



# introduction

## INTRODUCTION

### Research Design

The following research outline was based on several items: the Scope of Work prepared for the Division of Highways, and similiar scopes of work prepared for other urban archaeological projects in Philadelphia. All services outlined in the Division of Highway's Scope of Work were accepted and should be considered as part of this summary of research procedures.

The South Wilmington Boulevard project was seen as an opportunity to determine the nature of the resources that will be recovered prior to the proposed construction of the highway. The data consists primarily of historical information pertaining to the eighteenth and early nineteenth century development of the City of Wilmington. Mid-Atlantic Archaeological Research recognized the need to recover this data and developed the following research design as a means of accomplishing the objective.

### Background Investigation

It was noted in the scope of work for this project (Appendix 2) that the City of Wilmington developed through a sequence of phases, each of which is represented in the project area. The earliest residential occupation of the city occurred within the area on Market Street. Thomas Willing, who laid out the town of Wilmington in 1731, established his residence here. The Bush and Medenhal Residences were both located within this general vicinity.

The area continued to serve as a residential area well into the nineteenth century. By the late eighteenth century, however, it began to function as a commercial center, and later as an industrial center. The location near the Christiana River and the railroad determined its character.

During the development of Wilmington, earlier structures and complexes were replaced with newer construction. Much of what once existed has been totally destroyed, and no evidence can be expected to remain. Subsurface evidence of other features, however, may yet exist and can be recovered from areas in which the later development was not totally destructive. For instance, some nineteenth century cellars may have only partially destroyed deep features of earlier lots. The objective of the proposed research project is to recover existing data about the development of the City of Wilmington, and to place this information into a developmental model. The following technical procedures were designed to do this.

### Document Search

Phase I of the Scope of Work called for a thorough document search in order to accumulate information "regarding the occupation and development of the project area". The objectives of the search have been discussed and will not be repeated

here. Instead, the procedures to be used to accomplish the objectives will be described at this time.

Mid-Atlantic Archaeological Research, Inc. (MAAR) personnel have reviewed copies of pertinent historical records pertaining to the project area. Pertinent records include documents containing information about the material content and structures of the project area from its earliest historical occupation to approximately the middle of the nineteenth century. In some cases, pertinent information was located in later documents.

Documents include those available for inspection at the following locations:

1. Hall of Records, Dover
2. Historical Society of Delaware, Wilmington
3. City of Wilmington
4. New Castle County
5. Hagley Museum
6. Library of Congress
7. Other public and private collections

The document search was guided and coordinated by Mr. Charles Stump. Mr. Stump worked with full-time staff members of MAAR in accomplishing the goals outlined earlier. The documentary data has been summarized, if not presented in full, in this project report. The primary objective has been to develop block by block maps of the project area for various periods of time and, when possible, at regular intervals. These maps have been used in interpretation and to aid in the archaeological field investigations.

### Field Investigations

The schedule of field investigations proceeded as follows:

1. Monitoring - a full-time field monitor was assigned to observe any construction or demolition activities occurring during the project and to call for emergency operations by the field crew.
2. Sampling Survey - while monitoring, and perhaps data recovery on an emergency basis, was going on, the primary thrust of the project was to investigate a selected sample of the project area. The sample was chosen as representative of historically documented developmental stages. The procedure used included the removal of overburden due to the razing of the area. Experienced archaeological crews then completed the investigation by detailed excavation of features uncovered, or by recording techniques that stop short of total excavation.

Also done during the sampling survey was the test excavation of a sample of the area within the project that are relatively undisturbed, and may have been shallow midden deposits. Such areas included courtyards and areas protected by the subsequent construction of roadways and pavement.

3. Data recovery - this was emergency or salvage work conducted in areas in which significant features were accidentally exposed. Data recovery operations may have involved the entire field crew or a part thereof, and may have taken from several hours to several days.

Field crews assigned to the project consisted of experienced persons and numbered from four to eight, depending on the nature of the work being conducted at the time. Most field personnel, including the field supervisor, were assigned full-time to the project.

### Analysis and Report Preparation

Data analysis was conducted throughout the extent of the project. A field laboratory and drafting facilities were available nearby. At the completion of the field work, a laboratory crew including the Project Director was assigned to complete the analysis and the report as soon as feasible. All maps were studied and the artifacts were classified. The maps, the feature data, and the artifact data have been coordinated in this final, interpretative project report.

### Sampling Strategy

A major aspect of the archaeological investigations being conducted along the South Wilmington Boulevard project area is the sampling strategy developed by Mid-Atlantic Archaeological Research, Inc. In the introduction to the Scope of Work prepared by the Delaware Department of Transportation, it is stated: "This scope-of work is designed to ensure that a representative sample of this significant data will be recovered". The Scope of Work also contains the statement: "In Phase III, a random sample of the properties in each sampling stratum should be excavated, using an excavation strategy appropriate to the nature of the archaeological remains".

In order to assure that the requirements for a sampling strategy are met, the staff of Mid-Atlantic Archaeological Research, Inc. has developed the following strategy. Also considered in the strategy are those cultural resources not located in the present contract area, but expected to be added by a supplemental contract. Thus, the following applies to the entire area to be impacted by the proposed construction of the South Wilmington Boulevard including the 1/2 block along Front Street from Interstate 95 to French Street, and the blocks between Front and Fourth streets that lie between King Street and French Street to the east.

A sampling strategy is a plan for the investigation of a portion of a total population designed to assure that the sampled portion is representative of the total. The population to be sampled in the archaeological investigations includes over two hundred and fifty years of historical development of the City of Wilmington as it existed within the specified project area. In reality, the project area does not contain all aspects of Wilmington history, but is a microcosm of the development of most American cities, and contains sufficient information to allow for a reconstruction of developmental stages common to most cities.

This sampling strategy can be referred to as a stratified sampling program that considers the practical aspects of archaeological research. Strata have been set up, based upon documented stages of Wilmington's historical development. Each strata is then to be sampled according to a model of concentric ring, which suggest that a community develops out from the center over time, with different city functions being performed at different times with different rings. Also considered in the sampling strategy are historically documented sites and the practical aspects of accessibility and the availability of intact archaeological resources.

### Strata

The following developmental stages are accepted as useable strata for consideration in the sampling strategy. Each is described as a separate and recognizable developmental unit, verifiable through historical documentation.

- Stratum 1 - The Pre-1650 A.D. stage of Wilmington's development. Although it is known that prehistoric aboriginal populations lived within the present boundaries of Wilmington, no information that evidence of their occupation of the project area could be found. Therefore, this developmental stage or phase will not be considered in the sampling strategy.
- Stratum 2 - 1650 to 1731 A.D., a period in which considerable historical development was occurring within New Castle County, and even within the present boundaries of the City of Wilmington, was a developmental stage that does not seem to be represented within the project area. Preliminary historical documentation suggests that the area, with which we are concerned, was a part of several large landholdings, and did not witness any occupation by the landholders. This development stage will not be further considered here.
- Stratum 3 - The Initial Occupation began with the laying out of lots by Thomas Willing in 1731 and lasted until around 1772 A.D. This was the period in which the Town of Willington became the City of Wilmington, changing from a small community of several hundred to a residential and commercial center of almost three thousand occupants.
- Stratum 4 The period between 1772 A.D. and 1830 A.D. is the period during which Wilmington developed into a major commerical city of the eastern seaboard. During this time, the city also witnessed a phenomenal growth in population and spread throughout the entire project area and beyond. This was the initial period of Wilmington as an American city.
- Stratum 5 - Between 1830 and 1900 Wilmington took on its present configuration as an industrial giant. By 1900 A.D. its population had essentially reached its present size, and almost all structures within the project area had been constructed (with notable exceptions).

Stratum 6 - The years after 1900 A.D. are not being considered in this report, with a single exception: an "Art-Decco" structure located on King Street, was constructed in the early part of the century and will be considered as a cultural resource to be investigated.

#### Resource Functional Categories

In order to properly sample a population, it is necessary not only to consider historical developmental stages, but also the different functional categories which together make up the concept of a city. Wilmington's development includes a number of cultural systems, each of which can be considered in terms of a model of growth and development.

- Category A - Residential development began with the earliest construction by Thomas Willing and his fellow settlers within the project area. Residential use of the land often went along with the economic aspects, such as shop keeping, farming, and small manufacturing and trading operations. Residences were often located within structural complexes of multi-functions, but just as regularly are found moving outward from focal points within center city (a concentric ring model).
- Category B - Commercial activities began as soon as the area was occupied. Most early residents were not farmers, but operated small support commercial operations such as blacksmithing, shop keeping, tavern operating, etc. Wilmington's development as a community depended upon its ability to serve the surrounding parts of New Castle County, Delaware, and to ship goods to market elsewhere.
- Category C - Light manufacturing became Wilmington's forte late in the eighteenth century when it began to develop into a large town. The presence of water power and the easy access to inland products along water courses and early roads, made Wilmington a natural center for manufacturing operations. Light manufacturing was a major part of the developments occurring within the project area.
- Category D - Industry found a foothold in Wilmington around the turn of the century when the extensive sources of water power began to be developed. By the time that other forms of power had been discovered and developed, Wilmington was already a center of American industry.
- Category E - Government, Education, Religion, Etc. were also a major part of Wilmington's development. Very little is known about the part that these aspects of life played in the project area, and it is not expected that material remains of government, educational or religious structures will be found in the area.

### Samples

The following illustration should be consulted as a guide to the basis for selected sample units. An attempt has been made to select for investigation areas within the bounds of the South Wilmington Boulevard Project, which will contain evidence of the various developmental strata and functional categories. Not all can be sampled, due to practical considerations, however, the justification for each sample can be determined by reference to the chart.

	Category A Residential	Category B Commercial	Category C Lt. Manu.	Category D Industrial	Category E Other
Stratum 1 Pre 1650					
Stratum 2 1650-1731					
Stratum 3 1731-1772	$\frac{K-M}{F}$	$\frac{K-M}{F}$			
Stratum 4 1772-1830	Grubb	$\frac{K-M}{F}$	$\frac{F-K}{2-3}$		
Stratum 5 1830-1900	Justison	Grubb	Grubb	$\frac{S-T}{F}$	$\frac{M-S}{F}$
Stratum 6 Post 1900					

Sampling Units: Selected to Represent Total Population

$\frac{K-M}{F}$  King to Market, along Front

Grubb Grubb Lumber Company Lot

$\frac{F-K}{2-3}$  French to King between  
2cd and 3rd Streets

$\frac{S-T}{F}$  Shipley to Tatnall along Front

$\frac{M-S}{F}$  Market to Shipley along Front