

Gas Station
The single-story cinderblock gas station is in generally fair condition. The building is structurally sound, although the windows and doors are in poor condition and the west-facing windows have been boarded over with plywood. There is a great deal of surface deterioration from environmental staining, mold and water damage. The overall site is in poor condition as the original asphalt is cracking and contains several sinkholes. The recent removal of the gas tanks has also left the site with large areas of loose gravel. The site is surrounded by rusted metal guardrails, which cut off all access from the adjacent beach and driveway.
1. Western facade has boarded up windows. Rusty guard rail cuts off access from adjacent beach.

2. Gas station interior.

3. Northeast corner under fascia exhibits surface corrosion and rust.

4. One of several sinkholes on the property.
Grinnell’s Beach

This small town beach is somewhat neglected as Fogland Beach in South Tiverton is more popular with local residents. Grinnell’s is difficult to see and often driven past on Main Road in the blur of the landscape.

There is no properly defined parking area for the beach, so cars are parked right up to the water. The breakwater is disheveled and lackluster, partially comprised of discarded concrete slabs. Trash and debris wash up with the tides and are strewn about the coarse and rocky sand. The facilities are un-inviting and small. There are picnic benches and a playground that could use some refurbishment. However, the view from the beach is spectacular, and the comfortable size makes it a nice place for a quick dip with the family.
1. Grinnell’s is a man-made beach located next to the historic Stone Bridge abutment.

2. The restroom facilities are small and uninviting.
Stone Bridge Abutment

The Stone Bridge Abutment on Tiverton’s side of the river is scheduled for a partial rebuild in 2015. The steel is rusted, and the stones are falling into the water. The abutment serves as a breakwater that protects the waterway and provides calm waters of the harbor to the north. To ensure the safety of the boatyards and to prevent further jetty crumbling, $2.3 million is being invested in the abutment’s repair.

Memorial Park

This small patch of green along Main Road leads up to the bridge abutment. A cement walking path is laid along the river’s edge. Trees shade shrubs and flowers, and the World War I doughboy statue looks over stone benches.
Stone Bridge District

Just across the street are the Stone Bridge Restaurant, a Cumberland Farms, and a plaza populated with medical offices. On Main Road just to the north, shops include Coastal Roasters, Bank Newport, Nature’s Rock Shop, Paul’s House of Flowers and Standish Boat Yard. A more inviting waterfront or place of attraction could draw in more business for these establishments.
Previous Designs and Precedent Analysis

Previous Designs

Before RWU and the CPC were involved in the project, professionals had been commissioned to draw up designs for refurbishing the current gas station as another gas station. It involved re-roofing the main building and the pump's overhang for a more pleasing appearance.

1. The Seaside Gas Station.
2-3. Sketch and perspective of proposed design by Choubah Engineering Group, P.C.
Plat map for the former Seaside Gas Station site.
1. Proposed main road elevation.
2. Proposed left side elevation.
3. Proposed floor plan and elevations by Choubah Engineering Group, P.C.
Rehabilitation plan for Old Stone Bridge.
Precedent Analysis

In order to generate models for discussion at the charrette, students researched similar sites and projects including Bowentown Beach Holiday Park in New Zealand, Nashville Fun for Families Laguardo Recreation Area, the Mannistee Fish Cleaning Station in Michigan, and the Third Wave Kiosk along the Murray River in Australia.
Community Survey

In order to obtain direct information from area residents about their vision for the future of the gas station parcel as well as the surrounding assets of Grinnell’s Beach and the Stone Bridge abutment, RWU students created and sought participation in a public opinion survey. The actual survey was carried out electronically using the web-based Survey Monkey platform. Participation in that survey was promoted in several ways:

- A large banner was placed on the former Seaside Gas Station so people could take notice of the project, website, survey and the public workshop dates as they drove by on Main Road.
- All media coverage before the event mentioned public participation in the survey.
- Direct promotion through the project website www.Stonebridgereimagined.com.
- Links through affiliated websites such as the town of Tiverton and area civic organizations.
- Social media promotion through links on Facebook.

It is important to note that this kind of survey only draws responses from those people who show an active interest in project participation and the planning process. It is not a randomly selected population and cannot be considered statistically valid for its responses on key issues. However, it does provide an important view into some of the opinions of area residents about the potential future for the gas station site and the surrounding area. The survey remained active for approximately one month and resulted in a total of 217 responses from June 19-21, 2014.
Q2 In the last year have you used the amenities of Grinnell Beach or Old Stone Bridge abutment?
Answered: 214  Skipped: 3

Yes, on more than five... 20.56%
Yes, but on less than five... 35.05%
No 44.39%

Q3 Please rank the following as the MOST positive to LEAST positive outcomes that should result from the redevelopment of the Stone Bridge Gas Station parcel. (1 being MOST and 5 being LEAST positive)
Answered: 216  Skipped: 1

- Beautification of the Area
- Economic Development
- Increased Public Access
- Increased Recreational
- Other

1 MOST Positive  2  3  4  5 LEAST Positive
Q4 Please rank the following overall community benefits that could result from the redevelopment of the Stone Bridge Gas Station parcel. (1 being MOST important and 7 being LEAST important)

Q5 Please rank, in order of preference, a future use for the Stonebridge Gas Station parcel. (1 being MOST desirable and 4 being LEAST desirable)
Q6 If you could improve Grinnell’s Beach, please rank your preference for the following possible improvements (1 being your FIRST choice and 4 being your LAST choice).

Answered: 210  Skipped: 7

- Improved changing/shower...
- Improved parking...
- Location and a facility for...
- Designated area (with...

Q7 If you could improve the Stone Bridge Abutment, please rank your preference for the following possible improvements (1 being your FIRST preference 4 being your LAST preference).

Answered: 210  Skipped: 7

- Improved walking path...
- Improved lighting.
- Improved fishing pier.
- Improved dock for Town Fir...
Design Charrette

Planning the Charette

To prepare for the design charrette, students distributed posters and flyers around town to various businesses, gathering areas and door to door. RWU’s Public Affairs staff also distributed press releases to local media outlets, while Professor Arnold Robinson and his students met with Town officials and attended council meetings to canvass and promote the design workshop.

The design charrette was promoted regularly in local news outlets, including The Fall River Herald, The Sakonnet Times, EastBayRI.com, The Tiverton Patch and The Newport Daily News.

RWU students created a website with images of the site, historical background, a description of the project and processes being undertaken by the Town and students, goals for the project, ways for people to be involved, dates and times for the design charrette and links to the survey. Students also created a Facebook page for the project in order to share updates and interact with interested constituents.

The news was out, the information available — citizens had what they needed to arrive educated and ready to contribute to the vision for a small triangle of the town. Students had their statistics from the survey to form their models and proposals. They processed images and prepared graphics that would generate discussion.
Before anyone could enter the gymnasium of Fort Barton Elementary, there were practical logistics to take care of. Formal invitations were distributed to the Town Boards and Committees; maps, photos and floor plans were generated to make set up easier for volunteers; supplies and refreshments were purchased and donated to help support the event.

The steps students took to plan the community event could be turned into a systematic template used to work on other public issues.

Ground Rules
Students drafted a manifesto of civility for public forums and went over these ground rules with all charrette participants at the start of each session. Participants were encouraged to listen and consider courteously, encourage concerted efforts and embrace all possibilities — not ruling out any options. These established guidelines preserved the harmony of the generously participating public.

The Charrette
The Stone Bridge Reimagined community charrette was designed as a facilitated public conversation that would allow Tiverton and area residents to have input into the future use of the gas station parcel and how it relates to surrounding resources like Grinnell’s Beach, Memorial Park and the Stone Bridge abutment. Its goals were to foster the honest identification and discussion of the issues and then attempt to come to consensus regarding possible scenarios for land use, physical configuration and relationships to the surrounding neighborhood. For RWU
students, it was an opportunity to learn about design and planning through a real-world project and to demonstrate dynamic planning through their ability to attract, connect with and engage with concerned citizens on a specialized topic.

The workshop was free and open to the public. The sessions took place in the morning and evening of July 18 and on the morning of July 19, providing ample opportunity for everyone who wished to participate to attend the charrette. 31 people attended the 10:00-2:00 p.m. session on
Friday, July 18. That same evening from 6:00-9:00 p.m., 38 people attended. 20 people attended on Saturday, July 19 from 10:00-4:00 p.m. A total of 89 interested people attended the charrette and offered their voices and opinions.

Then, they separated for small group work at the six tables headed by students. A designated scribe posted sticky notes on their collection boards. They asked these questions:

• How do you imagine the Gas Station site/building being used?
• How might those uses relate to the surrounding uses and areas?

After an hour, group work was gathered, shared and discussed by the whole workshop. Then, in small groups again, participants focused on the design of the site, asking the questions:

• How do you imagine the Gas Station site/building looking and functioning?
• How might this design integrate with the surrounding uses and areas?

Finally, these ideas were shared and discussed and the meeting came to a close.
Outcomes

The charrette produced four potential scenarios that could define the site’s future appearance. They are not mutually exclusive, meaning more than one could be implemented alongside others. Their main purpose is to give the Town Planning Board a sense of direction when drafting their own final designs for the site. It gives them a general idea of what the community might want from the parcel.

Scenario 1: A New Structure

The existing structure would be removed to extend the park area with a new building. Pathways and low planters, sloping down stairs and ramps, would wind their way to the waterfront, connect the beach with the potential open pavilion amenities — including improved shower and changing facilities. This would involve demolition of the current site and construction of a new one. It would allow for modernization and customization for a purpose.
Scenario 2: A Natural Beach

The building would be torn down — replaced by an open space that would allow for a view of Portsmouth's eastern shore. Parking would be designated along the abutment. Grove trees would be planted. A retaining wall would separate a small green area from beach area. Sand quality would be improved. With no building, the beach and the area may be more aesthetically attractive.
Scenario 3: Retain and Repurpose the Gas Station Building

What once was the gas station would be shelled out and repurposed with another function: changing/shower facilities, food vending, equipment rentals (chairs, umbrellas, kayaks, etc.), art gallery, restaurant or harbormaster’s office — whatever is decided by town officials. Parking would be near the building. Pathways would lead to adjacent attractions.

Students recommended the existing structure be modified in one of two ways:

- A glass building that maximized views with large openings for easy access to areas and expansion including a potential observation deck.
- A rustic, Tivertonian-themed style — wood clad with punched openings, with the back of the building open to views.

1. Scenario 3 proposed renovation involves repurposing the gas station building for flexible uses.
4. Sketch of structure renovation as a glass building to maximize views.
Scenario 4: Improved Fishing Facilities

Fishing facility improvement would work in conjunction with any of the previously proposed scenarios. A strong and persistent sentiment expressed at the charrette was the need to clearly define areas for fishing and swimming. A stone wall would be constructed for this purpose. A welcome gate would greet people carrying poles over their shoulders. Having bench seating continue from the abutment to the fishing area would encourage congregation.

Facilities could be added: trash cans, fish line disposal containers, fish cleaning stations, sinks, water, wash bins and plentiful waste disposal containers. The town could add a refrigerated waste storage facility and the refuse could be sold to a company that produces pet food. This would be a way of producing money for the town that wouldn’t draw from tax dollars.

A Note on the Showers

The attendees of the charrette have identified these facilities as lacking. They could be restored, replaced or moved to the site of the former gas station.
Topics for Further Consideration

Before use and design of the former gas station site is decided, the community must first have a broad discussion and then make a decision on two conflicting elements:

- The value of view corridors from Main Road and buildings to the north and east.
- The role of the site in being an activity center on the waterfront.

Regardless of the future use of the gas station, it is recommended that:

- The former gas station site be integrated into Grinnell's Beach, Stone Bridge abutment and the overall Stone Bridge neighborhood.
- The pedestrian, bathing and fishing areas be demarcated and separated from vehicular traffic and parking areas.
- The fishing area be clearly demarcated from swimming and walking areas.
Conclusion

RWU students with faculty and community leaders planned and implemented a community design charrette that discussed the future of the Seaside Gas Station and the surrounding area. The workshop informed citizens and encouraged them to engage in an educated and productive conversation of how best to use the parcel of land. Their findings will be presented to the Town of Tiverton and used for considering a final plan for the site.

The students created a civic forum for an important issue Tiverton needed to consider. They gathered people in one space and developed possible solutions over the course of two days and three sessions. They encouraged activism and awareness of political happenings that will have a definitive outcome in a physical form. The work of the students and the charrette participants will impact the public spaces in Tiverton that many people use and see every day. Their collaborative work will inform decisions and designs, which will turn these spaces into a place where visitors and residents will want to stop, linger, walk along the beach or in the park, or enjoy coastal recreational activities.