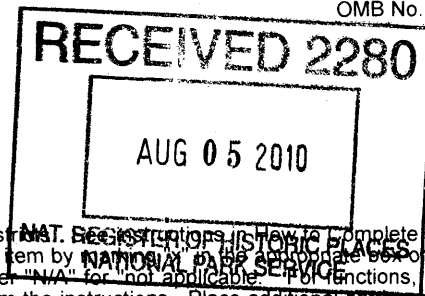


757



United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name THREE CHIMNEYS ARCHAEOLOGICAL SITE

other names/site number FMSF#VO196 Swamp Settlement; Spanish Chimneys; English Chimney

2. Location

street & number 715 West Granada Boulevard N/A  not for publication

city or town Ormond Beach N/A  vicinity

state Florida code FL county Volusia code 127 zip code 32174

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property  meets  does not meet the National Register criteria. I recommend that this property be considered significant  nationally  statewide  locally. ( See continuation sheet for additional comments.)

Barbara C. Mattick/DSHPO 7/30/2010  
Signature of certifying official/Title Date

Florida Department of State, Division of Historical Resources, Bureau of Historic Preservation  
State or Federal agency and bureau

In my opinion, the property  meets  does not meet the National Register criteria. ( See continuation sheet for additional comments.)

\_\_\_\_\_  
Signature of certifying official/Title Date

\_\_\_\_\_  
State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register
  - See continuation sheet
- determined eligible for the National Register
  - See continuation sheet.
- determined not eligible for the National Register
  - See continuation sheet.
- removed from the National Register.
- other. (explain) \_\_\_\_\_

Edson W. Beall  
Signature of the Keeper

9-16-10  
Date of Action

**5. Classification**

**Ownership of Property**  
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

**Category of Property**  
(Check only one box)

- buildings
- district
- site
- structure
- object

**Number of Resources within Property**  
(Do not include any previously listed resources in the count)

Contributing	Noncontributing	
0	0	buildings
1	1	sites
0	2	structures
0	0	objects
1	3	total

**Name of related multiple property listings**  
(Enter "N/A" if property is not part of a multiple property listing.)

"N/A"

**Number of contributing resources previously listed in the National Register**

0

**6. Function or Use**

**Historic Functions**  
(Enter categories from instructions)

INDUSTRY: processing site

**Current Functions**  
(Enter categories from instructions)

LANDSCAPE: unoccupied land

**7. Description**

**Architectural Classification**  
(Enter categories from instructions)

NO STYLE

**Materials**  
(Enter categories from instructions)

foundation BRICK  
walls  
roof  
other

**Narrative Description**

(Describe the historic and current condition of the property on one or more continuation sheets.)

**8. Statement of Significance**

**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield information important in prehistory or history.

**Criteria Considerations**

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years

**Narrative Statement of Significance**

(Explain the significance of the property on one or more continuation sheets.)

**9. Major Bibliographical References**

**Bibliography**

Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

**Previous documentation on file (NPS):**

- preliminary determination of individual listing (36 CFR 36) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # \_\_\_\_\_
- recorded by Historic American Engineering Record

**Areas of Significance**

(Enter categories from instructions)

ARCHAEOLOGY

INDUSTRY

**Period of Significance**

c.1770-1783

**Significant Dates**

c.1770

**Significant Person**

N/A

**Cultural Affiliation**

British Colonial Period 1763-1783

**Architect/Builder**

unknown

**Primary location of additional data:**

- State Historic Preservation Office
- Other State Agency
- Federal agency
- Local government
- University
- Other

Name of Repository

# \_\_\_\_\_

10. Geographical Data

Acreage of Property 1.65 acres

UTM References

(Place additional references on a continuation sheet.)

1	1 7	4 9 2 6 6 0	3 2 3 8 7 2 0
	Zone	Easting	Northing
2			

3			
	Zone	Easting	Northing
4			

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Leveroni, Mary-Lu/Archaeologist Rachel B. Porter/Robert O. Jones, Historic Preservationist

organization Bureau of Historic Preservation date July 2010

street & number 500 South Bronough Street telephone 850-245-6333

city or town Tallahassee state FL zip code 32399-0250

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A Sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items

(check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Trustees of the Internal Improvement Trust Fund

street & number 3900 Commonwealth Boulevard telephone 850.245.2157

city or town Tallahassee state FL zip code 32399-3000

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and amend listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.)

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127, and the Office of Management and Budget, Paperwork Reduction Projects (1024-0018), Washington, DC 20503.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 7 Page 1 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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**SUMMARY**

The Three Chimneys Archaeological Site is at 715 West Granada Boulevard, Ormond Beach, Volusia County, Florida. The property contains an individual British Period (1763-1783) sugar mill site that lies 1.2 miles west of the Tomoka River. It is situated a few meters north of State Road 40, West Granada Boulevard. The boundary for the National Register nomination encompasses a 1.65 acre portion of the parcel of land owned by the State of Florida. A majority of the designated boundary area is within the limits of the 100 year floodplain, which encroaches onto the site from the south (See Boundary Map). The nominated property has visible ruins of the British Period sugar boiling facility and rum distillery. Also present are non-period, and therefore non-contributing, features of "Fagen's" chimney, a well and trough, a pre-historic mound, and a chain-link fence. Temporary protective tents cover the brick features. These are not considered substantial enough to count as non-contributing elements or add to the count. Because the site is well known and visited by the public, there is no need to restrict information related to its location.

**SETTING**

***Environment***

The area of significance within the Three Chimney's property occurs within a mesic hammock environment that is adjacent to wet and flat lowlands lying north of the significant portion. Live oaks (*Quercus Virginiana*), cabbage palms (*Sabal palmetto*), saw palmettos (*Serenoa repens*), and several varieties of native ferns are dominant. Exotic vegetation introduced to the landscape include air potato (*Dioscorea*), bamboo (*Bambusa*), camphor (*Cinnamomum camphora*), Chinese tallow (*Sapium sebiferum*), grapefruit (*Citrus paradisi*) and Cherokee rose (*Rosa Laevigata*). The native live oak population was harvested during the middle of the 19<sup>th</sup> century. This alteration is reflected in the general age of the still remaining trees, which are a little over 100 years old. The one obvious exception is a live oak with a 77 inch diameter and an estimated age from 200 to 250 years. This tree dates to the plantation period of the area and the establishment of the Three Chimneys site. A small stream which flows southwest to northeast in the southeastern corner of the tract is within a designated jurisdictional wetland. This water feature is now

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number

7

Page

2

**THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

generally dry, but would have provided the closest natural freshwater source for occupants of the property. The natural hammock setting is thought to be much the same as it was during the British occupation, though understory, including non-native vegetation, has grown up in areas of disturbance.

***Previous investigations***

Prior to the purchase of the property containing the Three Chimneys site, several interpretations of the ruins had been proposed. It is not understood where the Three Chimneys name came from, as there is only above-ground evidence for two: the distillery and a twentieth century chimney built by William Fagen. During the 1930's and 1940's the property was noted for its picturesque ruins and incorrectly labeled "The Spanish Chimneys" (Wayne, et al., 1999:26). As with other sugar mill ruins in the area, it was thought that the foundations could have been remains of a Spanish mission; the Anacape Spanish mission was thought to be in the area, and, indeed, the nearby Dummet sugar mill was incorrectly interpreted as a Spanish site for many years.

By the early twentieth century the site was recognized as dating to the British Period, as evidenced by a postcard describing the image of what appears to be the north side of the distillery ruin and chimney as "The Old English Chimney" (Fig. 1). A 1931 history of Ormond Beach noted evidence of old cane rows in the fields surrounding the site (Hinkley, 1931), while a slightly later account stated that "this was definitely a sugar mill as some of the machinery has only recently been removed" (Stanton, 1949: 9). Despite this assertion, in 1972, Daniel Penton interpreted the ruins as an indigo processing facility attributed to the Second Spanish period occupation by Henry Yonge (Penton.1972). Later, in the 1980's a more accurate interpretation came about, beginning with Alice Strickland and the Volusia County Historical Commission's 1985 publication "Ashes on the Wind: The Story of the Lost Plantations" (Strickland, 1985). This work established the link between Richard Oswald and the Three Chimneys.

Over the next few years archaeological assessment was carried out around the site for possible State acquisition. Bruce Piatek reported on the ruins in 1987, then Laura Kammerer with the Florida Department of State in 1988. Ted Payne, through MAAR Associates, produced a thorough report in 1995, and a great deal of historic information

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 7 Page 3 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

obtained from repositories in the United Kingdom shed light on Richard Oswald's involvement in the area during the British occupation of Florida. In 1999, the Ormond Beach Historical Trust was granted permission from the Sun Beach Investment Company to manage the site. In efforts to preserve the site, and with the aid of a Division of Historical Resources grant, the Trust commissioned Southarc, Inc. to complete a preservation plan (Wayne, et al., 1999). Southarc returned to the property to address a structural stabilization plan in 2001 (Wayne et al., 2001). The State of Florida acquired the property in 2003, and it is now managed by the Ormond Beach Historical Society, Inc. on a fifty year lease agreement. Additional site assessment was performed through the Florida Department of State, and is on file with the Bureau of Archaeological Research in Tallahassee (White, 2006). The most recent archaeological work on the property was carried out by Ted Payne, who excavated part of the eastern firebox in 2007 (Payne, 2007).

**PHYSICAL DESCRIPTION**

The contributing resource for this nomination is the significant portion of the archaeological site, a 2.3 acre portion of the entire parcel (Photo #1). Some above ground features, classified as ruins, provide visual clues to the layout of the sugar mill; these are (north to south) the distillery and boiler feature (Photo #2). Additionally, subsurface deposits may indicate placement of now destroyed wooden frame buildings associated with the mill.

***Archaeology Site***

Significant artifacts that relate to the original sugar mill occur throughout the nomination area. A metal detector survey identified a scatter of 34 wrought iron nails (a technology diagnostic of a pre-1780 timeframe) in the eastern portion of the parcel (Fig. 2). Shovel testing around this find revealed other 18<sup>th</sup> century artifacts, including a strap handle from a "jackfield" container, and a coarse red earthenware sherd along with two fragments which appeared to have been broken from glass lamps. This scatter of building materials may indicate the location of a frame building related to the 18<sup>th</sup> century industrial complex (Payne, 1995: 37; Wayne et al., 1999:76-81; Wayne, 2010: 58). An excavation located outside of the entrance to the second firebox from the west end yielded a white clay pipe stem (one of two recovered from the site), which may have dated to the sugar processing

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 7 Page 4 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

period. Inside the eastern opening of the sugar train there is a two-piece iron sleeve 62.2cm deep, 40.6 cm wide, and 33 cm high. The sleeve is believed to be original and served as a flue liner for the opening (Payne, 1995: 45). This has been restored during the most recent stabilization effort. Based upon the location of this artifact, it has been speculated that the easternmost firebox where it was recovered held the batterie kettle and was therefore the last stage in the sugar making process. The concentration of wrought iron nails east of the boiler feature could be remains of the sugar purging house, where barrels of sugar were left for molasses to drain (Wayne et al., 1999: 80).

In 2000, the sugar train or boiling facility, and distillery features were fenced off in order to prevent vandalism of the above-ground portion of the site, enclosing 18,000 square feet of the site (Newman, 2000). This nomination includes the enclosed area as well as a discriminating area outside of the fence. The National Register site boundary reflects the significant features of this site that have been determined by both above ground features as well as judgmental shovel testing performed in the locality. The stream is a natural border to the east. The western boundary follows the property line and coincides with development where any site features are likely to have suffered substantial subsurface disturbance. The northern boundary falls just south of the 20<sup>th</sup> century structures; shovel testing in this area demonstrates a signature of historic activity relevant to the period of significance (i.e.; 1770-1783). It is thought that the lack of positive shovel tests north of the 20<sup>th</sup> century structures is due to subsurface disturbance during construction and agricultural activity. The southern boundary is forced from the construction of the road; again, subsurface disturbance precludes the ability to accurately identify significant remains. The described boundary includes areas where future archaeological investigation could yield information about the site and the time period in general.

***The Distillery***

The distillery is constructed out of coquina, the common local natural building stone, made of compressed shells, and handmade red brick (Photo #3); much of the foundation is coquina, while the brick was used for the rest. The brickwork evidences the British construction as the English cross bond pattern was used. This brickwork uses alternating courses (or rows) of headers (the small ends) and stretchers (the long sides) (Meide, 1994:



**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 7 Page 5 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

18). The distillery structure design corresponds with the features common in West Indian rum making facilities (Fig. 3).

The distillery feature consists of two fireboxes that lay side by side with a now collapsed chimney base in between (Photo #4). The chimney once stood flush with the north façade of the distillery, while at the base of the south wall the chimney opened to provide the flue for the two fireboxes; unfortunately, the chimney collapsed in February 1997. The MAAR (1995) study stated that the south base of the chimney originated at the junction of the fireboxes and curved upwards towards the north wall (Wayne et al., 1999:68). The chimney stood at 85cm long by 30cm wide and had a documented height of about 3.8 meters. The chimney has been left as it fell, now protected by a canopy. The overall dimensions of the distillery facility were approximately 3.72 meters long (east-west), and 2 meters wide (north-south). The condition of the distillery has deteriorated.

***The Sugar Train***

There are three types of brick evident in the construction of the sugar train (Photo #5); all of the original brick measured 19.4 x 8.3 x 5.2cm and appears to be handmade (Payne, 1995: 37). Two visibly different brick treatments have been used on the sugar train, with the darker red brick being used on the foundation of the structure, and a lighter brick, probably once lime washed, used from about the level of the recessed firebox openings and up. Use of the limewash may have been practical as well as aesthetic; the wash prevented expanding and contracting by sealing out the elements (Meide, 1994: 11). The third type of brick is modern, and was likely placed there during the twentieth century occupation (Wayne, et al., 1999: 47-48). All of the foundational brick has been laid in the English bonding pattern; the same as noted in the distillery. The bonding is made of a sand mortar with shell inclusions, though some variation exists between the original laid brickwork and the later additions made during the Fagen occupation of the early twentieth century.

The brickwork of the boiling structure has generally withstood the effects of the weather, but deterioration has taken place. Trees growing within the fireboxes had shifted the ends of the boiler and it was in danger of collapse. A stabilization project was completed in 2007 under the supervision of Brian H. Rand, President of Professional Restoration Inc. The east and west ends of the feature were stabilized and a top layer of brick was added to

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 7 Page 6 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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prevent further erosion (Photo #6). The bricks used are replicas of the handmade technology. In addition, a canopy has been placed over the boiler to help prevent further erosion (Photo #7).

The sugar boiling facility, an example of a Spanish sugar train, had four separate fireboxes with side openings for fueling that faced to the south (Photo #8) (Fig. 4) (Wayne et al., 1999:48-59); each firebox was used for the 4 steps in the boiling process, in keeping with the Spanish Train technology (see section #8, p.4) this facility represents. The brick sugar boiling structure was built on an earthen surface and measured 8.65 meters in length (east-west) and 2 meters wide; the train feature is trapezoidal in shape. A majority of the upper part of the sugar boiling facility is missing, though maximum height of about 1 meter near the northeastern section has been documented (Photo #9). In the early 1900's, the owner, Billy Fagen, built his home on top of the sugar train. The home has since been removed, but the brick fireplace that he constructed, known as "the Fagen Chimney," is still standing and is a non-contributing resource for this nomination.

***Non-Contributing Resources***

The non-contributing resources for this nomination include the isolated prehistoric mound in the northwest of the boundary, the trough and well (Photo #10) associated with the 20<sup>th</sup> century farmstead, and the only standing chimney on the site that was a part of the early twentieth century Fagen residence.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 1 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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**SUMMARY**

The Three Chimneys Archaeological Site contains the ruins of the oldest extant sugar mill and rum distillery in Florida (Wayne et al., 1999: 1). It is nominated for local and statewide significance under Criterion A for the significant role the site played in developing industry during the British rule of East Florida, as well as Criterion D for the site's potential to yield information about settlement and industrial practices during Florida's brief British period (1763-1783). The site is presently ruins, with two discernable above ground features that were once functioning parts of a sugar mill and rum distillery; however, more information pertaining to the layout and use of the sugar mill is buried as archaeological deposits. Morphological analysis of the ruins attests to the age of the site, namely the handmade brick technology and English Cross Bond brick laying style used on the sugar train and distillery which, when found together, can be diagnostic of the age. Moreover, historic documentation confirms that the property, once known as the "Swamp Settlement," was developed as part of a plantation grant to a wealthy Scotsman, Richard Oswald in the 1760's. A great deal remains to be learned about this site and, more broadly, eighteenth century sugar and rum manufacturing in Florida.

**CONTEXT**

*History of Development in General Area*

Prior to European contact in North America, prehistoric peoples inhabited the Three Chimneys property area and the surrounding lands. Volusia County currently contains 162 prehistoric sites that date from Paleoindian, Archaic, St. Johns, and St. Johns II periods. There is a non-contributing isolated prehistoric site in the northwest corner of the property that dates to the St. Johns period of Florida prehistory, evidencing the continued occupation of the east coast of Florida for thousands of years. As a majority of the relevant information about the site relates to historic events, the following synopsis will focus on Florida's historic period from the Early Spanish Period through to the twentieth century.

Florida's European history began in the early sixteenth century with the Spanish led exploration of La Florida by Ponce de Leon (1513, 1521), Pánfilo de Narvaez (1528), and

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number

8

Page

2

**THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

Hernando DeSoto (1539-40). Spurred on by the success of the French in settling Fort Caroline on the east coast, King Phillip II of Spain sent Pedro Menendez de Aviles to thwart the French attempts and settle a colony in the name of Spain. The colony was named St. Augustine and was predominantly a military outpost, but was also the base of the mission system that extended into West Florida along the Camino Real (Deagan, 1983). The Camino Real was later extended and mapped by the British in 1778 as "Kings Highway" (Milanich 1995: 179). Following the settlement of St. Augustine, the first mission of Jesuits, the Nombre de Dios, was established (date unknown). Several conflicts during this first mission period hindered the efforts of the Spanish settlers and missionaries, who made great attempts to convert the American Indians to Christianity. In addition to the extensive mission system implemented by the Spanish, land in Florida had been granted to dignitaries, but most failed to cultivate or improve the lands (Piatek, 1992: 319). The Three Chimneys tract was initially granted to Juan Alonzo de Esquivel during the First Spanish period (1565-1763) (Payne, 1995: 7).

After the Seven Years War (also known as the French and Indian Wars), the 1763 Treaty of Paris transferred ownership of Florida and Minorca from Spain to Britain in exchange for Havana, captured a year earlier by the British. The British took possession of Florida in July of 1763 and divided it into East and West Florida, a division that lasted until the start of the Territorial period in the 1820's. Despite the short amount of time the British held Florida (returning it to Spain just twenty years later in 1783), significant development occurred during their rule. The British had successfully developed agricultural and industrial complexes elsewhere along the Atlantic coast, and used the same approach was taken in Florida. Several large grants were awarded to wealthy British citizens upon the condition that plantations to be established and provisions produced that would return revenue to the Crown. Richard Oswald, the plantation owner of the Three Chimneys site, was one of these grantees. Many of the land owners, including Oswald were absentee planters (Wayne et al, 1999:17). Other prominent individuals played a part in developing northeast Florida, such as the Governor of Florida at that time, James Grant, who was a silent partner in Oswald's investment (Wayne, 2010:54). John Moultrie, Lieutenant Governor of East Florida under Governor Grant from 1767, held a land grant northwest of Oswald (Schaefer, 2000: 13). Another locally important British grantee was Andrew Turnbull whose experimental colony of indentured Minorcans at Smyrnea was a seminal example of the active endeavors in the new British colony. (See the Multiple Property

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 3 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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Submission cover, "Archaeological Resources of the Eighteenth-Century Smyrnea Settlement of Dr. Andrew Turnbull, Volusia County, Florida," (2003) and associated nominations.) Ruins of all these plantations are still encountered in East Florida, and many show evidence of reuse from the Second Spanish period and onward.

In 1783, Florida was returned to Spain through further treaties following the American Revolution. The British inhabitants left their plantations and requested remuneration from the British government for the lands they had developed (Siebert, 1972). Because of the British, the land had been cleared, planted, and in some cases irrigated with ditches; therefore, when the Spanish government established their land-grant policy based on the British grants, few settlers in East Florida experienced the difficulties that British planters faced. Land grant agreements in this period again emphasized the need for return of agricultural products and was based upon head rights of 100 acres plus fifty acres per person in their group, including slaves (Hanna and Hanna, 1950: 56). Like the British colonists, Spanish settlers, or those who swore allegiance to the Spanish government to become naturalized settlers, were required to develop their lands with industrial facilities and to cultivate the land to produce agricultural products within 10 years of the grant. After completing the prescribed timeframe, the homesteader would receive title to the land (Gannon, ed., 1996: 161). As under the British, sugar and indigo production were common, though rice cultivation was also carried out on the plantations. Cattle ranching, turpentine, and timbering were other common uses of the land.

By 1821 Spain surrendered Florida to the United States. This brought in new settlers from the northern plantations of the Carolinas and Virginia who also settled plantations and homesteads following the important industries of Florida, such as naval stores and timbering. Throughout the Second Spanish and Territorial periods, active resistance to the European presence from the Seminole Indians was common. Many of the laws affecting American Indians at that time focused on removing the Indians from lands that the new settlers desired. The Seminole tribe evolved out of resistance to these laws, banding together American Indians from all over the Southeast United States, as well as run away slaves from British and Spanish plantations who were all opposed to the restricting land laws. The conflicts culminated in three Seminole Wars and ultimately removal of the Seminole from habitable Florida lands.

United States Department of the Interior  
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 4 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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Florida became the twenty-seventh state in the United States of America on March 3, 1845.

***Sugar and Rum Production at the Swamp Settlement***

The basic method of sugar production involves crushing the sugar cane to produce juice, clarifying the juice, and boiling it in individual kettles through four stages until it begins to granulate. In the case of Three Chimneys, the early Spanish Train method of boiling the cane was used, as evidenced by the ruin of the sugar train (Wayne, 2010:26). The Spanish Train method employed furnaces or fireboxes underneath each kettle, which differs from the later Jamaica Train process that used one furnace situated next to the smallest kettle (the *batterie*) and a flue system to transfer heat to the other three (the *sirop*, *flambeau*, and *grande*). The final stage of sugar processing requires that the granulated sugar sit for a period of time to crystallize as the molasses drains out of the barrels; molasses could also be used with other byproducts of the sugar making process to make rum.

In the eighteenth century, rum distillation required two fireboxes that heated the potstill and doubler or retort to reduce down the fermented vapor of the molasses (Fig. 3). The Three Chimneys rum distillery is discernable as ruins just northeast of the sugar train. It is supposed that a sugar purging house where the molasses draining/ crystallization phase was completed was constructed somewhere within the significant area. Most of these structures would have been made of wood, although a tabby floor or foundation may also have been used. A concentration of wrought iron nails east of the sugar train and south of the distillery may represent the sugar or purging house, or it could have been the site of a fermenting house, where rum could be aged in oak casks (Fig. 4).

***Site Specific Historic Development: The British Period***

The general age of the site has been determined by the morphological features of the extant ruins, archaeological investigation, and historical documentation. The design of the sugar and rum production facilities at the Three Chimneys site predates the use of steam power and other nineteenth century technological improvements (Sitterson, 1953: 138). The sugar mill for the crushing of the sugar cane would have been animal powered (Wayne, 2010: 57). Sugar boiling used the "open kettle" process employing a "Spanish Train" facility, and

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 5 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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the rum distillation procedure would probably have been similar to that practiced at that time in the West Indies (Fig. 5). The site presents a unique opportunity to study how industrial procedures employed by the British in the Caribbean were adapted to the indigenous materials and the climate of the East Florida Colony.

The general age of the site has been determined by the morphological features of the extant ruins and archaeological investigation. A more precise date of construction and confirmation of intended purpose of the sugar making facility has been based on two historic documents. Colonial Public Record Office correspondence dating from December 14, 1770, states that a Jamaican planter directed the sugar and rum manufacture at Mount Oswald (Lawson, 1942). Mount Oswald was the location of Richard Oswald's main plantation house, and the correspondence likely refers to the entire plantation, which consisted of five developments. There is no other sugar making facility on the granted parcel, so it is assumed the 1770 document refers to the activity at the Swamp Settlement. A further document from 1773 states that Oswald would soon profit from the sugar plantation (Taylor, 1984:67). These two documents indicate that the Swamp Settlement was under construction or established as early as 1770, and was expected in 1773 to produce income sufficient to cover the costs of this settlement's development. According to an appraisal in 1784, in which three accounts were given based on personal observation, the Swamp Settlement consisted of 300 cleared acres and several substantial buildings, including the overseer's house, grain houses, sugar house, distillery works and sugar mill (Siebert, 1972: 59).

On the ground, the Three Chimneys site has several indicators attesting to the early date. Firstly, the unique size of the handmade bricks is just shy of Noël Hume's size classification of "English" brick. However, the brick making technique does follow his description of English bricks that are "cherry-red bricks that are tight grained, highly fired (sometimes to a blue black), and extremely hard" (1969: 82). They have been laid in the English cross bond style, further associating the site with the British Period in Florida. The design of the sugar train is also indicative of the English colonial timeframe, as it used the Spanish Train method of heating the sugarcane juice to produce the granulated sugar product; this will be discussed in detail later.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 6 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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With the evidence from the ruins alone, it is clear that an early attempt at sugar making was made on this site granted to Richard Oswald during the short British Period of Florida's history. However, what is not known is how efficient this facility was and how much sugar or rum was actually produced. At this point no information regarding exporting the products has been found. In 1783, several witnesses testified to the developments within Mount Oswald, including the Swamp Settlement. All of the witnesses attest to the attempt at sugar production there and the building of such facilities, but none could confirm the continued use of the facility as a sugar or rum distillery. One witness, Richard Payne, believes he saw the Swamp Settlement in 1781 or 1782. He claimed:

... There were more than 100 acres cleared, which were used as a sugar plantation, but not succeeding as expected, were abandoned and not converted as he ever heard into a rice plantation. That upon this settlement there was a large sugar house and every building he believes necessary for a sugar plantation; they were built of very good materials and good workmanship and when he saw them in perfectly good repair, but they were afterwards abandoned. (Siebert, 1972: 59)

A former agent for Mount Oswald, Lieutenant Colonel John Douglas, claimed that the sugar works were abandoned because "...this Situation was too far northward for a sugar plantation & he has heard that the plan not succeeding was laid aside on that Account" (Siebert, 1972: 60-61). It is not certain when sugar was no longer produced at the Swamp Settlement, but it appears that other endeavors on the plantation, such as indigo processing, were prioritized, since Douglas continues, "[t]hat it was better Calculated for an Indigo Plantation...." Although there is no proof that the facilities were ever used to process indigo, he confirmed that sugar making facilities had been erected on the plantation, and observing they were "...going to decay but might have been repaired for 100 pounds," Douglas believed they had been in use three or four years prior to that time (Siebert, 1972:60-61).

***The Second Spanish Period and Beyond***

The new Spanish rulers of East Florida granted land to several Englishmen in order to repopulate Florida rapidly; they had desired to revive the successful plantations of the



**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 7 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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British Period and allowed British Catholics to remain in the reoccupied territory. In 1803, Henry Yonge was awarded 850 acres, including Three Chimneys, on the Mosquito (Halifax) River. He worked for six years to develop the land but abandoned the area in 1809. The Three Chimneys area again became overgrown, and wooden structures deteriorated rapidly.

Yonge sold the grant to Octavius Mitchal in 1820 when it was certified and platted. Mitchal then sold it to John McQueen in 1822, and McQueen who then almost immediately sold it to John P. Williamson in 1823. The Superior Court of East Florida confirmed Williamson's title in 1845. In 1856, Williamson sold the grant to the Swift brothers, and they harvested the live oak trees for timber; however, the deed could not be confirmed because Volusia County records do not begin until 1857.

Philip and Francina Corbin purchased the property in 1875. It was at this time that the 850-acre grant was subdivided into small parcels and deeded to family members and friends of the Corbins (Payne, 1995:21).

William Fagen received the deed for the tract that contains the project area in 1916 having bought it from the heirs of his half brother, Hotel Ormond builder John Anderson. According to a dated inscription on the house foundation, Fagen built a residence there in 1914, prior to the deed's date. The house was erected with its south end resting on the northern edge of the sugar boiling structure. He set up a tourist attraction known as Camp Fagen. It included a small museum and some alligators to entertain guests from the Hotel Ormond (Payne, 1995:21).

William and Lillian Fagen sold the land to Edmund L Fisher in 1921 (Payne, 1995:21). At some point, the Fishers sold the property to William H. Flegart. A single-story, concrete and wood frame farmhouse was built to the north of the distillery remains. Three frame support structures and concrete watering features were also constructed. One unfinished structure has a date of 1948 with Flegart's name inscribed on it. The farm buildings have since been removed, but a well and trough remain within the fenced area of the site and are considered non-contributing resources.

In 1994, William H. Flegart sold the parcel to Sun Beach Investment Company.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 8 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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In 2003, the State of Florida acquired the 7.53 acre parcel surrounding the Three Chimneys. The property is managed by the Ormond Beach Historical Society under a 50-year lease agreement with the State.

**SIGNIFIGANCE**

***Criterion A: Industry***

The Three Chimneys site is an excellent example of the industrial endeavors undertaken by the British during their brief rule of Florida, and is a relic of the early British sugar and rum industry. The Three Chimneys site represents one of the earliest, if not the first, extant example of the Spanish train method of sugar production in Florida.

Britain's desire to colonize Florida was spurred in part by the need to lessen the drain on its gold supplies incurred through the purchase of imported commodities such as indigo, cochineal, cotton, silk, rice, oil, and wine. By growing these crops on British-owned soil, the Crown could provide its people with highly desired products directly. As an incentive, financial rewards were offered to those plantation owners in the colonies who were willing to grow agricultural products for commercial use (Griffin, 1991:51). One of the first grantees of land in East Florida was Richard Oswald. Oswald attempted to establish several types of potentially lucrative industries on his land: indigo, sugar, and rum were among them. He founded five settlements on his grant: Mount Oswald, where the main overseers residence was located; the Ferry settlement; the Cowpens settlement; the Adia settlement; and the Swamp Settlement, which is now known as the Three Chimneys site (Payne, 1995: 11). The Swamp settlement was devoted to sugarcane and was intended to produce the first sugar and rum in the new Florida colony. Based on the information contained at the site, it will be possible to establish and preserve a record of an eighteenth century industrial enterprise that is unique to the region.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 8 Page 9 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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***Criterion D***

The Three Chimneys site contains ruins as well as rich archaeological deposits preserved below ground. The site has the potential to yield information pertaining to the layout and use of the sugar mill, as well as the people who operated it.

Questions that may be addressed by future archaeological investigations include:

- What is the extent and layout of this particular sugar making facility? Archaeological identification of features such as the animal powered grinding mill, the sugar purgery (where molasses was allowed to drain and afterwards was collected for rum production), and the fermenting facility could shed light on any adaptation to the environment that this industrial effort considered.
- How does this facility represent a starting point for the evolution of industrialized methods for sugar production as adapted for the Florida climate? There is a close relationship between the British Period East Florida settlements and the British settlements in the Caribbean. Comparative research using global systems theory could answer many other questions about the logistics of British industrial endeavors in the Colonies.
- Does the non-contributing resource of the 1948 well have any earlier component that dates to the British occupation and function of the sugar mill?
- There are still questions about the sustained use of the facility to produce sugar, as the crop of sensitive sugarcane may not have survived reported freak weather at that time, including a snowstorm in February of 1773 (Ludlum, 1984: 23). Positive identification of all the usual structures associated with this industry, such as the overseers residence, the purgery, sugarhouse, and mill could bring us closer to understanding the functional lifespan of this sugar mill. This could help to answer questions pertaining to the perceived versus actual economic foundation that Richard Oswald was building by bringing this industry to Florida

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number       8       Page       10       **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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- Other significant features may exist on the site. For example, a slave settlement should be located near the facility, which could yield more information about the African people brought to America as slaves through the West Indian trade route.

A portion of the site has been sealed by the concrete flooring installed by Fagen in the early twentieth century. It is very likely that the above questions and more could be answered through investigations by future archaeologists.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 9 Page 1 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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**BIBLIOGRAPHY**

- Deagan, K. Spanish St. Augustine: The Archaeology of a Colonial Creole Community (Academic Press, New York. 1983).
- Gannon, M. The New History of Florida (University of Florida Press, Gainesville. 1996).
- Griffin, P. C. Mullet on the Beach: Minorcans of Florida: 1768-1788. (University Press of Florida, Jacksonville. 1991).
- Hanna, A.J. and Hanna, Kathryn Abbey. Florida's Golden Sands (Bobbs-Merrill Company, New York. 1950).
- Hinkley, A.G. The Colonization of Ormond, Florida (The E. O. Painter Printing Company, DeLand. 1931).
- Lawson, E.W. Public Records Office, Colonial Office, Correspondence of the Governor or Lieutenant Governor and the Secretary of State 1771-1772, National Park Service microfilm, No. 44:17 (St. Augustine. 1942).
- Ludlum, D. M. The Weather Factor (Houghton Mifflin, Boston. 1984).
- Meide, C. Bricks: An overview of Function, Form, and Historical Types.  
[http://www.staugustinelighthouse.com/downloads/lamp\\_Meide\\_1994\\_Bricks.pdf](http://www.staugustinelighthouse.com/downloads/lamp_Meide_1994_Bricks.pdf)  
Accessed June 15, 2010.
- Milanich, J. T. Florida Indians and the Invasion from Europe. (University Press of Florida, Gainesville. 1995).
- Newman, C. Recommendations for Archaeological Monitoring to Accompany Fence Placement at the Three Chimneys Sugar Mill site (8VO196), Ormond Beach, Florida. On file with the Bureau of Archaeological Research. (Florida Division of Historical Resources, Tallahassee. June 29, 2000).

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number      9      Page      2      **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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Noël Hume, I. A Guide to Artifacts of Colonial America (Random House, New York. 1969).

Payne, T. / MAAR Associates. Archaeological Assessment for the Three Chimneys Site and a Reconnaissance Survey at a Project Land Parcel, Ormond Beach, Florida (Florida Division of Historical Resources Master Site File Survey No. 4084, Tallahassee. 1995).

Payne, T. Archaeological Investigations in the Eastern-Most Firebox at the Sugar Boiling Feature, Three Chimneys (8VO196), Ormond Beach, Florida. (Florida Division of Historical Resources Master Site File Survey No. 13914, Tallahassee. 2007).

Payne, T. and Griffin, Patricia Preliminary Archaeological Investigations at the Joseph Martin Hernandez Mala Compra Plantation Settlement at Bings Landing County Park, Flagler County, Florida (Florida Division of Historical Resources Master Site File Survey No.5595, Tallahassee. 1999).

Payne, T. and Griffin, Patricia C. Sugar Making in East Florida and the History of Eight Plantations (Florida Division of Historical Resources Master Site File Survey No. 8640, Tallahassee. 2001).

Penton, D., Letter to Dorothy MacDuff, January 25, 1972. (On file with Florida Master Site File, Florida Division of Historical Resources, Tallahassee. 1972).

Piatek, J. B., "Archaeology and History at Tomoka State Park." The Florida Anthropologist 45(4). (Florida Anthropological Society, Inc., Tallahassee. 1992. p. 314-325).

Portland, Me.: Hugh C. Leighton Co., Postcard of Ormond Florida: The Old English Chimneys [19--?].

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number

9

Page

3

**THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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- Schaefer, D. "A Swamp of an Investment? Richard Oswald's British East Florida Plantation Experiment." In: Landers, J. G. (ed.) Colonial Plantations and Economy in Florida. (University of Florida Press, Gainesville. 2000).
- Siebert, W.H. Loyalists In East Florida 1774 to 1785; The Most Important Documents Pertaining Thereto, Edited with an Accompanying Narrative. Volume II: Records of Their Claims for Losses of Property in the Province. (Gregg Press, Boston. 1972).
- Strickland, A. Ashes on the Wind: The Story of the Lost Plantations. (Volusia County Historical Commission, Volusia County: Florida. 1985).
- Sitterson, J. C. Sugar Country: The Cane Sugar Industry in the South, 1753-1950. (University of Kentucky Press, Louisville, Kentucky. 1953).
- Stanton, E. Early Plantations of the Halifax: Concerning the Ruins. (Ormond Village Improvement Association, Ormond Beach. 1949).
- Taylor, Thomas, Settling a Colony over a Bottle of Claret: Richard Oswald and the British Settlement of Florida. (M.A. thesis, University of North Carolina, Greensboro, North Carolina. 1984, rev. 1993).
- Wayne, L.B., Dickinson, Martin, and Hall, Gregg /SouthArc, Inc. An Historic Preservation Plan for the Three Chimneys Sugar Mill Site (8VO196), Ormond Beach, Florida. (Florida Division of Historical Resources Master Site File Survey No. 6209. Tallahassee. 1999).
- Wayne, L. B. Sweet Cane: The Architecture of the Sugar Works of East Florida. (Tuscaloosa, Alabama. University of Alabama Press, 2010).
- White, A. Documentation related to mapping work carried out on the Three Chimneys site. On file with the Bureau of Archaeological Research. (Florida Division of Historical Resources, Tallahassee. 2006).

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number 10 Page 1 **THREE CHIMNEYS SITE, VOLUSIA  
COUNTY, FLORIDA**

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**VERBAL BOUNDARY DESCRIPTION**

E 454 Ft of Lot F Sub Grant Lot 7 ½ Ormond E 454 Ft of Lot G Sub Grant Lot 7 & Inc E 454 Ft Lot G Sub Grant Lot 6 1/20. This parcel contains 7.53 acres. Volusia County Parcel #41-14-32-01-10-0120.

The nomination is a 1.65 acre portion of this parcel.

The western boundary follows the property line. The northern boundary falls just south of the 20<sup>th</sup> century structures in line with GPS coordinates West: Y=81.0760 X= 29.2795; East: Y= 81.0746 X= 29.2800 recorded in the field by survey archaeologists. The southern boundary follows the property line as defined by right-of-way, and the construction of Granada Boulevard. The southern boundary also extends along the stream as a natural border. The eastern boundary parallels the eastern property line 120 feet west of that line.

**BOUNDARY JUSTIFICATION**

The National Register site boundary reflects the significant features of this site that have been determined by both above ground features as well as judgmental shovel testing performed in the locality. The described boundary includes areas where concentrations of above ground features or positive shovel tests were located, as well as contiguous areas where future archaeological investigation has the potential to yield information about the site and the time period in general. It is likely that the National Register boundary may be expanded in the future after additional, more intensive archaeological investigations are performed.

The northern boundary was determined by survey archaeologists who determined that a lack of positive shovel tests north of the 20<sup>th</sup> century structures is due to subsurface disturbance during construction and agricultural activity. Shovel testing in the nominated area demonstrates a signature of historic activity relevant to the period of significance (i.e., 1770-1783).



**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number \_\_\_\_\_ Photos \_\_\_\_\_ Page 1 **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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**PHOTOGRAPHIC LIST**

1. Three Chimneys Archaeological Site, 715 West Granada Blvd., Ormond Beach
2. Volusia County, Florida
3. Ormond Beach Historic Society (OBHS) members
4. 2008
5. OBHS
6. Current entry approach to site, looking northeast
7. Photo #1 of 10

Items 1 through 5 are the same for photos 1-5. Item #4 is 2006 for photos 4,5,8,9.

6. Tented boiling facility and distillery, looking northwest
7. Photo #2 of 10

6. Distillery, looking north
7. Photo #3 of 10

6. North side of distillery and chimney fall, looking south
7. Photo # 4 of 10

6. Boiling facility and Fagan's chimney prior to stabilization, looking west
7. Photo #5 of 10

6. Boiling facility stabilized, looking northeast
7. Photo #6 of 10

6. Fagan's chimney and tented boiling facility, looking south
7. Photo #7 of 10

6. South side of boiling facility, looking north
7. Photo #8 of 10

6. North side of boiling facility, looking south
7. Photo #9 of 10

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section number          Photos          Page   2   **THREE CHIMNEYS ARCHAEOLOGICAL SITE,  
VOLUSIA COUNTY, FLORIDA**

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3. Rachel B. Porter
4. 2006
6. Non-contributing well and trough, looking east
7. Photo #10 of 10

Sources of Figure graphics:

*Boundary Map*

SouthArc Inc., "Historic Preservation Plan for the Three Chimneys," 1999, page 78.  
Florida Master Site File # MS6209.

*Figure 1*

Postcard, "English Chimney," call #PC2591, Florida Memory Project, Florida State Archives.

*Figure 2*

"Area with Wrought Iron Nails,"

Payne, T. / MAAR Associates. Archaeological Assessment for the Three Chimneys Site and a Reconnaissance Survey at a Project Land Parcel, Ormond Beach, Florida, Newark, Delaware. (Florida Division of Historical Resources Master Site File Survey No. 4084, Tallahassee, 1995). P.36.

*Figure 3*

West Indian Rum Distillery; SouthArc, p. 41.

Source; Lewisohn, Francis, "Diverse information on the Diverse History of St. Croix, The St. Groix Landmarks Society, Fredericksted, U.S. Virgin Islands, 1964.

*Figure 4*

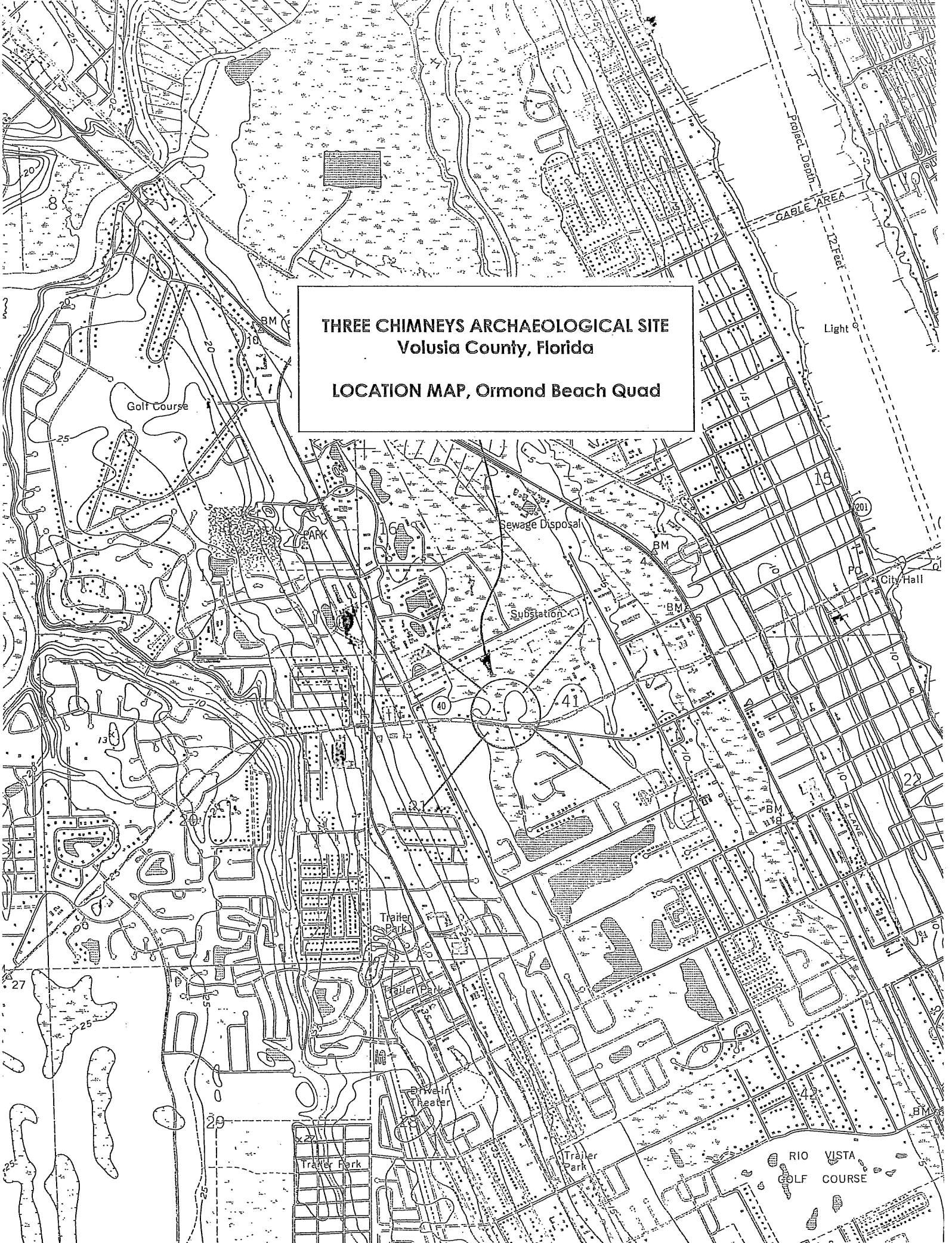
Four Box Boiling Facility

Payne/MAAR, 1995, p.38.

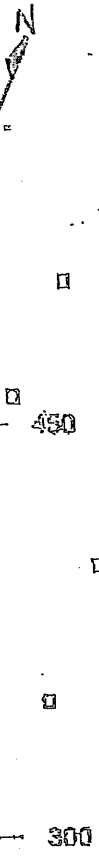
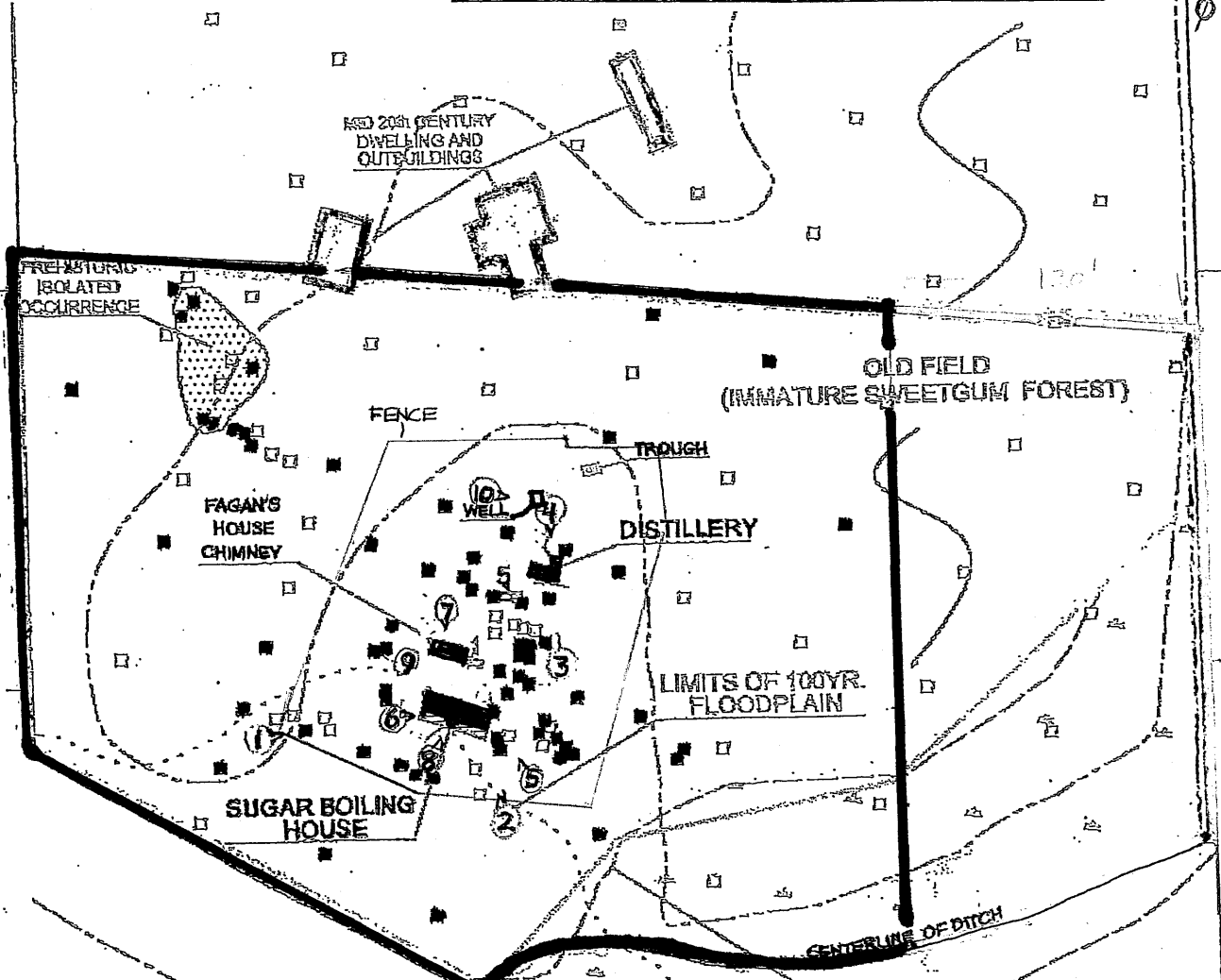
*Figure 5*

SouthArc. Inc., p. 33. Source; Guthrie, Margaret E., "Molassas," Early American Homes, 1999.

**THREE CHIMNEYS ARCHAEOLOGICAL SITE**  
**Volusia County, Florida**  
**LOCATION MAP, Ormond Beach Quad**



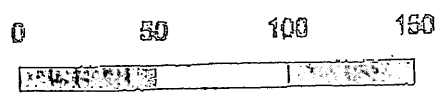
**THREE CHIMNEYS ARCHAEOLOGICAL SITE**  
 Site, Boundary Map & Photo Diagram



S.R 40

W. GRANADA BLVD.

\* T. PAYNE, 1985  
 BOUNDARY, JURISDICTIONS, BASE MAP  
 AND PARTIAL TREE SURVEY  
 PROVIDED BY CITY OF ORMOND BEACH, 1985



SCALE IN FEET

LEGEND	
	HISTORIC STRUCTURES
	BLOUGH
	PREHISTORIC ISOLATED OCCURRENCE
	WETLANDS
	LIMITS OF 100YR FLOODPLAIN
	OLD FIELD, 1843
	POSITIVE TEST UNIT
	NEGATIVE TEST UNIT
	EXCAVATION UNITS
	CM CONCRETE MONUMENT

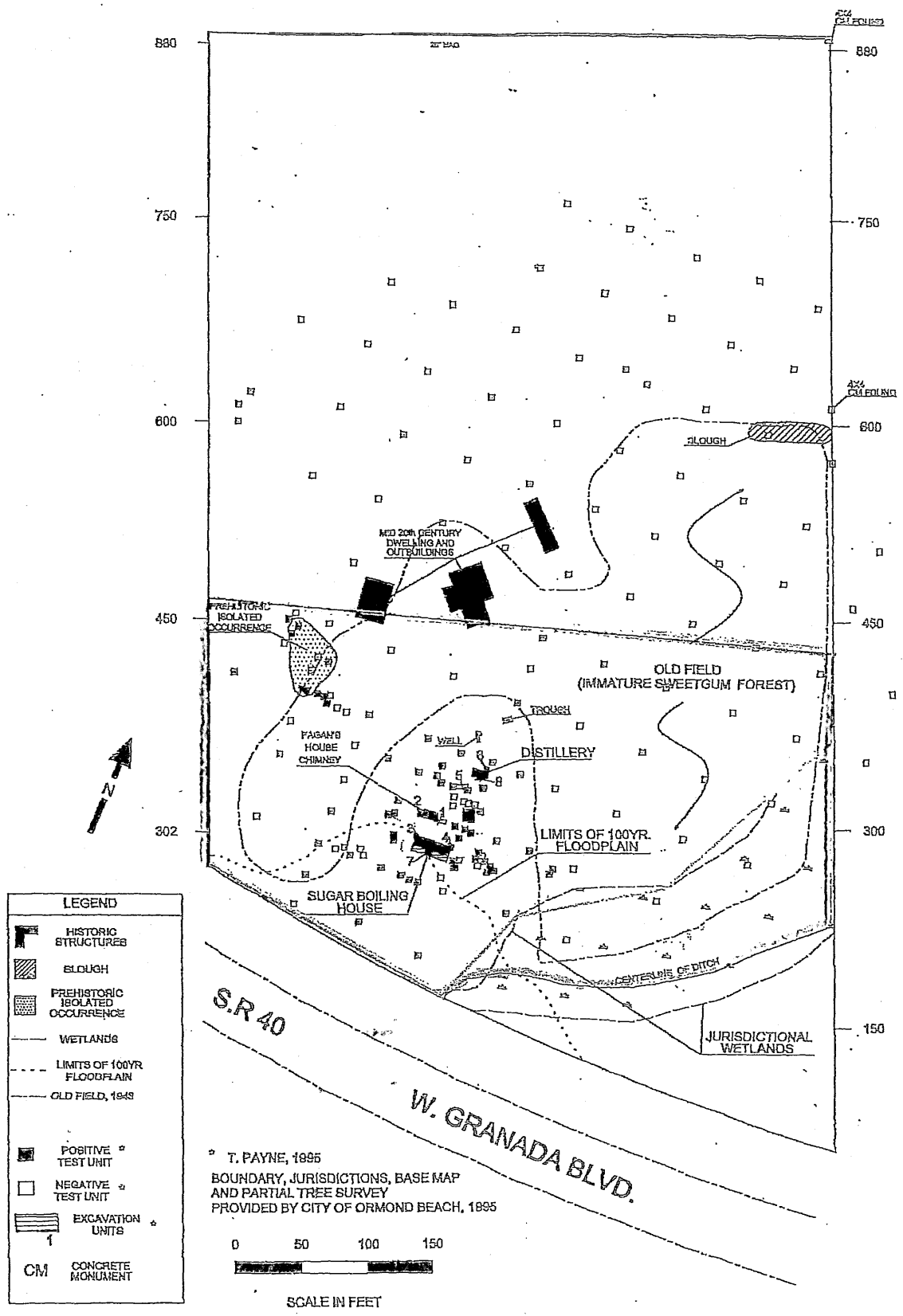


FIGURE 39. AREAS OF ARCHAEOLOGICAL EXCAVATIONS, THREE CHIMNEYS SITE (8VO196), ORMOND BEACH, FL

SOURCES: MAAR 1995; OBHT 1999

**SouthArc, Inc.**

Archaeological and  
Historical Services

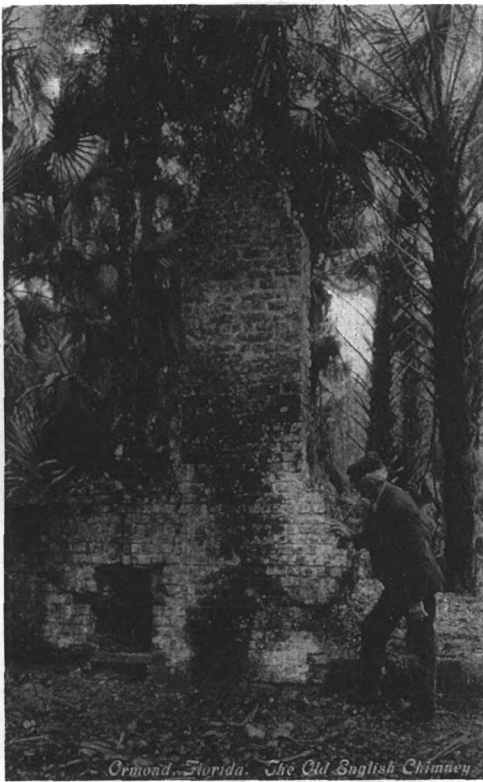


Figure 1 Postcard, early 1900s, Florida Memory Project, Florida State Archives

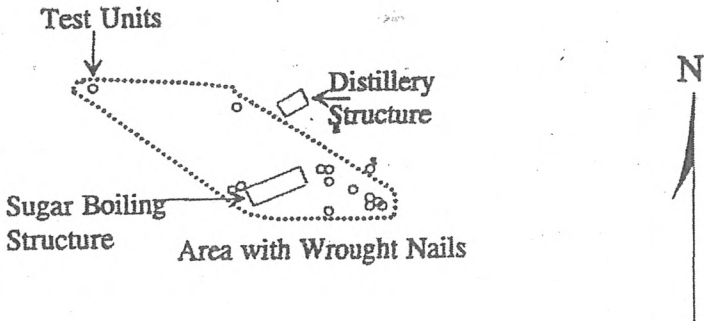


Figure 2 Area with Wrought Nails, east of boiler

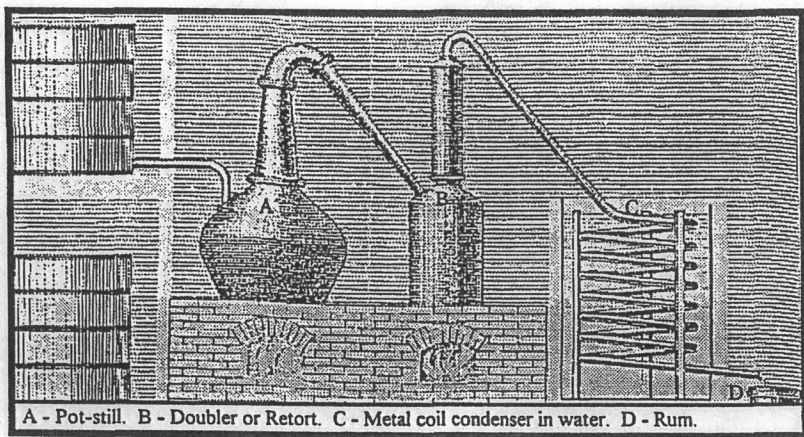


Figure 3 West Indian rum distillery

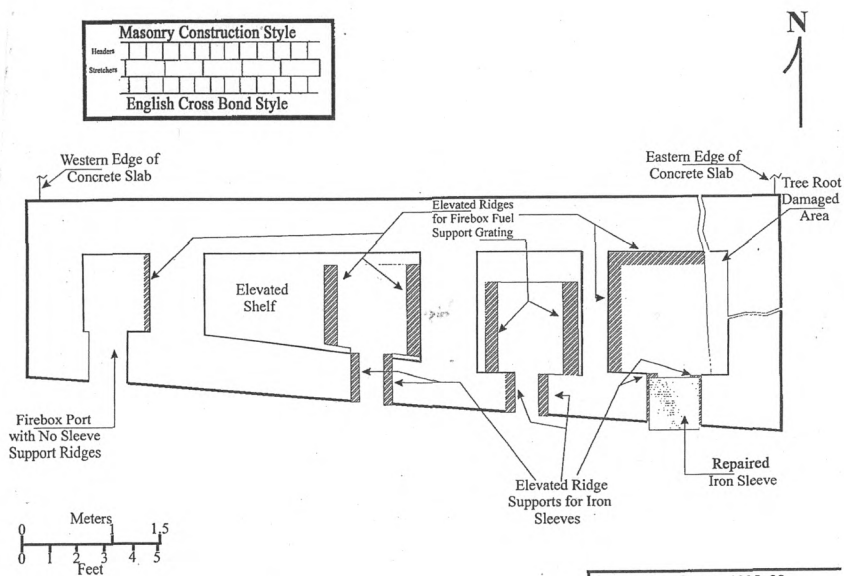
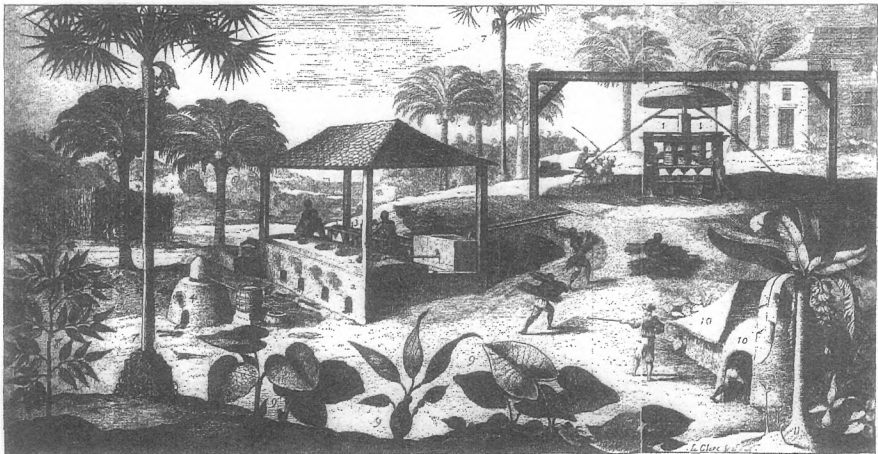


Figure 4 Boiling facility with four fire boxes

Figure 5 West Indies sugar processing



1. Moulin. 2. Fourneaux. 3. Fôrmas. 4. Vinaigrerie. 5. Canas de Sucro. 6. Gros. 7. Laitier. 8. Pajomirinha. 9. Choux Caraibas. 10. Cafes da Negres. 11. Fiquir. 12.

SUCRERIE. C. 1002. p. 117. p. 117. p. 117.