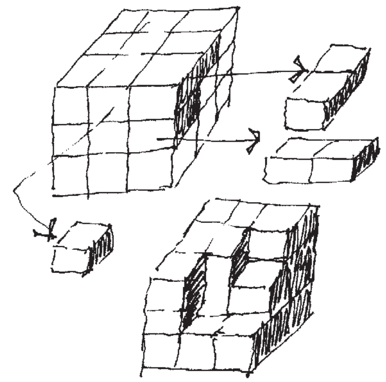
# Chapter 9 A design…the process…

*No place is a tabula rasa, without history; any intervention by any designer is part of a series of interventions, of marks already inscribed or yet to be inscribed on the site. Every design is subject to the actions of dynamic and unpredictable natural and cultural forces — the continual transformations produced by growth and decay, for example, or by changing patterns of social use and habitation.*
John Beardsley (Beardsley 2000, 62)

*The tasks of dealing with run-down industrial areas…require a new method… (a) new vision that accepts their physical qualities but also their destroyed nature and topography. This new vision should not be one of "re-cultivation," for this approach negates the qualities that they currently possess and destroys them for a second time. The vision of a new landscape should seek its justification exactly within the existing forms of demolition and exhaustion. We have to ask ourselves which spaces from among the dilapidated and redundant places we want to use and occupy, and which of those have to be changed by the mark of a cultural intervention or the remediation of historical contamination.*
Peter Latz (Latz 2001, 158-159)

The McMillan site is a landscape of removal. Reading the surface geometry, its formality, is facilitated by the absence of existing plant material and the site's flat topography. A thesis committee member once aptly compared the filter plain to an artificial skin, stretched tight across the surface and pinned down by two rows of stakes. Once that skin was removed, the sub-surface machine with its industrial repetitiveness remained to be dismantled, its components isolated. What should be taken away and what should be added? The powerful grid would be a useful guide. But where? And why? How could the site's powerful spaces be transformed into new spatial relationships that served a contemporary program? There were the existing horizontal layers, including the Olmsted landscape (or memories thereof), the filter fields with their manhole grids, and the service courts, the twenty acres of filter cells, the earth below, the surrounding institutional and residential neighborhoods. There were the existing vertical elements, including the memory of Olmsted's trees, the existing visually powerful sand bin towers, the filter cell columns and the cell walls, the verticality conveyed by the manholes. There was the site's location at the intersection of busy north-south and east-west corridors and there were the views to important external features. It was time to take out the scalpel.

Fig. 9.4 shows the general evolution of the design intervention. One existing condition of the Site was kept in mind throughout the process: the fact that there were only four "Level 3" interior filter cells that remained sufficiently stable to be used for



*9.1 Service Court*

*9.2 View of Washington Monument*

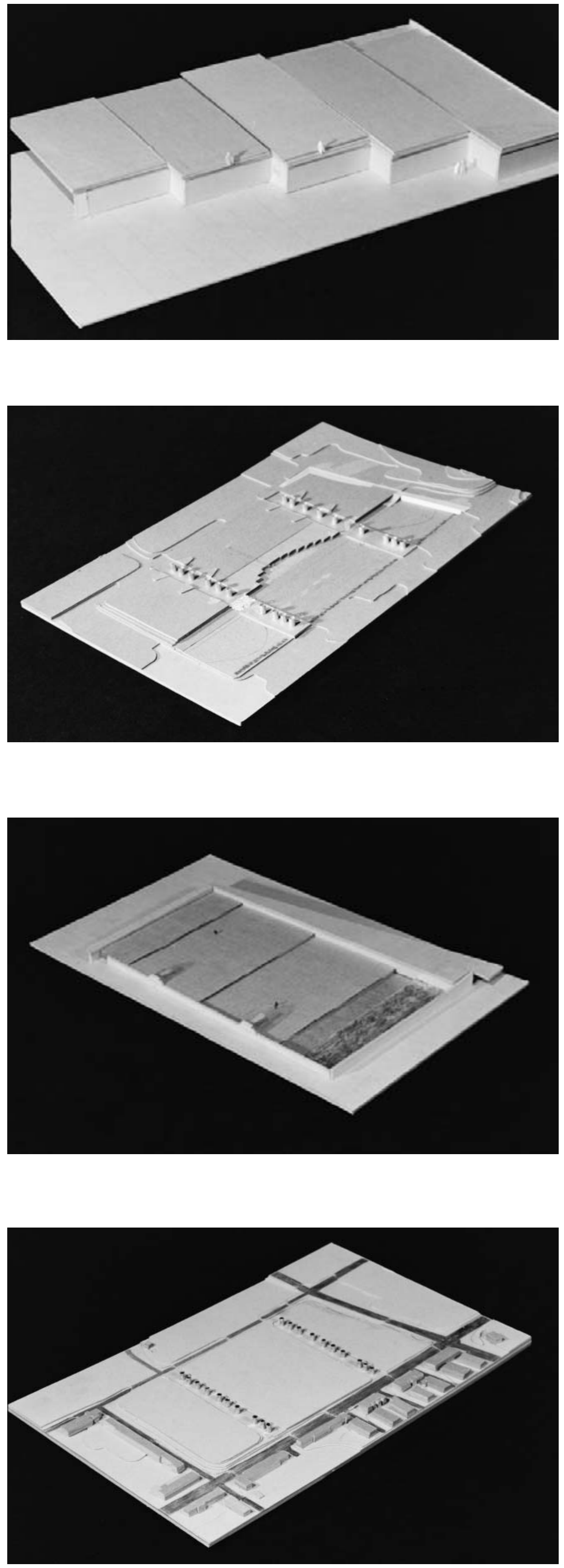
historical record. “Level 1” cells could not be salvaged, “Level 2” cells remained problematic. A decision was made early on that some if not all of the interior cells would be “preserved” with the remaining cells removed, filled or reconstructed.

The diagram showing the three cell condition levels also initially suggested an approximate line, running from the northeast corner to the southwest one. Use of that imaginary line for a major incision seemed reinforced by its coincidence with a line of sight from the northeast corner to the distant Washington monument. The thought of converting some of the filter cells, hinting of catacombs, as publicly accessible space, to be used for a range of possible uses from small restaurants and/or retail shops to a library, also influenced early design explorations. Earlier visitors to the site had conjured up similar images, without worries of costs, structural requirements, safety factors, etc. Weeks were spent exploring ways to use enclosed space in the western half of the site for everything from a museum and research center to classrooms, community meeting rooms and art space, to an underground swimming pool or aquatorium. The only consistent feature was retention of the two service courts with their sand bin towers and regulator houses.

After several months, the process remained somewhat stalled. Some tentative decisions were made as to general features to include in a final design: a broad north-south promenade cutting across the site; use of the service courts for farmers and crafts markets; open spaces for active recreation and cultural activity and others for private, family and small group relaxation and privacy; a range of educational experiences; unobtrusive parking and small cafes/food concessions and shops; and enclosed program space the use(s) of which could be determined later.

Throughout this process, the existing grids of the site — particularly the grid of the columns — guided the design’s evolution. As new spaces for new uses were sought, the grids assisted a desire to retain the site’s history, the machine with its twenty cells. The site began to be seen as a palimpsest that could enhance not only a better understanding of the site’s past and current layers but also provide a vision of the future layer. The existing grids were three-dimensional, the columns standing at tidy attention when the building’s roof was peeled back, the atmosphere and light passing through the manholes extending that grid skyward. As study models were repeatedly built and rebuilt and endless rolls of trace exhausted, the need to break the rationality of the grid in some important way, to introduce an element of tension, to highlight in a new way the contrast between the site’s past and future was recognized. The process was too timid. Un grand geste was needed.

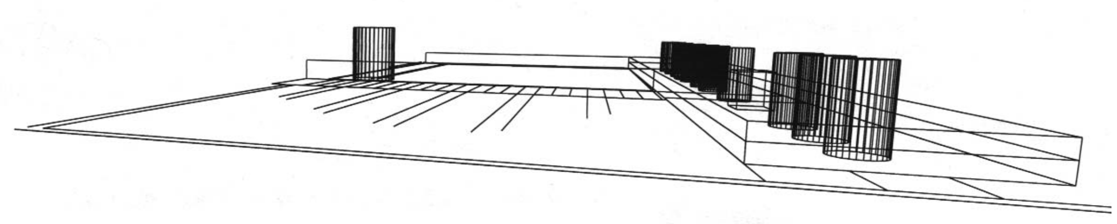
The reservoir across First Street to the west, so integral to the site’s history, Olmsted’s original landscape having encompassed both, provided the answer. Because of September 11, 2001, the connection between site and reservoir would undoubtedly remain broken, physically, for a long time as fears for the safety of Washington’s drinking supply were heightened. But spiritually, the connection must remain. Although access to the reservoir remained cut, the reservoir could come to the site. The reservoir’s edge was superimposed across the site, interacting with the north-south promenade. The palimpsest. The gesture.



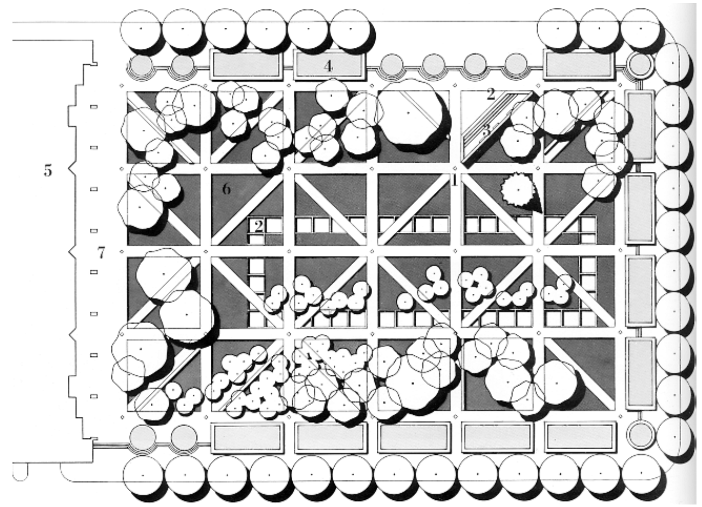
*9.3 Study models*

It was time to give detailed attention to each of the spaces that had been created. The site's landscape had been opened up, with substantial portions of its original filter cells removed. Even where that had occurred, however, memories of the strong grid pattern formed by the filter cell columns lingered and would be reflected in new landscape features. The palimpsest. The two major horizontal planes were 14 feet apart but vertical elements such as the sand bin towers were already pushing the landscape higher. There were now the north-south features of the promenade and superimposed reservoir edge, a powerful organizing reference. Finally, internal circulation and purification of water would be replaced by stormwater management highlighted by restored groundwater recharge and general eastern surface water drainage through most of the site.

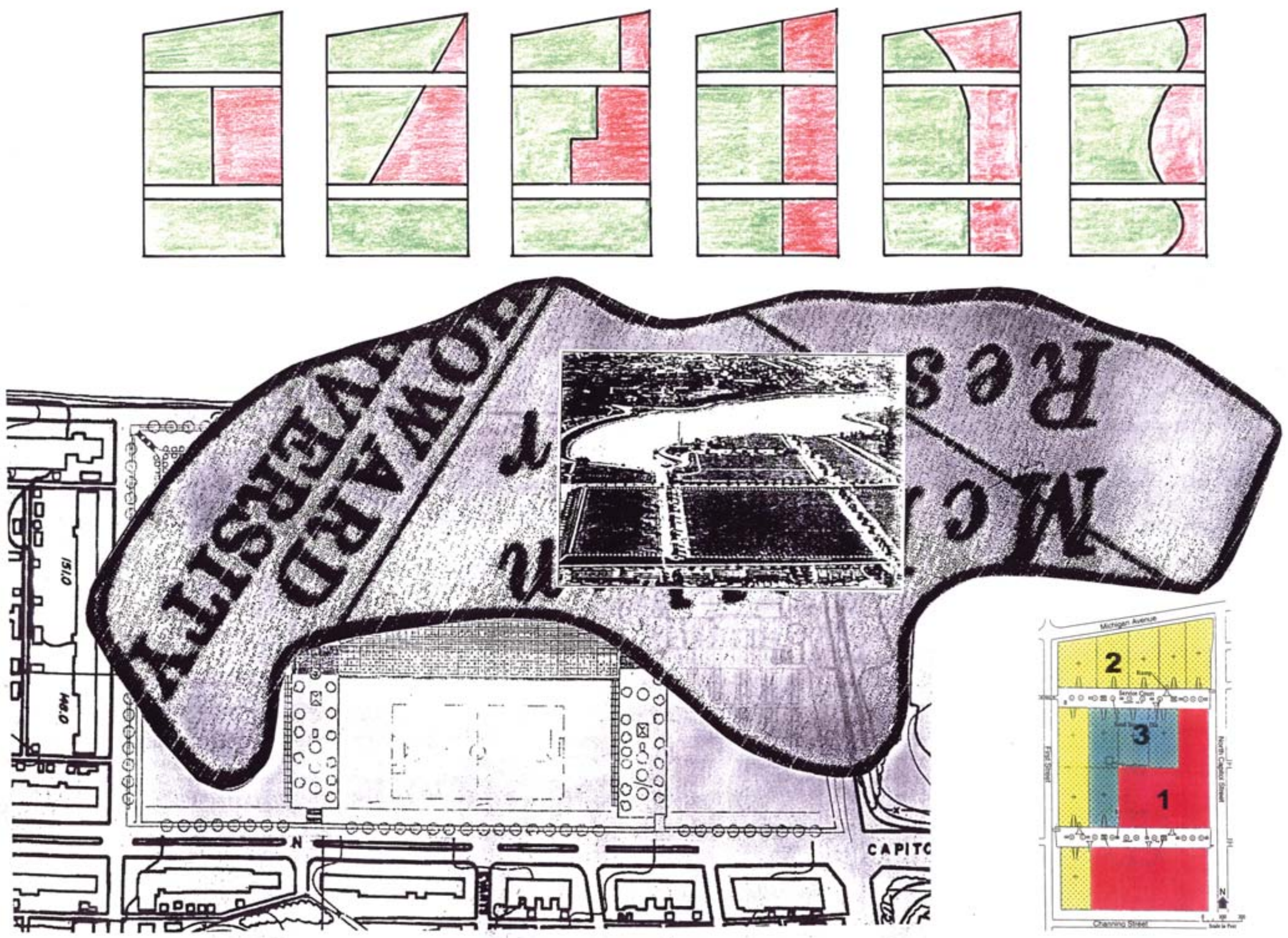
The design process accelerated…



9.5 CAD analysis



9.6 Study of the grid: Burnett Park, Ft. Worth



9.4 The process: evolution and solution

9.7 The Resevoir as viewed from South west corner of the site

# Chapter 10 A design...the parts...

*One way (to create a sense of pride through design) is to provide some diversity within the landscape. People don't all enjoy the same thing and the design must recognize the diversity of needs and desires. This means creating different types and feelings of spaces — not so different that they don't interconnect — but different qualities within an overall context. The site needs to have places where one can find sun or find shade; places of rest; places of excitement; places of intimate conversations and (of) large gatherings.*
Kathryn Gustafson (InSight 2000, 4)

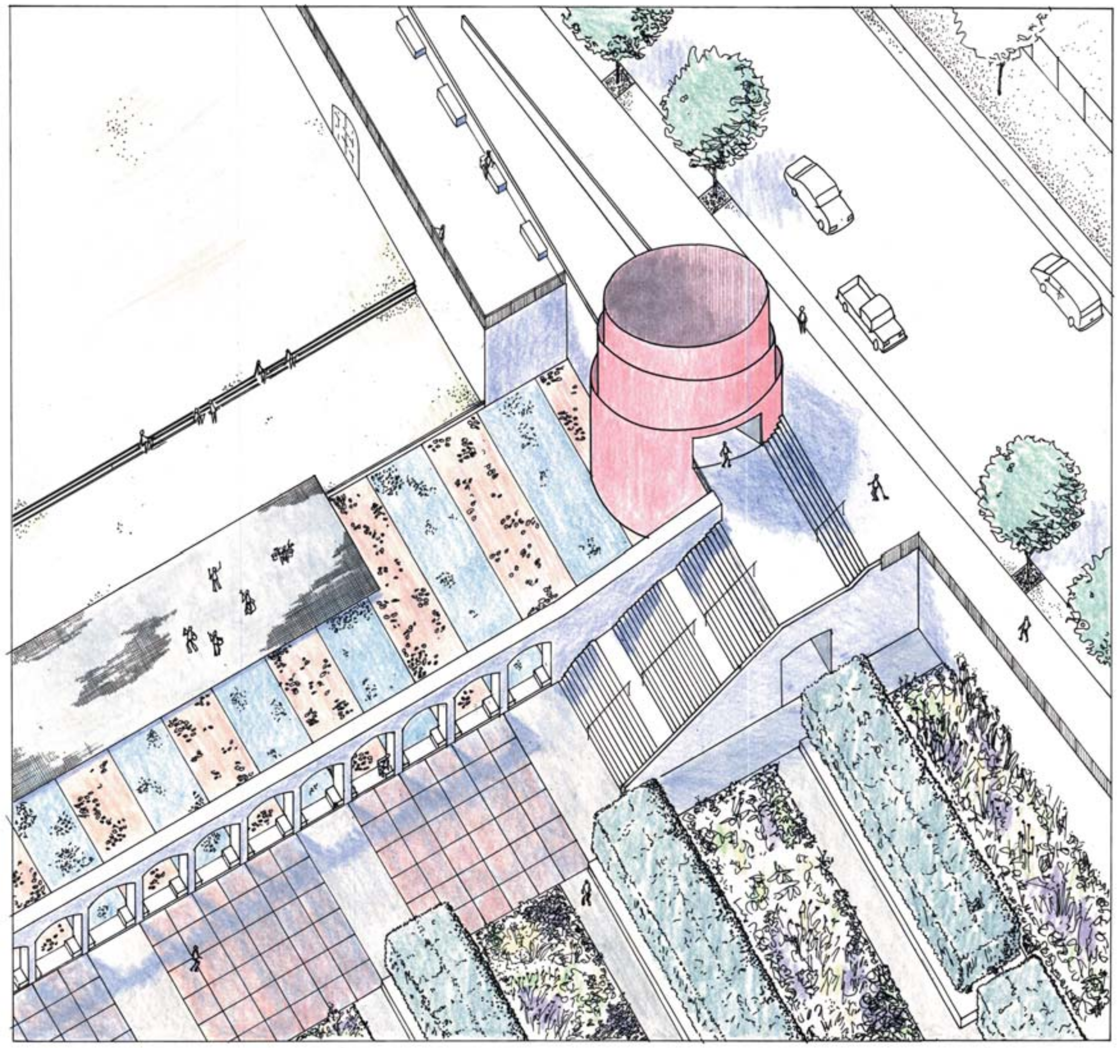
*Perhaps the greatest lesson of Bryant Park is that it is never "done," "finished," "complete." It is continually being modified, improved, adjusted, always fluid, never frozen. This is the defining quality of an urbanistically vibrant park.*
Roberta Brandes Gratz (Gratz 1998, 41)

The McMillan site is large and the redesign of it is complex. To discuss the new design, the new park is divided into the following parts to facilitate description:

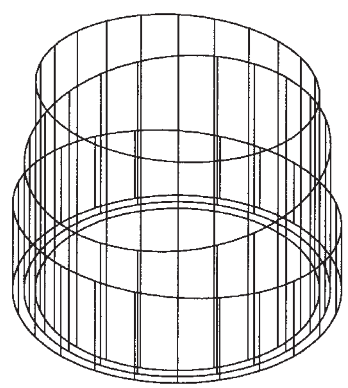
North-south promenade (and superimposed reservoir edge)
North and south service courts
Central plaza
Central play and large public event area
North garden
South garden
Northwest lawn area
Filter fields/program space/parking
Site perimeter

The parts are interrelated, responding to the full range of individual and collective visitor needs and desires while providing not only physical accessibility but, as Kathryn Gustafson has talked of the need for psychological accessibility, a feeling that one can cross the site from one end to the other, that one can visually take in the site from a variety of viewing platforms and perches (InSight, 1-2). The two service courts and the north-south promenade frame the site's primary spaces and, together with the sand bin towers, the elevated central roof and two large steel structures, provide strong visual reference points. The grids, visible and imagined, further tie together the site and its separate components.

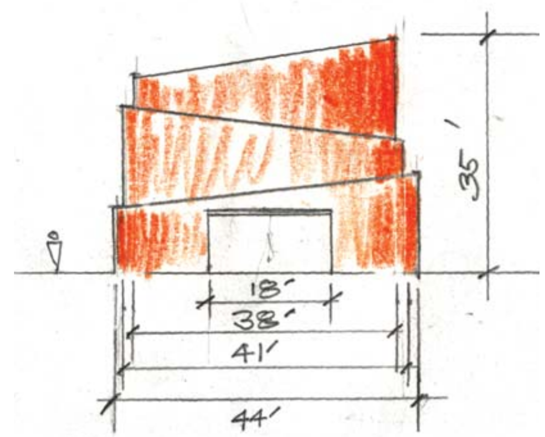
It should perhaps be noted here that all principal spaces detailed below meet ADA standards for accessibility.



*10.1 Axon view of North end of promenade*



*10.2 Wire diagram of steel structure*




*10.3 Sketch of steel structure*

**North-south promenade:** Moving toward the south, the promenade is a series of linked, expanding spaces. It extends from the principal Michigan Avenue park entrance on the north to a water wall marking the southern end. Off center, the promenade provides a zone along which the different design strategies visibly come together, where a transition between the old and the new occurs and a dialectical relationship between the two is implied, a relationship in which the old continues to play an important role.

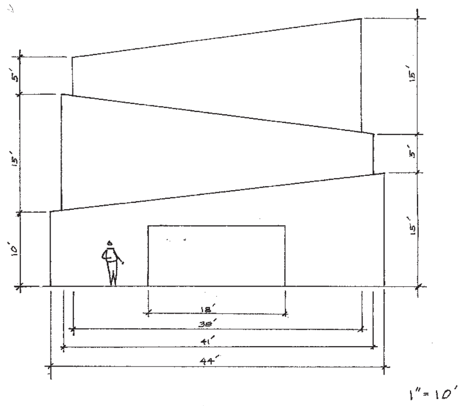
Starting at a widened Michigan Avenue sidewalk, it descends 19 feet via 30-foot wide steps, and then continues south at a width of 40 feet. The promenade is bounded on the right by a 14-foot high concrete wall. Cut into the wall are 12-foot high arches with columns at 14 feet on center, mimicking the original filter cell arches and columns. There are small seats in each open archway where visitors can relax and enjoy the various views. The promenade paving is interrupted every 42 feet by a 14-foot wide band of compacted crushed concrete, recycled from the site, and aligned with every fourth arch on one side and an aerial hedge on the other (see North Garden). From the southernmost open arch, a ramp extends to the northwest lawn. Portable "bridges" are available to provide additional accessibility to the northwest lawn from other open arches during concerts, film shows, or other lawn events.

The promenade continues at its 40-ft width through the northern service court, a section of the court having been removed to accommodate the walkway, public restroom facilities and a relocated sand bin tower, reconstructed in glass brick, which contains a spiral staircase to allow pedestrian movement between the walkway and service court above.

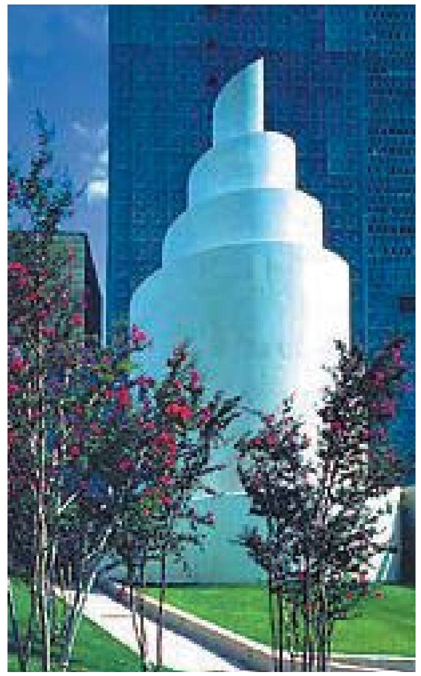
The promenade widens to 60 feet upon entering the central plaza area. Merging with the additional plaza space bordered by small cafes, shops and/or exhibition spaces, it continues to, and through, the southern service court. A section of that court, this time 60 feet wide, has likewise been removed to accommodate the walkway, public restrooms, and a second relocated sand bin tower also made of glass brick with a spiral staircase inside.

Continuing south from the southern service court, the promenade widens one last time to 80 feet. It is again bounded to the west by a 14-foot high concrete wall. Ghosted images of the original filter cell arches and columns are sandblasted in the wall (12-foot high, columns at 14-feet on center). Rather than being sandblasted, however, every fourth arch is indented 30 inches with small inset benches where park users can sit. In addition, one arch opens to a passageway to a spiral stairway within a large steel structure described below. Traversing the walkway at 56-foot intervals are five grated runnels, each one foot wide, through which rainwater runoff from the upper filter field flows into the South Garden.

The promenade ends at a 20-foot high water wall made of polished black granite. A 6-foot wide shallow pool of water lies at the water wall's base, extending the width of the walkway, and into which water flows from the top of the wall. The wall

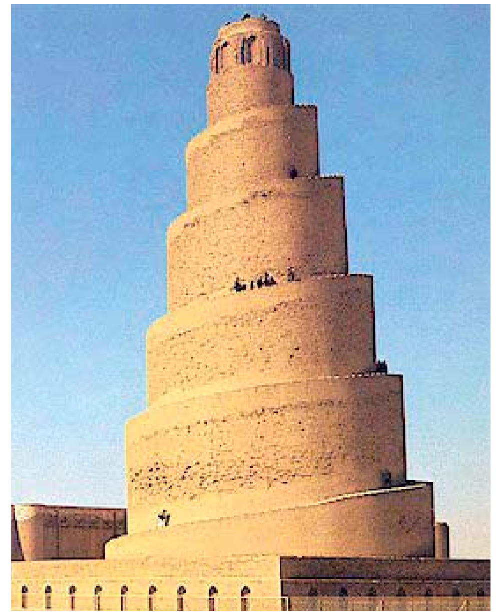


*10.4 steel structure*

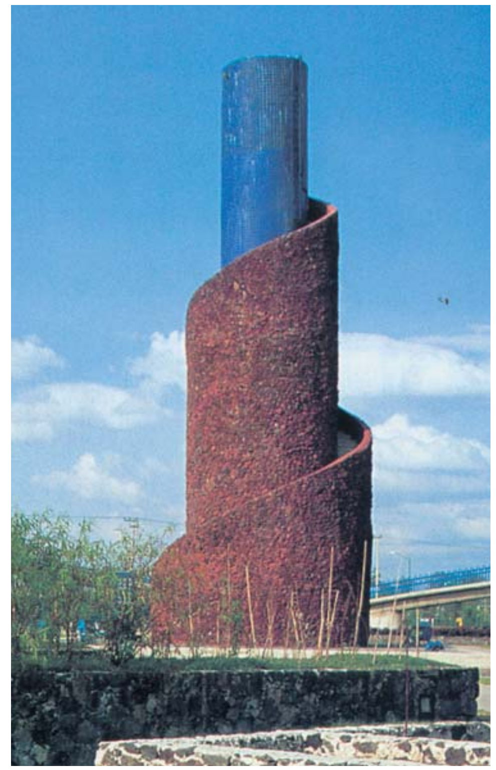


*10.6 Study of structures: Philip Johnson's Thanksgiving Chapel*

*10.8 Precast concrete pavers (North garden area of promenade)*



*10.5 Study of structures: The Great Mosque of Samara*



*10.7 Study of structures: Parque Ecologico Xochimilco* provides the opportunity for engraved inscriptions (e.g., “McMillan Memorial Park” with appropriate credits, dates, etc.). From the end of the promenade there is also a 10-foot wide accessible ramp leading to North Capitol Street.

Two steel structures consisting of three concentric cylinders of 44 feet, 41 feet, and 38 feet diameters respectively, frame the promenade at its northern and southern ends. Both structures are 35 feet above the ground planes on which they appear to rest and are open to the sky. The northern structure may be entered via an accessible ramp running parallel to the Michigan Avenue sidewalk and via initial steps down from the sidewalk. Inside the structure, four feet below street level, is an information center as well as a hydraulic elevator that provides accessible access to the lower level North Garden and to the north-south promenade. Public restrooms and telephones are located at the lower level. Even when the information center is closed, visitor access through the structure is assured during park hours. Large sliding glass doors housed within the structure’s outer and middle cylinders are employed during inclement and cold weather as well as during hours when the park is closed. The southern structure near Channing Street is less complex, containing a spiral staircase that provides visitor access between the north-south promenade and the upper filter field with its Hawthorn allee. It also has a hydraulic elevator for accessible access between the two levels. Furthermore, the promenade level of the structure opens into the parking garage, allowing easy movement between the garage and promenade.

*10.10 Sand bin tower: entrance detail*

*10.9 Eurocobble porphyry granite cobblestone (for service courts)*

*10.11 Thames Barrier Park: green wall*

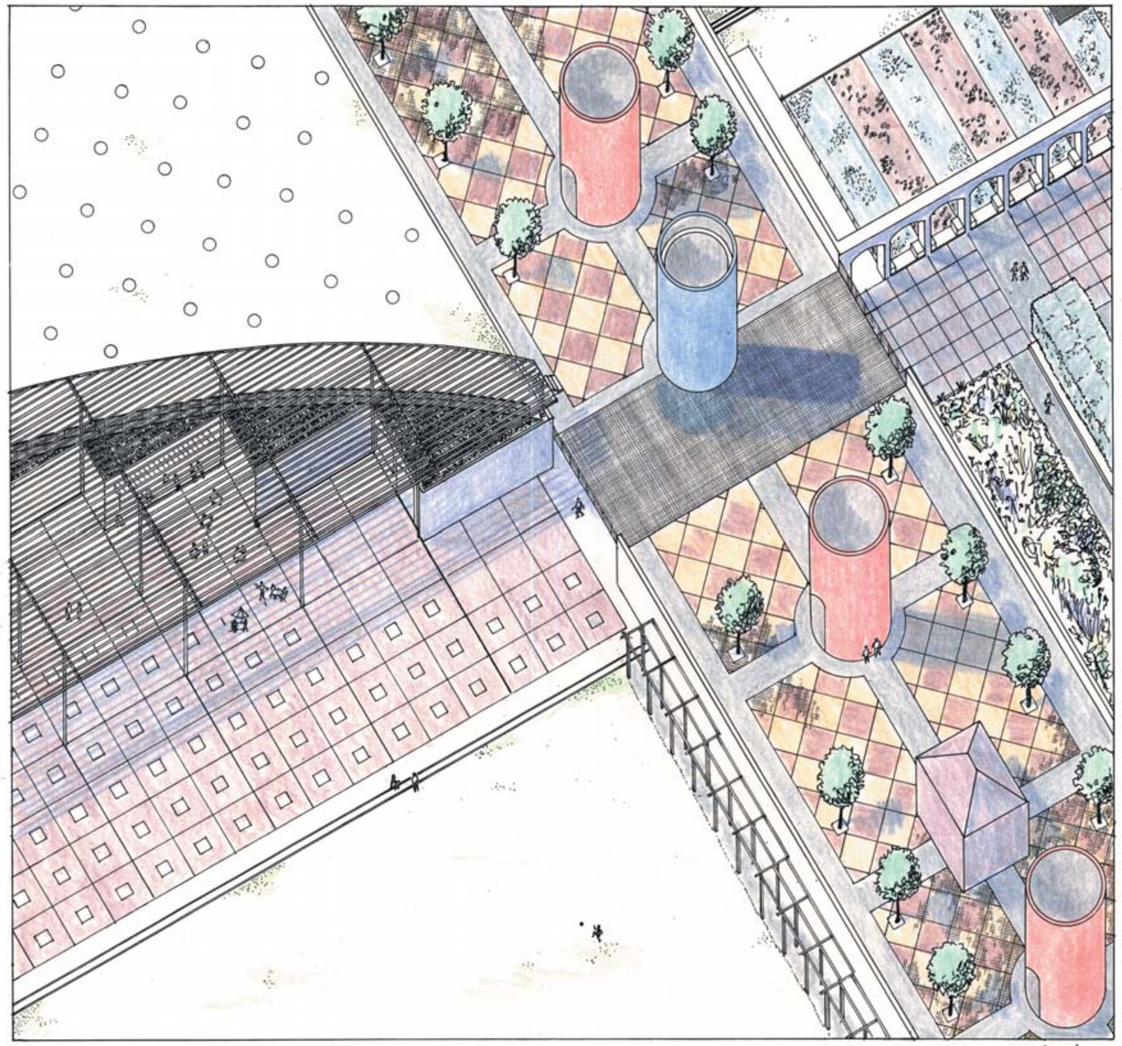
*10.12 Study of alternatives to concrete:*
*Rachel Whiteread’s resin water tower*

**North and south service courts:** Of all components of the existing site, the two service courts, and their imposing 32-foot high sand bin towers and four regulator houses, are the most prominent. Ask people today if they know where the McMillan site is and they often don't know. Mention the sand bin towers and they almost always react knowingly. The towers make the same powerful visual statement today as they did in Olmsted's day. They are retained, with the exception of one in each court that is replaced with a glass brick tower of the same dimensions and with spiral staircase within. In addition to allowing movement between the service courts and central walkway, each staircase ascends to a platform near the top, allowing views of the entire site and its surroundings. 'Natchez' crepe myrtle trees replace Olmsted's original choices of cork and mulberry trees but are located at the original sites chosen by Olmsted. The previous cast concrete paving is replaced with a colored paving pattern that ties together the entire court area with its variously spaced sand bin towers and trees. Steel mesh bridges cover the sections of the courts removed for the central walkway and permit unrestricted movement along the entire length of the courts.

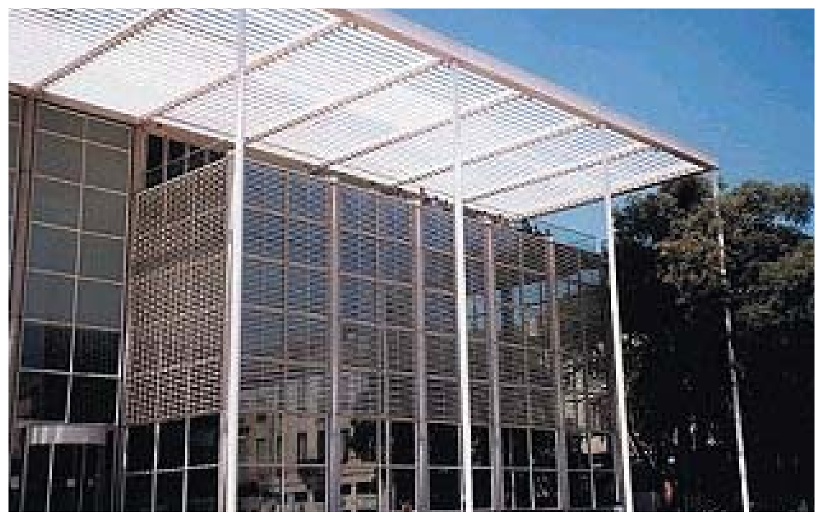
The sand bin towers do not lend themselves to ready adaptive reuse because of their limited ground level interior space (Greenhorne & O'Mara and Hammer, Siler, George Associates 2000, 7, reached a similar conclusion). Because they were made of reinforced concrete, however, they remain in good condition and serve as valuable historic references. The regulator houses, two in each court, are likewise in generally good condition and could be adaptively reused for a variety of purposes (e.g., food concession, educational, administrative). The service courts would be available for a variety of public activities, the most obvious perhaps being weekend farmers and crafts markets, art fairs, and other outdoor exhibits. The original ramp that each court had to connect it with a nearby street has been widened to twenty feet in order to permit limited access by service vehicles and small farmers and delivery trucks. At the eastern end of the South Service Court, a 30-foot wide staircase connects the court to North Capitol Street and serves as the park's second principal entrance, providing welcoming access to nearby neighborhoods to the south and east. A smaller, 10-foot wide staircase connects the western end of the North Service Court to First Street.

Access from the service courts to program and parking spaces below is provided via the original (and restored) double doors in the courts leading down to the original filter cells. Steel-framed, glass paneled 45-foot long arcades replace the bermed "humps" atop the filter planes on the other side of the court walls, providing natural lighting into the entranceways to the spaces below and marking these points of access to underground public space. The original ramps are replaced by staircases or, in the case of the parking area, by a ramp that is handicap accessible.

Where the filter fields and underlying filter cells have been removed, the concrete walls enclosing the earth beneath the service court floors are exposed. This occurs on the eastern side of the site where the service courts are bounded by the large central play area and the North and South Gardens. The two north-facing walls are covered with climbing vines, while the south-facing walls have arbors running their lengths, rebars serving as roof crosspieces to provide light shade and recalling the



*10.13 Axon view of central plaza and North service court*



*10.14 Study of roof structures: Sir Norman Foster, Nimes, France* site's past. The 12-foot arbor posts are 14 feet on center, a reminder of the filter cells that preceded them, with the arbors stepping down every 42 feet to accommodate the adjacent ground slope.

**The central plaza:** The central plaza area, located between the two service courts, is formed by the north-south promenade merging with additional space shaped by a collection of shops, cafes and/or exhibition spaces to its west, the latter aligning themselves with the superimposed reservoir edge as it crosses the plaza area. Two steps, running the length of the plaza, descend to the large grassy play and public event area.

Rising above the plaza and establishing a stunning visual presence of its own is a stainless steel roof structure, mounted on elegant thirty-foot high, 6-inch diameter stainless steel poles, spaced variously. The roof hovers above the plaza, visible from and forming part of the visual horizon of the filter plane, introducing new horizontal and vertical geometries to connect the above and the below. Its beams are spaced at 42 feet on center, its louvers at two feet, providing needed light shade below during Washington's hot summers.

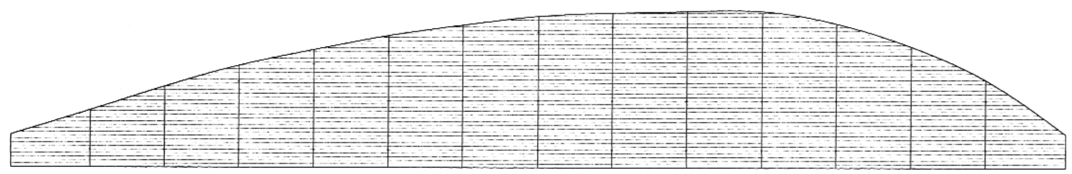
The plaza's paving consists of 14-foot square sections, each section made up of one-foot square concrete pavers allowing for two-inch wide stainless steel edging bands between the sections. Every third east-west band is aligned with, and runs directly to, the base of a central roof pole in the front row, the horizontal line visually transforming to the vertical and carrying the eye skyward to the roof overhead. Four-foot square grills are located in the center of all 14-foot square sections except those in proximity to the plaza's shops, cafes and/or exhibition spaces. The grills cover water/fogging nozzles, drain pipes, and lights. Both water spouts and fog mists can be choreographed in a wide variety of patterns and rhythms during the day and can be lit at night. Although water is incorporated into the design of the entire site, the central plaza's water feature is a piece de resistance that can be enjoyed both passively (e.g., by park visitors sipping coffee or enjoying a light meal on the plaza) and interactively (e.g., by children and others on a hot summer's afternoon).

**Central play and large public event area:** The large grass-covered central play and large public event area facing North Capitol Street will accommodate soccer games or other active recreation and large public events such as festivals, Earth Week and Arbor Day celebrations, commemorative events, etc. The area gently slopes (1.5%) toward North Capitol Street, culminating at a 25-foot wide linear, planted swale ("bioswale") that runs along the eastern edge of the entire site. Native perennials and shrubs that are low-maintenance and tolerant of wet soils are planted in the swale. The plantings ensure ground infiltration of site water runoff that reaches it and, together with soil microbes, will cleanse any runoff. Should flooding threaten, provision is made for excess water to drain into the City's stormwater sewer that runs along North Capital Street. The swale and its plantings constitute one of several demonstration garden areas in the site and provide an attractive edging to the expansive grassy area.

*10.15 Plaza analysis*

*10.16 Study of roof structures: Stanford University Medical School*

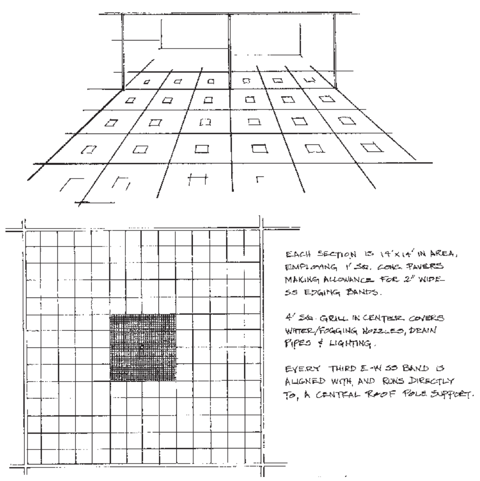
*10.17 Study of roof structures: Bailey's Crossroads, Virginia*



*10.18 Central plaza roof structure: CAD detail*

**The North Garden:** The superimposed reservoir edge, as it extends north of the northern service court, divides the North Garden area into two sections: one planted and the other grass-covered. There are five 14-foot wide planters extending east-west and aligned with five of the cut-away arches in the central walkway's western wall. European hornbeams, limbed up seven feet to provide a sense of openness and security, are planted in two rows at seven feet on center in the planters. The hornbeams are pruned to form long aerial hedges. The planter surface elevation remains constant; as the ground gently slopes toward North Capitol Street, therefore, the planter walls slowly increase in height, providing seatwalls of varying heights and, together with the aerial hedges, a pronounced edge to the transition between planted area and grass lawn created by the superimposed reservoir edge. 7-foot wide paths made of compacted crushed recycled concrete flank the planters. Between the paths, and between the paths and walls, are planting beds where low-maintenance drought tolerant perennials and shrubs are planted in large demonstration gardens. Two steps lead down to the turf portion of the North Garden, which slopes toward and culminates in the planted swale paralleling North Capitol. The lawn area will have some moveable chairs and picnic tables and will accommodate informal games.

**The South Garden:** Like at the North Garden, the superimposed reservoir edge divides the South Garden into two parts, albeit of quite different proportions. A grid of honeylocust trees is planted in the higher part. The trees are planted in crushed recycled concrete or stone dust at 28 feet on center. (Closer spacing may well be required to ensure a reasonably consistent canopy cover). One row of the grid extends into the promenade, serving to connect the two areas. Selected tree have been removed from the planting plan to allow for open spaces in which public art and small water features are located. One large Serra-like sculpture is placed in the central walkway itself, just outside the lower entrance to the circular steel structure looming above. Park users coming from the parking area or upper filter field are thus provided the option of entering and passing through the sculpture en route to their designations. Moveable seating is provided for use under the trees and/or on the




*10.19 Central plaza detail*

*10.20 Daniel Buren's Place des Terreaux, Lyon*


*10.21 Parc Andre Citroen, Paris*

*10.22 Parc Andre Citroen, Paris*

lawn below. Two steps, with exaggerated 9-inch high risers, descend to the grassed area that slopes toward and culminates in the planted swale. The steps, marking the sharp contrast between crushed concrete or stone dust surface of the upper level and the grassy lawn below, and the edge of the imposing honeylocust tree grid accent the imaginary reservoir edge. In the southeast corner, a small grove of serviceberry (Amelanchier) trees is planted to provide accent at the site's one location that is near street level. Commonly found in nature along streambeds such as the one that once traversed this corner of the site, the trees also provide light screening along Channing Street. Moveable seating and several picnic tables are also available on the grassed area for family and/or neighborhood gatherings, informal games, etc.

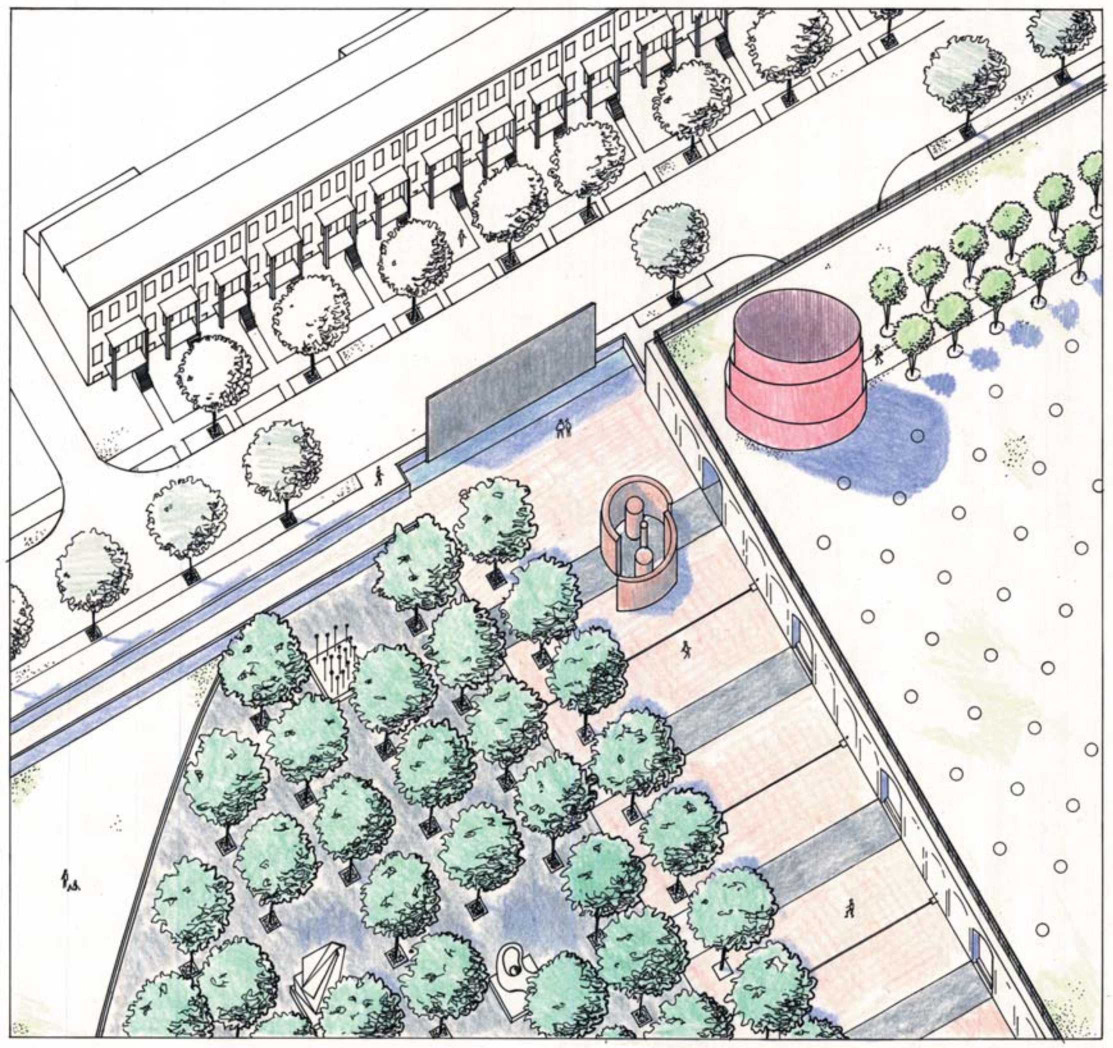
**Northwest lawn area:** This area consists of three parts. The upper level hosts an extension of the hawthorn allee at the original filter plain elevation. In addition to serving as the western visual edge of the lawn area, a piece of classical or contemporary public art should be located at the path's end to serve as a final destination drawing users along the allees. A strong candidate would be the original memorial fountain erected in 1913 and widely considered one of Washington's most beautiful. Originally located across First Street near the Channing Street intersection, it was removed in 1941 due to construction and has been awaiting a decision as to its final relocation since.

From the allee elevation, seven steps extending the width of the area descend to the lawn, which slopes (2.5%) toward the pool and performance platform to the east. Two sets of three steps, again extending the width of the area, twice interrupt the lawn's descent, serving as reminders of the original filter cells that have been removed. The North Service Court to its south and a concrete wall to its north frame the lawn. Movement between the court and the lawn is achieved by passing through two steel framed, glass paneled open-ended arcades, 45 feet in length. A balcony is located in the northern wall, accessible by steps leading down from the Michigan Avenue sidewalk. Double doors at lawn level beneath the balcony and replicating those of the service courts provide access to an enclosed service and storage area for grounds maintenance equipment, moveable chairs, and portable bridges.

A large pool is located at the foot of the sloping lawn. 60 feet wide and approximately 250 feet in length, the pool has alternating 14-foot wide panels of earth tone river pebbles and recycled pulverized blue glass, covered by a thin layer of water. The panels are aligned with the cut-through arches in the concrete wall along its eastern edge as described under "North-south promenade." Above the pool is a steel mesh platform, 30-feet by 100-feet and extending slightly over the lawn's edge. The platform is available for music concerts and other public performances and civic events. A large portable movie screen or acoustical screens can be mounted in steel sleeves at the rear of the platform when appropriate.

**Filter fields/program space/parking:** The original grass-covered filter fields in the area bounded by the North Service Court to the north, the North-South Promenade and Central Plaza to the east, Channing Street to the south and First Street to the west, has generally been rehabilitated. The original hawthorn allee walk has been reinstalled, terminating at its southeastern end at one of the two steel structures, the

*10.23 Bryant Park, New York City*



*10.24 Axon view of South end of promenade and South garden* northern end at some kind of sculpture or monument. There are several changes from the original plan, first and foremost the replacement of the manhole covers. Glass manholes covered with steel grills flush with the ground surface replace many of the original manhole covers. Elevated glass "manhole covers," the apex of their slanted surfaces 18 inches above ground level, would be installed over some program spaces below. The new "manholes" would allow natural light into the spaces below (even more so via the elevated manholes) and allow lighting from below to glow above ground at night. The character and configuration of the new manholes allow the spatial arrangements below to be subtly manifested through an otherwise uninterrupted filter field skin. Future changes in the configuration of elevated and surface level manholes would reflect changes in the program spaces below, a register in an evolving landscape.

The remaining rehabilitated filter planes, unique by virtue of their repetitive manholes, are as visually powerful now as they were nearly a century ago. During the thesis defense, one faculty member characterized them as sacred space, evoking the sacred versus the profane, serving to reveal the genius of the place. One way to mark the sacred character would be to have inscriptions etched on the elevated "manhole covers," recalling the site's history and perhaps that of leaders of the surrounding neighborhoods during the past century. Park visitors could wander through the fields, reading that history and, through the manholes, glimpse contemporary movement in the underlying landscape.

Steel-framed, closed glass-paneled arcades, replacing the bermed humps over areas of program space, have been described above. They signal the entrances to the public spaces below. Two of the original bermed humps, over the two filter cells that would be preserved, are retained.

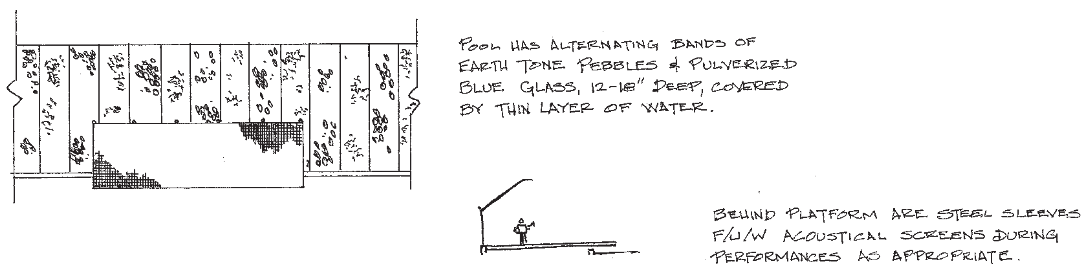
In the filter field area between the two service courts, there is a ten feet wide ramp, 205 feet long, which descends to the central plaza. In doing so, it takes the user through the preserved filter cells, which can be viewed through a glass partition. Plaques along the ramp would explain filter cell features and describe how the site operated.

The superimposed reservoir edge, between the two service courts, forms the eastern edge of the filter field. Over the extensions of the 42-foot wide spaces below (cafes, small shops, exhibition spaces), eco-roofs (also known as green roofs) have been installed, both to collect rainwater and channel it for on-site use and to educate park visitors as to their advantages. As is typical with eco-roofs, native grasses, succulents and other low growing plants capable of storing water under often harsh, drought conditions are planted in a continuous, thin growing medium. An observation railing would provide information regarding the roofs as well as other sustainable practices on the site.

A staircase has been installed in the southwest corner of the site, connecting the filter plane with the Channing and First Streets intersection, and replacing the original staircase that has disappeared.

*10.25 Potential future view of Northwest lawn area*

*10.26 McMillan Fountain awaiting new location*




*10.27 Details of pool with performance platform*

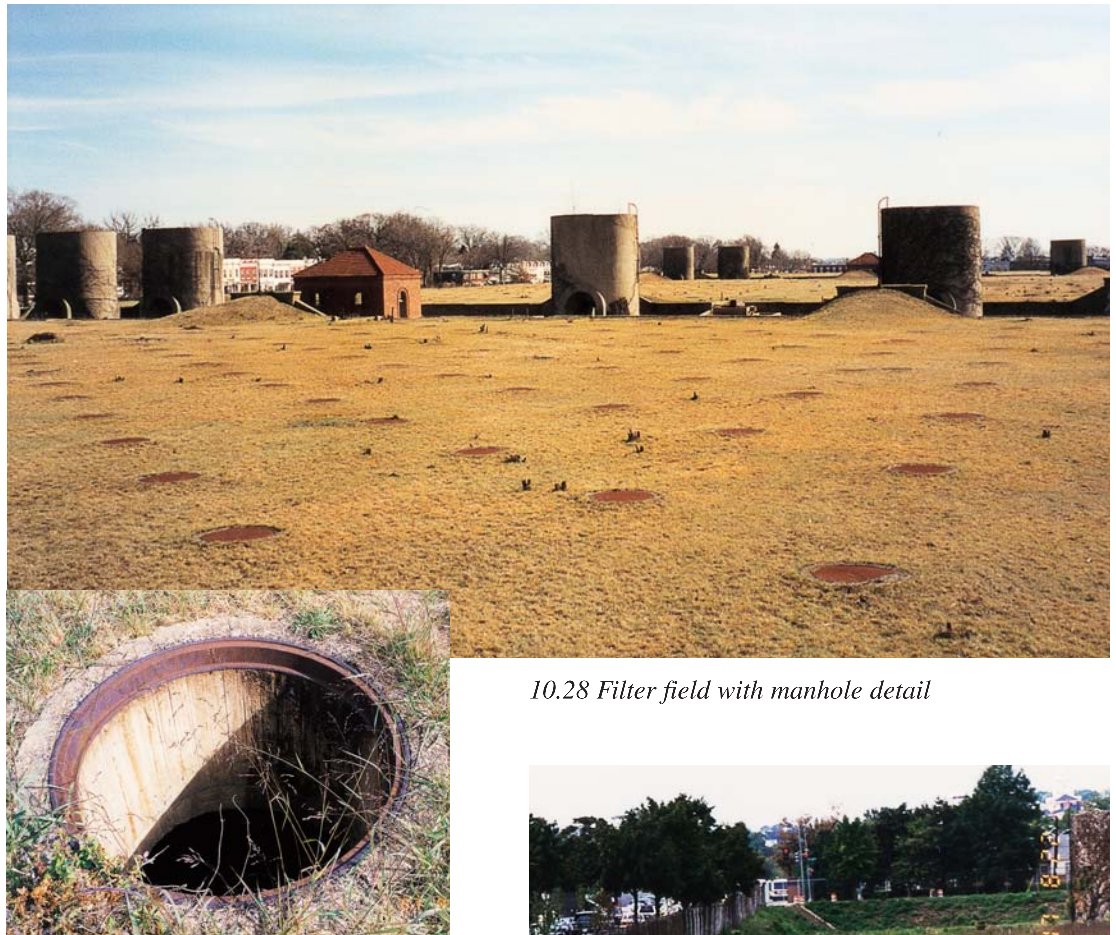
Finally, where the underground parking area is located, an approximate 20-foot high retaining wall facing Channing Street has been constructed to replace the original bermed slope. Two streetside entrances in the retaining wall, flanked by attractive plantings and perhaps climbing vines, permit easy access into and out of the parking area. The wall and retained berm that extends westward to First Street continue to provide some separation between Channing Street residents and park activity while not imposing a complete sense of exclusion.

A parking area with 124 parking slots, four of which are handicapped parking, is located on the southern end of the site. Users parking their cars in the area can access the main park areas via a ramp (handicap accessible) ascending to the South Service Court or, remaining at the same level, proceed via the steel structure into the north-south promenade. A large trash bin for the site is also located in the parking area. Service corridors from all underground program spaces can reach the parking area, and trash bin therein, for City collection and disposal. The parking facility can provide an additional source of revenue for the park.

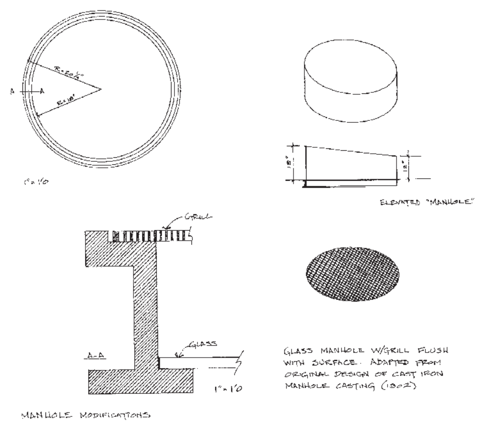
Two large program spaces are located underground on the western side of the site. Reconstructed from spaces once constituting three of the original filter cells, the two to the north of the south service court are 90,000 sq. feet; the one to the south is 45,000 sq. feet. After wrestling for several months over possible uses for these spaces, a conclusion was reached that it would be preferable to leave the determination of use(s) to decisions by stakeholders and potential park users. Although underground, these spaces will receive considerable natural light during daytime hours through the recreated “manholes.” (See Figure 10.33 which shows the library extension space built under New York City’s Bryant Park; spaces in the McMillan site would be able to use both natural and artificial lighting). Tempting as it first was, and tempting as it appears to have been with many first time visitors to the existing site, adaptive reuse of any of the existing cell structures for extended public access is not feasible, for structural and safety reasons, without major and costly reconstruction. These two underground program spaces could indeed be reconstructed, however, with features that would replicate some original filter cell features. Indeed, remnants of the original cells could be incorporated into any new interior design.

The above conclusion having been stated, two potential uses of these program spaces are particularly attractive. One would be a research/educational center focused on environmental issues and particularly on water. Such a center could be tied in with activities, resources and interests of Howard, Catholic and/or other universities in the Washington area, as well as those of the US Army Corps of Engineers (which continues to operate the current filtration plant across First Street). A second use might include studio, workshop and rehearsal spaces for local artists (visual and performing) and artisans, plus offices and meeting facilities for community groups.

As noted earlier, a series of fourteen 42-foot wide spaces open onto the central plaza. One such unit is divided because of the ramp descending from the upper filter plane and a separate ground level corridor connecting the program spaces on the western side of the site and also running through the preserved filter cells. Uses of



*10.28 Filter field with manhole detail*



*10.29 Details: new “manholes”*

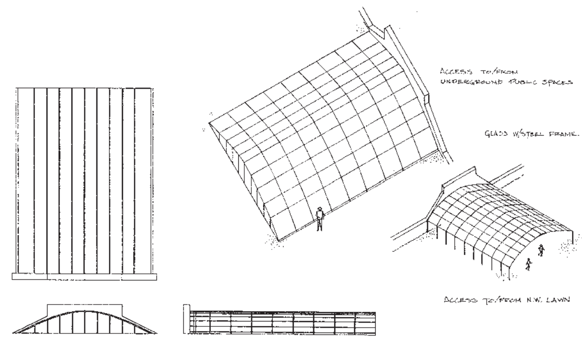
*10.30 Remnant of Hawthorn allee path*

these units, with floor space ranging from 1890 to 4830 sq. feet., would again be left to the stakeholders, park users and site managers. It is proposed, however, that serious consideration be given to inclusion of:

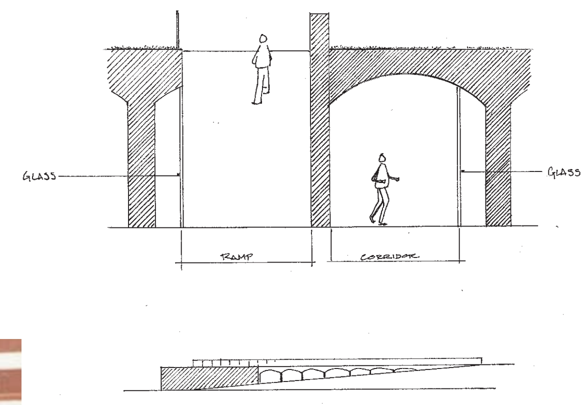
- ◆ At least two units that would be made available to Washington area museums and organizations for rotating exhibitions, visible via large display glass windows as well as possibly inside.
- ◆ Two or more small restaurants, cafes and/or coffee shops to serve park users.
- ◆ A bookshop/newsstand (including international journals) and/or lending library.

In addition, we propose to include two glass displays, built into the walls facing the center of the plaza of the two end units. Constructed along the lines of smaller "ant farm" exhibits, the two-foot deep displays would offer viewers a 12-foot wide section, from floor to ceiling, of a filter cell as it functioned when the site was still in full operation. Water would be recirculated through the filter section at the same rate of descent as occurred during earlier actual cell operations. These displays would not only be instructive, but they would also serve as constant reminders to park users of the site's earlier industrial history that the park seeks to celebrate.

**Site perimeter:** The sidewalk along Michigan Avenue has been widened and six-foot wide tree strip trenches for the red maple street trees have been provided. A sidewalk has been reinstalled along Channing Street to the south while the sidewalks along First and North Capitol Streets have been retained. Planting areas for all street trees have been increased as much as space permits; with tree strip trenches replacing tree pits where feasible and an appropriate structured soil mix used for all new plantings. The red maple street tree plantings on both sides of First, Channing and North Capitol Streets, as seen in Olmsted's original landscape plan, have been restored, as has been the row of red maple street trees along the site side of Michigan Avenue. The scattered trees, mature and generally attractive, planted on the northern side of Michigan Avenue would not be touched.



10.31 New steel-glass arcade structures




10.32 Ramp and corridor to central plaza

10.33 Spatial study: library extension under Bryant Park, New York

10.34 Spatial study: Dia Center for the Arts, Beacon, New York

# Chapter 11 A design...the accessories...

*Railings, seats, sculptures, follies not only design the space, they also transform the passive spectator into actor.*
(Spacemaker Press n.d., 16)

**Lighting:** As discussed above, natural lighting will enter underground spaces via redesigned “manholes” and “bermed arcades.” Artificial lighting can also play an indispensable role in keeping a site like McMillan Park alive when natural light dims, encouraging impromptu activity (e.g., music), all the more important during the late fall to early spring period when daylight hours become depressingly short. Throughout the year, the varying combinations of lighting that can be selected alters and relocates the park’s stage sets, transforming the park from day to night, summer to winter. Furthermore, good lighting is important for both reasons of security and of safety.

In addition to lighting for all staircases and walkways, all park spaces potentially used by visitors during evening hours have lighting installed (e.g., the central plaza, the central play and public event area, the northwest lawn and pool/performance stage area, the service courts, and the two steel structures). Uplights — spot, flood and/or wash — are installed to illuminate all trees in the site as well as the sand bin towers and regulator buildings in the two service courts and the roof structure above the central plaza.

Flying over the site at night, one would also see lighting patterns described earlier: the grid of lights in the central plaza floor, the light shining from the underground program spaces via the grid of redesigned “manholes” and via the “bermed arcades.” In addition, fiber optic lighting is embedded along the full length of the steps in the northwest lawn.

*11.1 B-K Lighting flush-at-grade uplight (for tree lighting)*

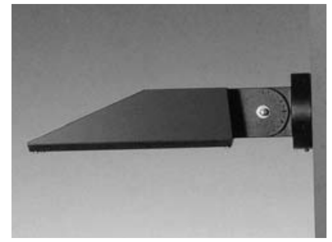
*11.2 B-K Lighting Yosemite Series w/inter-changeable optics modules (spot, flood and wall wash) (for service courts)*

*11.3 Bega pole mounted luminaire w/indirect optical system (inset Gantry Plaza State Park) (for all entrances to Park)*

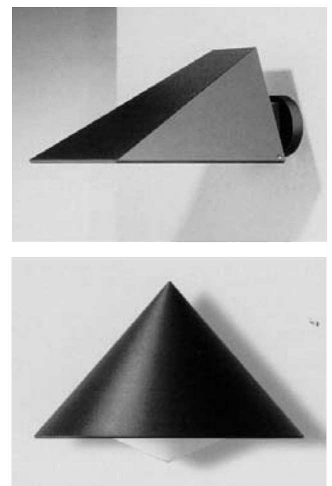
*11.4 Bega 20' pole mounted high performance flood-lighting luminaire (for central court active recreation/public events space; 22' spacing)*

*11.5 Bega bollard w/directional dis-tribution and shielded light*

*11.6 Bega recessed wall luminaire for all stair-ways (6' spaced as appropriate)*

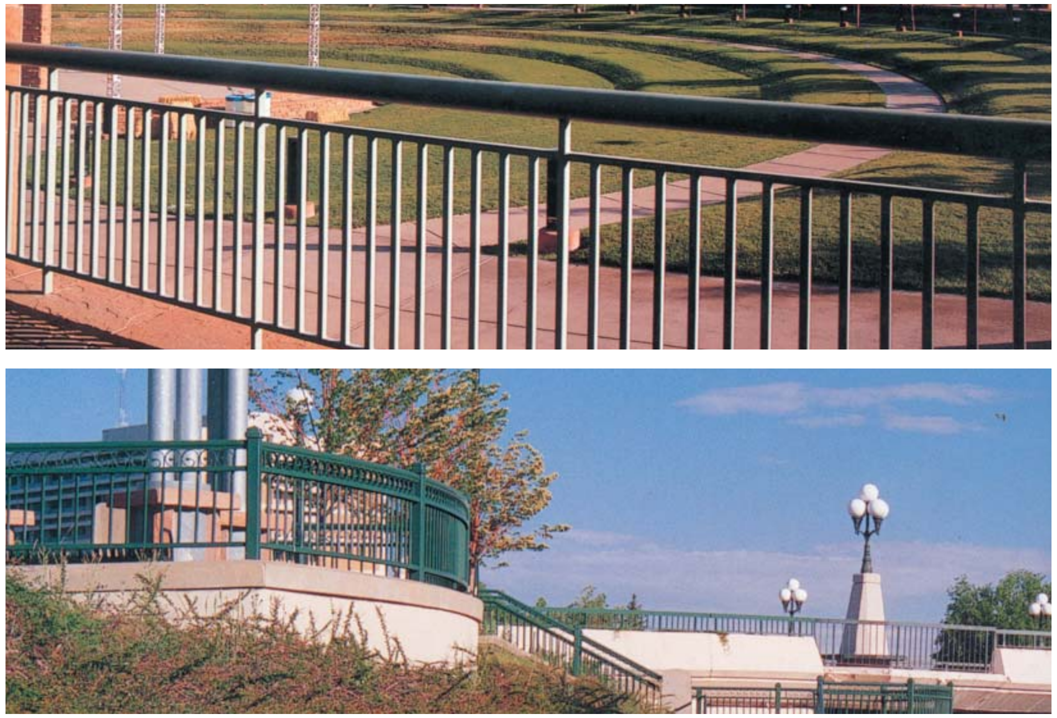


*11.7 Bega surface mounted floodlight luminaire (for walls on both sides of NW lawn)*



*11.8 Bega wall mounted luminaires w/mounted light sources (for walls along principal court walkways*

**Railings:** Railings are installed along the entire perimeter of the park, both to channel entry to and exit from the park via designated entrances, and for safety reasons because of street-park elevation differentials that reach as much as 20 feet in the North Garden area. More detailed railings are installed for all staircases, interior overlooks of lower park levels, for the service court bridges extending over the central walkway, and atop the retaining wall for the parking area entrances. An observation railing is installed at the upper filter field edge overlooking the eco-roofs and central plaza.



*11.9 Railings around entire Park perimeter w/more detailed railings for interior overlooks of lower levels and above garage entrances on Channing Street*

*11.10 Observation railing (for upper edge overlooking ecoroofs and central plaza)*

# Chapter 12 Some closing thoughts...

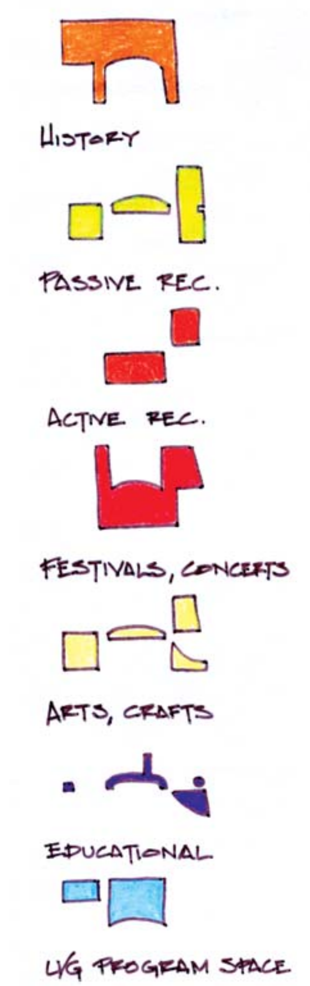
*(Regarding the park experience), we want a ground to which people may easily go after their day's work is done…where they may stroll for an hour, seeing, hearing, feeling nothing of the bustle and jar of the streets, where they shall…find… the greatest possible contrast with the restraining and confining condition of the town…*
Frederick Law Olmsted, 1870 (Hiss, 44)

*Nineteenth-century urban parks were primarily conceived as escapes into healthy, restorative, romantic, idyllic, pastoral settings. At the beginning of the twenty-first century, parks are widely seen as complementary parts of cities rather than as complete escapes from them.*
Alan Tate (Tate, 194)

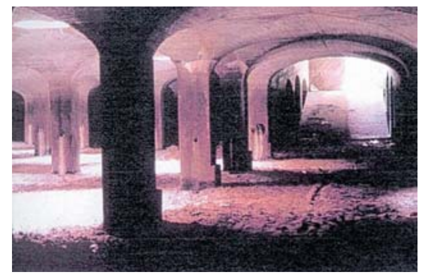
As we explored the McMillan site landscape, probing its layers and increasingly visible three-dimensionality, we used the landscape's geometry to deconstruct, to subdivide and add to it, honoring that geometry and its historic references while providing for a range of new spaces and experiences to meet the needs of contemporary visitors. Two scales were at work as we created a new park — the one of a park for the nation's capital, a destination for its residents and visitors; the other of a park that would become a integral part of the residential and institutional neighborhood context in which it is located. In the park, we shaped spaces for the full range of user expectations — from the private user to the large group.

Jane Jacobs has proposed that the small parks with the finest centers are those that serve as stage settings for people, "with complete confusion as to who are spectators and who are the show." That applies to larger parks as well and the new central plaza serves that role. Jacobs talks of "guitar players, singers, crowds of darting children, impromptu dancers, sunbathers, conversers, show-offs, photographers, tourists, and mixed with them all a bewildering sprinkling of absorbed readers (Jacobs, 105)." Over time, McMillan Park will naturally develop its own cast of actors, reflecting its own circumstances, but Jacobs' cast or something comparable sounds good for starters.

Everyone has his or her own list of what makes an urban city park successful. Daniel Biederman of New York City's highly successful Bryant Park lists ten factors — security, sanitation, concessions, restrooms, chairs and tables, lighting, horticulture, programming, design and management — plus number eleven, details (Tate, 31). Jacobs has discussed the variety of reasons for which people come to parks and notes that "even the same person comes for different reasons at different times; sometimes to sit tiredly, sometimes to play or to watch a game, sometimes to read or work, sometimes to show off, sometimes to fall in love, sometimes to keep an appointment, sometimes to savor the hustle of the city from a retreat, sometimes in hopes of finding acquaintances, sometimes to get closer to a bit of nature, sometimes



*12.1 Park use*


*12.2 Filter cell*

to keep a child occupied, sometimes simply to see what offers, and almost always to be entertained by the sight of other people" (Jacobs). The new McMillan Park responds well to all of Biederman's factors ("management" is essential, but outside the scope of this thesis). The park would easily accommodate, indeed welcome, Jacobs' actors and various parts of the park will respond to the different reasons they come. It is easy to add to the list: the student doing research on hydrology at the park's library or research center, the couple having a light dinner at the central plaza, the kids (and a few of the more adventuresome adults) cooling off in the plaza's fountains, local soccer players enjoying a week-end game, nearby university students in a touch football match, the visitors to the farmer's market in the North Service Court, the art fair in the South Court, the crowd gathered on the northwest lawn to enjoy an evening jazz concert or outdoor movie, the convalescing patient from the nearby medical center, the outing of children from the day care center across the street or a class coming to study the value of native plantings and green roofs, the family picnicking, the lovers quietly strolling the hawthorn allee path, workers from the fast filtration plant getting away for lunch, tourists visiting the rotating Smithsonian or National Building Museum exhibit.

"Calls for 'sustainable,' ecology-driven approaches to park design and management increased in the latter part of the twentieth-century (Tate, 198)." Given the central role of water in the site's history, water must be an inevitable centerpiece in any efforts to design an environmentally responsible park. Integration of drainage within all other open spaces and play areas ensures effective on-site reuse and groundwater recharge. The second major "sustainable' feature is the almost exclusive use of drought-resistant native plant material. This substantially reduces maintenance and irrigation requirements and represents a key educational component of the park.

During the 1992 LA Forum visit to the McMillan site, Mary Margaret Jones of Hargreaves Associates praised how Olmsted's allees of trees made "a sense of connection (with the neighborhood) in a very urbane and sophisticated way" (Leccese, 54). The Forum also discussed how the site's ground plane elevation at the southern end, around 20 feet higher at Channing Street, impeded the connection between park and local residents. We have addressed both thoughts. The original red maple tree plantings would be reestablished along both sides of the surrounding streets. In addition, the high berm is removed along the southern third of the North Capitol Street edge. There is a strong visual connection with the well-maintained townhouses lining the other side of this major north-south corridor, softened but not broken by the street trees. The central play and large public event area itself is now 7-11 feet below street level, substantially reducing any disruptive impact on the residential neighborhood. Berm alterations are more restricted along Channing Street, the facing townhouses being so close. However, there have been important alterations (e.g., the ramp from the North Capitol — Channing Street intersection and new retainer walls supporting the water wall and the two parking area entrance/exits). Street trees and planters and visible tree plantings in the site itself provide an attractive site edge for the residents. Consideration might be given as well to planting climbing vines on the retainer walls.

In addition to physical design elements, connection between the site and its surrounding neighborhoods will depend importantly upon what park spaces and programming offers to the residents and institutional workers and visitors. While we have already discussed this aspect, it cannot be emphasized enough. How the park's spaces, above and below ground, are programmed will determine the character of the park and how it is used. That will evolve in future years as the city changes but it will be essential to get it right from the beginning. Likewise, although maintenance is not treated in this thesis, it is absolutely essential if the park is to succeed.

Landscape thickness. Horizontal layers and strong verticality. The grid. Remembering history and revival by adding a new future. A palimpsest. Sustainability. As noted in Chapter 8, three basic goals for the design process were set. The first, to celebrate the history of the site, is met in many ways and at many locations within the site. Structural preservation was incorporated when practical (e.g., two interior filter cells; sand bin towers, regulator houses, and service courts; and large portions of the original filter cell fields) and important elements of Olmsted's original landscape design were retained. While respecting the site's history, however, it was also important that the site be transformed into a new park meeting 21st interests and requirements. Early recognition that the site, as viewed from its edges, only revealed one layer of a complex landscape dictated an exploratory intervention that uncovered a powerful geometry of horizontal layers, vertical elements and strong grids. The site's successful redesign would come, not from destroying that geometry but by learning from it. The process demonstrated how the geometry could be exploited to provoke and permanently instill memories of the past while informing new design strategies for the future. The north-south promenade, strengthened by the superimposed reservoir edge, provides what Peter Walker has referred to as the gesture, "the organizing element for perceiving the whole" (Thompson 1991, 66). The site's new spaces respond to the second goal of meeting a wide range of contemporary interests and needs of future users. The Project for Public Spaces (PPS) argues that a successful public space, park or other, is created when "sociability, multiple activities, and use intersect with comfort, image and access" with other intangibles and measurable factors such as crime statistics and user demographics warranting consideration (Hines 2002, 96). The principal PPS attributes seem as good a list as any and the new McMillan park responds well to each. Furthermore, looking back to the various stakeholder concerns and desires expressed during the public process, the new McMillan park has a lot to offer each interest. The design shows "the increasingly important role of landscape as a mediating element in contemporary urban infrastructure (Waldheim 2001, 15)." Finally, the design results have produced an environmentally responsible urban space that demonstrates sound sustainable practices with stormwater management central to that effort.