NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the National Register of Historic Places registration Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

X New Submission _____ Amended Submission

A. Name of Multiple Property Listing

Historic and Architectural Resources in Knoxville and Knox County, Tennessee

B. Associated Historic Contexts

(Name each Associated Historic Context, identifying theme, geographical area, and chronological period for each>)

1. Early Settlement and the Frontier, 1785-1860
2. Suburban Growth and Development in Knoxville, 1861-1940
3. Ethnic Settlement and Migration, 1785-1940

C. Form Prepared by

name/title Ann K. Bennett, Senior Planner
organization Knoxville-Knox County Metropolitan Planning Commission date May 1994
street & number 403 City County Building, 400 Main Avenue telephone (615) 521-2500
city or town Knoxville state Tennessee zip code 37902

D. Certification

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

Herbert L. Harper — 8/5/94
Signature of certifying official/ Title — Date

Deputy State Historic Preservation Officer, Tennessee Historical Commission
State or Federal agency and bureau

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

Signature of the Keeper — 9/23/94
Date of Action

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B. Fill in page numbers for each section in the space below.

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☒ Local Government
- ☐ University
- ☐ Other

Name of repository:

Knoxville-Knox County Metropolitan Planning Commission

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____ New Submission _X_ Amended Submission

A. Name of Multiple Property Listing

Historic and Architectural Resources in Knoxville and Knox County, Tennessee

B. Associated Historic Contexts

(Name each Associated Historic Context, identifying theme, geographical area, and chronological period for each>)

4. Institutional and Organizational Buildings, 1785 - 1940
5. Cemeteries and Gardens, 1785 - 1940
6. Industrial Growth and Development, 1785 - 1940
7. Barber, George, Architect, (1854-1915)
8. Lustron Houses in Knoxville, 1949 - 1951

C. Form Prepared by

name/title Ann K. Bennett, Senior Planner
organization Knoxville-Knox Co. Metro. Planning Commission date May 1996
street & number 403 City Co. Bldg., 400 Main Ave telephone (423) 521-2500
city or town Knoxville/Nashville state Tennessee zip code 37902

D. Certification

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

Herbert L. Harper — 10/21/96
Signature of certifying official/ Title — Date

Deputy State Historic Preservation Officer, Tennessee Historical Commission
State or Federal agency and bureau

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

Carol M. White — 12/3/96
Signature of the Keeper — Date of Action

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B. Fill in page numbers for each section in the space below.

Page Numbers

E. Statement of Historic Contexts

(If more than one historic context is documented, present them in sequential order.)

F. Associated Property Types

(Provide description, significance, and registration requirements.)

G Geographical Data

H. Summary of identification and Evaluation Methods

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

I. Major Bibliographical References

(List major written works and primary location of additional documentation: State Historic Preservation Office, other State agency, Federal agency, local government, university, or other, specifying repository.)

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☒ Local Government
- ☐ University
- ☐ Other

Name of repository:

Knoxville-Knox County Metropolitan Planning Commission

E. STATEMENT OF HISTORIC CONTEXTS

1. EARLY SETTLEMENT AND THE FRONTIER, 1785-1860

The Political Boundaries and Geography

Knox County, Tennessee, is bounded by seven counties: Anderson County to the north, Grainger County to the northeast, Jefferson County to east, Sevier County to the southeast, Blount County to the south, Loudon County to the west and Roane County to the northwest. Its present boundary has not changed since 1866; however, prior to the county's creation in 1792, the area remained in an almost constant state of transition. Soon after the close of the Revolutionary War, Knox County was in the District of Washington in the western territory of the State of North Carolina. In 1777, Washington County, North Carolina was created, roughly encompassing the present boundaries of Tennessee. Greene County was developed in 1783 from lands to the west of Washington County's present border; the creation of Hawkins County three years later divided Greene County in half. The Knox County area remained a part of Hawkins and Greene counties until 1792. Knox County's original boundary encompassed all or part of present-day Knox, Sevier, Blount, Roane, Anderson and Grainger counties.

Today approximately thirty miles long and twenty miles wide, Knox County contains 526 square miles. Elevations range from approximately 750 feet above sea level in the extreme southwest corner of the county near the Tennessee River to 2100 feet above sea level in the mountainous region to the northeast. The county lies in the heart of the Great Valley of East Tennessee, a segment of the Great Appalachian Valley which extends from New York to central Alabama. The topography of the valley lends itself to travel in the northeast to southwest direction, with links to areas beyond the state's boundaries. As a result, Knox County, once passes were discovered through the mountain ranges to the east, functioned as a chief transportation route for early westbound settlers.

During colonial times, the valley's southeast boundary, the Unaka Mountains, was a major barrier to settlers crossing into North Carolina's western territory. The region comprising what is now Tennessee was commonly referred to as the "lost colony." Into the 19th century, most of the roads in Tennessee were barely traversable by wagon, consisting of nearly unimproved bison or Indian trails. Rivers and their valleys, which provided alternatives to those unimproved trails, were important transportation routes. As settlers moved southwest they came into the region by routes that included trails along the Holston and French Broad Rivers, or by rafting the rivers themselves. Consequently, the rivers and the valleys were chief contributors toward the development of Knoxville, bringing settlers into the area and encouraging the city's growth as a major trade and communication center.

As the French Broad to the southeast and the Holston to the northeast provided access into the region, they combined to form the Tennessee River, historically, and mistakenly, sometimes called the Holston River. The

Holston and French Broad Rivers meet about four-and-a-half miles east of downtown Knoxville. These rivers, along with their tributaries, drain the entire Great Valley of East Tennessee and have played a dominant role for early settlers and the location of Knoxville itself.

The European history of Tennessee begins in 1673 when the land known today as the sixteenth state in the Union was a western territory claimed by both England and France. Frenchmen Jacques Marquette and Louis Joliet explored the Mississippi River in 1673 and in the same year two Englishmen, James Needham and Gabriel Arthur, visited the "Tomahitan" Indians in East Tennessee. Needham and Arthur, emissaries of a Virginia trader, were probably the first Europeans to reach the area. Soon trade was established with the Overhill Cherokee in East Tennessee. The Virginia traders, always few in number, are referred to today as "longhunters." They were adventurers and explorers who commonly settled in the Indian villages or constructed temporary shelter in the wilderness. Stephen Holston was one of them. A Virginia pioneer for whom the Holston River was named, he explored the river in 1748, and may have been one of the first Europeans to actually view the future site of Knoxville. The French Broad River was named by explorers from North Carolina, who when they viewed it from the Blue Ridge Mountains, realized it led to French territory.

Knox County's Settlement

In 1756, a company of soldiers under the command of Major Andrew Lewis arrived on the north bank of the Little Tennessee River west of Knox County. The Cherokee chiefs had appealed to the governors of both Virginia and South Carolina to build a fort along the Little Tennessee in order to protect their women and children from attacks by the Shawnee (or northern) Indians while their warriors were away fighting for the English. The South Carolinians built the fort, located in what is now Monroe County (near the Blount County line), and named it Fort Loudon (NHL - 6/23/65), although it was sometimes referred to as the Virginia Fort. Strained relations between the Cherokee chiefs and the governor of South Carolina led to the eventual demise of Fort Loudon in 1760.

Within the next ten years, two events occurred which had a significant impact on early settlement in Tennessee. The first was the signing of the Treaty of Paris in 1763. It ended the Seven Years War, with England prevailing over France for control of the eastern part of the Mississippi Valley, including East Tennessee. The second was the signing of the Treaty of Fort Stanwix. This treaty, executed at Fort Stanwix, New York on November 5, 1768, contained a deed of cession to the King of England by the Confederacy of the Six Nations. The Indian Nations relinquished their lands to the north and east of Tennessee River. Not only did the treaty alleviate the Indian threat, it also allowed English settlers to disregard the King's prohibition against his subjects settling west of the mountains.

Only one month after the Treaty of Fort Stanwix was signed, the first permanent settlement was established in Tennessee near the Virginia border. In early 1769, Captain William Bean settled further into the uncharted territory, establishing his residence along the banks of the Watauga River in upper East Tennessee, near present-

day Johnson City in Washington County. Additional settlers, many of whom were from North Carolina or Virginia, joined Bean and eventually created their own governing body, the Watauga Association. When news of the Revolution reached Tennessee in 1775, the settlements formed themselves into Washington District, created July 5, 1776; it was the first geographic division to be named for George Washington.

The British could not reach the back country, but were able to incite Indian hostilities and furnish the Indians with arms. An attack against the Watauga settlement led by Dragging Canoe and Old Abraham of Chilhowee failed. In retaliation, Colonel William Christian led several groups of militia against the Cherokee and destroyed their villages along the Little Tennessee River. Additional campaigns against the Cherokee were led by the men who later brought their families into Knox, Blount, and Sevier counties; some of them probably selected the land where they would eventually settle on these campaigns. The Battle of King's Mountain, when Colonel Evan Shelby succeeded in capturing and destroying the arms and supplies furnished to the Indians by the British, showed the British they could not control the back county. The end of the Revolutionary War caused Indian hostilities to decrease.

A stream of pioneers continued to trickle over the mountains during the 1770s. As they guided their boats down the Tennessee River system, the Knoxville area became familiar to many of them. The current State of Tennessee became a territory of the State of North Carolina in 1777. Settlers soon began to claim land, their settlement made possible by North Carolina's Land "Grab" Act of 1783 which opened the state's western lands to purchasers at ten pounds per one hundred acres. Land titles were acquired under this act by first marking the boundaries of a tract of land. This "entry" was submitted to the legally appointed entry-taker, who issued a warrant for the survey to the claimant. An official surveyor from the entry-taker's office then surveyed the land and submitted the drawn plat to the secretary of state, who was authorized to issue a grant which the governor authenticated. The title was finally clear when the grant was recorded in the deed records for the county where the land was located. John Armstrong was the entry-taker, and a land office was opened in Hillsboro, North Carolina in 1783. Martin Armstrong was the surveyor. All of the land grants issued in present day Knox County at that time were registered in "Greene County."

In 1783, the year that the Land "Grab" Act was passed, James White, James Conner, Robert Love, Alexander McMillan and surveyor Francis Alexander Ramsey (Ramsey House NR 12/23/69) explored the Knox County region. White returned to Knox County with his family in 1785, settling on the north bank of the French Broad River in Riverdale. In his *History of the Lebanon Presbyterian Church*, written in 1875, Dr. James Getty McCready Ramsey designates the location of White's first house as being "five miles up the French Broad River from its fork with the Holston, on property formerly owned by John Campbell, Esq., and now owned by James Kennedy." Local residents state that a stone foundation on property presently owned by a Campbell-Kennedy descendant (Survey No. 2495) is the foundation of White's first house.

Several additional sources confirm that in 1785 White and his family first located four to five miles east of the forks of the rivers along the north bank of the French Broad. Previously the site of White's Fort, located in

present day downtown Knoxville, was thought to have been White's first permanent residence in Knox County. White only stayed along the French Broad one year. By 1786, he had moved to the site of White's Fort in Knoxville. Others had settled and remained in the Riverdale area, however, including fellow explorers Cozby and Ramsey.

North Carolina ceded its western territory to the Federal government in 1784. The settlers west of the Appalachians formed Franklin, a new state. The State of Franklin's Indian policy supported the settlers' claims against the Indians, encouraging the settlers to purchase land in the area which is now Knox County. North Carolina quickly rescinded its cession, but the proposal of a new state was popular with western settlers. North Carolina was not able to provide troops or moneys for the defense of settlers in the western territory; the settlers felt that only through the authority of a new state could they be assured of continuing to occupy their lands. Hence, the State of Franklin remained in existence and received a great deal of support. John Sevier, as the publicly recognized leader of the State of Franklin, met with Cherokee Indians at Major Henry's house, located on Dumplin Creek in Sevier County near the present boundaries of Knox County. A treaty was negotiated which provided that the Cherokee relinquish some of their lands, permitting white settlement. The treaty provided an additional spur to the rapid migration of whites into the area.

Neither North Carolina nor the U.S. government acknowledged the State of Franklin, and in 1786 three of the four counties in what is now Tennessee resumed their representation in the North Carolina assembly. Greene County (present-day Knox County) was the only county that remained faithful to Sevier and the State of Franklin. The North Carolina Legislature separated Hawkins County from Greene County. From 1787 until 1789, when the last vestiges of the State of Franklin were restored to North Carolina's jurisdiction, Knox County was ruled by two governments: Hawkins County, North Carolina and Greene County, Franklin.

Settlement in Knox County followed the river valleys, which contained the earliest trails. Among the first areas to be settled were the headwaters of Flat Creek to the northeast and Beaver Creek and Bull Run Creek in the northwest. Settlers also migrated down the French Broad and Holston Rivers, following the river banks and establishing homesites there. As settlers began to pour into the new territory, drawn by the lure of land, they settled near each other, drawn to a center that could offer them some essential service. In the earliest settlements in Knox County, that center was often a fort or "station". Later, the center may have been a mill that could grind the settlers' corn or wheat into flour, or a ferry that offered them transportation across one of Knox County's major rivers - the Holston, French Broad or Tennessee. These settlements were located at nodes along the roads that grew from the original trails traveling through the county. Four signs of civilization set the settlement pattern for much of Knox County - stations, mills, ferries and roads. Their location in Knox County is discussed below.

Stations and Mills, Ferries and Roads

Since the Indian threat was very real during the 1780s and 1790s, the early pioneers tended to settle near each other. They clustered around a "station," the strongest cabin in a settlement, where nearby settlers could gather for safety from Indian attacks. Some stations were simple log cabins, while others were fortified blockhouses. Usually, stations were located about ten miles apart, or one day's journey by loaded wagon. After the mid-1790s, when the Indian threat had diminished, the stations were often stage coach stops for travelers on Knox County's primary roads.

Many of Knox County's present communities began as stations. Ball Camp, White's Fort, Sawyers, Adair, Manifold, Greene, Gilliam, Gillespie, Bartlett, Cavett, Campbell, McTeer, Wells, Bennett, Byrd, and Hackett were names associated with stations by the 1790s. Some of these stations have left the legacy of place names; the buildings of which they were composed no longer exist.

Stations were linked to each other by either road or river. Early roads that crossed Knox County included Emory Road, or the Yellow Mountain Trace, the North Carolina Road or Avery's Trace, Rutledge Pike, Sevierville Pike, Maryville Pike, Tazewell Pike, the Chattanooga Road and roads like Washington Pike, which led to early churches or mills.

Emory Road is responsible for the settlement of several communities which sprang up with a forts as their original center. The first fort along the road in Knox County (to the east) was Sawyers' Fort (Corryton Community), followed by Reynolds' Fort (Gibbs Community), Menifee's Station (Powell), Adair's Station (Fountain City), Ball Camp, Cavett's Station (Bearden area, and Campbell's Station (Farragut). The Sawyers-McBee House, 9834 Washington Pike (Survey No. 2625), the Chamberlain-Little House on Circle Road (Survey No. 2621), the Thomas Walker House at 645 Mars Hill (Survey No. 2514) and the Jacob Lonas House at 6341 Middlebrook Pike (Survey No. 12730) are among the few homes left that were originally located along or in the vicinity of Emory Road; they were not the original log houses, but were built some twenty years after the need for stations and forts had faded.

Adair's Station, or Fort Adair, (present-day Fountain City) was founded by John Adair in 1789. The "fort" was a four room log house located along White's Creek, five miles north of White's Fort in downtown Knoxville and two miles from Emory Road. Emory Road was part of the "Yellow Mountain Trace," and Adair was appointed commissary, supplying provisions for the Cumberland Guards, who escorted emigrant families along the Yellow Mountain Trace to the Cumberland settlements. Other families to join Adair were the McMillans, Conners, Grills, Halls, Tillerys, Weavers, Smiths, Lewises, Andersons, McCampbells, Karneses and Sanders.

The present-day Mascot Community was first established in 1796 when John Erwin bought approximately 150 acres of land along Flat Creek. In 1830 the land was sold to William Carter; Carter's descendants sold some of the original property to the Holston Mining Company which opened the first zinc mines in Mascot. The Carter

House (no longer standing) was used as a stopping place for travelers by its owner, Madison Carter, a stagecoach driver between New York and Nashville. John Howell operated the first store in the community.

Sawyer's Fort was approximately ten miles east of Adair's Station, near the present community of Corryton. In 1785, Colonel John Sawyer acquired one thousand acres in the eastern part of the county. He built a two-story log house (since demolished) surrounded by a stockade on the bank of Big Flat Creek where Emory Road crosses the creek, two miles east of present day Corryton and sixteen miles from White's Fort. In 1795, Sawyer bought more land from Stockley Donelson to sell to other settlers. The Adair family lived here when they first moved into the area, moving when their log house (Adair's Station) was built. Colonel Sawyer fought in the Battle of King's Mountain during the American Revolution. He was also a member of Washington Presbyterian Church, organized in 1802. His son William later acquired a portion of his father's holdings and built a frame, Greek Revival-styled house (1832) located on Washington Pike. The Sawyers-McBee House (Survey No. 2625) still stands and continues to be occupied by descendants.

Reynold's Fort is believed to have been located on Emory Road, perhaps west of present-day Harbison's Crossroads. The Crossroads are at the head of Beaver Creek, five miles west of Corryton. John Reynolds built a fort here in 1788, according to his grandson, the fourth governor of Illinois. Harbison, a Revolutionary War veteran, acquired land in the area in 1797. The Crossroads were named for his son, W. P. Harbison. One of the earliest settlers in the area was Nicholas Gibbs. The Gibbs community, located at Harbison's Crossroads, is named for Gibbs. Nicholas Gibbs built the Nicholas Gibbs House (NR - 9/19/88) in 1792; located on Emory Road, it remains in the Gibbs family today. Other early settlers in the area included the Tarvers who built the Tarver-Roberts House on Bud Hawkins Road (Survey No. 2627).

Menifee's Station was built c.1787 by John Menifee in the Beaver Creek Valley, ten miles northwest of Knoxville. Menifee was given a grant of land by North Carolina for his services in the Revolution. His cabin was located on the present Old Clinton Pike. His fort was on the frontier, and his cabin served as an outpost with a special guard to report Indian uprisings. In the early 1800s, Menefee sold the land to the Bells. The area later became known as Powell's Station (due to a train station in the area) and is now known simply as Powell. A log house (the Donelson-Curd-Bishop House at 7924 Bishop Road, Survey No. 6906) which, according to tradition, belonged to Stockley Donelson, is located in this area.

The stations along Knox County's river system sometimes became focal points for emerging communities. The names associated with these stations included Greene, Manifold, Gilliam, White, and Nicholas Bartlett. Gilliam's Station (Asbury) originally consisted of a fortified cabin with surrounding stockade. It was built by Devereaux Gilliam around 1786 on an Indian mound named Brakebill's Mound, located on the river bank in the forks of the river, approximately five miles east of present-day Knoxville. Gilliam's Station (which has not survived) was an early center of activity, with many of Knoxville's founding fathers, such as Francis A. Ramsey, Archibald Rhea, Thomas Gillespie and Robert Armstrong settling in the area. Gilliam operated a ferry across the Holston, and in 1791 the Lebanon in the Forks Presbyterian Church was established by the Reverend Samuel Carrick

immediately north of Gilliam's Station. This was the first Presbyterian church in Knox County. Historian Dr. J.G.M. Ramsey eventually acquired the Gilliam property and built his home around the Gilliam cabin. Ramsey also continued the ferry service. Ramsey's home, Mecklenburg, was burned during the Civil War.

Greene's Station was approximately five miles east of Gilliam's Station on the south bank of the French Broad River. It was established by Greene around 1786, soon after James White located directly across the French Broad River. Other early settlers in the area included James Cozby, the Reverend James Kennedy, Alexander Campbell, John McNutt and Jeremiah Jack. Greene's son-in-law, Samuel Bowman, established a ferry here in the 1830s; it operated until the 1950s. The Bowman-McBee-Hodges House (Survey No. 2803), a two story nogging house with Gothic Revival features, continues to stand on the south bank of the French Broad River. (A nogging house is built with post and beam timbers, and soft brick or masonry in the voids.)

According to Rothrock in *The French Broad-Holston Country*, Greene's Station later became known as Manifold's Station and was associated with the Kimberlin Heights community. However, based upon historical accounts (Ramsey *Annals*, 1853), oral history, maps and a Daughters of the American Revolution marker (marking Manifold's Station) these two stations were separate, with Manifold's not being established until the stage road came into existence in the 1790s; Manifold's Station evidently functioned more as a stagecoach station than as a fort.

White's Fort was established on the present site of Knoxville in 1786 by James White. White moved after spending a year along the French Broad River east of Knoxville. White built a log cabin and barricaded it with a wall, which earned it the name of "fort." White's Fort was on the North Carolina Road, and travelers frequently stayed with him, as his was the first cabin in the area. Soon after building his cabin, White erected a small tub mill where nearby settlers could grind their corn. In 1792, the land surrounding White's Fort became the capital of the Southwest Territory and was renamed Knoxville. A re-creation of White's Fort is located in downtown Knoxville about five blocks from its original site.

Campbell's Station in west Knox County began in 1787, when Colonel David Campbell and his brothers James and Alexander built a blockhouse on the west bank of Turkey Creek near the present Avery M. Russell House (NR 6/5/75). A tavern, tannery, wagon shop and cabinet factory were located there, on the road to Nashville, in the early 1800s. Samuel Graham Ramsey founded Pleasant Forest Church there. By 1810, Charles McClung and William Campbell had opened a general merchandise store. Alexander Campbell moved to the Riverdale Community in 1792, when he felt it was safe from Indian attack. His house is at 6722 Thorngrove Pike (Survey No.2496). His son, William, soon followed, and located in the Riverdale Community around 1815. William's house (Survey No. 2500) still stands. George Farragut lived a few miles away at Stoney Point, later known as Lowe's Ferry. Other settlers in the area were the Russells and the Lowes, who built a fort south of Campbell's Station on the Tennessee.

Ball Camp is located on Plum Creek in Hines' Valley, about thirteen miles west of Knoxville. The community is still known by the same name. Nicholas Ball was an American Revolutionary veteran, originally from Virginia, who was killed by Indians in 1793. He built a blockhouse at this location some time in the late 1780s; however, not much was heard about Ball Camp until it was mentioned in the newspaper in 1874, and described as a "lively little place." Ball Camp was located along the Emory Road.

Well's Station was established in 1791 by Amos Wells on what is now Hind's Creek. It is located approximately five miles from Ball Camp and is where Nicholas Ball was killed. Cavett's Station was established in 1788. It was located along Emory Road on present day Mars Hill. The thirteen residents of Cavett's Station were massacred September 25, 1793. Only one child survived. The victims were buried in a mass grave located off present-day Broome Road. Early settlers in the area included Thomas Walker (645 Mars Hill Road, Survey No. 12710) and Jacob Lonas at 6341 Middlebrook Pike (Survey No. 12730).

Emory Road began as "The Yellow Mountain Trace", originating in Morgantown, North Carolina. The western portion of the trace was known as "The Emory." The road terminated near Nashville and followed the grade of the Watauga crossing the Nolichucky to the east. After crossing the mountains, the road passed through Greene, Hamblen and Grainger counties near Rogersville, Bean Station, Rutledge and Blaine. It crossed the Holston River at Nance's Ferry and came into Knox County through Harbisons's Crossroads, Halls, Powell Station and Karns. The road paralleled Beaver Creek through its valley to the present-day Solway Bridge, and across the Clinch River at Lowe's Ferry. From this point, the road progressed through Crab Orchard and Crossville to Nashville. In 1788, North Carolina placed two companies of fifty soldiers each on the west end of the trace, which at that time was near Knoxville. These soldiers protected settlers from attack as they journeyed over the Cumberland Plateau, and cut a road further west for the benefit of the Cumberland immigrants.

In 1792, Charles McClung was commissioned by the Knox County Court to locate a thirty-foot wide public highway from the Knox County Courthouse due west through Campbell's Station to the western boundary of Knox County. The improvement was completed by the summer of 1795. In July 31, 1795, the Knoxville *Gazette* announced the "wagon road" was open from "Southwest Point" (Kingston) to Bledsoe's Lick. White's Fort, Bearden, Ebenezer and Loveville were all along this road before it reached Campbell's Station. The John Campbell-Matt Russell House (Survey No. 85), the Kennedy-Baker-Walker-Sherrill House (Survey No. 94), Knollwood (NR - 5/12/75) and the Alexander-Ramsey House (Glenmary, Survey No. 3646) are among the few left in this area.

At Adair's Station a mill and store were built and it was soon connected to White's Fort and mill by a wagon road. Northeast of Adair's Station, Washington Presbyterian Church was organized, and a road was built to reach it. The Love/Cole House, Harris Road at Washington Pike (Survey No. 2570) is located along the old road (Washington Pike) which led from Adair's Station to Washington Presbyterian Church.

By the late 1700s highway transport dominated water, and from 1795 to 1840 pack trails gave way to roads as regular mail and coach services were established. In 1792, the Knox County Court ordered roads to be built from Knoxville. Many new roads were built between stations, mills and ferries, including Rutledge Pike and Tazewell Pike to the Harbison's Crossroads area. Many of the old bridle paths and wagon roads were also improved during this period. In 1793, the court ordered a road to be built from the Sevier County line, following the "old road" toward the Little River and on toward Craig's (Maryville, Blount County) and Henry's (Tellico Blockhouse, Monroe County) Stations. The road led to Knoxville via a link connecting it to Gilliam's Station (at the joining of the French Broad and Holston Rivers) and the North Carolina Road. The Sevierville (Seiver County) to Maryville road is referred to by Dr. J.G.M. Ramsey in his Annals as the "great road to Knoxville...connecting it with Sevierville, Newell's and McGaughey's Stations." Ramsey mentions that on this road was located the cabin of John Sevier (Marble Springs, NR - 5/6/71). A map of the exact route of this road has not been discovered, and only traces of it can be found. The road was also referred to as the Chattanooga Road or the Public Road. A number of early log homes were located along or in the vicinity of the Chattanooga Road; surviving houses include the Hood-Krahwinkle House at 7012 Newbert Springs Road (Survey No. 2865). One of the few places where the old road bed can still be seen in the field adjacent to this house.

Manifold's Station was the first station north of the French Broad River west of Henry's Station on Dumplin Creek in present-day Sevier County. Manifold's Station was built in 1797 and was located at the corner of present-day Kodak and Deeton Hollow Roads. It was built along the North Carolina Road that led to Warm Springs, North Carolina. It served as a stage coach stop and inn until 1820. Early settlers in the area included the Newmans, Thomases, Kellys, Huffakers, Keeners, Cunninghams, Johnsons and Fraziers. Henry Huffaker ran a ferry from the Seven Islands Community, across the French Broad, to a landing along the stage road, one to two miles west of the station. Houses which represent the first or successive generations of these families still exist as the community of Seven Islands.

Seven Islands was begun as an extension of Boyd's Creek settlement in present-day Sevier County, which began during the Land "Grab" Act of 1783. William Hines was the first inhabitant of Seven Islands, settling in the gap known today as Purfield's Gap, at Bays Mountain between Knox and Sevier Counties. Hines operated a saw mill and a grist mill for the Boyd's Creek settlers in the 1780s and for the later settlers in Seven Islands. Another early inhabitant of the Seven Islands area was Peter Keener, who also operated a sawmill located on the French Broad River. Keener's two-story log house (the Keener-Widner-Gibson House) still stands at 8200 Seven Islands Road on a hill overlooking the river (Survey No. 2851). Other families in Seven Islands include Justus, Robert Johnson, Jeremiah Johnson, Henry Frazier, James Cunningham, Wrinkle, Newman and Underwood.

In 1798 a new road was ordered to be constructed from the "new ferry" on the south side of the "Holston," opposite Knoxville, to the old (Chattanooga) road leading to Tellico Blockhouse. This road is today known as Maryville Pike. The Flenniken House at 1513 Maryville Pike (Survey No. 2897), the Reagan House at 8427 Martin Mill Pike (Survey No. 2873) and the Tipton-Maxey-Berry House (3415 Maryville Pike - Survey No. 2826) serve as reminders of the significance of this road.

Many of the early roads led to mills. As settlements were established, they often clustered around mills, which served as central meeting places. Residents would bring sacks of corn on mill day and often wait in line for many hours, since the mills could not grind more than ten bushels a day. The miller, who often lived near the mill, took one-eighth of the corn as payment. Even though mills were constructed until the late 1800s, they were the central focus of the settlement of Knox County.

It is obvious from glancing over the Knox County Road Book, 1792-1819, that many of the public roads in Knox County were commissioned by the court in order to improve access to various mills. As these new roads came into being, more and more settlers located their residences along them. Early mills in Knox County mentioned in the Knox County Road Book, 1792-1819 include Barlett, White, Keely, Beard, Creswell, Robertson, Quaker, McTeer, Ferrel, Robinson, Sharkey, Doaks, Mannifee, Shooks, Mabury, Roseberry and Homsfirth. These very early mills and the millers' houses associated with them have not survived. However, more permanent mills, particularly the Riverdale Mill (NR - 3/13/87) are still present. Miller's houses which continue to remind us of the importance of this community center include the Keener-Widner-Gibson House at 8200 Seven Islands Road (Survey No.2851) and the McNutt-Campbell-Kennedy House (6416 Thorngrove Pike - Survey No.2469) and the Kennedy-Pickel House (6603 Thorngrove Pike - Survey No. 2470), both associated with the Riverdale Mill.

Early settlers depended on ferries to cross the Tennessee, Holston and French Broad Rivers when the water was high. These ferries united communities on opposite sides of the river. At least twenty-tree ferries have served Knoxville. Fourteen of them served the immediate Knoxville area, and nine operated in the forks of the rivers. Before statehood in 1796, at least six ferries operated in or near Knoxville - the Cunningham, Rhea, Anderson, Cozby, Gilliam and James White ferries. Other ferry operators in the Knox County area included Jeremiah Jack, Bowman (McBee/Hodges) and Huffaker on the French Broad, Armstong and McBee on the Holston, and Van DeVenter (Blow) and Wright on the Tennessee. Several of the ferry operators' houses survive to remind us of the status ferry operators held in the communities they served, including the Bowman-McBee-Hodges House (6802 Hodges Ferry Road - Survey No.2803), the Huffaker-Gose House on Huffaker Ferry Road (Survey No.2849) and the Moses Armstrong House at 6110 Ashville Highway (Survey No.276).

The Seven Islands Community was south of the French Broad, but here as further west, the community included residents on the north side of the river, linked by Huffaker Ferry. Catherine Huffaker and her sons George (whose son Henry built the Henry Huffaker House still standing on Huffaker Road, Survey No. 2844) operated Huffaker Ferry. The Justus, William Widner, Robert Johnson, Jeremiah Johnson, Henry Frazier, James Cunningham, and the Wrinkle, Newman and Underwood families also lived in of the Seven Islands community.

Located between Manifold's and Greene's Stations was the Riverdale Community, which remains today. The community was listed by the Tennessee *Gazetteer* as one of ten communities that existed in 1792 when the Southwest Territory was formed. The settlement had four mills in operation over the years. Two were on Thorngrove Pike, one was on Wayland Road and one was on the French Broad River. Another store (since

demolished) was located in the Riverdale Community at the south side of Thorngrove Pike at its intersection with Wayland Road, a few feet north of the Bowman-McBee-Hodges Ferry landing. Several other businesses located at this intersection in the 1800s, including a blacksmith shop, a cooper's shop and a tannery. All of these businesses were on the east side of Wayland Road, between the Riverdale Mill and Thorngrove Pike. The Kennedy-Pickle House (Survey No. 2470), located across the street from the mill, served as the post office for several years, as did the store and T.R.C. Campbell's home (the Alexander Campbell House, Survey No. 2496). Many of the early houses in the community have been preserved.

Bartlett's Station was formed by Nicholas Bartlett around 1786 along Stock Creek near the present-day Blount County line. Bartlett operated a mill along the river. A cluster of early residences is preserved in this area, along Stock Creek and the Little River. The c. 1786, log residence of William Tipton continues to stand on Maryville Pike, as do the Tarwater, Reagan, and Flenniken-Goddard log houses.

Ebenezer was probably the first settlement in the Sinking Creek or Ten Mile Creek area. Ten miles west of Knoxville, Ebenezer Byram built a cabin around 1786. An Indian attack was made on the cabin that year and again in 1792. In 1792, Reverend Samuel Graham Ramsey (Francis Ramsey's brother and Dr. J.G.M. Ramsey's uncle) organized the first church in the community. It was called Ebenezer and was the third oldest Presbyterian church in the county. Ramsey owned land on both sides of the stage road, present-day Kingston Pike and his house was called the Parsonage. He established Ebenezer Academy, a school for boys, at his home. His wife conducted a school for girls. Among the early settlers in the area were John Alexander (Ramsey's uncle), Dennis and Isabella McCaughan, Thomas Walker and Charles McClung. John Alexander's home, Glenmary, may have also been known as the Parsonage, the home of Samuel Graham Ramsey. Another, later (1839) home built by Thomas Walker still stands at 645 Mars Hill Road (Survey No. 12710) as does another Walker House, the Kennedy-Baker-Walker-Sherrill House.

Erin (Bearden Community) was an unincorporated town about five miles west of Knoxville on the North Carolina Road. The community was later named Bearden for Marcus de LaFayette Bearden, who owned a farm north of the community on present-day Weisgarber Road and was a captain in the Union Army during the Civil War. The town probably first came into existence when James Miller settled in the area in the late 1700s. John Gamble opened a tavern in 1817 on the old Miller place, and Jacob Lonas also settled in the area with this family. Baptist minister Thomas Hudiburgh operated an inn near the present Bearden School. Heywood Bennett, Captain William Lyon, Walter Kennedy and Matt Kirby were other settlers. A mill was operated at the present Towle Spring in the early 1800s. Early homes still standing in this area include the York House (Survey No.12415) on Middlebrook Pike (Survey No.12730).

Loveville (Lovell) was a rural community about one mile east of Campbell's Station and was named for Robertus Love who settled there around 1797. Loveville contained a tannery, rope walk, store, blacksmith shop and cobbler's shop. The businesses gradually disappeared over the years, and most were torn down when Kingston Pike was widened in the early 1940s. Cavett's Station, Campbell's Station, Ebenezer and the communities of Erin

(Bearden) and Loveville (Lovell) were all located within a valley of approximately twelve square miles, Sinking Creek Valley (also called Grassy valley) in west Knoxville. Samuel Fleming, William Walker, John Love and George Martin were the major, early landholders in this area. All of the stations in this area were connected by one of two roads, Emory Road or the North Carolina Road (later known as Kingston Pike).

By 1810, the need for protection against the Indians had been removed, but the stations continued to survive as settlement centers, and became the foundation of later communities such as Bearden, Riverdale and others. The ferries, which had located there because of the safety and the traffic that came to the stations, continued to operate in those locations until the need for them ceased. In many cases, the ferries operated until the mid-twentieth century. This is particularly true in east Knox County, where the Bowman-McBee-Hodges Ferry and the Huffaker-Gose Ferry provided access across the French Broad River up to the 1960s.

The roads often became the foundation for contemporary roads that still travel much of the original pathways. The Great Knoxville Road is an exception, in that it was originally oriented toward Riverdale, seven miles east of Knoxville on the French Broad. After Knoxville was settled in 1791, the Great Knoxville Road was reoriented so that its node was in Knoxville, and the connection to the south was made via Maryville Pike, constructed in 1811. In time, the original Great Knoxville Road which traveled south/southwest fell into disuse; traces of it can still be seen at a two separated locations in south Knox County, none more than a few feet in length. A map of its exact route has not been located.

The city of Knoxville's settlement began after settlers began moving to Knox County. In 1790 North Carolina ceded her western lands to the Federal government. Accepting the cession, the United States organized the Territory of the U.S. South of the River Ohio (commonly called the Southwest Territory). The newly created territory included all of the present State of Tennessee. William Blount was named governor, and in 1791 he signed the Treaty of Holston at the mouth of First Creek. This treaty was most influential in forging the way for white settlement into the country by removing Indian title to all of the present area of Knox County. In 1791, Governor William Blount chose the area between First Creek, the Holston River (now the Tennessee River), Crooked Street (now Walnut Street) and Fifth Avenue (now Church Street) as capital of the territory. Blount named the new city Knoxville after his immediate supervisor, Secretary of War Henry Knox.

On October 3, 1791 a lottery was held under the supervision of three commissioners, lots of land in the area designated to become capital of the Southwest Territory were auctioned. James White, who had purchased the land from North Carolina under the Land Act of 1783, had the area surveyed by Charles McClung and laid out into sixteen blocks of four lots each. The terms of the lottery along with a list or recipients and the respective lots which they drew, were published in the December 17, 1791 issue of the Knoxville *Gazette*. By early 1792 several homes were under construction, including the first frame house to be built west of the Alleghenies, Governor Blount's "mansion." (William Blount Mansion - NHL - 1/12/65)

From its creation in 1791 until 1817, when the state capital was moved to Nashville, Knoxville functioned as a frontier outpost and seat of government for the territory and the state. After the lottery, the first lots to be built upon were in the southeast quarter of town near the river. The square between Gay, Church Street and Boundary Streets was set aside for Blount College. No county buildings were erected immediately because Knoxville was still in Hawkins County. Knox County was created in June 1792, and a temporary courthouse and jail soon followed in 1793. By 1792, Knoxville had forty log buildings and a population of 200.

It was in 1792 that Samuel and Nathan Cowan opened the first store, John Chisholm opened the first hotel, known as Chisholm's Tavern, and Alexander Cunningham was given a franchise to operate the first ferry across the Tennessee River. During this time the Indian threat was still very real. In 1793, U.S. troops marched into town and constructed a log military blockhouse on the resent site of the Knox County Courthouse on Main Avenue at Gay Street.

Tennessee achieved statehood in 1796, and by about 1800, Knoxville had numerous retail establishments and industries producing goods for the local market. The hotel and tavern business was also well developed. In 1802, Knoxville visitor F.A. Michaux reported in his *Travels to the Westward of the Alleghany Mountains* (London, 1805) that "The houses, in number about 200, are, almost all, of wood. Although it has been built 18 or 20 years, this little town has not yet any kind of establishment or manufactory, except some tanneries. Commerce, however, is brisker here than in Nashville. The stores, of which there are 15 or 20, are also better provided." Most of the retail establishments at this time were located in the vicinity of Governor Blount's mansion. In 1807, the Knoxville *Gazette* published a report stating that 200 settlers a day passed through Knoxville on their way west. Due to the influx of people, the price of provisions in Knoxville was twice as high as in other towns.

In 1816, the state capital moved permanently to Nashville. After the capital moved, Knoxville continued to function as a stopover point for traffic on the roads connecting Nashville with the east and as a local trade center for agriculture. Census data support the fact that Knox County's economy served local needs. The census based on commercial and industrial development shows that Knoxville's population, until 1815, grew by only slightly more than 300 persons per decade. Manufacturing concentrated on basic local requirements, such as leather, guns, wagons, carriages, iron and spirits. An 1820 census of manufacturing establishments shows distilleries as being the number one manufacturer in Knoxville, with a total of sixty-one. Saddler shops came in second (there were eight of them), and tanyards and hatters tied for third, with seven each.

Retail establishments began to shift from State and Hill Streets near the former governor's office to State and Prince Streets (Prince Street is now Market Street). Communication began to improve during this period with Knoxville's second newspaper, the Register, beginning publication in 1816. The Knox County Public Library formed in 1817. Roads also began to improve during this year of transition . In 1821, the county legislature directed that eleven public roads be divided into three classes, stage roads, second class wagon roads (at least 12 feet wide), and roads wide enough for horses.

After the Indian threat was removed, population growth in Knox County slowly began to escalate. Between 1810 and 1820, the county population increased by approximately 3,000 people, and from 1820 to 1830 it grew by another thousand. While Knoxville may have been well along towards becoming a city, the surrounding county remained a frontier. Only the Indian attacks, common until the late 1790s, had ceased by 1800.

The period from 1817 to 1830 is the time when agriculture was changing from subsistence levels for the settlers themselves to a productivity level that allowed them to sell much of their production. Early frontier farms were dispersed throughout Knox County, in and around stations. Many of the settlers were of Scots-Irish background. Transactions in the frontier community were carried out informally, with little need for the elaborate banking and financial systems that developed after 1865. Most farms were self-sufficient. Small farmers were the typical settlers. Most owned several hundred acres but typically cleared only thirty to forty.

Land was cleared by burning, or trees were belted or girdled, and then felled after they died. The earliest settlers lived off of wild game, and livestock raising only began to be an enterprise after 1830. Hogs were the most numerous early farm animal. The Civil War was destructive of many agricultural practices, but its destructiveness to agriculture was minimized in Knox County where there were only a few farms, or plantations, capable in size or labor of practicing animal husbandry or growing crops on a large scale. Knoxville and Knox County remained only one step removed from the frontier until the 1850s. The coming of the first steamboat, the *Atlas*, in 1826, promised the beginning of widespread trade and sustaining contact with the larger world. However, the hazards of navigating the Tennessee River meant that extensive river shipping never developed. There was some trade during high water periods, but that trade was dependent on rainfall and never assured.

Knoxville and Knox County began to anticipate the rail service in the 1830s. Knoxville turned down state assistance constructing turnpikes in the 1830s due to the excitement over railroads; however, there was a recession in the late 1830s and the railroad did not come for another twenty years.

In 1848 the Tennessee General Assembly chartered the East Tennessee and Virginia Railroad to go from Bristol to Knoxville. In 1855, the East Tennessee and Virginia and the East Tennessee and Georgia railroads, which later combined to form the Southern Railroad, first established service to Knoxville. The prosperity this rail connection promised was soon interrupted by the Civil War. It was the largest generator of economic growth in the decades that followed the 1860s, but did not develop its full potential until hostilities had ceased and the rail lines had been repaired.

Public services in the city were poor until the second half of the nineteenth century, and trade remained local in nature. Streets were of dirt and remained unimproved until 1850. In 1834 the Knoxville Gazette published an article stating that Knoxville had twelve mercantile stores, a drug store, book store, three hotels, two weekly newspapers, four clergymen, five physicians and twenty-nine lawyers. The first Knoxville wholesale house to sell general merchandise opened in 1837 and was called McClung Wallace and Co. In 1842, the Third Knox

County Courthouse was completed. There was not regular police protection until 1849. 1846 saw the construction of Knoxville's first fire house.

By 1859 Knoxville had 25 law firms, 4 banks, 7 boarding houses, 6 hotels, 5 coffee houses, one restaurant, three saloons, one bowling alley, three newspapers, two printers, one livery stable, one omnibus line, one stage coach line, one telegraph company, three railroads, 21 grocery stores and 12 dry goods stores. Retail establishments were primarily located at Prince Street (Market) by 1839, but by 1850 had shifted to Gay, with three-quarters of all trade in the city conducted on Gay Street.

Between 1830 and 1860, Knoxville began its transformation into a commercial and cultural center; while Knox County contributed to that transformation by providing farm produce and a market for goods produced in Knoxville, it grew only slightly during those years. Even in Knoxville, the largest population growth would not occur until after the Civil War. In 1830, the Knox County population was only 14,498. Between 1830 and 1840, it grew by less that one thousand to 15,485. By 1850, it had increased by twenty-nine percent over its 1830 number, to a total of 18,807. Thus, at the start of the Civil War, Knoxville was on the verge of the growth and prosperity that would occupy it for most of the second half of the nineteenth century.

The years between 1830 and 1860 saw relatively little change in settlement patterns for Knox County lands outside the city of Knoxville. While the city continued to grow in concentric semi-circles from downtown, with growth south of the Tennessee River being limited, Knox County's growth focused on the stations, ferry lands and mills that had prompted the first settlements. As mentioned earlier, there were relatively few roads in the county; they linked the first settlements, tying them to the rivers and major roads like Kingston Pike or Emory Road. New settlers seemed to settle adjacent to the already established landholdings, and the second and third generation descendants of the first settlers often took possession of a portion of the original landholding and constructed new houses there. The paucity of new settlers appears to be related to two factors: first, by 1830, the most arable land in the valleys had been settled and most of the remaining land was rocky or steeply sloped, and second, new lands for settlement had opened to the west, and Knoxville and Knox County settlements functioned as stops for resting and provisioning before settlers bound for more distant parts continued on their westward migration. New settlements did not emerge in Knox County until the establishment of the marble and zinc mining industries encouraged their development, and the coming of the railroads created new economic patterns.

Typical of the growth occurring around an established center is the Seven Islands community along the French Broad River in southeast Knox County. Seven Islands has a nucleus noteworthy for its early settlement. Its growth continued from 1830 to 1860, as later generations of the first settlers moved away from the river and began to farm and build homes. However, the industry (illustrated by mills that no longer exist, and by the Huffaker Ferry) was still centered on the river. The community's growth continued after the Civil War as well, but was then focused on roads which served the area more than on the French Broad River.

Knoxville and Knox County have changed drastically since the early days of their existence. The stations, so important to the survival of the early settlers in the twenty years following 1785 have long since vanished, leaving place names as their legacy. The last of the ferries, so significant in linking communities on both sides of the French Broad, Holston and Tennessee Rivers, have not been active for thirty years. In some instances, even the roads no longer follow their first routes. However, individual, widely scattered houses and barns still remain from the frontier period of history. In a few instances, some of these structures are clustered enough to form small groups of resources, with the earliest structures intermingled with buildings from later historical eras. The remaining pre-1860 structures portray an important historical era; recording their history captures the settlement history of Knox County and Knoxville.

2. SUBURBAN GROWTH AND DEVELOPMENT IN KNOXVILLE, 1861-1940

The first year in which a census of Knoxville was taken, 1800, the town's population was 387. By 1990, its population had grown to 165,121. Knoxville's growth in population has meant the conversion of 87.5 square miles from forests to urban development. The largest amount of that conversion occurred after the Civil War. Then, rapid industrialization provided employment for large numbers of immigrants from the surrounding region, who not only demanded housing but, thanks to the wages paid in the burgeoning textile, iron, and other industries, could afford to purchase housing. Managers of these factories also demanded, and could afford, larger, more elaborate houses in new "elite" neighborhoods. This demand and the ability to support it combined with the development of streetcar lines and then the private automobile to make the land surrounding Knoxville accessible. Thus, by 1930, Harland Bartholomew's Comprehensive Plan for the City of Knoxville notes that 26.34 square miles of the county were developed with urban densities. The area included all of the present day central city of Knoxville, together with many surrounding "suburban" neighborhoods and is the subject of this context.

Suburban growth in Knoxville, as in most American communities, began with the first lots platted and sold that were located beyond the initial city boundaries. In Knoxville, that early growth was very slow. Knoxville had few economic factors to recommend it as a place for settlement in its earliest years. It was a frontier town, with industrial growth limited to that which supported its small population. It was a place to gather farm produce and livestock, which was then transported overland or by river to other markets. Settlers bound for more western lands passed through the city, but did not stay for long. There was a small regional population, but because of the mountainous Appalachian terrain, contact with Knoxville was limited or non-existent. Relative isolation continued from 1791 (the date of Knoxville's founding) until the 1850s.

Still, Knoxville was becoming a crossroads. The first attempts at river trade occurred before the Civil War. Of more significance was the coming of the Southern Railroad (then the East Tennessee and Virginia and the East Tennessee and Georgia railroad companies) in 1855. By the Civil War, Knoxville's role as a transportation center, made it a target of both Union and Confederate forces. After the Civil War, Knoxville's damages were those that could be expected in an area that was occupied by both the Confederacy and Union and that had a citizenry divided between the opposing sides in the conflict. The city first joined the Confederate cause, but after Union occupation in 1863, welcomed the end of hostilities. Many took an oath not to seek retribution against Confederate sympathizers. This attitude meant that the Civil War, although it brought destruction and upheaval to Knoxville and Knox County, also brought new investors to the community.

Union officers stationed in Knoxville during the Civil War saw the advantages the community offered in its rail connections and its surrounding hinterland with both natural resources and a supply of labor. Some of those officers, when discharged, stayed in Knoxville and invested in the community. Perez Dickinson, a native of Massachusetts who had moved to Knoxville early in its history, formed a local board of trade in 1869. Other former Union soldiers, including Hiram Chamberlain (who founded the Knoxville Iron Company), A. J. Albers,

founder of a patent medicine company, and William Wallace Woodruff, until last year still attached to downtown retailing, were instrumental in building the new Knoxville that emerged after the Civil War. Their empires were Knoxville's industrial base.

Knoxville's greatest industrial growth occurred in the 1880s. Between 1880 and 1887, ninety-seven new factories were built. Industry brought new prosperity to the community. The population grew through in-migration from the adjacent Appalachian region, and as it did, the demand for housing grew. Advances in public facilities - transportation, a water system, sewage disposal, street lights, electrical distribution, telephones - all affected the form of the new construction taking place after the Civil War. One of the first expansions was to the west, Fort Sanders (NR 9/16/80). Fort Sanders was within walking distance of downtown, and was an incorporated town (West Knoxville) from 1888 to 1897.

Other suburban expansions, like the shotgun houses found on Anderson Avenue and included in the Old North Knoxville Historic District (NR 5/14/92), some houses in the Park City Historic District (NR 10/25/90), and houses along Leonard Place and Grainger Avenue in the neighborhood now known as Brownlow, were built as self-contained mill villages to provide housing for workers in industries ringing downtown Knoxville to the west and north. People who lived there worked in the nearby factories, and were not dependent on jobs located in the city. Mechanicsville (NR 7/18/80), built for the workers and supervisors of the Knoxville Iron Factory, and later for the nearby rail yards, was one of the first of these industrial-based suburbs. Mechanicsville was not an incorporated community, and was annexed by Knoxville in 1882. In Knoxville, mill villages were usually built by speculative developers near the factories where workers provided them with a market. Neighborhood stores and corner groceries and drug stores provided the residents of these villages with goods and services, and for the most part made trips to Knoxville unnecessary. Particularly before the advent of the streetcar, in 1890, the trip to Knoxville was difficult and distance isolated these small settlements from the city.

The early suburbs were congested and dirty. The fuel for factory processes and home heating and cooking was coal, and since these areas were located near either factories or the concentrated population of downtown, they were still subjected to the pervasive coal dust, and the noise, smells and crowded conditions of downtown. Newer, cleaner, more desirable subdivisions began to spring up farther from downtown. Many of them (such as North Knoxville and Park City) grew around or next to the former mill villages, eventually joining with them to form a larger, unplanned street pattern. Subdivisions were juxtaposed, without any attempt to integrate them physically into a larger suburban development. The developments along the streetcar lines were marked by long, straight streets which intersected with the straight streets in the next subdivision at awkward angles. It was not until the advent of the automobile-oriented subdivision that more regular intersections were undertaken. In the 1923 plan for Knoxville, the planning consulting firm of Harland Bartholomew and Associates decried the awkward intersections and substandard streets that resulted from these expansion; many of those streets and intersections still exist.

More than any other factor influencing the spreading residential development and the neighborhood commercial development that served it, transportation (first streetcars and later the automobile) shaped Knoxville's future suburban growth. Knoxville's first mechanized streetcar was developed in 1890 by the Fountain Head Railway Company. It was a steam powered railway called the Dummy Line, reportedly because its passenger car was box-shaped. The Dummy Line connected Knoxville with the new resort development at Fountain Head, and was developed to serve it. Fountain Head within the year became Fountain City, with a small commercial hub at terminus of the Dummy Line, and scattered individual subdivisions located along its route. The Dummy Line began at Emory Place on Broadway, and traveled generally northward, deviating slightly to the west and then the east to serve burgeoning suburbs developing in its path.

These areas included Emory Place, a commercial area that developed at the Knoxville end of the Dummy Line, adjacent to Old North Knoxville (NR 5/14/92) and Fourth & Gill (NR 4/25/85), residential neighborhoods which developed from 1880-1940. Emory Place was a part of the incorporated town of North Knoxville, which was annexed by Knoxville in 1897. The neighborhood now called Brownlow began as a housing area serving the owners and workers of the Bradley Mill, located on Broadway. The area was subdivided in the 1890s as the Mayfield Addition and additional housing was constructed. Gibbs Drive in Fountain City developed along the route of the Dummy Line, and is the most intact of the small residential subdivisions that were spurred by the presence of transportation.

Street patterns in these newly developed areas were laid in a grid pattern to interact with the straight tracks of the railway. Adair Gardens, also in Fountain City, was developed as lower middle class housing with its streets feeding off Broadway, where the streetcar was. As the automobile became dominant, Broadway was also a primary traffic artery northward from downtown Knoxville.

The Dummy Line was advertised as providing one hour service from Knoxville to Fountain Head. However, it was evidently prone to breakdowns and interruptions in service. An anonymously written ditty of the time sets out its uncertain timetable -

Some folks say that the Dummy can't run,
But I done seen what the Dummy done done.
It left Fountain Head at half past one,
and pulled into Knoxville with the settin' sun.

An electric streetcar company was developed in 1892. Streetcar routes were built along McCalla and Burlington Avenues, and Washington Avenue. They gave rise to other residential subdivisions, with the Washington Avenue line fostering Park City (NR 10/25/90), another streetcar suburb made possible by transportation, but with a block pattern that was more rectangular than some of the other developments. The Dummy Line was replaced by electric cars in 1905; the electric streetcar line ran north along Broadway, and used some of the Dummy Line's former right of way.

Crossing the Tennessee River into South Knoxville had always been difficult. The area south of the Tennessee River was so isolated it was referred to as "South America" by Knoxvillians, and development there was limited. Ferries provided transportation across the river until the Civil War. When the Union Army occupied Knoxville, they built a bridge that was taken over by Knox County in 1866. The bridge was destroyed by a flood in 1867. In 1871 a private bridge company replaced it with a new one at the south end of Gay Street, which was destroyed by a tornado in 1875. In 1880 a private company replaced it. In 1898, when the 1880 bridge proved inadequate, it was replaced again by Knox County. The last replacement is the present Gay Street Bridge. With the construction of the new Gay Street Bridge across the Tennessee river to the south of downtown Knoxville, settlement to the south also accelerated. The Knox County Court, prior to the formal opening of the Gay Street Bridge in 1898, granted Knoxville Traction Company and the Knoxville Electric Light and Power Company the right to run electric cars over the bridge. This paved the way for the first suburban expansion south of the river. The land surrounding Perez Dickinson's home, known as Island Home, became the site of another early Knoxville suburb, also known as Island Home and developed around 1915. Island Home was never an incorporated community; it was annexed by Knoxville in 1917. The central street in the Island Home neighborhood, Island Home Boulevard, is a divided boulevard with a median strip. The curb cuts made for the streetcar tracks, which ran in the center of the median, can still be seen. This median is the only one remaining of streetcar generated development.

Commercial development in the streetcar suburbs occurred along the major streets leading to each suburban location, but most commercial activity was in downtown Knoxville. To the north along Broadway, a market operated at Emory Place for a number of years, and Mechanicsville (NR 7/18/80), Fort Sanders (NR - 9/16/80) and Park City (NR - 10/25/90) all had neighborhood serving commercial areas located along major streets just outside their boundaries.

Neighborhood elementary schools were widely distributed throughout the neighborhoods, but until the 1950s, Knoxville's high school students all attended Knoxville High School, centrally located and served by the streetcar, and later by bus lines. Many of the community's churches were located in downtown Knoxville, although there were also a number of churches located along Broadway Avenue leading from downtown, and on other major streets along which the streetcar lines traveled.

Knoxville later became fascinated with the automobile. The car's use did not become widespread until the 1920s, when it immediately opened another door to residential expansion. The city's population grew rapidly in the early 20th century, and tripled from about 37,000 in 1915 to 111,850 in 1940. Annexation created some of this increase - the annexation of large land areas in 1917 increased Knoxville's size from four to twenty-six square miles - but there was also a large population increase fueled by the increasing importance of the rail connections to the Appalachian region and the attendant growth in wholesaling and manufacturing. Adair Gardens was a typical suburban development of this time period, located near both a streetcar line on Broadway, and later dependent on the transportation artery for automobiles furnished by the same road. Adair Gardens' residents

traveled elsewhere for their commercial activities, either to Emory Place or to centralized shopping in Fountain City or downtown Knoxville; within the confines of the subdivision, the uses were residential. The automobile, coupled with the construction of additional bridges along Alcoa, and later Chapman, Highway, brought additional development to the area south of downtown Knoxville. Lindburg Forest is the best example of this suburban development.

The automobile suburbs that developed during the period were not bound by the gridiron pattern of the earlier streetcar suburbs. Areas like Forest Hills Boulevard and Lindburg Forest could be developed with larger lots and a curvilinear street system sensitive to their topography. The curved streets also served to prohibit high speed vehicular traffic which was characteristic of the earlier straight streets of the streetcar suburbs. Other residential areas that developed during this time period included Adair Gardens, Holston Hills, Lyons View Pike, Westwood and Chilhowee-Woodbine. Even the names of these areas, which included naturalistic terms like "forest", "hills", "gardens" and "wood" are descriptions of their appearance and layout. These areas were subdivisions. They were not incorporated as separate cities, and for the most part were annexed by Knoxville in 1917, when the city pursued its previously discussed vigorous annexation policy. These developments had a planned street layout, as exemplified by the street improvements for the Talahi development (Talahi Improvements - NR 12/26/79 now known as Sequoyah Hills.

These areas are representative of Knoxville's era of great suburban expansion, when strong economic growth generated the greatest percentage increase in population the city has yet experienced. The depression of the 1930s and the coming of World War II both served to slow housing construction, and even the creation of the Tennessee Valley Authority did not reverse that trend; only the end of World War II brought a level of housing construction and new subdivision development comparable to Knoxville's growth in the late 19th and early 20th centuries.

The streetcar suburbs differ stylistically from the later, automobile generated suburban development. As mentioned earlier, streetcar suburbs tend to be a collection of smaller areas, developed by individual developers who may have subdivided as few as ten lots or as many as ten blocks. These individual subdivisions can be extensions of earlier mill villages, developed before the streetcar system was available (in the 1890s), and often encapsulate the developments first built by speculators to house mill workers. The boundaries of these individual subdivisions meet each other at odd angles rather than being joined by a road system; this medieval street pattern is distinctive and obvious on maps of the city. The later, post-1920 automobile suburbs have a curvilinear street pattern and larger lots. Both the roads and the individual lots adapt to the original topography of the area and much of the natural landscaping present prior to development was preserved.

The streetcar and automobile suburbs of Knoxville and Knox County represent a unique period in urban growth. Each of them portrays a distinctive stylistic era; they also portray a pattern well represented in many U.S. cities, as the wealthier, more affluent citizens escaped to the idealized, naturalistic suburbs from the congestion and pollution of denser, urban settlement. Suburbanization began before the Civil War and has not yet ended.

However, when it combined with the transportation technologies that emerged in the last part of the 19th century, it created development patterns that are very evident in today's urban form.

3. ETHNIC SETTLEMENT AND MIGRATION, 1785-1940

East Tennessee saw its first groups of European-descended settlers arrive in the late 1700's. From that time up to the mid-nineteenth century, the inhabitants of Knox County were basically a homogenous people. These second-generation immigrants were predominantly of Scots-Irish ancestry, and overwhelmingly born on this continent.

Beginning in the 1840's, however, small groups of immigrants from mainland Europe chose Middle and East Tennessee for their home. Many had been coaxed here by agents who earned a commission from selling lands. German immigrants settled the town of Wartburg in remote Morgan County. Swiss settlers created the community of Gruetli-Laager in an isolated area of Grundy County. Another group of Swiss decided to forego a near wilderness existence, however, and instead chose Knoxville, an already established commercial center. The Swiss migration began in 1948 and continued until well into the 1890's.

Knox County's population growth prior to the Civil War lagged far behind the state as a whole. From the total population (including slaves) of 11,573 in 1795, the county had grown to a population of only 13,034 in 1820 and to just 14,498 ten years later. During these years, Knoxville's ruling class consisted of individuals of similar religious and ethnic background. They were composed mostly of merchants, professional men, and large real estate holders, and were descended from some of the town's original settlers. This group grew progressively wealthier as secession approached. A large portion were Presbyterians, most belonging to the socially dominant First Presbyterian Church. A majority owned few, if any slaves, having mostly house servants.

Ante-bellum Knoxville was atypical of southern cities, as political philosophies, and artistic and industrial endeavors seemed to demonstrate a doctrine which was hostile to the Old South. Nonetheless, there were also ardent secessionists in Knox County, including Dr. J.M.G. Ramsey. As a rule, Ramsey, and other like minded individuals, believed in slavery and in states' rights. Those who welcomed separation from the Union were, at least initially, in the minority. At the first test of sentiment in February 1861, Knox County voted almost ten to one against even considering secession.

Eventually, however, Knoxville was thrown deep into the throes of the Civil War. This was to change the fortunes of many, especially the freed urban and rural blacks. A second wave of immigrants rolled into Knoxville. These newcomers consisted primarily of American born Northerners, some of whom had already set up businesses in Knox County, but had left during the war. Among these individuals were some of city's most important future business leaders, including Edward Jackson Sanford, Hiram S. Chamberlain, A.J. Albers, and Anthony Legget Maxwell. Their coming was foreshadowed by Perez Dickinson, the Massachusetts school teacher who came here in 1829, and went on to become one of the city's merchant princes.

As Europe was suffering economically in the mid and late 19th century, many of its sons and daughters came to America. This put additional strains on American cities that were suffering similar economic woes. Although

there were many active charitable organizations, Knoxville suffered from social turmoil often common in cities with increasing immigration. According to local historian Lucille Deadrick, these social problems must have been distressing to those who remembered Knoxville as a small homogenous town.

The European immigrants were particularly active in forming societies based on their common languages and national origins. Typical of the late nineteenth century social events by an ethnic group was the drummer's picnic of May, 1888. The picnic consisted of a procession, contests, fireworks, and an "eating line," with music provided by Kibby's Drum Corps, the Enterprise Band, Crouch's orchestra, and an Italian band. Little by little each of the ethnic groups assimilated into America its own special way.

Many of the early architects and builders in Knoxville were skilled immigrants from Europe. These included C.T. Stephenson of Stephenson and Getaz, a native of England who came to Knoxville in 1866, and William N. Baumann who was born in 1813 in Bavaria. Arriving in America in the mid-1830's, Baumann worked as a carpenter throughout Tennessee and the Southeast. He settled in Knoxville in 1855, where he trained his son Joseph in the building trades. Joseph went on to found Baumann Brothers (later Baumann and Baumann), one of Knoxville's most prolific architectural firms of the late 19th and early 20th century.

The Early Pioneers - Descendants of Immigrants

In 1795, the population in Knox County was 11,573. According to territorial census 2,365 were slaves and 100 free Blacks. The vast majority of the remaining 9,108 shared similar religious views and Anglo ancestry. The Knox County delegates to the 1796 state constitution convention are representative of residents of the area. Those delegates were John Adair, William Blount, John Crawford, Charles McClung, and James White.

The background and early career of Knoxville's founder James White and his family was much like those of countless of Americans of his time. His father, Moses White, is thought to have emigrated from northern Ireland in the 1740's. He likely settled in Rowan County,
North Carolina, where James was born in approximately 1747. In 1785 James White moved with his family to what is present day Knox County. In 1790, James White's eldest child Margaret married a new settler to the area, Charles McClung. Charles McClung was born in Lancaster, Pennsylvania in 1761, the son of Matthew and Martha (Cunningham) McClung. Matthew McClung emigrated from northern Ireland around 1746.

John Adair was born in 1732 in County Antrim, Ireland. With his wife and children he came to America around 1771, and settled in Baltimore, Maryland. After two years he and his family joined a company of pioneers who were moving south. He worked as an entry taker in Sullivan County, North Carolina (present-day Tennessee), and in 1789 was commissioned to establish a store house in Hawkins County (present-day Knox County). In recognition of his services he was granted a 640 acre tract of land by the State of North Carolina.

William Blount was born in Bertie County, North Carolina, the eldest son of Jacob and Barbara (Gray) Blount. His great-grandfather, Thomas Blount, belonged to an English family of wealth and position, probably of Norman French origin. Thomas Blount came to America around 1669 and settled in Eastern North Carolina. William Blount was well educated and of the Presbyterian faith. He was a member of the Continental Congress in 1783, and he moved with his family to Knoxville in 1793. From Knoxville he served as Territorial Governor and United States Senator.

Other early settlers of Knox County shared similar family profiles. Many were born in Northern Ireland in such places as Londonderry County. These Scots-Irish immigrants included Robert McKinney, George McNutt, and John Reynolds. Many other settlers were of second or third generation English and Scots-Irish ancestry, including Thomas Humes, John McGee, John Sevier, and Presbyterian minister James Park.

The first reported architect in Knox County was Thomas Hope who was born in England and trained in London. He immigrated to Charleston, South Carolina and in 1796, he came to Knox County when he was commissioned by Francis Alexander Ramsey to design and construct a "gentleman's manor" out of local pink marble (Ramsey House - NR 12/23/69). During his tenure in the area he also designed "Trafalgar" for John Kain in 1807 (since demolished), the James Park House in 1821 (NR 10/18/72), Statesview, the home of Charles McClung (NR 4/24/73), and the residence of Dr. Joseph C. Strong, built c. 1812-14 and now demolished. Hope was known to have possessed a copy of William Paine's The Builder's Golden Rule or the Youth's Sure Guide (London 1782).

The Swiss

Throughout the 18th and 19th centuries, Swiss migrated to the New World in hopes of a better life. Usually Protestants, they searched for religious tolerance or solitude. The immigrants commonly belonged to one of the Protestant denominations: Swiss Brethren, Amish, Mennonite, or the German and Swiss Reformed Church. They formed communities where they practiced the religion of their choice. Today towns across America, from South Carolina to Wisconsin, reflect both their economic and spiritual successes.

The first French-speaking Swiss came to Knox County in 1848. Initially, it would appear that they settled in the north and east part of Knox County, in a location known as Grassey Valley, along Washington and Tazewell Pikes. They were the Chavannes, Gouffon and Sterchi families. The year 1848 was one of turmoil in Europe, with unemployment, religious persecution, and political unrest, all on the rise. The Chavannes' from Lausanne and the Guoffon's from Montricher had both suffered for their religious beliefs. Francoise Henri Sterchi, a political conservative from Lausanne, was ousted by a radical from his position as general commissioner and archivist for the Canton of Vaud. Together these families decided to seek new fortunes in the United States.

Upon arriving in New York, the three families learned about land for sale in Wartburg, Morgan County, Tennessee. They had likely already heard of the land in Morgan County because of marketing done by the East

Tennessee Colonization Company. That company was formed in 1844 for the purpose of colonizing several counties in East Tennessee with German and Swiss immigrants. Unhappy with the land that they saw for sale in Wartburg, the families traveled forty miles east to Knoxville. They were pleased with the area, and on September 6, 1848, Adrien Chavannes bought 275 acres four miles northeast of Knoxville near what is now the Whittle Springs community. The Chavannes home, in what was then known as Grassy Valley, or by the Swiss as "La praire," became the ~~came~~ the nucleus of the Swiss colony. Reportedly, the stand of grass was so lush that animals could almost be tracked as if the grass had been snow. Tazewell, Washington and Millertown Pikes are all in the northeast part of Knox County.

The following year, in 1849, the Buffat, Esperandieu, and Truan families all settled in Knoxville. For nearly a half-century thereafter, almost every year brought more Swiss families to join their relatives or religious brethren in America. By the time of the Civil War, there were approximately twenty French-speaking Swiss families living in Knox County. These included the Beney, Blanc, Bolli, Buffat, Chavannes, Ducloux, Esperandieu, Falconnier, Freymond, Gouffon, Guyaz, Jouvenat, Pella, Porti, Sterchi, and Truan families.

The Civil War saw a split in the community's ideology. A majority of the Swiss were Confederate sympathizers, including the outspoken Rev. Frederic Esperandieu, and Madame Anna Chavannes, who owned a woman slave. Several Swiss men served in the Confederate army, a smaller number fought for the Union, and others fled north to escape conscription. Although immigration ceased during the Civil War, it increased in the following decades.

Census records indicate that the number of native-born Swiss living in Knox County grew from 118 in 1850 to 208 in 1890. These new Americans often traveled back to Switzerland to get married or to encourage other family members to emigrate. Some of the new family names in Knox County in the late 19th century include Andre, Babelay, Berney, Burdet, Dovat, Dufour, Getaz, Guignard, LeCoultre, Marguerat, Mouron, Prodolliet, Rochat, Seilaz, and Taux.

For many years the Open Brethren Assembly met on Sundays in the home of the Rev. Adrien Chavannes. Starting in 1853, a Sunday school was offered for children of the Assembly. The group first met at "Moriah," the home of Pierre Francoise Buffat on Millertown Pike, and later at " Ebenezer," the Truan and Gouffon home on Tazewell Pike. The Open Brethren eventually split into two circles, one "in town" and one "in the country." Every six weeks the two circles had what was known as a General French Meeting. The gatherings usually lasted all day, with families bringing food for a meal following the afternoon meeting.

The Swiss immigrants, like those of many cultures, enjoyed their festivals and ritual get-togethers. Perhaps the biggest events were in celebration of the anniversary of Swiss Independence. The jubilees of 1871-1875 and 1891 were organized primarily by the German-speaking Swiss of Knoxville, and held in either Turner Hall or at Staub's Opera House. Peter Staub, owner of Staub's Opera House, was a German-Swiss immigrant, who twice served as mayor of Knoxville.

Many of the French-Swiss that immigrated to Knox County in the 1800's settled along Washington Pike. One of the earlier residences remaining in the area is the Alfred Buffat Homestead (NR 4/11/75), at 1717 Love Creek Road. The homestead, which is also known as "The Maples", was built in 1867. Buffat was eight years old in 1848, when he emigrated from Switzerland with his family. The Buffats established a farm on Millertown Pike and in 1861 erected a grist mill on Big Creek on their property. Although the mill, which was known as the "Spring Place", is now gone, the homestead and the nearby miller's cabin remain. Also along Washington Pike are the Stoffel/Jenkins Homeplace (Survey No. 2570) and the Babelay House (Survey No. 2566) both Queen Anne style residences that date from just after the turn of the century.

Along Tazewell Pike are structures associated with Knoxville's Swiss heritage. Shannondale Presbyterian Church at 4600 Tazewell Pike (Survey No.2581) was built in 1886. Other houses include the 1883 Truan House at 5016 Tazewell Pike (Survey No. 2584). Many of the French-Swiss are buried in either the Anderson-Guoffon Cemetery along Tazewell Pike, or in the Spring Place Church Cemetery. Spring Place Church burned in 1944.

Several other buildings in and around the downtown were/are part of the Sterchi family's influence on Knoxville. Along Fifth Avenue are two apartment buildings, the Lucerne and Sterchi Oaks (Survey Nos. 1406 and 1407) (originally Sterchi Flats). Behind the Lucerne sets the apartment building originally named the Nina (Survey No. 1405), after one of the Sterchi girls. The downtown landmark Sterchi Brothers Furniture Store, at 114-116 South Gay, was designed by third generation Swiss-American architect R.F Graf and Sons (Southern Terminal and Warehouse Historic District - NR 11/18/85). In addition to furniture and real estate, the descendants of Francoise Henri Sterchi also had interests in coal mining and dairy farming.

Other French-Swiss immigrants and their descendants were of particular note in the history of Knoxville. Some were known for their business savvy, while others gained recognition through their craftsmanship. One such individual was David Getaz, who came to Knoxville in 1874, after his architectural training in Paris. Getaz was a partner in Stephenson and Getaz, Architects and Builders. As the firm's designer, he was most noted for winning the 1885 design competition for the Knox County Courthouse (NR 4/24/73). In 1897, D. Getaz and Company served as general contractor for the Knoxville Market House, which burned in 1960. Getaz is also recognized for his 1886 design of the Shannondale Church (Survey No.2581), which is in the heart of the Swiss community along Tazewell Pike. In addition, the home designed and lived in by David Getaz, at 505 E. Scott Street in the Old North Knoxville Historic District (NR 5/14/92).

The following lists feature additional Swiss individuals and businesses that left an impact on Knox County. Businesses include J.P. Babelay Greenhouses, L.C. Berney Blacksmith and Wagon Manufacturers, Chavannes Lumber Company, Daniel Felix Sawmill and Gristmill, Gouffon Transfer and Storage Company, Rochat Realty Company, and Seilaz Saloon and Cafe. Noteworthy individuals include United States Supreme Court Justice Edward Terry Sanford, aviation pioneer Frank J. Andre, Sr., and Fred T. Andre, an innovator in the electrical field, who wired the first traffic light in Knoxville in 1915, and also directed the underground wiring which brought electricity to Sequoyah Hills. Albert Chavannes, grandson of Knoxville's' first French-Swiss settlers,

gained international recognition through his writing and publishing of The Sociologist, reportedly the world's first journal of sociology.

The African-Americans

Knoxville has always had the smallest African-American population among the four major cities in Tennessee. This is primarily because there was no plantation system in the Knoxville area, nor were there industries that used large numbers of slave labor. Most slaves were used to do housework and to tend to livestock for their masters. Some were taught various skills and hired out to other people by their masters.

In general, slaves in Knoxville were treated better than in most places in the South. There are several reasons why this was likely. First was the lack of an overriding sentiment for slavery in the area. Also the slave population was small, and slaves who performed housework and other contact jobs had personal relationships that encouraged affection. Because of their religious backgrounds, a number of Knoxville's early settlers expressed anti-slavery views. Such attitudes were not held in other parts of Tennessee and the South in the early 19th century. The Western Monitor and Religious Observer, a bimonthly periodical published in Knoxville from 1818-1820, had editorial views considered very liberal for the time and place. The Western Monitor advocated both religious tolerance among denominations, and the emancipation of slaves with resettlement in Africa.

During the early years of the 1800's, the State of Tennessee had slave laws that were considered much more humane than those of other southern states. These laws guaranteed slaves the right to food, shelter, clothing, and medical attention. When they became too old to work, they could not be sent away. Tennessee was one of five states that allowed slaves a trial by jury. Slaves had the right to a decent burial. Normally slaves were not required to work on Saturday afternoon or Sunday.

Slaves could not own property or carry a weapon. Marriage was allowed to other slaves on the plantation, but slaves could still be sold to satisfy the debt of a master. After the 1831 uprising in Virginia led by the slave Nat Turner and his followers, laws regarding the control of slaves became much stricter. The overall fiscal well being of Tennessee was closely tied to the slave economy, and legislators protected that economy.

In Knoxville, where circumstances were atypical of southern plantation life, slaves were considered more of a luxury than an investment in a labor supply. Some who owned slaves leased their services. The City of Knoxville paid slave owners for the use of their slaves as common labor on road building crews at the rate of ten dollars a month. Skilled laborers could make up to a dollar a day.

Some Knoxville slave owners showed a humanitarian policy towards Blacks, as evidenced by a Knox County Court record from February 4, 1797. These documents reveal that an emancipation was granted to "Jack," an African-American barber, on a petition from John Stone. This in spite of the fact that the emancipation was not within the scope and power of the County Court, since only a special legislative act could make the emancipation

valid. Jack took the name of John Saunders, and no bond was required of him, though such a bond was later required of emancipated persons under an act passed in 1801. Under the 1801 act, a slave named "Jesse" was emancipated and made a bond of $500.

Thomas Humes, an Episcopalian priest and educator, obtained three emancipations in 1849. Throughout his life, Humes showed a humanitarian attitude towards African-Americans, both bond and free. In 1857, he assisted Harry Turk, a 68 year old black man, to purchase his own freedom. Under an earlier act of the legislature, emancipated persons had to be removed from the County, unless because of age or disease they were unable to go under their own volition. In such cases, they were to be transported to the western coast of Africa, presumably at the expense of the County. The Court made provisions for the County to escape this financial obligation by providing that the emancipated individual, if too old or feeble, might be permitted to remain in the County. Turk petitioned that he preferred slavery under his kind master to that of a free Black outside of the State of Tennessee. He noted that at his age a removal to Africa would be a sentence of speedy death. The County Court in 1857 granted his petition to stay in Knox County.

By 1856 there were 25 free black families living in Knoxville. Many of them worked as hotel porters and waiters, gardeners, wagon drivers, street cleaners, house servants, and as laborers on the railroad. Free Blacks included John Dogan, Edward Livingston, and Melvin J.R. "Rad" Gentle and his wife Hester. Mr. Gentle, a shoemaker, came to Knoxville in the mid 1850's from Statesville, North Carolina. Following the Civil War, Gentle was active in state and local politics. John Dogan, a blacksmith and a slave for 30 years, was hired to do blacksmith work for other people. Dogan received pay he earned for working longer than his normal ten hour workday. He bought his freedom, and that of his wife Myra.

Both free Blacks and slaves were involved in the growth of local churches. Black Baptist churches grew out of the First Baptist Church. First Baptist was organized in 1843 with 26 whites and 20 blacks. Blacks were a majority in 1847, 39 to 31, which was not uncommon prior to the Civil War, even in Knoxville. Other congregations that grew out of First Baptist were Mount Olive and Mount Zion Baptist churches. Knoxville's first solely black church was the Greater Warner Tabernacle A.M.E. Zion Church. Established in 1845, it is reported to have been a stop on the Underground Railroad. None of these original church buildings now exist.

In 1860, of Knoxville's 3,074 citizens, only 752, approximately 20% were black. When Union soldiers took Knoxville in 1863, Blacks began to arrive in large numbers. The end of the Civil War did not halt this flow, even thought the newly formed Freedman's Bureau counseled newly freed Blacks to remain in the rural areas and not to glut Knoxville's then small labor market. The number of Blacks in Knoxville quadrupled between 1860 and 1880, growing to around 30% of the population. However, the influx of whites from the surrounding hinterland was numerically even more impressive, striking a balance that still exists today.

One of the biggest concerns in the African-American community following the war was the education of freed Blacks. The Western Freedmen's Aid Commission which was formed in Cincinnati in 1863, sent teachers in to

Tennessee and other states. In 1871, the people of Knoxville voted to establish free schools, and in 1876 the first public education was offered to local black children. Austin School was built and opened to students in 1879. In that same year Knoxville African-American James Mason, Knoxville's first black taxpayer, opened in his home a school for the deaf and dumb black children of Tennessee.

Knoxville College (NR 5/1/80) was established by the United Presbyterian Church in 1875 for the purpose of educating young black men and women for the ministerial and teaching professions. In 1890, the U.S. Congress required all land-grant colleges to provide separate but equal facilities. From that time until 1909, when Tennessee Agricultural & Industrial Normal School opened in Nashville, Knoxville College was a branch of the University of Tennessee, offering military training and courses in scientific agriculture.

Many institutions had separate facilities and/or annexes for Knoxville's Blacks, including the John Tarleton Home for Neglected and Dependent Children, the Knoxville General Hospital, and both the local YMCA and YWCA. Two municipal parks were acquired for Knoxville blacks in 1915, through an estimated $50,000 expenditure by the city. With a gift of $10,000 from the Carnegie Corporation, a library was secured for Knoxville blacks in 1917. The official report of the First National Conservation Exposition of 1913 states that the two story exhibit hall known as the Negro Building, " was designed by a Negro architect, built by a Negro contractor and Negro workmen, with money subscribed by Negro citizens of Knoxville."

A measure of Knoxville's relatively liberal attitude on the race question is the success attained by individual Blacks during the late 19th century. Including among these achievers were Samuel R. Maples and William Francis, both noted attorneys. Yardley, the son of an Irish mother and a black father, attended Dr. Thomas W. Humes' Sunday afternoon school for Negroes before the Civil war. He later taught school and must have read law books or studied law under a local attorney, for he passed the bar examination and was licensed to practice by Judge George Andrews. Yardley became a successful criminal lawyer, and was active in public affairs serving as a volunteer fireman, justice of the peace, and city alderman. In 1876, he ran for governor, and as an independent garnered approximately one percent of the total vote. In 1869 Isaac Gammon, a railroad hand, became the first Black to be elected to the Knoxville Board of Alderman. Several other Blacks held aldermanic seats in the 19th century, including Edward Livingston, William Yardley, Melvin J.R. Gentle, Green Fields, Henry Jones, and Cal Johnson. Caldonia Fackler Johnson was born into slavery in 1844 on the McClung estate, and went on to become one of Knox County's wealthiest citizens. In addition to a racetrack in Burlington, he owned several downtown business properties, including the Cal Johnson Building at Vine and Central (now demolished).

There are other noteworthy African-Americans, besides those who succeeded in the political arena. Dr. J.B. Young was probably the first Black physician to set up practice in Knoxville. In 1869, his office was listed on Market Square. J.M. Armistead was pastor at Mt. Zion Baptist Church, and publisher of the Baptist Companion, on of four Black newspapers published in Knoxville between 1878 and 1891. Richard "Uncle Dick" Payne provided Knoxville with fresh potable spring water from 1845 to 1885, in the years before the city had a water

plant. Other well known Knox County Blacks from the 19th and early 20th century included Alfred Anderson, Charles Canceler, Shadrach Carter, Hugh Draper, Frank J. Kidd, Samuel R. Maples, James Mason, Benjamin Maynard, Abraham B. Murphy, and Moses Smith.

Most Knoxville Blacks were laborers or servants; a great many worked for the Knoxville Iron Company, or in the marble-finishing plants. Others worked in the mines at Mascot, where as in most places they had their own facilities, including a recreation room. The following industries were also known to be principal employers of Blacks: the Burr and Terry Saw Mill; Knoxville Car Wheel Company; Knoxville Leather Company; Knoxville and Ohio Railroad; and Knoxville Rolling Mills. There is evidence that there was resentment of and prejudice against Blacks among the White working class. When the city streets were paved with brick in 1893 the White laborers of Knoxville held a mass meeting to protest the contractor using Blacks exclusively.

Despite the lip service given to Black achievement by White leaders, neither political party was above using crude appeals to racial prejudice when it suited election politics. If Blacks were happier in Knoxville than in the rest of the New South, it may have been because Blacks composed a relatively small portion of the population. This factor has seemed to affect race relations both in Knoxville and in the nation generally.

Some of the physical resources associated with the Knox County's early African-Americans include individual sites as well as neighborhoods. Mechanicsville (NR 7/18/80) is an excellent example of a industrial village. The neighborhood contains many prime example of worker housing, including a number of shotgun style residences. Several of the smaller homes along Fremont and to the north of Old North Knoxville Historic District (NR 5/14/92), were part of an area called Muck Town. This was home to many of the house servants who worked in the mansions along Armstrong and Scott. The predominant concentration of African-Americans in Knox County is in east Knoxville. Among the associated buildings that remain are the 1928 Austin High School, the old sanctuary next to the present day Warner Tabernacle A.M.E. Zion Church, and Speedway Circle, a half mile circular drive that follows the form established by the race track of Cal Johnson. Other sites in the city include Knoxville College, which features several buildings dating from the 19th and early 20th Century; and the Wallace Chapel African Methodist Episcopal Church at 5103 Homberg. Built in 1930, the church is a remnant of black community, consisting primarily of brick workers, that once existed along the railroad tracks.

Other Significant Immigrant Groups

During the 1850's several different groups of European immigrants were drawn to Knoxville. The majority of these immigrants were from Ireland, Wales, Germany and other assorted countries in Eastern Europe.

The Irish Catholics

The building of the Railroads brought many Irish to Knoxville, and for the first time Roman Catholics were numerous enough to form a parish. However, as with several immigrant groups, the Irish Catholics were not readily welcomed by some of Knoxville's most outspoken residents. Methodist parson and publisher of Brownlow's Knoxville Whig, William G. Brownlow, expressed his displeasure of this new element. He said that, "In all communities, Catholics are to be found who are good citizens, but in the general, they are a dangerous population, much to be dreaded. They will drink, swear, lie, break the Sabbath, and for a trifling consideration, get their sins pardoned by a presumptuous and arrogant Priest!"

In spite of such disdain, they clung to their faith and continued to settle in Knoxville. Priests, many of whom were Irish, came from the North to minister to the immigrant Catholics. They were responsible for missions, churches, and schools. A small church building was built in 1855 on Walnut Street in downtown Knoxville. After the Civil War the Church of the Immaculate Conception (Survey No. 1080) was built near the old church, on the site of a Union artillery battery called the Battery Wiltsie. Finished in 1886, this Victorian Gothic church served the entire Catholic congregation of Knoxville.

Besides working for the railroad companies, the Irish immigrants worked in wholesale houses and construction. Most 19th century Irish immigrants were a close knit group of people, and highly nationalistic. The Irish annually celebrated St. Patrick's Day with a number of festivities and a ball, with the Lamar House being the preferred location.

Perhaps one of the most recognizable Irish names in Knoxville today is Patrick Sullivan. Sullivan owned a tavern at the corner of Central and Vine in the heart of the wholesaling warehouse district. The warehouse area is currently a historic district called the Southern Terminal and Warehouse Historic District (NR 11/18/85); Sullivan's old building has been returned to its original use, and it bears his name. Along with Michael D. Sullivan, Patrick Sullivan was mainstay on the Board of Alderman in the 1870's and into the 1880's. Sullivan's residence is located in the Fourth and Gill Historic District (NR 4/25/85).

Another Irishman involved in local politics was George Dempster whose mother came from Ireland in 1872. Along with his brother Tom Dempster worked on the construction of the Panama Canal. Upon returning to the States, he attempted several business ventures, his most successful being Dempster Brothers, Inc., which manufactured heavy equipment including the Dempster Dumpster. A staunch Democrat he served as an alderman, city manger, and mayor of Knoxville. Dempster lived in several homes in Knoxville; one of them is located on Scott Street in the Old North Knoxville Historic District (NR 5/14/92).

The Welsh

A group of experienced Welsh ironmasters helped Hiram S. Chamberlain create the Knoxville Iron Company in 1869. These five Welshmen, David, Joseph, and W.J. Richards, Daniel Thomas, and Thomas D. Lewis, are particularly noted for contributed their technical knowledge and experience. Under Thomas' direction the company opened a coal mine at Coal Creek (now Lake City), approximately thirty miles northeast of Knoxville, along the Knoxville and Kentucky Railroad. Many of the Welsh immigrants found employment in either the coal mines or iron industry. Of those who worked for the Knoxville Iron Company, many built homes in the Mechanicsville area (NR - 7/18/80). Some, known for their singing voices, were involved in local choral groups. During the 19th and early 20th century, these choral groups along with rest of the Welsh community celebrated their nationality with music and speeches, in honor of St. David.

The Germans

The first Germans started to come to Knox County at the end of the 18th century. These settlers were mostly farmers and tradesman from Virginia, North Carolina, and Pennsylvania (Pennsylvania Dutch). Many had earlier settled in the upper counties of East Tennessee. They were often a strongly religious people, who as early as 1822, condemned slavery as a "great evil." Primarily of the Lutheran faith, they formed two early Lutheran churches in Knox County.

The first Lutheran congregation was St. Paul's Evangelical Lutheran Church, founded in 1805 in French, Tennessee, south of the Holston River. St. Paul's (renamed Zion Evangelical Church in 1854) remained a German-language church until the 1840's. Zion Lutheran Church, a landmark in the community and affectionately known as the "Old Deutch Church, " was destroyed by fire in 1955. In 1809 the Miller's Lutheran Church (also known as the Lonas Kapelle) was founded in northeast Knox County. The current building, the Millerstown Lutheran Church (Survey No. 2551) is used by another denomination now. Among the names of the founding families for these two congregations were: Alts, Booher, Brenner, Falckner, Houser, Karns, Lang, Mickels, Saine, and Weisgerber.

Beginning in 1844, the East Tennessee Colonization Company became responsible for the influx of new German and Swiss-German immigrants into the region. A number of the Germans who settled in the colony of Wartburg, in Morgan County, began to drift to Knoxville in the 1850's and 1860's. Many of these Germans were highly skilled laborers, and became well respected by local industries. Among those that made their way to Knoxville via Wartburg, were the Knabe, Knaffl, and Krutch families. For many years the Krutch (originally Krutzsch) family played an important role in the local art scene.

The small German-Swiss population seemed to associate themselves more closely with Germans than with the French-Swiss. Considering the importance of a common language in a foreign place, this assimilation seems natural. Such seems to be the case with Peter Staub, whose opera house often featured the Mozart and

Mendelssohn clubs, Knabe's orchestra, and the German Turnverein Band. These musical groups were mainstays during the May and October celebrations of German heritage.

One of the German immigrants who first settled in Wartburg before moving to Knoxville was Gustavus Robert Knabe. He was born in 1817 in Leipzig, Germany, where he studied music at the Leipzig Conservatory, and was a member of the Mendelssohn Orchestra. He arrived in Wartburg around 1847 and eventually landed in Knoxville at the close of the Civil War. He had served as a musician for the Union Army in the latter years of the war. While in Knoxville he organized the Philharmonic, a choral group and orchestra; and also taught at several schools including the East Tennessee Female Institute, and East Tennessee University (later the University of Tennessee). Through all of his accomplishments he gained a reputation that led him to being called "the Father of Music in East Tennessee."

The Bearden area of present day Knoxville was a small enclave for some of the earliest German immigrants. Records show that the second person to locate in Bearden was Pennsylvania Dutchman Jacob Lonas. Lonas and his two brothers, Johann and Heinrich, settled in the area in the 1810's. He had been in this part of East Tennessee a few years earlier but fearing what he considered hostile Indians he returned to Pennsylvania. Lonas was a member of the Lutheran church and rode on horseback from his home on Middlebrook Pike to attend the Miller's Lutheran Church, about five miles east of Knoxville, a distance of more than ten miles. The Jacob Lonas House, at 6341 Middlebrook Pike (Survey No. 12730), was built around 1830, and still features many old furnishing and Lonas' library of German books.

Besides locating within the current city of Knoxville, several Germans settled in small villages throughout the County. One group of German immigrants settled in the Ball Camp community of northwest Knox County. Arriving in the early 1870's, these Pennsylvania Dutch were known to practice the Omanite and Mennonite faiths. They were considered thrifty, progressive farmers, who were said to have been the first in the area to use lime on their land. Reportedly, they were also the first bring to Jersey cattle into the community. They organized a Mennonite church on Lovell Road, with an adjacent cemetery. They also developed the Smoker Cemetery on the present site of Karns High School. Among the settlers were the Duckwaller, Newhauser, Smoker, and Yoder families.

Two other German immigrants that came to Knox County in the mid 19th century were Adam Oehmig and Peter Kern. Adam Oehmig, a first generation Pennsylvania Dutch, moved to the Knoxville area around the 1840's, and reportedly was very active as a contractor and builder. In 1869, Peter Kern was a founding board member of the First German Evangelical Lutheran Church, the first Lutheran church to locate in the city of Knoxville. Kern was born near Heidelberg Germany in 1935, and came to Knoxville during the Civil War. He was a well respected businessman and was elected Mayor in 1890. His confectionery and bakery business still survive today in Knoxville. His double brick building, located on Market Square (Market Square Historic District - NR 12/20/84), built in 1876, likewise still remains on the northwest corner of Union Avenue and Market. Kerns' house (Survey No.13182) still exists in northeast Knox County.

The Jews

The Jews who came to Knox County were primarily from Eastern Europe, and were well educated. Among these immigrants were Gerson and Mattie Liebe (Rabinovitch) Corkland from Lithuania, and Max Friedman from Tarnopol, Poland. Late in Friedman's life he supposedly coined the term "New Deal" for Franklin Delano Roosevelt's programs. In 1864, the first organization among Knoxville Jews was formed and named The Knoxville Hebrew Benevolent Association. The purposes of the Association were to provide services in the Ashkenazi (German) form, provide a Jewish cemetery, and to collect funds for indigent and distressed Jews. Founding members included Isadore Fishel, Samuel Guggenheim, Sampson Hirsch, Solomon Lyons, Jacob Spiesberger, and Moses Stern.

One of Knoxville's most celebrated Jewish immigrants was merchant, philanthropist Max B. Arnstein. Arnstein was born in Germany in 1858, and came to America at the age of 16. Although of the Jewish faith he attended Catholic school and studied under the Jesuits. In 1888 he came to Knoxville with a cousin, S.M. Baruch, to open a fine department store. The Arnstein Building (Market Square Commercial Historic District, NR 12/20/84) on the southwest corner of Union Avenue and Market Square was built in 1905 to house offices and the Max B. Arnstein Department Store. The Arnstein store closed in 1928, and the building was later leased to the Tennessee Valley Authority.

The Others

Several other individuals and small groups of people have come to Knox County from around the globe. Of those who migrated here, two Mediterranean cultures are worth noting. Several Italians located in Knoxville, including Professor Guilliano, who directed local bands here for a number of years, including one Italian band which played the 1891 resort season at the Fountain Head Hotel. One locally predominant ethnic group first came to Knoxville in the early 20th century. Greeks began to arrive around 1915 and have continued to migrate to Knoxville, up to the present time. A noteworthy individual was Major George Farragut, who was born on the island of Minorca in the Mediterranean Sea of Spanish decent. After a successful military career he made his first purchase of land in Knox County, in 1794. His son David, who was born in 1801, would go on to become America's first Admiral, and one of Knox County's most famous offspring.

F. ASSOCIATED PROPERTY TYPES

EARLY SETTLEMENT AND THE FRONTIER, 1785-1860

F-I Single Residential Properties
F-II Description-Single Residential Properties

The domestic dwellings found in Knoxville and Knox County reflect the gradual progression of the area from tentative frontier settlements to prosperous, well-established homesteads. Initially, the settlers' houses were usually log; they had one room with a loft above. However, even early in the settlement process, some new landowners were able to built more elaborate dwellings. Also, as families grew and prosperity increased, additional rooms may have been added to the original one room structure.

Between the 1780s and the 1850s, perhaps thousands of log houses and barns were built. Only a few remain; many houses are well disguised with a weatherboard covering. The log houses which survive share several details. They are usually rectangular in plan, with half-dovetail notching. V-notching has only been found on one structure, the Keener-Widner-Gibson House (Survey No.2351) at 8200 Seven Islands Road. One, one and a half and two story examples can be seen in remaining log houses; however, two story examples are rare. Double pen log homes with a dogtrot located between them and other log homes in a saddlebag configuration, without an intervening central hall, comprise the bulk of the one and one and a half story structures. Chimneys are either brick or composite (brick with a massive stone foundation). Interiors were often finished with wide boards, sometimes beaded and hung horizontally on the walls.

Supporting structures which accompanied the domestic buildings included barns, smokehouses, sheds, grain storage buildings and other structures. Several barns from the first settlement years still remain. The remaining examples are built of hewn logs, usually with V-notching and a large second story which is cantilevered over first story pens, providing covered spaces outside the pens. Spring houses can also remain as supporting buildings for these residences. The smokehouses and sheds were usually built of logs; they are v-notched or have half-dovetail notching. Spring houses were usually built of stone or brick, with a floor that was channeled to allow the movement of cool water.

Once the early settlers had established their farms and could afford to, they began to build new homes or to add on to their first ones. Wood shingles were used on roofs, and windows had heavy, wooden shutters. Occasionally glass was used. The puncheon floors and clapboard wall covering seen in the earlier homes were replaced with planed tongue and groove flooring and weatherboard later.

Statement of Historical Context

E. 4. INSTITUTIONAL AND ORGANIZATIONAL BUILDINGS, 1785 - 1940

As people begin to form settlements they establish institutions that offer services and construct buildings or other systems to house those services. Knoxville and Knox County are not exception. Government, in particular, offered services which changed over time. These changes reflected not only the growth of government, but also newer technological solutions available providing services to meet the increasing demands of constituents. Other institutions established including charitable, educational and social agencies helped to meet societal demands. Many of these institutional organizations, when their financing has grown to an acceptable level, built structures intended to advertised their presence to the community, often with exemplary architecture that remains unique to the present day. An examination of the institutions and organizations that form a community can provide a picture of its history and of the architectural styles acceptable during a particular time period. The organizations and institutions with their associated buildings, sites or objects discussed in this section include schools, utility companies, churches, government buildings, and fraternal organizations, i.e., women's clubs, Masons and the YMCA and YWCA. There may be other types of organizations or institutions that fit into this category.

Schools

Knoxville, Knox County and the State of Tennessee have all established educational institutions in Knoxville and Knox County. One of the first institutions established soon after settlement include schools. However, many of the early schools were private institutions limiting the use to a select group. Private schools for boys were the first educational facilities established in Knoxville and Knox County frontier settlements. In 1810, James Hudson opened the Knoxville Literary Institution and offered instruction in Latin, Greek, English and the sciences. Other private academies included Rural Union Academy and Ebenezer Academy, both established in 1811. Early secondary education started with the establishment of seminaries and academies.

The earliest secondary school organized in Knox County had its opening on January 1, 1793. Organized by the Reverend Samuel Carrick, a prominent Presbyterian minister, the school is referred to as a seminary. Supported by tuition and subscription, the private institution had a strong religious influence. The school offered Latin, Greek, English, liberal arts, and the sciences. It was comparable to a Latin Grammar school and not well adapted to the educational skills needed on the frontier. In 1794 the trustees of Blount College organized the institution that became the University of Tennessee. However, there is no evidence that the earliest buildings survive.

Home schools often prevailed during the settlement period. The mother, with assistance from the father or another family member, often served as the teacher. Some families employed tutors for their children's education. Boys also had the opportunity to learn from apprenticeships and often individuals taught selected courses of study. Contemporary advertisements in local Knoxville publications show course offerings in fencing, swordsmanship and French military maneuvers.

An early boys' school in Knoxville, the Hamden Sidney Academy, evidently received some public moneys, probably a per capita payment. However, it did not receive funding through public tax levies. The Hamden Sidney Academy is first referred to in Knox County records in October 1834 when the Knox County Court appointed a trustee to the school. The school received its charter in 1806, but evidently did not begin instruction until 1817. During the school's existence it went through a series of mergers, first with East Tennessee College and later in 1848 with the public school system. The school closed from 1852 through 1866, and then leased to the University of Tennessee as a preparatory department. It later became a secondary school in the City of Knoxville and continued that role until the establishment of Knoxville High School. The structures associated with Hamden Sidney Academy have not survived.

Schooling for girls received less organization and was scarce in Knox County. The girls in Knoxville often had home tutors and could obtain private institution in needlework or dance on a fee basis. The Knoxville Female Academy, established in 1823, as a tuition supported female school, and received its charter in 1827. The school did not open until 1829. The Knoxville Female Academy, supported from 1841 by the Methodists, began to grant degrees in 1846. By 1850, several of its graduates had earned the degree "Mistress of Polite Literature." The school closed during the Civil War and its buildings served as a hospital. The school reopened in 1881. In 1890, new school buildings replaced the original, demolished, school building. Buildings from the second building phase do not appear to be extant.

Public schools started late in Tennessee and Knox County. A state measure adopted in 1815, granted education to the poor by paying their tuition to private schools or establishing schools for them in their home counties. This provision had two unfortunate results. First it did nothing to provide education for potential students who were not paupers and secondly, it established the idea in the public mind that public schools were only for the poor. A law established by the U. S. Congress required counties to set aside land for the use of public schools. However, in Knox County the settlers occupied the best land first and the remainder of land left for the schools was fragmented and difficult to combine into larger blocks for the construction of schools. Citizens complained to Congress in 1824, but no legislation enacted to remedy the problem.

The establishment of public schools finally began between 1830 and the Civil War, with the Tennessee constitution of 1834 providing that the legislature should promote literature and

science and define a public school fund. By 1836 the state established the office of State Superintendent of Public Instruction. The Superintendent was charged with administering the public school fund. The office of Superintendent of Public Instruction was soon abolished, but Knox County had already started to use the public school fund. Public schools were usually open for three months, with one school being listed as open forty days and two for four months and nine days. Boarding schools still operated in Knox County during this period.

In 1867, a revised state school law passed that provided for public schools. The law also required the construction of school houses. By September of 1869 there were 126 school in Knox County, usually constructed of logs and operating without any equipment other than log benches for the students. Each school district operated autonomously. In 1880, Knox County schools opened in August and operated for five months, closing at Christmas. Frame school houses were being built, but at the same time many school districts were in debt and five out of twenty-three did not function. Local newspaper reports of the period characterized Knoxville city schools of excellent quality.

Secondary education in Knoxville and Knox County finally became a publicly funded system by the late nineteenth century. By 1916 Knox County had seven public high schools. Knoxville High school opened in 1910 as the only city high school. In addition, following the large annexations of 1917, the previously existing school systems of Park City, Oakwood, Lincoln Park, Beaumont and Lonsdale were all added to Knoxville's school system. The city also built many public schools in the early twentieth century. Brownlow, built in 1915, Park Junior High School (NR 6/30/83) and Rule Junior High School were all constructed in 1925. A number of elementary schools were built in 1925. Knox County also built schools in some areas of the county prior to World War II. At least one school buildings, Riverdale, constructed in 1938 used assistance from the Public Works Administration (PWA). The school building still stands, although it is no longer used as a school.

By 1930, Peabody School (311 Morgan, Survey Number KN.1420[1]) constructed in 1874 at a cost of $6,000.00 with some funding from the Peabody Fund, had been vacant for several years. The school was sold to the Central Labor Union for $10,000.00. The Peabody School was the first school building built by Knoxville City funds. The school still serves as offices for Laborer's Local Union Number 818.

In the 1890s in Knox County there were a number of education institutions, including the University of Tennessee, Holbrook Normal College (1893), Baker-Himel School (1889, college preparatory school that closed in 1913), the Tennessee Deaf and Dumb School (1844) and

[1] Survey numbers mentioned in this document will be noted as KN.(Knox County) followed by a number, i.e., KN.1420.

Knoxville College (1875). Architectural evidence of these institutions is found at the Knoxville City Hall (NR 5/31/1972 and 12/2/1982) and the Knoxville College Historic District (NR 5/31/1972).

Holbrook Normal College, established in Fountain City and built with the help of the Knoxville and Fountain Head Land Company, encouraged Knoxville businessmen to buy land in Fountain City by touting the prospective large enrollment at the college. In 1893 four buildings were constructed for the college, including a three story, brick school building, two dormitories and a house for the president. The Fountain Head Hotel served as a girls' dormitory. The college opened on September 4, 1893 with an enrollment of more than one hundred students. Low tuition and lack of endowments made its functioning difficult and in 1900 the property was purchased by the Tennessee Baptist Association. In 1906, Knox County purchased the property and in 1930 demolished the buildings. The county built Central High School on the site. The first grammar school established in Fountain City occurred around 1902 or 1903.

Also existing in Knox County was Johnson Bible School, a correspondence school which in 1887 had over two hundred correspondence students. Several buildings still exist from the earliest days of the college's founding (KN.2830 - KN.2834). Johnson Bible College is named after Doctor Ashley Sidney Johnson, who moved back to Knox county in 1887. Doctor Johnson purchased the land originally settled by Jacob Kimberlin, on the French Broad River in southeast Knox County and continued the correspondence Bible college he had established while living in South Carolina. In 1888, Dr. Johnson was named postmaster of the Gap Creek Post Office, and its name changed to Kimberlin Heights. Doctor Johnson was a great-grandson of Jacob Kimberlin, a Revolutionary War soldier. Buildings were constructed on the site of Johnson Bible College in 1893. The purpose of the college was, and still is to train ministers for the Christian Church.

Knoxville College was established by the United Presbyterian church in 1875 for African Americans. Knoxville College not only trained teachers to supply African-American schools, it also educated its students in pre-college levels in order to allow them to achieve a college education. In 1878, seventeen percent of the student population studied on a level equivalent to, or above, that of a college freshman. By 1920 it was the leading supplier of African-American teachers. Enrollment was also enhanced during the 1880s when African American legislators obtained state scholarships for military cadets at the college. The college served as the Industrial Department of the University of Tennessee for African Americans after UT received funds under the Second Moral Act. A College of Arts and Sciences was established by Knoxville College in 1914. In 1979 the church deeded the title of the college property to the board of trustees of Knoxville College.
The Tennessee Deaf and Dumb School was established in 1844, one of the earliest deaf schools in the nation. The school first operated from a rented residence in east Knoxville, and opened in 1845. In 1846 the school received a gift of two acres of land just west of downtown and began the

construction of the first of its buildings, which opening 1851. The school grew rapidly, although interrupted by the Civil War when both Confederate and Union armies occupied the school as a hospital. The school reopened in 1868, and grew steadily to its largest size in 1905 when it had ten buildings on the site. In 1924, bearing the new revised name of the Tennessee School for the Deaf, the school moved to the Island Home property bequeathed to it by Perez Dickenson. In 1924.

On its Island Home site, the Tennessee School for the Deaf continued to grow, and its location met the aim of Perez Dickenson who willed the land to the school after an encounter he witnessed in downtown Knoxville between one of the students of the school and a horse and carriage. Its original 1851 campus and buildings served as the Knoxville City Hall from 1925 until 1980 and now serves as the offices for the Tennessee Valley Authority. On the Island Home site, a brick classroom building remains from the 1924 era of the institution. The Tennessee School for the Deaf also utilizes the 1846 Italianate summer home originally built by Perez Dickenson. Alterations to the building changed its appearance from Dickinson's ownership, particularly on the exterior. These changes have since acquired significance in their own right, through their association with the Tennessee School for the Deaf.

Blount College, which became the University of Tennessee, was established by the territorial assembly on September 20, 1794. The college was first funded through tuition fees and contributions. In 1806 the U. S. Congress passed legislation requiring Tennessee to establish two colleges, one in the east and one in the west. When the Trustees of the new college decided to use the Blount College buildings, an agreement allowed East Tennessee College to assume the Blount College assets in 1807. Until 1826, the agreement allowed East Tennessee College to assume the Blount College assets in 1807. Until 1826, the campus was located downtown, , but in that year the college began to acquire property in its present location. By the 1840s the school was known as East Tennessee University. In 1869 the school became the land grant college of Tennessee and an agricultural - industrial department was established. The school became the University of Tennessee in 1879. In 1886, the University of Tennessee accepted a grant of fifteen thousand dollars for the establishment of an agricultural experiment station. Several buildings remain on the University of Tennessee campus which date from the late nineteenth century and are important in understanding the earlier roles of the school (KN.13166 - KN.13178.)

Utilities

Within the city limits of Knoxville, the Knoxville Utilities Board is responsible for the distribution of natural gas and electricity, for water treatment and distribution and for sewage treatment. The service distribution network came first to Knoxville, and occurred for the most part after the 1880s. The Knoxville Utilities Board services extend into a small portion of the county. The remainder of Knox County is served by different utilities boards. As noted in the Suburban Growth and Development historic context of Historic and Architectural Resources of Knoxville and Knox County, Tennessee, the expansion of those services, together with transportation, helped to fuel the greatest expansion in population that Knoxville has experienced.

The manufacture and distribution of gas (in this instance, coal gas) was the first of the utilities to be established in Knox County. In 1856, William M. Churchill and William G. Swan were granted the right to supply the city with low cost gas. An issue of the American Gas Light Journal dated January 2, 1860, reported that there were 128 private meters and forty street lights served by the Knoxville Gas Light Company. The Knoxville Gas Light Company provided service until 1863. At that time General Burnside entered Knoxville, the company stopped production. The buildings were shut down, left abandoned and were neglected approximately three and one-half years. The system resumed supplying gas to sixty-eight customers on September 2, 1867, under the ownership of John R. And George Branner. By 1871 the system had 260 customers. From 1855 to 1888, the gasworks were located on the Tennessee River at the foot of Locust Street. From this location the company moved to the intersection of Cooper and Munson Street. The buildings were demolished in the last thirty years.

By 1903, the company became known as the Knoxville Gas Company. The company did not do well particularly after the establishment of the Tennessee Valley Authority. In 1945 Cities Service Company, which had controlled the gas company since 1910 approached the City of Knoxville about purchasing the facility. Knoxville bought the gas company and in 1947 added it distribution system to the Knoxville Utilities Board, where it is still housed.

A municipal water supply was first put in place in Knoxville in 1883, although some private distribution system occurred prior to that time. In an 1838 survey a new site was selected on First Creek near the Tennessee River. However, this system was never constructed. On April 26, 1850, a bond issue provided for the construction of a new system. However, half of the allocated money ($500,000), was voted to be a payment to the Knoxville and Kentucky Railroad four months later. A contract for the waterworks was let with the remainder of the fund, but like the earlier attempts, work was never started. The present water treatment and distribution system had its beginning in 1883 when the Knoxville Water Company was formed. In 1909, the Knoxville Waterworks laid a pipe consisting of bored logs from McCampbell Springs on Tazwell Pike to the

city. This stated location is misleading since street names have changed. McCampbell Springs appears to have been located Near the intersection of present day Broadway and Central.

In the interim, other measures were taken to compensate for the lack of a central water system Large cisterns were dug in the business district for the storage of a water supply. There were also vendors with water cars, including one operated by "Uncle Dick " Payne between the years 1845 and 1885. Payne peddled water around the city selling it by the bucket from the back of a two wheel donkey card. His operation is often called Knoxville's first waterworks.

The Knoxville Water Company encountered initial difficulties with breakdowns, as well as being inadequate for the rapid growth of the city in the late 1890s. The company was purchased by Wheeler and Parks (a Boston based organization) in the 1890s. They improved the pumping station located on the Tennessee River in 1894. Two other water systems were built in the 1890s: one opened on April 28, 1891, for the town of North Knoxville and the other opened on September 17, 1892, for the town of West Knoxville. Both were later incorporated into the Knoxville system when the communities were annexed into city.

In 1904 the City of Knoxville purchased the water system. A pumping station and water treatment plant were built in the Collegiate Gothic style in 1926 - 1927. Located on the north bank of the Tennessee River, the new facility cost approximately one million dollars. Originally called the Williams Creek plant, this facility was renamed for Mark B. Whitaker, a retired general manger of the Knoxville Utilities Board (KN.4660)

The Schuyler Electric Light and Power Company, formed in 1885, began its electric system on December 21, 1885. News articles of the time note that the streetlights were turned on each day at 4:30 p.m. The company gained some of Knoxville Gas Light Company's abandoned street light service but the first widespread electric street lighting did not take place until 1896 under the system developed by the Knoxville Electric Light and Power Company, organized in 1888. The company acquired the Schuyler Company in 1890. In 1892, there were 417 street gas lamps and 114 electric arc lights. With private subscriptions, the total number of arch lights extended to about 300. Other competitors were organized sporadically over the years, but with the establishment of the Tennessee Valley Authority, a city department (The Knoxville Utilities Board) was formed to distribute electrical power. The distribution of electricity was concentrated in that organization in 1938.

Churches

Although congregations were organized in Knoxville and Knox County during the earliest days of settlement , none of the original buildings appear to have survived. There is a rich collection of churches dating from the period after the Civil War and forward, but the initial buildings built as places of worship were evidently demolished to make way for the second or even third generation of church buildings. In many cases, the cemeteries accompanying the church buildings have survived.

The earliest known churches in Knoxville and Knox County were formed by members of the Presbyterian denomination. Lebanon-in-the-Forks Presbyterian Church was organized in 1791. It is not known when First Presbyterian Church in Knoxville was established. However, its congregation was active in 1793. Although the cemeteries that accompanied both of those congregations still exists. A later building houses the congregation of First Presbyterian Church and Lebanon-in-the-Forks no longer has an active congregation (in part as a result of the building burning approximately ten years ago). The Little Flat Creek area in northeast Knox Count appears to have been settled by members of the Baptist faith. The Little Flat Creek Baptist Church organized in 1796 and Beaver Dam Baptist Church in 1800. The Holston Baptist Association also organized in 1796. Stock Creek Baptist Church in south Knox County organized in 1806.

Methodism began in Knox County with the establishment of Seven Islands Methodist Church in 1803. The circa 1870 church building remaining now houses a non-denominational community church. Methodist congregations throughout out the county soon followed with churches at New Salem (1832), Hopewell (1821), Millertown Pike (1825 and Hendron's Chapel (1840). At least one Methodist congregation cooperation with a Masonic Lodge in buildings a facility that the two organizations used jointly. The building, now used for storage, still stands on Emory Road at Copper Ridge Road (KN.7270).

The first Episcopal congregation organized in 1844 and the first Catholic congregation began in 1809, with the Church of Immaculate Conception constructed to serve an Irish congregation in 1852. The Knoxville Hebrew Benevolent Society formed in 1866.

Government Buildings

As Knox County grew in population, the government offices constructed reflected the architecture of their time and the settlement population. One of the most evident contrasts occurs in the provision of post offices. Three buildings used as post offices remain from different eras of Knox County settlement. The first is located on Sevierville Pike and served as the post office for the

community of Shooks Gap. It is a one and one-half story log building, the home of John Meyers. Which for ten years also housed the post office. The owner was appointed as postmaster in 1882 and remained in that office until 1886, when the Shooks Gap Post Office was discontinued. When the Shooks Gap Post Office operated, there were a number of other rural post offices located in houses around the county. The owners of these houses served as postmaster to their communities.

This primitive log building contrast remarkably with the Old Post Office, or Custom's House, (NR 3/20/1973) built on Clinch at Market in downtown Knoxville circa 1869 - 1873. The three story building, credited to the architect Alfred B. Mullett, is built of Tennessee marble in the Renaissance Revival Style. At the time of its construction it was considered one of the finest structures in East Tennessee. The second Post office to served the City of Knoxville was constructed in 1934 (NR 5/24/1984). The three story Knoxville Post Office is a mixture of Moderne and Art Deco Styles designed by the architectural firm of Baumann and Baumann. The building incorporates at least six different colors or types of East Tennessee marble, as well as exterior walkways of Crab orchard stone.

Other government buildings that remain to mark Knox County institutional and organizational architectural styles are the Tennessee Deaf and Dumb School (Old City Hall) and the Knox County Courthouse (NR 4/24/1973) at the corner of Main Avenue and Gay Street. Constructed in 1885, by Stephenson and Getaz the brick building is two and one-half stories with a raised basement and a central clock tower.

Social and Fraternal Institutions

There are a number of other institutions in Knoxville and Knox County that have constructed buildings which enhance the architectural stock and the community's understanding of the importance of it institutions. Institutions include the Young Men's Christian Association (YMCA) of Knoxville, Tennessee organized in 1854. The Knoxville YMCA was constructed only ten years after the parent organization was founded in London, England. The YMCA has occupied its current downtown building at 605 Clinch since the present building was constructed in 1929 - 1930. The YMCA Buildings (NR 11/17/1983) is a Mediterranean Revival style building designed by a Knoxville architectural firm of Barber and McMurray. The YMCA was organized under the auspices of Knoxville's Second Presbyterian Church. Although the organization disbanded during the Civil War, the YMCA began to meet again in the 1890s. The current facility was built after a fund raising drive held in 1928. A YMCA raised a total of $500,000.

Several women's organizations have also had a strong influence in Knoxville, including the young Women's Christian Association (YWCA) founded in 1889 and now housed in a building located at

the corner of Clinch and Walnut in downtown Knoxville. Ossoli Circle (NR 3/21/1985), another women's organization, is housed in a Colonial Revival style Brick Veneer building designed by Knoxville architect Charles I. Barber of the Barber and McMurray Firm. The Ossoli Circle Women's Club served as an early leader in advancing women's issues, working for increased rights and promoting women's welfare. The history of Ossoli Circle Women's Club is also significant because it is the only women's organization, along with the YWCA, remaining in Knoxville that functioned before World War II.

Another significant women's organization was the Women's Education and Industrial Union, founded in 1890. The organization served to convince the city to appoint a police matron and supported and lobbied efforts for appropriations from the Knox County Court to build the Knox County Industrial School. One of its efforts continues today in establishment of the Mount Rest Nursing Home in 1893. The two story, brick building is still located on McCalla Avenue and continues to care for destitute and aged women. The Florence Crittenden Home is also a significant social institution. Founded in 1896, its headquarters were located in the Park City Historic District (NR 10/25/1990) on Woodbine.

E. 5. CEMETERIES AND GARDENS, 1785-1940

National Trends

Cemeteries

Cemeteries and gardens are unique fixtures of any community's open space. They reflect the community's attitude toward ceremonial activities, and the growth and evolution of landscape architecture through their design. They are also an important illustration of societal customs and attitudes. In many communities, the development of cemeteries and gardens set antecedents for or parallels the development of public parks; that trend did not happen in Knoxville and Knox County, as will be discussed later.

Cemeteries are good examples of the history of cultural development in the United States. Cemeteries represent a connection to our past and the design changes in cemetery development reflect what we consider culturally significant in our communities. Over time, changing concepts in cemetery design represent aspects of changes taking place in society. From its inception, the burial practices of the settlers in the 'new world' followed the practices of their ancestors in Europe. The word cemetery did not even come into wide usage until the nineteenth century. Previously, the places where the deceased were buried were called burying grounds. The word cemetery represented a new way of thinking about how the remains of the deceased were viewed. Translated literally, the word cemetery means a large dormitory where many people are sleeping. Before this change in attitude, the burial site was often considered insignificant; the emphasis placed on the departed soul. Family plots were uncommon and there was little or no system for the placement of graves beyond social hierarchy reflected in the congregation.

The first formal cemeteries in the United States followed the pattern of churchyard burials in Europe. The European burial customs had originally evolved from ancient monastic orders who desired to bury the bodies of their brothers as close as possible to the living, for they were considered an important reminder of the monastic living order. This custom quickly spread to other churches where, like the monastic order, the most honored person in the congregation received the grave site closest to the church. The poorest members were often buried in the far corners of the church graveyard. Criminals, strangers and unbaptized babies were buried on the north side of the graveyard, or not within the graveyard at all. Often, the area where the 'undesirable' were buried is known as the 'potters' field'. The derivation of 'potters' field' as the name for these burial grounds is though to have come from the book of Matthew in the New Testament which tells the story of Judas's betrayal and his attempt to repent and return the 30 silver pieces used to buy a potters' field. The potters' field served as the burial grounds of strangers after Judas hanged himself. The negative connotations associated with the potters' field often explains why, even after a burial in the potters' field families often continued saving money in an attempt to someday have their relative removed from the charity site and buried in a proper graveyard.

When the first settlers arrived in the new world the rate of survival was so poor that the settlers camouflaged the graves of their deceased in an attempt to conceal the large number of deaths from the hostile Indians. Death, although feared, was a common occurrence and not much emphasis or ceremony was place upon the burial site. It was not until a community was strong enough to protect itself from Indian attacks that the formal church grave came into existence in the United States in the middle and late eighteenth century. The first formal cemeteries, utilitarian in function, were crowded and followed the general form of church cemeteries in England with fencing around the perimeter and grave sites assigned according to the date of death. There was very little, if any, landscaping beyond the naturally occurring trees and shrubs. However, the design of these cemeteries often reflected the strong puritanical lifestyle. The graves served as a constant reminder of the importance of living a functional, pristine, religious life. The most common epitaph served to remind the living that their death was imminent: "Where you are now, so once was I. Where I am now, so you will be." Since so much time was spent on the church grounds, churchyard, cemeteries were often used as picnic grounds and as an area for gathering between church services. It was here that the dead were remembered for their pious or not so pious behavior.

In the early part of the nineteenth century concerns were raised about the loathsome state of many graveyards. Critical views of town cemeteries eventually gave rise to the new 'rural' cemetery. The New Haven's (Connecticut) New Burying Ground, founded in 1796 by James Hillhouse, was America's first designed funerary landscape. Later called Grove Street Cemetery, this was the first American cemetery completely planned from its conception. The grid layout following the design of city plans of that day was lined with poplar trees on a six-acre site. Instead of crowded square plots, the cemetery was designed with wide avenues so that two carriages could pass one another on each side of a grave site. The headstones in the cemetery faced in the same direction and smooth paths with painted rails were placed for visitors. Grove Street Cemetery was one of the largest burial sites developed for its time. This private cemetery, located far from the heart of the city, was the first to introduce the purchase of burial sites. A

non-denominational graveyard, Grove Street Cemetery encouraged the concept of family sections. Prior to this innovation people were not always buried according to their family relationship.

Wealth also played a significant role in the Grove Street Cemetery; the markers reflected the social position of the family members buried there. Poplar grave marker styles came into vogue during this time in the forms of obelisks, sarcophagi, shafts and draped urns. This type of remembrance was far removed from the barely legible script found on older slate tombstones. In many ways, the rise of the importance in marker design reflected the new attitudes of the second and third generation Americans. These Americans wanted monuments for the great men who had settled and developed the land. Following the tradition of European graveyards, markers were carved following the classical design elements of ancient Egypt, Greece and Rome. These markers represented an important shift in American attitudes toward developing a history and mythology of the settlement of the United States. Slowly a nation of people with diverse backgrounds established a grass-roots identity with the land on which they lived and in which they buried their ancestors. Although most of the grand markers were placed by those of wealth and importance, many families sacrificed to provide a gravestone or statue for their family members. During this era tombstones were very significant since the people of this time had no family photographs. The marker was often the only physical remembrances of their loved ones.

Pere-Lachaise Cemetery in Paris, France was the original inspiration for the 'rural' cemetery movement in America. Established in 1804, this cemetery attempted to employ the use of natural surroundings in a park like setting for the pleasure of the residents of the city. However, by 1825 over 25,000 markers had been placed within the walls of *Pere-Lachaise* and the 'rural' cemetery concept was defeated in Paris. Mount Auburn Cemetery, established in 1831, signaled a dramatic change in current attitudes about death. Burial sites which had previously been regarded as unattractive necessities now acted as both a final resting place and as a cultural gathering place. Two of the most significant factors which influenced cemetery changes included the yellow fever epidemic of 1794 and the high infant mortality rate. The yellow fever epidemic had overcrowded existing graveyards and many public health educators became increasingly concerned with the spread of disease and the loathsome stench which surrounded the burial sites. A Scottish traveler, Basil Hall, who generally scorned American innovations applauded the innovation of the 'rural' cemetery stating that the new form was a definite improvement over the "soppy churchyards, where the mourners sink ankle deep in a rank and offensive mold, mixed with broken bones and fragments of coffins." By the end of the nineteenth century most cities had passed legislation to establish new burial sites outside of the city limits of urban areas. In New York City alone, over 16,000 people died of yellow fever due in part to the conditions of local burial sites. The high infant mortality rate combined with unsavory graveyards also led many Victorian mothers to support cemetery reform since they desired an undisturbed peaceful cemetery for their dead children.

Other factors which influenced the rise of the 'rural' cemetery included the large number of immigrants who migrated to the United States and died here during the industrial revolution. Their graves overcrowded the available spaces remaining in local cemeteries. The rise of religious liberalism which promoted a new view of death as the natural beginning of a complete spiritual life also encouraged the rise of 'rural' cemeteries. Dying was now supposed to be viewed with optimism and this optimism was reflected by cemetery design.

Nature, believed to be the balanced combination of life and death, was fully incorporated into the 'rural' cemetery movement. Many people even believed that nature was given by God so that men could improve it. With this wisdom in mind, design guidelines were placed to require 'natural' development in 'rural' cemeteries. Guidelines for the selection of plants and trees were often included in rule books for cemetery development. Families were encouraged to employ simple trees and plants so that the cemetery would inspire a feeling of peacefulness. Eventually, the development of the 'rural' cemetery gave rise to the American park movement and the landscape architecture profession.

'Rural' cemeteries became very popular between 1831 and 1865 but one of the major flaws of this cemetery movement was that often the 'rural' cemetery developments were privately owned and thus too expensive for the lower middle class and the poor. Those of little influence or significance, as in colonial times, were relegated to the undesirable plots of land near stables and tool sheds; the artistic scenic overlooks were obtainable only by those of great income and prestige. In many southern states legislation was passed to place a color line in graveyards. While legislated in the South, for the most part the northern burial grounds were equally segregated. Interestingly, 'rural' cemeteries were used by people of all classes and reaches for recreational purposes. These cemeteries were often crowded with people who had no family connections to those buried there. The grounds were used by many families for picnics, walks and quiet reading areas. 'Rural' cemeteries became so popular that by the middle of the nineteenth century they were often referred to as "pleasure grounds".

The first large military cemeteries in the United States occurred during and after the Civil War beginning with Gettysburg Cemetery founded in 1863. Arlington National Cemetery was created shortly after Gettysburg Cemetery in 1864 and has remained one of the United States largest national military cemeteries. By 1989 there were over 110 military cemeteries documented in the United States with over one million nearly identical white markers. As the population in American cities greatly increased from 1850 to 1920 and job specialization became predominant, city residents sought effective new ways to systems urban growth and development. Planned growth became a popular concept in the organized labor movement and in municipal government. The lawn cemetery movement followed the national trend for systematic organization by seeking to organize cemeteries and their landscapes. In 1917, Dr. Hubert Eaton proposed "a great park, devoid of misshapen monuments and other customary signs of earthly death. Instead it was to be filled with towering trees, sweeping lawns, splashing fountains, singing birds, beautiful statuary, cheerful flowers, noble memorial architecture with interiors full of light and color, and redolent of the world's best history and romance." Drawing on concepts from the 'rural' cemetery movement, the lawn cemetery featured the use of natural topography for determining grave placement. Instead of the shaded, garden-like atmosphere of the 'rural' cemetery, the lawn cemetery sought to develop cemeteries with uninterrupted vistas in an open meadow landscape. Also, markers in the lawn cemetery were placed near scenic overlooks rather than on each grave site. Instead of many paths, the lawn cemetery had a limited road system which encouraged pedestrian visitors to walk over the green sod grounds. Individual graves were marked by small flat stones flush with the ground with limited information carved on them. Grave mounds were leveled after each burial so as to prevent a visual interruption of the landscape and to avoid any reminder of death. By the end of the nineteenth century, the lawn cemetery

had grown more popular than it rural cousin as visitors flocked to the lawn cemetery to enjoy its open setting.

In 1887 the Association of American Cemetery Superintendents was founded. Most members agreed that the lawn cemetery was superior to its rural counterpart since it acted more as a park with predetermined plans that were not concerned with individual preferences. Unlike the rural cemetery, the lawn cemetery sought to emphasize the combination of aesthetics and efficiency. The landscape was now the primary consideration for site development and individual tombstones and the stone caps surrounding the graves became undesired interruptions to the unified landscape. In part, the success of the lawn cemetery was due to the new concept of perpetual care. Although most rural cemeteries had been incorporated by the 1920's, the job placement of cemetery superintendents in lawn cemeteries seemed to be a more effective assurance of cemetery upkeep since the incorporation of cemeteries combined with yearly assessments of lot owners provided additional funds for maintenance. As cemetery management practices evolved, a school of thorough for cemeteries developed which was: "that the object of cemetery management is to get the maximum result from the minimum expenditure." After 1910, advertising became a popular method to encourage the potential lot owner to invest in the lawn cemeteries which provided perpetual care. Eventually, advertising became a catalyst for innovations in cemetery design and development. As early as 1916, when large monuments became popular again, there was a renewed demand for cemetery sites where individual markers might be placed. Capitalizing upon the desire, the owners of lawn cemeteries decided to allow markers over individual graves since most modern markers were simplistic in design and lacked the individuality and intricacy of tombstones found in earlier cemeteries.

In actuality, the heyday of the American cemetery lasted only about one century. After World War II, Americans turned to celebrate all that was youthful and as technology advanced and infant mortality rates dropped, the interest in cemeteries declined. American life spans have grown longer and the death of our parents and grandparents have changed our viewpoint about death. Now we are more likely to view our parents' death as the natural completed end to a long life. Americans are also more likely to move great distances from where they were born and where their ancestors are buried, and to more frequently now that a century ago, causing cemeteries and grave sites to become neglected or forgotten. The connection to our past through our ancestors has become something we are more likely to explore through old photographs than through visits to cemeteries. However, the cemeteries in our communities reflect the thoughts about open spaces and design of the times, the public's attitude toward death, and often contain monuments that are artworks reflecting popular motifs and themes and exemplary craftsmanship.

Gardens

Gardens have long played an important role in urban development. From the geometric, formal layouts of the Colonial period, through the *jardin anglais* popular from 1776-1850, to the Victorian period and beyond, the styles of the small house and the large estate gardens have changed to reflect their historic era. The first gardens planted by early American settlers probably occurred shortly after 1620. The Colonial period, lasting from 1620 to 1775 did not result in great innovation for gardens in America. Following the garden traditions of the Tudor style, the colonial garden basically did not change until the

jardin anglais movement became popular in the New World. But from the first attempts to settle in the New World, gardens were of the utmost importance to the newly arrived settlers. The first people to arrive in New England had been forewarned from early explorer's tales that there would be great difficulty securing food once they arrived. Often, it was a matter of life and death to secure food before the ships' stores ran out of provisions.

New France was actually the site of the first garden cultivated in the seventeenth-century New World. Champion was responsible for this initial undertaking located on an island in the St. Croix River. There are even surviving accounts and drawings of the garden, which is a worthy example of the parterre style brought over from England and France. Although the grounds were abandoned by Champlain and his men one year after they arrived, accounts written state that a party eventually returned to the site to find the outbuilding still in place and the garden still producing enough lettuce, cabbage and sorrel to provide the group with a salad. The gardens of the Pilgrims, who arrived ten years prior to the guest influx of Puritans, were purely functional in form. Located near the entrance to the house, the garden was planted with vegetables and herbs needed to sustain a household. Usually these gardens were fenced to protect the vegetation from being destroyed by wild animals. Arranged in small plots, these gardens contained the vegetables needed in smaller quantities such as onions, leeks, carrots, cabbage, and garlic. Realizing the importance of drainage, the Pilgrims often raised these small plots by adding soil and blocking the edges of the plots with saplings. Sometimes these plots were located on southern slopes so that the early spring vegetables would benefit from the sunshine. Maize, pumpkins, and other vegetables needed in larger quantities were grown in larger fields not necessarily located near the house, but cultivated in fertile strips of land where the ground would retain moisture. Flowers were grown near the house to provide fragrance, dyes and ingredients for medicine. Plants were not arranged in any particular order although most vegetables were planted in blocks. Walkways of tamped soil were provided for convenience. They generally led from one building to another. Occasionally these walkways were surface with gravel or crushed oyster shells.

In the Dutch colonies of New York the design of gardens was much more formal than the styles found in New England. Symmetrical in design, the Dutch gardens were separated by well defined walkways and garden plots were divided into specific sections for separating vegetation. As colonial towns grew to support considerable populations, the Dutch style became quite popular and was adopted by many town merchants who were living in smaller spaces and desired organized gardens because of space limitations. Door yard gardens also became popular in the early seventeenth century. These fenced gardens were planted very near the entrance to the house that the family would be able to enjoy the fragrances. Hedges also became popular alternatives to fences and walls since they were admired for their natural beauty and were able to block harsh winds. Early on, many towns regulated the height of fences allowing a higher fence along the sides and back of the property with a lower front fence. This often contributed to giving the street a feeling of continuity.

The basic design of the parterre garden in 1776 consisted of a central walk on axis with the front door. Secondary walks radiated at different angles off of the central walk. Generally, the central walk ended with some type of visual feature such as a sundial or a garden seat. As wealthier colonists built homes the

design of gardens became fancier. Surfaced paths followed the perimeter of the garden beds which were often a combination of round, rectangular and triangular shapes. These walks were also functional and provided an efficient method for harvesting and cultivating plants. Often, a narrow strip garden border would be found around the entire garden. Generally, gardens of this time followed the topography of the landscape. For example in Boston, where the land had considerable slopes, gardens were often designed in terraces. In other areas gardens were arranged to compliment the natural features of the landscape. Fruit trees were also important features in gardens of this time. Usually a single treat would be cultivated in the center of a garden plot to provide a focal point for the eye. Plants within the plots were not massed to give an overall effect as in Victorian times, but were admired individually. The gardens were now more often separated by use and the kitchen garden was now often relegated to the backyard.

By the early eighteenth century the formal parterre garden was on the decline and natural style gardening came into vogue. The natural style dismissed the formal patterns of the parterre garden and instead sought to "run into as great a wilderness as their nature will permit" By eliminating fenced enclosures and introducing the unobtrusive ha-ha wall, the views from the garden and the natural setting would not be obscured. Large landowners quickly incorporated this style into their gardening designs. President John Quincy Adams, a great lover of the natural style, had his formal gardens at home removed and replaced with an open avenue of elms adjoining a deer park. Washington's garden at Mount Vernon, a famous example of the natural style, combined limited elements of the parterre garden on its perimeter. A bowling green and a street lined avenue were the main design elements for Mt. Vernon's landscape. Washington also kept a deer park separated from the bowling green by building a ha-ha wall. At Monticello, Thomas Jefferson employed many elements of design from the 'natural style' popular in England and the United States. However, many designs originally planned by Jefferson for Monticello, such as a grotto, an extensive water cascade and a number of temples were never constructed.

In the United States, the natural style never reached the popular status it held in England. This was partly due to the high cost of designing and constructing landscapes in the natural style. Additionally, many Americans were not supportive of large landscaped gardens which seemed reminiscent of English nobility land holding. In the South the natural style never really caught on since interest in Greek Revival architecture did not lend itself well to natural style gardening. Another flaw of the natural style was that it was not feasible in urban areas where land holding tended to be of limited size.

The Industrial Revolution created great wealth in America. As people grew richer their tastes changed. Garden design reflected this change by introducing new eclectic landscape designs. During the Victorian era, from 1850-1900, gardens were designed in an ornate fashion. The classical designs of the Victorian garden's predecessor quickly disappeared with the creation of many new seed houses and nurseries and the rise in demand for exotic plants. Armed with an extensive palette of plants, the Victorian garden's predecessor quickly disappeared with the creation of many new seed houses and nurseries and the rise in demand for exotic plants. Armed with an extensive palette of plants, the Victorian designed elaborate gardens which combined plants of the same height to form carpet bedding. Carpet bedding plots were usually shaped in geometric patterns which were raised from the ground or planted on slopes so as to provide drainage and a better view of the design. The carpet bed was not used as extensively as many

other types of Victorian garden design because the plants used needed to be carefully raised in greenhouses and attended by talented horticulturists. The most elaborate carpet beds were found in urban public parks where great numbers of park strollers visited.

Italian design influences became quite popular during the Victorian period; many gardens employed classical elements such as columns, urns and water cascades. The Japanese Motif was also popular during this time and many gardens reflected this by designing Pagoda-type garden houses and moon bridges. The Victorian garden was an eclectic mixture of garden design which included various garden sections separated by shrubs according to style. Many international design influences were utilized and a large number of Victorian gardens were subdivided into sections which reflected a particular culture. Cast-iron fence design also became popular as the Victorian period progressed. The design of cast-iron-iron fences changed dramatically over time ending with a heavily designed style. Cast-iron fences were usually designed to suit the site and design of the house they surrounded. Large imposing houses would usually be fenced with a heavy Gothic fence design, while smaller houses would be surrounded by a delicately designed cast-iron fence. Benches, garden seats and statues made of cast-iron now became central features for many gardens.

The Victorian period was the era of foundation planting. New Victorian homes were built high off the ground. Foundations were hidden by small plants and shrubs surrounding the house. In some instances the design of the foundation planting was so spectacular that if drew all attention away from the design of the house. Poorer individuals did not usually have such elaborate gardens. The classical symmetrical garden design with shrub borders often remained in place with fruit trees and groups of carefully placed shade trees protecting the front or the sides of modest homes. In 1876, the centennial of this country, great quantities of trees were planted in celebration of this milestone and the tree lined city street grew in popularity. By the beginning of the twentieth century the eclecticism of the Victorian period reached its apex. Victorian gardens now combined French, Italian, Oriental and Colonial influences in their design with several terraced levels and water steps created to form impressive showplaces. Grand avenues like those in France also outlined the boundaries of many gardens. Reflecting pools surrounded by flowers gardens were equally popular. The Victorian garden began give way to new distinctive features such as the creation and use of very exquisite stone or bronze classical statues. The pergola, an Italian invention, became a quite popular feature in twentieth century gardens, as did other structures. Generally, a structure covered with ivy or roses would be the main feature of the garden, but fountains were also becoming increasingly popular as garden features. Designed from stone, the fountain was less ornate than the cast-iron fountains of the Victorian period. These new fountains were basically unobtrusive and provided a beautiful local point for a garden plot.

As time progressed the twentieth century garden grew more architecturally oriented with formal axial plans tying the garden to the house. Sunken gardens which could be overlooked from the house windows were very popular and the "wild garden" which mimicked the English countryside often surrounded other garden areas. Rock gardens also became popular during this time since the terraced style of gardening was compatible with the placement of rocks on terrace slopes.

Knoxville and Knox County

Cemeteries

In Knoxville and Knox County, the events which initiated cemetery or garden design mimic those that occurred on the national level. For example, the tradition of establishing graveyards adjacent to churches was commonly accepted in Knoxville and Knox County in its earliest days. Some of these early cemeteries survive in Knox County. Two examples, the cemetery that still remains at the former site of Lebanon-in-the-Forks Presbyterian Church, and the cemetery associated with the Seven Islands Community Church, are particularly representative of these early cemeteries. However, most of the cemeteries associated with early settlement in Knox County have continued to serve as burying grounds, growing larger and containing more contemporary monuments and other design elements installed as they continued to be used. This continued expansion has change their form and lessened the impact of their historical associations.

There are two cemeteries that remain in Knox County, both of them located within the present city limits of Knoxville, that retained their original plans and stopped accepting new burials a number of years ago. Since no burials have occurred for several years, their plans remain intact and the grave markers are consistent with their early histories. One of the best of these examples is the cemetery associated with First Presbyterian Church (Survey Nos. 1243 and 1245). The First Presbyterian Church Cemetery, located in downtown Knoxville, was the first cemetery established in Knoxville. Located next to the original site of First Presbyterian Church, and founded in 1793, the cemetery followed the national "churchyard" pattern of graveyard development. Like other churchyard cemeteries the space nearest the church wall was reserved for the important community leaders and their family members. The Utilitarian design of the First Presbyterian Church Cemetery also followed the typical pattern of placing graves closely together in long, narrow rows, with large, square or rectangular headstones facing forward. The First Presbyterian Cemetery was used until it reached capacity in 1857. The First Presbyterian Church Cemetery certainly mimics those of the earliest colonists, although it was not necessary for Knoxville's early settlers, after the first few years of settlement, to disguise deaths from the Indians. Traditions that were followed from the earliest times dictated the form of the cemetery.

Old Gray Cemetery and the adjacent National Cemetery (KN. 2331, NR pending) on Broadway and the Confederate Cemetery located in East Knoxville are excellent examples of the later, planned rural cemeteries. Their establishment may have been perceived as a move away from "unhealthy" cemetery locations nearer the residential sections of Knoxville, but no record has been found to prove that perception. Old Gray Cemetery, created in 1850, closely mirrors the rural cemetery movement of the early nineteenth century.

As Knoxville grew, the overcrowding of First Presbyterian Cemetery combined with the recurring annual epidemics of small pox and typhoid and led the leading members of the community to create a cemetery outside of the city. In part, Old Gray Cemetery was also established because the spaces for interment at First Presbyterian Cemetery had been exhausted. However, the unsanitary conditions at First

Presbyterian Cemetery also contributed to the founding of Old Gray Cemetery, which follows the design in vogue during its time period nationally for cemeteries, and clearly reflected the garden cemetery movement.

Old Gray Cemetery was the first local cemetery designed to enhance the natural landscape of the area. The cemetery incorporated design features such as walking paths and statuary. Gray Cemetery is crowded with monuments that reflect the popular Victorian grave marker style found in rural cemeteries across the country. Like other private rural cemeteries, plots were purchased and families were encouraged to purchase blocks of land to create family sections in the cemetery. Once again it is likely that Old Gray Cemetery was a necessary expansion to increase the number of available grave sites in Knoxville and was designed in the prevailing trends of the time. In the case of the Confederate Cemetery and the National Cemetery adjacent to Old Gray, both were reelections of the movement that gave rise to national cemeteries found in many locations. The Confederate Cemetery adjacent to potter's field on Bethel Avenue contains a caretaker's House and monument of East Tennessee marble.

Gardens

Traditions that were in effect when Knoxville was settled meant that gardens also reflected the colonial concept of gardens. Descriptions of early Knoxville talk about James White's log house in downtown Knoxville, and about the door yard garden in which kitchen herbs were grown. It is known that he had a turnip patch located a short distance from his house, at least when he established his household. This garden patch was on the land that the First Presbyterian Church and Cemetery were established.

Very few examples of early Knoxville and Knox County gardens remain and written histories do not suggest that they were ever widespread. Knoxville and Knox County were not settled by families who for the most part amassed a great deal of wealth. As a result no large estates or gardens accompany the majority of large houses. No public gardens were developed in either the city or the county. Island Home, the summer house and model farm of Perez Dickenson, a noted Knoxville, businessman, is the primary exception to the lack of gardens opened to the public in the nineteenth century. Although not in public ownership, the gardens were opened to Knoxvillians for their individual enjoyment. Dickenson also opened the gardens to groups who wished to use his facilities. The site was altered in 1899, when the Island Home Park neighborhood was subdivided, and the bulk of his land was given to the Tennessee School for the Deaf. Streets follow the path of his once extensive gardens.

There are perhaps six to eight extensively landscaped gardens in Knoxville and Knox County today, and only Raecheff Garden is public. Although others are open to the public periodically, primarily in the spring during Dogwood Arts Festival. Of these gardens, there are two still existing that reflect the design traditions of American gardens of the early twentieth century. In Fountain City, near the streetcar line which served the area of North Knoxville, Savage Gardens was established in 1915. Savage Gardens, which occupies over one half of a city block, is built on a steep hillside and features walkways and pergolas, together with waterfalls, reflecting pool, water towers and other water features which provided storage capacity for the self contained irrigation system that watered the gardens. Savage Gardens, a

private garden, was once open frequently to the public. The current owners are in the process of restoring the garden and make it available to the public from time to time in order to continue its tradition of public use. Savage Gardens follows the early twentieth century traditions of the Victoria garden with rock garden design influences and contains architectural features typical of that era. The garden is an eclectic mixture of terraced stone garden plots combined with Oriental, Italian and Greek features such as a pergola, a pagoda, a teahouse and a circle. As was the tradition in late Victorian gardens, Savage Gardens also has a mixture of planting designs and many rare specimens. Many pools are located throughout the garden, contributing to the Victorian garden tradition of fountains and reflecting pools.

Near the Knoxville Iron Works office is Raecheff Gardens, established on the site of waste heaps and debris storage from the iron works. Raecheff Gardens now in the care of the Tennessee Garden Club, and is currently maintained as a public garden. Raecheff Gardens, in addition to extensive carpet beds, contains elements with a Japanese design motif.

Although the cemetery movement across the county was associated with the development of park design, Knoxville and Knox County had such a scarcity of park land until after 1930 that parallels are clearly non-existent. In 1929, Harland Bartholomew's comprehensive plan for Knoxville remarked on the lack of developed parks in Knoxville, noting that the town did not appreciate the advantages of developing a park system. At that time in Knoxville, according to the Bartholomew plan, there were only ninety-two acres of parks and playgrounds to serve a population of over 100,000. The plan also noted that the first park in Knoxville, according came under the city's control in 1917, when they annexed West Knoxville and with it, Circle Park, which was established in 1888. The second, Emory Park, was acquired in 1894. Neither of these parks exists today.

Some of Knoxville's leaders, realizing the need for a park system in the early 1900s, made an effort to pass a $50,000 bond issue to purchase park land, but the effort was not approved at the polls. The Bartholomew plan also noted that the first parks amounted to little more that playgrounds, poorly maintained and equipped let alone landscaped. In 1926, Knoxville provided one acre of park space for an average 1,400 residents, while other similarly sized cities provided three to five times that much acreage. The provisions of public parks in Knoxville still lags behind other cities of comparable size, and virtually the only parks that exist in the city today were established after World War II and would not meet the requirements for National Register listing.

If Knoxville's provision for public parks was limited during this time period, Knox County's was non-existent. It was not until the 1960s when the Tennessee Valley Authority began to make land along the Tennessee River available to the county for park development that any county parks were developed or a system, o f regional parks was envisioned. Therefore, the design of city and county cemeteries and gardens preceded in a vacuum, and in the case of private gardens and cemeteries may have received more emphasis and retained a greater importance over a longer period of time than in some cities, since it provided the only image of landscaped open space for the county and city.

As a property type, the few gardens and early cemeteries present in Knoxville and Knox County increase knowledge of the practice of landscape design and the provisions of open space, reflecting the history and design changes of these facilities in American development. These properties are all the more noteworthy because of the scarcity and the lack of long existing public parks to offers any competition in understanding the history of open space development.

E. 6. INDUSTRIAL GROWTH AND DEVELOPMENT, 1785 - 1940

Several factors are required if industry is to develop beyond its most elementary state. There must be a market for the goods that will be produced and raw materials to manufacture these goods. There must be adequate transportation or a way to get goods to the market. There must also be labor to produce the goods, developing industry must be surrounded by a fairly settled society.

The evolution of industry in Knoxville and Knox County occurred gradually. Of those factors itemized above, the primary one lacking in Knoxville was transportation. Not only did Knoxville lack reliable transportation to regions outside Appalachia, but in many cases, the transportation routes inside Knox County were insufficient. Therefore, industrial development occurred gradually and was sparse within the county.

The topography of Knoxville and Knox County, which made transportation such a determining factor in economic development, was both an asset and a hindrance to economic growth. Knoxville did have an advantage when it came from communities and residents of the mountainous, barely accessible region surrounding the town. As a result the small settlements turned naturally to Knoxville and Knox County because of its river access and central location. This allowed Knoxville and Knox County to command the position as the center of growth for the East Tennessee region. At the same time, the topography limited the accessibility to other parts of the country. As a result the growth in Knoxville and Knox County occurred slower than it might have had there been greater access. It also meant that the development of industry in Knoxville and Knox County was inextricably tied with the development of transportation systems, both within the county and to areas outside the region.

In the county's earliest years, businesses supplied the most basic needs to the residential market and to travelers passing through the area. These staples included leather and leather goods, guns, milled grain, wagons and carriages, iron and spirits. Industries in the city during its first several decades included a grist mill on First Creek owned by James White, a tanyard on Second Creek, a blacksmith shop and other small industries. Mills located on other creeks in Knox County helped to from trade center in some of the smaller communities. These small communities often had tanneries, sawmills and commercial enterprises located near the centers of industry and commerce.

Overland roads were expensive and difficult to build provided some of the transportation routes in the county. The Tennessee River and its tributaries provided some transportation routes. The first steamboat, the Atlas arrived in Knoxville in 1826. However, the Tennessee River posed numerous navigation hazards, which were not mitigated until the Tennessee Valley Authority, established in 1934,

constructed dams and locks to aid the transportation on the river system. Prior to the building of locks on the Tennessee River, the most insurmountable difficulty with navigating the length of the Tennessee River were the shoals in Muscle Shoals, Alabama, which became the dividing line. Transportation services operated from Knoxville to Muscle Shoals and additional transportation services were available from Muscle Schoals down river to the Ohio and Mississippi rivers.

During the first years of the steamboat era, Knoxville had industrial and commercial ventures that were typical for a frontier community. By 1831 Knoxville featured five tan yards, two spinning factories, ten wool carding factories, three sawmills, one brass foundry and six blacksmith shops. There were also skilled craftsmen including cabinet makers, shoe makers, and coach and wagon makers. Most of these business concerns illustrate the localized nature of the economy. It was obvious that improved transportation was necessary for Knoxville to progress beyond a settlement town. Even the coming of the steamboat was destined to have only a minor impact on Knoxville's industrial growth because of the difficulties of navigating the Tennessee River. It was not until overland transportation problems were solved that Knoxville and Knox County began to realize that the bringing the railroads into the area was an essential prerequisite for creating long-term economic growth and development. This was especially vital for Knoxville as it did not participate in the national trend of building turnpikes in the 1830s. In the years immediately preceding and following the Civil War, Knoxville took great steps to tie into distant regional markets via the railroads. The East Tennessee and Georgia Railroad was the first line to enter Knoxville in the spring of 1855.

The construction of railroads to Knoxville in 1855 held great promise for solving the problems with both water and overland transportation. However, the Appalachian Mountains which provided such resources as hardwoods, and minerals, stood between Knoxville and the railroad networks to the east and provided the need for expensive bridges, tunnels and other engineering works that were time-consuming to build. The progress of rail construction was also halted by the Civil War. It was only after the Civil War that links were established with many rail lines, which traveled in every direction from the city. Knoxville then became the center for a network of crisscrossing lines. This important central position continued to fuel Knoxville's economic growth for almost a century declining in importance only as the rail network nationally declined in the face of improved highways and competition form the trucking industry.

The development of the network of railroads transformed Knoxville into a wholesale market. As crossroads communities throughout the Appalachian region were reached by real development Knoxville quickly became the center of a wholesale industry which distributed goods to the entire Appalachian region. By focusing on the successes of the wholesale industry, Knoxville eventually grew to be the third largest jobbing market in the South. It was during this prosperous post-Civil War period that the city developed a formal framework to encourage economic growth. In 1869 the Board of Trade and an industrial association were both established. Perez Dickinson served as the first president of the Board of Trade.

While wholesale businesses was a chief generator of economic activity, industries that were usually local in character continued to thrive in the county. A list of businesses from 1869 reads as follows:

seven flour mills, four furniture factories, five saddle makers, three foundries, one cigar factory, one soap factory, two breweries, one paper mill , one leather factory, and one slaughter house.

In addition to these businesses there was also a number of small scale enterprises including brickyards, tailors and shoemaker. In Knoxville several industries developed during this time period. The primary location for the wholesale trade occurred in the Southern Terminal and Warehouse District (NR 11/18/1985). The Knoxville city directories record industries that grew to supply goods for the wholesale trade in the Southern Terminal area. Products included shoes, work boots, work clothing, flour, coffee, candy, and hats. Two of these industries, White Lily Flour and JFG Coffee, still operate in that location. This post-bellum period of prosperity was reflected in a surge of population. From 1860 to 1900 the population of Knox County grew from 22,813 to 74,302, a growth rate of approximately 225% This rate of growth was much higher than the state as a whole, which only grew at a rate of 82%. Knoxville also consistently increased its proportion of the county's population, through both annexation and growth. Knoxville's population went from 30% of the county's total in 1870 to 43.8% in 1900. By 1940 Knoxville's population of 111,580 was 62.5% of the total Knox County population. Annexation continued to be the major factor for the population increase.

Population figures are important in understanding where the concentration of industrial and commercial activity took place in Knox County. From 1880 to 1889, ninety-seven new factories were built, some in and some around Knoxville. Types of industries located in and near Knoxville around 1900 included a gas works, a sash and blind company, a grist mill, leather works, iron companies, furniture manufacturers, marble finishing mills, cotton and woolen mills, a lumber mill and stock yards. Providing living quarters for employees meant that as early as the 1880s the downtown became encircled on its northern and northwestern edges by a group of mill villages. Two of the most significant of these towns-within-a-town were Mechanicsville (NR 7/18/1980) and Brookside Village. Mechanicsville served the residential and commercial needs of both management and labor working for the Knoxville Iron Company.

While transportation and industrial technology were necessary to bring about the economic changes that took place in the second half of the nineteenth century, natural resources also played an essential role in the growth. Local Knoxville and Knox County businessmen, justifiably proud of the transformation of the area from frontier to industrial boom town in less than a century, enthusiastically staffed expositions intended to focus on their advances. The Appalachian Exposition of 1910 was the first local fair staged to bring regional and national recognition to the Knoxville area. Several exhibit halls were constructed to illustrate the abundant natural resources found in the area. Agricultural, mineral, and forestry products were displayed in setting befitting their prominence. The halls are no longer extant, but a monument to the marble, one of Knox County's most prominent early industries, still remains. The local marble industry went so far as to construct a large East Tennessee pink marble and blue limestone bandstand in the center of the Chilhowee Park exhibition area, in order to showcase its goods. The bandstand is still used and retains its original form.

Promotional literature from around the turn of the century lauded the area for its unlimited coal and iron reserves, which would be ideal for an industrial center for steel and iron. However, the promotional deposits that have continued to prove beneficial to the local economy, include zinc, bauxite, manganese, kaolin, mica, kyuanite, talc, copper, tin, gold, asbestos, sandstone, dolomite, manganese, barite, sand, and shale. Small fields of oil and gas have also been found in the region.

The valley and mountains around Knox County were historically covered with extraordinary forests. Some of the more useful and valuable trees found locally included: white oak, northern red oak, black walnut, black cherry, ash, hickory, beech, yellow poplar, chestnut , red cedar, and sugar and red maples. Less important lumber included wood from the post oak, short leaf pine, and white cedar trees. These forests eventually led to industries manufacturing furniture and other wood products.

The nineteenth century saw large stands of trees cleared for farmland and urban development. Although some of the wood was used in local construction, much of it was left to rot in the early 1800s. Between the years 1820 to the 1870s many logs were shipped down river to other cities. By the 1870s other timber resources were being used as westward settlement continued, and the rail system was available to ship much of the timber. After the civil war, the timber was used to make charcoal to provide fuel to local industries. A furnace with a daily output of twelve tones of iron required about 500 acres of forest a year to supply it with fuel

Started in the mid 1800s the Knoxville Iron Company quickly grew to be the largest manufacturing concern in Knoxville. The company operated a rolling mill for merchant iron, a foundry, a machine shop and a mill for the production on nails, railroad spikes and ornamental fences. The iron goods were used extensively in and around Knoxville as well as shipped nationally. The Knoxville Iron Company grew steadily from the 1880s employing a work force of 250 to 850 employees at the turn of the century. Hopes were great for the future of the Knoxville Iron Company and the Roane Iron Works in nearby Rockwood. However, impressive estimates as to the quantity and quality of local iron ore deposits proved unreliable and Birmingham became the steel capital of the south.

Even during the time of peak production for the local iron works, the iron industry could not compete with the economic impact of the wholesaling and jobbing market. In 1885 Knoxville supposedly ranked behind only New Orleans, Nashville and Atlanta as a wholesale market in the South. The volume of business during this period amounted to between $15,000,000 and $20,000,000 annually. The leading lines were dry goods (five million dollars), groceries (three and one half million dollars), boots and shoes (one and three-fourth million dollars), hardware (one and one-half million dollars), machinery, agricultural equipment and other miscellaneous good (four million dollars). The compares to a total manufacturing output of $6,000,000 for 1885. Manufacturing output included iron, coal, marble, wooden ware, lumber and other concerns,.

In 1896 the Travelers' Protective Association ranked Knoxville third among southern cities, with nearly $50,000,000 in wholesale business annually. They also noted that there were approximately fifty jobbing houses with an average of twenty employees per company. Cowan, McClung and Company was the city's

premier wholesaler with annual sales in the millions. A newspaper article stated that in 1886 Cowan, McClung and Company was the largest taxpayer in the State of Tennessee. The McClung name can still be seen throughout the Knoxville area in association with a number of cultural and civic causes. Other individuals who played an important role in the city's jobbing and wholes business included Daniel Brisk, C. H. And D. L. Coffin, C. Morgan, R. S. Payne, E. J. Stanford, and W. W. Worded.

By the early 1900s Knoxville's position as a distribution center began to decline and manufacturing based on local resources and on available manpower became a more important portion of the economic base of the city. Through the last half of the nineteenth century, the marble quarries expanded, as did the textile and clothing trade. These two industries eventually grew to one among the greatest contributors to the local industry.

Other major concerns in post Civil War Knoxville included coal mining company offices, furniture makers, grain mills, nurseries and the brick industry. The large number of local coal company headquarters is particularly unique since Knox County is not a coal producing area. Knoxville, the largest urban area in East Tennessee, often attracted business offices of regional industries.

In 1900, 30.6% of Knoxville's total work force was employed in manufacturing and mechanical jobs. At that time Knoxville had a larger percentage of its population in manufacturing than Atlanta, Birmingham, Memphis, Nashville or New Orleans. Several of the city's major industries including iron works, wood works and Marble quarries, were particularly susceptible to changes in the construction industry. Nevertheless, Knoxville experienced good economic growth and stability up to the time of the Depression. By 1930 Knoxville had approximately 350 manufacturers employing 18,000 people.

Following the Depression and World War II, new technologies appeared that challenged many of the old industrial ways. Transportation links, specifically the interstate system, caused a decentralization of cities and the business that supported. The end result was the eventual demise of many of the manufacturing and industrial concerns tat had one helped shape Knoxville and Knox County. A number of physical reminders remain from this earlier period, illustrating Knoxville and Knox County's industrial foundation.

Textile Mills and the Apparel Industry

The first known textile related industry in Knox County was the cotton spinning factory built by William Oldham in 1833. Located on First Creek between Church and Cumberland streets, the operation featured mill dams which were destroyed in 1838 by a freshet. After this disaster Oldham moved his business to Blount County. The following list includes some of the more significant textile mills and apparel factories that operated in Knox County after Oldham: Appalachian Mills, Brookside Cotton Mills, Cherokee Mills, Knoxville Cotton Mills, Knoxville Knitting Mills, Knoxville Woolen Mills, Riverside Woolen Mills and Standard Knitting Mills. Assorted businesses involved in the apparel industry included McCulley Hat Company, J. T. McTeer Clothing Company, Sam C. Roney Shoe Company, Venus Hosiery Mill, and Hanna Manufacturing Company. These companies made pants, overalls and fine clothing including cashmeres and worsted wear.

Starting in the late nineteenth century the apparel factories and cotton mills grew to be among the area's largest employers. Brookside Mills was Knoxville's largest employer in 1902 with 900 employees. In that same year the Knoxville Iron Company, the city's long-time leading employer, employed around 850 workers, placing it third among local industries, and emphasizing the importance of textile manufacturing.

Brookside Cotton Mills was a complete cotton mill operation. The process started with raw cotton, which was spun into yarn and finally made into a finished cloth. The woven cloth, which was known as a greige good, was sent elsewhere for such finishing touches as bleaching and dyeing. The mill's proximity to the Knoxville and Ohio Railroad and to Second Creek provided excellent transportation of goods and the disposal of wastes, and was a primary reason for the site of the mill.

Typical shotgun style houses for workers were built to the north of the Brookside Mills property. These houses were rented to interested laborers. Although none of the shotgun houses remain, there are several similar examples scattered throughout Knoxville. Employees with more advanced positions often lived in the neighborhoods of Old North Knoxville (NR 5/14/1992) and Fourth and Gill (NR 4/25/1985). Pine Crest, the George Barber designed house at 131 East Scott, belonged to W. T. Lang, an official at Brookside Mill. This house in the Old North Knoxville Historic District is most widely known for the stained glass window which is built into the main chimney.

Most of the Cloth mills had similar locations along the railroad tracks and served as the nucleus for surrounding neighborhoods. Standard Knitting Mills' workers primarily lived in the smaller houses of Park City (NR 10/25/1990), The neighborhood straddles the northern and western edges of the mill complex. Several of the local mills including Brookside, Appalachian, and Knoxville Cotton, participated in community programs such as encouraging teenagers to go to school. In cooperation with the school board "opportunity schools" were set up in local school buildings, so that 14 through 18 year olds who worked half days in the mills would also have a time and a place for studying.

At the start of the Depression, Knoxville had twenty textile and clothing pants. Production was increased during the war years, as the military provided an expanding market. Broadside Mills became one of the country's largest producers of duck cloth. Following World War II, one and one-third of the people working in Knoxville worked in the apparel and textile industry, with an annual payroll of well over $6,000,000. In 1948, Knoxville had four large clothing factories, two large hosiery mills, one glove factory, and one factory for men's hats. According to a Chamber of Commerce industrial survey, Knoxville was the world's center for heavy knit underwear production. This was based on the production of only two of the local mills, the Appalachian Mills and the Standard Knitting Mills. Cherokee Mills was a smaller cloth mill not in direct competition with the heavy knitting mills. Cherokee Mills produced main dress clothing. The men's clothing industry also included a large plant for the manufacture of Palm Beach suits, which is still in existence today.

The period after World War II was the marking of the end of the local textile industry strongholds. Companies were facing new stiffer competition and were suffering from outdated equipment, some of

which was nearly exhausted following the production during the war years. Between 1948 and 1960 nearly 3,000 jobs were lost in the textile industry locally. However, not all of the workers were displaced, as the apparel industry had an increase of 1,200 workers during the same period.

The Marble Industry

Knox County and its surrounding area are among the most important marble producing areas in the country, ranking alongside Vermont and Georgia. Considered a fine building material, East Tennessee marble was specified for a number of nationally important building projects, including at least four buildings in Washington D.C. These include the Smithsonian's Museum of History and Technology, the Australian Chancery, the AFL-CIO Headquarters and the National Gallery of Art. The demand for marble became one of Knox County's strongest post-Civil War industries.

The Principal deposits of marble in Knox and adjoining counties occur in the Holston formation of Ordovician age. This formation reaches a thickness of 400 feet, but because of variations in texture and structural defects, workable beds are usually not more than sixty to eighty feet thick. The Holston marble outcroppings are more or less parallel belts over an area about twenty miles in width and 125 miles in length. The marble varies in color from light gray to light pink to deeper shades of red or chocolate. Stratigraphically the dark red and chocolate beds are found near the top of the formation while the light pink and gray beds occur near the bottom. The texture of the marble is mostly coarse, even granular, thought the texture of the marble in the darker beds may be irregular and variegated.

The great number of local companies that either quarried, milled or polished marble eventually led to Knoxville being nicknamed the "Marble City." Included among the companies were the Appalachian Marble Company, Asbury Marble Company, J. J. Craig Compendia (later Candoro Marble Company), East Tennessee Stone and Marble Company, Empire Marble Company, Enterprise Marble Company, W. H. Evans Company, Gray Eagle Marble Company, Gray Knox Marble Company, Juanito Company, Knoxville Marble Company, Phoenix Marble, Ross Marble Company and United States Marble Company.

In 1882 several quarries were in operation in Knox County with 300 workers employed. Nearly twenty-five years later the marble industry was doing approximately $1,000,000 in annual business. Concord (NR 10/27/1987), Asbury, Vestal, Ebenezer and other communities feature quarries or other marble related business. Self-sufficient communities sometimes grew up around the quarries. Commissaries were common, as were small houses that ere constructed for the workers and their families. Such a development, since demolished for redevelopment, existed in Ebenezer near the old Mansion Farm.

Marble has been used extensively in local construction projects. A large percentage of the marble quarried is not sound enough to be sawed in the marble mills. The surplus marble, especially the larger pieces can be used in masonry rubble construction. The refuse, or finely ground marble is excellent for use as quick lime, agricultural lime, or as a crushed road material.

Good transportation, specifically river barges and trains, helped move the marble throughout the country. The transportation was aided by Knoxville's central location in the eastern half of the United States. The seemingly endless resource allowed many of the Knox County communities to grow until the Depression. Bad economic times and changes in construction practices eventually forced many of the local marble companies out of business.

Quarries, marble mills, polishing plants and showrooms were once located throughout the county. Several physical reminders remain of the local marble industry. The most complete remaining industrial complex from the era is the J. J. Craig company, better Known as the Candoro Marble Company, in South Knoxville. The Candoro Marble Company buildings are now used by a variety of smaller marble finishers or fro scrap metal storage.

There are many examples of existing buildings, both locally and nationally, that are constructed with regionally mined marble. East Tennessee Pink Marble was likely first used on the Francis Alexander Ramsy House (NR 12/23/1969), built in 1796. Other more recent examples include the F. F. Graff designed bandstand in Chilhowee Park, the 1934 Knoxville Post Office (NR 5/31/1984), the Candoro Marble Showroom at 681 Maryville Pike and several of the larger homes along Kingston Pike, Lyons View Road, and Sequouyah Hills. One of the distinctive features of the Lindbergh Forest neighborhood in south Knoxville is that almost all of the houses incorporates at least some East Tennessee marble, either as building material or landscape material.

Zinc Mining

Along Mascot Pike is the early twentieth century mining town of Mascot. The first known settler in this area was John Erin in 1796. The community that developed was originally called Meek. Few residents in the area liked the name, and when the East Tennessee, Virginia and Georgia Railroad was built through the community, the name was changed to Mascot. Zinc was discovered in the 1850s and some surface mining occurred.

Around 1906 the Holston Zinc Company opened the first zinc mine in Mascot, and it became the principal activity. The American Zinc Company (also known as the American Zinc, Lead and Smelting Company) acquired the mines in 1910 and during their years of operation, developed Mascot as a company town. In 1971, ASARC) purchased the mines from the American Zinc Company, and has continued to run a zinc operation up to the present time.

Zinc ore mined in Claiborne, Jefferson, Knox and Union counties moved down the Holston and other rivers, to a reducing works in Clinton. The boats that were unloaded in Clinton were dissembled, moved by rail to the point of origin along the river and the reassembled so they could hold ore and make a future trip to Clinton. Although the creeks and rivers proved useful, they also posed some problems. A concrete canal had to be built to create a channel in Flat Creek, in order to prevent water from leaking into mine #2. (No longer in use, Mine #2 is now flooded). The old mining complex includes Mine #2 and the Mascot Mill. Along the loop formed by Staff Road are many large cottages built around 1915. These Craftsman style

houses were for the management employees of the mining company. On the other side of the railroad overpass are workers' houses. These simple structures were indicative of low costs industrial housing often built in mining communities. The mill town also included a smelting plant, a commissary, and several dormitories.

The Iron Industry

As mentioned in the overview, the local iron industry had some great individual successes but was too dependent on resources that proved fleeting. The foundry that had the greatest impact locally was the Knoxville Iron Company. The Knoxville Iron Company was incorporated in 1867 by a Union Army officer who was mustered out of the service in Knoxville. Hiram S. Chamberlain was chief quartermaster during the Union occupation of Knoxville. It was during that time that he recognized the abundant natural resources of coal and iron, as well as good transportation facilities and an untapped labor pool. Along with four Welsh ironmasters, Chamberlain created what was to be Knoxville's long time leading employer.

Most of the work force at the Knoxville Iron Company was racially mixed, consisting primarily of freed African Americans and Welsh immigrants. They lived nearby in the ornamented Queen Anne residences and simple shotgun houses of Mechanicsville (NR 7/18/1980) and Lonsdale. Lonsdale, annexed in 1917, was also part of the area around the Patent Button Company.

Prior to moving to Lonsdale in 1901, the Knoxville Iron Works was located in the Second Creek Valley, on the site of a natural spring. The original foundry (NR 3/25/1982) was built at the end of the Civil War and is all that remains of the early site. It originally featured a large pyramidal roofed cupola, a series of small cupolas, pilasters and a Roman Arch entry. The foundry was converted into the Strohaus for the 1982 World's Fair.

The Lonsdale site still features a number of remnants from the iron company's heyday. Ivan Raecheff, a noted Metallurgist who headed the Knoxville Iron Company for many years, turned a slag heap into a showplace garden on the company's ground. The Knox County Council of Garden Clubs now owns and maintains the Raecheff Garden.

Other foundries and iron companies took advantage of the local resources but none gained the success of the Knoxville Iron Company. Prior to the Civil War, New Yorker Anthony Leggett Maxwell established an iron works company (no longer extant) on Broad Street. Maxwell manufactured iron work for railroads, bridges, engines, boilers, plows and farming equipment. It is believed that his company closed during the Civil War.

The Knoxville Foundry and Machine Shop was begun in 1866 by John Wesley North. This foundry specialized in making pipes, plows, grates and saw blades. For a short time this foundry was Knoxville's largest manufacturer until its failure in 1870. The following list includes some of the other foundries and metal working companies that existed in Knox County: Clark Foundry and Machine, Clarke, Quiaife and Company (later known as Knoxville Car Wheel Company), Enterprise Machine Works, H. O. Nelson Iron

Works, Knoxville Metal Products Company (formerly the Knoxville Stove Works), Sanford-Day Iron Works and W. J. Savage Mill and Machinery. Physical resources associated with these companies are not known to exist now.

Brickmaking

Brickmaking is an industry that has existed in Knoxville since the first days of settlement. Brick was used for chimneys, foundations and sidewalks for some of the earliest structures in Knox County, Including the Blount Mansion (NHL 1/12/1966). However, it was not until the early part of the nineteenth century that brick was widely used as the main construction material. Two of the earliest remaining brick residences in Knoxville are the James Park House (NR 10/18/1972) and the Craighead-Jackson House (NR 3/20/1973). Another example of an early nineteenth century brick house is the Reuben Fox House on Copper Ridge Road, built in 1834 (KN.7272). According to a report by Karns High School students, the Reuben Fox House used brick that was made by an unusual method, which included using horses to trample rain soaked clay.

Specialized skills were required for the making and laying of brick. In the south, trained brick masons were often subject to competition from skilled slaves. Slave labor was a common practice in the construction of many of the large East Tennessee brick farm houses. However since there was only a relatively small number of slaves in Knox County, an additional pool of laborers was often recruited from among the locals. The recruiting process helped to increase the knowledge of brickwork in the area.

Despite the competition with slaves, there was still a short supply of brick makers and brick layers in ante-bellum Knox County. By 1850 there were twenty-eight brick masons in Knoxville and Knox County, half of them were born outside Tennessee. Primarily of Virginian and North Carolinian origin, the masons brought with them skills and tradition which governed the way that they manufactured and laid brick. For well over a century after Knoxville's beginning, local brick were made to standard common and modified English statue standards.

Between 1853 and 1869, the number of brick yards in and around Knoxville grew from approximately seven to about fifteen and twenty. Many of these brick companies were located near the clay beds of the Tennessee River or alongside the county's creeks. Such was the case of Samuel T. Atkins, who had several brickyards near the mouth of First Creek. During this period, pug mills and repressing machines were manually operated, and the important molding process was nearly always done by hand.

In the time period from 1860 - 1890 when Knoxville's population tripled, brick became one of the leading construction materials. Although frame construction continued to dominate residential construction, many store fronts, large wholesale industry warehouses, foundries, textile mills, workers' housing, and grand mansions were built of local pressed brick. This period also brought automation to the brick industry. Long term successful companies became the exception not the rule. When V. C. Fulcher brought the first steam powered brick machine to Knoxville in 1882, it spelled an end to the hand molding process.

According to a newspaper article from that year, Fulcher's vertical Monarch machine tempered the clay which was fed into it through a hopper on top, and then it pressure-molded nine bricks at a time. Three men were needed to dig the clay, two to shovel it into the hopper and two more to take the pressed bricks from the mold wheel. One boy oiled the molds while four men carried the bricks to the yard to dry. The process resulted in much higher production rates. Along with the railroads' ability to ship the brick great distances, the process greatly increased the opportunity for profit gains.

Some brick companies were producing in excess of seven million pressed bricks annually. The Knoxville Brick Company grew to be Knox County's most successful nineteenth century brick company. By 1903 the company produced dry-pressed common brick, facing brick, terra cotta, roadway brick and sidewalk brick. Besides supplying the Tennessee building industry, the Knoxville Brick Company supplied nearly every point accessible by rail in Kentucky, Virginia, North Carolina, Georgia and Alabama. Despite ranking as one of the largest brick manufactures in the South, the company suffered significant losses in the early twentieth century and was purchased by General Shale in 1934. All that currently remains of the site off Emory Road is a large rectangular depression covered by grass.

Changing technology and tough economic times in the early part of the 1900s saw the demise of many small brickmaking operations. With the construction boom over, many companies were fighting over a drastically decreased market share. In addition, modernization of brickmaking machinery and tunnel kiln design required the use of shale clays. Many local companies did not have access to this type of clay and could not afford to update their facilities. The result was a series of bankruptcies and corporate takeovers. These events basically stabilized the local brick industry in its current state.

The following list, although not comprehensive, gives a broad overview of the brick companies doing business in the Knoxville area from the mid-nineteenth century to the early half of the twentieth century. Some of these companies lasted only a few years, while others succeeded long term either individually or as part of a merger or acquisition. The date following the brickmaker's name indicates at least one year that it appeared in the city directory. J. C. Kinzel (1869), Joseph Mabry (1869), Middleton & Weatherford (1869), W. C. Fulcher (1882), Rep Jones (1888), Caldwell, Graw, and Caldwell (1890), Daniel A. Carpenter (1890), Knoxville Brick Company (1895), J. F. Scott & Son (1903), South Knoxville Brick Company (1903), Lonsdale Brick & Pottery Company (1904), J. F. Scott & Son (1905), Alex A. Scott Brick Company (1910), W. M. Davis & Son (1913), Scottsville Brick Company (1920), General Shale Brick Company (1924) and Cherokee Brick Company (1924). Although there are no known remains of the companies themselves, their product survives in many historic buildings.

Furniture

In the early twentieth century Knoxville was being promoted as "The largest Hardwood Mantel Market in the World." The region was already known for its abundant natural resources, including its forests. Even as early as the eighteenth century, lumber mills were beginning to appear on the banks of Knox County's waterways. For many of these mills, the progression into the furniture business was a simple one.

Around the time of the Civil War Samuel T. Atkins had, in addition to his brickyards, a planning mill and a lumber yard near the mouth of First Creek. Atkins was also known to make furniture and coffins at this site. It is said that Atkins converted to making coffins, instead of sash door and blinds, because of the large number of deaths during the Civil War.

During the twenty years following the Civil War, almost all of the local furniture making companies were established. Although most of the furniture was shipped outside of Knoxville certain pieces were built for local concerns. In 1872 Ristine and May Furniture Company built 400 chairs for the new Staub's Opera House (since demolished). This proved to be an inadequate amount for the 1,400 person capacity theater and the company made the remainder of the chairs.

With new construction and growth throughout the New South, furniture making grew to be among Knoxville's largest industries. Perhaps the largest of the area's furniture manufacturers was the Knoxville Furniture Company, which was incorporated in 1882. The Knoxville Furniture Company made bedroom suites and cabinet mantels. The company mainly used oak, but was also known to use curly birch, walnut and mahogany. In addition to traditional furniture pieces, other wooden objects make in Knox County included shingles, flooring, handles, kegs, trunks, wagon felloes, hat racks and assorted wooden specialties and novelties.

The following list includes furniture makers and associated business that operated in Knoxville in the ninetieth and early twentieth century. Among the firms were the Frank S, Atkins and Company, Atlumor Manufacturing Company, Barker Manufacturing Company, William Caswell and Company (formerly Howe Brothers), Cooley Brothers, Davis Furniture Company, Standard Handle Company, and Whittle Trunk Company. During the Depression and the World War II years, at least two major table and chair manufacturers closed their doors. Although there were approximately 600 persons still employed in the furniture industry after World War II, Knoxville had lost its claim as the worlds hardwood manufacturing capital.

Grain Milling

The history of local grist mills goes back to the beginning days of Knox County. According to an early industrial survey of Knoxville perhaps the first industry in the city was a corn mill plant established by James White. Grist mills were used to grind grain into flour and other products. The grist or flour mills were commonly located along creeks. This was to take advantage of the water as a power source for the operation, and if necessary for transportation.

Ebenezer Mill (NR 6/25/1987) sits on the east bank of Sinking Creek (now known as Ten Mile Creek) on the current edge of west Knoxville and was the site of an earlier mill, the Mansion Mill, circa 1835. The Mansion Mill was originally a part of Statesview (NR 4/23/1973), the estate of Colonel Charles McClung. Tub or turbine mills which generated power through the use of mill dam were often susceptible to the ravages of floods. Such was the case of the Ebenezer Mill in 1942. Though somewhat modernized after the flood, the Ebenezer Mill is unique with its original machinery largely intact.

Flour mills often served as center pieces for the typical self-sustaining, nineteenth century villages which once dotted Appalachia. By 1881, there were over 1,700 grist and flour mills scattered throughout Tennessee. Most of these were located in the hills of Middle and East Tennessee using the energy that streams traveling through the mountainous county generated. In 1891, there were at least fifty-seven mills in Knox County alone. Many of these mills had to up-date machinery that allowed four or more rolling mills to operate simultaneously, producing more flour that was needed for the local market. In outlying areas of Knox County in the latter half of the nineteenth century, the primary economic force for some communities continued to be a water-powered milling operation. At the same time, Knoxville in the latter half of the nineteenth century had developed a sophisticated textile industry which employed great numbers of people and used railroads to ship the raw materials and finished goods.

Prior to the 1890s the agricultural economy of Knox County was tied closely to the cotton area o the south. Most farm products were shipped into Alabama via the Tennessee River and later by rail. Flour was also shipped by rail to Charleston, South Carolina for export. Shipping rates were quoted for flour rather than wheat, which stresses the importance of the local milling process. Because of this vital link with transportation, the nineteenth century mills were usually close to a railroad, a waterway (barges), or both. After the 1880s. The soft wheat grown in East Tennessee suffered in competition with western-grown wheat and spring wheat, which is high in gluten. The soft wheat flours were still marketed in the South and Dixie Lily Flour, a local industry, produced most of that flour. The national trend toward hard wheat flour, however, spelled an end to the small mills that once dotted Knox County's streams.

Corn was also an important grain for the local mills. It was used for meat, animal feed, and mash for small stills. Records show that some corn mills were able to produce up to thirty bushels of meal per hour. Other grains and agricultural products were milled, but they never reached the importance of wheat or corn. Several grain mills were part of larger operations which featured such functions as saw mills, nurseries, tanneries and the raising of livestock.

There are no known records that indicate the number of mills that historically operated since the early days of Knox County. However, a site survey in 1985 noted that at least eight buildings which housed early mills still existed in the county. The mills often featured complex machinery and equipment, which at the time of a mills closing was often sold.

The Riverdale Mill (NR 3/13/1987), recently renovated, has newer machinery. Although it is not currently being operated, until recently it was one of the few active mills in the region. Another well known mill in the county was the Spring Place Mill which was operated by Swiss native Alfred Buffat. The 1861 grist mill stood along Big Creek near Millerstown Road, at the current site of Spring Place Park. Although the mill is gone, the Buffat Homestead, known as The Maples (NR 4/11/1975), at 1717 Love Creek Road still remains. In addition to those already mentioned, other grist mills that were formerly located in Knox County include the Knoxville City Mills, Lonsdale Mill, Scot, Dempster and Company, the Trio Mills and the Peters-Bradley Mill, which gave rise to the Brownlow Addition neighborhood.

Other Industries

A wide variety of products, ranging from heavy machinery to bonbons, were made or assembled in Knox County. Manufactured items included automatic drop-bottom mine cars, mucking machines for drilling tunnels, temperature regulating devices, chemical fire extinguishers, wagons and carriages. Additional goods made locally included warm air furnaces, mattresses, building materials, paper boxes, molded plastics, Portland cement, bellows, and parts for wooden automobiles. Knox County has also had a number of foundries, chemical plants, printing and engraving shops and several other assorted industrial concerns.

Lumberyards and sawmills, a paper mill, a fertilizer plant, a tobacco re-drying plant, a button factory (first manufactured buttons from mussels found in the Tennessee River) and the local ice companies used agricultural or river resources. The Knoxville Brewery Company, incorporated in 1886, also used local crops to make its XX Pale and Export Lager. Each of these industries and individual businesses had its own impact on Knoxville and Knox County although many of the physical resources associated with them are no longer extant.

E. 7. BARBER, GEORGE FRANKLIN, ARCHITECT (1854-1915)

George Franklin Barber, an extremely successful American architect, practiced in late nineteenth and early twentieth century America. He followed the practice of mail-order architecture, devising house plans that were made available through his publications. The houses were constructed from the plans in numerous locations across the country and even abroad. Barber's home during this time period was Knoxville, Tennessee; therefore, as might be expected, a number of Barber houses survive. He achieved a national prominence unique among Knoxville architects; his designs, constructed in Knox County and many surrounding counties, continue to focus attention on his work, and on Knoxville's neighborhoods containing his houses. Barber's work has achieved a continuing prominence unknown to other Knoxville-based architects.

George Franklin Barber was born July 1854, in DeKalb, Illinois, and grew up on a farm near Marmaton, Kansas. He had little formal education, and showed an early interest in rock collecting and in horticulture. One of the first public records of his name appeared in 1878, when he bought a farm in Kansas and advertised as a dealer in "Ornamental Nursery Stock". His occupation was listed, however, as "carpenter".

Barber family legend states he was interested in architecture as a youngster, drawing house designs with a stick in the mud. A notebook he composed and titled "Civil Architecture, 1873" has survived from his library; the notebook contains drawings of architectural elements with descriptions of them. According to Michael Tomlan, who wrote the introduction of a reprint of Barber's *The Cottage Souvenir No. 2.* Barber also had in his personal library English handbooks that included information about building and architectural modeling along with *Palliser's American Cottage Homes.*

Barber moved to DeKalb, Illinois in 1884. About this time he patented a "Nail Holding Attachment for Hammers," designed to allow a carpenter to hammer with only one hand. By the mid-1880s, Barber was acting as an architect for Barber and Boardman, Contractors and Builders, and designed the Congregational Church in DeKalb, Illinois (1885-1888).

Barber moved to East Tennessee to take advantage of its climate as an anti-dote for his poor health. He arrived in Knoxville in 1888 with his wife and child. In 1892, J. C. White was employed as his business manager. White, who was active in suburban residential development, was a principal in the Edgewood Land Improvement Company, with business interests on Washington Avenue in the Park City Historic District (NR 10/25/1990). Several of the houses in the Park City are attributed to George Franklin Barber, including 1635 and 1724 Washington Avenue, where the Knoxville *City Directory* records Barber as the resident.

Barber's achievements in the field of architecture, in addition to the exuberant designs he produced, included the publication of his designs. The first known printing book/catalog booklet occurred in 1887 or 1888, in DeKalb. Illinois, with a publication entitled *The Cottage Souvenir, Eighteen Engravings of Houses Ranging in Price from $900.00 to $8,000.00 in Wood, Brick, and Stone, Artistically Combined. Modern Artistic Cottages, or The Cottage Souvenir, Designed to Meet the Wants of Mechanics and Home Buildings* was published in 1888 and may also have been published in DeKalb. Twenty-five designs were included in this publication and Barber invited the reader to correspond with the authority, who would provide the necessary plans and specifications. In this, Barber followed George Palliser, who began to publish home plans in 1876 from his location in Bridgeport, Connecticut.

When he moved to Tennessee, Barber began to place more emphasis on his mail-order practice. It was some time before any of his designs were built in Knoxville. Indeed, it is still not known how many of Knoxville's historic buildings were designed by George Barber. In December, 1890, Barber published another work entitled *The Cottage Souvenir No. 2, A Repository of Artistic Cottage Architecture and Miscellaneous Designs*. This publication was larger and more diverse than his earlier works and is illustrated by photographs of completed houses as well as the floor plans and elevations This publication, according to Tomlan, marked the beginning of his mail-order practice on a national level.

Beginning in 1895, Barber published a monthly magazine, *American Homes, A Journal Devoted to Planning, Building, and Beautifying the Home*. The magazine presented his most popular designs, and discussed America's heritage. Articles in the magazine included pieces on the history of architecture, interiors, gardening, poetry and serialized romances. An issue might contain articles on the cost of residential construction, the proper setting and landscaping of a suburban home, and an account of a visit to a well-known tourism destination. The review of the history of architecture was contained in a series by Louisville, Kentucky, architect Charles Hite-Smith. By 1899, according to a forward to the reprint of *Cottage Souvenir No. 2* by Michael Tomlan, the magazine contained as many articles on suburban life in general as it did on architecture. Tomlan recounts that Barber remained in control of the magazine until 1902, when the editorial offices were moved to New York City. After that move, he remained an occasional contributor. Reasons for moving the editorial offices to New York are not given.

Barber's publications were intended to excite readers about becoming owners of a Barber-designed home. They could send in their names and addresses asking for a copy of a catalog. They would then be told how to secure the necessary plans, details, contract forms, color samples and a listing of the materials necessary to construct the house they wanted to build. Barber could also supply a customers with a list of eastern companies which he had selected for their reliability.

George Barber did not supply pre-fabricated houses, only house plans. However, if the customer resided in a particularly remote location, Barber would select and crate the supplies necessary to construct the house and ship them to the purchaser through Knoxville's extensive rail system. In *Cottage Souvenir No. 2*, Barber exhorted particular clients to "write to use concerning any changes wanted. . . and keep writing till you get what you want. Don't be afraid of writing often. We are not easily offended".

Barber designed houses, office buildings, carriage houses, apartment buildings, hotels, fences and architectural trim and features for interiors and exteriors. He also was willing to tailor his plans to the climate where they were to be built, and advertised that special attention was given to climate. Alternate plans were available for Northern and Southern construction.

The demand for Barber houses expanded in the mid-1890s. Barber's offices were then in the French and Roberts Building, a Barber-designed commercial building located in the Gay Street Historic District and built circa 1896 (NR 11/4/1986), and to date, the only commercial building confirmed as designed by George Barber. By 1900, his firm was the largest architectural office in Knoxville, with thirty draftsmen and about twenty secretaries.

Barber claimed that a local builder could work with his specifications, without necessitating supervision from Barber or his employees. According to Tomlan, correspondence with Barber's firm was recorded from Japan, China, the Philippines, South Africa, Europe, and almost every state in the United States and several provinces in Canada. One of the most publicized Barber designs in the Nunan Mansion in Jacksonville, Oregon. Its construction countermanded the claim by Barber that only local workmen were needed to construct his houses. The Queen Anne house was ordered by Jeremiah Nunan and built in 1891. Materials for the house were sent in 137 crates from Knoxville, which were accompanied by a foreman t supervise the local workmen. The house has been restored, and the owner who did restore it found the original blueprints in the attic space.

In 1908, the mail order portion of the company ceased. The reason given for this change is that Barber became more involved in local construction. Barber's son Charles had also returned from his studies at the University of Pennsylvania in 1910, bringing Beaux Arts preferences in design. It may have been that George Barber wanted to concentrate on building a more localized business that his son assume. Other factors, such as the rise of competitive mail order firms such as Sears, Roebuck and Company Modern Homes and Aladdin specializing in pre-cut houses may have influenced his decision. Also, the exuberant Victorian era houses and the tastes associated with that era were fading. George Barber might also have been feeling more of the negative effects of ill health that caused his original move to Knoxville.

George F. Barber died in 1915. In establishing his mail-order practice, he may have taken inspiration from George Palliser, a builder-architect of Bridgeport, Connecticut, whose publications began in 1876. Other imitators included Robert W. Shoppell of New York City. However, George Barber, more than any of them, seemed to capture the imagination of the era. Tomlan states that George Barber would have received mail-order catalogues, as he grew up in the Midwest, and later ordered his first architectural books through the mail. George Franklin Barber was an example of the late nineteenth century's rising middle class, and helped to record its ideas of architectural taste.

Following George F. Barber's death in 1915, his son Charles Ives Barber continued to practice architecture. The firm George Franklin Barber founded still exists today as Barber & McMurray, although there are no longer any Barber family members associated with the firm.

E. 8. LUSTRON HOUSES IN KNOXVILLE, TENNESSEE, 1949-1951

The prefabricated Lustron home first came about as an answer to the post-World War II housing shortages and the "baby boom". The construction of traditional housing could not support the millions of servicemen being discharged each month, almost half of whom were married. The housing demand, combined with high levels of income and savings added to the need to produce an adequate housing supply for the American people. Knoxville's housing market mirrored the pent-up demand for housing seen at the national level. During the fifteen years following World War II, vast areas of Knox County were developed with subdivisions, almost one-third of the current housing stock in Knoxville and Knox County was developed in the fifteen years following World War II.

One answer to the immediate need for housing was to devise a faster way of constructing that housing, and prefabricated housing seemed to supply an answer to the problem. The United States government had many reasons to support the creation of prefabricated housing. One major reason was to support the vast steel and aluminum industry that had previously been needed to provide materials for defense purposes. Additionally, during the war the United States had undergone an enormous domestic migration as family members sought to live near military posts. The shortage of housing in these areas had led the government to create temporary houses and portable cottages that needed replacement after the war ended. President Roosevelt realized before the war ended that "a nation of homeowners. . . is unconquerable . . ." and immediately sought to produce housing supplies that would meet the demand. Roosevelt's contention that home ownership supported the prosperity of the United States quickly became a civil defense strategy during the Cold War. When President Truman entered office he created the Truman Administration's General Housing Act of 1949 that supported the goal of a "decent home" for "every American family". The Lustron Corporation sought to meet these objectives and even after the company collapsed owing the federal government massive sums of money, the corporation's ideals maintained support for its engineered solution for the most personal of products.

President Truman recognized that the housing shortage was an urgent issue. Realizing that the process to pass a bill to support the creation of publicly funded housing would be a long and tedious process, Truman established an Office of Housing Expediter led by Wilson W. Wyatt, a supporter of urban planning and slum clearance. Wyatt introduced the Veterans' Emergency Housing Program one month after his appointment. Incentives were offered to the prefabricators as Wyatt believed that they could contribute over 850,000 homes in a two year period.

During World War II, Carl Gunnard Strandlund worked for the Chicago Vitreous Enamel Products Company where he received a military citation for inventing a process that quickly tempered armor plate for tank bodies. When the war was over, the company sought new allocations of scarce steel to continue operations. At the time, the plan was to create and erect five hundred gas stations, but the plan was rejected by the government as "non-essential". Strandlund quickly shifted to home building realizing that the government was supportive of this effort. However, in 1946, when the loan application was received, the costs of government loans exceeded the company's assets and the loan was rejected by the Reconstruction Finance Corporation. Eventually, Strandlund approached the Reconstruction Finance Corporation with a scaled down loan which was approved with the condition that Chicago Vitreous first raise 3.5 million dollars of private capital. Chicago Vitreous, nervous about supplying the corporate guarantees, declined additional participation. Strandlund, eager to assume complete control, resigned from Chicago Vitreous and secured voting control of the "new" Lustron corporation. Eventually, established in Columbus, Ohio, the Lustron corporation began production with five hundred workers and an extensive promotional campaign in 1948.

Some of the more interesting features of the Lustron houses were the included "extras" designed to attract consumer attention. The house was built to use space efficiently with only the front and back doors hinged. The interior doors were either pocket doors or sliding doors. The built-in cabinets, pass-through counters, built-in bookshelves, and china cabinets were popular feature of the Lustron house. The automatic dishwasher converted into a clothes washer. The heat was mounted in the ceiling and radiated into the rooms below. Interior walls were porcelain panels, eight feet tall.

Although these features were popular, many people lost interest in the Lustron house because of its "closed system" that did not allow for flexibility like traditional wood construction. This closed system left many potential customers uneasy since the Lustron house was not suitable for residents who might later wish to add rooms to their house. Additionally, the closed system included the interiors of the house which could not be modified by wall paper or paint. The Lustron home also eliminated the basement and the attic.

The Lustron advantage campaign countered these concerns by advertising the home's space saving design and the low maintenance needed to maintain the house. A booklet even explained that a Lustron house was the safest place to live during electrical storms since the steel frame construction was "really a self-contained grounded lighting rod".

The assembly of the Lustron house was not the easy task the advertisers led consumers to believe. The on-site construction demanded the assembly of over three thousand house components and at least a crew of three workmen. But it was not only the large number of parts that made the house difficult to build. The blueprints that the workmen were required to follow were complicated and competitors charged that "you could paper the walls with the blueprints they have to consult". Other builders agreed that the idea was good, but that there were simply too many engineering flaws, citing instances such as turning on a garbage disposal with a living room light switch. Eventually, workmen reduced the on-site construction to less that 350 hours, but by this time the Lustron company was losing huge amounts of money, $35,000 per day, and had lost support from the RFC Housing Branch to secure new loans.

In 1952, Strandlund gave the RFC a general release and a transfer of all his Lustron stock. In return, the RFC dropped the suit against Lustron for the debts owed by the corporation. Strandlund moved to Florida shortly afterward and after seventeen years moved to Minneapolis where he died in 1974. According to his widow, Clara, the couple lost everything after the Lustron failure. She denied that Strandlund had misused government funds stating that all Strandlund had wanted was "a house for every Joe".

Long after the failure of the Lustron Corporation, the owners of Lustron Homes have remained favorable toward their Lustron Homes. The Lustron Home was endorsed by the U. S. Marine Corps and many residents have cited the easy upkeep of the house and the excellent condition of the interiors even after many years as reasons why they enjoy living in a Lustron Home. In a Knoxville News-Sentinel article in 1985, the reporter quoted a Lustron house owner from Cincinnati as saying he is a stranger to leaky roofs, chipped wall plaster, peeling paint and termites; using a bucket, detergent and sponge to fix up his house.

Lustron houses were distributed through a franchised builder system. In Knoxville, the builder who constructed the Lustron houses was Roy Witt. In Knoxville, as in other locations, the house was delivered to the construction site on a tractor-trailer. Prior to delivery, the builder was required to complete the concrete floor. In Knoxville, six Lustron houses are known to have been constructed. Two are located in the Lindburg Forest Historic District east of Chapman Highway and south of Woodlawn Pike. One was located on Woodson Drive, east of Alcoa Highway. Lustron houses were also assembled in Sequoyah Hills, on Fairmont Boulevard east of Broadway and on Papermill east of Northshore. Of those six, only the house located on Papermill has been demolished.

Post 1940 Suburban Growth and Development In Knoxville

These mid to late twentieth century houses and areas are representative of Knoxville's era of great suburban expansion when strong economic growth generated the greatest percentage increase in population the city had yet experienced. The depression of the 1930s and the coming of World War II both served to slow housing construction and even the creation of the Tennessee Valley Authority did not reverse that trend; only the end of World War II brought a level of housing construction and new subdivision development comparable to Knoxville's growth in the late nineteenth and early twentieth centuries.

The expansion of subdivisions and clearing new land had very slow beginnings after World War II. There were a number of areas subdivided during the 1920s that still had undeveloped lots, and most of the immediate housing demands were met through infilling those areas. Thus, in most of Knoxville's circa 1920s subdivisions there are modern and Minimal Traditional houses in the midst of earlier bungalow and revival styles. Gibbs Drive in Fountain City, Island Home (Island Home Park Historic District NR 11/10/94) in South Knoxville and Sequoyah Hills and Holston Hills, and most of the other early twentieth century suburbs in Knoxville have houses constructed after World War II. In fact, the Talahi Improvements (NR 12/26/79) is an early twentieth century subdivision with a historic street pattern, street furniture and other improvements. However, the majority of the houses in the area are post World War II and only the plan is listed in the National Register. One of the more distinctive housing types, the post-war Lustron house, can be found in earlier subdivisions such as Sequoyah Hills and Lindburgh Forest (Lindburgh Forest Historic District NR 2/10/98).[1]

The practice of infilling land left vacant by the economic reverses of the 1930s and the economic demands of the 1940s extended to individual lots left along major traffic arteries as well. Two of the most distinctive remaining residential areas on major transportation routes are Kingston Pike between Cherokee Boulevard and Lyons Bend and Tazewell Pike from Oakdale to Shannondale Road. In both of these areas, fifty to sixty percent of the existing buildings date from the first quarter of the twentieth century; the remainder was constructed principally in the decade after World War II. The earlier houses along Kingston Pike are listed in the National Register as the Kingston Pike Historic District (NR 12/4/96).

Much of the infill housing from the immediate post-war years and into the 1960s was focused on the automobile era subdivisions of the 1920s. Housing styles tend to be bungalow or ranch forms or Minimal Traditional houses with Colonial Revival or Tudor Revival elements. Like earlier housing, materials are traditional brick, stone, or weatherboard. Weatherboarded houses have occasionally been sided with more modern materials. In scale and setback, the newer houses often fit in with the earlier buildings in a neighborhood.

[1] For additional information on this, see the context in the Knoxville and Knox County MPS on Lustron Houses.

Knoxville's earlier subdivision expansion, with the streetcar based Victorian-era suburb had few, if any, vacant lots left. As vacant lots were filled and the end of World War II allowed developers to subdivide new tracts of land, large areas of Knoxville's suburban fringe began to be developed. Many of these areas are nearing fifty years of age and will need to be assessed for National Register eligibility soon. Some of the more notable areas in the city are Martha Washington Heights in South Knoxville, West Hills and West View in West Knoxville and large residential areas of fountain city.

Beginning around 1800, heavy timber frame and brick dwellings were built in Knox County. The William Blount Mansion (NR - 10/15/66) is described as the first frame house west of the Alleghenies, but soon many frame homes existed in and near town. Soon after Blount constructed his home, larger town houses were built of brick or stone. Of those once located in what is now downtown Knoxville, the Craighead-Jackson House (NR - 3/20/73) remains as the best example.

Strong Federal and Georgian stylistic influences can be seen in these early houses. The Ramsey House (NR - 12/23/69) is a good example of Georgian detailing, while the Boyd-Harvey House (NR - 11/14/85) possesses good Federal detailing. Both of these stylistic influences, sometimes blended, were found in many of the early houses. As the century progressed, other stylistic influences began to be expressed, so that by the 1850s, both Gothic Revival and Italianate styles are seen in original construction and additions.

One of the ways to identify brick residences from this period is to note the brick pattern. According to Dr. Charles Faulkner, many of the brick homes built between 1800 and 1830 have front facades laid in the Flemish Bond pattern while the side and rear facades are laid in American Common Bond. After the Civil War, heavy timber framing gave way to the more easily constructed balloon framed house.

Early settlers in Knoxville and Knox County brought with them from the east coast and from Europe another unique construction technique - the nogging house. Some of the heavy timber frame houses were insulated with nogging, or brick infill, between the clapboards and the interior wall sheathing. The examples remaining in Knox County were built between 1790 and 1840 and include the Alexander Campbell House at 6722 Thorngrove Pike (Survey No. 2496), the Bowman-McBee-Hodges House at 6802 Hodges Ferry Road (Survey No.2803) and several others. They include the William Cobb House, a two story nogging house located near Strawberry Plains Pike. William Cobb first lived in the Watauga Settlement, and it is with him that Governor William Blount stayed in 1791 when he was making his way to Knoxville to negotiate the Treaty of the Holston. Later, when Blount Mansion was being constructed, Mary Grainger Blount and their children also stayed with Cobb. It is not known how long William Cobb lived in Knox County, but he did hold a large grant east of the Holston River, and stated in 1802 deed records that he was a resident of Knox County. His son William P. succeeded him in ownership of 500 acres of the land on which the William Cobb House is located. William Cobb died in Knox County in 1802; his estate was probated here. The Moulden-Caldwell House (Survey No. 2413), a two story nogging house, is located in east Knox County.

Most of the nogging houses were one and one-half or two stories in height, with an entry and stair hall which opened into a large room with an end fireplace. Upstairs, there were two rooms without a separate hall. As the owners of these early houses grew more prosperous, and their families grew, they enlarged their homes, usually by adding a one or two story rear ell. Many houses were also modernized or updated to contemporary architectural styles. The interior walls and ceilings of these homes were usually surfaced in wide boards, sometimes beaded. Doors are often planked, staircases are located in a hall, and chair rails are often used. Early

mantels are a simple shelf design, with particularly architectural designs found in later (post 1800) construction. The nogging houses usually reflect at least some of the architectural details of the style prevalent when they were built, and for the most part are Federal in their detailing. However, the Bowman-McBee-Hodges House (No.2803) mentioned above is Gothic Revival in detailing. Others, such as the Alexander Campbell House (Survey No. 2496), are Georgian. In some cases, like the McNutt-Campbell-Kennedy House (Survey No.2469), or the Rev. James Kennedy-Edward Pickel House (Survey No. 2470), the nogging sections have little architectural detailing or trim; details were added when additions were built, and are placed on the additions.

The properties included under "Early Settlement and the Frontier from 1785 to 1860" have distinctive architectural styles. This glossary is included describing the prevalent styles and their distinguishing characteristics. Sources used to compile the glossary include A Field Guide to American Houses, by Virginia and Lee McAlester, Guidelines for completing National Register of Historic Places Forms, National Register Bulletin 16, compiled by the National Park Service, U.S. Department of the Interior, American Architecture Since 1870: A Guide to Architectural Styles, by Marcus Whiffen, and Identifying American Architecture by John J. G. Blumenson. The styles described below refer to the buildings found in Early Settlement and the Frontier from 1785 to 1860 - Related Property Types.

Southern Colonial: The Southern Colonial House was originally constructed to be one room deep, with a steeply pitched roof. Buildings of this design may display symmetrically arranged doors and windows (which are often small-paned casement windows), a raised basement, modillioned cornices and massive chimneys; however, their primary distinguishing characteristic is the shape derived from massing and the steeply pitched roof.

Georgian: The Georgian style grew out of the Italian Renaissance and reached England in the mid-1600s, where architects such as Inigo Jones and Christopher Wren used its emphasis on classical details. The 18th century saw its use in English colonies; American carpenters, working for an increasingly prosperous population, used pattern books as guides. The Georgian house is usually a one or two story box with symmetrical doors and windows. Architectural details include a gable roof, paneled, centered front doors, transoms, sidelights, cornice moldings, and double hung windows with six to twelve lights.

Federal: The Federal, or Adam, style, was popular in the United States from about 1780 to 1820, but in local areas its popularity may have exceeded that. The style was a refinement of Georgian style. The Federal house, like the Georgian, is commonly a box, two or more rooms deep, with doors and windows arranged in symmetry, but lighter and more delicate in feeling. There may be projecting wings. Semi-circular fanlights, a small entry porch, molded cornices with dentils, and Palladian windows are common. Windows are usually double hung, multi-paned sashes placed singly in symmetrical rows; the window panes are often several inches larger than those found in Georgian houses. There may be decorative wooden crowns above the windows.

Greek Revival: The Greek Revival style was the dominant architectural style in the United States between 1825 and 1860, following settlers as they moved west. The style grew out of the interest in classical buildings that occurred in the late 18th century, and was encouraged by sympathy for Greece's war for independence (1821-1830) and the War of 1812, which diminished American interest in British influence (Georgian and Federal styles). Features include low pitched gable or hip roofs, a wide band of trim at the cornice line, porches supported by prominent square or rounded columns, transoms and sidelights at the main entry, and small paned double or triple hung wood windows.

Gothic Revival: The Gothic Revival style began in England in 1749; the first documented American example was designed by Alexander Jackson Davis in 1832. Most Gothic revival houses were constructed between 1840 and 1870, although a few later examples do exist. Features of the style include steeply pitched roofs, usually with side gables and cross gables which are centered or paired, decorated bargeboards at eaves, and one story porches with arched trim.

East Tennessee Vernacular: Although this is not a nationally recognized style, it is a distinctive style found in several counties in East Tennessee. The style is similar to the I-House in massing and symmetry. The houses which exhibit it are two stories in height, three bays in width, and two rooms deep with a central hall. End chimneys flank each side of an gable end roof. A wide (usually two-thirds) front porch with a shed or hip roof appears on the front elevation over the front door and windows. The houses usually have simple transoms, and little or no decorative ornamentation original to the structure; replacement porches may exhibit Folk Victorian or Craftsman ornamentation. A one story addition, usually two-thirds the width of the front section, is usually located to the rear of the house and is accessed through a rear door and includes a porch that runs the length of the ell. The construction date of these houses ranges from about 1840 through the early 1900s.

Italianate: The Italianate style began in England as part of the Picturesque movement, which emphasized rambling, informal farmhouses. They were modified and adapted in the United States. The style was publicized here by Andrew Jackson Downing, and quickly eclipsed the Gothic revival style. Italianate design emphasizes windows, cornices, porches and doorways. Windows are usually glazed with one or two panes, and may have arched window tops. Brackets often appear at window pediments, and paired and triple windows are frequent. Large eaves brackets are placed on a deep trim to support a cornice with a large overhang. Porches are usually one story, and the porch support is usually square with beveled corners. Paired doors may be present, and the doors usually have large pane glazing. The style generally dates from 1840 to 1880.

F - III. Significance - Single Residential Buildings

Residential properties are an excellent representation of the historical evolution that occurred in Knoxville and Knox County during the time of early settlement. They represent the most complete extant picture of the history

of Knoxville and Knox County during the frontier period. Representative examples of successive construction technology and styles exist throughout Knoxville and Knox County.

Types of construction used in the properties included in the period of early settlement (c.1785-1860) reflect first the frontier conditions and are exemplified by the log house, which could be constructed rapidly from materials that were at hand in order to provide shelter from the elements. As conditions ameliorated, the settlers began to build houses that reflected the knowledge they brought with them from Virginia, Pennsylvania and North Carolina. As the frontier became more settled, construction in the early settlement period expanded to include not only log, but also braced timber frame buildings. Nogging construction, which was achieved by filling in wall cavities of braced timber frame buildings with soft brick and covering the inner surface with plaster and the outer surface with clapboard, became more common. Brick construction also occurred during this period, but was rare. However, the number of brick homes that survive is almost equal to those of log, probably because they were more substantially built. Both the nogging and the later brick buildings used the forms expressed in the log houses, including both single and double pen floor plans. In using these floor plans, the buildings express a massing that speaks to their early construction dates.

The settlement of Knoxville and Knox County by immigrants from the more established East Coast communities may have begun before 1785, but most records point to 1785 as the beginning of recorded settlement. As people traveled into the region, converting Indian trails to wagon trails, they constructed stations, which centered the settlements of log houses built fairly near to them. Gradually, the individual settlers branched out further, building small one room log houses located within a days' ride of a station. Given the paucity of records surrounding these structures, the haste and temporary nature of their construction, and the changes that have been made to them if they have continued in use, there are few of these structures that remain. The Nicholas Gibbs Home (NR - 9/9/88), built in 1792, is one example of these early dwellings. Others include the house at 7012 Neubert Springs Road (Survey No. 2866), and a house located on Shannon Valley Drive (Survey No. 2588) which may have been built by John Baker Edmondson.

As the Indian threat subsided, and the first settlers became more prosperous and their families grew, they began to expand their original dwellings with additions. Houses which are associated with very early Knox County settlement, but which have been modified by successive owners include the Thomas-Frazier House (Survey No. 2507), with a log section built c. 1795, the Keener-Widner-Gibson House at 8200 Seven Islands Road (Survey No. 2851), built c. 1809 and modified by a large c. 1980 addition, the Flenniken/Goddard House (log section built c.1792), the Stockley-Donelson-Bishop House (Survey No. 6906) located on Bishop Road, the log section of which was built in 1792), and the log section of the Tipton-Maxey-Berry House at 3415 Maryville Pike (Survey No. 2826), which was built c. 1810.

Some of the first generation settlers were soon prosperous enough to construct new houses. If they did not, their children often established their own households in new houses when they became adults. Those building

these dwellings felt free enough from danger to build at some distance from the original stations; however, their dwellings were still located near the early transportation routes. The economic character of the area was also more settled, and sawn mills were more common, meaning that settlers were able to build larger homes with more sophisticated construction methods. It is in this era, usually after 1810, that residences constructed of braced timber frame, nogging or brick became more common. The exterior and interior ornamentation of these buildings usually borrows from Georgian or Federal design details, although in areas of Knox County which would have been fairly remote, those design details are usually few in number. The McNutt-Campbell-Kennedy House at 6416 Thorngrove Pike, the first section of which was built c.1796 (Survey No. 2469), the Alexander Campbell House at 6722 Thorngrove Pike (Survey No. 2496), built c.1800, the Bowman-McBee-Hodges House, Hodges Ferry Road (Survey No. 2803), built in 1836 and the Caldwell House on East End Road (Survey No. 2413), built c. 1812, are all examples of the nogging form of house construction. Brick houses dating from this era include the earliest part of the Williams-Richards House at 2225 Riverside Drive, built in 1842 (Survey No. 1316), the Boyd Harvey House (NR - 11/07/85), and Statesview (NR - 4/14/73). The Fox-Duncan House at 3800 Copper Ridge Road, c. 1834 (Survey No. 7272) and the Thomas Walker House at 645 Mars Hill Road, built in 1839 (Survey No. 12710), are also examples of brick houses built during this era. The brick houses that have been discovered dating from this era are either one and one-half or two story buildings.

In Knox County outside Knoxville, the primary economic base of settlement was agriculture. While many of the first residents operated grist mills, saw mills, ferries or other businesses that provided goods or services, they were also farmers. Because the best agricultural land was in the valleys, the large land grants claimed by the first wave of settlers nearly exhausted the best arable land in the county. This meant that population growth in Knox County outside Knoxville was very slow, as potential settlers were more attracted to new lands to the west. It also meant that the descendants of the original settlers, if they continued to be farmers, often farmed a portion of the original grant. Consequently, the homes of Knox County's early settlers may have housed several generations of family members, each of which could have made changes to the original buildings. These remodelings may have involved the additional of architectural trim, new living spaces, porches, windows, interior features, or other work clearly related to the era in which the changes were made.

The stylistic features that adorned the first braced timber frame, nogging and brick homes were those familiar to the owners and carpenters who had migrated to the frontier, possibly several decades before. Thus, some of the earliest houses not constructed of log tend to have a stylistic appearance and massing that pre-date the Georgian and Federal eras. Gradually, however, the transportation of goods, technology and stylistic changes reached the frontier and encouraged the use of features from Georgian and Federal styles. Few examples of Greek Revival stylistic influences remain in Knox County, and they appear in large public buildings, like the Knoxville City Hall, Western Avenue (NR - 5/31/72 and 12/2/82).

Larger, and sometimes more sophisticated, secondary buildings were also added as the farm holdings became more diversified and prosperous. The construction materials used in these barns, smokehouses and other

outbuildings usually matched those of the house. Braced timber frame smokehouses usually accompany nogging or braced timber frame houses; log barns and smokehouses usually accompany log dwellings.

F - IV. Registration Requirements - Single Residential Buildings

Of the buildings that survive from the days of early settlement in Knoxville and Knox County, all have been altered in some way since their original construction. Some, but not all, of those changes have so changed the basic form of the structure, or removed so many of the original interior or exterior details that the building has lost its association with the early settlement period. The buildings that will be eligible for nomination under criterion A must retain the appearance of the original house. Alterations that have occurred must be minor, and must not have changed the original massing, the majority of the architectural features, or the fenestration, and architectural integrity. They should also retain integrity of setting and should reflect the period for which they have significance.

In addition to possessing the architectural characteristics noted above, the properties eligible for nomination under criterion A should also illustrate the historical events that shaped Knoxville and Knox County during the early settlement period. The buildings may be associated with an early form of transportation, such as an inn or other stopping place along an early road. The building's association could be with a ferry that operated from that location, or with a station designated for defense from Indian attacks. The building could also be associated with early commercial or governmental activities.

Under criterion B, buildings nominated to the National Register of Historic Places will be associated with an individual who was significant in the history of Knoxville and Knox County during the time of early settlement. The significance can be community-based or local, or at a broader level.

Properties eligible for the National Register of Historic Places under criterion C for architecture will be eligible if they are good examples of an architectural style identified with that period and have undergone minimal changes or alteration. Very few properties dating from the period of Early Settlement in Knox County have survived to the present day in an original form. Alterations will be accepted in properties nominated under criterion C, provided the modifications do not remove those features significant in the early settlement period, but instead render them a good example of an evolved house.

F - IV. Registration Requirements - Single Residential Buildings

In some instances, exterior design remains intact while interior detailing has undergone changes that have removed some original features. Examples of this type of alteration include the Alexander Campbell House (Survey No. 2496). In other instances, some exterior details have been altered, but enough of the original bulk

and mass of the house remains, when combined with extant interior features, to evoke the time of construction; The Love-Cole House (Survey No. 2577) is an example of a building in this category.

Significant original interior details usually contribute greatly to a property's character, but a property may meet registration requirements without possessing those interior details if most of the exterior form and detailing is still present or has outstanding features on the exterior for eligibility under criterion C, or has outstanding historical importance (criteria A and B) and there is no other site associated with the area of significance the property is nominated. Significant property may be altered by side or rear additions, provided those additions are distinct from the original, do not overwhelm the original house, or no not intrude upon the original building. Alterations should not create confusion about the form of the significant portion of the property. Properties which satisfy registration requirements should also retain original roof forms, window and door openings, chimney placement, integrity of site and setting and integrity of materials. Secondary structures can be considered significant if they retain sufficient integrity to link them with the property's period of significance and to evoke an association with the period.

Acceptable modifications to buildings usually occurred in one of two ways. The modifications were made to the building outside the period of early settlement, but were associated with the same family that built the house, or with successive occupants who engaged in the business (ferry or mill operation, for example) that tied the property to the early settlement period initially. In some instances, the changes have taken the form of additions or alterations that occurred in the Early Settlement period (i.e., 1785-1860). In those houses, the original structure and the additions portray different phases of construction and architectural design that were present during the Early Settlement era. Buildings that have been altered within that period, with additions using construction common during that period, are excellent examples of the evolution away from the uncertainties of frontier life, and represent societal change in a way that confirms their eligibility under criterion C as well as criterion A. The Thomas-Frazier House, 3530 Frazier Bend (Survey No.2507) with its c.1795 log section in saddlebag plan, and its added c.1830 braced timber frame ell is a good example of this phenomenon.

F-I. Historic Districts
F-II. Description. Historic Districts

There are several small historic districts that are representations of early settlement and the frontier. These districts may contain residential properties and their supporting barns or other outbuildings and the store buildings, ferry landings, bridges or mills that developed as secondary business interests adjacent to the residential dwellings. These commercial facilities may have contributed to an early settlement's continued growth into a small community, but the people who established them did not rely exclusively on the businesses for income. In most instances the ferries or mills were run by a farmer who built a small business to supplement his income and placed that business on his land holdings near his home. Both the Kennedy/Riverdale Mill (NR -

3/13/87) and the Hodges Ferry site in Riverdale and Ebenezer Mill (NR - 6/25/87) reflect this arrangement. The Kennedy/Riverdale Mill is associated with the McNutt-Campbell-Kennedy House (Survey No. 2469), while the ferry landing is associated with the Bowman-McBee-Hodges House (Survey No. 2803). These commercial ventures were owned by the owners of the historic houses, but were not their only financial undertakings. Ebenezer Mill, in west Knox County, was associated with Statesview (NR - 4/24/73), but was not the owners' primary occupation. It served their milling needs as well as those of a larger community.

Historic districts in this category are usually small, and represent the remaining resources of properties developed around some unifying community structure or service, such as a mill, station, store, or ferry landing. The majority of structures in these districts will be representative of the early settlement period and are united by their history or development succession, which often stretches over a period of years with unifying theme the community-oriented economic or social force that encouraged their continuing development. The architectural styles contained within such a district duplicate those described in Section F, pages 80-83. It should be noted that the architecture of the commercial buildings is utilitarian in nature, with few embellishments. Braced timber frame construction and clapboard or weatherboard siding are the rule, with gable roofs and symmetrically arranged door and window openings.

It is possible that archeological sites are associated with many of the earliest examples of early settlement in the county. Properties in the hands of organizations such as museum houses have had either limited or extensive archeological exploration. This is true for Blount Mansion (NHL 1/12/65), Ramsey House (NR 12/23/69) and others. For the most part, the location of potential archeological sites is not known, although there is one potential site in the yard of the McNutt-Campbell-Kennedy House (Survey No. 2469), thought to be the first house site of James White.

F - III. Significance - Historic Districts

Historic districts are eligible for the National Register of Historic Places if they possess cohesive collections of properties predominantly dating from a defined period of significance and if they are reasonably free of intrusions, incompatible alterations, or recent development. Individual buildings and their supporting structures will be considered contributing to the district if they retain integrity of one or more of the following: association, design, materials, workmanship, setting, location and feeling. Contributing properties in a district should retain integrity of association. Integrity of design, materials, and workmanship may be compromised, but not enough to significantly change the historic appearance of the district. The properties may also reflect the technological or transportation advances that influenced their location or construction. Historic districts eligible under criterion A will be representative of the early settlement period by their cohesive collection of buildings constructed during the period 1785-1860. The districts will reflect, through their collection of buildings, an early settlement are in Knox County.

Neighborhoods and small communities frequently developed over several decades; therefore, districts could contain resources with different periods of significance. Historic districts in Knoxville and Knox County may be eligible under criterion C if they are representative of a cohesive collection of buildings that reflect the styles of buildings identified in residential properties and are eligible for consideration if they retain sufficient stylistic and structural features to identify the property as having been built during the time period considered in the period of significance. Districts may also be eligible under criterion A if they are significant in the development of Knoxville and Knox County.

Supporting buildings that could be included with either individual residential buildings or districts include garages, sheds, smokehouses, barns and storage buildings. In order to be considered contributing, they should be consistent in age with the era identified in the nomination, and should reflect workmanship, materials or architecture associated with that time period.

F - IV. Registration Requirements

To be eligible for the National Register of Historic Places, historic districts must be either architecturally or historically significant in the early settlement era of Knoxville and Knox County (criterion A). They may possess a cohesive collection of properties that are primarily from a defined period of significance and are reasonably free of intrusions, incompatible alterations, or recent development (criterion C). They may also be associated with the life of a person or people significant to the history which the district represents (criterion B). Contributing buildings in a district should retain integrity of association. Integrity of design, materials or workmanship cannot be significantly compromised.

Historic districts that are eligible under either criterion A for early settlement or under criterion C as good examples of architectural styles built during the early settlement period of Knox County, will have the majority of their buildings dating from 1785-1860. While many of the buildings in a district may not be individually eligible for the National Register of Historic Places, they should retain their architectural integrity. As many buildings from this period will have undergone some degree of change over time, these changes should not be major changes and buildings should still be identifiable as examples of early settlement buildings.

It is possible that archeological sites are associated with many of the earliest manifestations of settlement in Knoxville and Knox County. Properties in the hands of organizations such as museum houses have had either limited or extensive archeological exploration. This is true for Blount Mansion (NHL 1/12/65), Ramsey House (NR 12/23/69), and others. Districts eligible under criterion D only have not been assessed.

SUBURBAN GROWTH AND DEVELOPMENT, 1861-1940

F-I Single Residential Properties
F-II Description-Single Properties

Knoxville and Knox County's development before the Civil War was fairly slow. Its reliance on an agriculturally based economy was dominant. Railroads arrived in the city in 1855-56, and only their coming began to spur Knoxville's growth as a regional center. The Civil War intervened shortly afterwards, and the potential for wholesale trade and industrialization was not realized until the decades following the cessation of hostilities. A great deal of the urban fabric of Knoxville and Knox County was developed after 1861and before 1940. Included are residential structures built as single households with a wide range of architectural styles, including Queen Anne, Eastlake, Bungalow and Craftsman, Colonial Revival, Spanish Revival, Neoclassical, Dutch Colonial Revival, French Eclectic, and vernacular interpretations. Vernacular style houses include Folk Victorian, Queen Anne Cottage, Foursquare houses and shotguns. While many of these residential properties are single or two family structures, there are a small number of surviving multiple family dwellings included. Typical commercial styles, which will apply in historic districts that are to be discussed in the glossary, are also noted. The following Glossary gives general architectural descriptions of the stylistic influences typical in these districts.

The properties included under "Suburban Growth and Development from 1861 to 1940" have distinctive architectural styles. To facilitate describing the structures and better portray the architectural styles, a glossary describing prevalent styles and their distinguishing characteristics appears below. Sources which were used to compile the glossary include A Field Guide to American Houses, by Virginia and Lee McAlester, Guidelines for Completing National Register of Historic Places Forms, National Register Bulletin 16, compiled by the National Park Service, U. S. Department of the Interior, American Architecture Since 1870: A Guide to Architectural Styles, by Marcus Whiffen, Victorian Commercial Architecture in Indiana, published by the Historic Landmarks Foundation of Indiana, and Identifying American Architecture by John J. G. Blumenson. The styles refer to the buildings found in the "Suburban Growth and Development, 1861-1940" Property Types.

Late 19th Century Styles

Gothic Revival: The Gothic Revival style began in England in 1749; the first documented American example was designed by Alexander Jackson Davis in 1832. Most Gothic Revival houses were constructed between 1840 and 1870, although a few later examples do exist. Features of the style include steeply pitched roofs, usually with side gables and cross gables which are centered or paired, decorated bargeboards at eaves, and one story porches with arched spandrels at the columns.

Italianate: The Italianate style began in England as part of the Picturesque movement, which emphasized rambling, informal farmhouses. They were modified and adapted in the United States. The style was publicized here by Andrew Jackson Downing, and quickly eclipsed the Gothic revival style. Italianate design emphasizes windows, cornices, porches and doorways. Windows are usually glazed with one or two panes, and may have arched window tops. Brackets often appear at window pediments, and paired and triple windows are frequent. Large eaves brackets are placed on a deep trim to support a cornice with a large overhang. Porches are usually one story, and the porch support is usually square with beveled corners. Paired doors may be present, and the doors usually have large pane glazing.

Richardsonian Romanesque: Henry Hobson Richardsonian, a Boston architect, began to design Romanesque houses in 1879-1880; his public buildings became popular in the 1880s. After he died in 1886, a monograph on his life and work increased interest in the style, and many examples exist from the 1890s. Identifying features include round-topped arches over windows, porch supports or entrances, masonry walls, and heavy stone or brick work trim.

Queen Anne: Elaborate decoration on all exterior surfaces is a chief characteristic of Queen Anne design, as are irregular floor plans. Steeply pitched complex roof shapes are usually found, and may be surfaced with colored slate laid in patterns, or with textured terra cotta tiles. Patterned shingles are often used on walls. Bays, bay windows and oriel windows emphasize the irregular shape of these buildings. The front facade is asymmetrical. Full or partial length porches, or wrap around porches, are common. Turrets and balconies are found on these houses. Porch columns are usually turned or chamfered, with trim of elaborately sawn wood, lacy spandrels, spindle work, beaded balusters, and ornamented attic vents or windows. Two over two double hung windows are common. Leaded and stained glass may be used in the upper sash of double sash windows, as well as in transoms and sidelights. One common window form, the Queen Anne window, consists of a double hung window with an upper sash of small square panes around a large square central pane. This upper sash is usually combined with a lower sash of one large or two smaller vertically divided panes, although some examples may have both upper and lower sashes of the same pattern.

Eastlake: The Eastlake style was used at the same time as the Queen Anne, and is similar to it in massing. However, it appears to be more vertical than the Queen Anne styles, without the Queen Anne style's elaborate bays and oriel windows. Window styles are identical to those of Queen Anne buildings. Wood trim is more massive and robust than Queen Anne detailing, with bargeboard, door and window trim being characterized by applied bull's eyes, rosettes, or applied "x" shapes. Trim was usually formed by a chisel or gouge, or a lathe, rather than a scroll saw. Rows of spindles, beaded spandrels, and brackets are common.

Folk Victorian: The facades of Folk Victorian houses may be asymmetrical, and usually highlight a front gable. Spindle work details and spandrels, as well as jig-sawn trim, are used often, and trim details are usually derived from Queen Anne styles. The trim is much less elaborate than that found on a Queen Anne style. The roof is

usually a gable roof. Porches are full or nearly full length, with simple chamfered or turned posts. Windows are double hung, often with two over two glazing. The Folk Victorian house may be either one or two stories.

Queen Anne Cottage: The Queen Anne Cottage grew out of the Queen Anne style, and is a builder form of that style. One or one and one-half stories in height, and asymmetrical, it is usually marked by a hip and gable roof, corbelled interior chimneys, and sawn wood ornamentation. The Queen Anne Cottage often has a full or three-quarter front porch, which sometimes wraps to one side; the porch roof is supported by wooden columns which may be turned or chamfered or, less commonly, rounded. Post brackets, sawn wood or louvered attic vents, and spindle work balustrades are often found. Windows are usually double sash, with either two over two or one over one panes. However, the upper sash may be a Queen Anne design of leaded or stained small panes. These small panes may also be found in transoms or sidelights. A "cottage" window may also be used on the front facade, and is a fixed shallow upper pane (either plain or with geometric patterns) above a fixed lower sash. Cottage windows may also be found later styles, and seem to be the antecedent of the modern "picture window." Wall coverings are usually weatherboard. There may be patterned wood shingles in gables, and the roof covering may be of patterned asbestos shingles.

Shotgun: The term "shotgun" applies to a floor plan arrangement in which the rooms of the house open in succession from front to rear without a separate hallway. The term "shotgun" comes from the description that a shotgun could be fired in the front door and all of the shot would exit through the rear doorway without hitting any intervening walls. Front gable roofs are common on the shotgun house, which usually has a full or three-quarter front porch. The houses usually provided worker housing. Trim is not elaborate, and may be either from the Victorian era or from the later Craftsman period. Window pane configuration reflects the style with which the house is detailed.

Shingle: The Shingle house is usually two or three stories tall. In its pure form, it has a uniform covering of wood shingles from roof to foundation walls, with no corner boards. The sweep of the roof often continues to form porch roofs and the roof is steeply pitched. Multiple porches are common. Casement or sash windows may be used, they are often grouped into twos or threes. The Shingle style borrowed elements from other styles: the Queen Anne contributed wide porches and asymmetrical forms; the Colonial Revival contributed adapted gambrel roofs, classical columns and Palladian windows; and Richardsonian Romanesque added an emphasis on irregular, sculpted shapes. Houses in Knoxville and Knox County are not pure Shingle, but show influence of the style in their use of wall covering and other embellishments.

Early 20th Century Styles

Italian Renaissance Revival: This style of building features low-pitched hipped or flat roofs. Hipped roofs are covered by terra cotta or cement tiles. Arches above doors or windows, or on porches, are common. A symmetrical facade and recessed entry porches are used. This style is less common than Craftsman, Tudor or

Colonial Revival styles. Windows are usually double hung, with multiple panes in the upper sash and one pane in the lower.

Prairie: The Prairie style feature low-pitched roofs, often hipped, with wide overhanging eaves. One story porches, wings, and other detailing strengthen the horizontal lines of the building. Front porches often have massive, square porch columns or piers, often of masonry. The upper sashes of windows, as well as transoms and sidelights, often show geometrically patterned small panes and are called Prairie windows in this nomination.

Craftsman: Buildings of this style usually have low-pitched gable roofs with wide eaves overhangs. Roof rafters are usually visible, and decorative beams and knee braces are widely used. Porches usually stretch across all or most of the front facade, with a roof supported by tapered or square columns, or by posts resting on piers or a balustrade. Dormers are used extensively. Weatherboard is a common wall surface material. Windows are usually double hung, with the upper sash having three, four, or more panes, while the lower sash has one.

Bungalow: The Bungalow house is usually one or one and one-half stories in height. It uses a rectangular plan, which might have been modified by later additions. There are fewer embellishments than found on Craftsman houses. In addition, the Bungalow most often has a front gable roof. There is usually a full or three-quarter front porch, with simple wood or brick columns and without a balustrade. Windows are usually double hung one over one sash, with the windows being shorter and wider than the windows of houses from earlier design eras.

Tudor Revival: Steeply pitched roofs, usually gabled, characterize the Tudor Revival style. Half-timbering, tall, narrow windows and massive chimneys are also common. The style was common in early twentieth century suburbs.

Colonial Revival: The characteristics of the Colonial Revival style include pediments supported by pilasters or porticos supported by slender columns at the main entry. The front facade is usually symmetrical, with a central entry, which often has a fanlight or sidelights. Windows have double hung sashes, usually with multiple panes.

Dutch Colonial Revival: Dutch Colonial Revival is a variation of the Colonial Revival style marked by its use of a gambrel roof, with the gambrel end facing either the front or side of the building. Other characteristics of the Colonial Revival period apply, with pediments or porticos as entries, double hung multiple pane windows, and a symmetrical facade.

Neoclassical: Facades of Neoclassical houses may feature columns the full height of the two-story building; however, one-story cottages are also present. A full or partial-width porch with columns may be found. Symmetrical front facades and multiple-pane glazing in double sash windows are usually present on the front facade.

American Four Square: This house style was used from the 1900s until the 1930s, and is recognized by its square appearance and often hipped, pyramidal roof. Front and side dormers are often used. It is two or two and one-half stories in height, and interior spaces are often arranged into four main, square or nearly square, spaces. A full front porch is most common in these buildings. Detailing on the house may be from any of the styles common in the early twentieth century. It is common to find sidelights and transoms on a American Four Square, and these may be of leaded, stained or beveled glass. Double hung windows are usually used, and they may have a patterned upper sash or may be in a one over one configuration.

Minimal Traditional: This style was dominant after the 1920s, and has a conservative, simple form of detailing. Eaves are usually flush, roof shapes are low-pitched, and porch hoods or covered porticos are common. Windows are usually double hung, with multiple pane glazing in each sash. Facades may be either symmetrical or asymmetrical.

French Revival: This style is based on precedents provided by French domestic architecture. The style may be symmetrical, asymmetrical or towered, usually displays brick, stone or stucco wall cladding, flared eaves, and a tall, steeply pitched hipped roof. Doors may be in arched or flat openings. Windows may be either double hung or casement windows. If they are casement sashes, they may have small leaded panes. French doors are often used.

Spanish Revival: The Spanish Revival style uses details from the entire history of Spanish architecture. It usually has a low-pitched roof, which may be gabled, hipped or flat, and is covered with roof tiles. The walls are usually stucco, but may be stone or brick. The use of arches is common and the facade is normally asymmetrical. Balconies are often present, arcaded walkways or porches are common, and chimneys often have additional ornamentation.

Mission Revival: The Mission style was developed in California and spread eastward during the early 1900s. Shaped dormers and roof, tile roof covering, shaped dormer or roof parapets, large piers supporting roofs and stuccoed wall surfaces are common in the style. Arches and shaped windows are also found.

No Style: Some residential buildings in the "Suburban Growth and Development, 1861-1940" are referred to as "No Style." They are of varying ages, and use a wide range of materials in their construction. Some of them were built without architectural ornamentation, so that while their massing, window configuration, or age may link them with earlier styles, they do not possess qualities of that style themselves. Others may have been an architectural style common in the period when they were built. However, the stylistic details that linked them with that style have been removed over the years, so that no distinctions remain.

Modern: In this nomination, the stylistic term "Modern" is used to describe those buildings built after World War II, from 1946 forward. The style includes those building styles often referred to as Ranch, Split-level and

Contemporary. Ranch Houses are usually one story in height with a low-pitched roof and broad facades, porch roof supports, decorative shutters, or other details that refer to the Colonial Revival stylistic precedent. The Split-level style, with wings and sunken garages, is a variation from this era, as is the Contemporary, with its wide eaves and low-pitched or flat roofs. Windows in all these styles are usually single pane sashes, often aluminum. Although there may be exceptions, buildings of this style generally will be listed as non-contributing.

Commercial Styles

Victorian Vernacular Commercial: This style was common between 1880 and 1910. These buildings are simple stores, offices, factories and other structures divided into rectangular structural bays with large glazed front windows to admit light. They have the ornamentation which characterizes other buildings of the same time period; common to the style are pressed metal cornices with brackets, simple window hoods or segmental arched window heads outlined in brick, and some decorative brick or stone work, all of which suggest Queen Anne, Italianate and Eastlake stylistic details.

Commercial Vernacular: Commercial buildings in this style have been built since around 1910. They are similar structurally and in massing to Victorian Vernacular Commercial - utilitarian structures divided into rectangular bays, usually with large glazed front openings to admit light. However, they have little applied ornamentation or decorative stone or brick work; if it exists, the ornamentation is reminiscent of early twentieth century residential styles.

F - III. Significance - Single Residential Buildings

During the period from 1861 to 1940, Knoxville and Knox County, Tennessee saw a great increase in prosperity. The single residential buildings that can be associated with suburban growth are rare. However, there is one house built at 2921 Broadway (Survey No. 111), with construction clearly tied to the expansion of streetcar line. There may be several houses in Fountain City which were originally constructed as summer homes and made accessible by the expansion of the streetcar line. The single houses appear to have been constructed by individuals who benefited in some way from the increasing economic prosperity of the era, reflect the change in Knoxville from a primarily subsistence, agricultural economy to one which benefited from the construction of railroads, and later the automobile. Single houses, with their accompanying garages, sheds or other support buildings, were built using the architectural styles prevalent at the time, and were located along streetcar routes, or later roads, that could be used to escape the noise, dirt and congestion of the central city. They reflect the economic growth of the city and county, as well as the change in building technology and architectural styles. They may be eligible for National Register listing under criterion A, B, or C for their significance in community development, association with an important person, or architectural significance. The few individual structures

that exist outside a simultaneously developed area will be linked through ownership to suburban growth, and development trends or through ownership to industrial growth.

F - IV. Registration Requirements - Single Residential Buildings

To be eligible for the National Register of Historic Places, residential properties must be either architecturally or historically significant to the growth and development of Knoxville and Knox County. Individual properties should retain sufficient physical characteristics to identify them as having been built during the period of significance, retain integrity of one or more of the following: design, workmanship, materials, setting, location, feeling and association. Individual residential properties may be nominated under criteria A, B or C for their representation of history, their association with a significant individual in the development of Knoxville and Knox County, or for their architectural significance.

F-I. Historic Districts
F-II. Description. Historic Districts

Suburban growth in Knoxville was fueled by rapid industrialization and development of the textile, iron and rail industries, all of which entered their strongest growth period after the Civil War. Large numbers of immigrant workers from the surrounding region, as well as managers of the new factories, demanded and could afford new single family houses. This economic impetus combined with the era's emerging technologies, to create the large suburban expansion that occurred between 1861 and 1940.

Distinctive styles are noted in the glossary of this nomination. Details they possess which distinguish the historic districts include front entries consistent for the prevalent styles, steeply sloped, complex roof shapes, dormers, brick chimneys and decorative gable vents. The placement of the houses, on rectangular lots and near the public sidewalks, the sidewalks themselves, the street pattern (curvilinear for areas developed after 1925 and rectangular for districts developed between 1861 and 1925), and other details that clearly mark these areas as historic.

Those districts that were developed from 1861 to 1925 focus on styles of the Victorian era, and well as the Craftsman and Bungalow styles of the early twentieth century. Most of the structures are vernacular adaptations of those styles, and may draw from several styles. These districts are also likely to contain designs of one of Knoxville's noted architects, George F. Barber. Barber's designs are particularly prevalent in the Park City Historic District (NR 10/25/90), but can also be found in Old North Knoxville Historic District (NR 5/14/92) and the Fourth and Gill Historic District (NR 4/25/85). Other noteworthy local architects will also be represented in the historic districts of this time period.

The development of streetcar lines created the first major boost for suburban development. As the lines were built, developers bought land adjacent to the newly laid tracks and developed streetcar suburbs, characterized by their long, straight streets, sidewalks, and narrow lots. The streetcar suburbs have residential designs with steeply pitched, complex roof shapes, architectural embellishments, large front porches and multi-paned windows, which unify them. Lot shapes and sizes speak to their pedestrian orientation. Most of these houses are frame construction, and most of them have weatherboard wall coverings.

There are several categories of properties that may be present in these districts, including single and multiple family dwellings, together with garages, carriage houses, or sheds as supporting buildings, neighborhood-serving commercial buildings, churches, schools, and neighborhood commercial buildings which capitalized on the pedestrian nature of the developments, or represented the terminus of streetcar lines that delivered residents to their neighborhoods. Public improvements such as street markers, unique paving materials, street lights, curb cuts for streetcar lines, median strips, landscaping, and other details that clearly mark the district as belonging to a particular historic era may also be present.

Some of the streetcar suburbs were adjacent to, and later came to include, mill housing built for the workers in industries that ringed Knoxville to the north and east. The mill housing was built by speculators, and owned by individuals rather than by the company which ran the mill. The location of some of this worker housing, adjacent to the larger houses of the industrial managers or owners, provided economic stimulus for location patterns which exist today, where the larger, more elaborate houses of the upper classes are usually located on streets at or near the tops of ridges in neighborhoods like Old North Knoxville (NR - 5/14/92), while the smaller workers' houses are located on lower elevations.

There may also be districts that developed at the terminus of streetcar lines. One such district, Emory Place (Survey Nos. 1393 - 1446), includes not only the commercial buildings that developed at the streetcar stop, but also apartment or residential hotels, a church and the facility that served as Knoxville's only high school throughout the first half of the twentieth century. The concentration of uses in that area reflects the importance of the streetcar to economic prosperity and suburban growth. At one time, the area also included a public market and fire station, both of which were demolished several decades ago.

The grid street pattern of the streetcar suburb gradually gave way to the curvilinear street pattern found in automobile suburbs, as Knoxvillians became fascinated with the automobile. By the 1920s, when the use of the car was fairly general, residential expansion was again growing rapidly. Automobile suburbs were distinguished by their curvilinear street patterns that enhanced the topography of the land where they were developed. In addition to being curvilinear, streets were also developed without prominent curbs, and sidewalks were usually not part of the public improvements. The automobile suburbs also rely more heavily on the early 20th century revival styles. The residences are more likely to have masonry wall coverings, and to use as their design

vocabulary the revival styles which came into vogue after 1900. The automobile suburbs carried names which typified both their form and the naturalistic settings they cultivated - Lindbergh Forest, Adair Gardens, Holston Hills, Sequoyah Hills (Talahi - NR - 12/26/79), and Forest Hills (NR - 3/14/92).

In the automobile suburbs, there was more separation between workers and managers than is found in the streetcar suburb. Large areas tended to be developed exclusively as either working class or professional or management housing. The size of lots, elaborate design and size of houses form the elements that distinguish between working class and upper class suburbs, with larger, more elaborate houses being the standard for upper class neighborhoods. In the automobile suburbs, those that were developed for the more prosperous economic classes also tended to have more public improvements, with uniform street lights and median strips the most common.

F - III. Significance - Historic Districts

The historic districts that will be considered significant under the Suburban Growth and Development portion of the Multiple Resource nomination will be those districts that represent the history of suburban growth, the form of development commonly associated with particular forms of transportation and development technology, and the architectural styles that mirror those associations. The districts should clearly indicate the economic conditions of their first residents, and the way of life and social relationships that those economic conditions dictated. They will also reflect the technology that was present when they were developed. Therefore, the significance of these districts will lie in their architecture, but also in the layout or street pattern of the district, the size and stylistic details present on the buildings that make up the district, the public improvements that were installed when the district was developed, and other factors that illustrate their developmental history.

Each of the districts is a cohesive collection of structures that possesses a significant concentration, linkage, or continuity of sites, buildings, structures or objects united either historically or aesthetically through their physical development. They may be composed of a single subdivision, or they may contain only the part of the subdivision that was developed contiguously and before the depression of 1929 caused construction to cease - a cessation that lasted until after 1947. They may also include several different subdivisions that are linked historically because they were developed almost simultaneously as small three to six lot subdivisions. Property types within the residential historic districts include primarily residential dwellings and their outbuildings. Property types within the commercial districts are likely to be mixed, and may include not only residential and commercial buildings, but also churches, schools, fire stations, and other buildings developed to support adjacent residential areas, either with commercial or services or employment of residents in the areas.

In their varying size and styles of residential and commercial structures, each of these districts combines to form a picture of the city of Knoxville as it passed through the most significant economic growth it has yet

encountered. The elaborate mansions of the industrial owners, as well as the more modest middle class housing of the managers and clerical workers and the smaller, plainer houses of the workers all demonstrate the social and economic climate that prevailed when they were built. The relative size and elaborate design details make upper class housing distinct from lower class or worker housing, in the streetcar and the automobile suburbs. In the earlier streetcar suburbs, upper class housing was usually developed high on the ridge lines, while the workers' housing was usually in the valleys. However, they were usually located adjacent to one another. In the later, automobile, suburbs, the character and size of individual houses was more homogeneous. Economic types were not mixed within a developed neighborhood; instead, the building materials, size and details of all the houses tended to be very consistent.

The historic districts will also reflect the transportation technology that was present when they were developed. Streetcars operated best along straight tracks, and the subdivisions that were laid out along streetcar lines consisted of straight streets, usually developed parallel to the streetcar tracks. Sidewalks provided pedestrian access to the streetcar stops. Residences were located on fairly narrow lots facing the streets.

The residential districts contained in the Suburban Growth and Development portion of the multiple resource nomination may be eligible under criterion A or criterion C for their significance to the development of Knoxville and Knox County during the economic boom that began after the Civil War and continued to World War II. Their significance under criterion A includes their representation of the economic prosperity that came as a result of Knoxville's industrialization and increased prominence as a regional wholesaling center following the Civil War. It also includes the understanding that they contribute to urban development patterns, as the reliance on public transportation first (from 1861 to 1915), and then private automobiles (1915 to 1941), fueled the development of new residential areas remote from the earliest concentration of settlement, the area that is now downtown Knoxville. Residential historic districts are composed of a number of styles which are usually cohesive in their major design elements, although there may be a wide range of representative styles and sizes within each district. The majority of properties in these districts would have been built between 1861 and 1940.

F - IV. Registration Requirements

Historic districts under suburban growth are likely to be composed of residential properties that are primarily single family homes. They may also contain apartment houses, commercial buildings, churches and schools. The original uses of the buildings in the historic districts will reflect the largely pedestrian character of the era in which they were built. Public improvements in these districts, including not only the pattern of the street layout, but also street furniture like street name signs, street lights, permanent house number markers, and sometimes even paving materials, can also be included as a contributing factor in historic districts.

The residential and commercial historic districts and individual properties contained in the Suburban Growth and Development portion of the multiple resource nomination may be eligible under criterion A or criterion C for

their significance to the development of Knoxville and Knox County during the economic boom that began after the Civil War and continued to World War II. Their significance under criterion A includes their representation of the economic prosperity that came as a result of Knoxville's industrialization and increased prominence as a regional wholesaling center following the Civil War. It also includes the understanding that they contribute to urban development patterns, as the reliance on public transportation first (from 1866 to 1915), and then private automobiles (1915 to 1941), fueled the development of new residential areas remote from the earliest concentration of settlement, the area that is now downtown Knoxville.

Those districts eligible under criterion C are eligible because they are representative examples of architectural styles built during the 19th and early 20th centuries. Buildings can include specific examples of Queen Anne, Bungalow, Craftsman, Neoclassical, Colonial Revival, Dutch Colonial Revival and Minimal Traditional styles. Within these architectural styles, the buildings will reflect the prosperity and growth of industrial Knoxville. The homes may be the elaborate houses of owners and managers of industries and trade houses, or the modest lower middle class housing that housed industry and trade workers.

Residential historic districts contained in this section are eligible for the National Register of Historic Places if they reflect the growth of Knoxville and Knox County during the time period from 1861 to 1940, and possess architectural significance. Districts must possess a high degree of integrity. They may reflect the economic and technological transportation advances that took place in this era.

The majority of resources in these districts should retain sufficient physical characteristics to identify them as having been built during the period of significance. They should also retain integrity of one or more of the following: design, workmanship, materials, setting, location, feeling and association. Contributing resources (C) will be those that are significant to the historic and architectural development of a district, or reflect the city or county's development, have compatible design elements, and maintain the scale and use typical of that era. Individual buildings will be considered non-contributing resources (NC) if they fall outside the period of significance or do not retain integrity of association, design, materials, workmanship, setting or feeling. Each of the districts that represents suburban expansion between 1861 and 1940 is a cohesive collection of structures that possesses a significant concentration, linkage, or continuity of sites, buildings, structures or objects united either historically or aesthetically through their physical development. When considering suburban growth and development, there may be a single subdivision, or a district may contain only the part of the subdivision that was developed contiguously and before the depression of 1929 caused construction to cease - a cessation that lasted until after 1947. The districts may also include several different subdivisions that are linked historically because they were developed almost simultaneously as small three to six lot subdivisions. Property types within the residential historic districts include primarily residential dwellings and their outbuildings.

ETHNIC SETTLEMENT AND MIGRATION, 1785-1940

F-I Archeological Sites
F-II Description-Archeological Sites

The properties associated with Knoxville and Knox County's immigrant populations have been well-assimilated into the growth of Knoxville as a whole, and the locations of property originally associated with their entry into this area have been incorporated into the urban and suburban growth that the entire area as experienced. For the most part, references to properties associated with particular immigrant groups will be found in other district nominations. There are some individual resources - primarily churches or individual houses - that still bear the theme of association with the original immigrant groups that were responsible for them. The architectural styles chosen by them are not unique to particular immigrant groups, and can be found in the glossary of styles developed under other sections of this Multiple Property nomination.

One of the few exceptions to this set of circumstances would be the resources associated with Knoxville and Knox County's immigrants who were slaves. While there are no unaltered slave "cabins" remaining in the county, there are archeological sites that are associated with slavery. Two archeological investigations have been carried out thus far - a site exploration at Blount Mansion (NR - 10/15/66) and another at the Nicholas Gibbs House (NR 8/3/88).

The location of archeological sites connected with ethic settlement and migration has also not been determined. However, there probably are extant sites associated with slave cabins located in what was the rural area outside the city, as well as in historic black neighborhoods located inside the city of Knoxville. The slave cabins would have been associated with the homes of prominent farmers or landholders. The black neighborhoods are shown on various early city records. Two that are known are Muck Town, which was located north of the Old North Knoxville Historic District (NR 5/14/92), and an area along the eastern edge of downtown Knoxville, centered on Marble Alley and State Street.

F-III. Significance

For the most part, the resources that are present in Knoxville and Knox County and associated with ethnic settlement have been integrated into the remainder of the architectural fabric found there, as the settlers' lives were integrated. Most of the built resources associated with the immigrants are better portrayed with the era of history in which they were built, because while they are a reflection of the immigrants who built them, they reflect more accurately the economic, social and architectural facets of the time period in which they were built.

There are likely to be a limited number of archeological resources that are associated with the lives of ethnic people who came to Knoxville and Knox County, and particularly with the lives of African-American people.

These resources are, for the most part, unknown, although locations for them - slave cabins that are associated with the farms of prosperous landholders and small communities of laborers in particular industries - have been the subject of some tentative research. The built resources associated with these people have been destroyed over time and archeological sites are the only resource likely to give insight into their lives.

F-IV. Registration Requirements

Properties associated with Ethnic Settlement would be eligible for listing in the National Register of Historic Places under criterion D, if they have yeilded or are likely to yeild information on a specific ethinc group and their settlement patterns. Properties nominated under criterion D must be assessed by a professional archeologist.

The majority of extant resources associatd with an ethnic group are most likely to be nominated under other contexts.

ASSOCIATED PROPERTY TYPES

F-I. INDIVIDUAL BUILDING AND DISTRICTS: 4. INSTITUTIONAL AND ORGANIZATIONAL BUILDINGS, 1785 - 1940

F-II. DESCRIPTION: 4. INSTITUTIONAL AND ORGANIZATIONAL BUILDINGS, 1785 - 1940

The institutional and organizational buildings discussed in Section E: **Institutional and Organizational Buildings 1785 - 1940** may be significant for the architectural styles they represent and the building materials used in their construction. The buildings include, but are not limited to; schools, churches, and other buildings of a public nature. The styles and design types found elsewhere were prevalent at the time of construction of various facilities. The styles may be vernacular interpretations or of a representative style from the period. Building materials include wood, brick, concrete and East Tennessee marble.

Schools

School buildings include both public schools built as primary or secondary schools, and those built to house students at colleges and other higher educational facilities. Most of the extant school buildings remaining in the city or county are not the first generation of school buildings constructed during the early settlement period of Knox County. The majority of school buildings are of brick veneer construction and date from the first third of the twentieth century. One exception is a frame building located on Kodak Road at the intersection with Kelly Bend Road. Of simple frame construction, the building served as a one room school for children in the area. The school building was constructed in the late 1800s.

One of the earliest school buildings in Knoxville was the Peabody School (KN. 1420) constructed in 1874. The brick school was constructed with partial funding from the Peabody fund. The school was abandoned and vacant by 1930 and sold to a labor organization which still occupies the building. Other brick schools include Riverdale School, designed by the Barber and McMurray architectural firm and built as a project under the Federal Emergency Administration of Public Works. The Classical Revival style building has classrooms and a combination gymnasium and auditorium.

Several colleges in Knoxville and Knox County also retain buildings from the late nineteenth and early twentieth century. They include Knoxville College, of which nine buildings are included in the Knoxville College Historic District (NR 5/1/1980). The University of Tennessee campus retains several buildings, some dating from the nineteenth century and some from the first thirty years of the twentieth century. Johnson Bible College, located on Kimberlin Heights Road in southeast Knox County also continues to use several of the first buildings constructed on the campus.

School buildings provide excellent examples of the efforts that went on in communities to provide education. They present a good example of architectural styles and of the degree of sophistication in styles and in buildings materials and techniques that were present in the community when they were built. Their history mirrors the economic conditions of the era in which they were constructed, as well as the

educational philosophies of the period in which they were built. The simple one-room school in which children of all ages and education were housed is a startling contrast to the school buildings constructed twenty or thirty years later, where children were separated into grades, provided with smaller classes and separate facilities used for sports assemblies or cafeterias. Both speak to the wealth of the societies that built them and to the emphasis that communities placed on educational training.

Utilities

Utility systems are as complete a symbol of the degree of civilization of a society as anything man constructs. The need for urban societies to access clean water, safe waste disposal and accessibility to power sources have remained paramount throughout recorded history. The majority of the facilities built to serve the city or country are updated rapidly, as new technologies emerge, and therefore few older buildings or structures survive.

Of the main utilities built to capture the benefits of emerging technology in Knoxville and Knox County, the Mark B. Whitaker Water Plant survives. Built in 1926-1927, it was not the first facility to provide fresh clean water to Knoxville, but it is the earliest facility that remains. Its Collegiate Gothic style symbolized the importance that accompanied construction of the water facilities that served the city.

Churches

When churches were initially established in the community, the worshipers probably built very small places or worshipped in individual's homes or brush arbors. The older congregations that remain are probably worshipping in church buildings that are either a second or third generation building. The newer buildings are likely to be more elaborate than the first generation of church buildings.

The architectural styles and construction materials vary in the church buildings that remain in Knoxville and Knox County. Congregational buildings in Knoxville are frequently built of stone or brick. Some, such as the Immaculate Conception Cathedral (KN. 1080) in downtown Knoxville, are Gothic Revival in style with elaborate details and ornate stained glass windows. St. John's Episcopal Church (KN. 1059), also located in downtown Knoxville, is stone construction and Romanesque Revival with strong Gothic Revival features such as lancet windows.

Simpler, frame versions of the Gothic Revival style can be found in many of the churches located outside the city limits in Knox County. One of the most noteworthy of these in the Millertown Lutheran Church (KN. 2551) which features frame construction, a central bell tower and sawn ornamentation. Of particular interest are many of the Methodist churches built throughout the county. Their appearance suggests that there might have been a plan book available to the congregations involved in their construction, since many of them feature similar elements. Many of the main line denominations offered architectural guidance to congregation, usually through architectural plans geared to the sized of the congregation. Quatrefoil windows, paired, flanking bell towers or single off center bell towers, tripartite windows, shingled eaves and another similar features or variations of them can be found on many of these churches.

However, folk history collected about the buildings indication that congregational members would copy elements of a church they liked when constructing their own new church, this folk history does not take into account the existence of plan books that guided church construction as well as ready made ornamentation.

In one instance, a building exists which was built for a joint purpose. The two story brick building at the intersection of Copper Ridge and Emory roads served as a Methodist church and a Masonic Hall (KN. 270). The building is now used for storage, but its prominent location atop a hill, and the cemetery located adjacent to it, illustrates its importance to the community when it was built. Some of the earliest buildings built as settlers found their way to what became Knoxville and Knox County were the churches. Although none of the earliest buildings survive, many of the active congregations can trace their roots to the early churches that were established when the city and county were settled.

Church buildings that have survived in Knox County date form the 1850s and forward. They may, as in the case with downtown churches, be significant examples of a particular architectural style, with an imposing presence created through the use of expensive materials. There may also be simple interpretations of architectural styles, using indigenous materials that help them adapt well to the communities around them. Significance for these building is drawn from two sources. The first is their architectural style, whether it is a grand version or a simple interpretation of a style prevalent during the era in which they were built. The second source of significance is their importance to the community, evidenced by the investment of time and effort that resulted in the church's construction. Through many of these religious institutions, the history of settlement of a particular section of Knox County, or the immigration of a particular group of settlers can be traced. This may also contribute to their significance.

Government Buildings

In Knoxville and Knox County government buildings, primarily post offices, represent the greatest diversity in architectural styles. The Renaissance Revival style of the Customs House (NR 3/20/1973) and the Art Deco styling of the Knoxville Post Office (NR 5/24/1984) contrast remarkable with the log house located on Sevierville Pike and that served for a time as the Shooks Gap Post Office. It is known that many of the small rural communities were served by local post offices that were located in hoses or crossroads stores. However, the Shooks Gap Post Office is the only extant building identified by the Knox County survey.

Offices built to house government functions have also played a significant role in Knox County history. The former Knoxville City Hall represents one of the only Greek Revival architectural examples of remaining in the county and achieves additional significance from its original use as a home for widows and orphans, as well as the Tennessee School for the Deaf. The Knox County Courthouse with its blend of architectural details is an imposing symbol of government.

Social And Fraternal Buildings

Social and fraternal activities were important in the lives of most communities and Knox County is no exception. The YMCA and the YMCA buildings, both designed by the architectural firm of Barber and McMurray, a firm which in the era of revival style buildings, sensitively interpreted those architectural styles. Other types of buildings can include clubs of fraternal organizations that may have played an important role in the social history of Knox County. These may include Masonic halls, which in the early days of the county's history, were often built in conjunction with churches or schools. Also included in this category are women's organizations such as Ossoli Circle and the Women's Education and industrial Union.

F-III. SIGNIFICANCE: 4. INSTITUTIONAL AND ORGANIZATIONAL BUILDINGS, 1785 - 1940

Institutional and organizational buildings in Knoxville and Knox County may be eligible under criterion A for their role in the history of the county's development, as important examples of buildings used for religious and educational buildings, or buildings that served to house social organizations and public utilities. These properties may be eligible under the areas of community planning and development, education, ethnic heritage, religion and social history. While these may be the primary categories institutional or organization buildings may fall under, they are not limited to these areas of significance. These buildings may also be eligible under criterion C as good examples of a type of architectural style, construction methods or as an examples of an architects' work. Properties may be eligible under criterion B as properties associated with an individual or individuals that were important in the development and growth of Knox County.

Institutional and organizational buildings play an important role in the development of a community and county. Some of the first buildings to be constructed by early settlers were churches and schools. At the same time social and fraternal organizations may play a role in the social history of the communities usually indicate growth beyond the early settlement days. These organizations were usually formed to serve specific needs of a community or county. While they may have been exclusive in their membership, these organizations often played a role in helping the community by providing support for schools, government policies, and by providing insurance or support for the widows and orphans of their members.

As Knox County, Knoxville, and smaller communities grew, the public buildings that house government functions also grew over time and reflect society's needs by providing governmental leadership. Public utilities were built to serve the communities with technological advances in water, sewer, or electrical and gas consumption and provided an easier way of life. Post offices provided the residents a means of communication with others who lived outside of their immediate community, public schools allowed greater numbers of children an opportunity for education.

F-IV. REGISTRATION REQUIREMENTS: 4. INSTITUTIONAL AND ORGANIZATIONAL BUILDINGS, 1785-1940

Institutional and organizational buildings may be eligible for the National Register of Historic Places if they meet the criteria for significance and retain their architectural integrity. Many of the buildings that survive

as examples of institutional and organizational activities in Knoxville and Knox County have been altered over time. Some of the changes have resulted in additions to the original structure, modernization or updating of rooms to provide for the changes and needs that have occurred over time. Often school buildings have been converted to other uses as the schools become too small for a community or were not able to be updated to meet modern educational standards. Churches often under-go changes as a congregation grows. These changes may be additions, or entirely new buildings constructed over the site of the original church. Public utility buildings change with the advances in technology that often results in the abandonment of buildings as they become technologically obsolete. Government buildings often reflect the growth of the community by constructing new buildings or by updating older buildings. Social and fraternal organization buildings may be abandoned as the organization no longer serves the purpose it originally served or moves to a newer buildings.

Often these buildings hold great meaning for the community or neighborhood they located in and are viewed as being very significant buildings to the people who reside in the community. However, to meet registration requirements the buildings must retain their architectural integrity of design, workmanship, location, settings, materials, feeling and association. It is expected that many institutional or organizational buildings will have expanded since their founding and alterations that do not have a significant impact on the original structure or are more than fifty years old Will be considered eligible for the National Register if they meet the criteria for history, architecture, or association with a significant individual or event.

Not all schools or churches will meet the registration requirements. Building that have had major alterations or large additions will not be eligible for the National Register. These buildings may not meet National Register criteria if they are not architecturally significant. Not all churches or schools will meet the registration criteria for education, religion, or social history. The use of a building for religious or educational purposes does not necessarily give it significance for religion or education. Likewise, all governmental or social and fraternal buildings must retain integrity and meet the registration requirements for institutional and organizational buildings.

Institutional and organizational buildings must retain the architectural fabric that portrays their role in the history of their community and the stylistic era in which they were built. The buildings should represent a unique role in Knox County's history. The fact that a building may have been or is still used for a particular purpose does not confer significance; rather it is a combination of the architecture, their place in history, and their integrity that may render them eligible for the National Register.

F-I. HISTORIC SITES: 5. CEMETERIES AND GARDENS, 1785-1940

F-II. DESCRIPTION: HISTORIC SITES: 5. CEMETERIES AND GARDENS, 1785-1940

Cemeteries

The cemeteries found in Knoxville and Knox County are often reflections of national trends in the design and use of cemeteries. Cemeteries include multiple components including headstones, monuments, crypts, fences, gates, central monuments, roadways, landscaping and maintenance buildings. Almost every church or community, and some large family holdings, had a cemetery associated with them. Several of the community or church cemeteries in outlying areas of Knox County were developed after the trends for developing churchyard cemeteries had been eclipsed by the rural cemetery movement nationally. However, there are few cemeteries left in Knoxville and Knox County that fall consistently within one of the national design trends. Most allowed interments over time and exhibit features that do not fit within a historical trend or framework.

The First Presbyterian Church Cemetery, the Confederate Cemetery, and Old Gray Cemetery are the best examples of cemetery development in Knoxville and Knox County. The overall landscape design of each, while drawing on different design antecedents, is reflective of national trends in design. Individual elements which should support the nationally evolved design models include the layout of the cemetery itself, the type and nationally evolved design models include the layout of the cemetery, the type and design of headstones, fencing, landscaping, auxiliary buildings such as caretaker's sheds or offices, gates or other individual design elements which, when combined, from a complete design for the cemetery.

Even the most complete examples of cemeteries will have been altered by time. Trees not in landscape designs may have grown on the grounds, grave markers may have deteriorated or been vandalized, and the setting in which the cemeteries are located may have been altered externally. However, the pattern of walkways, roads and physical improvements may include but is not limited to the landscape, grave markers, fencing, gates or other components, still evokes the design era during which the cemetery was established.

Gardens

There are few surviving gardens of significant size and scale in Knoxville and Knox County that could be considered separate entities, rather than a simple landscape frame for the structure they surround. Those that do survive should reflect the national design trend that gave them their framework. Like cemeteries, gardens may include multiple components, including but not limited to, site or location, design, walkways, gates, fencing, gazebos, garden or green houses, tool sheds and planned landscapes features.

Landscape features of the gardens will have changed over time as plant material dies and is replaced or as trees and plants continue to mature and grow. Particularly in the case of trees, the shade they cast as they mature will create a new micro-climate that will cause alterations of other plantings. However, the design trends that set their basic structure should still be visible in the design of the garden.

In addition, gardens may have acquired a measure of public support and/or a tradition of public interest in their continued survival. Their large scale and sacristy may have led to recognition of their public nature, although in private ownership. While this public support is not part of the garden design, it may be a measure of the garden's completeness and historical associations.

F-III. SIGNIFICANCE: 5. HISTORIC SITES, CEMETERIES AND GARDENS, 1785-1940

Cemeteries and gardens in Knoxville and Knox County, Tennessee are likely to be eligible for the National Register of Historic Places are under criterion C for landscape design. Cemeteries may also be eligible under criterion A for there significance in early settlement and growth and community planning. Cemeteries may also be eligible under criterion B for their association with important individuals, a family, or prominent early settlers. Criterion Exception C or D may also apply to cemeteries

Cemeteries should, by their original and continuing interment patterns, illustrate either the colonial pattern or the later garden pattern of development. A cemetery's significance may be a result of headstones and monuments that illustrate significant sculpture or the work of a significant stone cutter. Their significance may be a result of the landscape and park like setting illustrating the rural cemetery movement and open landscape in a city with very little open recreational land. The significance of a cemetery may derive from its association with prominent early settlers that played a significant role in the settlement of Knoxville and Knox County. Many of these early burials may be the only site directly associated with these early settlers.

Gardens are most likely to meet the requirements for landscape designs, landscape architect or association with a prominent citizen.

F-IV. REGISTRATION REQUIREMENTS: 5. CEMETERIES AND GARDENS, 1785-1940

To be eligible for listing in the National Register of Historic Places historic sites of cemeteries and gardens must meet the criteria for listing and retain integrity of setting, location, feeling, association and workmanship. Not all cemeteries and gardens will reflect National Register significance. To list a cemetery or garden on the National Register it must be historically significant to a community, reflect national design trends, or have significance in landscape architecture. Cemeteries and gardens may be eligible under criterion A if they represent important historical events or movements, under criterion B their association with a significant person or persons must be clearly identified and justified. For historic sites to be eligible under criterion C they should clearly demonstrate design features that illustrate a specific type of landscape design movement.

Because the historic sites associated with cemeteries and gardens are likely to have undergone some changes in landscaping due to the nature of living materials, they must retain integrity of feeling and association with a landscape movement. While plant material is always changing, the original intent of the cemetery or garden design must be evident. Structures, such as sheds, greenhouses, or changes may in portions of the landscape design after the period of significance will be noted as noncontributing.

F-I. INDIVIDUAL BUILDINGS AND HISTORIC DISTRICTS: 6. INDUSTRIAL GROWTH AND DEVELOPMENT, 1785-1940

F-II. DESCRIPTION: 6. INDUSTRIAL GROWTH AND DEVELOPMENT, 1785-1940

Industrial growth has occurred in Knoxville and Knox County since the first European descended settlers arrived. The buildings associated with the early industries are likely to have been demolished as technology progressed. Later eras of industrial development have, left a legacy of buildings associated with particular industries. Included in this category are Ebenezer Mill (NR 6/25/1987), Riverdale Mill (NR 3/18/1987), and Knoxville Iron Foundry (NR 3/25/1982). Industrial resources have been found in both in the City of Knoxville and rural areas.

Industrial buildings are constructed with a variety of materials. The earliest industrial buildings are most likely to have been of wood construction with weatherboard siding. Later industrial buildings are most likely to have been built with materials believed to aid in fireproofing. These may by buildings of frame construction with some type of metal siding and roof or may be of brick construction. Other materials likely to be found include concrete, tar or asphalt shingle roofing, brick veneer or steel frame.

Industrial buildings are likely to be found in a complex that may include as few as two buildings or several buildings. Industrial businesses may begin in a single building. However while some, such as grist mills, do not grow beyond one building, it is far more likely that a successful operation that continues for several years will have grown beyond a single building. As industries became more complex the stages of the industrial process is likely to extend beyond a single building. Complexes or historic districts may include, but are not limited to, office buildings, manufacturing plants, storage facilities, open spaces to facilitate the entire operation, railroad spurs, and showrooms.

F-III. SIGNIFICANCE: 6. INDUSTRIAL GROWTH AND DEVELOPMENT, 1785 - 1940

Industrial properties may be eligible for the National Register of Historic Places under criterion A for their role in the industrial growth and history of Knoxville or Knox County. Criterion C for architecture as good examples of industrial building, most likely to utilitarian in its style or usage. They may also be eligible under criterion C for their engineering significance. If a particular industry is associated with a significant individual and is a building is the best representative property associated with that person, may be eligible under criterion B. However, it is unlikely that an industrial building in Knox County will fall under criterion B.

The earliest industrial sites, which have no extant structures may be eligible under criterion D if the site has the potential to yield or has yielded important information on how the early industry operated. Prospective archeological sites will need to be assessed by an archaeologist before listing a property under criterion D.

Industrial properties reflect an intact representation of Knoxville and Knox Country's industrial growth and development from its earliest days of settlement to the beginning of World War II. An industrial district is a collection of structures possessing a concentration, linkage or continuity of sites, buildings, structures or objects united either historically or aesthetically through their physical and historical justification. Property types within a historic district may include showrooms or sales rooms, buildings that house the industrial process, storage facilities and, in some cases, worker housing.

One of the most compete and impressive collection of industrial buildings left in Knoxville is the Candoro Marble Works, located at 681 Maryville Pike. Still remaining on the site are industrial buildings that housed cutting and polishing facilities, the shipping office and the sales office. The sale office is clad in East Tennessee pink marble with interior finishes displaying the variety of marble types and design features that could be achieved with marble. The site itself, located on a railroad spur and near a creek that provided water for industrial use is impressive in the echoes it gives of a once thriving industry. Concord Village (NR 10/22/1987) is also important reminder of the marble industry. Mascot located in northeast Knox County is associated with zinc mining and includes worker and staff housing as well as support buildings and some industrial sites.

Brookside Mills, located on Baxter Avenue in Knoxville, is the remaining site associated with the textile industry. Some of the brick industrial style buildings that remain on the Baxter Avenue site have been slightly altered. However, the buildings retain the characteristics that typify textile manufacturing in Knoxville. The remaining housing associated with the Brookside Mills property is included in the Old North Knoxville Historic District (NR 5/14/1992) and in the Fourth and Gill Historic District (NR 4/25/1995). In addition , the Park City Historic District (NR 10/25/1990) contains housing associated with the now demolished Standard Knitting Mills. The Brownlow area, located along Grainger Avenue and Leonard Place in North Knoxville, contains remaining housing for both the mill owner and mill workers.

The architectural style associated with the remaining industrial buildings could best be described as Industrial or Utilitarian architecture. Some of the architectural details may duplicate the residential styles found in Knox County. Single structures can usually be placed in one of two categories; first there are the mills usually constructed with heavy timber frames construction with few architectural details, simple gable roofs and walls clad in weatherboard. The second includes late nineteenth and early twentieth century brick buildings with large multi-paned windows. These buildings may be constructed with reinforced concrete.

The majority of industrial buildings that remain in Knox County include fairly indistinguishable steel frame or brick buildings. Often the structure contains north facing skylights. The Candoro Marble complex does contain one building (KN. 3475), a showroom that was designed by local architect Charles Barber and is noteworthy for its architecture and use of material. While the majority of buildings may not appear to have major architectural stylistic influences, they are significant for their construction techniques and form that facilitated the industrial process.

F-IV. REGISTRATION REQUIREMENTS: HISTORIC DISTRICTS OR INDIVIDUAL BUILDINGS: 6. INDUSTRIAL GROWTH AND DEVELOPMENT, 1785-1940,

Historic districts or individual buildings associated with industrial growth in Knoxville and Knox County, Tennessee will be eligible for the National Register of Historic Places if they are within the period of significance, and have only minor alterations or additions. Buildings and districts will be considered eligible if they retain integrity of design, association, material, workmanship, setting, location, and feeling. In addition, they must meet the criteria for significance for industrial growth and development, architectural or engineering significance, association with an individual or as an archeological site.

Historic districts must retain a cohesive collection of buildings with few intrusions, incompatible alterations of recent development. Individual buildings will be considered contributing to the historic district if their retain integrity. A historic district may have evolved over a fairly long period of time. The changes made to the complex during the period of significance will be considered as contributing alterations. Housing for industrial workers is most likely to be included in a larger neighborhood and will have undergone alterations over time as the homes became owner occupied rather than company owned. For residential areas to be eligible under Industrial Growth and Development, they also will need to be a cohesive collection of buildings that represent industrial housing. Housing must retain integrity to be considered as contributing to a historic district.

Individual buildings eligible for Industrial Growth and Development will have to meet the criteria for integrity and must be the primary building of an industrial operation. Most individual buildings likely to meet the criteria for listing will be early mills or small industrial concerns. Individual buildings that were once a part of a large industrial complex will be considered a remnant of that operation and not eligible for listing unless it has architectural significance that transcends its industrial significance.

F-I. DOMESTIC PROPERTIES: 7. BARBER, GEORGE FRANKLIN, ARCHITECT (1854-1915)

F-II. DESCRIPTION-DOMESTIC PROPERTIES: 7. BARBER, GEORGE FRANKLIN, ARCHITECT (1854-1915)

The majority of George Franklin Barber's designs were domestic buildings. They were usually built for individuals who saw and admired his work, and not for the speculative market, although there is one area in Knoxville, located within the Park City Historic District (NR-10/25/90), where Barber was a partner in a real estate development, and where several Barber designed houses are clustered in one location. Barber lived for short periods in several of the houses in this area before selling them to successive owners.. However, most of the Barber buildings will be individual landmarks surrounded by other buildings that, while they may date from the same time period, do not possess the unique characteristics of Barber designed buildings.

George Barber called his first published designs "Romanesque"; they were variations of Queen Anne design. They focused on "Romanesque" elements added to enrich a Queen Anne front elevation. These elements included towers or turrets, oriole windows, open pavilions at the corner of verandahs and arches with bead screening. Beginning in 1893, he began to publish Colonial designs, but retained much of the Romanesque massing and form in those designs. He called these dwellings "Colonial Renaissance" designs, which was embodied in the use of scrolled medallions under the eaves and in porch columns with classical orders. He also drew several "Colonial Cottage" models, using shingles and gambrel, hip or flared gable roofs. Dormers were often included. The Colonial Cottage design, although it was usually two stories in height, hid the second story under the roof lines. The "Colonial House" was usually a straightforward two stories in height.

The three colonial themes gave way to Barber's "Georgian" or "Classical Colonial" style. These buildings usually stood on a substantial base and employed projecting porticoes with paired or tripled columns with classical orders. They used a symmetrical front facade. Hip roofs were common, as were flat decks crowned by balustrades. Dormers and flanking chimneys were often used. Later catalogs emphasized Bungalow, Tudor Revival, and Mission Revival interpretations.

George Barber spent most of his active career in Knoxville, and it is logical that many of his designs are represented here. Some of the buildings noted under this section of the Multiple Resource nomination will have been listed in one of Knoxville's previously nominated National Register districts. Several have been recorded as reported Barber designs in the four historic districts that developed during the time he was active - Park City Historic District (NR 10/25/1990), Ft. Sanders Historic District (NR 9/16/1980), Fourth and Gill Historic District (NR 4/29/1985) and Old North Knoxville Historic District (5/14/1992). However, even for most of those buildings reportedly designed by Barber, no confirming research has been completed. Very few designs of his later Colonial designs have been discovered.

Because George Barber was a local architect, he also designed additions to houses. At least one of these, at 1319 Grainger Avenue, has been confirmed because the homeowner discovered the plans for the addition in the attic of the house. The house features a two story porch with columns and a front addition, which constitute the Barber-designed addition. The addition contains Barber Colonial design features.

As Barber has acquired more cachet recently, claims have been made by various individuals that they "own Barber houses", but these claims have not been researched. Even with additional research, it may not be possible to establish the veracity of their claims, in part because the buildings have been altered, but primarily because copies of all of Barber's publications do not exist in publicly accessible collections. In addition, one of the advertising points Barber made in his publication, and evidently carried out, was that he was more than willing to alter printed designs if the client desired such alterations. This means that, particularly locally, where he was readily accessible, the built product may resemble the published plan only slightly. Local researchers find houses that "look like Barber designs" but have floor plans unrelated to anything they have seen in his plan books. In addition houses that have the massing of Barber designs, and a floor plan clearly identifiable in one of his pattern books, will not have the exterior

details (brackets, oriel windows or balconies) that are characteristics of his plans; in most cases, it is not these have been removed in later renovations, or were never built.

About twenty-five properties have been identified in Knoxville that have documented design features of typical Barber designs. As noted previously, the majority of those are located in the Edgewood Land Improvement Company section of the Park City Historic District, where principals in his firm were engaged in developing the subdivision.

F-III. SIGNIFICANCE: 7. BARBER, GEORGE FRANKLIN, ARCHITECT (1854-1915)

George Franklin Barber's work, significant for architecture, embodied the ideals of a growing middle class, and his contributions to the evolution of architectural appreciation were far reaching. His designs continue to be admired, both locally and nationally. George Barber seemed to capture the imagination of the newly emerging Victorian middle class. This group of people, lifted from a set of limited economic circumstances, could afford to indulge their tastes for acquisitiveness and ostentation, in clothing, furnishings, houses and other possessions. George Barber, through publication of his designs, made the elaborate Victorian-era house available to many people. On the back cover of the reprint of *The Cottage Souvenir No. 2* there is a quote from George Barber that sums up this phenomena..

> All over American the idea is spreading that a new building must be original, not hereby meaning a freakish departure from well known principles of design, but one planned originally for the owner. . .

Barber's chosen venue for publishing his designs, an inexpensive catalog with ample illustrations, price lists, reached clients throughout the United States and in other countries. This, combined with his accessibility and willingness to adapt to clients, spurred acceptance of his designs. Barber's designs continue to have wide-based appeal. As the interest in Victorian-era buildings has grown, his designs have been restored (sometimes as museum houses), used for line drawings of cards and even as a model for a doll house. His elaborately styled houses continue to capture the imagination.

George Barber was one of the most successful late nineteenth domestic architects. He had the ability to satisfy the tastes of the era, and his philosophy involved continuous effort at developing a taste for well-design buildings. His success is illustrated by the interest still generated by the buildings he designed.

F-IV. REGISTRATION REQUIREMENTS: SINGLE PROPERTIES: 7. BARBER, GEORGE FRANKLIN, ARCHITECT (1854-1915)

George Franklin Barber's architectural design survive throughout the State of Tennessee. Although some minor alterations may have occurred, many of the interior and exterior architectural details and the basis floor plan must be present for an individual building to retain its architectural and historical significance.

The nominations of buildings designed by George Barber will, for the most part, fall under criterion C, since they contain characteristics that link them with George Barber's work by being traced directly as his design through extant floor plans, design elements, publications, or receipts. In order to be eligible under criterion C, the building must retain enough original fabric that it can be documented through research of George Barber's publications, or through the presence of original floor plans or other documents, be clearly attributed to Barber. Not all of his designs in Knoxville will be found in pattern books. As a resident of the city he could, and probably did, prepare original designs for local clients. However, even those original designs, while they may never have been published, may have incorporate design details found in the pattern books or in other extant houses that designed by Barber.

Alterations to individual Barber houses must be minor and must not have changed the original massing, the majority of the architectural features, the fenestration, and the overall architectural integrity. Individually nominated properties must retain both interior and exterior integrity. Barber Houses already located in Historic Districts and listed as contributing buildings will not be individually listed unless the district losses its National Register standing. The houses should retain integrity of setting and location.

Other buildings, not including houses, designed by George Franklin Barber may be eligible for listing in the National Register of Historic Places if they meet the criteria for eligibility. While his houses are usually readily designed by their standardized elements, further study and research may be required to document other buildings designed by the architect.

F-I. RESIDENTIAL PROPERTIES: 8. LUSTRON HOUSES IN KNOXVILLE, 1949 - 1951

F-II. DESCRIPTION: RESIDENTIAL PROPERTIES: 8. LUSTRON HOUSES IN KNOXVILLE, 1949 - 1951

The original designs of the Lustron House were developed by Morris Beckman, a former draftsman at Skidmore, Owings and Merrill. His plan for the Lustron House emphasized function and utility. Beckman created a house with built-in storage space and an open plan design to provide a feeling of spaciousness although the house was only 1,029 square feet. Created of approximately thirteen tons of porcelain-enameled steel, the house exterior was covered with two-foot panels. The entire house including the walls, ceiling panels, cabinets, rain gutters, and roof tiles were constructed from steel. The house was constructed on a concrete slab.

Different models were developed as the houses were marketed. According to promotional materials, Lustron had eight house types. Three models with either two-bedroom or three-bedroom floor plans and the largest model also came in with or without built-in amenities. The three house models were the Westchester, which was the most widely sold model, the Meadowbrook and the Newport. The Westchester was the largest model and came in either 1,085 square feet or 1, 209 square feet sizes. The middle size house, the Meadowbrook was available in either 775 square feet or 1,023 square feet. The

smallest house, the Newport was available in 713 square feet or 961 square feet. Also available from the company were two garage packages and one breezeway package.[2]

Four standard exterior colors were created for the Lustron houses: Dove Gray, Maize Yellow, Surf Blue, and Desert Tan. Trims and gable ends were complementary shades of off-white, gray, yellow or dark brown. The interiors were gray with the exception of yellow surfaces in the kitchen, bath and utility room. The roofs were gray, green or dark blue.

The Lustron houses were built within the Modern style, with long, low massing, a shallow pitched roof, and windows that were painted and with a tripartite window on the front elevation. The Lustron houses obviously had only a few floor plans or design modifications and all of those were derived at the factory. Individualized changes could not be made to meet the desires of local builders or owners.

Five of the six Lustron Houses constructed in Knoxville and identified through the city survey are still extant. Only the house on Papermill has been demolished. However, one of the remaining houses, located on Woodson Drive, has been altered too much to qualify for National Register listing. The form of the original Lustron House is barely visible, because additions have been made on all elevations.

F-III. SIGNIFICANCE: 8. LUSTRON HOUSES IN KNOXVILLE, 1949 - 1951

The Lustron House, with its almost exclusive use of porcelain coated steel, and its concerted appeal to the post World War II home buyer, with its standardization and attempt at assembly-line construction, symbolizes the era immediately after World War II in a way that few other residential construction types can. The use of modern materials, modern fabrication and on site assembly embody pre-fabrication and the production of large quantities of housing for the returning GIs. The fact that the assembly was difficult, engineering flaws were present and not many of the homes were built, is almost incidental to the effort that went into developing the house and simultaneously developing its image.

In Knoxville, as in other locations where the scarce Lustron houses survive, they present a distinctive image to passers-by. Although they are forty-four years old, they look much newer, and for the most part have remained in excellent repair. The original porcelain exteriors including the roofs, remain unblemished, and structurally sound, more so than many of their counterparts in age. The materials are distinctive, with the roof in particular causing comment from casual observers.

As the symbol of an age that placed its faith in suburbia, in mass production, in providing single family housing for almost all its citizens, and in the use of new materials, the Lustron houses mirror the decade following the close of World War II. Their significance lies under criterion C for Architecture and Engineering as they represent distinct characteristics of a method of construction, and a use of materials. Their construction typifies a unique era in history. Lustron Houses also meet Criterion Exception G since

[2] Lisa Raflo, "Lustron Houses in Georgia" National Register of Historic Places Multiple Property Documentation Form.

there is sufficient research and information available on Lustron houses and the Lustron Corporation and prefabrication to evaluate these houses.

F-IV. REGISTRATION REQUIREMENTS - RESIDENTIAL PROPERTIES: 8. LUSTRON HOUSES IN KNOXVILLE, 1949 - 1951

The houses manufactured by the Lustron Corporation and assembled by individual contractors survive throughout the State of Tennessee, and in other locations across the country. Limited numbers of the houses were manufactured, only a few thousand between 1949 and 1951. However, if the houses do survive, they are mostly unaltered on both the interior and exterior. This is do in part because they have not deteriorated enough to require major repair and in part because the building material makes it almost impossible to alter.

The nominations of Lustron Houses will fall under criterion C for their use of distinctive construction materials and method of construction or fabrication. In order to be eligible for nomination under that criterion, the building must retain its original materials and floor plan, including one of the Lustron Corporation's standard color schemes in the original porcelain steel. Alterations that have occurred must be minor, and must not have changed the original massing, the architectural features or the fenestration. Rear additions may be acceptable if they contain less square footage than the original house and the roof line and setback do not distract from the original house. Lustron houses should also retain integrity of setting. In the case of the known Lustron house that has not retained its integrity, extensive additions on all facades have obliterated the original design features and comprised the materials and architectural design of the structure, rendering it ineligible for listing on the National Register of Historic Places.

Lustron Houses may be either individually eligible for the National Register of Historic Places as an import representative of a housing movement after World War II or may be considered contributing in a district.

G. GEOGRAPHICAL DATA

The geograpical area encompassed in the multiple property nomination, Historic and Architectural Resources in Knoxville and Knox County, Tennessee includes all of Knox County.

H. SUMMARY OF IDENTIFICATION AND EVALUATION METHODS

The Knoxville-Knox County historic and architectural survey was conducted for the Tennessee Historical Commission between 1982 and 1984. The survey work was carried out by the Knoxville-Knox County Metropolitan Planning Commission (MPC). Following the conclusion of the survey, the MPC prepared a Cultural Resources Plan, which identified potential National Register eligible sites and districts. That Cultural Resources Plan was updated in 1992, prior to beginning work on the Multiple Resource nomination. Several National Register nominations, for both districts and individual properties were prepared using the information gathered during the survey. Grant assistance for preparation of this section of the Multiple Resource Nomination was provided by the Tennessee Historical Commission and the National Park Service.

The Multiple Resource nomination is based on the historic survey results and on the Cultural Resource Plan together with its update. As part of the survey and plan methodology, the historic periods of Knoxville and Knox County were divided into eras of development, with the first stretching from the first recorded European settlement through the beginning of the Civil War. Later sections of the Multiple Resource nomination deal with the changes encouraged by technological changes in transportation and architecture that took place after the Civil War, with ethnic migration, and with post Civil War industrial development. Information for the contexts and individual nominations has been gathered by individual interested in the properties, or by staff people with the Knoxville-Knox County Metropolitan Planning Commission. The bulk of the research for this nomination has been prepared by Ann K. Bennett, a staff planner at the MPC and by Pamela Dishongh and Vincent Gauthier, interns at the MPC.

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