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FILE NO.

THE PUBLIC ROADS
SERVING HOPEWELL FURNACE

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1955

Prepared

by

Russell A. Apple

Park Historian

Hopewell Village National Historic Site

October 1955

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*Dir. Hist
4/11/61*

PREFACE

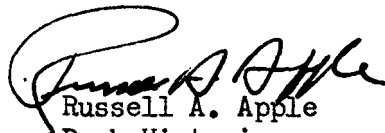
The purpose of this report is to provide a history of the public roads which served Hopewell Furnace in Hopewell Village, Union Township, Berks County, Pennsylvania. Hopewell Village and part of its surrounding rural area is now the Hopewell Village National Historic Site. It is administered by the National Park Service, United States Department of the Interior.

The need for this report arose August 1955. At this time money was made available by the National Park Service to obliterate a modern paved road which passed through the village, and to restore the village portion of the roads which served the village during the time it was an iron making community. The obliteration and restoration project was part of the program to repair, refurnish and restore the village to its historic condition, as an aid to its interpretation to visitors as an historic site. Research was necessary to locate the historic roads, determine their use and history, and to authenticate their restoration.

The research took two forms, archeological investigation on the site to search for the roads and their elevations and dimensions, and historical research in various repositories for information concerning them.

Paul J. Schumacher, Archeologist, of the Independence National Historical Park, Philadelphia, Pennsylvania, handled the

archeological phase of the research, and is submitting a separate report. This is the report of the historical research.


Russell A. Apple
Park Historian

Hopewell Village National Historic Site

October 16, 1955

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INTRODUCTION

Hopewell Village was an early American iron making community. Almost continuously for 113 years, iron was smelted in a cold-blast, charcoal burning furnace. Iron ore and limestone came from nearby mines; charcoal was made in the surrounding hardwood forests; and the products were sold nearby and as far away as Boston. These products included rough and finished castings, but the principal product was pig iron. Because the furnace, located in the wooded Schuylkill valley, was isolated from nearby communities, the workers and their families lived near the furnace, and an industrial village was created.

Hopewell Village was a typical iron making community, representative of many such villages on the middle Atlantic seaboard. It is important historically because it represents the beginnings of America's iron and steel industry, and because its way of life was as typical of Colonial and early America as was life on a New England farm or on a Southern plantation, if not as well publicized.

Roads were important to this little, industrial village. While Hopewell Furnace was located near the raw materials necessary to manufacture iron and near to markets, without roads the materials could not be brought to the furnace nor could the products be distributed. Roads were also important to sustain life in the village. While as self-sufficient as possible, the village still had need to import certain foods, food products, and other manufactured articles. The sources of raw materials and the market distribution points were

within six miles of Hopewell Furnace; thus, Hopewell's necessary road system existed within a circle of twelve mile diameter, with Hopewell as the center. Roads developed which radiated out from Hopewell like unevenly spaced spokes on a wagon wheel.¹

Topographically, the area surrounding Hopewell has considerable variation in surface features. Hills abound, ranging from steep and rough to gently rolling.²

Roads built in this area do not go in a straight line between termini, but follow contours in order to reduce grade. Hopewell's roads were built for loaded wagons, and the builders and users were practical men who valued and cared for their livestock. Hopewell "was heaven for horses, but hell for women."³

The Hopewell Furnace location, so placed to be near a furnace bank and a source of water for power, puts it near the political boundary which divides Berks County from Chester County. While the furnace is in Berks County, a principal source of iron ore was in Chester County. Two of the public roads serving Hopewell Furnace cross the county line, a situation which serves to split the public records between two official depositories. Before

1. See map 9.

2. James Cass, "Master Plan Development Outline, Hopewell Village National Historic Site, Pennsylvania, General Information." submitted to the Director, National Park Service, February 14, 1952; Map, Honeybrook Quadrangle, Pennsylvania, Topography, U.S. Geological Survey, surveyed in 1904, ed. of Apr. 1907, reprinted Aug. 1912; personal observation.

3. Reginald Evans Smith, interview conducted by J.C.F. Motz, Aug. 4, 1940.

the creation of Berks County in 1753, the site where Hopewell Furnace now stands may have been either in Lancaster County or Chester County. Hopewell is now in Union Township, Berks County, so named because this township was located near the point where Lancaster, Chester and Philadelphia Counties once met.

Maps and descriptions of the early political boundaries were vague and lack the detail necessary to locate the political position of the Hopewell Furnace area before the creation of Berks County. However, searches through county records and early maps fail to reveal any road building activity of a public nature in the present Hopewell area before the creation of Berks County in 1753.⁴

The records of public roads in Chester County are filed with the Clerk of Court, Chester County Court House, West Chester, Pennsylvania. The original road papers are well preserved, and have been organized and bound for easy reference. The records of public roads in Berks county are filed with the Clerk of Quarter Sessions, Berks County Court House, Reading, Pennsylvania. The original road papers are unorganized and filed loosely in file drawers or shelves. Labels on the drawers are not always descriptive of contents. Consequently, much searching was necessary to locate the original papers, and in some cases efforts were not successful.

4. Searches were conducted in records of Robsonia Township, Lancaster County, and in Nantmeal Township, Chester County, for the period before creation of Berks County. Both Lancaster and Chester Counties extended eastward to the Schuylkill River, and Philadelphia County was on the other side of the river.

Both depositories, however, have a well-indexed reference system by township. The road books, which contain the official declaration of the opening of public roads and the orders to view prospective roads together with legal descriptions of the roads, are legible. In some cases drafts have been placed with the declarations; in others, they were placed in special draft books. These drafts were copied into the official records by court employees who used as a guide the original drafts submitted by the viewers.

Human error has caused some of the drafts in the official books to differ from the ones submitted by the viewers. Some errors are also present in the lengthy courses and distances copied into the official books from the original descriptions submitted by the viewers. In all cases where the original papers submitted by the viewers could be located, these were used for the legal descriptions and drafts. In one case it was found that the courses and distances of the draft were different from the description of the road, yet both were on the same paper, an original one submitted by the viewers.⁵

A distinction should be made between public roads and private roads, and mention should be made of customary roads. A customary road is one which evolved naturally over occupied or vacant land. Thus several neighboring farmers might, through need, develop a rough road or cartway on their own initiative to the nearest grist mill. Long and continued use would make this road a customary road.

5. This was an 1825 road. Road Book 1, p. 692, Draft Book 1, p. 374, original papers filed in Union Twp. Drawer, Berks County Court House.

If such a road passed through private land, it was subject to blockading by the owner, subject to pasture fences created across it, and its maintenance, if any, depended on the most frequent users. In any case the location, continued use and maintenance of this customary road would be indefinite and a private matter.

Frequently, a necessary, customary road would become so crossed with fences, with so many detours, and in need of regular maintenance, that the users would petition the court to make this road a public road. The court would receive the petition, appoint a group of men to view the road, or review the need for a road, and if they saw fit, to lay out a road, and report back to the court. The court would then accept the report of the viewers, if favorable, complete the legal description, and sometimes a draft, and declare the road open to public use. This road was then a public road. Sometimes a public road was created between two points where no customary road existed, if the viewers and court saw fit. Sometimes the viewers reported back to the court that the proposed road was not necessary, and the petition was denied, sometimes to be submitted later under more favorable circumstances.

A complete record of public road matters is kept by the courts. The descriptions of the roads laid out and made public include the starting point, courses and distances of the legs, and the terminal point. Frequently trees, rocks or other impermanent features were selected for reference points, which makes it difficult to retrace on the ground many of the early descriptions.

The advantages of having a road made public were many. The

cost of laying out the road and the cost of its maintenance, an important consideration, were borne by the public at large and not just by the most frequent users. The permanence of the right-of-way was assured, as was its continued maintenance. Those whose lands were crossed or damaged by the public road were compensated by the court.

A private road was built by a company or individual on land owned or leased by the company or individual or over a right-of-way secured from another land owner. The purchase of right-of-way and the cost of construction and maintenance, if any, were private, not public matters. No public records were kept of such roads. Knowledge of the existence of private roads, if they are not still in use, must come from on-the-ground traces, maps, mention in private papers, or from the memories of those who used or saw them, or who remember older persons who have mentioned them. The documentation of private roads is a haphazard matter when compared to public roads.

However, certain private roads have been included in this report. This was necessary because private roads in Hopewell Village must be restored. It is not possible to interpret the industrial process without them. No public road entered the Village until 1804, yet the Village was in existence by 1771. There must have been a private road which linked the Village with a public road north of the Village. There were private roads in the furnace vicinity to move supplies and products, and a lengthy private road from Hopewell Mine

to the Furnace. Eventually, portions of these private roads became portions of public roads, resulting in the reduction of maintenance costs to the Furnace operators.

Today's nomenclature of the historic roads in Hopewell Village must differ from their original local names. Roads are usually called by their principal destination. In 1770, a road leading from near Hopewell Village was probably called the Coventry Road, for that was its principal terminus. Today, that road is called the St. Peters Road. St. Peters is today a nearer and more important place than Coventry, even though St. Peters is not a way-point on the Coventry Road. A road to St. Peters branches off the historic road to Coventry, yet in more recent times local residents were more interested in getting to St. Peters than to Coventry, and the original name and destination has gone into disuse.

The 1809 road from Hopewell to Jones Mine is today called the Joanna Road, after a furnace near Jones Mine. The 1757 road which leads from the Hopewell area to Scarlet's Mill and on to Reading, is today never thought of as a road to Scarlet's Mill, or to Reading, but as a summer shortcut through French Creek State Park to a firetower. Its original purpose and destination has been forgotten. The original destinations and dates of opening have been adopted in this report to identify the public roads.

To avoid confusion, terminology has been standardized. The county seat of Berks County is called in this report Reading Town to avoid any possible confusion with Reading Furnace, in Chester County. Reading Furnace for this report, has reverted to its orig-

inal spelling, Redding Furnace, a practice also adopted by the present owner of the furnace ruins. The Hopewell Mine has in historic times been called the Middle Mine, because it lies approximately halfway between the Warwick Mine and the Jones Mine. It is called the Hopewell Mine in this report. The spelling "draft" has been adopted in preference to the older "draught". An important place name, missing from the maps of Hopewell Village proper in this report, is Brushy Hill, a term applied to the hill north of the Village, and up which the mule teamsters fought with loads of pig iron for 113 years. Both the 1804 and the 1825 public roads ran down this hill into the Village. The "Meadowbank Road", a private road which leads from south of the barn in the Village up to the 1757 Coventry Road, has the easiest grade of the three known roads up Brushy Hill.

The method of research has been briefly mentioned in the discussion of the records in the court houses of Reading and West Chester. In searching for data on the public roads entering the Hopewell area, examination was made of records in the Court Houses of the counties of Berks, Chester and Lancaster; in the files of the historical societies of Berks, Chester and Lancaster Counties; in the files of the Hopewell Village National Historic Site; in the files of the Pennsylvania Historical and Museum Commission, Harrisburg; and in the files of the Pennsylvania Road Commission, Harrisburg and South Temple. Numerous interviews were conducted with former residents or with those concerned with public roads in the Hopewell area.

cp. p. 23

Of the maps examined, 22 were considered pertinent, and copies were either secured or tracings made. The reliability of details of many of the early maps is questioned, for maps made the same year by different cartographers vary on road locations and topographic features.⁶ Chestnut Hill has been placed both in Berks County and in Chester County by different map makers.⁷

Because of the apparent unreliability of most of these early maps, they have been used merely to verify the existence of a road between two termini as of the date of their publishing. Yet the very early maps have been found to be faulty for even this use. For instance, the 1792 Howell map indicates a road between Birdsboro and Hopewell. The map shows the road as leading directly from Birdsboro to Hopewell, and on to Coventry Forge in Chester County. Such a road must have been a private or a customary road, if it existed then, and its maintenance costs on private users would have been expensive. The road must have been at least nine miles in length over

6. Topographic Map of the State of Pennsylvania Drawn from Actual Surveys by H.F. Walling. Published by Smith Palmer and Co., No. 358 & 360 Pearl St., New York and 27 South Sixth St., Phila. 1862. Contrast with Union Township Maps of Berks County, by H.F. Bridgens, published by A.R. Witmer, Safe Harbor, Lancaster County, 1862.
7. Placed in Berks County on Map of the Public Roads in Berks County, Pennsylvania, constructed from actual surveys made under direction of the State Highway Department, By Authority of an Act of Assembly approved May 31, 1911. Same Hill called Bear Hill on Union Township, from Township Maps of Berks County, Bridgens, 1862, *op cit.*; and called Miller Hill on an undated blueprint (c. 1861-1875) of Union Township, in Berks County Historical Society. Chestnut Hill placed in Chester County on Map of Vicinity of Philadelphia and Reading from Actual Surveys by D. J. Lake and N. S. Beers, Philadelphia, 1860. Maps in text hereafter cited as date and principal maker, such as Map, 1860 Beers.

hilly country. Records show that a public road from Birdsboro to Hopewell was not opened until 1804, but a Hopewell area to Coventry road was opened in 1757-1758.

If the 1804 Birdsboro to Hopewell road was created over a private or customary road, it did not follow the course of the road on Howell's 1792 map. The 1804 road did not leave Birdsboro, but rather left some distance from Birdsboro on the early road leading from Birdsboro to Scarlet's Mill. Yet a road opened in 1757 from Scarlet's Mill to the Hopewell area, which is still in use, does not appear on this map at all.⁸

While it is possible that a Birdsboro-Warwick road did exist in 1792 as a customary or private road, there is no record of such existence, and for the purpose of this report the 1792 Howell map is considered inaccurate and the court records concerning the establishment of public roads have been relied on. *yes*

Confusion exists even on late 19th century maps as to the road leading from the Hopewell Mine to Hopewell Furnace. On some it is marked as a public road, on some as a private road, and on some as both a combination public and private road. This will be discussed below.

The data most depended upon have been the court records. *right*
The legal descriptions and/or drafts have been copied from the original papers submitted by the petitioners and viewers who laid out the

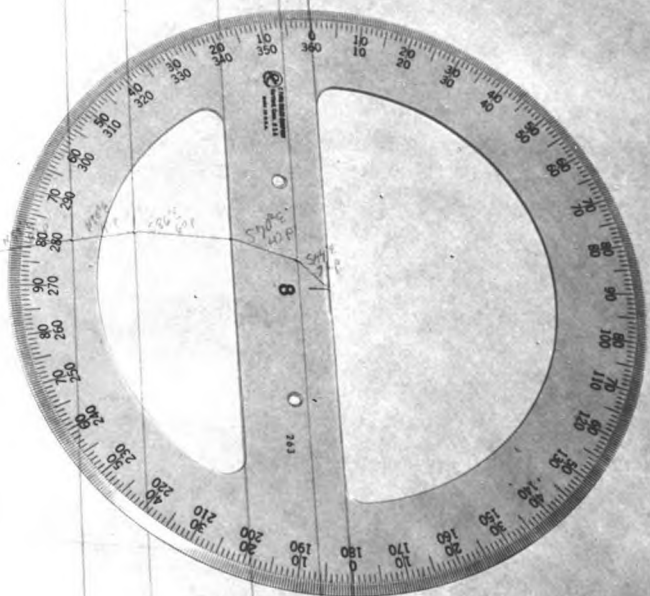
8. A Map of the State of Pennsylvania, by Reading Howell, 1792.

ILLUSTRATION ONE

Drafting a Road from its Description

DIETZEN
2077-48

LAND PROGRAM — USDI — REGIO



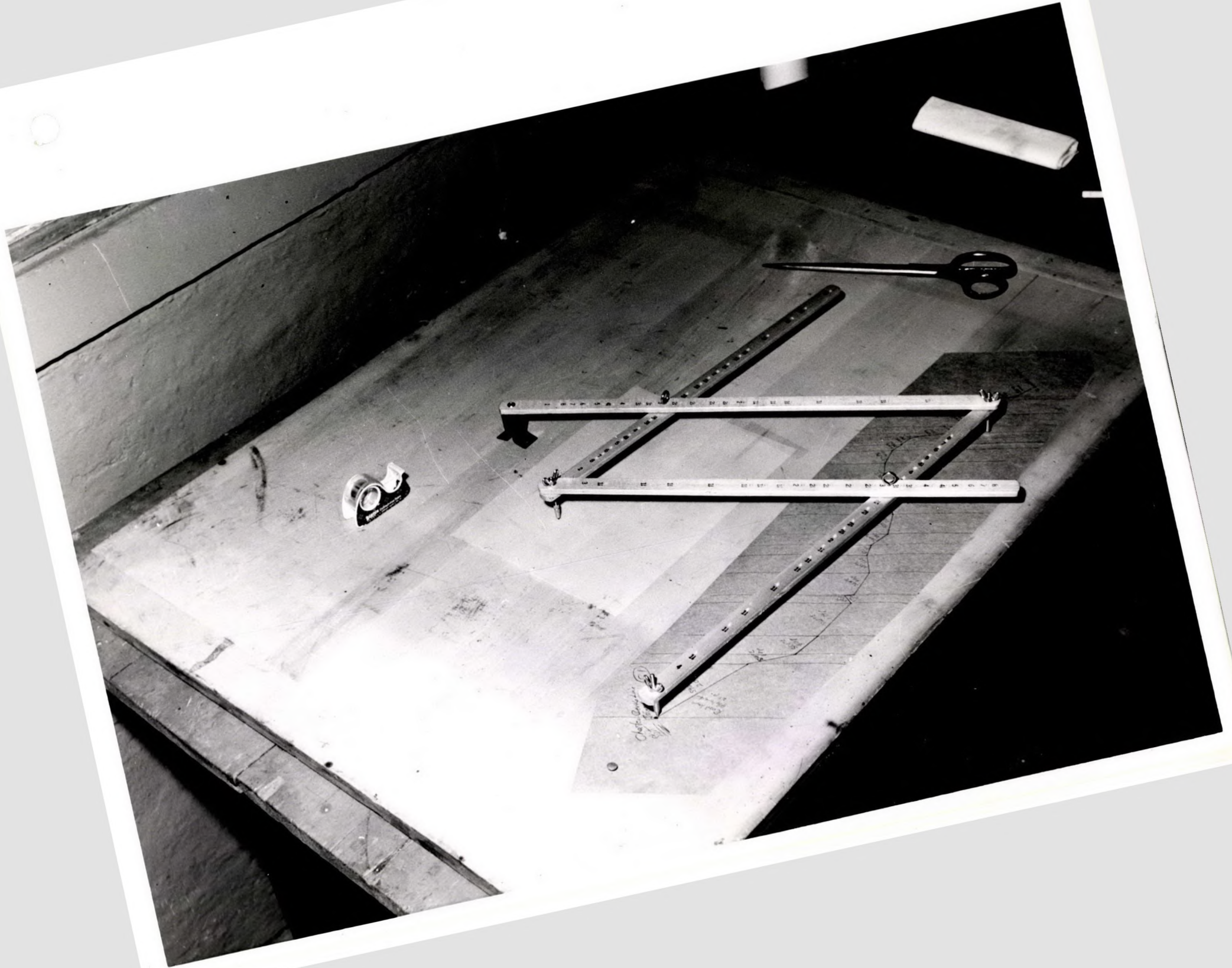
roads wherever possible, and where not, on the copies of these papers in court records. From these descriptions of the courses and distances, drafts were made in a small scale. The small scale drafts were then reduced by means of a pantograph to the scale of the 1860 Beers map. The Beers map was found to be the most accurate and was the one most relied upon. The reduced drafts, on tracing paper, were then overlaid on the 1860 Beers map, terminus on terminus, to see if the drafts fitted roads known to be in existence in 1860. Many of the roads treated in this manner did fit, and many of the roads fitted those still in existence.

By this manner it was possible to retrace on the ground the courses of some of the historic roads and to identify them by their modern local names. Some of the roads found have passed out of existence, even in the memory of those familiar with the area.

Many road descriptions were copied and many drafts made of roads which did not enter the Hopewell area. Data were taken on any public road whose identification or draft indicated that it might have entered the Hopewell area. For instance, many roads had a terminus at the boundary line between Chester and Berks County. Since this boundary line was close to Hopewell Furnace, it was felt necessary to draft out these roads and place them on the test map. This was done for roads not only in Union Township, Berks County, and in Warwick Township, Chester County, just across the line from Hopewell, but for adjacent townships in both counties. This method resulted in finding the first public road which entered the Hopewell area, the 1757 Scarlet's Mill to the Berks-Chester boundary line.

ILLUSTRATION TWO

Reducing the Draft to Larger Scale



This road was indexed only to Cumru and Robeson Townships in Berks County, yet a major portion of this road passed through Union Township. The original township in Chester County adjacent to Union Township, Berks County, was Nantmeal. This later was divided into East and West Nantmeal Townships, and later yet, Warwick Township was created out of part of East Nantmeal Township. Such political boundary changes complicated and lengthened the search.

The drafts and the legal descriptions of the historic roads give a rough traverse of the course of the road. The courses and distances go from point to point in a straight line, and do not indicate the minor curves and deviations of the roads on the ground. Thus, it is not possible by the use of these descriptions to find the actual position of the roads, but only to find the general location. To apply the legal description to a specific point on the ground is only possible if the road is in existence and has not been changed by later work, such as straightening out a curve. The determination of the actual position of these historic roads inside Hopewell Village itself has been aided by the use of these rough traverses. But again, in the case of the public roads up Brushy Hill, it is difficult to point to a spot on the ground and say that a public road passed over that spot. It is possible that the road positions varied over the surface of Brushy Hill and other hills because of weather conditions, new construction, or deep ruts due to long use.

The maps in this report reflect the results of research into public roads serving Hopewell Furnace. In the large scale maps of Hopewell Village, known private roads have been included.

ILLUSTRATION THREE

Fitting Draft to Road on 1860 Map



They have been identified by existing traces, archeological research, and from the reports of interviews on file made by National Park Service employees with former residents of Hopewell Village.

Occasionally roads will appear on the smaller scale maps of the Hopewell area which are not identified in the text. As Hopewell's service roads came into existence, other roads began to link them together or to link them with other roads. These linking roads, while not directly connected with Hopewell, have been placed on the maps because they are in existence in 1955. The later maps in this report begin to approximate the existing road system. At times as a road secondary to Hopewell's industrial effort became abandoned through disuse, it has been dropped from the maps. Such a road is that portion of the Reading Town-Redding Furnace road which passed near Hopewell Mine in Map 2.

With the exception of the first three photographs which deal with the method of drafting roads, the photographs have been selected to show the location and appearance of the historic public and private roads in Hopewell Village. All were taken after Hopewell Furnace ceased operation, that is, after 1883, and therefore, they show the Village after the iron making effort had ceased. Missing from them are such features as ore piles, workmen and industrial vehicles.

Photos IV, V, VI, VII and VIII are from the Bull Collection, Chester County Historical Society. The others were recently made by the writer.

Harker Long, Hopewell's last furnace manager, was a valuable source of information to other researchers.⁹ Mr. Long, before Hopewell Village became a National Historic Site, wrote a short book on the History of Hopewell Furnace. In this book, he said

There is no doubt that the first road to Hopewell was what we call the 'old Birdsboro road' and the next was the 'old Bear Hill Road' to Douglassville.¹⁰

Mr. Long said later

However, while at the Historical Society of Berks County, Mr. Charles B. Montgomery, the Curator, showed me a copy of a court order given in 1751 to lay out a public road from Israel Robeson's, a point on the Schuylkill road near the Bird¹¹ mansion, past Hopewell Forge to the County Line. Evidently there was a forge at Hopewell before the furnace was built in 1771, which I had doubted in the forepart of these notes. The blueprint showing the court order also had on it a tracing of the road to the Chester County line, about 400 yards south of the Hopewell Furnace. While there are neither bearings or distances given on the blue print, I must confess it looks to me as if the road that goes up through this Birdsboro and Texas, Mexico and Kulptown [points on the 1804 Schuylkill-Birdsboro Connection road] and on to and past Hopewell is the road that has always been called the old Birdsboro Road¹¹. Strange indeed that none of the old employees at Hopewell sixty years ago ever knew anything about this forge, yet when I come to wonder where William Bird got the iron to work in his forges at Birdsboro, I must conclude that he possibly hauled it over this road from Old Reading¹¹ and Warwick¹¹ Furnaces in Warwick Township, Chester County.

- not near Reading
(see below)

9. Roy E. Appleman, "Verbatim Notes Taken from Mr. Harker L. Long Birdsboro, Pa., at the site of Each Subject Discussed, Hopewell Village, December 1935." Typescript. Jackson Kemper, "Notes Taken after Conversation with Mr. Harker Long, Aug. 7, 1936." Typescript.

10. Harker A. Long, A Short History of the Hopewell Furnace Estate in Union Township, Berks County, Reading; n.d., (c. 1930), p.5.

11. Italics his.

In order that doubt may be removed from the information which follows below, it is necessary to attempt to refute Mr. Long's statements in regards to roads.

It is believed that Mr. Long held some erroneous conclusions, conclusions evidently not shared by Mr. Montgomery, who later was employed in research for data on Hopewell Forge.

The search for the copy of the court order shown Mr. Long has been fruitless. It is not in the files of the Berks County Historical Society. It may be in the late Mr. Montgomery's personal papers at Lebanon Valley College. Since the copy could not be found, a search was conducted for the court order in the court houses of both Berks and Lancaster Counties. It is believed that the court order refers to the road which runs down the west side of the Schuylkill River from near Reading Town to Birdsboro and on southward to the Chester County line. But no order was found. Israel Robeson's could not be found on early maps, but there was a Robeson Post Office on the Schuylkill River near Reading Town in 1860.¹² If this be the Robeson's referred to by Mr. Long, then his description fits this road along the Schuylkill.

*Had was
near the
Robeson
massacre!*

The location of Hopewell Forge is important. If it was near the site of Hopewell Furnace, then his road description might place a road into the Hopewell area before any road found in this research. No other records, except the presumed inaccurate 1792

12. Map, Beers, 1860.

Howell Map, indicate such a road. Mr. Montgomery spent considerable time in 1941 searching for the location of Hopewell Forge. He finally concluded Hopewell Forge was near Birdsboro. He said

We feel that there is not much question about the location of the Hopewell Forge--alas and alack! For it is not on the Hopewell Lands. Instead it is but a short distance south of Birdsboro--rather South of Wm. Birds's orchard but 1650 feet and the forge was about 360 feet from the dam!¹³

If Hopewell Forge was in Birdsboro, and Robeson's near Reading Town, then the court order was concerned with the road on the west side of the Schuylkill. It is interesting to note that no data were located on this road, possibly because the road was laid out in 1751, if that date is correct, and Berks County was not created until 1753. However, this area was, prior to 1753, in Lancaster County and no data were found there either.

It is noted that the draft of the road seen by Mr. Long was without courses and distances. Thus, it was merely a series of connected short lines of unknown scale. Since the road Mr. Long calls the "old Birdsboro Road" has since been identified as a public road laid out in 1804, and Mr. Long "confesses" to his identification, Mr. Long does not make a strong, positive identification.

Mr. Long also raises the question as to the source of iron for the Birdsboro forges of William Bird. He concludes that the iron

13. Montgomery to Garrison, Apr. 29, 1941, Montgomery papers, Hopewell Village N.H.S.

came from Warwick and Redding Furnaces. This was correct¹⁴ but the route of iron from these furnaces to Birdsboro would have probably been west along the so-called Ridge Road in Chester County (presently a portion of state route 23), which was declared a public road in 1738, to the Schuylkill River, then up the river on the west side to Birdsboro. This would have been an easier route, though less direct, than through the Hopewell area.

It is probably, however, that the Birdsboro forges also secured iron from a furnace operated by the Birds at Roxborough, near Reading Town.¹⁵ The opening of a road in 1751 on the west side of the Schuylkill from near Reading Town to Birdsboro, would create a public road for the transportation of iron smelted by the Bird family at Roxborough Furnace to forges operated by the Bird family at Birdsboro.

Mr. Long's association with Hopewell began in 1867. At that time the public roads inside Hopewell Village had been completed and firm for 42 years. His personal knowledge concerning the building of Hopewell's service roads is believed accurate only in the case of a public road opened in 1856, and his knowledge here is second hand. He was closely associated for many years with those who had been present during the construction of the 1856 road.

14. Ledger, William A. Bird, 1744 to 1761, p. 10. Original at Historical Society of Penna. (ref. 14 Amf.111) from a copy in Montgomery papers, Hopewell Village N.H.S..

15. Miscellaneous notes, Montgomery Papers, Hopewell Village N.H.S.

However, it is believed that when Mr. Long speaks of matters of which he had first hand knowledge, or of matters which occurred shortly before his association with Hopewell, that he may be relied upon.

CHAPTER I

ROADS PRIOR TO 1770

Existing Roads by 1756.

If in 1756, a person stood on the future site of Hopewell Furnace, he would stand in virgin wilderness. Yet if he could walk in a straight line for a few miles either north or south, he would enter an industrial area. The walk would of necessity be through the forest, for no road stood closer than four miles away. It was this very forest, located between industrial areas, that later would cause the establishment of Hopewell Furnace on the site. The forest was a necessary supplier of the raw material charcoal, which was used to stoke the furnace fires and to smelt the iron ore. The nearby industrial areas supplied the other necessary raw materials--iron ore and limestone, provided a group of men trained in the iron industry, and were either markets themselves or distribution points to more distant markets, such as Philadelphia, Lancaster, and Wilmington, which were in turn trans-shipment points for the Atlantic coastal trade or the western frontier.

The one thing lacking to make the future Hopewell area into an industrial center itself was a road through its wilderness. While the road itself would not bring the industry, it would bring men into the area, and among the men would be one who would grasp the potential lying there and be in a position to act.

Four miles in a straight line to the north was Birdsboro, where the forges of William Bird beat pig iron into wrought iron

and made wrought iron implements. Four miles in a straight line to the south was the Ridge Road in Chester County. East along the ridge road was Coventry Forge, founded in 1711, and known for its quality iron products. Farther south of the Ridge Road was Warwick Furnace, Warwick Iron Ore Mine, and the Redding Furnace. Four miles in a straight line to the southwest from the future Hopewell site was the Jones Iron Ore Mine.

To the northeast, just four miles away, was the Schuylkill River, a carrier of products down river to Philadelphia, although not a very satisfactory one. A road paralleled both the east and west banks.

To the ^{west} east, just four miles away, was a road which ran between Lancaster County and Birdsboro. Scarlet's Mill was a way-point on this road. In effect the future Hopewell area was surrounded by roads, all approximately four miles away.

These roads were:

1. A road along the west bank of the Schuylkill River.
2. A road between Scarlet's Mill and Birdsboro.
3. The Ridge Road in Chester County.

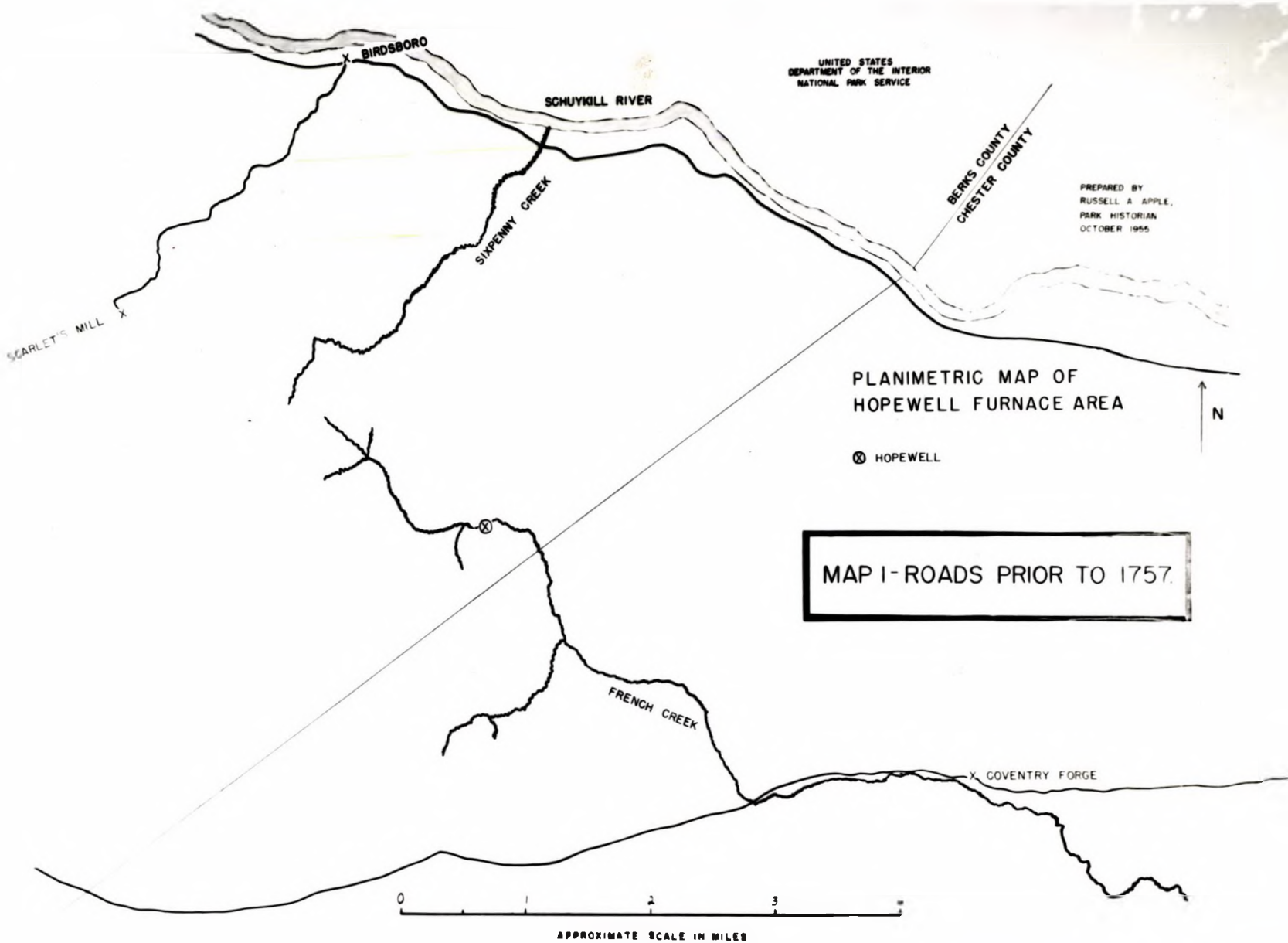
The future Hopewell area was not connected with any of these roads.¹

1 Documentation of these early roads has been difficult, and such documentation was not important to this report. They were in existence before roads entered the Hopewell area, for these roads joined with them. However, information about these roads in existence prior to 1757 may be found: Ridge Road- H. Frank Eshleman, "History of Lancaster County's Highway System, from 1714 to 1760," Papers Read Before the Lancaster County Historical Society, March 3,

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BERKS COUNTY
CHESTER COUNTY

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The 1757-1758 Road.

According to a petition submitted to the February Sessions of the Quarters Sessions Court of Berks County in 1757, a road was needed to link Reading Town with Scarlet's Mill and with Coventry Forge in Chester County. Since the court only had jurisdiction as far as the boundary line between Berks and Chester Counties, the petition asked that the road go as far as this line. John Scarlet, proprietor of Scarlet's Mill, was one of the 15 signers of the² petition.

There is doubt not yet resolved about the actual date of the founding of Hopewell Furnace as well as of the existence of Hopewell Forge near the present site of Hopewell Furnace. It is interesting to note that no name known to be connected with the Bird family interests signed the petition. If there had been a forge at Hopewell, or if the furnace was contemplated by 1757, certainly a Bird, or someone closely connected to the Birds, would have been interested in having a road built into the Hopewell area at public expense.

*Unless
road
was
built
there*

1922, Lancaster, Pa., 1922; H. Frank Eshleman, Esq., "The Great Conestoga Road," Papers Read Before the Lancaster County Historical Society, June 5, 1908, Lancaster, Pa., 1908; Scarlet's Mill to Birdsboro Road-Petition of Mark Bird to Justices of the Court of General Quarter Sessions of Berks County, August 16, 1764, in drawer marked "Robeson Township," Clerk of Quarter Sessions, Berks County Court House; Schuylkill Road- as stated in the Introduction, no documentation has been found, but the date is believed to have been 1751.

- 2 Petition to February 1757 Court of General Quarter Sessions, Berks County, filed in drawer marked "Miscellaneous Unfinished Roads," Clerk of Quarter Sessions, Berks County Court House.

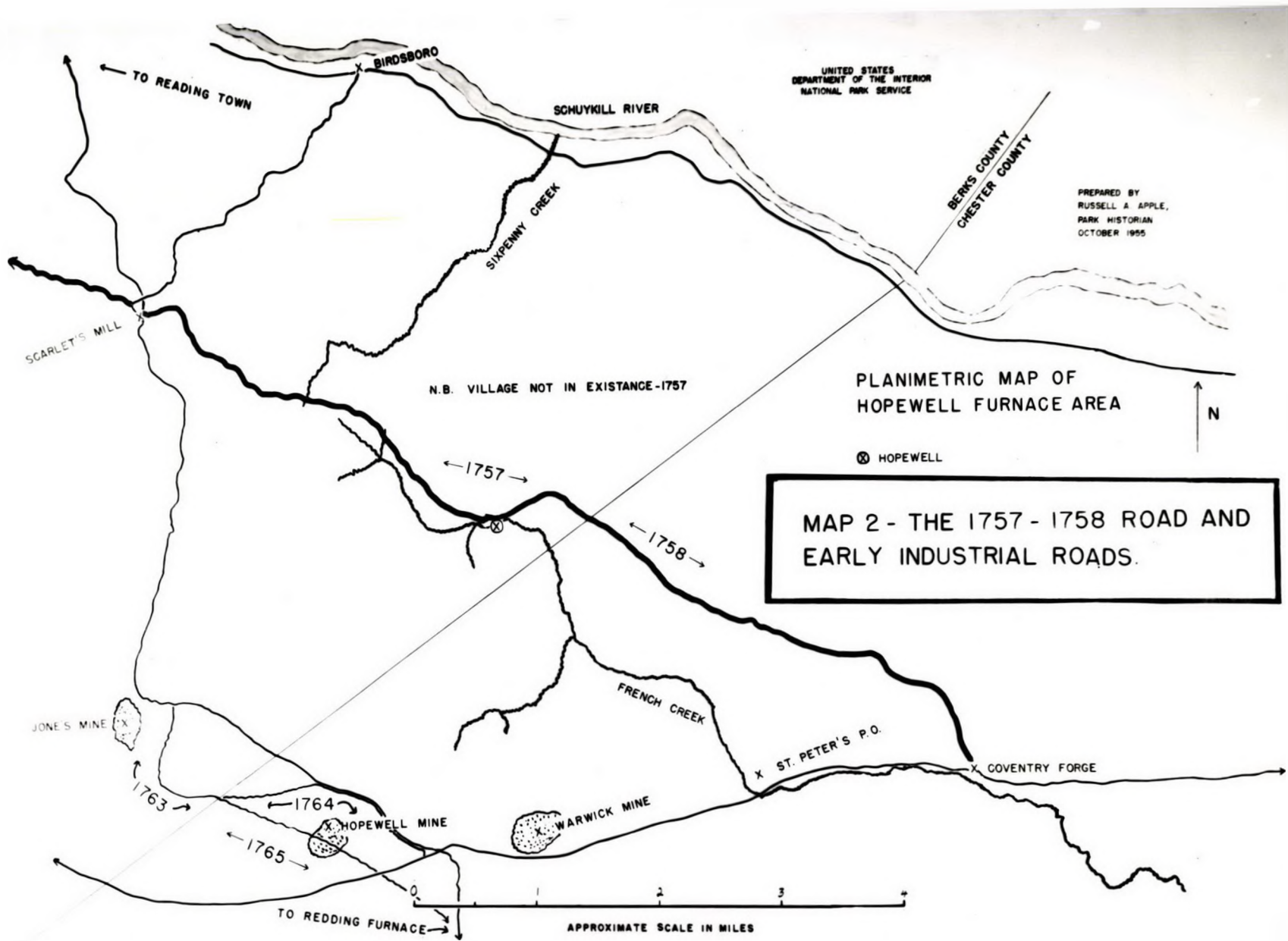
Accordingly, a road nine miles in length was laid out from the land of Richard Lewis, or from Josiah Boone's sawmill, points on the west side of the Schuylkill near Reading Town. This road continued "where most suitable thereabouts...to lead the best way to John Scarlet's Mill in Robeson [Township] and from there to extend the directest, if the ground will allow it, to the division line between Berks and Chester Counties, in order to have the said Road by the Pervision [sic] of Chester Court further extended to Coventry Forge on french creek...."³

In the legal description of the road, no mention is made of a forge or furnace save Coventry, while other features, such as John Scarlet's gate, and the Cocollyco Road, are mentioned. It is fair to assume that if anything of importance had existed in the Hopewell area, it would have been mentioned. It was probably because "the ground allowed it" that this 1757 road entered the Hopewell area. It was the first known public road to enter this virgin land, and its existence and continued use today testify to the wisdom of its creation. *right*

Its location on top of Brushy Hill, north of the site of Hopewell Village, caused it to pass near to, but not through, the Village area. The viewers possibly considered taking the road down Brushy Hill to the nearby Chester County line, but chose instead, because of easier grade, a side-hill route to a point on the line some distance away.⁴

3 Road Book 1, p. 2, Berks County Court House.

4 Declared open to public use Feb. 8, 1757, as recorded in Road Book 1, p. 2, Berks County Court House.



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CHESTER COUNTY

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PLANIMETRIC MAP OF
HOPEWELL FURNACE AREA

N

⊗ HOPEWELL

MAP 2 - THE 1757 - 1758 ROAD AND
EARLY INDUSTRIAL ROADS.

APPROXIMATE SCALE IN MILES

The accepted date for the founding of Hopewell Furnace is 1770. Indirect historical evidence supports this date, and this is the date assumed to be correct by several historians.⁵

Whatever the date of the founding, the position of the 1757 road atop Brushy Hill places this road out of the Village proper. Until a public road entered the Village (in 1804), there must have been a private road which connected Hopewell Village with the 1757 road from Scarlet's Mill to the county line. This connection is believed to be the "Meadowbank Road," a road which starts from south of the barn and travels northeast by an easy grade up to the 1757 road.⁶ The Meadowbank Road is a private road. Its present condition is a trace, overgrown by trees and bushes, but the roadbed and evidence of ruts are visible. See Map 3.

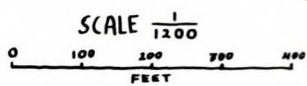
Why?
Name?
I Do Not Agree with this premise PFS

Chester County acted in 1758 to continue the public road to Coventry Forge. The report of the viewers said in part

The Persons appointed to View and if they Saw occasion to lay out a Road to begin at the line dividing the Counties of Chester and Berks in a Road already laid out in said County of Berks from the Mill of John Scarlett [sic] to the said division line Extending from the said division line to Coventry Forge on French Creek....

-
- 5 Among them: Arthur Cecil Bining, Pennsylvania Iron Manufacture in the Eighteenth Century, Harrisburg, 1938, p. 51; and Dennis C. Kurjack, Hopewell Village National Historic Site, Washington, D.C., 1952, p. 19.
- 6 Charles Sheridan Painter, former Hopewell resident, interview with Joseph R. Prentice, October 12, 1955.
- 7 As recorded in Chester County Road Book A, p. 252. Original-papers filed in Volume 7, p. 61, Chester County Court House.

- WALL
- HOPEWELL FURNACE
- ORE ROASTER
- WAGON SCALES
- WATER WHEEL
- PRIVATE ROAD
- PUBLIC ROAD
- SLAG
- OFFICE-STORE
- WHEELWRIGHT SHOP
- BLACKSMITH SHOP
- CHARCOAL HOUSE



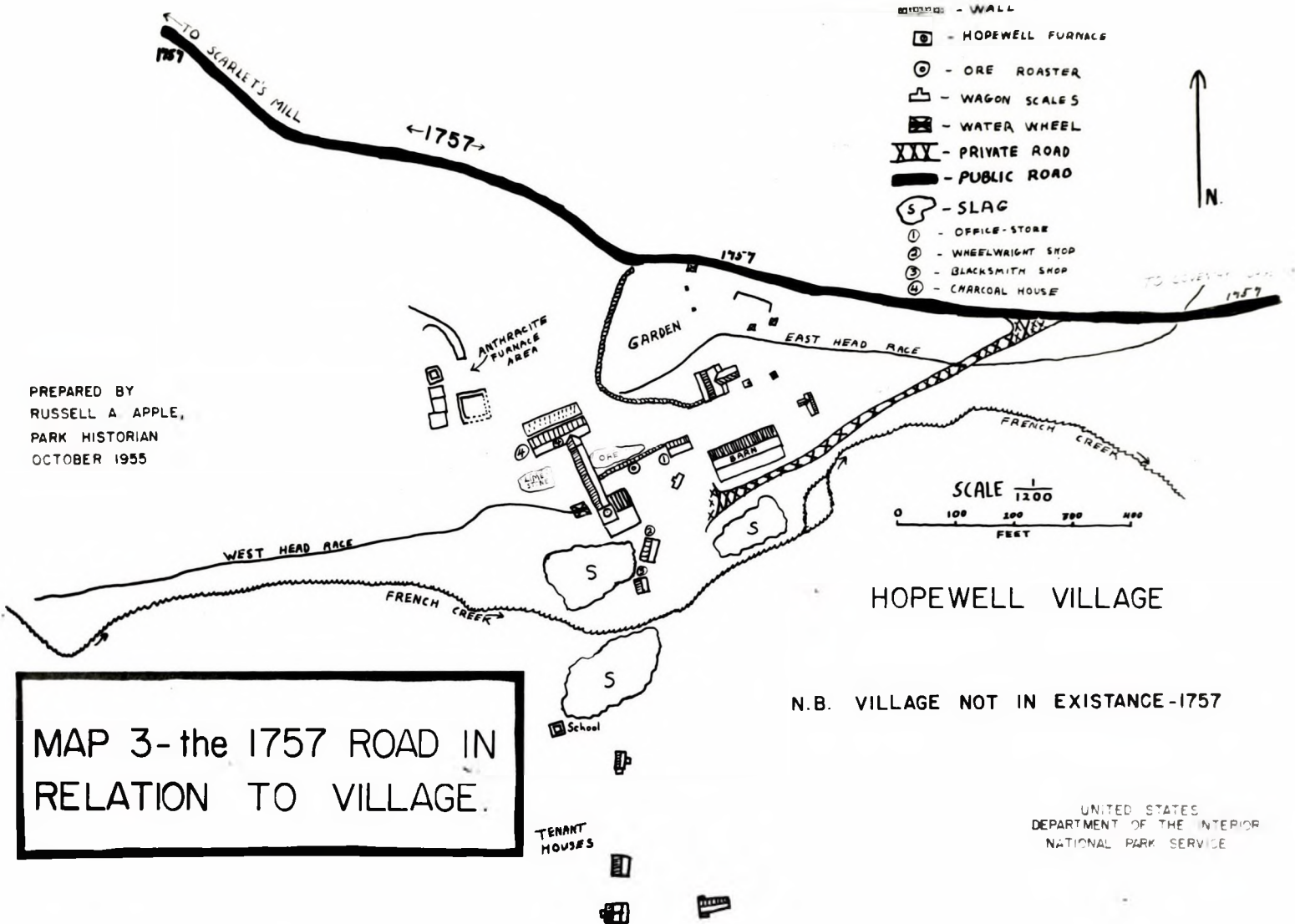
HOPEWELL VILLAGE

N.B. VILLAGE NOT IN EXISTANCE-1757

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MAP 3-the 1757 ROAD IN
RELATION TO VILLAGE.



The Chester County portion of the road was four and a quarter miles long. It was declared open as a public road on August 30, 1758.

See Map 2.

The Southeast Industrial Roads.

Before the establishment of Hopewell, a series of industrial roads developed which linked Redding Furnace, Warwick Mine, the mine which was later to be called Hopewell Mine, and Jones Mine. Eventually, Hopewell joined this linkage system by direct roads to all but Redding Furnace, which ceased operation before the others. These early industrial roads were secondary to Hopewell's needs.

The early mines and furnaces were interconnected in order to speed transportation of ore, products and supplies. When Hopewell Furnace was built, it, too, became interconnected with the others. Therefore, these early industrial roads have been included in this report.

The road from Reading Town to Redding Furnace was the first of these. It was laid out in 1763. Apparently, a portion of this road was not laid out as well as had been the 1757 road, above, for this petition was submitted to the November Sessions of 1763

That whereas There has been a Road laid out by orders from your Worships Leading from Reading Town Towards Reading Furnace...which Road Was Expected by Us to be a Road Leading towards the Lower Mill & on Towards Philadelphia, But the Lower Part of Said Road below the House of Edward Goff Being Laid over a Very Steep Mountain in which is Scarce Passible by Waggons by Reason of Which Chester County Court have never thought proper to Lay out the part of Said Road which was to Join it in the Said County to Render the Same of the Use and Purpose for which it was Designed and Your petitioners being informed that there has a Road Lately

Laid Out Leading...by Warwick Furnace and...Towards the Valley Forge & Down to Philad. -- Which Road would if Extended Answer to Come Up by James Fisks & Join the County Line opposite to the Land of David Thomas, Millwright...therefore your petitioners Do Humbly Pray....⁸

And they went on to ask for a new lower portion for their road.

⁸
Their prayer was answered. Here was a clear request for a better wagon road with easier grade, and for the purpose of transporting products to the Philadelphia market. Not all the petitions examined stated reasons as clearly. This road was joined in 1764 by the Chester County portion.⁹

which road?

In 1765, Redding Furnace was instrumental in the creation of a public road which ran from the furnace to the point on the Berks-Chester line where the 1763-1764 roads mentioned above met. An important way-point along this road was the mine later to be known as the Hopewell Mine.¹⁰ As of the opening of this 1765 road, all three mines were connected. See Map 2. As time elapsed, the portion of this road which passed near the location of Hopewell Mine was abandoned, and was not present on the 1860 Beers map. See Map 5.

8 Confirmed as public road Nov. 8, 1763, as recorded in Road Book 1, p. 46. Draft in Draft Book 1, p. 13. Berks County Court House.

9 Confirmed as public road Nov. 27, 1764, as recorded in Road Book A, p. 341. Original papers including draft in Vol. 10, p. 21, Chester County Court House.

10 Confirmed as public road August 27, 1765, as recorded in Road Book A, p. 344. Original Papers including draft in Vol. 10, p. 30, Chester County Court House.

CHAPTER II

HOPEWELL'S INDUSTRIAL ROADS

The Hopewell Mine Connection

None of the roads described so far were built for or because of Hopewell Furnace. The name Hopewell or the name Bird or any variant thereof does not appear on the original road papers of any road discussed in Chapter I. The only road which so far has entered the Hopewell Furnace area was built before the first blast was lit in Hopewell Furnace or its supporting village created. This first road--the 1757-1758 Scarlet's Mill to Coventry Road--passed north of the Village near the top of Brushy Hill and was connected to the Village by a private road after the Village came into existence. This private road is believed to be what is now called the Meadowbank Road. See Map 3. The term "private road" is used in preference to the term "customary road," because it is assumed the Meadowbank Road was built by Mark Bird on his own land for the use of Hopewell Furnace.

Another essential road which probably was built at the time of the erection of the furnace was the private road from Hopewell Mine to the furnace. Because only portions of this mine access road were ever made into public roads, records are lacking and no descriptions, legal or otherwise, are available for the entire length. However, most of the maps made during the last half of the 19th Century show it in existence, although there is some confusion as to its status. The maps made earlier are either considered unreliable or were made to such a scale that the detail of this road

↓ ?
Do not
agree !!
Summing to
conclusion
OFS

?
proof of
also

was omitted. The present status of that portion of the mine road which never achieved public road recognition is abandonment, and this portion has been omitted from modern maps. It is difficult to find even the trace. The mine also has been abandoned. See Map 4.

Since it is known that Mark Bird built Hopewell Furnace and also was the owner of Hopewell Mine, it is logical to assume he used his ore at his furnace. Therefore, since a road is known to have existed between the two, the status of which is undeterminable, it is also logical to assume that this road was built at the time of the building of the furnace.

*How done
know?
Case Ref:
8/15*

The assumption of a 1770 or earlier building date for a road to Hopewell Mine is aided by an examination of the known routes between Warwick Mine and Jones Mine to Hopewell Furnace prior to 1772 (the date when Jones mine was connected to Hopewell Furnace, see below). Ore from the Warwick Mine would have to travel east along the Ridge Road to Coventry Forge, and then over the 1757-1758 Scarlet's Mill to Coventry Road as far as Hopewell, a distance of approximately nine miles. Ore from the Jones Mine would also travel approximately nine miles, moving north along the Reading Town-Redding Furnace Road to Scarlet's Mill, then along the 1757 Road to Hopewell. The cost of hauling ore from either of these two mines would be approximately twice the cost of the haul over a four mile road between Hopewell Mine and Hopewell Furnace. In addition, ore secured from a mine owned and operated by one person would be cheaper than ore bought from a mine owned by others, other conditions being equal. Since the

securing and transportation of ore was a daily occurrence, the furnace being in blast 24 hours each day when operating, it would be a financial advantage to build a road between mine and furnace.

Harker Long speculates

I think the reason Mark Bird built Hopewell Furnace was because in some way he became the owner of an eighty-acre tract of land on the east end of Thomas Hill's property in Warwick Township, Chester County, about three miles south of Hopewell, in which he found a fine deposit of iron ore. This was known as the Middle Mine or Hopewell Mine. I believe the most of the iron ore used at Hopewell came from this mine up to the time they sold said mine to the Pottstown Iron Company about 1870 or 1871.¹

*de. add
notes
as
16-page*

Mr. Long's association with Hopewell began in 1867, so his information concerning the source of ore is probably correct.

Since roads are frequently taken for granted, it would be an unstated, obvious fact that there was a road connecting the two.

The small community at the Hopewell Mine was known as ² Birdstown. This housed the miners and their families and stabled livestock used for hauling.

Portions of this private road to the mine later became public roads. That is, it is logical to assume that when public roads were created that right-of-ways already existing on the ground were utilized, for these right-of-ways were cleared and in daily use. These portions were:

1 Long, History, op. cit., p. 7.

2 Warwick, "Breou's Official Series of Farm Maps, Chester County, Pennsylvania, Philadelphia, 1883.

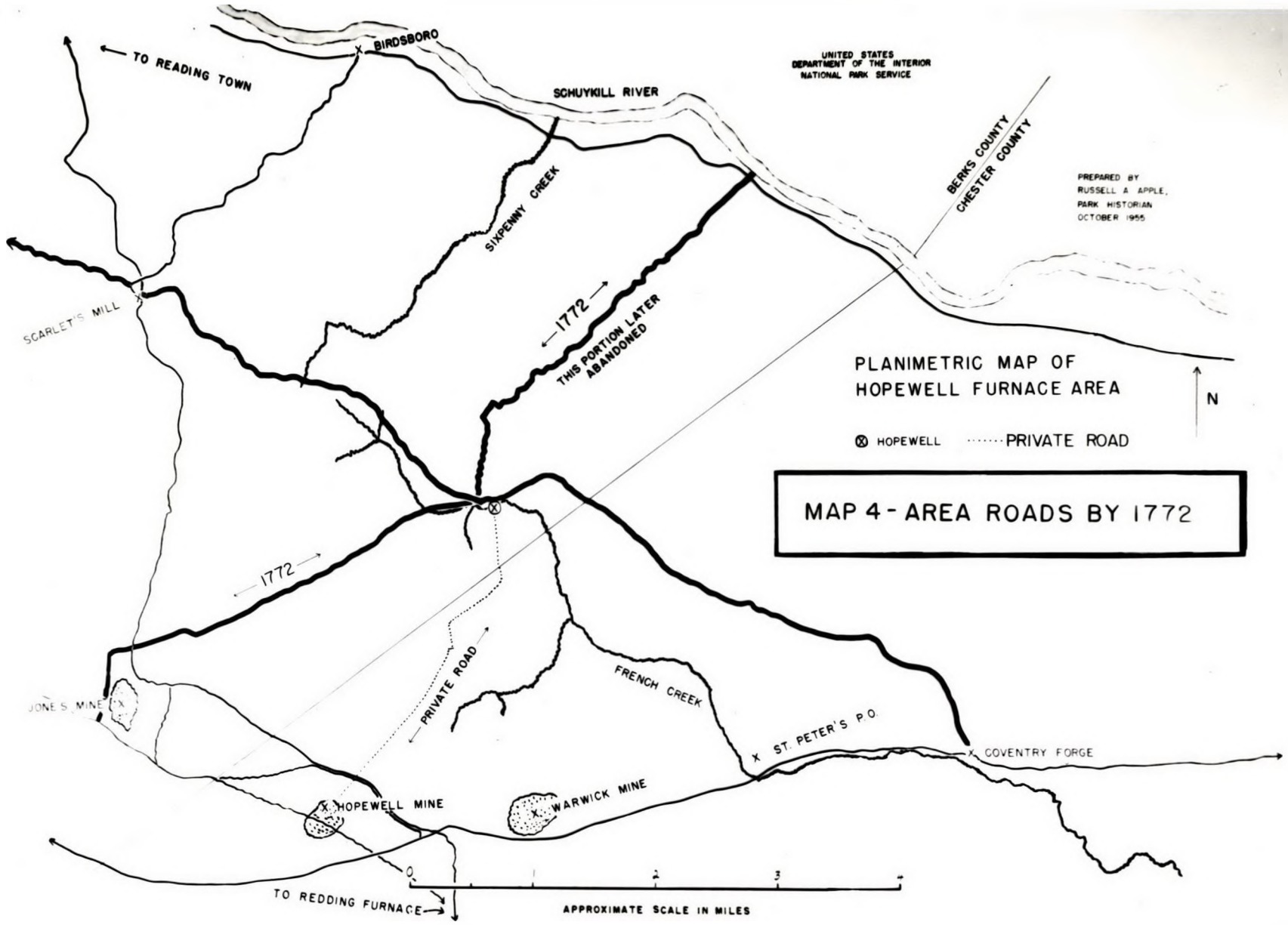
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OCTOBER 1955

PLANIMETRIC MAP OF
HOPEWELL FURNACE AREA

⊗ HOPEWELL PRIVATE ROAD

MAP 4 - AREA ROADS BY 1772



TO REDDING FURNACE

APPROXIMATE SCALE IN MILES

1. The road in the village which crossed French Creek and ran south past the tenant houses to the Chester County line. This became a portion of the 1804 Schuylkill-Birdsboro Connection. (See below and Map 6.)

2. A portion of the road which is a continuation of above, starting at the Chester County line and continuing to Warwick Mine, built in 1815. (See below and Maps 5 and 7).

The portion of the road to the mine beyond the 1815 public road mentioned immediately in 2 above remained a private road throughout its period of use. No mention could be found in the records of Chester County to indicate its confirmation as a public road nor of its being vacated as a public road. Special investigation was conducted into this point. However, it appears on several maps as a public road, on several maps as a part private and part public road, and on two maps as a private road.

Jones Mine to Schuylkill (1772)

The first public road whose description mentions Hopewell specifically is the road built in 1772 between Jones Mine and the

-
- 3 Topographic Map of the State of Pennsylvania, by H.F. Walling, Philadelphia, 1862, (includes part of road system in Chester County adjoining Hopewell); Geological Map of Chester County, by J.P. Lesley, State Geologist, n.p. 1880; "Honey Brook Quadrangle" Topography, State of Pennsylvania, G.P.O., ed. of 1907, reprint of 1921.
- 4 Atlas of Chester Co., Pennsylvania, by H.F. Bridgens, Safe Harbor, Pa., 1873; "Warwick," by County Commissioners, in Breou's Official Series of Farm Maps, Philadelphia, 1883; "Honeybrook Quadrangle," Topography, State of Pennsylvania, G.P.O., ed. of 1907, reprint of 1912.
- 5 Philadelphia to Reading, by Beers, op. cit., 1860; unnamed map by E.P. Knoll, Philadelphia, 1896.

need map maps

6

Schuylkill River. This was the second public road to enter the Hopewell area, and like the first, passed north of the Village on Brushy Hill. The 1772 road intersected the 1757 road on Brushy Hill, ran north for a short leg for more than a half a mile and then went northeast to the Schuylkill. (See Maps 4 and 6). Hopewell was a way-point mentioned in the description. The short leg which ran north from the intersection on Brushy Hill was later utilized as part of the 1804 Schuylkill-Birdsboro Connection. (See below). *part?*

Access to the 1772 Jones Mine to Schuylkill Road was probably gained by use of the Meadowbank (private) road from Hopewell Village. However, it is possible that a shorter route to the new intersection on Brushy Hill was sought by residents of Hopewell Village. The Meadowbank Road would take a wagon to a point on the 1757 road almost a quarter of a mile from the intersection, thus making the route from the Village via the Meadowbank Road more than 1900 feet long. The straight line distance from the furnace to the intersection was approximately 800 feet, with the intersection to the northwest. A straight line route would make the grade too steep for loaded wagons, but a route with a satisfactory grade could be made by bearing first west and then north, a distance of approximately 900 feet. Such a route from near the furnace to the intersection was part of the 1804 Schuylkill-Birdsboro Connection, and it is possible that the 1804 road utilized an existing private road from the Village to the intersection. See Map 6. *I do not Agree to this as called Meadow Rd. PJS*

6 Confirmed as a public road Feb. 14, 1772, as recorded in Road Book 1, p. 100 (no draft), Berks County Court House.

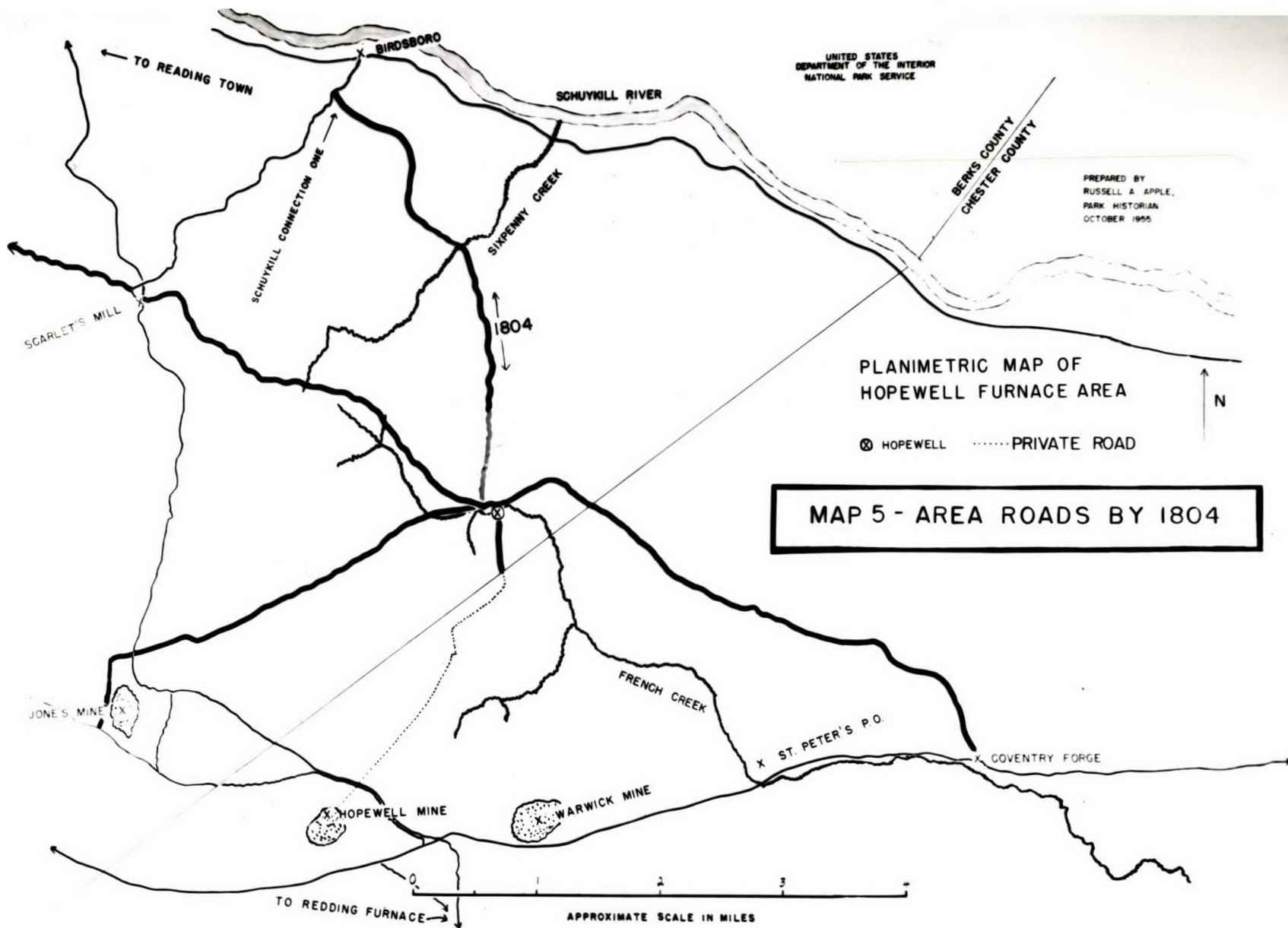
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PLANIMETRIC MAP OF
HOPEWELL FURNACE AREA

⊗ HOPEWELL PRIVATE ROAD

MAP 5 - AREA ROADS BY 1804



With the opening of this 1772 road, Hopewell was connected directly with the Jones Mine and with the network of early industrial roads to the southeast. Hopewell was also connected with the Schuylkill River.

The reason for the creation of this road, unless it was for the purpose of opening up a road over which to transport ore to Hopewell and the Schuylkill, seems obscure. The impetus seems to have been on the side of the Jones Mine interests, but it is unknown why they would desire a connection with the Schuylkill River. At any rate the portion of the road between Hopewell and the Schuylkill was abandoned before 1804. Part of the portion abandoned was utilized for an 1804 road, and the remainder utilized for an 1856 road (see below). If Hopewell interests had desired a public road to a mine, they would have probably chosen a road to their own Hopewell Mine.

Hopewell utilized the 1772 road shortly after its creation, however. In 1774, Mark Bird⁷ bought the Jones Good Luck Tract, a mine adjoining the Jones Mine. The 1772 road was then a supply road as far as Hopewell.

Schuylkill-Birdsboro Connection (1804)

The first public road to have Hopewell Furnace as its stated destination and purpose was an 1804 road which linked

7 Patricia Peirce (sic), "Iron and Copper Mining in Caernarvon Township," The Historical Review of Berks County, XVI (Oct.-Dec. 1950), p. 12. See also Harker Long, History, op. cit., p. 7.

Hopewell with a road which led from Scarlet's Mill to Birdsboro,⁸ which is on the Schuylkill River. See Maps 5 and 6. This 1804 road linked the numerous iron works in Birdsboro with Hopewell Furnace, and provided a shorter route for the movement of supplies and products between Reading Town, Birdsboro, and Philadelphia.

As the road approached Hopewell, it utilized an abandoned half mile of the 1772 road from Jones Mine to the Schuylkill, and the intersection of the 1804 road with the 1757 Scarlet's Mill to Coventry road coincided with the earlier intersection.

should show as map - document

Since the 1804 road was the first public road to enter the Village, a route with proper grade was found down Brushy Hill. The 1804 road continued through the Village, passed between the office-store building and the barn, crossed French Creek with a bridge,⁹ and went straight on through the tenant area to the Chester County line. The section of the road through the tenant house area was believed to have been originally a portion of the private road to Hopewell Mine.

copy

Do not take off

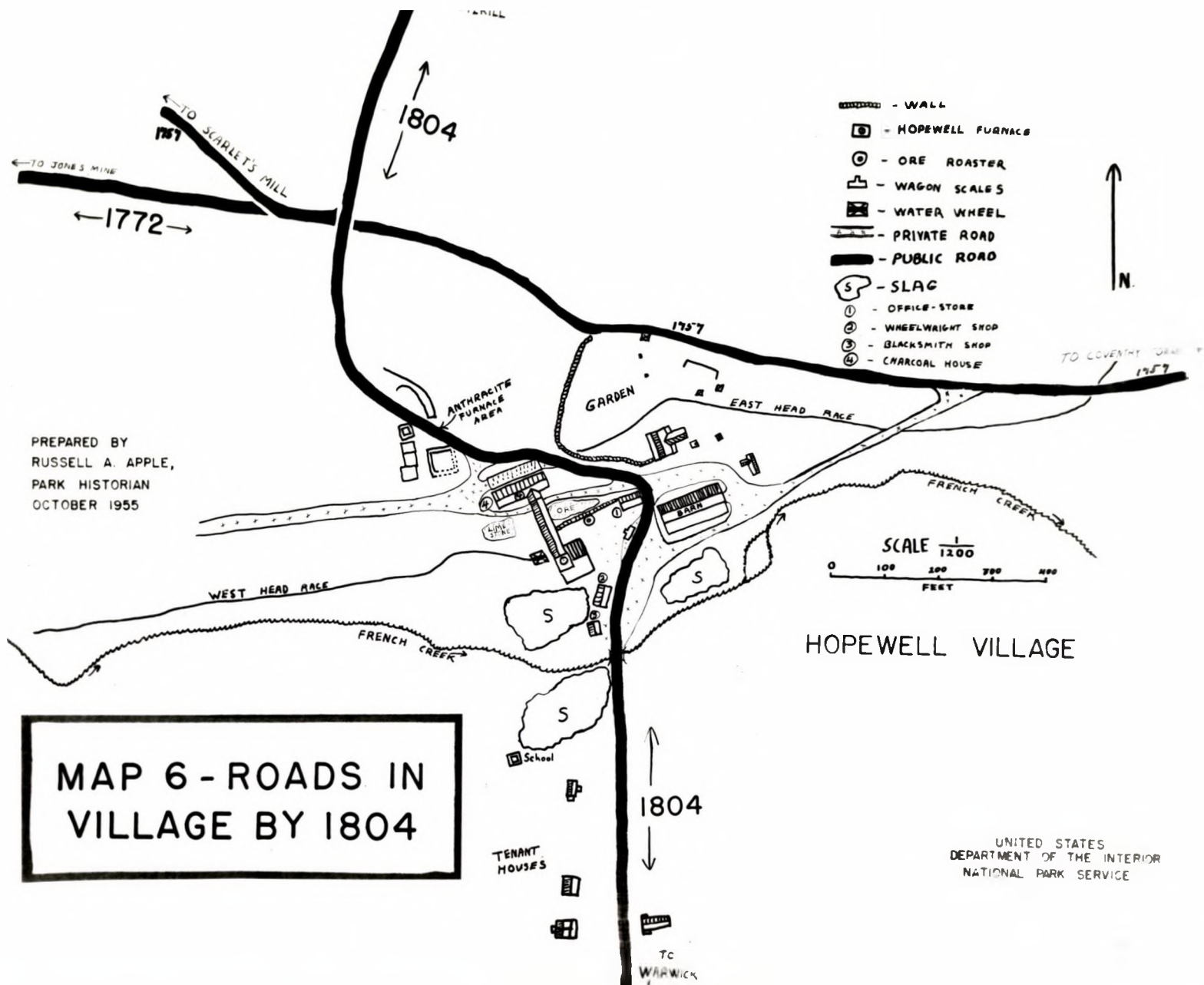
up top p. 29

The detail of the route of the 1804 road down Brushy Hill has been a problem to locate. The description and draft have been of aid, but on-the-ground traces are confusing. There seems to have been a number of roads or roadbeds down Brushy Hill, and it is

8 Declared a public road April 20, 1805, (draft submitted to the court December 31, 1804), as recorded in Road Book 2, p. 185, Berks County Court House.

9 "There was always a bridge over French Creek on the Warwick Road." Mrs. Sally Boone, in interview with J.C.F. Motz, Mar. 22, 1941, p. 3.

not given



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**MAP 6 - ROADS IN
VILLAGE BY 1804**

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possible that they are all a part of the 1804 road. A complicating factor has been the placement in 1849 of a blast furnace, which utilized anthracite coal, on the road location. The erection of this anthracite furnace, its associated buildings and supporting roads has left a confusing pattern of ruins and traces. This area is now marked with a second growth forest complex.

proof?
logic

But its approximate location, as placed on Map 6, has been verified by the original description and draft, by on-the-ground examination, and by some secondary historical evidence.

interference
with work

Charles Sheridan Painter, who was born in Hopewell Village in 1898, remembers that his grandfather told him that he formerly came down a road near the anthracite furnace through the so-called cedar pasture.¹⁰

could be
just a
road for
the
anthracite
furnace

Hunter Care told Historian Roy E. Appleman that it was possible to drive through the charcoal unloading shed north of the Charcoal House, but that if the shed were^{w^{as}} full of charcoal or blocked with a wagon, that it was possible to utilize a road "above"¹¹ (north or uphill) the shed. It is believed that this road "above" refers to a part of the 1804 road. In his book on the history of Hopewell, Long also said

It is fair to conclude that if the big [anthracite] furnace at Hopewell would have been a success, they would soon have laid out a new road from the furnace to the top of the hill.¹²

"laid out"
implies
a brand
new road
to me

10 C.S. Painter, in an interview with Joseph R. Prentice, Oct. 8, 1955.

11 Appleman, "Notes after Long Interview," op. cit., p. 6.

12 Long, History, op. cit., p. 5.

ILLUSTRATION FOUR

1804 Road by Wheelwright Shop



ILLUSTRATION FIVE

1804 Road past Tenant Houses



ILLUSTRATION SIX

1804 Road between Barn and Office



ILLUSTRATION SEVEN

1804 Road; Private Road Intersection



It is believed that Long's use of the word "new" refers to a better roadbed and not to a completely new road. ?

Other short stretches of this 1804 road through the Village have been identified in recorded interviews on file at Hopewell Village National Historic Site, and the traces of these stretches are evident today. *of the site*

On Map 6, some supporting private roads have been placed. Traces of these roads are evident today, and some are still in use as service roads. The long, private road leading west of the Charcoal House is the road to the Hopewell Dam. The private road leading from north of the office building through the long building connecting the Charcoal House and the Furnace was for the deposit of iron ore and limestone in huge piles in the open. The link of this private ore road with the 1804 road between the Charcoal House and the Anthracite furnace area was to permit the empty ore wagons to return to the mine by driving straight ahead instead of trying to turn around in a restricted area. West of the barn were the wagon scales where loaded ore wagons were weighed as they arrived from the mine. A small by-pass, private road, traces of which exist, to accommodate the wagon route over the platform scales has been found. (See Map 6). A private road is indicated which passed through the charcoal unloading shed just north of the Charcoal House. ?

Schuylkill Connection Two (1809)

Utilization of the Schuylkill River for the transportation of Hopewell's products down river to Philadelphia was apparently the

reason for the building of a public road in 1809 which reduced¹³ the distance from Hopewell to the river. This 1809 shortcut to the Schuylkill River left the 1804 Schuylkill-Birdsboro Connection approximately one and three quarters miles on the Hopewell side of Birdsboro and followed in a general manner, the course of Sixpenny Creek to the river. See Map 7.

Second Jones Mine Road (1809)

The second public road to enter the Village itself was the second public road to connect the Jones Mine area with Hopewell Furnace. With Hopewell the owner of the Jones Good Luck Tract Mine, the need for a road which connected the mine with the furnace was understandable. The need for a second road is not as easily understood. It is surmised that the first road--built in 1772 and part of it abandoned--had become impassable or that its route was a poor one for an all-weather road. Hopewell interests seemed to be the motivating factor in the establishment of this second road. The road was laid out from Hopewell to the Jones Mine area, while the 1772 road had been laid out starting at Jones Mine and continuing to the Schuylkill. Hopewell was a way-point along this road, not a terminus.

The second Jones Mine Road was declared open for public use during the November Sessions of the Court of General Quarter Sessions, Berks County.¹⁴ See Maps 7 and 8.

¹³ Declared a public road in July 1808, as recorded Road Book 2, p. 259, Draft in Draft Book 1, p. 283, Berks County Court House.

¹⁴ Opened December 31, 1809, as recorded in Road Book 2, p. 260, Draft in Draft Book 1, p. 289, Berks County Court House.

In entering the Village, the 1809 Jones Mine Road forded French Creek just west of the bridge which carried the 1804 road across. It was long a mystery why the 1809 road had not intersected the 1804 road south of the bridge so that wagons could enter the Village over the bridge. This intersection exists today, and seems the logical route. However, the existence of a slag pile which blocked this possible intersection during the operation of the furnace has recently been discovered. The pile caused the road to veer and to cross the creek bed near the road's eastern terminus.

What Bridge?
Newly mentioned
before Civil War.
Douglas Ford
across creek
long time
why a bridge
here?

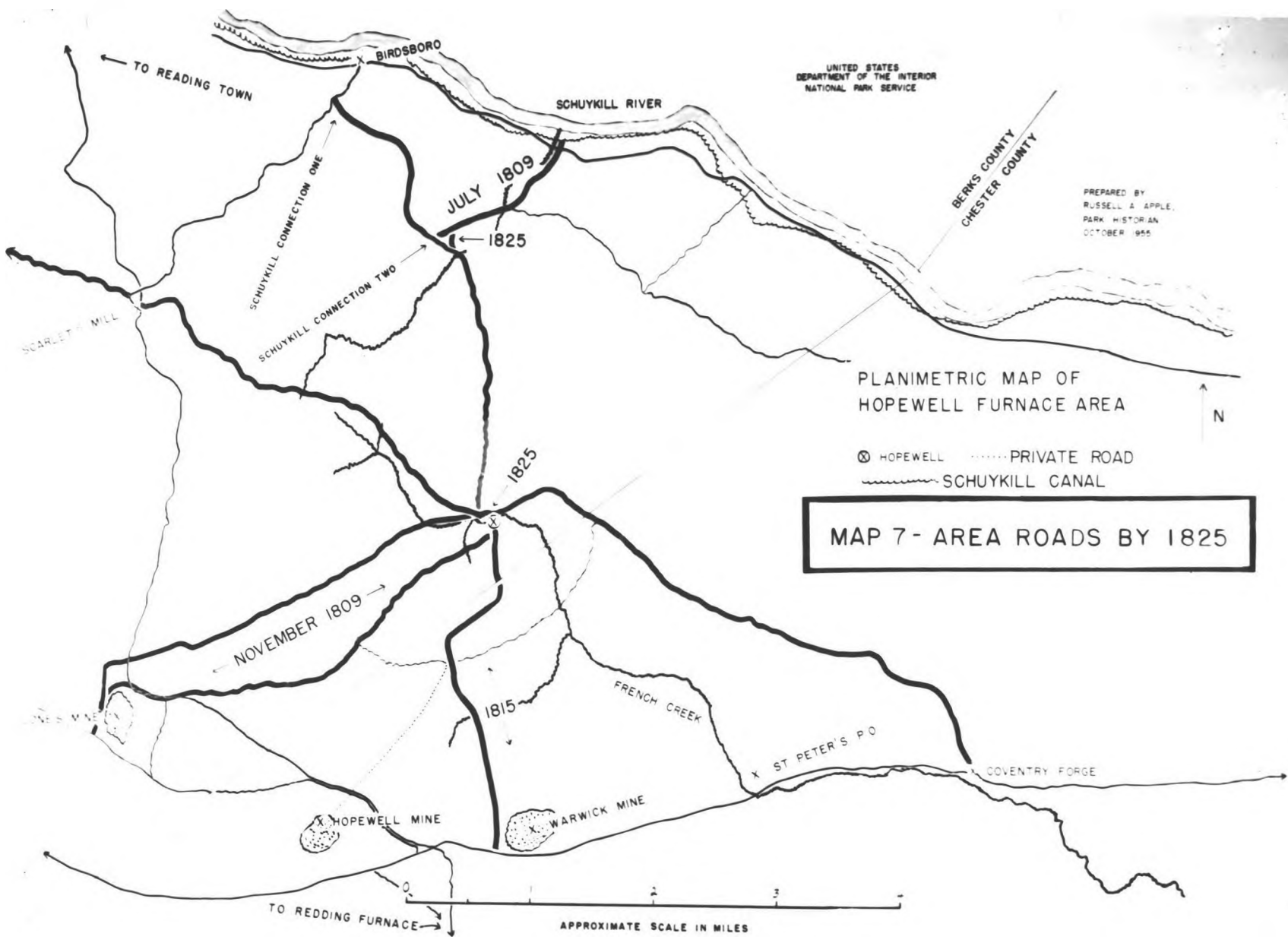
The slag
pile was
not that
large in
1809.
JRS

After the fording, the 1809 road passed to the south side of the Blacksmith Shop, rounding the shop's southwest corner, and joining the 1804 road. The trace of this eastern end exists today, and the site of the ford is clearly visible.

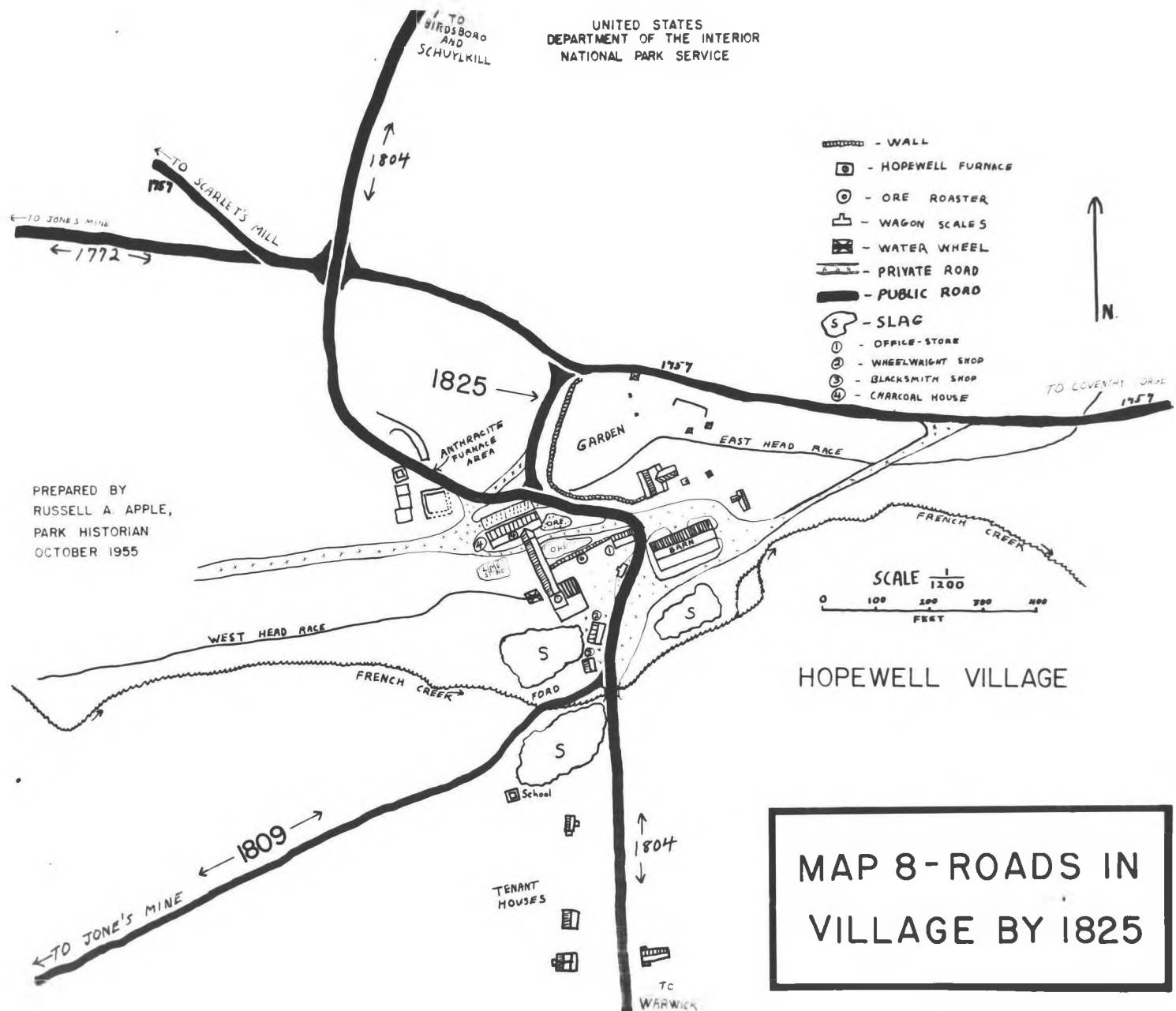
Warwick Connection (1815)

The petition to establish a road from the Warwick Mine to Hopewell Furnace was signed by men interested in the iron industry of Chester County. Perhaps the Hopewell owners were just as interested in the opening of this road, but as residents of Berks County, they did not sign a Chester County petition.

-
- 15 Charles Sheridan Painter, in interview with Joseph R. Prentice on site, Oct. 10, 1955. Mr. Painter said the pile was removed for road building purposes 1907 or 1908.
- 16 Mrs. Sally Boone, interview by Motz, Mar. 23, 1941, op. cit.; Appelman, "Notes after Long Interview," op. cit.
- 17 Petition with original papers, filed in Vol. 31, p. 170, Chester County Court House.



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SCALE $\frac{1}{1200}$
0 100 200 300 400
FEET

HOPEWELL VILLAGE

MAP 8-ROADS IN
VILLAGE BY 1825

It is believed that the northern portion of this road utilized a portion of the private mine road which led from the furnace to Hopewell Mine. See Maps 5 and 7. Hopewell was now connected by direct roads with all three of the major iron mines in the area.¹⁸

Realignment of the 1804-1809 Roads (1825)

While this realignment was actually the insertion of two short legs to eliminate corners and to shorten the distance from Hopewell to the Schuylkill River, the project was classified as the laying out of a new public road for the entire distance from Hopewell to the Schuylkill. According to the draft, the major portion of the 1804 Schuylkill-Birdsboro Connection and the 1809 Schuylkill Connection Two were utilized.¹⁹

As will ^{shown} be seen by Map 7, a curve was placed to ease and shorten the intersection of the 1804 and ^{July} 1809 roads as part of the road work in 1825. The believed detail of the road construction in Hopewell Village is shown in Map 8.

The starting point of the description and draft of the 1825 road realignment was "Beginning in the old road at Hopewell furnace opposite to the office door thence through the land of Brooke & Company...." Brooke and Company were the then owners of the furnace.

18 The connection to Warwick Mine (near Warwick, Pa., which was formerly called St. Marys) was declared open as a public road on May 4, 1815, as recorded in Road Book D, p. 389, Chester County Court House.

19 Original Draft filed in Drawer marked Union Township, Berks County Court House. Road declared a public road on Apr. 8, 1825, as recorded in Road Book 1, p. 622, Draft in Draft Book 1, p. 374, Berks County Court House.

The legal description gives the first course and distance as North five degrees West for a distance of sixty nine perches (N5°W69 p.). A perch is the same length as a rod, sixteen and one half feet. North five degrees West means that the course is five degrees to the west of North, or a compass course of 355°.

The first course and distance on the original draft submitted by the viewers was North seventeen degrees West for a distance of twenty four perches (N17W24 p.).

Before starting to lay out on the ground either of these courses it was necessary to establish the starting point and to find the right office door. Points in front of all known office doors were tried and from these points both courses were tried. In all cases results were unsatisfactory in that they did not agree with existing roads, traces or other evidence. Accordingly, attempts to locate the 1825 road by means of retracing it on the ground with the description and survey as guides were abandoned.

It is believed that the first course of the road took the road up Brushy Hill by a more direct route than that used by the 1804 Schuylkill-Birdsboro Connection. This made this part of the road steeper and more difficult to use with a loaded wagon. Charles Sheridan Painter remembers that a caretaker by the name of Miller, who lived in the Ironmaster's Mansion early in the 1900's, frequently hitched up extra mules to loaded wagons passing through to aid them on this section of the 1825 road up Brushy Hill. Mr. Painter also remembers that teamsters would frequently ask permission to take their wagons up the easier Meadowbank Road, or to use the ore wagon

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ILLUSTRATION EIGHT

1825 Road up Brushy Hill



road through the long building which connected the Charcoal House with the furnace, then round the west end of the Charcoal House and take a private cut-off road which entered the 1825 road part way up Brushy Hill.²⁰ This cut-off has been placed on Map 8. The trace of this cut-off road is plainly visible.

The status of the portion of the 1804 road which traversed Brushy Hill in 1825 is not known. It is surmised that it was in poor condition, or perhaps it required frequent or costly maintenance to keep it in usable condition. Possibly the township road supervisors, who maintained public roads, felt that since Hopewell's wagons were the most frequent and hard users, that Hopewell should undertake a great^er share of the maintenance.

It is probable that the portion of the 1804 road up Brushy Hill continued in use at least until the abandonment about 1855 of the anthracite furnace. It is logical to assume that the placement of the anthracite furnace about 1849 was based on the presence of the 1804 road section up Brushy Hill. OK
CJFS

It was undoubtedly hoped that the 1825 route up Brushy Hill would prove satisfactory. Examination of the probable grade and available historical evidence indicate that this portion of road was not too satisfactory for use by wagons loaded with pig iron. It is possible that the 1825 road up Brushy Hill became a by-pass road for non-industrial uses, such as for carriages, and for the use of light or empty wagons. This would keep them out of industrial traffic on

20 C. S. Painter, in interview with Joseph R. Prentice, Oct. 10, 1955.

the 1804 road and its deep ruts. This section of the 1825 road has been termed the "buggy road" to indicate its probable use by light vehicles only, and to distinguish it from the 1804 wagon road.

Whatever its real purpose, the petition, signed by Clement Brooke, among others, said

That in early times of the settlement of Berks County a Road or path was opened from Hopewell Furnace leading towards Douglass ford on Schuylkill which has been in use as the only pass over a rough & hilly part of country to that ford ever since and owing to the roughness of the steep elevation of the ground it is with great difficulty that it can be used for loaded waggons to travel even with a very moderate load, and much labour is required to keep it at all passable - -

*is 1804
early time?*

*so they
make an
even
steeper
road!*

The Canall along Schuylkill is now going into operation it is necessary that there be as good roads as the nature of the ground will admit, for the produce of the Furnace and Iron works in Berks County to find a cheap way to market on said Canall.²¹

It is possible that the viewers claimed the entire road length on the strength of this petition, and it is also possible that they did considerable repair to the lengthy portions of the 1804 and 1809 roads which they followed, as well as building the two short sections.

The importance of the canal for the distribution of Hopewell's products is attested to by the many "Canall Books," which list the shipments, which books are preserved at Hopewell Village.

It should be noted that none of the maps examined that were dated after 1825 show or indicate the existence of two roads

²¹ Petition, Aug. 5, 1824, filed in drawer marked Union Township, Berks County Court House.

up Brushy Hill. These roads are shown on Map 8 in the positions they are believed to have occupied.

As of the opening of the 1825 road up Brushy Hill, the road system in Hopewell Village proper was completed. It is believed that by 1825 all private and public roads in the village were in existence as shown on Map 8. Further additions to the public roads serving Hopewell Furnace occurred during attempts to shorten and better the connections with the Schuylkill Canal.

Shortcut to Schuylkill (1827)

With the canal an important economic lifeline for the distribution of products, which until about 1840 included castings, it was only natural that shorter and better ways would be sought to the canal. While the original papers could not be located, it is believed that the canal connection at Monocacy was important enough and used enough to warrant a shortcut. This shortcut was completed²² in 1827. It is shown on Map 9.

Schuylkill Connection Three (1856)

Until approximately 1848, the canal was probably thought of by Hopewell as a means to distribute products. But for the years between and including 1849 to 1855, it was utilized to import into Hopewell a new raw material, anthracite coal. This coal was thought for technical reasons to be a better fuel than the charcoal formerly used, and an anthracite furnace was erected at Hopewell to utilize

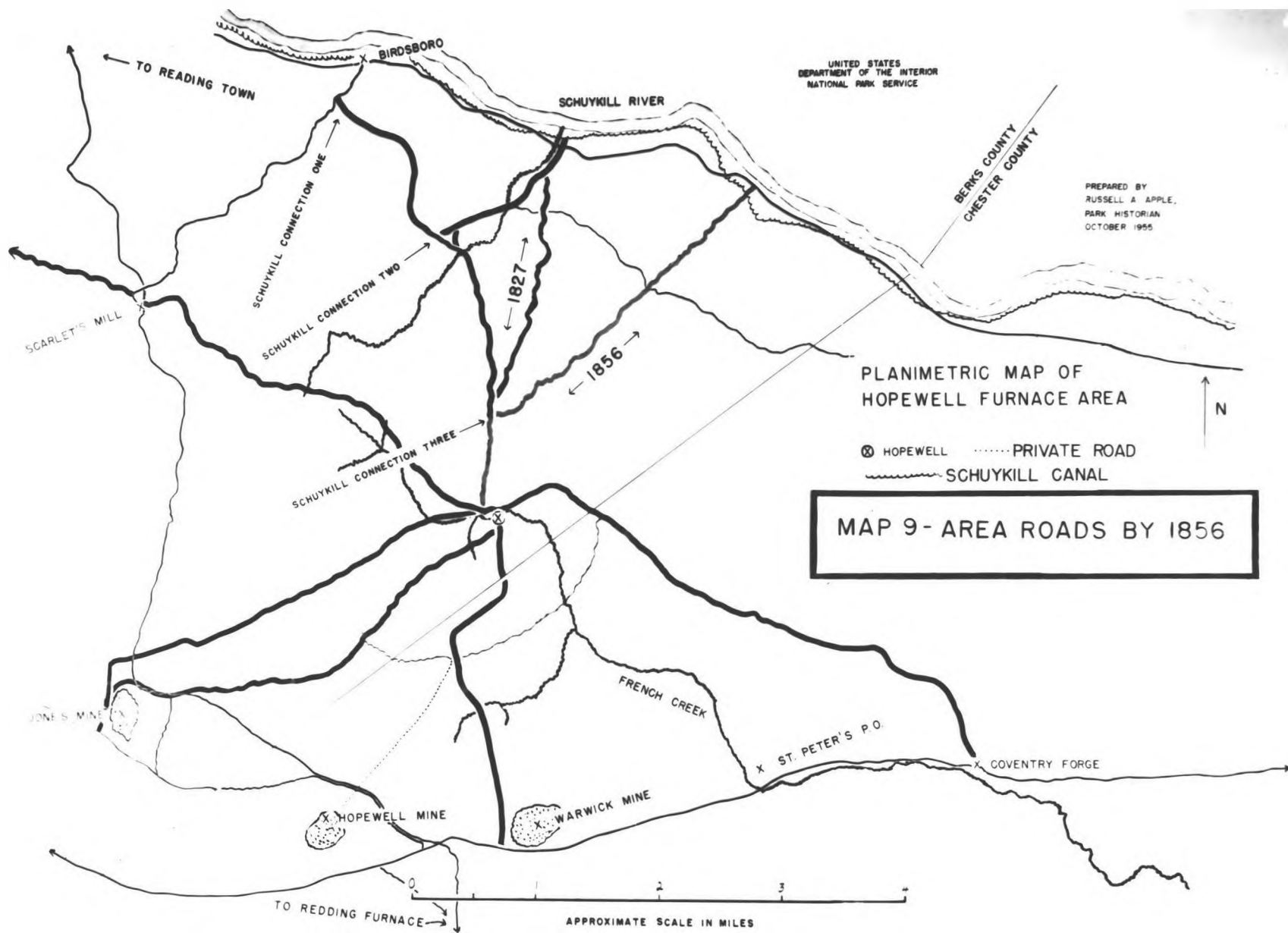
22 Road declared a public road in April 1827, as recorded in Road Book 3, p. 196, Draft included, Berks County Court House.

it. Anthracite fuel was less compressible than charcoal, which condition made it possible to build a wider and higher furnace, one which could hold more iron ore. The limiting factor heretofore had been charcoal. If too heavy a load were placed on top of it, the charcoal packed too tightly to permit the blast to pass through it, and difficulty was experienced in smelting. The compressibility of charcoal limited the height of charcoal furnaces to 30 feet, and the width of the inner chamber, or bosch, to nine feet, since the design of the bosch served to help support the charge inside the furnace. The use of anthracite coal removed this objection to, and limiting factors of, charcoal. It was possible to smelt more ore and produce more iron in a larger furnace, and one was built in Hopewell Village along, or on, the portion of the 1804 road up Brushy Hill. While the furnace was being built, a private road was laid out from the canal to near Hopewell.²³ It utilized the route of the abandoned portion of the 1772 Jones Mine to Schuylkill Road (see above). See Map 9. The purpose of this road was to transport to Hopewell the anthracite coal brought to Hopewell Landing at Port Union, a canal port on the west side of the Schuylkill River opposite Douglassville.²⁴

Harker Long believed that if the anthracite furnace had been successful, that a track would have been laid over the road for

23 Long, History, op. cit., p. 5. Long's tenure at Hopewell began about 13 years after the anthracite furnace episode was completed.

24 Howard Gale, "Notes after interview with Charles Sheridan Care, Feb. 24, 1941"; Long, History, op. cit., p. 5. See also Jackson Kemper, "Notes taken after conversation with Mr. Harker Long, Aug. 7, 1936."



25

use by horse and mule drawn cars. The failure of the anthracite furnace has been blamed on the cost of fuel, and the furnace was taken apart and moved to Monocacy to be nearer the canal and the source of fuel. Mr. Long states that after the furnace had been moved that the private road built from the canal was sold to the "township."

26

This road was declared a public road in 1856.²⁷ At the time of the declaration, damages were awarded to the owners of the land crossed by the road. Edward and George Brooke together received \$75.00, and Brooke and Buckley & Company received \$150.00.²⁸

The making of this road into a public road did not remove it from the use of Hopewell Furnace as a service road.

This completes the records found of the public roads which served Hopewell Furnace. Map 9 shows these roads as I believe them to have existence from evidence presented in this report.

25 Long, History, op. cit., p. 11.

26 Long, History, op. cit., p. 5.

27 Declared a public road Sept. 13, 1856, as recorded in Road Book 5, p. 145, Draft included, Berks County Court House.

28 Road Book 5, p. 145, Berks County Court House.

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