

127-6722

United States Department of the Interior
National Park Service

National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting property groups relating to one or several historic contexts. See instructions in National Register Bulletin *How to Complete the Multiple Property Documentation Form* (formerly 16B). Complete each item by entering the requested information.

New Submission Amended Submission

Approved on
VLR: 09/19/2014
NRHP: 04/08/2014

A. Name of Multiple Property Listing

Tobacco Warehouses in Richmond, Virginia, 1874-1963

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

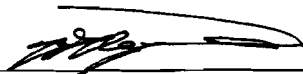
Tobacco Processing and Storage in Richmond, Virginia, During the 19th and 20th Centuries
The Influence of the American Tobacco Company, 1900-1911
Cigarette Production in Richmond, Virginia, 1874-1930s
Insects and the "Closing" of Warehouses, 1940s-1960
Tobacco-related Resources in Richmond, Virginia, Mid-19th through Mid-20th Century

C. Form Prepared by:

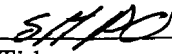
name/title: Bryan Clark Green
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date: 28 June 2013

D. Certification

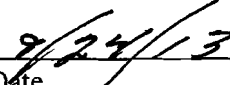
As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.



Signature of certifying official



Title



Date

Virginia Department of Historic Resources
State or Federal Agency or Tribal government

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I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper

Date of Action

Table of Contents for Written Narrative

Create a Table of Contents and list the page numbers for each of these sections in the space below. Provide narrative explanations for each of these sections on continuation sheets. In the header of each section, cite the letter, page number, and name of the multiple property listing. Refer to *How to Complete the Multiple Property Documentation Form* for additional guidance.

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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 to amend existing 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.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 250 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, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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E. Statement of Historic Contexts

The historic contexts for this MPD focus on commerce and trade, in particular, the storage, processing, and production of tobacco in Richmond, Virginia, between 1874 and 1963. While previous National Register nominations have looked at production facilities, this MPD focuses attention on the related system of storing tobacco, before and after it is processed, but before it leaves the processing facility as a commodity item. This MPD argues that the storage and warehousing system is overlooked as an integral part of the system for processing tobacco, and seeks to broaden the understanding of the physical resources involved in tobacco processing in Richmond, Virginia.

Throughout the 19th century in the United States, leaf tobacco products were mainly “plug” products (e.g. tobacco that is chewed), though snuff was also popular. Smoked tobacco was generally taken in the form of cigars or pipes. Cigarettes were not mass-produced but rather were individually rolled by the user. Tobacco production was localized: cultivation, curing, and production into its ultimate form all occurred at a local level, with limited distribution. Because of this, quality and taste varied greatly between producers, and even within individual producers, by year and batch.

As tobacco production centralized at the end of the 19th century, producers became increasingly concerned with the need for quality control, in order to ensure that the taste sought by the consumer was at least somewhat consistent throughout a given brand’s production. This was the beginning of the concept known as the “blend;” the combination of tobaccos (and, later, fillers) used to reliably create a particular flavor profile for a given brand of tobacco products.

The idea of the “blend” became critical during World War I, when “ready rolled” tobacco – the mass-produced cigarette – became popular with the general public (far surpassing small-scale locally-produced tobacco products), and the maintenance of consistent flavor across a given brand became critical. International tobacco importation and processing became a critical concern for the tobacco industry in the early 20th century.

Tobacco Processing and Storage in Richmond, Virginia, During the 19th and 20th Centuries

On the way through the process to become a cigarette, tobacco is stored twice. First, it is stored in wooden hogsheads in whole leaf form, as it was purchased from the producers and delivered to the warehouses, where it was then aged. After the tobacco is aged, it is removed from the hogsheads, processed (chopped to specific dimensions, depending upon the portion of the leaf and the grade of tobacco being produced, and the various portions of the leaf sorted and separated for use in different portions of the cigarette-manufacturing process), returned to hogsheads, and placed back into storage. At this point, the processed tobacco is ready to be supplied to a cigarette-manufacturing facility, where it is blended with other processed tobaccos to produce the desired blend for the cigarette to be manufactured. Cigarette manufactures required large volumes of aged and processed tobacco to be on hand to be fed into the cigarette-manufacturing equipment.

With the older, slower cigarette-manufacturing equipment, the storage capabilities of elevator-serviced, multi-story, masonry buildings were sufficient to maintain stocks of tobacco ready for manufacturing. However, as newer high-speed cigarette-manufacturing machines increased in speed and efficiency, cigarette manufacturers found that their facilities were incapable of holding enough supplies of processed tobacco to maintain production.

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The Influence of the American Tobacco Company, 1900-1911

James “Buck” Duke of the American Tobacco Company followed developments in the mass market production of cigarettes and the maintenance of the “blend” closer than nearly anyone. Duke controlled a large segment of the United States tobacco market by 1900, when he turned his attention abroad, making aggressive moves into the European tobacco market. Several European firms responded with the creation of Imperial Tobacco, a conglomerate of thirteen smaller, independent European firms determined to resist the onslaught of the American Tobacco Company. In retaliation for the American Tobacco Company’s incursions into the European market, Imperial Tobacco moved into the American market, making capital investments in cooperating companies. The focus of their strategy was the establishment of a strong presence in the heart of tobacco-producing America. Examining the American market, they selected a site for their warehouse and auction center in a community that had a long-established tobacco economy: Rocky Mount, North Carolina.

American Tobacco, realizing the threat of this incursion, soon agreed to work with Imperial Tobacco to form the British American Tobacco Company, LTD. This monopoly soon acquired over 250 tobacco companies, attracting widespread criticism and eventual legal action by United States federal prosecutors. In 1907 the trust was challenged, and in 1911 the conglomerate was broken up by the U.S. Supreme Court.

Cigarette Production in Richmond, Virginia, 1874-1930s

While these developments were taking place in North Carolina, producers in Richmond, Virginia, were facing a problem. Existing tobacco production and warehouse facilities in Richmond were multi-story masonry buildings located in the Shockoe Bottom neighborhoods. In a crowded urban environment, these tobacco concerns were unable to expand, and often faced limited rail connections on the downtown spurs and poor access to the James River. In response, Richmond annexed the town of Manchester, south of the James River. Manchester had better access to the James, with far less building density and a much more accessible set of rail spurs. American Tobacco Company located its new facility in Manchester, and many other tobacco companies were soon to follow.

While early cigarette manufacturing was a minor industry in Richmond (cigarette manufacturing was first introduced to Richmond by the P.H. Mayo & Bros. Tobacco Company in 1874), other companies soon followed, as an embrace of machine production transformed the industry. One of these companies was Philip Morris, which moved to Richmond in 1919. Incorporated in New York City in 1903, by 1911 Phillip Morris was one of approximately 300 small tobacco companies in the United States. After the breakup of the British American Tobacco conglomerate, there were new opportunities for small competitors. After the conclusion of World War I, cigarettes quickly grew in popularity, fueled in no small part by increasing social acceptance of women smoking in public. Hundreds of new brands emerged, each vying for the attention of the consumer. One of these new brands, patented in 1925 by Philip Morris, was Marlboro.

In the 1920s, advertising and marketing were critical components of the tobacco industry. Advertising – fueled by increasing literacy and a burgeoning market for newspapers and magazines – shifted from local advertising to a national audience. Production had to keep up with the new demand, and the new national audience demanded that a given cigarette (such as Marlboro) had to taste the same, no matter where it was purchased in the country. The industry understood that mass production was necessary to profitably keep up with demand, but that mass production also had to protect the characteristics of the “blend” of each cigarette brand. As Philip Morris prospered, the firm began to look outside of crowded and expensive New York City (with its successful and protective unions) to a more hospitable production site.

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In 1928, J.O.W. Gravely, Jr., was elected President of the United Leaf Tobacco Company, a United States – British conglomerate formed to insure the cooperative efforts of European and American tobacco traders, just as Imperial and American had formed the British American Tobacco Company some 27 years earlier. Gravely understood that the new high-speed cigarette machines required mass bulk storage, and that storage had to be capacious enough for a producer to have enough tobacco on hand to maintain its blend.

A representative example of the business relationship between tobacco producers and tobacco warehouses is seen with Philip Morris and the Chesapeake Warehouses. In 1928, Philip Morris was looking around Richmond for a site for a new production facility. Philip Morris appears to have purchased and refitted an existing factory (now known as the Philip Morris Stockton Street Plant, 700 Stockton Street, DHR File #127-0457-0057) on the corner of Maury Street and Commerce Road in order to produce several blended cigarette brands, beginning operations in 1929.¹ Simultaneously, the Chesapeake Warehouses at 1100 Dinwiddie Avenue (DHR File #127-6720) were under construction, and the warehouses and the new Philip Morris plant opened at the same time. Importantly, Philip Morris did not provide any warehouse space for itself. The two facilities were just four blocks apart, and the new Chesapeake Warehouses provided exactly the kind of high-capacity, easy-access warehouse space necessary for the high-speed production Philip Morris undertook in their new, retrofitted facility. (Philip Morris and the Chesapeake Warehouses expanded simultaneously in 1937, and the Philip Morris plant expanded again in 1945.) In addition to Philip Morris, the Chesapeake Warehouses originally served American, Reynolds, P. Lorillard, and other tobacco companies in its louvered, or “open”, warehouses from 1929 through the 1940s.

Insects and the “Closing” of Warehouses, 1940s-1960

Modern, single-story tobacco warehouses were not open to the air, as the term implies, but rather were galvanized metal-clad and louvered buildings with no insulation, no interior finishes, and no impermeable weather barriers. This was the typical design of tobacco warehouses as they sprang up across Richmond’s south side to serve the new high-speed cigarette production facilities. The high concentration of tobacco in these new, large warehouses, and the new process of ageing it in bulk gave rise to a new problem: the tobacco beetle.

The shift to large-scale warehousing meant that tobacco was left in storage for several years, creating an ideal environment for the tobacco beetle. Tobacco beetles are insects that are drawn to tobacco, and will live their entire lives in the leaves, if left alone. They consume the leaves for food, and use them for shelter and breeding grounds, destroying the product. This occurs most often while they are undisturbed and undetected, which occurred while the tobacco was stored out of sight in massive hogshead barrels. The hogshead’s design has survived for centuries due to its ventilating effects. This characteristic, unfortunately, also allowed access to the beetle, causing significant monetary loss.

The battle against the tobacco beetle was exactly the same as the treatment for insects that attacked and consumed rice, wheat, barley, chocolate, paper, coffee, tea, fruit and a host of other consumables. Fumigation, a method by which oxygen is removed from the insects’ permeable environment and replaced with gas, effectively killed both insect and eggs. This is done best in buildings which are impermeable, and can hold asphyxiate gases for 96 hours, at levels where no egg or embryo could survive. The skin of choice for those buildings is metal. Metal skins can be gasketed and covered with impermeable coatings which reduce the majority of preparation necessary to control gases in these warehouse fumitoriums, therefore accomplishing its function without interruption or posing a real danger out of doors.

Fumigation began as early as September 1930, but it soon became apparent that architectural changes – and more space – were necessary in order for fumigation to prove effective. By 1954 many other bulk tobacco

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storage buildings were being built to handle the demand for space. They were commonly skinned with flat-seamed sheet metal or steel “R”-panels and gasketed. In December 1953, the Chesapeake Storage Corporation first discussed the necessity of enclosing its warehouses, determining that enclosing them was critical to “maintain present business.”² In January 1954 the firm sought proposals for enclosing the warehouses, and work was underway by June 1954.³ The Chesapeake Warehouse facility was retrofitted between June 1954 and September 1960, when the last of the warehouse retrofits was completed, becoming a “closed” facility.⁴ Galvanized metal louvers were replaced with seamed steel panels, which remain in place today. The typical fumigation process was done with smoke via ‘smudge pots’ at first. In the 1960s, methyl bromide, a concentrated antioxidant gas, was used. It is still the gas of choice worldwide, but has been declared illegal in the United States due to its greenhouse effect, and has been replaced by Phosphine. All are asphyxiates and dissipate when ventilated. Tobacco was generally fumigated when it arrived at a warehouse, when it was shipped out of a warehouse, and each year it remained in a warehouse.

Tobacco-related Resources in Richmond, Virginia, Mid-19th through Mid-20th Century

There are several significant tobacco-related resources listed on the Virginia Landmarks Register and the National Register of Historic Places, but it appears that there are no listed resources that reflect the critical significance of the modern, single-story tobacco warehouse to the 20th century cigarette industry, a defining sector of the Virginia economy, and no MPD exists that embraces the full range of production issues involved in modern cigarette production.

Two Richmond historic districts contain many 20th century tobacco production resources; those districts are the Shockoe Valley & Tobacco Row Historic District, Richmond (DHR File #127-0344), and the Manchester Industrial Historic District, Richmond (DHR File #127-0457, two boundary increases). The Shockoe Valley & Tobacco Row Historic District contains many tobacco-related resources, reflecting the generations before that represented by the Chesapeake Warehouses. Resources in the Shockoe Valley & Tobacco Row Historic District range from mid-19th century tobacco factories, including the John Enders factory (ca. 1849), the Myers Brothers factory (1850), the William Grant factory (1853), and the Robinson factory (ca. 1849), to large, late 19th century warehouses, including the P. Lorillard Warehouse (ca. 1890) and the Pace Tobacco Company. The turn of the 20th century brought with it a decline of the small tobacco producers in the district, and great change brought about by the high-speed automation of the cigarette production industry. Locally-based manufacturing did continue, for example, see the Cameron Annex (1897 and 1905) and the Climax Warehouse (1899), but only one locally-owned company that saw significant early 20th century expansion was Larus and Brothers (1897, rebuilt after a fire in 1911, expanded 1916 and 1925). National mergers greatly impacted the cigarette industry in this district: for example, Allen and Ginter merged with W. Duke and Sons, Kinney Tobacco Company, W.S. Kimball and Company, and Goodwin and Company to become the American Tobacco Company, which at one point controlled 90% of the cigarette manufacturing in the United States. National companies maintained a presence in the district, including Philip Morris (1933) and American Tobacco, but the 20th century was to see the cigarette industry move south of the James River into South Richmond. Here, the Manchester Industrial Historic District, Richmond (DHR File #127-0457, two boundary increases) includes the Philip Morris Stockton Street Plant (DHR File #127-0457-0057), possibly a pre-existing building that was purchased by Philip Morris which definitely saw major construction activity in 1937 and 1945. Interestingly, none of the related warehouses – the buildings that made high-speed cigarette production possible – are listed. Other large mid-20th century cigarette production facilities in South Richmond, such as R.J. Reynolds and Philip Morris, have never been nominated for listing on the Virginia Landmarks Register or the National Register of Historic Places.

While the tobacco industry in Virginia from the 18th century through the close of the 19th century is well represented on the Virginia Landmarks Register and the National Register of Historic Places, the 20th century

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industry – at a time that it was one of Virginia’s most significant economic sectors, and at a time when it led the nation in significance – is barely represented on the Registers. Most significantly, the warehouse system which made high speed cigarette production possible is not represented at all.

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F. Associated Property Types

(Provide description, significance, and registration requirements.)

Description

The architectural resources associated with tobacco processing in Richmond, Virginia, can be divided into four categories. Those categories are:

1. Small-Scale Production and Storage Facilities

Mid-19th century small-scale production and storage facilities. These mid-19th century facilities, all of which were located in the City of Richmond, north of the James River, combined production and storage into a single, generally modest sized, masonry facility, generally two, sometimes up to four stories tall, and were integrated into the urban fabric of what is now called Shockoe Bottom, and were accessed by road. Hogsheads of tobacco received at these factories, as well as finished tobacco products sent forth from these factories, were all sent by road.

2. Vertically-Arranged Production and Storage Facilities

Late-19th century, larger masonry storage facilities. Vertically-arranged production and storage facilities were large, masonry facilities, with significantly larger footprints than their mid-19th century predecessors, and could be as tall as six stories, though access was still by a combination of stairs and freight elevators. These facilities were similarly located in the City of Richmond, north of the James River. Unlike their predecessors, these facilities were located close to railroads, and tended to be located on the north bank of the river for convenient access to the rail lines that ran along the canal there. These facilities typically included warehouses in their complexes, and these warehouses were similarly multi-story buildings, in which hogsheads were transported through freight elevators.

3. Modern Horizontally-Arranged Production and Storage Facilities

Early to mid-20th century high-speed manufacturing facilities. These facilities were designed to take advantage of the newly invented high-speed cigarette rolling machines, and were far more efficient than their predecessors. While they were masonry facilities as were their predecessors, these facilities arranged production in a horizontal fashion (using production principles championed by Henry Ford) and were designed to increase speed and efficiency of production. These facilities were located south of the James River in Manchester (later incorporated into the City of Richmond), and were located on newer rail spurs there, as these were more efficient than the rail spurs north of the James. These facilities did not contain warehouses as a part of their design; warehousing was outsourced to large, single-story frame warehouses (described below) that contained no elevators, and were similarly located near the same rail spurs. The production facilities required vast arrays of warehouses to feed the new, high-speed production lines housed within them.

4. Modern Horizontally-Arranged Warehouse Facilities

Early- to mid-20th century large, single story, frame warehouses. These facilities were designed as single story facilities, so that they could operate more efficiently and with less handling of hogsheads than was required by the older, multi-story masonry

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warehouses. These warehouses were located south of the James River in Manchester (later incorporated into the City of Richmond), and were located on the newer, more efficient rail spurs located there. Hogsheads were typically shipped to the warehouses by rail, and loaded directly into the facility; when needed by the nearby production facilities, they were loaded onto trucks and transported to the factories. These facilities can be divided into two groups:

- a. the earlier wood frame, wood or metal-clad, louvered “open” facilities (1920s through ca. 1950), and
- b. the later wood frame, metal-clad “closed” facilities (including those “open” warehouses converted at later dates to “closed” facilities) which were closed to allow for fumigation to control the tobacco beetle (1950s through the present).

Significance

Examples and their significance within the categories described above include:

1. Small-Scale Production and Storage Facilities

The early tobacco production and storage facilities, (mid-19th century) were usually small operations which were usually locally owned by individuals, small groups, and/or families. Tobacco production was not mechanized during this time period and human labor was required to produce the various tobacco products. Throughout the 19th century in the United States, leaf tobacco products were mainly “plugs” (e.g. tobacco that is chewed), though snuff was also popular. Smoked tobacco was generally taken in the form of cigars or pipes. Cigarettes were not mass-produced but rather were individually rolled by the user. Tobacco production was localized: cultivation, curing, and production into its ultimate form all occurred at a local level, with limited distribution. Because of this, quality and taste varied greatly between producers, and even within individual producers, by year and batch. The production operations, including the de-stemming of the tobacco, aging, and manufacturing of the various products were all housed within the single building. Before the advent of the railroad, early tobacco products were usually peddled by traveling salesmen on horse and wagon or by boat. Richmond’s proximity to the James River provided easy access for the dispersion of tobacco goods.

Small-scale production and storage facilities were constructed before the use of electricity. They were also constructed before advances in building construction methodology. Large spans were not readily available at the time and were not appropriate because of the lack of artificial light. Therefore, the buildings are predominantly rectangular in plan and constructed with masonry (usually brick.) These early tobacco buildings stand between two and four stories tall. Because of the lack of artificial lighting at that time, the buildings do not have a large footprint. The building design required windows which were tall and large that could allow natural light to penetrate into the work space. In most cases, but not all, the buildings have gabled roofs with stepped parapets at each end of the building. Hand-operated elevators which were used for the movement of the tobacco between floors, not as passenger elevators, are sometimes located within the buildings.

A prime example of a small-scale production facility is the William Grant Factory (1853) located at 1900 East Franklin Street in Shockoe Bottom (Parcel ID #

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E0000163017). This building is an “L” in plan, which maximizes the natural light that enters the building. The long sides of the “L” front 19th Street and Franklin Street. The building is constructed with brick and is four stories tall with an attic space located beneath the cross-gabled roof. The gable ends are punctuated with a stepped parapet. The windows are large and evenly spaced.

Other examples include John Enders factory, the Myers Brothers factory (1850), the William Grant factory (1853), and the Robinson factory (ca. 1849).

2. Vertically-Arranged Production and Storage Facilities

The turn of the 20th century brought with it a decline of the small tobacco producers in Richmond, and great change brought about by the high-speed automation of the cigarette production industry. With the introduction of the cigarette rolling machine in 1880 by James A. Bonsack, the output of cigarette manufacturing was increased exponentially. Locally-based manufacturing did continue, for example, see the Cameron Annex (1897 and 1905) and the Climax Warehouse (1899), but only one locally-owned company that saw significant early 20th century expansion was Larus and Brothers (1897, rebuilt after a fire in 1911, expanded 1916 and 1925). Larger companies began to buy-out the smaller, local operations. National mergers greatly impacted the cigarette industry in this district; for example, Allen and Ginter merged with W. Duke and Sons, Kinney Tobacco Company, W.S. Kimball and Company, and Goodwin and Company to become the American Tobacco Company, which at one point controlled 90% of the cigarette manufacturing in the United States. National companies maintained a presence in the district, including Philip Morris (1933) and American Tobacco, but the 20th century was to see the cigarette industry move south of the James River into South Richmond (formerly the independent City of Manchester).

The use of large machinery in the tobacco manufacturing process requires more space than previously needed in the smaller, locally-owned tobacco factories. The entire manufacturing process is still maintained on a contained site, it just requires a larger amount of area. This sometimes results in the use of multiple buildings. Although these buildings still rely on windows that provide abundant natural light, the use of electricity also enabled the buildings to encompass a greater area as natural light was not the only means of lighting the factories. Due to advances in construction, the tobacco buildings constructed during this time are predominantly masonry and can be upwards of five to six stories tall.

A major example found in the Shockoe Bottom neighborhood was the American Tobacco Company, Virginia Branch, as well as the correlating Steam Power Plant, which was constructed at 2600-2618 East Cary Street in 1930. Both the main building and the steam power plant were drawn by J. F. Serrine & Company, Engineers from Greenville, South Carolina. The building is rectangular in plan with a central courtyard. The six story building is constructed with masonry and features visible pilasters on the exterior of the building. Large, industrial style windows are located between the pilasters to maximize the natural light that enters the building. Precast concrete is also visible on the exterior of the building. A loading dock extends the length of the Cary Street elevation.

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Other examples include the P. Lorillard Warehouse (ca. 1890), located at 22nd and Cary Streets; The British American Tobacco Company (1914), located at Lombardy and Leigh Streets (associated one-story early 20th century frame warehouses were located one block to the west: these were demolished and the site was developed with a Kroger grocery store); and Continental Tobacco (1927) at 1912-1918 East Cary Street.

3. Modern Horizontally-Arranged Production Facilities

With the popularity of the cigarette bolstered during World War I and World War II, as well as the campaign to enlarge cigarette consumers to include women, the tobacco industry continued to grow. Advertising – fueled by increasing literacy and a burgeoning market for newspapers and magazines – shifted from local advertising to a national audience. The continuously growing group of consumers also demanded continuity in the products they purchased. Production had to keep up with the new demand, and the new national audience demanded that a given cigarette had to taste the same, no matter where it was purchased in the country.

Previously, the majority of tobacco manufacturing was located north of the James River. In a crowded urban environment, the tobacco companies were unable to expand, and often faced limited rail connections on the downtown spurs and poor access to the James River. In response, Richmond annexed the town of Manchester, south of the James River. Manchester had better access to the James, with far less building density and a much more accessible set of rail spurs (which were also more efficient, as the lines into Manchester were straighter and had fewer urban obstacles to be navigated). American Tobacco Company located its new facility in Manchester, and many other tobacco companies were soon to follow.

With the abundance of available land south of the river, the companies were able to expand their production facilities as need be. The production facilities took advantage of advancements in building construction and were able to encompass even larger amounts of space dedicated entirely to the production of tobacco products, primarily cigarettes. Advancements in cigarette production continually increased the output of the product. The new high-speed cigarette machines required mass bulk storage, and that storage had to be capacious enough for a producer to have enough tobacco on hand to maintain their blend.

Located at 1100 Jefferson Davis Highway, the Model Tobacco Company is a prime example of a modern horizontally-arranged production facility. Originally, the facility was comprised of six buildings including the main building, power plants, and sheds. The main building was designed by the Chicago architecture firm of Schmidt, Garden, and Erikson, of Chicago, in the Art Deco style. The six-story red-brick building was constructed in 1939-1940. Large, approximately nine-foot tall letters that spell Modern Tobacco are located on both the north and south elevations. The letters are punctuated by vertical concrete elements on the north and south elevations. Horizontal bands of two over two double-hung windows are located on each level and extend the length of the east and south elevations. Dark brownish red brick is located between the windows.

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Another example of these larger factory facilities is, within the Manchester Industrial Historic District (DHR File #127-0457, two boundary increases), the Philip Morris Stockton Street Plant (DHR File #127-0457-0057), possibly a pre-existing building that was purchased by Philip Morris which definitely saw major construction activity in 1937 and 1945.

4. Modern Horizontally-Arranged Warehouse Facilities

In order for the production facilities south of the James River to be able to operate at the highest capacity available, large expansive warehouses were required to be able to store and age the tobacco as needed. Many of the large tobacco companies did not construct and own their own storage sheds. This allowed business opportunity in the way of warehouse operation. The warehouses were quickly constructed and sprang up along the railroads south of the James River in Manchester and beyond. The warehouses were designed in two styles: the earlier wood frame, wood or metal-clad, louvered “open” facilities (1920s through ca.1950), and the later wood frame, metal-clad “closed” facilities (including those “open” warehouses converted at later dates to “closed” facilities) which were closed to allow for fumigation to control the tobacco beetle (1950s through the present).

The warehouses were usually a single tall story in height, eliminating the need for elevators and the resulting extra personnel necessitated by all of the additional handling (as was required at the older multi-story tobacco warehouses north of the James in Richmond). Their enormous capacity and ease of access are the essential characteristics of their design. The buildings are constructed with sawn timber framing. Interior spaces are open and utilitarian in nature, constructed to allow flexibility for moving and storage of the large hogsheads (barrels) of tobacco kept in the warehouses. Typically, the floors were elevated and consisted of soil covered by 4-6 inches of cinders, with concrete aisles. The buildings usually have roofs that are tar and gravel; sometimes these roofs are punctuated by large skylights which light the interior. The buildings had electric lighting from the beginning, but it was minimal, and the skylights were the main source of light. The warehouses were usually designed in sets or multiples and constructed with brick firewalls separating the individual warehouses. The buildings were originally clad in either wood or galvanized metal that possessed louvers, to allow air circulation within the warehouses.

Due to the ventilation properties of these warehouses, tobacco beetles, which are insects that are drawn to tobacco, were able to infiltrate the hogshead of stored tobacco, destroying the product, as well as creating a significant monetary loss. In order to extinguish the tobacco beetles, many of the open warehouses were converted into “closed” warehouses or fumitoriums. The warehouses were re-skinned with flat-seamed sheet metal or steel “R”-panels. Metal skins can be gasketed and covered with impermeable coatings which reduce the majority of preparation necessary to control gases in these warehouse fumitoriums, therefore accomplishing its function without interruption or posing a real danger out of doors.

Other examples include:

- a. the early “open” facilities. These resources include the Chesapeake

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- Warehouses (as originally constructed) and the surviving sheds at American Tobacco and Model Tobacco, and
- b. the later “closed” facilities (including those converted at later dates). These resources include the Chesapeake Warehouses as modified.

Registration Requirements

1. Small-Scale Production and Storage Facilities

Registration requirements for this class of tobacco warehouse and production facility would include on the exterior the retention of unencumbered brick elevations, wood (or aluminum-clad wood) sash windows, and wood-frame industrial-type doors. The roofs of these buildings are generally not visible from the street, and the roofing materials should not be considered character-defining. On the interior, these buildings originally consisted of largely undivided, open work areas; interior spaces were simple, utilitarian, and received few finishes. While it is understood that the interior character of most of these buildings has changed over time, registration would assume that these changes were in keeping with the character of the building. Any new corridors, partitions, and finishes should be easily read as later interventions and should be sensitively installed with deference to the building’s original industrial use.

Small-scale production and storage facilities will be eligible for listing in the National Register through this Multiple Property Listing if they maintain integrity of location, design, setting, feeling, workmanship, materials and association or some combination thereof, as specified below.

Buildings described in this section typically must retain integrity of location. The building’s setting should demonstrate continuity over time, for example, a building originally constructed in an industrial setting would continue to reflect this historic use even if the building has been adapted for light industrial, commercial, or other use.

For a building to retain integrity of design, workmanship, and materials, original construction materials should be retained to the fullest feasible extent even if the building has been adaptively reused. Repairs to buildings, if present, should have been carried out using new materials that match the original in content, color, texture, shape, and size, and using construction methods as similar to the original as possible. Introduction of unsympathetic components that obliterate or obscure exterior historic materials will erode integrity; interior finishes should be sensitively applied to maintain the historic industrial character of the building. Adaptations and alterations dating from the period of significance that were intended to allow the building to continue its historic use should not be considered as eroding integrity.

Integrity of feeling and association will be maintained only if the resource retains physical characteristics that convey a sense of the historic use and design. Integrity of location and setting are important to conveying integrity of feeling and association. As noted above, buildings also should retain at least some degree of integrity of design,

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workmanship, and materials in order to convey integrity of feeling and association. Depreciation or loss of these features may degrade their eligibility for individual listing on the National Register, or render them non-contributing to a historic district.

Common and minor modifications will not sufficiently affect the integrity of a building to cause it to be ineligible for listing, as follows:

- Alterations (including replacement in kind) of deteriorated decorative and structural elements such as roof parapets, load-bearing walls, and railings;
- Modifications or additions for fire exits;
- Replacement in kind of windows and doors;
- Installation of fire suppression, mechanical systems, and interior finishes that allowed continued use of the building.

2. Vertically-Arranged Production and Storage Facilities

Registration requirements for this class of tobacco production and warehouse would include on the exterior the retention of unencumbered brick elevations, wood (or aluminum-clad wood) sash windows or steel-framed industrial windows, and wood-frame or metal-wrapped wood industrial-type doors. The roofs of these buildings are generally not visible from the street, and the roofing materials should not be considered character-defining. On the interior, these buildings originally consisted of large undivided, open work areas that were simple, utilitarian, and received few finishes. While it is understood that the interior character of most of these buildings has changed over time, registration would assume that these changes were in keeping with the character of the building. Any new corridors, partitions, and finishes should be easily read as later interventions and should be sensitively installed with deference to the building's original industrial use. The depth of the floor plate of this class of warehouse creates challenges to light the interiors (which were often lit historically by incandescent lighting), and so registration admits of some modification to make this possible.

Vertically-arranged production and storage facilities will be eligible for listing in the National Register through this Multiple Property Listing if they maintain integrity of location, design, setting, feeling, workmanship, materials and association or some combination thereof, as specified below.

Buildings described in this section typically must retain integrity of location. The building's setting should demonstrate continuity over time, for example, by retention of multiple buildings and maintenance of spatial relationships among the buildings to reflect the historic use even if the property has been adapted for light industrial, commercial, or other use. Several examples of vertically-arranged production and storage facilities cited in this MPD have been successfully reused as multiple family apartment complexes.

For a building to retain integrity of design, workmanship, and materials, original construction materials should be retained to the fullest feasible extent. Repairs to buildings, if present, should have been carried out using new materials that match the

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original in content, color, texture, shape, and size, and using construction methods as similar to the original as possible. Introduction of unsympathetic components that obliterate or obscure historic materials will erode integrity. Adaptations and alterations dating from the period of significance that were intended to allow the building to continue its historic use should not be considered as eroding integrity.

Integrity of feeling and association will be maintained only if the resource retains physical characteristics that convey a sense of the historic use and design. Important to this aspect are integrity of location and of setting, as the urban environment in which these buildings originally were constructed is a character-defining feature. As noted above, buildings also should retain at least some degree of integrity of design, workmanship, and materials in order to convey integrity of feeling and association. Depreciation or loss of these features may degrade their eligibility for individual listing on the National Register, or render them non-contributing to a historic district.

Common and minor modifications will not sufficiently affect the integrity of a building to cause it to be ineligible for listing, as follows:

- Alterations (including replacement in kind) of deteriorated decorative and structural elements such as roof parapets, load-bearing walls, and railings;
- Modifications or additions for fire exits;
- Modifications to permit adequate interior lighting;
- Installation of fire suppression and mechanical systems that allowed continued use of the building.

3. Modern Horizontally-Arranged Production Facilities

Registration requirements for this class of tobacco processing facility would include on the exterior the retention of unencumbered brick elevations, wood (or aluminum-clad wood) sash windows, and wood-frame industrial-type doors. Modern era design elements, such as narrow bands of windows and concrete stringcourses, are typical as well. The roofs of these buildings are generally not visible from the street, and the roofing materials should not be considered character-defining. On the interior, these buildings originally consisted of largely undivided, open work areas; interior spaces were simple, utilitarian, and received few finishes. While it is understood that the interior character of most of these buildings has changed over time, registration would assume that these changes were in keeping with the character of the building. Any new corridors, partitions, and finishes should be easily read as later interventions and should be sensitively installed with deference to the building's original industrial use. Continued use of this resource type in an industrial capacity is not unusual, although adaptive reuse options that are respectful of the historic integrity can be undertaken.

Modern horizontally-arranged production and storage facilities will be eligible for listing in the National Register through this Multiple Property Listing if they maintain integrity of location, design, setting, feeling, workmanship, materials and association or some combination thereof, as specified below.

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Buildings described in this section typically must retain integrity of location. The building's setting should demonstrate continuity over time, for example, by retention of the low-scale massing and horizontally arranged footprint of the building, with spatial relationships to rail spurs still evident (although it is not necessary for the spurs themselves to remain intact). Infill construction that obscures these aspects will erode integrity.

For a building to retain integrity of design, workmanship, and materials, original construction materials should be retained to the fullest feasible extent. Repairs to buildings, if present, should have been carried out using new materials that match the original in content, color, texture, shape, and size, and using construction methods as similar to the original as possible. Introduction of unsympathetic components that obliterate or obscure historic materials will erode integrity. Adaptations and alterations dating from the period of significance that were intended to allow the building to continue its historic use should not be considered as eroding integrity. Non-historic additions that raise the building's height would significantly erode integrity, as the low-scale massing of this resource type is a character-defining feature. Any historic restrained Modern-era design attributes contribute to integrity, while application of post-Modern or other unsympathetic decorative treatments would erode integrity.

Integrity of feeling and association will be maintained only if the resource retains physical characteristics that convey a sense of the historic use and design. Important to this aspect are integrity of location and of setting, as the industrial environment and extensive rail spurs in which these buildings originally were constructed is a character-defining feature. As noted above, buildings also should retain at least some degree of integrity of design, workmanship, and materials in order to convey integrity of feeling and association. Depreciation or loss of these features may degrade their eligibility for individual listing on the National Register, or render them non-contributing to a historic district.

Common and minor modifications will not sufficiently affect the integrity of a building to cause it to be ineligible for listing, as follows:

- Alterations (including replacement in kind) of deteriorated elements such as roof parapets, bands of windows, framing materials, and masonry walls;
- Modifications or additions for fire exits;
- Installation of fire suppression and mechanical systems that allowed continued use of the building.

4. Modern Horizontally-Arranged Warehouse Facilities

In order for the production facilities south of the river to be able to operate at the highest capacity available, expansive warehouses were required to be able to store and age the tobacco as needed. The warehouses were quickly constructed and sprang up along the railroads south of the James River in Manchester and beyond. The warehouses were designed in two styles: the earlier wood frame, wood or metal-clad, louvered "open" facilities (1920s through ca.1950), and the later wood frame, metal-clad "closed" facilities (including those "open" warehouses converted at later dates to "closed"

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facilities) which were closed to allow for fumigation to control the tobacco beetle (1950s through the present).

Registration requirements for this class of tobacco warehouse would include on the exterior the retention of metal cladding, ventilation louvers if present, and wood-frame or wood-frame metal-wrapped industrial-type doors. The roofs of these buildings are generally not visible from the street, and the roofing materials should not be considered character-defining. The roofs of this class of tobacco warehouse were frequently punctuated by skylights; these should be considered character-defining and should be retained. On the interior, these buildings originally consisted of undivided, open work areas; interior spaces were simple, utilitarian, and received few finishes, and often had no interior walls whatsoever.

Both open and closed warehouses face challenges for reuse, especially regarding windows: these buildings historically contained no windows, and were lit only by skylights complemented by some overhead suspended incandescent lighting. In the case of open warehouses converted into closed warehouses, restoration of louvers removed during the conversion into closed warehouse facilities can be undertaken without eroding integrity. It may be appropriate to restore louver openings to allow installation of windows to light the interior of the building, however, such modification must be in keeping with the industrial character of the exterior. In the case of closed warehouses, carefully planned and limited insertion of windows on non-primary elevations may be permitted without compromising historic integrity. On the interior, since these spaces were never finished, partitions may be added so long as they are held beneath the trusses and allow the volume of the space to be read. Finishes to the interior perimeter of the building may be necessary to allow continued use, as the spaces historically have no insulation or interior wall cladding. Interior changes should be in keeping with the character of the building, meaning that they are simple and utilitarian, and any new corridors and partitions are easily read as later interventions.

Modern horizontally-arranged warehouse facilities will be eligible for listing in the National Register through this Multiple Property Listing if they maintain integrity of location, design, setting, feeling, workmanship, materials and association or some combination thereof, as specified below.

Properties described in this section typically must retain integrity of location. The property's setting should demonstrate continuity over time, for example, by retention of historic spatial relationships among multiple, low-slung buildings. Some complexes do not retain the full complement of warehouses originally constructed to serve the tobacco industry, however, as long as a sufficient number are present to continue to relate to one another in their original sense, integrity of setting will be preserved. Non-historic infill construction that obscures the historic spatial relationships will erode integrity of setting.

For a property to retain integrity of design, workmanship, and materials, original construction materials should be retained to the fullest feasible extent; for those warehouses that were "closed" during the mid-twentieth century, materials related to this period are important to retain. Exterior ornamentation is understood to have been

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minimal for this resource type. Integrity of design, workmanship, and materials requires that the buildings retain a utilitarian character. Repairs to buildings, if present, should have been carried out using new materials that match the original in content, color, texture, shape, and size, and using construction methods as similar to the original as possible. Introduction of unsympathetic components that obliterate or obscure historic materials will erode integrity. Non-historic additions that raise a warehouse's height would significantly erode integrity, as the low-scale massing of this resource type is a character-defining feature. Application of unsympathetic decorative treatments will compromise integrity as well.

Integrity of feeling and association will be maintained only if the resource retains physical characteristics that convey a sense of the historic use and design. Important to this aspect are integrity of location and of setting, as the industrial environment, extensive rail spurs, and spatial relationships in which these buildings originally were constructed is a character-defining feature. As noted above, buildings also should retain at least some degree of integrity of design, workmanship, and materials in order to convey integrity of feeling and association. Depreciation or loss of these features may degrade their eligibility for individual listing on the National Register, or render them non-contributing to a historic district.

Common and minor modifications will not sufficiently affect the integrity of a building to cause it to be ineligible for listing, as follows:

- Alterations (including replacement in kind) of deteriorated structural members and roofing materials;
- Modifications or additions for fire exits;
- Installation of fire suppression and mechanical systems that allowed continued use of the building.

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G. Geographical Data

The table below presents the full range of properties identified to date that are associated with this MPD, including examples where above ground resources are no longer extant and condition of subsurface deposits is not known at this time. All are located within the city limits of the City of Richmond, Virginia. Properties included in this table must be evaluated on an individual basis to establish if they retain integrity for National Register nomination under this MPD.

Name	Owner	Building Address	Permit	Date	Architect or contractor	Warehouses surviving	Warehouses demolished	Type	Modifications
<i>Warehouses South of the James River</i>									
Tobacco Warehouse	American Tobacco	“S/S of Ingram Ave. between 9th St. Rd. and 17th St. and 9th St. Rd. b/t Bruce and 16th Streets”	Permit number 25333 (1939); 25477 (1939); 25478 (1939); 26482 (1941); 26651 (1942)	1939, 1941, 1942	None identified	31 warehouses survive [Seven more to be demolished 2013]	Seven warehouses demolished 2000-2006; seven more slated for demolition in 2013 for City of Richmond; remainder planned for demolition by City of Richmond as part of relocation of services from vicinity of Diamond on Boulevard	Single-story, high-bay frame warehouses	Open louver, converted to closed. Built up roofs added; skins replaced by American or Brown and Williamson with Galvalume R panel cladding.
Tobacco Drying Warehouse	John D. Blair, Jr.	2601 Maury Street [bounded by Clopton, Decatur, Maury, and East 29 th Street]	Permit number 25312 (1939); 26549 (1941); 26787 (1942)	1939, 1941, 1942	E. L. Bass and Bros., contractor for 1941; none identified for 1939 and 1942;	28 survive; four pairs of new buildings also on site, office facility	Four pairs of warehouses were demolished	Single-story, high-bay frame warehouses	Open louver, converted to closed. Philip Morris added same skin as used on Chesapeake to all buildings. The change was made after 2000.
Tobacco Drying Warehouse	Boxley Vaughn	“S/S 9th St. Rd”	Permit number 24464	1938	None identified	One warehouse survived (#23); brick office survives [Chesapeake Storage leased this property from Boxley Vaughn; Chesapeake paid for buildings]	Eight warehouses demolished (#15, 16, 17, 18, 19, 20 21 22)	Single-story, high-bay frame warehouses	Open louver, converted to closed. Skin remains from conversion to closed warehouse
Tobacco Storage Shed	Carrington and Company, Leaf Tobacco Co	“S/S 6th St. between Morgan St. and City Limit” [probably just north of Philip Morris Stockton Street Plant, 315 East 6 th Street]	Permit number 8241	1921	E. L. Bass and Bros., contractor	None – vacant lot	All buildings demolished	Permitted as “frame shed.”	
Tobacco Storage Shed	Chesapeake Storage Corporation	E. side of Dinwiddie Ave. between 9th and 15th Sts	Permit number 22088 (1931); 23866 (1936)	1931, 1936	None identified	Eight warehouses remain (# 1, 2, 3, 4 5, 12, 13, 14)	Five warehouses demolished in the 1990s (#7, 8, 9, 10, 11)	Single-story, high-bay frame warehouses	Open louver, converted to closed

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Name	Owner	Building Address	Permit	Date	Architect or contractor	Warehouses surviving	Warehouses demolished	Type	Modifications
Tobacco Storage Warehouse	H. C. Cockrell Storage	Dinwiddie Ave. and 12th St.	Permit number 27430	1945		Parcel 1: two buildings remain Parcel 2: heavily modified – closed, floors removed, turned into flex space; four buildings remain	Parcel 1: Four buildings demolished Parcel 2: none demolished	Single-story, high-bay frame warehouses	
Tobacco Warehouse	Dark Leaf Warehouse Corp.	900 Dinwiddie Ave.	Permit number 13390	1924	R. G. Trimble, Consulting and Constructing Engineers; Wise Granite Company Corp., Contractor	Nothing original remains – all buildings (six) on the site replace the original buildings	All tobacco warehouses demolished	Frame tobacco warehouse	
Tobacco Storage Shed	Richmond Tobacco Storage	S/S Ingram Ave. between 9th St. Rd. and 14th St.	Permit Number 23861	1936	None identified	12 buildings survive.	No warehouses demolished.	Single-story, high-bay frame warehouses	All enclosed, open louver originally, louvers removed, re-skinned 2000-1012.
Tobacco Storage Shed	Southern States Tobacco Co.	1000 Middlesex St.; (Now 4 Manchester Road)	Permit Number 25320	1939	None identified	No warehouses survive.	All warehouses demolished		
Four Tobacco Warehouses	E. K. Vietor	1800 Semmes Ave.	Permit Number 10049 (1922); 29821 (1948)	1922, 1948	None identified	Original warehouses demolished; current warehouses 1970s, and themselves slated for demolition.	All warehouses demolished	Four open shed tobacco warehouses covering 20,000 square feet each	
U.S. Tobacco (Model Tobacco)		1100 Jefferson Davis Hwy	None	1938-40		Eleven warehouses survive.	At least eleven warehouses demolished	Single-story, high-bay frame warehouses	
<i>Warehouses North of the James River</i>									
Tobacco Warehouse	China-American Tobacco Trading Company	“SE corner Belleville and Henrico Sts.”	Permit number 7663	1920	Marcellus E. Wright, architect; Wise Granite and Construction Co., Contractor	Not built.			

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Name	Owner	Building Address	Permit	Date	Architect or contractor	Warehouses surviving	Warehouses demolished	Type	Modifications
Tobacco Warehouse	Export Leaf Tobacco Co.	W/S Lombardy St. bet Marshall and Leigh St.	Permit number 3097A (1913); 11965A (1923)	1913, 1923	Francisco & Jacobus, Architects and Engineers; Jno. T. Wilson Co. Inc. (1913); Engineering Dept. of the Export Leaf Tobacco Co.; E. L. Bass and Bro., Contractor (1923)	One building demolished.	Now a U-Hail storage facility	Multi-story masonry warehouse	
Warehouse addition to factory	Falk Tobacco Company	Franklin and Grace, 20th and 21st Sts	Permit number 8227A (1920); 11448A (1922)	1920, 1922	J. T. Nuckols, Contractor	All surviving buildings rehabilitated into apartments.		Brick addition to five-story brick tobacco factory building.	
Tobacco Drying Warehouse	Larus Brothers	"Valley Rd. & 5th St. Viaduct" [Valley Road is now 2 nd Street]	Permit number 25354, 25021	1939	None identified	If this warehouse was actually built (and that seems doubtful), it has been demolished.	All warehouses demolished	Frame warehouse	
Tobacco Warehouse	Liggett & Myer Tobacco Co.	7th and Canal Sts.	Permit number not given, control number 134 (1912), Permit number 6203 (1918)	1912, 1918	Albert F. Hunt, Architect (1912); John T. Wilson Co. Contractors (1918)	Completely re-clad when converted into Richmond Plaza		Multi-story brick warehouse	
Tobacco Warehouse	R. J. Reynolds Tobacco Co.	S/S Byrd St. between 10th & 12th Sts.	Permit number 1779 (1910); 1997A (1911); 7426 (1920)	1910	Charles M. Robinson, Architect; Harwood and Moss, Contractor (1910 and 1911); R. J. Reynolds Tobacco Company (Office of the Chief Engineer); R. J. Reynolds Tobacco Co. Contracting (1920)	Reinforced concrete & brick warehouse with four floors cut into the slope so that the 11th St. elevation is two stories high and the 12th St. is four stories (1910). An additional story has been added to the 1910 warehouse design (1911). Brick tobacco warehouse (1920)		Multi-story masonry warehouse	

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H. Summary of Identification and Evaluation Methods

(Discuss the methods used in developing the multiple property listing.)

Survey Methodology

A preliminary survey was undertaken to identify surviving tobacco warehouses in Richmond, with special emphasis on warehouses south of the James River, as most surviving warehouses north of the James River have been registered. The survey identified every tobacco warehouse for which a building permit was issued by the City of Richmond between 1907 and 1949. The survey also identified all tobacco warehouses listed in Virginia Landmarks Register and National Register historic districts in Richmond. To that list the survey added known warehouses that were either not issued permits, or were located in Henrico or Chesterfield County at the time, as those counties do not retain building permits for this period.

Each tobacco warehouse was assembled into a spreadsheet identifying the name of the building, the original owner, the location, as well as information about how many warehouses survive on each site, any modifications to the warehouses, and other such information (see Section G). Each building (or site, if the building has been demolished) was photographed, and an aerial photograph of each was also collected, as it is much easier to understand the nature of each complex from the air. This information was also collected into two maps (one north of the James River, the other south of the river), each identifying surviving tobacco warehouses, as well as the sites of demolished warehouses, and further includes the locations of the tobacco processing and cigarette manufacturing plants that these warehouses served.

Summary of Survey Findings

The survey found that there was a clear shift in tobacco warehousing / cigarette processing that appears to have occurred during the decade of the 1920s. This shift is visible both in the design of the tobacco warehouses themselves, as well as in their physical location. The earliest warehouses, all dating before 1930, are elevator-serviced, multi-story, masonry buildings that often included within them tobacco-processing and cigarette-manufacturing equipment; all of these are located north of the James River. The newer warehouses, all built after 1922 (the oldest surviving warehouse dates to 1924) were single-story, high-bay, frame warehouses that never contained any tobacco-processing or cigarette-manufacturing equipment; all of these are located south of the James River.

Pre-1930 elevator-serviced, multi-story, masonry tobacco warehouses

The earliest tobacco warehouses in Richmond are all located north of the James River. These tobacco warehouses are all elevator-serviced, multi-story, masonry buildings that often included within them tobacco-processing and cigarette-manufacturing equipment. These buildings were substantial, and are among the defining characteristics of the Tobacco Row area of Richmond.

An excellent example of these early warehouses is the Liggett & Myer warehouse and processing facility, now demolished, which once stood on Canal Street in Richmond, between Sixth and Seventh streets. Designed by Albert F. Huntt in 1912, with an addition in

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1918, the building was a six-story, concrete-frame building. Hogsheads of tobacco were moved throughout the massive building by way of elevators, in what came to be viewed as a time-consuming process, as only a few hogsheads could be moved at any time, and it required several workmen to accompany the hogshead at all time. The plan of these buildings required much handling of the hogsheads of tobacco: they were located near busy rail sidings that had to be shared, and all hogsheads were vertically relocated only by means of freight elevators. With the advent of high-speed cigarette-manufacturing processes, these buildings were no longer considered efficient.

Post-1920 single-story, high-bay, frame tobacco warehouses

As the newer high-speed cigarette-manufacturing machines increased in speed and efficiency, cigarette-manufacturers found that they were unable to maintain sufficient supplies of processed tobacco faster in their facilities to maintain production. In addition, the number of workers required to handle the hogsheads through the elevators in the facilities was becoming an undesirable expense. In order to maintain production, cigarette-manufacturers turned to a new kind of warehouses.

These warehouses were single-story, high-bay, frame warehouses. Unlike the warehouses used in the earlier production and manufacturing model, the newer warehouses never contained processing or manufacturing equipment, and were often not owned by the cigarette-manufacturing companies themselves. Many of these new warehouses were owned by companies that did not process tobacco or manufacture cigarettes, but brokered and stored tobacco. These new warehouses had no elevators, and had large, broad floor plates, generously lit from above with skylights. They were designed to receive hogsheads from adjacent rail lines, be maintained by small staffs, and discharge hogsheads to trucks for the short trips to nearby processing and manufacturing plants (see attached map). These warehouses were located south of the James River, as land was cheaper, and the warehouses would expand horizontally, instead of vertically, and they were located immediately adjacent to abundant rail spurs in the area.

Excellent examples of these warehouses in use were exhibited in the Virginia Exhibition at the 1939 New York World's Fair, no doubt touting their modernity and efficiency. The need for handling was greatly reduced, and as the survey map records, they were all located in the immediate vicinity of tobacco-processing and tobacco-manufacturing facilities south of the James River. These warehouses were designed to hold vast quantities of tobacco and be operated by a small number of people, while located adjacent to both rail spurs and truck routes.

These single-story, high-bay, frame warehouses fed the two production facilities and high-speed cigarette-manufacturing facilities south of the James River, operated by U.S. Tobacco (Model Tobacco building) and Philip Morris. The Model Tobacco building was fed by adjacent single-story, high-bay, frame warehouses to the north, while Philip Morris processed tobacco at its Commerce Street facility and manufactured cigarettes at its Stockton Street facility. The attached map of surveyed resources shows the vast amount of warehouse space located in the immediate vicinity of the U.S. Tobacco and Philip Morris facilities.

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Surviving Resources

There was at one time a vast amount of square footage enclosed by single-story, high-bay, frame tobacco warehouses south of the James River. Over time, many of them have been demolished, and of the survivors, many have been altered. For the purposes of this MPD, the conversion from “open” to “closed” sheds are treated as a necessary evolution of the aging and storage process, and an essential step to control and prevent pest infestations. Many other alterations, however, have not been in keeping with the evolution of storage techniques. Examples of single-story, high-bay, frame tobacco warehouses converted from open to closed warehouses include American Tobacco, John D. Blair, Jr., Boxley Vaughn, Chesapeake Storage Corporation, H. C. Cockrell Storage, H. C. Cockrell Storage, Richmond Tobacco Storage, and U.S. Tobacco (Model Tobacco).

Many single-story, high-bay, frame tobacco warehouse complexes have been demolished in their entirety. Completely demolished complexes of single-story, high-bay, frame warehouses include the Carrington and Company, Leaf Tobacco Co.; Dark Leaf Warehouse Corp.; Southern States Tobacco Co.; and E. K. Vietor.

All surviving single-story, high-bay, frame tobacco warehouses appear to have suffered at least partial demolition of some warehouses, ranging in numbers from small to large. Examples include the American Tobacco (31 warehouses survive; seven warehouses were demolished 2000-2006; seven more are slated for demolition in 2013 by the City of Richmond, and the remainder are planned for demolition by the City of Richmond as part of relocation of services from the vicinity of the Diamond baseball park); John D. Blair, Jr., (28 survive; four pairs of warehouses were demolished); Boxley Vaughn warehouses (one warehouse survives; eight warehouses were demolished); the Chesapeake Storage Corporation (eight warehouses remain; five warehouses were demolished); H. C. Cockrell Storage (four buildings were demolished, the remaining buildings are heavily altered); Richmond Tobacco Storage (12 buildings survive; an unknown number were demolished); and U.S. Tobacco (Model Tobacco) (eleven warehouses survive; at least eleven warehouses were demolished).

The surviving warehouses from this group constitute a significant group of resources that tell the story of the shift in tobacco processing and cigarette manufacturing in Richmond, and bear witness to the shift to high-speed machinery that led to the relocation of the cigarette industry during and after the decade of the 1920s, from north of the James River to south of the James River. The contributions of the cigarette industry to the economic and social history of Richmond are well-known; without these new warehouses, the cigarette industry would never have achieved its prominence nor its significance in the social and economic history of Richmond.

United States Department of the Interior
National Park Service

Tobacco Warehouses in Richmond, Virginia, 1874-1963
Name of Multiple Property Listing

Virginia
State

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ENDNOTES

¹ The Philip Morris Stockton Street Plant is listed as a contributing resource in the Manchester Industrial Historic District. The date listed in that nomination for this resource – 1937 – is incorrect, and refers to an addition made to that building. The nomination lists the building as being built in 1937, with additions in ca. 1945 and 1982. The building was actually a pre-existing structure purchased by Philip Morris, onto which several additions were made. Three drawings for the Philip Morris Stockton Street plant survive at in the City of Richmond's Bureau of Permits and Inspections, Building permit architectural blueprints and specifications, 1907-1949 Collection at the Library of Virginia. Those drawings are: 1) Permit Number: 24268, Factory Building, Address: 700 Stockton St., 1937 Control Number: 1953, Drawn by: Francisco & Jacobus, Engineers & Architects, New York, Chicago; Contractor: N/A; Commissioned by: Philip Morris & Company, Ltd., Inc.; 2) Permit Number: 24368, Power House for Philip Morris & Co., Ltd., Address: Rear of 212 East 8th St., 1937 Control Number: 2014, Drawn by: Francisco & Jacobus, Engineers & Architects, New York and Chicago; Contractor: N/A; Commissioned by: Philip Morris & Co.; and 3) Permit Number: 26538 1/2, Commission Stemmary Building, Address: Everett & 8th Sts., 1941 Control Number: 2247, Drawn by: Baskervill & Son; Contractor: Laburnum Construction Co.; Commissioned by: Philip Morris & Co., Ltd., Inc.

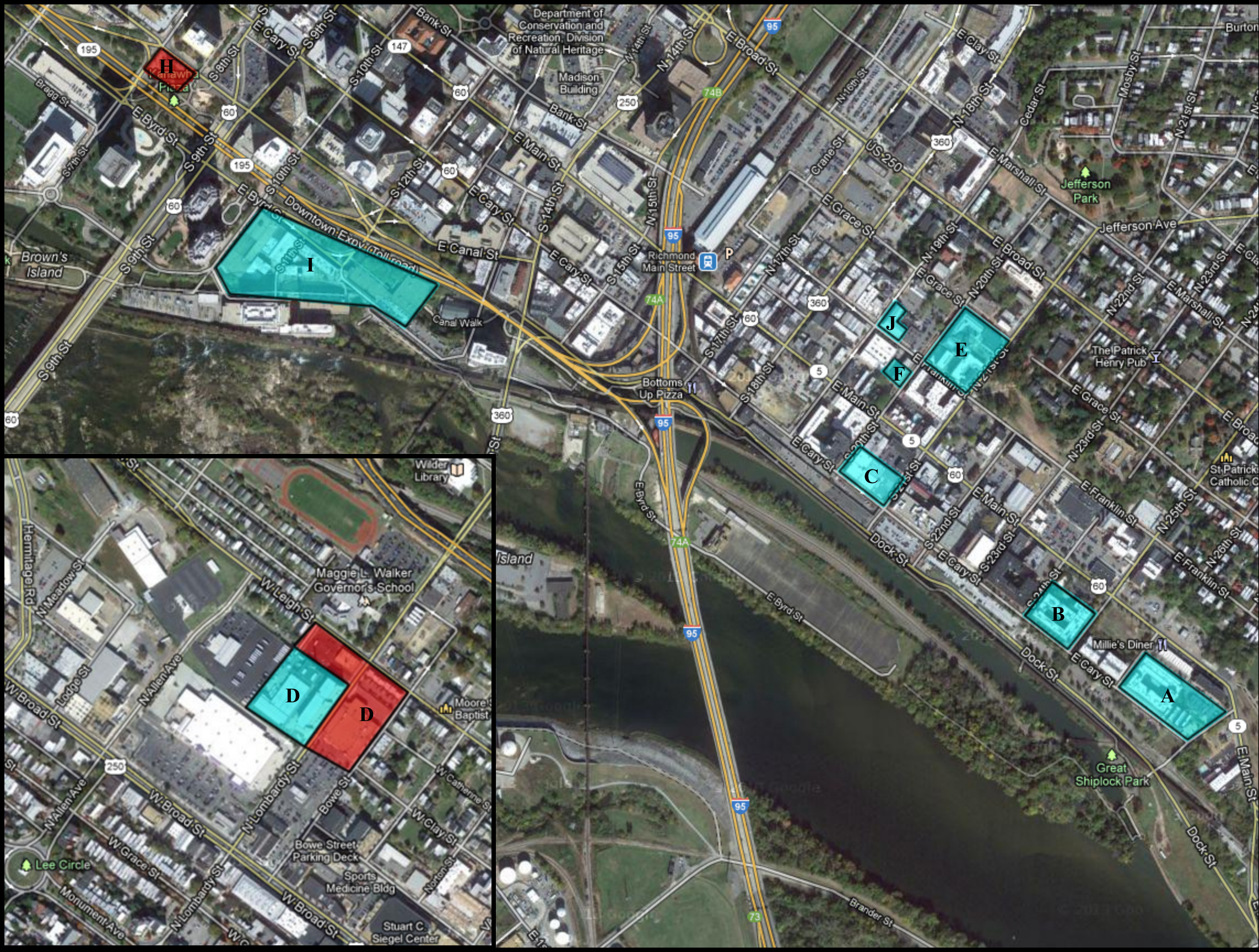
² Chesapeake Storage Corporation, Minute Book, December 1953.

³ Chesapeake Storage Corporation, Minute Books, January 1954 and June 1954.

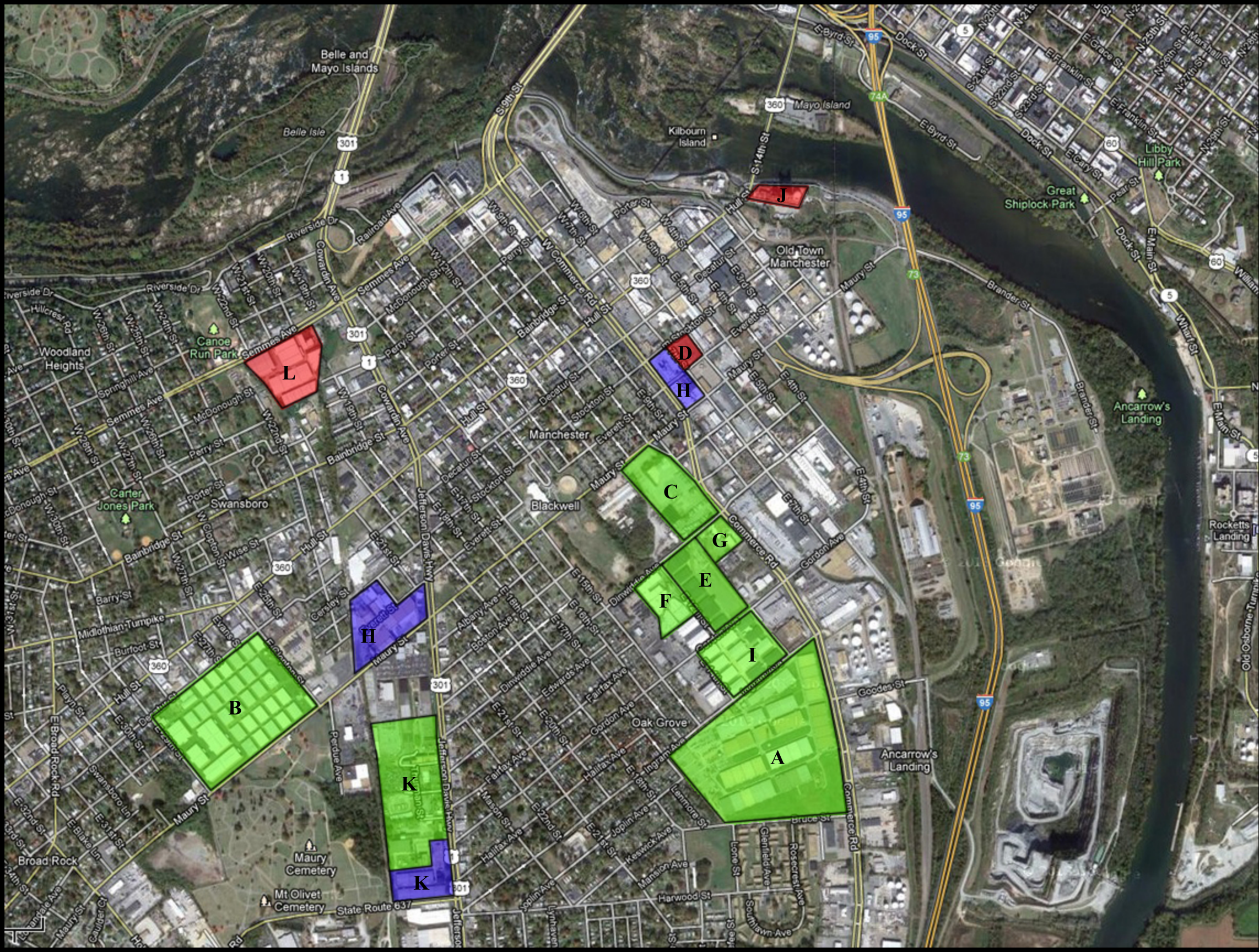
⁴ Chesapeake Storage Corporation, Minute Book, March 1958, December 1958, January 1969, July 1959, and September 1960.

Tobacco Resources North of the James River 1849-1930

- Integrated Multi-Story, Elevator Served, Masonry Warehouse/ Processing / Production Facility
- Single Story High Bay Frame Warehouse
- Demolished Multi-Story, Elevator Served, Masonry Warehouse/ Processing / Production Facility



Corporation		Date
A	American Tobacco	1930
B	Cameron Annex	1897, 1905
C	Climax Warehouse	1899
D	Export Leaf Tobacco Company (See Map in Lower Left Corner)	1913, 1923
E	Falk Tobacco Company	1920, 1922
F	John Enders	1849
G	Larus Brothers (May Not Have Been Constructed)	1939
H	Liggett & Myers Tobacco Company	1912, 1918
I	R. J. Reynolds Tobacco Company	1910-11, 1920
J	William Grant	1853



Tobacco Resources South of the James River 1921-1962

- High-Speed Processing / Manufacturing Facility
- Single Story Frame High Bay Warehouse
- Demolished Warehouse

	Corporation	Date
A	American Tobacco	1939-1942
B	John D. Blair, Jr.	1939-1942
C	Boxley Vaughn	1938
D	Carrington and Company	1921
E	Chesapeake Storage Corporation	1931, 1936
F	H.C. Cockrell Storage	1945
G	Dark Leaf Warehouse Corporation	1924
H	Philip Morris	1940, 1945
I	Richmond Tobacco Storage	1936
J	Southern States Tobacco Co.	1939
K	U.S. Tobacco (Model Tobacco)	1938-1940
L	E. K. Vietor	1922, 1948