## The Progressive Club Johns Island, South Carolina

# Preservation Studio Spring Term 2015

Graduate Program in Historic Preservation

COLLEGE of

The Graduate program in Historic Preservation sponsored through Clemson University and the College of Charleston would like to extend our thanks to the following groups and individuals: The family of Esau Jenkins, The Progressive Club Board members, Wesley United Methodist Church, Craig Bennett with Bennett Preservation Engineering, Historic Charleston Foundation, Clemson University's Graduate School of Architecture, Professor Amalia Leifeste, teaching assistants Sarah Sanders and Amber Anderson, and the community of John's Island.

Project Completed by: Jane Ashburn, Amanda Brown, Naomi Doddington, John Evangelist, Brent Fortenberry, Jessica Fortney, Haley Schriber, Anna Simpkins, Jean Stoll, Michelle Thompson, Rachel Walling, Meghan White, & Meredith Wilson

The Graduate Program in Historic Preservation with Clemson University/College of Charleston has spent one month researching and documenting the Progressive Club on Johns Island, South Carolina.

We spent time researching the history of the Progressive Club so that we had a better understanding of the structure we would be studying and documenting. Our first day on site, the class divided into small teams, each focusing at a different section of the building and working on measured drawings. All interior and exterior walls have been measured to 1/8 inch per the Historic American Buildings Survey standards. The field drawings and measurements were then entered into AutoCAD software to create digital drawings. See the Progressive Club measured drawings section for the result of this work.

Next our class assessed conditions of the Progressive Club. Groups looked at structural concerns where walls are bowing outward, areas with bio growth, areas where chemical alterations have occurred and mechanical failures in the building material. We discussed current conditions on site with structural engineer, Craig Bennett of Bennett Preservation Engineering, PC. See the Progressive Club condition drawings at the end of this report for our full analysis.

Finally, the class discussed at length possible avenues for the site moving forward. As preservationists, we looked to the specific standards set forth by the Secretary of the Interior and the National Park Service. Options range from allowing the site to decay with no intervention to building an entirely new structure.

The following report includes:

- o A brief history of Johns Island and the Progressive Club
- o Detailed descriptions of the documentation process
- o Detailed discussion of current conditions
  - o Individual mechanisms of decay
  - o Building pathology
- o Treatment options
- o Visions for the Progressive Club
- o Summary of options
- o Appendix
  - o Measured Drawings
  - o Condition Drawings

#### Johns Island, South Carolina

The earliest known inhabitants of what is now Johns Island South Carolina were tribes of nomadic Native Americans who sustained themselves by hunting and are thought to have erected impermanent lean-to dwellings made of animal hides. Linguistic and archeological findings, supported by Native legend, suggest that these earliest people migrated from the Mississippi and Ohio River valleys. Evidence of this early Native occupancy is supported by shell rings found on Johns, and other surrounding islands. Shell rings consist of oyster shells, fish bones, and broken shards of pottery. In essence, shell rings are made up of the most enduring remaining evidence of discarded wastes.<sup>1</sup>

The Progressive Club is located along River Road just off the coast of Charleston County in pastoral Johns Island. Johns Island is situated inshore of Seabrook and Kiawah Islands, lies west of James, and east of Wadmalaw Islands, and is separated from the mainland by the Stono River, part of the Intracoastal Waterway. At present, almost one-third of the island has been annexed by the City of Charleston.<sup>2</sup> This rural barrier island is located just a twenty-five minute drive from famous Broad Street on the Charleston peninsula, but feels like a world away. Johns Island is just one of many expanses of land that collectively form what are commonly referred to as the Sea Islands. This low-lying archipelago stretches along the coast of the Atlantic Ocean, from South Carolina all the way down to Florida. The Sea Islands are detached from the mainland by a series of rivers, marshes, tidal creeks, inlets, and lagoons. Johns Island abounds with quintessential, picturesque Southern landscapes; live oaks drip with Spanish moss while elegant, long-limbed egrets wade in the grassy marsh below. Alligators, sea turtles, and snakes are not an infrequent sight. It is here on Johns Island that one finds the celebrated Angel Oak tree, thought to be one of the oldest living things east of the Mississippi River.<sup>3</sup> The Angel Oak is estimated to be in excess of 400-500 years old, stands 66.5 feet tall, measures 28 feet in circumference, and produces enough shade to covers 17,200 square feet. From tip to tip its longest branch distance is 187 feet.<sup>4</sup> Some suggest that the Johns Island Angel Oak might date back as far as 700 to 1400 years ago.5 Like the Progressive Club Sea Island Center, the Angel Oak was severely damaged as a result of Hurricane Hugo in 1989, though it has subsequently been rehabilitated in an effort that received both local and national attention. The Angel Oak and its surrounding 35 acres of forest have by now been protected in perpetuity.<sup>6</sup>

<sup>1 &</sup>quot;Johns Island, South Carolina," *SCIWAY,* (Sciway.net, 2015), http://www.sciway.net/city/johnsisland.html, Accessed Feb. 14, 2015. 2 "Johns Island, South Carolina."

<sup>3 &</sup>quot;Angel Oak Park," *Charleston Parks Conservancy*, (Charleston Parks Conservancy, 2010), http://www.charlestonparksconservancy.org/ our\_parks/view\_park/angel\_oak\_park/. Accessed Feb. 14, 2015.

<sup>4</sup> Angel Oak Tree, (Angel Oak Tree, 2015), http://www.angeloaktree.com/, Accessed Feb. 14, 2015.

<sup>5</sup> Sarah Fick, David Schneider, and Robert P. Stockton, James Island and Johns Island Historical Survey, (Preservation Consultants, Inc., 1989,) pg. 4

<sup>6</sup> Queen Quet Marquetta L. Goodwine, "Continuing to Progress on Johns Island, SC, in the Gullah/Geechee Nation," *Gullah/Geechee Nation*, (September 21, 2013,) http://gullahgeecheenation.com/2013/09/21/continuing-to-progress-on-johns-island-sc-in-the-gullahgeechee-nation/, Accessed Feb. 14, 2015.

Also located on Johns Island is the only remaining Praise House built by the South Carolina Sea Island people. Built in 1917, Moving Star Hall was the assembly place of the Moving Star Young Association. The Association served as a religious, social, and charitable community organization important for the role it played in preserving the black musical, religious, humanitarian, and social traditions of the Sea Island people.<sup>1</sup> The Praise House is known to have been replaced by churches after emancipation and is significant for carrying the "survival of a purely plantation institution into the early 20th century."<sup>2</sup> The Moving Star Praise House is now listed on the National Register of Historic Places.

#### The Sea Island Gullah People

The Gullah are a distinguished group of African Americans whom inhabit the Atlantic coastal Sea Islands of South Carolina and Georgia. "Because of their geographical isolation and strong community life, the Gullah have been able to preserve more of their African cultural heritage than any other group of Black Americans. They speak a creole language similar to Sierra Leone Krio, use African names, tell African folktales, make African-style handicrafts such as baskets and carved walking sticks, and enjoy a rich cuisine based primarily on rice."<sup>3</sup> In the 18th century, white American colonists in the region learned that the cultivation of rice would be a superior crop choice in the marshy semi-tropical terrain along the coastline. Having little familiarity themselves with the production of challenging rice crops, these colonists made the decision to forcibly import African slaves mainly from the West African country of Sierra Leone, a region they referred to as the "Rice Coast," The Rice Coast is part of the customary rice-growing region of the African continent. Africans involuntarily imported from the Rice Coast comprised the largest number of slaves brought to South Carolina and Georgia in the 18th century. The Gullah people who inhabit the Sea Islands today, including Johns Island, are direct decedents of these rice-growing individuals. The Gullah have deep roots on Johns and the other Sea Islands, their rich and vibrant history is an indelible part of the story of the lowcountry.<sup>4</sup>

<sup>1 &</sup>quot;National Register Properties in South Carolina: Moving Star Hall, Charleston County," *South Carolina Department of Archives and History*, http://www.nationalregister.sc.gov/charleston/S10817710118/, Accessed Feb. 14, 2015.

<sup>2 &</sup>quot;National Register Properties in South Carolina: Moving Star Hall, Charleston County."

<sup>3</sup> Joseph A. Opala, *The Gullah: Rice, Slavery, and the Sierra Leone-American Connection*, http://www.yale.edu/glc/gullah/, Accessed Feb. 14, 2015.

<sup>4</sup> Opala.

#### The Progressive Club

In 1948 Esau Jenkins and Joe Williams, two Sea Island residents, organized the Sea Island Progressive Club Center to respond at first to the legal, and later to the economic and social, needs of the African-American Sea Island communities surrounding Charleston, South Carolina.<sup>1</sup> Esau Jenkins, who was born on Johns Island on July 3, 1910, had long been aware of the difficulties facing the African-American population Johns Island and the wider Charleston area.<sup>2</sup> In 1945 he purchased a bus to transport island children, including his own, to Burke High School in Charleston. Until 1953, when the Haut Gap High School opened, there was no high school for black students on Johns Island. Jenkins' bus was the only way for most Johns Island children to attend high school.<sup>3</sup>

The assault of Sammy Grant, an African-American Johns Island resident, spurred Esau Jenkins to extend his efforts to helping the wider Sea Island community. The statement of significance for the Progressive Club national register application states that Sammy Grant "was shot by a white man for kicking at the man's dog in an effort to defend himself from an attack."<sup>4</sup> Esau Jenkins recounted a slightly different version of events in *Ain't you got a right to the tree of life*. He stated that a white woman accused Sammy Grant of setting his dog on her dog. Grant denied the story, but the next day the woman's husband, a Mr. Malone, called Grant out of his house. Malone shot Grant with a 12-gauge shotgun at nearly point-blank range. Grant survived, and Malone was originally acquitted of any wrong doing. "Here's another man being shot for a dog," Jenkins said. He went on, "We can't afford to let things like that go on. We, as people who know better, should make it better and make race relations better."<sup>5</sup> Jenkins organized a group of citizens to hire a lawyer, and Malone was eventually found guilty of assault and fined.<sup>6</sup>

In response to this incident, Esau Jenkins and Joe Williams organized the Progressive Club in 1948 to provide legal assistance to African-American residents of the Sea Islands. The first fifteen members met in the Moving Star Hall every third Sunday. They collected monthly dues that were used to pay bail and hire attorneys for members charged, often unjustly, as in the case of Sammy Grant, for legal violations.<sup>7</sup> The organization gradually began to focus on the more general social and economic needs of the community. Funds were then used not only for legal assistance but also for low interest loans to African Americans to purchase "cars, fertilizer, and other necessities."<sup>8</sup> The Progressive Club quickly became a vital source of economic relief for the impoverished African Americans of Johns Island and other Sea Island communities.

#### "A First Class Citizen" - The Citizenship School

Esau Jenkins, however, was not content to only offer financial assistance to his fellow island residents. He had a grander vision of permanently bettering the social and political standing the African-American Sea Island community. In 1948, the same year he organized the Progressive Club, Jenkins purchased buses to transport island residents who commuted into

<sup>1&</sup>quot;Statement of Significance," National Register of Historic Places Registration Form, (United State Department of the Interior, National Parks Service, 2007), 2007, 13.

<sup>2&</sup>quot;Statement of Significance," 19.

<sup>3</sup> Ibid., 20.

<sup>4</sup> Ibid., 13.

<sup>5</sup> Guy and Candie Carawan, Ain't you got a right to the tree of life: The People of Johns Island, South Carolina - Their Faces, Their Words, and Their Songs, (Athens: University of Georgia Press, 1989), 145-146.

<sup>6 &</sup>quot;Statement of Significance," 13.

<sup>7</sup> Ibid., 13-14.

Charleston to work.<sup>1</sup> One day in the 1950s, one of his passengers, a Mrs. Alice Wine, asked Jenkins if he would teach her to read and write so she could pass the literacy tests required to vote.<sup>2</sup> She recounted the experience in *Ain't you got a right to the tree of life*?

He start to help me read and when I get to them hard words I feel like jump it. My tongue so heavy until I couldn't pronounce the words, you know. But he said to me, 'No, the hard word is the things for you to learn."... Then he take we up to a registration board on Society Street, and we get in line... And I be in line next to this girl, and she read and she stammer. And then the man put me for read, and I read those things just like I been know 'em.<sup>3</sup>

Mrs. Walker was the first of Jenkins' passengers to register to vote and to become, as she herself put it, a "first class citizen."<sup>4</sup> Esau Jenkins strove to teach all of the adults, who took his bus to work, to read the portions of the Constitution administered by the voting poll locations as literacy tests.<sup>5</sup> This is the beginning of what would, with the help of the Highlander Folk School, become the model of the Civil Rights era citizenship schools.

The Highland Folk School was a Civil Rights organization in Monteagle, Tennessee, that had already planted experimental schools for teaching community leadership skills to African Americans in rural Alabama and Tennessee. They had received mixed results.<sup>6</sup> The citizenship school in Johns Island, by contrast, was proved to be a remarkable success.

In the summer of 1954, Jenkins and Septima Clark, another native of Johns Island, attended a workshop at the Highlander Folk Center. Clark had been a teacher in the Johns Island schools for decades until she was dismissed without pension because of her membership in the NAACP. With the help of the Highlander Folk Center, Clark and her niece Bernice Robinson developed a citizenship school curriculum that was implemented through the Progressive Club. With financial assistance from Highlander, Jenkins purchased the abandoned Mt. Zion Elementary School on River Road in Johns Island. The school building housed both the Progressive Club co-op and the citizenship school. The first citizenship classes were held in January of 1957.<sup>7</sup> Robinson and Clark focused on teaching the adult students literacy, particularly how to read the sections of the South Carolina constitution they would be required to read at the voting polls. Within three years, the number of registered voters on Johns Island had tripled.<sup>8</sup> In 1960 there were nearly 600 blacks registered to vote in Charleston County. The success of the Progressive Club Citizenship school led to the founding of similar schools on nearby Wadmalaw Island, Edisto Island, St. Helena Island, Daufuskie Island, and the north area of Charleston.<sup>9</sup>

<sup>1 &</sup>quot;Statement of Significance," 14.

<sup>2</sup> Ibid., 14.

<sup>3</sup> Carawan, 149.

<sup>4 &</sup>quot;Statement of Significance," 14.

<sup>5</sup> Ibid., 14.

<sup>6</sup> Townsend Davis, Weary Feet, Rested Souls: A Guided History of the Civil Rights Movement, (New York: W. W. Norton & Company), 1998, 432.

<sup>7 &</sup>quot;Statement of Significance," 14-15.

<sup>8</sup> Davis, 322.

<sup>9 &</sup>quot;Statement of Significance," 15-16.

The mission of the Progressive Club went well beyond the original purpose imagined by the Highlander Folk Center. Instructors did not only strive to prepare their students for the voting literacy tests; they strove to teach them any skills they deemed necessary to "shaping an effective citizen" and addressed the broader needs of their students.<sup>1</sup> Students learned arithmetic and writing in addition to reading. They also learned to order from catalogues and make money orders."<sup>2</sup> Bernice Robinson, the principal instructor of the school, wrote in a letter to her sponsors at Highlander detailing the many skills taught at the Progressive Club:

I have fourteen adults, four men and ten women, and there are thirteen high school girls enrolled to learn sewing. There are three adults that have had to start from scratch because they could not read or write... We have to give them some arithmetic. The men are particularly interested in figures.<sup>3</sup>

Her students learned to write their own names as well as short stories about their daily lives. Each session ended with the entire class singing local folk songs or freedom songs borrowed from Highlander.<sup>4</sup> As the Progressive Club's role broadened, it became clear that the organization needed a new facility. The old Mt. Zion Elementary School simply could not support all of the needs of the community. In addition to the growing citizenship school, Esau Jenkins envisioned providing Johns Island's black community with recreational facilities. The Progressive Club was also in need of space to accommodate the many out of town guests who came to observe the citizenship school. As news of the Progressive Club's success spread, similar programs grew throughout South Carolina, Georgia, and Mississippi.<sup>5</sup> Between 1961 and 1965 sixteen hundred citizenship teachers were trained and sent out to educate roughly twenty-five thousand adults throughout the Southeast.<sup>6</sup>

#### 1962 - The Current Building

In 1962, the old Mt. Zion Elementary school was demolished, and a larger building, which stands in ruins today, was completed in March of 1963.<sup>7</sup> The small front room served as co-operative grocery store and gas station; two fuel pumps were installed out front.<sup>8</sup> The proceeds from this store were used to repay the fifteen hundred dollar loan from the Highlander Folk School who secured funding the construction of the building.<sup>9</sup> The large multipurpose room was added soon after the construction of the store.<sup>10</sup> It was used as a gymnasium, classroom, community center, day care, and commercial kitchen. This study will refer to this multipurpose room as the gathering space. As part of a third building campaign, a line of four dormitories with bathrooms extended from the back side of this central room. These rooms were used to participate in workshops at the Progressive Club.<sup>11</sup>

<sup>1</sup> Ibid., 15.

<sup>2 &</sup>quot;Statement of Significance," 15-16.

<sup>3</sup> Davis, 322.

<sup>4</sup> Ibid., 327.

<sup>5 &</sup>quot;Statement of Significance," 16.

<sup>6</sup> Davis, 323.

<sup>7 &</sup>quot;Statement of Significance," 16.

<sup>8</sup> Ibid., 16.

<sup>9</sup> Davis, 326.

<sup>10</sup> Progressive Club, Property Files, Historic Charleston Foundation.

<sup>11 &</sup>quot;Statement of Significance," 16.

In 1964 a small porch to the west of the gathering space and to the south of the dormitories was closed in and served as an office and bookstore.<sup>1</sup> This study will refer to this room as the sun porch. There was also a volleyball court on the lawn.<sup>2</sup>

The mid 60s was high point in the Progressive Club's history. The organization continued to be active in improving the political standing of the local African American community, but now its new facilities allowed it to have a more pronounced influence in all aspects of community life. The Progressive Club was concerned with more than political equality; it was concerned with the overall quality of life of the surrounding community. A letter from Esau Jenkins to Gedney Howe of the Antipoverty Program details the services the club offered:

The people with whom I work are some of the poorest ones on God's earth, I believe. If I were to tell you all the conditions of some of the homes I have visited, I don't think you would believe that these conditions still exist in America at this day and time... Because of the conditions noted above, we have obligated ourselves and denied ourselves, and borrowed and begged for money to help build a center that our boys and girls and adults could use. It's the one place on the Island where they can play basketball, table tennis, and other games, or skate. We have also had workshops on citizenship. We have had a few folk festivals, which were well-attended by both races. We can't have these too often because of the lack of money.<sup>3</sup>

In the same letter, Jenkins goes on to describe the programs the Progressive Club would provide if given the money. These included a day-care for pre-school aged children; sewing, knitting, and ceramics classes for young people aged 16-21; and evening classes in basketball, weightlifting, adult remedial reading, music, and citizenship responsibilities.<sup>4</sup>

The Progressive Club continued to be a positive force in the Johns Island community through the 1960s. The center hosted multiple folk music festivals over the years. A major festival held in 1965 featured the Georgia Sea Island Singers, SNCC's choir, the legendary Moving Star Hall Singers, Guy and Candy Carawan, and Bernice Johnson Reagon of Sweet Honey in the Rock.<sup>5</sup>

In 1969 the Progressive Club served as a meeting place for discussing and addressing the MUSC Hospital Strike in Charleston.<sup>6</sup> Following Esau Jenkins' death in 1972, the Progressive Club began to fade.<sup>7</sup> The Club continued to operate the grocery store profitably until 1975. A group of Johns Islands then leased the space and operated it as a store for some time.<sup>8</sup>

However by the 1980s the building had fallen into disrepair. The final blow for the Progressive Club came in 1989 when Hurricane Hugo severely damaged the buildings roof. Since then the Progressive Club has lain vacant, falling further into disrepair over the years.<sup>9</sup> Within recent years, there has been a concerted effort to recognize the important role Esau Jenkins and the

<sup>1</sup> Progressive Club, Property Files, Historic Charleston Foundation.

<sup>2 &</sup>quot;Statement of Significance," 18.

<sup>3</sup>Esau Jenkins, "Letter from Esau Jenkins to Gedney Howe of the Antipoverty Program," (January 12, 1965), Esau Jenkins Papers, 1963-2003, Avery Research Center at the College of Charleston, Low Country Digital Library at the College of Charleston. 4 Jenkins.

<sup>5 &</sup>quot;Statement of Significance," 18.

<sup>6</sup> Ibid., 17.

<sup>7</sup> Davis, 330.

<sup>8 &</sup>quot;Statement of Significance," 19.

<sup>9</sup> Davis, 327.

Progressive Club at large played in the history of Johns Island. The property was added to the National Register of Historic Places in 2007, and in 2013 the Preservation Society of Charleston installed a historic marker in front of the Progressive Club ruins. The marker describes the amazing contributions of Esau Jenkins' and the Progressive Club to the Johns Island community and the regional and national significance of the place.<sup>10</sup> However, as of yet, the question of how to treat the ruins of the Progressive Club Sea Island Center has not been fully answered. This study aims to offer insight into the range of appropriate preservation treatments that may be applied to the site.

<sup>10 &</sup>quot;The Progressive Club, Charleston County," National Register Properties in South Carolina, (South Carolina Department of Archives and History), http://www.nationalregister.sc.gov/charleston/S10817710183/, Accessed Feb. 13, 2015.

<sup>&</sup>quot;Continuing to Progress on Johns Island, SC in the Gullah/Geechee Nation," (Gullah/Geechee Nation, Sept. 21, 2013), http://gul-lahgeecheenation.com/2013/09/21/continuing-to-progress-on-johns-island-sc-in-the-gullahgeechee-nation/, Accessed Feb. 13, 2015.

#### Why We Document

The documentation of historic structures provides a graphic record of significant buildings for future generations. Should a significant building, such as the Progressive Club, fall to greater disrepair, the record and architectural drawings of its former state will still exist. As buildings may continuously evolve, be adapted to new use, and undergo extensive alterations, the architectural drawings produced may serve as the only evidence of the building's previous, historical form.

Documenting a building such as the Progressive Club is the first step that should be taken before any type of alterations are made to the structure. Documenting the building allows for a snapshot look at the current condition of the building. This type of graphic documentation allows for a better informed decision with regard to mitigation options for the Progressive Club's future. Additionally, drawing sets such as those produced for the Progressive Club, can provide research opportunities for scholars near and far if submitted to a digital, public access archive such as the HABS collection at the Library of Congress. The submission of architectural drawings to the Library of Congress protects the records in a permanent and accessible collection for future use and safeguarding.

#### **Discussion of Conditions Reporting**

The following survey is a conditions report of the Progressive Club. With the aid of Craig Bennet, students gathered evidence through non-invasice methods to create a structural analysis of the ruins. The onsite observations presented here chronicles the current and potential future conditions of deterioration. The conditions investigation is presented in the following assessment reports: bio-growth & anthropogenic; thermal & meteorological; chemical; and mechanical, natural hazards, & electromagnetic.

Evaluating each system, we graded materials and building systems on historic and structural integrity. This study produced a set of drawings indicating the extent of each condition observed and further research determined the severity of each observed defect. The following report organizes the conditions in a range from detrimental to moderate concerns, which will be useful in moving forward with plans for the Progressive Club.

## Thermal and Meterological

#### Precipitation

Precipitation is a prevalent issue at the Progressive Club. The ground retains dampness due to lack of direct sunlight near most of the structure. Rainfall, dew, frost, and atmospheric moisture all affect the level of dampness in the ground and exposed concrete masonry units (CMUs). All of these sources of moisture contribute to the dampness of the structure and encourage the growth of mold and mildew. As a result, there is significant bio-growth throughout the exterior of the structure. The retained moisture has contributed to green and black mold as well as mildew that covers the structure, and provides a moist environment for clover and vine growth.

Metal elements on the structure have rusted with increased speed due to precipitation exposure. On some parts of the building there is significant staining of the CMU adjacent to the metals. This is a result of water passing over the metal and collecting iron and then depositing the iron on the adjacent surface as it washes over it.

In addition to precipitation, the building materials of the structure, primarily the CMUs and Portland cement-based mortars do not dry out and create a habitat for bio-growth on the cap and middle sections of the building. The corners of the building that do not receive direct sunlight and collect debris due to wind and other natural elements display a substantial amount of bio-growth.

## Thermal Cycle

Thermal cycles have contributed to slight movements within the structure as the building's different materials and components contract and expand slightly, depending on the outside temperature and their specific material properties. The most significant issue due to the thermal cycle are cracks that have appeared throughout the structure, notably the poured slab. The concrete flooring shows cracks that were likely due to the changes in temperature. The mortar joints around the CMUs and some lintels above doors have cracks as well. Building connections show varying degrees of separation that may be related to temperature fluctuations and is a major stability concern.

#### Wind

The ruins of the Progressive Club have significant wind damage, primarily from Hurricane Hugo in 1989. The effects are visible in the lack of a roof over the structure. Everyday wind has caused a build-up of leaves, dirt, and other debris in corners of the structure that affect dampness. Pressure from wind pressing on the walls has caused weakening of the CMUs as well.

## **Bio-Growth and Anthropogenic Damage**

#### **Bio-Growth**

The surrounding landscape hosts biological and human mechanisms of decay impacting the struture. Biological and anthropogenic conditions of the landscape consist of dispersed trash, man-made pits, evidence of termite damage in the wooden roofing system and window frames, and general overgrowth of the area.

The majority of surfaces at the Progressive Club feature bio-growth. Mold is prolific on the walls above six feet high and below one foot. Fungus such as lichens are located knee-to-waist high, mostly on the east and west exterior walls. Moss is also wide spread in the mortar joints of the CMUs, but does not appear to be destructive to the cement surfaces. Plant encroachment is evident on every surface of the building, ranging from clover and tree growth through the foundation to vine damage. Lastly, arboreal damage from roots growing too close to the foundation has caused the walls to deform in places. The remnants of the roof system and the front room north window frame show signs of termite damage.

#### Anthropogenic damage

Anthropogenic damage—conditions created by humans— to the site is visible across the area. Trash, consisting of old bottles and plastic, is located mainly outside the ruins but within the fenced in area. Old cisterns and septic tanks on the west side of the building are collecting trash and water. Holes in CMUs, ranging from an inch to six inches in diameter, suggest human interference.

#### **Chemical Agents**

A variety of issues of concern relating to chemical reactions on the structure of the Progressive Club. Corrosion of metals, iron staining, pitting marks from salt, chemical reactions due to water, environmental conditions, potential reactions of the paint to water or chemicals, and geochemicals could have affected the structure or foundation are all problems that present harm to the structure.

#### **Corrosive Agents**

Water and salt are the leading corrosive agents to be aware of in regards to the Progressive Club. Although CMUs are fairly resistant to corrosion, they are not immune to cracking or splitting due to other chemical reactions. Rusting of hinges, bolts, nails, lintels, metal brackets, and tierods, for example, have caused spalling, or splitting, of the CMUs, which weakens the structural integrity of the individual units. Attempts to strengthen the failing walls with rebar is problematic to the rusting of the metal, which expands the rebar and places undue pressure on the CMUs. There are also concerns about the decomposition of falling leaves both inside and outside which may affect the CMUs. Evidence of pitting on the poured concrete flooring may be attributed to ambient agents such as the decay of leaves. There is an area of questionable deposit located on wall 28 which may be calcium or lime build-up. There is no evidence of salt efflorescence at this time, which is a positive observation.

## Natural Disasters, Mechanical, and Electromagnetic Damage

#### Natural Disasters

The damage, and successive reverberations caused by Hurricane Hugo in 1989, has undoubtedly been the catalyst for much of the structure's current condition. This is especially noteworthy with regards to the failure of the roof. The absence of a roof is the single most substantial factor responsible for shortening the lifespan of the building. In essence, the loss of a roof has either caused, stimulated, or compounded all other factors responsible for the deterioration of the structure such as: water damage, bio-growth and injury to the foundation.

## Earthquake

Past damage and life-safety issues are a major threat. Precaution, with respect to the building's stability in an earthquake, is emphasized due to the structure's proximity to a fault line. On August 31st 1886 the largest regional earthquake to date in the Charleston area was recorded. Although the damage caused by the earthquake was most devastating to the city of Charleston proper, its effects were felt as far as 103 miles away. In fact, according to the United States Geological Survey (USGS) "many of the 20 earthquakes of intensity V or greater (Modified Mercalli scale) that centered within South Carolina occurred near Charleston." According to the Mercalli scale, an intensity rating of V is considered Moderate while the scale's highest rating of X (Extreme) is defined as "some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent."1

It is necessary to carefully consider the structure's vulnerability to earthquake, as non-reinforced CMU construction is not adequate to meet modern code requirements. The potential for earthquake in an unreinforced CMU structure produces a pressing concern for liability and life-safety issues.

## Flooding

The site and surrounding area is highly susceptible to flooding, as is much of the lowcountry. Furthermore, the Progressive Club is located in a zone that likely was landfill. This suggests that the ground is not sturdy and is likely to revert at some point to a swamp-like landscape. The site, as with many of the adjacent and nearby properties, shows clear visual evidence of pooling and standing water.

## Gravity

As with all buildings, gravity is undoubtedly working against the building. Deteriorating conditions related to gravity are evident with regards to the lintels ---the horizontal support of timber, stone, concrete, or steel located across the top of a door or window that spans the opening-as these areas support all of the stress forces from materials above the doorway. This places additional pressure on the center of each lintel, causing them to twist out of plumb.

<sup>1&</sup>quot;The Modified Mercalli Intensity Scale." The Modified Mercalli Intensity Scale. Accessed February 5, 2015. http://earthquake.usgs. gov/learn/topics/mercalli.php. 19

#### Vibrations from Road

The structure sits relatively near the main road. The near constant vibration caused by passing vehicles continuously agitates the structure and supporting soils. As the locations of both the road and the building are permanent, the only obvious solution would be to reinforce the walls nearest the road, keeping in mind this persistent factor.

#### Electromagnetic

Radiation stemming from UV light has drastically distressed the structure's interior and exterior paint layers, fading any surface exposed to the sun. Sampling remaining areas of paint protected from the sun, would allow comparisons to be drawn about original color. However, it is these shaded areas where paint is most intact, that are most susceptible to higher levels of moisture, contributing to bio-growth and water issues.

## Wall Stability

#### Issues with the Original Construction

The Progressive Club ruins are built of unreinforced CMUs. Inserting vertical steel reinforcing bars into the currently ungrouted channels of the block walls would help to stabilize them. However, reinforced concrete has a significantly shorter life span than unreinforced concrete. When steel reinforcing bars begin to oxidize they rust and expand. By contrast grout and concrete shrink overtime. Eventually the growing steel reinforcing bars will cause the surrounding grout and concrete to crack. An example of the incompatibility between concrete and steel reinforcing bars can be seen in the lintel over the doorway between the gathering space and the sun room. Swelling reinforcing bars have caused the poured concrete lintel to crack down its center. Stainless steel reinforcing bars to extend the lifespan of a reinforced structure but at great financial expense. These different approaches and their costs and benefits must be considered when going forward with any preservation plan for the Progressive Club ruins.

The settling of the walls and foundation, particularly at areas where additions are tied into the original structure, pose a potentially serious threat to the stability of the existing walls. The additions were constructed after the original structure had already experienced settling. The additions then continued to settle after the original structure had stabilized. This uneven settling has caused many parts of the additions to pull away from the original structure, resulting in large cracks in the walls. In particular, large cracks are visible at the western end of the north wall of the gathering space, where the wall of the original building was extended (see page 20 of the Condition Drawings), and at the southern end of the west exterior wall, where the dormitories were tied into the gathering space (see page 13 of the Condition Drawings). These cracks should be monitored to see whether they are dynamic or static. If the cracks are dynamic, meaning they are still growing, they will certainly be in need of further monitoring and perhaps intervention to prevent serious damage to the structure. If the cracks are static, meaning they are no longer growing, then they are far less urgent. Occasional monitoring is suggested, but intervention may not be necessary.

The interior walls dividing the dormitories are particularly unstable, as they are not tied into any other walls. These walls can be rocked back and forth with very little force. Access to this part of the ruins should be restricted, unless these walls can be properly braced with a connection to the north and south walls of the dormitories. The introduction of some sort of roof structure could serve to stabilize these walls if it can be properly tied in.

#### Newly Arisen Problems

The absence of any roof structure means there is no shear bracing to hold up the walls. Posi-

tive and negative pressure on the walls from wind are carried only by that wall rather than being shared by the adjacent walls.

Some sort of shear bracing, such as from a roof structure or additional tension rods, should be built and tied into the walls of the ruins in order to stabilize the existing walls, as with a stable, braced structure. A fully covered roof would have the added benefit of protecting the ruins from sun and rain. However, openings, including doors and window openings, in the walls would still allow wind to enter the building. A covered roof would have to combat uplift forces, possibly causing further damage to the walls in strong winds. An open roof or additional tension rods would not protect the structure from sun and rain, but it would be much less vulnerable to strong winds.

There are also places where a new window or door opening has been cut through the existing concrete walls without installing any sort of lintel. Since the structure was built without any horizontal reinforcement, the CMUs directly above these openings are totally unsupported. Most concerning is the doorway cut between the commercial space and the gathering space, where an unsupported concrete block has already begun to slip and is certain to fall (see page 14 of the Condition Drawings). This poses a serious life safety issue. This opening, as well as the others, must be properly supported to transmit the gravitational loads across the opening and secure material at the head of the opening from falling.

Throughout the structure, the concrete lintels above door and window openings are shifting, causing cracks in the walls. These areas should be monitored to see if the cracks are dynamic or static. If they are dynamic, additional monitoring and intervention will be necessary.

#### Incompatibility between materials

Metal elements throughout the ruins are posing problems. There has been minor mortar loss around rusted nails driven into walls in the dormitories. The metal door lintels in the dormitories are also heavily rusted. When these lintels fail, the concrete blocks directly above them will be unsupported and likely to fall. This will pose a significant life safety issue to workers and volunteers or to visitors, should the site ever be reopened to the public.

#### **Biogrowth**

Trees and shrubs growing too close to the structure are causing significant damage to the north and east exterior walls of the sunroom (see pages 5 & 8 of the Condition Drawings). This plant growth should be removed to prevent further damage to the structure caused by root growth. Regular yard care will be necessary to prevent this problem from reoccurring.

## Foundation

#### Cracks and Settling

There are several cracks visible in the concrete slab. Concrete tends to shrink over time, and this is the most likely cause of the cracks in the slab. This condition is probably exacerbated by the lack of control joints introduced into the slab during construction. It is possible that the walls

bounding the slab are exerting extra forces on the foundation as they settle out of plumb. Uneven settlement of the foundation and potential chemical reactions between aggressive soils and concrete could be further undermining the integrity of the foundation. It is recommended that a structural engineer perform a full analysis of the make-up and construction of the foundation and diagnose points of weaknesses. Soil tests would also be necessary to determine whether the chemical makeup of the soil on the site is damaging the foundation. Soil erosion could cause further damage to the slab. Because the structure does not have a roof to shed rain water away from the building, water pools around the foundation and exterior walls. This could cause erosion of the soil around the foundation in some areas, leading the foundation to settle unevenly. All slabs visible at grade are walkable. However the sloping threshold between the gathering space and the sunroom poses a trip hazard. It would need to be properly marked or mitigated if the site is to be opened to the public.

#### Biogrowth

Because there is no roof to deter the water from entering the interior, the interior floor is consistently exposed to rain. Though most of it can dry throughout the day, portions such as the south west corner of the gathering space, which does not receive enough direct sunlight, are rampant with algae, mildew, moss, clover and other bio growth. Though most concerns with bio growth are cosmetic, there are plants and saplings growing through the slab that could further widen the cracks in the slab and the foundation.

## Interventions and Recent Building Campaigns

#### 2009 Wall Stabilizaiton

In 2009 in accordance with plans drawn up by Bennett Preservation Engineering, PC, four galvanized steel tie rods were used to stabilize the north and south walls of the gathering space (see page 9 of Measured Drawings). Two rods were mounted on each wall, one on either of the long sides of the wall. They run the length of the walls and are attached to one another at the ends by galvanized steel plates. The tie rods use tension to brace the walls along their long axes. Overall the tie rods and wall plates are in good condition. The rods, plates, and the bolt holding them together are in need of regalvanizing in some areas (see pages 18 & 20 of Condition Drawings). If neglected, these areas could begin to corrode, weakening the rod and possibly causing wall failure. The steel plate on the western end of the south wall has been knocked out of alignment and there is evidence of material loss (see page 20 of drawing set). It should be realigned and the two tie rods attached to it checked for damage. Any necessary repairs should be made.

#### Recent Building Campaign in the Gathering Space

There is evidence that at some point after the tie rods were installed in 2009, 3 new courses of CMUs were built on top of the north and west walls of the gathering space. These three top courses of CMUs have different mortar than the rest of the walls. Piles of mortar that visually matches the mortar of the newly built courses has built up no top of the tie rods, demonstrating that this rebuilding campaign occurred after the tie rods were installed. Steel reinforcing bars are visible extending from the tops of these rebuilt portions. From ground-level observation is it

impossible to determine whether these reinforcing bars extend down into the original portions of the walls. Reinforced concrete will behave differently, being generally more stable and able to resist tensile forces, than unreinforced concrete. However, as discussed, reinforced concrete weathers differently than unreinforced. This difference between the original and the rebuilt portions of the wall could lend to the instability of these walls, as the two sections will respond differently to external forces. The added height and weight of these additions is also likely to further destabilize these walls.

Along with the rebar protruding at the uncapped top of the walls, bundles of rebar have been laid at the tops of the repaired walls. The rebar bundles are not tied in to the wall vertically and are not continuous around the perimeter. They therefore provide no support to the wall. It is hypothesized that this rebar was part of a reconstruction project initiated in the past five years.

#### <u>Site</u>

#### Plant-life

There are three separate concerns regarding plant-life on the property. The first pertain to trees, weeds, and mosses that are actively encroaching on the structure. This includes seedlings that have taken root in the various cracks and fissures in the concrete slab and block walls. Vines, saplings, and other plants growing up through cracks in the slab or the walls should be removed either mechanically or chemically on a regular basis. Mechanical methods of plant removal are preferred, as chemical removal methods have a strong potential to adversely impact the adjacent structure. The stumps of trees and bushes growing too near the building, particularly along the north and east walls of the sunroom, threaten the stability of the walls and foundations. Even though these plants have been cut back, they trap moisture and debris against the ruins, and their roots can still damage the walls and foundation (see page 5 of the Condition Drawings). Careful excavation of these stumps should be made as soon as is feasible. There are several dead trees on the site, and one living tree has large branches growing over the structure. Removal of dead trees by a professional company is recommended to prevent their falling on the structure in a major storm event. Similarly, an arborist should be retained to evaluate the large living tree with branches overhanging the structure. This professional would be tasked with planning for the removal of the dangerous limbs while preserving the health of the tree.

#### **Pump-house**

The small pump house structure is in an advanced state of deterioration. The metal elements of the roof are corroded, likely beyond salvage, and the roof has collapsed. The CMU walls have areas of missing mortar. To eliminate threats to visitor safety, the pump house must be either repaired or removed. It is preferable to maintain the pump-house as a historic landscape feature, but its maintenance is of lower priority than that of the main structure. If the pump house begins to divert resources from the maintenance of the ruins and it is determined the pump house does not make a significant contribution to the historic and cultural integrity of the site, it could be removed to eliminate the extra cost of continued maintenance.

#### Power Line

An easement granted to the electric co-op allowed for installation of high-power and low voltage power lines directly over the existing structure. Consultation with a Civil Engineer is recommended to determine how much clearance needs to be given to the low-voltage line closest to the building. This clearance height will aid in determining which, if any, roof structure can be utilized to protect the ruins. Further consultation with the electric co-op is underway and is necessary to determine whether the power lines could be moved.

#### Fencing

Areas of the chain link fence around the perimeter of the site are in disrepair. A large hole has been cut in the western length of the fence, likely by someone trespassing on the site. Likewise, a large portion of the fence on the east side towards the rear of the site has been torn down, possibly by a falling tree. For the moment, repair of the fence at these two areas should be undertaken. In future replacement of the chain link fence should be considered, as it is easily cut by trespassers.

#### Pits

There are several open pits on the site that are of note with respect to conditions reporting. The existing sewer/septic tank access pit to the west of the building is especially problematic (see page 1 of the Measured Drawings). The pit may be contributing to uneven settling and instability of the western exterior wall of the ruins. Soil near the base of the structure may be slowly moving into the pit. This would lead to uneven settling at that portion of the building, which may account for several cracks in the walls in that area. In order to maintain the stability of the site, this pit should be filled. The reuse of the pit as part of a new plumbing or septic system is unlikely. This pit and others on the site also pose life safety threats. Visitors may fall into this pit or the old cistern or well at the south end of the site (see page 1 of the Measured Drawings). These pits should be filled to ensure visitor safety as well as to aid in stabilizing the ruins. Though effective at marking the ground-plane hazards, the steel reinforcing bars protruding from the ground around the septic tank access pit should be removed or at the very least capped to help ensure the safety of visitors to the site.

## Treatment Options

In preparation for determining appropriate preservation treatments for the ruins of the Progressive Club Sea Island Center, the Clemson/College of Charleston Graduate Program in Historic Preservation has completed measured drawings of the Progressive club as it stands today as well as an assessment of the current conditions of existing elements of the structure. The program used this information in its consideration of the four historic preservation treatments, as defined by the Secretary of the Interior, in relation to the site.

In 1979, the Secretary of the Interior in collaboration with the National Park Service created the four approaches to the treatment of historic properties; preservation, rehabilitation, restoration and reconstruction. They are defined as follows:

1. **Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.

2. **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.

3. **Restoration** depicts a property at a particular period of time in its history, while removing evidence of other periods.

4. **Reconstruction** re-creates vanished or non-surviving portions of a property for interpretive purposes.<sup>1</sup>

As a class we have concluded that **preservation** and **reconstruction** are the only two viable approaches for the Progressive Club ruins. Both rehabilitation and restoration require that the vast majority of the original structure still be intact. Rehabilitation and restoration are not feasible because not enough of the original building remains and what parts of the building do remain are in too advanced a state of deterioration. The Progressive Club ruins are in such an advanced state of decay that preservation and reconstruction are the only viable preservation options for the site.

This chapter presents and describes preservation precedents that span the entire spectrum of approaches contained within the spheres of preservation and reconstruction.

<sup>1</sup> Kay D. Weeks and Anne E. Grimmer, The Secretary of the Interior's Standards for the Treatment of historic Properties 1 with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings, Washington, D.C.: U.S Department of the Interior and National Park Service, 1995.

## **Preservation Treatments**

#### **Preservation in Place**

Preservation is defined as "the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site. It may include stabilization work, where necessary, as well as ongoing maintenance of the historic building materials."<sup>1</sup> The preservation treatment option holds a building in its existing form. Intervention and maintenance is only performed to stabilize the current structure; it does not consist of rebuilding or restoration to its original form.

A "preservation in place" conservation ethic is a cornerstone of the historic preservation movement. During its formative years the movement prioritized preservation in place as the preferred conditions treatment. According to preservationist William Murtagh, "in a broad sense, preservation [his emphasis] has been defined as a concern for the rate of consumption of buildings."<sup>2</sup>

The strength of the preservation treatment approach lies in its retention of a building's original fabric-this option does not greatly disturb a structure's primary building components except in the case of stabilization. Thus a building retains an authentic rather than contrived, historic character. The weakness of this preservation approach is that while it stabilizes a building in the short-term, in the longer-term measures need to be taken to maintain a building's character.

#### Active Landscape

Preserved ruins do not have to become a passive, stagnant shadow of the structure they once were, a mere remembrance of a past that no longer directly influences the present. Occasionally the best approach to preserving ruins is to incorporate them into a larger active landscape that continues to play an active role within the surrounding community. One successfully example of this approach are the Old Town Hall Ruins in Darwin City, Australia.

The Old Town Hall Ruins are the remnants of a porcellanite stone building constructed in the 1880s. The buildings served at different times as a town hall, a court house, a bank, a navy workshop, and WWII museum. In 1974 Cyclone Tracey ripped through Darwin City, nearly destroying the ninety year-old town hall. Rather than abandon or rebuild the ruined structure, the people of Darwin City chose to make the ruins the focal point for a new public park. By incorporating the building's remains into a new outdoor space for their community, the people of Darwin City opted to turn this potentially tragic loss into an idyllic and engaging landscape. In the years following the destruction, the remaining partial walls of the old town hall were stabilized and then surrounded by a green lawn, gardens, and trees. This reworked space is now used for weddings, religious ceremonies, plays, recitals, poetry readings, theatre performances, launches, public meetings, and educational activities. The ruins have been reimagined as a beautiful and functional landscape feature that is both respectful of the structure's past and mindful of its continued vitality.<sup>3</sup>

<sup>1</sup> Kay D. Weeks and Anne E. Grimmer, The Secretary of the Interior's Standards for the Treatment of historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings, (Washington, D.C: U.S Department of the Interior and National Park Service, 1995.)

<sup>2</sup>William J. Murtah, Keeping Time: The History and Theory of Preservation in America, Third Addition, (New York: Wiley, 2006,) pp.5–6. 3 "Policy for the use of the Old Town Hall Ruings Lot 4995, Town of Darwin," (Northern Territory Government Department of

The landscape at the Old Town Hall Ruins also incorporates a memorial or museum function. A signboard at the entrance to the park gives the history of the site and displays images of the original structure. The ground within the ruins has also been paved with bricks laid in concentric circles to represent the spiral shape of a cyclone. The site therefore acts as a memorial and a sort of museum in addition to an event venue and community gathering space.<sup>4</sup>



#### Roof

It may be advisable to place a roof over the ruins in order to protect them and to facilitate the reactivation of the site. A roof may take many forms, and each variation will necessarily come with its own pros and cons. Roof structures may be super structures, meaning they are built around and over the site without any connection to the ruins themselves, or they may be tied into the walls of the structure.

A super-structure can be an excellent choice for covering ruins because it will have minimal structural impact on the site while still protecting it from rain and UV radiation. In 2000 a roof super-structure was built over the ruins of Menokin, the 18th century home of Francis Lightfoot Lee near Warsaw, Virginia. The roof protects the ruins from rain and UV light while strategically placed skylights allow some light to penetrate and illuminate the ruins for visitors' convenience. Installation of the free-standing roof also required no alterations be made to the existing ruins.<sup>5</sup>

Another option is to tie the roof into the ruins. A tied-in roof provides shear bracing that helps stabilize the walls of a structure. One example is this industrial warehouse in Shanghai, China. Archi Union Architects wrapped the original building in concrete block walls. A new roof structure was tied into the existing walls. The open roof structure was clearly intended to provide sheer bracing rather than protection from sun or rain.

Lands and Planning, 15 Aug. 2010).

<sup>4</sup> Ibid.

<sup>5</sup> Laura Heiman, "ARIS & Menokin: New Technology for a Renewed House," Digital Public History (29 Feb. 2012,) Accessed 14 Feb. 2015, http://www.dighist.org/2012/02/aris-menokin-new-technology-for-a-renewed-house/.

Both roof types, super-structures and tied-in roofs, can range from open to fully covered. They can also be designed to cover either the entire site or a select portion. It is recommended that the type of roof be chosen and designed with the character of the site in mind and the needs of visitors in mind.



#### The Hinge

Within the world of preservation it is sometimes appropriate to combine preservation techniques with reconstruction ideas. There are blurred boundaries between the two preservation treatments that is sometimes the best fit for a specific project. This hinge between preservation and reconstruction is one that combines preservation's method of retaining an existing buildings form and reconstruction's task of re-creating portions of the property for interpretive purposes.<sup>6</sup> When professionals do choose this route there should be a high level of sensitivity to the existing structure and to the execution of combining old and new.

Some pros to this type of preservation treatment include the protection as well as the expansion of the original fabric, the inclusion of additional programming possibilities, and the sparking of new interest in the abandoned sites. Precedent examples of this methodology focus attention on enabling the continued use of the original building fabric. The remains of the original structure are preserved and stabilized, and new programming is inserted within the old envelope. In this way the historic character of the original structure is maintained while allowing the old site to become usable again.

The House of Ruins located in the Latvian district of Saka on the coast of the Baltic Sea a product of this approach to preservation. The site was originally home to a 19th century traditional Latvian barn that by the 21st century had turned to ruin. In 2002 the architecture firm of NRJA undertook the project of repurposing the ruins to house a new structure. Rebuilding the original shell of the stone barn with modern material, NRJA gave the old structure new meaning. Within

<sup>6</sup> Kay D. Weeks and Anne E. Grimmer, The Secretary of the Interior's Standards for the Treatment of historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings, Washington, D.C: U.S Department of the Interior and National Park Service, 1995.

the old envelope, the architects inserted a new glass structure with functional living space. This insertion of the new within the space of the old made room for a new programming of the building. Tying the new building in to the old wall left a clear separation between the old and the new while also reinforcing the structural integrity of the old wall.<sup>7</sup>

Dovecote Studio in Suffolk, England was originally part of an industrial complex. Prior to 2008 the one story, Victorian-era brick building was left in ruins. As part of what is now the Aldeburgh Music complex in Snape Maltings, Haworth Tompkins Architects repurposed the building into a studio space. A prefabricated, weather-tight Corten steel structure was inserted into the existing shell of the dovecote. During construction the building was stabilized to prevent further damage, but it was left in ruins form to retain its aged aesthetic. With the new prefabricated building the architects were able to utilize the original footprint while also expanding upward to a second story. This gave the building much more programmable space than what was originally available within the dovecote.<sup>8</sup>



## **Reconstruction Treatments**

#### **Reconstruction in the Strictest Sense**

Reconstruction in the strictest sense is an exact replication of a structure using original construction methods and materials. "Strict Reconstruction" suggests a complete copying, faults included. This stringent form of intervention is certainly one of the most extreme treatment options. There are several other approaches to reconstruction that are less extreme.

7 "House of Ruins," (Divisare, October 11, 2010), http://divisare.com/projects/144460-NRJA-House-of-Ruins.

8 "Dovecote Studio," Haworth Tompkins, accessed 12 Feb. 2015, http://haworthtompkins.com/built/proj04/index.html.

#### **Full Reconstruction**

A full reconstruction using similar plans and materials along with new construction methods is a viable solution in preserving a ruined structure. In this approach a new structure is constructed that appears and functions just as the original structure did. Existing materials may be salvaged and implemented in the new construction effort, depending on their quality and condition. However this new building is not considered a reconstruction in the strictest sense. Certain changes are made to the original plans in order to meet modern day codes and ADA standards, and modern building techniques are employed for the sake of public safety. This method replicates the aesthetic qualities of the original structure while meeting modern safety codes and providing modern amenities.

A precedent project for this treatment type is Frauenkirche in Dresden, Germany. This church experienced severe heat damage, finally falling to the ground during World War II following a bombing of the city. Beginning in the 1990s, efforts were made to reconstruct the building, using rubble from the former church. Images depict a newly constructed church; the historic rubble can be seen where the dark material is plotted against the lighter new construction.<sup>9</sup>



#### Partial Reconstruction

Partial reconstruction is a more flexible preservation treatment than full reconstruction, but it still aims at reproducing some of the structure's original appearance. A portion of the structure is reconstructed to appear and function like the original structure. This portion is, like the full reconstruction discussed above, built using modern construction techniques alongside materials similar or identical to those of the original structure. Any materials that can be salvaged from the ruins may be reused in this portion of the new building.

Astley Castle, located in North Warwickshire, England, is an example of a successful partial

9 "Frauenkirche Dresden." Frauenkirche Foundation. accessed February 9, 2015. http://www.frauenkirche-5 dresden.de/startseite/.

reconstruction that transformed a ruin into a functional building. The original structure lacked a roof, and fire had damaged several walls. Although new stone and timber was used to strengthen the crumbling structure, the new materials are visually distinct from the old. This ensures that visitors will be aware of what is new and what is original and therefore will not misunderstand the historic evolution of the castle. The architects of Astley Castle carefully sought a way in which the old and new materials would complement one another. The result is a combination of old and new that preserves the historic integrity and character of the castle while allowing it to be a usable building once more.<sup>10</sup>



#### Replacement

The final and most flexible preservation reconstruction treatment is the replacement of the original structure with a completely new building that incorporates some of the original materials. The major distinction between full and partial reconstructions and replacement is that a replacement building does not pretend to be old or historic. The new building does not need to resemble the original in appearance or function. However elements of the original structure may be salvaged and reused in the new construction. With this treatment option, it is recommended that the remainder of the structure be deconstructed and any structurally-sound components saved. These materials should be reincorporated into the new building as special features and small touchstones of the past.



10 "Astley Castle," *The Landmark Trust*, (The Landmark Trust, 2015), Accessed 12 Feb. 2015, http://www.landmarktrust.org.uk/search-and-book/properties/astley-castle-4806/.

### **Preservation Treatment**

#### **Preservation in Place**

The use of the non-interventional preservation treatment approach is not appropriate for the Progressive Club. The surviving building fabric is vested with the material memories of the community's past. Places like the Progressive Club site trigger memories; spaces and architectural forms bridge the past and present. In this spirit, leaving the site as a ruin that is not open to the public does not capture the spirit of the site, community, and its past.

#### Active Landscape

A viable possibility for the Progressive Club posits that the current ruins, and surrounding landscape, be "reimagined," as an outdoor venue for community events. This option would allow the continue duse of some of the actual physical components of the club, as well as serving to continue the spirit of fellowship and community on which the Progressive Club was founded. As an initial step, the walls of the existing structure would first need to be reinforced, and/or selectively demolished, with perhaps a total demolition of the dorms and partial demolition of the gymnasium, to ensure the area is safe for public use. As an active landscape feature, the Progressive Club might once again serve as a venue for musical groups, educational speakers, and community events such as barbeques, family gatherings, and celebrations. A green lawn would be maintained, and perhaps a few picnic benches could be distributed throughout the space; a play area for children could be incorporated as well. This plan would allow the next generation to use the space and to also form connections to the site of the Progressive Club, while retaining as much of the building's original fabric as possible.

This plan for the Progressive Club could also include a museum or memorial component. The installation of signboards detailing the history of the site would allow visitors to learn about and appreciate the former Progressive Club Center while enjoying the newly imagined greenspace.



The existing ruins of the Progressive Club are valuable because of the historically significant events and individuals they once housed. This preservation treatment would preserve and memorialize the ruins while ensuring that they continue to play a vital role in the life of the local community. However this treatment would also require that the current Progressive Club Board maintain two sites, as the landscape on the original site could not accommodate all of the needs of the community. This approach would require the construction of a new community center across River Road. Other preservation approaches may allow for the current site to become a community center once again while still memorializing the original building.

#### Roof

Any of the roofing treatments discussed in the previous chapter could be viable options at the Progressive Club ruins. In choosing which type of roof structure to implement, or whether to roof the structure at all, the Board must carefully consider the current conditions of the site as well as what purpose the site will serve in future. It is recommended that if the ruins are to be open to the public, at least some portion of the structure be roofed to provide shade for visitors. A roof can also be used to mitigate further water and sun damage to the structure and, depending on its style of construction, help to stabilize the remaining walls.

First it must be determined whether or not the roof will be a free-standing super structure. A free standing roof would be the least intrusive, as it does not require any change be made to the existing fabric of the ruins. A roof that is tied into the CMU walls will necessarily alter the existing structure. However, though more intrusive, this approach has the added benefit of helping to stabilize the structure. After the failure of the roof system due to damage from Hurricane Hugo in 1989, the Progressive Club decayed rapidly. This was in part due to the loss of shear bracing to the exterior walls as discussed in the conditions report. A fully integrated roof will give the walls of the ruins much needed shear bracing.

It also must be determined whether the roof system should be open or offer full coverage. A fully covered roof that spans the entire site is not recommended as it is likely such a structure would trap moisture and hasten the deterioration of the ruins. Even if the site were fully covered with a roof structure, rain water would still intrude through openings in the CMU walls. The roof would simply keep sunlight from drying the interior, which would lead to increased bio-growth and deterioration of the existing fabric. A fully covered roof may be used in parts of the site, but these concerns must be taken into account in making that decision. An open roof, such as a trellis, could still be tied into the walls, providing shear bracing, and would offer some protection from rain and UV light.

A Clemson Architectural College in Charleston rendering from 2012 illustrates a flat trussed roof. This roof system does not tie into the structure but does help protect the site and visitors from sun and rain. However a flat roof might have more maintenance issues than a more steeply pitched roof, which will shed water better and therefore be less prone to water damage. A second roof that may work for the Progressive Club site would be a trellis, which would allow most sunlight to read the ruins, thus mitigating the damp conditions. Another option would be to consider using a partial roof that covers only one section of the site and applying another preservation method to the rest of the site. Whatever roof system is chosen, the Board must be careful to carefully consider how it will relate to the surrounding landscape. Some roof options may work in tandem with the large trees at the rear of the lot in creating a closed off and dark atmosphere, which is to be avoided.



#### The Hinge

When combining preservation techniques with reconstruction ideas at the Progressive Club, portions of the original structure may be incorporated into the new facility. Sections of the existing ruins would be maintained in place and stabilized. This includes saving iconic architectural features such as the original painted Progressive Club sign. The stabilized ruins would then be paired with a new structure which could be designed to house whatever programs or community events the board deems appropriate. This treatment may require some selective demolition of the ruins to accommodate the new building and to ensure visitor safety.

This hybrid provides the community with a visually interesting center that honors the spirit of the old building while also providing a functional space. The advantage of this plan is that it enables the community stakeholders to pick and choose which portions of the building are given new purpose. For example, the front room, which originally functioned as the grocery store, could remain a space for community workshops. This would involve preserving the existing shell of the store and inserting a new structure within its footprint. The large gathering room would serve as a green-space for outdoor activities. The benefit of this method is that it ultimately allows flexibility to meet the current needs of the community while preserving the integrity of the existing ruins.





## **Reconstruction Treatments**

#### **Reconstruction in the Strictest Sense**

While it may be appropriate to demolish the existing ruins and reconstruct the Progressive Club, a strict reconstruction is not a viable option. The building was constructed in a way that does not provide long term stability or safety if it were reconstructed in the exact manner of the original. The reconstructed rooms of the Progressive Club would not meet the standard building codes of today. The historic nature of the structure offers certain building code exemptions. However, there are ethical implications of bypassing codes to recreate what would be an unsafe structure.

In 1963 the Progressive Club needed a cost-efficient building that could be built quickly to respond to urgent and immediate needs in the community. The builders were not concerned with building a structure with an extended lifespan. The current condition of the Progressive Club is structurally unsound.

The key elements needed for reconstruction are present. The building is well documented in the form of measured drawings and photographs. Methods and materials employed during construction are known. The layout and original uses of the spaces are well-known and thoroughly documented. It would therefore be possible to execute an accurate total reconstruction of the original building. However this is not the optimal choice. Instead a less strict reconstruction treatment could be used to recreate the aesthetics of the building while correcting defects in the original methods of construction and updating the materials and methods to address contemporary building codes.

#### **Full Reconstruction**

Full reconstruction is a viable option for the Progressive Club. This approach entails creating a modern building visually identical inside and out to that constructed in 1963. New materials and modern construction methods would be used to ensure the building is up to current codes. Existing materials could be incorporated if and when appropriate. If existing materials were incorporated, they would need to be structurally reinforced. The new facility could function as it once did in the past but would also be equipped with current technology and other resources for learning. A reconstructed building could allow community members to utilize a new facility and continue to further the history of the site. The Progressive Club could carry on its tradition of education and community outreach for years to come in a newly reconstructed building. The reconstruction illustration below appears to have been completed by Liollio Architects and is part of a collection archived at Historic Charleston Foundation.



This approach allows the new building to retain the aesthetic character of the original building while meeting current codes and providing modern amenities. Such a building would effectively memorialize the past, but it would place certain limitations on the future. This approach requires that any new building occupy the exact same footprint as the original. Even interior dividers would remain the same, requiring the community to fit their modern day needs into the 1963 floorplan. A less strict partial reconstruction, detailed next, would retain some of the aesthetic qualities of the original building while allowing for greater flexibility in the floorplan and programming of the new building.

#### **Partial Reconstruction**

The Progressive Club may no longer would adequately fulfil its purpose within the community if it were fully reconstructed. The current day club members desire to further their mission of providing education, childcare, and a community center to the residents of Johns Island. The focus on civil rights, youth and communal spirit do not have the same needs as in 1963, thus it may not need the same spaces. The design of the store, meeting hall, and dormitories fit the mid-century scope of the building. Current day needs of a technology-based community center would not mesh with the structure provided in a full reconstruction. A partial reconstruction of the building may be a better fit for today's Progressive Club.

One method of partial reconstruction requires rebuilding a portion of the building to look as it did in the 1960s while reconstructing the rest in an entirely new manner. This new construction would not need to share the same design, footprint, or layout as the original.

One option for the partial reconstruction would be to rebuild a section, such as the front of the building where the store originally stood, while the rest of the building would be taken down and rebuilt with a new vision. A second option would be to reconstruct both the front room and the larger space that functioned as a gathering space and take down the dormitories, possibly rebuilding them with a new function. A third option is to rebuild the exterior of the Progressive Club to look just as it did in the 1960s. The interior floorplan, however, would not need to remain the same. This final option would fully recreate the aesthetic qualities of the exterior of the original building while allowing the interior to adapt to modern needs.



#### **Replacement Building**

With this treatment option, the current Progressive Club structure would be replaced, but its historical, social, and cultural significance would be maintained. This treatment suggests that the CMU structure be dismantled and the site prepped for a new building. With the help of an architecture firm, a building could be designed that more effectively addresses the technological, educational, and programmatic needs of the present-day community.

Though this replacement building would be entirely new, making no attempt to recreate the original in whole or in part, it need not detract from the successes of the former Progressive Club. Efforts would be made to salvage and reuse some of the original material in the new building. Pieces of the Progressive Club resonate with the local community and should be reincorporated into the new construction as touchstones of the past. The concrete masonry units painted with the prominent green stripe of the Progressive Club should be saved for reuse, as well as the corner featuring the hand-painted "Progressive Club" logo. These pieces would be incorporated into the modern construction.

The Board Members have expressed interest in creating a space that echoes the mission of the historic Progressive Club created by Esau Jenkins while responding to community needs that did not exist in 1963. This goal cannot be attained without the addition of modern amenities. A newly designed floor plan, without the constraints of the original layout would provide the Progressive Club with the most flexible space for many years to come.



MSHP class of 2016's preferred Progressive Club treatments. Following much consideration the group categorized the viable treatments in terms of the most desirable (bold top) to least (small bottom) from a preservation perspective.
### Preservation

These ideas and visions are part of the visioning process towards the goal for the Progressive Club. We recognize that we bring a unique explatory, preservation oriented perspective to this process and that the board is taking a great deal of input to their deicsion process. Phase one is developing vison and the hope is that these ideas will provide clarity to move the the to phase two, budgeting.

### Summary of Prefered Treatments

## Landscape Feature

An active landscape is an option that can incorporate a space for recreation and community use but can also incorporate a museum aspect. This would call for reinforcement on the current structure and perhaps some selective demolition.

Roof Structure

Another vision is tying in a roof structure over the exisiting ruins. It could have minimal structural impact and help support the walls. The space would then be either kept as ruins or made into an active landscape.

## Hinge

In between preservation and reconstruction this strategy is protecting some of the current fabric and expanding on the existing footprint. This would provide a new building integrated with the ruins.

All of these options keep the historic integrity of the current ruins and footprint. The ruins are kept, which is important to a preservation ethic and a new building maybe built across the road. One aspect to keep in mind with this approach is that there will be two sites taking resources.

### Reconstruction

Full Reconstruction

The first reconstruction option is to deconstruct the ruins and do a full reconstruction using the same footprint and design of the orginal building while utilizing new materials and building techniques. The aesthetic would be the same as the 1963 building but the building would be up to code for the 21st century. This option would keep the historic appearance of the building.

## Partial Reconstruction

Partial reconstruction rebuilds a portion of the 1963 building paired with introducting a new building on the site or treating the remaining ruins as a landscape.

### Replacement

Replacement would mean building a completely new building on the site and possibly incorporating reused CMUs from the orginal building.

The reconstruction options have one building and site to maintain. Also, the interior of the new building can fit the programming and function of the Club.

From these options, there are a wide range of visions that can stand-alone, be paired with a new construction on the land across Rivers Road, or be hybridized. The hope is to find an option to fit the Progressive Club amd catalyze discussion and ultimately a consensus. The next steps in the process are budgeting, funding, design, and construction and these can be accoplished with supporting agents.

- "Angel Oak Park," Charleston Parks Conservancy, accessed February 13, 2015, http://www.charlestonparksconservancy.org/our\_parks/view\_park/angel\_oak\_park/.
- "Angel Oak Tree," Angel Oak Tree, accessed February 13, 2015, http://www.angeloaktree.com/.
- Bennett, Craig M. "On Site Structural Engineering Elements." Lecture, January 26, 2015.
- Burns, John A. ed. Recording Historic Structures. Hoboken: John Wiley & Sons, Inc., 2004.
- Carawan, Guy and Candie. Ain't you got a right to the tree of life?: The People of Johns Island, South Carolina - Their Faces, Their Words, and Their Songs. Athens: University of Georgia Press, 1989.
- "Continuing to Progress on Johns Island, SC in the Gullah/Geechee Nation," Gullah/Geechee Nation, last modified September 21, 2013, accessed February 13, 2015, http://gullahgeecheenation.com/2013/09/21/continuing-to-progress-on-johns-island-sc-in-the-gullahgeechee-nation/.
- Davis, Townsend. "Charleston/Johns Island: The Citizenship Schools." Weary Feet, Rested Souls: A Guided History of the Civil Rights Movement. New York: W. W. Norton & Company, 1998, 319-330.
- Divisare. "Projects." Divisare. accessed February 12, 2015, http://divisare.com/projects/144460-NRJA-House-of-Ruins.
- Haworth Tompkins Ltd. "Dovecote Studio." accessed February 12, 2015, Haworthtompkins.com.
- "Johns Island, South Carolina," SCIWAY, accessed February 13, 2015, http://www.sciway.net/city/ johnsisland.html. "J-Office & Silk Wall."
- "The Modified Mercalli Intensity Scale," USGS Earthquake Hazards Program, accessed February 13, 2015, http://earthquake.usgs.gov/learn/topics/mercalli.php.
- "Moving Star Hall, Charleston County (River Rd., John's Island)," South Carolina Department of Archives and History, accessed February 13, 2015, http://www.nationalregister.sc.gov/charleston/S10817710118/.
- Murtah, William J. Keeping Time: The History and Theory of Preservation in America. New Jersey: John Wiley & Sons, 2006.
- Northern Territory Government. "Policy for the Use of the Old Town Hall Ruins Lot 4995, Town of Darwin," Department of Lands and Planning, last updated on August 15, 2012. accessed February 13, 2015, http://www.lands.nt.gov.au/\_\_data/assets/pdf\_file/0020/24383/policy-OTHR.pdf.

- O'Connor, Meghan. "Eighteenth-Century House Ruin to Be Restored...With Glass." National Trust for Historic Preservation. Last modified Dec 3, 2014. http://blog.preservationnation. org/2014/12/03/menokin-foundation-restored-structural-glass/#.VNueA\_nF\_y4 (Accessed Feb 10, 2015).
- Opala, Joseph A. "Introduction," The Gullah: Rice, Slavery, and the Sierra Leone-American Connection., accessed February 13, 2015, http://www.yale.edu/glc/gullah/.
- Preservation Consultants, Inc. "James & Johns Island Historical Survey." January 1, 1989. Accessed February 13, 2015. http://nationalregister.sc.gov/SurveyReports/HC10002.pdf.
- "The Progressive Club, Charleston County," National Register Properties in South Carolina, (South Carolina Department of Archives and History), accessed Feb. 13, 2015, http://www.nationalregister.sc.gov/charleston/S10817710183/.
- "Standards for Reconstruction," Technical Preservation Services, National Park Service U.S. Department of the Interior. accessed February 12, 2015, http://www.nps.gov/tps/standards/ four-treatments/treatment-reconstruction.htm.
- "Statement of Significance." National Register of Historic Places Registration Form for the Progressive Club, Johns Island. United States Department of the Interior National Parks Service, 2007.
- Weeks, Kay D. and Anne E. Grimmer. The Secretary of the Interior's Standards for the Treatment of His-toric Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Build-ings. Washington, D.C., U.S. Department of the Interior/National Park Service, 1995.

### Images

Archi-Union. accessed February 11, 2015, http://www.archi-union.com/project\_view.asp?id=35.

- Christ Strang & Bradley Little, "Exterior Perspective" (presentation by CAC.C students presented to the Progressive Club, Spring 2012).
- Darwin-Town-Hall.jpg. April, 2012. "Everyday Life." Ed Unloaded: Life through our eyes. accessed February 12, 2015. <a href="http://edunloaded.com/wp-content/uploads/2012/04/darwin-town-hall.jpg">http://edunloaded.com/wp-content/uploads/2012/04/darwin-town-hall.jpg</a>>.
- Derry and Raphoe, "Rebuilt Frauenkirche," AIC Review, Derry & Raphoe Diocesan Library Project Blog. June 9, 2011, accessed February 12, 2015, https://derryandraphoe.wordpress. com/2011/06/09/aic-review/.
- Evans, Adrian. Welsh Abbey. January 5, 2015. Faerie Magazine. accessed Febuary 11, 2015. https://www.facebook.com/65239508296/photos /a.318899128296.147103.65239508296/10152613352738297/?type=1&theater.

Front Elevation Sketch. Liollio Architect, 1992, from the Historic Charleston Foundation Archives.

The Landmark Trust. "Astley Castle," 2015, accessed February 12, 2015, http://www.landmarktrust. org.uk/search-and-book/properties/astley-castle-4806/.

Leifeste, Amalia. Skopje, Macedonia. Photograph, n.d.

- Löwe, Giso. Dresden, Luther-Denkmal, Ruine der Frauenkirche. November, 1958. Allgemeiner Deutscher Nachrichtendienst—Zentralbild, Dresden. accessed February 12, 2015. http:// commons.wikimedia.org/wiki/File:Bundesarchiv\_Bild\_183-60015-0002,\_Dresden,\_Denkmal\_Martin\_Luther,\_Frauenkirche,\_Ruine.jpg.
- "North Facade with Protective Shelter, 2000." Menokin Photo Library, 2000. accessed February 27, 2015, http://www.menokin.org/photo.htm.
- "Post AIME famil @ Town Hall Ruins 2013." Agentur, accessed February 13, 2015, http://www.agentur.com.au/timeline/town-hall-ruins/.
- Vitolina, Karlina. House of Ruins. 2010. Divisare. accessed February 12, 2015. <a href="http://divisare.com/projects/144460-NRJA-House-of-Ruins">http://divisare.com/projects/144460-NRJA-House-of-Ruins</a>.

# The Progressive Club Johns Island, South Carolina

Preservation Studio Spring Term

2015

COLLEGE of Graduate Program in Historic Preservation









}	 	
<u>ا</u>		

п









METERS



Wall 1





Wall 6



Wall 8







Wall 5



Wall 7









Wall 10











on/College of Charleston MSHP Class of 2016	
) Plan	
$\frac{3}{32}$ " = 1'-0"	Sheet No. 01 of 37









No Scale

### North Elevation



East Elevation

South Elevation

West Elevation









The northern corner of the east exterior wall has a The east exeterior wall has a large large amount of biogrowth. If not removed the vines will continue to weaken the structural integrity of the wall. stairstep crack running two thirds of the wall height. KEY The Progressive Club of Charleston Cracks Structural Concern Clemson/College of Charleston Mold & Mildew MSHP Class of 2016 • Plants & Vines Conditions Elevations Moss & Lichen East Exterior Elevation, Section 1 Corrosion & Iron Staining

Chemical Staining

Not to Scale



### 3383 River Road, Johns Island, SC







The eastern wall of the dormitory space is cracked under the sill and debris is sitting at the foundation. Portions of this wall have already fallen.







### This hal bowing sucept

Clemsc N

Condition East Exte

Not to So

alf of the g and bi tible to fo	collapsed east exter ogrowth. This portion ailure at any time.	ior wall has major of the wall is also
The 338	Progressive Club 3 River Road, Jol	of Charleston ans Island, SC
on/Colle MSHP CI	ege of Charleston ass of 2016	▼
ons Elevations		
erior Elev Scale	vation, Section 3 Sheet No. 08 of 37	







The front store area was not tied into the addition of the gathering space. The walls are separating and a large crack has formed. Although the gathering space wall is held by a tie rod, the wall and intersection are very unstable.













The west exterior elevation is bowed outward. This was likely caused by the collapse of the roof, leaving nothing to support the wall. Tie rods were added in two areas in 2008 to aid in supporting the wall, however, the invasion of vines along the wall and soft ground have added to the instability of the wall.

Not to Scale

### KEY Cracks Structural Concern Mold & Mildew

- Plants & Vines
- Moss & Lichen
- Corrosion & Iron Staining
- Chemical Staining





Chemical Staining

Not to Scale





Detail of top of opening.





Not to Scale

Opening between store and gathering space that was cut through the CMUs after original construction. The opening has no reinforcement and CMUs are starting to come loose creating both a structural and safety hazard.









Metal diamod grating in original window opening is rusting and causing staining on the wall. The adjacent oak tree is starting to send branches through the grating.



Not to Scale





Metal diamond grating inserted in window opening is rusting and causing staining on the surrounding CMUs.



Lintel over primary entry spans a wide opening and is beginning to crack away from the rest of the structure at the ends.

Clem	sc N
Wall 3	$\mathcal{C}$

Not to Scale

### KEY Cracks Structural Concern Mold & Mildew

- Plants & Vines
- Moss & Lichen
- Corrosion & Iron Staining
- Chemical Staining

_		







KEY

Cracks Structural Concern Mold & Mildew Plants & Vines Moss & Lichen Corrosion & Iron Staining Chemical Staining

Not to Scale

This wall of the store is not tied in to the wall it shares with the gathering space. There is a large crack where the two walls meet and this wall is beginning to bow outward.







### KEY

Cracks Structural Concern Mold & Mildew Plants & Vines Moss & Lichen Corrosion & Iron Staining Chemical Staining

The structural integrity of the east wall has been compromised through the loss of a large portion of CMUs. The stairsteps and missing CMUs pose a severe threat of safety. Additionally, biogrowth and vines are further degrading the wall, and are a constant source of moisture.











KEY

Cracks Structural Concern Mold & Mildew Plants & Vines Moss & Lichen

Corrosion & Iron Staining

Chemical Staining

Remnants of graffiti are visible in the red paint. The area has been cleaned with chemicals leaving a texture similar to sand blasting and removing some of the red decorative paint. The integrity of the CMUs has been compromised because of the chemicals.

Additionally, structural cracks are seen stair-stepping under the window opening.

Not to Scale







Wall 10



The sun porch has been greatly exposed to biogrowth and plants, which are interrupting the joint where the wall meets the foundation.

Additionly, the window is causing significant issues. The brick sill is loose and there is a large crack forming underneath it. The left portion of the window has been roughly cut diminishing the structural integrity of those CMUs.

Clems
Walls 9
Sun Por

### Wall 9



KEY

Chemical Staining






on/College of Charleston WSHP Class of 2016			
& 12, Conditions Elevation			
ch		003	
cale	Sheet No. 23 of 37		







Wall 14



The loss of a lintel has caused CMUs to be exposed consequently allowing more to fall off the top of the wall. The brick sill on the window is sloped outwardly and down at an angle not originally intended. This stress is causing a crack beneath the window opening which will potentially develop further.

Clemsc N
Walls 13
Chamb

Not to Scale

Cracks Structural Concern Mold & Mildew Plants & Vines Moss & Lichen Corrosion & Iron Staining Chemical Staining

KEY

Biogrowth is affecting all the walls and floor of this room. Black mold can be easily seem on the walls. This can be contributed to the lack of sunlight that reaches this portion of the building due to overhanging trees.







The structural integrity of the CMUs has be compromised by rough cutting the window opening, as well as the large hole near the door. Rust staining from previous iron intrusions are detected across the wall.

The rough window opening causes future concern for the postition of the lintel overhead.



Chamber A

Not to Scale

Throughout the dormitories and bathrooms in the back of the structure, metal lintels have been placed at the doorways. They are severely rusted and corroded, posing potential failures. Some iron staining is also detected at the sides of the doorways.













Black mold is prominent in the dormitory spaces. This area receives little sun throughout the day and remains constantly damp.





Wall 22



Chamber B

Detail of rusted metal lintel supporting CMU's above doorway. Expansion of metal plate has caused some CMUs to shift out of plumb.





This wall has ghost marks from roofing materials that once covered the dormitory spaces and holes where rafters once sat. The holes greatly diminish the structural integrity of the CMUs. Black mold is also present becuse this wall is almost completely shaded all day.



collapse.

Not to Scale

KEY Cracks Structural Concern Mold & Mildew Plants & Vines

Wall 23

Moss & Lichen

Corrosion & Iron Staining

Chemical Staining



A doorway has been cut through a wall that was not designed with a door. These interior CMU's are half the width of the exterior blocks and were greatly weakened when cut through. The two portions of this wall are structurally unstable and susceptible to imminent









Interior half of lintel is missing, possibly caused by roof of dormitory caving in. Window opening is weakened and adjacent CMUs have also shifted.

Chamber C

Not to Scale

Doorway has been cut through a wall that was designed without a doorway. Blocks are cracked and rough, and both sections of interior wall are structurally unstable.











Wall 28

Stainless steel tie rod shows little rust on the plate and cable. However the bolts on the plate and joints between sections of the rod are rusting causing staining on the CMUs.



Chamber C

Not to Scale

# KEY Cracks Structural Concern Mold & Mildew

- Plants & Vines
- Moss & Lichen
- Corrosion & Iron Staining

Chemical Staining

Metal plate supporting CMUs above doorway is rusting. This causes staining and the plate has also expanded, pushing CMUs out of plumb.









This wall has staining from the window and metal clip. A hole has been punched through one CMU, greatly diminishing the structural integrity of that area of the wall.

Bathroom C/D

Not to Scale

Wall 29

KEY



Chemical Staining



Wall is not tied to exterior walls and a crack spans to the doorway. The top portion of this wall could collapse at any point.







## Lintel detail with context of doorway.



on/Colle MSHP CI	ege of Charleston ass of 2016	
& 34, Conditions Elevation		
er D	009	
cale	Sheet No. 34 of 37	



Black mold is present throughout the structure. Large sections of wall receive little to no sun and the surfaces never completely dry out.



Wall 35

Chamber D

Not to Scale













Bathrooms inside gathering space are not tied into strucure and lintels and mortar joints are starting to separate.

