12-1983

Municipal Service Center: Seneca, South Carolina

Christopher E. Jordan
Clemson University

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MUNICIPAL
SERVICE
COMPLEX
SeneCa, South Carolina
MUNICIPAL SERVICE CENTER:

Seneca, South Carolina:

by; Christopher E. Jordan

A Terminal Project submitted to the faculty of the College of Architecture, Clemson University in partial fulfillment of the requirements for the degree of Master of Architecture.

December 1983.

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Frederick G. Roth, Committee Member

Teoman K. Doruk, Committee Member

Richard Norman, Committee Member

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Harlan E. McClure, Dean, College of Architecture
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Dedicated to my parents

for their love and support
Acknowledgments:

Frank Wise - Seneca Town Planner.

Kenn Holladay - Supervisor of the Seneca Street and Sanitation Department.

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Prof. Teoman K. Doruk - Committee Member
Prof. Frederic G. Roth - Committee Member
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Kelly Haas
Laura Foster
1. PROBLEM STATEMENT
Like many jurisdictions the City of Seneca, South Carolina has steadily increased the size of its local
government to meet the needs of a growing populous. Due
to the wide range of services provided to the people of
Seneca, the city government is divided into several
branches each specialising in a particular field of service.

At this time several of these governmental branches are
in a desperate need for better and more accommodating bases
of operation. Many of the departments have outgrown their
existing facilities or the facility is in need of repair.

This project will deal with the immediate needs of the
Street and Sanitation Department, and the Public Utilities
Department as well as the needs for the Police Department,
Town Planner, Chamber of Commerce, and the City
Government itself. The goal of this project will be to
design the facility to serve the needs of the city so they
can proudly be identified with the new facility.
A. INTRODUCTION

Oconee County is in the northwestern corner of South Carolina, bordered by the Savannah River to the southwest, the Chaitooga River to the northwest and the Blue Ridge Mountains to the north and various creeks and lakes to define the county on the east side. The adjacent counties are Hart, Franklin, Stephens, Habersham, and Rabun in Georgia; Jackson and Transylvania in North Carolina; and Anderson and Pickens in South Carolina.

The northwestern half of the county has a mountainous character and because of this the vast majority of the development within the county has occurred in the foothill area in the southern and eastern parts of the county.

The city of Seneca along with Walhalla and Westminster, are located in the southeastern part of the county and are the major cities in Oconee County. Seneca is the largest of these three cities. Seneca is located about 110 miles northeast of Atlanta, Georgia and 125 miles southwest of Charlotte, North Carolina. The area around Seneca is generally comprised of rolling hills used for farming or for timber. Seneca's only notable natural landmark is Seneca Creek which is adjacent to the city.
The history of Seneca is very strongly tied to the coming of the railroads to Oconee County.

From the year 1788 to 1888 a part of western South Carolina called the Pendleton District was relatively unsettled. When growth and development started to occur further inland to the Pendleton District around the 1830’s and 1840’s, the very large jurisdiction was subdivided into Pickens, Anderson, and Oconee counties.¹

In the early 1850’s John C. Calhoun envisioned a railroad running from Charleston, South Carolina to Cincinnati, Ohio. The benefits of this railroad were the connection of the Atlantic seaport in Charleston with the Ohio River in Cincinnati. This railroad was to run through all three of the new counties that were the old Pendleton District. Work on the railroad was begun in 1854 with the acquisition of the right of ways and the construction of a segment from Perryville, now Utica, to the city of Anderson. This is as far as the construction got at the time because of the Civil War. The result of this construction, however, did leave a segment of railway from Anderson to Perryville, which is next to Seneca, without a link to the outside world.²

In early 1871 the Atlanta and Richmond Air Line Railway Co. planned to run a railway from Atlanta, Georgia to Richmond, Virginia. Part of this plan included the linking of their line with the existing main line of the Blue Ridge Railroad which went through the undeveloped area of Seneca. In late 1871 the needed land was purchased to build the Atlanta and Richmond Air Line Railway so it could link up with the Blue Ridge Railroad and use common tracks through Oconee County. Part of this land included the present site of Seneca. The railway company decided to locate the towns of Seneca and Westminster, South Carolina and Toccoa, Georgia at their present sites to accompany the railway. These towns were envisioned as trade centers and locations where water could be obtained for the steam locomotives.³
In 1873 the Richmond and Atlanta Air Line Rail- 
road founded the City of Seneca from a point located 
along the line called "the center of the city". From this 
point the city was generated out for 1/2 of a mile to 
the north, south, east, and west. The streets and lots 
were laid out in a pattern within this one square mile 
box. On August 21, 1879 the rail company put the 
land up at auction to sell the remaining plots of land.

Seneca was first chartered on March 5, 1874. In 
the early years一座 like any other town along the 
railway main line of the few supply stores, two hotels 
to accommodate the small farmers, and other trades 
related to the railway. Seneca had switch tracks, 
many passenger trains, and several industrial 
operations. By the 1890's Seneca was to become a 
great place for local industries and the merging of the various 
small towns into one city. Several types of heavy locomotives 
that 
were used for longer distances led to the 
hyperspeed trains of the early 20th century. 

The city grew faster and the town became the 
largest city in the county. Today it is 

served by the Blue Ridge Railroad and the Southern 
Railroad on the main line, and the Carolina and North- 
Western Railroad running the spur to Pendleton and 
Anderson.
In 1873 the Richmond and Atlanta Air Line Railway founded the City of Seneca from a point located along the line called "the center of the city". From this point, the city was generated out for 1/2 of a mile to the north, south, east, and west. The streets and lots were laid out in a pattern within this one square mile box. On August 21, 1875 the rail company put the land up for sale in small plots with the stipulation that a city would be built on the site. In the fall of 1875 the railway held an auction to sell the remaining plots of land.

Seneca was first chartered on March 14, 1874. In the early years Seneca was like any other town along the railway consisting of a few supply stores, two hotels to accommodate the rail travelers, and other trade related facilities. All trains stopped in Seneca to switch tracks, pick up cargo, or to discharge passengers. By the 1890's it became apparent that Seneca was to become a great trading center because of the merging of the various railways within it.

Architecturally the city was typical of railway towns of the time, with the construction of numerous wooden structures, unpaved streets, a large public park adjacent to the railroad station, and residential neighborhoods in the outer parts of the city.

Subsequently the development of better locomotives that could travel faster and for longer distances led to the bypassing of smaller towns to make better time and the concentration of rail service in the larger cities. This trend affected Seneca and throughout this century rail traffic in Seneca declined. However this only occured after the city became the largest in Oconee County and a major commercial and trade center for the area. Today it is served by The Blue Ridge Railroad and the Southern Railroad on the main line, and the Carolina and North-Western Railroad running the spur to Pendleton and Anderson.
C. THE PRESENT

Population of Oconee County:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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<tbody>
<tr>
<td>1900</td>
<td>23,634 people</td>
</tr>
<tr>
<td>1910</td>
<td>27,337</td>
</tr>
<tr>
<td>1920</td>
<td>30,117</td>
</tr>
<tr>
<td>1930</td>
<td>33,368</td>
</tr>
<tr>
<td>1940</td>
<td>36,512</td>
</tr>
<tr>
<td>1950</td>
<td>39,050</td>
</tr>
<tr>
<td>1960</td>
<td>40,204</td>
</tr>
<tr>
<td>1970</td>
<td>40,728</td>
</tr>
<tr>
<td>1980</td>
<td>49,871</td>
</tr>
<tr>
<td>1990</td>
<td>66,132</td>
</tr>
<tr>
<td>2000</td>
<td>79,932</td>
</tr>
</tbody>
</table>

Population of Seneca

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>5,227</td>
</tr>
<tr>
<td>1970</td>
<td>6,027</td>
</tr>
<tr>
<td>1980</td>
<td>6,931</td>
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The early economy of Oconee County was totally based on farm production and related services provided for the farmers. "Today the present Oconee economy has two pronounced features. First, dominant functions performed by the economy involve the production of goods rather than services. During 1970 manufacturing industries accounted for one-half of all employment. Second, the Oconee economy has become highly industrialized. Manufacturing is the principal basic support of the economy."* Oconee County is on the edge of the Piedmont economic development especially with regard to the textile industry.

Throughout history the city of Seneca has experienced a faster rate of development than the rest of Oconee County. This is because of industries locating near Seneca for the city's available land as well as its easy access to the rail lines and major highways. Now the central area of Seneca is threatened by development on the Rt. 123 by-pass in Clemson and Seneca, as well as development on Rt. 28 near Highway 11.*

To project the future needs of Seneca it is necessary to anticipate the population as well as economic growth. Both of these areas are dependent on each other to give the city its future tax base and to provide required services. From previous trends and projections, Seneca's population and economy should continue to grow past the year 2000.
economic breakdown of the Oconee economy:

<table>
<thead>
<tr>
<th>Category</th>
<th>% of economy</th>
<th>Employees</th>
</tr>
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<tbody>
<tr>
<td>manufacturing</td>
<td>49.2</td>
<td>8,856</td>
</tr>
<tr>
<td>services</td>
<td>19.9</td>
<td>3,582</td>
</tr>
<tr>
<td>retail</td>
<td>12.2</td>
<td>2,196</td>
</tr>
<tr>
<td>government</td>
<td>6.0</td>
<td>1,080</td>
</tr>
<tr>
<td>construction</td>
<td>5.7</td>
<td>1,026</td>
</tr>
<tr>
<td>transportation</td>
<td>2.6</td>
<td>468</td>
</tr>
<tr>
<td>agriculture</td>
<td>2.0</td>
<td>360</td>
</tr>
<tr>
<td>wholesale</td>
<td>1.3</td>
<td>234</td>
</tr>
<tr>
<td>finance</td>
<td>1.1</td>
<td>198</td>
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After Seneca's decline in the railroading, the city shifted its transportation dependence to the motor vehicle. Along with the rest of the country, "physically the automobile has affected land development more than any other known transportation medium in recent times". To get around Seneca an organized street system had to be developed.

Access to Seneca today is by automobile either directly or by driving from the Clemson-Oconee Airport which is limited to small propeller driven aircraft. There are four major access routes to Seneca, U.S. 123 from Clemson to the East, U.S. 123 from Westminster to the West, S.C. 59 from Fairplay in the South, and S.C. 28 from Walhalla in the Northwest. Within the city the streets are laid out in a gridiron pattern of approximately 400 by 400 feet. The average street width is 80 feet, with the exceptions of East Main Street, 50 feet wide, and Main Street, 95 feet wide. North First Street is the major street in the central business district providing cross town traffic movement and connections with all the major approach routes into the city.

There are two commercial areas within Seneca, the first being the original downtown area around the train station and extending to North First Street. The second area is the Rt. 123 by-pass to the north. The downtown area is primarily devoted to small specialty shops, while the by-pass has large stores, shopping centers and drive up facilities.

Seneca has two major residential areas; the first being the original housing area on the south side of town; now the historic district, and the second being the recent development along the lake to the north of the Rt. 123 by-pass. Neither of these residential areas is within walking distance of the commercial areas, with the exception of the small part of the historic district near the railroad tracks.
In December of 1969 a comprehensive planning project was done for the city area of Seneca, Walhalla, and Westminster. The planning project forecast a five million dollar increase in payrolls for the area with new industries moving in. Because of the projected increase in industry and population this report recommended the creation of a "new town" to be located in the center of the three existing towns. This new town would supply the needed public assembly areas and civic services. The main advantage of this new town would be that the three towns could jointly support the facilities, while any one of the towns was too small to justify these types of facilities on its own. For various reasons this plan was never implemented.

In 1971 a more specific investigation was done for the city of Seneca. This proposal dealt primarily with Seneca's future needs in housing, and the housing relationships to the business center. The report observed that there were many areas available for housing development within Seneca. The report also recommended that the deteriorated structures be renovated or removed. This plan was used by some private individuals who renovated their own homes, and adopted by the city as a guide for growth.

In 1975 a comprehensive city plan was done for the city of Seneca again. This plan observed the decline of the central business district due to development in other areas around Seneca. The proposal saw a great need to revitalize the central business area around the train station and city hall. To accomplish this, the report recommended that the pedestrian be given more consideration in the automobile dominated central area. The report saw a need for a civic area within an activity core in the city's central area. Around this activity center there would be a mixed use zone and then residential areas on the outskirts. Pedestrian paths would link Gignilliat Park to the north and the City, Library to the south, to the activity center. The proposal's intent was to create an identifiable activity center with a near by residential area to support the businesses within this core.
In 1978 a land use plan for Seneca was done, updating the 1971 report adopted by the city. This report also dealt with the relationship of businesses and residential neighborhoods to the downtown area of Seneca. This report also recommended that the residential areas should surround the central business district with pedestrian access to the commercial areas from the residential neighborhoods. The report acknowledged the current and future residential development that will occur along the "beltline" and the shores of Lake Keowee. Accommodation of these new neighborhoods with easy vehicular access to the business district should be provided. This proposal is currently used as a guideline for the city's growth.

The most recent proposal, done in 1982, dealt primarily with the revitalization of the central business district. This proposal saw a need for a general clean up and restoration effort with the older historical commercial buildings. In addition, the report saw a need for the area to have a shift in emphasis from vehicular to pedestrian traffic. The major streets should accommodate fewer and slower rates of traffic to allow for street furniture for the use and safety of the pedestrian. Sufficient vehicular parking should be provided to accommodate those that are driving into town. It is too early to see if this recommendation is to be implemented.

In summary the future of Seneca lies in its execution of the intent of all these proposals. The central area should give an emphasis to the pedestrian, the residential areas should surround this business area, and the overall mixture of uses in the same areas should be unified with the new zoning proposals currently being debated.
The governmental structure is an important part to any civilized society. For the government to function well and the people to respect the government's identity, there must be an understanding between both parties. This understanding is based on the government's ability to hear and respond to the needs of the people, and for the people to express their needs to the government.

In a poll taken in 1973, it is obvious that the people of this country want their governments to provide more and better services. The poll indicated that the people wanted more money spent on police patrolling, cleaning and repairing streets, and cleaning parks and playgrounds, while spending current allocations on trash and garbage collection, street lighting, and freeway building. All of these services are typically provided by the local governmental agencies and not administrated on the federal level with the exception of freeway construction.

To provide these services the appropriate funds must be collected and distributed within the governmental agencies. Typically these funds are collected by sales taxes, property taxes, and appropriate user fees. In exchange for these payments, the people are provided with the basic governmental services.

The Oconee County government is projected to grow to the year 2000. This growth will occur because of an increased population and new industries in the county which will require greater governmental contributions to these basic services. The city of Seneca will also require a growth in services to accommodate its growing population.

The City of Seneca provides for the police and fire protection as well as maintenance of the streets, trash removal, water and sewerage and electricity. The governmental structure of Seneca is one of a Mayor and a City Council determining the city's policies. Functioning as a separate entity, but working with the City Council, are
the Planning Commission and the Public Works Commission. The Planning Commission regulates and determines policies, with the Council's approval, for the city's growth and zoning. The Public Works Commission is comprised of a board of supervisors elected by the people to act independently for the supervision of the sewer, light, and water services. It is the duty of the Commission to provide these services to the citizens of Seneca at the lowest cost and to oversee the construction and maintenance of the new facilities.

Working directly under the City Council are the Police and Fire protection, Recreation Department, and the Street and Sanitation Departments. The Recreation Department is responsible for the safe operation and supervision of the city's various recreational facilities and services. It is the responsibility of the Street and Sanitation Department to maintain the streets and sidewalks, as well as the removal of trash. In addition to these services, the Street and Sanitation Department provides for the maintenance of all the city vehicles.
Any piece of mechanical equipment requires periodic maintenance and repair. Motor vehicles require specialized maintenance and care if they are to function as intended. Working with a supply of fuel is also part of vehicle service. To best accommodate these needs for the vehicles, it is preferable to provide all these services at one facility. In this manner one facility can handle all problems with the motor vehicle, not just a few specialized components.

Within a single facility, the vehicles can be inspected predictably for any sign of imminent mechanical problems. In the event that the vehicle is not lost through failure and further damage to other parts can be prevented. It is reasonable for the failure of one part to adversely affect other parts because of the close interdependence of the parts of a motor vehicle when it becomes necessary to reduce the long-term costs and the reduction of major breakdowns.

Because of the numerous services the city of Seneca offers, the city owns many motor vehicles. Many years ago the city saw the need to keep these vehicles well maintained to be able to use them and reduce the costs of vehicles. It was found that by reducing the number of vehicles in the city, the important role of the city’s and people’s dependence on these vehicles. To best service these vehicles, the city started to operate its own maintenance shop under the operation of the Street and Sanitation Department.

At the present time the city’s Street and Sanitation Department, with its maintenance shop, is located at the intersection of Depot and South First Streets. This building was originally used for commercial storage and sales, but was adapted to house the Street and Sanitation Departments needs. The building does not serve the needs of the Street and Sanitation Department in its present deteriorated condition, and an inability to handle the new
Any piece of mechanical equipment requires periodic maintenance and repair. Motor vehicles require specialized maintenance and care if they are to function as intended. Routine maintenance along with a supply of fuel is also part of vehicle service. To best accommodate these needs for the vehicles, it is preferable to provide all these services at one facility. In this manner one facility can handle all problems with the motor vehicle, not just a few specialized components.

Within a single facility, the vehicles can be inspected periodically for any sign of imminent mechanical problems. If inspected the vehicle is not lost through failure and further damage to other parts can be prevented. It is common for the failure of one part to adversely affect several other parts because of the close interdependence of all the parts within the vehicle. So, if the vehicle is maintained well the cost of the maintenance can be offset by the long term cost savings in the reduction of major breakdowns.

Because of the numerous services the city of Seneca offers, the city owns many motor vehicles. Many years ago the city saw the need to keep these vehicles well maintained to increase the useful life of the vehicles and to reduce breakdowns. The elimination of breakdowns is of particular importance with the emergency vehicles because of the city's and people's dependence on these vehicles. To best service these vehicles, the city started to operate its own maintenance shop under the operation of the Street and Sanitation Department.

At the present time the city's Street and Sanitation Department, with its maintenance shop, is located at the intersection of Depot and South First Streets. This building was originally used for commercial storage and sales, but was adapted to house the Street and Sanitation Departments needs. The building does not serve the needs of the Street and Sanitation Department in its present deteriorated condition, and an inability to handle the new
larger vehicles and the lack of supplementary facilities. In addition to these deficiencies, the present building is of a wood and load bearing masonry wall construction which is not suitable for the safe containment of motor vehicles with their combustible fuels and the heavy equipment needed to service these vehicles.

There are several reasons for properly storing vehicles. It is preferable to park these vehicles in an organized predetermined spot which permits for their easy retrieval and movement. As long as an organized system of vehicle storage is used, the process of parking and the retrieval of the vehicle will be much faster and less complicated. This vehicle organization will also allow for a more efficient method of land utilization.

Another consideration for the storage of vehicles is to provide for the protection of the vehicles from vandals and thieves. With the high cost of vehicles today, it is a good idea to protect the investment in the vehicle from damage or loss. Another form of protection these vehicles need is from the elements. It is common knowledge that the various forms of weather encountered by unprotected vehicles have adverse effects on their longevity. A properly protected vehicle will last longer and will be more convenient to operate.

Seneca's present vehicle storage facilities, located adjacent to the maintenance facility, consists of a graveled flat area to allow the vehicles to be parked where space is available along the perimeter of the fenced lot. The new facility should allow for a better organization and sheltering from the elements, while maintaining a secure area around the vehicles.
C. VEHICLE STORAGE

For over 2000 years the issue of storage of our various transportation equipment had to be addressed. In the early years this problem was limited to the storage of the carriage and the feeding and sheltering of horses. Back then, as today, these vehicles were large and difficult to maneuver which adds to the problem of storage.

There are several reasons for properly storing vehicles. It is preferable to park these vehicles in an organized predetermined spot which permits for their easy retrieval and movement. As long as an organized system of vehicle storage is used, the process of parking and the retrieval of the vehicle will be much faster and less complicated. This vehicle organization will also allow for a more efficient method of land utilization.

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Seneca's present vehicle storage facilities, located adjacent to the maintenance facility, consists of a graveled flat area to allow the vehicles to be parked where space is available along the periphery of the fenced lot. The new facility should allow for a better organization and sheltering from the elements, while maintaining a secure area around the vehicles.
In addition to the repair and storage of Seneca’s motor vehicles, the proposed facility will provide for all the support systems of the Street and Sanitation Department. These include the administrative offices, employee support areas, and the storage of vehicle parts. The facility will contain all the Street and Sanitation Department activities.

This facility will also provide the Seneca Public Utilities Department with badly needed storage and administrative offices that are now either nonexistent or separated from each other. An enclosed area to store spare electrical and water service parts is needed. At the present time, these parts are either stored in an open field or not stocked because of the lack of adequate storage areas.

The Public Service Department also needs support facilities for its administrators and workers. These support facilities will include the administrative offices, an area where utility payments can be made, and worker support areas. These services are presently housed within the City Hall, but are severely limited by a lack of space.

This facility will provide for the needs of both the Street and Sanitation Department and the Public Utilities Department.
A. INTRODUCTION

To allow the municipal service facility and its dependent functions to operate in the best possible way a good site must be selected. The site must be of appropriate size to house the facility and all its components. In addition the selected site must be in harmony with the needs of the city and have a positive impact on the area around it.

The city of Seneca has tentatively selected a site for the vehicle maintenance shop on South Fourth Street. This site is on the periphery of the city and bordered on two sides by residences and by recreational fields on the other. It would appear that a better site could be selected that would be in a more convenient location for its users and to be more harmonious with its neighborhood. Because of these deficiencies in the proposed site an alternative site selection investigation is needed.
B. SELECTION CRITERIA

To select a site for the Seneca Street and Sanitation Department several criteria must be addressed. These criteria are: location, plot size, impact on the neighborhood and the city, and other economic considerations.

The location of the site is a primary concern for many reasons. Because this facility deals with motor vehicles which will be traveling throughout the city, it is important that the facility be within easy access to all parts of the city. Not only should the site be centerally located but should also have an easy access to the county dump, city Police Station, the Fire Station, and the other city vehicles stationed at the City Hall and the public utilities department. These requirements, along with the fact that numerous large vehicles will use the facility, dictate that the facility should be located near a major street.

The size of the site is an obvious factor to consider when investigating alternative sites for any facility. Not only must the site be large enough for the building but it must accommodate the large numbers of vehicles housed on the site. The site should also provide additional space for future expansion.

The impact of the facility on its location should be a positive one. This not only includes a harmonious coexistence with adjacent sites but also a positive impact on the entire neighborhood. The new site should also be in compliance with the new zoning ordinances that the city is now developing. The adhesion to the new city zoning plan by the city government will provide an example to the private sector to do the same and to work within the zoning limitations.

Other considerations to be dealt with in the site selection process are topography, ownership of the land, and ease of acquisition. After all these considerations are addressed, the best location for the facility will be selected.
C. ALTERNATE SITES

Investigations of alternate sites led to three possible locations for the municipal service center. All are owned by the city, and two are vacant at this time.

The first site is the original site selected by the city, located on South Fourth Street. This site is located away from the street but does front directly to Scotland Road to the rear and Adams Court to the side. Both Scotland Road and Adams Court are residential streets with small individual houses on Scotland Road and town houses on Adams Court. Both streets are lightly traveled and quiet. South Fourth Street is a moderately heavily traveled four lane road with truck and automobile traffic.

The site has undefined boundaries but is no larger than three hundred by four hundred feet in size. It is basically a rectangle with the longer sides facing Scotland Road and the baseball diamond on South Fourth Street.

The service facility’s impact on the neighborhood, will be adverse if placed on this location. The surrounding noise and odors associated with the facility would not be compatible with the adjacent residential areas. In addition to this the facility would be remote from the other public city facilities.

The site is gently sloping to the west. It is vacant at the present and has no trees.

The second site is the present vehicle maintenance facility location. It is at the southwest corner of South Depot and South First Streets. Across South First Street run the railroad tracks in the towns center, and on both sides of the site there are a few light commercial buildings with a residential area to the rear. All the streets in the area are lightly traveled, but South First Street does lead to other major street. The site is one hundred and fifty feet in length along South First Street and two hundred and twenty feet along South Depot Street.
The impact of this location would not be significant. It would neither detract from nor enhance the neighborhood. The residential area behind the facility does need a buffer from the railroad tracks but a small park or a strip of light commerical buildings would do the job better. This site, like the previous one would be segregated from the rest of the governmental functions of Seneca, but to a lesser degree.

This site is the only one with a existing building. Removal of this building would add to the cost of the new facility. The site is generally flat.

The third site is located on the south west corner of the intersection of North Depot and North Second Streets. The site is behind, and down the hill from the city hall. The area next to this site, in the center of the block, is also vacant, and the area accross North Second Street consists of a mix of high and low density residential areas. Both North Second and North Depot Streets carry a moderate amount of traffic.

The site area is defined by the existing buildings adjacent to the site, but its approximate size is about five hundred feet along North Second Street between North Depot and Townville Streets, and about three hundred feet deep from the edge of North Second Street.

The site is presently vacant and represents a major void in the inner part of the town. It is in a transitional area between the residential and business district of downtown Seneca, and, if properly developed, this site could create this transition between these two areas. This site would be convenient to the majority of the other city services.

The site is vacant but does have a steep slope and has numerous trees. The city owns the site as well as the land across North Second Street.
D. CONCLUSIONS

A critical examination of the three sites leads to the conclusion that number three is the best location for the municipal service center. The reasons being its size, central location, and its adjacency to other city functions. The steep slopes could be a disadvantage of the site, but this aspect of the site can be designed to become an asset for the facility.
A. INTRODUCTION

In order to have a thorough understanding of the selected site, a comprehensive site analysis must be performed. This analysis will give a better understanding of the site’s contextual relationships and its numerous characteristics. In this way the new site’s uniqueness can be enhanced through the design process.

In the analysis of this site, the zoning and land use of the area around the site, circulation characteristics, visual images, climatic information, and other site data will be examined.

The land use trend developing within Seneca in the past ten years is quite strong. It has frontage along two of the major streets within Seneca’s city limits. North First Street to the south of the site is the major artery within the city linking the downtown area to the 123 by-pass on both ends. To the west of the site is North Townville Street which links the downtown area to the 123 by-pass, between the two ends of North First Street, and continues on to Lake Keowee. Along both of these streets there is commercial activity. Most pedestrian traffic occurs along these two streets because of the use of natural attraction and generation of the commercial activities.

Visually the site offers a good view towards the northwest because of the slope of the land in that direction. There are several visual edges created by the adjacent buildings, especially in the service areas of the North First Street Buildings.

Strong winter winds come primarily from the northwest in the city. Summer winds come from the southwestern direction. The sun reaches its maximum height in the horizon on June 22nd at an angle of 78 degrees, and the lowest solar occurs on December 22nd with a solar angle of 31 degrees.
B. ANALYSIS

The land use trend developing within Seneca in the past ten years has been generally undirected. Commercial buildings crop up in the center of residential neighborhoods and the central business district is losing its retailers to the sprawl along the 123 by-pass. To counter this trend, the city plans to restrict the commercial development along the by-pass to get a higher building density in the central business district.

The site selected falls on the commercial and residential edge separating the downtown areas from the surrounding residential areas. It has frontage along two of the major streets within Seneca's city limits. North First Street to the south of the site is the major artery within the city linking the downtown area to the 123 by-pass at both ends. To the West of the site is North Townville Street which links the downtown area to the 123 by-pass, between the two ends of North First Street, and continuous on to Lake Keowee. Along both of these streets there is commercial activity. Most pedestrian traffic occurs along these two streets because of the natural attraction and generation of the commercial activities.

Visually the site offers a good view towards the northeast because of the slope of the land in that direction. There are several visual edges created by the adjacent buildings, especially in the service areas of the North First Street buildings.

Strong winter winds come primarily from the northwest in the city. Summer winds come from the southwestern direction. The sun reaches its maximum height in the horizon on June 22nd at an angle of 78 degrees, and the lowest level occurs on December 22nd with a solar angle of 31 degrees.
PROPOSED LAND USE

COMMERCIAL

RESIDENTIAL

EXISTING LAND USE
CLIMATIC WINTER

SUMMER WINTER

SITE

31°

78°

SUMMER

WIND SOLAR
The site slopes from North Townville Street down to North Depot Street, and there is also a large depression in the center of the site towards the Townville Street side of the site. Vegetation on the site consists primarily of older trees spread sparsely throughout the site. Water run-off occurs in the direction of the corner of North Depot and North Second Streets.
C. CONCLUSION

The most distinguishing feature of this site is the great change of elevation from one part of the site to another, and the large natural depression occurring in the center of the site. Another distinguishing characteristic is the location of the two commercial areas on North First and South Second streets and a developing residential area along North Second Street. Between these and in this area, the site must extend from the transit terminal space (different use) to commercial areas (different use).
C. CONCLUSIONS

The most distinguishing feature of this site is its great change of elevation from one end to the other and the large natural depression occurring in the center of the site. Another distinguishing characteristic is its relation to two commercial edges on North First and North Townville Streets and a developing residential area along North Second and North Depot Streets. Because of this relationship the site must serve as a transitional space between these two different uses.
Sinclair Lewis suggested that work in a filling station was the best vantage point from which to study the American culture. In the early days gas was sold by the bucket which was dangerous because of the potential fire hazard, as well as being inconvenient. In 1905 C. H. Laessing stood an old water heater on end and equipped it with a glass gage for a better system of gas distribution. After the 1920's the gas stations started to become complete automotive service facilities to care for all the needs of the motor vehicles.

In the past sixty years these complete service facilities have become very popular. Numerous private industries and governmental agencies have found it to be economical and convenient to operate their own service facilities. These case studies will deal with several of these facilities and their design attributes and deficiencies.
case study one:

Independence National Historical Park Maintenance Facility:

This vehicle and park maintenance facility occupies 20,000 square feet in Philadelphia's prestigious Society Hill area. The biggest challenge the architectural firm of Mitchell and Giurgola had was to effectively place the large structure into the residential neighborhood. They accomplished this by breaking down the scale of the building. The roof consists of several connected "sheds" giving the appearance of different functions occurring within each shed. This technique not only reduced the scale but allowed the architects to express what activity was occurring within each shed.

Other aspects that are respectful of the existing neighborhood are a small vehicle entrance to the service yard and the repair bays exiting into this service yard. The building is constructed of brick to give the large expanses of the facade a material that can relate to the adjacent residences. To further break up the long walls each shed is slightly shifted in relation to the others to give depth and variety to the walls. The service yard is completely enclosed to create a noise and visual barrier from the neighborhood.
case study two; 
Consolidated Edison Customer Service Facility;

This building, located in the northeast Bronx, as a place for customers of Con Edison to pay their bills and air grievances concerning their service. The building houses the administration of the utility on the upper floor and the laborers on the lower floors. To separate these two functions there are two entrances, one being the public entrance, and the other for the employees on the lower level.

The building is designed in a very simple manner by the architect Richard Dattner to be a very functional design. This was done for two reasons; to give the public the impression that Con. Edison was using their money wisely, and to allow the building to blend into the working class neighborhood.17
case study three:
*Boston City Hall:*

Boston's now famous city hall has its roots in history. The idea of creating a large gathering place for public assembly adjacent to a government building goes back to Siena's 13th century pallazzo pubblico. This square or meeting place adjacent to the city hall serves as a public activity generator for the area as well as physically bringing the government to the people.

The City Hall was designed to fit into a complex city plan and to revitalize the neighborhood in which it is located. The exterior of the building expresses the functions that are occurring within to allow for a working government image for the people of Boston.18 "The new city hall will work if its participation spaces work. Its life will flow around the symbolic seat of power, ignoring it but also promoting a more intimate interaction of people and place."19
A. INTRODUCTION

In order to determine the spacial needs of this Municipal Service Facility a program must be developed. This program will identify the users and activities of the facility and from these findings space requirements will be determined. Additionally the program will identify the relationships between these spaces.

Several divisions of the Seneca City Government will use the new facility. The Street and Sanitation Department will house their administrative offices at the facility as well as their employee support areas, and store their equipment on the site. The Public Utilities Department will house their administrative offices, supply areas, offices, collectors, and their vehicles at the facility.

Additionally it is proposed that the Police Department, administrative functions, the City Planners Offices, as well as the Chamber of Commerce will be located in the facility.
The Street and Sanitation Department will have six full-time employees working in the facility. One superintendent will manage and oversee the Street and Sanitation Department as well as the entire facility. The superintendent will have one secretary to keep records and perform other secretarial tasks. There will be a central purchasing worker who will be in charge of the acquisition and inventory of all the small parts within the parts room. The parts room shall keep a limited supply of small parts used for the service of the vehicles. The larger parts are ordered as needed by the mechanic or the central purchasing person. There will be three mechanics to work on the service of the vehicles.

The superintendent is responsible for the supervision and smooth operation of the facility, in addition to the supervision of the Street and Sanitation workers. He will prepare the request for the budget to the city government each year, in addition to presenting the needed documentation of the needs for these funds.

The secretary will keep records of the employees, facility expenses, and any other needed information to insure the efficient operation of the facility. In addition to these duties the secretary will be a receptionist for the superintendent.

The Street and Sanitation Department is responsible for the repair and service of all city owned vehicles. This includes the fire equipment, police vehicles, public utilities vehicles, and the Street and Sanitation Departments own vehicles.

Seneca's fire trucks are owned by the County, but given to the city for its use. The city is responsible for the maintenance of these four fire trucks and the chief's car. The fire vehicles are housed in the fire house, built in 1965, located next to the bridge over the railroad tracks on South Oak Street. The fire trucks are scheduled for preventative maintenance every six months. The vehicles
MECHANICS
(3 employees)

ARRIVAL

PARK PERSONAL VEHICLE

PUNCH OUT

SHOWER AND CHANGE CLOTHES

EMPLOYEE LOUNGE

CHANGE CLOTHES

RETRIEVE PERSONAL VEHICLE

PUNCH IN

WORK IN REPAIR BAYS
W/ access to tools, parts, storage, wash bay, gas pumps, etc.

GO OUT TO TOW OR REPAIR DISABLED VEHICLES

DEPART

are generally gassed up every two weeks, or when necessary. Because of the nature of these vehicles they are not used very often, but must be maintained well to insure reliable service.

The Police Department owns six patrol vehicles, five on line and one chief's car. Each shift uses three or four of the on line vehicles, plus the chief's car which is always in use. Each officer spends about 65% of his on duty time on vehicular patrol. 21

When not in use the police vehicles are currently parked on North Depot Street just outside the police station behind the city hall. These vehicles are gassed up two to four times a day at every hour of the day. The police vehicles have a preventative maintenance schedule of once every three or four months. This is because of the heavy use these vehicles experience, as well as the need for reliable service from the vehicles to protect the public.

Because of the complexity and diversity of these vehicles there is a need for specialized equipment and mechanics familiar with the various vehicles. Mechanics will repair motors, transmissions, suspension systems, and other lesser mechanical parts of the vehicles. The mechanics will do minor body work and change tires as needed. In addition to these repairs, the mechanics will perform the regular scheduled maintenance of the vehicles. The refueling of the vehicles will usually be done by the driver of the vehicle, but the washing of the vehicle will be done by the facility mechanics.

The Street and Sanitation Department has three major tasks. These tasks are the removal of trash and debris from the designated collection points, streets, and city owned land, the repair of all the non-state owned streets within the city limit and the sidewalks, the final task is the maintenance and servicing of all the city owned motor vehicles.
Seventy to eighty percent of the cost of solid waste management is the cost of collection. In a small city the size of Seneca, the collection cost is low, but as city increases in size the collection cost can be expected to increase as well. The greatest expense is the removal of litter along the highways because of the numerous man hours involved. ²²

The city of Seneca at this time uses a land fill for trash disposal. Their land fill, located on the "Belt Line", will be used for the next five to ten years before another site must be located. Oconee County operates the landfill, but Seneca uses it at no cost because the city donated the land to the county to use as a land fill.

The city provides trash pickup within the city limits, with the pickup method now converting to curb side from backyard pickup. This change was made to save time and subsequently reduce the labor cost. It is now the responsibility of each residence to store trash in containers and to transport these to the curb on the designated collection dates. In the central business district the city uses the trash bucket method of pickup; as recommended in the 1969 report, a dumpster system would be better for the collection and the visual impact of the downtown area. At this time the city operates four trash collection vehicles within the city.

There are 14 trash collection workers presently employed by the city. These workers would assemble in the early morning to change from street clothes to work clothes. They would check in to the office to check out their vehicles which are then fueled before leaving for the days work. After completing their collections and delivering it to the land fill, the workers would return the vehicles, shower and change into street clothes before leaving the facility. It will be necessary to provide for the employee parking for the 14 trash collection workers.
STREET AND SIDEWALK REPAIR

The trash vehicles would be kept at the facility in a sheltered environment to protect them from the elements. The vehicles would be maintained and repaired as needed.

The Department of Streets and Sanitation maintains all the sidewalks and the non-state owned roads within the city limits. Even though the state maintains the state roads within the city, they often will pay the city to do minor repairs on these roads.

The state does its work through the county which has a facility on West South Fourth Street just outside Seneca. This county facility was built in 1931, and is used primarily for the storage of county maintenance equipment.

Similar to the trash collection workers the street and sidewalk employees would assemble at the facility in the morning to change into work clothes, and check in to the office. They would pick up their vehicles and gas them up as needed. When the workers finish their day they would return to the facility to shower and change to street clothes. The administrative offices of the street and sidewalk repair and the sanitation workers would be shared because both functions under the same department. There are 12 employees involved with the street and sidewalk repair.

The Public Utilities Department provides electricity and water to the residents of the Seneca area. Seneca's water system is quite extensive, supplying the lower 1/3 of Oconee County, or about 70 square miles, with water. The source for this water is Lake Keowee, with a filtration plant capable of pumping four million gallons a day with minor modifications. The maximum demand on the system occurs in the summer between the hours of 4:30 and 5:00 PM. The water system is self-supporting with funds coming from hook-up fees and meter charges. The water system is adequately sized to provide service for many years.
The department uses four employees to read water and electric meters. In addition the department employees 13 workers to maintain the water lines and pumps. Both the meter workers and the maintenance workers would use the facility as a central gathering point to change into their work clothes and pick up the necessary equipment to do their jobs. Before leaving for work the employees would gas up their vehicles for the day. In the evening the workers would return the vehicles and equipment and then shower and change into their street clothes.

The Public Utilities Department supplies electricity to 90% of the structures within the city limits and a small percentage of the surrounding customers. The electricity is purchased in bulk from Duke Power and redistributed to the customers. As described previously, electric and water meters are read by the same person. There are 12 electrical maintenance workers who would use the facility in a similar manner as the water workers.

A total of twenty trucks and twenty cars would be used by the Utilities Department. These vehicles will be stored and maintained by the Street and Sanitation Department.

To serve the customer and the needs of the Utilities Department the department provides a customer service branch. In addition to handling customer complaints or requests for information this operation also prepares the utility bills and credits accounts when the payment is mailed in or brought by in person. All customer records are kept here to be used as a reference when needed. This area will employee approximately ten people.

It is proposed that the the Police Department will house all their administrative and support facilities within the new facility. The Police Department employees dispatchers to receive incoming calls and to deal with people visiting the department on a twenty-four hour basis. The dispatcher relays information by radio to police officers on patrol. The dispatchers are also the link between patrol officers
POLICE OFFICERS
(18 employees)

ARRIVAL

CHECK INTO STATION AND CHANGE CLOTHES

GO OUT ON PATROL

RETURN TO STATION WITH PRISONER OR TO FILE REPORTS WHEN NEEDED

RETURN TO PATROL

RETURN TO STATION AT END OF SHIFT

CHANGE TO STREET CLOTHES

DEPART

and the computer which contains information about stolen property and criminal suspects. The dispatchers also handle records and are responsible for prisoners.

The Police Department would have two shift offices and a chiefs office. It would also have a men's and women's locker area to store clothes, change into uniforms, and shower at the end of each shift.

The Police Department would have the facilities for temporary (48 hours) detention of suspects. These facilities would have their own access to an outside secured area for the transfer of prisoners to and from the police vehicles.

The Town Planner employees three workers in addition to a receptionist. This department is responsible for developing proposals for the orderly growth of the city and the issuance of builders permits.

The Chamber of Commerce is an information arm of the city government. It is the chamber's purpose to encourage commerce and tourism within Seneca. The Chamber of Commerce will employ three people. One of which would serve as a receptionist for visitors.

The Tax and License Department has the dual responsibility of assessing and collecting the tax revenue for the operation of the city services as well as issuance of city licenses.

This department employs four workers to administer these activities. One of these persons is qualified to assess the property values and establish property taxes. Two additional employees would oversee the day-to-day operation of the office.

The Town Clerk is in charge of all city records. This office would employ four people including one overseer. City records must be available to city employees and the
CITY GOVERNMENT WORKERS
(12 employees)

ARRIVAL
PARK PERSONAL VEHICLE
CHECK INTO OFFICE
PERFORM WORK TASKS IN OFFICE
CHECK OUT OF OFFICE
RETRIEVE PERSONAL VEHICLE
DEPART

general public, this is done through the assistance of workers in the clerk's office.

The administrative branch of the government of the city of Seneca consists of the elected mayor and council members. Each would have an office in the proposed facility. Two secretaries would be employed, one of whom would serve as a telephone receptionist. Meetings of the council and mayor would be held either in a conference room or a council chamber which should provide public seating for approximately 150 people.
C. SPACE REQUIREMENTS

STREET AND SANITATION DEPARTMENT

2. Work Bays @ 500 sq.ft. ea.  
1000 sq.ft. total  
The mechanics should be able to drive large vehicles straight through the bays, each of which will have a hydraulic car lift to be used on the smaller vehicles. Good lighting is required. The area needs good ventilation to exhaust fumes. The bays should be located near the tool storage area, air compressor, and the parts room.

1. Grease Pit @ 500 sq.ft.  
500 sq.ft. total  
The mechanic should be able to drive any vehicle over the pit without turning. The pit should be covered when not in use. The lighting should be such that it illuminates the underside of the vehicle. The area needs good ventilation to exhaust fumes. It should be designed so it can service both large and small vehicles. It should have a grease gun and grease storage area nearby, and be near the tool storage and the parts room.

1. Tire Bay @ 300 sq.ft.  
300 sq.ft. total  
The tire bay should have direct access to the tire storage and be convenient to the work bays. The area should be equipped with a tire fitting and balancing machine. The area should be near the air compressor, pneumatic drill with a nut attachment, and an air hose.
1. **Welding Area @** 500 sq.ft. total

The area should be equipped with a welding torch and solder storage. Good ventilation is required to exhaust fumes and heat. The area should be near the parts and tool rooms.

1. **Wash Bay @** 500 sq.ft. total

The area should be somewhat remote to allow for vehicle washing without disturbing the other areas. The area needs good exhaust to remove water vapor and needs good drainage. The bay needs hot water, soap storage, and wash brushes. Provisions must be made for the washing of large and small vehicles as well as high vehicles. The wash area should have good lighting to allow for the observation of the wash quality.

1. **Parts Room @** 250 sq.ft. total

The parts room provides a limited supply of small parts. A shelving system is required. Easily operable lighting controlled near the access to the room should be provided. The parts room should be near the work areas, and be keyed for security.
1. **Tool Room @** 200 sq.ft.  
200 sq.ft. total

This room should be keyed to protect the tools within. There should be good operable lighting provided with the lighting control located near the room's entry. The room should be provided with a shelving system to efficiently store tools. This area must be near the work areas.

1. **Tire Storage Area @** 200 sq.ft.  
200 sq.ft. total

This should be a large open area with a stacking or shelving system for the efficient storage of tires. This area has no need for ventilation or climate control. Operable lights should be provided. This area should be located near the tire bay.

1. **Superintendent's Office @** 150 sq.ft.  
150 sq.ft. total

The office needs some natural light and requires a system of air handling and conditioning. It should be located centrally to allow for observation of all activities. It would be furnished with a desk, chair, shelves, and files. The office should be keyed to provide security for its contents.

1. **Secretary's Office @** 150 sq.ft.  
150 sq.ft. total

This office should have natural light and air conditioning. It should be next to the superintendent’s so the secretary can act as a receptionist. It will be furnished with files, typing desk, and chair. The office should be keyed for security.
1. **Locker & Shower Room** @ 350 sq.ft.  
   **350 sq.ft. total**  
   This area should have the potential to be subdivided into a men's and women's locker room at a later time if needed. There should be 30 lockers with the room capable of handling 15 people at one time. A good exhaust system is needed to remove humidity and odors. It should be located near the time clock and next to the restrooms. The room will be provided with showers, lockers, lavatories, and benches.

2. **Restrooms** @ 120 sq.ft.  
   **240 sq.ft. total**  
   These restrooms should be adjacent to the locker rooms but independently accessible.

1. **Utility & Compressor Rm.** @ 120 sq.ft.  
   **120 sq.ft. total**  
   This room shall be located near the work and tire bays.

1. **Employee Lounge** @ 120 sq.ft.  
   **120 sq.ft. total**  
   This should be a air conditioned space and easily accessible from the locker rooms and the work areas. It will be furnished with chairs, a sofa, tables, shelves, and perhaps a tv.

1. **Storage Room** @ 200 sq.ft.  
   **200 sq.ft. total**  
   Climate control is not needed in this general storage room. Shelves would be needed and the door should be keyed.
20. **Covered Truck Parking @** 400 sq.ft. ea.  
8,000 sq.ft. total  
A covered area for the safe storage of 35 large vehicles. The area shall be designed to be secured at night.

20. **Covered Vehicle Parking @** 200 sq.ft. ea.  
4,000 sq.ft. total  
Provide a covered area for the storage of 40 cars and pickup trucks. The area shall be designed to be secured at night.

30. **Employee Parking @** 200 sq.ft. ea.  
6,000 sq.ft. total  
A parking area for 30 employee personal vehicles. This would be a paved area, but not necessarily covered.

2. **Gas Pumps @** 300 sq.ft. ea.  
600 sq.ft. total  
This would be a covered area where vehicles would be fueled. It should be viewable from the superintendents office. Provide for the lockup of the pumps at night and weekends.

1. **Road Work Shed @** 200 sq.ft.  
200 sq.ft. total  
This shed would house the tar, gravel, concrete mixture, and other materials needed for the repair of streets. The shed should be remotely located but easily accessible to the truck storage areas.
1. Customer Service @ 130 sq. ft.
   130 sq. ft. total
   This area should relate directly to the public. The employees will deal directly with customers as well as answer the telephone inquiries. The area would be air conditioned and should have natural light. It would have an information window, desks, chairs, and a storage area for files.

1. Collections area @ 140 sq. ft.
   140 sq. ft. total
   This area should also relate easily to the public to facilitate bill payment. It may have a drive-up window. It would be furnished with desks, chairs, a filing system payment windows, and possibly a computer terminal for payment records. This area should be adjacent to the customer service area and the accounting area.

1. Accounting area @ 390 sq. ft.
   390 sq. ft. total
   This is generally a private area not accessible to the public. It will be furnished with desks, chairs, and files. It shall be next to the vault and the collections area.
1. **Vault @ 90 sq. ft.**

   This room is for the secure storage of important documents and money. Access to this area shall be controlled by either a key or a combination lock. It will be of such a construction as to protect the contents from fire and theft. Shelves and other filing systems should be provided.

1. **Receptionist Area @ 90 sq. ft.**

   In addition to responding to the public the receptionist will control access to the director and work areas. It would be furnished with desks, and chairs.

1. **Directors Office @ 210 sq. ft.**

   This office will have a desk, chairs, a small conferance table, files, and shelves. It should be near the conference room and controlled by the receptionist.

1. **Secretary Office @ 140 sq. ft.**

   This office should be centrally located and near the director's office. It would be furnished with a desk, chair, typing table, and files.
1. Conference Rm. @ 160 sq.ft. total

One wall of the room should be fitted with a projection screen. It would be furnished with a large conference table and chairs, and a small amount of storage for conference equipment. This room would be controlled by the receptionist, and near the director's office.

10. Offices @ 120 sq.ft. each 1200 sq.ft. total

General offices used by the various employees of the utilities department such as the collections agents, supervisors, equipment managers, purchasing agents, and others. Access to all of the offices should be controlled by the receptionist. Each office would be furnished with a desk, chair and storage facilities for files.

1. File Room @ 100 sq.ft. total

This room would house the majority of the files used by the utilities department. Natural lighting is not needed nor desired. The room should be secure but easily accessible to employees of the utilities department, it would not be accessible to the general public.
1. **Plan Room @** 90 sq.ft.  
90 sq.ft. total  
This room will be the storage space for the plans of the various projects and undertakings of the department. The requirements are the same as the file room.

1. **Engineering Office @** 320 sq.ft.  
320 sq.ft. total  
Within this area the plans and equipment for the utilities department will be drawn and investigated. The engineering room will have internal access to the rest of the department's offices, but have controlled access to the general public. Good artificial lighting and ventilation are required. This area should be near the testing lab.

1. **Canteen @** 150 sq.ft.  
150 sq.ft. total  
This area would have complete access to the whole facility and all employees. The furnishings would be a refrigerator, stove or hot plate, table and chairs, and some lounge furniture. Provide for the exhaust of fumes and good ventilation.

1. **Locker & Shower Room @** 250 sq.ft.  
250 sq.ft. total  
This area would have the potential to be subdivided into a men's and women's locker room at a later time if needed. There would be 30 lockers to accommodate 15 people at any one time. A good exhaust system is needed to remove humidity and odors. The area should be located near the time clock, next to the restrooms, and near the hot water storage tank. The room will be provided with showers, lockable lockers, sinks, and benches.
2. Restrooms @ 120 sq.ft.

Provide one mens and one womens restroom as required. Both restrooms would have easy accessibility throughout the facility, and have good ventilation, drainage and water supply.

1. Multi Purpose Room @ 730 sq.ft.

This room would serve several purposes such as the meeting of all the facility employees, large eating room, and the temporary storage of over-sized equipment when being tested. This room shall be directly adjacent to the employee lounge, and near the testing lab.

1. Testing Lab @ 200 sq.ft.

This would be located directly off of the multi-purpose room and the warehouse to allow for the easy testing of incoming equipment. The room will be equipped with numerous electrical and water connections and workbenches to do the testing. Exhaust and good artificial lighting are needed.

1. Warehouse @ 11000 sq.ft.

This area should house all the spare equipment that the department needs to provide reliable electrical and water service. Provide a loading dock and exterior access to this area. Good lighting and ventilation are required. This area does not have to be climatically controlled, but some control is preferable. There should be access to the area from the multi purpose room and the testing lab.
20. **Covered Truck Parking @**

400 sq.ft. ea.  
8,000 sq.ft. total

Provide twenty spaces of parking for large vehicles. This area does not have to be enclosed, but must provide ventilation to vent out fumes. Proper lighting must be provided.

20. **Vehicle Parking @**

200 sq.ft. ea.  
4,000 sq.ft. total

Parking for the smaller vehicles of the department. Provide ventilation to exhaust fumes and lighting.

40. **Employee Parking @**

200 sq.ft. ea.  
8,000 sq.ft. total

Provide space for parking of the employee's personal vehicles. This area should be on the periphery of the site and open to the street.

1. **File and Storage Room @**

200 sq.ft.  
200 sq.ft. total

This area will be used for the storage of all equipment and evidence used by the Police Department. Provide operable lighting next to the door.

2. **Locker Rooms**

250 sq.ft. total

Provide a men's and smaller women's locker room for the police officers to change and store their clothes and shower. These rooms should be provided with a exhaust system to vent out moist air.
Police Department

2. Offices @ 120 sq.ft. ea.
240 sq.ft. total
These two shift offices should be close to the dispatch area, locker rooms, and the exit to the police cars. These offices will be provided with natural light, and conditioned air.

1. Chiefs Office @ 170 sq.ft.
170 sq.ft. total
The chief’s office requirements are the same as the shift offices except larger.

1. Dispatch Area @ 250 sq.ft.
250 sq.ft. total
This area is the nerve center for the police department so a central location is needed, as well as direct public access for inquiries and visits. This area should be near the shift offices, chief office, locker rooms, public entrance, and jail area.

1. File and Storage Room @ 200 sq.ft.
200 sq.ft. total
This area will be used for the storage of all equipment and evidence used by the Police Department. Provide operable lighting next to the door.

2. Locker Rooms 250 sq.ft. total
Provide a mens and smaller womens locker room for the police officers to change and store their clothes and shower. These rooms should be provided with an exhaust system to vent out moist air.
1. Booking Area @ 120 sq.ft. 120 sq.ft. total
This area would be where the I.D. photographs are taken, finger printing, as well as prisoner questioning. This room should be near the jail area and be able to be secured.

8. Mens Cells @ 80 sq.ft. ea. 640 sq.ft. total
These cells must be secure and have bathroom facilities to serve the jailed person. Natural light and a frequent air change are also required. This area must be self contained. Locate this area near the booking room and the sally port.

3. Womans Cells @ 80 sq.ft. ea. 240 sq.ft. total
Same requirements as the mens cells.

1. Juvenile Cell @ 80 sq.ft. 80 sq.ft. total
Same as mens cells but must be separate from all other cells.

1. Temporary Holding Cell @ 80 sq.ft. 80 sq.ft. total
Same as juvenile cell

1. Sally Port @ 300 sq.ft. 300 sq.ft. total
This area would be covered and fenced to allow for the parking of the police vehicles in the area for the transfer of prisoners to the detention area. This area also serves as a fire exit for the exit of the prisoners. Provide good lighting in the area.
12. Police vehicle parking @ 200 sq.ft. ea  
2,400 sq.ft. total

Provide for the parking of 12 police vehicles. It is important that these vehicles be near the police department and have quick and easy access to the city streets.

12. Impounded car area @ 200 sq.ft. ea  
2,400 sq.ft. total

Provide a locked and protected area to house the police's impounded cars. This area should only be controlled by the police.
Town Planner

1. Reception area @ 200 sq.ft.

This would be the first area a visitor to the town planner's office will encounter. This area would be large enough to accommodate a small waiting room, exhibits, and the receptionist work area.

2. Offices @ 120 sq.ft. ea.

These offices will house the workers of the town planner. Provide natural light and locate the offices near the receptionist area.

1. Directors Office @ 200 sq.ft.

The director of planning would oversee the whole office and direct office policy from this office. Provide natural lighting and locate near reception area and the conference room.

1. Conference Room @ 200 sq.ft.

Provide acoustically sound room with climate control for large meetings. Locate near reception and conference room.

1. Storage Room @ 120 sq.ft.

This room will be for the storage of plans and files. Provide for a operable light.
Chamber of Commerce

3. Offices @ 120 sq.ft. ea.
360 sq.ft. total
These offices will be manned by the workers of the Chamber of Commerce. Each office should be acoustically tight to allow for private meetings within each office.

1. Reception & Information @ 200 sq.ft.
200 sq.ft. total
This area will serve as the public contact with the Chamber of Commerce. Tourists will pick up information here and view a small exhibit about the city. Visitors to the Chamber of Commerce will be received here and if necessary wait until helped. This area should have direct access to the public.
City Government

1. Tax and License Area @ 300 sq.ft. 300 sq.ft. total
   Three or four workers keep tax records, assessments, and distribute licenses. Direct contact to the public is needed.

1. City Clerk Area @ 250 sq.ft. 250 sq.ft. total
   This branch of the government will employ three or four workers to store and keep the city records. This area will be near the tax and license area, secretarial area, office area, and have direct public access.

1. Secretarial Area @ 200 sq.ft. 200 sq.ft. total
   This area will serve the whole government section but a close relationship to the mayor and the council members would exist. This area would be provided with a waiting area for visitors. This will be the reception area for visitors to the mayor and council members. One of the secretarial employees will operate a switchboard.

1. Conference Room @ 250 sq.ft. 250 sq.ft. total
   This room would be used for small private meetings within the city government branch. Provide natural light and conditioned air to the room.
1. Mayor Office @ 250 sq.ft.  
   250 sq.ft. total  
The mayor's office shall be near the secretarial area and have access to the council chambers. Provide natural light and a good view from the office.

6. Council Member Offices @ 100 sq.ft. ea.  
   600 sq.ft. total  
Provide these offices for council members to conduct business and store needed materials to do their job. Provide natural light.

4. Offices @ 170 sq.ft. ea.  
   680 sq.ft. total  
Provide four offices for the workers of the City Clerk and the Tax and License areas. These offices will be used by the overseers of these areas. Provide natural light.

File and Storage Space @ 300 sq.ft.  
300 sq.ft. total  
This area is to be located in a convenient area for access by all workers, but near the City Clerk area.

1. Council Chamber @ 1,800 sq.ft.  
   1,800 sq.ft. total  
This area will be used for any public meeting conducted by the government of Seneca. Provide built-in seating, fresh air supply, and the required fire exits. (seating for 150 people)
D. AREA SUMMARIES

Street and Sanitation Department:

2. Work Bays @ 500 ea. 1000 sq.ft. total
1. Grease Pit 500 sq.ft. total
1. Tire Bay 300 sq.ft. total
1. Welding Area 500 sq.ft. total
1. Wash Bay 500 sq.ft. total
1. Parts Room 250 sq.ft. total
1. Tool Room 200 sq.ft. total
1. Tire Storage 200 sq.ft. total
1. Superintendent's Office 150 sq.ft. total
1. Secretary's Office 150 sq.ft. total
1. Locker & Shower Room 350 sq.ft. total
2. Restrooms @ 120 each 240 sq.ft. total
1. Utility & Compressor 120 sq.ft. total
1. Employee Lounge 120 sq.ft. total
1. General Storage Room 200 sq.ft. total

Total 4,780 sq.ft.
Public Utilities Department:

1. Customer Service 130 sq.ft. total
2. Collections 140 sq.ft. total
3. Accounting 390 sq.ft. total
4. Vault 90 sq.ft. total
5. Receptionist 90 sq.ft. total
6. Director’s Office 210 sq.ft. total
7. Secretary’s Office 140 sq.ft. total
8. Conference Room 160 sq.ft. total
9. Offices @ 120 each 1200 sq.ft. total
10. File Room 100 sq.ft. total
11. Plan Room 90 sq.ft. total
12. Engineering Office 320 sq.ft. total
13. Canteen 150 sq.ft. total
14. Locker & Shower 250 sq.ft. total
15. Restrooms @ 120 each 240 sq.ft. total
16. Multi-Purpose Room 730 sq.ft. total
17. Testing Lab 200 sq.ft. total
18. Warehouse 11000 sq.ft. total

Total 15,630 sq.ft.
**Police Department:**

1. Chiefs Office
   - 170 sq. ft. total
2. Dispatch Area
   - 250 sq. ft. total
3. File & Storage Room
   - 200 sq. ft. total
4. Locker Rooms
   - 250 sq. ft. total
5. Booking Area
   - 120 sq. ft. total
6. Mens Cells @ 80 ea.
   - 640 sq. ft. total
7. Womens Cells @ 80 ea.
   - 240 sq. ft. total
8. Temporary Holding Cell
   - 80 sq. ft. total
9. Juvenile Cell
   - 80 sq. ft. total

**Total:**

- **2,270 sq. ft.**
**Town Planner:**

1. Reception Area | 200 sq.ft. total  
2. Offices @ 120 ea. | 240 sq.ft. total  
1. Directors Office | 200 sq.ft. total  
1. Conference Room | 200 sq.ft. total  
1. Storage Area | 120 sq.ft. total  
6. Council Offices @ 100 ea. | 600 sq.ft. total  
4. Offices @ 170 sq. ft. | 680 sq.ft. total  

**Total:** | **960 sq.ft.**

1. File & Storage | 300 sq.ft. total  
1. Council Chamber | 180 sq.ft. total  

**Total:** | **840 sq.ft.**

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**Chamber of Commerce:**

3. Offices @ 120 ea. | 360 sq.ft. total  
1. Reception & Info. | 200 sq.ft. total  

**Total:** | **560 sq.ft.**

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**City Government:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Space (sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tax &amp; License</td>
<td>300 total</td>
</tr>
<tr>
<td>1. City Clerk</td>
<td>250 total</td>
</tr>
<tr>
<td>1. Secretarial</td>
<td>200 total</td>
</tr>
<tr>
<td>1. Conference</td>
<td>250 total</td>
</tr>
<tr>
<td>1. Mayor Office</td>
<td>250 total</td>
</tr>
<tr>
<td>6. Council Offices @ 100 ea.</td>
<td>600 total</td>
</tr>
<tr>
<td>4. Offices @ 170 ea.</td>
<td>680 total</td>
</tr>
<tr>
<td>1. File &amp; Storage</td>
<td>300 total</td>
</tr>
<tr>
<td>1. Council Chamber</td>
<td>1800 total</td>
</tr>
</tbody>
</table>

**Total:** 4,630 sq.ft.

**Total Interior Spaces:** 28,830 sq.ft.
**EXTERIOR SPACES:**

- **40. Truck Parking @ 400 ea.**
  - Total: 16,000 sq. ft.

- **60. Vehicle Parking @ 200 ea.**
  - Total: 8,000 sq. ft.

- **80. Employee Parking @ 200 ea.**
  - Total: 16,000 sq. ft.

- **2. Gas Pumps @ 300 ea.**
  - Total: 600 sq. ft.

- **1. Road Work Shed**
  - Total: 200 sq. ft.

**Total Exterior Space:**
- **40,800 sq. ft.**
MUNICIPAL
SERVICE
COMPLEX
SENeca, S.C.
LOCATION

CONCEPT

CONCEPTS

2. Ibid., pp. 1-18


4. Ibid., p. 7

5. Ibid., p. 7

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7. Ibid., p. 58

8. Hammer et al., p. 3


10. Ibid., p. 55

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15. Ibid., pp. 4-10


17. Ibid., pp. 124-125


19. Ibid., pp. 51-52


23. South Carolina Appalachian Council of Governments, Oconee County Land Use and Thoroughfare Plan, (Springfield, VA, June 1972) pp. 16-18

24. Mushkin, p. 289
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