

1 ANALYSIS AND EVALUATION OF CHARACTER

2 DEFINING FEATURES (EXCERPTS FROM CHAPTER 4 AND 5, *JEFFERSON* 3 *NATIONAL EXPANSION MEMORIAL CULTURAL LANDSCAPE REPORT 2010*)

4 STATEMENT OF SIGNIFICANCE

5 The Gateway Arch is well known as an extraordinary structure, a soaring emblem, part sculpture
6 and part memorial, embodying the principles of Modernism as executed by one of its most
7 recognized masters, architect Eero Saarinen. The landscape — though not initially afforded the
8 same recognition — is the inextricable connection between the Gateway Arch and its setting. The
9 design for the landscape surrounding the Gateway Arch is the result of a close collaboration
10 between Saarinen and landscape architect Dan Kiley.

11 *DESIGN INTENT*

12 The significance of the landscape is dependent upon its ability to convey the character intended by
13 the master designers. The intent of the designers is encapsulated in part by Saarinen's words about
14 the Memorial in 1959:

15 "All the lines of the site plan, including the paths and roads, and even the railroad
16 tunnels, have been brought into the same family of curves to which the great arch
17 itself belongs. More and more I believe that all parts of an architectural composition
18 must be parts of the same form-world."¹

19 Original design intent is a key aspect of significance for the Memorial, and thus a factor in the
20 determining which landscape features do or do not contribute to its significance. Design intent at
21 the Jefferson National Expansion Memorial is expressed through the built form as it exists today,
22 and also through the designers' surviving drawings, written and verbal communications.

23 The intent of the National Park Service has always been to communicate the architectural and
24 landscape architectural values of the collaborative Saarinen/Kiley concept plan. The landscape
25 surrounding the Gateway Arch derives significance from that design concept. The ideas of the
26 Saarinen/Kiley plan are important; however, not all of the built features at the Memorial reflect the
27 intent of Saarinen/Kiley. This is due, in part, to financial constraints over a long implementation
28 period. In this respect, the more the features reflect the designer's intent, the more significant they
29 are as integral parts of the cultural landscape.

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¹Aline B. Saarinen, ed., *Eero Saarinen on His Work* (New Haven and London: Yale University Press, 1962), 18.

1 COMPARATIVE ANALYSIS OF HISTORIC AND EXISTING LANDSCAPE 2 CONDITIONS

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4 Since the significance of this landscape is directly related to the Saarinen/Kiley design concept
5 rather than its physical implementation, those features which have a character reflecting the
6 designers' intent are more significant than those constructed features which diverge from the
7 intent. Therefore, each landscape feature was assessed as either being contributing or non-
8 contributing based upon its relationship to design intent. This chapter concludes with an
9 assessment of the integrity of the Memorial.

10 Terms frequently encountered in descriptions of the significance of the cultural landscape are
11 *contributing*, *character-defining*, and *non-contributing*. The terms "contributing" and "non-
12 contributing" are specific, quantifiable items intended for field identification of features for the
13 purpose of the Cultural Landscape Inventory (CLI) and National Register of Historic Places
14 evaluations.² Further, "non-contributing" features can be classified as either "compatible non-
15 contributing" or "incompatible non-contributing." Definitions are as follows:

16 Contributing

- 17 • A contributing feature is "a biotic or abiotic feature associated with a landscape
18 characteristic that contributes to the significance of the cultural landscape."³
- 19 • At the Memorial, contributing features reflect the Saarinen/Kiley design intent
20 in their built character.

21 **Character-defining** features are within the set of contributing landscape features; they are
22 those features that represent the essential historic qualities that lend the landscape its
23 significance. Character-defining features represent the most "prominent or distinctive
24 aspect(s), quality(ies), or characteristic(s) of a historic property that contributes
25 significantly to its physical character. Structures, objects, vegetation, spatial relationships,
26 views...may be such features." According to the *CLR Guide*, "The term 'character-defining
27 feature' was conceived to guide the appropriate treatment and management of historic
28 structures (and later of cultural landscapes), so that features conveying historic character
29 would be retained by treatment activities."⁴

30 Non-Contributing

² National Park Service, U.S. Department of the Interior, *The Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes* (1996).

³ National Park Service, *The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes*.

⁴ *CLR Guide* (1998), *Landscape Lines* 3, 4.

- 1 • A non-contributing feature is “a biotic or abiotic feature associated with a
2 landscape characteristic that does not contribute to the significance of the
3 cultural landscape.”⁵
- 4 • In the case of the Memorial, a non-contributing feature is one that was designed
5 and implemented by a subsequent designer, or a design that was altered during
6 implementation to the point that it no longer reflects the Saarinen/Kiley design
7 intent.

8 **Non-contributing compatible** is a term used most often in describing buildings or other
9 features in urban historic districts that are not historic in their own right, but are
10 constructed or sited in a way that does not detract from the surrounding historic fabric.

11 **Non-contributing incompatible** features are the non-historic features of the landscape
12 that are intrusive and may detract from its integrity.

13 TOPOGRAPHY

14 Historic Condition: Saarinen was responsible for the design of the landform, and intended the
15 catenary-curve geometry which characterizes the Gateway Arch and other site structures to also be
16 expressed by curving lines on the ground plane.⁶ The landform is composed of fill and carefully
17 sculpted to achieve specific spatial and visual effects.⁷ Saarinen’s insistence that the railroad cease
18 to be a visual and physical obstruction between the city and the riverfront had a decisive effect on
19 the landform. This decision resulted in a combination of open cuts and tunnels for the railroad
20 through the eastern part of the Memorial. The topography was masterfully sculpted to hide the
21 tracks and, as a result, the train causes minimal distraction in the Memorial setting.

22 Other significant designed landforms included the bowls creating the north and south ponds, the
23 plinths forming the north and south overlooks, and the berms along Memorial Drive. The ponds not
24 only serve as aesthetic features but were also designed as part of the drainage system, as they were
25 sited at some of the lowest elevations in the landscape. The two overlooks, in contrast, were
26 constructed high above the river levee to provide vantage points for views. Berms located along
27 Memorial Drive, while part of the original plan, were constructed higher than originally designed,
28 when during the second phase of construction (1978 to 1981), excess fill material was added to
29 them (possibly also to reduce the impacts of wind on the Gateway Arch). The southwest berm was
30 built up six feet higher, and the northwest 14 feet higher, than specified in the original design.

31 Analysis: Contributing. The topography of the Memorial grounds is a character-defining element of
32 the Saarinen/Kiley concept. The landform was implemented as originally intended, and remains

⁵ National Park Service, *The Secretary of the Interior’s Standards for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes*.

⁶ Mary Hughes, Dan Kiley’s Site Design for the Gateway Arch, *Preserving Modern Landscape Architecture: Papers from the Wave Hill-National Park Service Conference* (Cambridge, Massachusetts: Spacemaker Press, 1995), 30.

⁷See drawing number JNEM 3019, produced by Saarinen & Associates in 1962, copy on file in JNEM Archives, Record Unit 120, Drawer 12, Folder 10.

1 intact today. The few changes made over time result in only minimal divergence from the design
2 concept. The only major change during construction was the increase in height of the berms along
3 Memorial Drive. These berms as built eliminate views of the highway and reduce noise and
4 pollution within the park, and are therefore functionally important to the visual quality of the
5 Memorial landscape.

6 SPATIAL ORGANIZATION

7 Historic Condition: The landscape surrounding the Gateway Arch was designed using the Modern
8 interpretation of Beaux-Arts compositional principles, a signature style that Saarinen employed in
9 many of his designs. At the Memorial, the overall space was organized and unified, combining a
10 nearly symmetrical plan with an east-west primary axis, a north-south secondary axis, and a
11 repetition of curving forms echoing the catenary curve geometry of the Gateway Arch in various
12 other features. The monumental character of the landscape is achieved through the scale and
13 proportional relationships of the spaces, and the spatial experience of compression and expansion
14 created along the length of the pedestrian walks.

15 The planting plan was altered during the second major phase of implementation. The changes
16 diverged somewhat from Kiley's design, affecting the pattern of spatial organization, particularly
17 around the ponds. The number of plants was diminished, resulting in fewer enclosed spaces,
18 thresholds, and edges than originally intended. Reduction in the numbers of plants used for
19 screening functions slightly weakened the intended separation of Memorial operations and visitor
20 use areas.

21 Analysis: Contributing. The overall spatial organization of the property remains the same as the
22 Saarinen/Kiley plan, and therefore is contributing. A few minor departures from their plan occur in
23 the planted forms and density used along the east-west axis, Memorial Drive, around the operations
24 areas, in Luther Ely Smith Square, and around the ponds. However, the strength of the designed
25 spatial organization of the Memorial grounds continues to be character-defining. Landscape
26 features that support the overall spatial organization of the Memorial landscape are identified as
27 contributing features are described below in more detail.

28 *SYSTEM OF WALKS AND ALLÉES*

29 The circulation system was a key element in organizing the Memorial landscape. The uniformity of
30 the closely spaced allée planting and the curving edges and alignments of the walks are part of the
31 original Saarinen/Kiley design and evoke the intended spatial quality, despite substitution of a
32 different tree species.

33 *PRIMARY AXIS BETWEEN THE OLD COURTHOUSE AND THE RIVER*

34 The relationship between the Old Courthouse, the Gateway Arch, and the river is a strong axis that
35 was a primary organizing element of the Saarinen/Kiley concept from the beginning. Saarinen
36 intended for the Memorial to connect to the city and the river. The center of the axis (the opening
37 beneath the Gateway Arch) was left as an open space, clear of vertical elements, and was intended
38 to create a strong visual and physical connection between the city and the river, through the

1 Gateway Arch. The spatial connection between the Old Courthouse (a civic symbol of St. Louis) and
2 the Mississippi River survives as a character-defining feature that is a key component of the
3 Saarinen-Kiley plan.

4 *POND AREAS*

5 Kiley's intended spatial composition at the ponds was to contrast dense, tall forest tree masses in
6 some areas with open meadows in others. The edge between these spaces was to be articulated
7 with flowering trees. The sinuous edge of the ponds was intended to create smaller spaces within a
8 larger whole. In general, the topographic relationship of the ponds to the rest of the Memorial
9 grounds is the same as in the Saarinen/Kiley design.

10 *OVERLOOKS*

11 The overlooks were intended as formal viewing platforms for the river, a key component of the
12 symmetrical site plan, as well as "finials" for the Memorial grounds as viewed from the east side of
13 the river. They continue to fulfill these functions today. For more analysis of the overlooks as
14 structures, see the *Buildings and Structures* section below.

15 *LUTHER ELY SMITH SQUARE*

16 In the Saarinen/Kiley plan, Luther Ely Smith Square was a raised plaza defined by two triple allées
17 of trees (of the same single-species planting as seen on the rest of the Memorial grounds) on the
18 north and south sides of the block. Two pedestrian overpasses emerged from these allées and
19 connected to the east-west axial walkways. The pedestrian overpasses and rows of trees were
20 intended to physically and visually connect the square to the rest of the Memorial grounds. The
21 overpasses and tulip poplar allées were never implemented, nor was the raised plaza. Luther Ely
22 Smith Square lacks elements that were identified in the Saarinen/Kiley concept for the space.
23 Although its details and furnishings are not in keeping with the Modern aesthetic of the rest of the
24 Memorial grounds (non-contributing), the space itself upholds the spirit of the major axis from the
25 Old Courthouse to the river by leaving this vista unobstructed (compatible).

26 *OLD COURTHOUSE BLOCK*

27 The Old Courthouse was integrated into the design composition as a symbol of the city of St. Louis.
28 It was intended to function as the eastern axial terminus of the Saarinen/Kiley site plan. It
29 continues to fulfill this function today.

30 *SERVICE AREAS*

31 Service areas were sited as zones on the Saarinen/Kiley plan. These operational areas were not
32 designed in detail by Saarinen/Kiley but their plans clearly showed these facilities were to be sited
33 within low points in the topography and screened by vegetation, concealing them from the view of
34 visitors. The spatial arrangement of the service areas reflects the Saarinen/Kiley design intent,
35 including their siting at low points surrounded by screening vegetation to camouflage their
36 presence.

37 **VIEWS AND VISTAS**

1 The centrality of the Gateway Arch within the axial composition of the Memorial landscape had a
2 direct influence on the designed views and vistas and are contributing. According to Saarinen, “the
3 Arch is in a sense a vertical monument on one axis and a wide monument in another.”⁸ Views and
4 vistas relate to both of these aspects of the Gateway Arch, the city, and the river.

5 VIEW FROM THE OLD COURTHOUSE TO THE GATEWAY ARCH

6 The strong east-west axial relationship between the Old Courthouse and the Gateway Arch was
7 intended to create a primary vista, referred to at one time as the “Saarinen vista.” From the east, the
8 Gateway Arch was to frame the Old Courthouse. From the west, the Gateway Arch was originally
9 designed to frame a view of the Mississippi River. Saarinen wanted to create a strong visual
10 relationship between the river and the city it influenced. Pedestrian overpasses and allées were
11 designed, but never realized, in Luther Ely Smith Square with the intention of strengthening the
12 frame of the vista. The vista created between the Old Courthouse and the Gateway Arch is a
13 fundamental concept from the Saarinen/Kiley design that was realized and is a major feature of the
14 landscape today.

15 VIEW ALONG THE NORTH-SOUTH AXIS

16 Views of the Gateway Arch were intentionally planned from specific vantage points in the Memorial
17 grounds. These views resulted from the designers’ manipulation of landscape features such as
18 topography, circulation and vegetation. The vistas from the north and south triangles, on axis with
19 the Gateway Arch, framed the sides of the Gateway Arch as a “vertical monument,” tall and narrow,
20 as opposed to the view discussed above which portrays the Gateway Arch as a “wide monument.”⁹
21 The designed views to the Gateway Arch along the north-south axis of the memorial are a
22 character-defining feature of the Memorial landscape.

23 A series of glimpses of the Gateway Arch were intended along the pedestrian approaches, and were
24 framed by the layout of the walks and the dense plantings of trees. The close, regular spacing of the
25 trees and the gentle curve of the walks creates a sheltered condition, with occasional moments of
26 openness that reveal views of the Gateway Arch. As the trees have grown, they have more closely
27 fulfilled the original design intent by blocking views of the Gateway Arch from some areas of the
28 Memorial grounds. Dramatic glimpses of the Gateway Arch from vantage points along the walks
29 exist as intended.

30 VIEWS AROUND THE PONDS

31 Views from the pond areas are shaped by the surrounding undulating landforms and plantings.
32 Clumps of trees contrasting with open meadow areas were intended to obscure views in some
33 areas and afford dramatic views in other areas, such as the views from within the circular plantings
34 of bald cypress near each pond, framed through an intentional gap in the arc of the trees. The
35 reflection of the Gateway Arch in the ponds was intended to enhance views from this area. Views to
36 the Gateway Arch from the ponds reflect the design concept and therefore are contributing.

37 VIEWS BETWEEN THE MEMORIAL AND EAST ST. LOUIS

⁸John Peter, *The Oral History of Modern Architecture* (New York, Harry N. Abrams, Incorporated, 1994), 201.

⁹Peter, *Oral History of Modern Architecture*, 201.

1 The view from the Gateway Arch to East St. Louis was intended to feature a wooded park on the
2 east side of the Mississippi River, however, Saarinen/Kiley's concept of what was to be viewed in
3 East St. Louis was never fully defined or realized. Saarinen's vision was to extend the Memorial to
4 the east side of the river because of the magnificent views afforded from the east side toward
5 downtown St. Louis. Open views to and from East St. Louis reflect the design intent and therefore
6 are contributing. As with views from the Old Courthouse to the Gateway Arch, this view is
7 influenced by the axial arrangement of the design and therefore the Gateway Arch appears as a
8 wide monument.

9 VIEWS FROM THE OVERLOOKS

10 The overlooks were designed to function as viewing platforms for the Mississippi River and are
11 contributing.

12 SCREENED VIEWS OF SERVICE AREAS

13 The service areas were intentionally screened through their placement within topographic hollows
14 and planting design and are contributing.

15 BUILDINGS AND STRUCTURES

16 *GATEWAY ARCH*

17 Historic Condition: The Gateway Arch, a 630-foot-tall monumental structure in the form of a single
18 weighted, inverted catenary curve, was constructed between 1963 and 1965. It was composed of
19 172 triangular, stainless steel, double-walled sections.¹⁰ The Gateway Arch was intended to be the
20 centerpiece of the landscape, with its geometry echoed in other designed features in the
21 surrounding landscape. On the larger scale, the landscape was intended to serve as a base to the
22 Gateway Arch, grounding it in an abstracted "forest." From the river and East St. Louis, the
23 floodwalls and overlooks were meant to appear as "finials" at either end of a "pedestal" supporting
24 the Memorial.

25 Analysis: Contributing. The Gateway Arch, the main character-defining feature of the Memorial,
26 was constructed as the original architect and engineers intended, and has been maintained in its
27 original condition; its role as primary focal point of the surrounding landscape also remains as
28 intended. A Historic Structure Report is currently underway for the Gateway Arch.

29 *OLD COURTHOUSE*

30 Historic Condition: The three-story Greek Revival Old Courthouse was constructed between 1839
31 and 1862.¹¹ The Old Courthouse underwent major rehabilitations in 1941-1942, 1954-1955, and
32 1985. Throughout the cultural landscape period of significance, the first floor of the building served

¹⁰For more detailed information regarding the Arch construction and engineering, see JNEM Archives, Record Units 103, 104, 106, and 120.

¹¹Midwest Regional Office, National Park Service, Department of Interior, *National Register of Historic Places Inventory - Jefferson National Expansion Memorial*, prepared by Architectural Historian Richard I. Ortega (Omaha, Nebraska: March 3, 1976), 1.

1 as a museum, interpreting the famous Dred Scott case that took place in one of its courtrooms.¹²
2 The second floor featured two restored courtrooms and served as administrative offices.

3 Analysis: Contributing. The Old Courthouse is a major element of the axial arrangement of the
4 Memorial. More information is needed regarding its historic appearance over time.

5 *VISITOR CENTER AND MUSEUM OF WESTWARD EXPANSION*

6 Historic Condition: The underground Museum of Westward Expansion and visitor center located
7 beneath the legs of the Gateway Arch was conceptualized as early as 1959.¹³ The visitor center was
8 completed in 1966. The lobby, including the center fountain and the loading zones for the
9 transportation system was designed by Saarinen & Associates after Eero Saarinen's death. Two
10 theaters were conceptualized as part of the interpretation of the Gateway Arch.

11 Analysis: Contributing. The belowground location of the visitor center and Museum of Western
12 Expansion reflect Saarinen's design intent, though the exhibit design itself is not historic. The
13 underground portions of the Memorial are conceptually important. The two concealed service areas
14 (the generator building and shipping and receiving) for this complex are also contributing,
15 characterized by their carefully concealed siting and ongoing function.

16 *MAINTENANCE FACILITY*

17 Historic Condition: According to the approved concept development plan, a maintenance building
18 was to be located at the south end of the site. Other than its location, no details about the
19 maintenance facility were specified on the Saarinen/Kiley plan. However, it is evident from the
20 proposed landform surrounding the building that it was intended to be an earth-sheltered
21 structure, hidden from view.

22 In 1974 a temporary prefabricated steel building was erected on the southwest portion of the site.¹⁴
23 The temporary building was relocated and then was replaced in 2003 with a newly constructed
24 two-story maintenance facility sited in the location designated on the Saarinen/Kiley plan.

25 Analysis: Non-contributing compatible. While the maintenance facility is in the location specified in
26 the Saarinen/Kiley concept, it was not developed in the original plans. The maintenance facility has
27 no relationship to the design aesthetic or "form-world" (in Saarinen's terms) of the Saarinen/Kiley
28 plan. However, it is sited in the manner shown on the Saarinen/Kiley plan, which specified service

¹²During the early years of the Memorial, prior to the completion of the Museum of Westward Expansion, the Old Courthouse served as a museum interpreting the overall themes of the Memorial.

¹³Sharon A. Brown, *Administrative History of Jefferson National Expansion Memorial National Historic Site, Part I* (National Park Service, 1984), 122; and Bob Burley, oral history interview with Gregg Bleam and Gina Bellavia, July 27, 1995. Mr. Burley was an employee of Saarinen & Associates from 1956-1963. The 1948 Competition Drawing and other interim plans for the Memorial project showed as many as three museums planned for the site, all above ground. Plans were made to place the museum under the Arch after the concept of aboveground museums was abandoned, in part because of cost. Saarinen welcomed the idea of eliminating surface structures because they tended to clutter the site and detract from the focus on the Gateway Arch.

¹⁴*Temporary Maintenance Building Completion Report*, copy on file in JNEM Archives, unprocessed Rennison Collection.

1 areas to be placed low in the topography and screened by plantings. While the maintenance facility
2 is non-contributing and is not the product of Saarinen/Kiley, it is compatible with the Memorial.

3 *PARKING GARAGE*

4 Historic Condition: Parking was always a part of the Saarinen/Kiley concept plan and was
5 envisioned to occur on the north end of the Memorial.¹⁵ The existing parking garage is a three-story
6 (two underground) structure accommodating 1,208 cars and occupying 4.7 acres.¹⁶ The garage
7 construction was made possible by an agreement between the City of St. Louis, the Bi-State
8 Development Agency, and the National Park Service.¹⁷

9 Analysis: Non-contributing compatible. The parking garage is in keeping with the use identified for
10 this area in the Saarinen/Kiley design concept, but was not developed in the design and is therefore
11 not contributing. The garage is generally unobtrusive from the Memorial landscape and was
12 designed to fit into the designated area on the original plan for parking, so its form and use are
13 compatible with the character of the Memorial. It is not, however, the work of Saarinen or Kiley. It
14 does not share the distinctive Modernist design vocabulary of the Memorial landscape as conceived
15 by the original designers (evident in the overlooks and retaining walls, for example).

16 *GRAND STAIRCASE*

17 Historic Condition: Eero Saarinen designed the grand staircase to symbolize “the movement of
18 peoples through St. Louis, the gateway.”¹⁸ The stairs were a monumental physical connection
19 between the Gateway Arch and the riverfront.

20 Analysis: Contributing. The grand staircase is part of the Saarinen/Kiley concept. The location,
21 function, and general form was retained from the original plan. As identified in their vision, it
22 serves as the grand formal connection from the Gateway Arch to the riverfront on the primary axis.

23 *NORTH AND SOUTH OVERLOOKS*

24 Historic Condition: The overlooks were designed to provide a place to view the Mississippi River
25 from the Memorial grounds. They were constructed as designed by Saarinen & Associates in 1960-
26 1962. The interior spaces of the overlooks were envisioned as museum locations but this use was
27 never realized.

28 Analysis: Contributing. The north and south overlook structures, implemented in the initial
29 construction of the Memorial, directly reflect the Saarinen/Kiley design concept and are character-
30 defining structures. The key features are their location at the ends of the Memorial; their open
31 quality that permits sweeping views from atop the overlooks; the presence of catenary curve
32 segments in the form of the overlooks; and the monolithic appearance of the structures owing to
33 their unified form and material.

¹⁵See early plans, Eero Saarinen & Associates. Copies on file at JNEM Archives, uncatalogued collection. Parking areas were planned for both the north and south ends of the site at one time.

¹⁶Moore, *Urban Innovation*, 16.

¹⁷Moore, *Urban Innovation*, 13-22. Historian Bob Moore details the history of the construction of the parking garage as well as the operating agreement among the three agencies.

¹⁸Saarinen, *Eero Saarinen on His Work*, 18.

1 *RAILROAD OPEN CUT WALLS AND TUNNELS*

2 Historic Condition: The depressed railroad alignment that runs through a series of open cuts and
3 railroad tunnels was conceptualized and designed by Saarinen & Associates. Constructed in 1959-
4 1960, the cuts and tunnels concealed the rail line from view, fulfilling a major design priority of
5 Saarinen's. A 960-foot-long tunnel segment was constructed beneath the proposed grand staircase,
6 connecting the two open cuts. The entrances to the tunnels are curved, using catenary segments
7 reflecting the geometry of the Gateway Arch. The tops of the railroad cut retaining walls are also
8 curved.

9 Analysis: Contributing. The curvilinear entryways to the tunnels were intended to reflect the
10 "single form-world" present throughout the site. The tunnels and open cuts were intended to screen
11 the railway from the Memorial grounds. They were constructed to closely reflect the Saarinen/Kiley
12 design.

13 *RETAINING WALLS*

14 Historic Condition: Retaining walls at the depressed service areas were not clearly detailed by
15 Saarinen and Kiley.¹⁹

16 Analysis: Non-contributing compatible. The walls do not directly relate to the Saarinen/Kiley
17 design and therefore they are non-contributing. However, they are functionally important to
18 maintain the existing landform.

19 **VEGETATION**

20 **GENERAL PLANT COMPOSITION**

21 Historic Condition: Dan Kiley proposed a plant palette of 16 tree species to structure and define
22 spaces. His intent was to rely on a purposely limited number of species, creating a consistent and
23 dense planting to give the spaces character and definition. The design concept depended upon the
24 scale and form of the tulip poplar (*Liriodendron tulipifera*) to define the triple allées; tall canopy
25 trees such as oak (*Quercus sp.*), ginkgo (*Ginkgo biloba*), and hackberry (*Celtis occidentalis*) to create
26 forested areas to the north and south of the ponds; and a limited number of understory flowering
27 trees like Eastern redbud (*Cercis canadensis*), flowering dogwood (*Cornus florida*), star magnolia
28 (*Magnolia stellata*), and saucer magnolia (*Magnolia x soulangiana*) to edge the tall tree canopy, and
29 to provide color and texture. These flowering trees were intended to work together with the pond's
30 curvilinear edge to define small-scale spaces. Evergreen trees, including Canadian hemlock (*Tsuga*
31 *canadensis*), were intended to screen views of service and parking areas.

32 Analysis: Contributing. The overall plant composition in some ways reflects Kiley's design intent,
33 particularly the distinctive planted form of the dense allées of uniform trees, the open lawn on the
34 vista from the Old Courthouse to the Gateway Arch, and the baldcypress circles. However, there are
35 currently 32 tree species planted at the Memorial, twice the number proposed by Kiley, and in the

¹⁹Although details of the retaining walls were not developed by Saarinen & Associates, the proposed landform around these areas clearly required retaining walls.

1 pond areas, the concept of forest and meadow has been somewhat obscured by the development of
2 a manicured, park-like character composed of small groups and single tree plantings set in a closely
3 clipped lawn. The original intent in tree structure, form, and texture have not always been taken
4 into consideration when tree replacements were made.

5 SINGLE-SPECIES ALLÉES

6 According to the Saarinen/Kiley concept plan, a triple allée (three parallel rows) composed entirely
7 of tulip poplar trees was to be planted along either side of the walks for a total of six rows. The
8 dense, uniform mass of upright, straight-trunked trees planted along the walks was the strongest
9 single feature of the Kiley planting plan. The uniform, tall trees define the pedestrian space and
10 conceptually strengthen the simplicity of the Gateway Arch and the surrounding site design. The
11 allée planting along the walks reflects the overall Saarinen/Kiley design concept and therefore is
12 contributing. Although the tree species originally specified by Kiley was not implemented, the
13 concept of a uniform planting of the same tree with a precise alignment and close spacing was
14 implemented and is a character-defining feature of the Memorial grounds.

15 BALDCYPRESS CIRCLES

16 Two circles of baldcypress trees (*Taxodium distichum*), one in the northwest portion and one in the
17 southwest portion of the site, were depicted on the Saarinen/Kiley concept plan. These areas had
18 been depicted since the earliest plans in 1947 and were originally meant to be “campfire”
19 interpretive areas. The baldcypress trees reflect the Saarinen/Kiley design concept and therefore
20 are contributing. Although the number of trees was reduced during implementation, the general
21 form and materials were maintained.

22 POND AREA PLANTINGS

23 Kiley’s design concept for the pond areas relied on a limited number of species and a large number
24 of trees, providing massing that was to be reminiscent of a forest with a few open meadow areas.
25 The concept for planting included a few tall canopy tree species planted in groves; and several
26 species of flowering trees planted as an understory edge around the canopy tree groves to provide
27 color and texture. The specific location of trees varied in the conceptual planting plans making it
28 difficult to discern whether Kiley had specific locations in mind for these plantings within the pond
29 areas; the general intent for the character of the plantings, however, is clear.

30 The overall plant composition and spatial arrangement around the ponds does not reflect Kiley’s
31 design intent, and therefore is non-contributing. The concept of forest and meadow is obscured by
32 random tree plantings. The attributes of tree structure, form, and texture in Kiley’s design have not
33 been taken into consideration when tree replacements were made. The result is a non-distinctive,
34 disorganized character in the plantings.

35 RAILROAD OPEN CUT AND TUNNEL PLANTINGS

36 Kiley proposed dense plantings screening the railroad cuts and tunnel entrances. Kiley specified
37 predominantly Canadian hemlock to screen the area and eastern redbud and flowering dogwood to
38 add texture and color. Shrubs, such as fragrant sumac (*Rhus aromatica*), flowering quince
39 (*Chaenomeles speciosa*), and mugo pine (*Pinus mugo*) were also intended to screen visually

1 incompatible uses as well as add interest with color, form, and texture. The groundcover Bulgarian
2 ivy (*Hedera helix* 'Bulgaria') was proposed along the steep slopes on the west side of the railroad
3 cuts.

4 A few of the original trees have been retained, but for the most part these areas have been
5 substantially altered. Existing vegetation character, which is primarily open lawn with scattered
6 individual trees and groups of small trees, does not reflect the Saarinen/Kiley concept planting
7 plan, which called for dense evergreen screening with a few flowering trees for contrast. Therefore,
8 these plantings are compatible, but non-contributing.

9 PLANTINGS ALONG THE EAST SIDE SLOPES

10 Kiley proposed massed tree plantings along the eastern slopes. These plantings included flowering
11 dogwood, star magnolia, Arnold crabapple (*Malus arnoldiana*), black pine, and Bulgarian ivy. The
12 planting followed the Kiley proposal closely. The Bulgarian ivy was removed several years later
13 because it was being choked out by weeds. The plantings as they were done are non-contributing
14 compatible.

15 SERVICE AREA PLANTINGS

16 The plants proposed around the service areas were intended to visually screen these operational
17 functions and discourage visitors from approaching. The plantings around the service areas
18 generally reflect Saarinen/Kiley concept of screening the facilities from view. However, many of the
19 plants have been replaced with different species, and in the case of the maintenance facility,
20 existing plantings are too sparse to screen the area effectively. The service area plantings are non-
21 contributing compatible.

22 STREET EDGE PLANTINGS

23 Kiley intended tulip poplars to be planted along both sides of Washington Avenue, as well as along
24 the edges of a large triangle within the roadway, and on the north and southeast lawns of the Old
25 Courthouse block. These were never realized. Along the eastern side of Memorial Drive, groves of
26 canopy and flowering trees were intended to extend approximately 350 feet along the sidewalk
27 from each entrance, interspersed with meadows (unrealized). Thick plantings along Poplar Street
28 were intended to screen the maintenance area from view. In addition to the plantings along the
29 eastern slopes of the Memorial discussed above, Kiley intended Canadian hemlock to line both sides
30 of Leonor K. Sullivan Boulevard. Baldcypresses were substituted for the hemlock, and planted only
31 along the eastern side of the street. The plantings that exist today are non-contributing compatible.

32 PARKING GARAGE PLANTINGS

33 The Saarinen/Kiley plan proposed Japanese pagoda trees for the main parking area on the north
34 end of the Memorial. The intent of these trees was presumably to shade the parking lot and to
35 integrate the lot with its surroundings. The proposed planting was dense and would have screened
36 views of the proposed parking area from the Memorial. This was never realized, and the plantings
37 that were added after its construction were was modified to accommodate a new pedestrian
38 sidewalk and was later reduced due to the installation of a security camera. The existing planting

1 does not reflect any aspect of the originally proposed Saarinen/Kiley plan and therefore it is non-
2 contributing compatible.

3 LAWN AREAS

4 Little emphasis was placed on lawn in the Saarinen/Kiley plan. The most prominent turf areas
5 identified on their plan were large, open lawn underneath and stretching to the west of the Gateway
6 Arch, and the “triangles” along the north-south axis of the Memorial. The open areas around the
7 ponds were meant to represent meadow, and therefore presumably were not envisioned to be
8 mown turf, but rather taller grasses.

9 The open lawn areas under the Gateway Arch and on the north-south axis of the Memorial are
10 important aspects of the Saarinen/Kiley plan primarily in terms of the spatial quality of openness
11 rather than the quality of the turf itself; therefore the lawn vegetation (grass) does not itself
12 contribute to the significance of the landscape (non-contributing compatible). The lawn areas are
13 important to the current appearance of the Memorial grounds and should retain a certain quality
14 level to meet the expectations and uses of an urban park.

15 LUTHER ELY SMITH SQUARE PLANTINGS

16 In the Saarinen/Kiley plan, Luther Ely Smith Square had two triple allées of tulip poplars on the
17 north and south sides of the block. Two pedestrian overpasses emerged from these allées and
18 connected to the allées along the east-west axial walkways. The vegetation was intended to
19 enhance the spatial organization present in the eastern portion of the Memorial grounds. The
20 overpasses and tulip poplar allées were never implemented. Hence, the plantings in Luther Ely
21 Smith Square are non-contributing incompatible.

22 CIRCULATION

23 PEDESTRIAN WALKS

24 Historic Condition: The curvature of the walks was meant to reflect the catenary curve of the
25 Gateway Arch. The symmetrical alignment of the walks strengthened the axial arrangement of the
26 site design. The paving material for the walks was not specified by the designers. The layout of the
27 walks and the spacing of the trees in and alongside them was intended to be the dominant
28 landscape feature, reflecting the simplicity of the Gateway Arch. The alignment of the walks was
29 implemented as the original designers intended.

30 Analysis: Contributing. The existing walk layout reflects the Saarinen/Kiley design concept and
31 therefore is contributing. Walk alignment is an important organizing elements of the design and a
32 character-defining feature. The layout of the walks, their unified material appearance, their earthy
33 color and texture, and their relationship to the tree plantings are all distinctive characteristics that
34 come from the Saarinen/Kiley design. The specific aggregate material of the walks is not as
35 important, since no material was specified by Saarinen/Kiley, although it is compatible with the
36 design of the walks at the Memorial.

1 GATEWAY ARCH ENTRANCE RAMPS AND STEPS

2 Historic Condition: The entrance ramps leading to the visitor center were designed by Eero
3 Saarinen and Associates and constructed in the 1960s. The concept of entering the Gateway Arch at
4 the base was important because it dramatically affected the visitor experience. Approaching the
5 Gateway Arch across the Memorial grounds and being able to touch the base before descending
6 below, then ascending to the top, provided a breathtaking experience of contrast in scale and an
7 unfolding visual experience of the Memorial.

8 Analysis: Contributing. The Gateway Arch entrance ramps and steps are part of the Saarinen design
9 concept and therefore are contributing.

10 OLD CATHEDRAL PARKING LOT

11 Historic Condition: The Old Cathedral parking lot was conceptually located south of that historic
12 structure. Details of the lot were not developed by Saarinen/Kiley; however, the approved plan
13 shows a planting bed on the lot's west side along Memorial Drive. The parking lot was constructed
14 in 1961 as a result of an agreement between the National Park Service and the Archdiocese.²⁰

15 Analysis: Non-contributing compatible.

16 Conceptually the parking lot contributes to the Saarinen/Kiley design because it is located on the
17 site they selected for this function, directly south of the Old Cathedral. However, the materials and
18 construction details, while not conflicting with their surroundings, do not reflect any aspect of the
19 Saarinen/Kiley design concept.

20 OLD CATHEDRAL SIDEWALK

21 Historic Condition: The sidewalk leading from the Old Cathedral to the Gateway Arch was not a part
22 of the Saarinen/Kiley plan. The eight-foot-wide walk was constructed of exposed aggregate to
23 match the Memorial's existing sidewalk system.

24 Analysis: Non-contributing compatible. The Old Cathedral sidewalk was not part of the
25 Saarinen/Kiley design and therefore it is non-contributing. However, the walk is unobtrusive,
26 matches the existing walks in terms of its materials, and is functionally important to circulation in
27 the Memorial.

28 INTERIOR ROADS

29 Historic Condition: Interior roads to the service entrances were not clearly detailed on the
30 Saarinen/Kiley site plan. A road to the south service area was illustrated on the plan to be about 12
31 feet wide, with unspecified paving. The road was to lead from the sidewalk southwest of the south
32 leg of the Gateway Arch to the south service area (shipping and receiving). A service road, while
33 necessary, was not clearly indicated on the Saarinen/Kiley plan at the north service area (generator
34 building).

²⁰Cooperative Agreement between United States of America and the Archbishop of St. Louis, February 23, 1961. Copy on file at JNEM, Office of the Superintendent.

1 Analysis: Non-contributing incompatible. The interior service roads as constructed do not reflect
2 the Saarinen/Kiley plan and therefore are non-contributing. They are generally not visually
3 intrusive at ground level, but the use of light-colored concrete is quite visible from above (in views
4 from the top of the Gateway Arch).

5 PERIMETER ROADS

6 Historic Condition: The exterior roads surrounding the Memorial grounds created definite edges to
7 the site design. It was originally bounded by Washington Avenue on the north, Poplar Street on the
8 south, Wharf Street on the east, and the Third Street Expressway on the west. A pair of pedestrian
9 overpasses were conceptualized early in the planning stages to bridge over the Third Street
10 Expressway between the Gateway Arch and the Old Courthouse, and were studied more extensively
11 by Saarinen & Associates after Saarinen's death. Few changes were made to the exterior roads.
12 Washington Avenue was relocated approximately 20 feet north when the Arch Parking Garage was
13 constructed in 1986. Wharf Street was renamed Leonor K. Sullivan Boulevard, and the Third Street
14 Expressway became known as Memorial Drive.

15 Analysis: Contributing. The exterior roads on the perimeter of the Memorial are generally the same
16 as during the period of significance and therefore they are contributing. Although this aspect of the
17 design is partly unrealized without the pedestrian overpasses, the potential to make this visual and
18 physical connection remains.

19 CONSTRUCTED WATER FEATURES

20 NORTH AND SOUTH PONDS

21 Historic Condition: The Saarinen/Kiley concept plan depicted lagoons (ponds) on the northwest
22 and southwest portions of the site. The lagoon edges were depicted as complex and sinuous. Their
23 complex shapes, combined with Kiley's planting plan, were meant to create a variety of intimate
24 spaces along the ponds' edges.

25 By 1969 the plans for the lagoons took on a more simplified form, still curving, but with less
26 intricate and irregular geometry, and the islands and footbridges were no longer considered.
27 Although the sizes and shapes are comparable to those proposed by Saarinen and Kiley, the
28 simplification of the edge represents a difference from the original design.²¹ However, it fulfills the
29 design intent to a great degree.

30 Analysis: Contributing. The north and south ponds reflect the Saarinen/Kiley design concept and
31 therefore are contributing. Although the shapes have been simplified and the islands and
32 footbridges were not constructed, the location and design concept of the two curving-edged
33 reflecting ponds meets the designers' intent.

²¹An examination of the existing topography and the proposed landform suggests that implementation of the Kiley design of the lagoons would have required excessively steep grades.

1 SMALL-SCALE FEATURES

2 BENCHES

3 Historic Condition: Benches were designed by Saarinen & Associates for the levee development.²²
4 The proposed benches were 10 feet long, 2 to 3 feet wide, and 1 foot 4 inches high. They were
5 composed of limestone bench tops set on a limestone block and a concrete base. Concrete benches
6 were later designed for the Memorial.²³ Seven benches were constructed on the east and west sides
7 of each rest area for a total of fourteen (14) benches. The size and construction specifications for
8 the benches matched the design specifications proposed by Saarinen & Associates; however, the
9 material was changed from limestone to concrete. Four more benches, similar in design to the ones
10 described above, were installed on the landings of the grand staircase. Another type of bench, black
11 metal pipe frame with cast iron slats, was installed in Luther Ely Smith Square, but was
12 subsequently replaced with recycled-plastic park benches.

13 Analysis: Contributing. The existing benches reflect the benches proposed by Saarinen for the levee
14 and therefore they are contributing. Although the material was changed, the size and construction
15 specifications were retained and therefore the benches reflect Saarinen's design intent. The
16 quantity of benches and their locations have also been altered, but these can be considered
17 reversible, temporary conditions.

18 LIGHTING

19 Historic Condition: A large lighting standard detail, consisting of a 27-foot single pole and shaded 6-
20 foot-wide luminaire, was recommended by Saarinen & Associates, although proposed locations
21 were not identified.²⁴ The implemented lighting standards were modern in style, 12-foot-tall single
22 poles of brown-painted aluminum with a single 21-inch-diameter globe. The standards were placed
23 12 inches from the edge of the sidewalks, between the trees, approximately 90 feet apart. In 2001,
24 large spotlights were added to illuminate the Gateway Arch at night. They are located within four
25 in-ground light vaults located at the base of the Gateway Arch, two just to the east and two to the
26 west of the legs.

27 Analysis: Non-contributing compatible. Although the design for the light standards was altered in
28 implementation, the light standards are modern-looking and sympathetic in style to the rest of the
29 Memorial. The new floodlighting beneath the Gateway Arch is low in profile and relatively
30 unobtrusive.

31

²²NHS-JNEM drawing number 3077 (dated 11-23-60), copy on file in JNEM Archives, Record Unit 120, drawer 23, folder 7. The drawing includes construction details for planting, pavement, and benches on the levee.

²³ Drawing number 366/41009A (May 1971), JNEM Archives, Record Unit 120, Drawer 17, Folder 2.

²⁴ Saarinen & Associates drawing number NHS-JNEM 3077 E-4 (December 9, 1960), JNEM Archives, Record Unit 120, Drawer 22, Folder 2. See also a line drawing depicting proposed proposed luminaires along Wharf Street, found at Arteaga Studios Ltd., dated September 11, 1963, no. 639-11-3. It is unclear from this artist's rendering whether the luminaires were also proposed for the Memorial's walkways.

1 ASSESSMENT OF INTEGRITY

2 Integrity is the ability of a property to convey its significance. A property must not only be
3 significant, but it must also have integrity. It is the combined effect of all of the landscape features
4 that determines the overall integrity of the site. The National Register recognizes seven aspects or
5 qualities of integrity: location, design, setting, materials, workmanship, feeling, and association.²⁵ To
6 have integrity, a feature need not possess all of these qualities. The evaluation of integrity is
7 somewhat subjective, but it must always be based on the physical form of the property in relation
8 to its significance. At the Memorial, this means that the existing physical form must relate to the
9 conceptual design intent of the approved Saarinen/Kiley plan in one or more of these seven aspects.

10 According to the CLR Guide, “Historic integrity is determined by the extent to which the general
11 character of the historic period is evident, and the degree to which incompatible elements
12 obscuring that character can be reversed.”²⁶ In the case of the Memorial, the historicity of existing
13 materials is less important to its integrity than the survival of the overall design concept as
14 implemented in a form that still conveys the more abstract intentions that are the most essential
15 aspect of its character.

16 Preservation is based in large part upon the idea of authenticity. Traditionally, authenticity is
17 defined by the historicity of existing materials, and also by how the built landscape manifests
18 design intent. Particularly in Modernism, tangible materials and craftsmanship (which can be
19 broken down into individual, replaceable or repairable elements and features) are secondary to
20 intent and vision of the totality (manifest in a broad, holistic way that does not easily lend itself to
21 being subdivided into features, elements, or parts).

22 SUMMARY

23 The Memorial landscape retains a high level of integrity, and continues to convey its significance as
24 a nationally distinguished designed landscape of the Modern period. Landscape features that
25 contribute to this significance include the Gateway Arch; the Memorial’s overall landform and
26 spatial organization; views; the system of walks; the single-species allées; ponds; overlooks;
27 railroad open cuts and tunnels; grand staircase; baldcypress circles; screen plantings and depressed
28 service areas; the entrance ramps into the Gateway Arch; and the benches.

29 Some of the non-contributing landscape features, while not of value in providing a connection to the
30 significant design of the Memorial, are compatible with the landscape and may be left in place or
31 replaced. These include the service and maintenance areas and their retaining walls and plantings;
32 plantings along the street edges, east side slopes, and pond areas; areas of lawn; Luther Ely Smith
33 Square features; the parking garage; the Old Cathedral parking lot and sidewalk; interior service
34 roads; and small-scale features including the lighting system, drinking fountains, kiosk, irrigation
35 system, and memorial plaques.

²⁵National Park Service, U.S. Department of the Interior, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (1991), 44.

²⁶Robert R. Page, Cathy Gilbert, and Susan Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (Washington, D.C.: National Park Service, 1998), 72.

1 Other features are non-contributing incompatible; these features may have a negative effect on the
2 integrity of the landscape, as they are visually intrusive or not in keeping with the site's significant
3 character. They should be considered for removal or replacement with compatible features. These
4 include plantings at Luther Ely Smith Square and the parking garage; and small-scale features
5 including trash receptacles, chain-link fences, entrance signs, and tree grates.

6 The key action recommended in the General Management Plan is the initiation of a Design
7 Competition to gather a wide range of ideas for the revitalization of the Memorial. The treatment of
8 the Memorial landscape in any of the proposed design solutions that emerge from the Design
9 Competition must retain and enhance the character-defining contributing features of the landscape
10 that reflect the design intent of Eero Saarinen and Dan Kiley, and thereby preserve and enhance the
11 integrity of the Memorial.

12

13

TREATMENT RECOMMENDATIONS

INTRODUCTION

According to the National Park Service *Guide to Cultural Landscape Reports* (1998), a GMP “is the primary planning document for determining the general treatment of all cultural resources in a park based on cultural and natural resource inventories. However, many GMPs do not specifically address the treatment of cultural landscapes.”¹ The guide states that the Cultural Landscape Report, among other documents, can be developed to provide this treatment information in concert with the GMP.

The GMP preferred alternative is expressed physically as a series of management zones, which are descriptions of desired conditions for the resources and visitor experience of the Memorial. The zones are applied to different geographic areas of the Memorial, identifying appropriate resource conditions, visitor experiences, and types of facilities that could occur in those locations. Five management zones have been developed for use at the Memorial, including:

- Heritage Education and Visitor Amenities
- Original Landscape
- Orientation
- Streetscape/Riverscape
- Service

In addition, there are two Design Competition Areas that overlay these zones. Design Competition Areas provide zones with thresholds for changes that may occur as part of a major design competition under way in 2010. New features and elements may be added in these areas, provided they meet the intent of the underlying management zones:

- Design Competition Area A
- Design Competition Area B

Further guidance is provided in the *Guide to Cultural Landscape Reports* (1998). Based on the definitions of the four alternative treatment approaches and the documentation and analysis of the Memorial’s landscape and its character-defining features, the recommended overall treatment for the Memorial grounds is rehabilitation.

The goal of rehabilitation is to preserve the portions or features of the property which are significant, yet still allow for alterations and additions necessary for efficient and safe operation of the Memorial. Within the framework of the overall landscape treatment, recommendations for individual features are made.

¹Robert R. Page, Cathy Gilbert, and Susan Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (Washington, D.C.: National Park Service, 1998).

1 RECOMMENDED PRIMARY TREATMENT APPROACH: REHABILITATION

2 The primary treatment approach recommended for the Memorial landscape is a rehabilitation
3 approach. As defined by the Department of the Interior:

4 Rehabilitation encourages improvements to a historic property that make possible
5 an efficient contemporary use while preserving those portions or features of the
6 property which are significant to its historical or cultural values. Archeological
7 investigations may be required prior to replacement of missing historic features or
8 projects involving new construction. In rehabilitation, the entire history of the
9 landscape is retained for interpretation.²

10 Rehabilitation will help meet the goal of preserving the original design concept as developed by
11 Eero Saarinen and Dan Kiley. It allows for the retention of non-contributing compatible features,
12 such as the parking garage, maintenance facility, memorial plaques, and lighting fixtures; and also
13 allows the addition of compatible new features or the addition of unrealized features found in the
14 Saarinen/Kiley design concept, such as the two fountains and the pedestrian overpasses. Detailed
15 recommendations for the rehabilitation of the landscape follow.

16 A key concept in the idea of rehabilitation is *compatibility*. In the rehabilitated landscape, one goal is
17 to allow for necessary changes while ensuring that those changes do not detract from the character
18 of the landscape or diminish its significance by changing the site's appearance in a negative way. In
19 the future, proposed additions (for example, designs developed through a future competition to
20 resolve access and other issues) would be carefully reviewed for their compatibility with the
21 character of the Memorial landscape. Existing non-contributing compatible features would either
22 be retained as they are, or replaced with new, compatible features to support new uses with
23 minimal detriment to the integrity of the landscape. "Rehabilitation improves the utility or function
24 of a cultural landscape, through repair or alteration, to make possible an efficient compatible use
25 while preserving those portions or features that are important in defining its significance."³

26 TREATMENT CONCEPT

27 In order to protect the integrity of the Memorial grounds, the defined concept for treatment of the
28 cultural landscape emphasizes the preservation and maintenance of character-defining features
29 related to the Saarinen/Kiley plan. Other aspects of the site may be adapted to meet contemporary
30 management, operational, and safety needs. The Memorial's existing character-defining landscape
31 features are maintained through active preservation maintenance, while necessary alterations of
32 existing features are made and new features are added in a manner that is compatible with the
33 existing Saarinen/Kiley designed landscape.

²U.S. Department of the Interior, *Guidelines for the Treatment of Historic Landscapes* (DRAFT, undated), prepared by the Preservation Assistance Division, National Park Service, 45.

³ Department of the Interior, National Park Service, *Director's Order 28: Cultural Resource Management Guideline* (Washington, DC: NPS Office of Policy, 1998), 100.

- 1 • Site Planning and design: Future design interventions at the Memorial are envisioned to
2 retain the overall site design and landscape setting as developed by Saarinen/Kiley. The
3 arrangement of the existing site circulation system, siting of buildings and structures within
4 the grounds, and the subtle use of catenary curve segments reflecting the form of the
5 Gateway Arch are retained and maintained as character-defining features of the landscape.
- 6 • Topography and landform: The sculpted, curving topography of the Memorial is retained
7 and maintained. This landform was conceived by Saarinen as a designed feature used to
8 control views and movement, emphasizing the Gateway Arch while subtly concealing
9 functional operations areas, Memorial Drive, and the railroad. The landform continues to
10 serve this purpose, retaining its sculpted form in the portion of the Memorial grounds east
11 of Memorial Drive. West of Memorial Drive, the topography of Luther Ely Smith Square may
12 be altered to meet management goals, as long as changes do not block the visual axis
13 between the Gateway Arch and Old Courthouse.
- 14 • Views and vistas: Important character-defining views to and from the Gateway Arch are
15 retained, maintained, and potentially enhanced. These include views between the Old
16 Courthouse, the Gateway Arch, and the river; and along the north-south axis of the
17 Memorial. Any development occurring on the East St. Louis extension is undertaken with
18 the understanding that the view to the Gateway Arch from East St. Louis along the primary
19 axis is important to the Saarinen design concept. Secondary views to the Gateway Arch from
20 the overlooks, across the ponds, and from along the walks in the Memorial grounds are
21 retained and maintained as contributing features of the Saarinen/Kiley designed landscape.
- 22 • Single-species allées: The use of a uniform, single tree species to line and enclose the walks
23 is retained and maintained, reflecting the Saarinen/Kiley design intent and the simple
24 “form-world” of the Gateway Arch. This planting also strengthens the formal qualities of the
25 pedestrian circulation system. The trees remain closely spaced, retaining the character-
26 defining sense of enclosure along the walks that contrasts with the vertical monumentality
27 of the Gateway Arch.
- 28 • Use of limited palette of tree species: The continuing use of a limited number of tree species
29 to define spaces somewhat reflects the “forest versus meadow” concept envisioned by
30 Saarinen/Kiley from the beginning of the design competition, and partially realized in the
31 planting that was implemented.