



# Eames House Conservation Management Plan



The Getty Conservation Institute





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The Getty Conservation Institute (GCI) works internationally to advance conservation practice in the visual arts—broadly interpreted to include objects, collections, architecture, and sites. The Institute serves the conservation community through scientific research, education and training, field projects, and the dissemination of information. In all its endeavors, the GCI creates and delivers knowledge that contributes to the conservation of the world's cultural heritage.

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**COVER:**

The balcony parapet above the living room in the Eames House, 2017.



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The GCI wishes to acknowledge the funds and resources provided by the GCI Council through the GCI's Conserving Modern Architecture Initiative, which made this cross-disciplinary and comprehensive Conservation Management Plan (CMP) possible. We thank Kyle Normandin, former GCI senior project specialist, for his role in managing the investigative stages of the project that led to the CMP. The GCI also acknowledges the work of our colleagues at GML Heritage, who, in addition to developing the CMP, provided considerable in-kind support for the work. The GCI recognizes in particular the significant additional voluntary efforts of contributing authors Sheridan Burke and Jyoti Somerville. Thanks also go to the GCI's Sara Galerne and graduate intern Sarah Yoon for administrative project support and assistance in tracking down images, respectively, and to Suzy Pickles and Clare Moore of GML Heritage for project graphics support.

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We gratefully acknowledge the contributions of Getty staff members in the preparation of initial investigations and treatments at the Eames House, in particular the late Shin Maekawa, senior scientist, for environmental investigation and monitoring. Thanks also go to GCI Science Department staff for paint, concrete, and wood analysis as well as environmental and climatic condition monitoring, and to J. Paul Getty Museum Decorative Arts Conservation Department staff for wood paneling investigation and conservation.

A number of specialist consultant studies—including geotechnical and topographical surveys, structural inspections, a landscape survey and tree assessment, and inspections of services—have informed the work. In addition to serving documentation purposes, the results of these investigations will be instrumental in the development of conservation treatment and maintenance strategies for the House and its contents and collections as well as its overall setting. Many of the studies by staff members and consultants will be published in a forthcoming compendium.

In addition to photographs and materials held by the Eames Office and the Eames Foundation, a number of archives were consulted in researching the historical background of the site. The largest repository of Eames-related materials is the Eames Collection at the Library of Congress, where Margaret McAleer and Ford Peatross were especially helpful. We would also like to acknowledge the assistance of staff at the Getty Research Institute (Charles and Ray Eames Architecture and Furniture Designs, 1940–1978 collection, and the Julius Shulman Photography Archive), the Office of the Los Angeles County Registrar-Recorder (Property Records Division), and UCLA Special Collections (John and Marilyn Neuhart Papers). Local historians Randy Young and Jan Loomis were generous with their time and archival materials.







## CHAPTER 1

.....

# Introduction

### 1.1 Background

This Conservation Management Plan (CMP) provides a framework for the ongoing care and management of the Eames House, including decisions about its conservation. Based on a thorough assessment of its heritage values, the plan provides policies to assist the Eames Foundation in the long-term management of this National Historic Landmark as a house museum.

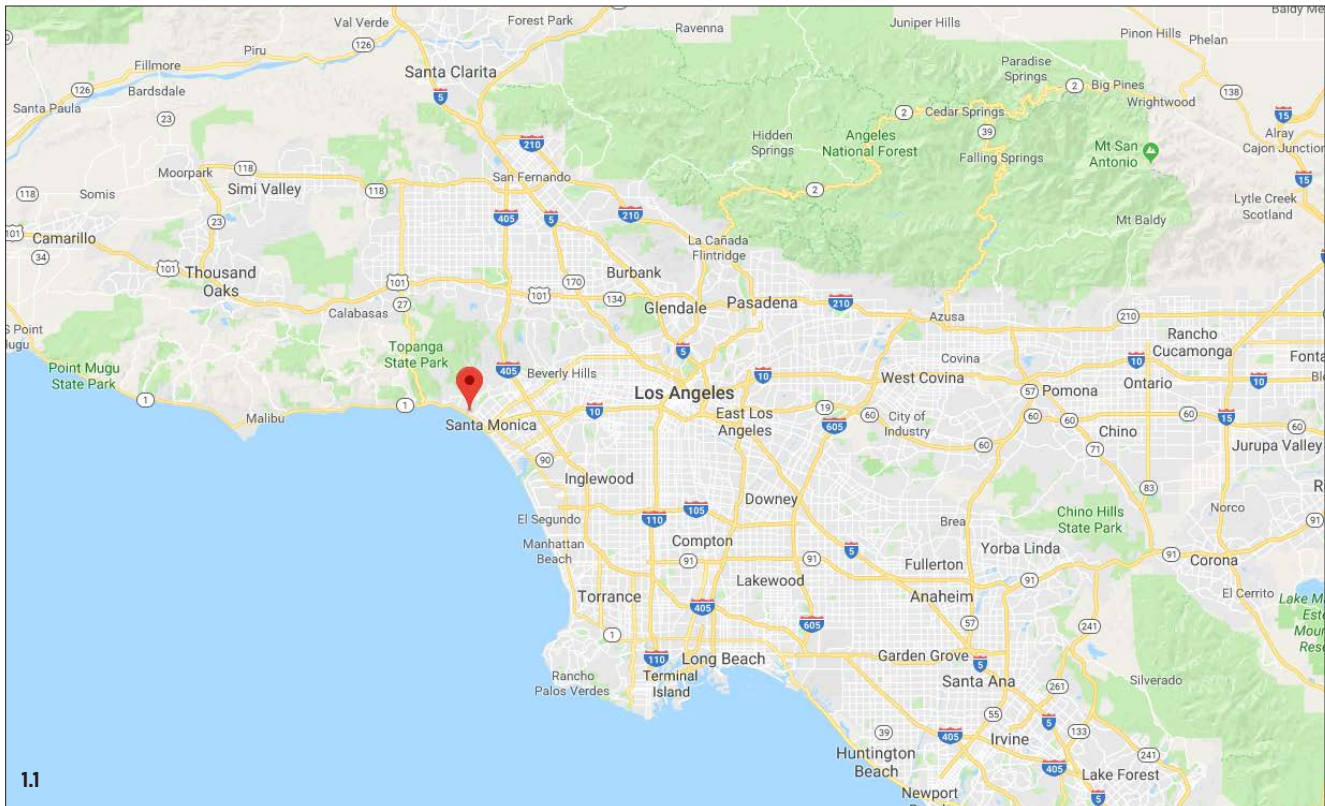
The Eames House, also known as Case Study House No. 8, located in the Pacific Palisades neighborhood of Los Angeles, is an internationally recognized exemplar of modernist residential design. Constructed in 1949, it was designed by Charles and Ray Eames, who moved in at the end of that year and remained there for the rest of their lives. In 1988, ownership passed to Charles's daughter, Lucia, who with her five children felt a keen responsibility to preserve it as Charles and Ray had left it. In 2004, the family established the nonprofit Charles and Ray Eames House Preservation Foundation to preserve and protect the House and provide educational experiences that celebrate the creative legacy of Charles and Ray Eames. The following year, Lucia Eames and her son Eames Demetrios expressed the family's aspirations in a joint interview with *Metropolis* magazine:

We have to make Charles and Ray's work relevant to future generations.... [They] had this blend of vision and pragmatism. I think the Foundation represents the pragmatic part—it's the physical object, the place where they created their visions. But they can't be separated. So if it's just this highfalutin philosophical exercise...well, the world doesn't need another foundation like that.... But the world perhaps could use another foundation that values both parts of the equation. (Makovsky 2005, 68–69)

Since its creation, the Eames Foundation has endeavored to preserve the site and share it with visitors, using it as a locus for understanding the Eameses' approach to design and providing the opportunity to learn about Charles and Ray through direct experience. The Foundation has been a careful steward, but as the House approaches seventy years, evidence of its aging is becoming apparent, particularly in significant and vulnerable elements and fabric.

The Eames Foundation is seeking to develop a long-range strategy for the ongoing conservation, maintenance, display, and interpretation of the House and its contents and collections, and the management of the setting. This CMP will be a critical tool in developing and underpinning that strategy and to guide the Eames Foundation in its stewardship mission to ensure the survival of the House for future generations.

Through this CMP, the Eames Foundation board, which at this writing comprises the five grandchildren of Charles and Ray Eames, also seeks to ensure the continuity of stewardship of the Eames House and facilitate the intergenerational transfer of knowledge about the place. The intent of the CMP is to detail approaches to identifying and implementing conservation policies to guide work that is appropriate to the significance of the site, its unique components and values, and its ongoing use. It recommends undertaking further research and policy development.



**Figure 1.1** Map of greater Los Angeles area. The red pin indicates location of the Eames House site in Pacific Palisades.

## 1.2 The Eames House Site

The Eames House site (the “site”) is located at 203 Chautauqua Boulevard in the Pacific Palisades neighborhood of the city of Los Angeles, California. It sits on a bluff overlooking Santa Monica Bay, on the northern edge of Santa Monica Canyon (fig. 1.1).

The site area is approximately 1.69 acres and comprises four parcels, including all of lot 1 and portions of lot 2, tract 13251, in the City of Los Angeles, County of Los Angeles, State of California, as per the map recorded in 1945 in book 269, pages 48 and 49, in the office of the Los Angeles County Recorder. The site is accessed via a right-of-way easement that traverses portions of lots 2, 4, and 5, tract 13251, which is used in common with neighboring properties (fig. 1.2).

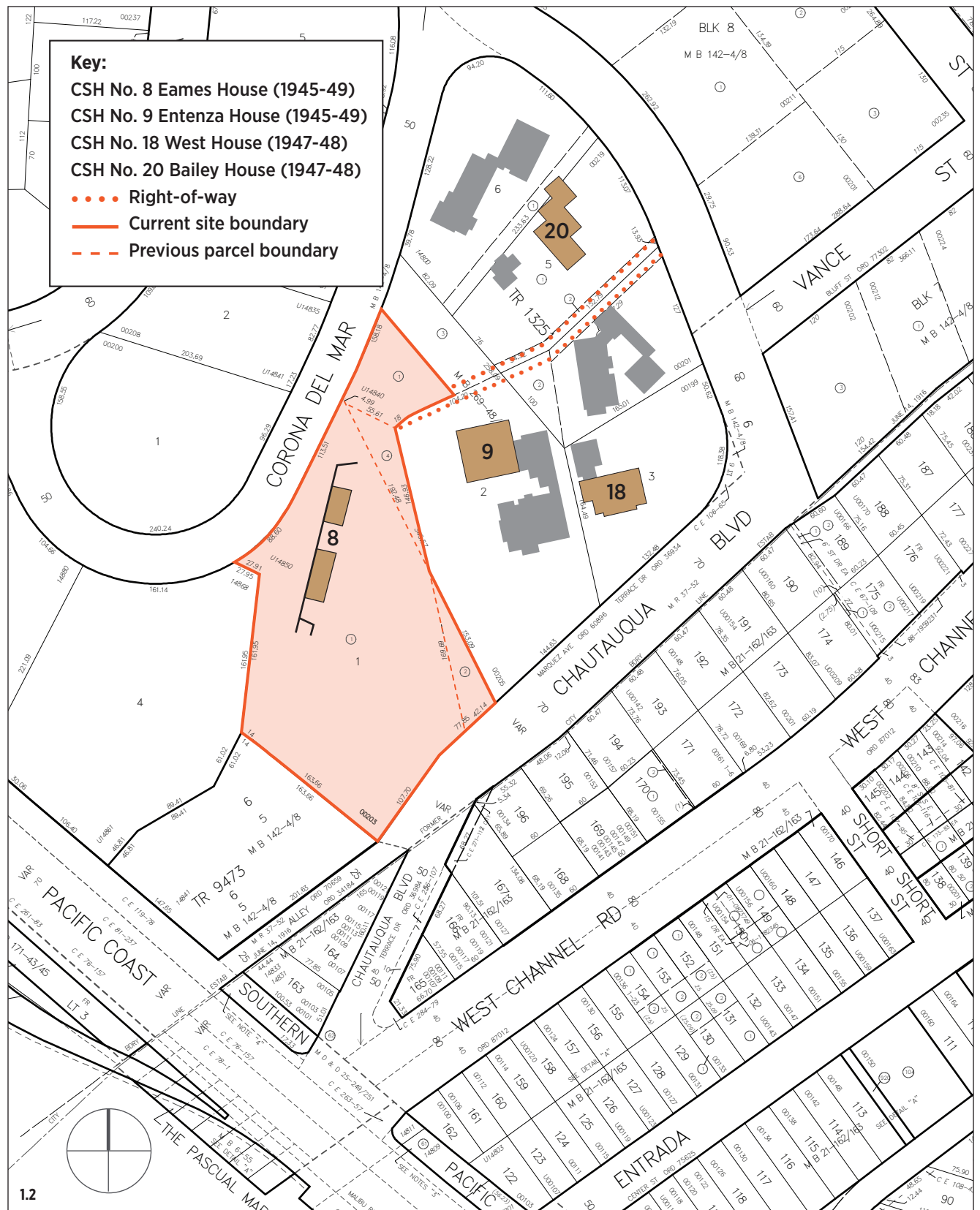
Over the years, the site has been amalgamated with portions of adjacent properties. Listed below are the current Los Angeles County Assessor’s parcel numbers that compose the site:

- 4411-028-001
- 4411-028-002
- 4411-028-012
- 4411-028-013

A further parcel of adjacent land on the bluff’s edge, APN 4411-029-005, though owned by the Eames family, is not currently under the Foundation’s ownership and is not included within the site that is the subject of this CMP. It may become part of the site in the future.

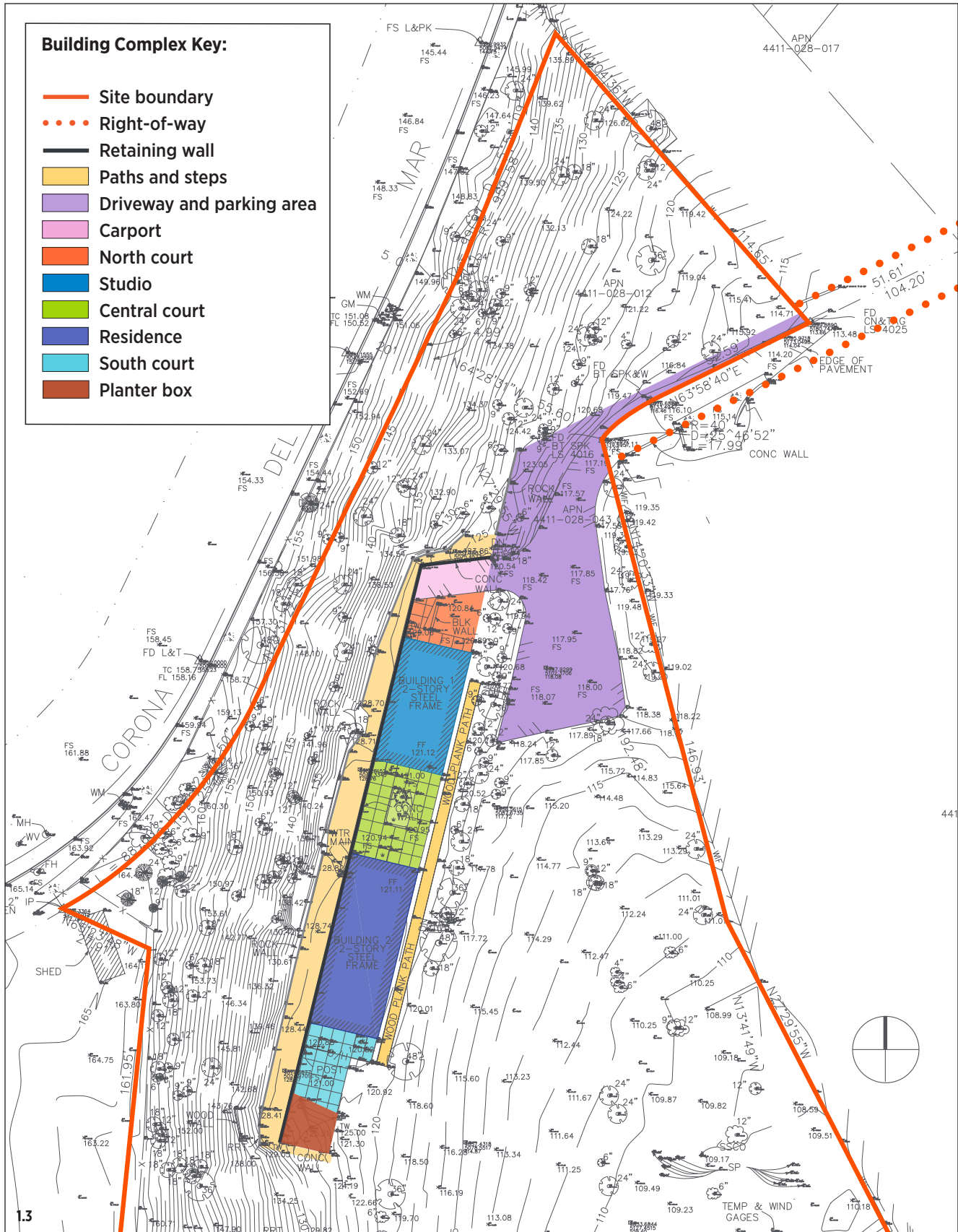
In many contexts, “Eames House” is taken to mean the architecture or the building. In this CMP, the terms “Eames House” and “House” are used in two ways. They are used to refer to the building complex itself (defined below), but they are also used more expansively to indicate the whole of the land owned by the Eames Foundation together with the building complex, its contents and collections, and its setting and landscape. The terms “site” and “place” are also used to convey this holistic meaning.

The building complex includes the built elements of the site (fig. 1.3). Key elements are the residence, studio, and three courtyards—the central court (between the residence and studio), the south court (south of the residence), and the north court (north of the studio)—as well as the integrated retaining wall, planter box (at the south end of the south court), carport (paved area with canvas canopy north of the north court), and driveway and parking area. These specific terms are used in the CMP to describe these elements of the building complex. Other terms may



**Figure 1.2** Parcel map of the Eames House site, indicating the amalgamation of portions of adjacent tracts over time (shaded) and locations of the three nearby Case Study Houses (CSH). Right-of-way delineation is indicative only.





**Figure 1.3** Plan of the Eames House building complex and other built elements of the site. Right-of-way delineation is approximate.

have been used by Charles and Ray Eames to describe some of these site elements, and alternate terms—“terrace” or “patio” instead of “south court,” for instance—may be used by the Eames Foundation or in other publications.

The building complex is surrounded by well-established garden plantings and an extensive array of potted plants. Among the major landscape features of the site are the wide meadow with views to the Pacific Ocean, the steep upper slope, and the row of mature eucalyptus trees, believed to have been planted by Abbot Kinney in the 1880s, along the east elevation of the building complex, in addition to numerous other mature eucalyptus trees around the site (fig. 1.4). The Eames House is set on a dramatic mesa above Pacific Coast Highway and faces the meadow, with views of the Pacific Ocean beyond. Cut into a steep slope leading to Corona del Mar, the House is accessed via a right-of-way easement from Chautauqua Boulevard. It is one of four Case Study Houses in the immediate vicinity (see fig. 1.2). The residence features a remarkable interior, and its contents and collections, assembled over the lifetimes of Ray and Charles Eames, form an intrinsic part of its heritage significance.

### 1.3 Heritage Listings

The Eames House site has been designated a landmark at both the local and national levels.

- The City of Los Angeles designated the Eames House, Studio, and Grounds as Historic-Cultural Monument No. 381 on July 15, 1988.
- The United States Secretary of the Interior declared the Eames House (Case Study House No. 8) a National Historic Landmark on September 20, 2006 (Historic Resources Group and National Park Service 2005).
- Properties designated as National Historic Landmarks are automatically entered on the National Register of Historic Places. The Eames House was listed on the National Register on September 20, 2006.
- Properties listed on the National Register are automatically entered on the California Register of Historical Resources. The Eames House was listed on the California Register on September 20, 2006.

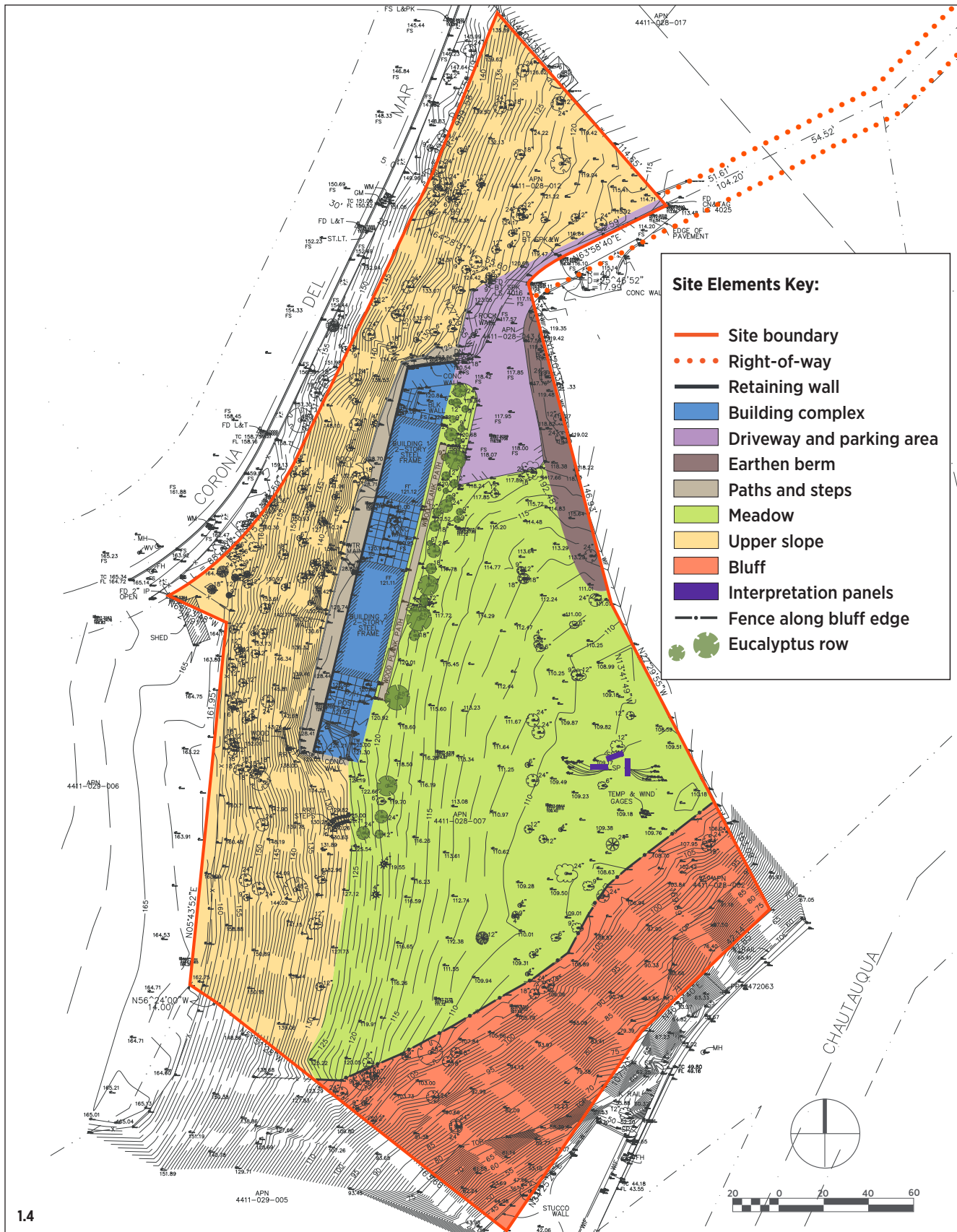
### 1.4 Methodology of the CMP

At its simplest, a conservation plan is a document which sets out what is significant in a place and, consequently, what policies are appropriate to enable that significance to be retained in its future use and development. (Kerr 2013, 1)

The development of a CMP involves an intensive initial phase of gathering, analyzing, and assessing information about the place and its condition, history, and associations. Understanding what is significant about a place provides the essential framework for developing an approach to policy decisions about its conservation, management, and development. This plan responds directly to international conservation planning practice but is tailored to the specific needs of the Eames House and the stewardship of the Eames Foundation. The conservation planning process is illustrated in figure 1.5 (pg. 7).

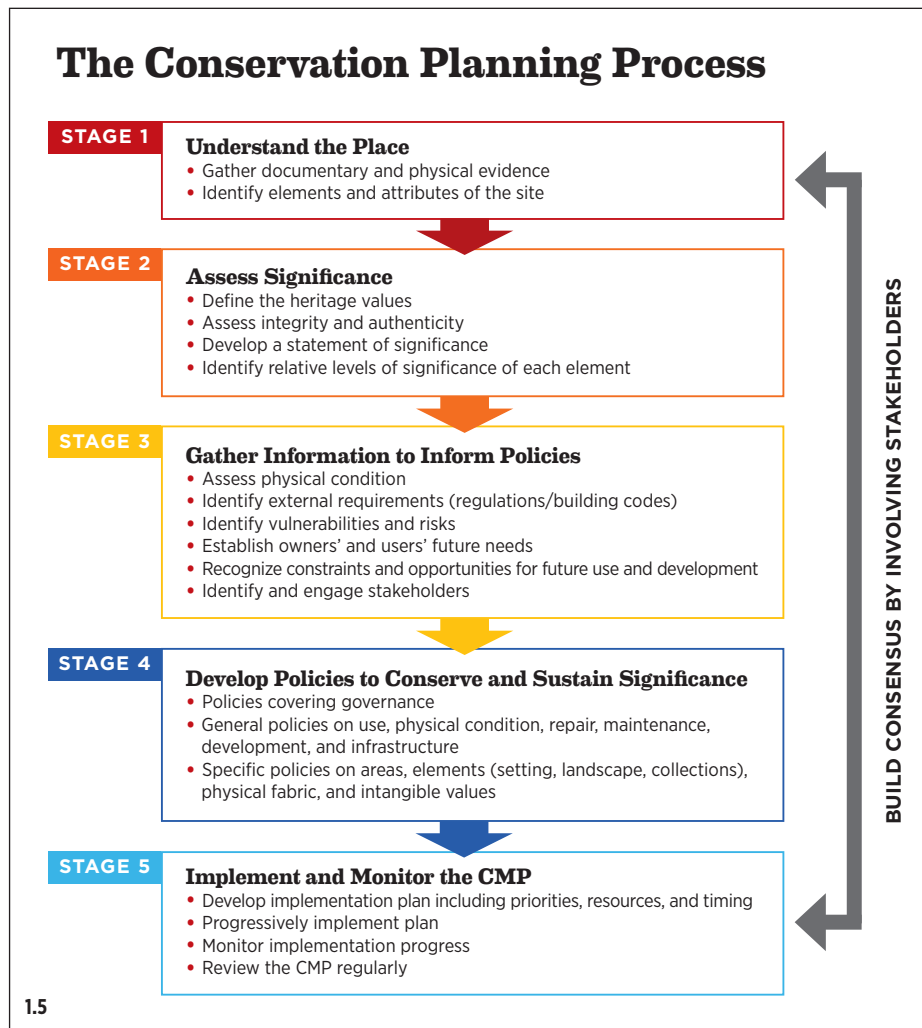
In essence, the CMP provides a framework within which conservation—that is, the care and continuing life of the site—will be carried out in such a way that the heritage significance of the place is retained and interpreted, and its future is made secure. Central to this is the statement of significance, a succinct summary of the site’s attributes and values, to which the subsequent conservation policies directly relate. The Eames House Conservation Management Plan is based on the Australian values-based methodology developed by James Semple Kerr and set out in *Conservation Plan*, which has been instrumental in developing a philosophical approach to conservation planning for the management of important heritage places internationally (Kerr 2013).

The CMP follows the philosophy and principles of *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013* (the Burra Charter) (Australia ICOMOS 2013a)



**Figure 1.4** Plan of the Eames House site, showing the layout and the landscape and topographical elements. Right-of-way delineation is approximate.





**Figure 1.5** Chart of the conservation planning process, involving a sequence of investigations, decisions, and actions to plan for and manage places of cultural significance.

and reflects the *Approaches for the Conservation of Twentieth-Century Architectural Heritage, Madrid Document 2014* (the Madrid Document) (ICOMOS International Scientific Committee on Twentieth-Century Heritage 2014). These documents provide benchmark conservation planning principles and processes of direct applicability to this iconic site of twentieth-century architecture. Both the Burra Charter and the Madrid Document advocate a cautious approach to change: Do as much as necessary to care for the place and to make it usable, but otherwise change it as little as possible so that its cultural significance (also referred to as heritage significance) is retained.

To date, only a few CMPs have been developed in the United States using this specific methodology, which is compatible with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*, the nationally recognized tool that guides preservation in the United States (US Department of the Interior, US National Park Service, Technical Preservation Services 2017).

## 1.5 Structure of the CMP

In preparing this CMP, extensive research and analysis was conducted, as detailed in the comprehensive list of Works Cited at the back of this volume. The CMP structure is outlined below, and the accompanying six-step process, correlated to each chapter, is shown in table 1.1.

As stated earlier, the first five chapters of the CMP involve gathering, coordinating, and analyzing documentary and physical evidence to develop an understanding of the place, which leads to the assessment of significance and creation of the statement of significance, as outlined below:

- Chapter 1 provides an introduction to the site and an overview of the CMP process.
- Chapter 2 gives a comprehensive history of the site, including a contextual analysis of the

lives and work of Charles and Ray Eames, designers and owners of the House.

- Chapter 3 includes an analysis of the site's current physical layout, form, and fabric. It describes conditions as of the summer of 2016.
- Chapter 4 provides a comparative analysis of the place within the context of postwar modern domestic architecture, in relation to the Case Study House Program, as a work of architecture by Ray and Charles Eames, and as an architects' own home.
- Chapter 5 contains the essential assessment of the heritage significance of the site—its built elements, landscape, and contents and collections—using standard assessment criteria. It contains a succinct statement of significance and includes tables clearly identifying the building elements and attributes that contribute to significance.

**TABLE 1.1**

## **CMP Development and Implementation Process**

<p><b>STEP 1:</b> <b>Understand the Site</b> [Chapters 2 and 3]</p>	<p>Understand and define the site and its key elements and components through the following:</p> <ul style="list-style-type: none"> <li>➤ <b>Research:</b> historical documentation and consultation with the Eames Foundation</li> <li>➤ <b>Observation:</b> fieldwork and fabric examination</li> <li>➤ <b>Analysis:</b> Identify key components and information gaps</li> </ul>
<p><b>STEP 2:</b> <b>Assess the Significance</b> [Chapters 4 and 5]</p>	<p>Determine why the place is significant:</p> <ul style="list-style-type: none"> <li>➤ Compare the Eames House to similar places</li> <li>➤ Assess the significance of each key element and component</li> <li>➤ Use agreed-upon criteria to assess the site's heritage values: historic, aesthetic, social, scientific</li> <li>➤ Analyze the attributes of its elements and components: form, function, fabric, location, intangibles</li> <li>➤ Draft the statement of significance</li> <li>➤ Assess the level of significance of each element and component ranging from exceptional to intrusive</li> </ul>
<p><b>STEP 3:</b> <b>Identify the Vulnerability Factors</b> [Chapter 6]</p>	<p>Identify how this significance is vulnerable:</p> <ul style="list-style-type: none"> <li>➤ Identify vulnerability factors that impact the site's future management and conservation, including environmental, regulatory, resource, and use-related issues</li> </ul>
<p><b>STEP 4:</b> <b>Critically Develop Conservation Policies</b> [Chapter 6]</p>	<p>Decide what actions are needed to sustain the site's significance:</p> <ul style="list-style-type: none"> <li>➤ Develop both general and specific conservation policies that are based on the significance of the site's elements and components and that address the identified vulnerability factors</li> </ul>
<p><b>STEP 5:</b> <b>Identify Priorities and Responsibilities</b> [Chapter 7]</p>	<p>Identify responsibilities and agree upon conservation action priorities:</p> <ul style="list-style-type: none"> <li>➤ Establish responsibilities and priorities</li> <li>➤ Identify the most urgent conservation needs of the place</li> </ul>
<p><b>STEP 6:</b> <b>Implement, Monitor, and Periodically Review the CMP</b> [Implementation phase]</p>	<p>Manage in accordance with policy:</p> <ul style="list-style-type: none"> <li>➤ Regularly monitor implementation of the CMP and review it every five years</li> </ul>

The final two chapters of the CMP contain guidance for the site's care and conservation:

- Chapter 6 provides detailed conservation objectives and policies considering the site's physical condition, vulnerabilities to the agents of deterioration, and specific requirements to retain significance, all set within the objectives of the Eames Foundation.
- Chapter 7 summarizes the priority action recommendations for consideration and implementation by the Foundation.

Additionally, the Eames House Conservation Management Plan Overview provides a graphic summary of some of the CMP's key points, including the site's heritage significance and important conservation management policies.

## 1.6 Specialized Terminology

The Eames House CMP uses a number of specialized terms, defined in the glossary at the back of this volume. This terminology is consistent with the Burra Charter, and the glossary clearly indicates terms drawn directly from the charter. Where relevant, related terms as defined by the United States *Secretary of the Interior's Standards* are provided for reference.

## 1.7 Limitations

The CMP provides both broad and detailed policy guidelines for the ongoing use and care of the site, including the building complex, its landscape and setting, and associated contents and collections, to ensure the conservation, interpretation, and management of the site's many significant values for future generations.

In addition, the CMP provides policy recommendations for implementing detailed work and a framework for prioritizing works, both of which require periodic review and updating, but does not include detailed work programs or specifications. A detailed maintenance schedule and specific plans—such as an interpretation plan and plans for landscape, collections, and visitor management, or wildfire emergencies—are beyond the scope of this CMP; however, it is recommended that each of these plans be developed for the site. Further, it is acknowledged that many physical elements and components have been, and will continue to be, subject to specialist investigation and research as part of the ongoing study and care of the place.

The CMP is not intended to be a static document. Rather, it should be reviewed and revised periodically to incorporate the results of new investigations or in response to changing conditions and values of the site.

## 1.8 Authors

The Eames House CMP was prepared by a cross-disciplinary and multi-skilled project team of heritage specialists. GML Heritage, in Sydney, Australia, was commissioned by the GCI to prepare the CMP and provide advice and peer review on conservation management of the site.

This CMP has been prepared by the following team:

- Sheridan Burke, conservation planner and partner, GML Heritage
- Jyoti Somerville, heritage architect and senior associate, GML Heritage
- Gail Ostergren, historian and research specialist, GCI
- Laura Matarese, graduate intern (2014–15) and associate project specialist (2016–18), GCI
- Chandler McCoy, senior project specialist, GCI

The preparation was initiated and directed by Susan Macdonald, head of the GCI Buildings and Sites department. The Eames Foundation has been closely involved in the development of the CMP, with board members Lucia Dewey Atwood and Eames Demetrios actively participating in workshops and discussions to develop the significance assessment and conservation policies, in addition to reviewing the text. ■





# Historical Development

## 2.1 Introduction

Chapter 2 summarizes the historical development of the Eames House site—from its earliest occupation to the present—and provides brief biographical details about the lives and work of Ray and Charles Eames. Its specific purpose is to inform the CMP’s assessment of heritage significance and conservation policies; it is not intended as a detailed historical analysis, which is outside the scope of a CMP.

The history is of vital importance in identifying key attributes, elements, associations, and values of the place that will inform the significance assessment and conservation policy development sections of this CMP. Its major functions are:

- to assist the full understanding of the physical form, elements, attributes, and fabric of the place, including all contributory components of the site and its setting;
- to identify associations, events, and values that may or may not be tangibly embodied in the physical fabric of the place or in the associated historical records but are essential contributors to its heritage significance; and
- to allow a comprehensive and appropriately supported assessment of the nature and degree of the heritage significance of the place using all relevant criteria and values, both tangible and intangible.

## 2.2 History of the Eames House Site to 1945

### ➤ 2.2.1 Location and Setting

The Eames House is sited on a bluff overlooking Santa Monica Bay, on the northern edge of Santa Monica Canyon, in the Pacific Palisades neighborhood of Los Angeles. The community of Pacific Palisades sits atop a wide mesa several hundred feet above the Pacific Ocean. Its name is derived from the mesa’s impressive oceanfront cliffs, which, when viewed from a distance, resemble a defensive barricade known as a palisade. To the north lie the rugged slopes of the Santa Monica Mountains. A number of canyons cut through the mesa to the ocean. Santa Monica Canyon, a broad valley formed by the confluence of three watersheds, separates Pacific Palisades from the neighboring city of Santa Monica (Young and Young 1997, 1).

The sea cliff along the coast highway is composed largely of sandstone, shale, and alluvium. The portions of the cliffs that are of sandstone or composite are relatively stable, but the areas of softer shale and alluvium are susceptible to landslides and mudflows. What geographer Richard Logan refers to as the “ever-threatening” Chautauqua cliff, above which the Eames House stands, is “composed entirely of slightly consolidated alluvium.” The “canyon borders and sea-cliff edge,” he notes, present “serious stabilization problems” (Greenwood 1983, 2).







Canyon (see fig. 2.1), for \$55,575 to a syndicate headed by Abbot Kinney (Young and Young 1983, 14–25; *Los Angeles Times* 1887) (fig. 2.2).<sup>1</sup>

### Abbot Kinney and Santa Monica Heights

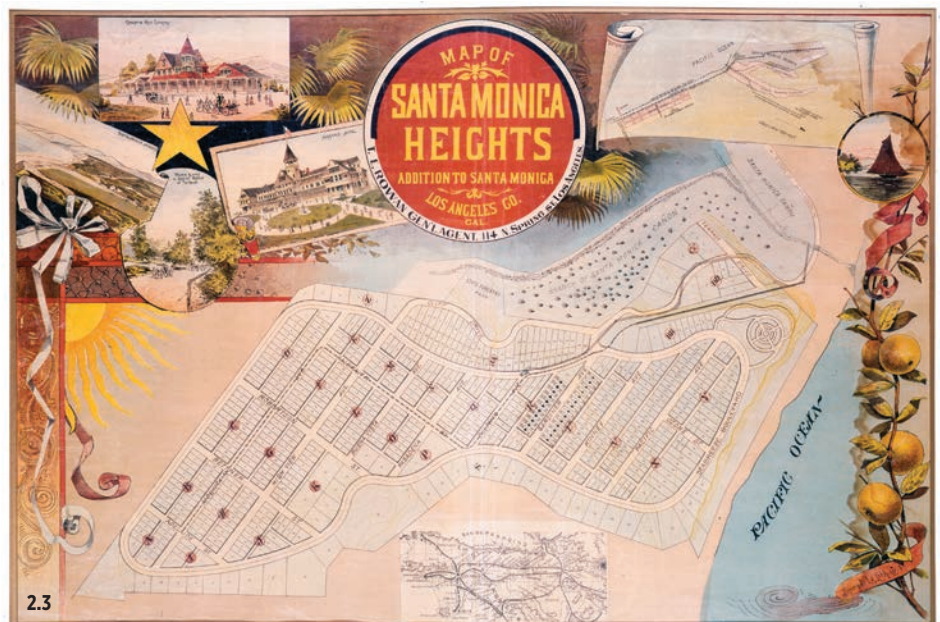
Abbot Kinney and his partners planned to subdivide the tract and build a fashionable residential district called Santa Monica Heights (Los Angeles County Recorder 1889) (fig. 2.3). They mapped the area and organized the Santa Monica Outlook Railroad as a means of transporting residents and prospective buyers from the depot in Santa Monica along the coast and up to the Heights. Under Kinney's guidance, streets were planned, parts of the area were graded, and neat rows of eucalyptus trees planted, forever altering the mesa's appearance.

The eucalyptus was introduced to Southern California from Australia in the second half of the nineteenth century. By the 1870s, the fast-growing genus of more than seven hundred species was touted for its multifaceted commercial potential as well as for its usefulness as a windbreak and an ornamental tree. Kinney, a man of many interests, including horticulture, was among the eucalyptus's great proponents.<sup>2</sup> As chair of the State Board of Forestry, Kinney persuaded John P. Jones and Arcadia Bandini de Baker, two major landholders in Rustic Canyon—an offshoot of Santa Monica Canyon—to donate six acres to the State of California in 1887 (increased to twenty acres in 1889) for the establishment of an experimental forestry station.<sup>3</sup> The station would be used as a testing ground for the adaptability of foreign species to local growing conditions. A variety of eucalyptus specimens were planted at the Santa Monica Forestry Station under Kinney's direction; in 1895, he identified nine species planted there (Kinney 1895, 17), while a 1917 survey cataloged seventy-two eucalyptus species at the site (Young and Young 1975, 34).<sup>4</sup> The University of California took over the station's management in 1893 and continued to operate it until 1923. In 1953, the last vestiges of the Santa Monica Forestry Station were turned into a city park. The station site was designated California Historical Landmark No. 840 in 1971. In 2008, the Santa Monica Forestry Station Eucalyptus Grove was designated Los Angeles Historic-Cultural Monument No. 935.

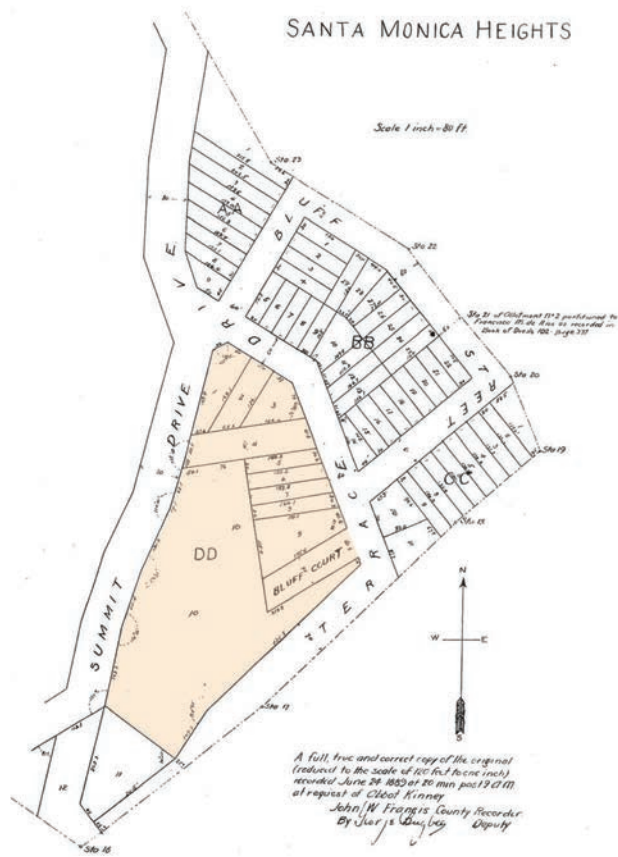
Kinney's intention for the Santa Monica Heights subdivision coincided neatly with the development of the nearby forestry station, but his association with the State Board of Forestry ended in 1888. Nonetheless, he left a legacy of eucalyptus plantings at the Rustic Canyon station and above the Palisades bluffs, including many of the trees that grace the Eames House site. His development scheme for Santa Monica Heights, however, was not realized. He had acquired the property at the height of a local real estate boom, and his plans were likely affected by the sharp market downturn that commenced in 1888. In the end, Kinney subdivided only a small fraction of his 247 acres.<sup>5</sup> The tract map for Santa Monica Heights filed with the Los Angeles County Recorder in June 1889 included only the southeasterly portion of the bluff (Los Angeles County Recorder



**Figure 2.2** View of the bluff at the mouth of Santa Monica Canyon in 1885, several years before Abbot Kinney acquired the land and began planting eucalyptus trees. Tents can be seen on the canyon floor; the area was a popular camping destination in the late nineteenth century.



**Figure 2.3** Promotional map of Abbot Kinney's proposed Santa Monica Heights subdivision. The future site of the Eames House is located on block DD, above the roundabout.



2.4

**Figure 2.4** Santa Monica Heights tract map, recording the formal subdivision of a portion of Abbot Kinney's proposed development in 1889. Lot 10 of block DD (shaded) would be the future site of the Eames and Entenza Houses.

**Figure 2.5** The edge of the bluff, part of the property once owned by Kinney, at the mouth of Santa Monica Canyon as it appeared in 1910. Collis Huntington's 4,720-foot Long Wharf is seen in the distance.



2.5

1889) (fig. 2.4). The Eames and Entenza Houses stand on lot 10 of block DD of the 1889 Santa Monica Heights tract.

#### Collis Huntington and the Long Wharf

In 1891, the *Los Angeles Times* (1891a, 1891b, 1891c) reported that Kinney sold the entire property to Collis P. Huntington of the Southern Pacific Railroad, though inclusion of lot 10 of block DD in that sale has not been confirmed.<sup>6</sup> Huntington's intent was to develop Santa Monica Bay as Los Angeles's primary port, with a wharf at the mouth of Potrero Canyon, about half a mile north of Santa Monica Canyon. Kinney's former property would serve as the site for a grand estate, with views to the port operations below (Young and Young 1983, 30).

Despite indications that Congress was likely to favor San Pedro as the site of a Los Angeles port facility, Huntington forged ahead with the construction of a rail line along the coast and an extraordinary wharf extending 4,720 feet into the bay (fig. 2.5). Officially named Port Los Angeles, the Long Wharf was completed in 1893. Federal support and associated funding, however, went to San Pedro in 1897, and the Long Wharf rapidly lost momentum. Huntington's death in 1900 marked the end of Port Los Angeles, as well as plans for a bluff-top estate.<sup>7</sup> The property passed to his wife, Arabella, and was held intact for the next quarter of a century.

#### 2.2.4 Twentieth-Century Land Transactions and Subdivision Annexation and Early Subdivision of Pacific Palisades

By the early twentieth century, investors, including the Santa Monica Land and Water Company headed by Robert Gillis, had begun assembling large tracts of land and preparing subdivisions in the Pacific Palisades area. Development took off in earnest in the 1920s, following the end of World War I. On June 14, 1916, the land of the former Rancho Boca de Santa Monica and much of the surrounding area—a total of 48.67 square miles—were annexed by the City of Los Angeles as the Westgate Addition; the community of Pacific Palisades is situated within this addition. On April 28, 1925, an additional 0.17-square-mile parcel at the mouth of Santa Monica Canyon, below the bluff on which the Eames House is now sited, was annexed by Los Angeles.

#### The Chautauqua Association and the Pacific Palisades Association

In August 1921, the Methodist Assembly campground and Chautauqua Association held its annual assembly in Rustic Canyon at a site adjacent to the forestry station. Established in western New York in the 1870s, the Chautauqua movement brought adult educational courses, lecture programs, and cultural events to communities across the country.<sup>8</sup> Desirous of establishing a residential community and permanent Chautauqua Assembly site in the area, the Methodist Episcopal Church formed the Pacific Palisades Association (PPA), under the direction of Rev. Charles Holmes Scott, to oversee the development. The community of Pacific Palisades was formally founded on January 14, 1922, on property that the PPA had acquired on the mesa to the west of Rustic Canyon.

#### Huntington Palisades

Through the early 1920s, the PPA's activities expanded as it bought up tracts of land and added new subdivisions to the Pacific Palisades community. In 1926, the PPA purchased a 226-acre tract from the estate of Arabella Huntington, which encompassed most of the property that Abbot Kinney had acquired from Francisca Marquez de Rios de Peña in 1887 (Los Angeles County Recorder 1926; Young and Young 1983, 110). The PPA named the development Huntington Palisades



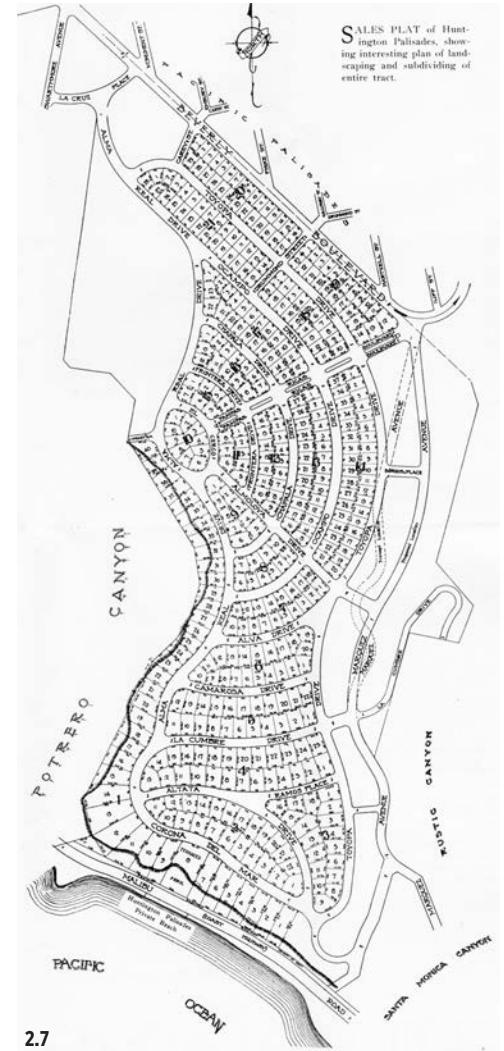


(fig. 2.6). Several parcels of the original Santa Monica Heights subdivision, including lots 9 and 10 in block DD, were excluded from this sale (fig. 2.7).<sup>9</sup>

To date, it has not been possible to establish when Kinney sold those particular lots or to whom, nor is it clear when or under what circumstances those parcels were separated from the rest of the Marquez de Rios de Peña/Kinney/Huntington holdings. According to Pacific Palisades historian Betty Lou Young, in the early 1900s Robert Gillis owned the five-acre meadow—the site of block DD, lots 9 and 10—which at the time purportedly held several shacks that were occupied informally (Young and Young 1997, 129).<sup>10</sup> A peppercorn tree and what appear to be the remains of concrete footings visible in a photo taken in the mid-1940s may be evidence of some prior, undocumented use of the site (fig. 2.8).

Huntington Palisades was developed for a well-heeled clientele. Its undulating streets were beautifully landscaped and lined with ornamental street lamps; Kinney's mature eucalyptus trees were preserved, though new streets were cut across rows (fig. 2.9).<sup>11</sup> Lots were of varied sizes, many with beautiful ocean views. Utilities were laid underground. Streets were graded and paved. In 1928, Marquez Road, originally called Terrace Drive on Kinney's Santa Monica Heights subdivision map (see fig. 2.4), was widened and renamed Chautauqua Boulevard, erasing the memory of the area's rancho-era past in favor of more recent history.

The Huntington Palisades development bordered on but did not include the area subdivided in the 1889 Santa Monica Heights tract map. Property records from 1924 indicate that Ralph and Margarita Dallugge, who owned several properties in the area including a ranch in Rustic Canyon, held a deed and mortgage on block DD, lots 9 and 10.<sup>12</sup>



**Figure 2.6** View of the bluff at the mouth of Santa Monica Canyon, ca. late 1920s. (Compare with fig. 2.2.) A sign for the Huntington Palisades subdivision is located near the future site of the Eames House. The entire mesa is covered in eucalyptus trees, many planted by Kinney several decades earlier.

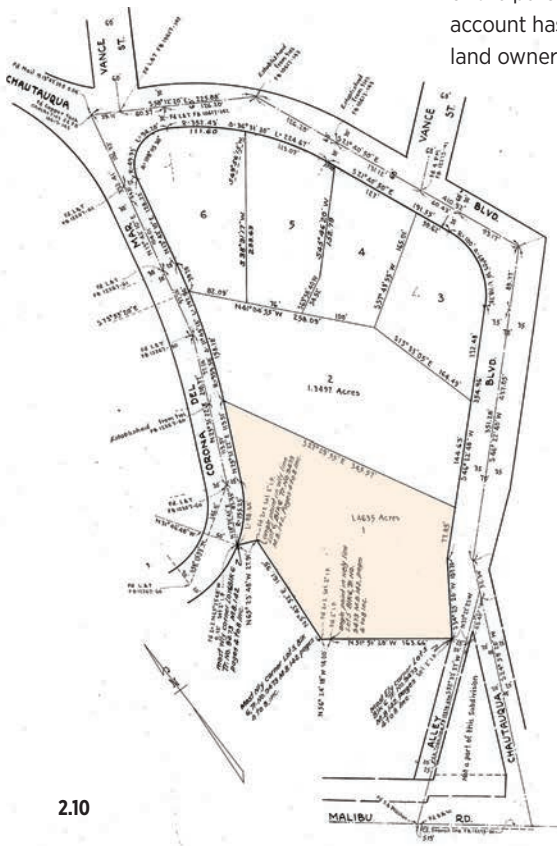
**Figure 2.7** Sales plat map for the Huntington Palisades development. The Eames House site is just outside of the development at the lower right, where Corona del Mar curves to meet the unmarked road—which later would become Chautauqua Boulevard—that connects to the coast highway.

**Figure 2.8** View of the future Eames House site, looking toward the Pacific Ocean, 1946. The short, wide-trunk peppercorn tree (right of center) and the possible remains of concrete footings (center and right foreground) may indicate earlier occupation of the site.



**Figure 2.9** Aerial view of the Pacific Palisades area, looking northeast, 1927. Long rows of trees planted as part of Abbot Kinney's subdivision scheme are clearly visible, as is the street pattern of the Huntington Palisades development. The Eames House site is located somewhere along the southwest edge of the mesa.

**Figure 2.10** Map of tract no. 13251, showing John Entenza's subdivision of the five-acre parcel in 1945. Entenza sold lot 1 (shaded) to the Eameses and built his own house on lot 2. Lot 3 is the site of Case Study House No. 18; Case Study House No. 20 is located on lot 5.



### Will and Betty Rogers

In July 1927, the Dallugges sold this property to actor, humorist, and cowboy philosopher Will Rogers and his wife, Betty, whose own home and ranch was located next door to theirs (Los Angeles County Recorder 1927a). The following month, the parcel was incorporated into tract 9473 as lot 6 of block 6 (Los Angeles County Recorder 1927b). In August 1931, the Rogerses acquired tract 9473, lots 5 and 7, which bookended lot 6, consolidating ownership of the bluff (Los Angeles County Recorder 1931).

The Rogerses were major landowners in the area. In addition to their ranch, their holdings included the bath house building, still extant at the foot of Chautauqua Boulevard and Pacific Coast Highway, and a significant amount of oceanfront land. Their exact intent for the bluff site is not known. Will Rogers died in 1935. Upon her death in 1944, Betty Rogers left the ranch and beachfront land to the State of California. Both are now operated as state parks.

### John Entenza and the Eameses

The Rogers heirs sold other landholdings, and in January 1945, John Entenza, editor of *Arts and Architecture* magazine, purchased the five-acre parcel above the bluff from the Rogers estate as an incubation site for his Case Study House Program (Los Angeles County Recorder 1945).<sup>13</sup> He subdivided the property into six lots, two larger (lots 1 and 2) and four smaller ones. Tract 13251 was approved by the Los Angeles Bureau of Engineering on October 26, 1945 (fig. 2.10).

In January 1946, Entenza sold the four smaller lots to individual owners.<sup>14</sup> He retained ownership of the two larger lots, which were to become the sites of the Eames (lot 1) and Entenza (lot 2) Houses. Ray and Charles Eames purchased lot 1 from Entenza in July 1948 (Los Angeles County Recorder 1948) (fig. 2.11).

As stated above, the history of land ownership and development in the Pacific Palisades area is complicated and documentation is often difficult to access. Accounts of the ownership history of the parcel that Entenza acquired in 1945 are incomplete and at times contradictory. While this account has drawn extensively on documentary evidence in an effort to sort out the sequence of land ownership, gaps remain, offering future research opportunities.

## 2.3 Southern California Modern Architecture and the Case Study Houses

### 2.3.1 The Case Study House Program

The Eames House was constructed as Case Study House No. 8 under *Arts and Architecture* magazine's influential Case Study House Program. Announced in the January 1945 issue by John Entenza, the publication's editor, the program was devised to promote the design and construction of innovative, low-cost, prototypical modern houses that would serve the needs of postwar families. In his program brief, Entenza proposed the "study, planning, actual design and construction of eight houses, each to fulfill the specifications of a special living problem in the Southern California area." Regionally and nationally recognized architects were invited to participate, each chosen for his ability to "realistically" evaluate the housing needs of a specific client and site and create "'good' living conditions" using new and innovative materials and techniques (Entenza 1945, 37).<sup>15</sup>

### 2.3.2 *Arts and Architecture* Magazine and John Entenza

According to architecture critic Esther McCoy, under Entenza's editorship *Arts and Architecture* "established a strong line of communication between laymen and the architectural profession," making it an excellent vehicle for the dissemination of new architectural ideas (McCoy 1977, 8). Although he had a great impact on



the promotion of modern architecture over the course of his career, Entenza did not display a strong interest in the subject until he was in his thirties, when his father's partner commissioned a house design (unbuilt) by Harwell Hamilton Harris; in 1937, Entenza commissioned his own house by Harris, located at 475 Mesa Road in Rustic Canyon, a short distance from the Pacific Palisades property.<sup>16</sup>

In 1938, Entenza began working at *California Arts and Architecture*, a regional publication with an emphasis on traditional homes and gardens. In short order, he took over as editor (his name first appeared on the masthead in February 1940) and began shifting the publication's focus more firmly toward modern architecture and design, broadening its geographic range in the process. By 1944, he had completely overhauled the publication, dropping "California" from the title that February and—guided by an editorial advisory board composed of a number of prominent architects, artists, and designers—providing content covering many aspects of contemporary culture but particularly modernism in the arts, architecture, and design.<sup>17</sup> The magazine, which also expressed a commitment to social issues, brought these concerns together in the Case Study House Program. Anticipating the postwar construction boom, the program aimed to address the looming need for well-designed but affordable solutions to the pent-up demand for new housing brought about by the deprivations of the Depression and the shortages of the war years.

### ➤ 2.3.3 Predecessors to the Case Study House Program

The Case Study House Program was not unique in the annals of architectural history; rather, it was, as architectural historian Helen Searing notes, "an American synthesis of two hallowed means of transforming domestic architecture: the illustrated periodical and the demonstration dwelling," traditions dating to the mid-nineteenth century in Europe and the United States (Searing 1998, 107). In the United States, model house designs were regularly featured in specialized journals and the popular press, especially magazines dedicated to a female readership. For instance, in 1895, *Ladies Home Journal* published the first of a long series of plans for simple houses that could be constructed at moderate cost, including three sets of designs by Frank Lloyd Wright published between 1901 and 1907.

Demonstration dwellings, which made their first appearance at the Great Exhibition of 1851 in London, brought new design ideas, construction methods, and materials before the public in a tangible way. Such dwellings have been a significant part of world's fairs and expositions ever since. Many of these were temporary buildings constructed on the exposition grounds, but in some instances, such as the Golden Gate International Exposition of 1939, model homes of permanent construction were built off-site and sold after the expo's closing. In the United States, there is also a tradition of demonstration houses constructed as exhibits unto themselves. Regardless of the context, the primary goal of American demonstration houses was the sale of new building materials, household technologies, furnishings, and appliances.<sup>18</sup>

In general, American home design remained largely conservative into the postwar period. For this reason, Searing argues that the European demonstration dwellings of the interwar period—such as the Weissenhofsiedlung housing development in Stuttgart, which Charles Eames visited on a trip to Europe in 1929—are "the closest precursors to the Case Study Houses, in intention as well as style." While in the United States the primary purpose of the demonstration home was to sell building materials and equipment, in Europe the goals were "more broadly social and architectural"; that is, to provide well-designed housing prototypes. These European models were developed under both public and private initiatives, included single-family and multifamily housing, and were manifested as both temporary and permanent structures. Their common aims



**Figure 2.11** John Entenza (far right) with Charles and Ray Eames, photographed on the bluff in 1946, the year after Entenza acquired the property.

were to “experiment with the building process and to economize through the rationalization of plans and the standardization, prefabrication, and mass production of parts.” Furthermore, they sought to foster “a new and resolutely contemporary life style” through housing (Searing 1998, 109, 112). All of these goals aligned with the aims of the Case Study House Program, which sought to innovate using proven building components as well as new materials.

#### ➤ 2.3.4 Modernism in Southern California

Although conservative home design continued to predominate throughout the United States, by the time the Case Study House Program was launched in 1945, Los Angeles had been a hotbed of experimental, modernist architecture for some three decades and was a ready testing ground for new ideas in residential design. Irving Gill, Frank Lloyd Wright and his son, Lloyd Wright, Richard Neutra, and Rudolph Schindler were at the forefront of this movement, pioneering innovative uses of materials and form.

The 1930s and early 1940s saw the emergence of a new, younger generation of modern architects, including Julius Ralph Davidson, Harwell Hamilton Harris, Raphael Soriano, Gregory Ain, A. Quincy Jones, and John Lautner. When the program began, many of the hallmarks of the Case Study Houses—including the experimental use of materials such as steel, plywood, and large expanses of glass in a residential context; modular building designs; open floor plans and the integration of indoor and outdoor space; clear expression of materials and structure; emphasis on prefabrication; and concern for the design of low-cost housing—were already part of Southern California’s modern architectural vocabulary. These characteristics could be found in a few well-designed, moderately priced modernist housing tracts, such as Ain’s Mar Vista Tract (1948) and the Mutual Housing Association’s Crestwood Hills (1946–50) by Jones, Whitney Smith, and Edgardo Contini, that were developed in Los Angeles during the early years of the program.

#### ➤ 2.3.5 Implementing the Case Study House Program

When Entenza announced the program, in the words of architectural historian Elizabeth A.T. Smith: “It was in confidence that many of the best architectural talents of his generation were already preoccupied with the issue of housing, and yearned for the opportunity to apply their ideas after the war years’ forced hiatus in building” (Smith 2002, 8). The program launched quickly, and by the end of 1945, nine design concepts had been presented in the pages of *Arts and Architecture*, the last two being collaborations between Charles Eames and Eero Saarinen on residences for Ray and Charles and for Entenza himself. Owing to delays in construction caused by material shortages and to “Entenza’s desire to keep good design before the public,” the program was extended and expanded (McCoy 1998, 22). At the time of its conclusion in 1966, thirty-four single-family houses had been presented in the pages of the magazine, twenty-four of which had been constructed.<sup>19</sup>

While Entenza described the magazine as the client, *Arts and Architecture* did not in fact finance the construction. Initially, architects participated at Entenza’s invitation, but designs that lacked actual clients were not built. As the program progressed, architects brought designs for which they already had clients to Entenza. If approved, they were included in the program. Clients were no doubt motivated by the desire to own an innovative, modern home, but they also enjoyed discounts on merit-specified construction materials, equipment, and furnishings provided by manufacturers in exchange for notice in the magazine.<sup>20</sup> The houses were fully furnished, equipped, and landscaped under the corresponding architect’s supervision. They were opened to the public for viewing during a six- to eight-week inspection period (Entenza 1945, 38). Public interest in the program was considerable. According to architecture critic Esther McCoy, 368,554 people visited the six houses that were completed during the first three years of the program, the only period for which such information is available (McCoy 1977, 10).<sup>21</sup>

Internationally, the architecture world took notice. Well publicized in the pages of *Arts and Architecture*, which enjoyed a wide, international distribution, and featured in the foreign architectural press as well, the Case Study House Program was, according to a 1959 article in *Architectural Review*, “one of the most distinguished and influential architectural research programmes ever inaugurated” (*Architectural Review* 1959, 2). Architectural historian Reyner Banham (1998, 186),



for instance, recalled visiting any number of London architectural offices in the mid-fifties, seeing pages from *Arts and Architecture* pinned above drafting tables as inspiration and directly influencing the drawings below.

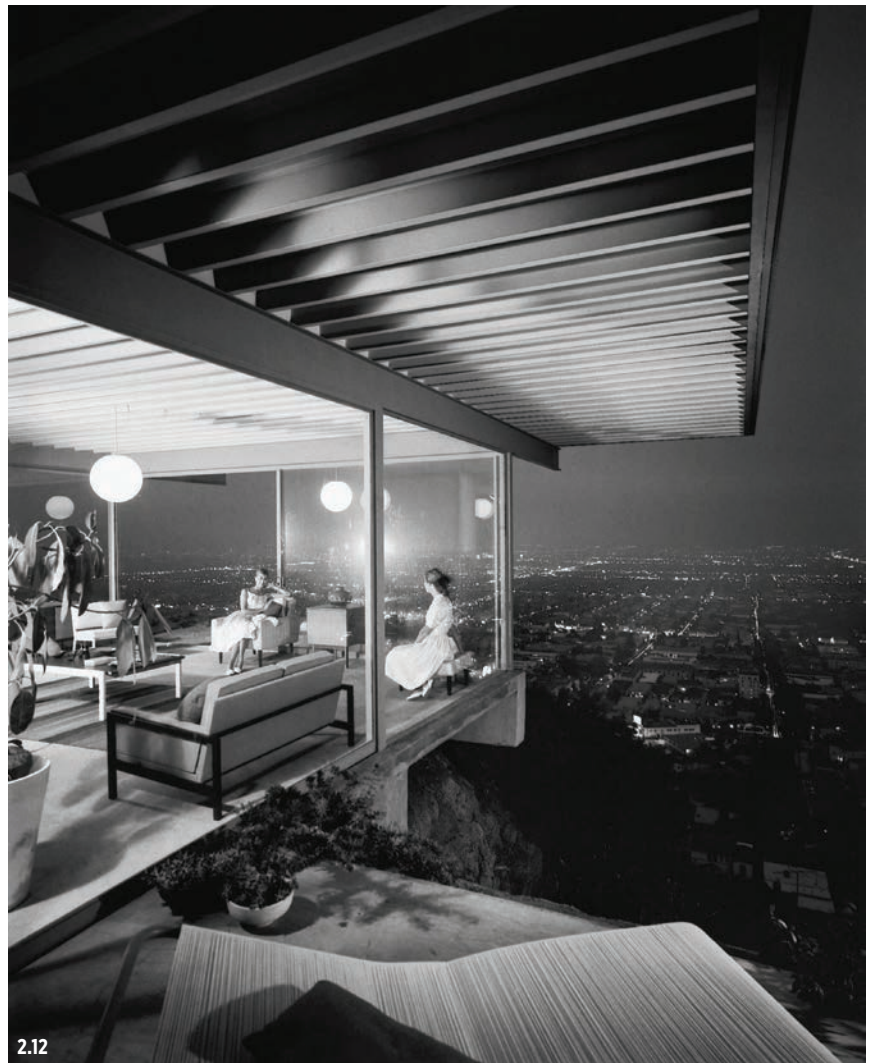
Yet, for all of the program's far-reaching influence—and despite Entenza's directive that each house “must be capable of duplication and in no sense be an individual ‘performance’” (Entenza 1945, 38)—few, if any, of the Case Study House designs were replicable prototypes. The best known of the houses, including the Eames House and Pierre Koenig's Case Study House No. 22, known as the Stahl House (fig. 2.12), were singular creations marked by the architects' seamless integration of the buildings and their sites, as well as their highly original use of materials, especially steel and glass (Smith 2002, 9). Of the Case Study Houses built before 1950, the Eames and Entenza Houses were the first to fully embrace the adaptation of industrial materials and construction techniques. These two residences represent the transition from modernism as it had evolved in Los Angeles to the iconic, experimental steel-and-glass structures that epitomize the Case Study style. Of all the Case Study Houses, the Eames House is perhaps the most widely recognized internationally as an exemplar of modernism (Banham 2001, 205–12; McCoy 1977, 11–12; Smith 2002, 9).

### ➤ 2.3.6 Subsequent Attitudes toward the Case Study House Program

The process of historicizing the program began as early as 1962 with Esther McCoy's book *Modern California Houses*, a retrospective of the program published four years before it officially ended; a second edition, titled *Case Study Houses: 1945–1962*, was issued in 1977, reflecting a continuing interest in the topic (McCoy 1977).

A major exhibition, *Blueprints for Modern Living: The History and Legacy of the Case Study Houses*, which ran from October 1989 to February 1990 at the Los Angeles Museum of Contemporary Art (MOCA), further burnished the program's reputation. It supplied a kind of antidote to postmodernism as it introduced the Case Study Houses to a new generation of designers and the public. Architectural historian Peter Moruzzi surmises that the MOCA show was a “key element in the resurgence of interest in Modernism in Southern California in the mid-1990s” (Moruzzi and National Park Service 2013, 13).

The program's continuing significance has been further demonstrated by the listing of associated properties on the National Register of Historic Places. On July 23, 2013, the National Park Service formally listed ten Case Study Houses in California based on a multiple property nomination form prepared by the Los Angeles Conservancy's Modern Committee; an eleventh house was officially determined eligible but not listed at the owner's request.<sup>22</sup> The properties were designated for their associations with the Case Study House Program and as exemplars of California's experimental postwar modern housing. As it had already been designated a National Historic Landmark in 2006, the Eames House was not included in this nomination.



**Figure 2.12** Pierre Koenig's Stahl House (Case Study House No. 22), one of the program's best-known works. This widely published photograph, shot by Julius Shulman in 1960, did much to generate interest in the Stahl House and the entire Case Study House Program.

## 2.4 Eames House Designs and Construction

### ► 2.4.1 Case Study Houses Nos. 8 and 9: Initial Concepts and Design (1945–49)

The Eames and Entenza Houses, Case Study Houses Nos. 8 and 9, respectively, were conceived as siblings, not twins but distinct individuals sharing common material characteristics and related to each other geographically. The initial plans for the two houses, designed for adjacent lots on the Pacific Palisades site that Entenza purchased in 1945, were published in a single article in the December 1945 issue of *Arts and Architecture* at the close of the Case Study House Program's first year. Designed by Charles Eames and Eero Saarinen, they were described as “two houses for people of different occupations but parallel interests” (*Arts and Architecture* 1945, 44).

From the outset, the magazine acknowledged that the two designs could not be considered “solutions for typical living problems,” one of the chief goals of the program, but posited that by “meeting specific and rather special needs,” they might contribute to a new approach to more typical housing requirements. These special needs had to do with the clients’ particular—and, for the era, somewhat unconventional—working and living specifications; in each

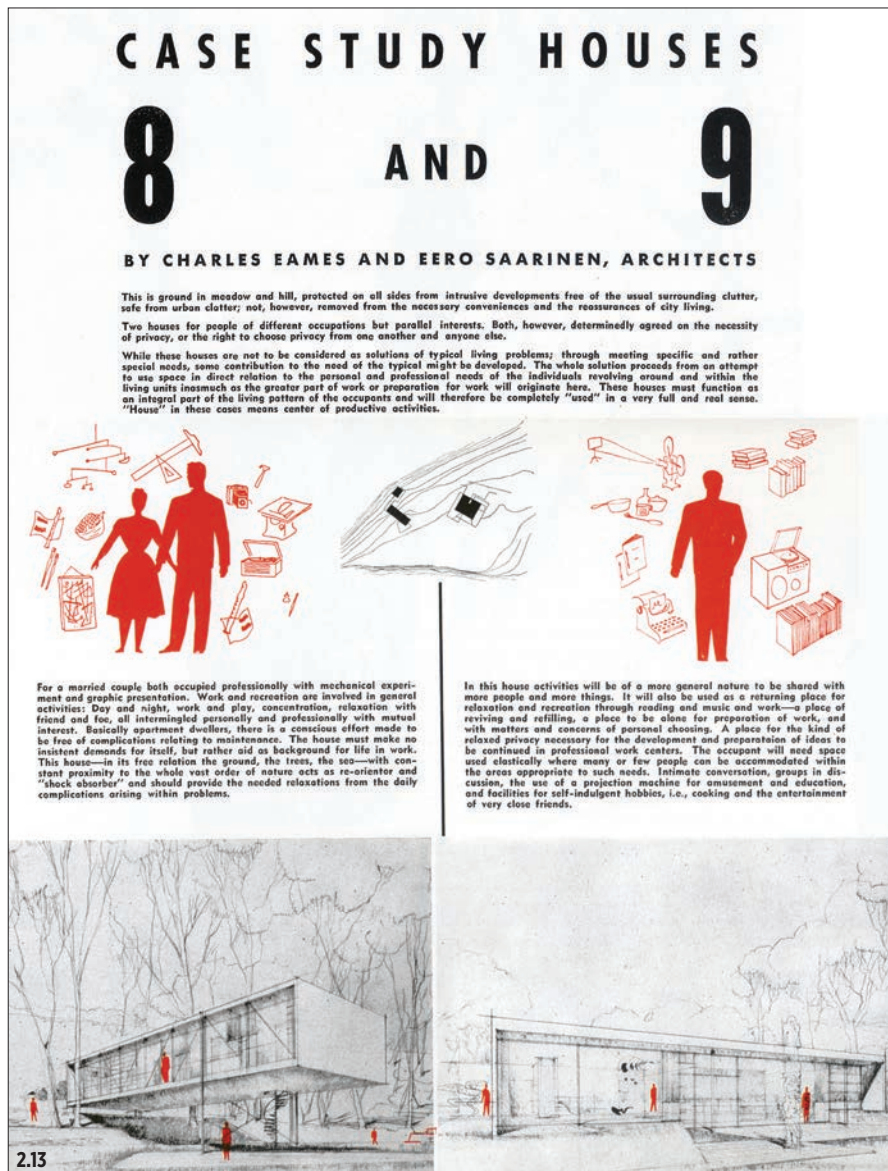
case, “house” would mean a “center of productive activities” (*Arts and Architecture* 1945, 44).

John Entenza, the “client” for No. 9, was a single man who required a house that served both his social and personal needs, with flexible space for entertaining friends and colleagues and a study where he could work without distraction. Ray and Charles Eames, the “clients” for No. 8, were described as a “married couple both occupied professionally with mechanical experiment and graphic presentation.” The house was to serve as both home and work space, and would make no “insistent demands for itself, but rather aid as background for life in work” (*Arts and Architecture* 1945, 44) (fig. 2.13).

Both houses were designed to take full advantage of their bluff-top site, which featured a wide meadow opening out from a hillside (see fig. 2.8), a row of mature eucalyptus planted by Abbot Kinney, and spectacular views of the Pacific Ocean below. The intent was to use the land communally, though each house would be oriented so as to have “complete privacy within its own indoor-outdoor needs,” as well as unobstructed views across the meadow toward the ocean (*Arts and Architecture* 1945, 45).

The two houses were not alone on the bluff. Entenza’s original intent in purchasing and subdividing the parcel was to locate a total of six Case Study

**Figure 2.13** Project briefs and preliminary drawings for Charles Eames and Eero Saarinen’s designs for Case Study Houses Nos. 8 and 9, as published in the December 1945 issue of *Arts and Architecture*.







**Figure 2.14** Case Study House No. 18, designed by Rodney Walker, completed in 1948 and photographed the same year. The house is located on parcel 3 of tract 13251 (see fig. 2.10).

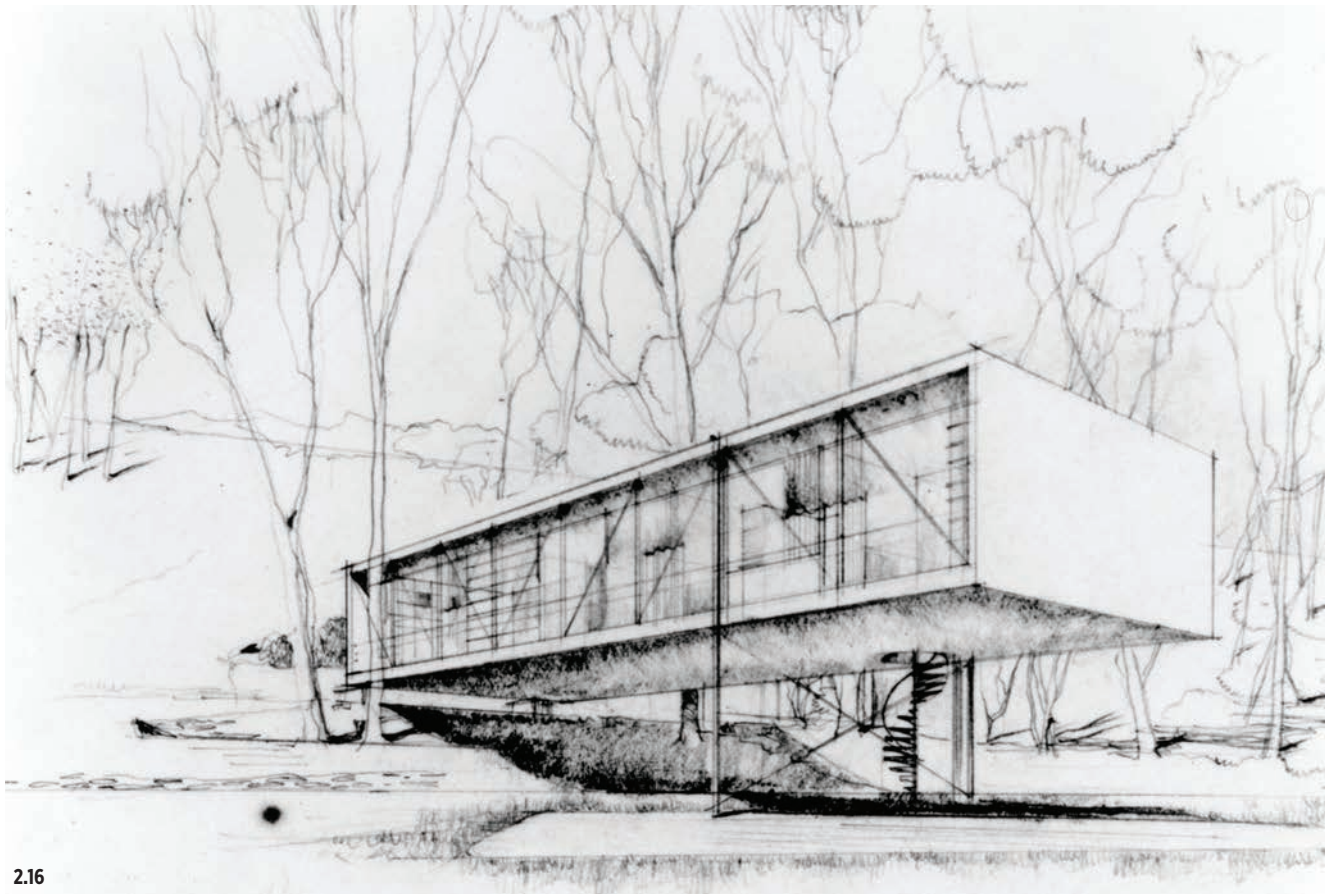
Houses there (see fig. 2.10). Two of these—No. 18 (fig. 2.14) by Rodney Walker and No. 20 (fig. 2.15) by Richard Neutra (known as the Bailey House)—were completed in 1948. To Entenza's disappointment, the remaining two lots were not developed under the program. Although a prospectus for the fifth house on the bluff—Case Study House No. 21 by Richard Neutra—was published in the May 1947 issue of *Arts and Architecture* (1947, 30–32), the house as built was so heavily modified from its original plans that it was disavowed by both Neutra and the Case Study House Program.<sup>23</sup>

In its original configuration, the Eames House was conceived as a simple rectangle of steel and glass jutting out from the hillside at a 90-degree angle, raised above the meadow on a pair of slender steel columns (fig. 2.16). A glass wall afforded direct views of the ocean beyond. Referred



**Figure 2.15** Case Study House No. 20 (the Bailey House), designed by Richard Neutra, shown in 1948, the year it was completed. It occupies parcel 5 of tract 13251 (see fig. 2.10).





2.16

**Figure 2.16** Early perspective drawing of the Eames House, referred to as the Bridge House, 1945.

to as the Bridge House, the structure was “independent of the ground” (*Arts and Architecture* 1945, 45). Access was via a spiral staircase from the parking area beneath the house, with a secondary entrance a step above grade at the hillside end. A separate studio building was nestled into the hillside behind the trees and was connected to the house by an exterior path.

By contrast, the Entenza House sat squarely on the ground, though it too had stunning views across the meadow to the ocean (since altered). Using similar structural components (indeed, the materials lists for the two houses, as published in the March 1948 issue of *Arts and Architecture*, are identical), Eames and Saarinen designed two very different structures, successfully demonstrating the flexibility of the steel elements (*Arts and Architecture* 1948). Edgardo Contini (quoted in McCoy 1977, 54–56), structural engineer for the two designs, described the buildings as “exercises in contrasts,” noting that the Bridge House fully revealed its structure, while the intent of the Entenza House was to “eliminate structure,” with its light steel frame hidden within a sheath of steel, concrete, plaster, and wood.<sup>24</sup> The house is essentially a 42-by-42-foot box, its interior spaces open and flexible, with the exception of a “monastic, windowless study” that occupies the house’s core (*Architectural Forum* 1950, 98). On three sides, there is a sense of enclosure and privacy, but the entire south wall is of glass, opening the house to the meadow, with the ocean visible beyond (fig. 2.17). The completed Entenza House, as published in the July 1950 issue of *Arts and Architecture*, did not deviate substantially from its original design of December 1945. This was not the case for House No. 8, which Charles and Ray Eames completely redesigned in the fall of 1948, despite the fact that the building components for the initial design had already been fabricated and delivered to the Pacific Palisades site.

## ➤ 2.4.2 Case Study House No. 8: Final Design and Construction (1948–49)

### Background to Changed Design

Various rationales for the redesign of the Eames House have been offered, including two given by the Eameses themselves. First, Charles felt that the Bridge House design failed to make efficient use of construction materials and did not achieve the maximum amount of enclosed space. As Ray explained, “it did not justify the cost of the steel.... We therefore set out to look

for the largest possible space to be enclosed for the same amount of materials.” Second, more than two years elapsed from initial building design to delivery of construction materials, time that the Eameses spent “getting familiar with the place.”<sup>25</sup> They found that they “loved the meadow” and questioned why they should “clutter it up with a house” (quoted in Kirkham 1990, 136). Furthermore, two trees in the row of mature eucalyptus would need to be sacrificed to accommodate the Bridge House structure. According to their grandson Eames Demetrios, Charles and Ray “realized they had made the classic architectural error of choosing a beautiful site and then destroying it with a building” (Demetrios 2013, 136–37).

Several scholars have suggested that the original scheme may have been abandoned because it bore distinct similarities to a sketch of a glass house on a hillside (ca. 1934) by Ludwig Mies van der Rohe, which Charles saw on exhibit at the Museum of Modern Art (MoMA), New York, in the fall of 1947.<sup>26</sup> Contini, structural engineer for the first version of No. 8 and No. 9, theorized that it resembled too closely a house Eero Saarinen had designed in 1941 (Jones and Smith 1998, 53n2), identified by Pat Kirkham (1995, 111–12n50) as “almost certainly” the Sam Bell House in New Hope, Pennsylvania (unbuilt) (Detroit Institute of Arts and Metropolitan Museum of Art 1983, 73). Regardless of whether there is any truth to either of these theories, plans for the Bridge House continued to progress into 1948, after Charles returned from New York.

### Design Development and Authorship

A model and description of the Bridge House appeared in the March 1948 issue of *Arts and Architecture* and a set of architectural drawings was produced—most undated but several bearing a date of May 1948. Furthermore, on September 23, 1948, the Los Angeles Department of Building and Safety issued a permit for the structure; the architects named were Eames and Saarinen, and the licensed engineer was Contini.<sup>27</sup> Surely these are indications of their intent to construct the building. Yet, just three weeks later, on October 14, a set of architectural drawings for an entirely new design was completed; the building permit for these was issued on November 3. Whatever the impetus for the redesign, once the decision was made, the work was undertaken with astonishing speed.

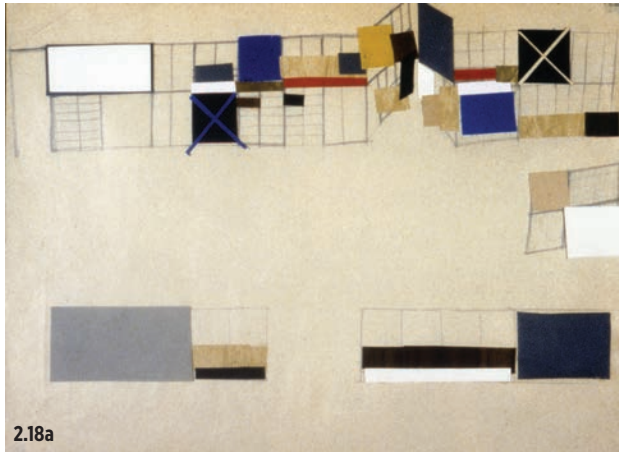
Under the new design, Saarinen’s name was no longer associated with the project, and Charles alone was listed as architect and designer of Case Study House No. 8. He was not, however, licensed to practice architecture in California, so the architect of record and draftsman for the project was an Eames Office employee, Kenneth Acker, who was on staff between 1948 and 1950. Acker worked as a draftsperson and planner on Eames Office projects, including the Herman Miller showroom, for which he was also the architect of record, and the Billy Wilder House (Neuhart, Neuhart, and Eames 1989, 89, 103, 12, 37). He was licensed in California from 1941 to 1981 (California Department of Consumer Affairs 2014), but beyond that his career is not well documented.

Although Charles was initially given sole credit as designer of the Eames House, with Acker occasionally listed as consulting architect (*Arts and Architecture* 1949a, 1949c; Entenza and Eames 1949), Ray is now widely acknowledged as its co-designer, making her the only woman on the roster of Case Study architects (Hines 2010, 529; Kirkham 1995, 104). In redesigning the House, the Eameses treated the original building components as a kit of parts to be rearranged to better meet their needs. This approach was not unique to the House; as architectural historian Beatriz Colomina has observed, the “idea of design as the rearrangement of a limited kit of parts was a constant in their work” (Colomina 1997, 129). Eames Demetrios notes that they “played

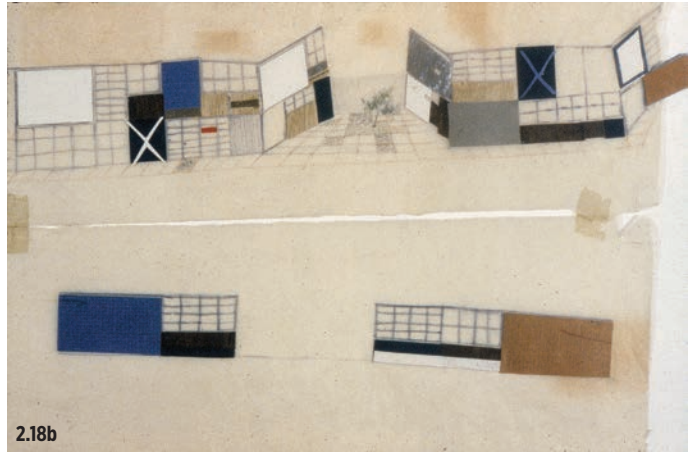


**Figure 2.17** View of the living room facade of the Entenza House, which looks out toward the ocean, 1950. The house used many of the same construction and finishing materials as the Eames House, to different effect. Note the Ferrobord wall on the far right, painted in alternating stripes of gray and white. The Eames studio is visible at left, in the distance.





2.18a



2.18b

**Figures 2.18a and 2.18b** Color studies for the Eames House, in the hand of Ray Eames, showing her working through different fenestration patterns and color schemes, 1949.

with" various "configurations" for the House, as evidenced by a number of sketches, some in Charles's hand and some in Ray's, but each using the "same essential vocabulary" (Demetrios 2013, 136–37) (figs. 2.18a and 2.18b).

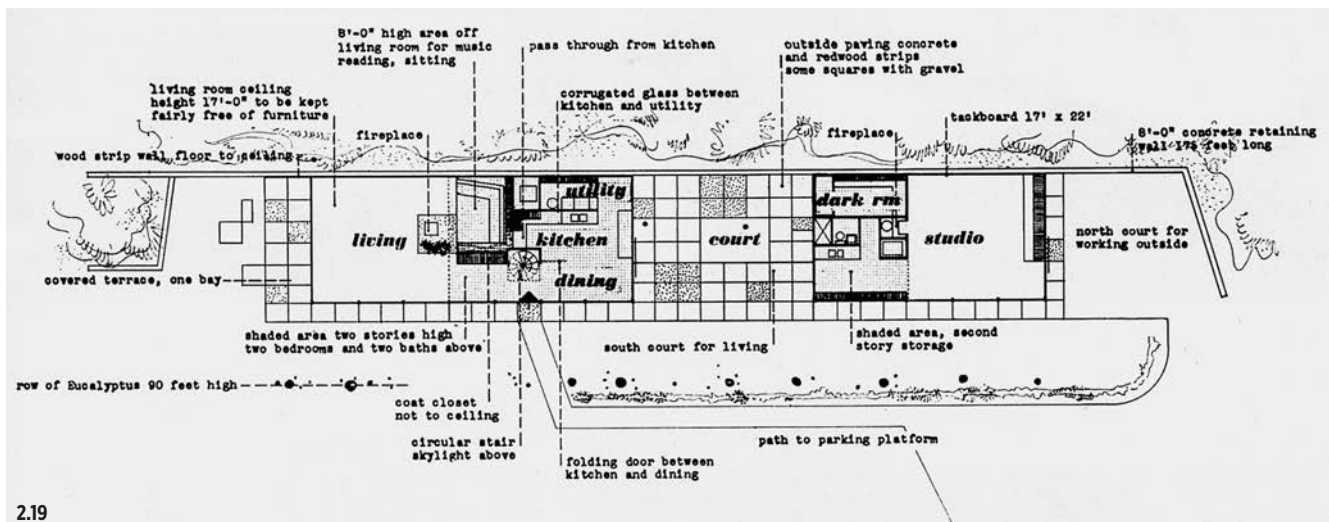
### Key Components and Features of the Final Design

In consultation with a new structural engineering firm, Mackintosh and Mackintosh, the Eameses reworked the original elements into a new plan. The public got a first glimpse of the plan in the May 1949 issue of *Arts and Architecture*, several months after construction had commenced (fig. 2.19). Images of the site and the steel frame under construction were published earlier that year (*Arts and Architecture* 1949b, 1949c). The oft-repeated story is that "every piece of steel had found its way into the new design: only one additional beam was required" (McCoy 1977, 57). Charles Eames stated that only one bar joist had to be fabricated (Adato 1975). Architect Edward R. Ford (1990, 229–31), however, has argued that this is unlikely. Although a substantial number of parts clearly correspond, in his comparison of the working drawings for both designs, he found that many new components would have been needed, while others would have required significant modification.

Regardless of the degree to which the original structural steel and building components were incorporated into the second design without modification, the Eames House as built used those materials more efficiently and succeeded in enclosing a larger amount of space. While placement of the studio was largely unchanged in the second design iteration, the residence itself was radically re-sited. Swung around 90 degrees to align with the studio, it was nestled into the hillside, or upper slope, behind the row of towering eucalyptus trees and was lowered from its stilts to sit squarely on the ground.

To fit the structures between the upper slope and the trees, a significant amount of excavation was required; an eight-foot-tall concrete retaining wall was built into the slope and forms

**Figure 2.19** Plan for the redesigned Eames House, as published in *Arts and Architecture* in May 1949. Features called out in this drawing were realized, with the exception of the living room fireplace.



2.19



the lower part of the buildings' rear walls. The excavated soil was used to create a landscaped berm that afforded privacy at the lot line with the Entenza House, which was now directly in the sightlines of the Eames House.

### Construction (1949)

Excavation of the site began in late 1948 or early 1949, and by March 1949 the retaining wall and steel frame had been completed (fig. 2.20).<sup>28</sup> *Arts and Architecture* (1949c, 30) reported that the frame was erected in a day and a half, with a total of ninety man-hours, while the steel decking and factory sash followed “in short order,” according to Charles Eames (Eames 2015, 69).<sup>29</sup> Although the cost of steel components far outweighed that of traditional wood-frame construction materials, the speed with which the structural elements were erected represented a labor savings. *Architectural Forum* estimated the cost of labor to erect framing lumber at approximately 50 percent of the cost of material, whereas labor to erect the Eames House was approximately 33 percent of the cost of steel. Construction costs for the retaining wall, foundation, and periphery paving were estimated at approximately \$5,000 (Blake 1950, 94). Eames noted that construction of the Eames House cost roughly the same as a “conventional house of good quality,” and commented that the retaining wall was responsible for “more than its share of the cost” (Eames 2015, 69; Blake 1950, 94, 96). These figures cannot be verified, as records documenting the actual cost of materials and labor for the Eames House have not been located. Construction was completed in December, and Charles and Ray Eames moved into their new home on Christmas Eve 1949.

The general contractor on the job was the Los Angeles firm of Lamport, Cofer, and Salzman, which worked on several other Case Study Houses as well. Most of the Eames Office staff members were also pressed into service, both at the site and in the Eames Office shop (fig. 2.21). Despite its reputation as an exemplar of prefabricated construction, the Eames House is in fact highly crafted. While most of the building components were machined, off-the-shelf parts that anyone might be able to assemble, the House as realized is a customized expression of the Eameses' particular aesthetic, “an almost perfect synthesis among art, craft, and technology” (Page 1980, 216). Furthermore, a fair amount of handcrafting went into its construction. Charles noted, for example, that Cemesto board panels were “about ¼ inch too thick to use in the sash without [rabbeting]” (Eames 2015, 70).<sup>30</sup> One staff member, Don Albinson, recalled his work in the Eames Office shop adapting window frames and handcrafting parts not found in builder's catalogs, which were then transported to the site and installed by the contractor. Staff members made sliding door frames and tracks, constructed the spiral staircase that connects the residence's upper and lower floors, and fashioned some of the built-in furnishings and cabinets (Neuhart and Neuhart 1994, 39–43).<sup>31</sup>



**Figure 2.20** Photo showing the structural steel frame and retaining wall before installation of the roof decking and window units, ca. December 1948.

**Figure 2.21** Charles and Ray Eames with staff members next to the concrete retaining wall during the Eames House construction, 1949. Clockwise from top left: Verla Shulman (atop ladder), Charles Eames, Frederick Usher, Don Albinson, Charles Kratka, and Ray Eames (under ladder).







2.22

**Figure 2.22** The Eames House, clad in a complex array of materials, 1950. This view of the residence shows its appearance shortly after construction.

**Figure 2.23** Cemesto panels on the Eames studio, 1957. Some of these panels were left their natural gray color while others were painted, giving a subtle variation to the east facade's composition.



2.23

## 2.5 The Eames House Site

This section is intended to give a broad sense of what the Eames House was like in the early years that it was inhabited by Ray and Charles Eames. It provides insights into some of the Eameses' decisions in designing the House and helps to contextualize subsequent material in this chapter. It is not intended as a comprehensive description of the site. For a more detailed, technical description of the site in its current condition, see chapter 3. Additional material on the history of changes at the Eames House over time can be found in the timeline in appendix A.

### ➤ 2.5.1 The Structures

The Eames House's standard, light, factory steel framing forms a delicate structural web that is filled with a variety of materials: transparent, translucent, and wire glass, and opaque panels, some brightly painted (fig. 2.22) and others a soft gray (fig. 2.23). Placement of materials was based on interior organization and the need for light and privacy. Currently a glossy black, the structures' steel frames were originally painted in what Charles described as "a rubber-based #5 coating" from the A. C. Horn Company, which

was mixed into a "dark, neutral, and very satisfying gray" (Entenza and Eames 1949, 33).<sup>32</sup>

As Charles explained:

Color was planned and used as a structural element, and while much concern was given to its use in the various structural planes, the most gratifying of all the painted surfaces is the dark, warm gray that covers the structural steel and metal sash. The varying thickness and constant strength of this line does more than anything else to express what goes on in the structural web that surrounds the building. It is also this gray web that holds in a unit the stucco panels of white, blue, red, black, and earth. (Entenza and Eames 1949, 30)

The Eameses experimented freely with color, using inexpensive paint from the Sears, Roebuck department store. According to Ray, they "could try a color and see its relationship to others," then "simply change it" if they didn't like it (quoted in Kirkham 1990, 136). In fact, the Eameses made few changes, and subsequent painting campaigns have attempted to match the original colors visually, which have become "fixed in the mind of the architectural community and taken to be the architecture" (Colomina 1997, 132). The overall effect is of two rectangular steel cages clad in a mosaic of colors and textures, translucents and solids that allow for a play of light and color and reflection across the skins of the buildings.



The residence and studio employ many features that today might be described as “green” or sustainable. With their west walls built into the upper slope, the structures enjoy a natural insulating effect. Although a significant amount of excavation was needed in order to execute this design, most of the site was left undisturbed; the excavated soil was not hauled away but was instead used to form the berm. The buildings are situated to capture ocean breezes; cross ventilation through sliding doors and operating windows—which were frequently kept open—is the main form of cooling. The residence’s south court roof overhang and the row of eucalyptus trees provide shade. The living room’s southern orientation takes advantage of the low wintertime sun. Mechanical and electrical systems are minimal. The residence was constructed with a Payne forced-air heating unit, but it was used sparingly. A much-recounted story is that when asked about the heating system, Charles Eames pointed to the sweater he was wearing (Goldstein, Lee, and Polyzoides 1988, 25; Neuhart and Neuhart 1994, 54). Sitting lightly on the land, the Eames House embodies Charles and Ray’s appreciation of nature.

## ➤ 2.5.2 The Residence

The main entrance to the residence is a discreet door located on the eastern facade. When closed, it is barely visible. To the right of the door is a four-sided, rotating black ceramic bell of unconfirmed origin. The National Historic Landmark nomination for the Eames House attributes the bell to Maria Martinez of San Ildefonso Pueblo in New Mexico (Historic Resources Group and National Park Service 2005, 5); however, this has not been confirmed and it would be an unusual form for Martinez.<sup>33</sup>

The residence is laid out in a compact plan. The door to the main entrance opens directly into a hallway that spans the length of the building and connects the ground-floor interior spaces. Immediately opposite the door stands the spiral staircase, one of the interior’s signature features. Designed and constructed in the Eames Office shop, it fills a narrow stairwell and is illuminated by a skylight (fig. 2.24). Despite the fact that the staircase occupies tight quarters, it has an airy quality that inspired *Interiors* magazine to call it “a cagy masterpiece of space economy” (Gueft 1950, 115). Initially, the floors of the hallway and the living room were bare concrete, but sometime before 1955 they were finished with 9-by-9-inch vinyl asbestos tiles in a warm white.<sup>34</sup>

To the south, the hallway leads to the lofty living area, described by *Interiors* as “one of the most enchanting corners in modern architecture.” In designing it, the Eameses were “lavish with light, air, and space above all” (Gueft 1950, 112–13). Two stories in height, with views out the glazed south wall across the partially covered south court and the meadow to the Pacific Ocean beyond, it is here that the nearly seamless integration of indoors and outdoors is most apparent (fig. 2.25).

This effect is heightened by the extension of the

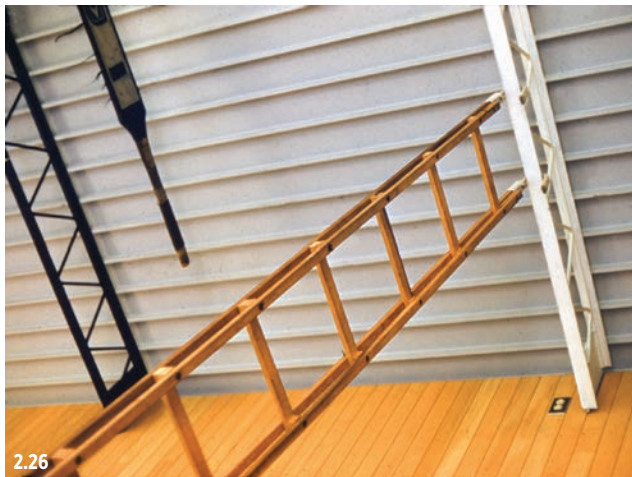


**Figure 2.24** The spiral staircase, as viewed through the open main-entrance door in this early photo. Ray Eames’s painting “For c in limited palette” hangs on the stairwell wall (see fig. 2.53).

**Figure 2.25** View of the living room from the balcony, looking out the south wall toward the ocean. Taken in 1950, shortly after the House was completed, the photo shows the room minimally furnished.







**Figure 2.26** The living room ladder, fabricated in the Eames Office shop, in an early photo. The ladder added vertical circulation to the room. It anchors to a roof truss and can be moved as needed. The top of the tallwood wall paneling can also be seen.



**Figure 2.27** View out the east-facing living room windows through the row of eucalyptus and across the meadow to the Pacific Ocean in the distance, ca. early 1950s. The wooden walkway is visible in the foreground. The south-facing windows at right look out into the south court.

**Figure 2.28** Early photo showing the shadow play on the living room's interior surfaces.

**Figure 2.29** Workers from Deering Milliken hanging the living room draperies, 1949.

room's ceiling over part of the south court and by the continuation of the tallwood paneling on the west wall of the living room to the exterior west wall of the south court. According to *Architectural Forum*, Eames used wood siding here because he “needed something to nail into” (Blake 1950, 95).<sup>35</sup> A movable ladder, fabricated in the Eameses' own shop, was designed to hook onto the open-web joists (fig. 2.26), giving, in Charles's words, a “vertical circulation to the room” as well as a practical way of hanging objects or changing lightbulbs (Eames 2015, 70).

Views of the meadow through the eastern windows are filtered through the towering row of eucalyptus trees that line the front of the building (fig. 2.27). Natural light streams through the two window walls, creating an ever-changing play of shadows cast by the window frames and the vegetation onto the interior surfaces (fig. 2.28). The dark, warm gray paint on the steel frame's interior complements the colors of the tree trunks. The varying sizes of the steel window and door units provide myriad ways of framing the views to the outside. Pleated draperies of natural colored linen and rayon fabric, originally by Deering Milliken, were hung on all living room windows except for one upper section each on the south and east walls (fig. 2.29), adding another layer of texture and providing light control and privacy.

A wide sliding glass door at the center of the south elevation opens onto the brick-paved south court, literally connecting the room to the outdoors. A narrow opaque panel set into the south facade exterior bears a faint photographic image of tree branches, echoing the eucalyptus foliage and its reflections on the structure's surface. Based on photographic documentation, at least four different images have appeared on panels in this location.<sup>36</sup> The first was likely installed in the early 1950s, but the precise date has not been determined.<sup>37</sup>





2.30



2.31

A key south court feature, constructed in 1949, is a large sculpture composed of three charred wooden ocean-pier piles standing upright, affixed to a metal stand (fig. 2.30). When the pier at Venice Beach, California, was demolished in the late 1940s, Charles and Ray retrieved the piles and brought them to the property because, according to Ray, they wanted to “keep something” to “remember it by” (Kirkham 1990, 136). The unassembled wooden members are visible in photos of the south court under construction in 1949, and the finished sculpture was displayed in the largely unfurnished living room when photos of the Eames House were published in the December 1949 issue of *Arts and Architecture* (Entenza and Eames 1949, 31–32). By mid-1950, the sculpture had been moved to the south court, where it remains to this day.<sup>38</sup>

The bedroom area is located above the north side of the living room and has an overhanging balcony (fig. 2.31). A movable floor-to-ceiling panel can be used to divide this space into two bedrooms. Sliding canvas-covered panels reminiscent of Japanese shoji screens close off the sleeping areas above the balustrade; left open, they integrate the balcony spatially with the soaring living room (fig. 2.32). Despite this flexibility and sense of openness, the upstairs areas, which also include two bathrooms and a dressing area, were very private, and interior and exterior views into them are extremely limited.

An alcove with a built-in sofa is nestled into the area beneath the overhanging bedrooms, creating an intimate space that contrasts with the expansive scale of the living room (fig. 2.33). This area forms a sort of inglenook, with a built-in stereo speaker and storage cabinets instead of a fireplace.<sup>39</sup> A two-tiered bank of cupboards with sliding doors occupies the wall above the sofa. Sometime prior to 1958, another row of cupboards located immediately above the sofa

**Figure 2.30** Detail view of the south court, showing the pier sculpture and the photographic panel above the sliding glass door, 1952.

**Figure 2.31** View of the north and east sides of the living room, showing the overhanging balcony of the bedroom area with the sliding panels partially closed, 1950.

**Figure 2.32** View across the master bedroom into the second bedroom, 1950. The sliding room divider, seen at right, is partially extended. At left, the sliding panels on the balcony parapet are partially open, allowing a view of the living room’s tallwood wall.

**Figure 2.33** The living room alcove as it appeared in 1950, showing the custom built-in sofa, cupboards, and cabinetry. Within a few years, the Eameses had removed the bottom row of cupboards to create more open shelf space. The end wall of the alcove is of rosewood.



2.32



2.33





**Figure 2.34** View of the kitchen, 1949. The Modernfold accordion door could be used to close off the kitchen, though in practice the Eameses kept it open. The corrugated glass wall above the kitchen cabinets obscures views of the service area while allowing light into the space.

was removed, creating an open space for the display of objects.<sup>40</sup> A small pass-through above the sofa opens to the kitchen. During the first five years, a wooden magazine rack was added to the west wall.<sup>41</sup> The alcove floor is the only carpeted surface in the Eames House. The end wall of the alcove facing into the living room is paneled in rosewood.

At the north end of the ground floor are the kitchen and dining areas, which can be closed off from each other by a Modernfold accordion door, though Ray admitted in an interview that it was never used, as she and Charles preferred open living spaces (Jones and Smith 1998, 52) (fig. 2.34). To the rear of the kitchen, a service area is obscured from public view by a translucent, corrugated glass panel. A large sliding

glass door opens from the dining area onto the exterior central court, which serves as an open-air foyer and outdoor room, as well as a circulation space between residence and studio.

### ➤ 2.5.3 The Studio

The Eames studio, on the north side of the central court, mirrors the residence's layout, but it is a smaller, less complex space with fewer rooms and simpler finishes. The southern portion of the building has two levels, while the double-height studio space occupies the northernmost portion of the building. The second-floor loft or mezzanine, intended to serve as both storage and work space as well as a guest room, overlooks the studio space, echoing the living room's configuration at the southernmost portion of the residence. It is accessed by a simple, open steel staircase with wooden treads, open risers, and pipe handrails, which was added in the building's early years; initially, the loft was reached by a painter's ladder (Eames 2015, 69).<sup>42</sup> An opening between the staircase and the edge of the parapet wall provides additional access to the mezzanine, allowing items to be hoisted in and out. It is blocked with a movable Eames Storage Unit (ESU) (fig. 2.35). The fascia board at the edge of the mezzanine features a photo mural showing details of the Venice pier in ruins (Kirkham 1990, 136). At the south end of the building, beneath the loft, are a small kitchenette, bathroom, utility nook, and darkroom.



**Figure 2.35** Early view of the simple open-tread staircase, which was built in the Eames Office shop and provides access to the studio loft. The fascia board features a photo mural of a detail of the Venice pier. An Eames Storage Unit fills the gap between the parapet wall and staircase rail.



Flooring in the kitchenette, studio proper, and darkroom was exposed concrete slab until the late 1950s, when it was finished with wood parquet tile. Originally laid end to end, the parquet was taken up at an unknown date to address damage and buckling caused by moisture coming through the slab and was re-laid in a basket-weave pattern in all but the darkroom, which retains the original configuration.<sup>43</sup> The bathroom and mezzanine floors were finished in Voit rubber tile.

Light streams into the studio space through the steel window sash, filled with a mix of clear glass and polished wire glass. According to Charles, wire glass was used primarily for safety reasons, but it became “an important contributing esthetic element” that was “successful in establishing the plane” while “allowing freedom to look through and beyond” (Entenza and Eames 1949, 33; Eames 2015, 70) (fig. 2.36). A sliding glass door on the north elevation opens to a garden area leading to the carport.

#### ➤ 2.5.4 The Landscape

The landscape, as it appeared when John Entenza first offered the site to Ray and Charles Eames, was a critical element in the redesign of Case Study House No. 8 (fig. 2.37). Where the Bridge House dominated the site and was positioned to take maximum advantage of the ocean views, the Eames House as built chose oblique views of the ocean in exchange for the preservation of the meadow and eucalyptus trees. In 1949, *Arts and Architecture* rolled out details of the new design for the Eames House over a period of months, starting with an article in the February issue that focused entirely on the site. While it showed a photo of the excavated area, the retaining wall under construction, and the “created shelf” where the House would sit, the emphasis was on the landscape, which had “been left free to return to meadow.” The House, it continued, was “a part of the land” but at the same time “somewhat removed from it or confined within it” (*Arts and Architecture* 1949b, 37). Tucked between the upper slope and the trees, the structure was “an unmistakably manmade object in the landscape” (Goldstein, Lee, and Polyzoides 1988, 23).

The meadow itself, which occupies a large portion of the site, was not left in an entirely natural



**Figure 2.36** Exterior view of the studio through the east facade, showing the aesthetic effect of the wire glass in the window sash, 1949.



**Figure 2.37** The Eames House site, looking southwest toward the ocean, ca. late 1940s. Ray and Charles’s appreciation of the site’s natural qualities, including the wide meadow and row of eucalyptus trees, deepened in the years after they designed the original Bridge House and ultimately contributed to the reorientation and redesign of the House.





**Figure 2.38** Early view of a portion of the meadow on the Eames House site, planted in rye grass with the east facade of the residence in the distance.

state; it was planted to allow for low maintenance and a natural, informal appearance (fig. 2.38). As Charles described it in the December 1949 issue of *Arts and Architecture*, “The meadow sloping away from the house toward the ocean is planted in rye with scattered wild flowers. The flowers will do their bit in the spring, and the green rye will be allowed to grow yellow during the dry season” (Entenza and Eames 1949, 27). In a 1983 interview, Ray reflected on life with the meadow: “It is wonderful to see all the changing seasons in it—even here in California. Now, in July, it is yellow and dry whereas in spring it is high and full of

flowers. We cut it only once a year in late May or June” (Kirkham 1990, 135–36).

Other areas of the site were planted as well. Charles reported that landscape architect J. A. Gooch, who served as the “planting consultant” for the site, had “sensitively provided a combination of shrubs and trees that are natural to the environment” (Entenza and Eames 1949, 27), though the exact nature and extent of his work is not known.<sup>44</sup> He may have assisted with the landscaping of the constructed earthen berm (fig. 2.39) that separated the Eameses’ property from Entenza’s, which was planted with what Charles described as “eucalyptus bushes which will someday be large” (Eames 2015, 71).

As was typical of modernist landscape design, the Case Study House Program took what Esther McCoy described as “a new direction” away from the “romantic tradition” that blended with the Spanish colonial and other revival styles so prevalent in Southern California. According to McCoy (1975, 56), Case Study gardens “looked designed. The spaces were fragmented, with a variety of textured surfaces in walks, walls and patios.” There was also a move toward “the wide use of low maintenance plant material.”

Although much of the Eames House landscape had a natural appearance, the areas immediately surrounding the building complex, behind the screen of mature eucalyptus trees, were more intensively landscaped and gardened (fig. 2.40). These areas fit the Case Study model in the choice of flora, the fragmentation of spaces, and especially the variety of textured surfaces of the pathways and courtyard paving materials, as evident in the brick, wood, and marble pavement materials and their greenery and rock insets, in the pebble and gravel pathways, and in the wooden walkway (originally made of railroad ties) that connects the residence and studio. Plants, both potted and planted in the ground, soften the edges of the two structures, further blurring the distinction between indoors

**Figure 2.39** The earthen berm between the Eames and Entenza properties, under construction in 1949.

**Figure 2.40** Detail of the central court as it appeared in 1958, showing brick pavers set in a grid of wooden strips and intensive plantings. Ray and Charles’s granddaughter Lucia is crouching at center.







and outdoors, supplying spots of color from within, and providing cutting flowers (fig. 2.41).

As a roughly one-and-a-half-acre parcel of largely undisturbed land, the meadow and trees are habitat for a number of animal species, including gophers, raccoons, insects, snakes, and birds. The site has also been a pass-through for deer and other wildlife in an increasingly built-up area. During the fall and winter, the eucalyptus trees are filled with clusters of monarch butterflies that use them as an overwintering site.

The relationship between the structures and the landscape is nearly seamless. As the sun moves across the sky, there is a lively interplay of light, shadow, and reflection across the exterior surfaces. Indoors, shadows cast by the eucalyptus trunks and foliage and by the structural grid form patterns across the living room balcony and other interior walls. The slender steel frame, with its abundance of glass infill, forms the most minimal of barriers (fig. 2.42). These qualities have been widely commented on. In November 1950, one of the earliest published accounts of the Eames House gave a particularly eloquent depiction: “At all hours the surface is a moving pattern of reflected sky, trees, and foliage. Shadow patterns mingle with reflections and shrub sprays inside the house mingle in the lacelike appliqué of the pattern on the walls until it is almost impossible to tell which of the growing plants are inside and which are outside the house” (Gueft 1950, 110) (fig. 2.43). Writing in 1962, Esther McCoy (1977, 54) captured the effect: “After thirteen years of living in a house with exposed steel frame, Ray Eames said, ‘The structure long ago ceased to exist. I am not aware of it.’ They live in nature and its reflections—and reflections of reflections.”

**Figure 2.41** Outdoors, at left: the wooden walkway and potted plants. Indoors, at right: plants in the entry hall. In the center: the thin steel frame of the residence’s east facade. Plants soften the buildings’ edges and blur the boundaries between indoors and out, shown in this early photo.

**Figure 2.42** The degree to which the residence’s primary facade forms what architect Tim Vreeland referred to as “the thinnest possible membrane between indoors and outdoors” (Vreeland 1977a, unpaginated) is dramatically revealed in this view south from the front of the central court, photographed in 1950. At right, the view through the open sliding glass door runs the entire length of the residence to the south court beyond. To the left of the slender steel frame, there is an uninterrupted view along the exterior walkway that runs between the front of the residence and the eucalyptus row. (The wooden walkway had yet to be constructed.)



**Figure 2.43** The play of shadows and reflections, blurring distinctions between indoors and out. Here, the hillside and eucalyptus trees are reflected in the south court’s windows, but interior details are also clearly visible, including the open front door and spiral staircase treads, the Truscon ceiling, and shadows of the steel frame on the living room balcony. At right, through the corner of the glazed south and east facades, the meadow and a small forked tree can be seen in this early photo.





### ➤ 2.5.5 Contents and Collections

For all its architectural and landscape innovations, one of the most remarkable things about the Eames House is the diverse array of furnishings and objects with which it was filled. Although the earliest photographs—shot by noted architectural photographer Julius Shulman, *Life* magazine photographer Peter Stackpole, and others, including Ray and Charles themselves—depict a sparsely furnished, almost ascetic space, the House rapidly evolved into something else entirely (figs. 2.44a and 2.44b). In a 1966 essay, architect Michael Brawne (1966, 450) wrote that on visiting the House in 1955, he saw “the richness of an additive process” as compared to the early published photographs. Ray and Charles Eames were inveterate collectors with wide-ranging tastes, and Ray in particular had an eye for composition. Architect Leon Whiteson (1989, D6) recalled Lucia Eames describing Ray’s “rare gift for transforming a room into a sanctuary of design. She continually moved objects about to avoid visual boredom and subtly altered the architectural mise en scène.”

As the Eameses’ collections grew, toys, folk art, brightly colored textiles, seashells, and stones came to coexist comfortably with George Nelson bubble lamps, antiques, abstract expressionist paintings, and Eames-designed furnishings (fig. 2.45). Living spaces, designed to be open, flexible, and informal, housed an ever-growing array of objects and furnishings carefully arranged in unexpected juxtapositions. The strong association between the House and its shifting contents was noted as early as 1950, when an article in *Portfolio* magazine remarked that the shelves and bookcases were designed by the Eameses “with the purpose of interchangeableness,” providing space for objects to “be placed and taken away, and endless variety given to the room” (*Portfolio* 1950, n.p.). In early photos, two paintings by Hans Hofmann hang on the paneled living room wall. Photos taken in the late 1950s show them suspended horizontally from the ceiling, interrupting the soaring sense of space and giving viewers an entirely different perspective of the artwork (see fig. 2.44b). During the House’s first decade, two pieces of furniture were constructed in the Eames shop—a wooden, double-sided bookcase and a large steel rolling planter—which, along with the original ladder, helped to define the living room space.<sup>45</sup>

This softening and humanizing of the modern aes-

**Figures 2.44a and 2.44b** The living room, sparsely furnished in 1950 (a), when the House was new. By 1958, the room was filled with furnishings and the Eameses’ diverse collections (b). The movable ladder, hooked to the exposed roof trusses, was used to hang objects from the ceiling, such as the Hans Hofmann painting, which hung horizontally for a time.





**Figure 2.45** View of the living room, looking south, 1994. An Eames Sofa Compact is covered with textiles and an animal skin. A candelabra and other objects are carefully arranged on the floor in the foreground. The large, wooden, double-sided bookcase also holds assemblages of objects. The movable ladder and the tallwood wall are behind the bookcase.

thetic, which set the Eames House apart from its contemporaries—characterized as they are by spare, even sterile interiors—was widely commented upon. Esther McCoy (1973, 67) observed that the Eameses “were the first to fill in the Spartan framework so acceptable to modern architecture with a varied and rich content,” while Paul Goldberger (1978, 136) described the effect as “rather like being inside a Joseph Cornell box.” Robert Venturi (1997, 186) quipped that the Eameses had “reinvented good Victorian clutter. Modern architecture wanted everything neat and clean and they came along and spread eclectic assemblages over an interior.”<sup>46</sup> In many ways, the House is as much a container for the carefully crafted display of objects that reflected the Eameses’ design sensibilities and lifestyle as it is a work of architecture (fig. 2.46). Ray and Charles described this profusion of objects as “functioning decoration” (Kirkham 1995, 143; Kirkham 1998, 17). Though they no doubt delighted in their visual qualities, the Eameses asserted that they collected things because they were good examples of eternal design principles, the truthful use of materials, or expert craftsmanship. Over time, the collections came to characterize the space. As Barbara Goldstein notes, “the dominance of the structure receded and the contents of the house progressively took over” (Goldstein, Lee, and Polyzoides 1988, 23).<sup>47</sup> The House’s contents and collections—which include objects acquired on travels; gifts from family, friends and associates; and Eames Office prototypes and furniture designs—reflect elements of Charles and Ray’s personal and working lives and relationships.

**Figure 2.46** Overhead view of the alcove, showing a variety of assemblages: pillows and textiles on the sofa, objects on the coffee table and shelves, and books arranged on the floor. Compare with the spare appearance of the alcove in fig. 2.33.





**Figure 2.47** Charles Eames and Eero Saarinen (*right*), with whom Charles shared a lifelong friendship, photographed in 1939.



**Figure 2.48** Ray Kaiser, photographed in New York in 1941.

## 2.6 Charles and Ray Eames

### ➤ 2.6.1 Biographical Background

Charles and Ray Eames were among the most celebrated designers of the twentieth century. Their professional partnership began with their marriage in 1941 and continued until Charles's death in 1978. He was trained as an architect, she as an artist, and this training informed the way they viewed the world and how they approached their work. The Eames Office's prodigious, widely influential output encompassed the fields of graphic, industrial, toy, and exhibition design in addition to film, photography, and architecture, but the Eameses are perhaps best known for their innovative furniture designs.

#### Early Years

Charles Ormand Eames was born in St. Louis, Missouri, on June 17, 1907. He began working at the age of ten to help support his family. In 1925, he entered Washington University in St. Louis on a scholarship to study architecture, and while he was a student he found work as a draftsman in an architecture firm. Eames was asked to leave the university in 1927 after just four semesters, owing in part to his espousal of Frank Lloyd Wright's ideas; however, in 1970, the university bestowed upon Eames an honorary doctorate in arts (Demetrios 2013, 58; Carpenter 1979, 16).<sup>48</sup> In 1929, Charles married Catherine Woermann, an architecture student at Washington University.<sup>49</sup> The following year, their daughter, Lucia, was born. In 1930, Charles and a partner opened an architectural practice, Eames and Gray (later Eames, Gray, and Pauley), in St. Louis. The Depression years were difficult for architecture firms, and Eames and Gray completed only a few commissions. Lacking work, Charles traveled to Mexico in the fall of 1933 and spent some eight months absorbing the country's visual culture and supporting himself by sketching and painting (*St. Louis Post Dispatch* 1934, 1).<sup>50</sup> By the spring of 1934, Eames was employed with the Historic American Buildings Survey (HABS) documenting buildings in Missouri and Louisiana.<sup>51</sup> Later that year, he started the architectural firm of Eames and Walsh with a new partner.

In the fall of 1938, Charles received a fellowship to study architecture and art at the Cranbrook Academy of Art, Bloomfield Hills, Michigan. In 1939, he became an instructor there and the following year was made head of the industrial design department. That same year, he took a part-time job with the architecture firm run by Eliel Saarinen and his son, Eero. At Cranbrook, Charles was one of an impressive group of students and faculty, many of whom were already or soon would be well known in the design world.<sup>52</sup> The academy offered courses in a range of design disciplines and emphasized an integrated approach to the arts and architecture. Eames's studio mate Ralph Rapson, a future Case Study architect, recalled that Charles spent much of his time in the ceramics and weaving studios, the metal shop, and the photography studio, "obviously preparing himself for that wonderful, rich, and varied kind of practice that he [later] had" (quoted in Demetrios 2013, 88).

Cranbrook was also a place where Charles fostered a number of important relationships, both personal and professional. One of these was with Eero Saarinen, who became a close collaborator and lifelong friend (fig. 2.47). The most significant collaboration between Eames and Saarinen during their Cranbrook years was their winning entry in MoMA's 1940 Organic Design in Home Furnishings competition (Miller 1983, 110; Demetrios 2013, 36–39; Neuhart, Neuhart, and Eames 1989, 25).<sup>53</sup> They were assisted by a number of Cranbrook students who enthusiastically contributed to the entry drawings and models. Among them were Don Albinson and Harry Bertoia, both of whom would later work in the Eames Office; and Ray Kaiser, a young woman who had begun auditing classes at Cranbrook in September 1940, and who would marry Charles Eames the following year.

Bearnice Alexandra Kaiser (she legally changed her name to Ray in adulthood) was born in Sacramento, California, on December 15, 1912. Her artistic talents were evident from an early age. Following high school, she studied fashion design at the May Friend Bennett School (Bennett College) in Millbrook, New York. Upon graduation, Ray moved to New York City, where she studied with German émigré and abstract expressionist painter Hans Hofmann (fig. 2.48).



During the six years that Ray studied and painted with Hofmann, she honed her sense of color, pictorial structure, and space, as well as an understanding of their relationship to one another. The art of composition, which she cultivated through her studies with Hofmann, infused her work for the rest of her life. At Hofmann's studio, Ray was part of a community of like-minded artists, and in 1936 she became a founding member of the American Abstract Artists. She was interested in a wide range of art forms, including film, music, theater, and modern dance, which she studied with Martha Graham. As Pat Kirkham (1995, 41) notes, by the time Ray enrolled at Cranbrook, she was "firmly committed to modernism" and was "in touch with all the latest developments in painting and sculpture."



**Figure 2.49** Newlyweds Charles and Ray Eames in 1941, shortly after their arrival in Los Angeles.

### Marriage

Ray Kaiser spent only a few months at Cranbrook, leaving in December 1940. Over the ensuing months, she and Charles carried on an intense correspondence. They were married on June 20, 1941, at a friend's house in Chicago, and immediately drove to California. They arrived in Los Angeles in July with little more than a new Ford and a tumbleweed collected on their trip west (Demetrios 2013, 95, 96–100) (fig. 2.49).

## ➤ 2.6.2 Early Years in Los Angeles

### Work and Contacts

Within a short time, Ray and Charles began making connections in their newly adopted city, and Charles was soon employed in the art department at MGM Studios, working on set design. One of their early acquaintances was John Entenza, publisher of *California Arts and Architecture* magazine, who introduced them to architect Richard Neutra. Before long, the Eameses moved from a Hollywood hotel into the Neutra-designed Strathmore Apartments in Westwood, where they would live for the next eight years, an experience that Charles later noted "greatly added to the richness of [their] lives" (Eames 1949; see also Hines 2010, 526).

### Molded Plywood and Furniture Design

In their spare time, Charles and Ray continued experimenting with molded plywood in their apartment, building on the lessons learned from the MoMA Organic Design competition, and eventually developing the basic method by which plywood could be molded on a mass production level.

In 1942, the Eameses and John Entenza formed the Plyformed Wood Company to produce molded plywood leg splints for military use. In 1943, they opened a plant in the former Bay Cities Garage at 901 Washington Boulevard in Venice, which would serve as the Eameses' working address for the rest of their lives.<sup>54</sup> With the end of World War II, the company transitioned production to the molded plywood furnishings that would establish the Eameses' reputation as furniture designers. In 1949, the Herman Miller Furniture Company acquired the rights to manufacture Eames-designed furniture, the beginning of an important lifelong business relationship. During this period, Charles and Ray occupied a portion of the building at 901 Washington Boulevard. When Herman Miller moved production to other facilities in 1958, the Eames Office took over the entire building, which became the center of operations until Ray's death in 1988.



**Figure 2.50** Cover of the December 1943 issue of *Arts and Architecture* magazine, one of twenty-six Ray Eames designed between 1942 and 1947.

### ➤ 2.6.3 Relationship with John Entenza and *Arts and Architecture* Magazine

Throughout the 1940s, as they developed and expanded their furniture line, the Eameses were closely associated with Entenza's *Arts and Architecture* magazine. Ray began designing covers for the publication in 1942, producing twenty-six of them in five and a half years (fig. 2.50).<sup>55</sup> Both Charles and Ray contributed articles to the magazine. In February 1942, Charles's name appeared on the masthead as a member of the magazine's editorial advisory board. In May, he was listed as an editorial associate, and Ray's name was added to the advisory board; they served in these roles through 1952.<sup>56</sup>

In the early 1940s, the Eameses collaborated with Entenza on several projects whose concern with architecture's social impact foreshadowed the Case Study House Program, including plans for a city center developed by John and Charles that were published in the May 1943 issue of *Architectural Forum* and the June 1943 issue of *Arts and Architecture* (Neuhart, Neuhart, and Eames 1989, 37). Charles served as a jury member for *Arts and Architecture*'s Designs for Postwar Living competition in 1943 (the winning

design was submitted by Eero Saarinen and Oliver Lundquist) (Goldstein 1990, 21), and he and Ray worked with Entenza and Herbert Matter to produce a July 1944 special issue on industrial housing (Neuhart, Neuhart, and Eames 1989, 47).

When *Arts and Architecture* launched the Case Study House Program in January 1945 in an effort to address postwar housing needs, Charles Eames was one of eight architects initially selected to participate in the program. He and Eero Saarinen produced two designs that first year, Case Study House No. 8 for the Eameses and No. 9 for Entenza. Several years later, Charles and Ray reworked the design for their own home, while Entenza's house was constructed much as originally envisioned. The Eameses moved into their newly constructed home in December 1949.

**Figure 2.51** The Eames-designed Herman Miller showroom (1949), photographed in 1950. The showroom bears a distinct kinship with the Eames House. Its facade used the same factory steel frame and sash as the House and was also infilled with a variety of glass and opaque panels.

**Figure 2.52** The Max De Pree House (1954), in Zeeland, Michigan, photographed the same year. It is similar in spirit to the Case Study Houses and in structure to the Eames House, but in deference to local tradition and climate, it is constructed of wood.

### ➤ 2.6.4 The Work of the Eames Office

In addition to the two Case Study Houses, the Eames Office completed only three built architectural commissions, including the Herman Miller Furniture Company showroom in the Los Angeles area (fig. 2.51), which opened in the fall of 1949; and the 1954 house in Zeeland, Michigan, designed for Max De Pree (fig. 2.52), son of Herman Miller's president, who himself became the firm's CEO years later. Both structures demonstrate a kinship with the Eames House. The Eameses' final built project, a whimsical station and rail yard for a one-fifth-scale railway in Los Angeles's Griffith Park, was wholly unlike their other architectural work. The Eameses also designed several unrealized architectural projects, most significantly a house for their friend, film director Billy Wilder (1950), and the Kwikset House, a low-cost, prefabricated kit house (1951). Both projects were in the spirit of the Case Study House Program in their exploration of residential uses of industrial



2.51 •



2.52



building materials (see appendix B for additional information on these and other Eames architectural projects).

Throughout his working life, Charles Eames defined himself as an architect, although he stopped practicing architecture in the conventional sense following his years at Cranbrook, and the Eames Office undertook only a handful of architectural projects. Ray defined herself as a painter, though as the years passed she produced fewer and fewer canvases (fig. 2.53). Nonetheless, their early training imbued everything that they created. “The way I saw painting was in terms of structure and color,” Ray stated. “Charles, as an architect, saw things in terms of structure and so there was no real difference in the way we both saw design, although we had trained in ‘different’ areas” (quoted in Kirkham 1990, 135). Structure was at the core of every Eames project, whether it was film, furniture, toy, or exhibition design; Charles considered all of their work to be a form of architecture (Diehl 1972, N14; Gingerich and Eames 1977, 327).

In his later years, when asked why, as an architect, he had worked in such a wide range of mediums, Charles replied, tongue in cheek, that in part it was the result of his “chickening out” (quoted in Diehl 1972, D14). He desired a greater degree of control over the outcome than is possible with most architectural projects:

You work on an idea, but standing between you and the event itself are many traps. The finance committee, the contractor, the subcontractor, the engineer, even politicians—all of them can really cause the concept to degenerate. Going into furniture or film is a deviation of a sort, but at least we have a more direct relationship with the end product—a better chance to keep the concept from degenerating. That’s why architects design furniture—so you can design a piece of architecture that you can hold in your hand. (Diehl 1972, N14)

The Eames Office was a collaborative operation, with Charles and Ray Eames at its helm. Their work encompassed an astonishing array of design disciplines—furniture, toy, graphic, book, and exhibition design, as well as filmmaking and photography. While many staff members may have been involved in any given project, the Eameses’ hands were visible in every single one, and no project was finished until they determined it was. Charles was the affable public face of the firm, while Ray played a less visible role, but theirs was a full creative collaboration. Each brought particular talents to the partnership, and it is impossible to separate their contributions. In the words of designer and former Eames Office staffer Michael Glickman, “the Eames’ work was seamless. The join could not be seen” (Glickman 1988, 26).

A common thread through much of the work has come to be known as the guest-host relationship. As Charles observed, “the role of the architect, or the designer, is that of a very good, thoughtful host, all of whose energy goes into trying to anticipate the needs of his guest” (quoted in Diehl 1972, N14; on the guest-host relationship, see also Demetrios 2013, 155–66). Thus, an essential component of the Eames Office’s process, which informed all their projects, was identifying and addressing user needs. This design process, regardless of the product, was largely iterative. It is well illustrated in their approach to designing a chair, the product with which the name Eames is probably most closely associated. Charles and Ray would work through their ideas with staff members, who then would build a full-scale model from the materials to be used in the final design (fig. 2.54). The Eameses and their staff would test it, sit in it, and make adjustments, working through a series of models and refining various components until Charles and Ray approved the final version. Whether working with plywood, plastic, or aluminum, they



**Figure 2.53** Ray Eames, “For c in limited palette,” 1943. Casein on Masonite, 8½ x 11 in. This painting hangs in the stairwell shown in fig. 2.24.



**Figure 2.54** Ray Eames working on the mold for La Chaise with staff members Frances Bishop (*left*) and Robert Jacobson (*center*), 1948.



**Figure 2.55** Installation view of *Think*, a twenty-two-screen slide show designed by the Eameses as the centerpiece of the IBM Pavilion at the 1964–65 New York World’s Fair, photographed in 1964.



**Figure 2.56** Ray and Charles outside the living room on a rainy day in March 1978. The rolling planter can be seen through the living room window and the meadow is covered in grass.

innovated in the use of materials and form, and sought ways to apply new technologies to furniture manufacturing. Between 1945 and 1978, the Eameses put more than forty major furniture designs into commercial production, many of which are still being produced through licensing agreements with Herman Miller and Vitra.

In the late 1950s, the Eameses’ interest in filmmaking and exhibition design grew. Although they continued to design furniture, it was consuming less of their time and attention, while their reputations as idea communicators were blossoming. The concept of structure applied as clearly in filmmaking as it did in furniture design, and the film medium gave the Eameses an unprecedented degree of control over the product, both the message and how it was presented. In all, the Eameses made more than eighty short films. Some were experimental in nature and many were visually stunning; however, the primary objective was always information communication rather than entertainment.

In addition to motion pictures, the Eameses worked with multiscreen slide presentations using a wealth of visual material to communicate ideas. Perhaps most notable were *Glimpses of the USA*, commissioned by the US State Department for a major 1959 exhibition and cultural exchange in Moscow; and *Think*, a twenty-two-screen project created for the IBM Pavilion at the 1964–65 New York World’s Fair (fig. 2.55). The Eameses also collaborated with Eero Saarinen and his successor firm, Roche/Dinkeloo, on the design of the IBM Pavilion itself, with Roche/Dinkeloo taking the lead on architecture and site design and the Eames Office handling presentations and exhibitions, graphics, and signage.

Charles and Ray’s exhibition designs, like their film and slide presentations, were rich in content, with layers of visual material, artifacts, and information, built on a solid foundation of research. They produced exhibitions on a variety of scales ranging from permanent, interactive museum installations, such as 1961’s *Mathematica* at the California Museum of Science and Industry in Los Angeles, to temporary exhibits for IBM’s corporate centers. Several large museum exhibitions traveled internationally, including their most complex presentation, *The World of Franklin and Jefferson*, in honor of the US Bicentennial. This extensive, densely layered exhibition was presented in seven cities, opening in Paris in 1975 and closing in Mexico City in 1977. The Eames Office also produced a companion book and two films, one documenting the Paris premiere, the other capturing material from the exhibition itself.

*Franklin and Jefferson* was the last major project completed by the Eames Office before Charles’s death on August 21, 1978. In the ten years that followed, Ray brought to completion several projects under way when Charles died. She then closed the Eames Office and set about coordinating the transfer of its vast archive to the Library of Congress. She also worked with Marilyn and John Neuhart on the definitive catalog of the Eameses’ work, *Eames Design: The Work of the Office of Charles and Ray Eames*, published posthumously. Ray died on August 21, 1988, the tenth anniversary of Charles’s death.

## 2.7 Living and Working in the Eames House

### ➤ 2.7.1 Uses of the Residence and Studio

Charles and Ray Eames moved into Case Study House No. 8 on Christmas Eve 1949 and lived there for the remainder of their lives (fig. 2.56). For them, life and work were intertwined, and



the House was both their home and a place of work. They did design work and made films in their home studio and used the House as a location to photograph or film their furniture, toys, and other designs, and as a place to test ideas and evaluate designs outside of the Eames Office. Photographs taken over the years show varied arrangements of furniture and the ever-growing collections of objects, many of which were used as film props or in other work. In her later years, Ray recalled evaluating new furniture designs at the House: “We used to bring a piece of furniture we were working on home to look at it, because at the office everything was out of scale” (quoted in Saatchi 1984, 200). Some of those pieces remained at the House.

The Eames House was used as a photo location as early as August 1950, when images shot by *Life* magazine photographer Peter Stackpole captured children playing with a prototype of the Eames-designed self-assembly construction kit called the Toy on the partially paved south court (fig. 2.57), and Charles playing with the Toy in the studio as Ray looked on.<sup>57</sup> While the 1950 Herman Miller catalog depicted Eames furniture in fairly nondescript settings (Herman Miller Furniture Co. 1950), the 1952 catalog featured three images of furniture set at the House (fig. 2.58), though the building might be recognizable only to those who knew it well (Nelson and Herman Miller Furniture Co. 1952, 96, 100, 11). These early shoots set in motion a practice that would continue throughout the Eameses’ working lives. As late as 1970, a film produced for Herman Miller to promote the Soft Pad line of chairs was shot at the House (Neuhart, Neuhart, and Eames 1989, 348).

Another Eames design documented at the House was the 1957 Solar Do-Nothing Machine, created for the Aluminum Company of America, also known as Alcoa. A demonstration product rather than a production prototype, it was installed in the Eames House meadow, where it was photographed and filmed (fig. 2.59).<sup>58</sup>

Not only did the House serve as a location for photos promoting Eames-designed products,



**Figure 2.57** Children playing with the Toy for *Life* photographer Peter Stackpole (far left), August 1950. The south court’s narrow strip of brick paving was later widened.

**Figure 2.58** Eames-designed dining chairs and card table, exquisitely set by Ray, photographed in the dining area for Herman Miller’s 1952 catalog.

**Figure 2.59** Camera operators filming and photographing the Solar Do-Nothing Machine, created for Alcoa, in the meadow of the Eames House, 1957.







**Figures 2.60a and 2.60b**  
The sofa in the living room alcove (a), which served as a prototype for the iconic, high-backed Sofa Compact (b). Photos: (a) 2011, (b) 1954.



**Figure 2.61** A model posing in the Eames House living room, photographed for *Vogue* magazine in 1954.



but in at least one instance it also played a role in Charles and Ray's iterative design process. The iconic, high-backed Sofa Compact, introduced in 1954, was based upon the sectional seating unit built into the Eames House living room alcove (figs. 2.60a and 2.60b) (Neuhart, Neuhart, and Eames 1989, 191).

The House was widely published in the architectural press, but its "showroom quality" also worked well as a setting for fashion shoots (Colomina 1997, 146). In 1954, both *Life* and *Vogue* shot fashion spreads at the House that featured the living room (fig. 2.61), with accompanying text emphasizing the boldness and distinctly Californian look of both the clothing and the architecture. Exposure in such national, general-readership publications brought the Eames House and its designers to a wider public eye (Colomina 1997, 146–47; *Vogue* 1954; *Life* 1954).

The studio was a flexible-use space that served different functions over the years as the Eameses' needs evolved. Through the late 1950s, it was a work space, serving as an extra sleeping space when needed. However, it was never the Eameses' primary work space; by the time the House was completed, the Eames Office had been operating at the 901 Washington Boulevard location for six years. The home studio was used by the Eameses and their office staff for project planning and design, filmmaking, toy making, and photo developing and printing in the built-in darkroom. A 1950 article in *Life* made note of a 22-foot tack board on the studio wall, which Charles used for mounting experimental designs and specimens such as "Mojave desert plants" that served as inspiration (*Life* 1950, 150–51).

Most of the Eameses' early experimental films were shot and/or edited in the studio, beginning in 1950 with their first film, *Traveling Boy*, which features a wind-up toy as the central character. They made two subsequent and increasingly intricate films, *Parade* (1952) and *Toccata for Toy Trains* (1957), that reflected their love of toys. *Toccata*, the most complex of the toy films, was shot entirely on a 4-by-8-foot tabletop; photos of the work in progress suggest that the studio space was fully dedicated to this project for the duration of filming (fig. 2.62). All three films were produced in the studio outside of working hours, with friends and Eames Office staff volunteering their help. Years later, Hugh De Pree of the Herman Miller Company recalled a late-night session working on one of the toy films in the studio with Billy Wilder and Charles, a process he described as "exhausting but exhilarating" (De Pree 1986, 166–67).<sup>59</sup>

The Eames film most closely associated with the House is clearly *House: After Five Years of Living* (1955), which not only was produced in the studio but also takes the House as its subject. When it came to



depicting the Eames House on film, rather than panning a movie camera across each room, Ray and Charles pieced together nearly eleven minutes of still images, fast-cut in a wordless sequence. Using photos that they shot between 1949 and 1955 and focusing mainly on details—not only architectural but of the contents, flowers and plant life, and the site itself—Charles and Ray did not set out to create a literal depiction. Instead, the film evokes the Eameses' feelings for their home and its environment through what architect and academic Michael Brawne referred to as “the sequential images seen by a roving eye” (Brawne 1966, 452). It also serves as a visual record of the House and its contents as they appeared in those early years.

In 1977, the House was used as a set for two of the six two-and-a-half-minute vignettes that composed the film *Polavision*, created for Polaroid to demonstrate the features of its new instant-movie camera system. The living room served as a stage set where the Eameses captured their youngest granddaughter in *Lisa Draws a Letter*. The House and meadow played a central role in *The Chase* (fig. 2.63), which depicts a teenage girl (another granddaughter, Lucia) chasing a boy—who has stolen her diary—across the meadow, up the spiral staircase, out a rear window, and across the site (Neuhart, Neuhart, and Eames 1989, 442; Demetrios, Fowler, and Crist 2012, 390).

Although these short films were shot at the House in the 1970s, the Eameses had entirely shifted their office operations to 901 Washington Boulevard by the late 1950s. The studio was still used as a private work space but began to serve more and more often as additional living space and guest quarters (Kirkham 1995, 119). In 1958, Charles's daughter, Lucia, and her three young children visited for the summer. To accommodate them, Ray and Charles transformed the studio into a sleeping space and play area (fig. 2.64). Oldest granddaughter Carla recalls the cardboard boxes that the children “built into castles” that were “scattered with a single swing on a rope” hanging from the studio ceiling. “A low, wide table” provided room “to draw, read, assemble Tinkertoys and other structures. Outside, the meadow beckoned—races, chases, tree climbing and skirmishes abounded” (quoted in Demetrios, Fowler, and Crist 2012, 386; Makovsky 2005, 76–77). All the Eames grandchildren have fond memories of visits to their grandparents' house.

At some point the studio was set up as a permanent sleeping space. A 1978 article in *House*



**Figure 2.62** Charles and Ray at work in 1957 in the studio on their film *Toccata for Toy Trains*, shot on a 4-by-8-foot tabletop.

**Figure 2.63** Still from the two-and-a-half-minute film *The Chase*, filmed at the Eames House and meadow in 1977.

**Figure 2.64** Three of the Eames grandchildren playing at the low, wide table in the studio in 1958, after the studio was transformed into guest quarters and a play area.



2.63



2.64





2.65

**Figure 2.65** The studio in the late 1970s, set up as Ray Eames's bedroom. The bed is left of center, covered in a blue-and-white checkered spread. The low, wide table seen in fig. 2.64, now covered with plants, books, and other objects, remains in roughly the same location.

*Beautiful* noted that it served primarily as “guest quarters” (Lewin 1978, 77). In 1984, *House and Garden* reported that the studio served “not only as a guesthouse but also as a storage space and working area” (Saatchi 1984, 200). According to family recollection, Ray had her belongings moved from the residence’s upstairs living quarters to the studio immediately after Charles’s death, and used it as her bedroom for the remainder of her life; from that point on, guests would stay in the residence (fig. 2.65).<sup>60</sup> The precise date at which the studio became fixed as an additional

bedroom is not known, but its use as such provides a final example of the Eameses’ long-standing practice of using the space flexibly and reconfiguring it as their needs evolved.

Over the years, as their business grew in size and complexity, the Eameses spent far more time at 901 Washington than they did at home. They enjoyed having breakfast at home, but lunch and dinner were generally taken at the office—they had a cook on staff—where they worked late into the evenings and frequently on weekends (Conroy 1977, f3–f4).

### ➤ 2.7.2 Entertaining at the House

Charles and Ray Eames were gracious hosts, attentive to the needs of their guests, be they family, personal friends, business associates, or architectural pilgrims drawn to the famous house. A great deal of their entertaining was conducted at the Eames Office—a 1975 article in *Fortune* magazine stated they hadn’t thrown a dinner party at home in years—but regardless of whether they were entertaining at home or at the office, attention was given to the last detail (McQuade 1975, 99). Visitors to the Eames Office recall a kind of ritual that involved (with some variation) being greeted by Ray, hearing an overview of current work from Charles, viewing an Eames film, and dining on a beautifully presented lunch directed by Ray (De Pree 1986, 49; Demetrios 2013, 156–62). Ray’s table settings, at the office and at home, were legendary (fig. 2.66).

With entertaining, as with their work, no detail was too small. Pat Kirkham reports that “before an informal evening” with their close friends Billy and Audrey Wilder, “the Eameses sent members of their staff to ensure that the candles had burned down to an appropriate length and that every pillow and each plant was in the proper place” (Kirkham 1995, 188). Despite the air of informality, great care was taken to arrange the setting. On rare occasion, that attention to detail went unappreciated. In a filmed interview in 2011, architect Kevin Roche laughingly recalled a dinner he attended at the House. Having saved room for dessert, he was perplexed when, instead of a sweet, the Eameses served each guest a bowl of flowers to admire, “a visual dessert.” He stopped at Dairy Queen on the way home (Cohn and Jersey 2011).

The living room alcove, a small, sheltered space carved into a corner of the soaring room, provided a cozy setting for conversation and film screenings. Photos show Ray and Charles, alone or with guests, seated on the built-in sofa (fig. 2.67). A 16mm film projector inside one of the built-in cupboards and a



2.66

**Figure 2.66** A kitchen table setting by Ray Eames, undated photo. Her table settings were careful compositions of color, texture, and form.



pull-down screen above the sliding door on the south window wall quickly converted the living room into a screening room, where Liisa Demetrios recalls watching her grandparents' latest films (Demetrios, Fowler, and Crist 2012, 390).

Perhaps the best-documented social event to occur at the Eames House took place in July 1951, when the Eameses hosted a Japanese tea ceremony, performed by tea master Sosei Shizuye Matsumoto, for an illustrious group of guests that included actor and director Charlie Chaplin, designer Isamu Noguchi, actress Shirley Yamaguchi, actor Ford Rainey, and poet Iris Tree (fig. 2.68). The living room was reconfigured for the occasion. Making use of the open trusses, a large panel was suspended horizontally from the ceiling, creating a more intimate sense of space within the room. Geometric panels from the Toy, which had just gone on sale, adorned the wood-paneled wall. Much of the furniture was removed and the floor was covered with tatami mats. Guests knelt at ten-inch-tall, wire-based occasional tables that the Eameses had designed for Herman Miller the previous year (Kirkham 2011, 166; Koschmann and Herman Miller Discover Blog 2013). The overall effect evoked that of a traditional teahouse.

On occasion, the Eameses entertained staff and business associates at the House. Hugh De Pree recalled a 1967 tour with an international group of Herman Miller licensees who traveled across the country visiting several of their designers' studios and ending in Los Angeles, where the Eameses hosted a lunch under a tent set up in the meadow, followed by a visit to 901 Washington (De Pree 1986, 76–77; Demetrios 2013, 163). IBM managers and consultants who worked with the Eameses on the *Movable Feasts* exhibition in 1973 were photographed lunching at the House, seated around one of Ray's beautifully spread tables.

### ➤ 2.7.3 Sharing the Eames House with the Architectural Community

From the start, the House has been an architectural pilgrimage site, and Ray and Charles happily shared it with visitors, be they renowned architects or students. The Eames House was listed in the 1951 publication *A Guide to Contemporary Architecture in Southern California*, with the notation that the “designer will show his own home” (Harris and Bonenberger 1951, 34). In his 1972 paean to Los Angeles, *Reyner Banham Loves Los Angeles*, the British architectural historian wrote that it was the Eames House that “really taught architecture lovers to come to Los Angeles” (Banham 2011). Noted architects including Alison and Peter Smithson, Kevin Roche, Eero Saarinen, Robert Venturi and Denise Scott Brown, and countless others are known to have visited. In 1962, Norman Foster and Richard Rogers, recent graduates of the Yale School of Architecture, paid a visit (Treiber 1995, 7–8). Rogers later recalled a morning spent with Ray and Charles at the Eames House and Office as the high point of another California trip in 1977 (Rogers and Rogers 1978).

The Eameses welcomed students



2.67

**Figure 2.67** Charles and Ray relaxing on the built-in sofa in the alcove in 1951, which provided a more intimate space within the soaring living room.

**Figure 2.68** Guests in the Eames living room, configured in the manner of a Japanese teahouse for a tea ceremony in 1951. At rear is the tallwood wall, decorated with pieces of the Toy for the occasion. An arrangement of Eames Low Wire Tables is in the foreground. From left: Isamu Noguchi, Ray Eames, Yoshiko (Shirley) Yamaguchi, Sosei Shizuye Matsumoto, Charlie Chaplin, Henrietta Lederbom, Iris Tree, Betty Harford, Christian Lederbom, and Ford Rainey.



2.68



**Figure 2.69** Students and instructors from Immaculate Heart College, Los Angeles, in the living room on a visit to the Eames House in 1957.

and other visitors to the House as well (fig. 2.69), and letters in the Charles and Ray Eames Collection at the Library of Congress show that Ray continued to extend warm hospitality to such visitors following Charles's death. Common themes appear in these thank-you notes: appreciation for the opportunity to see an important building; Ray's kindness and generosity as a host; and the refreshments and how they were served. Sometimes the writer enclosed photos or a small token of appreciation. A letter from Norwegian architect Gunnar Grandberg, who brought a sizable group to the Eames House in October 1987, hit on all these themes. He

thanked Ray for her "heartwarming welcome," called the House a "poetic statement," and noted that the "reception with the touch of Norwegian food was just overwhelming." In gratitude, he enclosed a photo showing Ray and his group on the south court, gathered around a small table laden with food, and "one thing" he'd noticed she "lacked": a slicer for the Jarlsberg cheese (Grandberg 1987).

Charles and Ray also received architectural tourists of a more general sort. For instance, the House was one of six examples of regional architecture included in a fund-raising tour sponsored by the Art Council of the Los Angeles County Museum of Art on March 25, 1979 (*Los Angeles Times* 1979, F12).

#### ➤ 2.7.4 Maintenance of the House

The initial brief for Case Study House No. 8 expressed a desire that the House be "free of complications relating to maintenance" (*Arts and Architecture* 1945, 44). The House as constructed, however, was not entirely low maintenance. Spending much of their time at the office, the Eameses relied heavily on staff for general maintenance of the property. A housekeeper and a gardener performed routine cleaning and upkeep, while trusted Eames Office staff performed more technical tasks and repairs. Don Albinson was the first staff member charged with maintenance of the House. When he left the Eameses' employ in 1959, Richard Donges took over. After his departure in 1979, Sam Passalacqua assumed responsibility and stayed on until shortly after Ray's death. Ray's task lists for Passalacqua, now in the files of the Library of Congress, are a window into the types of projects he was charged with, including reattaching floor tiles, repairing the kitchen countertop and sliding door, coating the exterior wood wall, and rebuilding the carport.<sup>61</sup> When major maintenance or repairs such as reroofing or repainting were needed, the appropriate specialists were engaged.

Some of the maintenance challenges are inherent in the building's design and construction. Moisture and leaking were among the greatest difficulties. Water easily pooled on the flat roof and the drainage system was inadequate. Water cascaded over the edge of the roof and down the walls, leaking in through window frames. An elbow drainpipe was introduced above the south court at an unknown date in an effort to address the issue. Other problems included the brass fittings on the large sliding doors, which flattened out and had to be replaced, as well as floor tiles in both the residence and studio, which were damaged by moisture entering through the concrete slab.

Documentation of maintenance efforts at the House has been difficult to locate. The Eames Foundation holds some records. According to research conducted by Marilyn and John Neuhart for their 1994 book, *Eames House*, a few major maintenance tasks were carried out regularly. In order to protect the steel from the sea air, the interior and exterior of the structures' frames were repainted regularly, as were the stucco panels. Glass was cleaned monthly to remove salt residue as well as oil deposits from the eucalyptus trees. The canvas carport awning was replaced on a regular basis. Difficulties finding suitable replacement materials or developing acceptable long-term solutions made other maintenance issues more challenging to address (Neuhart and Neuhart 1994, 51–54).



## 2.8 Influence of the House during the Eameses' Lifetimes

### ➤ 2.8.1 Publications and Exhibitions

Internationally, the Eames House is among the most widely recognized and influential works of domestic modern architecture, and Charles Eames's reputation as one of the twentieth century's notable architects was cemented on the basis of this single building. Upon its completion, the House was widely published in the architectural press, both in the United States and abroad, where it was touted as a triumph of residential design using prefabricated materials. In addition to *Arts and Architecture*, which tracked its construction throughout 1949, articles appeared in the early 1950s in other US publications, including *Architectural Forum* (Blake 1950) and *Interiors* (Gueft 1950). The House was also featured in the British publications *Architectural Review* (1954) and *Architect's Yearbook* (Kaufmann 1951), as well as other foreign publications such as *Domus*, in Italy (1951; Santi 1951), and *Architecture d'aujourd'hui*, in France (1953). Furthermore, the House appeared in popular publications, including *Life* (1950), and in newspaper features in cities as far-flung as New York (*New York Times* 1951) and Sydney, where the *Sunday Herald* (1953) identified it as one of the most "significant" examples of postwar architecture in the United States.

The House was included in *Built in USA: Post-war Architecture*, an exhibition at MoMA that ran from January 20 to March 15, 1953, and in the accompanying catalog. This exhibition featured forty-three buildings, nineteen of which were private homes, that were constructed from the end of World War II through June 1952. The Eames House appeared alongside works by some of the twentieth century's most important architects, whose buildings were selected for demonstrating the "quality and significance of the moment" (Hitchcock and Drexler 1952, 9).

Case Study House No. 8 continued to be featured in articles and books throughout the Eameses' lifetimes.

### ➤ 2.8.2 An Inspiration to Architects

The Eames House has exerted an enormous influence on subsequent generations of architects who have experienced it through architectural publications and by making the pilgrimage to Los Angeles to visit it in person. The House resonated particularly with architects from Great Britain, as has been noted by architectural historian Reyner Banham and others (Banham 2011, 205). In "Eames Celebration," a 1966 special issue of the British publication *Architectural Design*, which contained a substantial amount of material on the House, architects Alison and Peter Smithson described it as a "cultural gift parcel received here at a particularly useful time" (Smithson and Smithson 1966, 432). The House was especially significant to architects associated with the High-Tech style that emerged in the 1970s, including Richard Rogers, Michael Hopkins, and Norman Foster (Davies 1988, 7, 18–19). In his book *High Tech Architecture*, Colin Davies has offered a succinct definition of the style that could just as easily be a description of Case Study House No. 8:

[W]e can simply say that its characteristic materials are metal and glass, that it purports to adhere to a strict code of honesty of expression, that it usually embodies ideas about industrial production, that it uses industries other than the building industry as sources of both technology and of imagery, and that it puts a high priority on flexibility of use. (Davies 1988, 6)

To cite one example of the Eames House's widespread influence on High-Tech architects, Richard Rogers refers to it as "one of the prime exemplars" to shape his mind (Whiteson 1989, D1). When the House received the American Institute of Architects' Twenty-Five Year Award in 1978, architect Tim Vreeland described its influence on Rogers and Renzo Piano's design for the Centre Pompidou in Paris (1971–77), "which seems to combine, with a gigantic shift in scale, so many of the things that Eames has been interested in: the off-the-shelf industrialized steel components, the use of electronics in the display of information, and the building seen as a simplified container for a rich variety of art objects" (Vreeland 1977a, unpaginated).

The Eames House has inspired countless residential designs as well. Two well-known examples are Michael and Patty Hopkins's home (1976) in Hampstead, London, and Peter

de Bretteville's Willow Glen Houses (1973–75) in Los Angeles. Both are discussed in chapter 4.

The Eames House is one of the best known of the Case Study Houses, but it is also widely regarded as one of the twentieth century's most significant works of architecture in its own right. It is a constant entry in volumes on twentieth-century architecture, whether or not the subject is specifically modernism, and it has been the subject of monographs by John and Marilyn Neuhart (1994) and James Steele (1994). Some of the late twentieth century's architectural luminaries have identified it as among their most admired buildings—Renzo Piano has named it one of his five favorite twentieth-century buildings (Phaidon 2014), and Norman Foster includes it in his top nine buildings of all time (Shortlist.com 2014).

### ➤ 2.8.3 Awards and Recognitions

The architectural significance of the Eames House has been recognized with a number of awards and recognitions. The most noteworthy of these, pertaining directly to the House and awarded during Charles's and Ray's lifetimes, are described below.

In 1978, the "Charles Eames House" received the American Institute of Architects' Twenty-Five Year Award. This honor, which recognizes architectural design of enduring significance, is conferred on a project that is twenty-five to thirty years old and designed by an American architect. Architect Frank Gehry defined in a letter three reasons the House was put forward for the award: first, its importance as "the most beautiful" of the steel Case Study Houses and because it had "remained virtually unchanged in its design or use"; second, its "beautiful adaptation to its site"; and third, its two areas of innovation. These included its "undisguised and direct use of off-the-shelf industrialized steel components in a house," which strongly influenced a younger generation of architects in the United States and abroad, and "the particularly beautiful way" that the Eameses filled the Spartan frame of the House with their collections (Gehry 1976). As architect Jerrold Lomax noted, the Eames House was significant as the "background for groups of things which make it both a personal exhibition space and a comfortable home" (Lomax 1977).

The House's international importance was recognized in 1979, when the Royal Institute of British Architects awarded the RIBA Royal Gold Medal to the Office of Charles and Ray Eames. Established in 1848, the medal is given "in recognition of a lifetime's work." It is "awarded annually to a person or group of people whose influence on architecture has had a truly international effect" (Royal Institute of British Architects 2014). Although the award was determined on the basis of the Eames Office's entire body of work, the citation made specific reference to the Eames House, describing it as:

a seminal building that appealed and pointed the way at so many levels simultaneously. From light-hearted California 'House and Garden' pop, a domestic fun palace of toytown images, through to a working demonstration of systems thinking.... For the first time (and not bettered since) this house demonstrated the true potential of so many possibilities usually articulated by theorists, academics and critics—industrialisation, prefabrication, adhocism, catalogue buildings: all that and 20th Century Victoriana as well. A beautiful object at one with its landscape and a considered response to the Californian climate. (Royal Institute of British Architects 1979, 143)

This was, according to the *RIBA Journal*, the first time that the Gold Medal was awarded to a "truly multifaceted design practice" and the first time that a "woman's name appeared on the roll of honor" (Osley 1984, 80). Ray Eames traveled to London to accept the award.

## 2.9 The House after Charles and Ray (1988–2004)

### ➤ 2.9.1 Initial Usage by the Family

Following Ray Eames's death on August 21, 1988, Charles's daughter, Lucia Eames, inherited the House and all of its contents, as well as the Eames Office property and intellectual rights to the Eameses' work. In accordance with Ray's wishes, the family focused first on closing out 901 Washington, selling the building, and completing the transfer of the extensive Eames Office



archive (which included photos, drawings, correspondence, and records) to the Library of Congress, a process initiated in 1976 and continued by Ray until her death. In 1988, a large collection of Eames-designed furniture prototypes and production models, along with the furnishings and contents from Charles's office as well as other objects, was acquired by the Vitra Design Museum in Weil am Rhein, Germany (Iovine 2000; Remmele 2007, 30; McDonough 1989, 19).<sup>62</sup> Additional items, including several complete rooms from 901 Washington, went to other institutions (Demetrios 2013, 270–71). Lucia Eames also retained a significant collection of Eames-designed furniture. With the office building cleared, attention turned to honoring Ray's wish that the Eames House be preserved.

In the years after Ray's death, family members continued to use the residence and studio and assumed responsibility for its upkeep. Granddaughter Lucia Dewey Atwood took up residence in the studio, where she remained as caretaker for a year. Lucia Eames and her husband used the House as a pied-à-terre when visiting from the Bay Area. They conducted a six-month-long repair and landscaping campaign that was completed by August of 1989; documentation of the nature and extent of this campaign has not been located (Whiteson 1989, D1; McDonough 1989, 19, 22). Due to their great fondness for the House and its setting, family members were determined to keep the residence and its interior collections intact. Even when using it, they made efforts to minimize disturbances to the contents and avoided using the kitchen and appliances. Following the initial restoration work, the property was opened to "architects, designers, and critics" by appointment (Whiteson 1989, D1), continuing Ray and Charles's tradition of sharing the House with the design community. The House was also featured on organized tours, such as those sponsored by the Los Angeles Conservancy in 1990 and 1995 (Los Angeles Conservancy 1990, 1995).

Although 901 Washington had been shut, the Eames Office continued to operate under the direction of Lucia Eames and her son, Eames Demetrios. In 1989, the office moved into the Eames House studio, which served as a daily workplace for staff and as a film editing studio for Demetrios for the next fifteen years, until the office again relocated, in part to reduce wear and tear on the site (fig. 2.70); the Eames Foundation then took over care of the House. Since its construction, the studio space had repeatedly been adapted to meet current needs, so restoring its use as an active, creative workplace was a way to honor the spirit of the place. The mission of the reincarnated Eames Office was defined as "communicating, preserving and extending the work of Charles and Ray Eames."

Eames Demetrios described the enterprise as a family business that allowed them the flexibility to do interesting work while generating funds that could be used to take care of the House (Freudenheim 2000). This was a critical factor. Family members take their responsibility to preserve the House nearly as it was during Ray's and Charles's lifetimes seriously, but it is a costly endeavor. The Eames House is sited on a large and valuable piece of property in an affluent neighborhood where teardowns and additions to older houses are commonplace. Next door, Eames and Saarinen's Case Study House No. 9, similarly situated on a large lot with commanding ocean views, might easily have been demolished. Instead, it was renovated in 1997 and adapted for use as the guest wing of a newly constructed two-story, 6,500-square-foot addition that alters the context but preserves the original (Filler 1997, 154). Architectural pedigree aside, the Eames House may have been vulnerable to similar treatment had the Eames Foundation not been established. As Lucia noted in a 2005 interview, if she were to die unexpectedly, her children "would be put in a terrible position."



**Figure 2.70** Charles and Ray's grandson Eames Demetrios working on a film in the studio in 1996.



2.71

**Figure 2.71** The offices of the Eames Foundation, established in the Eames House studio, filled primarily with contemporary Eames furnishings, 2013.

In that same interview, Eames Demetrios estimated that the property was “conservatively worth about ten million dollars” and noted that the family would not have been able to meet tax obligations while preserving the property intact (both quoted in Makovsky 2005, 73).

### ➤ 2.9.2 Establishment of the Eames Foundation

This financial reality, combined with the family’s deep desire to preserve Ray and Charles’s legacy, spurred them to establish a private operating foundation, the Charles and Ray Eames House Preservation Foundation (commonly shortened to the Eames Foundation), in 2004. Ownership of the House was transferred to the Foundation, which is recognized as a tax-exempt, not-for-profit organization under section 501(c)(3) of the United States Internal Revenue Code. According to its mission statement, the Foundation was established to “preserve and protect the Eames House and to provide educational experiences that celebrate the creative legacy of Charles and Ray Eames” (Eames Foundation 2017). Lucia Eames described the House as the keystone to the Foundation’s efforts: “If it can be secured, then I hope it will be like the center of the sun radiating out, enticing people who are interested in new ways of communicating.” The House, she continued, “will always give a feel for their approach. It’s very tangible, almost primary source material” (quoted in Makovsky 2005, 69–70).

The Eames Foundation established offices inside the studio, continuing the tradition of using it as a flexible space that meets current needs (fig. 2.71), and set about developing educational programming in and around the House. As of this writing, the Foundation continues to manage the House (fig. 2.72). ■

**Figure 2.72** Eames Foundation volunteers, seen through the sliding door of the north façade in 2016. The Foundation has used the studio as its base of operations since 2004.



2.72



## Notes

- <sup>1</sup> Kinney's syndicate partners were Patrick Robinson, James Bettner, Judge Gardner, and D. Galbraith, according to the *Santa Monica Outlook* (1887, 3).
- <sup>2</sup> A tobacco millionaire, world traveler, champion of American Indian rights, and real estate developer, Kinney authored a major study on the eucalyptus species.
- <sup>3</sup> There is conflicting information on this. Betty Lou Young names Arcadia Bandini de Baker as one of the donors of the forestry station property (Young and Young 1975, 32; Young and Young 1997, 25–26), but several earlier sources name her second husband, Robert Baker, as the donor (Ingersoll 1908, 311; Kinney 1890, 147).
- <sup>4</sup> Fifty-four varieties of eucalyptus were counted at the site in 1943 (Hastings 1944, 20–22).
- <sup>5</sup> According to Betty Lou Young, the Santa Monica Heights subdivision was sixteen acres (Young and Young 1983, 40).
- <sup>6</sup> Whether the purchaser was Huntington personally or Southern Pacific is not clear from newspaper accounts and has not been confirmed by property records. Articles dated 1891 report that the buyer was a representative of Southern Pacific. In 1897, it was referred to as Huntington's private property (*Los Angeles Times* 1897). Young and Young (1997, 27, 29) describe Huntington as the buyer. Jan Loomis (2009, 72) indicates that Kinney sold the land to Frank N. Davis, who sold it to Huntington.
- <sup>7</sup> The remains of the wharf were dismantled in 1920.
- <sup>8</sup> By the mid-1920s, the nationwide Chautauqua movement had reached its peak and began declining rapidly. The Chautauqua Institution, from which the movement grew, continues to offer a robust summer program at its campus on the shores of Lake Chautauqua in western New York.
- <sup>9</sup> Also excluded were lots 7 and 8 in block BB and portions previously deeded to the city for street purposes (Los Angeles County Recorder 1926).
- <sup>10</sup> This information came from Gillis's daughter, Dorothy Gillis Loomis, and is otherwise undocumented. According to Dorothy, her father won "a cottage halfway up the Chautauqua hill" in a poker game "at the expense of a luckless sea captain" (Young and Young 1983, 40).
- <sup>11</sup> The *Los Angeles Times* (1927) reported that there were 987 full-grown trees in the subdivision, including fifty-four different varieties of eucalyptus planted more than thirty years earlier.
- <sup>12</sup> The Dallugges' deed also included Bluff Court, a roadway along the southeast line of lot 9 on Kinney's Santa Monica Heights subdivision map. These lots would be consolidated in a new subdivision two years later (Los Angeles County Recorder 1924a, 1924b).
- <sup>13</sup> Beverly Hills National Bank handled estate properties for the Rogerses.
- <sup>14</sup> The buyers were Clarence J. and Mildred Harasta (lot 3), M. B. Scott (lot 4), Stuart G. and Lucia F. Bailey (lot 5), and Roy and Bonnie Huggins (lot 6). The Harastas appear on the building permit for Case Study House No. 18. The Bailey House is Case Study House No. 20. The other lots were not developed under the Case Study House Program (Historic Resources Group and National Park Service 2005, 16n25).
- <sup>15</sup> The original roster of Case Study architects included Charles Eames, Eero Saarinen, J. R. Davidson, Sumner Spaulding, Richard Neutra, William Wurster, and Ralph Rapson (Entenza 1945, 40–41). By the program's conclusion, the roster numbered twenty-nine architects (Smith 2002, 422–34).
- <sup>16</sup> John Entenza was born in Michigan in 1903. His mother was a mining heiress and his father an attorney involved in veterans' and workers' issues. He studied liberal arts in college and trained for diplomatic service with the Department of Labor before changing course and moving to California. Between 1932 and 1936, he worked for an experimental film production unit at MGM Studios.
- <sup>17</sup> Accounts of Entenza's tenure at *Arts and Architecture* are inconsistent. The authors have relied on Barbara Goldstein (1990, 8–9), Victoria Dailey et al. (2003, 58–59, 99n72), and David Travers (2008, 6). Entenza's name does not appear on the magazine's masthead in any capacity until the February 1940 issue (vol. 57, no. 2), in which he is listed as editor. Beginning with the December 1943 issue (vol. 60, no. 10), he is listed as both editor and publisher.
- <sup>18</sup> Local examples include the 1936 Architects Building Material Exhibit, for which Richard Neutra designed his Plywood Model Home (*Architectural Forum* 1936, 37–46; Hines 2005, 149–50), and the "[First] Post-War House" of 1946, designed by the firm of Wurdeman and Becket for developer Fritz Burns (*House Beautiful* 1946; Hine 1998, 172–73). Ironically, the winner of Neutra's Plywood House was Stella Gramer, law partner of John Entenza's father. She moved it to the Westwood lot intended for the house Harwell Hamilton Harris had designed for her, which went unbuilt (Germany 1991, 213n27).
- <sup>19</sup> An unbuilt, unpublished design by Killingsworth, Brady, and Smith (no. 26) is not included in this count. In the post-Entenza years, two apartment-building designs were also commissioned, one of which was constructed in Phoenix, Arizona (Smith 2002).
- <sup>20</sup> For instance, the cost of materials for the Eames House was "partly borne by manufacturers who contributed to the experiment" according to Peter Blake (1950, 94). Esther McCoy (1998, 23) asserts that Truscon Steel Company donated the steel decking for the Eames and Entenza Houses, as well as materials for several others; however, this assertion is undocumented and is expressly refuted by David Travers (2008, 6), Entenza's successor at *Arts and Architecture*. Descriptions of merit-specified products used in the Eames House appear in *Arts and Architecture* (1949d, 1949e).
- <sup>21</sup> Unfortunately, McCoy did not cite her source for this rather extraordinary figure. According to the 1950 US Census, the population of Los Angeles at that time was 1,970,358. Even if we consider the likelihood that McCoy's figure does not reflect unique visitors, the implication is that there was significant interest.
- <sup>22</sup> The ten Case Study Houses include Nos. 1, 9, 16, 18, 21, and 22, in Los Angeles; No. 10, in Pasadena; No. 20, in Altadena; No. 23c, in La Jolla; and No. 28, in Thousand Oaks. The eleventh home, deemed eligible but not listed, was No. 23a, also in La Jolla.
- <sup>23</sup> The location of Neutra's Case Study House No. 21, as published in *Arts and Architecture*, does not correspond with the actual location of the house. See also Hines (2005, 210). Citing an interview with Mrs. Stuart Bailey, owner of the neighboring Case Study House No. 20, Hines erroneously identifies the disavowed Neutra as Case Study House No. 19.
- <sup>24</sup> The Italian-born Contini immigrated to the United States in 1939 and settled in Los Angeles after World War II. An architect, engineer, and urban designer, he worked with Eames and other Los Angeles architects, including A. Quincy Jones and Frederick Emmons before becoming a founding partner at Victor Gruen and Associates in 1951. In 1979, he was appointed president of the Urban Innovations

Group, the practice arm of the UCLA School of Architecture and Urban Planning. Over the course of his career, he was the planner on a number of important projects. He died in Los Angeles in 1990 (Whiteson 1990).

<sup>25</sup> The exact date of delivery has not been determined. According to Amelia Jones and Elizabeth A. T. Smith (1998, 51), the materials were delivered in the fall of 1948.

<sup>26</sup> The sketch was published in the catalog for the exhibition (Johnson 1947, 109), which ran from September 17 to November 23, 1947. Charles covered it for *Arts and Architecture* (Eames 1947). Some, including Alison and Peter Smithson (1994, 98), have surmised that Mies's sketch was in fact the "probable base source" for the Bridge House design, although there is no evidence that Charles saw the sketch prior to his 1947 visit to MoMA, nearly two years after the design's initial publication in *Arts and Architecture*.

<sup>27</sup> The date the building permit application was filed is not recorded. The associated plot plan was date-stamped July 15, 1948. The date on which plan checking was completed is illegible.

<sup>28</sup> The exact date excavation began is not known. "December 29, 1948" is written in pencil on the back of the construction photo in fig. 2.20. No other dated construction photos have been located. It has been generally assumed that construction began in 1949.

<sup>29</sup> Charles wrote that the steel was erected in 48 hours. Peter Blake translated this information as a five-man crew erecting the "entire structural steel" in sixteen hours and noted that "three days later, one man had finished the roof deck" (Blake 1950, 96).

<sup>30</sup> Although Charles Eames correctly spelled "rabbeting" in the original letter, now held at the Library of Congress, it was misspelled as "rabbitting" in the published transcription, cited here.

<sup>31</sup> Architectural drawings for the staircase, as well as a description of its construction in *Arts and Architecture* (Entenza and Eames 1949, 35), support the assertion that it was built in the Eames Office shop and was not prefabricated. Charles Eames, "Circular Staircase for Case Study House 1949," architectural drawings, July 20, 1949, Eames Office files. The Eameses may have considered a prefabricated staircase. Earlier drawings note stairs manufactured by the Duvinage spiral stair division. "Case Study House Number 8," architectural drawing, sheet 8, October 14, 1948, Eames Office files.

<sup>32</sup> It is not clear when the color was altered from gray to black.

<sup>33</sup> The attribution was based on Eames family recollections. Martinez was erroneously identified as Mexican in the NHL documentation; Pat Kirkham refers to it as "a 'folk' bell...ordered from a builder's catalogue" but neglects to document her source (Kirkham 1998, 25).

<sup>34</sup> The white tile flooring had not yet been installed when the House was photographed by Julius Shulman in July 1950 but is visible in the 1955 film *House: After Five Years of Living*.

<sup>35</sup> Though described as wood paneling, an investigation revealed that the paneling is actually tongue-and-groove flooring installed with ¼-inch gaps to achieve the characteristic grooves of wall paneling.

<sup>36</sup> These photos are part of the Eames Office Collection. Thanks to David Hertsgaard of the Eames Office for this photographic research and identification.

<sup>37</sup> The panel is not visible in photos shot in the summer of 1950. The photo panel may appear in one shot in the film *House: After Five Years of Living*, though it is difficult to be certain.

<sup>38</sup> The sculpture is on the south court in Julius Shulman's July 1950 photos of the House.

<sup>39</sup> The plan as published in the May 1949 issue of *Arts and Architecture* (1949a, 38) showed a fireplace, though it was not situated within the

alcove. By the time the issue appeared, construction of the House without a fireplace was well under way. No fireplace is indicated on the October 1948 architectural drawings (Case Study House No. 8, sheet 6, October 14, 1948, in the files of the Eames Office). Ray later recalled that they had considered a fireplace but that Saarinen convinced them they were "being absurdly romantic" (quoted in Kirkham 1990, 136).

<sup>40</sup> The original cupboards are absent in Julius Shulman's 1958 living room interior shot.

<sup>41</sup> The rack is visible in photos shown in the film *House: After Five Years of Living*.

<sup>42</sup> The date the staircase was built and installed has not been determined, but it is visible in *House: After Five Years of Living*. Design drawings are undated (Eames 1948).

<sup>43</sup> Marilyn and John Neuhart (Neuhart and Neuhart 1994, 46) indicate that the parquet was laid in 1958 "to make a more resilient surface." The parquet is visible in photos shot in the summer of 1958 (Demetrios, Fowler, and Crist 2012, 387–89). The date the tiles were re-laid has not been determined, but they can be seen in an undated photo published October 1977 (Vreeland 1977a, unpaginated).

<sup>44</sup> Of the sparse information found, it is known that Jesse Alexander Gooch was a graduate of the University of California, Berkeley. He was a landscape architect with Armstrong Nurseries in Ontario, California, in the late 1920s and early 1930s. He later worked in Los Angeles, where he died in 1960 (*Berkeley Daily Gazette* 1933; Gooch 1929; King 1933; *Los Angeles Times* 1960).

<sup>45</sup> The precise dates the bookcase and planter were added to the room are not known. There are photos in *House: After Five Years of Living* that appear to show the planter, but none showing the bookcase. The bookcase is dated to 1957 in Neuhart and Neuhart (1994, 50).

<sup>46</sup> For another version of Venturi's quote, see McCoy (1973, 67).

<sup>47</sup> On the Eameses' approach to the House's interior collections, see also McCoy (1973, 67), Goldberger (1978, 136), and Pittel (1999, L74, L78).

<sup>48</sup> Some sources give 1928 as the year Charles left the university, including Kirkham (1995, 12) and Neuhart, Neuhart, and Eames (1989, 20).

<sup>49</sup> This marriage ended in divorce in 1941.

<sup>50</sup> Eames Demetrios (2013, 77) indicates that Charles remained in Mexico for eight to ten months. Pat Kirkham (1995, 18) gives the length of his stay as eight months.

<sup>51</sup> A photo dated April 10, 1934, in the HABS/HAER (Historic American Buildings Survey / Historic American Engineering Record) collection at the Library of Congress shows Charles conducting measurements at the Jean Baptiste Valle house in St. Genevieve, Missouri (Historic American Buildings Survey and Harkness 1934). Kirkham (1995, 18) was unsure whether the HABS work took place before or after the Mexican trip. Based on the dated photo, it can be placed after.

<sup>52</sup> Cranbrook instructors during this period include Eliel Saarinen, Loja Saarinen, Eero Saarinen, Carl Milles, Zoltan Sepeshy, Harry Bertoia, Marshall Fredericks, Maija Grotell, Wallace Mitchell, and Marianne Strengell (Neuhart, Neuhart, and Eames 1989, 24). Charles's studio mates were Ben Baldwin, Harry Weese, and Ralph Rapson (Demetrios 2013, 88).

<sup>53</sup> Winning designs were fabricated and then displayed in the MoMA exhibition *Organic Design in Home Furnishings* the following year (Noyes 1941).

<sup>54</sup> Plyformed's first shop, opened in 1942, was at 10946 Santa Monica



Boulevard in West Los Angeles. In January 1943, a second shop opened at 558 Rose Avenue in Venice, and was followed by the largest location, 901 Washington, later that year. In 1943, Plyformed became the Molded Plywood division of Detroit-based manufacturer Evans Products.

<sup>55</sup> Ray designed six covers in 1942, ten in 1943, eight in 1944, and two in 1947 (Neuhart, Neuhart, and Eames 1989, 31, 39, 45, 86).

<sup>56</sup> Their names last appeared on the masthead in the December 1952 issue (vol. 69, no. 12).

<sup>57</sup> The following year, *Life* photographer Allan Grant shot similar scenes on the south court, as well as children in the meadow wearing Eames-designed animal masks. These images can be viewed on the *Life* photo archive hosted by Google at <http://images.google.com/hosted/life>. Some were published in *Life* magazine (*Life* 1951).

<sup>58</sup> The machine can be seen in action in a short film produced by

Eames Demetrios (Demetrios 2012 [1995]), who discovered the original unedited footage in the 1990s.

<sup>59</sup> De Pree did not divulge which film Charles and Ray were working on at the time.

<sup>60</sup> A photo of the studio bedroom was published in *L.A. Architect* in October 1977, some ten months prior to Charles's death (Vreeland 1977a). The same photo appears in Lewin (1978, 77–78). John and Marilyn Neuhart suggest that Ray set up the bedroom in the mid-1960s following a back injury (Neuhart and Neuhart 2010, 62).

<sup>61</sup> The files contain a number of handwritten lists with dates ranging from 1981 to 1988 (Eames 1981–88).

<sup>62</sup> According to Iovine, the Eames family was unable to find an American museum to take the complete collection. On the Eameses' relationship with Vitra, and on the Vitra collection, see Remmele (2007).





## CHAPTER 3

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# Physical Evidence

## 3

### 3.1 Introduction

Chapter 3 describes the physical fabric of the Eames House site and its conditions, including the building complex (internal and external), landscape and topography, and contents and collections. It is intended to provide an overall summary of current conditions to supplement, rather than reproduce or replace, the detailed information from previous studies and investigations. In many areas, existing elements, components, and fabric matched original and early records, reflecting the site's high level of intactness and integrity.

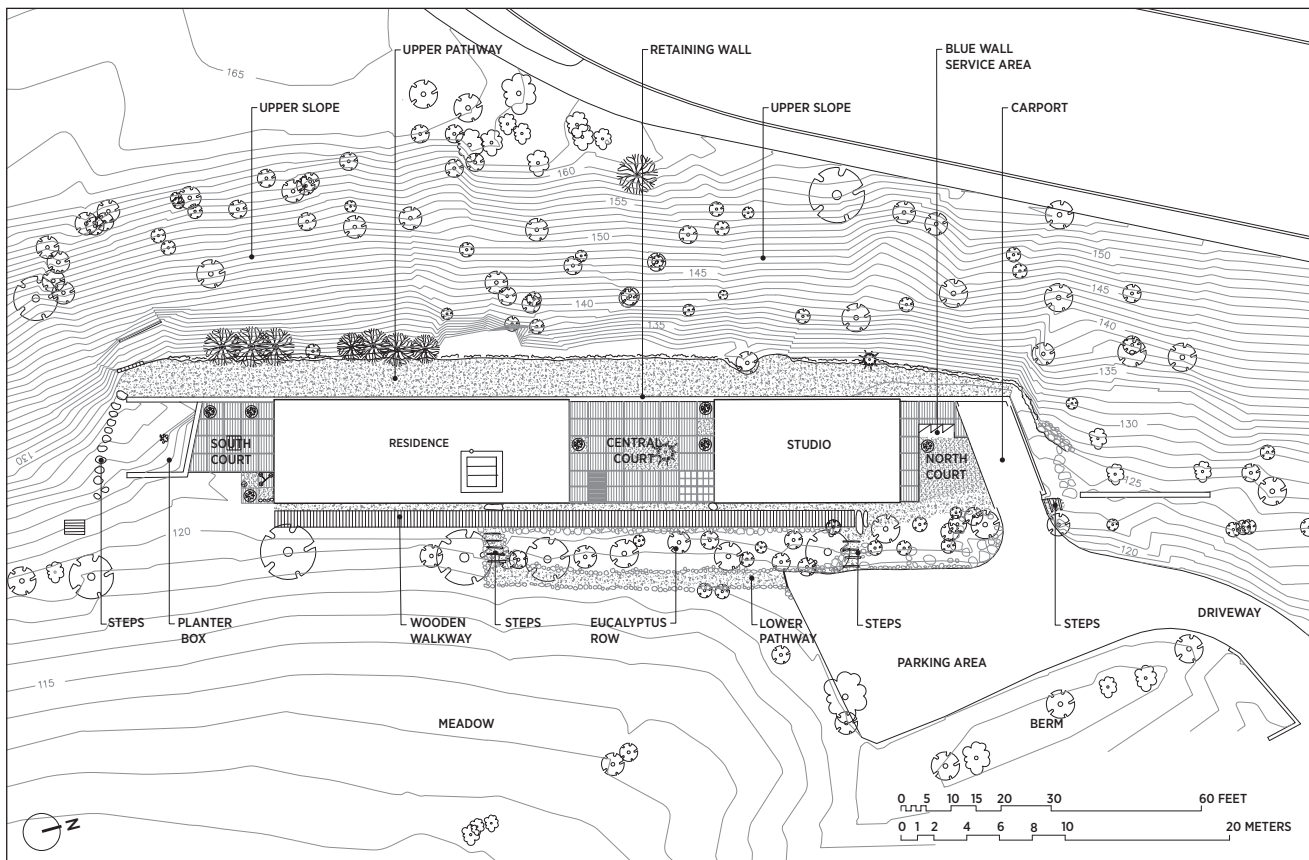
This description is based on inspections of the site that were carried out by GML Heritage in May and July 2014, and by GCI team members and specialist consultants both before and after those dates. It reflects conditions through the summer of 2016, including roof work completed in late 2014.

#### ➤ 3.1.1 Existing Documentation

Existing documentation recording the layout, detailing, construction methods and materials, and key elements is extensive (including drawings, photographs, and published accounts) and covers the entire life of the site. From the many detailed original and early drawings (including architectural, mechanical, and steelwork), a comprehensive account of the site—and particularly the development of the building complex—can be assembled. A review of these documents provides important information not only on the components, materials, and methods used but also on how the design and detailing evolved as the building was constructed, lived in, and used. There are two essential reference points in the design of the Eames House: first, the original architectural drawings prepared in 1948–49 for building approval and construction, and second, the measured drawings prepared under HABS in 2013–14 (Historic American Buildings Survey 2013).<sup>1</sup> Copies of these drawings are held at the Library of Congress, where they are publicly accessible, and by the Eames Foundation.

The site and its key elements and components have been extensively and continuously photographed since construction. These photos are held by the Eames Foundation and other archives, including the Library of Congress and the Getty Research Institute. Some of these historical images appear in this report, together with more recent photos that record particular details or conditions in order to illustrate issues identified or policies developed in the CMP.

Recent investigations conducted at the site by the GCI and by specialist consultants have produced a wealth of material that has informed the content of this report (Matarese forthcoming). Several were especially useful in describing the physical evidence at the site. These include an extensive fabric analysis of the building complex carried out by Escher GuneWardena Architecture in 2011; a 2014 landscape survey of the site by Carlberg Associates that evaluated 246 trees and documented plant and hardscape materials; and a site survey prepared by Leighton Consulting and Land and Air Surveying in July 2014 that recorded the location and extent of existing site



3.1

**Figure 3.1** Eames House building complex showing location of elements and components.

elements, components, and conditions (Escher GuneWardena Architecture 2011; Carlberg Associates forthcoming; Leighton Consulting forthcoming). Leighton's site survey, with modifications, is shown in figure 3.1.

### ➤ 3.1.2 Approach

Analysis of the site's physical fabric has been organized into three categories:

- the whole of the **building complex**, including structures, courtyards, retaining wall, and other built features, such as the carport and raised planter box. This analysis is more expansive than many accounts of the place, which focus primarily on the iconic building elements of the residence and studio;
- the **contents and collections** within the residence and studio, which reflect the lives, work, and legacy of Ray and Charles Eames, including their relationships with other important individuals; and
- the whole of the **landscape** of the site, including plantings (particularly the iconic eucalyptus), and natural and human-made topographical features, including the meadow, upper slope, and berm.

This chapter provides a summary account of the existing site elements and conditions, divided into the three categories identified above, rather than a comprehensive description of all existing site information. It is intended to:

- provide a useful overall understanding of the site;
- identify the key components of the various site elements and attributes to assist the analysis of significance and development of conservation policies; and
- facilitate reference to the more detailed existing supporting and background material where necessary.

Based on the site investigations and analysis, a summary of the key elements and components and their significance and conditions was prepared for each category to inform the detailed conservation objectives and policies in section 6.9 in this volume.

The inspections were carried out with the assistance of the Eames Foundation and within



appropriate safety and access constraints. No fabric was opened up as part of the inspections, but results of recent GCI and Eames Foundation investigation and repair works were reviewed.

### 3.2 Existing Site Layout

The existing layout of the site includes the building complex, landscape and topographical elements, and driveway and parking area (see plans in figs. 1.3 and 1.4). Also see figure 3.1 for a detailed view of the building complex and its immediate surroundings.

### 3.3 Building Complex

#### ➤ 3.3.1 Summary of Elements

The key elements of the building complex include:

- the structural retaining wall—which supports and defines the whole of the west elevation of the building complex, including structures—and courtyard areas;
- the separate residence and studio structures linked physically via the retaining wall and shared central court; and
- the open central court, the south court with its raised planter box, and the north court and carport areas, which are outdoor areas that are functionally and visually integrated with the residence and studio.

Adjacent paths (to east and west) and paved areas

such as the driveway and car parking area at the northeast corner of the site are transition areas between the building complex and the surrounding landscape.

#### ➤ 3.3.2 Concrete Retaining Wall and Slabs

An 8-foot-tall, reinforced concrete retaining wall, nearly 200 feet in length, forms the continuous west wall of the building complex (residence, studio, and courtyards) at the first-floor level (fig. 3.2). Each structure sits on a poured-in-place, reinforced concrete slab. The slabs rest on concrete footings that run continuously under both buildings.

#### ➤ 3.3.3 Residence and Studio Exteriors

The residence encloses about 1,500 square feet of space and the studio, 1,000 square feet.

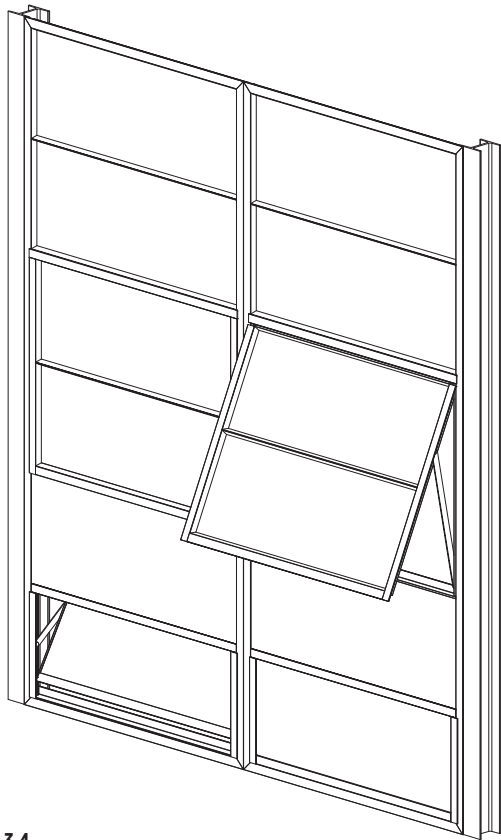
#### Modular Design and Structure

Both residence and studio are of modular design and rectangular in plan and three-dimensional form. The structure is laid out in two parallel rows of 4-inch H-columns set 20 feet, 4 inches apart on the east and west elevations, with a 12-inch open web joist spanning between each pair of columns. The west row of columns (approx. 9 feet tall) appears shorter than the east row (approx. 18 feet tall) because the west row is partially embedded in the concrete retaining wall, which forms the lower portion of the residence and studio's west walls.<sup>2</sup> The residence is eight bays long, but its southernmost bay is a roofed exterior area partially covering the south court; the studio is five bays in length. In the residence, half of these bays are spanned by web joists at the 8-foot height that support the second floor; in the studio, two of the five bays are divided in this fashion (fig. 3.3). The columns were spaced so that each bay could be infilled by two



**Figure 3.2** The concrete retaining wall during construction, ca. 1949.

**Figure 3.3** View of the steel frame and web joists during construction, looking south from the studio, ca. 1949. The lower joists will support the studio's second floor.



3.4

**Figure 3.4** Typical Truscon window configuration used to fill a structural bay. Axonometric, exterior view.

**Figure 3.5** Roof of the studio in 2017, showing perimeter flashing detail and curb section following reroofing campaign of 2014–15.

**Figure 3.6** View of the residence roof and skylight in 2017, following reroofing campaign of 2014–15.

sections of Truscon Steel's 8-foot-tall, standard architectural sash (fig. 3.4).

The structures' roofs are constructed of Truscon's Ferrobord steel decking laid directly on the joists, exposed to the interior but topped with a built-up assembly. The current roof assembly, installed in the winter of 2014–15, comprises a layer of rigid insulation topped with a membrane and gravel. A continuous curb section has been installed on all sides of the roofs of both the residence and studio. It is set back about 6 inches from the roof edge (fig. 3.5). This curb prevents the majority of rainwater from flowing down from the roof onto the building facades. It is interrupted at two locations on the west side of each roof to allow runoff to be collected in two short gutters and directed down toward the ground in vertical rain leaders mounted on the west walls. Because the curb is installed about 6 inches from the roof edge, it is visible only from the upper slope. The roof of the residence holds an original, prefabricated, pitched skylight glazed with wire glass. In the last reroofing, the original skylight curb height was raised one inch to provide more efficient flashing and prevent leakage (fig. 3.6).

All steel components were manufactured by Truscon (*Arts and Architecture* 1949e, 47; *Arts and Architecture* 1949f).<sup>3</sup> For protection from the elements, all exposed exterior steel is painted, currently a glossy black.

### Cladding and Glazing

The residence and studio's external building envelopes are formed of light steel framing that is infilled with a variety of materials. The modular nature of the steel structures confers a strict geometric order to the facades; however, this is interrupted by the various configurations of architectural steel sash that fill the structural bays and hold a variety of infill materials (fig. 3.7). Some sashes have a single large opening, while others are divided into multiple, equally sized lights—as many as two rows of six lights each. A narrow spandrel around the perimeter of each building covers the height of the second-floor deck structure. The spandrel's openings are filled with either glass or opaque materials (fig. 3.8).

On both buildings, window units consist of fixed units, as well as operable awning and hopper units. In the residence, extant original glazing materials include clear polished plate glass; Mississippi Glass Company's Factrolite obscure glass in the bathrooms, the front entrance, and the northeast corner of the dining room; and Mississippi polished wire glass in the skylight. In the studio, extant glazing materials include clear polished plate glass; Factrolite obscure glass in the west wall of the studio balcony and the bathroom; and Mississippi polished wire glass in the three northern bays of the east wall of the studio and the sliding door to the north court. A number of panes of damaged or broken glass have been replaced with tempered, clear float glass or similar glass, particularly following the 1994 Northridge earthquake. Several panes of



3.5



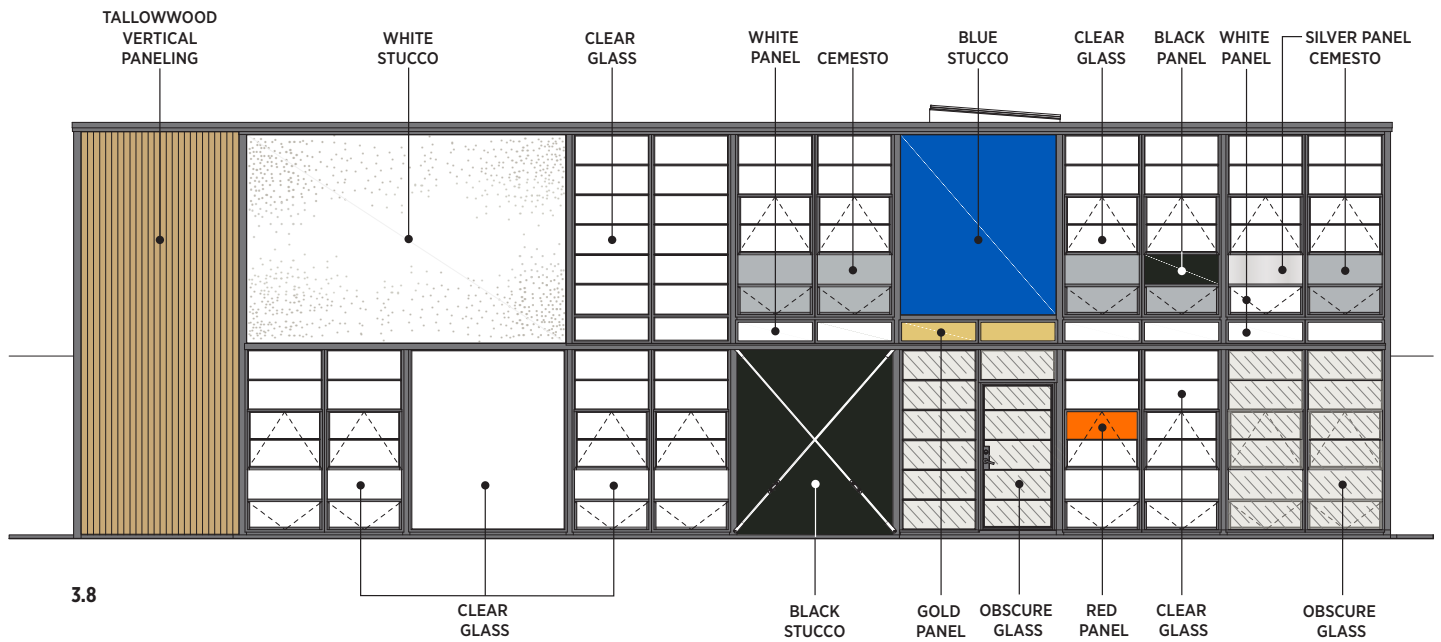
3.6





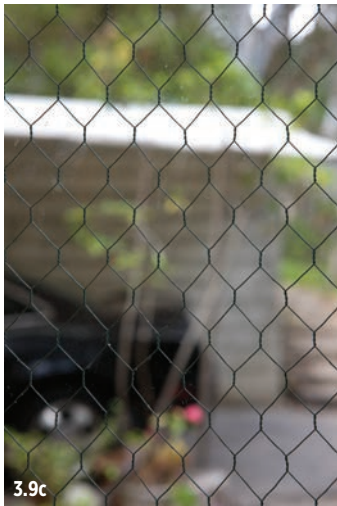
3.7

**Figure 3.7** View of the east elevation of the residence, 2013. The strict geometric order conferred by the building's steel frame is enlivened by the various configurations of architectural sash infilled with glass or solid panels in a variety of textures, materials, and colors.



3.8

**Figure 3.8** East elevation of the residence, showing the pattern and color of infill materials. The east elevation is the most readily recognizable view of the building complex.



**Figures 3.9a, 3.9b, 3.9c** Three types of glazing were used for aesthetic or functional reasons. The bulk of the glazing is clear glass (a); obscure glass was used for privacy, light control, and visual interest (b); and wire glass was used in the studio and the stairwell skylight for safety and aesthetic reasons (c). All photos: 2016.

wire glass are cracked but remain in place because a suitable replacement material has not been identified (figs. 3.9a–c).

Not all the Truscon window units are filled with glass. Cemesto, an insulated cement-asbestos fiberboard manufactured by Celotex Corporation, is used extensively on both the residence and studio. Some Cemesto panels are painted, but most have been left their natural gray. Due to deterioration over the years, a number of Cemesto panels have been repaired or replaced with similar material. Since 2012, several have been replaced with plywood.

In areas where Truscon window-wall systems are not used, there are larger sections of solid wall constructed of Ferrobord profiled steel decking or framing with a stucco finish. These wall sections vary in size—for example, the largest stucco panels fill a double bay width. They are painted a rich blue, a bright reddish-orange, light beige, white, silver, gray, or black. On the residence's east facade, white painted steel cross-bracing was left exposed over a full-bay-width stucco wall section that is painted black (fig. 3.10). The same approach was taken with blue cross-bracing over a black stucco panel on the studio. Two additional sets of cross braces are hidden beneath painted stucco, one each on the east facades of the residence and studio. On the south elevation of the studio and on the west elevation of both structures, the ribbed steel surfaces of painted Ferrobord panels add to the layering of colors and textures (fig. 3.11). The south elevation of the studio also houses several varnished plywood panels, to the right of and surmounting the door. A small panel with photographic silhouettes of eucalyptus trees—now faded—is featured above the fixed panel to the east of the sliding door to the south court.

The front door to the residence is located on the eastern facade, occupying the north half of the sixth bay from left to right. It is a Truscon steel-and-glass door with five horizontal lights and

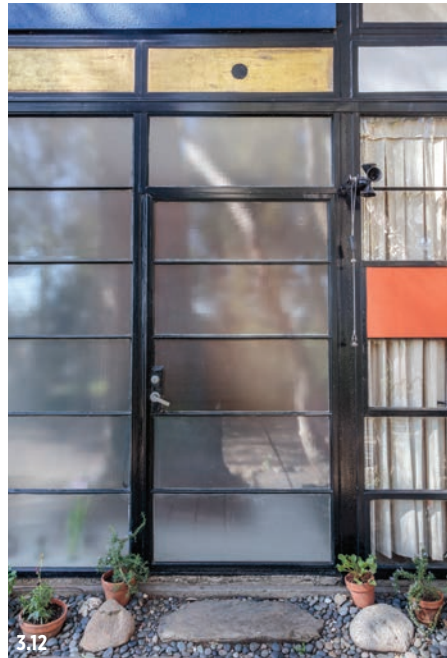


**Figure 3.10** Exposed cross-bracing over a black stucco panel on the residence's east facade, 2016.





**Figure 3.11** Truscon Ferrobord panel on the studio's west elevation, 2017. Painted, ribbed panels add color and texture to the buildings' facades.



**Figure 3.12** Front door of the residence, 2017. The door itself is surmounted by a translucent glazed panel to match the configuration of the adjacent section of sash. The panels above are covered in gold leaf. A smooth stone serves as a doorstep. The doorbell is visible to the right of the door.

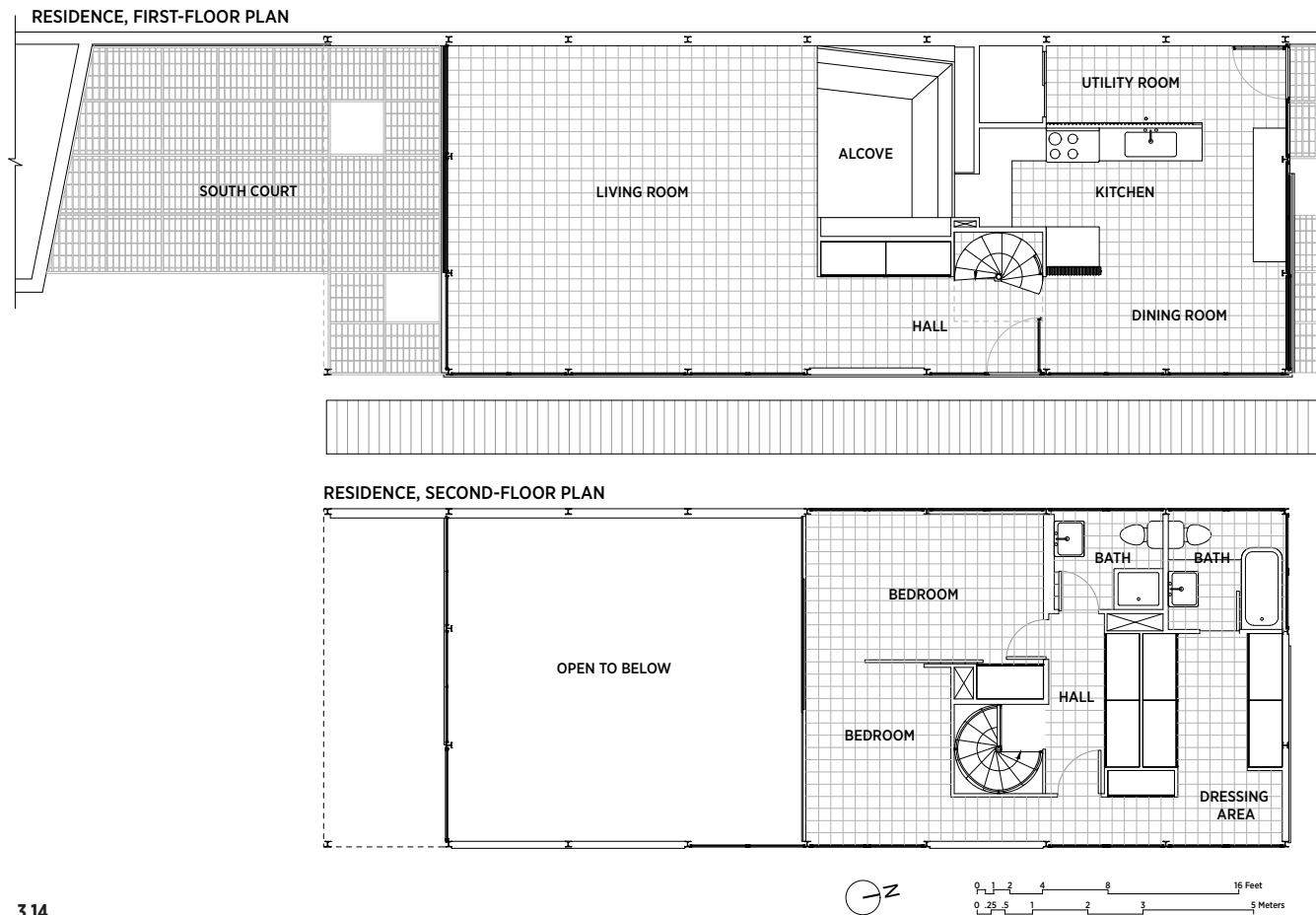
a fixed transom above, creating the impression that the door, when closed, has six lights. The door and transom are glazed with obscure glass. This pattern of openings and materials is echoed in the adjacent fixed panel to the south. The closed door blends into the facade and its function is barely perceptible. It is marked by a flat, natural stone flanked by two decorative stones. Spanning the bay immediately above the door is a pair of small panels covered in gold leaf. To the right of the door is a rotating black ceramic bell of unconfirmed origin (fig. 3.12).

The external doors at the northwest corner of the residence and southeast corner of the studio are flush wood veneer doors set into steel frames and jambs (fig. 3.13). Both open directly into the central court. Large, custom-made, steel-framed sliding glass doors are located in the center of the south elevation and at the east end of the north elevation of the residence, and at the east end of the north elevation of the studio.

The rear (west) elevations of the second floor of the residence and studio are constructed on top of the reinforced concrete retaining wall. These walls are infilled with a greater amount of opaque material than those of the east facade. Exposed utility meters, electrical boxes, and similar service fixtures are located on the west elevation, hidden from the primary views.



**Figure 3.13** South entrance to the studio, 2017. The wood veneer door has smaller plywood panels above and directly to the right. To the left, a panel of Truscon sash is infilled with a combination of clear glass and opaque panels.



**Figure 3.14** First- and second-floor plans of the residence.

**Figure 3.15** Detail of the spiral staircase, 2016. The treads are of plywood fastened to sections of steel beam that radiate from a central column. The brass pipe handrail curves around the walls of the stairwell, which are covered in plywood veneer.

**Figure 3.16** Upper landing of the stairwell, lit by a skylight, 2011. The staircase's central column is topped with a glass flame-shaped finial. The stairwell column is topped with a decorative glass flame-shaped finial, and is illuminated directly above by the skylight (fig. 3.16).

### ➤ 3.3.4 Residence and Studio Interiors

A floor plan of the residence is shown in figure 3.14.

#### **Residence: Entrance Hall**

The front door on the east elevation opens directly into a hallway that runs the length of the residence and connects the ground-floor interior spaces. The custom-built spiral staircase leading to the second floor is located immediately opposite the main entrance. It is constructed of plywood treads fastened to sections of steel beam formed into flanges, which are fitted into collars that radiate from a central steel column. The walls of the stairwell are covered in a warm U.S. Plywood Corp. Korina veneer. A circular brass-pipe handrail is secured to the paneling with stanchions (fig. 3.15). The stairwell column is topped with a decorative glass flame-shaped finial, and is illuminated directly above by the skylight (fig. 3.16).





The west wall of the hallway between the stairwell and living room is formed by a freestanding storage closet that contains both hanging and shelf space. Constructed of off-white painted wood, the closet unit features two double prefabricated metal sliding-door assemblies from Republic Steel. The closet doors are painted in shades of gray and black; one has a craquelure finish. The framework of the door assembly and the circular, recessed door pulls are painted a soft white (fig. 3.17). The closet units are topped with fluorescent-tube uplighting, concealed by the top edge of the closet.

### Residence: Living Room

From the single-story hallway, the interior space opens into the double-height living room, with views out of the south and east elevations, across the partially covered south court and meadow to the ocean in the distance. The living room floor, like the hallway, is finished in a light, warm white that enhances its spaciousness. The 9-inch-square vinyl tiles, installed in 2012, reproduce the size and layout of the originals and closely match the original color.

The thin steel framing of the south and east walls of this room is infilled with glazed, operable hopper, awning and louver window units, and fixed plate-glass windows of varying size, blurring the boundaries between indoors and outdoors and framing the views of the landscape. A wide sliding glass door fills the center bay of the south elevation, opening the room to the south court.

In addition to the abundant windows, the living room's light and airy feeling is derived from its double-height, exposed-web joists and its ceiling constructed of Truscon corrugated Ferrobord decking, which was left exposed and painted white. The open web joists are painted either black, white, or bright yellow (fig. 3.18). The original custom-built movable ladder hooks onto the open web joists to allow access to the ceiling.

Whereas the southern and eastern walls of the living room are clad primarily in glass, the solid, double-height western wall is clad entirely in vertical tallowwood strips. This tallowwood paneling extends along the covered section of the external west wall of the south court, providing continuity (fig. 3.19). The GCI's investigations concluded that it is tongue-and-groove flooring that was installed with ¼-inch gaps to achieve the grooves that are characteristic of wall paneling (Heginbotham forthcoming).

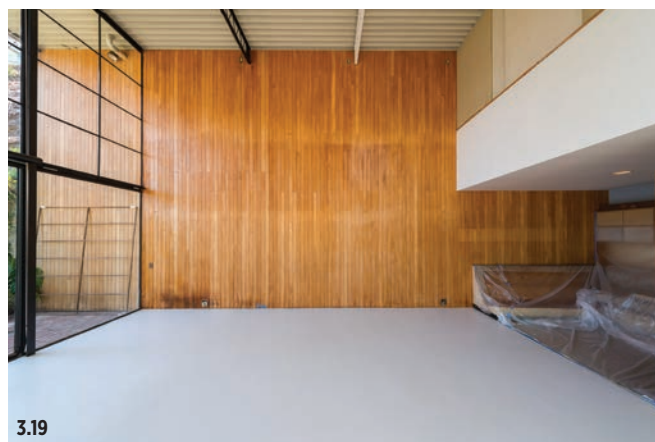
A large, opaque wall panel, covered in painted Wall-Tex wall canvas, fills the upper half of the two southeastern bays. This panel acts as a visor and directs the view to the south across the meadow toward the ocean. The view out the eastern windows takes in the row of towering eucalyptus trees. Sunlight filtering through the trees creates a play of light and shadow on interior



**Figure 3.17** Freestanding closets that serve as the hallway's west wall, 2017. The closets are constructed of painted wood with prefabricated steel sliding-door assemblies. The end wall of the closet unit is paneled with rosewood.

**Figure 3.18** Living room ceiling and exposed web joists, 2016. The ribbed underside of the Ferrobord roof decking forms the ceilings in both the residence and studio. The joists are painted in varied colors. Lighting fixtures are clamped to some of them.

**Figure 3.19** The living room's tallowwood wall, 2012. The entire west wall of the residence is paneled with narrow tallowwood strips. Extension of the paneling to the exterior wall of the covered portion of the south court helps integrate interior and exterior spaces.





3.20

**Figure 3.20** Balcony parapet of the living room, 2017, showing the interplay between building and nature in the patterns of light and shadow on surfaces.

surfaces (fig. 3.20). The steel frame's warm gray paint echoes the colors in the eucalyptus trunks.

Natural-colored linen and rayon pleated draperies hang on most of the living room windows. The current draperies are not original. A retractable projection screen is discreetly mounted on the south living room wall, above the sliding glass door.

On the north side of the living room, the second-floor bedroom area forms a balcony overhang that spans the room. Its parapet wall is covered in painted wall-fabric and is capped with a wooden rail. While the living room's expansiveness is enhanced by the open character of the bedrooms, sliding canvas-covered panels atop the balcony rail can be used to close off the upstairs sleeping areas.

An alcove beneath the balcony overhang forms a more intimate space on the north side of the soaring living room. It houses a custom built-in, L-shaped, upholstered sofa fabricated by the Eames Office; wood veneer cabinetry with a built-in stereo speaker; wall-mounted plywood storage cabinets with sliding doors made of sheets of Plyon, a "translucent glass cloth laminate" by Swedlow Plastics (Entenza and Eames 1949, 35), set into wooden frames; and open shelving for the display of objects. Various decorative papers have been applied to cabinet backs, inside open shelving, to the base of the sofa, and atop the cupboards. A small pass-through above the sofa opens to the kitchen. A wooden magazine rack hangs on the west wall. The alcove floor is the only carpeted space in the residence; the original carpet is extant and is covered by a newer,

loose pile carpet. The back of the freestanding hall closet serves as the east wall of the alcove. Its end, which faces into the living room, is paneled in rosewood (fig. 3.21).

#### **Residence: Second-Floor Bedrooms, Dressing Area, and Bathrooms**

The bedrooms, bathrooms, and dressing area occupy the second floor of the residence's four northernmost bays. Each of the two bedrooms, overlooking the living room, has a direct entry



3.21

**Figure 3.21** View of the living room, looking north, 2013. The balcony overhang forms a ceiling for the alcove, an intimate space within the soaring living room. The rosewood wall marks the east side of the alcove and the entrance to the hallway.





3.22

from the hallway at the top of the spiral staircase. A large, fabric-covered sliding wood panel provides a divider between the two rooms; when open, the two spaces are integrated into one large bedroom (fig. 3.22). When closed, a hidden closet in the smaller guest bedroom is revealed. Painted, fabric-covered sliding panels reaching from the balcony parapet to the ceiling can be used to close off the bedroom spaces from the living room. Original wall-mounted, painted-metal gooseneck lamps above the beds provide reading light (fig. 3.23).

A dressing area and two adjoining bathrooms complete the suite of upstairs rooms. The dressing area is organized around large, freestanding closets similar in construction and materials to the

**Figure 3.22** View into the master bedroom from the guest bedroom, 2017. The sliding wood panel room divider is at left, and the sliding panels on the balcony parapet are at right.



3.23

**Figure 3.23** The master bedroom, 2016. Gooseneck lamps mounted on the wall above the bed provide reading light. At right is the hallway to the dressing area. At left is the guest bedroom with Plyon window shades drawn.



3.24



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3.26

**Figure 3.24** Upstairs dressing area, 2016. At left, freestanding wooden closets with prefabricated steel door assemblies serve as the hallway wall. Ray's dressing table and mirror are visible on the north wall. At right, Plyon window screens diffuse light, and the opaque material on the lower wall is Cemesto.

**Figure 3.25** View of dressing area closet units, looking west, 2016. Ray decorated the circular recessed pulls with brightly colored paper insets that have faded over time. The west wall is clad in walnut plywood.

**Figure 3.26** View of Ray's bathroom, 2013. The floor is clad in Voit rubber tile in a black-and-white checkerboard pattern. The ceiling is clad in bird's-eye maple plywood. Metal light fixtures are mounted on the ceiling. Ray's toiletries sit atop the wall-mounted shelf with sliding Plyon doors.

downstairs closets; these are also topped with uplighting and are painted a soft white (fig. 3.24). The closet doors' circular recessed pulls are decorated with brightly colored paper insets; many are now faded or worn (fig. 3.25). The west wall of the dressing area is of walnut plywood. In the bathrooms, bird's-eye maple waterproof plywood is applied to the underside of the Ferrobord decking, separated by a layer of Celotex, to reduce condensation (Eames 2015, 69). The bathroom walls are clad in both gray and off-white Micarta plastic laminate wall panel. Charles's bathroom has a shower stall and Ray's has a bathtub.

Original 9-inch-square Voit rubber tiles cover all the upstairs floors. Ray's bathroom floor is laid in a black-and-white checkerboard pattern; the white tiles have aged to cream (fig. 3.26). Charles's bathroom is in a color identified in *Arts and Architecture* as sea sand (Entenza and Eames 1949, 33); it has aged to a bluish green. The rest of the upstairs floor tiles are in one of two beige tones.

Light enters the upstairs rooms through banks of clear glass windows on the east and west elevations; Ray's bathroom is lit from the north as well. Some of the bathroom glass is translucent. The clear glass windows in Ray's bathroom are hung with curtains. The west bedroom windows along the upper slope and all the windows on the east facade feature custom light diffusion screens constructed of wood-framed sheets of Plyon that slide on wooden tracks (Entenza and Eames 1949, 35).





**Residence: Kitchen and Utility Areas**

At the north end of the residence (at ground-floor level) are the dining, kitchen, and utility areas, which are single-story-height spaces occupying the two northern bays of the residence, closest to the studio. The dining and kitchen areas form one space, which can be divided by a Modernfold accordion door; in practice, this door is always kept folded at the south end of the space, maintaining the largest opening to the kitchen (Jones and Smith 1998, 52). The door conceals the rear of the refrigerator (fig. 3.27). Korina plywood paneling carries through from the hallway to the east and south walls of the kitchen. White steel cabinets by Berger Manufacturing are topped with a variety of surfaces, including black, gray, and white plastic laminate, butcher's block, and marble. The original Kelvinator cooking range is extant; the refrigerator is a later replacement. These areas have plaster-finished ceilings covered in painted wall fabric. As in Charles's bathroom, the flooring is original 9-by-9-inch Voit rubber tiles in sea sand that currently appear to be a bluish green (Entenza and Eames 1949, 30). They are in a deteriorating condition.

A utility room is located along the west elevation. It is separated from the kitchen by a Mississippi Glass Company translucent, textured, corrugated glass panel set into a wooden frame that sits atop a half wall. The tallowwood paneling on the western spine wall carries through from the living room. The south and west walls are painted a vibrant blue. This area houses a water heater, washer, and dryer. A pair of white, painted metal closet doors conceals the original furnace; the inset, circular door pulls are painted—one red and one blue. A vent pipe is painted red (fig. 3.28).

On the east elevation, the window walls are a mix of clear glass with curtains and Factrolite, a translucent, textured glass that softens the light flowing into the dining area. Window units above the cabinetry along the north elevation are glazed in clear glass and hung with curtains (fig. 3.29).



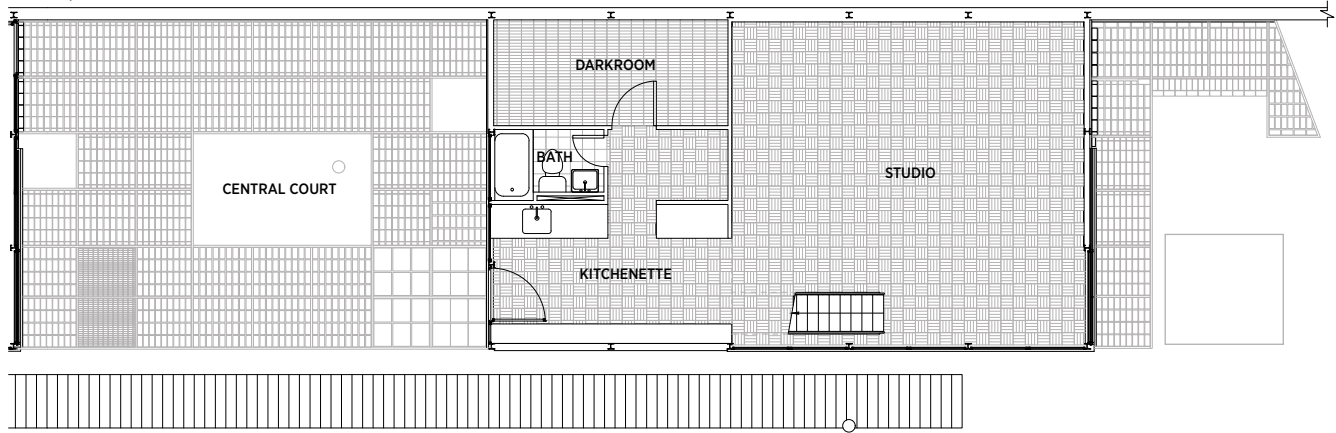
**Figure 3.27** View of the kitchen, 2016. The hallway and staircase are visible at left. The Modernfold accordion door conceals the back of the refrigerator. The original Voit rubber floor tiles are faded and in deteriorating condition. Above the countertop and sink, the corrugated glass panel provides visual interest while allowing light into the utility area.

**Figure 3.28** Utility area west of the kitchen, on the other side of the corrugated glass panel, 2013. The tallowwood spine wall continues into this area. At rear in the photo, white closet doors conceal the original furnace. Walls and pipes, including the vent pipe at center, are painted bright red or blue.

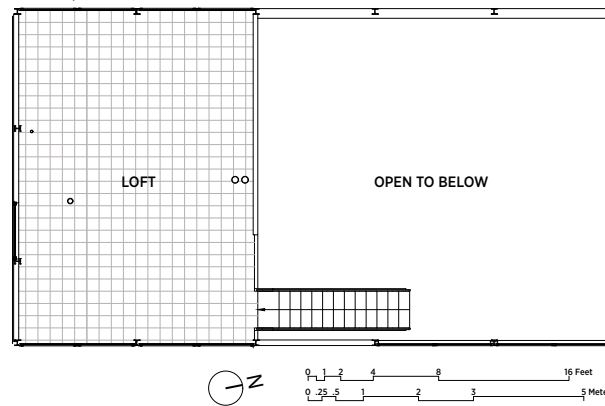


**Figure 3.29** North wall of the kitchen in 2017, showing the prefabricated steel cabinets and window units filled with clear glass and hung with curtains. At right, the steel-framed sliding door opens to the central court.

### STUDIO, FIRST-FLOOR PLAN



### STUDIO, SECOND-FLOOR PLAN



3.30

**Figure 3.30** First- and second-floor plans of the studio.

There are two doors on the north facade: a steel-framed, flush wood veneer door at the northeast corner and a clear glass, steel-framed sliding door from the dining area into the central court, which is hung with curtains.

### Studio Interiors

A floor plan of the studio is shown in figure 3.30.

**Figure 3.31** West wall of the studio entryway in 2013, lined with prefabricated steel cabinets that form the small kitchenette. The double-height studio space and part of the staircase are visible at right.

**Figure 3.32** Custom-built plywood storage cupboards with Plyon sliding doors, mounted on the wall opposite the kitchenette, 2017.

The main entrance to the studio opens off the central court into a single-story space that occupies the width of two structural bays. With the exception of the bathroom, the plaster-finished ceilings in this area are covered in painted wall fabric. A small kitchenette with white steel cabinets similar to those used in the residence is located on the west wall of the entry hall. It includes a kitchen sink but no cooking facilities. The walls in this area are painted a variety of colors, including black, beige, and red, and above the northern bank of kitchen cabinets, a vibrant cobalt blue (fig. 3.31). Opposite the kitchenette, the east wall is lined with wall-mounted plywood storage cupboards that feature sliding doors constructed of Plyon set into wooden frames on wooden tracks (fig. 3.32).



3.31



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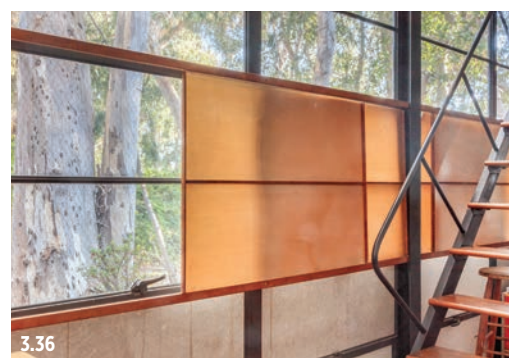
3.33



3.34



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A doorway through the west wall bisects the kitchenette area and leads to a small bathroom with a toilet, sink, and shower. Here, each wall and the ceiling are painted a different color. A service nook holds a hot-water heater and furnace, and the former darkroom is now used for storage. These spaces occupy the whole of the southwest end of the building.

To the north of the kitchenette, the main studio space is double height and three bays in length. Like the residence, it has ceilings of painted, ribbed Truscon steel decking with exposed joists. A second-floor balcony opens onto the studio space. The south wall of the space forms the balcony parapet. The wall's edge and balcony parapet are capped with a wooden rail. The balcony is reached by a simple, open steel staircase with wooden treads, open risers, and pipe handrails, designed and constructed in the Eames shop. An opening between the staircase and the end of the parapet wall is blocked by an early, low Eames Storage Unit (ESU). The fascia board at the edge of the mezzanine features a photo mural showing a detail of the Venice pier in ruins (Kirkham 1990, 136) (fig. 3.33).<sup>4</sup>

The studio proper, kitchenette, and service nook are floored in parquet laid in a basketweave pattern over the concrete slab (fig. 3.34); the darkroom parquet is laid end to end (fig. 3.35). The bathroom and loft are floored in rubber tiles similar to those used in the residence.

The studio itself is flooded with light. The east elevation comprises single- and double-height bays of steel window sash filled with Mississippi polished wire glass. The lower windows house sliding light-diffusion screens made of Plyon set into wooden frames on wooden tracks (fig. 3.36). Light also enters the studio from the north elevation, where two upper bays are filled with clear glass. On the north elevation, a sliding glass door—glazed with wire glass—opens onto the north court (fig. 3.37).

**Figure 3.33** View of the studio, looking south, 2013. The staircase was designed and built in the Eames shop. At right is the original photo mural of the Venice pier. Unlike the residence, the studio is an active work space and most of its furnishings are not original.

**Figure 3.34** Detail of parquet floor in basket-weave pattern, typical of most of the floors in the Eames studio, 2016. The parquet was first installed over the concrete slab in 1958 in an end-to-end pattern.

**Figure 3.35** Detail of parquet floor in the former darkroom, the only room to retain the original end-to-end configuration, 2016.

**Figure 3.36** Sliding custom-built light-diffusion screens in the studio, providing light control and privacy, 2017.





**Figure 3.37** The studio north elevation, as seen from the upper pathway above the retaining wall, 2013. The sliding glass door is at lower left, beneath the brightly painted stucco panel.

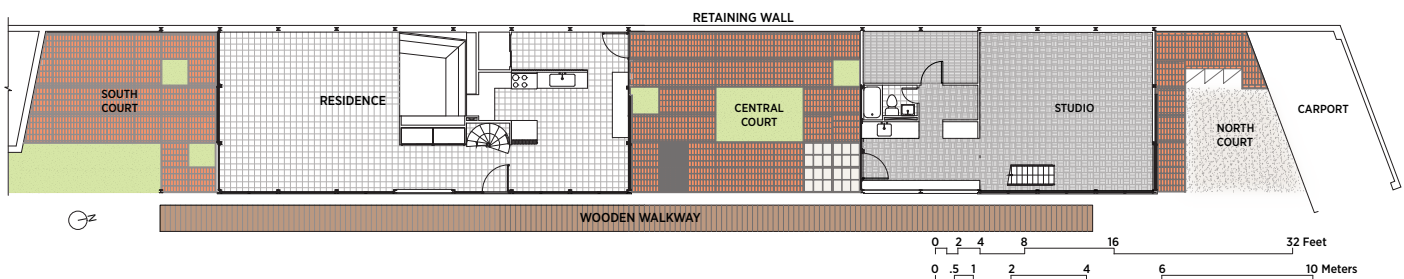
**Figure 3.38** Ground-floor plan of the building complex, showing buildings and courtyards.

#### Residence and Studio: Lighting Fixtures

Throughout the residence and studio, areas with finished ceilings feature two types of permanent lighting fixtures. Recessed ceiling fixtures from Century Lighting provide general area light, for instance, in the alcove and kitchen. Wall- and ceiling-mounted fixtures from Gotham Lighting provide general, task, and accent lighting over the kitchen sink, in the ceiling of Ray's bathroom, and other areas. In the living room and studio, light is provided by clamp-on lamps affixed to the exposed ceiling joists and plugged into electrical outlets installed near the ceiling. The freestanding closet units in the residence feature concealed, tubular uplighting.

#### ► 3.3.5 Courtyards and Outdoor Areas

The building complex features three outdoor living areas, all of which are enclosed at the rear by the retaining wall, as shown in the floor plan in figure 3.38. The residence and studio are connected by an open courtyard known as the central court. A covered area (part of the south court) at the south end of the residence is open on its southern and eastern sides. A more modest paved court is situated on the north of the studio. A wooden walkway runs along the full length of the east facades of the residence and studio, providing another horizontal connection between the two structures and their associated outdoor spaces. Plants in small beds and terracotta



**3.38**



pots fill the courtyards and line the walkway, softening the edges of the buildings, blurring the distinction between indoors and outdoors, and providing splashes of color. These elements and components are described in further detail below.

### South Court

At the south end of the residence, the court serves as an outdoor room. It also provides the foreground to views from the living room across the meadow to the ocean below. The south court, accessed by a sliding glass door at the center of the south facade, features a covered area immediately adjacent to the living room where the roof of the residence extends the width of one structural bay to provide shade and shelter (fig. 3.39). The living room's tallowwood paneling and Truscon ceiling extend to the rear wall of the south court, heightening the sense that this is an outdoor room. A gold-painted wooden trellis hangs on the upper portion of the tallowwood wall; the exterior edge of the tallowwood paneling is also painted gold. A small panel featuring a faded photograph of eucalyptus trees is housed immediately above the fixed glazed pane to the east of the sliding door (fig. 3.40).

The open area is enclosed to the rear (west) by the concrete retaining wall. It is also enclosed at the south end by a large, raised concrete planter box that abuts the retaining wall and the upper slope. The box is planted with seasonal and perennial flowers and is currently protected by deer netting (fig. 3.41).<sup>5</sup>

The south court's pavement, which extends to the south of the covered area, features 2-inch-wide wooden strips laid in a grid and infilled with dry-set brick; several squares within the grid are unpaved. One unpaved square is landscaped with mondo grass; another holds a small Japanese black pine. Sawn whiskey barrels and unglazed terracotta pots in various dimensions hold potted trees and plants.

A sculpture of three charred pier pilings anchored upright on a metal base stands on the brick-paved area beyond the south court overhang (fig. 3.42). An unpaved square immediately to its north holds potted and planted foliage. A large, bench-like piece of salvaged wood sits on the pavement near the tallowwood wall.



**Figure 3.39** View of the south court off the living room, 2017. The fully glazed south wall and wide sliding door integrate indoors and outdoors. The roof overhang, one structural bay's width, along with the extension of the living room's tallowwood paneling to the exterior, heightens the sense that this is an outdoor room.



**Figure 3.40** Panel affixed above the wide, easternmost pane on the south elevation of the residence in 2016, featuring a badly faded photograph of eucalyptus trees.



**Figure 3.41** Concrete planter box that abuts the retaining wall and encloses the south end of the south court, 2017. It is planted with flowers and held a small persimmon tree that has since died.





**Figure 3.42** Sculpture of three charred pier pilings installed upright on a metal base, an early addition to the south court, 2016.



**Figure 3.43** View of the central court, four structural bays in width, 2013. It serves as a connection between the residence (*left*) and the studio (*right*). Enclosed at the rear by the concrete retaining wall, it is paved in a variety of materials and contains an array of plants and trees, both potted and planted.

### Central Court

The central court, which serves as a connection between the residence and studio, is enclosed to the rear by the concrete retaining wall (fig. 3.43). It is equivalent in length to four structural bays. The central court's pavement features 2-inch-wide wooden strips laid in a grid and infilled with a varied pattern of brick and wooden blocks. Marble pavers mark the entry to the studio. Occasional squares within the grid are unpaved and landscaped. Near the center of the court, a larger unpaved area is planted with mondo grass and holds a pine tree. Unglazed terracotta pots planted with annuals and perennials are located on the edges of the central court's paved areas. Sawn whiskey barrels serve as planters for larger plants, including a rubber tree, kentia palm, and yew pine. The building facades facing the court are far less transparent than the primary facades.

**Figure 3.44** View of the north court, connecting the studio (*left*) to the carport (*right*), 2017. The court holds a variety of potted plants, rocks, and tree stumps on a bed of small river rock. The carport is a canvas awning anchored to the north return of the retaining wall.

### North Court and Carport

At the north end of the studio, the sliding glass door opens onto a small court (fig. 3.44). A grid of wooden strips (many now missing) infilled with dry-laid brick forms a narrow, L-shaped paved area that extends along the north elevation of the studio and retaining wall. The area north along the retaining wall houses a service yard, which is hidden from view by a cobalt blue, dry-laid concrete block wall.

North of the blue wall, the carport consists of a canvas awning on a metal framework anchored to and enclosed by the return at the end of the retaining wall. The carport is paved in asphalt.

The ground between the north court's brick-paved area and the carport, extending from the blue wall to the row of eucalyptus trees, is covered in small river rock, forming a pathway between the carport and the building complex. Immediately in front of the blue wall, numerous unglazed terracotta pots and wooden planters hold a variety of plants, some sitting directly on the ground, others on tree stumps. This area is accented with larger stones.







### 3.4 Contents and Collections

The interiors of the residence, with their rich and varied contents, are remarkably intact. This section describes the collections in general and highlights a few key pieces. It is not an inventory. The contents and arrangement of the studio interiors, as discussed below, do not reflect the era of Charles and Ray Eames's occupation of the site. The space has been adaptively reused as the Eames Foundation's offices.

#### ➤ 3.4.1 Residence Contents and Collections

The contents and collections of the residence comprise a diverse array of objects, both natural and human-made, that were collected or created by the Eameses. Ray and Charles displayed objects in carefully composed arrangements, frequently setting them in unexpected juxtapositions. The arrangements of objects in the living room, kitchen, and entrance hall (areas readily visible to current visitors) have been maintained much as they were at the time of Ray's death in 1988 (figs. 3.45a and 3.45b). The arrangement of objects in the upstairs rooms is more dynamic, although many objects here also remain in their original locations. Upstairs is off-limits to most visitors, so these spaces are used for storage, the placement of environmental monitoring equipment, and other temporary, ad hoc purposes. These uses sometimes necessitate the temporary relocation of original objects or introduction of new objects.

The collections comprise furniture, artwork, and craft and found objects, such as paintings, toys, models, dolls, ceramics, books, shells and stones, and folk artifacts from diverse cultures. Also included are important original Eames furniture prototypes—the living room bookshelves and the alcove's table and built-in sofa—as well as objects custom crafted to meet specific needs of the space, such as the living room ladder and rolling planter (fig. 3.46). The collections also



**Figure 3.45a** View of the living room alcove, showing the rich array of materials in the Eameses' collections, 2013. Few surfaces are unadorned, and arrangements are as they were during Ray and Charles's lifetimes.

**Figure 3.45b** Detail of an assemblage of objects on the right-hand corner of the alcove's coffee table in 2016, consisting of folk objects, a seashell, glassware, and sprigs of greenery.





**Figure 3.46** View of the living room from the second-floor bedroom overhang, 2013. Many notable items in the collection are visible, including prototypes and furnishings constructed specifically for the space, such as the bookshelf and ladder (*right*) and the rolling metal planter (*left*). Draperies on the south and east walls have since been rehung.

**Figure 3.47** An early ESU (seen from the studio balcony) in 2016, one of the few original furnishings that remain in the studio.



feature a number of Eames production items.

Many items were acquired by Ray and Charles on their travels; they also collected objects that they believed demonstrated good design principles. Other objects were gifts from family and important professional and personal friends and acquaintances, such as the painted wood sculpture given to them by Alexander Girard.

The collections also include personal effects, clothing, ephemera, and household textiles, which are not openly displayed. Kitchen shelves and cupboards are filled with dishes and glassware.

### ➤ 3.4.2 South Court Collections

Two important components of the collections are sited on the south court: the photographic panel of eucalyptus trees (see fig. 3.40) and the pier pilings sculpture (see fig. 3.42).

### ➤ 3.4.3 Studio Contents and Collections

The studio, which now serves as the Eames Foundation's offices, is furnished with Eames-designed and other appropriate furnishings that best meet the Foundation's working needs, but they are not original to the space. Some original or early objects remain in situ, including the ESU on the balcony (fig. 3.47), the photographic panel on the fascia board of the balcony, and a hanging shelf that displays set pieces from Charles and Ray's film *Toccata for Toy Trains*. Other important Eames-designed objects, such as the musical tower, were moved here from 901 Washington and have found a compatible home in the space.





**Figure 3.48a** View from the parking area in 2013 toward the ocean during the wet season, when the meadow is green with grass. The building complex is at right.



**Figure 3.48b** View from the parking area in 2016 toward the ocean during a period of drought, when the meadow grasses have died back due to lack of rainfall.

## 3.5 Landscape

### ➤ 3.5.1 Summary of Elements and Components

The Eames House landscape is an essential element of the site. Natural and human-made elements and components include:

- the meadow, eucalyptus row, upper slope, and ocean views, which greatly influenced the final design and construction of the building complex;
- the earthen berm, which serves as a human-made barrier between the Eames House and the adjacent site; and
- the driveway and various pathways, which are functional—defining circulation around the site—as well as visual components.

### ➤ 3.5.2 Meadow and Bluff

A long, shared right-of-way easement leads from Chautauqua Boulevard to the Eames House site and its driveway, terminating in a small, paved parking area. Immediately south, a gently sloping meadow ringed by eucalyptus and other trees opens to a view of the Pacific Ocean. During the wet season, when seed has been planted, the meadow is grassy, with scattered weeds and wildflowers, and dies back during the dry season (figs. 3.48a and 3.48b). Occasional trees and other plantings





**Figure 3.49** The row of mature eucalyptus in front of the building complex, 2016. The Eameses situated the complex between these preexisting trees and the hillside.

in and around the meadow include, but are not limited to, eucalyptus, acacias, an aged peppercorn tree, an olive tree, an Aleppo pine, and a pampas grass clump. A simple wood-and-rope swing hangs from a eucalyptus tree. Three interpretation panels and a weather monitoring station are located in the southeast portion of the meadow. There is a steep, inaccessible bluff at the edge of the site, which descends to the mouth of Santa Monica Canyon and Pacific Coast Highway below.

Key views from the meadow include that of the southeast elevations of the residence and studio, and out to the ocean.

**Figure 3.50** Northernmost section of understory, 2016. The gently sloping ground under the eucalyptus row is most intensively landscaped at the north end of the building complex.

**Figure 3.51** Northern section of understory, 2016. The steps from the meadow to the wooden walkway at the studio's east elevation mark the end of the most intensively landscaped section of understory.

### ➤ 3.5.3 Eucalyptus Trees and the Eucalyptus Row

An arborist's study of the site, conducted in the fall of 2014, inventoried 212 eucalyptus trees with trunks 4 inches or greater in diameter (Carlberg Associates forthcoming). Most significant of these is a row of mature eucalyptus originally planted in the 1880s, which defined the location of the building complex. They form a screen in front of the building complex, which is nestled between them and the slope of the hillside behind (fig. 3.49). Sunlight filters through the trees, casting patterns of light and shadow on the interiors and reflections on the external walls.

At the northernmost end of the row, the gently sloping ground under the eucalyptus trees is landscaped with a variety of plants and stones (figs. 3.50 and 3.51). The understory beneath the







3.52



3.53

central section, between the two flights of steps leading from the meadow to the building complex (see section 3.5.6), is planted in an assortment of groundcovers (fig. 3.52). At the southern end of the row, the ground is planted in fescue grass, currently worn bare (fig. 3.53).

### ➤ 3.5.4 Upper Slope

On the western portion of the site, to the rear of the building complex, a steep slope rises to Corona del Mar, where the property is edged by a plumbago hedge that covers a chain-link fence. The retaining wall of the building complex is built into the base of this slope. The slope is covered by numerous trees, primarily eucalyptus, with diverse undergrowth and clumps of jade and plumbago (fig. 3.54). The area is irrigated by an automatic sprinkler system with spray heads. Mid-slope erosion above the south court/planter box area has been stabilized with bamboo and railroad ties.

**Figure 3.52** Central section of understory in 2016, between the two sets of steps leading from the meadow to the building complex. This section is landscaped in a variety of plants.

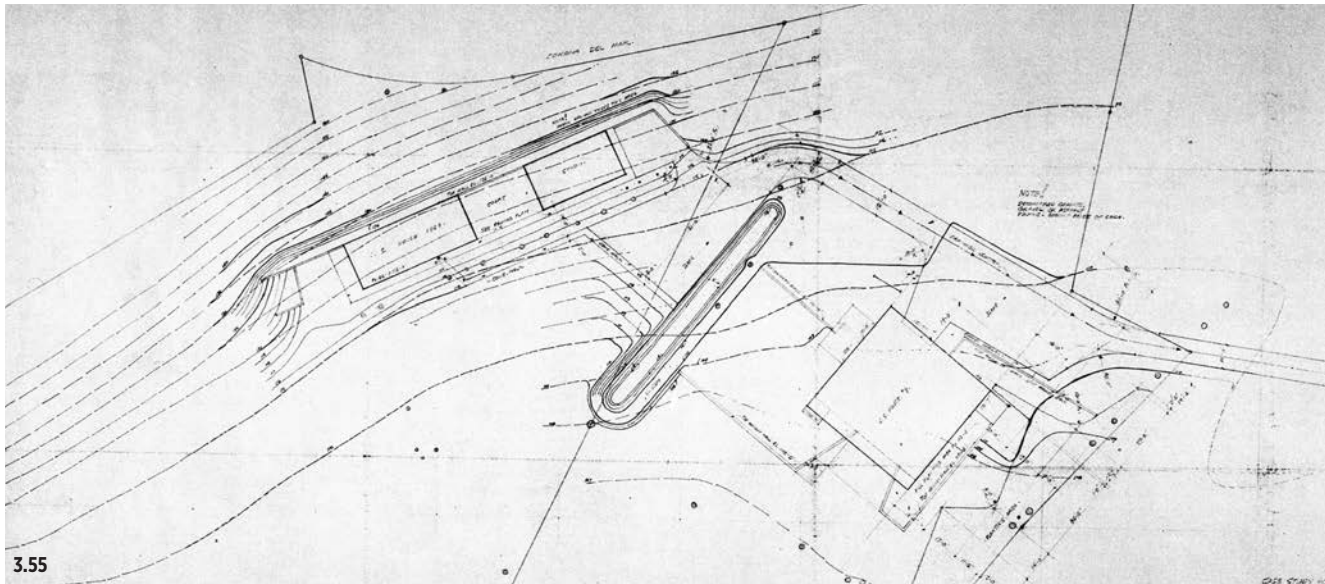
**Figure 3.53** Southern section of understory in 2017, planted in fescue grass, worn bare following a prolonged period of drought.

**Figure 3.54** View of the upper slope, 2016. The western portion of the site rises steeply to the roadway above. The slope is covered primarily in eucalyptus and diverse groundcover. The building complex, visible at lower right, is built into the slope.



3.54





**Figure 3.55** Original 1949 site and grading plan for the Eames and Entenza Houses. The elongated oval shape between the two buildings is the earthen berm. It is not known whether this grading plan was carried out precisely.

### ➤ 3.5.5 Earthen Berm

A low earthen berm separates the Eames House site from the adjacent Entenza House site (Case Study House No. 9) (fig. 3.55). Built of earth excavated from the upper slope during construction of the retaining wall, the berm is now heavily planted in cape honeysuckle and plumbago, which form a privacy hedge. Eucalyptus and pittosporum trees in the vicinity may in fact be planted on the berm itself. Plantings are overgrown, and the extent to which the earthen berm survives is unknown (figs. 3.56a and 3.56b).

### ➤ 3.5.6 Driveway, Pathways, and Site Circulation

#### Wooden Walkway

A wooden walkway constructed of milled lumber planks (8 inches wide by 40 inches long by 4 inches deep) is set between the eucalyptus row and the east side of the building complex. This linear element visually links the residence and studio with the three courtyards while providing an exterior walking surface between them. It serves as a view corridor between the building complex, the row of eucalyptus, and the site beyond. The roughly 18-inch border between the edge of the walkway and the east side of the building complex is covered in river rock. This serves as a bed for potted plants (fig. 3.57).

#### Driveway and Lower Pathways

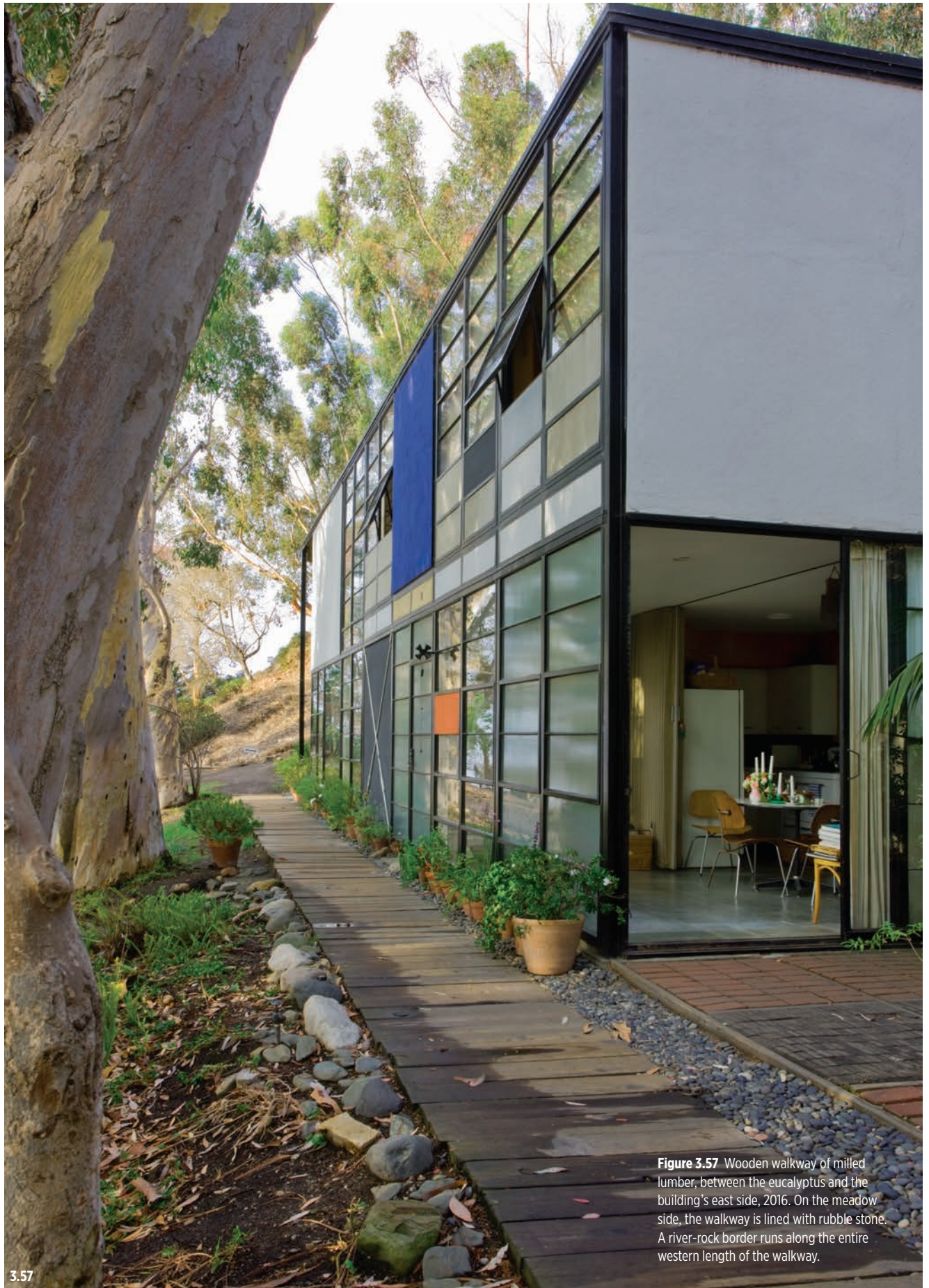
The driveway and several pathways indicate the approach to the building complex and facilitate circulation around it. The driveway is paved in asphalt and leads to a wedge-shaped parking area

**Figure 3.56a** View of the earthen berm, as seen from the Entenza House in 1949. Built of earth excavated during construction of the building complex, the berm provided a barrier between the Eames and Entenza Houses.

**Figure 3.56b** Location of the earthen berm, as seen from the Eames House site in 2016. Planted in cape honeysuckle and plumbago, which form the privacy hedge seen at left, the berm itself is no longer visible.







3.57

**Figure 3.57** Wooden walkway of milled lumber, between the eucalyptus and the building's east side, 2016. On the meadow side, the walkway is lined with rubble stone. A river-rock border runs along the entire western length of the walkway.



**Figure 3.58** Lower pathway and steps leading to the front door, 2016. The pathway is lined in rubble stone and covered in river rock, and leads across the meadow to the front of the residence.

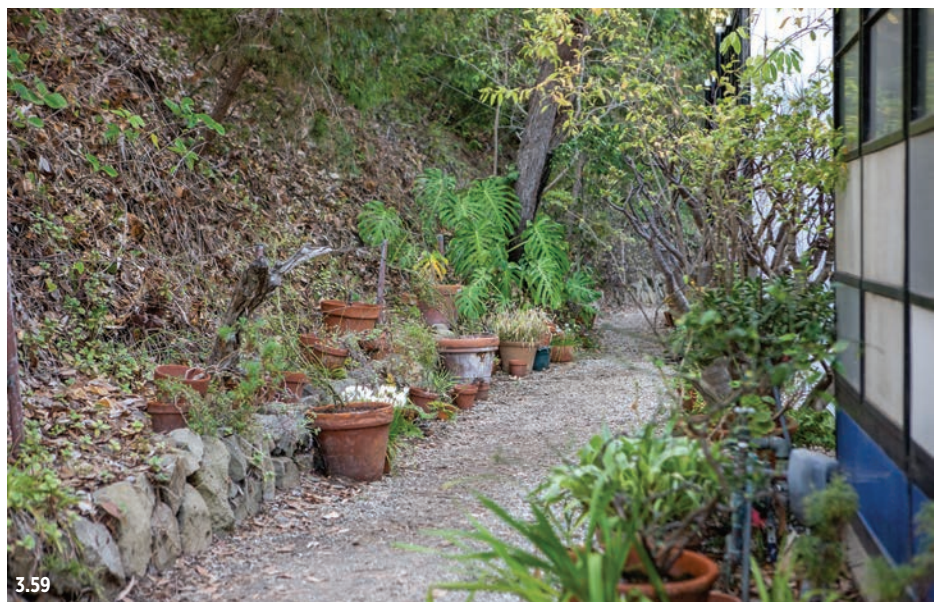


to the northeast of the studio and to the carport directly north of the studio. A pathway delineated by rubble stone and covered in compacted dirt and small river rock leads from the parking area along the top of the meadow toward the residence to a set of five informal steps. Constructed of board risers with gravel-topped treads, the steps are cut between two trees in the row of eucalyptus and lead to the wooden walkway in front of the residence's main entrance (fig. 3.58). Four similar steps lead from the parking area to the walkway in front of the studio's eastern facade (see fig. 3.51). A second pathway, also covered in river rock, leads from the carport to the studio's sliding glass door.

**Upper Pathway**

Above the retaining wall at the rear of the building complex, the upper pathway is covered in pebbles and compacted dirt and gravel and is edged on the upper-slope side by a low rubble-stone wall (fig. 3.59). A metal-pipe and wire-cable railing rises from the rubble-stone wall along the central section of the pathway. Potted plants intermittently line both sides of the path. The upper path is accessed from below via informal earthen stairs with stone steps at each end of the retaining wall. Another informal path, accessed from the carport by a set of four steps with rough wooden risers, branches off from the north end of the upper pathway and leads toward Case Study House No. 20, next door.

**Figure 3.59** Upper pathway of pebbles and compacted dirt and gravel in 2016, providing access to the rear of the building complex and upper slope.





## 3.6 Conclusions

Site investigations and documentary research revealed a richly layered record in the physical fabric of the Eames House. The site retains much of its original or early character, and internal and external elements, detailing, and fabric are highly intact. Close integration of the building complex with its contents and collections and its landscape setting is also notable, reflecting a high degree of integration of design intent and use.

At the same time, site investigations found the physical condition of some elements, components, and fabric to be poor and/or vulnerable to agents of deterioration or damage, ranging from water and sunlight exposure to earthquake and fire damage. These are discussed in section 6.9. ■

### Notes

- <sup>1</sup> Original architectural drawings are held in the Library of Congress Work of Charles and Ray Eames collection. Facsimiles can be accessed at the Getty Research Institute, Charles Eames Architecture and Furniture Designs, 1940–1978, vols. 1 and 2.
- <sup>2</sup> These dimensions have been rounded from field measurements. See sheets 4 and 5 of the HABS drawings for specific measurements (Historic American Buildings Survey 2013).
- <sup>3</sup> Republic Steel is identified as the manufacturer of steel components in *Arts and Architecture* (1949c, 30). Truscon was a subsidiary of Republic Steel.
- <sup>4</sup> A photo by *Life* photographer Peter Stackpole, taken in August 1950, shows Charles standing on the mezzanine above the mural.
- <sup>5</sup> During the current drought, deer in search of food have become a threat to the site's foliage. The Eames Foundation intends the netting as a temporary solution.







## CHAPTER 4

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# Comparative Assessment

The comparative assessment in this chapter provides a context to help demonstrate, explain, and justify the significance of the Eames House. It endeavors to identify and analyze the rarity or representativeness of the site by comparing it to similar sites and places. This comparative assessment supports the significance assessment in chapter 5.

### 4.1 The Eames House in the Context of Postwar Modern Domestic Architecture

The Eames House is among the most highly regarded examples of postwar modern architecture nationally and internationally. Published widely throughout the years, the House has inspired and shaped the work of generations of architects. It has been especially influential in the development of domestic architecture, which will be the focus of this analysis.

The Eames House exemplifies many of the architectural ideas of the postwar period. It seamlessly integrates indoor and outdoor spaces through its use of glass walls and sliding glass doors. This integration is further achieved through the open central courtyard, which functions as both a circulation space and an outdoor room, and through the south court, which serves as a second outdoor room. The soaring, light-filled spaces of the living room and studio foster an engagement with the landscape from the interior of the House. The use of movable partitions and open floor plans creates flexible spaces. The structures' steel framework is honestly revealed and displays the innovative use of prefabricated and industrial materials.

In the years immediately following its construction, the Eames House was widely published in the architectural press to great acclaim both nationally and internationally. The House was included in the Museum of Modern Art's 1953 exhibition, *Built in USA: Post-war Architecture*, which featured forty-three buildings designed by some of the twentieth century's most significant architects. The exhibit was curated by architectural historian Henry-Russell Hitchcock, who used "quality and significance of the moment" as his criteria (Hitchcock and Drexler 1952, 9). Of the nineteen single-family homes included, the Eames House, along with Philip Johnson's Glass House (1945–49) and Ludwig Mies van der Rohe's Farnsworth House (1945–51), achieved the greatest lasting international recognition and acclaim.<sup>1</sup> Today all three are house museums.

The Eames House is quite unlike its International Style steel-and-glass contemporaries, such as the elegant, sparsely furnished glass boxes designed by Mies and Johnson. Both the Farnsworth and Glass Houses use steel framing to maximize the amount of glass, allowing for the greatest possible transparency and minimal enclosure; in these two houses, it appears that the choice of materials was secondary to these larger architectural ideas (figs. 4.1 and 4.2). In contrast, the Eames House is very much defined by its materials and the way they are combined. It achieves a level of great transparency in a very different way, taking into account texture, pattern, and color.



**Figure 4.1** Philip Johnson, Glass House, New Canaan, Connecticut (1949), photographed in 2014. Spatially simple and sparsely furnished, the Glass House maximizes the concept of transparency.

**Figure 4.2** Ludwig Mies van der Rohe, Farnsworth House, Plano, Illinois (1951), photographed in 2013. Despite its transparency, the Farnsworth House has few actual openings to the outdoors. Its material and color palette is very limited.

For all their transparency, though, the Glass and Farnsworth Houses are glass boxes that have few actual openings to the outdoors. This is quite the opposite of the Eames House, where indoor and outdoor spaces are highly integrated. Sliding glass doors open onto courtyards, which act as outdoor rooms, and operating windows on all sides of the buildings allow for the free flow of air.

These three houses also demonstrate two different approaches to the organization of interior space. Johnson's and Mies's structures use minimal interior divisions and rely primarily on furnishings to create distinct zones. In comparison, the Eames House interior is more spatially complex. Fixed walls and doors define rooms, while movable partitions facilitate flexibility, providing greater openness or enclosure as desired. The double-height spaces in the living room and studio, with their overlooking balconies, produce interlocking spatial volumes that, when combined with the sliding walls and partitions, create a far more layered and changeable interior space than the universal space achieved in both the Farnsworth and Glass Houses.

There are also significant differences in the nature of the interior finishes and furnishings. The Eameses embraced and celebrated the use of new and experimental prefabricated and industrial materials—such as Plyon, plywood, and Cemesto, and exposed steel trusses and metal roof





decking instead of a finished ceiling over most of the buildings—showcasing their utility and beauty in residential design. Mies and Johnson used traditional finishing materials, including brick, luxurious woods, and travertine.

Unlike the Johnson and Farnsworth Houses, the Eames House was an experiment in the use of prefabricated building materials. In the immediate postwar years, the profound need for new housing spawned a proliferation of experiments in prefabricated housing design in the United States and abroad. Some projects, such as the Levittown communities in New York and elsewhere, used precut lumber, prefabricated window units, and assembly-line construction techniques to build large numbers of traditional houses quickly. Others were far more experimental in their design vocabulary and use of materials, though these rarely made it into mass production. In France, for example, Jean Prouvé designed a small number of prototypical houses and buildings, including *Maison Tropicale* (1949–51) and a small subdivision of modest homes in the Paris suburb of Meudon (1949). His work emphasized the development of practical, affordable solutions rather than architectural and design theories. Constructed of prefabricated steel and aluminum components that were manufactured in his own workshop, none were put into mass production. His final architectural project was his own house, in Nancy (1954), which employed a number of experimental building technologies and materials, most salvaged from projects aborted when he lost control of his factory (fig. 4.3). A long, low structure set into a hillside, the light and airy house clearly demonstrates Prouvé's ingenious use of materials. Likewise, the Eames House was innovative in its use of industrialized construction materials, but rather than custom manufactured parts, these were largely off the shelf. While it was not designed as a prototype for mass production housing, the Eames House clearly demonstrated the potential utility of prefabricated, industrial components in residential construction.

The Eames House has exerted an enormous influence on subsequent generations of architects and designers, particularly those from Great Britain (Banham 2001, 205). It played a significant role in the development of the High-Tech style in the 1970s, which is epitomized by the use of metal and glass; emphasizes industrial production, prefabrication, and technology; and prioritizes visibility of structure and flexibility of use.

The House has clearly served as a direct inspiration for many residential designs, including Peter de Bretteville's *Willow Glen Houses* (1973–75) in Los Angeles and Michael and Patty Hopkins's own house (1976) in Hampstead, London.<sup>2</sup> The Hopkinses, who are associated with the High-Tech style, have acknowledged the Eameses' influence on the design of their house, which combines residential and studio space in one structure (Pawley 1985, 56; Hopkins 2014; Davies 2006, 174–75). Like the Eames House, it is a two-story steel-framed glass box organized on a grid. Its roof and side walls are composed of steel decking, while its front and rear facades are clad entirely in clear glass; all interior and exterior structural elements are exposed (fig. 4.4). The Hopkins House was built without any fixed interior partitions, save two freestanding bathroom pods. Venetian blinds served as flexible space dividers and provided privacy from the street. The Hopkinses later added partitions to create three bedrooms (Bradbury and Powers 2009, 222; Hopkins Architects 2014). Their house carries the concepts of architectural

**Figure 4.3** Jean Prouvé, *Maison Prouvé*, Nancy, France (1954), photo undated. Prouvé's house is constructed of prefabricated materials manufactured in his own workshop.

**Figure 4.4** Michael and Patty Hopkins, *Hopkins House*, Hampstead, London (1976), photographed in 2016. The Hopkins House is a steel-and-glass box constructed of prefabricated materials. This view of its garden elevation reflects its kinship with the Eames House.

**Figure 4.5** Renzo Piano and Richard Rogers, Centre Pompidou, Paris (1971–77), photographed in 2013. The Pompidou is an icon of the High-Tech movement, which owes much of its inspiration to the Eames House.



transparency and spatial flexibility, as demonstrated by the Eames House, to their farthest reaches. The Hopkins House is built solely of steel and glass. Where its simple structural grid and minimal detailing confer a strict order to the structure, the Eameses created a lively, playful composition marked by a variety of infill materials and colors.

Norman Foster, Richard Rogers, and other architects associated with High-Tech have noted the Eames House's influence on their work, and the case can be made that this extends beyond the domestic scale to large public buildings such as the Centre Pompidou in Paris (fig. 4.5). With its flexible plan, exposed structure, and exuberant use of color, as well as its function as a container for a wide array of art objects, the Pompidou can be seen as a direct descendant of the Eames House. See section 2.8.2 for additional discussion.

#### ➤ 4.1.1 The Eames House in Relation to *Arts and Architecture Magazine's* Case Study House Program

*Arts and Architecture* magazine's Case Study House Program is one of the most influential programs in the design and construction of innovative modern housing ever carried out in the United States. Between 1945 and 1966, plans for thirty-four single-family homes were published in the magazine's pages, twenty-four of which were constructed.<sup>3</sup> The Case Study House Program commissioned architects, primarily from Southern California, to create relatively modest, well-designed housing solutions for postwar American families using new and innovative building materials and techniques. In doing so, it produced some of the most notable works of American postwar residential architecture. The Case Study Houses were widely publicized, and the Eames House (Case Study House No. 8) is perhaps the most celebrated, both nationally and internationally.

Of the twenty-four single-family houses constructed under the program, two are known to have been demolished and three are known to have been altered significantly.<sup>4</sup> The Eames House is the only Case Study House listed as a National Historic Landmark, the highest designation available to a property in the United States. In 2013, ten additional Case Study Houses were officially recognized for their national significance when they were entered on the National Register of Historic Places under a multiple property nomination (Moruzzi and National Park Service 2013).<sup>5</sup>

Of the extant Case Study Houses, the Eames House is particularly significant for a number of reasons. It is the most intact in terms of physical fabric, setting, and interior contents. Of the four Case Study Houses located in John Entenza's Pacific Palisades subdivision, it is the only one that has not sustained significant modifications to the structure and/or setting.<sup>6</sup> Designed in tandem with the Entenza House, it was the first of the steel-and-glass Case Study Houses to be completed, leading the way for subsequent designs by Craig Ellwood and Pierre Koenig, which would come to epitomize the Case Study style. The Eames House stands out as the only Case Study House that was designed by and for its occupants, and





the House has enjoyed exceptional consistency of ownership and stewardship.

The two most recognized houses designed under the program, the Eames House (No. 8) and the Stahl House (1959) (No. 22) by Pierre Koenig (fig. 4.6), offer the closest comparison. Both are constructed of steel and glass. They have been widely published internationally and are instantly recognizable based on the work of architectural photographer Julius Shulman and others. The significance of each has been acknowledged through historic designation.<sup>7</sup>

Both houses have enjoyed remarkable continuity of ownership. Although the original owners are no longer living, the houses remain in the control of the original families. In both cases, the families recognize the significance of the site and are committed to preserving it for the future. The Stahl House is still privately owned by the Stahl family. Since 2004, the Eames House has been owned by a nonprofit foundation that is presently operated by the five Eames grandchildren. Neither house currently functions as a full-time residence. Each is open to the public by appointment for the purpose of sharing the site and raising revenue for its preservation. Both properties are available for special functions and photo shoots. In practice, such events take place at the Eames House on a very limited basis due to the vulnerabilities of the collections and site. The Stahl House is much more actively used for events, commercial photography, and film and photo shoots.

Although their settings are a study in contrasts—the Stahl House, perched on the edge of the Hollywood Hills with stunning views of the city below, and the Eames House, nestled into a hillside and shielded by a row of eucalyptus trees with a view across the meadow to the ocean beyond—both houses maintain a high degree of integrity of setting. While the Stahl House maintains a high degree of material integrity, the degree of integrity of the Eames House is exceptional. Alterations at the Stahl House include a sympathetic kitchen remodel, refacing of the chimney with rustic stone to match the hearth, addition of a wooden walkway along the side of the house for safety purposes, and modifications to the swimming pool and deck. The Eames House has sustained very few alterations beyond routine repair and maintenance, which has included limited replacement of damaged original fabric, such as the living room floor tiles. The Stahl House is filled with iconic modern furnishings that make a strong design statement

**Figure 4.6** Pierre Koenig, Stahl House, Los Angeles (1959), photographed in 2012. The Stahl House is one of the most widely recognized of the Case Study Houses.



**Figure 4.7** The Stahl House living room, 2013. The house retains a high degree of integrity despite alterations such as the refacing of the chimney with rustic stone. Its furnishings make a strong design statement but, unlike the Eames residence, are not original to the house.

but are not original to the house (fig. 4.7). In contrast, the Eames residence's contents and collections are largely intact. It appears today much as it did in Julius Shulman's iconic 1958 photograph. The furnishings and objects collected by Ray and Charles Eames remain in situ, allowing visitors to see how the building's designers inhabited the space.

#### ➤ 4.1.2 The Eames House as a Work of Architecture by Charles and Ray Eames

Over the long span of their working lives, Charles and Ray Eames designed and built very few buildings. Beginning in 1945, the Eameses produced five built architectural projects: Case Study House No. 8 (by Charles and Ray Eames) and Case Study House No. 9 (by Charles Eames and Eero Saarinen for John Entenza), both 1945, the Herman Miller showroom (1949), the Max and Esther De Pree House (1954), and a miniature railway station for Griffith Park (1957, demolished). This analysis focuses on their four extant works. They also designed a number of unbuilt projects, which are detailed in appendix B. Charles trained as an architect and practiced in St. Louis, Missouri, during the 1930s, prior to meeting Ray. Charles's early architectural career is also covered in appendix B.

In terms of construction materials and setting, the Eames House was designed as a sibling to Case Study House No. 9, but where it boldly reveals its prefabricated steel structural elements, the Entenza House conceals them beneath a layer of steel decking, concrete, plaster, and wood. The Entenza residence is essentially a 42-by-42-foot box, with open and flexible interior spaces and a windowless study at its core. On three sides, there is a sense of enclosure and privacy, but the entire south wall is of steel-framed glass, which originally opened the house to the meadow and views of the ocean in the distance. In the mid-1990s, a 6,500-square-foot building, known as the Terner House, was added to the property (fig. 4.8). It is connected by a windowed gallery to Case Study House No. 9, which was renovated into a guesthouse. While the original house has been sympathetically restored, the large addition compromises the property's ability to convey its original context and setting. By contrast, the Eames House and its immediate setting remain largely unaltered.

There is a marked affinity between the Eames House and the Herman Miller showroom (1949) in what is now West Hollywood, California. Both are simple rectangular forms. The show-





4.8



4.9

room's primary facade was constructed of the same Truscon Steel Company framing material as that used on the House; steel sashes were infilled with clear, translucent, and patterned glass, as well as opaque decorative panels. The remaining exterior walls of the showroom, however, were of exposed brick. Similar to the House, the showroom was arranged on a modular grid. The interior was designed for maximum flexibility, with metal inserts in the ceiling and floors where movable partitions could be fixed, creating infinite possibilities for arranging displays.

The Herman Miller showroom building is extant, but it has sustained some exterior alterations (fig. 4.9; compare fig. 2.51). At least one section of steel sash window framing has been altered, reducing the number of lights; the original opaque panels have been replaced with glazing, all of which is clear glass; and the fair-faced brick has been painted and in some places plastered. The interior, designed as a flexible space, has been configured to meet the current tenant's needs. Despite these alterations, its original design is immediately recognizable.

As with the Herman Miller showroom, there is a clear kinship between the Eames House and the Max and Esther De Pree House (1954) in Zeeland, Michigan, though the latter is constructed of wood in deference to local building traditions, the client's wishes, and the Michigan climate (fig. 4.10). The main facade of the rectangular, two-story, flat-roofed structure is organized as a modular grid in a manner similar to that of the Eames House and the Herman Miller showroom, but much of the infill is wood panel rather than glazing. The sides of the house are windowless, and the rear elevation features large windows overlooking a wooded area. Although it is in the spirit of the Eameses' California work, the De Pree House does not share the same sense of transparency.

The original design was a 2,000-square-foot structure, with modular, open interiors. Plans were also developed for future additions to the house, which allowed it to be expanded in a manner complementary to the original design. The De Prees lived in the house until 1975. In 2010, the Herman Miller Company purchased the house with the intent of restoring and preserving it (Michigan Modern 2016). The current condition of the house has not been determined. It was listed on the National Register of Historic Places in 2017.

Of this handful of built projects, the Eames House is the most personal, innovative, widely publicized, and critically acclaimed; it is also the least altered of their extant buildings. The Eameses' reputations as architects are based on this, their most iconic and influential work of architecture.

**Figure 4.8** The Entenza House (*left*) and the Terner House, Pacific Palisades, photographed in 2010. The Terner residence, designed by Barry Berkus, was added to the Entenza House property in 1997. The Entenza House now serves as guest quarters.

**Figure 4.9** Charles and Ray Eames, Herman Miller showroom, in what is now West Hollywood, California (1949), photographed in 2017. The showroom used the same Truscon steel sash as the Eames House. Although it has sustained some alterations (compare to fig. 2.51), the original design is still readily recognizable.

**Figure 4.10** Charles and Ray Eames, Max and Esther De Pree House, Zeeland, Michigan (1954), photographed in 2011. Despite the use of wood rather than steel in its construction, the De Pree residence bears a direct kinship with the Eames House.



4.10

## 4.2 The Eames House in Comparison to Other Architects' Own Homes

As the home that Ray and Charles Eames designed for themselves, the Eames House is one of countless architects' own homes worldwide. Architects frequently use the homes that they design for themselves as creative laboratories. Unencumbered by a client's needs and requirements, the architect can experiment freely with materials, design, and the organization of space, testing new ideas that may ultimately come to characterize his or her practice. The end result is often an important artistic statement, a kind of built manifesto of the architect's approach to design. The comparative examples discussed below are, like the Eames House, architects' homes that are no longer in residential use and are now open for public visitation. The overall focus here is on characteristics and qualities that may distinguish the Eames House from other architects' homes, including its function as a creative incubator; the integrity of the structures, collections, and setting; the use of the home as a teaching tool; and the effect of continued family involvement on the spirit of place.

### ► 4.2.1 The Architects' Home as a Creative Incubator

The Eames House was a creative incubator, as was each of the houses discussed in this section. It exhibits many of the hallmarks of the Eameses' work generally and the House with its contents epitomizes their iterative design process. Using a limited range of primarily mass-produced materials, Charles and Ray produced a complex, compelling design that functioned well and met their needs for the duration of their lives.

The Eames House was the collaboration of a married couple who were also professional partners. It was conceived not just as a home but as the place where their professional and personal lives intersected and merged. The home studio was a space where they created films, tested new ideas, and developed designs away from the pressures of the Eames Office. While the interior contents and the uses of the studio evolved during the period that Ray and Charles inhabited the site, the structures themselves experienced minimal alterations beyond routine maintenance. Instead, the Eames House served as the inspirational container for the creation of other work.

Other architects' homes that demonstrate some similarities to the Eameses' approach include Alvar Aalto's house in Helsinki, Finland (1936), and Walter Gropius's house in Lincoln, Massachusetts (1938). Once completed, both homes served their inhabitants well and neither was the subject of continual experimentation or extensive modification. Like the Eameses, the Aaltos were a creative couple and their partnership was both personal and professional. Aino Aalto was an architect and designer of furniture and household objects, as was her husband, and together

they founded the Artek firm, which sold their furniture and lighting designs. Though Alvar Aalto is generally credited as the architect of the house, it was undoubtedly a joint effort and combined a family home and office in a single structure. On the exterior, the facade articulates the building's dual purpose. On the interior, the double-height studio is separated from the living room by a large wooden sliding panel (fig. 4.11). Built early in Aalto's career, the structure incorporated a number of elements, such as dark-stained wooden battens, that would come to characterize his architecture. By the 1950s, the Aalto practice had outgrown the space and a new office was built on a nearby site. Thereafter, Alvar and his second wife, Elissa, who also was an architect and designer, used the home office as their private studio. The Aaltos made minor alterations over the years, primarily related to modernization and comfort

**Figure 4.11** Alvar Aalto, Aalto House, Helsinki (1936), photographed in 2003. The Aalto House combined residence and studio in one structure. The studio can be seen at the rear of the photo, beyond the sliding wall panel that separates it from the living room in the foreground.



4.11



rather than major structural changes or additions; even the changes that Elissa made to the interior textiles and furnishings preserved the home's original atmosphere (Suominen-Kokkonen 2007, 138–43; Suominen-Kokkonen 2003, 36–37).

Like the Eames and Aalto Houses, the Gropius House in Massachusetts was also an expression of the architect's fundamental design principles. In this case, Walter Gropius adapted Bauhaus ideals to New England's climate and building traditions while incorporating as many innovative and standardized materials as possible. Rather than a large studio space, he included a more intimate study. This room was designed

around a double desk constructed in the Bauhaus workshop, where Walter and his wife, Ise, who handled much of her husband's correspondence, worked side by side. Like the Eameses and Aaltos, the Gropiuses made only minor changes to the house during their lifetimes.

In contrast, many architects' homes serve as ongoing testing grounds for new ideas, as modifications are made in response to evolving needs and lifestyles. Examples include the Frank Lloyd Wright Home and Studio in Oak Park, Illinois; Patrick Gwynne's Homewood, outside London; and Sir John Soane's Museum in London. The Frank Lloyd Wright home, his earliest domestic design, was a modest abode for his young family. The original structure, completed in 1889, was Wright's interpretation of the Shingle style, though he was already experimenting with some of the design concepts and features that would come to epitomize the Prairie style. In the ensuing years, Wright remodeled and expanded the house to meet the needs of his growing family and architectural practice, including the addition of the studio wing in 1898. In the process, he tested new design elements and construction methods. Wright made significant modifications to the structure after he left his family in 1909, transforming the house into a rental unit and the studio into a residence for his wife and children.

The Homewood was designed by Patrick Gwynne for himself, his sister, and their parents. Completed in 1938, it was one of the largest interwar Modern Movement houses in Britain; it is furnished with Gwynne's own creations and is set in a ten-acre woodland garden that he also designed. With the exception of a few years during World War II, Gwynne lived in the house for the rest of his life. As his needs and tastes changed over time, Gwynne, who relished experimenting with new and innovative materials and techniques, updated and altered the house's layout, fabric and finishes, and furnishings.

An extreme example of the continually evolving architects' home is the house and museum that John Soane designed for himself. Between 1792 and 1824, he purchased, demolished, and rebuilt three contiguous terrace houses, which he remodeled and expanded into a unified structure. Not only did this serve as his family's home, his office, and a showcase and laboratory for his architectural ideas, Soane also conceived and designed the complex as a museum for his extensive and ever-growing collections of artwork and architectural artifacts. Soane realized his creative vision through the structure's ongoing evolution as well as the constant acquisition of artifacts and rearrangement of his collections in idiosyncratic juxtapositions.

Alvar Aalto took a very different approach with his Muuratsalo Experimental House (1952–53). He conceived this modest lakeside residence as a space to test new building forms, materials, and construction techniques, and he experimented continuously there (Alvar Aalto Foundation 2016) (fig. 4.12). In this way, it was quite different from the Eames House. The Muuratsalo structure itself was the subject of ongoing experimentation, whereas the Eames House was a highly innovative building that, once constructed, was an inspirational container in which life and creative work took place.



**Figure 4.12** Alvar Aalto, Muuratsalo Experimental House, Säynätsalo, Finland (1952–53), photographed in 2014. Aalto experimented with materials and forms in the courtyard of this house.



4.13

**Figure 4.13** Ernö Goldfinger, 2 Willow Road, London (1938–39), photo undated. View of the studio, filled with its original contents, displayed much as they were when Goldfinger and wife Ursula lived and worked there.

#### ► 4.2.2 Integrity of the Place

The integrity of a heritage place encompasses a multiplicity of factors: buildings, interiors and collections, immediate landscapes, and wider settings. Because these elements are interrelated and many sites do not embody all of them, it is useful to compare the Eames House to a number of other places.

The Eames House maintains an exceptionally high degree of integrity. Today, it appears much as it did during Charles and Ray's lifetimes. The buildings themselves retain a high degree of original building fabric, including interior fittings and fixtures. While the landscape has matured, the immediate setting too is largely intact. Furnishings, artworks, artifacts, and household and personal items collected and used by the Eameses remain in the House, and the interiors of the publicly visible rooms have been maintained much as they were when they lived there. Taken together, the structures, setting, and collec-

tions convey a strong sense of the designers' intent and how they inhabited the space.

A number of other examples of architects' houses that retain a high degree of integrity can be cited, including the Gropius House and both Aalto houses, discussed above. Each of these has undergone restoration and conservation work in its transition from residence to house museum, but without the need for extensive renovation. All have intact interior collections and landscapes, which give visitors a good sense of how the Gropius and Aalto families lived in these houses.

#### **Buildings and Collections**

Another comparative example, which bears many similarities to the Eames House in terms of its contents and collections and method of display, as well as its history as the home of a creative couple, is Ernö Goldfinger's home at 2 Willow Road, Hampstead, London (1938–39) (fig. 4.13). Goldfinger, a leading figure in the British Modern Movement, was an architect, furniture designer, and writer; his wife, Ursula, was a painter and sculptor. The Goldfingers were avid and lifelong collectors of modern art, amassing an important collection that was displayed in the house. Their continuous acquisition of works transformed the interiors over the years. In an approach similar to that taken by the Eameses, modern paintings and sculptures were arranged alongside Goldfinger-designed furnishings, primitive sculptures, and everyday objects, creating a multilayered environment that contrasted starkly with the spare, modernist interior shown in photos taken of the house in the 1940s. To aid the understanding of the house as a home, the National Trust, which now owns it, preserves and displays even the most ephemeral of objects.

Sir John Soane's Museum also retains a remarkably complete interior collection, though on a scale that far exceeds the other examples discussed here. Soane established his collection of antiquities, plaster casts, architectural fragments and models, drawings, paintings, prints, books, and other artifacts as a museum designed to inspire and educate. The museum also holds Soane's furnishings and many of his domestic objects. Some of these were disposed of immediately after his death, but for the most part the collection remains intact. In the years following Soane's death, particularly in the latter part of the nineteenth century, alterations were made to the house and collections were rearranged (Pryce 2015). Over the last half-century, a rigorous effort has been made to re-create historic rooms as they appeared at the time of his death and to reinstall his original displays, based on research into the extensive documentation Soane left in his archive.

A key factor in the intactness of the Eames, Aalto, Gropius, and Goldfinger Houses and collections, as well as the Soane Museum, relates to the fact that all of them were inhabited for many years by their original designers and neither the buildings nor their contents were sold following their deaths. In the interest of preserving her husband's legacy, Ise Gropius herself arranged the donation of their house and its contents to the Society for the Preservation of New England



Antiquities. John Soane acted on his own behalf to secure the future of his collection and museum; in 1833, he negotiated an act of Parliament to preserve his house and collection in its state at the time of his death and to keep it open to the public. The Aalto and Goldfinger Houses, like the Eames House, came into nonprofit ownership through the actions of immediate descendants concerned with honoring the designers' legacy.

Patrick Gwynne took a different tack. In 1993, he offered the Homewood, its contents, and its acreage to the National Trust, with the provision that he would continue to live in it, and that after his death the house would remain inhabited and not be turned into a full-time museum, though there would be ongoing public access. Gwynne worked with the Trust, advising on the house's restoration, which drew on photos, documents, and Gwynne's own memories while reflecting his continually evolving ideas. Through the restoration, many of the years' accretions were retained, but some spaces were returned to their 1938 appearances. The unusual arrangement between the Trust and Gwynne may have resulted in a greater amount of period restoration than initially intended; however, as the Homewood's restoration architect, John Allan, noted, "At the Homewood, everything was authentic, in the sense that no matter what period it dated from, it was the product of the original designer" (Harwood 2004, 33; Bingham 2004; Croft 2004).

All of these examples stand in stark contrast to situations in which an architect's home has passed through a sequence of owners, structures have been heavily modified, and the designer's possessions have been disbursed. In these cases, any effort to restore the site, frequently a task carried out by a nonprofit foundation or a governmental agency, is likely to require significant research and curatorial decision making about reconstruction, reproduction, and interpretation.

The Frank Lloyd Wright Home and Studio is an excellent example. Wright himself repeatedly modified the building over the years, then sold the property in 1925. Over the next half-century, the house was used as a residence and underwent further alterations until 1974, when it was acquired by a nonprofit intent on restoring it as a house museum. A thirteen-year-long restoration effort was completed in 1987. The meticulously researched project took the house and studio back to 1909, the last year Wright lived and worked there, a curatorial decision that necessitated removing Wright's later alterations. New materials were utilized as necessary to achieve desired structural and aesthetic outcomes. Many missing and altered features were re-created based on historical documentation and the recollections of Wright's living children and grandchildren. Some original furnishings were returned to the property and others were re-created from historical photographs. When no information on the original was available, other period-appropriate, Wright-designed furniture was used. Visitors to the Frank Lloyd Wright Home and Studio can gain a great understanding of the architect's work and his comprehensive approach to design, but they are seeing a re-created environment that does not fully reflect how he inhabited and worked in the space.

Designer Eileen Gray's recently restored home, known as E.1027 (1929), also passed through a series of owners before being abandoned and falling into severe disrepair. Located on a remote coastal site in Roquebrune-Cap-Martin in the south of France, Gray envisioned E.1027 as a summer home for herself and her lover, Jean Badovici. (They parted ways in 1932, and she built another house for herself nearby.) An icon of early modernism, E.1027 was a deeply personal design—open, flexible, and compact, responding to the site and landscape—and a completely integrated work of architecture and place. Gray designed the house, furnishings and fittings, and landscape. The site was purchased by the town of Roquebrune-Cap-Martin and the Conservatoire du littoral in 1999, and stabilization and restoration work began in 2000. Gray's furnishings had been dispersed; some were re-created for display (fig. 4.14). The house opened for public



**Figure 4.14** Eileen Gray, E.1027, Roquebrune-Cap-Martin, France (1929), photographed in 2014. View of the main room. Original furnishings and carpets designed by Gray have been re-created for display. A mural by Le Corbusier is visible at center left.

**Figure 4.15** Walter Gropius, Gropius House, Lincoln, Massachusetts (1938), photographed in 2016. The landscape is a significant element of the house's design and is largely intact. Gropius incorporated some preexisting landscape features into his design, such as the old rubble-stone field walls seen at right.



visitation in 2015 and work is ongoing. One controversial aspect of this project was the decision to restore eight large wall murals painted by Le Corbusier in 1938 and 1939. These were originally painted at Badovici's invitation, much to Gray's dismay. While they are historically important works, Gray felt they were a violation of her design. As long as the murals remain in situ, the house cannot be considered fully restored to Gray's vision; the mural pictured in figure 4.14 has recently been covered in order to honor the original design. Yet, even if all the murals were removed and the interior furnishings fully re-created, the house would still be experienced as a reconstructed design statement rather than as a domestic space that demonstrates how Gray inhabited it.

A final example, Rudolph Schindler's home in West Hollywood, California (1922), is an important architect's home that has been divested of its interior contents and no longer conveys any sense of its former domestic use. Now operated as the MAK Center for Art and Architecture, the Schindler House has found a new life as a gallery and event space. Visitors gain a sense of the architecture and materials, along with Schindler's design and construction methods, but it is not experienced as a domestic space. The space contains a handful of furniture reproductions and is not interpreted as a residence. In short, it shows little connection to the people who made it their home. The Eames House, in contrast, clearly conveys the joy the Eameses felt for their living environment.

### **Landscape and Setting**

In the examples discussed above, the relationship between the house, its immediate setting, and the wider context is important to the design. The integration of indoor and outdoor space was a hallmark of modern residential design, and each of these buildings achieved this masterfully. As the environs have changed around many of them, those that were originally built on large parcels of land are the most likely to retain a high degree of integrity of setting.

The extended setting of the Eames House has evolved over the years into an increasingly well-to-do residential enclave of sizable homes, but the House's immediate setting and its view sheds are largely unchanged. This is in part due to its orientation on a large bluff-top site, nestled into a hillside, with views across the meadow toward the ocean. It is also a factor of the abundant trees and foliage across the site and around its perimeter. Over time, the open relationship between the Eames House and its immediate neighbors has been lost due to the construction of privacy fences and hedges, but beyond that, the changes to the immediate setting are primarily a factor of foliage maturation.

Similarly, the Gropius House, the Homewood, and the Muuratsalo Experimental House possess remarkably intact landscapes (fig. 4.15). The Gropius House and the Homewood are well integrated with designed garden landscapes, and Muuratsalo is located in a heavily wooded lakeside setting. All were constructed on large plots in sparsely built locations and retain high integrity of wider context. Both the Goldfinger and Soane residences were built as infill



within an existing streetscape, and their wider surroundings are also fairly unchanged. The Frank Lloyd Wright Home and Studio was built within a specific suburban context that remains highly intact. Indeed, the surrounding area, designated locally and nationally as the Frank Lloyd Wright Historic District, contains the single greatest concentration of Prairie-style residences anywhere, including twenty-three buildings designed or remodeled by Wright himself.

Other examples have experienced a greater change of setting. Eileen Gray's cliff-hugging E.1027 still enjoys uninhibited ocean views, but its immediate surroundings are in transition. It is part of an important historic ensemble that includes Le Corbusier's Cabanon (a one-room cabin) and holiday cottages, as well as the bar-restaurant L'Etoile de Mer. The Cap Moderne Association, which is tasked with conserving them, is developing plans for expanded facilities nearby. Finally, the narrow suburban street where Alvar Aalto's Helsinki home stands is today lined with a number of multistory residential buildings. While the approach to the house is quite changed, the views from within are less so. The house's street facade is nearly solid, and its interior orientation was always toward its still-intact rear garden.

Of the examples cited herein, the setting of the Schindler House has been the most compromised. Since its construction in 1922, the neighborhood has evolved from one of single-family homes on large lots to one dominated by three- and four-story multifamily structures. A defensive wall of tall bamboo now surrounds the house, mitigating views of the changed streetscape but also altering the house's original sense of openness to the landscape.

### ► 4.2.3 The Architects' Own Home as a Teaching Tool

Many architects use their homes as teaching tools, either implicitly or explicitly. As a testing ground for materials, construction methods, and ideas of spatial organization, the architects' home is the built expression of a particular approach to design. On the most basic level, through publication and/or visitation, the architects' home serves as a tool for disseminating an understanding of his or her work to the profession or potential clients. Some architects also conceive of a more formal didactic function for their homes.

John Soane's house and museum is an unparalleled example of the architect using his home as teaching tool. Soane conceived his home with the explicit purpose of housing and displaying his collections (fig. 4.16). As early as 1808, Soane labeled sketches of new proposed gallery spaces as his "museum" (Feinberg 1984, 225). Elected professor of architecture at the Royal Academy in 1806, by 1812 he publicly made clear his intention to use and develop his collection and museum for the benefit of his students and the architectural profession (Clark 2008, 8). The earliest guidebook to the collection was published in 1827 (*The Union of Architecture, Sculpture and Painting* by John Britton), followed by three editions of a guidebook, *Description of the Residence of John Soane, Architect*, in Soane's own hand (1830, 1832, and 1835) (Knox and Moore 2009). The last of these published in full the text of the 1833 Act of Parliament, which stipulated that the house and its contents would pass into the care of a board of trustees that would preserve and maintain it for the public benefit in perpetuity, and provided an endowment for this purpose.



**Figure 4.16** John Soane, Sir John Soane's Museum, London (1792–1824), photographed in 2009. Soane conceived his house as a museum for his collections. Here, a bust of Soane, surrounded by cinerary urns and sculptural fragments, is on display in the Dome.

In Massachusetts, Walter Gropius also used his house to foster understanding of modern architecture. An educator and the founder of the Bauhaus in Weimar, Germany, Gropius immigrated to the United States in 1937 to accept a professorship in the Harvard School of Design's architecture department. He designed the house in a manner consistent with the Bauhaus philosophies of simplicity, functionality, economy, and beauty derived from the materials themselves rather than ornamentation. Gropius and his wife believed their house exemplified timeless architectural qualities, and they used it as a tool to educate students and visitors about modernist concepts and Bauhaus principles. Ise Gropius's decision to donate the house for use as a museum was her way of ensuring that it continued to serve this educational mission.

The Eames House is one of Ray and Charles's most celebrated designs. It exhibits many of the hallmarks of their work and epitomizes their design process. As a product of the Case Study House Program, it was conceived with an educational purpose: to demonstrate the innovative use of modern design and materials in developing affordable houses for postwar families. Widely published in the architectural press, it was recognized as an important work of architecture early on and was highly influential in design circles. Throughout their years in the House, the Eameses welcomed a wide range of visitors. Friends, business colleagues, architects, designers, students, and other interested members of the public came from around the world to see the House and meet the designers. Although their approach was not formally didactic, by hosting such large numbers of visitors the Eameses actively promoted good design principles through direct experience of the House and its living environment.

#### ► 4.2.4 The Architects' Home as a Pilgrimage Site

To some degree, each of the homes discussed here can be viewed as an architectural pilgrimage site—a place of particular significance or interest that is visited as an act of homage or respect.<sup>8</sup> From its earliest days, the Eames House was such a site. Over the years, numerous prominent architects—among them Alison and Peter Smithson, Jørn Utzon, Kevin Roche, Eero Saarinen, Robert Venturi and Denise Scott Brown, Harry Seidler, Norman Foster, and Richard Rogers—as well as countless lesser-known architects, designers, and architecture and design aficionados have made the journey to the House. As British architectural historian Reyner Banham observed, the Eames House “taught architecture lovers to come to Los Angeles” (Banham 2011).

Architectural tourism has a lengthy history and has become a worldwide phenomenon, offering ever-growing opportunities to explore formerly private architects' homes. These houses attract visitors who are interested in learning about the architects and their work by experiencing the most personal of creations, their own homes. While the designers of a few of these sites, such as Frank Lloyd Wright and John Soane, are so widely known that they attract large numbers of visitors, most, including the Eames House, welcome much more modest numbers of visitors.<sup>9</sup> It is the Eames Foundation's hope that visitors to the House come away with a better understanding of the Eameses' work through direct experience of the site.

#### ► 4.2.5 Continuity of Stewardship and Spirit of Place

The Eames House has enjoyed an exceptional degree of continuity of ownership and occupation. The Eames, Gropius, Goldfinger, Soane, Gwynne, and Aalto Houses were essentially one-family homes, occupied by their designers for many years, then transferred intact to some form of nonprofit ownership by the original owners or their immediate descendants. In some instances, such as the Eames House, this encompasses a continuity of family involvement that helps to preserve the personal spirit of place. In others, stewardship is assumed by a larger heritage organization—for example, the National Trust (2 Willow Road, the Homewood) or Preservation New England (the Gropius House)—that is less likely to foster those intangible values that come from family involvement.

In 1995, when inheritance taxes threatened to separate the late Ernő and Ursula Goldfinger's collections from their house, the National Trust purchased 2 Willow Road from the family. The Trust then faced the challenge of transforming a small house, filled with a valuable collection of art and furniture as well as a lifetime of belongings, into a house museum while preserving its physical sense of openness and informality. The Trust also wanted visitors to understand the



space not just as a designed environment but as a family home. The decision was made to display the house as it was in Ernö Goldfinger's late years, rather than returning it to an earlier, aesthetically purer time. To further aid the sense of the house as a place that was lived in, the Trust has preserved even the most ephemeral of contents. The display of the stuff of everyday life has the effect of humanizing the Goldfingers, rather than presenting them as uncompromising modernists. By avoiding the use of physical barriers to manage visitors, which would deaden the space, the Trust instead allows visitors to move through the

house much as its occupants did, enhancing their understanding of 2 Willow Road as a domestic space and a connection to its occupants (McKay 2006, 154–64; McKay 2000; Pezzini 2001; Feluś 1996; Kinoshita 2003; Whitcombe 2013).

Architect Robin Boyd's Walsh Street House (1958), located in a suburb of Melbourne, Australia, shares similarities with the Eames House. The Robin Boyd Foundation endeavors to foster a spirit of place in its ongoing programming. Regarded as an exemplar of Australian modern architecture, the house was designed by Boyd, who also was an architecture critic, for his own family. In 2004, Boyd's widow sold it to the newly established Robin Boyd Foundation. Created in conjunction with the Boyd family, the foundation's mission is to continue Boyd's work and spirit through public programs that increase awareness of how design can improve the world. Its board is composed of architects, academics, and others with expertise in the design world, and includes a Boyd family representative. Like the Eames House, the Walsh Street House retains many of its original contents, including furnishings designed by Boyd's associates, and remains largely unchanged from when the family occupied it. Unlike the Eames House, it does not allow regularly scheduled visits but is open for tours, lectures, seminars, and special events including performances that honor the Boyds' love of music (fig. 4.17). The Boyds, like the Eameses, were legendary entertainers, and the foundation has built on that legacy by offering monthly morning coffee, afternoon tea, and twilight champagne visits (Robin Boyd Foundation 2016).

Charles and Ray Eames lived in the House from 1949 until their deaths, in 1978 and 1988, respectively. In 2004, the family established the nonprofit Charles and Ray Eames House Preservation Foundation to preserve the site for future generations and to foster continued understanding and appreciation of Ray and Charles's design legacy. It is a family-run foundation, the board comprising the five Eames grandchildren, allowing the House to remain under the careful, hands-on stewardship of the Eames family. This legacy of family oversight ensures that in addition to the physical elements of the site, the intangible heritage values associated with the House will be maintained.

The Eames Foundation continues to honor the spirit of the place by continuing practices established by Charles and Ray. Vases of fresh flowers are always displayed in the living room and kitchen, in arrangements that are similar to those Ray herself would have created, bringing a sense of life into the space. The Eameses enjoyed playing with the space, rearranging furnishings and objects and suspending things from the living room ceiling trusses. The Foundation continues this practice to a degree, further enlivening the layered spaces and keeping these traditions alive. The Foundation also continues to honor Ray and Charles's reputations as gracious hosts who paid attention to the smallest detail. During Foundation events, care is taken to honor Eames family traditions—from picnics and games in the meadow to elegant dinners—by carefully planning every detail to ensure that guests have an “Eamesian” experience. The



**Figure 4.17** Robin Boyd, Walsh Street House, Melbourne, Australia (1958). Classical guitarist Rupert Boyd performs in the courtyard in 2016. The Robin Boyd Foundation holds events that honor the Boyds' reputations as gracious hosts and music lovers.



4.18

**Figure 4.18** Glenn Murcutt, Magney House, Bingie Point, New South Wales, Australia (1982–84 and 1999), photographed in 2007. The design of the Magney House was shaped by the qualities of its particular setting and draws on Australian vernacular forms, conveying a strong sense of place.

of the structures and the reflections and shadows that play on them; the playful color palette of the building facades; and the carefully arranged interior collections—come together in a way that seems inevitable and wholly unique to this place. As these qualities play on all senses, the place is best understood and appreciated through direct experience.

Similarly, the works of the Australian architect Glenn Murcutt are derived from his deep understanding and appreciation of each building site's particular sense of place. His houses are renowned for their responses to and integration with their sites, and each house is a distinct response to a specific place. Murcutt's work is influenced by Australian vernacular and traditional agricultural buildings, which accounts for his frequent use of galvanized, corrugated metal and long, narrow forms. It is also influenced by his understanding of the site for which he is designing, so that each building is shaped by the aspects of its own particular setting. For example, the Magney House in Bingie Point, New South Wales, sited in an exposed coastal environment, is designed to provide views to the sea and at the same time protect against wind exposure and respond to the seasonal position of the sun (fig. 4.18). Murcutt created an asymmetrical, upswept metal roof that curves dramatically toward the sea. He protects the north, sun-facing glazing with metal louvers and overhanging roof eaves, and provides a mostly solid south wall on the windward side. Using horizontal corrugated metal for both the walls and the curving roof, the house is a long, silver-gray rectangle sitting on a largely open, windswept landscape. It is clear that decisions about the house's form, the position of its windows, and its materials are determined by the climate, the views, and the sun and wind. Like the Eames House, the Magney House structure and its landscape setting are carefully integrated to create a balanced unity.

Charles and Ray Eames carefully placed the building complex on the site in order to preserve the row of historic eucalyptus trees and the meadow and to allow the distant view of the Pacific Ocean to be experienced in a certain way. This careful site planning strikes a balance between the natural and the human-made that can be compared to other sites, such as the Zen gardens found in Kyoto, Japan. At the fifteenth-century temple Ryōan-ji, famous for its minimalist rock, or dry, garden, a visitor can stroll the outside gardens, enter the abbot's quarters, and then step outside onto the veranda to gaze at the enclosed dry garden. This garden, surrounded by a low wall, is the focus of attention, but the trees outside the wall, which are part of a borrowed landscape, also contribute to the scene (fig. 4.19). Most visitors sit on the deck with the temple hall at their backs, contemplating this perfectly composed dry garden. These elements together, along with the larger temple complex and adjacent hall, and the borrowed landscape beyond the garden wall create a perfectly balanced experience. Ryōan-ji is perhaps the most famous and most photographed garden in Japan, yet the experience of being there cannot be replicated (Treib and Herman 2003, 93). To fully appreciate it, one must go there in person.

active, continuing family involvement in the care and presentation of the Eames House is one of the factors that sets the place apart from the many architects' homes that have lost that sense of connection.

### 4.3 A Sense of Place

The Eames House conveys a strong sense of place, derived in part from the interplay between the site's natural environment and human-made elements. The individual components and natural qualities of the site—the rustling leaves and the fragrance of eucalyptus trees; the views of the Pacific Ocean and the breezes that blow in from it; the broad, sometimes dry meadow; the steel and glass





Like Ryōan-ji, the Eames House is world famous and has been photographed countless times, yet images cannot capture it in its entirety or convey its sensory response to nature. The Eames House strikes a careful balance. It is, in the words of Eames granddaughter Lucia Dewey Atwood, the “complete expression of an idea...a perfect unity” of elements that can be fully understood only through direct experience.<sup>10</sup> ■

**Figure 4.19** Dry garden at Ryōan-ji, Kyoto, Japan, dating from the 15th century, photographed in 2008. This Zen garden strikes a balance between the natural and the human-made environment and can be fully appreciated only through direct experience.

## Notes

- <sup>1</sup> Other notable architects whose residential work was featured in the exhibition included Gregory Ain, Edward Larrabee Barnes, Marcel Breuer, Harwell Hamilton Harris, Richard Neutra, Paolo Soleri, Ralph Twitchell and Paul Rudolph, and Frank Lloyd Wright.
- <sup>2</sup> On the Willow Glen Houses, see Frampton and Larkin (1995, 199–206) and Vreeland (1977b).
- <sup>3</sup> Two apartment buildings were also designed, one of which was built.
- <sup>4</sup> Those known to have been demolished include No. 11 (1946) and No. 16 (1947). Those known to be heavily altered and therefore ineligible for listing include No. 17 (1956), No. 18 (1958), and CSH 1950.
- <sup>5</sup> An eleventh house was formally determined eligible for the National Register in 2013 but was not listed. Many of these houses have been modified but retain sufficient integrity to convey their historical significance. Sources vary on the status of the eight remaining houses. Some may be eligible for designation under the multiple property nomination; others may have been altered beyond recognition.
- <sup>6</sup> In 1997, a 6,500-square-foot addition was made to the Entenza House. Although the original house was restored and the connection to the new structure was minimal, the setting has been significantly altered. Case Study House No. 20 was expanded three times by the original architect, Richard Neutra, so the alterations are well integrated. Case Study House No. 18 was heavily damaged in the 1994 Northridge earthquake and required extensive restoration. Done sensitively, the house retains integrity of design and setting.
- <sup>7</sup> The Stahl House is listed on the National Register of Historic Places and is designated as a Los Angeles Historic-Cultural Monument.
- <sup>8</sup> The meaning of “pilgrimage” here is loosely adapted from a secondary definition in the online Oxford English Dictionary, 3rd ed., March 2006.
- <sup>9</sup> The Frank Lloyd Wright Home and Studio reported 88,410 visitors in 2015 (Frank Lloyd Wright Trust 2015, 9); Sir John Soane’s Museum welcomed 119,361 during its 2015–16 fiscal year (Sir John Soane’s Museum 2016, 23).
- <sup>10</sup> Lucia Dewey Atwood, interview by Gail Ostergren, Chandler McCoy, and Laura Matarese, August 16, 2016, Getty Conservation Institute, Los Angeles, unpublished.







## CHAPTER 5

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# Assessment of Cultural Heritage Significance

### 5.1 Introduction

This chapter assesses the cultural heritage significance (also known as heritage significance) of the Eames House site—which includes the building complex, its landscape and setting, and the contents and collections—to ensure that heritage values of the place are clearly identified and assessed. “Cultural significance,” as described by James Semple Kerr,

is a simple concept. Its purpose is to help identify and assess the attributes which make a place of value to us and to our society. An understanding of it is therefore basic to any planning process. Once the significance of a place is understood, informed policy decisions can be made which will enable that significance to be retained, revealed or, at least, impaired as little as possible. A clear understanding of the nature and level of the significance of a place will not only suggest constraints on future action, it will also introduce flexibility by identifying areas which can be adapted or developed with greater freedom. (Kerr 2013, 4)

In assessing significance, this CMP examines all the qualities of the place, both tangible and intangible, that give the site meaning in its current physical, social, and cultural contexts. The purpose of the assessment process is to provide the foundation for development of significance-based policies to guide the conservation, interpretation, and management of the site.

As part of the development of this assessment of heritage significance, which is based on the internationally recognized methodology set forth in the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (the Burra Charter, described in section 5.3 below) (Australia ICOMOS 2013a), this section reviews the heritage assessment criteria used in the United States and how these are met by the Eames House.

The Eames House has been designated as a National Historic Landmark and as a Los Angeles Historic-Cultural Monument, discussed in section 5.2 below. In using the significance assessment criteria and methodology developed in accordance with the Burra Charter, this CMP also recognizes the potential international significance of the Eames House. There is a high degree of similarity between the criteria used in the United States and internationally.

This significance assessment identifies key **elements** and **components** of the site, then uses agreed-on **criteria** to identify their type of significance as represented by the following heritage values: historic, aesthetic, social, and scientific.<sup>1</sup> It draws on the analysis of documentary and physical evidence in chapters 2 and 3, and on the comparative analysis in chapter 4. It analyzes the **attributes** of each element or component relating to its function, form, fabric, and location, including tangible and intangible values, and assesses their **integrity** and **authenticity**. Finally,

the **level of significance** of each component is assessed using a standard scale ranging from *exceptional* to *intrusive*. For specialized terminology related to the significance assessment process, see the glossary at the back of this volume.

## **5.2 US Heritage Assessment Criteria and Listings**

In the United States, heritage sites can be designated at the national, state, and/or local level. As indicated above, the Eames House is currently designated as a National Historic Landmark and as a Los Angeles Historic-Cultural Monument. These designation criteria and their assessment and application to the Eames House are detailed in appendix C. The regulatory obligations of listing are outlined in appendix D.

### **➤ 5.2.1 National Historic Landmark**

#### **Definition and Assessment Criteria for National Historic Landmark Significance**

National Historic Landmarks (NHLs) are places of national (rather than state or local) significance that are designated for their “exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archaeology, engineering and culture” (US National Park Service 1999, 9). This is the highest level of designation in the United States. Properties are evaluated for listing based on their national significance and integrity, defined in the United States as their ability to convey their historical attributes or associations. Seven aspects of integrity are used to evaluate NHL eligibility: location, setting, design, materials, workmanship, feeling, and association; places listed as NHLs must possess a high degree of integrity.

#### **National Historic Landmark Listing for Eames House**

The United States Secretary of the Interior declared the Eames House (Case Study House No. 8) a National Historic Landmark on September 20, 2006; it was the ninth site in the city of Los Angeles to attain this distinction.<sup>2</sup>

The Eames House was designated a NHL under three criteria:

- for its association with broad historical patterns of national importance (criterion 1),
- for its association with the lives of significant persons: Ray and Charles Eames (criterion 2), and
- for its architectural significance (criterion 4).

These are described in the statement of significance (see below) that appears in the NHL database (US National Park Service 2013).<sup>3</sup>

The Eames House National Historic Landmark application notes that the House and its site are remarkably intact and possess an exceptional degree of integrity in all seven aspects of integrity. The period of significance for the Eames House is identified as 1949 to 1988, encompassing the nearly forty-year period from construction to the death of Ray Eames. It includes three dates of significance: 1949 (construction), 1978 (Charles Eames’s death), and 1988 (Ray Eames’s death) (Historic Resources Group and National Park Service 2005, 7–8).

The Eames House nomination was initiated by the National Park Service (NPS) as part of a proposed Modern Architecture Theme Study. Owing to budget constraints, the project was scaled back and the NPS elected to move forward with only the Eames House nomination.<sup>4</sup> To date, the Modern Architecture Theme Study has not been completed.

Following is the NHL statement of significance:

The Eames House is an exceptionally important work of post-war Modern residential design and construction, and it embodies many of the distinguishing characteristics and ideals of postwar Modernism in the United States. It is regarded as one of the most significant experiments in American domestic architecture. It is also significant for its association with the Case Study House Program. The Case Study House Program was a product of the many concerns regarding housing and architecture voiced in the post-World War II period. It was to be a concentrated program of commissioning houses by a select group of architects, thereby providing an opportunity for innovative architects to imagine, design, and construct the ideal home for a postwar American family.



The Eames House, or Case Study House #8, is the most recognizable and most widely published of all the residences completed with the Case Study House Program. The Eames House is the property most closely associated with nationally significant designers Charles and Ray Eames. This property served as their private residence and working studio throughout their long and prolific careers as furniture designers, filmmakers, photographers, exhibition designers, and graphic artists. This property is also one of the few architectural works attributed to Charles Eames. (US National Park Service 2013)

### ➤ 5.2.2 National Register of Historic Places and California Register of Historical Resources

All National Historic Landmarks are automatically listed on the National Register of Historic Places and on the California Register of Historical Resources. No additional evaluation was conducted when the Eames House was listed on these registers. See appendix C for an explanation of National Register and California Register criteria and their application to the Eames House.

### ➤ 5.2.3 City of Los Angeles Historic-Cultural Monument Designation

Under the Los Angeles Cultural Heritage Ordinance, a Historic-Cultural Monument (HCM) is defined as “any site (including significant trees or other plant life located thereon), building, or structure of particular historical or cultural significance to the City of Los Angeles” (City of Los Angeles 2007). Resources are evaluated based on four significance criteria (see appendix C).

The City of Los Angeles designated the Eames House, Studio and Grounds as Historic-Cultural Monument no. 381 on July 15, 1988. At that time, required documentation was rather thin, as evidenced by the Request for Historic-Cultural Monument Declaration, which was prepared by the Los Angeles Conservancy. It is notable that the designation was for “Case Study House No. 8—The Eames House and Studio and Grounds.” While this acknowledges the significance of the site itself, there was no in-depth discussion, and site plans were not included in the documentation. The nomination document does not call out the specific criteria under which the Eames House was designated. Based on the significance statement summary (see below), it appears that the House was designated at a minimum for its architectural significance (criterion 3) and as a notable work of a master designer (criterion 4). The statement is written in such a way that additional criteria could apply as well. The Eames House was just shy of forty years old when it was declared an HCM in July 1988.

The significance statement summary is as follows:

The Eames house [sic] is an outstanding example of industrial steel frame modular construction and is regarded by architects and designers around the world as one of the most significant buildings of the post-war period. It became an important prototype for pre-fabricated housing, even though its plan was never reproduced. It is one of the most important structures in Southern California and should be designated a Cultural Landmark because of its revolutionary design and construction. Furthermore, it is the single most important piece of architecture designed by Charles Eames that has not been altered. Finally, it is a monument to the genius of the Eames Office which was the most important design office in the United States, if not the world, from 1944-1978. (Los Angeles Cultural Heritage Commission 1986)

### ➤ 5.2.4 Relationship of Existing Listings to the CMP Statement of Significance

Existing national and local designations and listings for the Eames House have been reviewed in the preparation of this CMP. Additional research and scientific investigation undertaken during this process has produced a new and deeper understanding of the place and its heritage significance (fig. 5.1). In the context of the new information and understanding of the place, the heritage significance assessment of the Eames House has been augmented and revised.

This is, in fact, a necessary and desirable process. All significance assessments should be regularly reviewed in the context of new information about the place, changes to the elements or fabric, or improved approaches to heritage analysis. This CMP seeks to ensure that the identification and development of appropriate policies for the conservation of the significant heritage values of the Eames House are effective within its local, national, and international contexts.



**Figure 5.1** View of the Eames House from across the meadow, 1950. The significance assessment takes into account the building complex, its landscape setting, and its contents as an integrated whole.

## 5.3 Heritage Assessment

### ➤ 5.3.1 International Practice and the Burra Charter

The philosophy and methodology of the Burra Charter, which underpins the analysis and recommendations of this CMP, is internationally recognized as providing a sound heritage assessment framework that is widely applicable and readily understood and implemented. This philosophical approach and methodology is based on establishing a clear understanding of the place and assessing its heritage significance, and forms the basis for the development of policies to conserve, interpret, and manage it for the future. (A diagram of the conservation management process is shown in chapter 1, fig. 1.5; policies are detailed in chapter 6.)

In the process of assessing heritage significance, the Burra Charter methodology identifies the need for consideration of both tangible and intangible heritage values, summarizing these values as being of historic, aesthetic, scientific, social, or spiritual value to past, present, or future generations. The elements, components, and attributes of the place include human-made structures, natural and human-made landscape features, potential archaeological evidence, contents and collections, archival materials and records, and historic and contemporary uses and associations. The significance assessment identifies and evaluates interrelationships between different values, including intangible attributes such as social significance. It also recognizes that places may have a range of values for different individuals or groups, which may change over time and with use, or as a result of new information. Comparative analysis with similar sites assesses the rarity or representativeness of the place. Consideration of integrity and authenticity leads to an understanding of the levels of significance of each element.

As the following sections demonstrate, this CMP's assessment of the heritage significance of the Eames House using the Burra Charter methodology has supported and enhanced previous heritage assessments of the House while also allowing its future to be set within a more widely applicable, potentially international, context.



### ➤ 5.3.2 Criteria for Significance Assessment

As noted above, the Burra Charter identifies five heritage values of a place: historic, aesthetic, social, scientific, and spiritual. These are generally referred to as the criteria for assessing heritage significance. The criteria are intended to order thinking about a place, but they are not mutually exclusive and may overlap. These and similar criteria are commonly recognized in international practice, although different terminology and subcategories may be applied in different cultural and geographic contexts. These criteria are recognizable in, and are compatible with, the NHL designation criteria as well as other federal, state, and local heritage designation criteria in the United States.

In this CMP, the heritage significance of the Eames House has been assessed using four of the Burra Charter values—historic, aesthetic, social, and scientific—which are explained in section 5.4 (Australia ICOMOS 2013b).

### ➤ 5.3.3 Elements, Components, and Attributes

The terms “elements,” “components,” and “attributes” are fundamental to the significance assessment process. They are used in a specific sense in this CMP.

The term **element** is used to describe the major spaces and structures of the site, such as the residence and meadow. The term **component** is used to describe parts of an element; for instance, in the case of the Eames House, the roof is an element of the residence and the peppercorn tree is an element of the meadow (figs. 5.2a and 5.2b).

The term **attributes** is used to describe the five aspects of the elements and components of the place that contribute to and demonstrate its heritage significance, either separately or in combination. These are function, form, fabric, location, and intangible values, as shown in table 5.1. The process of assessing significance involves identifying and evaluating key attributes of the place using both the historical evidence (in the research) and the evidence of the site itself (in its physical elements and components).

Attributes may have one or more type of heritage value. For example, the form of the building complex has both historic and aesthetic value. Different attributes may also have different levels of value. For example, some of the external glazing of the Eames House is original and some has been replaced. The original fabric is of greater heritage value historically than later replacement glazing (which is still important for its contribution to the form and function of the place).

Attributes can be tangible or intangible. For example, the function of the building complex as the home and work environment of Ray and Charles Eames is expressed tangibly in the building fabric and documentary records and intangibly in oral histories and the memories of visitors.

### ➤ 5.3.4 Levels of Significance

Individual elements, components, and attributes may have different levels of significance, depending on the extent to which they embody or demonstrate key heritage values. Taken together, they contribute to the overall level of significance of the place. Generally, elements or components are ranked using a standard scale of *exceptional*, *high*, *moderate*, or *little significance*, or as *intrusive*. In the case of the Eames House, most components are exceptional and a few are moderate or intrusive. The authenticity, integrity, and intactness of the place—both overall and of particular components—also contribute to the level of its heritage significance. As Kerr notes, “the words ‘authentic’ and ‘intact’ often appear in conservation plans and they should be used with precision. Intactness refers to the degree to which the place and its fabric is still all there—authenticity to whether what you see is the real McCoy” (Kerr 2013, 32).



**Figure 5.2a** View of the south court, a major space of the building complex, 2017. The term *element* is used in the CMP to describe the major spaces and structures of the site.

**Figure 5.2b** View of the brick paving and tallowwood wall, components of the south court, 2017. The term *component* is used to describe parts of the larger elements of the site.

**TABLE 5.1**

## The Five Attributes That Contribute to the Significance of the Eames House Site

**Figure 5.3** Ray and Charles Eames used the House for both personal and corporate entertaining. Here, Ray and Charles host their friends, film director Billy Wilder (*left*) and his wife, Audrey, in 1959.



### FUNCTION

Current and former uses, activities, and practices



**Figure 5.4**

The form of the building complex integrates indoor and outdoor spaces, as seen in this view of the residence in 1950, looking across the center court to the south.

### FORM

Design, details, spaces, configuration, scale, and character of the place

**Figure 5.5** The fabric of the Eames House is characterized by a variety of building materials. This 1950 view of the bedroom shows Plyon window screens, Truscon architectural sash infilled with clear glass and Cemesto panels, and Truscon joists and ceiling.



### FABRIC

Physical material, landscape elements, interiors, related contents and collections, artifacts, documentation (archives and records), and subsurface archaeological remains



**Figure 5.6** This 1950 photograph shows the building complex placed in relation to the preexisting row of eucalyptus trees, which screened the views toward and away from it across the site to the ocean.

### LOCATION

Setting, views, and relationships between site elements

**Figure 5.7** To host this tea ceremony in 1951, perhaps the best-documented social event at the Eames House, Charles and Ray had the living room reconfigured to evoke the feeling of a traditional Japanese teahouse (see chapter 2).



### INTANGIBLE VALUES

Traditions, associations, meanings, techniques, and management systems; the spirit, experience, and feeling of the place, which is often passed through oral tradition and social practices or events



## 5.4 Heritage Values of the Eames House

This section sets out the cultural heritage values of the Eames House arranged in accordance with the criteria identified in section 5.3.2 above. The evaluations of significance include consideration of the original and subsequent layering of fabric, uses, associations and meanings of the place, and elements and components, as well as its relationship to its immediate and wider contexts, both physical and cultural. As noted above, multiple values may apply to the same element or attribute of the site—for instance, the building complex is significant on four criteria: historic, aesthetic, social, and scientific.

The elements, components, and attributes assessed in the NHL and HCM designation documentation for the Eames House have been reassessed during the preparation of this CMP and new ones have been identified. This new evaluation is based on the detailed research for the contextual history (chapter 2); examination of a wide range of existing site elements and fabric including topographical and landscape features, building components, fittings and finishes, and contents and collections (chapter 3); review of various oral recollections; and comparison with other places with similar elements, attributes, and heritage values (chapter 4).

The key heritage values of the Eames House site identified through this process are summarized in the statement of significance in section 5.5.

### ► 5.4.1 Historic

Places with historic value are representative of an important pattern, theme, or trend in history. A place may be of historic value if it influenced, is associated with, or was the location of an important event or activity. A place may also have historic value if it has a strong or special association with an important person or group of people. The significance will be greater where evidence of the association or event survives at the place and/or its setting is substantially intact.

#### HISTORIC SIGNIFICANCE:

- The Eames House is **an outstanding international exemplar of postwar modern residential design** and exhibits many of the hallmarks of the period. These include the innovative selection and use of industrial materials in a residence; the integration of indoor and outdoor living and working spaces; an open-plan layout and flexible-use spaces; the honest expression of materials and structure; and an emphasis on the use of prefabricated and experimental construction materials.
- The Eames House is one of the most **intact and internationally recognized** works designed under *Arts and Architecture* magazine's influential **Case Study House Program**.
- The Eames House is **a place of international pilgrimage for architects and designers**.
- As **the home that world-renowned designers Charles and Ray Eames designed for themselves**, the Eames House

provides a visceral experience of their lives, work, and aesthetics, and demonstrates their attitude toward the interrelated nature of life and work. The site's exceptional integrity sustains the Eameses' legacy as innovators and communicators of ideas.

- The Eames House has had an **exceptional continuity of ownership, occupation, and ongoing care**, with Charles and Ray in residence from Christmas Eve 1949 until their deaths in 1978 and 1988, respectively. Their descendants' ongoing stewardship through the Eames Foundation facilitates public access and research.
- Since the time of its construction, the Eames House has been extensively photographed, filmed, and written about, **internationally transmitting the influence of the Eames House and its creators as icons of twentieth-century modernism**.

**Elements and components that contribute to and/or reflect HISTORIC SIGNIFICANCE include the following:**

- **The building complex**—including residence and studio, courtyards and retaining wall—which retains a high level of the significant components of its original form, fabric, and architectural design.
- **The immediate setting** of the building

complex, including its landscape forms and fabric, trees, garden plantings, potted plants, and sculptures, and the extent to which they provide evidence of original and evolving functional and visual development of the site and the Eameses' desire to retain

**Elements and components continued**

the natural character of the setting.

- **The original land parcel**, the form of which has not been subdivided or further developed since construction, though it has been increased in size with the addition of segments of neighboring land parcels.
- **The extended setting** of the site, which provides evidence of early topographical features and layout as well as the character of the surrounding Case Study group and Pacific Palisades area (fig. 5.8).
- **The interiors, contents and collections**

(some of which are prototypes), and evolving changes to fabric, fittings, and finishes.

- **Particular items** within the collections and/or building or landscape fabric associated with significant events and people (as supported by documentation and/or oral recollections), such as the wooden sculpture that was a gift from Alexander Girard, and the Japanese and Indian artifacts the Eameses collected on their travels.

**Attributes that demonstrate HISTORIC SIGNIFICANCE include the following:**

- The function, form, fabric, location, and intangible attributes of the **building complex**, and its **contents and collections**, as well as the cultivated and natural **landscape**.
- The **form, location, and fabric** of the **row of eucalyptus trees** and the immediate and extended **settings**, which provide evidence of the evolving development of

Pacific Palisades, including Abbot Kinney's early subdivision plans.

- **The location of the Eames House site within the context of a group of Case Study Houses.** Surviving evidence of the original group of Case Study Houses—including the original lot and subdivision layout, shared access, and the architectural forms and surviving fabric of the residences that were part of John Entenza's plan for the site, as well as iconic views toward and from neighboring vantage points and the Pacific Ocean—enhances the historic and interpretive values of the site.
- **The interiors, contents and collections**, and evolving changes to fabric, fittings, and finishes that reflect and embody the diversity of the Eameses' tastes, interests, skills, work, travel, and design and experimentation, as well as their personal and professional relationships.
- **The continuation of Ray and Charles Eames's domestic, working, and social practices**, such as vases of flowers in the kitchen, rearrangement of furniture, picnics in the meadow, restaging and reimagining the 1951 tea ceremony, and visits by architects and designers and other interested parties.
- **The ongoing stewardship of the Eames Foundation** to use and conserve the functions of the place as a house museum and center for creative thinking and design.



**Figure 5.8** The early shared-landscape relationship between the Eames House and two other Case Study Houses, the Entenza House (No. 9) and the Walker House (No. 18), seen in the background at right in 1950, is evident here.



## ► 5.4.2 Aesthetic

A place with aesthetic value conveys a high level of artistic, creative, and/or technical achievement that may be expressed through the design, construction, and technical attributes and elements of a place. Aspects of sensory perception such as smell, sound, touch, and feeling associated with the place and its uses can be expressed under this criterion. Aesthetic qualities may include the concept of beauty and formal aesthetic ideals. Expressions of aesthetics are culturally influenced.

### AESTHETIC SIGNIFICANCE:

- As **the home that world-renowned designers Charles and Ray Eames designed for themselves**, the Eames House provides a visceral experience of their lives, work, and aesthetics, and demonstrates their attitude toward the interrelated nature of life and work. The site's exceptional integrity sustains the Eameses' legacy as innovators and communicators of a wide range of ideas.
- The Eames House, with its contents and collections, including carefully composed assemblages of objects, textiles, and artifacts, provides **evidence of the Eameses' humanization of industrial modernism**. This includes the interplay between craft and machine work, the use of the found object as art, the relationship between building and landscape, and the

celebration of the ordinary and utilitarian.

- The evolution of the Eames House design from the Bridge House to the final design (as built) demonstrates the deepening of the Eameses' **understanding and appreciation of the natural qualities of the site over time**, including its topographical character, the open meadow with its views out to the Pacific Ocean, the preexisting row of eucalyptus trees, and the play of light and shadow. The placement of the building complex embodies a sympathetic understanding of the spirit of the place. It respects and retains the site's natural qualities and, through careful design, integrates the natural with the human-made.

#### Elements and components that contribute to and/or reflect AESTHETIC SIGNIFICANCE include:

- **The Eames House site as a whole**, including structures (with their significant original forms, fabric, architectural character, and detailing), topographical and landscape features, trees, gardens, and potted plants, as well as furniture, finishes, and contents and collections.
- **Incorporation of key design features of postwar modernist residential design—including new forms, fabric, and construction methods**—in an integrated, aesthetically notable, and readily understandable way that captured and retained public interest around the world. It was recognized early on as a pivotal

structure in the history of twentieth-century design.

- **Interiors, contents and collections**, and evolving changes to fabric, fittings, and finishes that reflect and embody the diversity of the Eameses' tastes, interests, skills, work, travel, and design and experimentation, as well as their personal and professional relationships.
- **Natural elements** that contribute to the site's sense of beauty, such as topographical features, historical plantings, and habitats for local species, including insects, birds, and migratory fauna.

#### Attributes that demonstrate AESTHETIC SIGNIFICANCE include the following:

- **The conception and use of the building complex and entire site** by a creative couple who did not distinguish between family and work life and used all of the site for both as part of an integrated whole, creating a home and studio with opportunities for flexible uses integrated into the layout and use of the spaces.
- **The exceptional level of integrity and authenticity of the site**, including its function, form, fabric, finishes, and contents, enhances its aesthetic significance.
- The Eames House is **one of the couple's most celebrated designs**. It exhibits hallmarks of the Eameses' work and epitomizes their work and design processes.
- The **first of the steel-and-glass Case Study Houses**, leading the way for subsequent designs that would epitomize the Case Study style.
- Designed to demonstrate and champion the **principles of efficient engineering and use of materials**.
- Other significant architectural

## Attributes continued

achievements related to these attributes include the following:

- ▶The **use of industrial components in a residential context**.
- ▶The **selection and use of new products and materials** in new ways that demonstrate the Eameses' use of the site for experimentation with materials, detailing and meeting specific design issues and the clear expression of materials and structure, and an emphasis on prefabrication.
- ▶The **honest expression of structure and materials** as an essential aesthetic aspect of the design. This was an important element of the Eameses' work and design processes.
- ▶The **creative use of color**, material, and texture in the design of the residence and studio, including the main external facades and interior spaces that have contributed to the building's aesthetic and have made it readily recognizable around the world (fig. 5.9).
- ▶The **flexibility of the building complex planning and layout**, which included open-plan spaces, flexible walls/enclosures, and the integration of

**Figure 5.9** View of the east facade of the residence, 2017. The honest expression of structure and the creative use of color, texture, and varied materials are among the attributes that demonstrate the aesthetic significance of the building complex.



5.9

interior and exterior spaces.

▶Methods used by the Eameses to **humanize the industrial modernism** of the House through the interplay of handcrafted and machine-made work, displaying found objects, the ordinary and the utilitarian item, and plants in pots or vases as part of changing but carefully composed eclectic assemblages of objects, textiles, and artifacts.

- The **use and fabric of the site, together with family stories and memories, embody the Eameses' personal life experiences, particularly in the expansive contents and collections**. Through these, the evolution of the working lives of the Eameses at home is clearly demonstrated, with experimental objects, acquired artifacts, and gifted objects arranged throughout, reflecting significant ideas, principles, and design experiments and/or prototypes.

- The **landform and landscape planting of the site** demonstrates the evolution of the design, from the initial Bridge House concept developed with Eero Saarinen, which was designed to maximize ocean views, to the final design, which reoriented the residence, setting it into the slope of the hillside alongside the studio and altering its relationship to the eucalyptus row and meadow, which were retained in response to the site's perceived natural beauty.

- The **physical and visual relationships** between the Eames House and the neighboring Case Study House sites, as well as the extended setting, with its distinct topography, landscape character, and views from neighboring vantage points, such as the road above the site.

- **Iconic views** to, from, and within the Eames House site, including views of the Pacific Ocean and views across the meadow to the building complex and eucalyptus row.

- The **overall sensory experience** of the place, which includes the scents of eucalyptus trees, flowering plants, and herbs; the sound of leaves rustling in the breeze; and the dappling of sunlight through the moving branches and leaves. Charles and Ray felt that the House, with its "proximity to the whole vast order of nature," acted as a "shock absorber" that would calm and restore them (*Arts and Architecture* 1945, 44).



### ► 5.4.3 Social

The social value of a place refers to the associations that a place has for a particular community or cultural group and the social or cultural meanings that it holds for them.

#### SOCIAL SIGNIFICANCE:

- The Eames House has had an **exceptional continuity of ownership, occupation, and ongoing care**, with Charles and Ray in residence from Christmas Eve 1949 until their deaths in 1978 and 1988, respectively. Their descendants' ongoing stewardship through the Eames Foundation facilitates public access and research.
- The continuing practice of welcoming visitors and guests, which has come to be known as the guest-host relationship, **honors Charles and Ray's way of living and socializing and communicates their spirit of the place.**
- The Eames House, with its contents and collections, **embodies the Eameses' reflective, iterative approach to design.** The contents and collections include important furniture prototypes and production models that demonstrate Charles and Ray's constant evolution of designs through use and iterative experimentation.
- Since the time of its construction, the Eames House has been extensively photographed and written about, **internationally transmitting the influence of the Eames House and its creators as icons of twentieth-century modernism.**

**Elements and components that contribute to and/or reflect SOCIAL SIGNIFICANCE include the following:**

- **The whole of the site and its interrelated elements and components**, including the form and fabric of the landscape,

building complex, interiors, and contents and collections, and their ongoing interpretation and use.

**Attributes that demonstrate SOCIAL SIGNIFICANCE include the following:**

- **The continuing use of the site** for design education by the Eames Foundation, including its function as a house museum with a variety of visitation and educational programs, as well as special events relating to both the past and future of the site.

- **The broad-reaching, ready recognition of the iconic form and fabric of the Eames House** by name and through visual images is evidence of the influence this place has exerted on generations of architects, designers, and the general public both nationally and internationally. The Eames House has been recognized

the cultivation and display of fresh flowers, meadow picnics, the tea ceremony, and receiving visiting architects, designers, and others from around the world (fig. 5.10).

- **Gifts received from important visitors**, such as Billy Wilder and Alexander Girard, are a significant part of the collections and reflect the Eameses' social and professional relationships.
- **The appreciation and use of the site** since its construction as **a place of interest and pilgrimage** for architects, designers, and students, thus maintaining the Eameses' legacy as innovators and communicators of ideas.
- **The Eameses' use of and experimentation with modern materials** to achieve specific technical and aesthetic design outcomes, including innovations in material combination, detailing, finishes, and fittings, as demonstrated in both the building complex and the collections' furniture prototypes. This provides opportunities for further research in this area to enhance understanding of mid-twentieth-century design techniques and materials.
- **The Eameses' evolving interest in diverse cultures**, transnational **personal and professional relationships**, domestic and international **travel**, and **projects** in both the United States and overseas.



**Figure 5.10** Overhead view of the 2012 tea ceremony, an homage to the ceremony hosted by the Eameses in 1951 (see fig. 5.7). Such continuing events and uses demonstrate the social significance of the Eames House.

through architectural awards and through local and national historic designations.

- **The continuation by the Eames Foundation of uses and practices** that honor the spirit of Charles and Ray's usage of the site and maintain a sense of connection with the original owners and their intangible social practices, such as

#### ► 5.4.4 Scientific

A place has scientific or research value if it has the potential to yield information that reveals more about an important aspect of the past. The information potential will depend on the quality of the data and the level to which it may contribute substantial information about the place itself or related places that may not be available from other sources. The site may also be able to address important research questions relating to the site, its history, earlier practices, materials, and/or usage.

##### SCIENTIFIC SIGNIFICANCE:

- The Eames House is **an outstanding international exemplar of postwar modern residential design** and exhibits many of the hallmarks of the period. These include the innovative selection and use of industrial materials in a residence; the

integration of indoor and outdoor living and working spaces; an open-plan layout and flexible-use spaces; the honest expression of materials and structure; and an emphasis on the use of prefabricated and experimental construction materials.

**Elements and components that contribute to and/or reflect SCIENTIFIC SIGNIFICANCE include the following:**

**Figure 5.11** Plyon cupboard doors in the upper level of the living room alcove in 2011, built of one of the many experimental materials used by the Eameses that demonstrate the site's scientific significance.



- **Original building components, materials, form, and detailing** of all structures, including particular fixtures, fittings, and finishes, as well as the ways they were combined that were new or experimental when first introduced.
- **Original fabric and/or fittings of the structures**, such as sliding screens, composite panels and veneers, light fixtures, and off-the shelf products—the kitchen's steel cabinets and folding door, for example—which provide evidence of now obsolete products and building and construction methods of historical and scientific interest (fig. 5.11).
- **The open, undeveloped areas of land and natural landscape features within the site** that have supported the migration

and/or habitat of various natural species, including its value as an overwintering site for monarch butterflies.

- **The various furniture prototypes** that have been retained and displayed in the building complex, including the living room bookshelves, the alcove sofa, and various chairs and shelving components, which demonstrate the Eames design approach and its evolution through use and iterative experimentation.
- **The culturally significant**, early, nonindigenous plantings throughout the site, which predate the Eameses' occupation, including the peppercorn and Abbot Kinney's eucalyptus row. These and other early plantings may provide evidence of the oldest site vegetation.
- **The potential surviving archaeological resources** relating to previous functional use of the site and the construction of the Eames House.

**Attributes that demonstrate SCIENTIFIC SIGNIFICANCE include the following:**

- **The evidence of postwar construction techniques** in the form and fabric of the building complex—including excavation processes, site preparation for construction works, and contemporary concrete and steel construction methods—which is supported by extensive documentary records in the Eames archive.
- **The site's ability to demonstrate the postwar design principles of efficient use of prefabricated industrial materials and engineering construction methods for residential construction**, including in particular the use of standardized off-the-shelf or prefabricated components (though these were then often customized

by the Eameses to meet specific needs) in its form and fabric.

- **The Eameses' use of and experimentation with modern materials** to achieve specific technical and aesthetic design outcomes, including innovations in material combination, detailing, finishes, and fittings, as demonstrated in both the building complex and the collection's furniture prototypes. This provides opportunities for further research in this area to enhance understanding of mid-twentieth-century design techniques and materials.
- **The landscape form and fabric and its potential archaeological resources.**



## 5.5 Statement of Significance

This statement of significance summarizes the key heritage values of the Eames House as identified and assessed in the preceding sections.

### Statement of Significance

▶▶ The Eames House is **an outstanding international exemplar of postwar modern residential design** and exhibits many of the hallmarks of the period (fig. 5.12). These include the innovative selection and use of industrial materials in a residence; the integration of indoor and outdoor living and working spaces; an open-plan layout and flexible-use spaces; the honest expression of materials and structure; and an emphasis on the use of prefabricated and experimental construction materials.

▶▶ The Eames House is one of the most **intact and internationally recognized** works designed under *Arts and Architecture* magazine's influential **Case Study House Program**.

▶▶ As **the home that world-renowned designers Charles and Ray Eames designed for themselves**, the Eames House provides a visceral experience of their lives, work, and aesthetics, and demonstrates their attitude toward the interrelated nature of life and work. The site's exceptional integrity sustains the Eameses' legacy as innovators and communicators of a wide range of ideas.

▶▶ The Eames House is **a place of international pilgrimage for architects and designers**.

▶▶ The Eames House has had an **exceptional continuity of ownership, occupation, and ongoing care**, with Charles and Ray in residence from Christmas Eve 1949 until their deaths in 1978 and 1988, respectively. Their descendants' ongoing stewardship through the Eames Foundation facilitates public access and research.

▶▶ The Eames House, with its contents and collections, **embodies the Eameses' reflective, iterative approach to design**. The contents and collections include important furniture prototypes and production models that demonstrate Charles and Ray's constant evolution of designs through use and iterative experimentation.

▶▶ The Eames House, with its contents and collections, including carefully composed assemblages of objects, textiles, and artifacts, provides **evidence of the Eameses' humanization of industrial modernism**. This includes the interplay between craft and machine work, the use of the found object as

art, the relationship between building and landscape, and the celebration of the ordinary and utilitarian.

▶▶ The evolution of the Eames House design from the Bridge House to the final design (as built) demonstrates the deepening of the Eameses' **understanding and appreciation of the natural qualities of the site over time**, including its topographical character, the open meadow with its views out to the Pacific Ocean, the preexisting row of eucalyptus trees, and the play of light and shadow. The placement of the building complex embodies a sympathetic understanding of the spirit of the place. It respects and retains the site's natural qualities and, through careful design, integrates the natural with the human-made.

▶▶ Since the time of its construction, the Eames House has been extensively photographed, filmed, and written about, **internationally transmitting the influence of the Eames House and its creators as icons of twentieth-century modernism**.

▶▶ The Eameses' practice of welcoming visitors and guests, which has come to be known as the guest–host relationship, is evident in the Eames House and its contents and collections. The continuing practice of welcoming visitors and guests **honors Charles and Ray's way of living and socializing at the Eames House, and communicates their spirit of the place**.

**Figure 5.12** The Eames House, view of the east facade, 1950. Designed under the Case Study House Program, the House embodies a range of heritage values related to its significance as an exemplar of postwar modern residential architecture and its associations with Charles and Ray Eames.



## 5.6 Significance of Elements, Components, and Attributes

The elements, components, and attributes of a place contribute to its heritage significance in a number of ways. Loss of integrity or poor condition may diminish significance. The identification of the contributions of individual elements, components, and attributes to overall significance forms a useful framework for decision making about the conservation of or changes to the place.

Within a site, the significance of individual elements and components is often assessed as a means of indicating their relative significance to the site as a whole, thus helping to guide policy decisions for conservation and other actions. As James Semple Kerr explains, “While the statement of significance sets out in general terms the nature and level of significance of a place, the assessment of individual elements provides the flexibility necessary for the management of future change” (Kerr 2013, 19). The levels of significance and related appropriate conservation actions for the Eames House are explained in table 5.2. The remarkably original condition of the

**TABLE 5.2**  
**Levels of Significance and Related Conservation Actions**

EXCEPTIONAL	MODERATE	INTRUSIVE
 <p><b>Figure 5.13</b> View of the living room, 2013. This room contains an exceptional level of original fabric and today appears much as it did during Ray and Charles Eames’s lifetimes.</p> <p><b>EXPLANATION:</b> Rare or outstanding element that embodies and demonstrates heritage significance. Generally retains exceptional level of original fabric. May have minor alterations that do not detract from significance.</p> <p><b>CONSERVATION ACTIONS:</b> Conservation, preservation, restoration, reconstruction. Adaptation and/or interpretation where significant layout, elements, and/or fabric are altered, missing, or deteriorated.</p>	 <p><b>Figure 5.14</b> An Eames Lounge Chair and Ottoman in the living room, 2016. The original lounge chair was in deteriorating condition following years of use and environmental exposure. It was replaced with this later version, which is of moderate significance.</p> <p><b>EXPLANATION:</b> Altered element with less original fabric of intrinsic heritage significance, but contributes to overall significance of place.</p> <p><b>CONSERVATION ACTIONS:</b> Retention and conservation where possible but adaptation and/or alteration permissible.</p>	 <p><b>Figure 5.15</b> Detail view, west elevation of the residence, 2017. Redundant wiring, ducts, meters, and control boxes installed along the west elevations of the buildings after Ray and Charles’s deaths are intrusive.</p> <p><b>EXPLANATION:</b> Damaging to significance, its removal is encouraged.</p> <p><b>CONSERVATION ACTIONS:</b> Remove or modify intrusive elements to reduce adverse impacts.</p>



House means that most elements and components are of exceptional significance, with only a small number of moderately significant or intrusive elements.

Based on this analysis of the site, CMP policies have been developed (see chapter 6) to ensure that the significant elements, their constituent components, and their respective attributes—including function, form, fabric, location, and intangible values—are appropriately retained and conserved, interpreted, and managed. One attribute may be more significant than another. Less significant attributes can tolerate change more than significant ones.

### ► Relative Levels of Significance for the Eames House

This section relates select elements, components, and attributes of the Eames House that are of exceptional significance to the statement of significance (section 5.5.1). This is not a comprehensive list. It is intended to demonstrate how significance is embodied in a range of elements, components, and attributes. Many of the examples given demonstrate more than one type of significance; however, in order to highlight the widest possible range of elements, components, and attributes, repetition has been minimized. The final two subsections enumerate elements, components, and attributes that are of moderate significance or are intrusive.

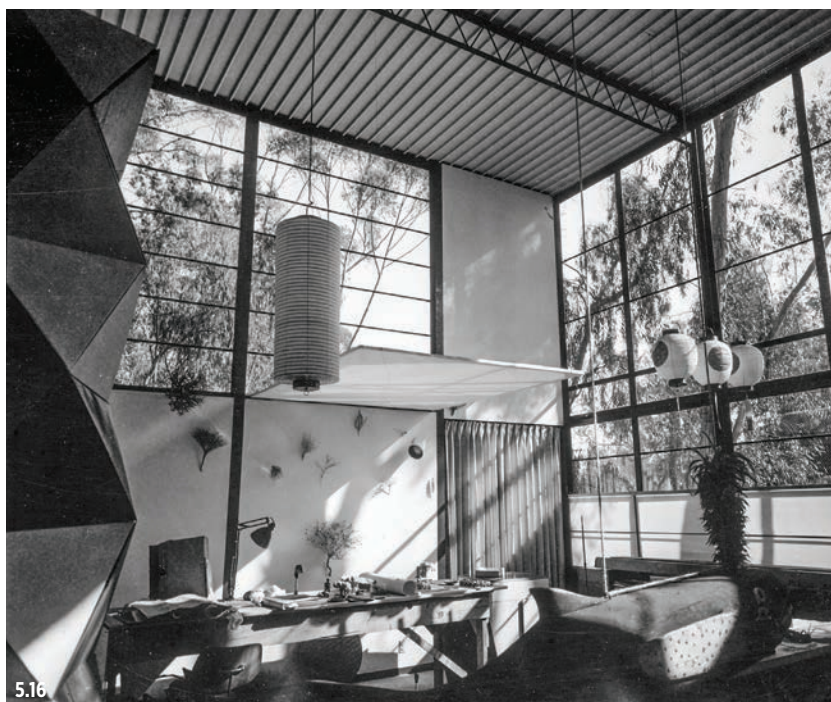
### Examples of Elements, Components, and Attributes of **Exceptional Significance**

#### ►► EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:

The Eames House is **an outstanding international exemplar of postwar modern residential design** and exhibits many of the hallmarks of the period. These include the innovative selection and use of industrial materials in a residence; the integration of indoor and outdoor living and working spaces; an open-plan layout and flexible-use spaces; the honest expression of materials and structure; and an emphasis on the use of prefabricated and experimental construction materials.

*Exceptional significance is demonstrated by the following:*

- 1. The form, fabric, construction, modular layout, and detailing** of the original 1949 design of the building complex, which epitomizes the simplicity, rationalism, and industrial standardized character of postwar modern architecture.
- 2. The Eameses' innovative selection and use of materials in a residence**—some prefabricated or experimental—is embodied in many elements and components. These include the prefabricated steel frame; Cemesto board cladding; large panes of glass; wire glass studio windows; plywood wall paneling; Plyon cupboard doors and sliding window screens; off-the-shelf furnishings such as the steel cabinets and closet units in the kitchens, hallway, and dressing area; and the Modernfold door in the kitchen.
- 3. The honest expression of materials and structure** is evident in the use of a variety of construction materials, including exposed



reinforced concrete for the retaining wall, unpainted Cemesto cladding, plywood wall paneling, and the exposed steel frame, roof trusses, and ribbed underside of the metal roof decking that forms the ceiling (fig. 5.16).

**4. The visual and functional integration of the indoors and outdoors** in the residence and studio is achieved by the layout and

**Figure 5.16** Interior of the studio, 1952. The character of construction materials is honestly expressed through the ribbed underside of the Truscon Ferrobord roofing, which forms the ceiling, the open web joists that support it, and the Truscon steel sash infilled with a variety of materials.



**Figure 5.17** Living room, looking east toward the meadow, 1950. Visual and functional integration of indoors and outdoors is achieved by the thin steel structure, extensively infilled with operable and fixed windows, that frames views of the landscape.

construction methods and materials, exemplified by extensive use of glass cladding and operable windows, as well as the three sliding glass doors, which integrate the two structures with the three courtyards and allow for the free flow of movement between them. The interior potted plants, courtyard plantings, flowering potted plants, eucalyptus row, and wider landscape are readily visible through the extensive glass cladding, further blurring boundaries between indoors and outdoors (fig. 5.17).

**5. The open-plan layout and flexible use of space** are achieved through the double-height spaces with mezzanine overhangs in the residence and studio and the use of sliding walls and screens. The Eameses

used furniture, in particular large, space-defining furnishings such as the living room bookshelves and rolling planter, to create distinct zones and varied layouts within rooms. The flexible uses of spaces over time, particularly in the studio, supported the integrated and changing living and working needs of Charles and Ray Eames.

**6. The creative use of color and texture** in the design of the building complex has created an aesthetic that is readily recognizable as “the Eames House” around the world.

**7. The exceptional level of authenticity and integrity** of the site makes it an outstanding international exemplar of postwar modern residential design.





►► **EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:**

The Eames House is one of the most **intact and internationally recognized** works designed under *Arts and Architecture* magazine's influential **Case Study House Program**.

*Exceptional significance is demonstrated by the following:*

**1. The integrity of the form and fabric of the whole site**—the elements, components, and attributes of the building complex and landscape, along with the contents and collections—makes the Eames House one of the most intact surviving houses designed under *Arts and Architecture* magazine's Case Study House Program.

**2.** The Eames House (No. 8), situated within the **context of a group of Case Study Houses** (Nos. 9, 18, and 20) on the same Pacific Palisades bluff, includes intact landscape and

topographical elements such as evidence of the original lot and subdivision layout, the earthen berm shared with the Entenza House (No. 9) site, shared access roadway, historic trees, and notable views (fig. 5.18).

**3.** The Eames House is one of the **most internationally known** of the Case Study Houses. It is widely recognized through iconic photographs used in books, films, and magazines, and through name association with its creators.

**Figure 5.18** View from the Entenza House toward the Eames House, 1949. Both were part of a cluster of Case Study Houses built on the bluff and shared landscape features such as the earthen berm, preexisting eucalyptus trees, and views of the ocean and extended landscape.



**Figures 5.19** Charles Eames at work in the studio in the early 1950s. The uses of the studio evolved with the Eameses' needs. In the early years, it was an active work space, but later it was used as living and sleeping space. Following their deaths, it has been returned to its historic use as a work space.



**Figure 5.20** Assemblages of objects in the kitchen, 2017. The arrangement of original belongings much as they were when the Eameses inhabited the residence provides an experience of their lives, work, and aesthetics and demonstrates their attitude toward the integrated nature of life and work.

#### ►►EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:

As **the home that world-renowned designers Charles and Ray Eames designed for themselves**, the Eames House provides a visceral experience of their lives, work, and aesthetics, and demonstrates their attitude toward the interrelated nature of life and work. The site's exceptional integrity sustains the Eameses' legacy as innovators and communicators of a wide range of ideas.

#### *Exceptional significance is demonstrated by the following:*

1. The **whole of the site**—the elements, components, and attributes of the building complex and landscape, along with the contents and collections—provides a visceral experience of how the Eameses lived and worked at home (fig. 5.19).
2. The Eames House is one of the couple's most **celebrated designs**. It is internationally recognized through published photographs and through name association with its creators
3. The **visual presentation** of the residence as a home, with an array of original objects, furniture, and day-to-day household

ephemera arranged and displayed as they were when the Eameses lived in the home, provides a visceral sense of their life, work, and aesthetics (fig. 5.20).

**4. The flexible spaces** of the residence, studio, and landscape embody the integrated nature of life and work at the Eames House. Through layout and design details that provided flexibility, such as sliding doors and walls, these spaces were designed and used for life and work by the Eameses.

**5. The contents and collections include objects acquired by the Eameses** on their travels, such as Japanese and Indian artifacts.

#### ►►EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:

The Eames House is a **place of international pilgrimage for architects and designers**.

#### *Exceptional significance is demonstrated by the following:*

1. **International pilgrimage** to the site—appreciation of and reflection on the elements, components, and attributes of the building complex and landscape, as well as the contents and collections.
2. **Photographs, letters, and anecdotes of visits** to the site and/or meetings with Ray and Charles are found in the Eames House and Eames Office collections, the Library of Congress, Eames family records, and the personal records of countless visitors from around the world.
3. The **appreciation and use of the site** since its construction as a place of interest

and pilgrimage for architects and designers maintains the Eameses' legacy as innovators and communicators of ideas. Continuing international pilgrimage to the Eames House, facilitated by the Eames Foundation and its current use as a house museum, honors the Eameses' practice of welcoming guests (fig. 5.21).

**4. The exceptional level of authenticity and integrity of the site** is a major attraction to designers and architects as well as the informed visitor.

**5. The form and fabric of the site** and its evolution, as recorded in iconic images.





**Figure 5.21** A group touring the Eames House in 2017.

►► **EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:**

The Eames House has had an **exceptional continuity of ownership, occupation, and ongoing care**, with Charles and Ray in residence from Christmas Eve 1949 until their deaths in 1978 and 1988, respectively. Their descendants' ongoing stewardship through the Eames Foundation facilitates public access and research.

*Exceptional significance is demonstrated by the following:*

- 1.** The whole of the site—the elements, components, and attributes of the building complex and landscape, along with the contents and collections—demonstrates its **occupation by Ray and Charles Eames and its evolution** during their lifetimes. The level of intactness is evidence of their care of the site.
- 2.** The **Eames Foundation's ongoing stewardship** of the site as a house museum facilitates access for a variety of visitation and educational programs and special events.

- 3.** The **continuation of practices that honor the spirit of Charles and Ray Eames'** usage of the site and maintain a sense of connection with the original owners and their way of working, living, and socializing at the site (fig. 5.22). Practices include the placement of vases of fresh flowers in the kitchen and living room (fig. 5.23), rearrangement of furniture, occasional picnics in the meadow, and onetime events such as the reimagining, in 2012, of the 1951 tea ceremony.

**Figure 5.22** Ray (third from left) and staff picnicking in the meadow, 1953. In continuing to host events in the meadow, the Eames Foundation honors Charles and Ray's way of living and entertaining at the House.

**Figure 5.23** Bouquet of fresh flowers arranged by the Eameses' longtime housekeeper, 2012. The Eames Foundation continues to display fresh floral arrangements that reflect Ray's practices.





**Figure 5.24** Detail view of the living room alcove, 2016. The built-in sofa served as a prototype for the Eameses' Sofa Compact, demonstrating their iterative approach to design.



**Figure 5.25** An assemblage of objects on the kitchen counter, 2016. Displays of items collected by the Eameses, reflecting their interests in good design and aesthetics, are found throughout the residence.

►► **EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:**

The Eames House, with its contents and collections, **embodies the Eameses' reflective, iterative approach to design.** The collections include important furniture prototypes and production models that demonstrate Charles and Ray's constant evolution of designs through use and iterative experimentation.

*Exceptional significance is demonstrated by the following:*

- 1.** The whole of the site—the elements, components, and attributes of the building complex and landscape, along with the contents and collections—embodies the **Eameses' design principles and their iterative approach** to the evolving design of the site.
- 2.** The **various furniture prototypes and production models** that have been retained and displayed in the building complex, including the living room bookshelf, the alcove sofa, and various chairs, demonstrate the Eameses' design approach and its

evolution through use and iterative experimentation (fig. 5.24).

- 3.** The **landscape** embodies the Eameses' reflective and iterative approach to the site's design through the placement of the building complex, which evolved from the Bridge House design to its current built form in the hillside (conserving the site's topography and preexisting row of eucalyptus trees), and through the evolution of plantings and potted plants in the landscape and building complex over Ray and Charles's lifetimes.

►► **EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:**

The Eames House, with its contents and collections, including carefully composed assemblages of objects, textiles, and artifacts, provides **evidence of the Eameses' humanization of industrial modernism.** This includes the interplay between craft and machine work, the use of the found object as art, the relationship between building and landscape, and the celebration of the ordinary and utilitarian.

*Exceptional significance is demonstrated by the following:*

- 1. Objects, textiles, and artifacts in the collections** that demonstrate the Eameses' humanization of industrial modernism and celebrate the utilitarian and the ordinary include furniture, artwork, craft artifacts, toys, models, dolls, ceramics, books, household items, and found objects such as stones, shells, and the tumbleweed that Charles and Ray Eames collected and displayed.
- 2.** The **arrangement and display of the contents and collections** is an integral

element of the significance of the site and evidence of the evolution of the lives of the Eameses at home. Craft artifacts, found and decorative objects, and household items were displayed in carefully composed arrangements that are evidence of the Eameses' design ideas, aesthetics, and principles. Arrangements of objects are found throughout the residence in locations such as the kitchen and living room, and on bookcase shelves (fig. 5.25).





3. The building complex demonstrates the **interplay between craft and machine work** through the use and adaptation of industrialized construction techniques and materials. The Eameses' craftsmanship is evident in the use of materials and techniques to construct the House and outfit its interiors: for example, the prefabricated steel closet unit in the residence hallway is wrapped on two sides by the living room's handcrafted

rosewood wall and the alcove's custom cabinetry, softening its industrial nature.

4. The **placement of the building complex** in the landscape is evidence of the Eameses' approach to the humanization of industrial modernism. Mature trees and plantings contrast with and soften the geometry of the steel frame and the industrial character of the infill materials (fig. 5.26).

**Figure 5.26** View of the residence's primary facade and the eucalyptus row on either side of the wooden walkway, 2013. The placement of the building complex is evidence of the Eameses' humanistic approach to modernism. The mature trees and plantings soften the industrial character of the building complex.

#### ►► EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:

The evolution of the Eames House design from the Bridge House to the final design (as built) demonstrates the deepening of the Eameses' **understanding and appreciation of the natural qualities of the site over time**, including its topographical character, the open meadow with its views out to the Pacific Ocean, the preexisting row of eucalyptus trees, and the play of light and shadow. The placement of the building complex embodies a sympathetic understanding of the spirit of the place. It respects and retains the site's natural qualities and, through careful design, integrates the natural with the human-made.

#### *Exceptional significance is demonstrated by the following:*

1. The placement of the building complex is sympathetic to the **topographical features of the site**, including the steep upper slope, meadow, and bluff; the row of eucalyptus trees planted by Abbot Kinney; and the character of the surrounding group of Case Study Houses, the wider Pacific Palisades area, and the views to the Pacific Ocean

(fig. 5.27). These elements and aesthetic attributes of the site were influential in determining the design, form, layout, and siting of the building complex and provide the now iconic setting in images of the buildings and site as a whole.

2. The landscaped setting of the building complex—set back from the bluff and





**Figure 5.27** The site under construction, 1949. The final placement of the building complex was sympathetic to the preservation of the site's topographical features, existing trees, the meadow, and significant views to the ocean reflecting the Eameses' understanding of and respect for the site's natural qualities.

**Figure 5.28** View from the south court across the meadow to the ocean, 1953. Such notable views reflect the Eameses' appreciation of the site's natural qualities, which were celebrated through the design and placement of the building complex.

excavated into the hillside—**respects and retains the site's natural qualities**, and integrates the natural (topography, existing plantings) with the human-made (building complex).

**3. Notable views** include those from the residence across the meadow to the Pacific Ocean, and views from the meadow toward

the southern and eastern elevations of the building complex (fig. 5.28).

**4. The form, location, and fabric of the row of eucalyptus trees** along the east elevation of the building complex and the effect of the tracery of eucalyptus tree trunks, branches, and leaf silhouettes in the shadows and reflections on external walls and interiors.







**Figure 5.29** Ray and Charles standing on the steel frame, 1949. This widely published photo unequivocally associates the Eameses with the House, one of their most influential collaborative works.

**Figure 5.30** Ray and Charles in the living room, 1958. Widely published images, such as this one by Julius Shulman, have propagated international recognition of the Eameses' work.

►► **EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:**

Since the time of its construction, the Eames House has been extensively photographed, filmed, and written about, **internationally transmitting the influence of the Eames House and its creators as icons of twentieth-century modernism.**

*Exceptional significance is demonstrated by the following:*

- 1.** The Eames House is the most significant and intact example of **Charles Eames's architectural designs** and the most complete and readily recognized expression of **Ray and Charles's collaborative enterprises** (fig. 5.29). This is embodied in the elements, components, and attributes of the building complex and landscape, as well as the remarkable interiors and contents and collections.
- 2.** The Eames House incorporated **key design features of postwar modernist residential design**—including new forms, fabric, and construction methods—in an integrated and readily understandable way. It was recognized early on as a pivotal structure in the history of twentieth-century design.
- 3.** The Eames House has been **extensively published internationally**, propagating the Eameses' furniture, design principles, way of living, and aesthetic (fig. 5.30).
- 4.** The ready recognition of the iconic form and fabric of the Eames House by name and through visual images is evidence of **the influence** this place has exerted on generations of architects, designers, and the general public both nationally and internationally.







**Figure 5.31** Charles (*third from left*) hosting a group of IBM managers and consultants at a beautifully set table in 1973. Tableware used for entertaining and everyday use is a significant component of the Eames House's contents and collections.

**Figure 5.32** Two of the Eames granddaughters at play in the studio, 1958. The studio was a flexible space used for work, play, and living as the Eameses' needs evolved and changed.

**Figure 5.33** Replacement floor tiles installed and photographed in 2012 reproduced the dimensions, color, and finish of the original tiles.

#### ►►EXCERPT FROM THE STATEMENT OF SIGNIFICANCE:

The Eameses' practice of welcoming visitors and guests, which has come to be known as the guest-host relationship, is evident in the Eames House and its contents and collections. The continuing practice of welcoming visitors and guests **honors Charles and Ray's way of living and socializing at the Eames House and communicates their spirit of the place.**

#### *Exceptional significance is demonstrated by the following:*

- 1.** The Eames Foundation continues to **welcome guests and visitors** to the Eames House, honoring Ray and Charles's way of sharing the House by providing tours of the site, as well as other educational events and activities. The meadow, central court, and south court are also used by the Foundation for informal picnics, events, and recreation.
- 2.** The **guest-host relationship** is evident in particular items in the contents and collections that are associated with significant events and people, as supported

by documentation and/or oral recollections.

**3. Particular items** in the contents and collections relate to entertainment and events, such as china bowls, candelabra, and tea sets (fig. 5.31).

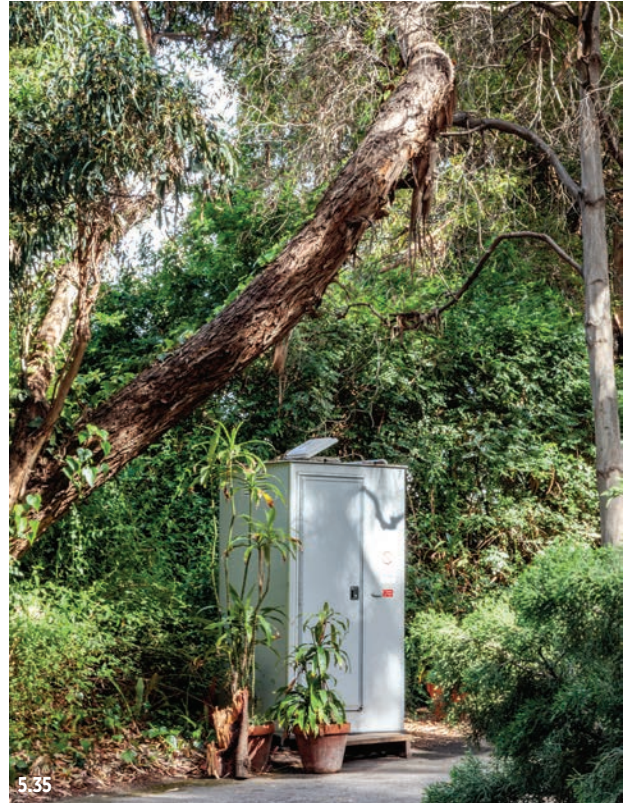
**4.** The **flexibility of spaces and uses** of the residence, studio, and landscape at the Eames House provided a number of settings for living and socializing: for example, the use of the living room space for a Japanese tea ceremony or the studio as a play area for the Eames grandchildren (fig. 5.32).



#### **Examples of Elements, Components, and Attributes of Moderate Significance**

- 1.** Substitute components or materials that have been installed since Ray Eames's death in 1988, such as the replacement of three damaged Cemesto panels in the studio with plywood, the replacement of floor tiles in the living room and hall of the residence (to maintain functionality and significant attributes of aesthetic character) (fig. 5.33), and the replacement roof on the residence and studio in 2015, which included use of new materials and design features that improve water drainage.





**2.** Replacement of select original contents and collections with in-kind objects for conservation and stabilization and to aid in interpretation. For example, the deteriorated original Eames Lounge Chair, located in the living room of the residence, has been removed and replaced with another Eames Lounge Chair (see fig. 5.14). These replacement objects are distinguished as props.

**3.** Interpretation signage and installations in the meadow (fig. 5.34).

**4.** Changes to fixtures, fittings, and services that were made during the Eameses' lifetimes, even though they are visually or physically intrusive.

**Figure 5.34** Interpretive signage at the site, 2017. These signs are installed at the edge of the meadow, away from the building complex (visible in the background), providing visitors with information about the site and its designers while protecting the most significant views of the building complex.

**Figure 5.35** Museum amenities such as this portable toilet are essential to infrastructure but are also intrusive components. Photo: 2017.

### Examples of Elements, Components, and Attributes That Are Intrusive

**1.** Intrusive and redundant fixtures, such as wiring, ducts, meters, and control boxes along the west elevation of the residence and studio that were installed after Ray and Charles Eames's deaths (see fig. 5.15).

**2.** Excessive growth of plantings, such as areas of overgrown jade, plumbago, and cape honeysuckle on upper slope and berm.

**3.** Portable toilet located in the parking area near the entry to the residence and studio (fig. 5.35). ■

### Notes

<sup>1</sup> The Burra Charter recognizes a fifth heritage value: spiritual. However, this CMP does not assess the Eames House for spiritual value.

<sup>2</sup> As of December 2016, there were eleven NHLs in the city of Los Angeles (US National Park Service 2015).

<sup>3</sup> The Eames House met NHL criteria 1, 2, and 4 (United States Government 2012).

<sup>4</sup> The NHL nomination places the Eames House within the Modern Architecture Theme Study draft context (Historic Resources Group and National Park Service 2005, 8); NHL nomination coauthor Kari Fowler confirmed the decision to move forward with the individual nomination (Kari Fowler, conversation with the author, March 30, 2014).







## CHAPTER 6

# Conservation Policies

### 6.1 Introduction

James Semple Kerr writes, “Conservation is about the care and continuing development of a place in such a way that its significance is retained or revealed and its future is made secure. The objective of the conservation plan is to set out how that aim may best be achieved. In doing so it seeks to relate the proposed conservation action to the procurable resources” (Kerr 2013, 2).

This chapter sets out key conservation policies to guide the conservation, interpretation, and management of the Eames House site so that its cultural significance is appropriately conserved, interpreted, and managed. The policies seek to:

- conserve the cultural heritage significance of the site, including the significant elements, components, and fabric of the building complex, its contents and collections, its landscape, and its relationship to its extended setting;
- provide recommendations for the conservation of the site and all of its elements;
- identify vulnerabilities that may adversely affect the site and need preventive conservation action, modification, mitigation, or removal;
- identify where and how change can be managed so it is compatible with these policies and will facilitate the conservation and long-term security of the site; and
- consider how conservation requirements can best be coordinated with other demands on the site (functional use, visitor management, financial realities, security concerns, etc.) to ensure development of appropriate solutions for its conservation and management in the short and long term.

The policies seek to show the essential relationship between the vulnerabilities of significant elements and specific conservation policy recommendations.

#### ► 6.1.1 Organizational Structure

The role of the policies in this CMP is to provide a framework for decision making about the future use, care, conservation, and presentation of the Eames House. Section 6.2 outlines considerations in the development of conservation policies in relation to a range of issues, including opportunities and constraints arising from the significance of the site, requirements of the site owners, uses and the physical condition of the site, and vulnerabilities of the site.

The policies are arranged in a specific order, starting with general policies that provide an overarching umbrella for decision making in sections 6.3 through 6.8. First, policies for governance of conservation actions (section 6.3) provide a practical framework to implement the CMP and establish the relationship between conservation and a wider range of procedural matters, including long-term planning and management goals. This is followed by general policies for the conservation of the Eames House site (section 6.4); implementation planning for the management and treatment of site elements and components (section 6.5); maintenance and repair



6.1

**Figure 6.1** Diagram showing the CMP as the guiding framework for a range of specific investigations, plans, and policies in support of future actions regarding the Eames House.

(section 6.6); infrastructure and services (section 6.7); and treatment of fabric (section 6.8). Together, these sections seek to achieve a coordinated and holistic outcome; that is, the retention of the heritage significance of the site and support for its meaningful use and interpretation.

Detailed conservation policies are discussed in section 6.9. These are specific to areas, elements, components, and fabric of the site and its setting, and elaborate on the general policies. They relate to use, physical condition, and vulnerabilities identified through research and site investigation.

The general and detailed conservation policies are not intended to be exhaustive, nor do they include all relevant assessment and analysis or provide detailed recommendations for all conservation actions. Instead, they are to be used as a guide for how particular actions should be approached. Specialist investigation and advice, documentation, and development of a work plan are generally required to guide specific actions.

The CMP is an overarching management document. It identifies a number of necessary specialist investigations, condition assessment reports, and management plans for the Eames House, as indicated in figure 6.1. These specialist investigations, reports, and plans, which will direct future conservation actions, should follow the CMP approach by first understanding the site and assessing its significance, then developing policies and recommendations that conserve and enhance its significance.

## 6.2 Considerations in the Development of Conservation Policies

### ➤ 6.2.1 Introduction

Development of a useful set of conservation policies requires consideration of a range of issues that are generally divided into the following categories:

- the constraints on, and opportunities for, use and development of the site arising from its statement of significance;
- the requirements of the site users and owners;
- the physical condition, authenticity, and degree of integrity of the fabric of the place; and
- requirements imposed by external factors (such as natural and human-made disasters) and agencies including regulatory authorities.





**Figure 6.2** Members of the Eames Foundation board, photographed in 2004. Standing, from left: Liisa Demetrios, Eames Demetrios, Byron Atwood, Carla Atwood Hartman, and Lucia Dewey Atwood. Seated: Lucia Eames.

### ► 6.2.2 Considerations Related to Significance

Conservation policies are based on the significance of the site (as identified in the statement of significance in chapter 5, section 5.5) and relate to the accompanying relative levels of significance of site elements, components, and attributes (identified in section 5.6). Conservation policies have been developed to conserve, interpret, and manage the significance of the site.

### ► 6.2.3 Considerations Related to the Condition and Integrity of Site Elements

Review of the condition of the major site elements carried out for this study identified a number of key issues relating to their physical condition and integrity that should be considered in developing conservation policies and priorities for implementation.

Where specific agents of deterioration responsible for the current condition of key elements of the site were identified, policy recommendations are made to deal with these vulnerabilities. Key issues included effect of water penetration on concrete, wood, and steel components; impact of sunlight, heat loads, insects, and humidity on interior finishes and contents; and impact due to landscape features (including topography and trees).

### ► 6.2.4 Considerations Related to Owner Requirements and Proposed Uses

Currently, the residence functions as a house museum; the Eames Foundation offices are located in the studio building. With a board made up of Charles and Ray's five grandchildren (fig. 6.2), the Foundation, which was established in 2004, is committed to conserving the Eames House, which it sees as critical to safeguarding and advancing the Eameses' greater legacy. The Foundation's primary goals are as follows:

- Conserve, present, and interpret the heritage significance of the Eames House.
- Continue the current use as a house museum.
- Secure the continuity of stewardship of the House and its site, and the intergenerational transfer and recording of primary knowledge about the place.
- Share the conservation lessons learned with others, and enhance and strengthen the community of practice associated with the day-to-day management and conservation of modern houses.

This CMP is one step toward achieving these goals, which are articulated in the Eames Foundation's strategic plan. The Foundation's requirements for the continued conservation and use of the site include managing visitation (in particular, the tours and interpretive programs), ensuring secure financial operations, providing appropriate site facilities, and overseeing periodic and ongoing maintenance projects.

### Interpretive Programs

The Eames Foundation works to create a meaningful visitor experience while minimizing the impact on the Eames House's physical fabric. Currently, the Foundation's interpretive programs

**Figure 6.3** Guests enjoying dinner in the Eames living room following the tea ceremony, 2012. The Foundation raises funds for conservation work by hosting special events.



and public educational outreach are conducted primarily through self-guided tours of the Eames House's exterior. Guided interior studio tours are given on a limited basis, and guided, ground-floor interior tours of the residence are offered on a very limited basis due to space restrictions, staffing limitations, and the fragile nature of the residence's contents and interior finishes.

The Eames Foundation's long-term objectives in relation to visitation, tours, and interpretive and educational programs are as follows:

- Conserve, interpret, and manage the heritage significance of the Eames House.
- Continue offering tours of the House as a primary means of educational outreach.
- Continue expanding Eames Foundation interpretive and educational activities to provide "experiences that celebrate the creative legacy of Charles and Ray Eames" (Eames Foundation 2016).
- Establish the visitor-carrying capacity and consider potential impacts on the site when developing programming.
- Determine and engage the optimum number of staff members and volunteers to carry out interpretive and educational programs and to monitor visitors.
- Continue offering exterior tours to schools and to other nonprofit organizations as a means of relationship building.
- Balance the Foundation's desire to display the House in a way that promotes the relationship between interior and exterior (currently done by keeping doors and curtains open) with the need to create a safe collection environment.
- Monitor site security while enhancing the on-site visitor experience.

### **Financing Operations and Conservation of the Eames House**

The Eames Foundation finances operations and conservation through a number of channels. Its membership program generates support at various contribution levels. Funds are also generated through the sale of Eames-related items at the House. Special experiences and one-off events are held for fundraising purposes and are designed to provide an "Eamesian" experience. Long-standing relationships have been established with founding sponsors Herman Miller, Vitra, and the Eames Office, which provide partial funding for operations as well as conservation. The Foundation has successfully solicited grant funding for conservation work from other foundations and nonprofit organizations, including the Getty Foundation, the Dunard Fund, the Ludwick Family Foundation, and the National Trust for Historic Preservation.

The Foundation's long-term objectives in relation to the financial operations for the conservation of the site are as follows:

- Increase the size of the Eames Foundation membership program by targeting membership benefits to attract and retain Foundation members.





**Figure 6.4** View of the parking area, with the portable toilet at right and studio at left, 2017. Museum infrastructure, such as visitor facilities and parking, poses challenges that need long-term strategic planning.

- Continue charging admission fees to public visitors as a means of supporting operations.
- Continue seeking long-term funding for conservation work through increased fundraising activities from corporate and philanthropic sponsors.
- Continue fundraising through limited interior tours and other premium experiences for visitors.
- Continue hosting Eames Foundation fundraisers on site (fig. 6.3).
- Increase fundraising through rentals for special events and photo shoots while continuing to manage physical impacts to the site and compatibility with the Eames Foundation mission.
- Continue earmarking funds raised through event rentals for conservation-related work and activities.
- Build an endowment in order to secure the House into the future.
- Increase diversity of fundraising sources and opportunities.

### Site Facilities and Management

Visitor amenities at the Eames House site are limited, and parking is restricted to neighboring streets. Any effort to expand visitor facilities or provide parking within the present site boundaries (fig. 6.4) may adversely impact heritage values and would have an impact on the surrounding residential neighborhood. The Eames House shares its bluff-top location with three other Case Study Houses (Nos. 9, 18, and 20). The other properties are high-value, privately owned homes over which the Eames Foundation has little influence.

The Foundation's long-term objectives in relation to site facilities and management at the site are as follows:

- Improve basic visitor and staff facilities, such as bathrooms.
- Acquire nearby property for creation of a visitor center and parking area, thus freeing the studio for use as a site of interpretive and educational programming and to house exhibits or events that promote greater understanding of the Eames House and the work of Charles and Ray Eames.
- Create a Case Study Bluff historic district and restore the original physical relationship between the Eames House and its neighbors, reinstating John Entenza's original intention for the cluster of houses and providing a better understanding of the Case Study House Program overall. To achieve this, the Foundation would need to either secure their neighbors' cooperation or purchase the other properties on the bluff.
- Develop a team of staff who are dedicated to maintenance of the Eames House and who adhere to the policies of the CMP, including implementation of a Maintenance Plan that includes cyclical maintenance and repairs (see policies 28 and 29).

## 6.3 Policies for Governance of Conservation Actions

### ► 6.3.1 General Governance Policies

#### Policy 1: Adoption of CMP and Implementation of Conservation Policies

*The conservation policies set out in this document should be adopted by the Eames Foundation as a guide to future conservation, interpretation, and management of the place.*

Copies of this CMP should be held by the Eames Foundation as owners of the site and by the GCI and made available online.

#### Policy 2: Regular Review of Policies

*The conservation policies should be reviewed at regular intervals by the Eames Foundation as owners and users of the site to ensure that policies are being implemented and works and operations are planned in accordance with CMP recommendations.*

Reviews should be carried out at ten-year intervals or less, depending on the condition of the place and/or particular issues or problems facing the owners and/or users, including pressure for change/development or new regulatory controls, or when pertinent new information becomes available.

#### Policy 3: Professional Conservation Advice

*Relevant and experienced conservation advice and practitioners should be used to assist in the review of policies when required and for the development and supervision of works proposals for the site, including maintenance and repair.*

Consultant advice and contractual work on significant elements and/or fabric should be carried out by firms or persons with proven expertise and experience in conservation-related projects in the relevant fields. This includes professional consultants, contractors, and tradespeople.

Care should be taken during all work to ensure that significant elements, components, and attributes are adequately protected from damage.

The appointment (as advisers) of a collections conservator, a conservation architect, and a landscape architect would provide the Eames Foundation with consistent technical advice and guidance. These appointees should have relevant qualifications and demonstrated experience in conservation practice, site management, and modern heritage.

#### Policy 4: Best Practice Conservation Principles

*The future conservation management and interpretation of the place should be carried out in accordance with best practice conservation principles such as the Burra Charter and the Secretary of the Interior's Standards for the Treatment of Historic Properties.*

The following conservation principles from the Burra Charter are particularly relevant to the Eames House site:

- "Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible" (Article 3.1)
- "Conservation of a place should identify and take into consideration all aspects of cultural and natural significance

without unwarranted emphasis on any one value at the expense of others" (Article 5.1)

- "Where the use of a place is of cultural significance it should be retained" (Article 7.1)
- "A place should have a compatible use" (Article 7.2)

Although they are worded differently, these and other principles outlined in the Burra Charter and in the *Secretary of the Interior's Standards for Rehabilitation* are compatible. As a National Historic Landmark, the Eames House is subject to the Secretary's Standards (US Department of the Interior, US National Park Service, Technical Preservation Services 2017).

#### Policy 5: Role of Significance in Site Management

*The statement of heritage significance of the site and assessments of the significance of individual elements as set out in this plan should guide all planning for and implementation of work for its conservation, interpretation, and management.*

The assessment of significance (see chapter 5) should guide the conservation of significant areas, elements, and fabric as well as key visual and functional relationships. In this context, "conservation" includes all the activities ascribed to it in the Burra Charter, including preservation, maintenance, restoration, reconstruction, and adaptation. Note that the definitions used here differ slightly from those of the US Secretary of the Interior but are compatible.

#### Policy 6: Significance Guides Conservation Actions

*The elements and attributes of the place, which contribute to its most significant historic, aesthetic, social, and technical values, should be appropriately conserved, interpreted, and managed as part of its future use.*

Priority should be given to the conservation of elements and attributes of the highest—that is, exceptional—significance.

Table 6.1 sets out, in general terms, the appropriate conservation treatment for areas, elements, components, and fabric in accordance with their level of significance, as identified in detail in chapter 5, section 5.6.

#### Policy 7: Coordinated Planning

*Proposed changes to use or fabric and/or development of any part of the site should always be considered as part of a coordinated and documented plan for the whole place.*

This policy seeks to facilitate an orderly and methodical approach to the care and management of the place. It also seeks to encourage careful investigation of alternative uses or developments for particular areas, elements, and/or fabric in order to minimize adverse impacts on, and retain as far as possible, the significant values of the place.

#### Policy 8: Site Recording for Archival Purposes

*Archival recording of the existing site layout and key elements should be completed as a permanent record that will enhance understanding of the site and inform future conservation, interpretation, and management actions. Baseline recording should be reviewed and updated at regular intervals, for instance, when the CMP is updated or when works occur.*

The archival recording process is intended to provide regularly



**TABLE 6.1****Conservation Treatment by Level of Significance**

<b>Level of Significance:</b>	<b>EXCEPTIONAL</b>	<b>MODERATE</b>	<b>INTRUSIVE</b>
<b>Appropriate Conservation Treatment:</b>	Preservation, conservation, restoration, reconstruction. Adaptation and/or interpretation only where significant layout, elements, and/or fabric are altered, missing, or deteriorated.	Retention and conservation where possible but adaptation and/or alteration permissible.	Remove/modify intrusive components to reduce adverse impacts.

updated documentation of the layout, components, fabric, and condition of the site and the changes made over time. The record should include accurate, scaled survey plans of the whole site, showing all built components and major landscape features (including plantings and earthworks). The HABS documentation (Historic American Buildings Survey 2013), together with the topographical survey and geotechnical report (Leighton Consulting forthcoming), tree survey (Carlberg Associates forthcoming), and the initial recording of the site by Escher GuneWardena Architecture (Escher GuneWardena Architecture 2011), forms the current Eames House baseline site recording (fig. 6.5). These documents should be viewed holistically and supplemented with additional archival recording of the building exteriors and interiors, contents and collections, and landscape to develop a complete baseline site record.

Where required, the existing baseline documentation should be supplemented by additional photographs of site elements, components, and details, with notes on materials and condition, to build a comprehensive account of the site. Documentation should record areas of deterioration and alterations and the condition of fabric so that the progression of changes can be monitored to help future decision making. Prior to and after any changes, opening up of components or fabric, or works on the site, additional drawings and/or photographs recording the relevant areas and components should be undertaken. Ongoing repair and restoration of components and fabric should be documented and added to the overall record. Once completed, copies of the archival records should be securely stored by the Eames Foundation as part of the Eames House archive.

The *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* and the National Park Service Heritage Documentation Programs provide useful guidelines for the development of both historical documentation and architectural and engineering documentation (US National Park Service 1983b; US National Park Service, Birnbaum, and Capella-Peters 1996; US National Park Service 2016).

Charles and Ray Eames left a large collection of photographs of the site that spans nearly forty years. Many photos are undated and do not formally document the site, but they provide a valuable record of the place as seen through the Eameses' eyes. Copies are held by the Eames Office and at the Library of Congress.



**Figure 6.5** Members of the HABS team measuring the north elevation of the studio in 2013. The HABS drawings form part of the baseline documentation of the site.

#### **Policy 9: Preparation of a Heritage Risk Management Plan**

**A Heritage Risk Management Plan should be prepared to address the range of vulnerabilities and risks faced by the Eames House, to identify their likelihood and consequences, and to develop appropriate management measures to anticipate and prepare to mitigate these risks. All recommendations should be evaluated in the context of the significance of the place, the impacts of proposed works/measures, and the options available to lessen impacts.**

The development of an integrated, long-term Heritage Risk Management Plan (HRMP) using benchmark standards is of fundamental importance given the susceptibility of the site to various

risks with potentially significant consequences, including natural disasters (such as earthquakes, landslide, wildfires, severe storms, and tree falls); the cumulative effects of visitor pressure; possible theft or vandalism; and development impacts (such as construction on neighboring parcels or road expansion), as well as the complexity and cost of dealing with these issues.

The scope of the HRMP should include measures to:

- prevent or lessen the likelihood of the risk;
- reduce/mitigate the severity of potential outcomes;
- implement before and during critical events; and
- deal with the aftermath/consequences if required.

A Disaster Preparedness Plan (DPP) is a key component of the HRMP. The DPP outlines the immediate response to all types of disasters. A wildfire emergency plan, as well as plans for other specific types of disasters such as earthquakes and landslides, should be completed in advance of the full HRMP. All recommendations of the HRMP should ensure the effective conservation of the heritage values of the place and the elements and attributes associated with these values. The HRMP should integrate the policies of the CMP and consider the vulnerabilities that arise from the Eames House's function as architectural icon and house museum and its location on a potentially unstable bluff in a wildfire corridor. The exceptional significance of the residence and studio should be taken into account in any proposals for protective infrastructure to ensure that potential risk mitigation measures do not adversely impact the significance of significant elements and attributes. Practical considerations related to funding, available human resources, and the significance of the place also should be taken into account to ensure the usefulness of the HRMP to the Eames Foundation. The plan takes into account priorities and budget estimates for specific goals and outcomes and recommends readily achievable activities (such as emergency protection and/or retrieval procedures, with specific goals and time frames) based on benchmark standards.

### ► 6.3.2 Use and Management

#### **Policy 10: Management of the Site**

*The site should be used and managed in accordance with the policies in this CMP for its long-term conservation, interpretation, and management.*

The site, which includes all the lots owned by the Eames Foundation, should be used and managed in a holistic manner, with each part contributing to the story and heritage values of the place.

#### **Policy 11: Regulatory Requirements**

*Any proposed works to the Eames House site should comply with the regulatory requirements that result from its heritage designations.*

The Eames House is designated as both a National Historic Landmark (NHL) and as a Los Angeles Historic-Cultural Monument (HCM). Upon listing as an NHL, the Eames House was automatically entered on both the National Register of Historic Places and the California Register of Historical Resources. Regulation of designated properties is generally administered at the local government level. Alterations to the site must comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*

(US Department of the Interior, US National Park Service, Technical Preservation Services 2017). Regulatory requirements are detailed in appendix D.

#### **Policy 12: Compatibility of Proposed Uses**

*The use of the place as a house museum and related activities should be compatible with the conservation of its cultural significance and with its interpretation.*

Museum-related uses would facilitate the most appropriate conservation outcomes for the Eames House by ensuring its conservation and public appreciation through interpretation. However, key characteristics of the place (size, type of construction, age, and contents and collections), as well as the Eames Foundation's current interpretive practices, pose challenges to the protection of vulnerable fabric from agents of deterioration (such as environmental conditions and pests) and to the management of visitation, security, and activities associated with museum use. Actions that support the CMP policy objectives—including physical conservation of building fabric, landscape, and contents and collections, site security, public presentation, and facilities—will assist the long-term sustainability of the place.

The management of the Eames House by the Foundation provides an exceptional advantage in planning for, and being able to offer a range of, activities and methods of interpretation and outreach that have the potential to be varied in extent, economic return, and impact on the place as a whole. In determining specific activities and priorities, however, the guiding objective remains to protect and conserve the components and elements of greatest significance by removing agents of deterioration, stabilizing/repairing fabric as necessary, and interpreting and protecting the place for the future. This approach aligns precisely with the Eames Foundation's own mission statement.

Specific policies in this section address the conservation management issues arising from the proposed uses of the place—as a museum facility, architectural icon, meeting and teaching center—such as security, collections policy and storage, conservation of building fabric, and provision of visitor facilities. Each policy takes into account the significant values, elements, components, and attributes of the place and needs to be considered as interrelated, with potentially competing priorities for attention and funding.

#### **Policy 13: Interpretation Plan**

*An Interpretation Plan should be prepared and implemented for the site as an essential part of the conservation planning process to facilitate community and visitor understanding of the heritage values and conservation management objectives of the place.*

The research phase of the Interpretation Plan should identify significant themes and key interpretative stories, as well as interpretive opportunities at the site, and profile likely audiences for interpretive activities. The implementation phase of the Interpretation Plan should tell stories and identify interpretation media, projects, and programs, which could range from simply conserving and presenting the place as is, to website development, signage, and events (fig. 6.6).

#### **Policy 14: Visitor Management Plan**

*A Visitor Management Plan should be prepared and implemented for the site that identifies objectives and specific goals for use,*



**carrying capacity, and visitation of the Eames House to help guide decision making and priorities for care and management of the place, both in the short and long term.**

Conservation, interpretation, and management of the key site elements and attributes should inform all management objectives and goals to ensure a sustainable future for the use and presentation of the place. Measures to appropriately protect and care for the building complex should be coordinated and balanced with its presentation to visitors (fig. 6.7). In some instances, these measures may impact visitor experiences, but with appropriate management and interpretation, visitors can be actively engaged in understanding the conservation process. An example of a managed activity is showing visitors the residence with curtains drawn at certain times of the day to protect the interior and its contents from sunlight. The related activities of opening and closing curtains, with explanations by guides, could facilitate greater focus and understanding. Different visit times and commentaries could be advertised, with different costs for tours that provide guided commentary.

Supporting and managing public visitation is a related high-priority activity and should be planned for, taking into account current and predicted visitor data, behavior, and control, as well as information requirements. Particularly important is the need to establish the site-carrying capacity, to plan for projected visitation and visitor facilities, and to identify potential impacts and how to control them before serious problems arise.

#### **Policy 15: Monitor Impacts from Use and Use-related Activities**

***All uses and activities should be monitored to determine the nature and level of impacts on significant site elements, values, and attributes. If adverse impacts are identified, changes should be made to activity types, levels of use, and/or management of activities. Physical protection measures may also be required to remove or reduce impacts.***

This policy recommends monitoring and control of visitor access to and use of the site to limit potential impacts on significant components and attributes. Its implementation requires consideration of a range of issues relating to site security and entry controls, way-finding and site behavior instructions, and control of visitor numbers; and it should be read in conjunction with the relevant policies. In essence, this policy identifies the need for the Eames Foundation to appropriately manage one of the site's major sources of "impact"—the large number of visitors, both well intentioned and not.

Providing a controlled point of entry as part of the future conservation and upgrading of the termination of the right-of-way at the northeast entry to the site is recommended to define the point of arrival for visitors and improve site security.

#### **Policy 16: Adaptation for Proposed Uses**

***If adaptation to the site or construction of new facilities (including services) is proposed, the potential impacts on significant elements, components, and attributes should be identified and assessed before any changes are implemented. If adverse impacts are identified, alternative measures should be investigated.***

This policy seeks to ensure that all proposed changes to the components, fabric, or attributes of the place to accommodate



**Figure 6.6** Visitors interacting with the Eames Giant House of Cards in the meadow, 2014. Such activities allow visitors to experience the creative legacy of Ray and Charles and should be incorporated into the Interpretation Plan.

**Figure 6.7** Visitors observing the living room from the exterior, 2015. Currently, such self-guided tours are the main form of visitation; interior access is very limited to minimize impact.





**Figure 6.8** The Eameses carefully sited the building complex behind a screen of eucalyptus trees. By 2015, the subsequent growth of trees had obscured views toward and from the building complex and meadow. A selective pruning and removal program has since been implemented. Photographed in 2017.

specific uses or functions are appropriately assessed, together with suitable alternatives, before being selected for implementation.

Key characteristics of the building complex and landscape setting of the Eames House pose challenges for managing visitation, security, and protection of vulnerable fabric from agents of deterioration, risk, and activities associated with museum use. Consequently, when planning adaptation, methods of public presentation, or site management policies, the Eames Foundation may need to consider alternatives to “standard” museum practices. This will ensure conservation of the most significant attributes of the site, particularly its unique architectural character and authenticity and integrity.

## 6.4 Policies for Conservation of the Eames House Site

### Policy 17: General Site Conservation

*Conserve all elements, components, and attributes that contribute to the Eames House site’s heritage significance in accordance with the policies of this CMP.*

This policy includes preservation, maintenance, restoration, reconstruction, and adaptation when necessary of the building complex, immediate setting, and site landscaping (natural and human-made). It also includes conservation and interpretation of significant attributes, including visual and functional relationships between site components, both within the site and its extended setting.

Decisions made regarding the treatment of particular areas, elements, and fabric should be based on detailed assessments of physical character, including materials and condition, as well as on significance.

### Policy 18: Views

*Significant views to, from, and within the site should be conserved as much as possible. A detailed analysis of existing views and original and intended views should be undertaken.*

In general, it is important that all decisions about the location of new development (including structures or signage) and landscaping should take account of key views to and from the site and ensure that the most significant views are appropriately conserved and/or enhanced. A view study should be completed in conjunction with the development of a Landscape Management Plan (see policy 25).

Conservation or restoration of significant views may require selective pruning of soft landscaping and managed changes to reduce overgrown trees and plantings, and to allow interpretation of now obscured

early vistas (fig. 6.8). In these situations, decisions should balance the relative significance of views and plantings with privacy needs and changes that have been made to neighboring properties. Some significant historical views have been lost and cannot be restored.

### Policy 19: New Development

*New development on the site should be avoided as much as possible. Where required for essential functions or long-term viability of the place, it should be limited to the minimum degree of change necessary. New development should be sited and designed to conform to all relevant policies of this CMP and be reversible.*

This policy is intended to help guide long-term management of the site, particularly as related to its proposed museum use and public visitation. All new structures on the site constitute new development as defined in this CMP, including signage, screens, fences, storage facilities, and visitor services and facilities.

The provision of facilities for visitors is a challenge for all historic sites, and particularly so for a small modernist house museum with no back-of-house area. With appropriate controls on siting, size, architectural character, construction, access route, screening, and signage, compatible new development for visitor facilities could be achieved.

### Policy 20: Maintaining Legibility of Early Eames House Site Configuration

*The legibility and character of the early configuration and layout of the site should be maintained and interpreted.*

This policy relates to the significance of the place as one of the group of Case Study Houses erected on John Entenza’s Pacific Palisades subdivision, and the survival of the original configuration and layout of this subdivision within the current site.

Significant original relationships between the Eames House and its extended setting and historic context have been impacted in several ways. While the original Eames parcel composes the bulk of the current site, additions from neighboring lots during the



Eameses' lifetimes increased its size and altered its configuration. Furthermore, neighbors have erected privacy and security fencing and landscape screening along property boundaries, and the Eames Foundation has added hedging to block views of new development. This has resulted in substantial alterations to physical and visual relationships with neighboring properties.

This is quite notable in two places. First, on the boundary shared with the Entenza House, the low earthen berm, which originally provided a minimal demarcation between the two houses, has been supplemented by a metal fence and hedge screening for privacy. Second, the boundary between the Eames House and Case Study House No. 20 (the Bailey House) is also now marked with a wooden fence; tall plantings on the neighboring lot screen out all views between the properties. According to family recollection, before the fence was constructed, the Eameses and the Baileys informally shared this area, and Ray had a standing invitation to pick flowers grown by her neighbors.

Various changes to the street frontages, hard and soft landscaping, and fences along the original right-of-way access have also impacted on the Eames House's significant relationships with its extended setting and context. Most notable has been the loss of the more open, visually integrated character of Entenza's original vision for the Case Study Houses group, which had greater informality of landscape and less demarcation between lots, allowing the borrowing of landscape and views between gardens and houses.

#### **Policy 21: Right-of-Way**

***Surviving evidence of the original (1945) right-of-way from Chautauqua Boulevard, including layout, components, and fabric, should be appropriately conserved and its original character reconstructed/interpreted where possible to enhance the extended setting of the residence and studio.***

The role and character of the site's original vehicular access right-of-way, or driveway, are important in establishing the extended setting for the residence and studio, as well as the arrival experience for guests approaching the House (fig. 6.9). This policy refers to the treatment of the right-of-way and its boundary walls and fences (old and new) and seeks to ensure that the approach to, and first vistas of, the Eames House appear as they did historically to the greatest degree possible. The Eames Foundation does not own or control this right-of-way, which is shared with neighboring properties through an easement, thus its conservation requires cooperation with these property owners.

#### **Policy 22: Potential Archaeological Resources**

***All excavation-related works on the site, including demolition or removal, new construction, modification of open spaces, and provision of underground services, should take into account the***



**Figure 6.9** The driveway to the Eames House from Chautauqua Boulevard, shared with neighboring properties, provides an important approach experience for visitors by establishing its setting among other Case Study Houses and creating a sense of anticipation, 2017.

**Figure 6.10** The old peppercorn tree in the meadow near the bluff, which predates the Eameses' occupancy of the site and may be a remnant from an earlier use of the property, 2017.

***site's potential to retain archaeological evidence of past use and, if found, consult appropriately qualified professionals.***

Although no potential site archaeological resources have been identified by either the documentary (historical) research or physical investigations of the site, recognition of potential archaeology should be included in all relevant works specifications and directives to contractors to help protect more ephemeral evidence of past landscape features such as plantings (fig. 6.10), paths, walls, steps, and fence lines that have deteriorated or been covered over.





**Figure 6.11** Weather station installed by the GCI in the meadow, 2016. Environmental monitoring began in 2011 to gather baseline temperature, humidity, and wind data that will inform environmental improvement recommendations.

## 6.5 Policies for Implementation Planning

**Policy 23: Implementation Planning for the Building Complex**  
*Planning and decision making to conserve the building complex should be carried out in accordance with the policies and philosophical approach outlined in this CMP. Detailed investigations, including assessment of the physical condition of fabric, should follow the methodological approach of the CMP, with significance determining the nature and degree of intervention.*

All investigations, survey work, and the preparation of documentation for implementing works should be prepared by specialist conservation consultants in accordance with the objectives and policies in this CMP. The works should also be prioritized to assist coordinated planning and decision making (see recommendations in chapter 7). Individual conservation projects should be approached holistically; for instance, planning for conservation of courtyard surfaces should consider treatment of the wood strips as well as site drainage and grading issues.

### Policy 24: Implementation Planning for the Collections

*A Collections Management Plan should be prepared and implemented for the site as a matter of priority to guide access to and conservation of the interiors and the contents and collections of the Eames House.*

The contents and collections of the Eames House site are intrinsic elements of the site's significance. The completion of the object identification inventory for each room to museum standards, including an integrated object location and condition survey, is a priority in order to document the scope of the collections and to identify the related conservation issues to be managed. The Collections Management Plan should comply with the policies of the CMP (Conservation Management Plan) and incorporate the environmental improvement recommendations developed by the GCI from 2011 to 2017 (Maekawa forthcoming; Henry 2017) (fig. 6.11) and the collection condition and risk assessment undertaken by the GCI from November 2016 to January 2017 (Boersma 2017).

### Policy 25: Implementation Planning for the Landscape

*A Landscape Management Plan (LMP) should be prepared and implemented for the Eames House that develops detailed management and conservation policy recommendations for its ongoing care and interpretation.*

The landscape setting of the Eames House is a major contributor to the site's historic and aesthetic significance and today requires careful management and interpretation. The LMP should be in accord with this CMP and build on the landscape survey and assessment undertaken in 2014–15 (Carlberg Associates forthcoming). The LMP will assess the landscape's cultural and historic values and analyze changes that have occurred over time. Treatments and actions that conserve significant elements and components will be recommended, with the recognition that change is inherent in a living landscape.

**Policy 26: Developing Plans for Specific Conservation Works**  
*Plans for specific conservation works should be developed within the context of the CMP philosophy and approach. Documentation should include the overall scope and extent of the works as well as methods and materials for implementation.*

This CMP provides general policy guidelines for the treatment of significant elements, components, and fabric of the building complex and its immediate setting, landscape, and collections; however, a specific, individual project plan should be prepared for each proposed activity or conservation work, based on a detailed assessment of the nature and condition of fabric and specialist advice on key conservation issues. All solutions should be tailored to particular problems, particularly where:

- opening up of components or fabric is required to accurately determine the nature and extent of original detailing and/or condition;
- areas cannot be easily accessed for investigation; and
- specialist advice may be required to establish priorities and



assist with analysis and/or specification of remedial works (e.g., from a structural engineer with expertise in heritage buildings or a specialist materials conservator).

Individual projects should consider their potential impacts across the entire site. They should be coordinated to ensure consistency of methods and materials, to minimize negative impacts including the number of times the site is disturbed, and to achieve multiple conservation outcomes. This should also assist implementation of works in a cost-efficient manner.

Projects should be prioritized to address the most urgent conservation needs first. Emergency stabilization for particular site elements or components should be implemented as a matter of priority where identified or required. Implementation priorities are identified in chapter 7.

## 6.6 Policies for Maintenance and Repair

### Policy 27: Maintenance Planning

*An integrated Maintenance Plan for the building complex, contents and collections, and landscape should be prepared to assist ongoing care and management of these elements and the site as a whole. The Maintenance Plan should include cyclic maintenance and priority maintenance works requirements.*

Given the specific problems resulting from the lifespan of modern materials and the difficulty of finding replacement materials and components, regular, ongoing—that is, cyclical—maintenance is an essential part of all preventive conservation. Emergency maintenance or repair issues (e.g., leaks from fixtures) should be resolved as soon as possible.

A Maintenance Plan, including cyclical and priority works (see policies 28 and 29), should be prepared by appropriately qualified heritage professionals and include inspection checklists and works recommendations for relevant areas, components, and fabric. Recommendations should be based on the significance outlined in chapter 5, the policies of this CMP, and appropriate conservation philosophy and repair techniques. A holistic approach that recognizes the inter-relationship between maintenance issues across the site and the need for regular inspections is an essential part of a Maintenance Plan.

All works should be directed toward doing as much as necessary but as little as possible, consistent with general conservation principles. This includes retaining, maintaining, and repairing existing significant fabric wherever possible rather than replacing elements. Where this is not possible, restoration or reconstruction of significant detailing should be considered.

The Maintenance Plan should be reviewed at regular intervals to ensure that it is proving effective in retarding deterioration. Five-year intervals are recommended, but ten-year intervals (as recommended for the CMP review) may be suitable and more realistically implemented. The Maintenance Plan should also be reviewed if there is a change of use or a notable

change of condition, such as following an earthquake or fire.

The current maintenance tasks log implemented by the Eames Foundation, supplemented by historical records, will provide a valuable record of works undertaken to date and identify trends that should inform the development of the Maintenance Plan and its priorities.

### Policy 28: Cyclical Maintenance and Repair Works

*Regular, cyclical maintenance and repair works should be identified in the Maintenance Plan for the site, together with appropriate time periods and priorities for their implementation.*

Of particular importance is the need to arrest and/or repair damage to significant original fabric (of the building complex, contents and collections, and landscape) from ongoing deterioration due to rising and falling damp, sunlight and heat exposure, aging and/or weathering of unprotected fabric, dust, insect attack, impact damage (including wear and tear), or other causes. Examples at the Eames House that require cyclical maintenance include, but are not limited to, the roof and roof drainage system, external windows and doors (fig. 6.12), the contents and collections of the building complex, and key landscape elements (such as the row of eucalyptus trees along the east elevation and plantings within the courtyards).

### Policy 29: Priority Maintenance and Repair Works

*Maintenance and repair works identified in the Maintenance Plan as being of high priority should be implemented as soon as possible.*

This policy is intended to highlight that some maintenance and repair works should be implemented as a priority to protect vulnerable and important areas, elements, and fabric before significant deterioration and/or loss occurs, and thus ensure the integrity of the place is conserved. Works identified in this CMP as being of high priority for implementation are listed in chapter 7.

**Figure 6.12** A worker repairing a Truscon hopper window in 2012. Repair of steel components should be carried out as part of a regular, cyclical maintenance schedule.



## 6.7 Policies for Infrastructure and Services

### Policy 30: Existing Utilities and Services

*All existing services and utilities should be regularly checked for condition, function, safety, and adequacy, and repaired, upgraded, or otherwise made safe as required.*

This policy applies to water supply and drainage (including sewerage and storm-water and groundwater drainage), electricity and communications (phone, data, etc.), gas, security (cameras, alarms, etc.), fire protection (detectors, extinguishers, etc.), and environmental services (heating, etc.). In general terms, these services and associated fittings should be regularly checked and maintained in safe condition throughout the site. Significant features, such as original fittings, should be retained as much as possible.

Maintenance and repair needs and priorities should be determined following appropriate investigation and assessment of existing utilities and services (water and sewerage, mechanical, electrical, fire protection, etc.), taking into account the general policies in this CMP relating to the treatment of significant fabric. Requirements for ongoing inspections, testing, cleaning, and repairs should be incorporated into the Maintenance Plan, prioritized, and implemented. Modern services, where required, should be appropriately integrated and hidden from view as much as possible.

### Policy 31: Externally Mounted Fixtures and Services

*The physical and visual impacts of the accumulation of wiring, ducts, meters, and control boxes that have been added along the west elevations of the residence and studio since Ray's death in 1988 should be reduced by removing intrusive, redundant fixtures, rationalizing servicing routes and locations, and upgrading installation detailing.*

Though effectively the back-of-house service area, the west elevation of the building complex is an integral functional component of the original structure. The honest expression of services and the working life of the site should be balanced with the reduction of accumulated fittings and stored items.

In its role as a house museum and exemplar of architecturally significant and highly intact postwar residential architecture, retention and display of services used and installed by the Eameses is an appropriate interpretation measure. The introduction of later services and fittings, however, should be balanced against the historic and aesthetic/architectural values of the place; that is, their installation and use require careful control, siting, and camouflage to minimize impacts on the significant aesthetic values of the place.

### Policy 32: Removal of Stored Equipment

*The collection and storage of equipment and tools in publicly accessible areas around the building complex should be managed to prevent accidents and assist public passage and safety.*

This policy is directed toward rationalizing storage at the rear/west elevations of the residence and studio. Although this was traditionally the back-of-house storage area for pots, ladders, and other items, the continuation of this historical use creates

public safety and security challenges in the site's current use as a house museum.

### Policy 33: Original In-floor Ducted Heating System

*Retain the original ducted heating system (including in-slab ducts and outlets) in situ and utilize as part of an upgrading of the environmental conditions of the residence as appropriate.*

This policy takes into account both the historical and technical significance of the original ducted heating system and the investigations by the GCI in 2012, which determined that, although the condition of the ducted system is variable (with deteriorated sections requiring repair/replacement), it could be utilized for future HVAC systems.

### Policy 34: Upgrading Security Services

*Internal and external security requirements should be reviewed regularly and impacts on significance should be assessed when planning upgrades to existing security systems. Ongoing security measures to monitor and protect the building complex, collections, and site, and to deter potential threats, should be ensured.*

An integrated approach to dealing with security issues—including theft, damage through fire or storms, vandalism, trespass, and unsafe access—is necessary for the ongoing care of the place. Upgrades to current security systems should be undertaken with professional advice from experts experienced in house museums and installing systems where significant fabric is at risk.

All measures should consider their potential impacts on the significance of the site as a whole in addition to potential alternatives that would have less impact on key elements and values. Use and conservation management policies for the site should also be included as part of any security upgrade to provide site protection in a manner that is compatible with the needs and significance of the Eames House; for example, minimizing the visual impact through the size, location, and color of new external fittings.

## 6.8 Policies for Treatment of Fabric

### Policy 35: Distinguishing between Original/Early and New Fabric

*Conservation works (including reconstruction and adaptation) should ensure that the authenticity of original and early elements, components, and fabric being retained is respected and maintained, and that alterations or new works are appropriately identified.*

Where original fabric or detailing has been completely removed, and/or there is lack of documentary evidence of key elements or components, accurate restoration or reconstruction is conjectural and should be avoided.

In this context, adaptation may include interpretive re-creation of areas, elements, components, fabric, and detailing, but this should be appropriately distinguished from the original.

Measures to distinguish between new and existing elements, components, and fabric should be appropriate to the element, component, or fabric and its context. In some situations, new or replacement components may be clearly interpreted as new and/or of more recent design; for instance, substitution of a



later Eames Lounge Chair and Ottoman for the original in the living room. In other situations, more subtle differentiation should be used where this is an equally effective and more appropriate treatment to conserve and interpret significance (particularly to areas, elements, components, and fabric of the highest significance, such as the floors of the major interior spaces).

#### **Policy 36: Conservation of Historic Layering**

*Site elements, components, and fabric of different periods—that is, the historic layering of the site—should be conserved in accordance with the type and degree of their significance.*

The intention of this policy is to recognize the role of different periods, events, and developments in the significance of the place as a whole and its contributory elements, components, and attributes. As with all historic places, change and evolution has been part of the life of the place, and was acknowledged by Charles and Ray as an aspect of much of their design activity.

At the same time, the heritage significance of the place is related, in large measure, to its rarity and value in that it retains the integrity and authenticity of so much of its original architectural design, building components, fabric, and contents and collections, all within its original landscape setting. The less-tangible associations with continued family involvement, educational efforts, and public outreach add to its significance. This policy applies to the whole of the building complex, contents and collections, and landscape elements, and recognizes that landscape evolves over time.

The site's history can be broken into four significant periods:

- Pre-1948: before the Eameses acquired the site
- 1948–88: Charles and Ray Eames's ownership and occupation
- 1988–2004: Eames family ownership, use, and stewardship
- 2004 to present: the Eames Foundation use and management

Within the 1948–88 period, the most important years are those when Charles and Ray Eames owned and occupied the site together.

#### **Policy 37: Conservation Works as an Opportunity for Interpretation**

*Conservation, restoration, and reconstruction of key significant elements, components, and fabric are the primary means of interpreting the place and its important components, attributes, and associations.*

Conservation works that sustain significant elements and fabric are important opportunities for interpretation. Where new fabric is added as part of conservation or adaptation work, or a replica replaces an original item retired from the collections, these measures should be interpreted, for example, by telling the story of the original construction or the conservation philosophy that underpins the ongoing stewardship of the place and its collections by the Eames Foundation. Revealing and recording previously hidden elements and fabric and identifying new fabric and elements used as part of reconstruction and adaptation are part of the interpretation process. Archival recording of changes as they are made, date stamping of new elements as they are inserted, and erecting temporary signage while conservation works are under way are typical interpretation methods.

### **► 6.8.1 Removal of Significant Fabric**

#### **Policy 38: Evaluation of Alternatives**

*Proposals to remove original or significant early fabric should be made in the context of adequate evaluation of the use and significance of the place as a whole, consideration of reasonable alternatives, and appropriate advice from conservation professionals. Works that would remove or adversely impact significant areas, elements, components, fabric, or other aspects of the significance of the place should be permitted only in limited and specific circumstances.*

This policy reflects the need for coordinated decision making to ensure the appropriate conservation of the site's significant elements and fabric to ensure that the potential impacts of any change have been adequately identified and assessed. It also takes into account the requirement by most heritage authorities that alternatives be considered where works are proposed if they may adversely impact on areas, elements, or fabric of significance.

Activities that may be permitted include the following:

- Works that make the recovery of aspects of greater significance possible
- Works that help ensure the security and viability of the place and are necessary because there is no feasible alternative (e.g., to meet safety and/or legal requirements)
- Works for which full investigation of alternative options to minimize adverse impacts has been undertaken and appropriately/objectively evaluated

Before any change or removal is carried out, the elements and fabric that would be affected should be adequately recorded. Where appropriate, information about the works should be included in the interpretation of the place. See also policies 16 and 19, which guide decisions about new development or adaptation.

#### **Policy 39: Evidence and Reversibility**

*Where significant early elements or fabric are removed, evidence of their location and/or character in situ should be retained where possible to allow interpretation and/or future reinstatement.*

Where significant elements or fabric need to be removed and stored for later reinstatement or archiving, their location (in situ) should be recorded, and the elements or fabric should be cataloged and stored safely. Where props or facsimiles are used in the place of original components, they should be identified and interpreted as such.

## 6.9 Detailed Conservation Policies

This section identifies specific conservation policies for elements, components, and fabric of the Eames House site, including the building complex, contents and collections, and landscape. It is not intended to provide a complete or exhaustive account of all possible policies for the site, but rather to establish the framework for an approach to planning and decision making that takes into account:

- ▶▶the significance of the elements, components, and/or fabric and their contribution to the attributes of the site;
- ▶▶the current nature, condition, construction, integrity, and authenticity of key site components and fabric; and
- ▶▶risks and vulnerabilities that affect or have the potential to affect the condition and/or long-term life of key components and fabric.

From these inputs, key objectives and detailed conservation policies for the ongoing care and management of the site have been developed, as set out in the sections below. The detailed policies should also be implemented within the framework of the following overarching conservation objectives:

- ▶▶To ensure all elements and components of the Eames House are maintained in a sound condition with the maximum retention of fabric and overall physical integrity
- ▶▶To ensure that appropriate and adequate preventive conservation is carried out to halt deterioration before vulnerable and significant fabric is lost and to ensure cost-efficient long-term conservation
- ▶▶To develop and implement regular inspection, investigation, maintenance, and repair programs
- ▶▶To minimize visual and physical changes to original form and fabric of the components by appropriate conservation approaches and works, including repair methods and materials
- ▶▶To ensure specialist conservation advice is obtained prior to decision making and/or undertaking conservation and interpretation measures
- ▶▶To implement environmental improvement recommendations developed by the GCI from 2011 to 2017 (Maekawa forthcoming; Henry 2017) to remove or reduce agents of deterioration, including water, excessive sunlight, humidity, and temperature
- ▶▶To implement a range of research projects and plans to support conservation, interpretation, and management

## Building Complex

### ► B1 Building Complex—Roof and Roof Drainage

#### Description

A replacement roof assembly was installed in 2014. It consists of the following:

- Rigid insulation adhered directly to Ferrobord steel substrate. A continuous section of short curb was installed about 6 inches from the perimeter on all sides of both the residence and studio roofs (fig. 6.13). This curb is interrupted at two areas on the west side of each roof, where two short sections of gutter are placed to collect rainwater (fig. 6.14).
- Original roof drains have been capped. The original rain leaders on the residence and the studio, which attach to these drains (mounted vertically on the west walls), are no longer in use. The new stainless steel gutter sections are connected to new vertical rain leaders, which are connected to horizontal storm-water lines that carry the water away from the structure on its north and south sides.
- Bituminous layers of built-up roofing membrane covered with hot-mopped asphalt and gravel (fig. 6.15).
- There are two pieces of metal edge flashing overhanging the top of the exterior, consisting of an original flashing and a second flashing installed over it in the 1990s.
- The original skylight was repaired and raised, and new metal flashings were installed as part of the 2014 reroofing work (fig. 6.16).

#### Significance

- The surviving elements of original roof form and detailing, including the skylight, contribute to the exceptional significance of the building complex and the site as a whole.
- The profile of the original form of the roof is of exceptional significance.



**Figure 6.13** Southeast corner of the studio roof, in 2017, showing the curb added as part of the reroofing campaign in 2014 to improve weather tightness and drainage. Also visible at the top of the wall are the original and later (second) edge flashings.



**Figure 6.14** West elevation of the residence, in 2017, showing roof edge and short gutter section installed during the 2014 reroofing. Regular removal of leaf litter is an essential cyclical and preventive maintenance activity.



- The non-original roofing fabric and detailing (such as flashings and roof membrane) do not contribute to the significance of the roof.

### Condition

- The roof was made watertight and roof drainage modified as part of the 2014 repair works.
- The skylight and its original glazing was repaired and is in sound and watertight condition. One of the skylight's three panes is cracked, but it remains watertight.

### Vulnerabilities

- Leaf litter from surrounding trees blocks gutters and rain leaders if not regularly cleared.
- Potential for leaks in the roof during or after storms, which could lead to damage of interiors and collections.
- The wire glass skylight is vulnerable to breakage if a nearby tree limb should fall on it. The original wire glass is a potentially fragile material and there is no known exact modern equivalent for replacement.
- The skylight is an important original element but has been a source of water and light entry, leading to damage of interior



**Figure 6.15** Workers cover the built-up layers of bituminous roofing membrane with hot-mopped asphalt and gravel in 2014.

**Figure 6.16** The skylight, with its original wire-reinforced glass, was repaired in 2014 and is now in sound condition and watertight, 2017.

materials, especially the wood veneer lining of the stairwell area.

- Addition of new or adaptation of existing roof mount fixtures (e.g., for security or lighting) may impact original roof profile, fabric, and form.

### Conservation Policies Objective

*To ensure that the roofs and roof drainage of the building complex are maintained in a sound and watertight condition for the long-term security of the building complex, components and fabric, and contents and collections.*

#### Detailed Conservation Policies:

##### B1 Building Complex—Roof and Roof Drainage

**B1.1:** Minimize visual and physical changes to original roof form when repairing or upgrading. Removal of the second metal edge flashing (added in the 1990s) and reinstatement of a single edge flashing to reveal the significant, original clean line are recommended as part of future upgrading of the roof.

**B1.2:** Avoid or minimize making new penetrations and attachments that would compromise watertightness to the roof, including penetrations and attachments for security and lighting. If new roof-mounted fittings or devices are needed, use fixings that do not require penetration of original or early fabric and minimize their visibility from the ground.

**B1.3:** Remove hazardous materials that pose a health risk as the opportunity arises and replace with appropriate materials specified by conservation consultant.

**B1.4:** Maintain and repair original skylight with appropriate conservation advice.

**B1.5:** Investigate and implement measures to reduce sun penetration through skylight while retaining original wire glass with specialist conservation input.

**B1.6:** Implement measures to reduce leaf litter on roof in the short and long term to reduce fire risk and ensure proper roof drainage. This should include pruning and/or removal of vegetation hanging over roof and regular ongoing maintenance.

**B1.7:** Provide leaf control to drainage outlets to keep storm-water lines clear of leaf litter.

**B1.8:** Ensure that all drainage lines are clear for their entire lengths before new connections are made and that all vertical rain leaders have a cleanout that allows access in the case of blockage.

**B1.9:** Conduct quarterly inspection and cleaning of roof and drainage outlets as part of essential maintenance. Check before and in the wake of major storms.

## ► B2 Building Complex—Site Drainage and Water Management

### Description

- Subsurface French (agricultural) drainage line originally installed close to the base of the west side of the retaining wall, as shown in original working drawings. Original weep holes are located on the east face of the retaining wall in the courtyards (fig. 6.17).
- Subsequent changes to water supply and drainage lines have been progressively introduced to replace and upgrade deteriorated or inadequate services and improve disposal of water (fig. 6.18).
- Water for landscape irrigation is provided by a fixed sprinkler system on upper slope. Faucets are mounted on building walls and freestanding along pathways. These are used for watering potted plants and garden beds around the building structures.
- Site drainage appears to rely mostly on the slope of the ground to direct surface flow away from the building complex and adjacent paved areas. No physical evidence of functioning subsurface drainage systems has been identified to date.

### Significance

- The simplicity of the original site drainage and its minimal visual and physical impacts reflect the specific intentions of the original Eames design and its “straightforward” approach



**Figure 6.17** East face of the original concrete retaining wall facing the central court, in 2016, showing three weep holes from the original French drain, which runs behind the wall near the base.

**Figure 6.18** West elevation of the studio in 2017, showing new gutter and rain leaders connected to horizontal storm-water lines that keep all roof water away from buildings. These improvements were installed as part of the 2014 reroofing.



to solving functional problems, contributing to the overall aesthetic significance of the place.

- Changes made after Ray's death, including new fittings and fixtures, have impacted the aesthetic significance of the place.
- The site also reflects contemporary building practice, contributing to the educational and historical values of the site as an example of highly intact postwar construction.

### Condition

- The efficacy of the original French (agricultural) drain behind the retaining wall currently is not fully known, but it appears to be limited by compaction of the upper layers of soil, preventing drainage of water.
- As a result of the inoperable French drain and the limited slope of the path, there is currently no clear drainage path away from the structures for runoff of storm water coming off the slope.
- While a section of original waterproof membrane on the outside (west) face of the retaining wall appears to be intact where investigations were undertaken adjacent to the living room of the residence, the condition of the waterproof membrane along the remainder of the wall is unknown. Evidence of moisture has been noted on the inside surface of the west wall of the studio's storage room/darkroom.
- Buckling of the wood paneling on the living room's west wall due to damp in the wall appears to have been largely related to the malfunction of an adjacent garden sprinkler (since repaired) on the upper side of the wall.
- Areas of erosion adjacent to watering system outlets have been noted on the sloping areas.
- Water ponding in the courtyards appears to have contributed to the deterioration of wood pavers, wood strips, and the exterior tallowood wall, as well as mold growth on pavers and slabs.
- Evidence of rising damp through the ground-floor slab was found when the original living room and hallway floor tiles were removed during the 2012 floor refinishing. The slab in this area was waterproofed at that time. The slab in the carpeted area of the alcove has not been waterproofed.
- Evidence of lifting of tiles in the kitchen and utility area of the residence and parquet flooring in the studio indicates damp in the floor slabs in these areas as well as past water intrusions.

### Vulnerabilities

- The original groundwater drainage system has a limited capacity, particularly in dealing with the increase in water loading from the landscaping watering system.
- Surface and subsurface water runoff from the upper slope and path appears to be impacting on the upper levels of the retaining wall. In the recent past, a malfunctioning sprinkler head caused significant water loading on the building complex. This has been repaired; however, future malfunctions in the system could cause similar issues.
- The location of water supply and drainage lines along the west wall of the building complex concentrates potential water hazards (e.g., if pipes leak, block up, or break) (fig. 6.19).
- The level surfaces of the courtyards and carport have limited slope for water drainage and runoff. There is also an increase in the risk for water intrusion into the residence and studio due



to the limited differential between outdoor ground level and indoor floor levels.

- In some areas, evidence of water ponding against buildings and the retaining wall has been noted, particularly after garden and potted-plant watering. This is likely caused by ground surface slope toward the wall and building.
- Watering and splashing from hoses and sprinkler heads, particularly along the upper and lower pathways and courtyards, contributes directly to moisture load on the building complex (fig. 6.20).
- Damp in the concrete floor slabs (due to wet ground conditions and lack of waterproofing) affects flooring materials throughout the building complex, except where corrected in the living room and hallway.
- Erosion due to water runoff may physically and visually affect the landscape as well as the building complex.
- Long-term watering patterns of eucalyptus trees in the vicinity of the building complex may have impacted on their size, growth rate, and root locations. The trees have the potential to affect the adjacent structures.
- Minimal documentation of the extent, condition, and outfall of storm-water drainage lines on the site (including connections with roof drainage) is known.



**Figure 6.19** Spigots and pipes on the west elevation of the residence, 2017. The faucets, sprinklers, irrigation system, and watering regime for the upper path and slope are potential water hazards behind the retaining wall and require careful monitoring.



**Figure 6.20** Water draining from a potted plant down the concrete retaining wall, 2017. Watering and splashing from hoses and sprinkler heads along the pathways adds extra moisture loading to the building complex.

## Conservation Policies Objective

*To ensure that water use and site drainage are regularly reviewed, monitored, managed, and modified where necessary to remove sources of water penetration into the building complex and adverse impacts on the landscape, including erosion.*

### Detailed Conservation Policies: B2 Building Complex—Site Drainage and Water Management

**B2.1:** Assess existing drainage services and maintenance needs to develop a comprehensive Site Drainage and Water Management Plan that will coordinate objectives and controls on water use and improve drainage throughout the site, particularly around the building complex and its retaining wall. The plan should take into account the policies listed below and provide an ongoing record of the location and condition of elements.

**B2.2:** Consider modification of ground levels around the perimeters of the residence and studio to provide a more substantial slope away from the building.

**B2.3:** Consider the efficacy of installing new subsurface drains on the north, south, and east sides of the building complex to drain water away from the concrete floor slabs as part of site drainage upgrading.

**B2.4:** Consider the efficacy of installing new surface and/or subsurface drains along the west side of the upper path, adjacent to the low rubble-stone wall, to direct runoff from the upper slope away from the building complex.

**B2.5:** Investigate removal and/or relocation of water supply lines from the west side of retaining wall to reduce potential water loading on the building complex in the long term.

**B2.6:** Consider the relocation or capping of faucets to limit water discharge adjacent to the base of the building.

**B2.7:** Integrate the tasks required to reduce water loading on the building complex with tasks to improve general site drainage around it.

**B2.8:** Evaluate existing garden and plant watering regime and objectives to reduce splashing and runoff against sides of buildings and in courtyards and carport. Continue the practice of moving potted plants when watering or consider installing a drip system. Institute plant watering practices that will not wet the tallowood wall.

**B2.9:** Design and implement a program of monitoring to measure moisture levels in the floor slabs and inner face of the retaining wall (in the studio and residence) in association with specialist consultant.

## ► B3 Building Complex—Reinforced Concrete Slabs and Retaining Wall

### Description

- The original concrete retaining wall forms the west wall of the entire building complex, including the exterior courtyards. A return defines the north end of the carport.
- A raised concrete planter box abuts the south end of the retaining wall.
- The original structural concrete slab floors remain in the residence and studio. The detailing for reinforcement, edge beams, and ducting built into the slab is shown in working drawings.

### Significance

- Original form, layout, construction, detailing, and fabric of the retaining wall and slab have been retained and are clearly visible.

### Condition

- Exposed surfaces generally show little deterioration. Some exposed edges of the slab and the retaining wall show deterioration of concrete and reinforcement where water intrusion has affected fabric and/or impact damage has occurred, such as the top of the retaining wall and slab edges at the utility room door (figs. 6.21a and 6.21b). Mold growth also occurs in limited areas on shaded sections of the retaining wall and exposed slab edges in the courtyards and carport.
- As noted in B2 above, while a section of original waterproof membrane on the outside (west) face of the retaining wall

appeared to be intact where investigations were undertaken adjacent to the living room of the residence, the condition of the waterproof membrane along the remainder of the wall is unknown. Evidence of moisture has been noted on the inside surface of the west wall of the studio's storage room/darkroom.

- Concrete slabs are damp due to a range of causes, including the absence of a vapor barrier and site drainage problems (except where it has been corrected in the living room, as noted in B2) (fig. 6.22). Evidence of this damp is shown in the lifting of tiled and parquet floor finishes in the residence and studio, as well as rusting of the original in-floor steel heating ducts.

### Vulnerabilities

- Water penetration of the concrete, especially at the exposed edges of the slab, may result in deterioration of the concrete and rusting of reinforced steel.
- Unusually heavy water loading on the western side of the retaining wall could result in water penetration into the building complex.
- Ponding of water in the courtyards and at the base of the buildings contributes to the deterioration of the concrete slabs.
- Absence or failure of waterproofing treatments and/or vapor barriers to the slab and retaining wall contributes to their deterioration, as well as to the deterioration of finishes applied to them.
- Roots of adjacent trees and adjacent plantings that extend under the slabs and/or retaining wall may contribute to deterioration, such as cracking or movement of these concrete structures.

### Conservation Policies Objective

*To ensure that all reinforced concrete components of the site are appropriately monitored, maintained, and repaired to maximize the retention of significant fabric, minimize long-term deterioration, and continue to be safe and structurally sound.*

#### Detailed Conservation Policies:

##### B3 Building Complex—Reinforced Concrete Slabs and Retaining Wall

**B3.1:** Reduce water loading to slabs and retaining wall, particularly where drainage is poor and drying out is limited, in accordance with B2 Conservation Policies.

**B3.2:** Maintain and repair existing waterproofing treatments to the concrete slabs and retaining wall. Investigate options for, and efficacy of, new waterproofing treatments to these areas where required.

**B3.3:** Continue the program of identification and repair of concrete deterioration, such as at the exposed edges of slab and retaining wall, particularly where rusting of reinforcing is found. Prioritize repairs to the areas with the most urgent conservation needs.

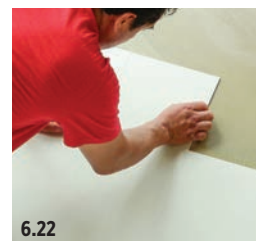
**B3.4:** Appropriate professional conservation advice should be used to guide concrete repair works and priorities.



**Figure 6.21a** Entry door to the utility room from the central court, 2016. Mold growth and evidence of damp are observed on the adjacent retaining wall.

**Figure 6.21b** Exposed edge of the concrete floor slab under the utility room door, in 2017, showing damage from impact and water penetration.

**Figure 6.22** A worker lays new living room floor tiles over the new vapor barrier, installed in 2011. Damp in the floor slab and the absence of a vapor barrier caused lifting of the original tiled floor.





## ► B4 Building Complex—Structural Steel Framing

### Description

- The original structural steel framing to walls and roof and floor decks includes standard I-beams, angles, and open-web trusses, as well as structural framing to door and window openings (fig. 6.23).
- The steel was originally painted a soft gray color and now has a glossy black finish. Paint research has identified original and several subsequent repainting campaigns in shades of gray and black (Phenix et al. forthcoming; Macdonald-Korth forthcoming).

### Significance

- The steel framing elements of the residence and studio clearly demonstrate the Eameses' design objective—and its successful realization—to use and honestly express modern industrialized and prefabricated building components (fig. 6.24).
- The building complex has a high degree of integrity of structural steelwork, with key elements of the original 1949 building's form, layout, construction, detailing, and fabric clearly and prominently displayed (fig. 6.25).
- The building complex was an early postwar use of steel framing in a residential context.

### Condition

- Overall, the condition of the structural steelwork and current paint coating is relatively good, with much of the significant fabric having been preserved.
- Works to investigate condition of the external steelwork (2011) identified areas of significant rusting and associated deterioration, including bottom base plate and sliding door elements in a number of locations. Some urgent, high-priority repairs were carried out in 2012 to halt ongoing rusting in these locations and repair the most significant areas of damage (fig. 6.26).
- Elsewhere, there are numerous localized areas of minor deterioration (e.g., rust) or past repairs particularly in vulnerable areas, including horizontal surfaces, junctions between steel and concrete slab, worn surfaces, and fixtures such as sills and tracks for the doors and windows.

### Vulnerabilities

- The major source of deterioration to the structural steel framework is water, which is retained against unprotected steel surfaces, especially where:
  - > the steel is exposed to water, such as spillage from adjacent hosing or during rain;
  - > water is unable to drain away or dry out on flat or shaded surfaces; and
  - > the steel surface is not protected by paint and/or window putty has deteriorated.
- Factors contributing to deterioration of steelwork include:
  - > deterioration and loss of sealants;
  - > movement and opening up of joints;
  - > deterioration of paint layer which protects surface;
  - > painting without adequate preparation of steel (with rust continuing under paint);
  - > impact damage; and
  - > accumulation of water in joints.



**Figure 6.23** The residence from the southeast during construction, ca. 1949, showing the steel frame and open web joists prior to installation of the roof deck and cladding materials. The modular character of the structure, regular spacing of the structural bays, and use of standard building components are evident.

**Figure 6.24** The studio's east elevation, showing detail of typical steel framing, 2017.



**Figure 6.25** Rare view of the living room in 2011, without its contents, prior to replacement of the floor tiles, showing how the Eameses used the modular nature of the steel structure to create diverse internal spaces.



**Figure 6.26** Base plates and sliding door of the kitchen after repair in 2012, maintaining the integrity of the steelwork and restoring the watertightness of the facade. Photographed in 2017.

## Conservation Policies Objective

*To ensure that the steel framing elements of the building complex are conserved through appropriate ongoing maintenance and repair in order to maintain the high degree of integrity of the structure and its fabric.*

### Detailed Conservation Policies:

#### B4 Building Complex—Structural Steel Framing

**B4.1:** A building envelope condition survey and repair plan should be prepared and implemented as a matter of priority, including:

- identification of deteriorated components;
- assessment of extent of deterioration;
- identification of the causes of deterioration and development of repair requirements;
- prioritization of the works; and
- ongoing maintenance methods and materials.

**B4.2:** Ongoing monitoring, repair, and maintenance of all structural steel is essential and should be implemented in accordance with the steelwork repair recommendations and proposed site Maintenance Plan. These works should also be integrated with the repair and maintenance of the steel-framed windows and external cladding.

**B4.3:** Limit the contact of moisture with the structural steel to prevent rusting. Keep all steel painted to avoid deterioration through exposure to moisture.

**B4.4:** When repainting the structural steel, base decisions on appropriate specialist paint research, investigation, and recommendations. Key priorities include ensuring existing paint surfaces are sound and intact to protect steel. Where adhesion is inadequate or where visible rust is present, undertake cleaning and preparation of steel before repainting.

**B4.5:** When repainting, paint colors and finishes should reflect a period of use associated with Charles and Ray Eames's joint occupancy of the site, as determined through specialist paint research (Phenix et al. forthcoming; MacDonald-Korth forthcoming).

**B4.6:** When repainting, retain previous layers of paint as part of the historical evidence to the greatest extent possible.

**B4.7:** Steelwork junctions and junctions between steelwork and panels or glazing should be inspected, cleaned, repaired, and thoroughly secured on an ongoing basis to ensure watertightness and to prevent or minimize movement as appropriate. Remove and replace redundant putties, gaskets, and sealants that are no longer effective and prevent sound sealing of junctions and joints.



## ► B5 Building Complex—External Cladding, Windows, and Doors

### Description

- External cladding elements include fixed and operable glazed panels (including sliding doors and awning, hopper, or louver windows), Cemesto insulated cement fiberboard, infill panels and Ferrobord profiled steel siding, stuccoed panels, and flush, steel-framed, wood veneer doors.
- Original steel-framed door and window units are fitted within the structural steel framing. These include fixed and opening frames (e.g., awning, hopper, or louver windows, hinged doors, and sliding doors) (fig. 6.27).
- Most steel-framed windows and doors retain their original hardware, including sliding door tracks, hinges, stays, handles, and catches.
- External cladding elements have a variety of finishes and colors depending on the substrate and the Eameses' aesthetic choices (fig. 6.28). According to the Eames Foundation, the most recent repainting of the steel was undertaken in the mid-1990s.
- The careful layout of large and small, solid and glazed infill panels—which vary in materials, color, and finishes—emphasizes the functional and decorative roles of the external cladding as non-weight-bearing infill within the dominant steel structural framing (fig. 6.29).
- Various types of glazing are used throughout the building complex, reflecting location (e.g., safety glass in areas subject to potential impact damage), functional role (relative to views, light requirements, and privacy), and aesthetic choices. Glazing types include original clear polished plate glass, wire glass, and translucent glass. Some original clear glass has been replaced due to breakage or earthquake damage over the life of the building complex. According to the Eames Foundation, Ray Eames replaced large glass panes with tempered glass due to safety concerns.
- The steel-framed front door, sidelight, and transom feature translucent glazed panes. These are surmounted by two panels finished with gold leaf.
- The external access doors to the utility room (north facade of the residence) and studio (south facade) are flush, steel-framed, wood veneer doors.
- Large sliding glass doors provide access to the living room (on the south facade) and dining room (on the north facade) as well as the studio (on the north facade).
- The studio doorway has plywood side and transom panels.
- A small panel with photographic silhouettes of eucalyptus trees, now largely faded, is above the fixed panel to the east of the sliding door to the south court. The historical evidence shows a sequence of at least four tree silhouette panels through the life of the building. The process of their creation is not known.



**Figure 6.27** View from the kitchen toward the meadow, 2017. The Truscon steel sash contains operable hopper and awning windows and fixed windows, glazed with either obscure or clear glass. At left is the sliding door.

**Figure 6.28** South elevation of the studio, in 2016, showing the Eameses' complex selection of cladding materials. The second story is clad in silver-painted Truscon Ferrobord. On the ground floor, the door and its three surrounding panels are of plywood. To the left of the door, a panel of Truscon steel sash is filled with a mixture of Cemesto and clear glass.



**Figure 6.29** East elevation of the residence, in 2017, infilled with a variety of cladding materials, including solid stucco panels and sections of Truscon steel-framed sash filled with clear glass and Cemesto panels. At lower right is the gold-leaf panel above the front door.

- Tongue-and-groove tallowwood paneling with a clear finish (last applied in 2012) is located on the west wall of the south court.

### Significance

- The external cladding of the building complex retains and displays key elements of the original (1949) form, layout, construction, detailing, and fabric of the structure, including the iconic color palette developed by Ray and Charles.
- The layout of fenestration framing and cladding elements—balancing large and small, solid and glazed, colored and plain—is an iconic feature of the building complex’s architectural and aesthetic character.
- The degree of integrity of the fabric varies following previous replacements of damaged glazing and insulated panels, but the building complex retains important evidence of its early infill walling.



**Figure 6.30** Cemesto panel, studio west facade, 2017. Damaged and deteriorating original Cemesto panels, which contain asbestos, present potential safety hazards.

### Condition

- Condition of external cladding varies considerably and is generally related to the nature of the material, location, and exposure to agents of deterioration.
- Original insulated Cemesto panels are in the most vulnerable condition, with surface deterioration, localized impact damage, and breakdown of edges, junctions, and sealants.
- The photographic panel has faded to the extent that the images have almost disappeared.
- Glazed elements are generally in sound condition. Some glass has been replaced, and some glass has old cracks but has been retained as a serviceable component.
- The exteriors of the wood veneer utility room and studio doors from the central court are in poor condition due to excessive weathering of protective finishes.
- Paintwork finishes vary in condition throughout the building complex.
- The tallowwood wall on the west wall of the south court was cleaned and refinished in 2012.

### Vulnerabilities

- Deterioration of original fabric, joints, and sealants, in addition to general wear and tear, has affected external fabric condition including watertightness.
- Environmental performance of the residence and studio is variable. The use of materials and construction techniques with low insulation values contributes to this condition.
- Extensive use of glazing has resulted in high levels of sunlight and heat penetration. Light was and currently is controlled with curtains over certain glazed areas.
- Asbestos-containing Cemesto panels may present a potential safety hazard to site users, particularly as elements deteriorate (fig. 6.30).





**Figure 6.31** Wire glass in a window of the studio, 2016. Some original building materials, such as wire glass and Cemesto panels, are difficult to source or are no longer available.

- Some original building materials, including wire glass and asbestos-cement (Cemesto) panels, are no longer available, and sourcing equivalent replacement materials may require research and investigation for long-term repair goals (fig. 6.31).
- Plywood panels and doors are particularly vulnerable to weathering from sun and water in exposed locations, particularly where finishes have weathered. The tallowwood wall is also vulnerable to sunlight and water, including splashing from hoses.
- The photo panel is vulnerable to the external environment and will soon be lost.

### Conservation Policies Objective

*To conserve and interpret the significant character, fabric, and detailing of the external cladding, windows, and doors of the building complex through appropriate maintenance, repair, and adaptation to ensure the building complex is retained in secure and weathertight condition with integrity.*

#### Detailed Conservation Policies:

##### **B5 Building Complex—External Cladding, Windows, and Doors**

**B5.1:** Conservation of the external wall cladding (including infill panels, windows, and doors) requires comprehensive, ongoing maintenance and repair work. This should be integrated with the conservation of the external structural steel framing (as set out in section B4).

**B5.2:** Steelwork junctions and junctions between steelwork and panels or glazing should be inspected, cleaned, repaired, and thoroughly secured on an ongoing basis to ensure watertightness and to prevent or minimize movement as appropriate. Remove and replace redundant putties, gaskets, and sealants that are no longer effective and prevent sound sealing of junctions and joints.

**B5.3:** Specialist conservation advice should be sought for the investigation and conservation of all external cladding panels, particularly the potential to preserve and reuse original solid (e.g., Cemesto) infill panels in an appropriate condition. Specialist advice should also be sought to identify appropriate replacement materials as necessary.

**B5.4:** Glazing should be maintained in sound and weather-tight condition and replaced with fabric matching the original where required (e.g., if broken). In some cases, retention of original fabric—for example, cracked panes of wire glass—is appropriate for short-term conservation (if safety is ensured).

**B5.5:** Specialist conservation advice should be sought for measures to preserve original decorative infill panels, including the tree silhouette panel on the south court and gold-leaf panels above the front door.

**B5.6:** Repair and refinish tallowwood, plywood paneling, and wood veneer doors as required to ensure long-term conservation of fabric. The investigation, repair, and maintenance of the two unpainted wood veneer doors are a priority. Finishes to bases of doors—including outside face and underside of panel—should be regularly maintained to protect from water damage.

**B5.7:** Appropriate measures to remove or significantly reduce water penetration into vulnerable fabric—including exposed steelwork, junctions between infill materials and steel framing, and wood paneling and doors—should be implemented as high-priority maintenance and repair works. Measures could include changing the location and/or methods of watering plants and adding appropriately detailed and visually discreet physical protection, such as flashings.

**B5.8:** Decisions about repainting infill panels and/or window and door framing should be based on appropriate specialist paint research, investigation, and recommendations. Paint colors and finishes should reflect a period of use associated with Charles and Ray Eames's joint occupancy of the site.

**B5.9:** When repainting the steel, base decisions on appropriate specialist paint research, investigation, and recommendations. Key priorities include ensuring existing paint surfaces are sound and intact to protect steel. Where adhesion is inadequate, undertake cleaning and preparation of steel before repainting.

**B5.10:** When repainting, retain previous layers of paint as part of the historical evidence to the greatest extent possible.



6.32



6.33

**Figure 6.32** View of the original Voit rubber tiles in the dining area, 2017. An original floor vent grille, part of the original underslab heating system, is visible under the chair. The kitchen and utility room floors are covered in the same tile.

**Figure 6.33** Detail of a variety of the original Voit rubber tiles on the second floor of the residence, 2017. Different tiles were selected for individual rooms: the guest bedroom floor is at left, the dressing area floor is at center, and Charles's bathroom floor is at upper right.

## ► B6 BUILDING COMPLEX—Internal Floors

### Description

- Reinforced concrete slabs to ground floors in the residence's kitchen, dining area, and utility room are finished with original rubber tiles (fig. 6.32). Upper floors in both structures were constructed on exposed, original steel framing and finished with rubber tiles (fig. 6.33).
- Residence floors in the living room and hallway, originally exposed concrete slab, were covered in white vinyl asbestos tiles in the early 1950s. Due to severe deterioration, these were removed in 2012 and replaced with modern, custom-made vinyl composition tiles matching the size and layout and closely matching the color of the 1950s flooring.
- Original exposed concrete slab in the studio was covered with wood parquet in 1958 (fig. 6.34).
- The living room alcove is the only carpeted floor surface.

### Significance

- Original form, layout, construction, detailing, and fabric of the 1949 buildings have largely been retained (with the exception of new floor tiles in the living room) and are clearly visible. New fabric is compatible with the aesthetic significance of the original.
- Some original elements, such as Voit rubber tiles, provide evidence of historical (now obsolete) products.

### Condition

- Evidence of damp affecting floor slabs and rubber and parquet tile flooring (as noted previously in section B2 and section B3).
- Original finishes vary in condition from good to poor according to location, use, and nature of material. The most significant wear to original rubber tiles is in the kitchen and utility areas (fig. 6.35). Upper levels in both the residence and studio are generally good.
- Wood parquet in the studio shows evidence of lifting, water damage and staining, impacts on surface (pedestrian traffic, etc.), fading, and previous repairs, including the rearrangement of original layout pattern between the north and south ends.
- Floor tiles in the living room and hallway were replaced in 2012 and are in good condition.

### Vulnerabilities

- Rising damp through the concrete floor is a contributor to deterioration of floor finishes.
- Though the recent installation of a vapor barrier system to the living room and hallway floor slab should limit rising damp, moisture still affects adjacent unsealed slab areas in the alcove, kitchen, dining area, and utility room in the residence.
- Wear and pedestrian traffic have the potential to accelerate deterioration of floor tiles and wood parquet, which may present potential safety hazards to site users. Original rubber floor tiles are no longer available, and sourcing compatible replacements—particularly to match original colors and surface character—may require research and investigation.
- Appropriate matches for wood parquet tiles (i.e., for repairs) and composition of original surface finishes may also require further research.



## Conservation Policies Objective

*To ensure that all original flooring fabric and finishes are maintained, repaired, or adapted in a manner that reflects and interprets their significance, allows meaningful retention of original fabric, and meets appropriate requirements for use and safety of the place.*

### Detailed Conservation Policies: B6 Building Complex—Internal Floors

**B6.1:** Implement B2 policies to reduce levels of damp in floor slabs. Monitor damp levels in floors as recommended.

**B6.2:** Before refixing, replacing, or refinishing floor tiles, ensure concrete is sufficiently dry and consider installing a vapor barrier.

**B6.3:** Seek specialist conservation advice prior to undertaking any works on internal flooring, and ensure samples of original fabric are recorded and retained for future reference.

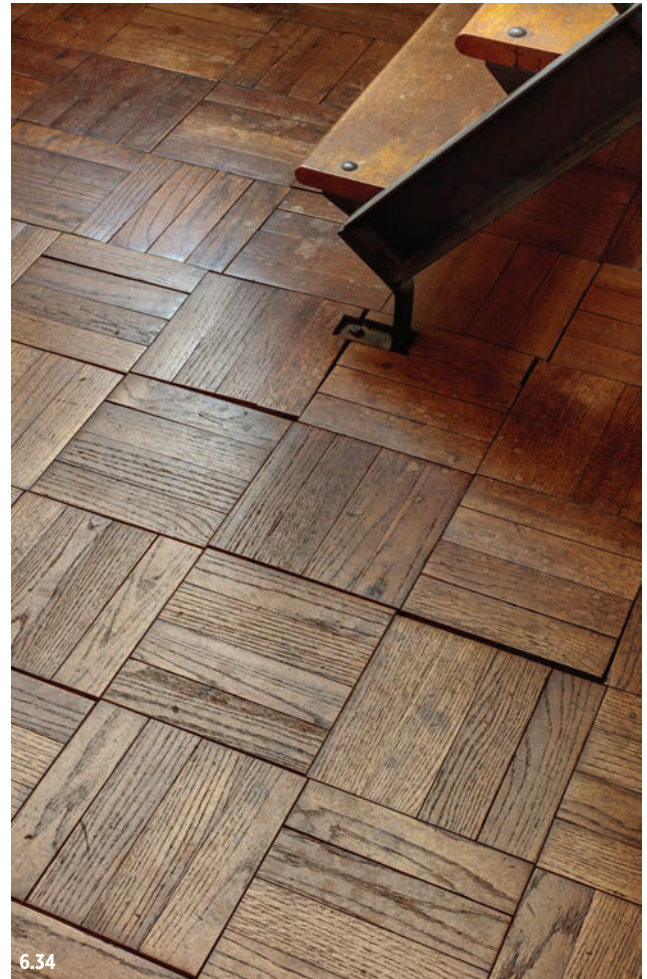
**B6.4:** Consideration should be given to assessing the safety and condition of the original tiles in the kitchen and utility room. If damaged tiles need to be replaced with contemporary compatible tiles for safety, waterproofing, or other reasons, options for limiting the amount of original fabric removed should be considered, particularly in low-traffic areas. It is recommended that samples as well as in situ sections of original fabric be retained and interpreted as part of the overall conservation strategy.

**B6.5:** Rubber tiles in other rooms (including the upper floors) should be monitored for condition and safety to assist long-term conservation and appropriate maintenance. Removable protection of original floor finishes should be considered—particularly for nonpublic areas and upstairs—to allow conservation in situ.

**B6.6:** The condition of the wood parquet flooring should be regularly monitored to determine levels of damp, lifting, and fading over time.

**B6.7:** Consider protection of flooring tiles from foot traffic, sunlight, water damage, and other potential deterioration. Any protective covering should be vapor permeable. Removable vapor-permeable coverings such as rugs could be used as a temporary measure. If a protective finish is applied directly to the wood parquet tiles, it should also be vapor permeable.

**B6.8:** Use of small amounts of old parquet fabric from hidden/nonpublic areas for localized repairs in publicly visible spaces may be considered. For larger repairs, new pieces can be milled based on the originals.



**Figure 6.34** Detail of the parquet flooring in the studio at the bottom of the spiral staircase, showing impact of wear and water damage, 2017.

**Figure 6.35** Worn and damaged original floor tiles in the kitchen, dining area, and utility room are monitored for condition and safety risk, 2017.

## ► B7 Building Complex—Internal Walls and Ceilings

### Description

Internal wall finishes installed over structural framing comprise a variety of materials and finishes, many using industrially produced composite fabrics that were new to the postwar era (figs. 6.36 and 6.37). Significant fabric and finishes include:

- tallowood tongue-and-groove boarding on the west wall of the living room and the utility room (extending outside to the south court);
- various types of veneer plywood;
- sections of solid interior walls most likely consisting of plaster over metal lath, finished with painted Wall-Tex or other stiffened canvas and/or paint;
- plastic laminate on bathroom interiors; and
- painted surfaces.

Ceilings vary throughout the building complex and include:

- painted Truscon steel decking (fig. 6.38);
- finished plaster or plaster finished with painted Wall-Tex or other painted, stiffened canvas; and
- maple veneer plywood for ceilings in upstairs bathrooms.

### Significance

- Original form, layout, construction, detailing, and fabric of the 1949 structures have largely been retained (with the exception of some wall coverings and finishes) and are clearly visible. New fabric is generally compatible with the aesthetic/architectural significance of the original.
- Some original elements, such as stiffened fabric wall coverings (Wall-Tex), provide evidence of former (now obsolete) products of historical and scientific interest.
- The selection and use of these modern materials, and experimentation with these materials and with modern industrial production, are important contributors to the overall significance of the site/place.
- Surviving evidence of original paint colors and subsequent layering contributes to significance as well as understanding and interpretation of the place and occupants.

### Condition

- Evidence of damp at the junction of the retaining wall and concrete slabs affecting internal wall finishes in the past, as well as more recently (e.g., buckling in the tongue-and-groove



**Figure 6.36** Walls and ceiling of Ray's bathroom, in 2017, featuring a variety of materials, including Micarta plastic laminate, Cemesto panels, and translucent glass set in steel-framed sashes, and bird's-eye maple veneer (on the ceiling). Curtains screen the clear glass windows.

**Figure 6.37** View of the utility room, 2017. Finishes include painted plaster and tallowood paneling. At left, sheets of corrugated glass surrounded by a wooden frame are set atop a half wall separating the service area from the kitchen. At right is a tackboard covered in black-and-white checkered fabric.

**Figure 6.38** The ribbed underside of the Truscon Ferroboard roof decking, left exposed and painted white to form the ceilings in both the residence (living room, shown here) and studio, 2017.



boarding on the west wall of the living room and damp in the west wall of the studio's storage room/darkroom).

- Original internal walls and finishes vary in condition from good to poor according to location, use, and nature of material. Some areas were not accessible for inspection because of wall coverings, cupboards, storage, and other obstacles.
- Painted surfaces on wall coverings and steelwork, including trusses and decking, are generally good, with some elements repainted at different periods (and in different colors).
- Deterioration of original fabric, joints, and surfaces from age and wear and tear has affected surfaces in the past, as shown by documentary records (Escher GuneWardena Architecture 2011) and physical inspection.
- Tallowwood wall was cleaned and refinished in 2012. Traces of use and age remain (fig. 6.39).

### Vulnerabilities

- As with external cladding, water, sunlight penetration, and wear and tear (including impact damage) are the major agents of deterioration of the internal walls and ceilings, affecting elements to differing degrees according to location, materials, and use.
- Continuing use of interior spaces has the potential to cumulatively increase impacts of wear and tear over time.
- The ceiling and internal wall fabric may be vulnerable to deterioration due to the experimental nature of materials and their composition, installation methods, and lack of replacement materials.
- The low insulation value of the external walls, as well as internal design features such as the open plan layout, use of natural ventilation, and lightweight and sliding partitions, affects the environmental condition of the interiors.
- The extensive use of glazing contributes to high levels of sunlight and heat penetration on interior surfaces, causing deterioration.
- Some original elements and materials, including composite wall coverings and applied finishes (e.g., Wall-Tex), are no longer available, and sourcing equivalent replacement materials may require research/investigation for long-term repair goals.
- The tallowwood wall paneling and other internal wood elements (such as Korina plywood and rosewood veneers) and their finishes are particularly vulnerable to weathering from sun and moisture in exposed locations.



**Figure 6.39** The tallowwood wall in the living room, cleaned and refinished in 2012, with the patina of use and age carefully retained.

### Conservation Policies Objective

*To ensure the appropriate investigation, maintenance, and repair of all significant early finishes and fixtures providing maximum retention of integrity and authenticity of fabric while maintaining the safety, use, and interpretation of the building complex.*

#### Detailed Conservation Policies:

##### **B7 Building Complex—Internal Walls and Ceilings**

**B7.1:** Implement B2 policies to avoid or reduce impacts of damp and water penetration to internal walls, lining, and paneling, including the tallowwood wall in the living room (which extends to the exterior south court).

**B7.2:** Implement monitoring of damp levels in the west wall of the residence and studio.

**B7.3:** Implement environmental improvement recommendations developed by the GCI between 2011 and 2017 (Maekawa forthcoming; Henry 2017) to protect and conserve interior fabric and finishes and to protect internal wall finishes from UV exposure.

**B7.4:** Maintain appropriate restrictions on use and visitation to interiors, and implement measures to help protect wall surfaces from damage in all areas (from use by the public and by the Foundation). Measures to protect and maintain original wall surfaces may be included as part of the site's overall housekeeping practices.

**B7.5:** Implement regular inspections of internal walls and ceilings as part of the cyclical maintenance schedule (as recommended in general CMP policies 27 and 28). Investigate and implement appropriate cleaning and protection methods. Cleaning of original fabric is preferable to repainting or refinishing where possible, particularly with significant plywood veneers and fabric wall coverings. Maintain the texture of Wall-Tex wall coverings. Maintain all woodwork with regular conservation review, repair, and refinishing to ensure its long-term conservation. Ensure that maintenance and repair are undertaken in concert with B10 policies.

**B7.6:** Specialist conservation advice is recommended for measures to conserve significant fabric and finishes of internal walls and ceilings.

**B7.7:** Finishes should be conserved in a way that demonstrates how the Eameses used and furnished the space (e.g., retaining the patina of age on the tallowwood paneling).

**B7.8:** Decisions about repainting should be based on appropriate specialist paint research, investigation, and recommendations. The paint should reflect the period of use associated with both Charles and Ray Eames.

## ► B8 Building Complex—Internal Stairs

### Description

- A spiral staircase linking the lower and upper floors of the residence is located in the entry hall opposite the front door (fig. 6.40). Its treads are of plywood mounted on sections of steel I-beam formed into flanges, which are fitted into collars that radiate from the center of the steel column. A flame-shaped glass finial tops the central pole of the staircase. A skylight lights the staircase from above (fig. 6.41).
- A simpler, straight, and relatively steep steel-framed staircase with wooden treads provides access to the mezzanine level of the studio (fig. 6.42).
- Both staircases were fabricated in the Eames Office shop.

### Significance

- Both internal stairs are important as original (to the residence) or early (to the studio) components of the building complex and visually prominent elements of their respective locations.
- The spiral staircase represents the striking combination of efficient industrial design—to meet essential functional requirements for access and space—and sculptural forms. Its design and aesthetic character have been favorably commented upon from the earliest years of the site.
- Both stairs, crafted by Eames Office staff, feature the careful workmanship and detailing typical of the Eameses' design work generally and the Eames House as a whole.

### Condition

- Both stairs are generally in good and sound condition.
- The wall surfaces around the spiral staircase in the residence, particularly the plywood veneer finishes, have been affected by sunlight and/or water exposure, resulting in areas of bleaching and localized staining (fig. 6.43).



**Figure 6.40** The residence's spiral staircase, as seen through the open front door, 2014. Plywood treads are mounted on custom-made steel flanges that radiate from the central steel column.

**Figure 6.41** The spiral staircase, lit from above by the original skylight, which was repaired during the 2014 reroofing campaign and is now watertight, 2016.

**Figure 6.42** The staircase in the studio, a simple, open, steel-framed structure with wooden treads, open risers, and pipe handrails, 2017.

**Figure 6.43** Upper-level area of the spiral staircase, 2011. The plywood veneer walls have suffered light and moisture damage and require conservation.





## Vulnerabilities

- The wood and steelwork fabric of the stairs is generally subject to damage from water (especially steelwork where surface paintwork protection has broken down), surface wear and tear, and excessive heat/light, particularly on wood surfaces where surface protection has worn away.
- There is the potential for increased wear and tear if visitation is significantly increased.
- Water penetration and excessive sunlight associated with the original skylight over the spiral staircase have previously affected the plywood veneer paneling of the upper area, causing staining, bleaching and movement. (Refer to section B1 and section B7.)

## Conservation Policies Objective

*To ensure appropriate maintenance and repair of the stairs so that their significance is conserved and interpreted, the maximum amount of significant fabric is retained, long-term deterioration is minimized, and they remain safe and structurally sound.*

### Detailed Conservation Policies: B8 Building Complex—Internal Stairs

**B8.1:** Ensure that specialist advice is obtained to investigate, document, and implement appropriate maintenance and conservation works (including methods and materials) and minimize visual and physical changes to the original form and fabric.

**B8.2:** Implement regular inspection and maintenance to preserve the good condition of the structure and fabric of both stairs.

**B8.3:** Implement environmental improvement recommendations developed by the GCI from 2011 to 2017 (Maekawa forthcoming; Henry 2017) to remove or reduce agents of deterioration, including water and excessive sunlight.

**B8.4:** Implement appropriate conservation work on areas identified as needing urgent attention as a matter of priority, including plywood laminate on upper level of the stairwell and areas of lifting and/or watermarked wood veneer finishes within the residence.

**B8.5:** Maintain the original skylight and investigate and implement measures to reduce sun penetration as per policies B1.4 and B1.5.

## ► B9 Building Complex—Sliding Screens, Partitions, and Internal Doors

### Description

- Movable panels feature in both residence and studio in a variety of materials and finishes. Many exploit industrially produced composite fabrics that were unique to the postwar era and were used in innovative ways by the Eameses (fig. 6.44). Significant fabric and elements include:
  - > sliding partitions on the balcony of the main bedroom (above the living room alcove) comprising fabric-covered wood panels on metal tracks set into the wood balcony railing;
  - > a sliding, floor-to-ceiling wooden partition between the two bedrooms (fig. 6.45);
  - > a proprietary folding partition (by Modernfold) between the kitchen and dining area at the north end (fig. 6.46); and
  - > Plyon sliding panels set into wooden frames on wooden



**Figure 6.44** View from the master bedroom, looking east, 2016. Plyon window panels in custom-designed wooden frames provide light control. At right, sliding panels atop the balcony parapet can be used to close off the bedroom from the living room below.

**Figure 6.45** The sliding wood panel separating the two bedrooms, partially closed, viewed from the guest bedroom, 2017. The partially closed sliding panels atop the balcony can be seen at right.

tracks, used as window coverings and cupboard doors in both the residence and studio.

- Internal doors are generally wood flush with chrome steel and/or brass hardware (including knobs, hinges, mortice locks, etc.). Unusual round-ended hinges feature on many of the original doors.

## Significance

- A high level of original and early components and fabric has been retained, contributing to a high level of integrity and authenticity of the site as a whole.
- Some original elements, such as stiffened fabric (Wall-Tex) and fiberglass (Plyon), provide evidence of obsolete products of historical and scientific interest.
- The selection, use, and innovative experimentation with modern materials by the Eameses are important contributions



**Figure 6.46** The original Modernfold door separating the kitchen and dining area/hallway, maximizing flexibility of the space, 2016. In practice, the Eameses kept the door folded, where it served as a wall to cover the back of the refrigerator as shown here.

to the significance of the place. This demonstrates, in particular, their characteristic use of the site for experimentation with materials, detailing and meeting specific design issues.

## Condition

- Original fabric varies in condition according to location, use, and nature of material but is generally in good to reasonable condition.
- Some areas were not accessible for condition inspection because of wall coverings, cupboards, and storage, and most screens (including the Modernfold door) were not moved or opened up.

## Vulnerabilities

- Generally, components are in quite good condition, but localized deterioration of original fabric, joints, and surfaces from age and wear and tear was noted in some areas and components.
- Surface soiling and/or discoloration of elements and fabric pointed to aging of early materials, soiling, and/or environmental impacts such as sun, water, and surface pollutants/dust.
- There is potential for increased wear and tear more generally if use is significantly increased without appropriate management controls.

## Conservation Policies Objective

*To ensure the appropriate investigation, maintenance, and repair of all original and significant early fabric and fittings to ensure maximum retention of integrity and authenticity of fabric while maintaining the safety, use, and interpretation of the building complex.*

### Detailed Conservation Policies: B9 Building Complex—Sliding Screens, Partitions, and Internal Doors

**B9.1:** Minimize visual and physical changes to original components and fabric using appropriate cleaning, conservation, and repair methods and materials, including specialist conservation investigation and advice, particularly for rare fabric and features.

**B9.2:** Implement regular inspection and maintenance to preserve good condition of structural components and fabric.

**B9.3:** Implement environmental improvement recommendations developed by the GCI from 2011 to 2017 (Maekawa forthcoming; Henry 2017) to remove or reduce agents of deterioration, including dust, humidity, water, and excessive sunlight.



## ► B10 Building Complex—Built-in Furniture and Fixtures

### Description of Built-in Furniture

- The built-in L-shaped sofa in the living room alcove (north end) is a custom-made structure designed by the Eames Office and constructed in upholstered plywood. Based on photographic evidence, the original upholstery was replaced during Charles and Ray's lifetimes, most likely during the 1950s (fig. 6.47).
- Built-in storage cupboards and wall cabinets throughout the residence and studio are of the following basic types:
  - > floor-mounted freestanding closets (frequently used to organize space) with prefabricated steel sliding door assemblies by Republic Steel (fig. 6.48);
  - > in the east wall of the alcove, custom-made, wood, and plywood cabinets with hinged panel doors and sliding drawers, some with painted and paper- or fabric-lined finishes;
  - > custom-made wall-mounted wooden and plywood open shelving and cupboards with Plyon sliding panel doors in the residence alcove (some with paper- or fabric-lined finishes), bathrooms, and studio (fig. 6.49); and
  - > prefabricated painted steel cabinets with hinged doors used in the kitchen and studio kitchenette (fig. 6.50).

### Description of Bathroom Fixtures and Fittings

- Bathroom fixtures and fittings include vitreous china sanitary fittings (sinks and toilets), vanity units, mirrors, showers in Charles's bathroom and the studio, and the bathtub in Ray's bathroom.

### Description of Light Fixtures

Original light fixtures include:

- wall-mounted reading lamps (painted metal/aluminum) above the beds;
- concealed fluorescent tube uplighting atop the prefabricated metal closet units; and
- recessed ceiling fixtures and ceiling- and wall-mounted fixtures located throughout areas with finished ceilings.

### Description of Electrical Switches, Power Outlets, and Associated Cover Plates

- Switch plates are either plastic or metal. Some are painted or covered in decorative paper (fig. 6.51).
- Original electrical switches and power outlets are extant. Several new power outlets have been installed in the studio to meet the Foundation's safety and functional needs.

### Significance

- A high level of retention of original and early fabric of elements contributes to a high level of integrity and authenticity of the site as a whole.
- Some original elements, such as light fixtures and steel cabinets, provide evidence of obsolete products of historical and scientific interest.
- The selection, use, and experimentation with modern materials by the Eameses are important contributions to the significance of the place. This demonstrates, in particular,



**Figure 6.47** Rare view of the alcove without its contents and collections, showing the built-in sofa, shelving, and cabinetry, 2011.

**Figure 6.48** Freestanding, floor-mounted closets with prefabricated steel doors in the residence hallway, 2016. These help to organize the space and form the back of the alcove. Surviving original paint colors on the sliding doors contribute to significance.

**Figure 6.49** Custom-built plywood cupboards with Plyon sliding doors in the studio, 2017. The cupboards and the sliding door system remain in active use.

their characteristic use of the site for experimentation with materials, detailing and meeting specific design issues.

### Condition

- Original fabric varies in condition according to location, use, and nature of material but is generally in good to reasonable condition.
- Some areas were not accessible for inspection, and most built-in furniture was not opened up or investigated in detail because of contents, limited visibility, and other reasons. Furniture and fittings were not moved or opened up.

### Vulnerabilities

- Deterioration of original fabric, joints, and surfaces from age and wear and tear was noted in localized areas, including:
  - > framing and fabric of sliding cupboard doors because of their relatively fragile construction and regular use, particularly in the studio;
  - > surface soiling and/or discoloration of elements and fabric through aging of early materials (including upholstery fabric, papers over light switches and closet door pulls, and plastics) and cleaning challenges; and
  - > deterioration of materials, including rusting of steelwork (through damp and breakdown of painted surfaces), particularly in wet areas such as the kitchen and kitchenette.
- Some original elements and materials, including composite

wall coverings and applied finishes (e.g., Plyon and Wall-Tex), are no longer available, and sourcing equivalent replacement materials may require research/investigation for long-term repair goals.

- Wooden elements (such as plywood and wood frames to cupboard doors) are particularly vulnerable to sunlight and water in exposed locations.
- Components are generally in quite good condition, but localized deterioration of original fabric, fittings, and surfaces from age and wear and tear was noted in some areas, particularly those in regular use (such as kitchenette facilities in the studio).
- Surface soiling and/or discoloration of elements and fabric pointed to both aging of early materials (plastics, etc.) and environmental impacts (sun, water, heat, surface pollutants/dust, etc.), potentially contributing to long-term deterioration.
- There is potential for deterioration of materials (such as sofa upholstery) due to pest infestation and dust.

### Conservation Policies Objective

*To ensure the appropriate investigation, maintenance, and repair of all original and significant early fabric to ensure maximum retention of integrity and authenticity of fabric while maintaining the safety, use, and interpretation of the building complex.*

#### Detailed Conservation Policies:

##### **B10 Building Complex—Built-in Furniture and Fixtures**

**B10.1:** Implement regular inspection and maintenance to preserve the condition of structural components, fabric, fittings, and finishes.

**B10.2:** Further investigation and specialist advice on appropriate cleaning methods for elements and specific fabric components is recommended.

**B10.3:** Remove agents of deterioration (including water, excessive sunlight, and/or physical impacts) as early as possible through management and/or conservation action. Removable protection measures may be appropriate for items not displayed in public areas or outside of visiting hours.

**B10.4:** An ongoing program of rust removal and surface protection for the metal cabinets throughout the residence and studio should be developed and implemented. This should include appropriate methods to remove rust back to sound fabric, to treat with rust preventatives and reapply a finish coating to match the original detail, and to provide a waterproof seal over steel surfaces. Individual cabinet units may need to be removed and repaired off-site.

**B10.5:** Implement environmental improvement recommendations developed by the GCI from 2011 to 2017 (Maekawa forthcoming; Henry 2017) to remove or reduce agents of deterioration, including water, excessive sunlight, dust, and pests.



**Figure 6.50** Original prefabricated painted steel cabinets in the studio kitchenette, 2017. The cabinets show rusting of the steelwork caused by the breakdown of painted surfaces and exposure to damp. An ongoing rust removal and surface protection program will be developed.



**Figure 6.51** Switch plate covered in decorative paper, 2016. Ray used decorative papers on various surfaces and fixtures throughout the residence. These should be conserved.



# Contents and Collections

## ► C1 Contents and Collections

### Description

- The Eames House contents include all of the furniture and fittings in the building complex, as well as the three collections: the Eames House Collection, the Eames Family Collection, and the Interpretive Props Collection. The Eames House Collection comprises a diverse array of furnishings and objects—both natural and human-made—that were collected by Charles and Ray Eames. These objects are arranged in unexpected and highly personalized juxtapositions. From books to clothing to folk art dolls to kitchen crockery, the provenance of each component has an individual and group significance. The Eames Family Collection contains objects that were brought to the House by the Eames family. The Interpretive Props Collection is composed of replicas and replacements of original items in the Eames House Collection that can no longer be displayed (fig. 6.52). The Eames Foundation’s operational effects, such as office equipment and furnishings, are part of the contents but do not form a collection.

### Significance

- The Eames House Collection’s carefully composed, eclectic assemblages of objects, textiles, and artifacts demonstrate how the Eameses humanized the industrial modernism of the House, reveling in the interplay between craft and machine work, the found object, the utilitarian commonplace item, and the freshness of garden bouquets (fig. 6.53).
- The retention of the three collections in situ is of significance, providing a continuity of function and interpretation rarely equaled in modern house museums. The Eames House Collection, comprising objects owned by Charles and Ray, is the most significant of the collections.
- The active use of the home studio, mainly for filmmaking and product design, took place between 1949 and 1958, when the Eameses began doing most of their work at their Venice office space and the balance of time spent at the House shifted. Key components of the studio space include fixed elements—such

as the panel depicting the historic Venice Pier, from which the group of pier piles in the south court came—as well as objects that were originally installed in other locations but have found a compatible home in this historic working environment. The musical tower is perhaps the most notable example.

- The Eames House Collection demonstrates the evolution of Ray and Charles’s lives and work. Their collections gradually grew to include gifts, artifacts acquired on their travels, objects from nature, and many other items they considered significant as examples of design ideas and principles, personal life experience, and family stories.
- The Eameses’ reflective, iterative approach to design is evidenced in their collection. The contents and collections include important furniture prototypes and production models that demonstrate the Eameses’ constant evolution of their designs through use and iterative experimentation.
- The continuing practice of welcoming visitors and guests, which has come to be known as the guest–host relationship, honors Charles and Ray’s way of living and socializing at the Eames House and communicates their spirit of the place. The collections are displayed to elicit engagement and mutual enjoyment with guests.
- The collections contain a variety of potted plants that are displayed in the ground-floor rooms of the residence, many on a large, rolling metal planter custom-built for this purpose (fig. 6.54). The large *Monstera deliciosa* and its pot are original, but many of the pots and plants are replacements. They reflect the Eameses’ desire to blur the boundary between indoors and outdoors.
- The objects and furnishings used by the Eames Foundation

**Figure 6.52** Eames Lounge Chair and Ottoman, currently in the living room, 2016. This set was substituted for the original chair and ottoman owned by the Eameses, which was judged too fragile for display.

**Figure 6.53** A collection of items on the dining room table, in 2016, demonstrating Ray and Charles’s interest in a wide variety of ceramics and found objects. Many surfaces throughout the residence hold assemblages of items collected by the Eameses and maintained by the Eames Foundation in arrangements that reflect Ray’s practices, including displays of fresh flowers.





6.54

**Figure 6.54** Large, rolling metal planter custom-built for the living room, a mobile means of bringing plants and greenery indoors, 2016. The large *Monstera* is original.

**Figure 6.55** The living room with draperies drawn to reduce light exposure, 2016. Retention of the collections and contents in situ is of significance, demonstrating a continuity of function and interpretation potential rarely equaled in modern house museums, but exposes the collection to agents of deterioration. Preventive conservation measures, such as the use of curtains here, are required to minimize damage.



6.55

to meet its day-to-day operational needs are unlikely to be of significance to the site.

### Vulnerabilities

- Inventory of the contents and collections is not yet completed to museum standards.
- The record of Eames family associations with collections, contents, and their interpretation—needed to identify and distinguish between the collections—is incomplete.
- Replacement objects are not adequately identified.
- Agents of deterioration, which include visible and UV light damage, water and water damage, elevated interior temperature, humidity, mold, airborne dust, and pest intrusion (fig. 6.55).
- Lack of climate control system to stabilize conditions poses risks to the contents and collections in the building complex.
- Lack of priority assessment for collection conservation risks damage to collection components not known to be vulnerable.
- Environmental and storage conditions may not be optimum for specific collection components, such as textiles and clothing.
- Many objects are at risk of loss through age and fragility, including found objects, the pier sculpture, and ephemera such as paper goods and desert weeds.
- Vandalism, theft, and accidental damage pose risks to the site.
- Natural phenomena such as earthquakes, landslides, storms, wind, flood, and wildfire and smoke pose risks.
- Inadvertent movement or rearrangement of objects could impact significance.
- Indoor plants may introduce pests or excessive moisture to the interior.



## Conservation Policies Objective

*To conserve, sustain, and interpret the contents and collections through managing agents of deterioration and risk, taking preventive action, initiating ongoing conservation projects, and continuing good housekeeping management.*

### Detailed Conservation Policies: C1 Contents and Collections

**C1.1:** Complete and maintain the object identification inventory to museum standards, including integrated location and condition survey, to assess the scope of conservation issues to be managed.

**C1.2:** Develop and implement a Collections Management Plan for the site to identify, manage, and protect original or significant items of furniture, fittings, artworks, textiles, clothing, ephemera, archives, removed and stored building fabric, or other collections. The plan should include a strategy to monitor, maintain, and manage the three collections to retain and protect their significance into the future, even if they are still in use or on display. The plan should include loan, acquisition, and disposal processes. It should be prepared by an appropriately experienced conservator.

**C1.3:** Review the Foundation's existing House Operations Manual against international best practice to identify gaps and improvements in housekeeping and contents and collections records management.

**C1.4:** Continue to record Eames family knowledge on the collections and contents and on housekeeping practices (e.g., floral arrangement preferences, styles, and approaches) and include these in the House Operations Manual.

**C1.5:** Review all Eames House contents, confirm any Eames associations, and record to which collection each object belongs. Retire objects lacking documented associations as necessary. Continually monitor and document any new additions to the House. Clearly identify replicas and props. Objects and equipment that are among the Eames Foundation's operational effects, and thus not part of any of the collections, should also be identified.

**C1.6:** Implement environmental improvement recommendations developed by the GCI (Maekawa forthcoming; Henry 2017) to protect and conserve the contents and collections.

**C1.7:** Implement annual pest inspection of the site, giving priority to interiors and the collections, referencing weekly monitoring undertaken as part of regular housekeeping practice.

**C1.8:** Drawing on the GCI collection assessment undertaken in 2016–17 (Boersma 2017), assess and prioritize the conservation needs of the contents and collections to direct preventive and longer-term conservation work. Focus attention on the most vulnerable objects, including textiles and clothing.

**C1.9:** Use off-site storage as needed to improve collection management conditions.

**C1.10:** Develop a Disaster Preparedness Plan to prepare for potential disasters and plan recovery actions for contents and collections.

**C1.11:** Implement and monitor earthquake protection measures for the contents and collections—for instance, shims and reversible cupboard catches—with particular attention to collections on flat, open surfaces.

**C1.12:** Continue to provide site security and monitor on an ongoing basis.

**C1.13:** Selectively interpret collections through exhibitions, film, web access, contemporary art, and other means (subject to conservation and security needs) to provide alternative access and potentially reduce site pressures.

**C1.14:** Develop an Interpretation Plan to facilitate community and visitor understanding of the heritage values and conservation management objectives of the place and to guide decisions about messages and media to be used, including discreet signage, website access, events, guidebooks, and various tours and docent scripts.

**C1.15:** Engage with visitors about collection issues; for instance, explain why light monitors and pest traps are an important element of collections management, why replicas are used, and so forth.

**C1.16:** A Visitor Management Plan should be prepared and implemented for the site that identifies objectives and specific goals for use, carrying capacity, and visitation of the Eames House to help guide decision making and priorities for care of the place and its contents and collections in the short and long term.

**C1.17:** A Heritage Risk Management Plan should be prepared to address the range of vulnerabilities and risks faced by the Eames House, to identify their likelihood and consequences, and to develop appropriate management measures to anticipate and prepare to mitigate these risks. All recommendations should be evaluated in the context of the significance of the place, the impacts of proposed measures, and options available to lessen impacts.



## Landscape

### ► L1 Landscape—Eucalyptus Row

#### Description

- The row of irregularly spaced red gum eucalyptus trees planted parallel to the slope of the hillside predate the Eames House, now interspersed with younger volunteers.
- The understory plantings range from grasses at the southern end of the row to vinca and ferns toward the center and moss and juniper at the northern end of the row. The plantings at the northern end are interspersed with stones.

#### Significance

- Original tree location and species are of exceptional significance, relating to Abbot Kinney's 1880s planting on site and the Eameses' location and design of the building complex in 1949 (figs. 6.56a and 6.56b).

#### Condition

- An arborist report from 2014 indicates that based on the SULE (safe useful life expectancy) classification system, the condition of the trees in the row varies. Five trees have been identified as hazardous and their removal is recommended (Carlberg Associates forthcoming). Others are in adequate to good condition with variable remaining lifespans, girths, and foliage loads.
- The increased girth and size of trees partially obscures significant views toward and from the building complex. This condition affects the aesthetics of the silhouette of the tree trunks against the building complex, as well as the play of light and shadow on the interiors of the building (fig. 6.57).
- Understory plantings appear to be healthy.

#### Vulnerabilities

- Unmanaged loss of trees due to age, poor health, or structural issues poses potential loss of significance for the entire site.
- Trees may cause damage to the building complex as they deteriorate. Falling trees and branch and bark drop are potential site, human safety, and structural damage issues.



**Figures 6.56a and 6.56b** The historic eucalyptus row, dating to the 1880s. This landscape element helped to define the location of the building complex. It has grown significantly over the years, as demonstrated in these photographs from 1950 (a) and 2013 (b).

**Figure 6.57** The eucalyptus row, photographed in 2017. The row now dwarfs the building complex, obscuring views and altering the aesthetics of the site. Branch drop and leaf litter are significant visitor and building risks that must be managed. As the trees age, succession planting must be considered.



- Trees and leaf litter are a fire hazard to the site, in particular leaf accumulation on the roof and meadow, with additional adverse impacts from allopathic oil.
- Changes in the scale of the trees impacts the aesthetics of the site, including altering the patterns of light and shadow on the facades and interiors.
- Root invasion of slab and paths, as noted in policy B3.
- Damage to or loss of trees due to storm, drought, wildfire, or insect infestation.
- Lack of eucalyptus species diversity increases the risk of devastation through insect or pathogen infestation.

## Conservation Policies Objective

*To sustainably manage and conserve the eucalyptus row and its value as a significant element of the site and its setting.*

### Detailed Conservation Policies:

#### L1 Landscape—Eucalyptus Row

**L1.1:** Develop and implement a Landscape Management Plan to sustainably manage and conserve the landscape setting, elements, and values of the site. This should include analysis and policy advice for the individual trees in the eucalyptus row.

**L1.2:** Appoint a landscape architect with specific eucalyptus management experience to act as an adviser and expert sounding board by providing technical advice and guidance to the Foundation.

**L1.3:** The current eucalyptus pruning and watering regime and maintenance schedule for the site should be reviewed by a eucalyptus specialist.

**L1.4:** Retain the location and screening function of the eucalyptus row through selective thinning, replanting, and tree management by specialist arborists.

**L1.5:** Implement an ongoing tree management program that fully assesses the implications of hazardous tree removal, watering regimes, and growth of volunteers, and restore the significant character of the tree row by limiting its form in terms of size and spread.

**L1.6:** Undertake succession planning and planting for the replacement of trees as part of the landscape management of the site.

**L1.7:** Reduce risks to visitors, buildings, and property from branch drop, tree fall, and fire through proactive pruning or hazardous tree removal.

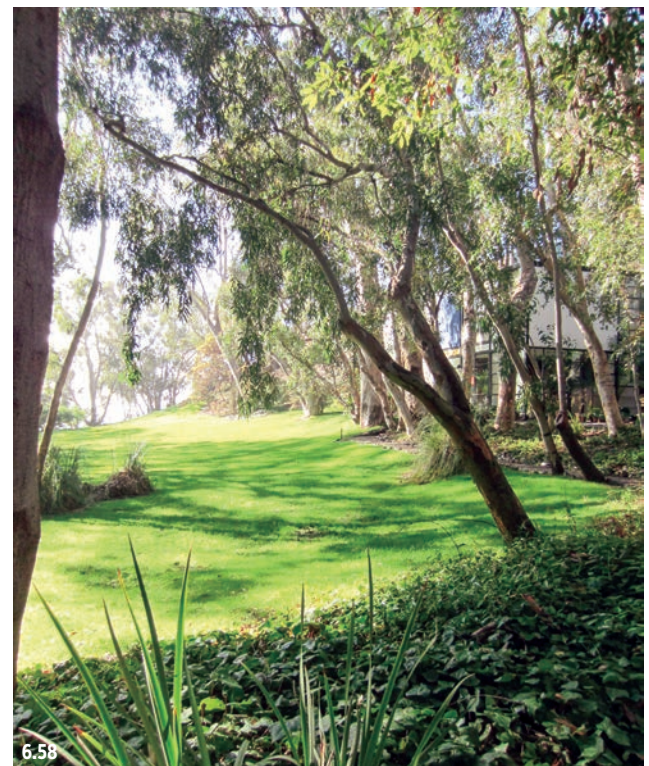
## ► L2 Landscape—Meadow

### Description

- The site has an open meadow of sown rye grasses and occasionally wildflowers, with scattered weeds (fig. 6.58). The meadow also has occasional trees and other plantings, including:
  - > a group of aged acacias to the southern fringe;
  - > an aged peppercorn tree;
  - > an olive tree;
  - > potentially remnant spring bulbs; and
  - > clumps of pampas grass.
- The meadow grasses die off seasonally as rainfall diminishes. As of fall 2016, the meadow is bare, reflecting a continued state of drought.
- There is a steep bluff area of scrub at the edge of the site with demonstrated risk of landslide.

### Significance

- The open meadow is an exceptional component of the site. It was one of the determining factors in the ultimate location and siting of the building complex. Originally, the meadow was part of a landscape that was shared by the Eames and Entenza Houses. Its openness and fringing with silhouette tree forms (acacia, eucalyptus, and pine) provide the essential open setting of the House and foregrounds views to the ocean. The seasonality of sown meadow grasses was a pleasure to Charles and Ray. Bulbs, poppies, and wildflowers were occasionally planted.



**Figure 6.58** View of the meadow from the parking area in a wet year, 2012. The Eameses sowed the meadow with grasses and occasionally wildflowers, a practice that the Eames Foundation has continued.



**Figure 6.59** The meadow in dry conditions, 2017. During drought years, the meadow is not sown and leaf litter is retained to reduce dust. Eucalyptus leaf litter needs to be carefully managed, as allopathic oil released by the leaves may suppress grass regrowth and is a potential fire hazard.



**Figure 6.60** Pampas grass in the meadow, 2017. Managing potentially invasive and flammable plants, such as pampas grass, jade, and plumbago, is an important component of landscape management.

## Condition

- The age of the meadow's eucalyptus and acacia trees varies. Many of the older trees are reaching the limit of their SULE.
- Changes in environmental conditions affect the ability of grasses and other plants to thrive in the meadow. In 2015, due to water restrictions related to sustained drought conditions, the meadow was not sown, which has eliminated seasonal changes in its appearance. As of fall 2016, the meadow is dry and covered in leaf litter, preventing dust from blowing (fig. 6.59).
- The covering of eucalyptus leaf litter may create an allopathic oil layer in the meadow, which could discourage grass growth and potentially add to fire risk.

## Vulnerabilities

- Leaf accumulation in the meadow (in particular, eucalyptus leaf due to its allopathic oil content) is a fire hazard and plant growth inhibitor, and potentially reduces water penetration.
- Changes in the type, palette, and location of plantings used during the Eameses' lifetimes may reduce authenticity and interpretability.
- Visitor infrastructure may be visually intrusive and may interfere with site appreciation and interpretation.
- Loss of historic fringe plantings (e.g., acacia and pine) and meadow plantings may adversely impact the landscape.
- Natural conditions and disasters include drought, wildfire (fig. 6.60), and landslide.

## Conservation Policies Objective

*To maintain the open meadow form with seasonal grasses and occasional silhouette trees on the fringes and to stabilize the bluff with drought-resistant plantings.*

### Detailed Conservation Policies:

#### L2 Landscape—Meadow

- L2.1:** Develop and implement a Landscape Management Plan to sustainably conserve and manage the landscape, elements, and values of the site. This should include assessment, analysis, and policy advice for the meadow.
- L2.2:** Manage the eucalyptus row in relation to meadow grasses to demonstrate seasonal and cyclical changes (including drought) and provide for serviceable use. Retain the fringe of acacia for blossom and silhouette form by succession replanting and pruning as necessary.
- L2.3:** Avoid the introduction of inappropriate new plant species.
- L2.4:** Maintain the meadow as a foreground to the ocean views in accordance with policy 18.
- L2.5:** Retain open form of meadow, with seasonal grasses and occasional trees, and silhouette trees on the fringes.
- L2.6:** Manage opportunistic invasive plants, including jade and plumbago, and avoid pampas grass expansion (it is also a highly flammable weed). Sterile varieties, where available, should be considered.
- L2.7:** Avoid introducing new permanent structures in the meadow other than modest interpretation and informal movable seating. Locate any such additions at the edges of the meadow.
- L2.8:** Select suitable plant species and management regimes recognizing changing water availability and desire to reinstate seasonal changes to the character of the meadow. Such issues should be investigated as part of a future Landscape Management Plan.
- L2.9:** Improve condition of meadow and sow seasonal grasses. Manage grasses to allow for seasonal change.
- L2.10:** Control leaf litter on a regular basis to reduce allopathic oil impacts and the risk of wildfire.
- L2.11:** Stabilize the bluff area; for example, with erosion-controlling plants.
- L2.12:** Research nonextant plantings and consider their re-introduction; for example, reinstatement of three pines (or a similar silhouette) in the original location on the bluff's edge.



### ► L3 Landscape—Earthen Berm

#### Description

- A berm of mounded earth excavated from the hillside was constructed on the boundary between the Eames and Entenza Houses in 1949 (fig. 6.61). Intended to provide privacy to the occupants of the two houses while allowing shared views of adjacent landscapes, it was initially planted with what Charles called “eucalyptus bushes” (Eames 2015, 71).
- The berm is currently planted with plumbago and cape honeysuckle to form a privacy screen (fig. 6.62).
- The Eames Foundation has encouraged expansion of these plantings in order to screen out views of a large house constructed on the Entenza property in the 1990s.

#### Significance

- The earthen berm is an essential component of the original landscape design for the site.

#### Condition

- The berm is now covered with a thicket and is no longer visible. Its structural condition is unknown. It is not known whether the original eucalyptus plantings are extant.



**Figure 6.61** Early view of the earthen berm and newly planted bushes, looking southwest from the Entenza House toward the Eames House, 1950.

**Figure 6.62** View of the earthen berm from the Eames House, looking northeast, 2017. The berm itself is no longer visible, hidden beneath later plantings that provide privacy between the lots.



#### Vulnerabilities

- Weathering and overgrowth of the plantings may threaten the berm structure.
- Firewood storage below the berm thicket harbors pests and is a potential fire risk.
- Storm/wind/wildfire damage is a risk.
- Impact of drought is a risk.
- There will be a sudden loss of privacy if the planting screen were to be removed.

#### Conservation Policies Objective

*To interpret the role of the earthen berm in the relationship between the two Case Study Houses and to retain visual privacy for the Eames House site by managing the berm plantings.*

#### Detailed Conservation Policies: L3 Landscape—Earthen Berm

**L3.1:** Develop and implement a Landscape Management Plan that assesses landscape and planting elements and provides policy advice for managing the landscape.

**L3.2:** Investigate the berm’s current condition and form and research its original plantings. Develop policies to conserve the berm and its plantings and manage them without opening undesirable views.

**L3.3:** Provide visitors with interpretation of the original berm structure and of the original relationship between Case Study Houses Nos. 8 and 9.

**L3.4:** Remove the firewood hazard from the site.

**L3.5:** Keep the shrub plantings (plumbago and cape honeysuckle or alternatives) pruned, well irrigated, and free of dead material as a fire management strategy.



## ► L4 Landscape—Upper Slope

### Description

- The steep upper slope composes the western portion of the site, rising from the rear of the building complex to the Corona del Mar roadway above (fig. 6.63).
- The concrete retaining wall of the building complex is built into the base of the slope.
- There is a short rubblestone retaining wall at the base of the slope on the west and north edges of the gravel upper path.
- The slope is vegetated by plumbago, jade plant, cape honeysuckle, Algerian ivy, big leaf periwinkle, fairy crassula, and eucalyptus trees according to an inventory completed in the fall of 2014.
- An automatic sprinkler system with spray heads provides irrigation to the upper slope.

### Significance

- Exceptional component defining the location of the building complex. The concrete retaining wall, which forms the rear of the building complex, is built into the slope.

### Condition

- There is recent evidence of mid-slope erosion above the planter box area of the south court, which has been stabilized with railroad ties and screened with bamboo (fig. 6.64). This is visually intrusive.
- The neighboring site above the upper slope has recently undergone extensive earthwork. There is concern that the sump, when full, may be causing additional pressure on slope stability. Additional water draining from the sump could cause further erosion.
- There are numerous eucalyptus trees across the upper slope (fig. 6.65). An arborist report in 2014 indicates that their



**Figure 6.63** The steep, heavily treed upper slope of the site, to the south and southwest of the building complex, 2016. The slope makes up the western portion of the site, rising behind the building complex to the roadway above.

**Figure 6.64** Area of erosion southwest of the building complex on the upper slope, temporarily stabilized with railroad ties and partially screened with bamboo plantings, 2017.

**Figure 6.65** The upper slope area north of the studio, self-seeded with eucalyptus trees and invasive exotic species, 2016.





condition varies. Seven have been identified as hazardous and a few are recommended for removal (Carlberg Associates forthcoming). Others are in adequate to good condition with variable remaining lifespans, girths, and foliage loads. A number of eucalyptus trees at the top of the slope were topped many years ago by neighbors. These and other topped trees around the site have since been restoratively pruned.

- There is a high leaf litter load throughout the upper slope (fig. 6.66).
- Exposed upper slope near bluff eroded and recent loss of pittosporum trees requires investigation and remediation.

### Vulnerabilities

- Erosion of hillside poses a risk.
- There is potential damage from landslide.
- Existing irrigation system may cause damage to buildings and contribute to erosion of the hillside. It may also contribute to overgrowth of trees and plantings.
- Plant type, leaf litter, and undergrowth pose a fire risk.
- Previously topped trees tend to be unstable and pose a risk to buildings and stability of upper slope.
- Diseased plants, such as pittosporum, pose a risk.
- Construction, earthworks, and drainage work on adjacent properties may adversely impact the site.



**Figure 6.66** The steep upper slope near the driveway entrance, with a heavy leaf litter load, 2017.

## Conservation Policies Objective

*To secure the stability of the upper slope to minimize its erosion and risks to the building complex and landscape.*

### Detailed Conservation Policies:

#### L4 Landscape—Upper Slope

**L4.1:** Prepare a Landscape Management Plan that provides policy and advice regarding upper slope management.

**L4.2:** Investigate, rectify, monitor, and manage the stability of the slope. Implement erosion management recommendations, including the planting of historically appropriate or compatible trees, shrubs, and ground cover.

**L4.3:** Work with neighbors and local authorities to identify and manage water, drainage, and fire risks to the Eames House, as well as adverse visual and privacy impacts, particularly in relation to future development on adjoining properties. Potential drainage onto upper slope is of particular concern and requires priority investigation.

**L4.4:** Manage trees on upper slope to ensure their health and longevity. Remove hazardous trees and replace with appropriate species. When trees are removed, leave stumps in place for slope stability.

**L4.5:** The irrigation system should be improved or replaced and regularly maintained to manage plantings and minimize water ingress to the buildings. Control flow of excess water down the slope. Investigate options for a water-saving irrigation retrofit.

**L4.6:** Remove or significantly reduce proliferation of invasive exotic species, for example, jade and plumbago; if required for interpretation, replant with sterile versions.

**L4.7:** Reduce fire hazard by regular removal of undergrowth and leaf litter, keeping in mind that excessive walking on the slope to perform this activity could adversely affect slope stability.

**L4.8:** Prepare a wildfire emergency plan for the site. Consider defensive planting options and the Los Angeles Fire Department's brush clearance requirements.





**Figure 6.67** The south court, covered by an extension of the residence roof, 2017. At left is the exposed concrete planter box where Ray grew fresh flowers. The persimmon tree, no longer extant, was planted here.

**Figure 6.68a** Central court, showing details of the pavement, 2016. The courtyards are paved in a variety of materials, much of it brick, arranged in a grid pattern formed by wooden strips. Marble pavers mark the entrance to the studio. A large, unpaved rectangle is visible at center. At left, the river rock border and wooden walkway run the length of the entire building complex.

**Figure 6.68b** Detail of wood block and brick pavers in the central court, 2016. Pavers are set between 2-inch-wide wooden strips laid in a grid.

## ► L5 Landscape—Courtyards including Planter Box and Carport

### Description

- The complex's three courtyards serve as open/outdoor rooms that contain an extensive collection of potted plants.
- Each court is bounded on three sides by elements of the building and/or retaining wall but is open toward the meadow.
- Each court has a differing character according to its orientation and the functions of adjacent internal spaces:
  - > The central court connects the residence and studio and serves as an entry court.
  - > The south court is partially covered by an extension of the residence's roof. It contains an original sculpture constructed of pier pilings on a steel framework. A large, raised, exposed-concrete planter box abuts the retaining wall at the end of the south court (fig. 6.67). It is planted with perennial and annual flowers, which were sometimes used for interior bouquets, and held a persimmon tree (gifted by Eero Saarinen), which died in 2016.
  - > The north court leads to the carport, which consists of a canvas awning suspended from the north return of the retaining wall and supported on a metal frame. An unmortared concrete-block wall, painted a vibrant blue, stands alongside the carport and hides an area used for trash cans and storage.
- The three courtyards are paved in a variety of materials and patterns (figs. 6.68a and 6.68b).

### Significance

- The outdoor spaces are key architectural components of the building complex, both visually and functionally. These visual



and functional roles have been retained and actively used and presented throughout the life of the site, thus enhancing their original role and significance.

- The role of these spaces within the landscape setting of the building complex is also significant. They enhance the light and views from within the residence and studio and are the setting for plant and floral displays that blur the boundary between indoors and outdoors and provide splashes of color through the glass (figs. 6.69a and 6.69b).
- A defining architectural element of the building complex layout, the exposed concrete, raised planter box delivers essential, seasonal floral display as a foreground to the view beyond. According to the Eames Foundation, some of the blossoms were used for bouquets in the residence.
- Of exceptional significance are the pier sculpture, which reflects the Eameses' interest in found objects and assemblage, and the persimmon tree grafted from the original tree gifted by Eero Saarinen, which died and was removed in 2016.

### Condition

- The built fabric and elements of these outdoor spaces is largely original and is in varied condition.
- The courtyard pavements do not provide adequate slope to shed water away from the buildings and retaining wall.
- Some of the plant materials are original, but most are not. They are generally in good condition.
- Deterioration of wood strips between pavers is noticeable in a number of areas, particularly where water accumulates (e.g., adjacent to building and retaining walls).
- The pier sculpture has suffered significant loss due to exposure to the elements and the now-discontinued practice of setting plants on it.
- The planter box appears to be in good condition.
- The carport canvas awning has been replaced several times as it has become worn (fig. 6.70).
- The unmortared blue wall appears to be in good condition, with light flaking of paint.

### Vulnerabilities

- As noted in the building complex section, water movement and drainage patterns within the courtyards contributes to the deterioration of building elements.
- The surfaces of the courtyards do not drain adequately and water flows toward the perimeter, causing ponding near the retaining wall and possibly allowing water into some areas of the buildings.
- Use of the retaining wall as the location of major drainage and water supply lines concentrates potential water sources (e.g., if pipes leak, block up, or break) in this vulnerable area.
- Discharge of exterior faucets directly into the ground increases water loading to the building complex.
- Watered garden beds are in close proximity to the edges of building structures.
- Further decay of pier sculpture is brought on by natural weathering and garden watering.
- Splashing from hoses contributes directly to moisture loading on courtyard and building fabric. The exterior tallowwood wall is especially vulnerable to water damage (see section B5 above).



**Figures 6.69a and 6.69b** Views of the central court, in an undated photo (a) taken during the Eameses' occupation and in 2017 (b). All three courtyards served as outdoor rooms filled with plant and floral displays.

**Figure 6.70** The carport, a canvas awning suspended on a metal frame that is anchored to the north return of the retaining wall, 2016. Foot access is from the north court (left). In addition to providing paved and planted areas, the court is still used for storage and trash cans, as it was originally.

- Potential impacts from the roots of plantings in courtyard areas adjacent to building fabric—including, for example, the *Monstera* plant roots growing under the tallowwood paneling on the west wall of the south court.
- Changes to the planting palette through purchase of inappropriate replacements pose a risk.
- Deer enter the site and feed on plants.
- The unmortared block wall is unlikely to withstand lateral forces, such as earthquake or impact.

## Conservation Policies Objective

*To retain the form, function, historic planting materials, and use of the courtyards, including the planter box and carport area.*

### Detailed Conservation Policies:

#### L5 Landscape—Courtyards including Planter Box and Carport

**L5.1:** Develop and implement a Landscape Management Plan for the site that assesses landscape and planting elements and existing planting schemes, and provides policy advice for managing the landscape.

**L5.2:** Reduce water loading to slabs and retaining wall, particularly where drainage is poor and drying out is limited, in accordance with B2 Conservation Policies.

**L5.3:** Evaluate existing watering regime and objectives in order to reduce water loading on buildings.

**L5.4:** Obtain arborist management advice regarding sustaining and managing the central court pine.

**L5.5:** Consolidate and conserve the pier sculpture.

**L5.6:** Conserve historic plantings, including implementing a rootstock project for important trees in the garden to ensure continuity in case of loss.

**L5.7:** Use Ray's plant lists to select suitable flowers and species for annual displays in the planter box. Explore alternatives when species are no longer available.

**L5.8:** Maintain pavers (e.g., wood blocks, marble, and brick) as a level, walkable surface and replace deteriorated elements with appropriate substitute materials.

**L5.9:** Maintain the integrity of the concrete planter box and repair as necessary with appropriate materials.

**L5.10:** Replace canvas carport awning as necessary, maintaining original design, materials, and types of knots.

**L5.11:** Retain the use of the blue wall as a screening device for the service area. Consider reinforcing the stacked unmortared masonry block wall for safety reasons.

## ► L6 Landscape—Walking Paths and Driveway/Parking Area

### Description

- The wooden walkway on the eastern side of the building complex, between the building and the row of eucalyptus, was originally laid with railroad ties in the early 1950s and replaced with shorter milled lumber circa 1989. The border between the walkway and building complex is covered in river rock and potted plants (fig. 6.71).
- The upper pathway on the western side of the building complex is covered in pebbles and compacted dirt and gravels (fig. 6.72). It serves as a back-of-house storage area for equipment and pots (fig. 6.73).
- The lower pathway, leading from the parking area to the front doorsteps, is delineated by rubblestone and covered in compacted dirt and small river rock.
- Other minor pathways are covered in similar materials.
- Steps from the lower pathway to the wooden walkway in front of the residence's main entrance are constructed of board risers with gravel-topped treads (fig. 6.74). Similar steps lead from the lower pathway to the walkway on the eastern elevation of the studio.
- Informal earthen stairs with stepping stones lie at the north and



**Figure 6.71** The wooden walkway, looking north, running between the building complex and the eucalyptus row, 2017. On the building side, the walkway is lined with river rock and potted plants. The current wooden planks, installed after Ray's death, are narrower than the originals.



south ends of the retaining wall; both lead to the upper path.

- An asphalt/blacktop driveway extends along the right-of-way from Chautauqua Boulevard into a wedge-shaped car parking area at the northeast of the building complex.

### Significance

- The driveway and paths around the building complex indicate the original functional layout and use of the site (fig. 6.75).
- The wooden walkway is a strong linear element that links the residence, studio, and exterior courtyards, directs movement between the eastern elevation and the row of trees, and shapes significant views and the experience of the site.

### Condition

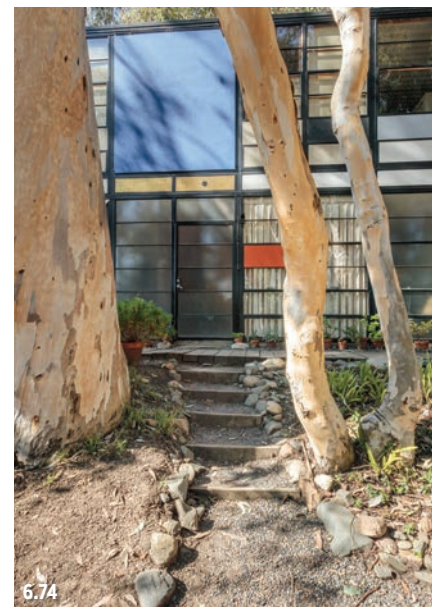
- The original railroad-tie wooden walkway was replaced in the late 1980s using lumber of a different dimension. Subsequently,

boards have been replaced as needed. The current condition is good.

- The lower and upper pathways, as well as the earthen stairs and steps, are in serviceable condition.
- The driveway and parking area are in serviceable condition.

### Vulnerabilities

- Current slope of pathways may cause water loading on the building.
- Undirected water flow down the rear slope is causing erosion of the earthen steps.
- Changes to materials or proportions of paths and the driveway impacts visitor experience.
- Intrusive museum infrastructure and visitor facilities, such as location of the portable toilet, may adversely impact site interpretation.



**Figure 6.72** The upper pathway, in 2017, west of the building complex above the retaining wall, surfaced with compacted dirt and gravels and lined with potted plants.

**Figure 6.73** The upper pathway behind the residence, 2017. This area is used for storage of ladders, pots, and equipment, and serves as a plant hospital. Continuation of this historical use must be balanced with current safety needs.

**Figure 6.74** The lower pathway, in 2017, leading from the parking area across the meadow to the wooden walkway and the residence's front door. The steps are gravel surfaced and built of board risers.

**Figure 6.75** The asphalt driveway, parking area (*foreground*), and carport (*right*), which continue to serve their original functions, 2017.



## Conservation Policies Objective

*To retain or restore the location, form and fabric, and materials of paths and driveway to conserve and interpret the original approach to the residence and studio and the site circulation pattern.*

### Detailed Conservation Policies:

#### L6 Landscape—Walking Paths and Driveway/ Parking Area

**L6.1:** Develop and implement a Landscape Management Plan for the site that assesses walking paths, driveway, and parking area, and provides policy advice for managing the landscape.

**L6.2:** Create a slight slope in pathways and courtyards where appropriate to drain water away from the building complex.

**L6.3:** Reinstall the original width of the wooden walkway with appropriately dimensioned lumber.

**L6.4:** Investigate the relocation of the portable toilet from the parking area to a less intrusive and visible area.

**L6.5:** Maintain asphalt for the driveway and parking area. When replacing the driveway and parking area surface, maintain the width and shape and use similar paving materials.

**L6.6:** Investigate the creation of a cistern under the parking area for retaining rainwater for garden watering.

**L6.7:** Research the original/early plant selections and manage and retain the varied plantings in the understory beside the driveway, removing the volunteer jade and plumbago plants to the degree possible.

**L6.8:** Research types of pebbles used in different areas of the site and reinstall as practicable.

**L6.9:** Investigate options and locations for a security gate at the driveway entrance.

**L6.10:** Devise an appropriate response to the erosion of earthen steps.

## ► L7 Landscape—Potted Plants

### Description

- Annuals and perennials in a variety of unglazed terracotta pots are located in courtyards and along pathways (figs. 6.76a and 6.76b).
- Various trees are planted in sawn whiskey barrels (fig. 6.77), which replaced the original sake barrels.
- An area alongside the upper pathway acts as a plant hospital and storage for pots.



**Figures 6.76a and 6.76b** Views of the east facade of the building, in an undated photo (a) taken during the Eameses' occupation and in 2017 (b), showing potted plants along the wooden walkway. Potted plants were frequently rearranged to provide color, texture, and detail.



## Significance

- A key element of landscaping the building complex, potted plants were used and rearranged to provide color, texture, and detail to the courtyards and edges of the buildings, as well as the interiors (fig. 6.78).

## Condition

- Plants are generally healthy and replaced as needed.
- The condition of the pots is varied.

## Vulnerabilities

- Loss of original pots and changes in the variety of pot shape or to their location and arrangement impact significance.
- Gradual changes in potted plant species through a wider variety of hybrids, colors, and so forth impact significance.
- Splash and runoff from watering of pots in close proximity to buildings can lead to water ingress and damage to exterior finishes, such as the exterior tallowwood wall.



**Figure 6.77** Sawn whiskey barrels serving as planters, 2017. These have replaced the original sake barrels, which became difficult to source.

**Figure 6.78** An arrangement of potted plants in the north court, set among decorative stones and tree stumps on a bed of small river rock, 2017.

## Conservation Policies Objective

*To conserve, manage, and interpret the significance of the pots and potted plants to visitors as part of the site experience.*

### Detailed Conservation Policies:

#### L7 Landscape—Potted Plants

**L7.1:** Develop and implement a Landscape Management Plan for the site that assesses the landscape and planting elements and provides policy advice for managing the potted plants.

**L7.2:** Manage potted plant watering in a way that avoids wetting of the exterior walls, causing unintended damage to the building complex fabric. This is a particular issue in the area adjacent to the tallowwood wall, where the jade plant is in close proximity.

**L7.3:** When needed, select replacement plantings for pots based on Ray's plant lists or other research. It is acceptable to purchase plants available in local nurseries as long as they are of the correct variety or are compatible substitutes for varieties that are no longer available. It may be necessary to obtain heirloom varieties from specialist suppliers.

**L7.4:** Retain potted plants around the residence and studio for display and to bring colors to the vicinity, referring to historic photos and Ray's plant lists for veracity, noting that the plant lists may represent desires rather than evidence of plantings.

**L7.5:** Undertake research and analysis of existing pots using historic photos and documents to identify original pot forms and conserve and replicate them as needed. Retain the variety of traditional unglazed terracotta form and fabric for pots.

**L7.6:** When replacement of sawn whiskey barrels becomes necessary, investigate the possibility of obtaining sake barrels similar to the original, otherwise replace in-kind.

**L7.7:** Repot plants on a cyclical basis, washing pots to remove salts and efflorescence.

**L7.8:** Develop plant lists for replacements by researching Ray's plant lists, and interpret these for visitors.

**L7.9:** Identify trees/plants with specific heritage significance and create succession plans for their eventual replacement. ■

## Notes

<sup>1</sup> Ian Innes, personal communication with Sheridan Burke, February 2016.

<sup>2</sup> Bob Newman, personal communication with Sheridan Burke, July 2014.







## CHAPTER 7

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# Priorities for Implementation

## 7.1 Introduction

This CMP for the Eames House identifies a wide range of conservation policies, and actions for the implementation of these policies, to promote the meaningful long-term conservation of this significant property. Because not all of these recommendations can be implemented immediately with currently available resources, they will need to be prioritized and staged based on funding availability. Some recommendations will also require additional investigation, diagnostics, and possible research, as well as expert advice, detailed implementation strategies, and documentation.

At the time this report was prepared, the main priorities were identified as follows:

- ensuring the buildings are made watertight and retained in this condition;
- minimizing the agents of deterioration within and outside the building complex;
- actively and sustainably managing the site landscape; and
- developing and implementing a comprehensive approach to the management of collections and contents.

The appointment of a conservation architect, a landscape architect, and a collections conservator is also recommended to provide consistent and expert conservation advice to the Eames Foundation as it implements the policies and recommendations in this CMP and prioritizes future actions and projects.

## 7.2 Priority Actions

Priority actions have been identified and have been prioritized according to whether they should be undertaken immediately or initiated within various time frames. They are cross-referenced with the detailed policies provided in chapter 6.

### ➤ *Actions that should be undertaken immediately:*

- Adopt the CMP, implement its conservation policies, and regularly review them (policies 1 and 2).
- Use professional conservation advice. Appoint a conservation architect, a collections conservator, and a landscape architect (policy 3).
- Conserve, manage, and interpret the site, its contents and collections, and landscape by implementing best practice conservation principles (policies 4, 5, 6, 10, 17, and 23).
- Manage the site in accordance with its defined significance (policies 5 and 6).
- Manage and monitor roof and site drainage (policies B1 and B2).

- Reduce fire hazard to the site by regular removal of undergrowth and leaf litter on the upper slope (policy L4.7), and through regular removal of leaf litter from the meadow (policy L2.10) and the roofs (policy B1.6).
- Work with neighbors to identify and manage water, drainage, and fire risks to the Eames House, as well as visual and privacy impacts, particularly in relation to future development on adjoining properties. Potential failure of the upper slope due to runoff from neighboring lot is of particular concern (policy L4.3).
- Develop a wildfire emergency plan for the site (policies 9 and L4.8).
- Monitor all uses, activities, and proposals for adaptation to identify, avoid, and mitigate heritage impacts on significant site elements, attributes, and values (policies 15 and 16).

➤ ***It is recommended that the following actions and processes be initiated within the next 12–24 months:***

- Prepare and implement a Landscape Management Plan (policy 25). This should include analysis of existing views and original and intended views to guide their management (policy 18).
- Implement environmental improvement recommendations developed by the GCI between 2011 and 2017 (Maekawa forthcoming; Henry 2017) (policies 24, B7.3, B8.3, B9.3, B10.5, and C1.6).
- Develop a Maintenance Plan for the building complex, contents and collections, and landscape that includes cyclical and priority maintenance requirements (policies 27, 28, and 29).
- Remove trees identified as hazardous and threatening to the building complex (policies L1.7 and L4.4).
- Investigate approaches to rectify, manage, and monitor instability and erosion of the upper slope and implement erosion management recommendations (policy L4.2).
- Prepare and implement a Heritage Risk Management Plan (including a Disaster Preparedness Plan) (policy 9).
- Implement an annual pest inspection for contents and collections (policy C1.7).

➤ ***It is recommended that the following actions and processes be initiated within the next 24–36 months:***

- Complete the object identification inventory (policy C1.1) and prepare and implement a Collections Management Plan (policies 24 and C1.2).
- Develop a comprehensive site drainage and water management plan to coordinate objectives and controls on water use and drainage throughout the site (policy B2.1).
- Prepare a building envelope condition survey, and schedule and implement high-priority repair and conservation and maintenance works, prioritizing measures to significantly reduce or remove water penetration into vulnerable fabric (policy B4.1).
- Appoint a eucalyptus specialist to review the current eucalyptus pruning and watering regime and maintenance schedule (policies L1.3 and L1.4).

➤ ***It is recommended that the following actions and processes be initiated within the next 36–48 months:***

- Prepare and implement a Visitor Management Plan (policies 14 and C1.16).
- Prepare and implement a Maintenance Plan, including cyclical maintenance and priority maintenance works requirements (policies 27, 28, and 29).
- Prepare an Interpretation Plan for the site (policies 13 and C1.14).
- Review the House Operations Manual (policy C1.3).
- Prepare an archival record of the site (policy 8). ■



## APPENDIX A

### Eames House: Timeline of Key Events

This timeline captures some of the key events and changes to the building complex over the lifespan of the Eames House. It is intended as a starting point for further research that will be based on documentation held by the Eames Foundation and at the Library of Congress. It may be expanded to encompass changes to the landscape as well.

#### ► 1945–49: Design and construction

YEAR	ELEMENT	DESCRIPTION
1945 (December)	Bridge House design	Plans for Bridge House published in <i>Arts and Architecture</i>
1948 (March)	Bridge House design	Bridge House model published in <i>Arts and Architecture</i>
1948 (September)	Bridge House design	Los Angeles Department of Building and Safety approves Bridge House plans and issues building permit.
1948 (October)	Revised House design	Plans for revised design completed
1948 (November)	Revised House design	Building permit issued for final design
1949 (January to March)	Revised House design	Additional architectural drawings and detail sheets completed
1949 (March)	Revised House design	Construction under way; completed retaining wall and steel frame published in <i>Arts and Architecture</i>
1949 (December)	Revised House design	Construction completed
1949 (December 24)	House	Ray and Charles Eames move into the residence.

## Timeline of Key Events

### ► 1950–55: The first five years

Many of the changes made in the first five years that Ray and Charles lived in the House represent them settling in and finishing details that may have been planned but not completed by the time they moved in. The exact dates these modifications were made are not known. They are elements not visible in the earliest published photos of the House, shot in 1950 by Julius Shulman and others, but documented in photos taken by the Eameses and used in their film *House: After Five Years of Living* or in other dated photos.

YEAR	ELEMENT	DESCRIPTION
Between August 1950 and March 1951	South court pavement	Paved area of the south court, which was originally very narrow, was widened sometime between <i>Life</i> magazine photo shoots done in August 1950 and March 1951.
1955 or earlier	Eucalyptus photo panel	Photographic panel showing eucalyptus trees was added to the patio. While difficult to make out, it appears to be visible in the film. Based on photographic documentation, at least four different eucalyptus photo panels have appeared here, probably replaced as the images faded. The process by which panels were produced is not known. Date the current panel was installed is unknown. Panel is quite faded.
1955 or earlier	Pier piling sculpture	While technically part of the collections, this is a space-defining element on the patio. The pilings themselves, remnants of the old Venice Pier collected by Ray and Charles in the late 1940s, appear in photos of the Eames House under construction. The completed sculpture was first photographed in the nearly empty living room in 1950 and was moved to the patio shortly thereafter, where it remains. It is currently in deteriorating condition due to exposure to the elements.
1955 or earlier	Hallway and living room floor	Originally bare concrete, the floor in these areas was laid with vinyl asbestos tiles in a warm white.
1955 or earlier	Alcove floor	Originally bare concrete, the alcove floor was covered in carpet.
1955 or earlier	Wooden walkway	Walkway constructed of railroad ties is laid over the dirt footpath that runs along the east side of the building complex.
1955 or earlier	Studio staircase	Staircase was planned at the time of construction but was constructed and installed sometime within the first five years. (It is not visible in photos shot by Peter Stackpole for <i>Life</i> magazine in August 1950.)
1955 or earlier	Alcove cupboards	There were originally three banks of wall-mounted cupboards on the north wall of the alcove. The one immediately above the sofa was removed to create more open shelving for the display of objects.
1955 or earlier	Alcove magazine rack	Wooden magazine rack was added to the west wall of the alcove above the sofa.
1955 or earlier	Living room bookcase	While technically part of the collections, the double-sided, custom-built wooden bookcase is a space-defining element of the living room.



## Timeline of Key Events

### ► 1956-88: During Charles and Ray's lifetimes

Key events related to the Eames House and modifications made during Charles and Ray's lifetimes. Few specific dates are known, but likely date ranges have been provided where available.

YEAR	ELEMENT	DESCRIPTION
1958	Studio floor	Parquet laid in an end-to-end pattern over the original exposed concrete slab. At an unknown date (but prior to 1977 based on photographic evidence), parquet was taken up to address moisture issues and was re-laid in a basket-weave pattern throughout the studio, with the exception of the darkroom, where it is still laid in the original configuration.
1958	Studio use	Studio is used as summer quarters for the Eameses' visiting daughter and grandchildren.
1958	Studio use	The Eameses' working life shifts to 901 Washington; the studio serves as flexible space thereafter.
Ca. 1958	Studio darkroom use	With shift to 901 Washington, the former darkroom becomes a storage space.
Ca. 1970s	Studio use	Studio is regularly used as a bedroom.
Ca. 1972	Carport	Carport awning replaced periodically as condition necessitates. Working drawings dated March 14, 1972, indicate that the awning was likely replaced that year. [Charles Eames, Carport Awning, March 14, 1972. Getty Research Institute, Charles Eames Architecture and Furniture Designs, 1940-1978 collection, volume 1]
1977	Studio	Four deteriorated Cemesto panels replaced with Transitop panels
1981	Studio and residence	Six deteriorated Cemesto panels replaced with Transitop panels
Unknown	Drainage	Elbow pipes added during Charles's lifetime to assist with drainage from the flat roof. These were capped in 2014.
Unknown	Corrugated glass partition between kitchen and utility room	According to family recollection, Charles applied a white coating to this partition to obscure views from kitchen into utility area. Sometime after his death in 1978, the coating was cleaned off the partition, to Ray's dismay. Traces remain.
1978 (August 21)		Charles Eames dies.
1978	Residence and studio	Exterior repainting in repair campaign following Charles's death.
1988 (August 21)		Ray Eames dies.

## Timeline of Key Events

### ► 1988–2004: After Charles and Ray

Upon Ray's death, Charles's daughter, Lucia Eames, inherited the Eames House and its contents. Between 1988 and 2004, the family took care of the House and used it lightly. In 2004, the Eames Foundation was established to care for and manage the House.

YEAR	ELEMENT	DESCRIPTION
1988–89	Studio use	Eames granddaughter Lucia Dewey Atwood resides in the studio as caretaker.
1988–2004	Residence use	Lucia Eames uses the House as a pied-à-terre when she is in town.
1989	Residence and studio	Exterior repainted
Ca. 1989	Wooden walkway	Original railroad ties replaced with milled lumber of slightly different dimensions
1989–2004	Studio use	The studio serves as the Eames Office's base of operations and is an active office work space and film editing studio.
1994	Residence and studio	Some clear glass replaced due to breakage during 1994 Northridge earthquake
1994	Residence and studio	Repair and repainting of exterior following 1994 Northridge earthquake
2004	Entire site	Eames Foundation established and ownership transferred to the Foundation

### ► 2005–present: The Eames Foundation

The site is owned and managed by the Eames Foundation as a house museum and site for understanding the lives and work of Charles and Ray Eames.

YEAR	ELEMENT	DESCRIPTION
2005–present	Studio use	Eames Foundation operates out of the studio.
2011–12	Living room and hallway	Contents of the living room are removed for display at LACMA, providing an opportunity to undertake needed conservation measures.
2012	Living room and hallway floors	Original VAT floor tiles are replaced with carefully researched custom tiles that replicate original size, color, and sheen. Vapor barrier is installed during process.
2012	Living room and patio tallowood wall	Tallowood wall is cleaned and resealed in 2012. Traces of age and use are retained in the finish.
2012	Residence and studio	Repairs are made to exterior metalwork and windows to improve watertightness and operability. Repairs are made to kitchen sliding door to improve functionality.
2012–13	Residence and studio	Paint excavation and analysis confirms that color of exterior steelwork changed over time from gray to black.
2014–15	Residence and studio roofs	Reroofing is done to improve drainage and water tightness. Skylight is raised 1 inch to improved watertightness.
2017	Site	Hazardous trees are removed. Trees are thinned.



## APPENDIX B

### Other Eames Architectural Projects

#### ► Charles Eames's Early Architectural Work

Charles Eames's interest in architecture began at a young age. When he was fourteen, he began working part time as a laborer in a steel mill and was quickly transferred to the engineering shop, where he employed his drawing skills as a draftsman. Following high school, he worked briefly designing lighting fixtures. He entered Washington University in St. Louis, Missouri, in the fall of 1925, where he completed four semesters of architectural study. While he was a student, he worked part time as a draftsman for Trueblood and Graf Architects. By 1930, he was sufficiently skilled to open an architectural office in St. Louis with a colleague, Elmer Gray. With the later addition of Walter Pauley as a partner, the firm came to be known as Gray, Eames, and Pauley.

The Depression years were difficult for architectural firms, and not much is known about the firm's work. According to Pat Kirkham, built work in the St. Louis area included a Colonial Revival-style house (1931) designed for Ernest Sweetser, a professor at Washington University, and the restoration of Pilgrim Congregational Church (1932–33), which encompassed restoration of the spire, design of new doors, and design of stained-glass windows and mosaics in collaboration with Emil Frei (Kirkham 1995, 14). Research into records of the Woermann Construction Company, owned by Charles's father-in-law, has identified two additional St. Louis-area residences, the Tudor Revival Skelly House (1932) and the Colonial Revival Scheu House (1933) (Society of Architectural Historians 2008, 4).

In the spring of 1934, Charles Eames was employed briefly on the Historic American Buildings Survey (HABS) documenting buildings in Missouri and Louisiana.<sup>1</sup> Later that year, he started an architectural firm with another former Trueblood and Graf colleague, Robert Walsh. At least seven of Eames and Walsh's designs—two churches and five houses—were constructed.<sup>2</sup> Most of their designs were not overtly modern and several of their houses are probably best described as revival style; as Charles later noted, in those lean years people took whatever work was available (Kirkham 1995, 27).

Their largest commission was the Roman Catholic Church of St. Mary's, in Helena, Arkansas (1935–36), for which Eames and Walsh were involved in every aspect of design, construction, and detailing, including interior fixtures and fittings. Stained glass, sculpture, and murals by three St. Louis artists were integrated into the project. Bearing traces of the National Romantic style in its brickwork, it was published in *Architectural Forum*, where it caught Eliel Saarinen's eye and eventually led to Charles's tenure at Cranbrook Academy of Art.

The Meyer House (1936–38) in Huntleigh Village, Missouri, was Eames and Walsh's largest residential commission. It was an exquisitely crafted project that drew on the Scandinavian modernism of the 1920s (Kirkham 1995, 22–27). Once again, the firm took charge of the interior detailing, designing rugs, furnishings, stained glass, and metalwork, some of which were produced by staff members at Cranbrook, where Saarinen was president.

Charles left his St. Louis architectural practice in the fall of 1938 to matriculate at Cranbrook. In 1939, he became an instructor there and in 1940 was named head of the industrial design department. That year he also took a part-time job with the architectural firm run by Eliel Saarinen and his son, Eero.

Eero Saarinen and Charles Eames became close collaborators and lifelong friends. Their first joint effort, in 1939, was the design of an exhibition of faculty work at Cranbrook Pavilion, foreshadowing Charles and Ray's later influence as exhibition designers (Miller 1983, 109). Charles and Eero also worked together on several projects for the Saarinen firm, including the furnishing designs for Kleinhans Music Hall in Buffalo, New York, their first effort at creating a curved plywood chair. Their most important Cranbrook collaboration was their award-winning entry in the Museum of Modern Art's Organic Design in Home Furnishings competition in 1940.

#### ► Architectural Work of the Eames Office

Beyond the two Case Study Houses, Charles and Ray Eames and the Eames Office undertook but a handful architectural commissions. Though trained as an architect, Charles was not licensed in the state of California; the office employed a young architect, Kenneth Acker, as the architect of record on its three built projects in Los Angeles (Case Study Houses Nos. 8 and 9, and the Herman Miller showroom). As is the case in all creative partnerships, Ray's contributions to the Eames architectural oeuvre are difficult to quantify. While Charles was initially credited as designer of the Eames House, sketches have been found in both of their hands (Demetrios 2013, 136–37). It was without question a joint effort, and the House is now widely recognized as the work of Charles and Ray Eames (Kirkham 1995, 106–8; Hines 2010, 529).

In 1948, Charles was commissioned to design the Los Angeles area showroom for the Herman Miller Furniture Company. It was located at 8806 Beverly Boulevard in the heart of the region's growing furniture and design trade, in what is now the city of West Hollywood. There is a distinct kinship between the Eames House and the showroom, both of which were constructed in 1949; the showroom was completed first, opening in the fall of 1949. In the estimation of Beatriz Colomina (1997, 146), they "were in fact the same project. They used the same principles. A light unselfconscious enclosure, a minimum of architecture, provided a flexible frame for multiple interior arrangements."

Like the Eames House, the showroom structure is a simple rectangular form. Its primary facade is composed of a factory steel frame and sash infilled with panels of clear, translucent, and patterned glass, as well as opaque plaster or composition decorative panels. The intent was maximum flexibility so that, depending on the fillers used, the front would be "as open or shut as desired" (*Progressive Architecture* 1950, 49). The other exterior walls were of exposed brick; the foundation was concrete slab.

The showroom's open interior was arranged on a 7-foot modular grid, with threaded metal inserts set into the concrete floor and welded to the ceiling trusses into which movable partitions

## Other Eames Architectural Projects

could be fixed, allowing endless rearrangement of the space to best accommodate the furnishings on display. Eames felt the architecture was important “only to the extent that it assisted the main business at hand” (*Progressive Architecture* 1950, 49), much as the Eames House was designed to serve “as background for life in work” (*Arts and Architecture* 1945, 44). Natural daylight flowing in from the street facade was supplemented by circular skylights 6 feet in diameter; artificial lighting took the form of adjustable fixtures hung from a ceiling grid.

An additional similarity between the Eames House and the showroom was the arrangement of objects and spaces within. The photo spread in an October 1949 *Arts and Architecture* article on the building, which featured detail shots of a number of tableaux and artifacts, noted that “much of the actual display material was fabricated and installed by the versatile members of the Eames staff.” Credit was also given to those who had lent notable objects for the displays (*Arts and Architecture* 1950, 29). Through the mid-1960s, the Eames Office designed, fabricated, and installed a number of Herman Miller’s furniture displays, reorganizing the interior spaces and creating settings that incorporated an eclectic mix of household items, folk art, plants, and objects collected by the Eameses and staff. Many of these came from, or later made their way to, the Eames House or appeared in other projects or films. The Herman Miller showroom occupied the Beverly Boulevard space until 1976, when it moved to the Cesar Pelli-designed Pacific Design Center, also in West Hollywood, another architecturally significant structure (Neuhart, Neuhart, and Eames 1989, 102–5, 46–47; Kirkham 1995, 126–28).

Following completion of the Herman Miller showroom and the two Case Study Houses, the Eames Office undertook very little architectural design work, building only two subsequent projects. One of these was a house in Zeeland, Michigan, designed for Max De Pree, son of Herman Miller’s president, and his wife, Esther. Completed in 1954, the house is in the spirit of the Case Study Houses, though it lacks the sense of transparency found in the Eameses’ California work. The finely crafted house is constructed of wood in deference to the climate and to the client’s requirement that the work be done entirely by local craftsmen, many of whom were immigrants from Holland who brought their wood-working traditions with them.

The primary facade of the rectangular, flat-roofed, two-story structure is organized in a modular grid with repeating vertical elements that are infilled with wood panels and glazing. Though there is some variation in the infill materials, the overall effect is one of “uniformity and regularity” (Kirkham 1995, 128). The sides of the house are windowless, clad in cedar, while the rear elevation features large windows looking out to a wooded landscape and stream. The Eames Office also designed the interiors. The original design for the somewhat modestly sized 2,000-square-foot structure included plans for future extensions to the house, which were eventually constructed. By anticipating this need, the Eames Office circumvented one of the perennial challenges facing owners of modest modern houses: adapting to increased space requirements without destroying the original design intent. The De Prees

lived in the house until 1975, when it was sold to a Herman Miller employee. In 2010, the company purchased the house with the intent of restoring and preserving it (Michigan Modern 2016). The Max and Esther De Pree House was listed on the National Register of Historic Places in 2017.

The Eameses’ final built project was stylistically unlike any of their previous architectural work. In 1957, the same year of their film *Toccata for Toy Trains*, they designed a station and rail yard for a one-fifth-scale railway operated in Los Angeles’s Griffith Park. The design was nostalgic and playful, inspired by Victorian railway architecture and perhaps more specifically by the toy train stations that appear in the film. The station house, which featured a clock tower accented with finials and sawtooth decorative trim boards running along the rooflines, was painted olive drab, red, and black. Other architectural elements, including sheds, trestles, signal posts, and a water tower, were built in the Eames Office to the same scale as the trains. In addition to the structures, the office designed the station’s graphics—tickets, signage, and a poster—which drew on typographical styles used by turn-of-the-century circuses and carnivals.

Many of Ray and Charles’s varied interests came together in this project: trains, scale models, circuses, toys, a sense of play, and the creation of a complete environment. Although they provided oversight and direction, much of the work was carried out by Eames Office employees. Don Albinson and Dale Bauer designed and constructed the rail-yard structures, Deborah Sussman developed the typography and color for the signage, tickets, and station facade, and John Neuhart designed the poster (Kirkham 1995, 130; Neuhart, Neuhart, and Eames 1989, 219). In the end, the Eames-designed Griffith Park Station was short lived; in 1963 it was drastically altered, and later was removed entirely.

### ► Unbuilt Architectural Projects

The remainder of Charles and Ray Eames’s architectural projects went unrealized for various reasons. These include their 1947 submission to the Jefferson National Expansion Memorial competition, sponsored by the City of St. Louis, which sought designs to commemorate Thomas Jefferson and his commitment to westward expansion. The Eameses’ plan, which was as much a design for an exhibition as for a monument, sought to honor Jefferson by encouraging education and participation. It was an ambitious scheme, consisting of a public park with a memorial mound and an amphitheater; a new museum along with historical structures; a “living memorial” housing a library, design laboratories, living and working quarters for students and researchers, and a printing plant; and a walkway lined with abstract sculptures that expressed Jefferson’s life and ideas. The sculptures in particular show Ray’s hand.

The Eameses’ entry did not win. It would have been quite costly to build and, according to Pat Kirkham, the city wanted “something more obviously like a monument.” The winning design was submitted by a group of architects led by their friend Eero Saarinen. Construction of the now familiar 590-foot stainless steel parabolic arch that stands on the banks of the Mississippi



## Other Eames Architectural Projects

was completed in 1965 (Kirkham 1995, 134; Neuhart, Neuhart, and Eames 1989, 85).

Perhaps the most significant of the Eameses' unbuilt projects was the 1950 house in Beverly Hills for their friends the film director Billy Wilder and his wife, Audrey. This design elaborated on ideas developed in the plans for their own house. It was a large, rectangular structure, modular in plan, to be built of prefabricated steel parts. The steel frame contained infills of glass and opaque panels, but many of the structural elements were concealed. It was conceived as a light-filled space with high ceilings and large windows, and contained a two-story living room, three bedrooms and three bathrooms, a dining room, and utility rooms. Preliminary plans were drawn and the Eameses built an elaborate model, photographs of which indicate that had it been built, it would have been an extraordinary structure. According to architecture and design writer Edward K. Carpenter (1979, 17), "no doubt" it would have been built had Wilder not "taken his pleasure entirely from the model." Years later, Ray noted that the house was not built due to Wilder's busy schedule (Kirkham 1995, 135n99).

The next unbuilt project was designed for the Kwikset Lock Company, which had supplied locks and hardware for the Case Study Houses. In 1951, the Eames Office was commissioned to design a low-cost, entirely prefabricated kit house. This afforded the Eameses another opportunity to pursue some of the aims laid out in the Case Study House Program by designing an affordable, innovative, easily manufactured modern house. In approaching the project, they determined to enclose as much space as they could on the \$8,000 budget. To achieve this, they minimized the number of steel components. The main facade was a modular steel frame fitted with a door and panels of translucent and wire glass, but the beams and other structural components were of wood. A curved roof made of sections of laminated plywood arched over the entire structure. The living room opened onto a garden.

The Kwikset House featured an open interior plan. Living areas were divided by freestanding storage units and movable dividers. The house contained two bedrooms and one bath. Interior finishes were kept to a minimum, and structural members were left exposed. A one-inch-scale model complete with miniature Eames furniture was constructed and photographed, but a prototype structure did not follow, even though the plans and the projected constructed costs met the terms set out in the project proposal. Soon after the model's completion, Kwikset changed hands and the new management was not interested in moving forward (Neuhart, Neuhart, and Eames 1989, 155; Kirkham 1995, 133–38). It would be the Eames Office's last major architectural commission.

Several small, unbuilt projects followed, including one that was literally quite small, the 1959 Revell Toy House. When the Revell Company approached the Eames Office to design a modern house for its collection, the Eameses returned with a ¾-inch-scale model house kit composed of injection-molded plastic modular panels and grids. It contained both opaque panels and window units that could be assembled into a variety of one- or two-story structures of varying complexity. The prototype version included a wide range of miniaturized Eames furniture—molded plastic chairs and tables,

Aluminum Group chairs and ottomans, Sofa Compacts, Case Goods units, and miniature plants, rugs, and decorative objects. The house was designed with a secondary purpose in mind: that the Herman Miller Company could use the kit in planning furniture layouts and as a sales and marketing tool. Ultimately, Charles decided that the potential for production problems was too great, and the scheme was abandoned; Herman Miller went on to create its own planning kit complete with ½-inch-scale furnishings (Kirkham 1995, 138–41; Neuhart, Neuhart, and Eames 1989, 235).

The Eameses' final two unbuilt architectural projects were the Birthday House for Hallmark Cards and a carousel enclosure for the Smithsonian Institution. The Birthday House, which took the form of a bandstand or carousel building, was designed in 1959 for a park in Kansas City, Missouri, as a special place for birthday celebrations. It went unbuilt due to a perceived lack of support on the part of the client (Kirkham 1995, 140–41; Neuhart, Neuhart, and Eames 1989, 243). In 1966, the Smithsonian's History and Technology Division asked the Eames Office to design a shelter for a nineteenth-century carousel that it wanted to operate on the National Mall in Washington, DC. In this case, the structure's design needed to respond to both the carousel and the rather staid architecture of the Mall. The Eameses' solution was a faceted-glass pavilion with doors that could be opened during the day and closed and secured at night; nighttime illumination would allow passersby to see the carousel. Again, a model was built and photographed, but the Smithsonian canceled the project after determining that it was too costly (Neuhart, Neuhart, and Eames 1989, 308; Kirkham 1995, 141).

## Notes

<sup>1</sup> A photo dated April 10, 1934, in the HABS/HAER collection at the Library of Congress shows Charles conducting measurements at the Jean Baptiste Valle house in St. Genevieve, Missouri (Historic American Buildings Survey and Harkness 1934). Pat Kirkham (1995, 19) was unsure whether the HABS work took place before or after Charles's trip to Mexico in 1933; based on the dated photo, it can be placed after.

<sup>2</sup> Pat Kirkham (1995, 20–22) identifies three of these houses: the Dinsmoor, Dean, and Meyer houses. At least two additional houses, the Morris and Hager houses, have been identified through Woermann Construction Company records (Society of Architectural Historians 2008, 5–6). All of these houses are in the St. Louis area.

## APPENDIX C

### Summary of US Heritage Assessment Criteria and Listings for the Eames House

	National Historic Landmark	National Register of Historic Places	California Historical Landmark	California Register of Historical Resources	Los Angeles Historic-Cultural Monument
<b>Listing Name</b>	Eames House	Eames House (NR no. 06000978)	The Eames House is not listed as a California Historical Landmark.	Eames House	Eames House, Studio and Grounds (HCM no. 381)
<b>Listing Date</b>	September 20, 2006	September 20, 2006	n/a	September 20, 2006	July 15, 1988
<b>Authorizing Legislation</b>	Code of Federal Regulations, Title 36, Part 65	Code of Federal Regulations, Title 36, Part 60	California Public Resources Code, Division 5, Chapter 1, Article 2, Section 5021	California Public Resources Code, Division 5, Chapter 1, Article 2, Section 5024.1	City of Los Angeles Administrative Code, Division 22, Chapter 9, Article 1, Section 22.171.7
<b>Definition</b>	Properties (defined as districts, sites, buildings, structures, or objects) that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship	The National Register is the official list of the nation's historic places and cultural resources that are worthy of preservation. Listed properties are significant in American history, architecture, archeology, engineering, and culture and possess integrity of location, design, setting, materials, workmanship, feeling, and association.	Buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value	The authoritative guide to the state's significant historical and archaeological resources	Any site (including significant trees or other plant life located thereon), building, or structure of particular historic or cultural significance to the City of Los Angeles
<b>Criteria</b>	<p>1. Associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained; or</p> <p>2. Associated importantly with the lives of persons nationally significant in the history of the United States; or</p> <p>3. Represents some great idea or ideal of the American people; or</p> <p>4. Embodies the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or</p>	<p>A. Associated with events that have made a significant contribution to the broad patterns of our history; or</p> <p>B. Associated with the lives of significant persons in or past; or</p> <p>C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or</p> <p>D. Has yielded, or may be likely to yield, information important in history or prehistory.</p>	<p>1. The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California), or</p> <p>2. Associated with an individual or group having a profound influence on the history of California, or</p> <p>3. A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.</p>	<p>1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or</p> <p>2. Associated with the lives of persons important to local, California or national history; or</p> <p>3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or</p> <p>4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.</p>	<p>1. Exemplifies or reflects the broad cultural, political, economic, or social history of the nation, state, or community; or</p> <p>2. Identified with historic personages or with important events in the main currents of national, state, or local history; or</p> <p>3. Embodies the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction; or</p> <p>4. A notable work of a master builder, designer, or architect whose individual genius influenced his or her age.</p>



## Heritage Assessment Criteria

	National Historic Landmark	National Register of Historic Places	California Historical Landmark	California Register of Historical Resources	Los Angeles Historic-Cultural Monument
	<p>5. Composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or</p> <p>6. Has yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.</p>				
<b>Age Requirement</b>	Generally properties that have achieved significance within the last fifty years are ineligible. Exception 8 in the Code of Federal Regulations allows designation of younger properties that are demonstrated to be of extraordinary national importance.	Fifty years. An exception can be made for younger properties that are of exceptional importance.	Same as for National Register.	Same as for National Register.	There is no age requirement for designation as a Los Angeles Historic Cultural Monument.
<b>Relationship to Other Registration Programs</b>	Highest level of designation in the United States	NHLs are automatically listed on the National Register.	Highest designation at the California State level	Properties on the National Register are automatically listed on the California Register.	Local designation
<b>Criteria as Applied to the Eames House</b>	<p>Criteria 1: For its association with the Case Study Program and the Modern Movement in the United States.</p> <p>Criteria 2: For its association with Charles and Ray Eames</p> <p>Criteria 4: As an exceptionally important work of postwar Modern residential design and construction</p>	See NHL criteria.	n/a	See NHL criteria.	<p>Criteria 3: As a significant work of postwar architecture, an outstanding example of industrial steel frame modular construction and an important prototype for prefabricated housing</p> <p>Criteria 4: As the most important work of architecture designed by Charles Eames</p> <p>Possibly criteria 1 and 2 as well</p>

## APPENDIX D

### Regulatory Requirements and Benefits of Designation

The Eames House is designated as both a National Historic Landmark (NHL) and as a Los Angeles Historic-Cultural Monument (HCM). Upon listing as an NHL, the House was automatically entered on both the National Register of Historic Places and the California Register of Historical Resources.

#### ► National Historic Landmark

National Historic Landmark status is a largely honorific designation. NHL owners can alter or demolish their properties unless federal funding, licensing, or permits are involved. The National Park Service (NPS) provides technical preservation assistance to NHL owners via telephone, email, and occasionally through site visits. When carrying out works, property owners are encouraged to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* but are not required to do so. There are four standards, with associated treatment guidelines: preservation, rehabilitation, restoration, and reconstruction (US Department of the Interior, US National Park Service, Technical Preservation Services 2017). The Secretary's *Standards for Rehabilitation* are the most appropriate for the Eames House.

In accordance with the *Code of Federal Regulations* (Title 36, Part 65.7), the NPS is responsible for monitoring the condition of NHLs. It maintains a relationship with property owners through periodic site visits and via regular contact with the State Historic Preservation Office (SHPO) in order to ensure that NHLs maintain their integrity, to serve in an advisory capacity to owners, and to update administrative records as needed. The NPS endeavors to monitor property conditions through a biannual, self-reporting process with NHL owners; in practice, reporting is conducted less frequently.<sup>1</sup> Should an NHL's character-defining features be lost or destroyed subsequent to designation, its listing can be withdrawn.

Upon designation, the NPS invites the owner to accept a landmark plaque. The Eames House plaque is displayed on a podium in the studio.

There are a few potential benefits to NHL listing by way of grants and tax credits. In some cases, NHLs may have higher priority for grants than other properties listed on the National Register of Historic Places.

Under Section 106 of the National Historic Preservation Act, federal agencies are required to consider the impacts of their actions on properties listed on the National Register, which includes NHLs. A federally funded or licensed undertaking (such as road construction) that poses a direct and adverse effect to a National Register property will trigger an in-depth environmental review and require development of mitigation measures that attempt to minimize the project's impact on the structure or site.

#### ► Los Angeles Historic-Cultural Monument

In the United States, regulation of designated properties is generally administered at the local level. As a Los Angeles HCM, the Eames House is subject to the *Los Angeles Cultural Heritage Ordinance* (City of Los Angeles 2007). Under the ordinance, proposed substantial alterations to a property are reviewed by the city's Cultural Heritage Commission and *must* comply with the *Secretary of the Interior's Standards*. To assist with compliance, the city's Office of Historic Resources provides technical assistance to owners of HCMs.

Owners of HCMs are entitled to employ the *California Historical Building Code* (CHBC) when carrying out work. The CHBC supplants the *Uniform Building Code*, allowing flexibility in the development of solutions that preserve original building fabric and methods while achieving an acceptable level of safety and accessibility. The CHBC can be applied to all historic buildings in California, regardless of the level of designation.

The Cultural Heritage Commission can *delay* (but not deny) demolition permits for HCMs for a period of 180 days, with an additional 180-day extension possible upon the city council's approval. A stay of demolition allows time for the evaluation of preservation alternatives.

Designation as an HCM offers limited protections under the California Environmental Quality Act (CEQA), California's counterpart to Section 106. Projects undertaken by public agencies, as well as discretionary projects by private parties (such as those requiring permits), are subject to CEQA. Under CEQA, projects with potential adverse effects on historical resources must conduct an environmental impact assessment and propose measures to mitigate significant impacts.

Designated HCMs are eligible to participate in the Mills Act Property Tax Abatement Program. Through this program, owners of eligible properties can enter into a Mills Act contract with the city. In exchange for a potential property tax reduction, owners agree to use the savings toward rehabilitation, restoration, and maintenance of their properties. The Eames House is owned by a 501(c)(3) nonprofit foundation and has been exempted from property taxes; therefore, it is not eligible to participate in the Mills Act program.

Owners of HCMs are encouraged to identify and celebrate their properties by installing bronze plaques that supply key information. The city has created a process for the design and manufacture of these plaques, but the cost is borne by the property owner.

#### ► National Register of Historic Places and California Register of Historical Resources

No additional requirements or benefits of designation, beyond those described above, result from the Eames House's listing on the national or California registers.

#### Notes

<sup>1</sup> Elaine Jackson-Retondo, National Park Service, National Historic Landmarks Program, telephone conversation with Gail Ostergren, June 4, 2014.



# GLOSSARY

The Eames House Conservation Management Plan follows the philosophy and principles of *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013* (the Burra Charter), and in general uses the charter's terminology. Where relevant, terminological equivalents from the *Secretary of the Interior's Standards for the Treatment of Historic Properties* are provided. The glossary also provides definitions for terms specific to the Eames House.

**Note:** All material cited by article no. is taken from the *Burra Charter 2013 (Australia ICOMOS 2013a)*. Other material is cited by author.

**adaptation.** “Changing a place to suit the existing use or a proposed use” (article 1.9). See also **rehabilitation**.

**agents of deterioration.** Phenomena or actions that cause decay or damage to the condition and/or integrity of the physical fabric (e.g., water and air causing the rusting of steel, sunlight causing the fading of finishes, pests destroying textiles, or soil pathogens that kill plants).

**attributes.** The five aspects of the components and elements of a place that contribute to and demonstrate its heritage significance, either separately or in combination. These attributes are its function, form, fabric, location, and intangible values (see chapter 5, section 5.3.3 for additional discussion).

**authenticity.** The expression of cultural values and historical processes of a place through both its tangible attributes—such as form and design, function and use, fabric and workmanship, location and setting—and its intangible attributes, including the spirit and feeling of the place. This term recognizes that places change over time and subsequent layers of development may also contribute to significance. An understanding of authenticity should be based on cultural context and the assessment of credible information in order to form a holistic perspective.

**building complex.** In reference to the Eames House, “building complex” refers to the whole of the built area along the concrete retaining wall set into the slope at the west side of the site (see figs. 1.3 and 3.1 in this volume). Key elements of the building complex include the major spaces and structures of the site, such as the residence, studio, central court (between the residence and studio), south court (south of the residence), north court (between the studio and carport), and carport (paved area with canvas awning at the north end of the studio), as well as the integrated retaining wall, driveway, and parking area. A right-of-way leads from Chautauqua Boulevard to the site.

**Burra Charter.** *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013* (Australia ICOMOS 2013a), commonly referred to as the Burra Charter, defines basic conservation principles and procedures. The charter and its associated series of Practice Notes (Australia ICOMOS 2013b) provide a best practice standard for managing cultural heritage places in Australia and are applicable internationally.

**Case Study Houses.** The residences designed and constructed as part of the program initiated in 1945 by John Entenza, publisher of *Arts and Architecture* magazine. The Eames House is Case Study House No. 8. Case Study House No. 9 is the adjacent Entenza House.

**collection(s).** An acquired body of objects. The Eames House contains three distinct collections. The most significant is the Eames House Collection, which contains the diverse range of objects, both natural and human-made, that were collected or created by Ray and Charles Eames. The Eameses assembled their collections for their own use, or based on personal associations or design interest rather than intrinsic value or connoisseurship objectives. The Eames House Collection's significance lies in its association with Ray and Charles and the Eames House. The second collection, the Eames Family Collection, comprises objects associated with the Eames family's use of the House in the years following Ray's death. The third collection, the Interpretive Props Collection, is composed of replicas and replacements of original items in the Eames House Collection that can no longer be displayed; for instance, the newer Eames Lounge Chair and Ottoman that replaced the worn original in the living room. See also **contents**.

**compatible use.** A use that “respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance” (article 1.11).

**component.** A contributory part of a major element. For example, the roof is a component of the residence. Plantings are a component of the courtyards. See also **element**.

**conservation.** “All the processes of looking after a place so as to retain its cultural significance” (article 1.4).

**Conservation Management Plan (CMP).** A document that “sets out what is significant about a place and from this, what policies are appropriate to enable that significance to be retained as part of its future use and development” (Kerr 2013, 1). In most cases, a CMP deals with the ongoing care of a place and management of change.

**contents.** The Eames House contents include all of the fixtures, as well as the furnishings and objects that compose the Eames House, Eames Family, and Interpretive Props Collections. The contents also include the Eames Foundation's operational effects, primarily the furnishings and office equipment that staff and volunteers use for their day-to-day operations. See also **collection(s)**.

**cultural significance.** The “aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, and related objects. Places may have a range of values for different individuals or groups” (article 1.2). Cultural significance may change over time and with use. Used interchangeably with “heritage significance” and “cultural heritage significance” or “value.” Frequently shortened to “significance.”

## Glossary

**cyclical maintenance.** Carrying out maintenance tasks at specific, repeated intervals. Sometimes called “periodic maintenance.” See *also* **maintenance**.

**Eames House.** In this CMP, the term “Eames House” is used in two ways. First, it refers to the whole of the property owned by the Eames Foundation, which includes the building complex, its elements and components, contents and collections, and landscape and setting. The terms “House” (capitalized), “site,” and “place” are used interchangeably with this holistic definition of “Eames House.” Second, the terms “Eames House” and “House” are used to describe the building complex itself. See *also* **building complex**.

**element.** A major space or structure of the site, such as the residence, studio, courtyards, or meadow. See *also* **component**.

**extended setting.** See **setting**.

**fabric.** “All the physical material of the place including elements, fixtures, contents and objects” (article 1.3). Fabric “includes building interiors and subsurface remains as well as excavated material and the natural elements of a place” (Australia ICOMOS 2013a, 2).

**heritage significance.** See **cultural significance**.

**House.** See **Eames House**.

**immediate setting.** See **setting**.

**intact(ness).** The degree to which the original fabric and form of the place survive.

**integrity.** The “measure of the wholeness and intactness” of the place and its attributes (UNESCO World Heritage Committee 2016, article IIE.88). In the United States, “authenticity” and “integrity” are often used interchangeably. The National Park Service defines historic integrity as “the authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s historic or prehistoric period,” such as its location, design, setting, materials, workmanship, feeling, and association (US National Park Service 1983a).

**interpretation.** “All the ways of presenting the cultural significance of a place” to enhance appreciation (article 1.17). Interpretation may include a combination of actions related to the treatment of the fabric (e.g., conservation, maintenance, restoration, reconstruction), the use of the site, or events and activities held there. It also includes the use of introduced explanatory material, using a variety of media. Interpretation is an essential conservation action.

**intervention.** Activities and works with a physical impact, including opening up of fabric to investigate and assess condition, and taking samples and measures (temporary or permanent) to protect fabric/components from deterioration. Intervention includes works to conserve, restore, reconstruct, adapt, and/or repair fabric.

**landscape.** In this CMP, this term refers to the surroundings of the Eames residence and studio. It includes major elements such as the upper slope, the eucalyptus row, and the meadow, and

smaller components such as paths, courts, and garden plantings. See *also* **setting**.

**maintenance.** The “continuous protective care of a place and its setting. Maintenance is to be distinguished from repair which involves restoration or reconstruction” (article 1.5). See *also* **preventive maintenance** and **cyclical maintenance**.

**place.** A “geographically defined area. It may include elements, objects, spaces, and views. Place may have tangible and intangible dimensions” (article 1.1). It has “a broad scope,” may include “natural and cultural features” (Australia ICOMOS 2013a, 2), and may have a “range of values for different individuals or groups” (article 1.2). In the case of the Eames House, “place” refers to the whole of the physical site area, along with its built features and landscape and its contents and collections (see figs. 1.2–1.4 in this volume).

**presentation.** The ways in which interpretive content about a place is communicated; for instance, through tours, informational panels, brochures, and websites.

**preservation.** In this CMP, this term is used in accordance with the Secretary of the Interior’s standards, which define preservation as “the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property... the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project” (US Department of the Interior, US National Park Service, Technical Preservation Services 2017, 17). This is a broader definition than that in the Burra Charter (article 1.6), which defines it as “maintaining a place in its existing state and retarding deterioration.”

**preventive maintenance.** Maintenance practices directed toward removing agents of deterioration before they affect fabric.

**rarity.** The degree to which a place possesses uncommon or endangered aspects of cultural heritage. To be considered *rare*, a place must possess uncommon or endangered aspects of a type of cultural heritage place. The assessment of heritage significance involves comparative analysis to identify the level at which the place is either a *rare* example of the significance criteria or *representative* of a particular type of place. This is intended to establish the comparative historic context within which the relative significance of values can be assessed. See *also* **representativeness**.

**reconstruction.** “Returning a place to a known earlier state.” This is “distinguished from restoration by the introduction of new material” (article 1.6). In the United States, the Secretary of the Interior defines reconstruction as “the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location” (US Department of the Interior, US National Park Service, Technical Preservation Services 2017, 165).

**rehabilitation.** “The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical,



## Glossary

cultural, or architectural values” (US Department of the Interior, US National Park Service, Technical Preservation Services 2017, 60). *See also* **adaptation**.

**representativeness.** The degree to which a place demonstrates the principal characteristics of a type of cultural heritage place. It is considered representative if it demonstrates the principal characteristics of a type of cultural heritage place. *See also* **rarity**.

**restoration.** The process of “returning a place to a known earlier state by removing accretions or reassembling existing elements without the introduction of new material” (article 1.8). In the United States, the Secretary of the Interior defines restoration as “the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history, and the reconstruction of missing features from the restoration period” (US Department of the Interior, US National Park Service, Technical Preservation Services 2017, 117).

**reversible.** Having the potential to remove or reverse works without damaging or altering significant features or fabric when applied to new development and/or work to existing areas and components. Reversible development should be designed with appropriate structural support, fixings, connections, and materials to be essentially independent of existing fabric/components, in order to allow complete removal without adverse impacts.

***Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.*** The nationally recognized tool that guides preservation in the United States.

**setting.** The “immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character” (article 1.12). “Setting may include: structures, spaces, land, water and sky; the visual setting including views to and from the place, and along a cultural route; and other sensory aspects of the setting such as smells and sounds. Setting may also include historical and contemporary relationships, such as use and activities, social and spiritual practices, and relationships with other places, both tangible and intangible” (Australia ICOMOS 2013a, 3).

For the purposes of this CMP, the “immediate setting” of the

Eames House is defined by the current site boundary around the entire perimeter of the site (see fig. 1.2 in this volume). The “extended setting” of the Eames House is defined as that area of Pacific Palisades surrounding the site with which it has identifiable visual, historic, or functional links and/or associations. This includes the adjacent Case Study House sites on Entenza’s 1945 subdivision (now modified); the vacant lots to the west and southwest; Corona Del Mar, the road that runs above the slope; and the Chautauqua Boulevard thoroughfare. It also includes adjacent areas and public thoroughfares, particularly the mouth of Santa Monica Canyon and Pacific Coast Highway to the south and southeast, which provide views of the site and/or contribute to its particular topographical character, and the bluff as a whole.

**significance.** *See* **cultural significance**.

**site.** The term “site” is used in two related ways in this CMP. First, it refers to the whole of the land area currently owned by the Eames Foundation and located within the property boundaries shown in figure 1.2. The current site of the Eames House includes the original lot 1 of John Entenza’s 1945 subdivision (tract 13251) with subsequent modifications, including a right-of-way to access Chautauqua Boulevard (included with the 1949 purchase of lot 1 by the Eameses), two adjustments between lots 1 and 2, and parts of the north end of lot 2. An additional parcel of land on the bluff’s edge is owned by the Eames family and may be added to the site in the future.

“Site” is also used in a broader fashion to refer to the whole of the physical site area, along with its built features and landscape, as well as the contents and collections. In this context, “site” is used interchangeably with “place.”

**SULE.** Safe useful life expectancy. An arboricultural risk-assessment tool for trees.

**use.** The “functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place” (article 1.10).

**values.** Qualities or characteristics ascribed to a place. Five heritage values—aesthetic, historic, scientific, social, and spiritual—are identified in article 1.2.

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