BEGINNING OF DESIGN

"I love beginnings. I marvel at beginnings. I think it is beginning that confirms continuation. ... I like English history, I have volumes of it, but I never read anything but the first volume, and even at that, only the first three or four chapters. And of course my only real purpose is to read Volume 0 (zero), you see, which has yet not been written."

Louis Kahn

The beginning of design was the first time we were surprised at the sun rising from the horizon, or the first time we built a castle using sands and pebbles on the beach, maybe the first time we helped to set the table so that the utensils looked more interesting.
Figures 1-1-4 illustrate the relationship between the development of the town and the historic sixteen blocks.
History of Blacksburg

In 1654, Colonel Abraham Wood got the permission from the government of Virginia to lead an expedition across the Blue Ridge and Allegheny Mountains. Seventeen years later, the New River Valley, including the counties of Floyd, Giles, Montgomery, Pulaski, and the city of Radford, was first explored when the expedition discovered the New River. Montgomery County was formed in 1776 and named after General Richard Montgomery, an American hero of the French and Indian War and the American Revolutionary War. Early in the mid-1740s, the location of the present town of Blacksburg attracted the European immigrants because of its fertile land. More immigrants came to the New River Valley and the surrounding regions about that time. In 1745, the first group of families, including Pattons, Drapers, and Lewises, founded Draper’s Meadow, the first settlement of Montgomery County. In 1753, William Lippard purchased a 600-acre plot on the eastern edge of Draper’s Meadow. However, the land was not used until nineteen years later, Samuel Black, the son of a Scotch-Irish immigrant, bought the tract. By the end of the eighteenth-century, his son William Black proposed to establish a town on his tract with the support of most of his neighbors. The town then developed with the settlement of skilled workers, the tradesmen, and the suitable local commercial structure.

Blacksburg was formally established in 1798 with a rectilinear grid of sixteen blocks (Figures 1--1-4). Each block was divided into four half-acre lots. The edge of the sixteen blocks is now known as Wharton St. in the east, Clay St. in the south, Draper Road in the west, and Jackson St. in the north. These early blocks of Blacksburg become the historic district of the town (Figures 1--5,6). Roanoke Street, the historic route that led southwest toward Tennessee and Kentucky, crosses through the historical area. It also connects the residential section in the northwest half of the district with the commercial section in the southwest. The historical district connects Virginia Polytechnic Institute and State University along the western edge and has obtained the college trade through the restaurants, shops, and theatres since the early times of the school.

Blacksburg is home to Virginia Polytechnic Institute and State University since the school was founded in 1872. The growth in the student and professorial population never slowed, because of the enlargement of the university. By the mid-twentieth century, Blacksburg had overtaken Christiansburg, the county seat, in population. The buildings on the campus were designed in the Collegiate
Gothic style, because of the influence of the campus plan, designed by the Cram and Ferguson Architectural firm in Boston, and the individual buildings, designed by Carneal and Johnston Architects in Richmond (Figures 1--7, 8). The exterior of the buildings on the campus is distinguished by the hokie-stone of the facades.

Although the early buildings in Blacksburg were built of logs, some of the surviving buildings were constructed in brick. Brick residential buildings, commercial buildings, and churches make the history visible — the world the ancestors lived in and dreamed about.
Courthouse Study

- History of Courthouses

Although the organizations of the courts changed a lot from the earliest time, the judicial presence is a constant. These changes influence the architectural design of the courthouses in the number and scale of rooms for judges and clerks, the exterior and interior materials and styles, and the technology for the heating, lighting, acoustic, and multimedia systems.

The typical courthouse in the American Colonial period only had the courtroom itself, with the offices in the nearby buildings (Figures 1--9, 10). Those courthouses were always seated in the prominent locations in the town and became a focal point in citizens' daily lives. One or two auxiliary rooms and a front portico were added to the courtroom in the early to middle nineteenth century. The courthouse also appeared with a formal and elegant classical exterior.

With the development of economies and the growth of population after the middle nineteenth century, complex courthouses with more and larger offices for the judges, clerks, and county officers became common. By the end of nineteenth century, the courthouses were designed in Neo-classical instead of the earlier Renaissance and Romanesque styles. The courtrooms became more monumental at that time. At the beginning of the twentieth century, courthouses became larger and more sophisticated buildings because of the increasing needs of the society. The courtroom remained at the central part of the building with the highest position and importance in the courthouse, while the circulation of people was less of a concern. The offices for jury, chambers, and clerks were not isolated from the public spaces; neither were the cells and corridors for the prisoners.

Modern design of courthouses began in the late 1920s and 1930s. Because of the influence of the depression economies and the world war, the development of courthouses decreased until the end of World War II. Nowadays, the needs of the courthouses are increasing. These courthouses are designed not only to meet the requirements of the standards for courts and ADA requirements, and to provide more rooms for the spectators, participants and electronic equipment, but also to appear with the dignity, independence and importance of the judicial system (Figures 1--11).
• Court System
The organization of Virginia’s courts has a four-tiered court system: District Courts, Circuit Courts, a Court of Appeals, and a Supreme Court. The counties and cities served by the District and Circuit Courts must provide the facilities for the courts.

The courts of Montgomery County are all set in Christiansburg, the county seat. These are Circuit Court, General District & Juvenile and Domestic Relations District Courts, and Offices of Juvenile Probation Office and Magistrate.

• General Design Issues
The courthouse is the home of law. It reflects the order, dignity, and authority of the society. Therefore, the design of the courthouse should provide the places where conflicts of different people will be resolved rationally and the court procedures will be carried out orderly.

An important design issue in the courthouse is the circulation and security. Three following groups should have separate access to the courtrooms: the first part is prisoners; the second part is the judge, jurors, court personnel, and witnesses; the third part is spectators, attorneys, people involved in the cases, and the press. Furthermore, holding cells for prisoners, offices and meeting rooms for judges and jurors, and public waiting areas should also be separated (Figure 1-12).
Site Analysis

The site of the courthouse is located near the historic district of Blacksburg. It is on the corner of the Washington Street and Draper Road, the south edge of the historical site. Nearby, there are two historical buildings that are listed on the preservation list of Blacksburg, the Thomas-Conner House built in 1882 (Figure 1--6,15) and the McCoy Funeral Home built in 1898 (Figure 1--5). The southeast block towards the site is occupied by the Town Hall, a brick and concrete four-story building built in 1969 (Figure 1--13,16). All the surrounding buildings are built in different forms and different times. The rich historical environment of the site provides the opportunity to articulate further the transition of time in Blacksburg.

The site for this project is selected near the Town Hall and the Police Station because of its public function. This new civic triangle with each building at the one vertex of the triangle, propose a strong the civic center of the town. Currently, no clear identification of the civic center exists. The civic centers of most towns are typically designed and seated as the important block in the plan and become the focus point in the community. However, in Blacksburg, the Town Hall, the Police Station, and the Montgomery County Library are scattered around the Town Park (Figure 1--14,18), without defining a place of civic recognition. Furthermore, the Town Park in the center of these buildings, full of trees and shrubs, does not provide a pleasant place for walking through and resting (Figure 1--19).

The topography of the site is challenge to the design. The site is located on a slope with the difference of 14 feet from south to north. It is also in a small valley compared to the surroundings. These topographic conditions provide the opportunity to have a four-story building with entrances on different floors, without imposing on the surroundings (Figure 1--24).
Figure 1--15 the Thomas-Conner House, 1882

Figure 1--16 the Town Hall, 1969

Figure 1--17 the gas station near the site, 1882

Figure 1--18 the Town Park

road around the drillfield -- the central part of VA Tech
the project site is located on the corner of Washington Street and Draper Road, adjacent to the historical district.

Figure 1–19 the relationship between the campus, the historical district and the site of the project.
Figure 1--20 transportation analysis

Figure 1--21 site analysis

Figure 1--22 commercial building density analysis

Figure 1--23 residential building density analysis

- Thomas Conner House
- McCoy Funeral Home
- Courthouse
- Town Park
- Town Hall
- Police Station
- Region Library
Figure 1–24 sketch of the topography study

- Size and height of the building comparing with surrounding building.
- Because of the topography, courthouse not look like a giant.

Using the slope site for different group of people.
Figure 1–25: The pattern of good and bad choice of the site of a house in terms of the shape of the water nearby.

Figure 1–26: Sketch of the study of water tradition in Blacksburg.
Figure 1–27 sketch of the Town Hall along Main Street

Figure 1–28 sketch of Movies, a video tape rental shop, along Main Street
Architectural Elements and Ideas

- The historical context of the surroundings will be an important factor in the design. The courthouse will be a public building that using the traditional material and has the traditional images of the judicial facilities.

- The courthouse together with the existing Town Hall and Police Station will build up a strong civic center of the town. This civic center will provide a boundary between the nearby residential buildings and the commercial area along the main street. Besides, redesigning the Town Park at the town civic center will be helpful in making the group of buildings a community center. The existing stream flowing through the park can be a resource to continue the water tradition in Blacksburg (Figure 1–28).
The corner condition of the courthouse becomes the transition from the residential area to the civic center, and from the campus to the civic center of the town. This transition will focus on the material transition, the scale transition, and paths for cars and pedestrians.

Both the courthouse and the courtrooms inside the building should have a similar hierarchy of the psychological and civic spirit. Detailed design is concentrated on choosing the materials, the layers and the joints of materials, and using sunlight.
Figure 1-30 master plan of the project
1. McCoy Funeral House (Figure 1-31)
2. Thomas Conner House (Figure 1-32)
3. Town Hall (Figure 1-33)
4. Police Station (Figure 1-35)
5. Courthouse
6. Central Square
7. Security Parking
8. Parking
Figure 1-33  east facade of the Town Hall

Figure 1-34  east facade of the library

Figure 1-35  south facade of Police Station