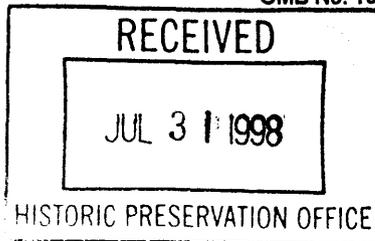


United States Department of the Interior
National Park Service



1571

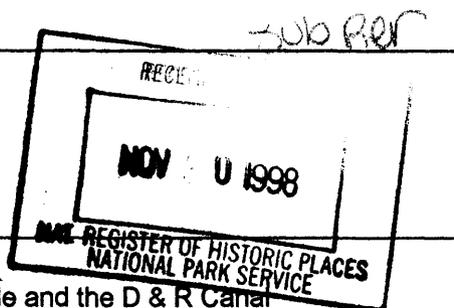
National Register of Historic Places
Registration Form

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

1. Name of Property

historic name Washington Road Elm Allée

other names/site number



2. Location

street & number Washington Road between the Penns Neck Circle and the D & R Canal

N/A not for publication

city or town West Windsor

vicinity

state New Jersey

code NJ

county Mercer

code 021

zip code 08550

3. State/Federal Agency Certification

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

Signature of certifying official/Title

Date

11/02/98

State of Federal agency and bureau Assistant Commissioner for Natural & Historic Resources/
DSHPO

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

Signature of certifying official/title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

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

Signature of the Keeper

Date of Action

Patrick Andrews

1/14/99

Washington Road Elm Allée
Name of Property

Mercer County, New Jersey
County and State

5. Classification

Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count.)	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
X <input type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____
<input type="checkbox"/> public-State	X <input type="checkbox"/> site	one	_____
<input type="checkbox"/> public-Federal	<input type="checkbox"/> structure	_____	_____
	<input type="checkbox"/> object	_____	_____
		one	zero
			Total

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

Number of contributing resources previously listed in the National Register
none

6. Function or Use

Historic Functions
(Enter categories from instructions)

Current Functions
(Enter categories from instructions)

Landscape
Transportation—Road-related

Landscape
Transportation—Road-related

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

N/A

foundation N/A
walls N/A
roof N/A
other

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

See continuation sheets pages 1-4.

8. Statement of Significance

Applicable National Register Criteria

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

Areas of Significance

(Enter categories from instructions)

A Property is associated with events that have made a significant contribution to the broad patterns of our history.

Landscape Architecture
Transportation
Other: Horticulture

B Property is associated with the lives of persons significant in our past.

X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

Period of Significance

1902-1950

D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

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

N/A

Significant Dates

Property is:

1902; ca. 1925; 1950.

A owned by a religious institution or used for religious purposes.

Significant Person

(Complete if Criterion B is marked above)

N/A

B removed from its original location.

C a birthplace or grave.

Cultural Affiliation

N/A

D a cemetery.

E a reconstructed building, object, or structure.

F a commemorative property.

G less than 50 years of age or achieved significance within the past 50 years.

Architect/Builder

N/A

Narrative Statement of Significance

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

9. Major Bibliographical References

Bibliography

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

Previous documentation on file (NPS):

X preliminary determination of individual listing (36 CFR 67) has been requested previously listed in the National Register previously determined eligible by the National Register designated a National Historic Landmark recorded by Historic American Buildings Survey # recorded by Historic American Engineering Record #

Primary location of additional data:

X State Historic Preservation Office
Other State agency
Federal agency
Local government
University
Other

Name of repository:

Washington Road Elm Allée
Name of Property

Mercer County, New Jersey
County and State

10. Geographical Data

Acreage of Property 6

Princeton, NJ Quad

UTM References

(Place additional UTM references on a continuation sheet.)

1	18	529920	4465260
	Zone Easting		Northing
2	18	530740	4464420

3	18	530720	4464400
	Zone Easting		Northing
4	18	529860	4465260

See continuation sheet

Verbal Boundary Description

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

Boundary Justification

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

11. Form Prepared By

name/title Susanne C. Hand

organization Kinsey & Hand

date July 30, 1998

street & number 14 Aiken Avenue

telephone 609-924-4990

city or town Princeton

state N. J. zip code 08540

Form prepared in consultation with Genevieve Keller, Land & Community Associates, P.O. Box 92, Charlottesville, Va. 22902

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

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

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

Photographs

Representative black and white photographs of the property.

Additional Items

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

Property Owner

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

name Mercer County

street & number 640 South Broad Street

telephone

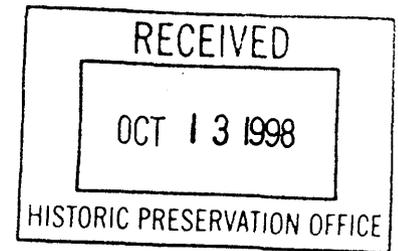
city or town Trenton

state N. J.

zip code 08650

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. 470 et seq.).

National Register of Historic Places
Continuation Sheet



Section number 7 Page 1

Siting and Summary Description

The Washington Road Elm Allée is located within West Windsor Township and is part of Route 571, a Mercer County road. This nominated portion of Route 571, also known as Washington Road, extends in a northwesterly direction from Route 1, which forms its southeastern boundary, to the bridge over the Delaware and Raritan Canal, which forms its northwestern boundary. The nominated .7 mile roadway, is straight, flat, and located on the northwestern edge of the inner coastal plain on land about 100 feet above sea level. The road curves and descends slightly as it approaches the bridge over the D & R Canal. Immediately beyond is the bridge over Lake Carnegie. Both the D & R Canal and Lake Carnegie are listed on the National Register of Historic Places. From Lake Carnegie, the land becomes part of the Piedmont and the road rises through a rocky wooded hill, through the campus of Princeton University and into Princeton Borough, where it ends at Nassau Street. The land to either side of the Washington Road Elm Allée is former nursery land, farmland, and fields. The open space setting has not changed significantly in the past sixty-five years. (figures 1 and 2)

The Washington Road Elm Allée consists of a row of Princeton Elms (*Ulmus americana* 'Princeton'), developed by Princeton Nurseries ca.1920. Of the 136 Princeton Elms planted on fifty foot centers along Washington Road in the mid-1920s, 76 survive. This allée has 32 original Princeton Elm trees on the northeast side of the road and 44 on the southwest side. The Princeton Elm trees are genetically identical, making their form and size quite uniform. They are now typically 24 to 26 inches in diameter, approximately 60 feet tall, and have the characteristic, vase or umbrella-shaped top typical of the American Elm. The branches from the elms within each row and on both sides of Washington Road meet, creating a high leafy canopy along the sides of the road and over the roadway. The straight and sturdy tree trunks provide a regular visual rhythm along the roadside. (photo 1)

The Princeton Elms are generally at a similar level as the 38' wide roadway; approximately 10 feet from the edge of the pavement. The allée now also has replacement trees—including 16 Norway Maple trees, (*Acer platanoides*) planted in the 1960s and 31 surviving small Liberty Elms (*Ulmus americanus* 'Liberty') planted in 1995—in most places where the original Princeton Elms have been removed. Also within the allée are four surviving older trees. Beyond the original allée of elms, outside the nominated area of this roadway allée, there is a second allée of elm trees consisting of Delaware Elms (*Ulmus americana* 'Delaware #2'), planted ca. 1983 with 8 replacement Liberty Elms interspersed along the northeastern row. Beyond this second allée on the northeastern side is a row long of forsythia, probably planted in the late 1960s. Along the row of the Delaware Elms on the southwest are utility poles, moved back from their original position between the allée and roadway in 1950. The repositioning of the poles outside the original allée, greatly added to the scenic quality of this landscaped roadway.

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

The Appearance of Washington Road from 1902 to the Present

In 1902 Mercer County improved this section of Washington Road, creating a 14 foot wide, six inch thick macadam roadway. Although no plans were found showing either road improvements or tree planting on Washington Road in the 1920s, surviving documents strongly suggest that 136 elms were planted along this portion of Washington Road in the mid 1920s. A 1924 photo looking southwest from Lake Carnegie shows a row of mature trees along the northeastern side of the road (the Jewel Farm property) and utility poles along the opposite side of the road, but no allée of young trees is evident. A Mercer County road plan of the intersection of Brunswick Pike and the Princeton-Princeton Junction Road from September, 1926, the earliest road plan showing this portion of Washington Road on file at the Mercer County Engineer's Office, shows a regular row of seven trees along the southwest edge of the roadway, indicating the elms were planted by 1926. It appears as if the roadway was approximately 21 feet wide by that time. An aerial photo dating from ca. 1929 clearly shows a complete allée of young trees. This aerial photo also shows a drive from Washington Road to Jewel Farm located north of the two extant large Green Ash trees (*Fraxinus pennsylvanica*); this drive was later eliminated. (figure 1).

Beginning in the late 1930s, plans were developed for a proposed widening of Washington Road to a 4-lane, 54-foot wide road. Although this major widening never happened, plans for it provide some of the best documentation of the road and the elms during that period. In 1940, county road plans show 136 trees, described as 3-5-inch diameter elms positioned directly across the road from one another, about 58 feet apart; within each row the trees are 50 feet apart. The existing road at that time is shown as approximately 19 feet wide. The road is not centered within the allée; it is set several feet closer to the northwestern row of trees. The 1940 plans called for the transplanting of the elm trees 40 feet to either side of the center line of the proposed 54-foot roadway within a 100-foot right-of-way.

The 1940 road plan also shows nine older trees, ranging from 15 inches to 30 inches in diameter, situated along the northeastern row, trees of the former Jewell Farm, the farm along the northeastern edge of the road. Six of these older trees were situated along the northeastern end of the row toward the D & R Canal; two of these, a Black Gum tree (*Nyssa sylvatica*) and a Green Ash tree survive. Three were along the southeastern end toward the Penn's Neck Circle; two of these—Green Ash trees—survive. The existence of these older trees explains the slight variation in spacing of the Princeton Elms; nearby elms were planted at slightly different intervals to accommodate the older trees within the new allée, maintaining a relatively regular appearance. The 1940 plans also reveal that twelve of the elm trees along the southwestern row (the second through twelfth trees closest to the canal along that row) were set back in 1938;

National Register of Historic Places Continuation Sheet

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11 of these setback trees survive today. Today, the set back of about six to eight feet is visible, but subtle; the sense of a long regular row of trees is maintained.

When plans to pave and enlarge the Washington road to 4 lanes were abandoned, the road was probably resurfaced and slightly widened. The "Tasty Pie" billboard, located along the northeastern side of the road on the property between the Jewel Farm and gas station was also probably removed at this time. By 1950, the existing roadway was 24 feet. (photo 2)

In 1950 plans for a more modest road widening were developed and, this time, carried out. Plans dating from April and August 1950 still show 136 regularly spaced trees; but only four older trees. The proposed roadway was paved in bituminous concrete and enlarged from 24 feet to 38 feet with the center line moved 6.5 feet to the southwest, resulting in widening along both sides of the road. The 1950 road widening centered the road within the allée. This road widening necessitated the removal and relocation of 27 utility poles, which had been situated between the roadway and the southwest row of trees in what was to become the shoulder of the widened road. The plans also show 13 utility poles set back to the west of the southwestern row of trees. The existing right of way is shown as 72.5 feet. In the plan for the intersection with Route 1, 15 of the Princeton Elms are shown with diameters indicated; these ranged from 6" to 12" in diameter.

The late 1950s and 1960s were probably the best years of the Washington Road Elm Allée. This was the period after the trees were centered on the paved roadway; the unsightly utility poles between the roadway and the allée had been removed; the trees had grown sufficiently to form a canopy above Washington Road; and the vast majority of original elms were standing. (photo 3)

The dates of removal of individual trees and the reasons for their removal are not adequately documented, but it appears from aerial photographs that several original trees were gone by ca. 1970. A wind storm knocked down about twelve Princeton Elm trees ca 1979. Within the last six years, one or two Princeton Elm trees have been lost each year.

Additional Current Description of Washington Road and the Princeton Elm Allée from Route 1 to the D & R Canal

Starting at Route 1 and moving in a northwesterly direction along Washington Road to the D & R Canal, the first surviving Princeton Elms encountered are diagonally across from one another, followed by three new Liberty Elm trees on the southwest and two Liberty Elms on the northwest.

National Register of Historic Places Continuation Sheet

Section number 7 Page 4

The next stretch of the road (section 2 on sketch map) has the longest section of the original allée with the largest number of original trees—45 Princeton elms on either side of the roadway—18 on the northeast and 27 on the southwest side. There are 15 Liberty Elms interspersed. (photos 1, 4, and 5) Beyond the allée on both sides, the land remains open space, former farmland and nursery. The 10th and 11th trees on the southwest side are noticeably smaller and shorter than the others; it is not known whether these are replacement trees, perhaps dating from the 1930s, or original trees which have not grown to the same size as the others. Beyond the row on southwest side, there are some hedgerows, former farm fields, a gravel drive, and a paved roadway that now leads to a heliport. On the northeast side, a Washington Road entrance to the Jewel farmstead, formerly located north of the surviving ash trees and visible on the ca. 1929 aerial photo, is long gone, but a path to the cemetery is still evident.

A third section of the Princeton Elm allée has survived less well. Seven Princeton Elms survive on both sides of the road with 9 Liberty Elms interspersed and a section of 16 Norway Maples trees (9 on the northeast side and 7 on the southwest side). An original elm tree now straddles gravel roadway to athletic fields on the northeast; this is the last elm before the row of 9 maples begins. (photo 6) Within this section, the land to the southwest beyond the allée descends to a ditch, then slopes upward and is covered with secondary tree growth and probably some nursery trees extending to the D & R Canal, obscuring the outer row of Delaware Elms.

A shorter final section of the road again has the majestic allée of Princeton Elms on both sides of the road, with 22 original elms, two older trees, 3 Liberty Elms, and 1 Norway Maple. On the southwest, this is where 11 surviving elms were set back (out of 12 originally set back) about 6 feet from the road in 1938. Across the road, the 11 elms (closest to the D & R Canal along the northeastern edge of the road) are situated on a berm which gently rises to a height of about six feet above the roadway. (photo 7) The two older trees, the Black Gum and Green Ash, are situated part way up the berm, slightly closer to the roadway. One of the trees, probably an original Princeton Elm, is somewhat shorter than the typical tall erect Princeton Elm and its trunk is slightly bent. (photo 8) Also on this side toward the canal there is another driveway to the athletic fields and some Sumac trees.

In most of the areas where the Princeton Elms have been removed, new trees have been planted, maintaining the regular rhythm of the allée with only a few gaps. This includes a section of sixteen maple trees, nine on the eastern side and seven across the road on the west. Within the original Princeton Elm allée, 31 of the small Liberty Elm trees planted by Princeton University in 1995 survive; 17 on the northeastern side and 14 on the southwestern side.

The absence of street lighting along this portion of Washington Road contributes to the appearance and feeling of the Washington Road Elm Allée at nighttime.

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Continuation Sheet

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Page 1

Washington Road Elm Allée, West Windsor, N.J.

Summary

The Washington Road Elm Allée is significant as a planned, landscaped entrance to Princeton with a well-preserved allée of American Elm trees. It represents one of the primary styles of landscape design along the American open road of the early twentieth century—the regularly spaced allée of shade trees. The Washington Road Elm Allée is one of a few surviving allées of shade trees along an open public road in central New Jersey. The Washington Road Elm Allée also is the most extensive surviving elm-lined roadway in central New Jersey and the only elm allée that serves as scenic vehicular entrance to a town.

The Washington Road Elm Allée is notable for its horticultural and scientific significance. The elms along this road are Princeton Elms (*Ulmus americana* 'Princeton'), a variety of American Elm which has the stately beauty of the American Elm and an unusual level of resistance to Dutch elm disease. The epidemic of Dutch elm disease which hit America in 1930, decimated over 100,000,000 elm trees, including the vast majority of elm allées that characterized the streets and open roads of many American towns and cities.

Criterion C: Washington Road is significant as a planned, landscaped roadway, designed with an allée of American Elm trees. Part of both the civic improvement movement that swept American towns and the road development programs of states and counties in the first decades of the twentieth century, the tree-lined paved roadway represented the marriage of American ideals of progress and beauty. The design is one of symmetry and simplicity—a regularly spaced row of trees planted on 50' centers planted directly across from one another along both sides of the road. As the Washington Road trees grew, they developed the distinctive, vase-shaped profile typical of the majestic American Elm and now form a high, continuous leafy canopy over the roadway. This created a magnificent vehicular entrance—a cathedral-like procession of column-like elm trunks and leafy arches—to Lake Carnegie, Princeton University, and the Township and Borough of Princeton, a scenic gateway that long has been recognized by planners, horticulturalists, scientists, artists, citizens, residents, and visitors.

Washington Road also is significant for its association with William Flemer II, President of Princeton Nurseries, one of America's largest and most important nurseries. In a horticultural career that spanned five decades, Flemer developed and sold trees and plants used in cities, towns, landscapes, parks, streetscapes, and roads all over America. Flemer propagated the elms planted on Washington Road from a local American Elm tree ca. 1920. He named this elm the "Princeton Elm" and provided 136 of these Princeton Elms for an allée on Washington Road. With the Princeton Elm, Flemer, through a combination of horticultural expertise, instinct, and luck, developed a kind of American Elm that scientific studies have shown to be exceptionally hardy and able to withstand the ravages of Dutch elm disease. One of William

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Washington Road Elm Allée, West Windsor, N. J.

Flemer's most important horticultural and scientific legacies is the development of the Princeton Elm—and this allée of Princeton Elms best represents that achievement.

Historical Background of Washington Road

In 1806, the Commissioners for the Laying of Roads for Middlesex County laid out the route of an 8 ½ mile public road extending from the Trenton Road in East Windsor (near Hightstown) to the "Main Street (Nassau Street) in Princeton. This new public road appears to have followed, in part, the route of an older road, and crossed the Turnpike Road (the Trenton/New Brunswick Turnpike or Route 1), chartered in 1804. The road appears on nineteenth century maps of the region, but like most roads in New Jersey and throughout the United States, it was undoubtedly in very poor condition by the second half of the nineteenth century.

Beginning in the 1890s and gaining momentum after World War I, America and New Jersey began a great period of road building and road improvement. Roadside beautification was part of the process. In 1891, New Jersey became the first state in the country to enact legislation for highway improvement. In 1895, New Jersey's State Aid Road Act gave counties responsibility for road improvement with oversight and matching funds provided by the state. According to the State Commissioner of Public Roads, Mercer County was "one of the most enthusiastic good roads counties in the State."¹

The section of Washington Road covered in this National Register nomination was one of the earliest improved roads in Mercer County. In 1902, when the county made improvements to 6.69 miles of the "Edinburgh, Dutch Neck and Princeton Road", this road was one of only 83.9 miles of state-funded improved roadway in Mercer County and one of only 797 miles of similarly improved road in the entire state. The 1902 *Report of the Commissioner of Public Roads*, proudly described the road: "This road begins at Edinburg and extends northerly through Dutch Neck and Princeton Junction to the Delaware and Raritan Canal near Princeton. It is build of macadam 14 feet wide and 6 inches thick, through one of, if not the finest, farming sections of Mercer County. It forms a much-needed outlet for the hay, grain, and other farm products for which this section is famous, to the markets of both Trenton and Princeton."²

In 1904, the last section of this road (the "Princeton Hill Road" from the D & R Canal to Prospect Avenue in Princeton Borough—beyond the boundaries of this nomination) was improved and the expense was "fully warranted as it closes the only gap between the improved road of northern and southern Mercer County and gives the inhabitants of Princeton what they have long wished for, a good, hard smooth means of exit from their borough to the Pennsylvania

¹ *Report of the State Commissioner of Public Road*, 1904, p. 51.

² *Report of the State Commissioner of Public Roads*, 1902, pp. 7 and 37.

National Register of Historic Places Continuation Sheet

Section number 8

Page 3

Washington Road Elm Allée, West Windsor, N. J.

railroad.³ On July 2, 1904, the *Princeton Press* reported the Board of Freeholders inspected, and formally accepted the Washington Street Macadam road, and remarked that "the ride to Penns Neck, the Junction and beyond over this smooth and graded highway will henceforth be a pleasure, in any kind of weather." This was one of only two improved roads between Princeton and Trenton; the other was the road from Princeton through Lawrenceville to Princeton, now Route 206.

In the succeeding years, Mercer County increased efforts to expand, improve, and maintain its system of county roads. Washington Road was undoubtedly repaired and improved by Mercer County, but minutes of the Mercer County Board of Freeholders from 1917 through 1932 make no mention of tree plantings and scant mention of roadway improvements. The County recorded that it sought bids for applying asphaltic oil on various roads including Washington Road in 1917. Washington Road is not mentioned by name on subsequent road improvements or repairs, despite several complaints by Princeton residents about the condition of the road during this period.⁴

Although no plans have been found to indicate the exact date or specify any details about the planting of the Princeton Elm trees on Washington Road, sources suggest the trees were planted ca. 1925. A photograph dating from 1924 and published in the *Princeton Recollector* shows the road from the bridge over Lake Carnegie to the D & R Canal and beyond. Past the canal there are mature trees along the northeast side of the roadway and utility poles along the southwest side. No allée of young trees is visible. A plan of September 25, 1926 for the intersection Princeton-Princeton Junction Road (Washington Road) and the Brunswick Pike (Route 1) shows a small portion of Washington Road north of the intersection with seven regularly spaced trees on the western side, which suggests the trees had been planted by

³ Op cit., 1904 p. 29. The map of improved roads in the state also is part of the 1904 *Report*.

⁴ In 1922 when Percy R. Pine II claimed that the condition of the road between Princeton Junction and Princeton was in "extremely bad and dangerous condition" the Freeholders referred the matter to the Road Repair Department and recorded no further comments or follow-up. In 1926, when the Princeton Chamber of Commerce communicated that the road was becoming "very much out of repair and it is felt by the people of the community that the most practical way to improve this road would be to re-build it in the near future", the freeholders filed the communication. On April 10 of that year, *the Packet* cynically commented, "It is expected the Freeholders will again patch this up sometime before another election." In 1932, when Princeton University President John Grier Hibben called attention to the poor condition of the much-traveled Washington Road "not only to Hightstown and the Junction, but points to the shore", County Freeholder Mr. Bray responded that the road was in "very good condition" and that he would answer the letter personally. Minutes of the weekly meetings of the Mercer County Freeholders do record road improvements in some detail on many other nearby roads, including Washington Road from Penns Neck to Hightstown, and Harrison Street, which became a County Road during this period, but whatever repairs were made over the years to Washington Road were not identified specifically for Washington Road.

National Register of Historic Places Continuation Sheet

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Page 4

Washington Road Elm Allée, West Windsor, N. J.

1926.⁵ This is consistent with anecdotal reports that the trees were propagated in 1920 and planted along the roadway five or six years later. An aerial map of ca. 1929 shows the complete allée of small trees.

Plans for a proposed road widening provide more detailed documentation of the state of the roadway and trees by the late 1930s.⁶ The first plan, probably dating from 1937, shows a portion of the roadway, approximately 24 feet wide, with regularly spaced trees to either side and utility poles to the northeast of the southwestern row of trees (in what is now the paved surface of the road). A plan of the full length of Washington Road from the Borough Line to the Penns Neck Circle (the intersection with Route 1) dating from February 8, 1940 provides more detail. It shows 136 trees, indicated as 3" to 5" elms, mostly on 50 foot centers directly across from one another on the road, that were to be transplanted forty feet to either side of the center line. The plan also shows 9 larger trees, 15" to 30" in diameter and marked for removal on the eastern side of the road; the existence of these larger, older trees accounts for the slight deviations from the otherwise regular spacing of the elms. The plan reveals that 12 trees on the western side of Washington Road toward the D & R Canal had been set back in 1938. The road widening did not take place, but the road was resurfaced and four of the larger trees were removed.

A more modest road widening was carried out in 1950, essentially creating the roadway that exists today. The road surface was expanded in both directions from approximately 24 feet to 38 feet, with the center line realigned 6.5 feet to the west. Utility poles within the area of the proposed resurfacing were to be removed and repositioned beyond the southwestern row of trees, and beyond the right of way line. The plan showing the widening of the Penns Neck Circle shows fourteen of the elms, with diameters of 8, 10 and 12 inches, except for one elm marked as 6 inches.

This road widening/utility pole relocation project improved and completed the design and construction work of the road and elm allée. It centered the allée along a generously scaled 2-lane roadway and removed the unsightly utility poles from along line of the southwestern row of trees, enabling the trees to grow unencumbered.

⁵ This plan and other road plans cited are on file in the Mercer County Engineers Office. The 1926 plan (#15-21) does not show trees of the northern side, but as the intersection improvements were on the southwestern side, it may not have been considered necessary to draw the trees to the northeast.

⁶ This was to be a Works Progress Administration project. The WPA and other Federal programs of the 1930s often included major work on both state highways and secondary roads and had recently widened Route 1.

National Register of Historic Places Continuation Sheet

Section number 8 Page 5

Washington Road Elm Allée, West Windsor, N. J.

Washington Road in the Context of the Civic Improvement/Roadway Beautification Movement

The 1920s were a period of road beautification in New Jersey and many states across America in response to a civic improvement movement which promoted shade tree plantings on streets and roadways. Lining streets and roads with trees was, of course, not a twentieth century development. Allées of trees had long been planted along American city and suburban streets, farm lanes, and country estates through both private initiative and governmental action. Municipal shade tree commissions were well-established in many municipalities, planting and maintaining shade tree allées along residential and commercial streets. The road beautification movement took a popular and well-established design idea—planting regular rows of shade trees—from the city and suburban street and moved it to the open road.

From early in the twentieth century, Princetonians promoted shade tree planting along both borough streets and the open road. As in other progressive American towns and cities, shade tree planting and advocacy was an integral part of a broader civic improvement movement. In Princeton, the Village Improvement Society, municipal officials, concerned citizens and the local press promoted shade tree planting. In 1902 the *Princeton Press* called for state legislation to encourage shade tree planting on the roadside, noting “trees minister so importantly to the public comfort and health during our tropical summers and contribute so much to the beauty of the landscape and the attractiveness of the roadside.” The article also noted to the efforts of both Princeton Township Committee which planted shade trees by the highways several years earlier and a generous citizen who offered trees to farmers on very attractive terms, resulting in many shade tree plantings along the roads.

In 1905, the Borough of Princeton offered five kinds of shade trees, including the elm, to beautify Borough streets. The elm was “considered by many as the most generally useful of all our trees. This tree grows to massive proportions, is long-lived, has spreading branches which form graceful arches that support a drooping fringe of twigs. The heads are so open that electric wires do not injure them, a desirable feature of all street trees.”⁷ In the Princeton region, local beautification efforts preceded Mercer County road landscaping and local groups and individuals advocated for and assisted the county in roadside beautification.

By the 1920s, the desire to beautify roadways also was, in part, a response to the rapid growth of gaudy roadside commercial development that sprang up along these new, improved roads. Huge numbers of makeshift signs and large billboards were installed to entice the motorist to pull over to snack bars, restaurants, stores, camps, gas stations, and farm stands along the open road or to stop and spend in the nearby town. Civic-minded Americans looked for ways to

⁷ “Shade Trees”, 1902 and “Shade Trees”, 1905. Also see “Town Progress,” 1902.

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regulate this unruly commercial roadside. Planting allées of shade trees was an ideal way of creating a healthier, more beautiful environment along the open road while keeping the brashness of the commercial roadside under control.

Planting regular rows of shade trees became a part of Mercer County's roadway improvement program in the 1920s. In Mercer County, as in other parts of the country, citizens, nurserymen, and local civic and patriotic groups encouraged, and often participated in, tree plantings along the open road. In 1921, A. G. Thompson proposed beautifying the Brunswick Pike (which had recently become a county road and was undergoing improvements) by planting trees on each side of the road. The county engineer recommended waiting until the road work was completed, but the records do not indicate whether any trees were purchased or planted. A few years later, the freeholders authorized \$950 for shade trees to be planted on both sides of Scotch Road.

Tree planting along Mercer County roads seems to have increased in the mid 1920s, following the passage of state legislation encouraging counties to landscape their roads. Chapter 15 of the Laws of 1924 provided for the "regulating, planting, care, and control of trees and shrubbery on the public highways" and authorized County Boards of Freeholders to establish County Shade Tree Commissions. Governor George Sitzer wrote the Mercer County Freeholders informing them of this law; shortly afterwards the governor's secretary, M. P. Pearce, informed to Mercer County that "he is delighted to hear that so much progress is being made in Mercer County for the planting of shade trees." In 1926 the Mercer County Shade Tree Commission requested the Board to "give consideration to planting shade trees on county roads when new highways are being made." The Board stated that "consideration will be given in every case possible" and budgeted \$8,500 for shade trees that year.

Organizations and individuals also donated trees for planting along roadways. In March, 1925, the General Mercer Chapter of the Daughters of the American Revolution (DAR) requested one half mile of county road along which they could plant some trees each year on Arbor Day. The freeholders authorized the Road Department to act and determine the location for tree plantings. In 1926 John H. Kuser gave 250 mostly White Ash trees for the road in the vicinity of the County Farm in anticipation of Arbor Day. The General Mercer Chapter of the DAR gave twenty oaks which were planted on River Road between Trenton Junction Road and Scudder's Falls Road to "supplement and extend the work started last year".

The experience of World War I was probably another influence on the type of landscaping—the allées of regularly spaced shade trees—most favored for the open public road. American soldiers saw the fine tree-lined roads in France. Following World War I, planting of memorial trees was moved out to the open road. On March 23, 1920, the Mercer County Freeholders passed a resolution authorizing the Director of Courts and Charities to purchase "approximately 180 trees of young growth" to be planted along "one of the main traveled highways of this

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county" as a "fitting and appropriate memorial to young Mercer County men who laid down their lives in war in Germany." The trees were to be planted and spaced about 60 feet apart along the sides of Nottingham Way between Hamilton Square and the village of Robbinsville. In 1925, the County Road Repair Department was authorized "to take care of Memorial trees on county highways."⁸ This suggests that Memorial tree planting was not limited to a single Mercer County road.

William Flemer II spoke of the influence of the French landscape, including the treed allées of French roads, on his landscape design ideas sixty years after serving in France as an ambulance driver. In addition to planting poplar trees as a windbreak along Princeton Nursery fields, Flemer planted allées of shade trees along its roads. "I also planted rows of sycamores along the roads after I got out of the army. They are sixty years old now and quite enormous. That, too, is a common feature in France. A lot of the roads there were built by the Romans for their armies. Before automobiles and trucks the soldiers had to march on foot, so they planted avenues of trees to keep the sun off the soldiers in the Summer. And as long as the trees were full of foliage, the German aviators couldn't see us. It was only during the Winter when the leaves were off that they shot."⁹

Princeton University also was an advocate and participant in shade tree planting along the open road and other gateways into Princeton. In addition to Washington Road, another main approach to Princeton was from the local railroad that ran from Princeton Junction to Princeton where it connected to the Pennsylvania Railroad. This railway, the "Dinky", ran between Washington Road and Alexander Road, on a right-of-way through the Mather and Schenck Farms, a 178 acre parcel bounded by Washington Road, the D & R Canal, Alexander Road and Route 1, that Princeton University acquired in 1922. In 1925, the University's Committee on Grounds and Buildings reported, "We have planted one hundred twenty small elm trees along the right of way between the railroad and the Schenck and Mather farms extending from Penns Neck to the Canal." The roadway in front of the Schenck and Mather Farms had been planted with trees a few years earlier.¹⁰

The State of New Jersey does not appear to have had the kind of formal tree planting program that other states developed in the 1920s. However, some state roads in central Jersey were landscaped. In what was described as an "experimental stretch for roadside beautification" the Brunswick Pike was to be planted in 1930 with "4509 units of nursery stock" including elm,

⁸ Information on the shade tree plantings on Mercer County roads are from the Mercer County Board of Freeholders *Minutes of Meetings*.

⁹ "Flemer Nurtured Nurseries," 1978, p 18.

¹⁰ Princeton University thanked Bayard Henry, the man responsible for acquiring the Mather and Schenck farms for the University, for planting the trees in 1923. The trees were probably planted along Route 1.

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maple, pine, sycamore, and oak trees between Trenton and New Brunswick. The contract for the trees was awarded to Princeton Nurseries.¹¹

The formal, symmetrical landscape design along the open road in the form of regular rows of shade trees appears to have its heyday in the 1920s. By the end of the decade, highway beautification advocates increasingly began to promote more naturalistic landscape designs along the open roadway. Rather than plant shade trees in "monotonous military lines"¹², roadway landscaping which used grassed shoulders, native trees, shrubs and perennial flowers in naturalistic groupings and vistas—the kind of design seen on the historic parkways of the period—was encouraged. Along Washington Road however, the elm allée was appreciated. The proposed road widening of the late 1930s was going to have the elms transplanted in regular rows. There was no proposal to redesign the landscape in a more naturalistic mode.

William Flemer II and the Development and Survival of the Princeton Elm

As he drove his model T ambulance through France during World War I, William Flemer II planned how he would further mechanize and develop a more organized and efficient nursery on the 265 acres of prime farmland he and his father had purchased before the War along Mapleton Road, a few miles northeast of Princeton. When he returned from overseas in 1919, Flemer began putting his ideas into effect. Over the next five decades, William Flemer II developed Princeton Nurseries into one of the largest wholesale nurseries in the world. Princeton Nurseries provided trees, shrubbery and plant materials for city streets, parks, gardens, college campuses, and roads throughout the country.

William Flemer II developed the Princeton Elm ca. 1920. He chose about 20 of the best elms on the nursery out of some 5000 seedlings and budded them in large quantities for testing, according to his son, William Flemer III. One was clearly far superior to the others and Flemer named this vigorous, well-shaped American Elm tree, the "Princeton Elm". Within a few years, Princeton Nurseries added the Princeton Elm to other species of elm trees it sold.

A Princeton Nursery price book from 1943-44 listed the Princeton Elm as a "selected strain of American Elm (all budded stock). In the young stage a type similar to the Moline Elm but with a slightly more spreading top." The Moline Elm was described as a remarkable new and very desirable variety with extremely strong growth and large, handsome, deeply grained foliage.

¹¹ "Princeton Nurseries Gets Tree Contract," 1930.

¹² *Scientific American*, July 1930. *American City*, September 1928, p.145, and May, 1929. The shade tree allée did not go completely out of style. In 1932, *American City* reported that a 7-mile highway between two Texas cities was planted in a double allée with sycamores spaced 50 feet apart along the roadway and oaks along the outer row.

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Recent DNA testing of several Washington Road elms by Joseph Kamalay, research biologist at the USDA Forest Service, confirms that the Princeton Elm is a single tree; the elms along Washington Road are Princeton Elms; and that they are genetically identical to each other. Another study sought to verify anecdotal information that the Princeton Elm was related to a large old elm tree in the Princeton cemetery. While these test results are not definitive, Kamalay believes there is highly suggestive evidence that the Princeton cemetery tree is a maternal parent of the Princeton Elm.

In the 1920s Princeton Nurseries sold thousands of American Elm trees throughout New England, the Mid Atlantic, and mid western states. American Elms were especially popular as street trees along residential streets and grand avenues because they were beautiful trees that transplanted easily, grew rapidly, and withstood difficult street conditions. As the civic beautification movement spread from within cities and towns to the open roads and highways, the typical street landscape—a regular row of a single species of shade trees—became a standard design of the landscaped roadway. As on the city street, the beautiful, sturdy American Elm was considered an excellent choice for the open road. It withstood drought, floods, heat, cold, poor soil, pollution, and motor vehicles.

Dutch elm disease (DED) was first described in 1921 in The Netherlands. The epidemic came to the United States in elm logs imported for veneers. Dutch elm disease was reported in Cleveland, Ohio in 1930 and hit the east coast about five years later. More than 90% of the estimated 77 million elms that were standing in cities in 1930 have died along with hundreds of millions of elm trees outside the cities, including those along America's open roads. In New Jersey, the City of Montclair reported a loss of 75% percent of its elm trees within a ten year period. On the Princeton University campus, despite an active spraying and sanitation program, the number of elm trees had dwindled from approximately 1000 elms in 1944 to 238 in 1964, another 75% loss. The disease and elm deaths continued, with a new wave of the epidemic hitting the United States in the late 1960s and early 1970s.¹³

With DED wreaking havoc in cities and landscapes throughout America, Princeton Nurseries stopped selling the Princeton Elm. Over the past fifty years, however, as horticulturalists began studying elms and DED, the reputation of the Princeton Elm has grown. By 1990, Princeton Nurseries once again was growing the Princeton Elm. The Princeton Elm has been shown to have superior qualities beyond anything William Flemer II could have imagined. In 1990 Gary L. Koller, Assistant Director for Horticulture at the Arnold Arboretum of Harvard University,

¹³ The national estimate is from Jack Barger of the U.S. Department of Agriculture Forest Service as quoted in *Popular Science*, July 1993 p. 72. The Montclair elm losses are from a September 11, 1964 letter from Albert Barker of the Montclair Shade Tree Bureau to Carl Breuer of the Princeton Open Space Commission in the DED file of the Princeton Township Shade Tree Commission. The Princeton University elm losses are from August 11, 1944 and August 20, 1966 articles in the *Princeton Herald*.

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described the Princeton Elm which the Arnold Arboretum had acquired from Princeton Nurseries in 1935. "Over the past decade every American Elm surrounding this plant has died of Dutch Elm Disease, but 'Princeton' remains healthy and vigorous... (and) "there is a place for it in the modern landscape." In tests done by Frank Santamour at the National Arboretum, "Princeton showed the greatest resistance."¹⁴

A recent research program undertaken by Denny Townsend, plant geneticist with the USDA's Agricultural Research Service, tested the tolerance of 12 elm clones and cultivars that had shown tolerance to DED in other studies. Townsend's research showed the Princeton Elm was far more tolerant to Dutch elm disease than the average American elm seedling. The Princeton Elm was the only elm with such a high level of tolerance that was bred before the arrival of DED in America. Moreover, the Princeton Elm was hardier than some of the other elm clones tested—elms that had been the result of years of scientific research and systematic breeding. By studying the Princeton Elm and other disease-resistant clones and cultivars, Townsend, Kamalay, and other researchers hope to develop an American Elm tree that is fully resistant to Dutch elm disease.¹⁵

In 1995 William Flemer III, estimated that a mere 6% of Princeton Elms along Washington Road had succumbed to Dutch elm disease. Even if this estimate is low, the survival of 56% of the original Princeton Elm trees is a remarkable survival, particularly in light of ice storms, wind storms, car accidents, and years of inadequate feeding and sanitation.¹⁶

The former nursery land and buildings along Mapleton Road near Kingston are one historic resource associated with William Flemer II—the one that embodies the breadth of Flemer's importance as a horticulturalist and nurseryman. The Washington Road Elm Allee is the other historic resource associated with William Flemer II in New Jersey—the one that best represents one of William Flemer's most significant horticultural achievements—the development of the Princeton Elm tree.

¹⁴ Koller, 1990. In recent years the growing reputation of the Princeton Elm has led to some new plantings. In 1996 and 1997 Cincinnati, which was developing, according to Denny Townsend, "the first disease-tolerant elm program in a metropolitan community under professional management," selected the Princeton Elm and planted 90 of them along two avenues.

¹⁵ The research design and results are reported by Townsend, Bentz and Johnson in "Variation in Response of Selected American Elms Clones to Ophiostoma" in the *Journal of Environmental Horticulture* 13(3), September 1995, 126-128.

¹⁶ Letter from William Flemer III to William Monroe of August 25, 1995. No records were found indicating the dates of the removal of the original Princeton Elm trees and the reasons for their removal. Recent tests on dead trees showed no trace of Dutch elm disease.

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The Washington Road Elm Allée in the Context of Roadway Allées in central New Jersey

The Washington Road Elm Allée is significant in the context of the highway beautification movement of the 1920s—specifically the shade-tree allée of the open road.¹⁷ Windshield surveys, aerial maps, and interviews with planners, forestry experts, and preservationists suggest that relatively few historic allées of shade trees remain along the open public roadways of central New Jersey. Road widenings, utility poles, commercial development, suburban-style subdivisions, disease, and lack of interest in this type of roadway landscape have all contributed to the demise of the roadside shade tree allée. Those allées that do survive do not generally have much integrity.

The allée of White Ash trees donated to Mercer County by John Kuser in 1926 and planted along Route 29 in Hopewell Township is still extant. The trees have been trimmed hard, but the allée remains attractive and quite intact. A longer row of White Ash on Franklin Corner Road between Pennington and Lawrence Township also survives, but these trees have been severely flat-topped over the years to accommodate utility poles along both sides of the road, negatively impacting the integrity of the allée and the appearance of the trees. The memorial allée of trees along Nottingham Way is no longer extant.

The Washington Road Elm Allée is also significant as a rare survivor of the once-plentiful elm allées that graced New Jersey. Not only have elm allées disappeared from the open roadway, the 60 plus years of Dutch elm disease have ravaged the once-familiar rows of elm trees along the residential streets, downtowns, and college campuses of New Jersey's cities and towns.

Three other elm allées survive in various states of preservation in the greater Princeton region. A .2 mile stretch of Plainsboro Road near at the intersection of Route 1 has approximately 30 surviving Princeton Elms. Although these elms are tall and healthy-looking, the roadway itself is one third the length of the nominated portion of Washington Road; many of the elms survive only along one side of the road; and the allée does not provide a scenic entrance to a town.

Nearby, in Plainsboro another row of Princeton Elms survives along the former driveway of the Walker-Gordon farm. According to William Flemer III, Henry Jeffers of the Walker-Gordon Farm

¹⁷ The extent to which the State of New Jersey, other counties, and municipalities planted allées of trees on roads under their jurisdiction has not been surveyed. The number of such allées created, the spacing and species of trees planted along roadways, and the names and landscaped lengths of the roadways on which the trees were planted is similarly unknown. Further research is needed to determine whether the highway beautification movement generated a relatively small, moderate, or very large number of shade tree allées along the open public highways of central New Jersey.

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bought the Princeton Elms from Princeton Nursery after seeing the young elms along Washington Road and had them planted in an allée along the entrance to his farm.¹⁸ These trees were severely pruned over the years; they are taller than the Washington Road elms, but do not now have a full, rich leafy canopy over the roadway. The roadway context is also very different; this allée serves as an entrance to a conventional subdivision, currently under construction.

Finally, there is a pedestrian-scaled elm allée along the 14' wide McCosh Walk on the Princeton University campus. Planted in the 1920s with American and English Elms, this allée was hard hit by Dutch elm disease in the 1960s. In many places there is no longer a row of elms along both sides of the walkway. Several American Beech trees, planted in 1964, are now interspersed with the surviving elm trees.

The Washington Road Elm Allée has 76 of its original 136 Princeton Elm trees along a .7 mile roadway. The allée, designed to be experienced from a moving vehicle, today forms a magnificent leafy canopy above the roadway. The survival of 56% percent of the original trees, represents a relatively high state of integrity, compared to both extant shade tree allées in general and elm tree allées in particular in central New Jersey. The moving of the utility poles from inside to outside the allée in 1950, represents the kind of placement recommended by roadway beautification advocates in the 1920s, but rarely undertaken in central New Jersey. This pole repositioning further adds to the integrity and appearance of the Washington Road allée. The surviving open space context and the lack of street lighting along the this portion of Washington Road further contributes to the historic and aesthetic character of the Washington Road Elm Allée.

The planting of 16 Norway Maple trees in a regular row within the allée where original elms were lost, unfortunately has changed the character of the allée in one small section of the roadway. However, the planting of 35 Liberty Elm trees within the allée in 1994, is reviving the allée in a most appropriate manner.¹⁹ A new feeding and sanitation program implemented by the Friends of the Washington Road Elms has helped improve the health and appearance of the original Princeton Elms. In advocating for the elm allée and taking the initiative to develop and implement a feeding and sanitation program, the Friends of the Washington Road Elms is working in the tradition of civic improvement groups of the early twentieth century who were instrumental in getting public officials to landscape the open roads of central New Jersey.

¹⁸ In the 1920s, the Walker-Gordon Farm leased the former Schenck and Mather farms along Washington Road from Princeton University, providing Jeffers a good vantage point for viewing the Princeton Elm allée.

¹⁹ The Liberty Elm (*Ulmus americana* 'Liberty') is a relatively new type of American Elm tree developed by the Elm Institute which, in test situations, has proven to be highly tolerant to Dutch elm disease.

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Books and Periodicals

"The Avenue and Bounces and Bumps." 1950. *The Packet*, (November 2).

Breese, Gerald. 1986. *Princeton University Land*. Princeton, New Jersey: Princeton University Press.

Burton, Walter E. 1930. "Beautiful Roadsides: Move for Slightly Highways is Becoming Nationwide." *Scientific American* 143: 18-19.

Cauchon, Dennis. 1997. "The Great Elm Returns." *USA Today*. (November 6): 1-3

Connell, E.A. "Five Billion Dollars Worth of Street Trees." 1932. *American City* (January): 143.
"Council Passes Resolution to Repair Part of Washington Road." 1926. *The Packet*, (April 10).

DiChristina, Mariette. 1993. "Rescuing an American Icon." *Popular Science* (July) 72-75, 89.

"Flemer Nurtured Nurseries." 1978. *Princeton Recollector*. (Spring): 1,16-20.

Gaskill, Alfred. *The Planting and Care of Shade Trees*. 1912. Trenton, New Jersey: State Gazette Publishing Company.

Hart, Val. 1950. *The Story of American Roads*. New York: William Sloane Associates.

Labatut, Jean and Wheaton J. Lane, eds. 1950. *Highways in Our National Life*. Princeton, New Jersey: Princeton University Press.

Line, Les. 1997. "The Return of an American Classic." *Audubon*. (September-October):70-75.

"Making the American Roadside Productive." 1920. *Scientific American* 123 (August 7,): 127.

Marriott, Paul Daniel. 1998. *Saving Historic Roads: Design & Policy Guidelines*. New York: John Wiley & Sons, Inc.

"Planting Highway Trees." 1920. *American City* 8 (6): 600.

"Princeton Nurseries Gets Tree Contract." 1930. *The Packet*. (October 25) 1.

Rae, John B. 1971. *The Road and the Car in American Life*. Cambridge, Massachusetts: The MIT Press.

"Roadside Improvement: A National Movement Well Underway." 1929. *American City* 40 (May) 100-102.

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"Roadside Trees and Public Utilities on Highway Rights of Way." 1928. *American City* 38: (March): 158.

"Shade Trees." 1902. *Princeton Press* (September 27).

"Shade Trees." 1905. *Princeton Press* (April 1).

Strasser, Laurie Lynn. 1996. "Seeds of Survival: U.S. Studying Disease-Resistant Princeton Elms." *Princeton Packet* (May 17): 1A, 17A.

"Town Progress." 1902. *Princeton Press* (September 6): 4

Townsend, A.M., S.E. Bentz and G.R. Johnson. 1995. "Variation in Response of Selected American Elm Clones to *Ophiostoma ulmi*." *Journal of Environmental Horticulture* 13 (3) (September):126-128.

"Trees for Street of Cities and Towns." 1920. *American City* 8 (6) 265.

"Two Texas Cities Planting Trees on Highway." 1932. *American City* (March) 132.

Untitled short articles on Washington Road Improvements. 1904. *Princeton Press*. (June 11, June 25, and July 2).

Vogelsang, Phelp. 1928. "Lending Interest to the Strip Between the Ditchline and Fence." *American City* (September):145.

Wolkomir, Richard. "Racing to Revive Our embattled Elms." 1998. *Smithsonian* (June) 40-49.

Government Documents, Maps, Photos, and Unpublished Papers and Documents

"An Act providing for the regulating, planting, care and control of trees and shrubbery upon the public highways in the counties of the State." Chapter 15, Laws of 1924. State of New Jersey.

Aerial photos ca. 1929; 1945, 1959, 1970, 1975, 1980, and 1995. On file at the Mercer County Engineer's Office, Trenton, New Jersey. Aerial photo from Keystone Aerial Surveys, November 23, 1994.

Board of Trustees Minutes and Records, Princeton University, Committee on Grounds and Buildings Box 51 Folders 1-13. Princeton University Archives, Princeton University.
Chairman of the New Jersey State Highway Department. *Annual Report*. 1917, 1919, and 1921. State of New Jersey: Trenton, New Jersey.

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"Four Lane Highway Planned by County," July 14, 1939. Unidentified newspaper article in Streets and Paths File, Princeton University Archives, Princeton University.

Grounds and Buildings Collection, Boxes 1, 13, 14, and 19. Princeton University Archives, Princeton University.

Koller, Gary. 1990. Letter to William Flemer III, (September 8).

Mercer County Board of Freeholders. 1917-1932. *Minutes of Meetings*. Mercer County Freeholders Office, Trenton, New Jersey.

Miscellaneous articles, letters, and documents and notes on Dutch Elm Disease. In the Dutch Elm Disease File of the Princeton Township Shade Tree Commission, Princeton, New Jersey.

New Jersey State Commission of Public Roads. *Annual Report*. 1902, 1904, and 1905. State of New Jersey: Trenton, New Jersey.

New Jersey State Highway Commission. *Preliminary Report for 1923.*, Trenton, New Jersey.

Plans of Washington Road, 1926-present. On file in the Mercer County Engineer's Office, Trenton, New Jersey.

Princeton Nurseries Retail Price List 1943-44. In the files of the Historical Society of Princeton.

Rankin, Walter M. 1940 "Some Notes on Princeton Trees." Paper read at the Historical Society of Princeton on file at the Historical Society of Princeton, Princeton, New Jersey.

The Shade Tree. Bulletin of the New Jersey Federation of Shade Tree Commissions. Available at the New Jersey State Library.

U.S. Department of Agriculture. 1949. *Trees: Yearbook of Agriculture*. U.S. Government Printing Office, Washington, D.C.

Interviews

Interviews with Richard Barrett, Friends of the Washington Road Elms; William Flemer III, former President, Princeton Nurseries; Wanda Gunning, Princeton, New Jersey; John Kuser, Rutgers University, Urban Forestry Department; Bob Wells, Friends of the Washington Road Elms; James Consolloy, Princeton University; and Joe Kamalay, Research Biologist, USDA Forest Service; March-May, 1998.

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

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Washington Road Elm Allée, West Windsor, N. J.

Verbal Boundary Description

The boundary of the Washington Road Elm Allée follows the right-of-way of Route 571, a Mercer County Road. This right-of way is 72.5 feet wide. The right-of-way is indicated on the *Plan and Profile of Washington Road from Penns Neck Circle to D & R Canal*, dated August 1, 1950. The *Plan and Profile of Washington Road from Penns Neck Circle to D & R Canal* is comprised of three sheets, also identified by reference numbers 14-132, 14-133, 14-134. It is on file at the Mercer County Engineer's Office, 640 South Broad Street, Trenton, New Jersey.

The boundary, based on rights-of-way, has two ends. The southeastern end of the boundary begins on the southwestern side of Washington Road (near the Penns Neck Circle). It extends northeast, across the road, at a ninety degree angle to the right-of way, beginning one foot outside of the drip line of the southwesternmost elm tree until it intersects the right-of way on the other side of the road. The northwestern end of the boundary is the centerline of the county bridge over the D & R Canal.

Verbal Boundary Justification

The boundary is a line of convenience. The optimal boundary would encompass a historic district which would include the multiple historic landscapes that provide a continuous historic and scenic entranceway to Princeton—the Washington Road Elm Allée, the Delaware and Raritan Canal, and Lake Carnegie. As the D & R Canal and Lake Carnegie are already listed on the National Register, it was considered unnecessary and impractical to incorporate those areas into a larger historic district.

A second boundary option was to extend the boundary from the D & R Canal boundary line perpendicular to beyond the Route 571 right-of-way to extend one foot beyond the drip line of the Princeton elm trees. This boundary would include land owned by a private property owner, Princeton University. This option was not chosen because of concerns that Princeton University would question the listing, delaying or even preventing the listing (through the Federally mandated owner objection process) of the Washington Road Elm Allée on the National Register.

National Register listing is critical to the preservation and protection efforts underway by the Washington Road Elms Preservation Trust. The proposed boundaries encompass the vast majority of the significant resource. The design intent is clearly visible within the boundaries. The boundary along the southwestern row of trees is 43.5 feet from the center line of Washington Road—a historically and horticulturally justifiable boundary line. The boundary along the northeastern row of trees is 29 feet from the center line of Washington Road and extends through the northeastern row of trees. The Washington Road Elms Preservation Trust will prepare an amended National Register nomination form with more optimal boundaries if and when any adjacent private property owner rescinds owner objection or requests to be included within expanded boundaries of the Washington Road Elm Allée.

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Additional Documentation

The following items are part of this National Register nomination form:

Figure 1 ca. 1929 aerial map

Figure 2 1994 aerial map

There are eight photographs (6 contemporary, 2 historic) in 8" x 10" black and white format. The contemporary photographs all were taken by Susanne C. Hand in April, 1998. The negatives are on file at Kinsey & Hand, Princeton, New Jersey. The photographs are labeled in pencil on the back and also identified below. The numbers key the photos to sheet 1 of the Washington Road Elm Allée sketch map.

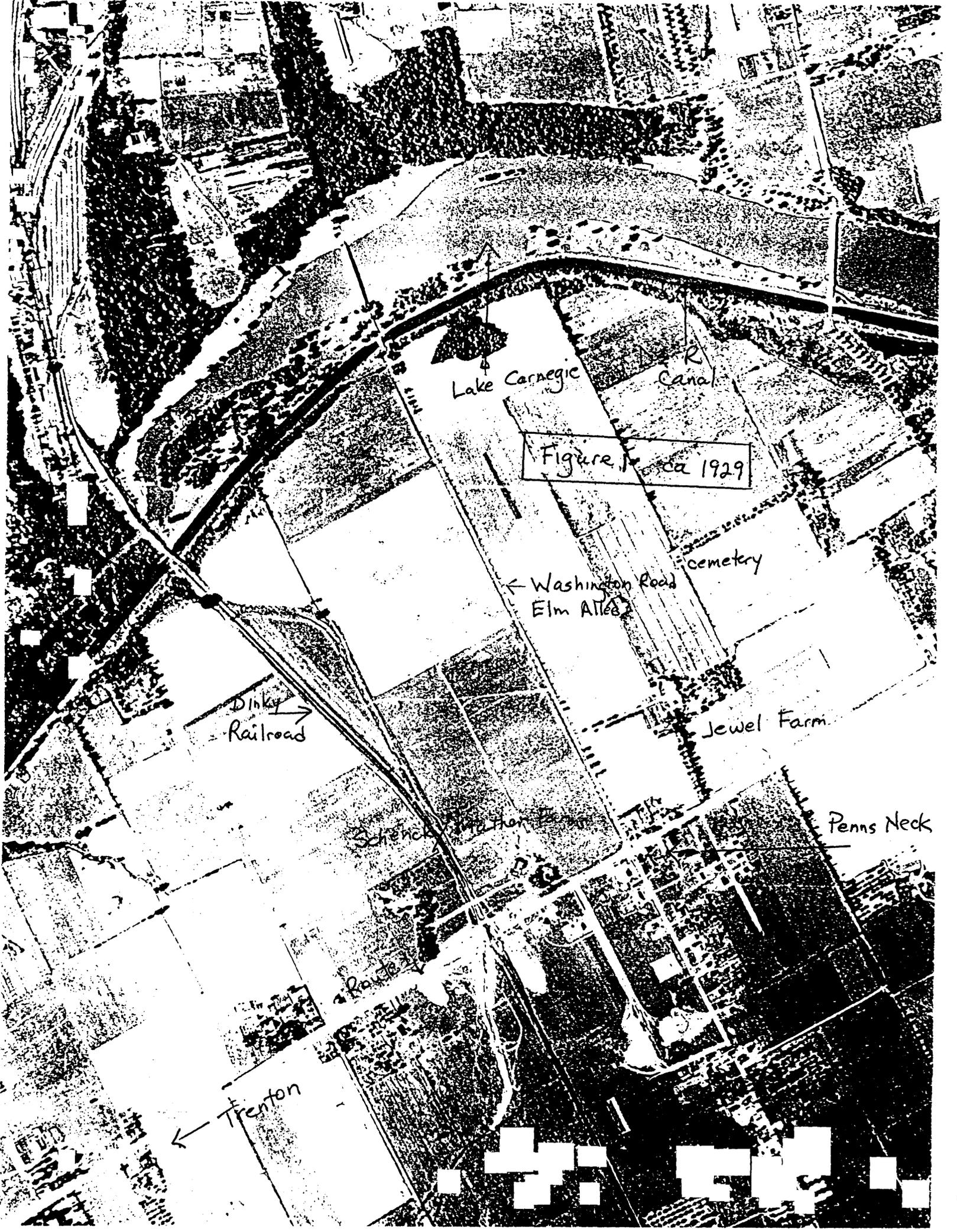
Photos

1. Washington Road Elm Allée, view south.
2. RCA, Penns Neck, Route 1, Jewel Farm, and Washington Road Elm Allée in background, 1948, Fairchild Aerial Surveys, view west, 1948. The photo is from the New Jersey State Archives, Trenton, N. J.
3. Washington Road Elm Allée, from a slide taken in 1961 by William Flemer III, view west. The slide is from William Flemer III, 232 Mapleton Road, Princeton, N. J. 08540.
4. Washington Road Elm Allée, view northwest.
5. Washington Road Elm Allée, view northwest.
6. Washington Road Elm Allée, view northwest.
7. Washington Road Elm Allée, view south.
8. Washington Road Elm Allée, view north.

Washington Road Elm Allée Sketch Maps

Sheet 1 Trees and Photos

Sheet 2 Boundary



Lake Carnegie

R Canal

Figure 1 ca 1929

← Washington Road
Elm Allée

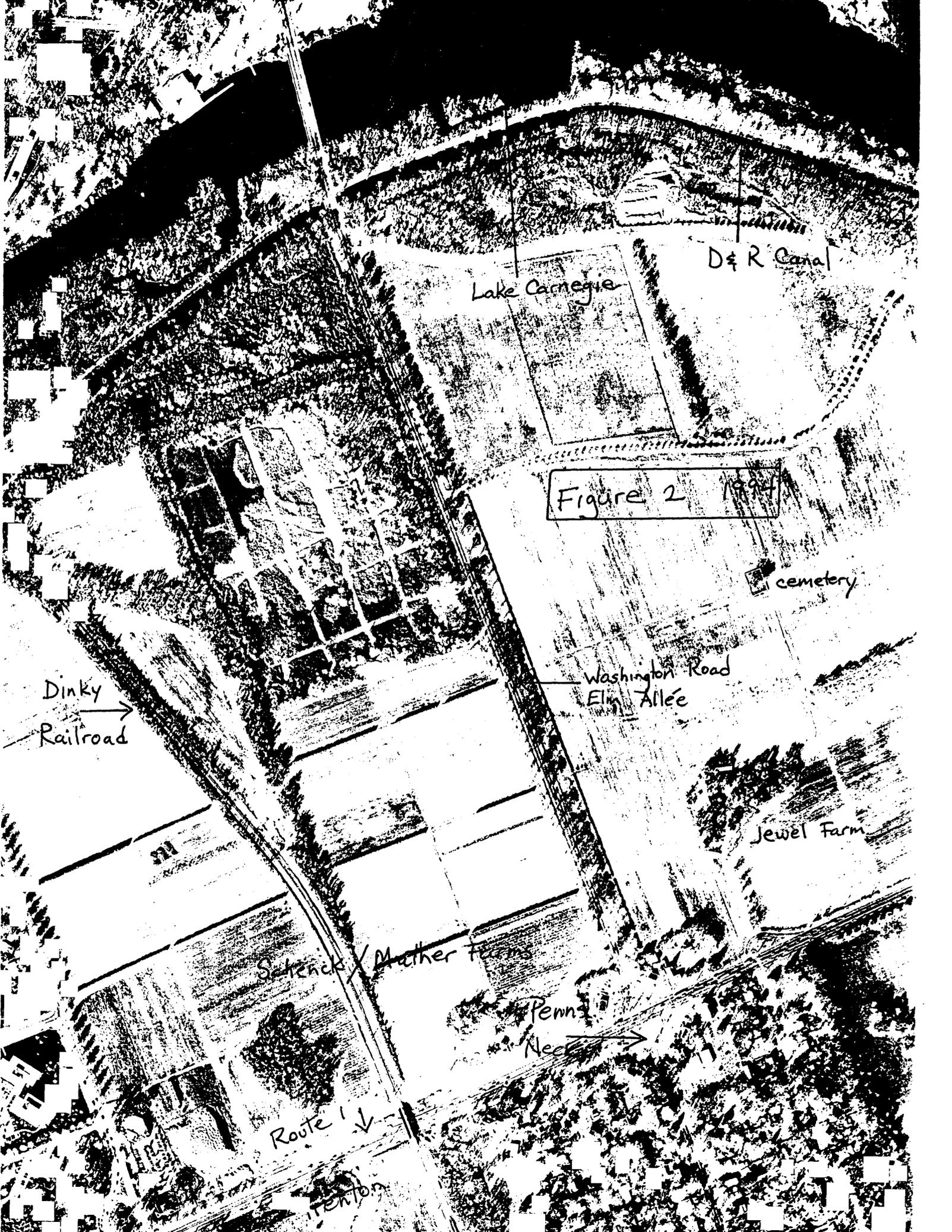
Cemetery

Dinky
Railroad →

Jewel Farm

Penns Neck

← Trenton



Lake Carnegie

D & R Canal

Figure 2 1994

cemetery

Washington Road
Elm Allée

Jewel Farm

Schenck / Mather Farms

Penns.

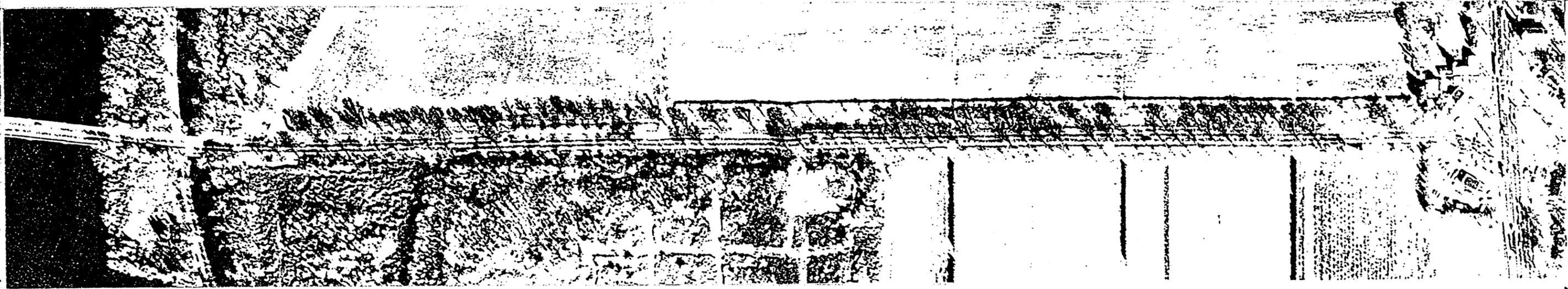
Neer

Route 1

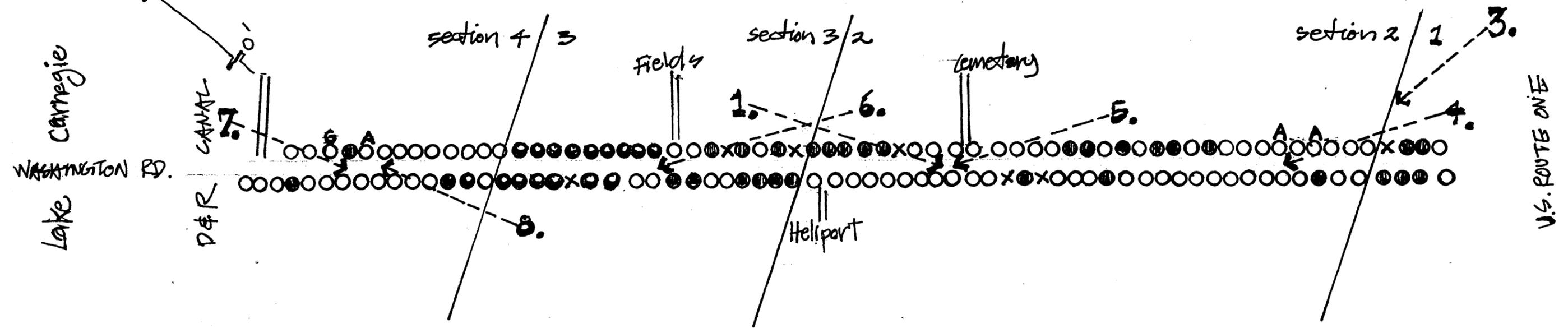
renton

Dinky
Railroad

Alan Goodheart 29 JULY 98



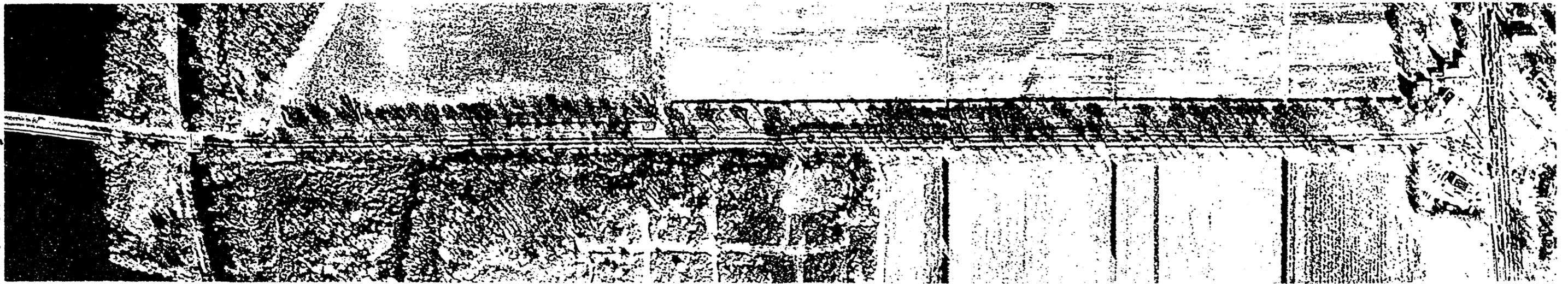
1994 Aerial Photo (above) and Plan Diagram (below)



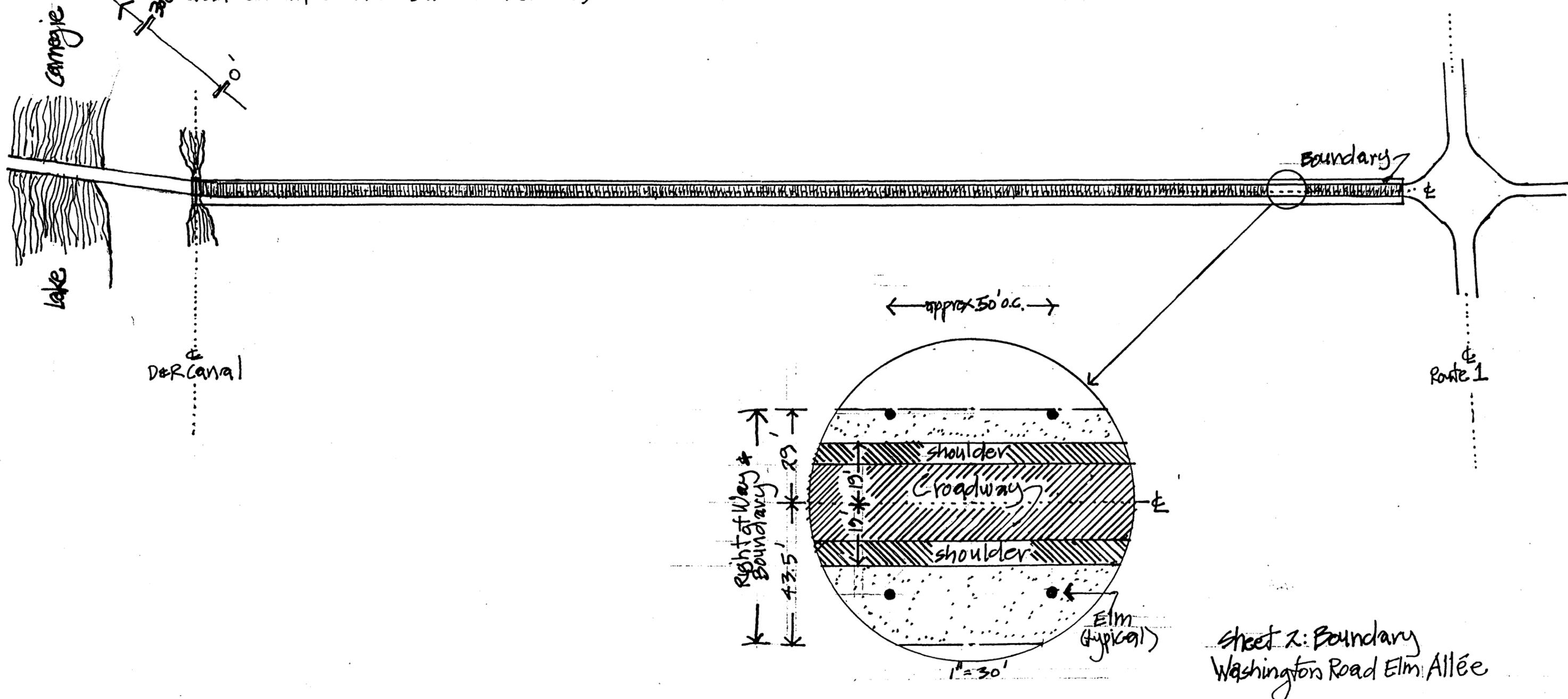
- Princeton Elms
- Liberty Elms
- ◐ Maples
- A ○ Ash
- ◑ Black Gum
- X missing tree
- 1-8 photo number and vantage point

Sheet 1: Trees and Photos
Washington Road Elm Allée

Alan Goehardt 25 July 90



1994 Aerial Photo (above) and Plan (below)



Sheet 2: Boundary
Washington Road Elm Allée