Chapter 21

Designing Urban Environments as Parks

In a sense, this chapter serves as the epilogue. The "take-away" message of this book is revealed in the tagline of its title: Designing the Experience. Although most students will not become architects or planners of space, most people within their careers will have some determination over some type of spaces to create experiences. Returning to figure 1 in the introduction, there are three components involved in creating the experience (figure 21.1). These are the activities and program, facility, and park resources. Although it is a world of fantasy, Disney World was introduced in Chapter 1 as an example bringing together all three elements to create an experience for participants. Most programmers will have the opportunity to create or modify activities and programs to create an experience. It is what program planners do. If they are lucky, they may have the opportunity to modify semi-fixed feature and fixed-feature space to help create the experience. This is the nature of the business and this is why it is important to understand how to design space.

Conceptually, the importance of designing space with nature was presented in Chapter 4 with the Man and the Environment Model. It advanced the thesis that the environment influences behavior. Also, it suggests that today people live and recreate in urban environments. It raises the issue of designing urban environments to create experiences that are designed with nature. This theme was echoed in Chapter 16 on designing with nature and the notion of aesthetic component in designing with nature. Although the model in figure 21.1 can be used to define any desired experience such as the world of fantasy created in Disney World, an implied emphasis in this book is designing the experience with nature.

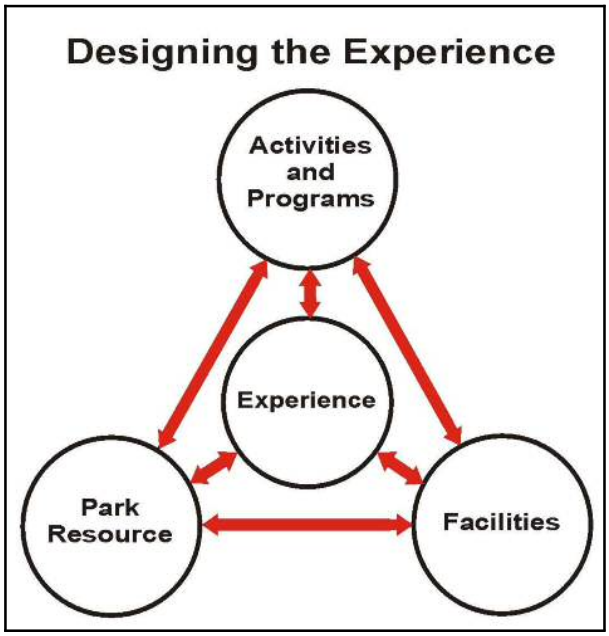

Figure 21.1 – Designing the Experience Model – Caption: This model was presented in the introduction and is again presented here. To create the experience, the programmer needs to design the setting, the facility, and the activities and programs to facilitate the desired experience. – Source: author – [file:\MDL-DesigningTheExperience.jpg]

In terms of designing urban environments as parks, there are essentially four alternatives. They are not mutually exclusive of each other either. People can be transported to the parks and natural areas or the parks can be brought to the people. If parks are brought to people, the question becomes how it is done. The second approach is to create islands of greenery. Third, urban areas can be designed as a park. It is the city as a park. Fourth, urban environments can be designed to simulate or create the same experiences that one would receive in nature.

Although it can be considered, transporting people to the parks is an issue of transport rather than design and it is outside the topical area of this book. Regardless, it is getting people to the parks and the experience. Vacations, field trips, excursions, and leisure time activities are all ways that people travel to outdoor experiences.

Typifying this approach is a student trip to the Everglades (figure 21.1). For many of the students on the trip, this will be their sole experience in wilderness and the backcountry. It is an experience that will last them for their entire lives.

Figure 21.2 – Everglades Trip – Caption: This trip is an example of taking people to the park or in this case the wilderness. For many students on this backcountry trip in the Everglades, this trip will be their primary lifetime experience in wilderness. Everglades, Florida – Source: author – [file:\EV07_ 046.jpg]

The second approach is to bring nature into the urban environment. This typifies the Victorian approach. If people can't go to the wilderness, bring wilderness to where people live. Traditionally, the Victorian approach treats parks as an island, as an inholding, or as the "hole" in the donut within the urban area. Birkenhead or Central parks typify this approach. Review Chapter 5 on the English Landscape Movement. This was the major approach of Repton, Brown, Paxton, Vaux and Olmsted used in the classic parks that they created. In addition to the discussion of this approach in the previous chapters, malls and linear parks are discussed in this chapter as part of this approach. Also, green roofs provide an interesting variation of this theme.

A third approach is to design the city or urban area as a park. It can be considered a variation of the Victorian approach since it has the same objective to increase the quality of life of urban dwellers. The garden community is introduced in this respect and includes the discussion of Greenbelt and Crofton, Maryland.

The fourth approach is to design the urban environment to create a similar experience as would be found in nature. Fallingwaters was introduced in Chapter 16 as a modernistic building that was rooted in organic architecture and in creating an experience similar to one found in nature. Fallingwaters demonstrates that the design can look anything but natural, yet deliver a naturalistic experience. Traditionally, this design approach is the province of architects. Although this approach is not explored in more depth in this chapter, it is still an important consideration, and more can be done in this area of designing with nature. In terms of designing urban environments with nature, this approach may be the most fruitful. It is one thing to bring greenery into the city. It is another to design modern architecture to deliver a similar experience that would be obtained in nature or the wilderness.

Victorian Approach

Philosophically, if you can't take people to nature, bring nature to the people living in urban areas. Building on the garden metaphor, civilization is an island or garden carved out of wilderness. Then many urban parks are metaphorically wilderness carved out of civilization which was originally carved out of wilderness (figure 21.3). Leopold (1966, p.264) suggested that "*Wilderness is the raw material out of which man has hammered the artifact called civilization.*" Stated another way, civilization is carved out of wilderness. Hence, the park is the reintroduction of wilderness into civilization and the author's backyard is no different. The caveat to the concept of introducing wilderness into the author's backyard is the brick lined pond which is a civilizing effect on the wildness in the backyard.

<b>***Traditional Urban Parks*** – Historically, this approach received major emphasis with the beginning of the industrial revolution and the movement of people from the countryside into the cities to work in factories. In discussing the English landscape movement in Chapter 5, the notion of bringing the parks to the people was noted. John Paxton's Birkenhead Park in Liverpool and its conceptual transition to Vaux and Olmsted's Central Park design epitomize this philosophical approach of bringing greenery to the people. It is the classic Victorian approach of solving the problem of bringing parks to the people.

<b>***Green Roofs*** – A potentially overlooked venue for creating parkland in urban areas, green roofs offer the opportunity to significantly increase parkland in urban areas (figure 21.4). Philosophically, it is Victorian in its approach of bring greenery into urban environments. Chapter 16 discussed green roofs in terms of LEED and stormwater management. However, in addition to their environmental contribution, they can provide significant park opportunities for people in urban areas. They can do so without consuming surface land which is at a premium in many urban areas. In addition, they can change the viewscape of the city significantly.

The Victorian approach to integrating parks into urban areas includes venues other than traditional parks. Other venues include malls and shopping malls, linear parks, and designing cities as parks.

Figure 21.3 – Carving Wilderness Out of the Backyard – Caption: This scene is of author's pond in the backyard. It is wilderness (the pond) carved out of civilization (backyard) that was originally carved out of wilderness. However, the brick border on the pond is really a civilizing effect on the wilderness (the pond) which was carved out of civilization (the backyard) which was carved out of wilderness (prior to the backyard). Philosophically, a simple pond in the backyard can create multiple layers of meaning. Frostburg, Maryland – Source: author – [file:\DSC_0035.jpg]

Figure 21.4 – Green Roofs – Caption: A potentially overlooked venue of creating parkland in urban areas, green roofs offer the opportunity to significantly increase parkland opportunities in urban areas. Green roofs can significantly change the urban viewshed also. – Source: author – [file:\GreenRoofs04.jpg]

<b>***The Lands Nobody Wanted*** – Chapter 4 introduced Shands and Healy' (1977) concept that parkland is often created from lands that nobody wants. Although he was documenting much of the timbered over lands that under the Weeks Act of 1911 eventually became Forest Service lands, the principle that parkland is initially the land that nobody wants has been and easily can be applied to urban parks also. It is an opportunity to develop parks. Think of it as recycling. Chapter 4 introduced the Japanese Tea Garden in San Antonio as a quarry used to make Portland cement that found new life as a sunken tea garden.

Another quarry and cement plant with considerable history in San Antonio called Cementville was also converted into a golf course (figure 21.4 and figure 21.5) and shopping mall that incorporated the kiln stacks and other remnants of Cementville (Rybczyk, 2000). The quarry and Cementville were located roughly four miles north of what is now downtown San Antonio, Texas. Cementville was the community that housed the employees who worked in the quarry. The quarry operated for over 100 years and as the city expanded northward, it ceased operation in the 1980s and move to another site. Isolated, the original community had its own recreational facilities including a swimming pool.

Cities and urban areas change and transform themselves. Often the lands that nobody wanted represent opportunities for parkland and to recycle these wastelands into viable and valuable resources.

Figure 21.5 – Alamo Cement Plant and Quarry – Caption: An aerial view of the Alamo Cement Plant which was converted into a championship golf course and shopping mall. The kiln smoke stacks visible in the photo were incorporated into the architecture of the present mall. The quarry became a championship golf course. San Antonio, Texas Source: http://www.trinity.edu/departments/public_relations/ .../AirShot.jpg – [file:\QGC_1320[gd].jpg]

Figure 21.6 – Quarry Golf Course – Caption: The lands that nobody wanted. The remnants of the former quarry are evident in the low lying areas in the foreground. However, closer inspection reveals the large quarry walls in the background and the scope of excavation beneath the homes along the ridge line. The smoke stacks of the kilns in figure 21.5 are off photo on the left side of the picture. San Antonio, Texas – Source: author – [file:\QGC_1320[gd].jpg]

Malls and Shopping Malls

The Victorian approach to bring the parks to people is well documented in Chapter 5 with the English landscape movement. The park concept with its promenade is easily transferred to other urban experiences. The mall approach organized around the central promenade is the center piece of malls of all types.

The shopping mall is a merging of the promenade in a traditional park and main street. The concept of the mall is pedestrian. In once sense, it moves the main-street of the city indoors into a climate controlled environment. The storefronts open to the mall and its pedestrian pace. It is what the planners envision main-street in the downtown should be like.

In a second sense, the mall is like traditional parks except the outdoor park is brought indoors. There are places where people can eat and socialize. It may not be quite the same as spreading the blanket on the grass in a park for a picnic, but it functionally serves a similar purpose. The mall provides other leisure time functions and activities. Walkers with health conditions may walk laps in the early morning. And the mall is often filled with amusement parks or the outdoors brought indoors.

Illustrating the mall as a park concept, two malls are discussed. These are the Gaylord Opryland Hotel and Mall America.

<b>***Gaylord Opryland Hotel*** – The Gaylord Opryland Hotel and Convention Center in Nashville, Tennessee is currently the largest non-casino hotel in the world. The design of the building is interesting on several levels. First, the hotel was not designed and constructed at one time (fig21.7). There are five main areas (Garden Conservatory, Magnolia, Delta, Cascades, and the Convention Center) that have their own uniqueness.

Second, The uniqueness of this facility, is that it is literally a shopping mall within a hotel. Generally, only the promenade of the mall is enclosed. In this case the entire mall is enclosed in the courtyard of the hotel (figure 21.8). It is mall on a grand scale.

Also, the general plan is one that focuses the attention of visitors inward toward the courtyard or center of the facility where there is an indoor mall or park with its promenade within the courtyard of the hotel (figure 21.8). Conceptually, the mall with its promenade is no different from the serendipitous promenade in Birkenhead Park (see figure 5.4), the Philadelphia Zoo (see figure 11.30), Sea World (figure 21.9), or Main Street at Disney World (figure 21.10). The attractions are located alongside the main promenade.

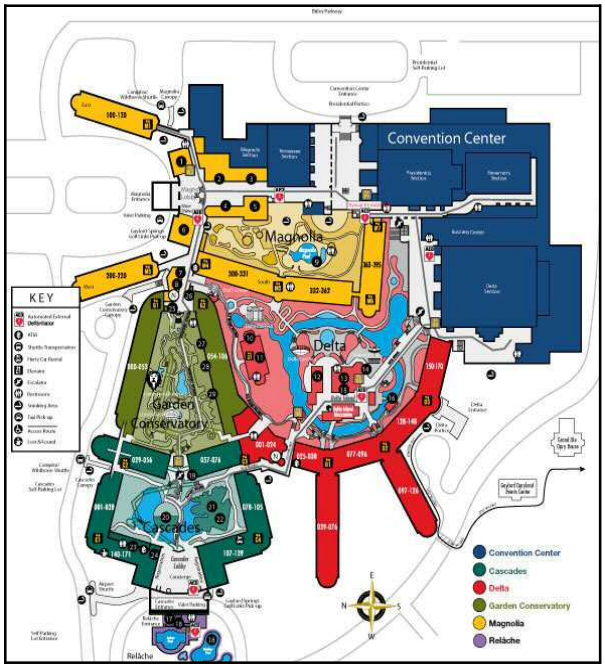

Figure 21.7 – Gaylord Opryland Floor Plan – Caption: The floor plan shows the non-homogenous construction and the five main areas of the facility. Also, is shows the inward focus from the rooms toward the mall area in the courtyard. Nashville, Tennessee – Source: Internet – [file:\GaylordOprylandHotelPromenade.jpg]

Figure 21.8 – Courtyard and Mall Area – Caption: The scene shows the inward focus of the facility and the mall area in the courtyard or atrium area. Nashville, Tennessee – Source: Internet – [file:\OprylandMall004.jpg]

Figure 21.9 – Promenade at Sea World – Caption: Main Street is a large promenade or outdoor mall with shops and restaurant lining the street. It is pedestrian oriented and similar to an indoor mall except it is outdoors. San Antonio, Texas – Source: author – [file:\DS2000-003.jpg]

Third, the landscape is classic Victorian in its approach (figure 21.11). Rather than bringing the park into the city, the park with its waterfalls, trees and picturesque landscapes was brought into the interior courtyard of the hotel. If it weren't for the superstructure of the building in the background, the restaurant overlooking the waterfall scene in figure 21.11, is consistent with the landscaping efforts of Repton, Paxton, or Olmsted.

Figure 21.10 – Main Street at Disney World – Caption: Main Street is a large promenade or outdoor mall with shops and restaurant lining the street. It is pedestrian oriented and similar to an indoor mall except it is outdoors. Orlando, Florida – Source: author – [file:\DS2000-003.jpg]

Figure 21.11 – Restaurant Overlooking Waterfall – Caption: A scenic outdoor vista typical of a wilderness setting indoors in a mall with air conditioning and without bugs. Nashville, Tennessee – Source: Internet – [file:\OprylandMall004.jpg]

<b>***Mall America*** – Not all indoor parks are as naturalistic as the Gaylord Opryland Hotel. Mall America is located in Bloomington, Minnesota which is a suburb of the twin cities (Minneapolis and St Paul). Completed in 1992, it is the second largest mall in the United States. There are over 530 stores in the complex and the mall occupies 4,870,000 square feet or 96.4 acres of space.

In contrast with Gaylord Opryland Hotel, Mall America is more of an amusement park within the indoor space (figure 21.12). The facility includes roller coasters (see figure 21.8), water slides and other attractions. It is a walk in the park complete with flowers and a stone wall (figure 21.13).

Figure 21.12 – The Park at MOA – Caption: Overview picture of park at MOA. Bloomington, Minnesota – Source: other – [file:\parkandfacilities\MallAmerica001.jpg]

Figure 21.13 – A Walk in the Park – Caption: A walk in an indoor park. Bloomington, Minnesota – Source: other – [file:\MallAmerica002.jpg]

Linear Parks

In urban environments, linear parks tend to be associated with river corridors gravitate to rivers and other wetlands located below the 100 year flood plain, and rails-to-trails. Although some of the waterways are water trails, many of these linear parks involving waterways contain extensive bike, jogging, and pedestrian trails. For the sake of discussion, two types of parks are discussed based on infrastructure costs. The first is the River Walk in San Antonio which requires a tremendous infrastructure including flood control measures to support the linear park. Other linear parks such Houston's Buffalo Bayou Trail are designed to be inundated and are much more practical since they require less infrastructure to support them.

<b>***San Antonio River Walk*** – The San Antonio River Walk is probably the most famous of the river walks. It is a linear park in an urban setting. Victorian in its approach, it brings nature into the urban environment. Also, it illustrates water as an attractant of people to a park setting. It is important to consider the infrastructure required maintain the park. There is an extensive infrastructure behind the River Walk to prevent the ravenousness of the floods as well as to augment low flows. The infrastructure behind the River Walk is often missed by most of the public visiting the River Walk. They see the benefits but are unaware of the costs involved in creating and maintaining the benefit. The River Walk concept has served as a model for other river walks and has been emulated elsewhere.

In 1927, the River Walk was the brain child of Robert H. H. Hugman who was enamored with New Orlean's charm after returning from a trip to the city. In 1929, he formally presented his plan and the downtown section of the River Walk was built during the 1930s.

Figure 21.14 – Original Section of the River Walk – Caption: This scene is located at the junction of the branch to the Convention Center. Located below street level, it creates a quaint world of its own with little integration with the downtown community surrounding it. – Source: author – [file:\pwrpt018riverjunction.jpg]

In October 1938 a special referendum was passed that assessed 1.5 cents per 100 dollars valuation for the river walk suggesting that a designated tax does work. As indicted elsewhere, the park fell into disuse until it saw rejuvenation in 1968 with the Hemisfair Worlds Fair. In addition, there was the building of the interstate highway system, increases in disposal income, and tourism. Today, the River Walk infuses over one billion dollars a year into the local economy.

<c>**River Walk Sections.** From a design perspective, there are three distinct sections to the River Walk. The first section is the original downtown section. Built primarily during the 1930s, it is distinctive because of its stonework and its isolation from the city surrounding it (figure 21.14). The River Walk is a narrow corridor located beneath the city. The scene in figure 21.14 is located at the junction of the River Walk which goes to the Convention Center. It is easy to see from this picture how people at street level can easily miss the River Walk. In one sense, the isolation from the busy streets above it makes the River Walk quaint and unique. From a design perspective, this quaintness is offset from a lack or integration with the immediate city surrounding it and may be considered a design weakness.

Figure 21.15 – New River Walk Section – Caption: This section is below the flood tunnel intakes at East Josephine Street. Notice how the river landscaping is more expansive than the downtown section and how it is integrated with its surrounding community. – Source: author – [file:\SA331.jpg]

The stretch below the flood intake at East Josephine Street was completed between 2005 and 2012 (figure 21.15). This stretch is much more open and integrated with its surrounding community. Juxtapose the two settings (figure 21.14 versus figure 21.15). They create very different experiences. They show how different design approaches can lead to very different experiences even though both designs can be considered good designs.

The third stretch is below the downtown section and above the outflow of the flood control tunnel beneath the city (figure 21.16). It is a typical channelized flood control channel with a bike trail paralleling it. Although it looks like levees bordering the side of the river, it is really a channelized river bank in it normal banks. Utilities often seek to use the parkland right-of-ways for their utilities. The

sanitation sewer system finds the river ideal since rivers are also the low point in the drainage system. Note the manhole cover of the sewer system in the left portion of the photo.

<c>**Flood Control.** It is axiomatic that rivers flood. The San Antonio River is no different from any other river. Although the low flows during summer can reach an almost septic 15 cfs (cubic feet per second), the River Walk with its extensive and costly development along the river can be totally inundated. To provide perspective, the flood waters of the 1921 flood were about two feet above the bridges pictured in figure 21.14. The development along the river requires extensive flood control measures to protect it from floods. First, the river through the downtown creates an oxbow. A bypass channel was dug which allowed the water to bypass the downtown portion of the oxbow. Also, floodgates were installed on the oxbow section to protect the downtown portion.

Flood control didn't end there. Completed in 1997, a reverse siphon tunnel 24 feet in diameter was bored 150 feet below the city 16,082 feet long (three miles) which could carry one half of the worst known flood waters (figure 21.17 and figure 21.18). Not only did the design address flood control, it addressed low flows. Low flows in the San Antonio River can be a septic 15 cfs. Water stored in the reverse siphon can be recirculated and pumped back to the beginning of the system to maintain a 50 cfs flow in the system. The entire River Walk itself is no different than one of the many recirculating fountains found along the River Walk.

<c>**Maintenance.** The original River Walk was not designed with major maintenance in mind (figure 21.19 and figure 21.20). Maintenance along the River Walk is problematic. The downtown portion of the River Walk is reachable by only boat and maintenance is either performed from boats or the river is drained if access by heavy equipment is necessary. In 2006, it cost the Recreation and Parks Department $350,000 per year. At that time, they were planning to subcontract this function out in the future.

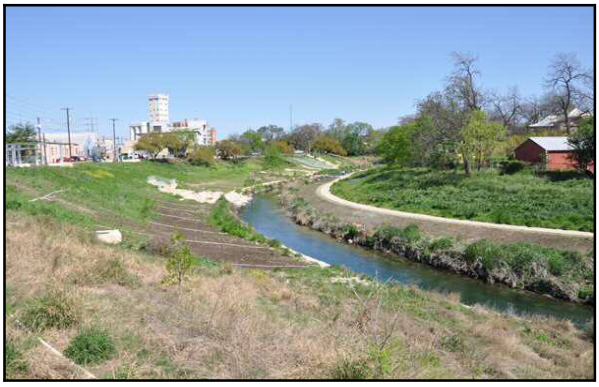

Figure 21.16 – Open Space Section on River Walk – Caption: This stretch is between the downtown section and the outflow of the flood control tunnel beneath the city. Although it looks like levees bordering the side of the river, it is really a channelized river bank in it normal banks. Note the manhole cover of the sanitation sewer system on the left side of the picture. – Source: author – [file:\SA304.jpg]

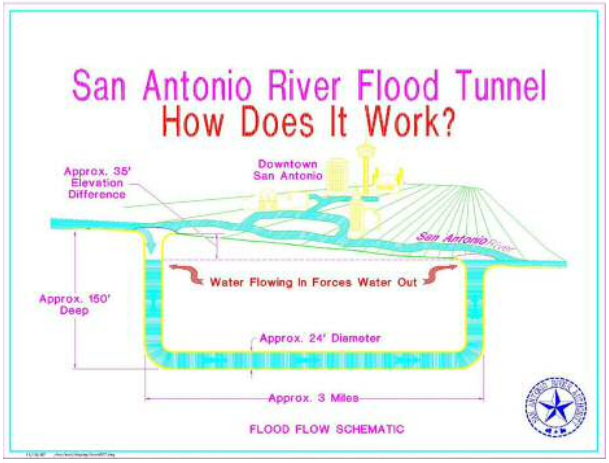

Figure 21.17 – San Antonio River Flood Control Tunnel – Caption: Rivers flooding is axiomatic. To protect the downtown portion of the River Walk, 24 foot tunnel was bored beneath the city to divert one-half of the worst known flood – Source: San Antonio River Authority – [file:\SA304.jpg]

Figure 21.18 – Out-take of San Antonio Flood Control Tunnel – Caption: The out-take of the tunnel underneath San Antonio. – Source: author – [file:\SA295.jpg]

Figure 21.19 – Gate #5 beneath East Nueva Street – Caption: The maintenance area in figure 21.18 is located to the left of the dam. The gates can be raised in times of flood, or the gates can be raised and the downtown section drained to allow heavy equipment access to the area. The riverbed becomes the access road for maintenance. – Source: author – [file:\SA345.jpg]

Figure 21.20 – Maintenance on the River Walk – Caption: A maintenance barge in the maintenance facility next to Gate #5 beneath East Nueva Street. – Source: author – [file:\RiverWalkMaintenance.jpg]

The River Walk concept has served as a model for similar river walks in other communities and it has been emulated elsewhere. The infrastructure behind the River Walk is often missed by most of the public visiting the River Walk. They see the benefits but are unaware of the costs involved in creating and maintaining the benefit. In a sense, the $350,000 in maintenance costs are more than offset by over one billion dollars of tourism revenue generated each year.

<b>***Houston's Buffalo Bayou Trail*** – Houston's Buffalo Bayou Trail is a linear park in downtown Houston that is designed to be flooded (figure 21.21 and figure 21.22). In contrast with the San Antonio River Walk, it requires less infrastructure and it is designed to be periodically inundated. For example, everything in figure 21.21 except the highway bridges in the background are designed to be flooded. The park bench in the picture is bolted to a concrete pad. Although it reduces theft, it prevents the park bench from being washed away during floods.

The lampposts lining the trail are designed to be inundated (see figure 21.21). They are constructed using galvanized steel. In addition, they utilize two bulbs for illumination. If one bulb burns out, maintenance

Figure 21.21 – Buffalo Bayou Trail – Caption: Everything in this photo below the highway bridges is designed to be flooded. This includes the lampposts lining the trail. They utilize two bulbs. If one bulb burns out, maintenance knows it is time to replace the bulb, but maintenance is not in a hurry to do so, because there is still light. Also, the park bench is bolted to a concrete base to prevent it from being washed away during high waters. – Source: author – [file:\BBT1071.jpg]

knows that it is time to replace the bulb. However, they have ample time to do so because the lamppost is still providing light. Also, the electrical panels and transformers are placed above the 100 year flood plain.

Pretty much everything in the flood plain is designed to be inundated. Even the pedestrian bridges across the bayou are designed to be flooded (figure 21.22). There is extensive use of galvanized steel in their construction. Again, everything in the photo except the highway bridges is designed to be inundated. This includes the bridge, the trail, and the vegetation. Native species tolerant to being temporarily inundated were planted on the river banks.

Figure 21.22 – Buffalo Bayou Trail – Caption: Everything in this picture except the highway bridges are designed to be periodically inundated. This includes the trail in the far left of the photo, the bridge across the bayou, and the vegetation lining the river. Native species tolerant to being inundated were planted on the river banks. – Source: author – [file:\BBT1059.jpg]

The trail is designed to support traditional recreational pursuits such as kayaking, jogging, biking, and walking (figure 21.23). Busy streets line both sides of the trail and serve as barriers to communities using the Buffalo Bayou Trail. For this reason overpasses and bridges become important access points to the park and need to be considered when designing linear trails. Consistent with Olmsted's design in Central Park, they are in the process of building pedestrian walkways. This helps to avoid the conflicts due to speed differentials between pedestrians and bikers.

Figure 21.23 – Kayakers – Caption: Two kayakers are putting in on the Buffalo Bayou Water Trail for a paddle. – Source: author – [file:\BBT1107.jpg]

<b>***Rails to trails*** – In an urban environment, rails-to-trails are linear greenways that are like the linear intrusions into the urban environment (figure 21.24). The High Line Park in Manhattan typifies the green intrusion of a rail-to-trail into the urban environment. It is a linear trail. Also, it is an example of the classic Victorian approach. This is neither good nor bad, but an example of bringing the park to the people in an urban environment.

Less dramatic than the High Line Park in Manhattan is most of the other rails-to-trails in urban environments (figure 21.25). The W&OD rails-to-trail outside of Washington, D.C. typifies the typical greenway provided by the rails-to-trail. Unfortunately, parkland often serves as an inexpensive corridor for utilities including sanitation lines, and in this case high voltage transmission lines. Also, the greenway is usually limited to the right-of-way of the abandoned railroad. Regardless, it provides a recreational opportunity for people and it is a greenway within the urban environment.

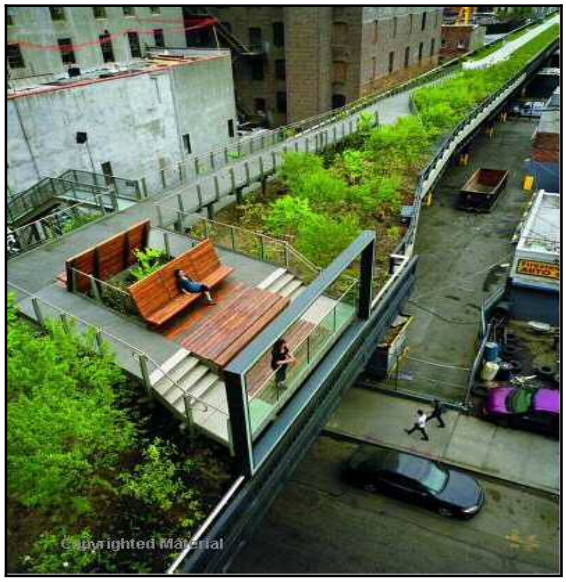

Figure 21.24 – High Line Park – Caption: High Line Park, Twenty-sixth Street viewing spur. The elevated public park constructed on abandoned railway in Manhattan. – Source: (Venhaus, 2002, p.3) – [file:\HighLinePark-Manhattan.jpg]

Figure 21.25 – W&OD – Caption: The W&OD provides valuable parkland opportunities. As with a lot of parkland, it also provides a utility corridor for power lines. – Source: author – [file:\W&OD005.jpg]

Designing Cities as Parks

Cities are designed for people. Traditionally, their design is heavily influenced by commerce and traditional industrial needs, cities are searching for new identities in a post-industrial society. In this respect, it may be time to revisit the concept of designing cities as parks.

Chapter 4 explored the definition of a park. One definition defined a park as *anyplace where people play*. It is not much of a conceptual leap to consider designing cities in a post-industrial era as places where people play. From the perspective of this book, the issue is one of defining space to create the experience or in this case cities to create an experience. This section raises possibilities rather than providing definitive answers. With the Greenbelt example, it suggests that communities can be designed to create an experience. And it does show how recreational facilities can become the center pieces of communities with Crofton, Maryland.

<b> ***Garden City Design*** - The Garden City design is both utopian and Victorian. Evenezer Howard is credited for developing the concept that brings the country into the city. He was born in 1850 in London, England. His concept of the garden city was influenced by Edward Bellamy's utopian work *Looking Backwards* published in 1888.

In 1903, he built his first garden city, Letchworth, located outside of London (figure 21.26). The town layout clearly demonstrates the greenbelt concept. Consistent with the traditional Roman city, the greenbelt served as the encircling wall around the town that limited development to the protective wall or in this case the greenbelt. Since development could be predicted, the size and amount of utilities and

other services are easily predictable also.

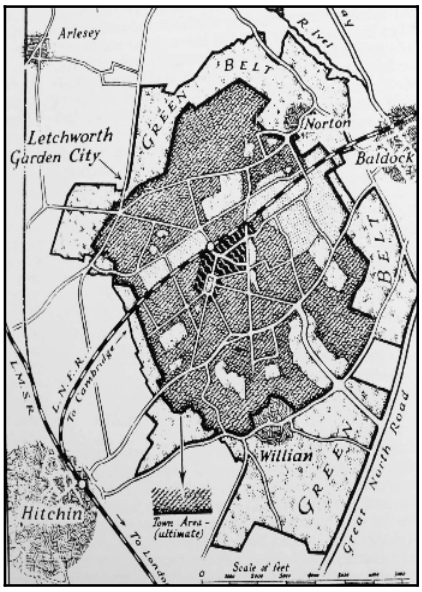

Figure 21.26 – Design of a garden city – Caption: Original layout of garden city. Note, that it is surrounded by a greenbelt. – Source: Library of Congress; Williamson, M., (1970, p.26) – [file:\greenbelt\gb-garden_city-nikon.jpg]

The garden city concept migrated from England to the U.S. in the 1920s. One of the first garden communities built was Radburn, New Jersey in 1929. Although more were planned, three planned garden communities were actually constructed during the Roosevelt administration. These were Greenbelt, Maryland, Greenhills, near Cincinnati, Ohio, and Greendale, near Milwaukee, Wisconson. Greenbelt, Maryland was considered the most successful of the communities. Many of the design features found in the garden city and Greenbelt were incorporated in the design of future planned communities such as Crofton.

<c>**Greenbelt, Maryland** – Greenbelt, Maryland is an example of designing a community to create an experience. In describing the development of Greenbelt, Fogle (1970, p.23) indicated that "*the greenbelt movement had its origins in the sprawling chaotic industrial cities of the nineteenth century*." An underlying theme regarding the development of Greenbelt and other garden cities is the utopian concept of improving the quality of life of urban dwellers. Just as the recreation movement was in part a reaction to the evils of the industrial movement, the greenbelt concept is a reaction to the same evils and an attempt to improve living conditions.

From a recreation perspective, the garden community and Greenbelt illustrate three points. First, the amenities for the community are located in the center of the town. These include stores and recreational services (figure 21.27). Their central location suggests that their overall importance is central to the community.

Second, the importance of recreation was recognized regarding its contribution to the quality of life and recreation and park services. Recreation was considered as part of the social commentary of the time and it was used as a major selling point for Greenbelt (figure 21.28). Recreation and park services were

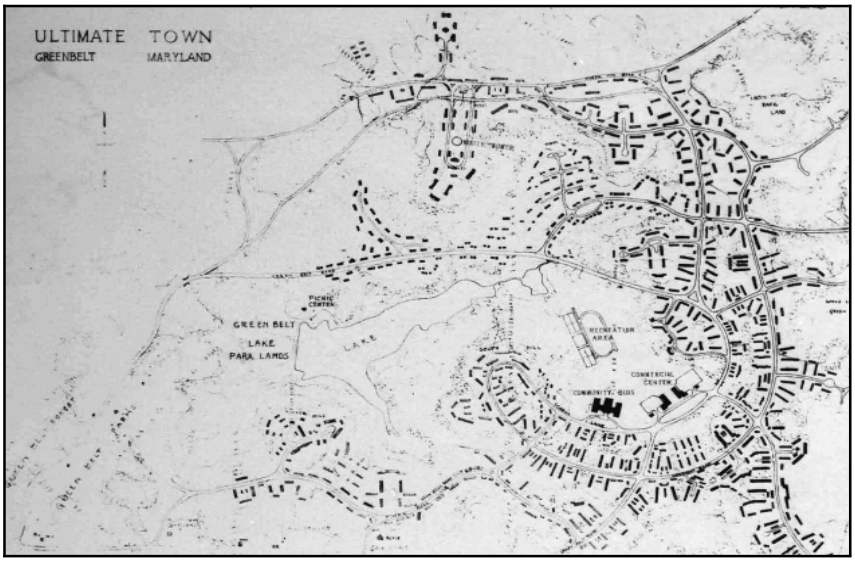

Figure 21.27 – Map - Greenbelt – Caption: – Indicating their importance to the community, recreation and commercial services are found in the center of the crescent layout of the Greenbelt. The greenbelt of woods surrounds the community and limits development. – Source: Library of Congress; Williamson, M., (1970, p.41) – [file:\gb-map-nikon[58].jpg]

Figure 21.28 – Poster – Caption: Recreation was an important component in this planned community. Making a social statement, the utopian goal of the greenbelt communities was to improve quality of life for families. The choice was between the playground in Greenbelt or the "Gutter." – Source: Library of Congress; Williamson (1970, p.50) – [file:\gb-gutter.JPG]

Figure 21.29 – Swimming Pool – Caption: Recreation was an important component in this planned community. The swimming pool, community center, and athletic fields helped create a wholesome environment which they considered as an alternative to the slums (see figure 21.26) – Source: Author – [file:\DSC_0014.JPG]

planned for and became an important part of the community services.

Recreational facilities included the community center, swimming pool, athletic fields, tennis courts, and cinema among its recreational facilities (figure 21.29). Recreation was both part of a sales campaign to sell houses, and it was also part of the utopian concept that focused on increasing the quality of life of its residents (see figure 21.28).

Third, the community was designed to create an experience. In terms of the thesis of this book, it would be a stretch to claim that Greenbelt was attempting to create a design with nature. However, it is worth noting that there was some amenities such as large windows which allowed for fresh air in the homes. There was a lake and trails as well as a forested greenbelt area surrounding the community (figure 21.30). Regardless, what is critical for this discussion was that the community was designed to create an experience for it residents, and in this respect, Greenbelt was reasonably successful. In part, the experience was recreation oriented. It demonstrates the principle that communities can be designed to facilitate an experience. In addition, many of its design features were incorporated in the design of future planned communities.

Figure 21.30 – Trail around the lake – Caption: Trail for walking and jogging around the lake – Source: Author – [file:\DSC_0010.JPG]

<c>**Crofton, Maryland** – The garden city concept easily morphed into the planned community anchored around a recreational facility. Often the recreational amenity is a golf course, lake, or both. It typifies the current concept of designing residential communities as a park.

Located roughly equal distance from Washington, Baltimore, and Annapolis, Crofton, Maryland was developed in 1963 by the Crawford Corporation at a similar time as Reston, Virginia and Columbia, Maryland. The community is anchored around a golf course (figure 21.31). In contrast to the athletic fields and community center in Greenbelt, the golf course and golf club are the amenity located in the center of Crofton. It reflects a changing times.

From a planning perspective the golf course becomes the equivalent of the greenbelts (figure 21.32). The golf course provides an aesthetic quality for the houses bordering the golf course. In addition, the golf course creates a park for the residents of the community where they can walk and jog. Looping around the community is the Crofton Parkway. In the tradition of Greenbelt, the community was designed to be self-sufficient with schools, town hall, and shopping area. Although the original shopping mall is still present, it has been surpassed by the strip malls located on Rt.3 which borders the community. Regardless, the original concept of designing a community as a park remains intact.

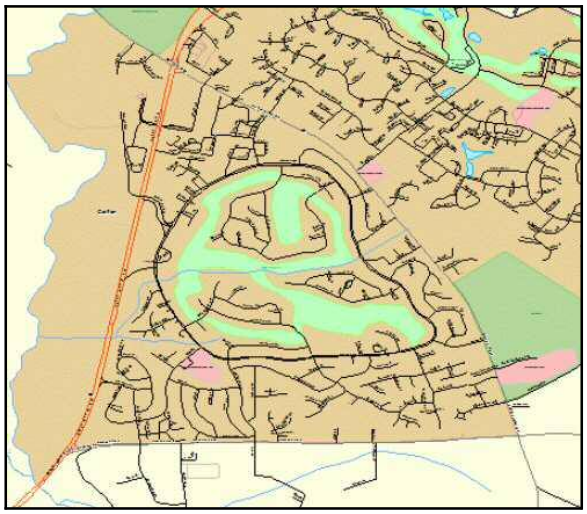

Figure 21.31 – Crofton Map – Caption: The map of Crofton, Maryland reveals two distinct design features. The original community was bordered by three roads (Rt.3, Davidsonville Road, and Defense Highway). Second, the community was designed around the golf course to maximize its exposure to the golf course. Note: The development in the upper right of the diagram is new development. Crofton, Maryland – Source: Internet – [file:\crofton-md-2420875]

Figure 21.32 – Crofton Golf Course – Caption: Crofton is a planned community built around the leisure time activity of a golf course. In contrast to the traditional greenbelt, this greenbelt is turned inward with the golf course providing parkland bordering large number of houses. In summer, the trees in the common area separating the houses and the golf course will be foliated and will enhance the park atmosphere.

Summary:

Often recreation and park professionals are in the unique position of being in charge of vast amounts of parkland. Some of this parkland is in urban environments where people both work and recreate for most of their lives. They have the ability to design the urban parks and the experiences they provide for people living in urban areas. They are recreational engineers of an experience.

The Victorian approach was to bring the outdoors to the urban areas using parks. It is the traditional approach. Many of the urban parks utilize this approach. Birkenhead Park in Liverpool, Central Park in New York City, Fairmount Park in Philadelphia, and Prospect Park in Brooklyn are several examples typifying this approach. They are islands or inholdings of greenery in urban spaces. Linear parks including the River Walk in San Antonio and rails-to-trails can be included in this approach also. Green

roofs provide an interesting innovation to this approach that can transform the viewshed within cities.

A second approach is to design urban spaces as parks. The Garden City design utilized open space greenbelts around the community to provide open space resources. Often, communities have used recreational facilities and opportunities as the center pieces of their communities. This brings the discussion full circle. The environment influences the behavior of man and man can design the environment that produces the experience. Recreation and park professionals are often responsible for managing a significant portion of the space that creates the experience. As they work with the technicians who implement the design of the park space, they need to have a vision of the experience that the design of space is delivering.

To paraphrase a quote from Aldo Leopold, recreational engineering is more than just bringing greenery into the cities. It involves building receptivity in the minds of those people living there. Designing urban parks and the experiences that they provide is one important component in building that receptivity. However, to not build that receptivity will eventually lead to qualitative bankruptcy. As recreational engineers, it is important for recreation and park professionals to understand how to design space to create the desired experience. This book introduces many techniques to do this. However, it is equally important for recreational engineers to understand why it is important to bring greenery in urban environments. It drives the techniques used in design. And, it drives the nature experience delivered.

References:

[Notes: FA10-Greenbelt.ppt; FA02-Historic Preservation 200311.ppt; FA10-river walk condensed 200906.ppt]

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