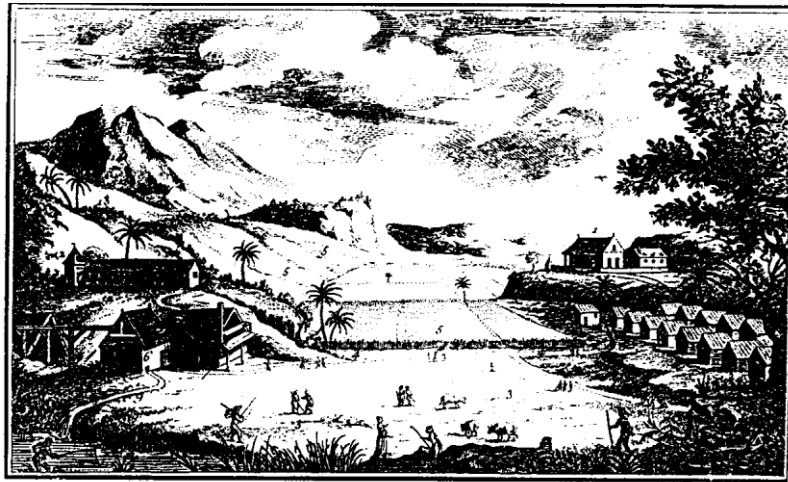


An Archaeological Assessment of  
The Pleasures Estate  
Sint Eustatius  
(SE 57)



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## Table of Contents

Acknowledgments .....	3
List of Figures .....	4
List of Plates	5
Review Statement	6
Introduction	7
Historical Background .....	7
Methods and Procedures .....	8
Results	9
Discussion .....	23
Recommendations .....	24
Restoration Issues .....	25
Conclusion .....	26
Appendix I Plates .....	27
Appendix 2 Photo Log .....	40

*Cover: An 18th Century Caribbean Sugar Plantation as illustrated by Denis Diderot in his LEncyclopidie.*

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## List of Figures

Figure 1 <i>Pleasures</i> Sugar Processing Buildings .....	11
Figure 2 The "Industrial Complex" at <i>Pleasures</i> .....	12
Figure 3 The "Large Cistern Complex" at <i>Pleasures</i> .....	16
Figure 4 The "Molasses Vat Complex" at <i>Pleasures</i> .....	19

## List of Plates

Plate I Northeast wall of Structure A in the Industrial Complex depicting two tiered construction .....	27
Plate 2 Southeast wall of Structure A in the Industrial Complex showing fragmented nature along entire length .....	27
Plate 3 Narrower southeast wall that may indicate another building in the Industrial Complex .....	28
Plate 4 Interior of northwest wall forming comer and containing a joist hole and doorway for Structure A in the Industrial Complex .....	28
Plate 5 Exterior southwest elevation "Double Wall" in Structure A of the Industrial Complex .....	29
Plate 6 Two parallel walls abutting each other in the Industrial Complex forming a "double wall" .....	29
Plate 7 Plastered area suggesting a gabled roof in the Industrial Complex .....	30
Plate 8 Modern poured concrete structure lying to the southeast of the Industrial Complex .....	30
Plate 9 Overall of Large Cistem Complex .....	31
Plate 10 Comer along the exterior of the Large Cistern that was used as the datum.....	31
Plate I I Interior view of the overflow drain on the Large Cistern .....	32
Plate 12 Limestone and Yellow-brick box structure adjacent to the Large Cistern .....	32
Plate 13 Yellow brick arched hole near the southwest comer of Structure A in the Large Cistem Complex .....	33
Plate 14 Overall of Structure A in the Large Cistem Complex .....	33
Plate 15 Filled doorway or window in Structure A of the Cistern Complex .....	34
Plate 16 Northeast joist hole along southwest wall of Cistern Structure .....	34
Plate 17 Southwest joist hole along southwest wall of Cistern Structure .....	35
Plate 18 Overall of Molasses Vat in Molasses Vat Complex .....	35
Plate 19 Overall of Molasses Vat Complex .....	36
Plate 20 Drain hole in the Molasses Vat .....	36
Plate 21 Doorway in Molasses Vat Complex .....	37
Plate 22 Yellow <b>brick feature</b> in southeast wall of Molasses Vat complex .....	37
Plate 23 <b>Wall of Structure 2 abutting Structure I in</b> the Molasses Vat Complex .....	38
Plate 24 Structure 3 in Molasses Vat Complex .....	38
Plate 25 Agricultural wall extending up the hillside in the southeast direction .....	39

## Review Statement

Overall the *Pleasures* plantation site is an excellent example of an 18'h and 19' century sugar processing facility. It is comparable to the *English Quarter*, *Princess Estate*, and *Fair Play* plantation sites in terms of structural preservation. It is possible that valuable artifactual information is preserved beneath the soil wash from the Quill volcano. However, this wash may have also removed artifactual evidence from the site. Excavations undertaken here have the potential to substantially increase knowledge regarding sugar processing in Dutch colonies. With this well preserved site investigations regarding slave life would be especially significant. Locating slave dwellings and associated artifacts should be a part of any future archaeological survey.

Restoration potential for the plantation is not promising without a very significant financial outlay. Substantial archaeological excavations would be absolutely necessary before any restoration could begin. Restoration of the buildings to original specifications would be difficult and expensive but certainly not impossible. If the plantation were to be restored it would be a magnificent contribution to the restoration projects currently underway through the Historic Core Restoration project in Oranjestad. A fully restored sugar plantation on St. Eustatius would also be a huge tourist attraction supplementing the Museum of the First Salute currently being constructed adjacent to the Simon Doncker House Museum in Oranjestad.

With these possibilities it is imperative that funding for archaeological work and subsequent restoration at the *Pleasures Estate* be pursued vigorously. *Pleasures* has the potential to be yet another beautiful facet on the "Historical Gem" that is St. Eustatius.

## Introduction

St. Eustatius is a small island in the Dutch West Indies that was a significant trading hub for the Americas during the 17<sup>th</sup> and 18<sup>th</sup> centuries. A sugar plantation economy supplemented the profits made through this international trade. One sugar plantation on St. Eustatius that operated during the 18<sup>th</sup> and early 19<sup>th</sup> centuries was the Pleasures Estate.

Although few references relating to the history of this particular plantation have survived the vagaries of time; documents regarding other sugar plantations are helpful to the investigation of Pleasures. It is located on the north slope of a dormant volcano called the Quill that dominates the southwest third of the island. During June 1997, the current owners of the property requested that archaeologists from the College of William and Mary in Virginia document the standing structures and evaluate their condition in terms of restoration potential. This task was completed during July 1997. The following report describes the extensive ruins located at Pleasures and evaluates the possibility for restoration.

## Historical Background

The occupants of the Pleasures Estate have left few documentary records behind. In the early 1980s Mr. Han Jordaan searched the "General Kingdom Archives" (A.R.A.) in the Hague". He was not able to locate any references to this particular property. In 1989, Ms. Marijke Koning and Han Jordaan both tried to locate records referring to Pleasures in the Hague. Little information was found. On a 1742 map of the island plantations are numbered, named and owners identified. Number 24 on this map depicts a plantation in the approximate location of "Pleasures". It is owned by "Captain Joan Z. Doncker". A 1775 map lists the widow of a Robert Stewart as the owner. This woman, Judith Z. Doncker, was the daughter of the aforementioned captain.

In 1782, after Judith Stewart-Doncker died an inventory was made. This list of her personal belongings is still available in the A.R.A. (inv. #123, fo. 308 e.v.). In this list is mentioned "**a large dwelling house and land, formerly occupied** by Madarn Stewart, situated on the hills above the old church Yard" and " a house and land situated on the hill, joining James de WINDT and old Governor Heyliger". No details of these houses are available. The Jordaan/Koning report states that the ruins on the property probably date back to the early 18<sup>th</sup> century.

No historical information regarding this property is available for the period between the 1830s and the turn of the century. After this time oral accounts can give us some context. Around 1913-14 the original 18<sup>th</sup> century house burned and a new structure was built in its place. On December 8, 1931 Edward Leslie Blair bought the "Pleasures House" for \$200 from Patrick Emile Ryan and Clement Malone. The deed

was passed in St. Kitts through the Consulate of the Netherlands. Therefore, after 1931 the Blair family owned this property until 1978. There were two parents and nine children living here. The Blair family lived at *Pleasures* until 1978 when the property came to its current owner. Myrtle Blaire is the only known member of this family still residing on St. Eustatius. The main house was still habitable although somewhat dilapidated during the 1970s.

Albert van der Waag acquired the property site unseen through a bank auction in 1979. Two years later the main house structure burned. A very large foundation and several concrete block rooms remain standing. The original 18<sup>th</sup> century foundation is completely obscured by 20<sup>th</sup> century additions and modifications. Adjacent to this foundation is a cistern with attached catchment. This cistern and catchment may be constructed of hewn stones taken from the structures further downhill that are the subject of this investigation. Prior to this study, Jay Havisser worked with field school students from the College of William and Mary to briefly survey and sketch the site in 1981.

Currently, the only inhabitants of *Pleasures* are a goat herd, roosters, chickens, the occasional donkey family, red-headed lizards, and hundreds of Jack Spanier wasps. This survey is the first step in assessing the feasibility of restoring *Pleasures* to its original 18<sup>th</sup> and 19<sup>th</sup> century form.

## **Methods and Procedures**

The *Pleasures Estate* site has been given the William and Mary site designation SE57. Vegetation was cleared around three structure complexes. Dense Coralita vine covering the walls and ground were removed using a heavy-duty rake and machetes. Small shrubs and larger trees were cleared using machetes and a chain saw while the remaining plants were pulled up by hand. Also, Jack Spanier wasp nests were carefully removed from the structures during this process. After clearing the structures and the area around them photographs were taken. The f/stop was adjusted so that the shutter speed always read 1/60" of a second so that a tripod would not have to be used. Two Nikon F- I cameras were used to document the site. Kodak Ektachrome Elite II slide film and Kodak T-Max DX black and white print film were used in these two cameras. A photo board was placed in most shots that listed the date, site designation, photo number and year. In overall and macro photos a 6 foot range pole was used as a scale. In micro and detail shots a 1 foot or a .5 foot scale was used. A north arrow was used in all photographs where practical. All photographs were documented in a photo log. (Appendix 11)

Drawings of each structure complex were made on Mylar using an alidade and plane table. Elevations were taken on all structures and adjacent ground using a transit.



Each complex was drawn on a single piece of Mylar. The drawings were then tied together by making an overall site map with only certain parts of the structures shot in. Using AutoCAD the four drawings were combined to form a detailed site map.

Observations were made regarding the stability of the structures in light of possible restoration. No excavations took place in this investigation. Two other plantation sites were visited to draw comparisons to the *Pleasures* complex. *Fairplay* (SE 10) and *English Quarter* (SE 45/6) plantations were both used in this comparison.

## Results

Three structure complexes were identified after the vegetation was cleared from this site (Figure 1). These structure complexes are designated the "Industrial Complex," the "Large Cistern Complex," and the "Molasses Vat Complex." Each of these appeared at first inspection to be singular, distinct structures. Upon further investigation it was determined that each structure actually consists of at least two buildings each. The following are specific discussions of each complex.

### Industrial Complex

Of the three structure complexes found on the site, this is the highest in elevation and it is also the largest (Figure 2). The complex measures approximately 22.5 feet by 68 feet. The main structure. (Structure A in Figure 2) is most likely two stories. The main structure is thought to be rectangular in shape. The complex may also consist of 2-3 other adjoining structures, as indicated by the walls found at the complex (Structures B and C in Figure 2).

#### *Structure A*

The main structure in the Industrial Complex appears to be rectangular and of hewn stone construction. The northeast wall was found to be intact along its full length, with the exception of a large opening halfway along the wall. The exterior facing stones of this **wall are carefully hewn and fit together** closely without need for smaller fill stones. This construction technique is known as "ashlar" (France 1984:198-200). The interior facing of the wall is constructed with smaller fill stones. The core of the wall consists of mortar and rubble fill (with no brick). This wall is approximately 12 feet above current grade on its interior side and is built in two tiers (Plate 1). The lower tier is approximately 3 feet wide and rises to approximately 5 feet above current interior grade. The upper tier is approximately 2.3 feet wide and rises to the remaining height of the wall. This tiered construction forms a very narrow shelf on the exterior of the wall and a wider shelf on the interior approximately 0.5 feet wide. A large opening in this wall lies approximately halfway along the length of the wall. The opening begins at about the level of the shelf, and is open to the entire wall height. The opening is approximately 4.5 feet wide and has no visible facing stones on either side. The lack of facing stones makes 9

the nature of the opening unclear. It could be a window, a second level doorway, or merely a missing section of wall.

The southeast wall was found to be fragmented along its length and is leaning significantly downhill (Plate 2). This wall appears to be of similar construction to the northeast wall, although the exterior of this wall is not visible because the current grade level is at the top of the wall on the exterior side. This wall also appears to be tiered and has a very wide shelf running along much of the visible length of the wall's interior. This shelf is approximately 2 feet wide and is 0.5 feet lower than the shelf on the inside of the northeast wall. The second, or upper tier of the southeast wall is approximately 2 feet wide. This tiered construction continues from the east corner to approximately 31 feet along the wall, at which point there is space of 8 feet where the wall has been destroyed by downhill soil wash. At the end of this 8 foot space, a wall continues along the same line as the aforementioned wall. However, it is of a narrower width - approximately 1.5 feet - and no shelf is evident. This may indicate a *separate* structure here. (Plate 3) This narrower section continues for approximately 7.5 feet to another soil wash area. Along this wall section, on the interior surface, is a whitish discolored area which may be the remains of a wall that projected toward the center of the structure. The space created by the next soil wash area is approximately 16 feet long. At the end of the soil wash area, the wall resumes again for three more feet before joining the southwest wall to form a perpendicular intersection.

Along the interior of the southeast wall of the structure, four rectangular joist holes were found, starting at the east corner. Each hole is approximately 0.5 feet wide, 0.5 feet deep, and 0.65 feet high; and they occur approximately 3 feet above the current grade or level with the interior shelf mentioned previously. The first three holes are placed approximately 8 feet apart and the fourth joist hole is placed approximately seven feet from the third.

The northwest wall is not evident at all, with the exception of a small portion adjacent to the north corner of the main structure (Plate 4). This short section of the wall extends approximately 2 feet southwest from the north corner. This wall is approximately 2 feet wide and contains a joist hole which corresponds directly with the first one found along the southeast wall. This wall also appears to be of two-tiered construction since there is a small shelf on the interior of this wall which is at the same height as that on the northeast wall interior. There may be a small exterior shelf as well, but this cannot be determined as the exterior facing stones at the shelf level are missing. This wall section ends at a probable second story doorway which is indicated by slanted facing stones on the end of the section. These facing stones are slanted. They are similar to those found in doorways and window openings at other plantation sites on St. Eustatius. The visible top of this "doorway" is at approximately 10 feet above current grade. No additional parts of this wall were found along the remaining length of the structure.

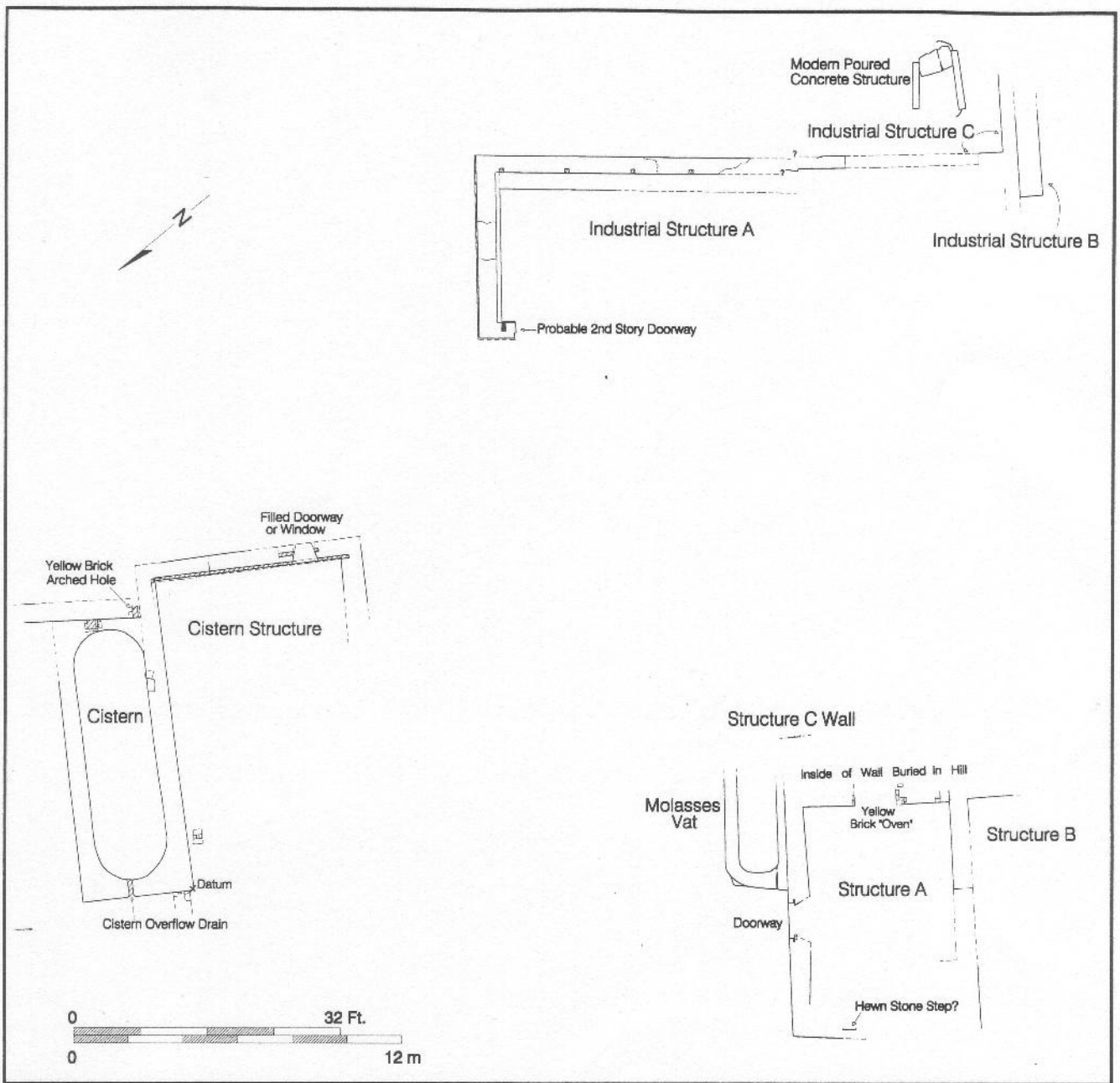


Figure 1. Site Map

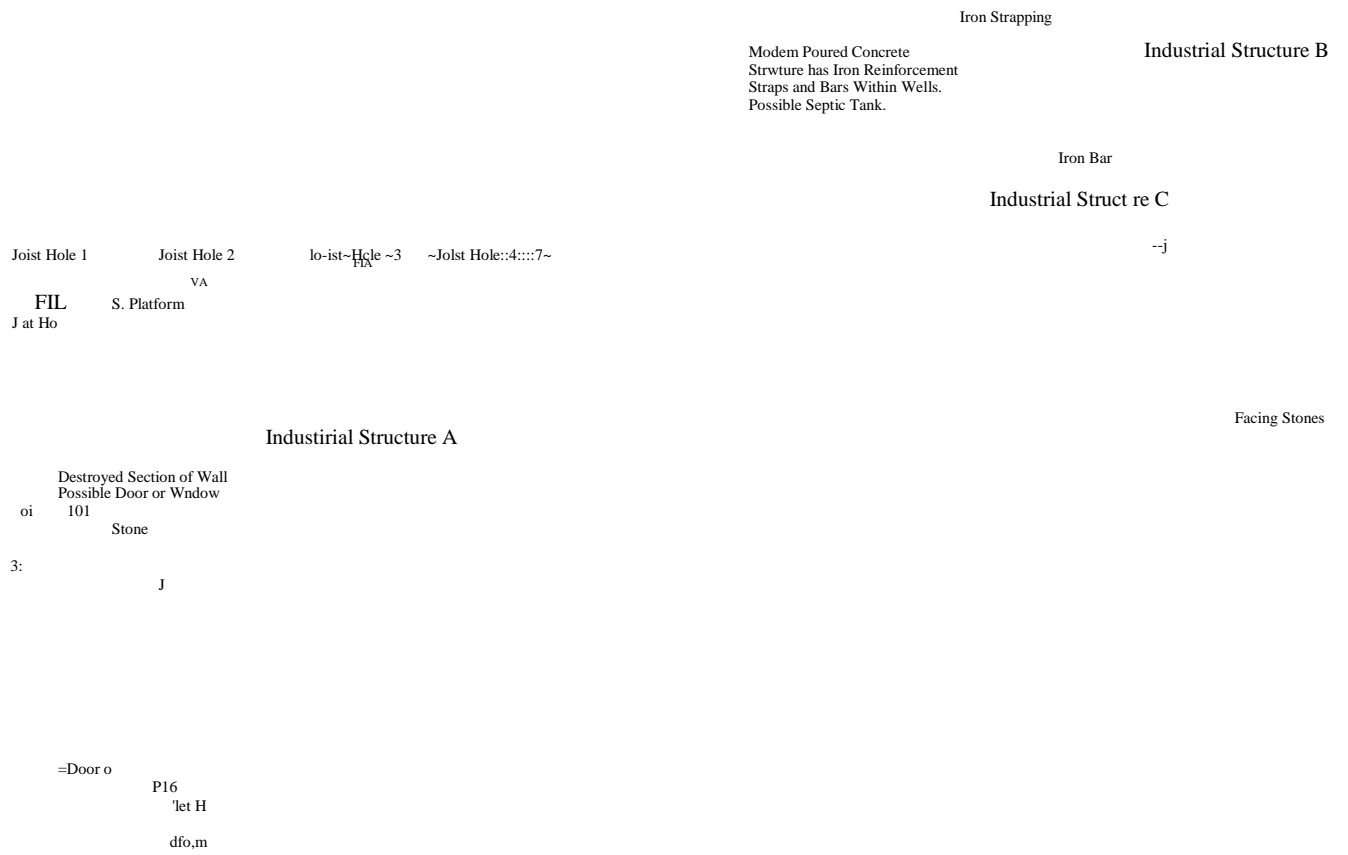


Figure 2. Industrial Complex

The southwest wall at the end of the main structure is evident where it joins the southeast wall. (Plate 5) From this intersection, the wall continues in both directions - to the northwest and to the southeast - for unknown distances. At the northwest end, the wall is visibly destroyed. At the southeast end, the wall disappears into the hillside and may continue for an unknown length. This wall is also abutted by a parallel wall, which may be a reinforcement or the wall of an adjacent structure. (Plate 6) This second wall is wider. (approximately 2.7 feet) and is probably of later construction, since it contains both red and yellow brick in its facing and core fill. The northwest end of this wall is finished with facing stones, indicating an exterior or interior surface. The wall continues into the hillside to the southeast for an unknown distance. The exposed portion of the wall is approximately 10 feet in length. The top of the exposed portion of this wall consists of a large section which has broken off and has tipped toward the interior of the structure. It remains on top of the wall because it is supported by a tree. This displaced section has a plastered surface on its northeast side. The plaster contains many small nicks, all of which are similar in orientation and depth. At the top of this section, the plaster ends at an angled ridge which suggests the former presence of a gabled roof (Plate 7).

Elevations were taken at all structural features and at various points in and around the structure. The grade inside the structure is very uneven due to the downhill soil washes that have broken through the southeast wall at various points.

#### *Other Features at the Industrial Complex*

A large modern poured concrete structure is located approximately 5.5 feet to the southeast of the southeast wall, approximately 4 feet northeast of the southwest wall (Plate 8). This structure has been damaged and is broken into two major pieces, one of which has tumbled down into the interior of the main structure. This modern structure appears to be a septic or other holding tank. Its walls are approximately 0.75 feet wide and are reinforced by iron strapping and iron bars.

#### **Large Cistern Complex**

The Large Cistern Complex is located downhill from the Industrial Complex approximately 32 feet to the north (Figure 1). This complex consists of a large in-ground cistern, as well as the remains of several walls and features. The entire complex measures approximately 38 feet by 44 feet (Figure 3).

#### *Cistern*

The cistern in the Large Cistern Complex is rectangular on its exterior. The interior has semicircular rounded ends. The cistern currently has no roof (Plate 9). The exterior of the cistern is approximately 34 feet long and approximately 12.5 feet wide. The interior of the cistern is approximately 30.5 feet long and approximately 8.5 feet

wide. The datum for SE 57 is located on the west exterior corner of the cistern. The datum was designated the zero foot elevation point for the site (Plate 10).

The bottom of the cistern is covered with soil and rubble of indeterminate depth. The rubble consists of limestone blocks, which may have formed a vaulted roof, and large sections of cistern wall which have fallen in. Due to the debris in the bottom of the cistern, it is impossible to determine the actual depth of the cistern or the composition of the cistern floor at this time without excavation. The current depth of the cistern is approximately 9 feet, as measured from the bottom of the cistern overflow drain to the current grade at the bottom of the cistern. These dimensions, taken together, yield a volume estimate of 16-17,000 gallons (60-65,000 liters) of water for this cistern.

The exterior walls of the cistern are composed of hewn stone with a rubble and mortar core. The interior walls are also of hewn stone, covered with a layer of plaster approximately 0.05 feet wide. The plaster also has a reddish hue in many areas which may be due to paint or algae growth on the walls. There are three limestone blocks approximately one foot square each that remain in situ along the southeast end of the southwest wall. Several other limestone blocks that seem to lie in course were found immediately adjacent to the southwest wall near the wall's northwest end (Figure 3).

At the northwest end of the cistern is an overflow drain hole that goes through the cistern wall to the outside. The interior of this hole is not plastered. The drain hole is situated slightly to the northeast of center at this end of the cistern. The hole is rectangular in shape and slopes downward as it approaches the outside of the wall (Plate 11). The interior and exterior openings for this hole taper to an increased width as compared to the rest of the hole. At the tapered ends, the hole measures approximately 0.8 feet wide and approximately 1.1 feet high on the exterior and 0.7 feet high on the interior. The rest of the drain hole measures approximately 0.5 feet wide. The hole occurs approximately 5 feet above current grade on the exterior of the cistern and approximately 9 feet above current grade on the interior. Two limestone blocks form the roof of the drain hole on the exterior side.

#### *"Limestone Box Feature "*

On the upper surface of the southeast wall of the cistern is a possibly modern square-shaped, chimney-like structure of indeterminate function. (Plate 12) It measures approximately 1.5 square feet on the outside and the inside is approximately 1 square foot. The feature rises from the top of the southeast end of the cistern approximately 3.8 feet. It is composed of limestone blocks with a layer of yellow brick near its top. Along the southwest wall of this feature is a limestone block mortared on top of the yellow brick. At the base of this feature is a limestone block projecting toward the southwest approximately 0.5 feet. On the west corner of the feature is a layer of mortar, which may have bonded additional limestone blocks to the upper surface. The southeast side of the

feature is formed by a stone wall, apparently already in place at the time that this feature was built, and which probably is part of another, larger structure. The limestone used to construct this feature is probably from the upper surface of the cistern as other blocks were found *in situ* here. One function for this feature suggested by Mrs. Vanka van der Waag is that it was used to filter water taken from the cistern or was used to filter water as it drained into the cistern.

Adjacent to the southeast end of the cistern is a stone wall approximately 14 feet long and 2.3 feet wide. This wall forms the southwest side of the aforementioned "limestone box," and continues to the northeast and to the southwest from the "limestone box feature." The wall rises approximately 7 feet above the southeast end of the cistern. At the southwest end of the wall is a corner where the wall joins another perpendicular wall (to be discussed later). At this corner is a yellow brick arched hole of indeterminate depth (Plate 13). The hole appears to be at the same level as the top of the cistern. The hole is approximately 0.7 feet wide and the height is unknown due to soil wash blocking the entrance of the hole. The sides and archway forming the hole are of mortared yellow brick. This hole appears to empty very close to the edge of the cistern and may have been used to fill the cistern.

Along the cistern's exterior northwest wall at the west corner are the remains of a stone wall projecting toward the northwest. This wall may be part of the structure to the southwest or it may be an additional structure. Its measurable dimensions are approximately 2 feet in width by 1.3 feet in length. The total length is indeterminate without excavation.

#### *Cistern Structure*

The cistern structure is located immediately southwest of the cistern (Plate 14). All walls are built of hewn stone with a rubble and mortar core fill. It measures approximately 27.5 feet in the northeast by southwest directions and is 40 feet to the west corner of the cistern. **The northeast wall of the structure is shared with** the southwest wall of the cistern. This wall is approximately 2.3 feet wide.

Along the interior of this wall at the southeast end is a small ledge 0.4 feet in width that runs from the east corner toward the northwest an indeterminate distance. It is measurable for 1 foot only. The east and south interior corners are intact. The southeast wall is approximately 2.2 feet wide. This wall is approximately 8.5 feet above interior grade at its maximum height. It is approximately 0.5 feet above exterior grade at its highest point.

There is a filled doorway or window approximately 2.5 feet northeast from the south interior corner (Plate 15). It has been exposed with the deterioration of this wall. Its interior opening width is approximately 3 feet. The exposed facing stones slant to a narrower exterior opening of indeterminate width. There are joist holes approximately 1 foot from the interior side of this wall above this opening. The ends of the joist holes are 4.8 feet apart. These holes are 0.4 feet in width and 0.4 feet in height. It is approximately 4 feet above current interior grade.

There are also joist holes in the east corner of the northeast wall and the opposite west corner in the south west wall. These two joist holes are connected by an indentation running the entire length of the southeast wall (Plates 16 & 17). The joist holes are approximately 0.4 feet in width and 0.5 feet in height. The indentation is approximately 0.3 feet in depth. The opposite ends of the joist holes are approximately 23.7 feet apart. The wall above this indentation is coated with plaster beginning approximately 7.1 feet from the east corner and approximately 7.5 feet from the west corner. The northeast end of this plastered wall section has a plastered facing. It is not possible to determine whether the southwest end has a plaster facing because it is destroyed. The measurable length of this feature is approximately 8.5 feet.

The southwest wall extends four feet toward the northwest on the interior and on the exterior it is measurable approximately 3.5 feet in length. The wall extends into the hillside toward the southeast and the wall is substantially destroyed to the northwest.

### **"Molasses Vat" Complex**

Approximately 55 feet to the northwest downhill from the industrial complex is an additional complex of buildings. At this location there are two definite structures and a "molasses vat". (Figure 4) There is a very small portion of wall uphill from this area which is probably an additional building. The entire measurable complex is 30 feet northwest to southeast by 33 feet **northeast to southwest**. These structures may constitute a sugar curing facility.

#### *"Molasses Vat"*

At the northeast end of this complex is a structure that is most likely a molasses vat. The "vat" is constructed of hewn stone and is mortared on the inside and on the top rim. This rim slants inward, and the vat has no roof. There is no visible evidence of a past roof. The interior of the vat is an elongated oval, with one end disappearing into the hillside. (Plate 18) As a result, it is impossible to determine the true length of the vat without excavation. The measurable length of the vat interior is approximately 10 feet. The width of the interior is approximately 4.5 feet. The bottom of the vat is filled with 17



soil, rubble, and faunal remains. Therefore, the bottom composition and true depth of the vat are impossible to determine without excavation. The maximum measurable depth of the vat is approximately 4 feet.

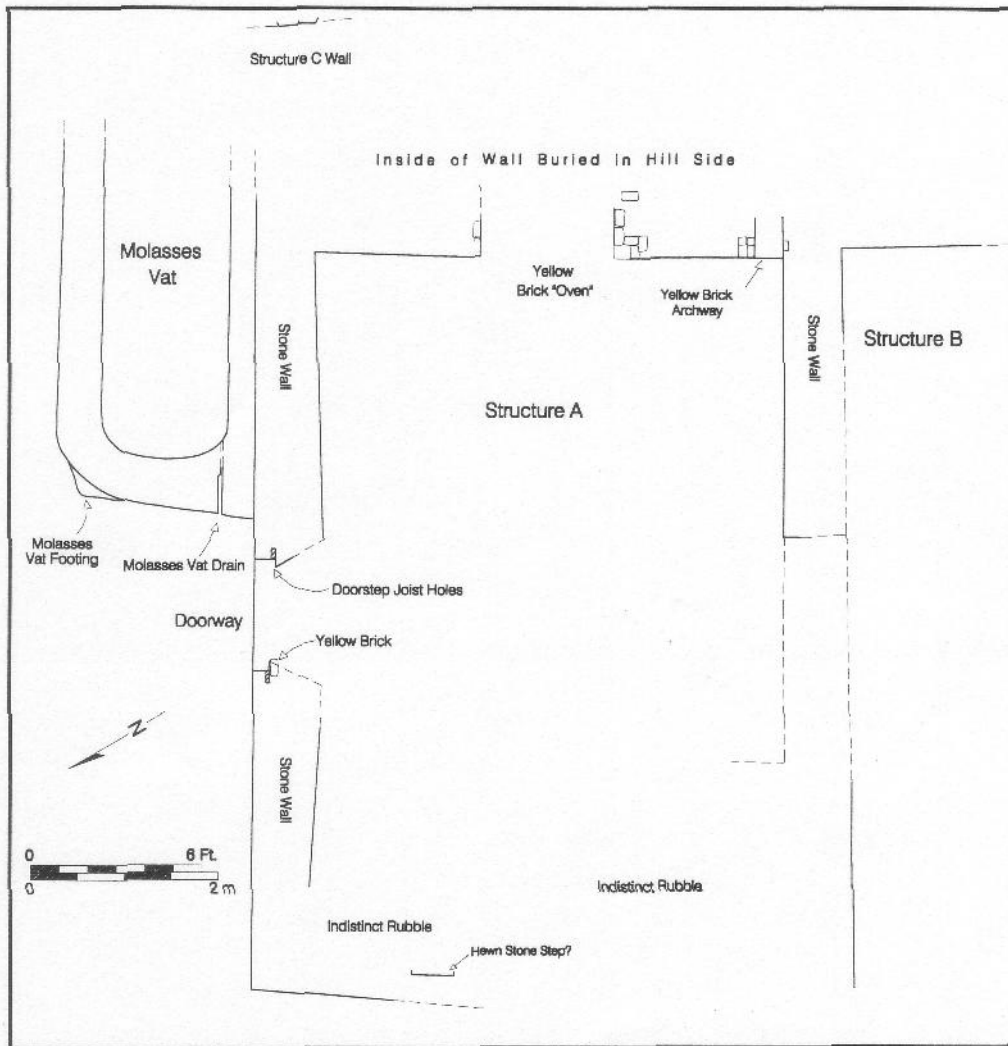
The vat abuts another structure on its southwest side. These two structures do not share a common wall. However, the two walls do contact each other and run parallel to one another. The vat wall that contacts the other structure is narrower than the other "independent" walls of the vat. The contacting wall is approximately 1 foot wide, and the other vat walls are approximately 1.6 feet wide. Beginning at the north corner of the vat, the exterior wall is plastered from the top edge of the footing to a point approximately two feet above the footing. This plaster extends around the exterior of the vat toward the southeast end of the vat until it disappears into the hillside (Plate 19). The previously mentioned footing can be seen just above current grade at the north corner of the vat. Large chunks of mortared rubble similar in construction to this footing are found directly to the northwest of the vat. These large chunks may have formed a horizontal mortared surface adjacent to the vat.

Near the west corner of the vat exterior is a drain hole that appears to run through the wall of the vat (Plate 20). This hole occurs approximately 4.2 feet below the rim of the vat and is approximately 1.1 feet northeast of the west exterior corner of the vat. This would have allowed liquids to drain directly from the west interior corner of the vat. The original outside entrance to the drain hole no longer exists, as many facing stones are missing from this area of the vat wall. Where observable, the drain hole has an oval shaped cross section near the exterior and tapers to a circular cross section as it approaches the interior of the vat. The oval cross section is approximately 0.2 feet in diameter and the circular cross section is approximately 0.1 feet in diameter.

#### Structure A

"Structure A" is the structure that abuts the "Molasses Vat" on the vat's southwest side. This structure is of un-plastered hewn stone construction **and appears to be rectangular in shape. The exterior dimensions of the structure are approximately 21 feet** from northeast to southwest, by at least 28 feet from northwest to southeast. The latter dimension is not precise because the southeast wall of the structure has been covered by downhill soil wash.

The width of the northeast wall ranges from approximately 2 feet to 2.5 feet. The interior surface of this wall is not parallel to the exterior of the wall. The width of this wall appears to increase as it approaches a doorway found along the wall (Plate 21). This doorway is approximately 10.5 feet northwest of the east interior corner of the structure. The exterior entrance to the doorway is approximately 4 feet wide. It remains this wide



*Figure 4. Molasses Vat Complex*

for approximately 0.7 feet into the wall, where it narrows to approximately 3.3 feet. From this point, the doorway gradually widens (due to slanted facing stones) again to a width of 4.5 feet at the interior of the wall. The wide exterior pocket in the doorway appears to have once contained a wooden doorjamb. There are also two doorstep joist holes at the bottom of the doorway. These joist holes are approximately 0.5 feet from the exterior surface of the wall and are approximately 0.4 feet deep. There is one yellow brick mortared in place immediately adjacent to the northwest joist hole on its interior side. From this yellow brick toward the interior, the slanted facing stones are missing.

The north exterior corner is the only intact exterior corner on this structure. The interior of this corner and most of the northwest wall have been reduced to indistinct rubble. Therefore it is impossible to ascertain the width of the northwest wall. The exterior surface of the northwest wall can be traced for only 5 feet from the north corner. Approximately 0.5 feet beyond this point and 1 foot into the interior of the wall was found a finished facing stone facing the exterior. It is approximately 1.5 feet wide.

The west corner of the structure is not visible due to the indistinct rubble in this area. A 7.4 foot section of facing stone is visible along the northwestern end of the southwest wall. The width of this wall is only measurable near the southeast end of the wall. This measurable section is approximately 2 feet wide. Approximately 18 feet from the south interior corner along this wall can be found a possible other interior corner. Ten feet from the south interior corner along the southwest wall is a possible doorway. Measurements of this doorway are not possible because only one side of the doorway is observable.

The southeast wall is covered by downhill soil wash on its exterior side. Therefore it is impossible to observe the exterior construction or width of this wall without excavation. The southeast wall does contain two yellow brick features observable from the interior (Plate 22). The first feature, immediately adjacent to the south corner, is the remains of an arched opening in this wall. The opening is approximately 1 foot wide and occurs approximately 4-5 feet above the current interior grade. The height of this opening is indeterminate since the top bricks of the archway are gone. The southwest side of this feature is only one course wide, while the northeast side of this feature is two courses wide. The second yellow brick feature occurs approximately 5 feet to the northeast of the first feature. This feature appears to be a rectangular opening in the wall. It is approximately 4.5 feet wide, and is lined with yellow brick one course wide. The height of this opening is indeterminate since it has no observable top.

### *Structure B*

"Structure B" consists of only one observable wall, which extends from the southwest wall of Structure A toward the southwest (Plate 23). This wall begins

approximately 0.3 feet southeast of the south interior corner of Structure A. As with the southeast wall of Structure A, only the interior of this wall is observable due to downhill soil wash covering the exterior side. On the interior side of the wall, facing stones can only be measured for 4.5 feet to the southwest. Beyond this point, the wall becomes indistinct rubble obliterated by downhill soil wash. This wall contains no observable features.

#### Structure C

The remains of "Structure U can be found approximately 8 feet toward the southeast from the east interior corner of Structure A (Plate 24). These remains consist of two mortared stones firmly attached to a suspected subterranean structure. These stones measure approximately 1.4 feet in length running from northeast to southwest. Further definition of this structure is not possible without excavation.

## **Agricultural Walls**

The southwest and northwest sides of the site are bounded by agricultural walls. These walls are constructed primarily of dry laid stone with some yellow and red bricks. Many of the stones have hewn faces, indicating that these walls may be constructed from the remains of other structures at "*Pleasures*". However, wall sections that are more intact indicate that stones may have been shaped just for these walls. The maximum height of these walls is approximately 2 feet. The walls have apparently deteriorated over time as stones have fallen, causing the walls to become lower and wider. The walls now average approximately 5 feet in width along most of their length. However, downhill from the "Cistern Complex" and the "Molasses Vat Complex" the remains of the northwest agricultural wall are much wider, measuring approximately 10- 12 feet in width in these locations. It should be noted that these two complexes are relatively close to the northwest agricultural wall and lie directly uphill from the wall. The west corner of the Large Cistern (which is also the datum for this site), measures approximately 30 feet from the centerline of the northwest agricultural wall. The north corner of Structure A in the Molasses Complex measures approximately 9 feet from the centerline of the northwest agricultural wall. The entire length of this wall, as measured along its centerline, is approximately 200 feet. At the wall's southwest end, the wall forms a corner with the southwest agricultural wall, which then extends uphill along the site to the southeast.

The southwest agricultural wall extends up the hillside in the southeast direction for an indeterminate distance in excess of 170 feet (Plate 25). Approximately 94 feet southeast of the corner formed by the northwest and southwest walls, another agricultural wall begins and extends to the southwest for an indeterminate length in excess of 300 feet away from the southwest wall. The southwest agricultural wall measures approximately 84 feet southwest of the east interior corner of Structure B of the Molasses Vat Complex. Farther up the hill, the southwest agricultural wall measures approximately 75 feet to the southwest of the southwest end of the Industrial Complex.

## Discussion

The ruins at *Pleasures Estate* are quite substantial and can be compared to other industrial sites on St. Eustatius such as *English Quarter* (SE 10), the *Princess Estate* (SE 220) and *Fairplay* (SE 45/6). The documented ruins seem to be the remains of a sugar processing facility.

The Industrial Complex may be the site of the sugar cane crushing equipment and/or the boiling train used to refine the sugar juice into pure sugar. It may also be the site of a drying/drain facility used to dry and drain molasses laden sugar. The only supporting evidence for these conclusions is that Structure A is a very large structure and it seems to be two stories in height. This second story is indicated by the height of the joist holes and the height of the walls. Many sugar crushing facilities had two floors (Francis 1984) It is also possible that this complex is a warehouse storage facility. Its large size lends itself to this possibility. Further investigation through excavation would undoubtedly reveal more substantive evidence regarding the exact function of this complex.

The Large Cistern Complex has one rather obvious function. The very large cistern would have provided water for the working plantation. Features adjoining this structure are much more anomalous however. The yellow brick arched feature is similar in design to flues found in cooking ovens in town, at the *English Quarter* and *Fairplay* plantations (personal observation) It would be quite odd to have built an oven so close to the cistern. The limestone box feature is also a mystery. It may be a structure to support equipment for dipping water out of the cistern or as mentioned previously it may be part of a water filtration system. The structure immediately adjacent to the cistern is of indeterminate function also. The most interesting feature on this structure is the filled doorway or window. This may indicate the addition of rooms or structures to the southeast of this structure. This structure could have been two floors in height as the upper portion of the wall above the joist holes is plastered. Possible functions for this structure are purely speculative until excavations are undertaken.

The Molasses Vat Complex is a very good candidate for the location of the sugar train. The yellow brick features here may be flue holes for the fires used to heat the coppers in the train. The location of the vat in close proximity to these features is also found at *English Quarter* and at *Fairplay* plantations. The drain hole in the molasses vat may have held a copper pipe at one time as there are some copper (Cu) stains on nearby stones. The pipe may have been removed for use elsewhere thus destroying the facing stones where the pipe exited the vat.

The Agricultural Walls are also called "Slave Walls" locally. They were used to define space on a large scale. The walls found at *Pleasures* separate the sugar processing facilities from the agricultural fields in a very impressive way. The relatively intact sections of wall indicate that they were carefully constructed.

## Recommendations

1. Begin an archeological excavation of the site to learn more about the structures that have been found and to reveal any buried structures, sugar processing machinery, and artifacts. It is extremely likely that more structures lie buried beneath the soil wash coming down from the Quill. Through excavation these structures can be located and identified. The structures that have been identified with this preliminary survey can be further defined and their function determined through excavation. No sugar processing machinery was located during this survey and few artifacts were found on the surface. This is due to the substantial soil wash coming downhill. A possible positive aspect of this soil wash is that it may have buried artifacts and equipment rather quickly. Preservation of artifacts and processing machinery would therefore be much greater than that found at *English Quarter* and *Fairplay* plantations. These plantations were constructed on level sites which would allow artifacts and machinery to be trampled upon by both animals and people and be exposed to the elements over a longer time period before they were buried. At *Pleasures*, the time during which artifacts would be exposed to these taphonomic factors would have been substantially less due to its location on a sloping surface. The great slope found on this site may have also had a detrimental effect for artifact preservation. Artifacts may have washed down hill away from their original place of deposition.
2. Hewn stones from the agricultural walls may be useful as materials for re-building the ruined structures on the site.

## Restoration Issues

A primary objective of this study is to assess the restoration potential for the ruins at the *Pleasures Estate*. At this time restoration would be a very expensive undertaking. The following are factors that need to be seriously considered for such a project.

**Leaning walls:** Many walls are leaning severely downhill due to pressure from soil that has washed against them. These walls would have to be carefully excavated so that they do not suffer further damage.

**Trees growing into walls:** Throughout the property trees have grown into the walls. The removal of these trees will substantially weaken or destroy the walls. With a restoration project these walls would have to be demolished and rebuilt to remove the tree roots.

**Cracked walls:** Many walls have severe cracks due to plant growth and water seepage. These walls would have to be demolished and rebuilt or the cracks filled by someone with much experience in restoring such structures.

**Difficulty of finding authentic building materials:** This would be a very expensive venture. In many restoration projects this can be the most expensive aspect. Experienced stone masons, carpenters, and joiners would have to be located in order to complete the project. Locating the wood, ironwork, and stone to be used in the restoration would be a difficult task.

**Unknown shapes of structures due to missing visible walls:** Most structures revealed with this survey have missing or incomplete walls. Roof and ceiling design is also questionable. However, archeological excavations may uncover much more about design, purpose, and function of the buildings.



## Conclusion

Overall the *Pleasures* plantation site is an excellent example for an 18' or 19' century sugar processing facility. It is comparable to the *English Quarter*, *Princess Estate* and *Fair Play* plantation sites in terms of structural preservation. Artifactual information is undoubtedly well preserved beneath the soil wash from the Quill volcano. Excavations undertaken here have the potential to substantially increase knowledge regarding sugar processing in Dutch colonies. With this potentially well preserved site investigations regarding slave life would be especially significant. Locating slave dwellings and associated artifacts should be a part of any future archaeological survey.

Restoration potential for the plantation is promising but only with a very significant financial outlay. Substantial archaeological excavations would be absolutely necessary before any restoration could begin. Restoration of the buildings to original specifications would be difficult and expensive but certainly not impossible. If the plantation were to be restored it would be a magnificent contribution to the restoration projects currently underway through the Historic Core Restoration project in Oranjestad. A fully restored sugar plantation on St. Eustatius would also be a huge tourist attraction supplementing the Museum of the First Salute currently being constructed adjacent to the Simon Doncker House in Oranjestad.

With these possibilities it is imperative that funding for archaeological work and subsequent restoration at the *Pleasures Estate* be pursued vigorously. *Pleasures* has the potential to be yet another beautiful facet on the "Historical Gem" that is St. Eustatius.

# Amendix 11 Photo Log

F	ISLAND DESCRIPTION	DATE	SrrE	FILM TYPE	PHOT	DIR.
1	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SW	NE ELEVATION OF"INDST. COMPLX'
2	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SW	NE ELEVATION OF *INDST. COMPLX'
3	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	INSIDE OF NE WALL"INDST. COMPLX'
4	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	INSIDE OF NE WALL"INDST. COMPLX'
5	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,111 NW	INSIDE OF SE WALL "INDST. COMPLX*
6	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NW	INSIDE OF SE WALL'INDST. COMPLX'
7	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NW	CONT. OF PREVIOUS ALONG SE WALL
8	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NW	CONT. OF PREVIOUS ALONG SE WALL
9	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SW	INSIDE SW WALL"INDST. COMPLX' DBLE WALL
10	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SW	INSIDE SW WALL'INDST. COMPLX" DBLE WALL
11	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	SW ELEVATION "INDST. COMPLX' DBLE WALL
12	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	SW ELEVATION *INDST. COMPLX" DBLE WALL
13	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III E	W CRNR W END SW ELEVATION *INDST. COMPLX*
14	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III E	W CRNR W END SW ELEVATION *INDST. COMPLX*
15	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NW	W CRNR W END SW WALL"INDST. COMPLX'
16	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NW	W CRNR W END SW WALL'INDST. COMPLX'
17	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III W	PLASTERED GABLE SW WALL"BOILING HOUSE
18	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III W	PLASTERED GABLE SW WALL"BOILING HOUSE
19	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	VIEW SE WL TWRD INSIDE NE WALL"INDST. COMPLX"
20	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,111 NE	VIEW SE WL TWRD INSIDE NE WALL"INDST. COMPLX*
21	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. JOIST HOLES IN NE & SE WLLS'INDST. COMPLX"
22	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. JOIST HOLES IN NE & SE WLLS "INDST. COMPLX"
23	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	DET. JOIST HOLE IN NE WALL"INDST. COMPLX"
24	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III NE	DET. JOIST HOLE IN NE WALL"INDST. COMPLX"
25	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. JOIST HOLE IN SE WALL"INDST. COMPLX"
26	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. JOIST HOLE IN SE WALL'INDST. COMPLX'
27	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. LEDGE IN NE WALL"INDST. COMPLX*
28	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III SE	DET. LEDGE IN NE WALL"INDST. COMPLX"
29	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III S-SE	UNKN CONCR STRUCT. INS CRNR "INDST. COMPLX"
30	St. Eustatius	07/11/98	SE 57	Ectakrome	RGG,III S-SE	UNKN CONCR STRUCT. IN S CRNR 'INDST. COMPLX'
31	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	INSIDE SE WALL'CISTERN STRUCTURE"
32	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	INSIDE SE WALL"CISTERN STRUCTURE'
33	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	SE END OF (CISTERN INSIDE) "CISTERN COMPLEX*
34	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	SE END OF (CISTERN INSIDE) 'CISTERN COMPLEX"
35	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	"CISTERN COMPLEX'SE HALF CISTERN INTERIOR
36	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SE	"CISTERN COMPLEX'SE HALF CISTERN INTERIOR
37	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SW	"CISTERN COMPLEX'SW SIDE CISTERN (INT-LONG)
38	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SW	"CISTERN COMPLEX"SW SIDE CISTERN (INT-LONG)
39	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NE	"CISTERN COMPLEX"NE SIDE CISTERN (INT-LONG)
40	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NE	"CISTERN COMPLEX"NE SIDE CISTERN (INT-LONG)
41	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NE	'CISTERN COMPLEX"NE SIDE CISTERN (INT N HALF)
42	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NE	"CISTERN COMPLEX'NE SIDE CISTERN (INT N HALF)
43	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SW	"CISTERN COMPLEX'SW SIDE CISTERN (INT N HALF)
44	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III SW	"CISTERN COMPLEX'SW SIDE CISTERN (INT N HALF)
45	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NW	"CISTERN COMPLEX"NW END CISTERN (INT NW)
46	St. Eustatius	07/12/98	SE 57	Ectakrome	RGG,III NW	"CISTERN COMPLEX"NW END CISTERN (INT NW)
47	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III NE	"CISTERN COMPLEX"NW END CISTERN (EXT SW)

48	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NE	"CISTERN COMPLEX"NW END CISTERN (EXT SW)
49	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NE	"CISTERN COMPLEX"NW END CISTERN (UP SURF. SW)
50	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NE	*CISTERN COMPLEX"NW END CISTERN (UP SURF. SW)
51	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SE	"CISTERN COMPLEX*NW END CISTERN (E)Cr NW)
52	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SE	'CISTERN COMPLEX'NW END CISTERN (EXT NW)
53	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SE	TISTERN COMPLEX"OVERFLOW DRAIN EXT VIEW.
54	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SE	"CISTERN COMPLEX'OVERFLOW DRAIN EXT VIEW.
55	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SW	'CISTERN COMPLEX'NW END CISTERN EXT NE SIDE
56	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SW	"CISTERN COMPLEX"NW END CISTERN EXT NE SIDE
57	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX'NW END CISTERN TOP NE SIDE
58	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NW	*CISTERN COMPLEX'NW END CISTERN TOP NE SIDE
59	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SW	"CISTERN COMPLEX"NW END CISTERN TOP MIDDLE
60	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	SW	"CISTERN COMPLEX'NW END CISTERN TOP MIDDLE
61	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX*NW END CISTERN DET INT DRAIN
62	St. Eustatius	07/16/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX"NW END CISTERN DET INT DRAIN
63	St. Eustatius	07/28/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX"NW END CISTERN INT VIEW
64	St. Eustatius	07/28/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX'NW END CISTERN INT VIEW
65	St. Eustatius	07/28/98	SE 57	Ectakrome	RGG,III	NW	"CISTERN COMPLEX"INT VIEW CISTERN OVERFLOW
66	St. Eustatius	07/21198	SE 57	Ectakrome	RGG,III		NW "CISTERN COMPLEX'INT VIEW CISTERN OVERFLOW
67	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	"CISTERN COMPLEX"AD STRUCT. WALL AT W CORNER
68	St. Eustatius	08101/98	SE 57	Ectakrome	RGG,III	SE	"CISTERN COMPLEX"AD STRUCT. WALL AT W CORNER
69	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	S	"CISTERN COMPLEX"CHIMNEY STRUC S VIEW
70	St. Eustatius	Oa/01/98	SE 57	Ectakrome	RGG,III	S	*CISTERN COMPLEX"CHIMNEY STRUC S VIEW
71	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	"CISTERN COMPLEX"CHIMNEY STRUC NE VIEW
72	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	'CISTERN COMPLEX"CHIMNEY STRUC NE VIEW
73	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN COMPLEX"YELLOW BRICK ARCHED FEATURE
74	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN COMPLEX"YELLOW BRICK ARCHED FEATURE
75	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	E	CISTERN STRUCTURE'NE JOIST HOLE SE WALL
76	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	E	CISTERN STRUCTURE'NE JOIST HOLE SE WALL
77	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN STRUCTURE'SW JOIST HOLE SE WALL
78	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN STRUCTURE"SW JOIST HOLE SE WALL
79	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN STRUCTURE" FILLED OPENING SE WALL
80	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	CISTERN STRUCTURE" FILLED OPENING SE WALL
81	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	CISTERN STRUCTURE"PLASTERED FACING SE WALL
82	St. Eustatius	Oa/01/98	SE 57	Ectakrome	RGG,III	SW	CISTERN STRUCTURE*PLASTERED FACING SE WALL
83	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	S	MOLASSES VAT CMLPX"OVERALL FACING SOUTH
84	St. Eustatius	Oa/01/98	SE 57	Ectakrome	RGG,III	S	MOLASSES VAT CMLPX"OVERALL FACING SOUTH
85	St. Eustatius	08/0198	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'OVERALL FACING SOUTHEAST
86	St. Eustatius	011101/98	SE 57	Ectakrome	RGG,III		SE MOLASSES VAT CMLPX'OVERALL FACING SOUTHEAST
87	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NW	MOLASSES VAT CMLPX'OVERALL FACING NORTHWEST
88	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NW	MOLASSES VAT CMLPX'OVERALL FACING NORTHWEST
89	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	E	MOLASSES VAT CMLPX"OVERALL STUCT 2 EAST VIEW
90	St. Eustatius	08101/98	SE 57	Ectakrome	RGG,III	E	MOLASSES VAT CMLPX"OVERALL STUCT 2 EAST VIEW
91	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	MOLASSES VAT CMLPX'OVERALL STUCT 2 NE VIEW
92	St. Eustatius	011101/98	SE 57	Ectakrome	RGG,III		NE MOLASSES VAT CMLPX"OVERALL STUCT 2 NE VIEW
93	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'SOUTH INT CORNER STRUCT 1
94	St. Eustatius	011101/98	SE 57	Ectakrome	RGG,III		SE MOLASSES VAT CMLPX" SOUTH INT CORNER STRUCT 1
95	St. Eustatius	08101/98	SE 57	Ectakrome	RGG,III	E	MOLASSES VAT CMLPX'EAST INT CORNER STRUCT 1

98	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	MOLASSES VAT CMLPX'NORTH INT CORNER STRUCT 1
99	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX'WEST INT CORNER STRUCT I
100	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX*WEST INT CORNER STRUCT I
101	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX*DET. VAT DRAIN HOLE EXTERIOR
102	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX*DET. VAT DRAIN HOLE EXTERIOR
103	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX'DET. DOORWAY NE WALL STR 1
104	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX'DET. DOORWAY NE WALL STR 1
105	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'DET. PLASTER ON EXT OF VAT
106	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'DET. PLASTER ON EXT OF VAT
107	St. Eustatius	08/01/98	SE 57	Ectakrome	AGG,111	SW	MOLASSES VAT CMLPX,YELLOW BRICK 'OVEN' SW SIDE
108	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX'YELLOW BRICK "OVEN" SW SIDE
109	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'YELLOW BRICK *OVEN" NE SIDE
110	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX*YELLOW BRICK"OVEN' NE SIDE
111	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NW	MOLASSES VAT CMLPX'DET. DRWAY NE WALL NW SIDE
112	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NW	MOLASSES VAT CMLPX'DET. DRWAY NE WALL NW SIDE
113	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	INDUSTRIAL CMLPX'DT. EXT. FACING STONE
114	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	INDUSTRIAL CMLPX'DT. EXT. FACING STONE
115	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	INDUSTRIAL CMLPX'DT. DET. STR 1 SE WALL PAINT
116	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	INDUSTRIAL CMLPX'DT. DET. STR 1 SE WALL PAINT
117	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	INDUSTRIAL CMLPX'DT. NW END STRUCT 2 WALL
118	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	INDUSTRIAL CMLPX'DT. NW END STRUCT 2 WALL
119	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	N	MOLASSES VAT CMLPX*OVERALL & STRUCT 3 N VIEW
120	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	N	MOLASSES VAT CMLPX"OVERALL & STRUCT 3 N VIEW
121	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX"DET. STRUCT. 3 WALL
122	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX"DET. STRUCT. 3 WALL
123	St. Eustatius	08/01/98	SE 57	Ectakrome	AGG,111	N	MOLASSES VAT CMLPX"OVERALL S' STRUCT 2 NE WALL
124	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	N	MOLASSES VAT CMLPX"OVERALL S' STRUCT 2 NE WALL
125	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	S	MOLASSES VAT CMLPX*DT. SLOPING MORT. SURF.,VAT
126	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SW	MOLASSES VAT CMLPX*DT. SLOPING MORT. SURF.,VAT
127	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'NW END VAT & DOORWAY STR 1
128	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	MOLASSES VAT CMLPX'NW END VAT & DOORWAY STR 1
129	St. Eustatius	08/01/98	SE 57	Ectakrofne	AGG,111	SE	SW AGRICULTURAL WALL VIEW TOWARD SE
130	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	SW AGRICULTURAL WALL VIEW TOWARD SE
NONE	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	SE	SW AGRICULTURAL WALL VIEW TOWARD SE
NONE	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	VIEW FROM "PLEASURES" TOWARD SABA
NONE	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III	NE	VIEW FROM PLEASURES* TOWARD SABA
NONE	St. Eustatius	08/01/98	SE 57	Ectakrome	RGG,III		BRAD GOODRICH RESTING AT PLEASURES'

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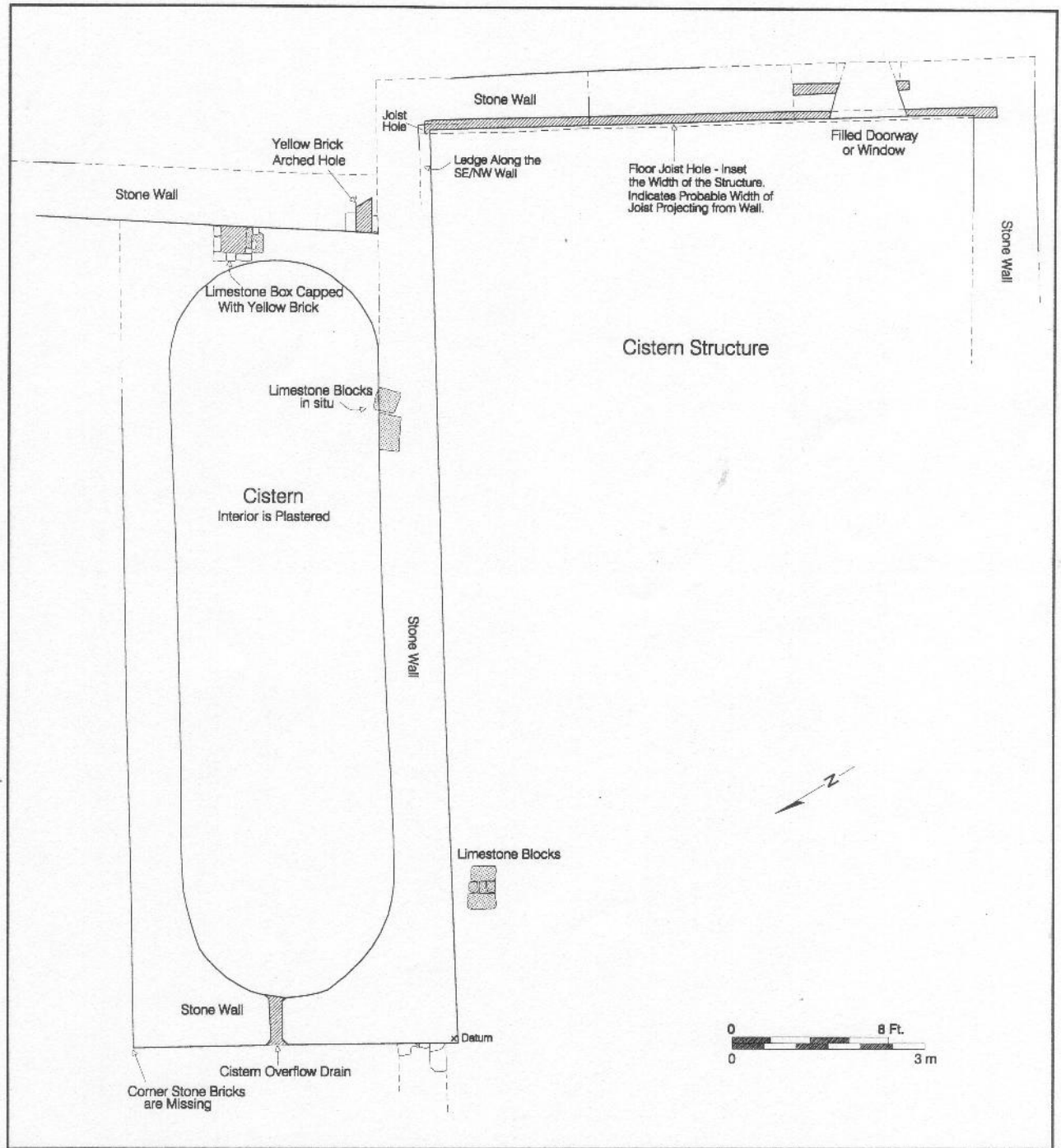


Figure 3. Large Cistern Complex