

(Capsule)

Log Tobacco Barn

The importance of log construction to the tradition of vernacular architecture in Calvert County cannot be understated. In tobacco barns in particular, this method of building is recorded as having been one of the first enjoying popularity in both the Eighteenth and Nineteenth Centuries.

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC PRESTON'S CLIFFS
Log Tobacco Barn

AND/OR COMMON

Preston's Cliffs Log Tobacco Barn

2 LOCATION

STREET & NUMBER

On Calvert Cliffs Nuclear Power Plant Property, Calvert Cliffs Parkway

CITY, TOWN

CONGRESSIONAL DISTRICT

Lusby

— VICINITY OF

STATE

COUNTY

Maryland

Calvert

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input checked="" type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER

4 OWNER OF PROPERTY

NAME Baltimore Gas and Electric Company

Telephone #:

STREET & NUMBER

CITY, TOWN

— VICINITY OF

STATE, zip code

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
 REGISTRY OF DEEDS, ETC.

Liber #: JLB 90/332

Folio #:

STREET & NUMBER

CITY, TOWN

STATE

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

—FEDERAL —STATE —COUNTY —LOCAL

DEPOSITORY FOR
 SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CT-59A

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input checked="" type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input checked="" type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The grounds about the Baltimore Gas and Electric Company's Nuclear Power Plant at Calvert Cliffs includes the ruins of "Preston's Cliffs" (CLVT 59) and several tobacco barns. Among these is a log barn located on the north side of the entrance road about 100 yards northwest of the Visitors Center.

It is a single pen log barn measuring 20' x 36' (Grooms) with a 13' shed addition on the south side that appears to have been an original consideration. Six rooms were added to the east end in modern times and along with modern siding helps to obscure the original appearance.

The walls of the main structure are made of round logs saddle notched with the ends allowed to protrude 6". The thickest logs are laid on the bottom and appear thinner at the top. The bottom three logs of the west end contain non-functional auger-holes. Twelve logs plus a squared plate are laid to form walls which measure 10' to the eaves. The sill log rests on fieldstone piers. The plates are squared to measure 10" x 6" in thickness and, like most of the wall logs, they are continuous (they appear to have cracked and have been spliced—not scarfed.) The end-plates are notched and rest on the side-plates.

An A-frame roof made of hewn timber rests on joists or tie-beams via flat-false plates. Only every second or third joist is pegged into the main plate, and the others are nailed with large cut-nails. The rafters are attached to the flat-plate with cut spikes as well. The flat plate appears to be pit-sawn. Most members of the truss system are hewn except that every other rafter appears to have been sawn. There is no evidence of shingles or purlins having been nailed onto the rafters of the west side. This is evidence that the shed on that side is original to the plan or at least that it is as old as the present roof.

This shed runs the entire length of the west side (36') and projects 13' beyond the wall of the main structure. Its longest plate has an 8 section scarfed into it on the west end. Tree-posts are mortised and tenoned into this plate and fastened with trunnels.

4'8" wide by 8'5" high double doors vent the centers of the north and south sides of the main block. A 4' x 3'2" door has been cut into the east end, but unlike the others it is framed with modern cut materials and wire nails. They are framed with older materials attached with cut nails. The sills remain continuous except on the north side where it has been cut at the door.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The importance of log construction to the tradition of vernacular architecture in Calvert County cannot be understated. In tobacco barns in particular, this method of building is recorded as having been one of the first enjoying popularity in both the Eighteenth and Nineteenth Centuries.

CONTINUE ON SEPARATE SHEET IF NECESSARY

CT-59A

9 MAJOR BIBLIOGRAPHICAL REFERENCES

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 986 acres

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE COUNTY

STATE COUNTY

11 FORM PREPARED BY

Wayne L. Nield, II
Historic Sites Survey
Broomes Island, Maryland 20615
5-2059

NAME / TITLE

ORGANIZATION

Winter 76-77
DATE

STREET & NUMBER

TELEPHONE

CITY OR TOWN

STATE

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438

Sources:

Marks, "Economy and Society," pp. 92-93.

Stone, Field notes, CT-59A, Architectural files, SMCC

William Tatham, William Tatham and the Culture of Tobacco. G. Melvin Herndon, ed. (Coral Gables, Florida: University of Miami, 1969), pp. 28-34.

This is a single pen log barn nine tobacco rooms long. Wide pedestrian doors centered in the side walls kept most logs of manageable length. The wall logs are unhewn chestnut poles locked at the corners with diamond notches. The sill logs are supported above the ground by large rocks. The original roof was framed of reciprocal-sawn oak: the rafters mortised, tenoned, and pinned at their apices, and the collars half-lapped and nailed to the sides of the rafters.

Later, the barn was badly neglected. Late in the 19th century or early in the 20th, the roof was rebuilt and a shed added. During the reconstruction, as many as possible of the old members were reused, so that original and replacement timbers now alternate in the roof frame. Five tie beams are old chestnut members hewn four sides and pinned to the plates, while five tie beams are pine poles hewn top only and toe-nailed to the plates. Six roof trusses were reassembled of sawn oak, while four were new carpentered of pine poles. Original shingle lath was reused for collar braces and the upper shed tier rails. Old tie beam fragments were used to prop the centers of the new and reused tie beams.

The shed addition is framed with cedar posts-in-the-ground mortised, tenoned, and pinned to the shed wall plate. The shed tie beams are reused from yet another barn. The barn reconstruction and shed are roughly dated by the materials employed. The new false plates (toe boards) are reciprocal sawn, and all nails are machine-cut.

Still later, in the mid 20th century, the barn was enlarged with a six room, box-framed extension. The extension probably dates after 1936 (see CT-598 below).

The 19th and 20th-century history of this barn is hardly exceptional. What makes this barn of regional and perhaps even national importance is that carpenter's marks on the logs of the barn allow us to extend its prosaic history of construction and reconstruction well back into the 18th century. This barn may be a unique survivor illustrating the transition from cheap, impermanent tobacco barns to the well built, permanent structures that gradually replaced them beginning in the 18th-century.

Many of the barn logs have carpenter's numbers cut into them. These are not assembly numbers. When log buildings are constructed, the logs are fitted, one at a time, as the walls are raised. Rather, wall logs are numbered when they are dismantled for reassembly elsewhere. At least two different groups of logs are reused in this barn, both of which have two generations of disassembly numbers. The present locations of the logs disregard all of the numbering systems. Seemingly, the logs were not numbered when they were taken down in 1820. Therefore, this barn was constructed of logs salvaged from two older barns each of which had been set up and taken down three times. The present barn is the fourth structure in which these logs have been used! Another permanent barn on this plantation (described next) was constructed in 1818. On this plantation, the years 1818-1820 saw an important shift from small, temporary tobacco houses that rotated around the plantation with the tobacco fields, to permanent tobacco houses to which the crop was brought by cart.

The construction of these two new barns was financed by the excellent tobacco prices prevailing 1815-1820 (\$8.04 to \$13.33 a hundred weight).

THE KEY-YEAR DENDROCHRONOLOGICAL
PATTERN FOR THE OAKS OF
MARYLAND'S WESTERN SHORE 1570-1980

American Institute of
Dendrochronology

APPENDIX

Building Descriptions

Garry Wheeler Stone

Historic St. Mary's City

1987

(Prestons Cliffs)

CT-59A ~~Wilson~~ Log Tobacco Barn

One predecessor constructed
fall-winter 1820
Present barn mid 19th-century
Later enlarged

Beside the entrance road of Baltimore Gas and Electric's Calvert Cliffs Nuclear generating plant sits a modest tobacco barn. Its gray shingles and siding conceal a remarkable artifact testifying to the evolution of Maryland agriculture over almost two centuries. The log core of the barn was constructed circa 1835-1860 from material salvaged from older, moveable tobacco houses. During the economic dislocation following the Civil War, the barn was neglected and its roof failed. Late in the century, before it could be put back into use, the barn and its shed had to be completely reroofed. Then, in the mid-20th century, the barn was lengthened with concrete foundations and sawn timber. The extension probably dates after 1936 (see CT-59B below).

Description

The tobacco barn is 15 rooms (60 ft.) long and 33 ft. wide. Six of these rooms are in a mid 20th-century extension, an extension box-framed on concrete piers. The mid 19th-century portion of the structure is 9 rooms (36 ft.) long. It comprises a log structure 36 by 20 ft. and an original shed 13' 5" wide. The barn hung three tiers of tobacco in its body and another three partial tiers in its roof space.

The core of the barn consists of a single log pen or structure 12 logs high. The wall logs are unhewn chestnut poles locked at the corners with diamond notches. Most of the sidewall logs are only 15 ft. long, as wide doors are centered on each side. Thus the structure required only 8 members a full 36 ft. long: 2 sills, 2 logs on each side above the doors, and the two hewn wall plates. Large rocks support the sill logs. Hewn joists span the width of the log pen. The rafter trusses are nicely assembled of reciprocal-sawn scantlings mortised, tenoned, and pinned at their apices. The shed on the south side is original. It is framed around hole-set cedar wall posts mortised, tenoned, and pinned to the wall plate. Shed and gables were closed in with vertical planks.

.../contd.

Late in the 19th century when the barn was rehabilitated, little could be salvaged except for the log pen, shed posts, and individual members. Fully half of the joists and almost half of the rafters had to be replaced. The carpenters began the reconstruction by rotating sound joists from the center of the barn to the gables. (The moved joists are not pinned to the plates. Those in their original positions are pinned.) The gaps were filled with pine joists hewn top only. Then reciprocal mill-sawn toe boards (plank false plates) were nailed to the ends of the joists, and the carpenters began setting up the rafter trusses. Five trusses were reassembled of sawn rafters, four new trusses were assembled of pine poles, and one old truss was reused more-or-less intact. (While not damaged by water, the carpenters broke it while pulling off the old roof. Thrifty souls, they salvaged the material by patching the truss back together with plank splices.) They then rebuilt the shed roof using a combination of old and new materials. Lengths of old shingle lath and rafters reappeared as collars, collar braces, and tier pole props.

Salvaged Material from Earlier Structures

The Wilson log tobacco barn bears evidence of not one but many rebuildings. Little of the material used in its initial construction was new. All the wall logs were reused from earlier structures, as were the plates, some of the joists, and an unknown number of rafters. Shed joists and wall posts were recycled from earlier sheds. Even the tier pole props down the center of the log pen--slight hole-set posts--had been used in two generations of earlier tobacco houses. But the most remarkable evidence of recycled material are the old disassembly numbers on the wall logs. Some of the wall logs had been used and reused three times prior to being incorporated in the present structure.

The tobacco barn walls are a hodge-podge of numbered and un-numbered logs. The numbers chopped into them are not assembly numbers. When log buildings are constructed, the logs are fitted, one at a time, as the walls are raised. Rather, carpenters number wall logs when a building is about to be dismantled for reassembly elsewhere. Ten of the logs have been numbered twice, another thirty or so have been numbered once, and over a dozen have no numbers. The present arrangement of the logs bears little relationship to their numbers. Thus this mid-19th-century tobacco barn was compiled from logs salvaged from several older tobacco houses, a circumstance in which the carpenter did not bother to number the old logs as he pulled them down.

.../contd.

It is not clear how many buildings were cannibalized to build the present log barn and shed. Three of the eight different numbering systems may be only variants used to distinguish different walls. The other five, however, distinguish different carpenters: 3 right-handed, 1 right-handed but using a broken hatchet, and 1 left-handed. As more than one carpenter could have numbered the logs of one building (working on different sides), we can only say that the logs of several tobacco houses are incorporated in the present structure. What is much clearer, however, is that the predecessor structures were very similar to the surviving building: 20 ft. wide, 36 ft. long, with doors on the long sides and roofs three tiers high. At least one of the predecessor structures was shedded. The only obvious difference between the first build of the present structure and its predecessors is that at least one of the earlier structures was taller--4 tiers high in the body (both the tier pole props and the shed wall posts have been shortened), and one of the predecessor structures had timber false plates. (The shed joists--but not the barn joists--retain the pin holes from attaching thick false plates.)

Thus the owner of this plantation built tobacco houses to a standard pattern, a standard that facilitated recycling materials as he shifted his tobacco houses around the plantation as his tobacco crop migrated to fresh soil.

Dating

How old are these structures? Only one precise date is available. The barn's hewn oak wall plates are recycled from a log tobacco house constructed during the fall or winter of 1820. The present log tobacco house is estimated to have been built circa 1835-1860, and probably near the beginning or end of this period. (Tobacco prices were very low, 1842-1849.) The twice-numbered logs had been used in three generations of earlier tobacco houses, but they might be only 15 to 20 years older than the existing barn. (Under brush fallow rotation, tobacco houses might have to be moved every five to ten years.) It is likely, however, that they are much older. During three periods in the late 18th and early 19th centuries, tobacco prices were so low that tobacco may not have been grown on the plantation. If the present tobacco barn dates from 1850-1860, then the oldest logs might only date back to the 1797-1808 high tobacco prices. If, however, the present structure dates from 1835-1841, then the oldest logs might predate the post-Revolutionary tobacco depression. Additional tree-ring studies might distinguish between these possibilities. While the quick-growth chestnut wall logs probably are undateable, the south sill (original to the 1835-1860 build) and some of the joists may be dateable.

.../contd.

There is no mystery why one of the predecessor structures was constructed or reconstructed in 1820. Excellent tobacco prices--\$8.04 to \$13.33 a hundred weight--prevailed during the period 1815-1820. These high prices financed the construction of a good frame tobacco barn on this same plantation in 1818. It is the next described structure.

References:

Chappell, Edward A. and Willie Graham, "A Log Tobacco House at Calvert Cliffs, Maryland." Ms., The Colonial Williamsburg Foundation, 1986.

Marks, "Economy and Society," pp. 92-93.

Stone, Field Notes, CT-59A, Architectural Files, SMCC

Tatham, William. William Tatham and the Culture of Tobacco.

G. Melvin Herndon, ed. (Coral Gables, Florida: University of Miami, 1969), pp. 28-34.

Key Tobacco Farm
Preston's Cuffs
12/15/76
CT-59A

20'

36'

13'

• - switched for
3 tiers of
tie-pins

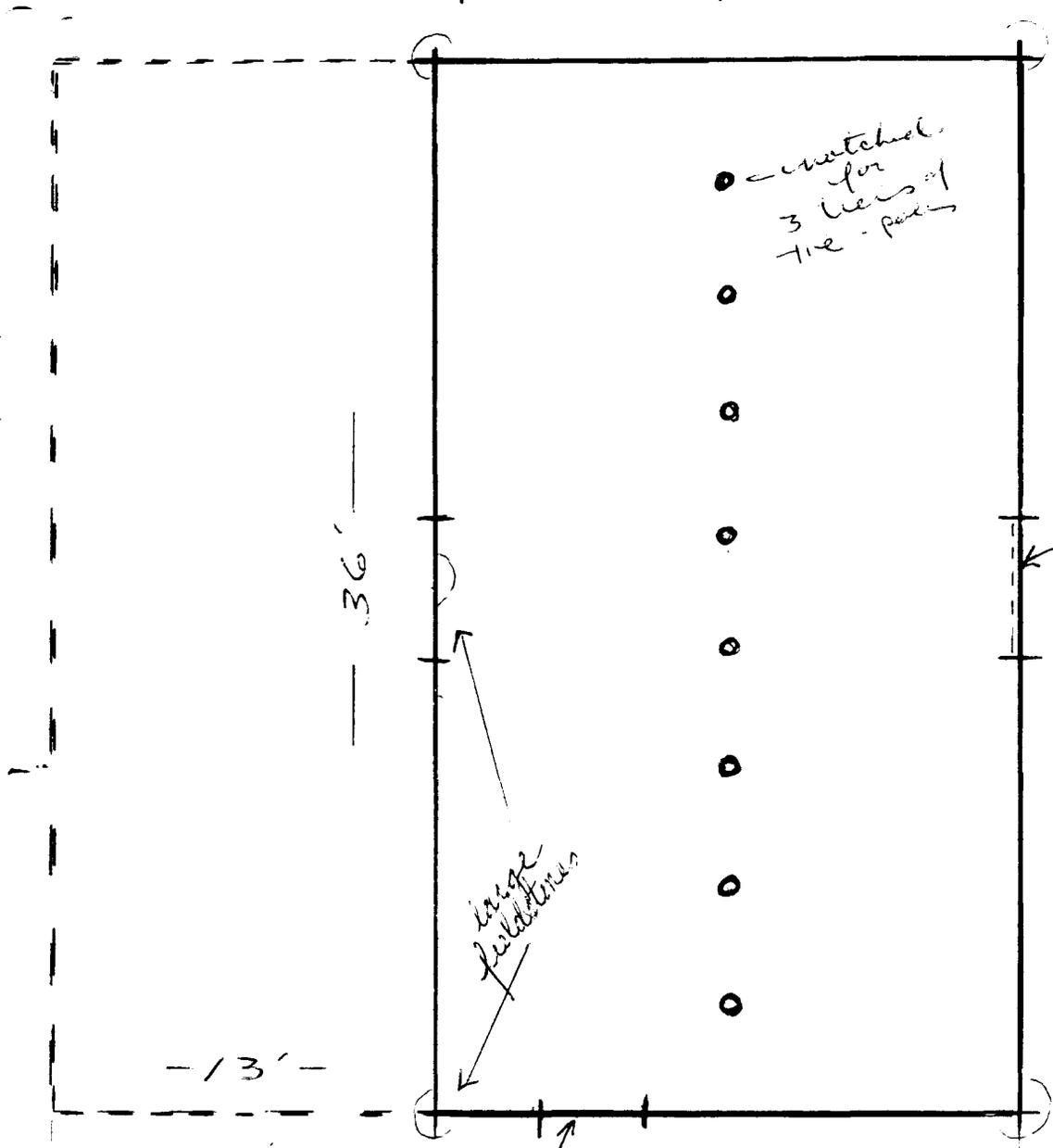
sell
cut (this one
only)

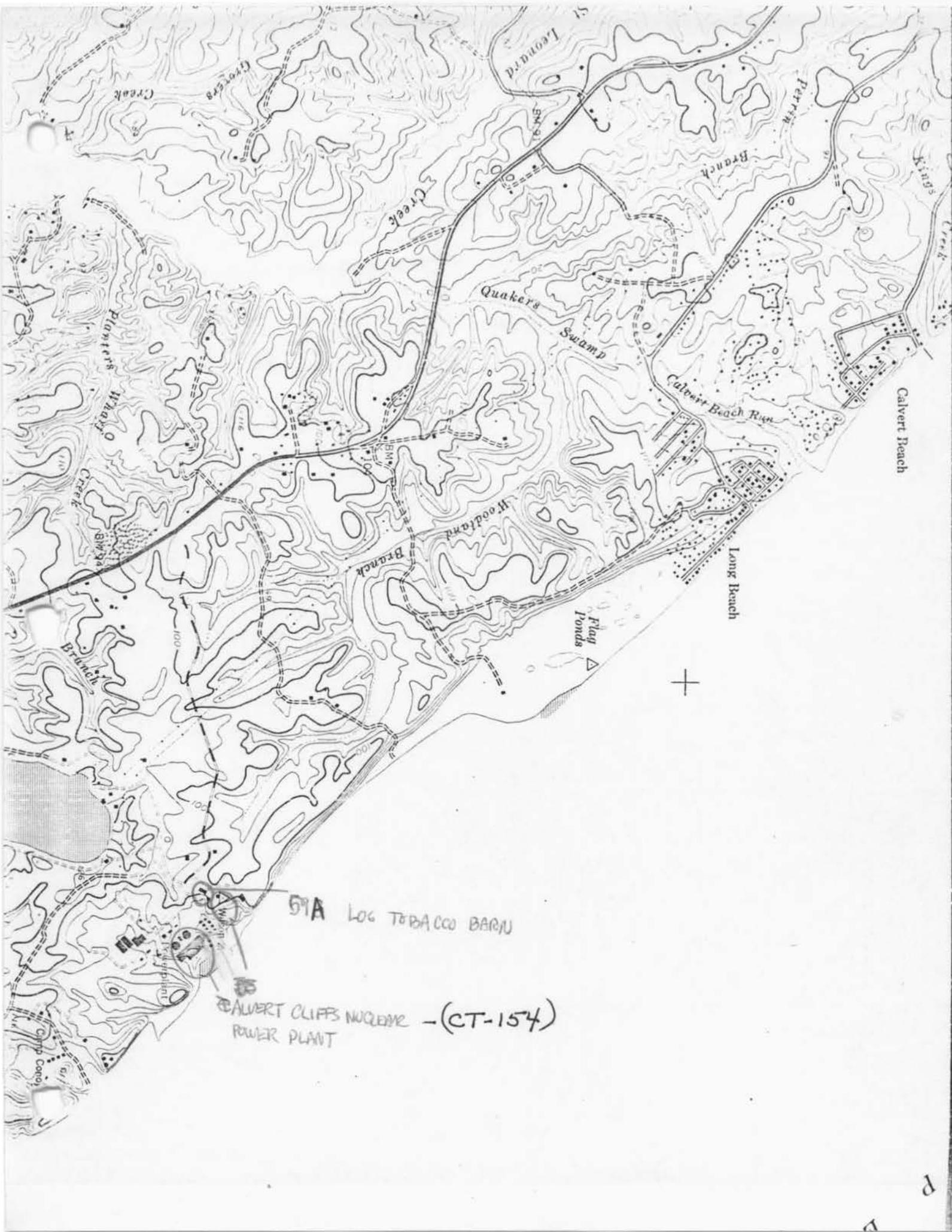
large
field lines

attention?



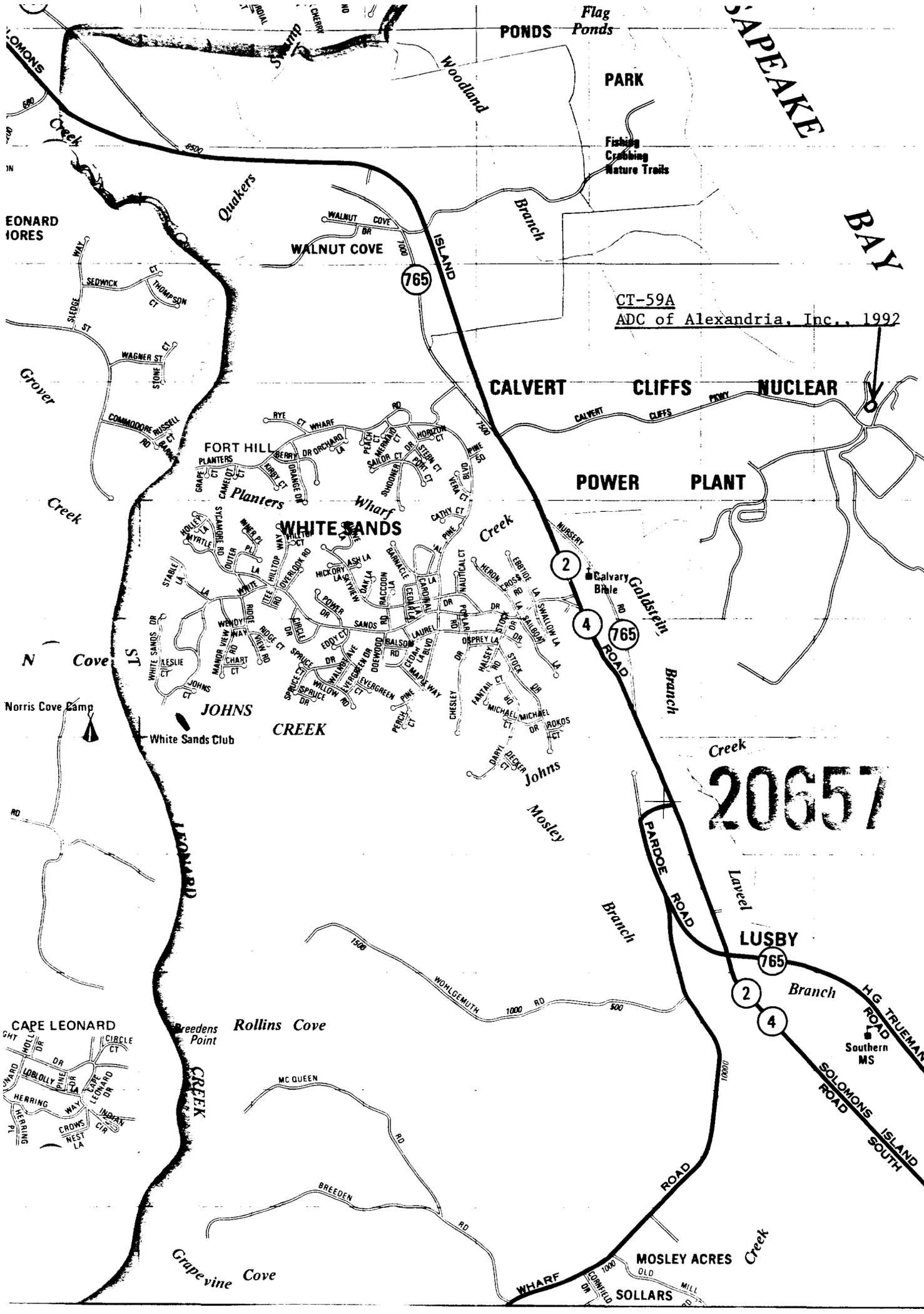
modern
add.





51A LOG TOBACCO BARU

CALVERT CLIFFS NUCLEAR POWER PLANT - (CT-154)



CT-59A
 ADC of Alexandria, Inc., 1992

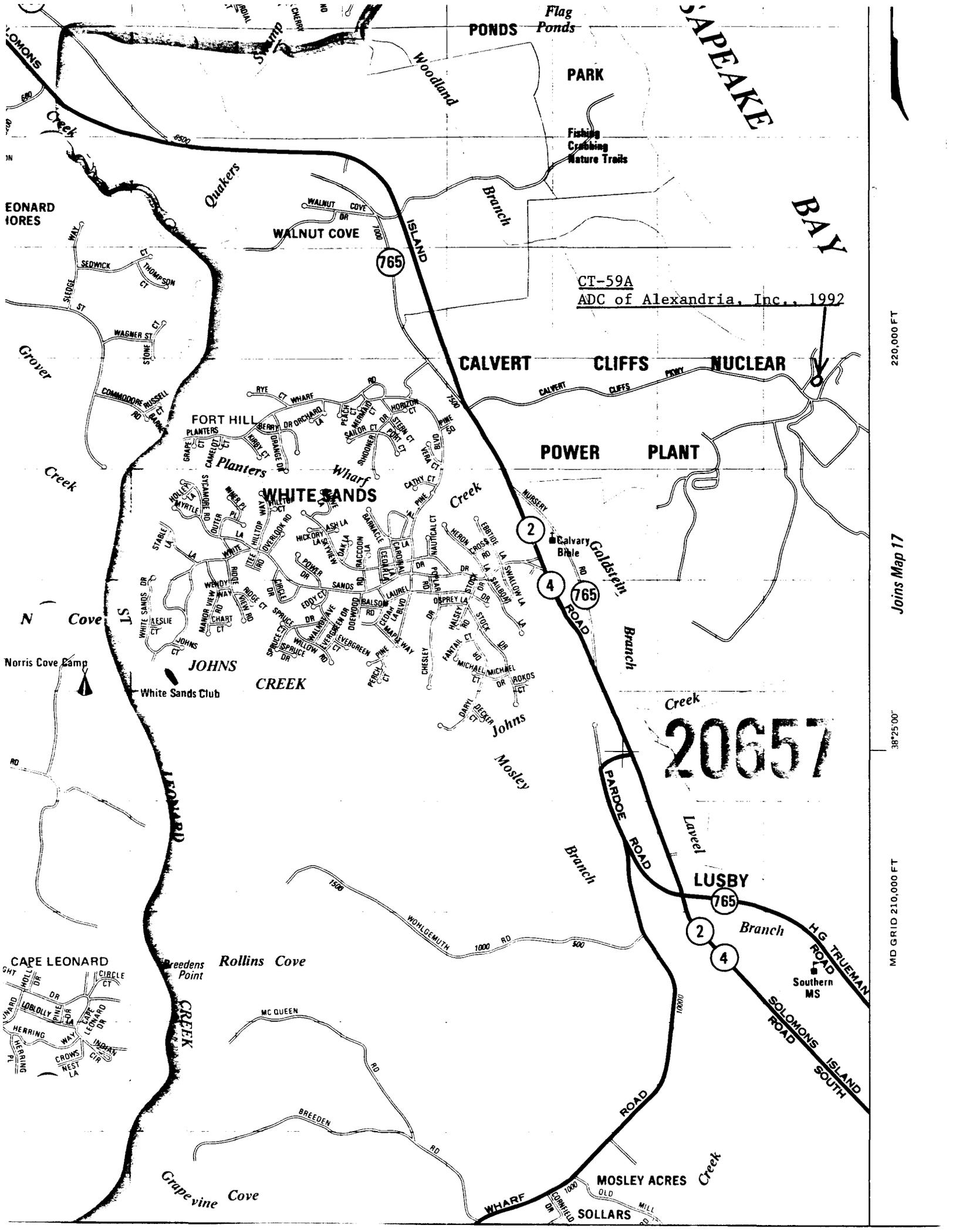
20657

220,000 FT

38°25'00"

MD GRID 210,000 FT

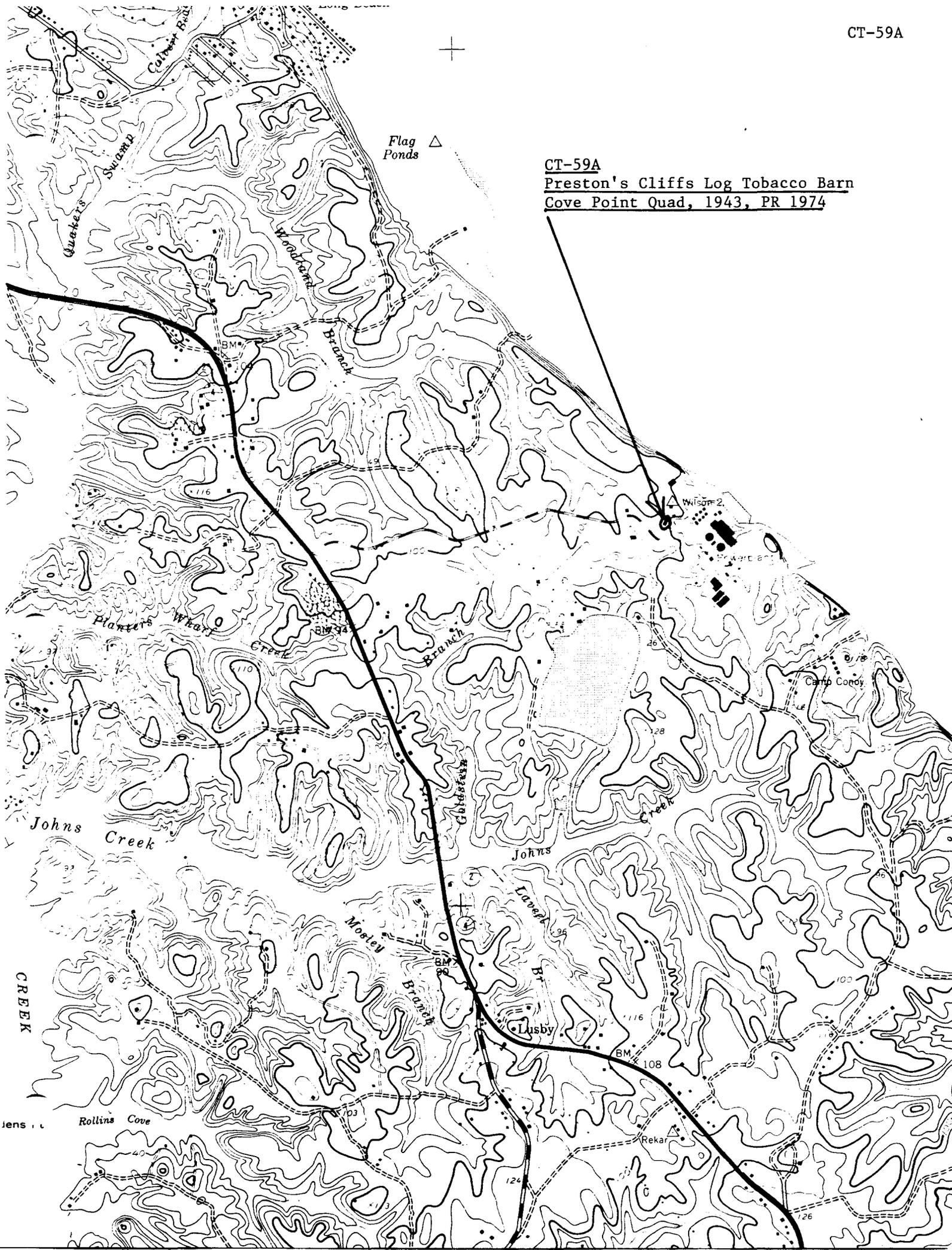
Joins Map 17





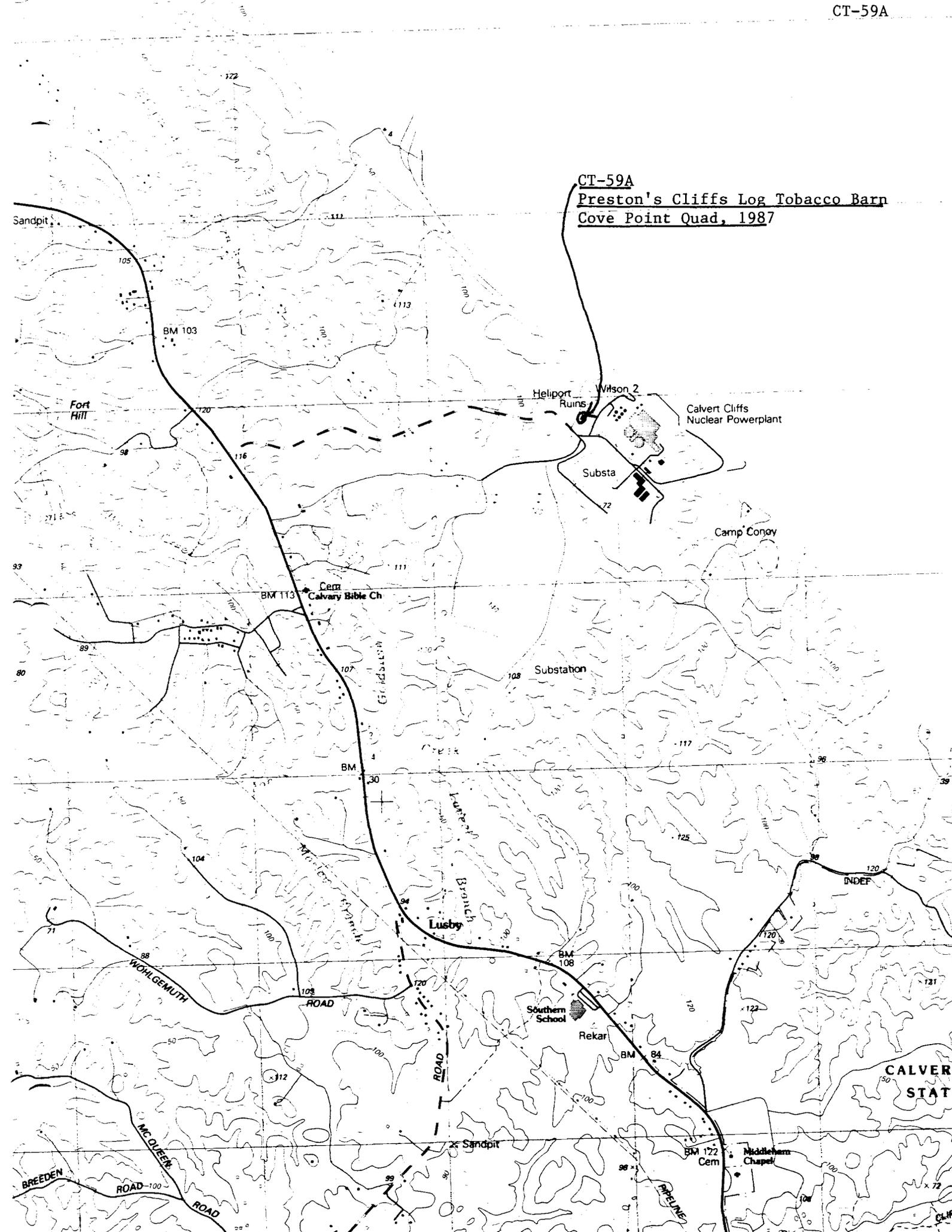
Flag Ponds 

CT-59A
Preston's Cliffs Log Tobacco Barn
Cove Point Quad, 1943, PR 1974



CT-59A

Preston's Cliffs Log Tobacco Barn
Cove Point Quad, 1987





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70%

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CT-59A

Tobacco barn at Calvert Cliffs
Nuclear Power Plant

BMD 12/78



CT-59A

CLVT - ~~137~~ ~~59B~~

Historic Sites Ltd.
Brookes Island, Maryland 20615
586-2050

~~Howard Russell House~~

PRESTON'S CLIFFS LOG TOBACCO BARN