Management of the Reflecting Pool

In the Reflecting Pool area, the double rows of elms had developed such full crowns that they appeared to require pruning and reshaping. Further investigation revealed that while the canopy was full, the root development of the individual trees was very poor. The roots were so underdeveloped that the trees were not secure in the ground. Several years passed before the elms' condition stabilized. Of the 250 elms planted in 1916, prior to the excavation of the reflecting basins, most exhibited such poor root development by 1929 that they were top-heavy and prone to falling over in high winds. Because the elms had been planted in moist, soggy conditions with inadequate drainage, replacement of these specimens would eventually be required. With the subsequent improvement of the groundwater level, the replacements evidently survived.⁵¹





View taken on the South side of the Reflecting Pact.

5. Tree fig. Same as picture as. 4. self tree is being pushed from its tertical position.

File No. 19.4-408

Figure 14 & Figure 15 – Series of images document the condition of "English" elms along the Reflecting Pool north and south walk, 1928-1929. MRC 2-37 & 2-38.



Figure 16 – Skating on the Reflecting Pool, February 3, 1935. MRC 3-22.

Figure 17 – Swimming in the main Reflecting Pool soon after its completion, 1926. MRC 3-23.



Recreational use of the Reflecting Pool began around 1926. The pool was used for swimming, ice skating, model sailboat races, flycasting contests, and as the setting for such large-scale events as the George Washington Bicentennial Festival of Youth held on May 14, 1932.⁵²

In 1929 both reflecting basins required repair. Because they had been constructed on "hydraulic fill" and had settled unequally, the smaller pool needed a new reinforced concrete bottom. The larger pool needed routine sealing maintenance. Rose Brothers completed these repairs in the fall of 1929. There may have also been problems with vegetation growing in the pools.⁵³

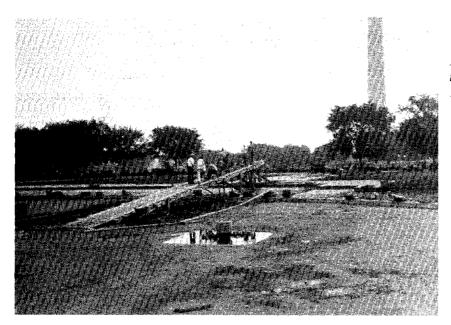


Figure 18 – Repair work to the Rainbow Pool, July 15, 1929. MRC 3-17.

Design for the Watergate

In March 1928, longstanding concerns over the merits of the ceremonial Watergate entrance to West Potomac Park were raised at a specially scheduled meeting of the CFA. The McMillan Commission had originally conceived of the steps as part of the formal treatment for the shoreline west of the Lincoln Memorial. Vehicular traffic traveling through West Potomac Park along the riverside drive had increased to such a level that severe congestion would result if the circular roadway and the roads connecting the proposed memorial bridge and parkway were to intersect near the steps as planned. This traffic issue was of particular concern to the "Washington" [National Capital] Park and Planning Commission. The controversy centered around how to balance the everincreasing numbers of automobiles passing through the park and the vision of the McMillan Commission. One solution proposed to construct an underpass drive below the bridge abutment to alleviate the anticipated traffic congestion. However, opponents feared that the adoption of such a proposal would both compromise the original concept for the Watergate steps and undermine the design for the memorial bridge. The debate further underscored the ways in which the McMillan Commission Plan had been altered over time. Final grade levels around the Lincoln Memorial and the bridge and the enclosed architectural form of the memorial differed from the original concept. These changes, in turn, drove further departures from the plan. The CFA's final recommendations on the traffic problems included adjusting the width of the Watergate steps; moving the steps back further from the water's edge; providing an underpass for a road under the bridge and the parkway approach; and considering the road as a driveway integral to "the architectural scheme rather than as a roadway in the true sense." 54

New Plans for the Mall

At the time of the debate over the conceptual design for the Watergate, Frederick Law Olmsted, Jr. was a member of the National Capital Parks and Planning Commission

(NCPPC). The NCPPC had been authorized in 1928 to be responsible for all comprehensive planning and project planning for the city. Olmsted, with his vast experience on other municipal and regional projects, his work on the McMillan Commission, and his service on the CFA, formulated the objectives for the commission at the outset. In his role, Olmsted personally oversaw the planning for parkways, parks, and neighborhood playgrounds. One of the first efforts of the commission was the development of comprehensive plans for the city that included recommendations for the Mall, which were based on both the L'Enfant and McMillan plans. Although the 1928-29 NCPPC plans for the Mall mostly focused on the expanse between the Capitol and the Washington Monument, key elements of their concept for the area between the Washington Monument and the Lincoln Memorial underscore the essential elements of the landscape around the memorial.

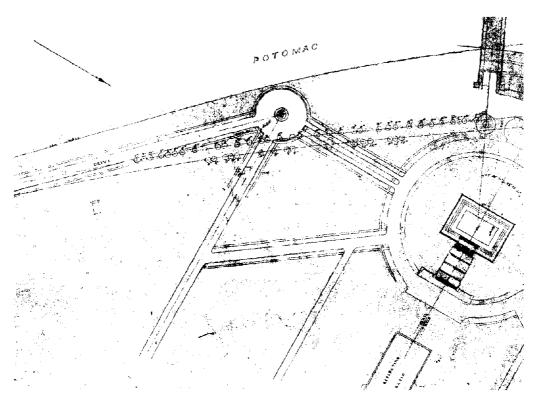
These plans reaffirm the simplicity of formal geometric patterns of circulation and vegetation along the Reflecting and Rainbow Pools, around the circular roadway, and along the radial roads. Delineation of the geometry established by the McMillan Commission was reinforced in the NCPPC design through the regular planting of trees and through the shape of the pools and the corridor of open spaces on both the north and south sides. Perhaps because of Olmsted's continuing influence on the landscape treatment, the cross arms of the original reflecting pool design remained as an outline of trees on the ground plain, more a horticultural feature than a water feature. In the more distant spaces, informal, wooded plantings of deciduous trees filled the triangles and rectangles created by the arrangement of the roads and drives. In reality, the complete "tapis vert" of the design could not be implemented fully until the Navy and Munitions Buildings and the adjacent parking lot north of the Reflecting Pool were removed. 55

Planting Plans - West Side and the Watergate

In 1928 Irving Payne oversaw the installation of plantings for the west side of the Lincoln Memorial according to the plan approved by the CFA several years earlier. However, because of the construction of the Arlington Memorial Bridge abutment, Payne had made changes "in the character of the planting and treatment. . . ." Payne's installation included a special treatment for the central area on the west side of the memorial, "with a scattering of trees and shrubs on the north and south sides." CFA landscape architect member Ferrucio Vitale overrode Payne's work by recommending a simpler design for the north, south, and west corners, consisting mostly of boxwood, which was to extend no more than 30 feet from the base of the memorial. Vitale also envisioned the circle of lawn to be free of trees and shrubs. In addition, he called for removing the vines growing on the raised terrace wall that had been planted a few years earlier. To save the masonry from damage by climbing vines, Vitale suggested climbing euonymus (similar to Euonymus fortunei var. radicans 'Vegetus') as a replacement.

By the end of the decade, James Greenleaf, former CFA member and consulting landscape architect for Arlington Memorial Bridge Commission, and the OPBPP had developed preliminary planting plans and contour and grading studies for the area at the

eastern end of the Arlington Memorial Bridge. This site development encompassed the bridge plaza on the District side; the riverside drive connection with the still uncompleted Rock Creek and Potomac Parkway; the north approach roads from B Street [Constitution Avenue] to the bridge underpass; the Ericsson Memorial site; and the south underpass approach road to the bridge. Several collections of existing trees had to be relocated to implement these designs. Six Japanese flowering cherry trees were transplanted from the riverside parkway at the Arlington Memorial Bridge to Meridian Hill Park, near the center of the city. Six Scotch and American Elms growing near the route proposed for a road that linked the Ericsson Memorial with a West Potomac Park polo field were also removed in anticipation of the completion of that memorial, although pavement, curbs, and gutters were not installed around it until the summer of 1932. Another 16 cherry trees and 20 mature Scotch and American Elms were removed from the vicinity of the bridge and riverside drive. Ten of these same elms may have been transplanted to the southern end of Rock Creek and Potomac Parkway only a short time after the opening of the K Street to West Potomac Park section of the parkway in April 1932. Section 1932.



Map 6 - Plan to relocate elms located along abandoned section of Riverside Drive, rev. 1929. NPS Map 801/80129.

Construction of the Arlington Memorial Bridge and its intersection with the Lincoln Memorial axis and the Watergate was almost completed in May 1932. At that time the OPBPP worked to install trees and shrubs around the Watergate and on the west side of the Lincoln Memorial. Gilmore Clarke, a landscape architect appointed to replace Vitale on the CFA, was initially alarmed by Payne's installation of Greenleaf's planting design for the west side of the Lincoln. Clarke had a strong background in large-scale landscape projects, especially from his award-winning work on the Westchester County Parkway.

Payne's "overdone" work drew additional criticism from other professionals concerned with the Arlington Memorial Bridge and the Lincoln Memorial. In the case of the Watergate and the bridge and parkway connections, the problems lay in the interpretation of the plan and not with the plan itself. However, the plant selection and choice of certain types of trees and shrubs at the Lincoln were the cause of significant disagreement between Clarke and Greenleaf. While both Clark and Greenleaf found Payne's work "on the ground" lacking in aesthetic sensitivity, the two could not agree on the philosophical basis for the overall planting design.

Clarke considered the implementation of the design for the west side of the memorial to be "coming up higher than it should . . . extending above the base of the columns." In addition, he found the selection of trees and shrubs for the west side "not in harmony" with those that had been planted on the east side. In particular, Clarke took exception to the choice of *Magnolia grandiflora*, the tree so strongly advocated by Greenleaf a decade earlier. Clarke found its "coarse foliage texture". . "too large in contrast with the delicate texture of the boxwood foliage heretofore used as the principal plant material." On the other hand, Greenleaf felt that because of the range of vistas on the west side, the plantings at the rear of the Lincoln should be of a broader scale than those on the front. He also felt that the rear, unlike the front, should not appear as a tight bedding group, and that it would be inappropriate to carry a similar planting scheme around all four sides of the memorial. Greenleaf cited the hardiness of the magnolia and suggested American holly as a companion plant. He further praised the character of the tree by noting

The splendid rounded masses of rich green foliage that this Magnolia ultimately develops can be a fine foil to the white marble columns of the Memorial building. In fact, I would like to return fifty years later and see irregular massing exclusively of Magnolia grandiflora contrasting with the mellowed marble of this perfect architecture, the box and yew becoming relatively unimportant but nevertheless enriching the effect in places against the granite wall of the platform.⁵⁷

The issue was never clearly resolved in 1932, and Clarke and Greenleaf continued to hold to their respective opinions. Since the revised planting plan had been originally approved by the CFA in the fall of 1931, prior to Clarke's term on the CFA, the installation of trees and shrubs on the west side of the Lincoln Memorial proceeded according to Greenleaf's design scheme.

Field inspection and tagging of this choice ornamental evergreen material for planting the Lincoln Memorial terrace, including the Watergate and wing walls, was made before transplanting, necessitating trips aggregating over 5,000 miles through the States of Virginia, West Virginia, Maryland and Pennsylvania. Further, careful inspection was made of all plant materials at the planting site to determine the quality, size, character, orientation, and final location of each plant to secure the most pleasing planting composition possible.⁵⁸

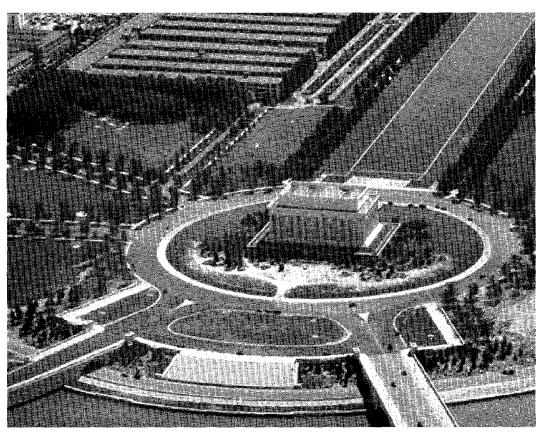


Figure 19 - Aerial view of installation of trees and shrubs on west side of Lincoln Memorial and beds flanking the Watergate steps, 1932. MRC 1-66.

In the end, the plant material used for the west side of the Lincoln Memorial, Watergate, and wing walls included several different types of glossy-leafed and coniferous evergreen trees and shrubs. Selected for the Lincoln Memorial were large specimens of southern magnolia, American holly, "treebox," dwarf boxwood, common boxwood, Japanese yew (*Taxus cupsidata*) and mugo pines. Similar plants were used at the Watergate and wing walls, with the exception of the southern magnolia, which were replaced by white pines (*Pinus strobus*).

In conjunction with the Arlington Memorial Bridge construction and planting plans, several contracts for the removal and the installation of trees on the west side of the Lincoln were given to different nurseries in 1932. One company removed elm trees on and around the bridge plaza and transplanted them. Another furnished and planted ornamental evergreens in the same area. The third company moved elms to the approaches at the plaza. James Greenleaf had prepared the plans to accommodate this activity. According to his specifications, 193 large American elms and 15 white pines were moved into the area bounded by Constitution Avenue, "B Street, south," 23rd Street, and the Potomac River. The elms were transplanted from their location between 23rd Street and Constitution Avenue, northeast of the Lincoln Circle and placed on each side of Constitution Avenue between the Potomac River and Henry Bacon Drive, south of Constitution Avenue between 16th and 17th Streets, along the circular road west of the

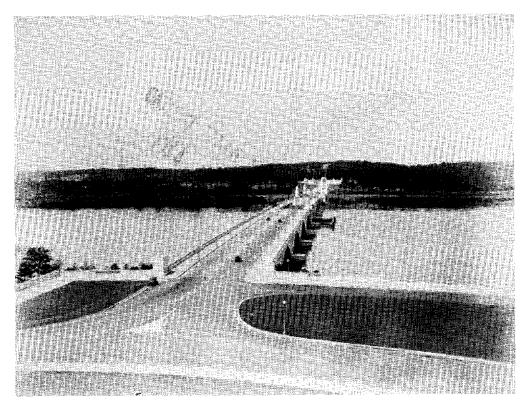
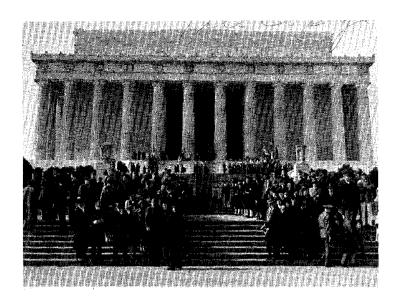


Figure 20 - Completion of Watergate plaza, sidewalks and bridle trail, June 9, 1933. MRC 1-75.

Lincoln Memorial and adjacent to the north and south wing walls of the Watergate plaza, and on each side of 23rd Street, S.W. The white pines were removed from their locations near the intersection of 26th Street and Constitution Avenue to new sites on the slopes adjacent to the north and south wing walls.

With the completion of the landscape treatment around the memorial in 1932, an irrigation system for the inner circle was installed. Other "improvements" included the addition of temporary, free-standing handrails on the raised terrace and stylobate steps, which were set-up as needed in alignment with the entrance to the memorial chamber. Although the Watergate area, including the bridge plaza, wing walls, and the descent of forty steps, was also completed by 1932, several features on the District side of the bridge were not finished until later. Schemes for the storage rooms under the Rock Creek approach were not approved by the CFA until October 1933, only to have the approvals rescinded the following month. Approvals for the design of the statues for the eastern end of the bridge and the parkway approach were not issued until 1935, and even then their granite bases remained unadorned by any sculpture for some 19 years.

Figure 21 - Temporary wooden steps to memorial chamber, Lincoln Birthday celebration, February 12, 1946. MRC 1-125.



Management by the National Park Service 1933-1945

New Stewardship Role for the National Park Service

In August 1933 the responsibility for the care and maintenance of monuments in the nation's capital was transferred from the War Department's Office of Public Buildings and Public Parks (OPBPP) to the National Park Service. This change meant that the OPBPP would no longer be directly involved in the stewardship of the Lincoln Memorial, the Reflecting Pool, and the Watergate area. Rather, a new division of the park service, known as National Capital Parks, was responsible for the management of all the reservations belonging to the federal government, including Rock Creek Park, East and West Potomac Park, and the George Washington Memorial Parkway. After the change, the Commission of Fine Arts commended the park service for its attention to the appearance of the capital's parks. They noted the service's efforts in growing "turf, elimination of scraggly shrubs, use of decorative low planting and the care of worthwhile trees" particularly in the smaller parks of the "old city." At this time, the park service submitted designs for two styles of park benches, a concrete and an iron version, both of which the CFA approved.⁵⁹

The park service also worked to revive significant plantings at the Lincoln Memorial. In March 1936, under the direction of the park, Public Works Administration workers replaced selected yew and boxwood shrubs, as well as portions of the dwarf boxwood hedges lining the approach at the Lincoln Memorial, with similar mature plants. They also supplemented existing boxwood specimens in the beds flanking the entrance to the approachway. Poor soil conditions and poor drainage combined with problems brought on by a combination of drought, winter cold, pests, and sun-scald had necessitated a rehabilitation of the boxwood. At this time drainage trenches were installed on both sides of the approachway to improve the conditions for both the newly planted hedges and

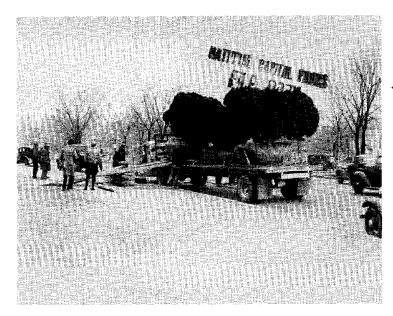


Figure 22 - Unloading replacement boxwoods off of flatbed truck, March 1936. MRC 2-50.

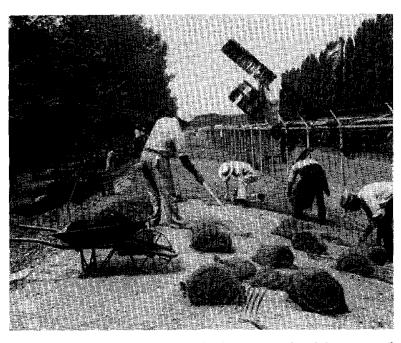


Figure 23 - Laying sod on flood levee to stabilize the earthen berm, August 4, 1936. MRC 2-127.

beds. Drainage trenches installed along each of the rows of the Reflecting Pool elms in 1935-36, also helped to improve the growing conditions for these trees.

On March 19, 1936, the Potomac River flooded to record high levels in Washington. As the waters rose, work crews constructed a temporary levee along the south side of the *Navy and Munitions Buildings* to hold back the flood. A permanent dike or flood control berm that was only $2\frac{1}{2}$ feet high at its western end near the Lincoln Memorial was constructed shortly after the temporary one was removed during the winter of 1938. It lay

parallel to the east/west axis, "at approximately one-half the distance between the Reflecting Pool and Constitution Avenue." 61

Cultural Events and Social Significance

As the frequency of summertime band performances declined at the D.C. War Memorial, the National Capital Parks began to introduce music on the west side of the Lincoln Memorial. Here in the amphitheater created by the Watergate steps, temporary chairs, booths, and kiosks were set up for the public's enjoyment of outdoor musical performances at the river's edge. Over time a series of increasingly elaborate orchestra concert shells were constructed on barges anchored near the base of the Watergate steps. Although the first program of concerts was held during the summer of 1935,

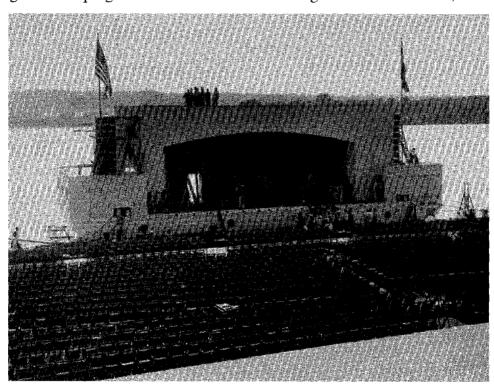


Figure 24 - Concert barge tethered at the base of the Watergate steps, in preparation for a concert, July 12, 1939. MRC 1-3.

documentation suggests that a formal orchestral barge was not in place before 1937. A more stylized architectural shell was created in 1939, and the third, an elaborate covered stage set off by flagpoles and planter boxes, was developed during 1947-1948. The steps provided most of the seating, with additional chairs arranged for the audience on the strip of lawn along the river, on platforms that spanned the road surface of the drive located between the steps and the lawn, and at the top of the steps. During concerts the underpass was closed to traffic, which was probably directed away from the river road to the Lincoln Circle. The summer series of concerts included performances by military bands, opera companies, and by the Watergate Symphony Orchestra "and the world's great

artists," organized under the auspices of the National Symphony. The theater and related services were managed and operated by a concessionaire, Government Services, Incorporated. A former storage facility located underneath the Rock Creek and Potomac Parkway approach (Parkway Drive) housed public restrooms for the area. Performances were discontinued in 1973. The barge was hauled away at that time, although the piers, which had provided anchorage for the floating stage, remained in the river until 1984.

The most significant cultural event that occurred at the Lincoln Memorial during the early years of NPS management was the Marian Anderson Easter Sunday concert on April 6, 1939. While this concert was ostensibly cultural, its significance is derived from the larger social and political impact on the nation as a whole. Because the Daughters of the American Revolution (DAR) had prohibited this noted African-American contralto from performing at the DAR's Constitution Hall, Secretary of the Interior Harold Ickes offered the steps of the Lincoln Memorial as an alternative concert location. Some 50,000 people positioned themselves on the approachway and at the Reflecting Pool steps to hear Anderson sing. Her performance was also broadcast live over national radio. The success of the concert marked the first nationally significant use of the memorial, the main steps, the approachway, the Reflecting Pool steps, and the circle as both a stage and a theater since the memorial's dedication in 1922 and the AIA's ceremonial dinner for Henry Bacon in 1923. While the selection of the site and the design of the Lincoln had been originally "conceived as a symbol of national consensus, linking North and South on holy, national ground," with the Anderson concert, the memorial became the "stronghold of racial justice."62 From 1939 the memorial became the setting from which to stage other significant events associated with both civil rights and freedom of speech.

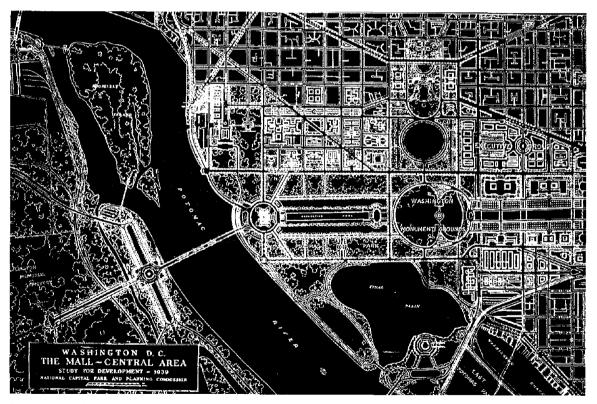
Effects of Park Planning

Construction of the last segment of Rock Creek and Potomac Parkway was completed in 1936. Over the years landscape architects such as Olmsted, Langdon, and Greenleaf had participated in the development of the final design. Although originally intended to link Rock Creek Park with West Potomac Park by means of a scenic, recreational drive, increasingly high volumes of commuter automobile traffic caused parkway administrators to institute one-way only routes during morning and evening rush hours in 1937. Because of the public perception that the parkway serves as an express route to downtown Washington, these one-way restrictions have remained in effect on the parkway to the present day. Since 1937 commuting traffic has had a profound effect on the circulation around the Lincoln Memorial. Park land near the memorial has been sacrificed to make road improvements to control traffic. The resulting changes to the overall landscape have detracted from the setting.

The National Capital Parks and Planning Commission updated their plans for the development of the Mall in 1937, 1939, and 1941. These plans reflect several changes that had taken place at the western end. The three proposals eliminated the cross arms from their treatment for the Reflecting Pool, showed the completion of the expansion of Constitution Avenue, and the addition of the Ericsson and the D.C. War Memorials. The

effect of the new flood control berm on the double rows of elms and the design for the planned open space next to the north side of the Reflecting Pool are not depicted, probably because a parking lot for the World War I temporary buildings still occupied this area, even though it was not marked on the NCPPC plans. While the berm served to help screen the parking from the pool area at this time, it eventually would become a topographical barrier, separating spaces that were designed to be together.

Elements of these plans that remain consistent with earlier NCPPC plans and the McMillan Plan for the Lincoln Memorial are the overall spatial organization, the vehicular and pedestrian circulation, and the longstanding arrangement of vegetation around the memorial structure along the outer edge of the circular roadway and along the pool. The three plans, however, outline new treatment for the Washington Monument grounds and the Tidal Basin that had a long-term impact on the Lincoln Memorial landscape. The 1939 and the 1941 plans, conceived by Gilmore Clarke, indicate the site of the Jefferson Memorial, which was then under construction. All three delineate proposals for the extension of Independence Avenue west from 14th Street along the route of B Street, S.W. Only the 1941 plan includes the design of an access ramp near the Watergate to connect the Independence Avenue extension with Arlington Memorial Bridge and Rock Creek and Potomac Parkway. 63



Map 7-Development plans for the later part of the 1930s no longer depicted the Reflecting Pool "cross arms," 1939. NPS Map microfilm 35-52F/1.

War and Changes in Land Use

The proposal for the extension of Independence Avenue from 14th Street to 23rd Street, S.W. was presented to the Commission of Fine Arts in November 1941. Concerns over the effect that a through route, designed primarily for connecting the new War Department Building (the Pentagon) in Virginia with the two major river crossings, at 14th Street and at Memorial Bridge, would have on the adjacent park land was a key issue in efforts to win approval for the change. The approved route, developed by mid-1942, created a system of one-way routes, rather than a single, two-way road that would make "... driving safer and pleasanter." This design also incorporated sections of existing park roads and portions of a circumferential road system designed by Frederick Law Olmsted Jr. in 1931 for the Washington Monument grounds. (The Olmsted design was never fully implemented.)⁶⁴ Automobiles using the old riverside drive still had to negotiate the small traffic circle at the Ericsson Memorial. However, sometime in 1943 the route was altered around this smaller monument to accommodate higher volumes of cars that developed when a separate eastbound lane was completed. This lane passed over the Tidal Basin on a newly constructed bridge, which was subsequently named Kutz Bridge in 1954 to honor D.C. Commissioner Engineer Charles Kutz. As part of the extension project, which was completed in August 1943, the entrances and exits to the Rock Creek and Potomac Parkway and Arlington Memorial Bridge were realigned to a partial cloverleaf pattern.



Figure 25 - New configuration of road system, with the addition of Independence Avenue and the on and off ramps from Lincoln Circle, January 27, 1960. MRC 1-108.

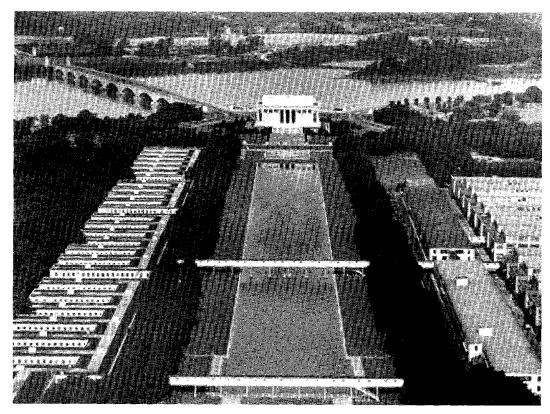


Figure 26 - Temporary elevated pedestrian bridges over the Reflecting Pool, June 1944. MRC 3-29.

The area around the Reflecting Pool was adapted in other ways to meet the expansion of the federal government during World War II. During 1942 temporary office and dormitory buildings were constructed for the use of government employees brought to the city to work on the war effort. Some of these quickly-built "tempos" were located on the western side of the Washington Monument grounds, on the main axis between 17th Street and the monument. Others were constructed in the area south of the reflecting pools. A chain-link fence, running along the most southern line of elm trees, separated these structures from the Reflecting Pool area. Two additional structures were constructed perpendicular to the older cluster of World I temporary buildings in the space formerly occupied by the parking lot on the north side of the flood control embankment. Finally two covered, elevated pedestrian bridges were erected in 1942 across the east/west axis to link the WWI structures with the newer WWII temporary buildings to the south. One spanned the Reflecting Pool close to the 19th street alignment, and the second crossed over the small plaza between the Reflecting Pool and the Rainbow Pool. A third bridge crossing 17th Street, just south of Constitution Avenue, linked the "tempos" on the Washington Monument grounds with the east side of the WWI structures. The cluster of "temporaries" located at the base of the Washington Monument grounds was expanded in 1943, when three wings were added to one of those buildings. With the influx of additional government workers to offices located in park areas, all-day parking was allowed in lots adjacent to the "temporaries" and along park roads in the monumental core. Over time, other changes to the Lincoln Memorial were proposed but were not approved. One was for the installation of light posts adjacent to the Reflecting Pool for

the purpose of practicing fly fishing techniques in the evening. Another was for the installation of permanent handrails on the raised terrace and stylobate steps leading to the memorial and for increased illumination of the steps.

Tourism and Traffic 1945-1970

Revival and Completion of Pre-War Plans

Near the end of World War II, the National Park Service, the Commission of Fine Arts and the National Capital Parks and Planning Commission prepared to return West Potomac Park to the conditions shown on the pre-war plans. The CFA urged

that the area along the south side of Constitution Avenue, now occupied by buildings, be planned as a naturalistic park area, within the rigid borders of the straight avenues, roads, and walks, with broad expanses of lawn with trees in mass, in groups, and singly, composed in a manner appropriate for passive recreation and in keeping with the immediate environment of two of the greatest memorials ever erected, the Washington Monument and the Lincoln Memorial. This is no place for active, noisy recreation: the area belongs to the people of the United States and it should not be dedicated for the use by Government employees and other residents of Washington as baseball and football fields. 65

Notwithstanding the commission's recommendations, the temporary buildings and the accompanying parking lots and fencing remained on both sides of the Reflecting Pool and at the base of the Washington Monument for many more years, prohibiting the development of these areas for "passive" recreation. However, the bridges crossing over the pools were removed during the immediate post-war period.

Four statuary groups of allegorical equestrian groupings were installed at the eastern end of the Arlington Memorial Bridge and at the approach to Rock Creek and Potomac Parkway in June 1951. Two of them, the *Arts of War* representing "Valor and Sacrifice," were designed by Leo Friedlander; the other two, the *Arts of Peace* shown as "Music and Harvest" and "Aspiration and Literature," were designed by James Earle Fraser. With the installation of these figures the plans for the bridge and the parkway approach were finally completed. However, several elements from the original bridge design were altered before and just after these last pieces were set in place. Not only had the road connections been realigned in the 1940s to meet the Independence Avenue extension, but by 1952, the original granite block pavers on the bridge was replaced with "asphaltic concrete." Such changes improved the flow and speed of traffic but also undermined the formal, ceremonial character of the bridge and its symbolic relationship to the Lincoln Memorial.

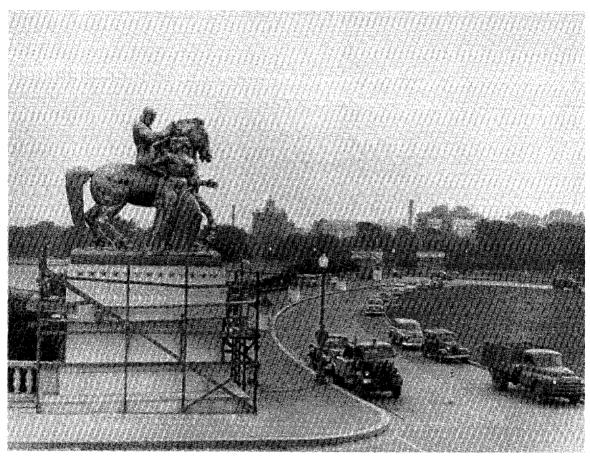


Figure 27 - Installation of "Sacrifice" statue on north side of entrance to Arlington Memorial Bridge, June 1951. MRC 1-76.

Repairs and Incremental Changes

The National Capital Parks worked to improve the appearance of the landscape around the Lincoln Memorial wherever possible. Some of the boxwood shrubs located adjacent to the retaining wall and the main approachway were thin and scraggly in appearance. In the spring of 1944, Irving Payne, the former OPBG landscape architect who had worked on previous memorial projects, recommended that the park service modify the original plan by changing the arrangement of evergreens. In June, a partial installation of yew shrubs (Taxus cupsidata 'Nana') replaced the dwarf boxwood hedge located on the south side of the approachway. By the summer of 1945, 348 yews had been planted on both sides of the approachway. The beds of dwarf boxwood flanking the entrance to the approachway and facing the circular sidewalk were rehabilitated with additional and replacement boxwood shrubs. A select number of larger boxwood shrubs on the front side of the raised terrace wall were also treated under this "program to rehabilitate" the Lincoln grounds. Among the 12 boxwoods brought in for the project was a large American boxwood, approximately 200 years old, that had been found growing in a South Carolina cottonfield near the ruins of a former colonial residence. Park plans designated this specimen for the lawn area just south of the approachway. National Capital Parks completed the rehabilitation in 1947.

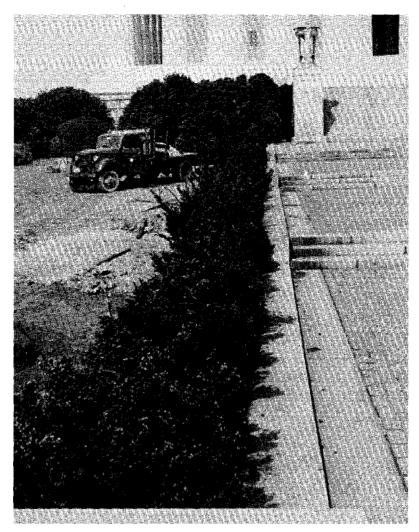


Figure 28 - The rough form of the new yews planted on the south side of the approachway, changed the character of the approachway hedge, May 3, 1944. MRC 2-96.

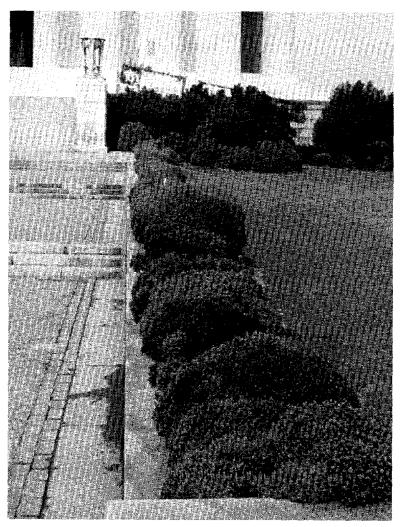
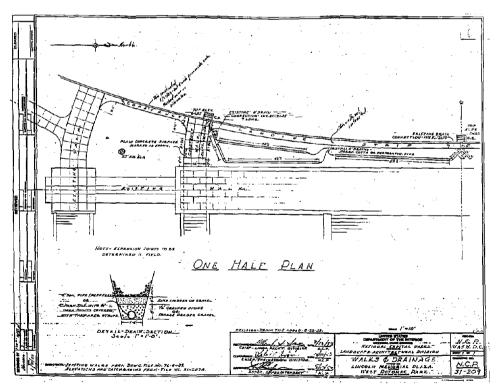


Figure 29 - Original character of approachway hedge illustrated by the rounded form of the boxwood, May 3, 1944. MRC 2-97.

Although control of horticultural pests had been a problem in West Potomac Park prior to the National Park Service stewardship, the first case of Dutch elm disease was not found until May 1947, in an area south of the Lincoln Memorial. Poor turf and pest "troubles" were among the longstanding concerns in the maintenance of the grounds around the city's "most popular structure." The yearly budget for caring for the approximately 300,000 dollars worth of trees and shrubs at the Lincoln Memorial grounds amounted to \$5,000 annually. Yet the site was plagued with "every trouble . . . in the country." George Harding, chief of horticulture and planting for National Capital Parks confirmed that:

The turf is filled with all sorts of stuff, from river muck to sand. It's the worst trouble spot we've got in town.⁶⁷

As part of a 1953 repaving of the circular roadway, National Capital Parks eliminated the rectangular edge of the circle's outer curb at the Reflecting Pool steps in favor of creating a continuous curb edge. Since the 1922 dedication, the rectangular section had been gradually adapted into an area for parking. The presence of parked automobiles, in addition to taxicab stands and the three bus stops allocated to the city's private bus companies, marred the area between the memorial and the pool and hindered pedestrians crossing from one to the other. Two triangular planting beds, shaped by the outline of the new and old curbs and new sidewalk connections, flanked the landing at the top of the steps. The beds, which were planted in boxwood, replaced most of the parking area and completed the changes made at this time.⁶⁸



Map 8 - Construction plans showing new layout of shrub beds at top of Reflecting Pool steps, 1953. NPS Map 31-209.

Visitation, New Uses and Incremental Change

Visitation at the Lincoln Memorial increased from over 1.5 visitors in 1948 to 2 million in 1959. At the same time increased levels of automobile traffic, from both visitors and commuters, continued to be a major concern of not only the National Park Service but also the District's Department of Highways and Traffic. In 1950, for example, bridle trails were closed within Potomac Park because of the incompatibility of horseback riding and large numbers of automobiles.

During the 1945-1970 period, the memorial steps and the approachway were increasingly used for public ceremonies and functions. By this time, the Lincoln Memorial and the surrounding grounds had developed into a significant setting for high-profile public events that ranged from prayer pilgrimages during the early years of the Civil Rights movement, to the destination for the 1963 March on Washington, which is best remembered for the famous "I Have A Dream" speech delivered from the memorial's steps by Martin Luther King Jr., the Resurrection City camp site for the Poor People's campaign in 1968, and a rallying point for the anti-Vietnam War movement. Events staged there ranged from the serious, such as the 1963 memorial service for President John F. Kennedy, to the celebratory, such as the Smithsonian Folklife Festivals held in 1975 and 1976. In addition, interior and exterior views of the Lincoln Memorial were frequently used by cinema production companies shooting films in Washington, D.C.⁶⁹



Figure 30 - Thousands of participants at the Lincoln Memorial grounds for the March on Washington, August 28, 1963. MRC 1-46.

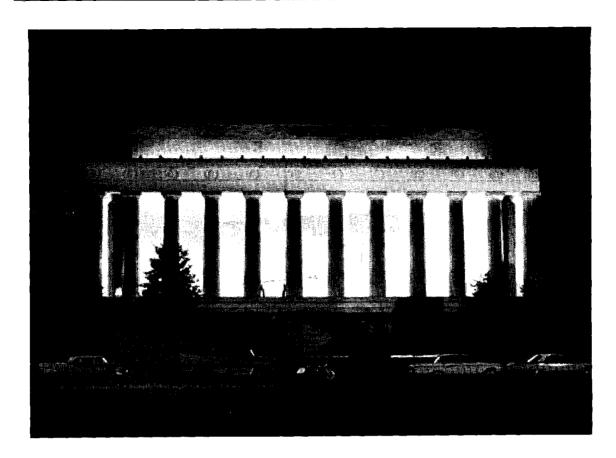


Figure 31 - Lighting effect on west colonnade of Lincoln Memorial, June 7, 1966. MRC 3-44.

Throughout the late 1960s and early 1970s, The Commission of Fine Arts reviewed the effectiveness of the original interior and exterior lighting at the memorial. New exterior lighting around the perimeter of the building was in place by the time of the Nixon Inaugural in January 1969. The incandescent spotlamps used to light the main steps were installed on both sides of the approachway in large rectangular box units. Their installation necessitated the removal of selected yew and box shrubs from the front facade planting. Two sets of lamps mounted on poles were also placed in the vegetation to cast light on the north and south sides of the building. Two other pole units were installed among the trees and shrubs on the west side. No evidence of alterations to the planting are documented for these pole installations. Floodlights located on the top of the marble column capital, around the base of the structure itself, directed light toward the colonnade of the memorial. To

National Park Service "Mission 66" improvements at the Lincoln centered on the addition of a "Tourist Information Kiosk." In 1965 the kiosk was constructed on the south side of the Reflecting Pool steps, several yards northeast of the intersection of French Drive and the Lincoln Circle. By 1968, soil compaction caused by pedestrian activity around the kiosk and adjacent refreshment trailer prompted the development of a new paving plan for this area. Although designed to prevent any further damage to the elms growing there, the character of the design in the proposal marks a significant departure from the original simple and balanced geometric layout of the landscape. Some years later a slightly different version of the plan was in fact implemented.

As other visitor issues arose, the National Capital Parks apparently evaluated them on an individual basis. In the early 1960s the Interior Department and the National Park Service responded to citizen requests for artificial ice-making capabilities at the Reflecting Pool by establishing a task force to investigate extending the use of the pool throughout the cold weather months for ice skating. Proposals were developed, but these plans were never realized. Eventually skating on the pools was prohibited all together. In 1964 the park installed permanent bronze handrails on the outside of both the raised terrace steps and the steps ascending the stylobate. The use of a temporary wood handrails appears to have ceased once the bronze versions were in place.⁷¹

Concern for pedestrian safety at the Reflecting Pool and at the entrance to the approachway were addressed in August 1972, when the eastern portion of the roadway around the Lincoln was closed to automobile traffic in the area between Bacon and French Drives. The road closing, which required the rerouting of traffic onto adjacent streets and onto Rock Creek and Potomac Parkway, was done on a seasonal basis for several years. The change became permanent in 1976 as part of the planning for the Bicentennial celebration. At that time, planners created a two-way traffic segment on the west side of the circle between Memorial Bridge and Bacon Drive.

Another change in circulation occurred in 1973, when the park management decided to remove the L-shaped sidewalks located along the top of the Watergate wing walls. A set of curving walkways replaced the originals. These were a continuation of the sidewalks on the bridge and the parkway approach (Parkway Drive) that followed the outer curb edge of the western portion of the Lincoln Circle and led down to Ohio Drive and the shoreline.⁷²

Plans for New Site Developments

In 1960 the park service sponsored a plan developed by landscape architects and engineering consultants to alleviate traffic around the Lincoln Circle by connecting existing road systems to the planned Inner Loop of the Interstate Highway System. This plan incorporated the construction of a tunnel under the western edge of the circular roadway that would connect the proposed Theodore Roosevelt Bridge approach on the northwest with Independence Avenue on the southeast. The proposal also called for a complete redevelopment of the grounds around the memorial and the surrounding area. including the Reflecting Pool, the radial roads and the Watergate. This landscape design proposed by Umberto Innocenti and Richard Webel marks the first overall plan for the Lincoln Memorial grounds since 1916. Although their design was never implemented. the Innocenti/Webel plan demonstrates the level of change considered possible at the Lincoln in the 1960s. To alleviate the impact of parking and automobile circulation, Innocenti/Webel's plan eliminated the circular roadway, French Drive and a section of Bacon Drive, while redirecting vehicles to a new route around the west side of the memorial and along the full length of the Reflecting Pool. To accommodate these elements of the design, they also proposed several alterations in pedestrian circulation, spatial organization, and vegetation. More significantly, however, they chose not to alter certain elements from the original design. These elements included the organization of the overall design along the east/west axis; the double rows of elms along the Reflecting Pool; the shape and form of both pools; the memorial approachway; and the masses of shrubs planted around the memorial structure.⁷³

Shortly after the 1960 proposal, Skidmore Owings and Merrill (SOM) created a Mall master plan for the National Park Service that incorporated the underpass concept. Although the landscape treatment for the Lincoln Memorial area featured in the SOM plan differed from the Innocenti/Webel design, and showed changes in the design of the Rainbow Pool and in the trees growing north and south of the elm walks, the similarities between the two proposals underscore, again, significant aspects of the original design that were deemed inappropriate for change. Among these are the linear arrangement along the east/west axis, the double rows of elms flanking the Reflecting Pool and the masses of shrubs around the memorial structure.⁷⁴

Acceptance of the underpass concept was influenced by the continuous public debate occurring throughout the 1960s and into the 1970s over the merits of freeways in the inner city. After prolonged deliberation the tunnel plan was eventually rejected, even though the Theodore Roosevelt Bridge and the west leg of the inner loop freeway, designed to connect with the tunnel, were under construction throughout the early 1960s. With the construction of the bridge approach and freeway segment near the western terminus of Constitution Avenue, changing the grade and adding several access roads were necessary in the area just north of the Watergate. The Theodore Roosevelt Bridge was dedicated in 1964; the west leg opened in 1966.

Throughout the 1966 to 1976 period, SOM worked with the park service and other agencies to refine their initial proposal. By the time of the 1976 Bicentennial, SOM's proposed treatment for the area around the Lincoln Memorial had developed into a design that featured much of the original layout and geometric arrangement along the Reflecting Pool, the circle and radial roads. Two areas that contrasted with the longstanding formality lay on the north and south sides of the Reflecting Pool, where SOM developed a more naturalistic landscape plan. The tunnel was no longer part of the overall design.

Conceptual planning for the improvement of the Mall may have influenced decisions that had a positive effect on the landscape surrounding the Lincoln Memorial. One improvement was the removal of the temporary WWII buildings from both the south side of the Reflecting Pool and the west side of the Washington Monument grounds during August of 1964. With this action, an unimpeded view between the Lincoln Memorial and the Washington Monument and the large open area south of the pool was restored. However, removal of WWI temporary buildings located on the north side of the flood control embankment did not occur until the summer of 1970.

Another visual improvement was initiated at about the same time as the demolition of the World War II structures. The National Capital Parks beautification program of 1964-1968 designated certain sites and federal reservations throughout the city for the planting of bulbs, annuals, and other flowers in beds, planters, and on slopes. While aquatic plants

had been floating on the Reflecting Pool for several years, the park added other seasonal color to planters on the Watergate plaza, a circular bed at the west end of Constitution Avenue, and on the hillside adjacent to the Rock Creek and Potomac Parkway approach. While the water lilies and other plants were removed from the pools in 1968, the planters, beds, and hillside were still maintained.⁷⁵

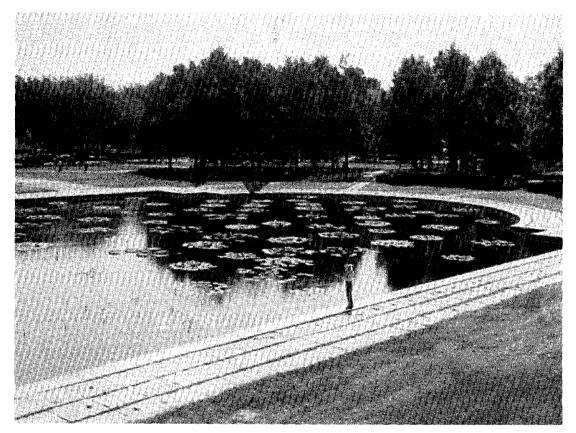


Figure 32 - Water lilies in Rainbow Pool, August 17, 1944. MRC 2-119.

Response to Contemporary Issues Through New Design and Preservation 1970-1996

Bicentennial Changes

In preparation for the Bicentennial celebration, several areas within the larger landscape of the Lincoln Memorial were altered. Although considered improvements or enhancements at the time, the changes that occurred around the west end of the Reflecting Pool and on the southeast side of the circle, between the Reflecting Pool and French Drive, deviated considerably from the original symmetry and balanced design for the memorial grounds. Most of these changes occurred in the rearrangement of pedestrian circulation and the selection of site details and materials. On the southeast segment, granite block pavers, ground cover, post-and-chain fencing, concrete, and concrete curbing were used together to create individual tree beds and a plaza-like area around the

two hexagon-shaped kiosks and a refreshment trailer, which had been set up there by 1973. While this treatment around the elms and along French Drive was done to accommodate higher levels of visitation and to protect the trees in this area, the overall effect detracted from the longstanding simplicity of design on the site as a whole. A more sympathetic installation of paving was added to the area between the base of the Reflecting Pool steps and the pool at about the same time. Here, cobblestone, granite, and concrete panels replaced relatively narrow walks of flagstone pavers, which had been added shortly after the completion of the pools. Although the design for the panels was based on an interpretation of the original treatment for the main approachway, the selection of materials and pattern of the new installation was not in keeping with the original design intent for this end of the Reflecting Pool. The two elm walks paralleling the pools were also repaved as part of this project with a bituminous paving, rather than concrete, the historic surface.⁷⁶

The most significant change to occur within the circle at the Lincoln Memorial since the installation of exterior lighting in 1969 was the construction of handicap accessible ramps and elevators. The ramps followed a modified L-shaped course along the outer edge of the wall behind the planting beds adjacent to the approachway and along the hedges lining the entry walks leading up to the memorial. Construction of the ramps, the low retaining walls behind the north/south sections of the ramps, and the elevators necessitated the removal of boxwoods and yews from both sides of the front facade planting. Construction may also have affected the condition of shrubs growing in adjacent areas. Soil compaction and other forms of disturbance appear to have caused damage to specimens other than those growing in the direct path of the ramps. One other aspect of the project was the construction of more than 100 curb cuts to accommodate



Figure 33 - View of north side of Lincoln Memorial, 1992. NPS DSC photo.

wheelchairs at the intersection of roadways and walks around the Mall and other park areas in the monumental core. These additions were completed in 1976. As part of the ramp construction, the park replanted several yews and boxwood on the east side. At this time two sets of six yews were planted in a semicircle to screen the exterior light boxes. The park also removed the two hedges of yews (*Taxus* x *media* 'Densiformis') flanking the approachway and subsequently planted new yew shrubs according to the same arrangement.⁷⁷

In 1977 park management replaced plantings near the approachway and on the opposite side of the Lincoln Circle with inkberry, or *Ilex glabra*. Shrubs in the pair of rectangular beds flanking the beginning of the approach to the memorial and in the two triangular beds marking the descent to the Reflecting Pool and had been damaged by exposure to intense sun and increased pedestrian traffic at these points. The *Buxus sempervirens* 'Suffruticosa' originally designated for these areas were unable to rejuvenate at a fast enough rate once they were damaged. Before the 1977 planting, park staff had replaced, at least one other time, the boxwood shrubs growing in the beds on both sides of the entrance to the approachway with Japanese holly, or *Ilex crenata*. As part of this planting effort, "boxwood, holly and yew, replacement and filler planting," were placed mostly on the north, south, and west sides of the memorial, "as directed by the [park] landscape architect." The American hollies and yews included in this planting were mature specimens. The two large hollies now growing on the east front were probably from this planting. Another plant type added to the landscape design was *Liriope variegata*, which was placed in the triangular beds at the top of the Reflecting Pool steps.⁷⁸

Other changes brought about by the Bicentennial occurred in areas adjacent to the Lincoln Memorial. These ranged from the installation of a floating dock near the Ericsson Memorial for the operation of commercial boat cruises on the Potomac, to the Folklife Festival, held in 1975 and 1976, on the open ground just south of the Reflecting Pool, to full-scale redesign of the former site of the World War I temporary buildings on the north side of the pool. Named Constitution Gardens, this naturalistic garden, reminiscent of 19th century public parks, was dedicated May 27, 1976.

The Development of Preservation Plans

In 1976 it was determined that the large population of midges and spiders congregating at the Lincoln Memorial at night was responsible for the soiling of the white marble exterior surfaces of the building. Attracted from their natural habitat along the Potomac shoreline to the Lincoln by the bright night lights, the midges attracted spiders. Large numbers of birds, in turn, were attracted to the spiders. As a result, the birds established nesting areas in the upper recesses of the structure. Cleaning debris and residue left by these pests with high pressure water proved to be damaging to the memorial itself. Park management tried various treatments to reverse this deterioration, but to no avail. ⁷⁹

The plaza between the traffic circle and the Reflecting Pool required several repairs in 1977. The park service noted that the joints in the stone sidewalk needed repointing.

Moreover, exposed aggregate in the south walk was deteriorating, showing evidence of cracking, spalling, and missing stones. The north walk and center panel had vegetation growing between the joints. Similar problems affected the memorial approachway, where the cobblestone panels were cracked and missing stones. Some of these conditions persisted for several years. In 1983 NPS employees noted that exterior drains around the building were inadequate, and unable to prevent seepage into lower chambers. In addition, the aggregate walks were crumbling.

Although swimming or wading in the pools had been prohibited for many years, during warm weather, large-scale gatherings on weekends, holidays, and other occasions prompted spontaneous wading. By 1978 periodic cleaning was required once or twice per year. It would take approximately three weeks per cleaning, as on average, 10 to 15 large truckloads of debris would need to be removed from the pools. In addition to the build-up of debris, the bottom was no longer watertight and the intake and drainage of surplus water required improvements. The reflecting pool underwent "reconstruction" in 1981. Upon completion of the project, the park service introduced a "self-sustaining ecological system," consisting of selected aquatic plants combined with natural bacterial action designed to consume algae and maintain the appearance of the pools. 80

In 1984, the National Capital Region proposed to rectify site problems in the area between the Lincoln Memorial and the Arlington Memorial Bridge. The large wooden piles formerly used to secure the Watergate concert barge were to be removed, as was the access road at the top of the steps, which had been used to service the concerts. However, the granite curb, marking the river side of the access road was to be left in place. The same proposal called for a "handicap access ramp," similar to the existing aggregate walk, at "the juncture of the walks connecting the Lincoln Approach, Bridge and Watergate steps."

Since the Bicentennial, ongoing preservation of the vegetation at the Lincoln has centered on the American elms lining the radial roads and the circular road and on the Dutch elms growing along both sides of the Reflecting Pool. Although the arrangement of the original planting had not always been maintained, efforts at sustaining a healthy collection of trees have been substantial. These efforts include following a prescribed balance in the selection of elm varieties and the cultivation of replacement elms at National Capital Parks-Central's nursery on Daingerfield Island near National Airport. 82

Other vegetation preservation has been directed toward the lawn areas around the memorial structure and along the Reflecting Pool. The 1993 Presidential Inaugural festivities necessitated the reseeding of grassy areas in late January. Because only rye seed, rather than the preferred fescue, could germinate at that time of year, sections were cordoned off with temporary fencing for a more rapid reestablishment of the lawn The longstanding use of temporary or snow-type fencing to restrict pedestrian access to the lawn during the off-season is now prevalent throughout the year as different grassy areas are allowed to rejuvenate.

Beginning in 1988 the Denver Service Center of the National Park Service, in collaboration with National Capital Parks-Central and the National Capital Regional Office, conducted studies about the need for the preservation of the Lincoln Memorial. As a result of their initial examinations, the raised terrace and the approachway were identified as two significant landscape features that required preservation. The restoration of the raised terrace, including the coping along the top of the retaining wall, began in the fall of 1993, and that of the approachway began in the fall of 1995.

In 1993, the National Park Service, in cooperation with the District of Columbia, the Federal Highway Administration, and the Architect of the Capitol, agreed on unified design guidelines for the vicinity of the National Mall streetscape. This area encompassed President's Park on the north, the Potomac River and the Southwest Freeway on the west and south, and Second Street on the east, including the Capitol grounds. The *Streetscape Manual* outlined consistent treatments for roadways, walkways, vegetation and site furniture. For the Lincoln Memorial grounds, Constitution and Independence avenues were defined as "major park roads," French and Bacon drive were defined as "park roads and drives", and the Reflecting Pool area and eastern portion of the Lincoln Circle were termed "special pedestrian ways." Based on this classification system, the manual provided standard details for each area. In 1991 17th Street, between Constitution and Independence Avenue, was the first NPS road project to implement the Streetscape Manual standards. Since the guidelines were developed, the NPS has used them for all their road projects in West Potomac Park and the Mall.

New Memorials, New Commemorative Landscapes

After the Bicentennial several new memorials were proposed for sites adjacent to the Lincoln Memorial. Unlike the Ericsson Memorial, the locations of some of these did not follow the geometric patterns established by the McMillan Commission plan, and later reiterated by the NCPPC plans, for the development of secondary sites in West Potomac Park. Two had little impact on the memorial grounds. The first, a separate memorial to the Signers of the Declaration of Independence, was located on a 1-acre island in the middle of the Constitution Gardens lake. It was completed in 1982. The second consisted of adding the names of Alaska and Hawaii to the other states already commemorated on the Lincoln Memorial. Although a bill introduced in the U.S. Senate in 1973 sought to include the names of Alaska and Hawaii on the attic frieze, where the other states were recognized, after lengthy debate a different proposal was eventually adapted. In 1985 the names of the two new states were engraved on a rectangular-shaped plaque that was installed on the center of the approachway, aligned with axis of the Washington Monument.⁸³

Two larger memorials developed during this decade have had significant impact on the Lincoln Memorial grounds. The first of these was a memorial to Vietnam War veterans, designed by Maya Lin, which was located in the western portion of Constitution Gardens adjacent to the northeast segment of the circular road. The Vietnam Veterans Memorial was dedicated in 1982. Two years later, a flag pole and statuary group, designed by

sculptor Frederick Hart, was added to Lin's understated, yet dramatic, geometric work. An overhead tree canopy and understory trees planted next to the sidewalk along the outer edge of the circular roadway screen this memorial from the Lincoln Memorial. However, they also affect the formal character of the planting of the American clms around the circle. Near the northeast section of the circle, a curved arrangement of paths leading from Constitution Gardens and the Vietnam Veterans Memorial intersects with the more linear walks on the north side of the Reflecting Pool steps. This arrangement has changed the formal character of the pedestrian circulation.

With the successful completion of the Vietnam Veterans Memorial, the area at the west end of the Constitution Gardens became strongly associated with veterans. Soon thereafter, veterans organizations requested permission to set up concession tents near Constitution Avenue, where they sold merchandise expressing veterans' points of view on pertinent issues. In 1983 the tents were moved to the top of the steps on the north side of the Reflecting Pool, where they have remained.

The second major memorial, dedicated to Korean War veterans, was authorized in 1988 and constructed on the south of the pool in 1995. The design of this memorial incorporated many of the same geometric elements as the Vietnam Veterans Memorial but adapted them to achieve a different overall effect. Like the Vietnam Veterans Memorial, the Korean War Veterans Memorial is adjacent to a section of the circular roadway around the Lincoln Memorial. Informal paths also intersect with the straight walks found on the south side of the Reflecting Pool. An overhead tree canopy and understory trees, planted to create a screen, are immediately adjacent to the sidewalk along the outer edge of the circle, as well. Both the walks and the trees at the western end of the Korean War Veterans Memorial fundamentally transform the formality originally planned for this area of the circle.

The kiosks and refreshment trailer that had been on the south side of the Reflecting Pool steps since the late 1960s and early 1970s were removed and relocated or replaced in 1995 as part of the Korean War Veterans Memorial's development. A "Tourmobile" kiosk, a souvenir kiosk, and a new, enlarged refreshment trailer now occupy sites on the west side of French Drive. A new information kiosk has been installed at the edge of the recently planted understory trees between the Reflecting Pool and French Drive. The old nonhistoric treatment of clustered structures, extended pavement, individual beds around the elms, and post-and-chain fencing has been continued in this designated area for visitor services.