



City of Muscatine



AGENDA ITEM SUMMARY

DATE: January 18, 2021

STAFF

Melanie Alexander, Director, Muscatine Art Center

SUBJECT

Staff seeks City Council authorization to apply for an Iowa's Rural Heritage Revitalization Grant for implementation of the Historic Landscape Preservation Plan for the Japanese Garden.

EXECUTIVE SUMMARY

The historic 1929 Japanese Garden at the Muscatine Art Center has potential to help shape historic preservation practices in the State of Iowa. The Muscatine Art Center plans to apply for an Iowa Rural Heritage Revitalization Grant offered through the State of Iowa. This is the first time this federally funded grant opportunity has been offered in Iowa, and only communities of under 50,000 residents may apply. In addition, the project must take place at a site listed on the National Register of Historic Places. Grants will be awarded in the range of \$75,000 to \$125,000. The timing is ideal for beginning the work identified in the Historic Landscape Preservation Plan for the Japanese Garden developed in September 2020 by Professor Heidi Hohmann, Department of Landscape Architecture at Iowa State University.

The Historic Landscape Preservation Plan addresses the needs of the garden as a public space while also preserving its historic character through repair and replacement of missing, lost, or damaged features. While Japanese-style gardens were popular in America from the 1890s through the early 1940s, most were destroyed at the outbreak of war in 1941. Laura Musser McColm's garden was spared this fate, making it one of the few remaining Japanese Gardens from this time period in the Midwest.

STAFF RECOMMENDATION

Staff recommends authorization to apply to the Iowa's Rural Heritage Revitalization Grant.

BACKGROUND/DISCUSSION

The overall goal of the Historic Landscape Preservation Plan is to bolster the garden's integrity by mitigating change while retaining its characteristic slopes, rockwork, circulation, water features, and other features, all of which provide the basis for its historic and Japanese character and feel. The process also involves the development of interpretive materials to educate the local community and visitors about the history of garden and its importance as one of only a handful of remaining Japanese-style gardens in the Midwest that date to the pre-World War II era. The staff will hold community engagement sessions, presenting the history as well as the plans for the garden.

Within the garden itself, one major goal is to return the sight and sound of water to the garden by repairing the pools and water system to full functionality. A new entry sequence is also planned, making

it possible to better mimic the pathway established during Laura Musser McColm's time while also complying with ADA requirements and giving visitors more direct access to the garden from the Muscatine Art Center's main entrance.

In recent years, the staff of the Muscatine Art Center has struggled to address the issues of the mature garden. In June 2013, the garden was damaged by tornado winds that took out one of four white pine trees planted in the 1980s. Issues with the ornamental yews prompted the staff to invite Professor Heidi Hohmann to visit the garden. In 2019, plans involving students in Hohmann's landscape architecture class were made, but travel restrictions and other issues related to COVID-19 made it necessary to scale-down the involvement of students. Instead, Hohmann and a graduate student worked with Muscatine Art Center staff to research and map the garden. Hohmann created side by side comparisons of historic photographs from the 1930s with her own photos taken in summer 2020, noting the character defining features as well as the ways in which the garden has changed over time.

Hohmann has agreed to serve as consultant on the project, ensuring that the landscape design firm follows the Department of the Interior's Standards for historic properties. In addition, the project will involve excavation to look for lava rock, original to the garden, believed to be below the soil surface. Because of the extensive nature of the work, a professional archeologist will be involved.

This project is a rare undertaking in the field of historic landscape preservation in the State of Iowa. Potentially, if COVID-19 conditions are no longer a factor, students from Iowa State University would likely be involved, and Professor Hohmann believes the project would be presentable at a conference such as the Alliance for Historic Landscape Preservation. The Japanese Garden project would be proposed as a session for the Iowa Museum Association conference when the conference is held in Muscatine in October 2022.

CITY FINANCIAL IMPACT

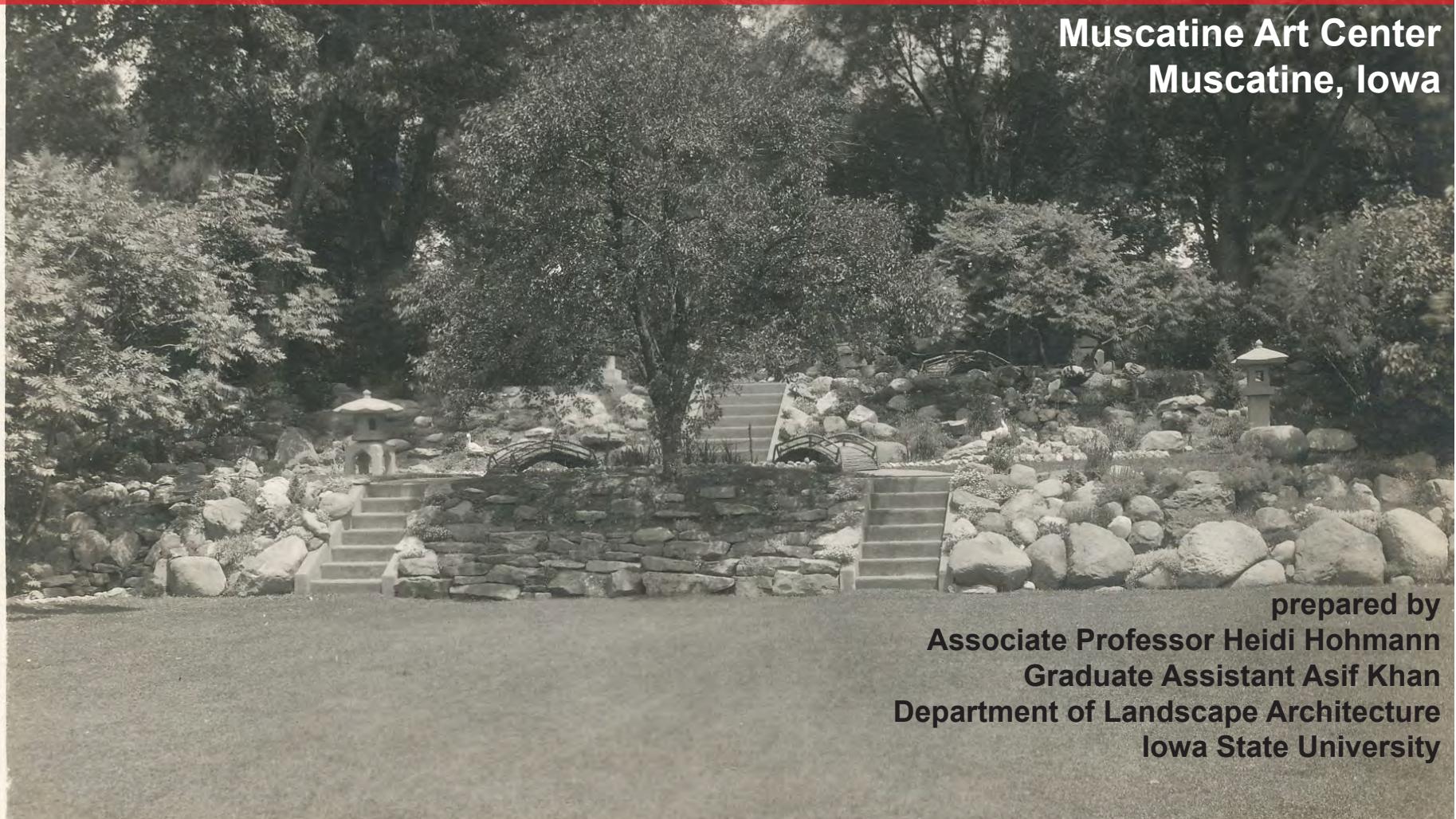
The grant requires a cash match of 30%. While budget numbers are being finalized, the estimated cost is \$200,000 to \$275,000. With funding from this grant at the maximum amount of \$125,000, the required cash match would be \$37,500. A bequest received in 2017 has been earmarked by the Board of Trustees for improvements in the Japanese Garden. This bequest totaled just over \$50,000 (held in the Muscatine Art Center's General Trust and in the Charitable Fund of the Muscatine Art Center Support Foundation). To complete the project, the staff will seek funds from additional granting agencies and other sources as needed.

ATTACHMENTS

Historic Landscape Preservation Plan for the Japanese Garden (Titled: "Musser Final Booklet")

Historic Landscape Preservation Plan for the Japanese Garden Laura Musser McColm Atkins House

**Muscatine Art Center
Muscatine, Iowa**



prepared by
**Associate Professor Heidi Hohmann
Graduate Assistant Asif Khan
Department of Landscape Architecture
Iowa State University**

Contact Information

Heidi Hohmann
Associate Professor
Department of Landscape Architecture
College of Design
715 Bissell Road
IOWA STATE UNIVERSITY
Ames, IA 50010

hhohmann@iastate.edu
515-294-8938

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The authors would like to thank Melanie Alexander and Virginia Cooper for their assistance in conducting this project long distance and under the constraints of the Covid-19 pandemic. We were limited in our ability to conduct field work and meet with them, and they graciously provided digital files from the archives, participated in digital meetings, and fielded emails and phone calls.

Non-Discrimination Statement

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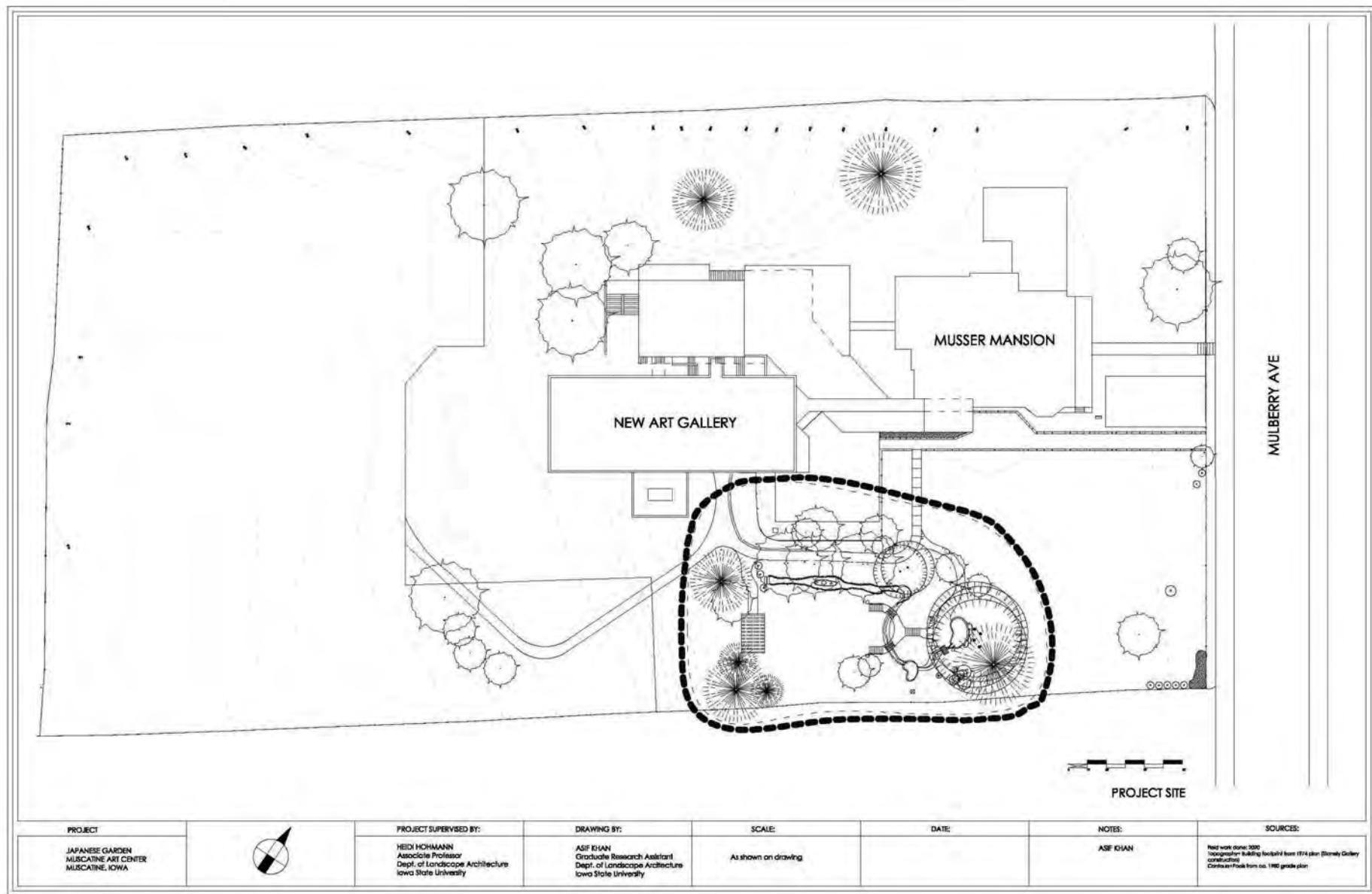


Figure 1: Overall Site Plan

Introduction

This project was undertaken in the summer of 2020 by associate professor Heidi Hohmann of the Department of Landscape Architecture of Iowa State University and graduate assistant, Asif Khan. The purpose of the project was to document the existing conditions of the garden, examine its history and provide some options for the future preservation of the garden, based on the home and garden's status as a property on National Register and on the Secretary of the Interior's *Standards for the Treatment of Historic Properties* and the National Park Service's *Guidelines for the Treatment of Cultural Landscapes*.

Summary of Process

The project began with an initial site visit in the summer of 2019 to discuss a potential project with museum staff and to review photographs and plans of the site from the museum archives. Digital copies were provided for use as base data.

In June 2020 we returned to the site for a day of field work, field checking the site plans from the 1970s and 1980s. Only the Japanese Garden was surveyed to locate new and eliminate missing features from the existing plans, using tapes and a rolling ruler to measure dimensions. Existing plants in the gardens were also identified and located. Two drawings of the site's existing conditions was created using AutoCAD, one of the Japanese Garden and one locating the garden within the overall site. These two drawings are presented here as Figures 1 and 2.

Next, a short narrative describing the garden's history from 1929 to the present was created. The narrative focuses on the garden's character during Laura Musser McColm Atkins lifetime, i.e., from 1929-1965. In particular, the narrative identifies and describes the garden's character-defining features, with a focus on the 1930s when she lived in Muscatine (and prior to her second marriage).

A historic garden plan (Figure 3) was created to depict this time period. The drawing was constructed by using the existing conditions plan as a base plan. Historic photographs then were carefully examined and features from the photos and time period were located on this plan. Locations of features are thus approximate, though were of course carefully considered based on locations of features that are still extant.

The three plans and narrative were presented to the museum staff for review during a mid-summer meeting, along with a presentation of changes that occurred in the garden between Laura Musser McColm Atkins' death in 1965 and the present. These changes were discussed in light of the museum staffs' perceived needs and desires for the garden's ongoing use. This discussion, plus an analysis of the garden's integrity, provided the basis for the creation of the preservation options, also presented in plans (Figures 6, 7, and 8). Narrative recommendations further expand on these graphic options. proposed at the end of this report.

The project was collaborative, but drawings and graphics are primarily the work of Asif Khan while the narrative text was primarily written by Heidi Hohmann

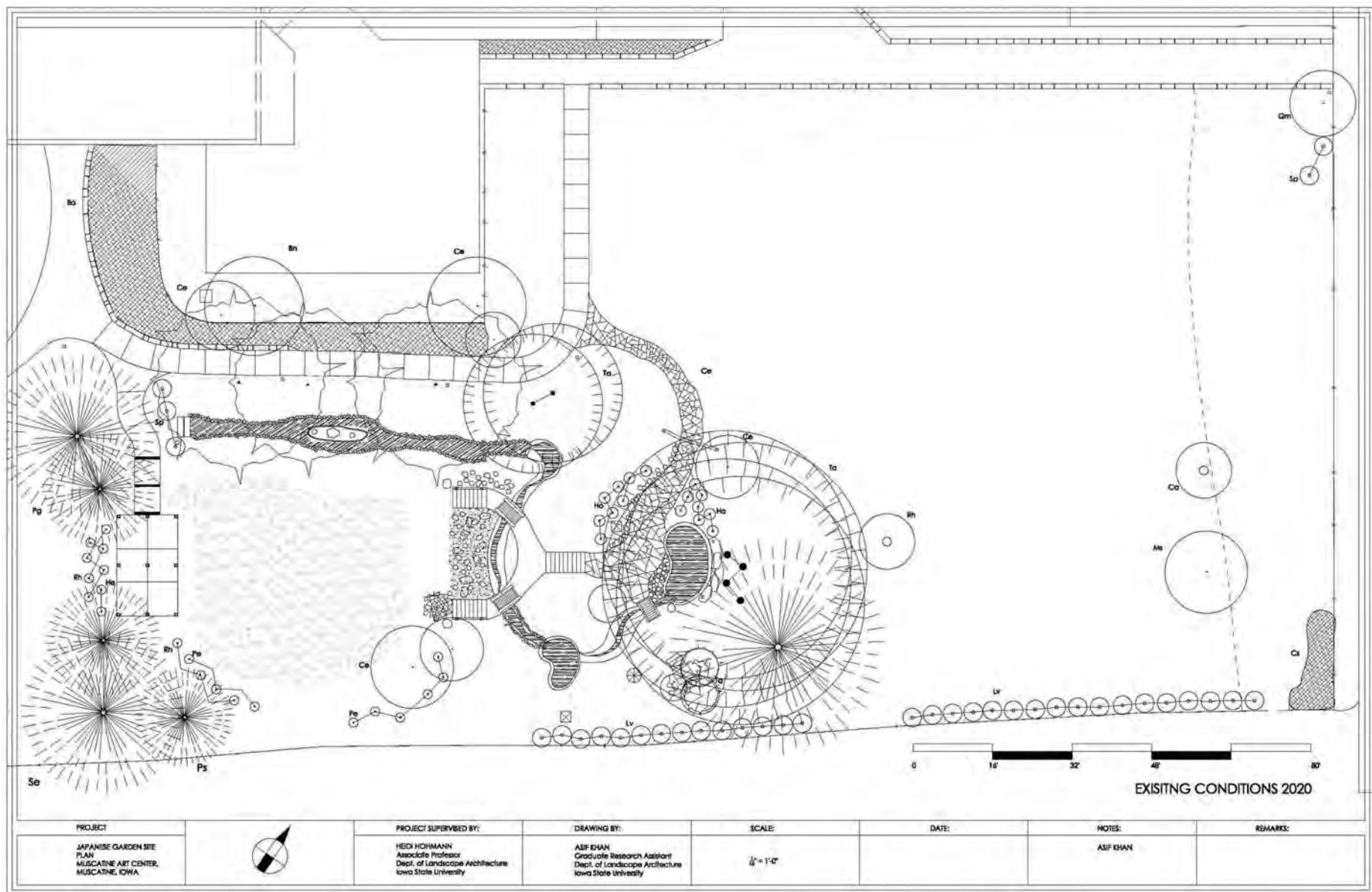


Figure 2: Existing Conditions Plan, 2020

Garden Timeline and Character

Pre 1929

In 1908 Laura Musser and her husband Edwin McColm moved to their newly built mansion on Mulberry Avenue in Muscatine, IA. Early photos show the area immediately around the house as lawn, with plantings of cannas and other bedding plants lining the walk. Other known landscape features include an arbor behind the house above the slope and a few large specimen trees around the house and lining the sidewalk. There is no known definitive, documentation of the area that is now the Japanese garden prior to its construction in 1929.

1929-1965

Laura Musser McColm installed the Japanese garden on half an acre land on the side yard to the mansion, sometime around 1929. Japanese decorative arts became in vogue in the U.S. during the late 1920s, and the construction of a Japanese style garden indicated its owner's cultural sophistication. At least two other properties in Muscatine featured elements of Japanese garden style. The primary documentation of the garden are photographs curated by the Museum. Though few have precise dates, a number can be dated to around the (early) 1930s. These photos correspond at least partially to two descriptions of the garden published in the *Muscatine Journal and News-Tribune* in conjunction with other Muscatine Garden Club activities.

The earliest description dates to May 12, 1931:

The Jap [sic] rock garden at the McColm home was carried out the true Jap motif. There are the four pools, three waterfalls, and a stream meandering for 75 feet. The garden, started last year, is at its full glory now, with the iris in bloom, and the flowers and shrubbery grown among the rocks to make a woodland scene. Even the bridges crossing the waterfalls and stream are representative. The stone lanterns are of Jap make. The tour of the garden

was highly interesting and pictorial, in view of the study of the club.

A slightly later description was provided on June 29, 1935:

The formal Japanese gardens of Mrs. E.L. McColm, 1314 Mulberry avenue, were among the most outstanding on the tour. Two black waterfowl guard the entrance to the series of gardens, each garden being on a different level.

A Japanese shrine, which is lighted at night, is reached by crossing a tiny wooden bridge over a rushing waterfall. Wooden Japanese pergolas and smaller shrines dominate the lower garden, which is lined with canals formed by the waterfalls on either side. In the garden below one may enjoy a hearty game of baby golf, while onlookers rest comfortably on garden benches placed about. It is an inspiring sight to look up from the lower level to the high banked temple shrine of the top-most garden.

Photographs generally confirm these descriptions, though a noted difference is the indication of two canals, one on either side of the lower lawn in the 1935 description. It may be that this feature existed only for a short time. Also not seen in photographs are Japanese pergolas in the lower level, though it may be that the second article referred to the arbor at the top of the slope behind the house. It's also possible that these features were either never photographed (there are few photos of the lower garden) or were temporary features.

However, historic photographs do reveal much about the garden's character during McColm-Atkins' tenure. These photographs have been used to create a plan depicting the garden's historic condition sometime around the mid 1930s (Figure 3). The plan was constructed using existing drawings and surveys from the museum's archives as baseline dimensional data, combined with dimensions

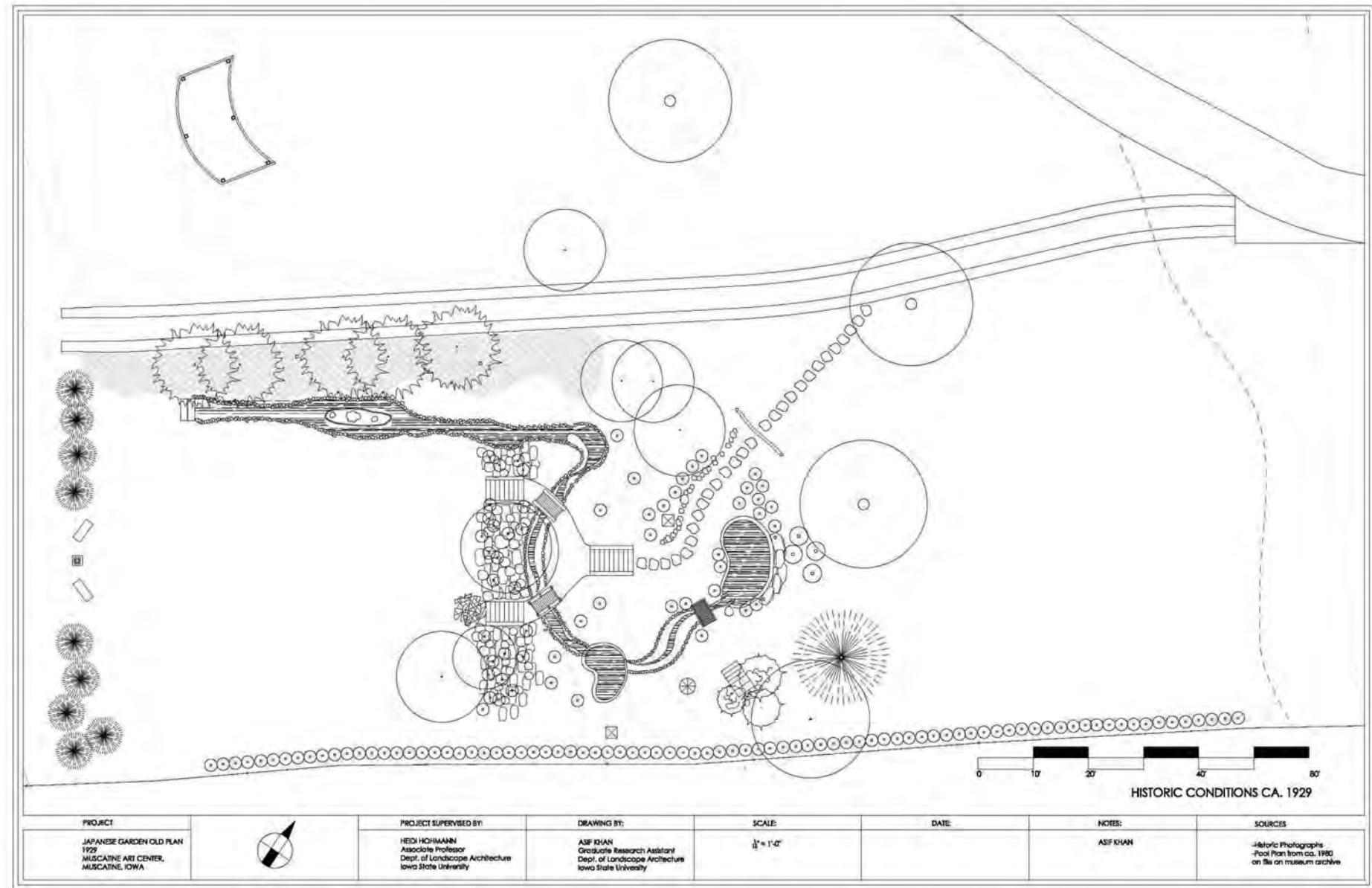


Figure 3: Historic Conditions Plan, ca. 1930s

of extant features and vegetation in the field. In the following description of the plan, the **text in bold highlights critical and character-defining features of the garden.**

The garden was **built on three levels, connected by two slopes held back by large, irregularly shaped granite stones**, leading down from Mulberry Avenue toward the back of the property. **A Torii—or Japanese garden entrance gate—marked the entrance to the uppermost level of the garden. Circulation was defined by a stepping stone pathway laid in grass that led through the Torii to the garden and thence down a set of three stairs to the lower levels.** The path led from the front porch of the house to the garden. Photos show the Torii approximately 9 feet in height and made of irregularly-shaped tree trunks (or branches), and polished with a dark hue.

The pathway through the Torii was framed by a grouping of mixed shrubs and a stone lantern on the right and led past the garden's largest **concrete pool, the source of the garden's central, important water feature—a stream connecting a series of small pools running through the garden.** Kidney-shaped and approximately 13 x 7 feet, the pool was surrounded by stones, low and just above water level in the front, with creeping vegetation planted between them. The "back" (or avenue side) of the pool was lined with large, horizontally shaped stones mounded into a low hill or grouping about 3 feet high. Not quite forming a wall, these stones were backed by a composition of mixed, varied evergreen shrubs of medium height. The current yews may or may not be shown in photographs of this time period; what is clear, however, is that at least three different species of evergreen can be seen located behind the pond. A few larger trees can also be seen behind these shrubs. Together these **layers of vegetation served to enclose the pool and upper edge of the garden, separating it from the lawn along the Mulberry Avenue frontage, making it more private.** Two large, metal sculptures of cranes initially ornamented the pond, one located within the pond, one atop the mound, though other sculptures were added and subtracted in this

area over the years. The upper level of the garden was primarily surfaced in lawn.

A concrete stream channel led from the far side of the kidney-shaped pool down the slope to the rest of the garden. Early photos depict a concrete edge to the stream; later, stones were added along its length on the upper level of the garden. A low, arched bridge crossed the stream and led to a wooden "shrine." The size of a large dollhouse, the shrine was a small structure with a gable roof and was located atop a set of stone steps. **The bridge leading to the shrine was made of thin twigs (or possibly bamboo), and was the one of three similar bridges crossing the stream.** A composition of evergreen and deciduous shrubs formed a backdrop for the shrine; behind it, a privet hedge lined an iron fence atop a concrete wall that separated the McColm property from its neighbor. Initially this hedge was about 3 feet high; later it grew taller and became a visual screen.

The stream led down the upper slope into a another, smaller, slightly kidney shaped pool and from there across the width of the garden. This second, narrow level of the garden also contained a fork in the garden path, which led from a flight of stairs traversing the first slope to a set of two stairs traversing the second. **These three sets of steps are an important circulation feature, and were originally lined with cheek walls.** It seems that the path on the second level connecting the two steps has always been concrete, in contrast to the grass on levels above and below. The other two bridges were located on this path and crossed the stream enroute to the two sets of steps. The stream, which appears on this level to be edged with rocks in most photographs, continued northwest to the other side of the garden where it filled another small pool. Then it tumbled down the second, lower slope to run at the base of a slope, lined with sumac, along the full length of the lower garden. A small pool with an island was located in the middle of the extent of the stream on this lowest level of the garden. Iris were planted on the island, and were a species planted along much of the waterway.

Between the two sets of stairs on the lower slope there appears to have (early on) been a centrally located flowering tree, perhaps a crab apple or a cherry tree. The size of this tree in photographs may indicate that it predated the creation of the Japanese garden. This idea is supported by the fact that early photos show a different, rectangularly dimensioned stone in this area between the slopes, which contrasts with the larger, irregular fieldstones on the other two sides of the slope. With regards to other plantings, photos of the garden looking up from the lower level reveal **a great variety of plants on the slopes of the garden**. Planted between the rocks, these **plants are clumped and mounded species**, in keeping with 1930s American interpretations of Japanese planting styles. They appear to include perennial herbaceous plants such as iris and sedums; deciduous shrubs, possibly low growing, mounded spireas; and evergreen shrubs, including dwarf mugo pines and creeping junipers. A few columnar evergreens, likely Chinese junipers (*Juniperus chinensis*) also dot the slopes, and clumps of sumac and lilac are also seen on the upper level and upper slope of the garden. As seen in the photographs, **the vast majority of both rocky slopes and the lower garden was originally open and sunny, a fact also confirmed by the large variety of sun-loving species (e.g., junipers, sedums) depicted in the photos.**

The garden's enclosure was provided by plantings and topography on the "long" (north and south) sides of the garden, which were the shady parts of the garden, though not in great extent. Sumac along the northwestern/mansion side of the garden screened the drive down the side of the hill and cast shade, but the low height of the trees meant that only the pool and the slope underneath the sumac were dark. Similar conditions were seen on the opposite side of the garden, where a line of small cobblestones lined a bed of mixed shrubs and herbaceous garden species. Over time the top level of the garden also grew shadier, as plantings densified behind the largest pond. The maturing of the larger specimen trees around the mansion and street trees along Mulberry Ave also provided a sense of vertical enclo-

sure and backdrop to the garden, especially when viewed from the lower level.

The garden featured many small-scale ornamental features, including four circular and square Japanese lanterns, with pyramidal and octagonal tops, located among the rocky slopes and upper levels of the gardens. A variety of statuary beyond the cranes also appeared and disappeared over time, including concrete, ducks, frogs and a squirrel. Two concrete benches were located at the far end of the lower garden, backed by a line of 8 arborvitae trees. The benches framed a vase or planter located on axis with the upper set of garden stairs; a tall martin house (or other bird house) was, at least for a time, located near the benches in front of the arborvitae hedge. **Small scale features moved and changed throughout Musser's tenure**. For example, the "twig" or bamboo bridges were reconstructed with dimension lumber, possibly as early as the late 1930s, when they are seen in a photograph with Drew Nagel, who was the groundskeeper between 1925 and about 1937.

Although precise dates of photographs are not available, the garden seems to have undergone at least some minor changes during the 1940s. Photographs show changes primarily in terms of vegetation. Columnar evergreens appear in many different locations in the garden and some plants move or vanish. The largest changes appear to be along the rocky slopes, where the variety of plants seems to have decreased over time. However, the retention of the garden through the 40s is at least somewhat remarkable, since anti-Japanese sentiments in the U.S. during WW II led to the destruction of many Japanese gardens. In contrast Laura Musser McColm—now Mrs. William Atkins after she remarried in 1938—retained the Japanese garden at her Muscatine house. After she remarried, she predominantly lived in Kansas City, and continued to do so after her second husband died in 1940. However, she retained the Muscatine house, visiting it periodically. She also maintained the Japanese garden until she died in 1964. After her death, her heirs Mary Catherine Atkins McWhirter (step-daughter)

and Mary Musser Gilmore (niece) offered the house and garden to the city of Muscatine. The building and site opened as a municipal art gallery and museum in 1965.

1965-1983

Changes to the garden during this period seem to have primarily been driven by the construction of the free-standing Stanley Gallery as a means to expand the house's new museum function. Plans for the building began in the 1970s, and it was constructed in 1976. The site planning for the gallery included a large parking lot to the west and the creation of a sculpture courtyard located between the mansion and the gallery. Circulation patterns also appear to have been changed at this time, including some alterations to the drive leading to the porte cochere. The gravel drive past the sculpture garden on the north became a concrete walkway that connected the top level of the garden down between the sumac and the courtyard to eventually reach the parking lot. Plantings were added around the courtyard, including, it appears, the river birch, though these may have been planted a little bit later. The lower level of the garden included a "performance area" just east of the enclosing line of arborvitae at the bottom of the Japanese garden. A pergola with modern, clean lines was eventually built in this location (it's not exactly clear when, but possibly as late as 1990; see below).

Garden vegetation continued to grow and change. In 1976, a locust tree, a linden tree, four maple trees, three crab apples, and 3 redbuds were planted on the museum property, though it is not entirely clear where. Given the recent inventory of vegetation it is possible that one or two of the redbuds may have been planted in the garden, but it is not certain.

1983-present

In 1983, a structure was built to link the gallery and the house. Now known as "the Linkage," the building was designed with a glass wall looking out onto the sculpture courtyard. Once the building was completed, the courtyard paving was reconstructed, and

new plantings added around it. Following the completion of the Linkage, the surrounding landscape was improved, including the northern edge of the Japanese Garden. This work may have been part of some ongoing renovation of the Japanese Garden undertaken by the City of Muscatine in the early 1980s, under the direction of landscape architect Randy Elder, who worked for the city (*Muscatine Journal*, May 14, 1981, page 8). Thus, around this time, the sumac on the slope along the lower garden was removed and replaced with four white pine trees, which screened the museum building from the garden. The stairs in the garden were also replaced; they were made a bit narrower and steeper and were reconstructed without cheekwalls. This construction also likely moved many of the stones on both the upper and lower slopes. A thick layer of mulch was also applied around many of the plantings, defining garden beds and mounding them up slightly. An electrical pole near the current upper entrance to the garden is also seen in a photo from around this time, as are three large mature oak trees located between the porte-cochere area and the garden. Notably, the stepping stone path leading into the garden is also seen in this photo. This path was thus hardened sometime later, as it is now a wider, stone pathway, which connects to the concrete walk along the new gallery rather than leading toward the front porch as it had as late as the early 1980s. It seems plausible that this hardening occurred simultaneously with the reconstruction of the Torii gate, which was reported on June 7, 1990 in the *Muscatine Journal* (page 15). The article also indicates that a pergola, likely at the bottom of the garden was constructed at this time.

Other more recent changes include the construction of the cast iron fence around the courtyard. In the past 20 years, the yews, which may or may not date to the 1930s, have grown up much larger than seen in historic photos. Although they are already showing "trunks" in a photo from the 1980s, today they are much taller and cast dense shade over most of the garden. Sagging branches are in some cases supported by wooden structures fashioned after traditional supports used in Japanese gardens.

The white pines have also grown tall and shade the north side of the garden. Today there are only three of the four originally planted in the 1980s. The one furthest west, closest to the pump house was lost in a storm in July 2013, as was one of the large oaks between the garden and the porte-cochere; the other two large oaks were lost sometime before then.

Other changes included work done by Scott Carver as an Eagle Scout project in 2002. This project also entailed moving stones and weeding to create areas for Parks Department staff to plant new plants. The pools were also blasted and sealed and cracks patched with fiber cement; drains were also cleaned.

In 2015-16, 'Leadership Muscatine' under John Wiegle spearheaded a volunteer campaign to work on preservation and restoration of the garden's key features. A major addition was the current, white pergola, utilizing some of the features of the pergola once located behind the mansion. The group also added new bridges and over 100 bulbs, plants, and trees were also introduced to the garden. Two metal cranes were returned to the upper pool, though not in their original form or location.

The current plants identified in the Japanese garden are as follows

Common name	Species	Abbreviation
Bur Oak	<i>Quercus macrocarpa</i>	QM
Spirea	<i>Spiraea</i> sp	SD
Siberian Pea Shrub	<i>Caragana arborescens</i>	CA
Magnolia	<i>Magnolia</i> sp	MM
Quince	<i>Chaenomeles speciosa</i>	CS
Rhododendron	<i>Rhododendron luteum</i>	RL
Norway Spruce	<i>Picea abies</i>	PA
Privet	<i>Ligustrum vulgare</i>	LV
Iris	<i>Iris</i> spp	ID
Lilac	<i>Syringa reticulata</i>	SR
Contorted Hazelnut	<i>Corylus avellana</i>	CO

Hosta	<i>Hosta hypoleuca</i>	HH
Dogwood	<i>Cornus alternifolia</i>	CS
English Ivy	<i>Hedera helix</i>	HE
Mugo Pine	<i>Pinus mugo</i>	PM
Trumpetcreeper	<i>Campsis radicans</i>	CR
Yew	<i>Taxus × media 'Densiformis'</i>	TM
Red Bud	<i>Cercis canadensis</i>	CE
Bearded Iris	<i>Iris 'Beverly Sills'</i>	IR
White Pine	<i>Pinus strobus</i>	PS
Sedum	<i>Sedum rupestre 'Angelina'</i>	SA
Daylily	<i>Hemerocallis minor</i>	HM
White Spruce	<i>Picea glauca</i>	PG
Littleleaf Linden	<i>Tilia cordata</i>	TC
Burning Bush	<i>Euonymus alatus</i>	EA
River Birch	<i>Betula nigra</i>	BN
Peony	<i>Paeonia lactiflora</i>	PL

Summary of Character Defining Features

A comparison of historic photos and duplicated photos from today, and a comparison of the two garden plans reveals that both significant continuity and change has occurred in the Japanese Garden. As highlighted in bold in the garden history timeline, the historic garden has important character-defining features. Seven of these are most important, and have been both retained and altered, as follows:

- 1. Its design as a tiered garden of distinct upper and lower spaces.** Built on the rolling topography of Muscatine's river bluff location, the garden featured 3 levels separated by slopes of large fieldstones. A composition of evergreens at the back of the crane pool and large shade trees further separated the public front lawn of the mansion from the garden below.
- 2. Bold rockwork, much of it on the slopes.** Large fieldstones and volcanic stones defined the slopes and the

stone mound around the upper pool. Some of this rock-work (such as at the upper pool) has been lost or changed, while it seems that some may have been buried by mulch and soil and may be extant.

3. **A circulation system of paths.** The garden was accessed from the front porch, and stepping stones led to the pool on the upper level. This path then reinforced a central axis and view down the slope in the garden before bifurcating at the second level and descending down steps. A gravel driveway provided an alternative route to the property levels below the Japanese garden to the west. This circulation pattern is mostly intact. Two changes include a change in function and materials for the gravel driveway and a re-orientation and change of materials in the entry path from the front porch. The latter is now oriented to the sculpture courtyard and the museum entrance in the linkage.
4. **A system of water features.** The gardens' streams and pools provided the garden with sound and animation. The piping system has been changed over time (the pump house at the bottom of the garden does not appear in early photos) but the pools and streams appear to be original, despite renovations to the garden in the 1980s and 1990s which undertook some repairs and patching.
5. **A variety of vegetation.** Historic photos reveal the gardens to have a large variety of garden perennials and shrubs, many low mounding and spreading, planted carefully between rocks. This variety has been lost over time, due to changes in sun/shade regimes and due to maturation and overgrowth of a few dominant species.
6. **A sense of enclosure.** The garden was enclosed on the north and on the east by slopes and a backdrop of vegetation. The south and west sides were less enclosed, and this enclosure was effected by vegetation. Although slopes on both the north and east sides are retained, both original and later vegetation have matured, changing the sense and level of this enclosure.

7. **A variety of small-scale features of Japanese style.**

Most of these are present in their original forms and locations. However, some features have been lost (such as the concrete benches), some features have been added (such as the pergola at the bottom of the garden), and some features have been changed. The latter include the cranes and the bridges. However, it is worth noting that the bridges, were changed at least once during the garden's historic period (1929-1965) and small scale features such as statuary were also added and subtracted during this time.

Analysis of Change / Photo Comparisons

Over time the garden has changed. This garden, like all gardens, has grown and matured. Changes implemented since 1965 have often not taken a holistic approach; that is, they have treated problems or altered parts without thinking of the garden as a whole. To show how much has changed, we paired historic photographs with existing conditions photographs. These photo pairs are presented below to highlight the different changes, both subtle and significant, that have occurred in the garden.



1965.292/M-862

Notable Changes/Comments

- Historic garden is visually open and sunny, with layered plantings (canopy, understory, ground plane).
- Current garden's middle-story dominates; lacks ground cover and perception of high tree canopy.
- Pathway is now wide, not stepping stones; is curved to museum entrance today. Historically was oriented to front door. Torii is shifted.
- Loss of sun and increased shade has changed plantings and upper garden's sense of enclosure.



1965.281.1/1965.281.2

Notable Changes/Comments

- Earlier photo on the left.
- Note the mixed evergreen composition behind stones and open sky in background in earlier photograph.



1965.281.1/M-394

Notable Changes/Comments

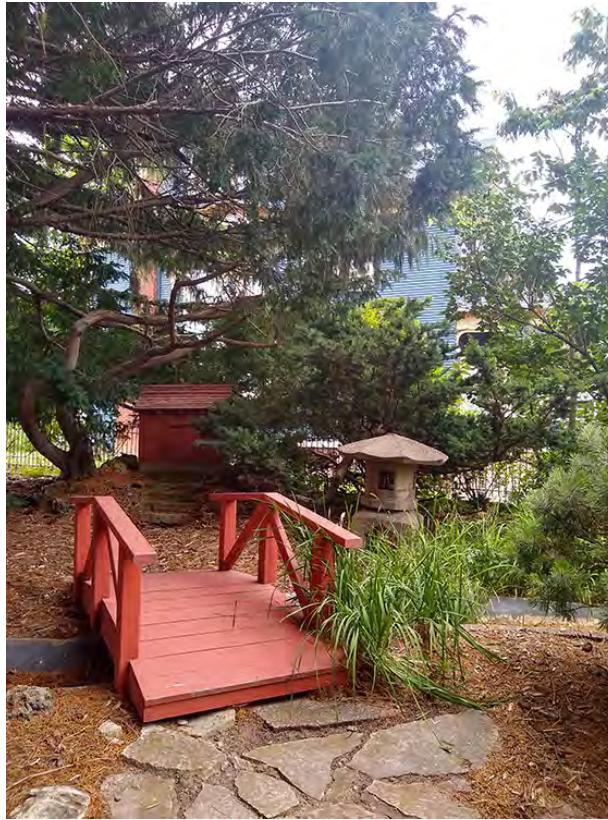
- Note changes in size of stones, height of mound, arrangement of cranes, and the more varied composition of evergreens historically.
- Note reversed scale of rocks to vegetation; today, vegetation dominates.
- Today, sunlight openings appear in middle of photo, not top of photo as historically, showing change in enclosure.
- Note needles in pond today, changing reflective quality of water.
- Note loss of variety in plantings amid the rocks.



1965.284.1/1964.281.4

Notable Changes/Comments

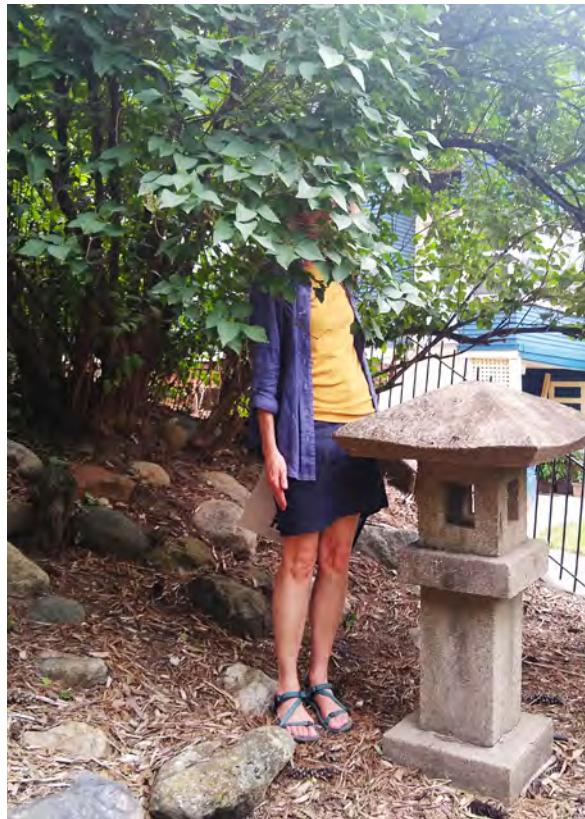
- Left photo seems to be earlier; note addition of stones along channel, taller privet hedge in photo on the right.
- Note iris at base of bridge—confirms newspaper accounts.
- Columnar evergreen is one of many that appears at many times—unclear what species; could be juniper or yew; smaller scale.



1965.284.29/M-175

Notable Changes/Comments

- Historic garden has grass and stepping stones.
- Current garden expanded walkway/patio and mulch and needles.
- Current backdrop very dense; note mature Norway spruce vs. high canopied deciduous tree.
- Shrine structure currently dwarfed by surrounding yews.



2006.680.i/M-144

Notable Changes/Comments

- Note historic lilac is still extant historic.
- Note (another) columnar evergreen in historic photo.
- Note how buried base of lantern is today, indicating amount of soil/mulch that should be cleared away.
- Note change in size of stones--some likely buried underneath mulch (?).



1965.281.6/M-828

Notable Changes/Comments

- Note buried base of lantern today; note lawn at base of lantern in historic photo.
- Changes in rock size and scale, changes in edging, fill level in pool.
- Note additional sculpture/ibis in historic photo.
- Note columnar evergreen on slope in historic photo.



2020.14.b/M-215

Notable Changes/Comments

- Photo on left is earlier
- Note dimensional stone and mature small tree (crabapple?) between lower staircases.
- Note large stones at base of lower slope, especially in the older photograph on the left.
- Note backdrop of upper canopy backdrop and layers of vegetation in both photographs.
- Note variety and mounded nature of plantings on rocky slope, especially in photograph on the right.



2006.679.a/M-215

Notable Changes/Comments

- Note loss of cheek walls on stairs.
- Note loss of plantings, loss of large stones in current garden.
- Note of loss of vegetative layering; only upper canopy in current garden—little understory, little ground plane planting.
- Current bridge and railings are visually dominant due to size and color; in historic garden (left), lanterns are dominant.



1990.168.9/M-194 and 1990.168.7/ M-358

Notable Changes/Comments

- Note loss of cheekwalls on staircases.
- Note change in edging along walkway
- Note addition (and visual dominance) of stair railings because of their size and bright color.
- Note the historic photos, circa 1937, show a second version of the bridges with lower side rails and constructed of different wood.



2006.681.a/M-707

Notable Changes/Comments

- Historic photo dates to after 1930s and is taken in spring or fall (no leaves on trees in background).
- Note changes in stones on lower slope—much smaller today.
- Note columnar evergreens in the background.
- Note dominance of red bridges and railings in current photograph.



2006.679.c/M-695

Notable Changes/Comments

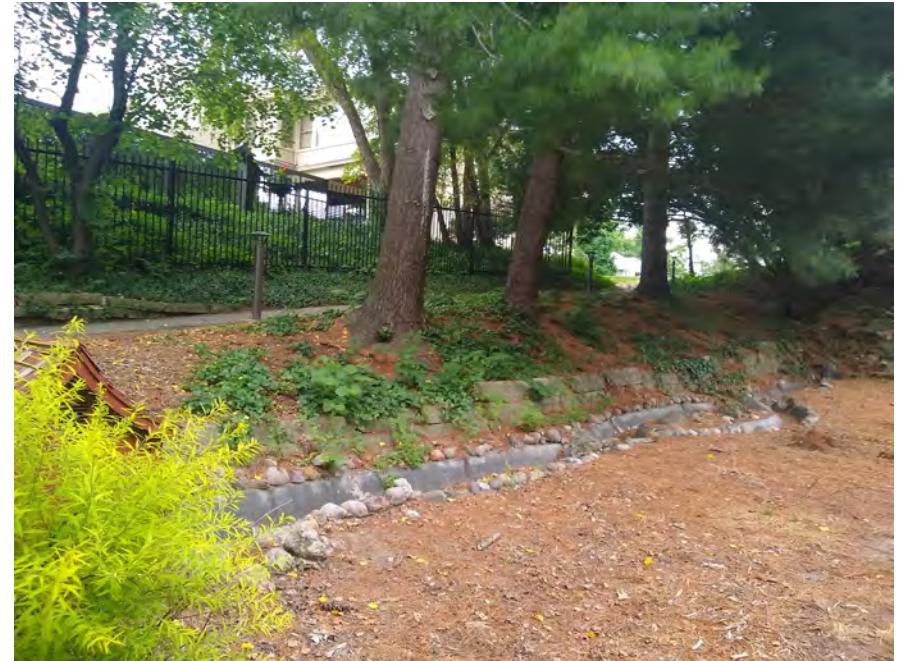
- Pergola has replaced benches on garden's central access. Pergola is bright white and draws attention.
- Lawns reduced in scope and changed in shape (due to expanding shade regime).
- Historic view more open; arborvitae seen in historic photo are still extant in some places, terminate garden view.
- Extant stream channel seen in both photos.



1965.282.2/1965.282.5

Notable Changes/Comments

- Benches still extant at end of 1930s (dogs in both photos, bridges same as those in Drew Nagel photo).
- Note stone bed edge on south side of lower garden.
- Note mugo pine and juniper on slope; iris along channel, stones along channel and walk.



2020.14.c/M-114

Notable Changes/Comments

- Note change of screening: material (deciduous to evergreen) and scale/ height—white pines no longer screen but rather shade garden.
- Note amount of “lawn” covered by pine needles—lawn has receded due to shade.
- Note stream course is still extant; lower pump house not seen in historic photo.

Historic integrity

Historic integrity is sometimes considered a measure of change, but it is not simply a means of describing change. Rather, integrity is a measurement of how well a property is able to convey its historic significance. Stated another way, integrity is an indication of whether or not enough physical fabric is present to represent the reason why the property is considered historic.

According to the National Register, historic integrity is defined by seven qualities—location, setting, feeling, association, design, workmanship, and materials—and their consistency to the historic period and design intent. Based on the amount of change in the garden's character-defining features (as demonstrated in the photographs, the seven aspects of integrity might be evaluated as follows.

Location: The location of the garden is unchanged. Integrity of location is high.

Setting: the setting of the garden was influenced by the addition of the Stanley Gallery and the sculpture courtyard. These two additions affected the sense of enclosure of the garden and changed the visual quality of its surroundings. However, the residential nature of the rest of the neighborhood, and particularly the neighboring house to the south remain similar to historic conditions. The integrity of setting is therefore moderate.

Feeling: The feeling of natural tranquility and the impression of a larger landscape of mountains and rivers which are characteristic of traditional Japanese gardens still persists but the overall feeling of the original garden has been altered. In part this is due to the transition of the garden from a private one to a public one and the addition of the Stanley Gallery. The gallery also changed the garden's sense of enclosure on the north side, as did the growth of vegetation. which also changed patterns of sun and shade. In particular, the evergreens (yews and pines) on the north and east

sides in particular have created dark, shady spaces, especially on the top level of the garden. This feeling is not unpleasant but it is different from the feeling of the original garden which was more open. There is also a bit of a feeling of vegetative decline as deep shade has limited the amount and variety of vegetation able to grow on the slope. Changes in the placement of large stones and small-scale features have also disrupted the feeling of well-placed elements that existed previously. Integrity of feeling thus might also be judged to be moderate and perhaps a bit lower.

Association: Integrity of association is high. The garden strongly retains its connections to Laura Musser McColm Atkins and the house. Although the site has become a public space and the garden has had new events and functions introduced to engage the community, the garden also strongly retains its associations with 19th century American Japanese garden design.

Design: Integrity of design is also quite high. It retains its three distinct levels, water features, small scale features and circulation, the latter with only minor changes. Changes in circulation include the replacement of stairs (though in their original location), changes in material, and minor changes in routing. However, there hasn't been a major conscious intervention in design except for the crane sculptures and the addition of the pergola at the bottom of the garden, and these changes might be viewed as easily mitigable. Other changes, such as the loss of stones visible in the gardens and the overgrowth of some vegetation and the loss of other vegetation, could be mitigated by repair and replacement in kind.

Workmanship: The workmanship of the garden has slightly changed over time, so integrity of workmanship is moderate. Many stones have been moved or buried, so that slopes and the crane pool lack the careful composition of stones that once characterized these areas. Likewise, the multiple replacement of wooden foot bridges, now with a more generic, off-the-shelf element, are symptomatic of changes in workmanship that affect the visual

scene of the garden. The positions of garden plantings, as well as their lack of thriftiness are indicative of the difficulty of gardening under changed microclimatic conditions (i.e., increase of shade). Most of these changes in workmanship can, however, be mitigated. Thus integrity of workmanship is also deemed moderate.

Materials: Integrity of materials is also judged to be moderate. All essential materials (earth, stone, water, vegetation) are present, but lack historic specificity. Original stone has been buried or removed; the plant palette has become much less diverse, with evergreen vegetation now dominating the space, and bamboo or twig bridges have been replaced by ones built of dimensioned lumber. Although these changes in materials affect the appearance and feeling of the garden, most of these changes are ones which can be mitigated.

An analysis of these seven aspects reveals that **the garden's overall integrity is moderate to high**. However, the areas where integrity are weakest are in many cases areas where change can be mitigated through repair, or in the case of vegetation, through removal and replacement. Although the garden has lost some historic integrity, its historic identity as defined by its sequence of tiered spaces and overall impression of a Japanese-inspired view of nature is still clearly and strongly evident in Muscatine.

Treatment Philosophy

The Secretary of Interior's *Standards for the Treatment of Historic Properties* define four treatments for historic properties: Reconstruction, Restoration, Rehabilitation, and Preservation. Of these treatments, Reconstruction and Restoration are not appropriate. Reconstruction is for properties that have been lost or have vanished and Restoration is applied when detailed documentation is available to return a property to a specific period. This garden is extant, so Reconstruction does not apply. Restoration of the garden is also not recommended, due to a lack of detailed docu-

mentation of the garden. Rehabilitation is applied when a property is changed for a new use or when its infrastructure is updated, and Preservation is used to retain a garden's current condition.

The treatment recommended for this garden falls somewhere between Rehabilitation and Preservation. When the overall property's use changed from private residence to public museum, little thought was given to how the garden within it would be impacted by this change, which included higher traffic and decreased maintenance. The treatment options proposed in this report are intended to address its needs as a public garden (Rehabilitation) while preserving its historic character (Preservation) through repair and replacement of missing, lost, or damaged features. The goal of the treatment in particular is to bolster the garden's integrity by mitigating change, especially that in the garden's vegetation and enclosure, while retaining its characteristic slopes, rockwork, circulation, water features, and small-scale features, all of which provide the basis for its historic and Japanese character and feeling.

Treatment Plan

For this submittal we have developed three treatment plan options (Figures 3, 4, and 5). These options return much of the garden to something closer to its original form and are essentially the same, except for the entry sequence. The three options propose slight differences in pathways, but all eliminate the current entrance from the concrete path around the south edge of the slope of the Stanley Gallery. This entrance denies the garden's original entrance from the front door of the mansion and orients it to the path leading from the parking lot. However, an entrance from the parking lot is already provided via the concrete path at the western end of the garden to the pergola pad, so the current path is really not necessary. All options thus reference the fact that the garden was originally accessed from the front door of the house. The options differ in the amount to which they honor this original entry. Option 1 (Figure 3) recreates it, and extends the stepping

stones back into the garden and all the way to the edge of the drive way near the front door. This treatment would be the most historically accurate and would bolster historic integrity the most. It is not, however, ADA accessible.

Option 2 (Figure 4), in contrast, extends the existing concrete and flagstone path along the original line of the stepping stones. This honors the historic alignment, but would ensure ADA access to the pool and upper garden. Option 2 also adds a stepping stone path from the museum entry at the atrium to the garden as well, acknowledging that visitors may want to access the garden from this vantage point. It is anticipated that the traffic from this point might be slightly less than from below, and thus stepping stones might be sufficient to support it, reducing impervious surfacing and the “imprint” of its non-historic alignment.

Option 3 provides a new entrance design, which “reinterprets” the access to the garden from both the house and the museum, intertwining the two desired alignments. One arcs from the museum and one arcs from the house, in two sweeping gestures.

Both historic character and ADA access are considerations in choosing an entry redesign. The best ADA access to this garden would include access to both the lower and upper gardens, so that visitors with ability differences could experience the garden from both above and below. However, access from either above or below might be deemed sufficient. It is perhaps worth noting that because replacement of the stairs with an accessible ramp would not be required because making the slope accessible would destroy the historic character of garden.

Generally ADA-accessible walks should be at least five feet wide and constructed of a smooth, level, and slip-resistant surface. An exception in width to a minimum of three feet can be made for an historic property. Three-foot wide paths longer than 200 feet require passing zones, but the path from the driveway to the upper garden is only about 120 feet long.

Because the gallery was constructed before the passage of the Americans with Disabilities Act in 1990, the path from the parking lot was not constructed with accessibility in mind. At this time, this path is too steep to be considered fully accessible, though a wheelchair could certainly be pushed up the slope. However, ADA access requires a path with a slope of 5%. An 8.3% slope is allowed, but requires hand rails on both sides and landings every 30 feet. From the contours on the site plan created for the Stanley Gallery, we estimate that the path from the parking lot to the lower garden is over 10%. Making this path accessible could be done relatively easily, though it would require some significant regrading of the lawn and possibly some removal of trees adjacent to the path. If an extensive garden project were undertaken in the future, to ensure inclusivity, we would suggest making the path accessible.

As is clear from the discussion above, the choice of entry option will need to weigh the differing values of historic character, accessibility, aesthetics and cost. The most historic option, Option 1, is not fully ADA-accessible because stepping stones in grass are not compliant, but is appealing because it boosts historic integrity. It might be acceptable if the lower garden is made fully accessible with a redesign of the path from the parking lot to the pergola to make the garden fully accessible from below. Options 2 and 3, are ADA-compliant but less historic in character. Option 2 might be made more historically compatible via a creative paving solution that better mimics stepping stones rather than simply extending the extant flag stone in concrete paving to the door. Option 3 simply adds a new 21st century layer to the garden and might not be recommended.

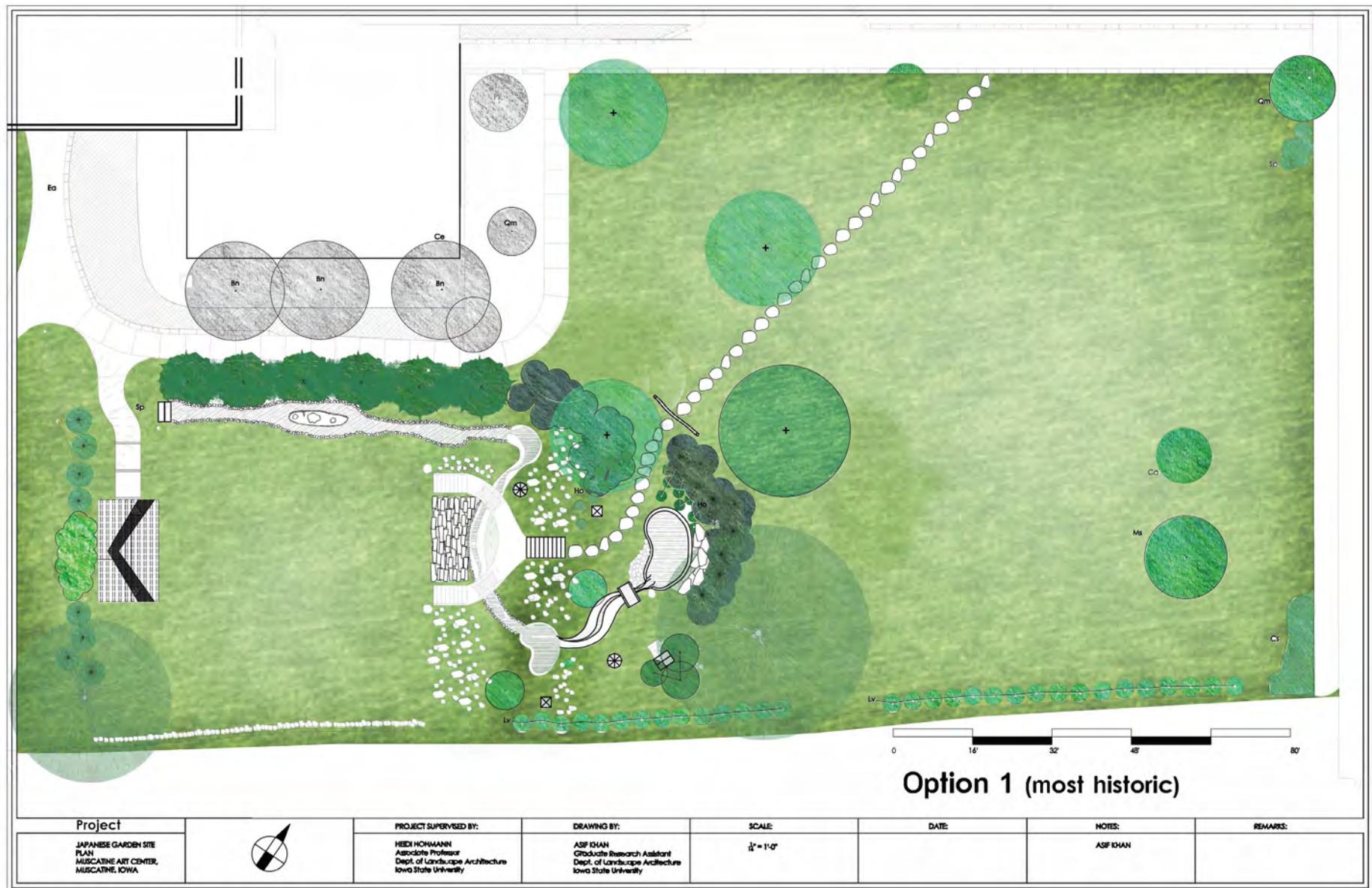


Figure 4. Option 1: Treatment Plan (most historic)

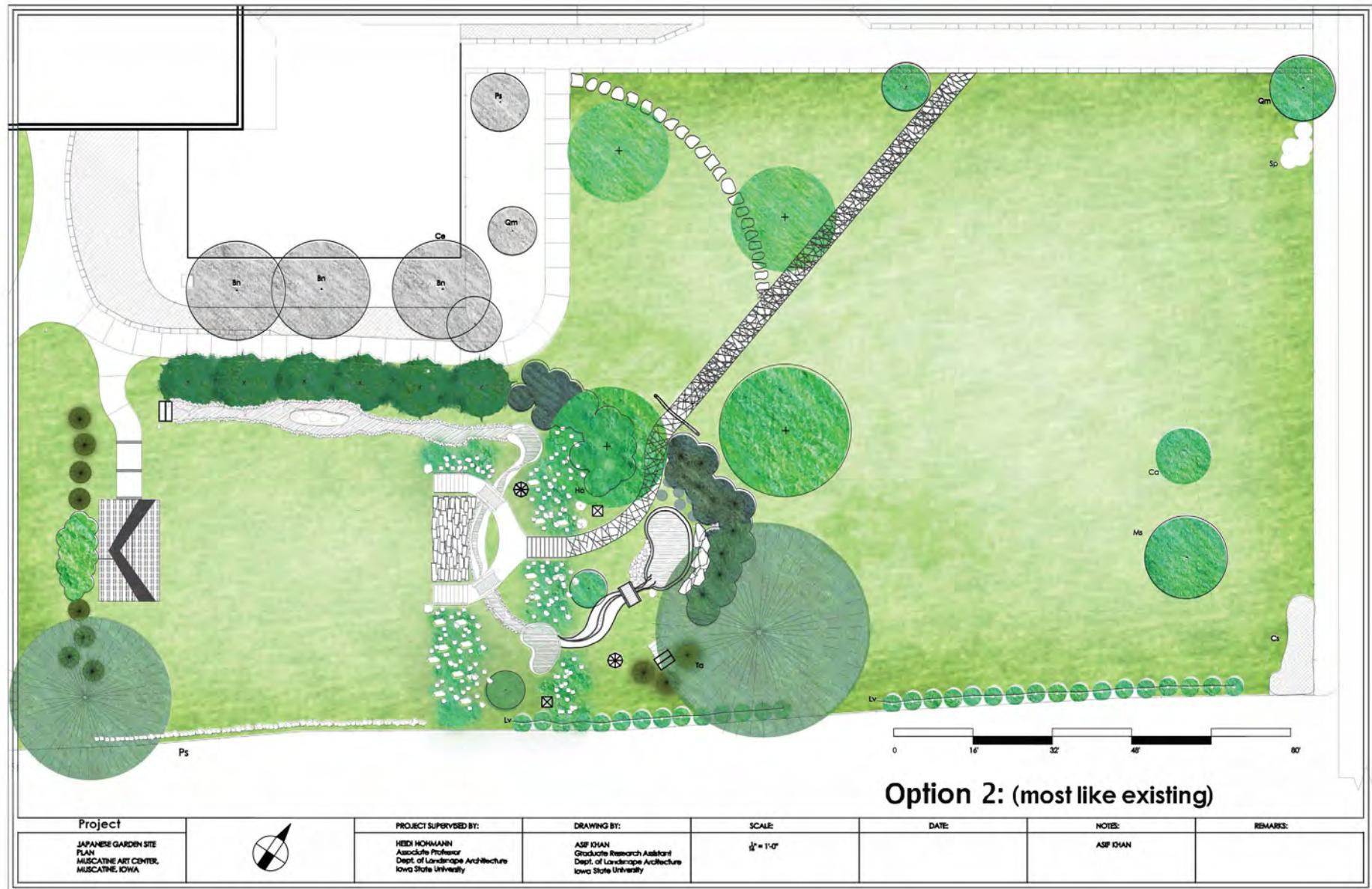


Figure 5. Option 2: Treatment Plan (most like existing conditions)

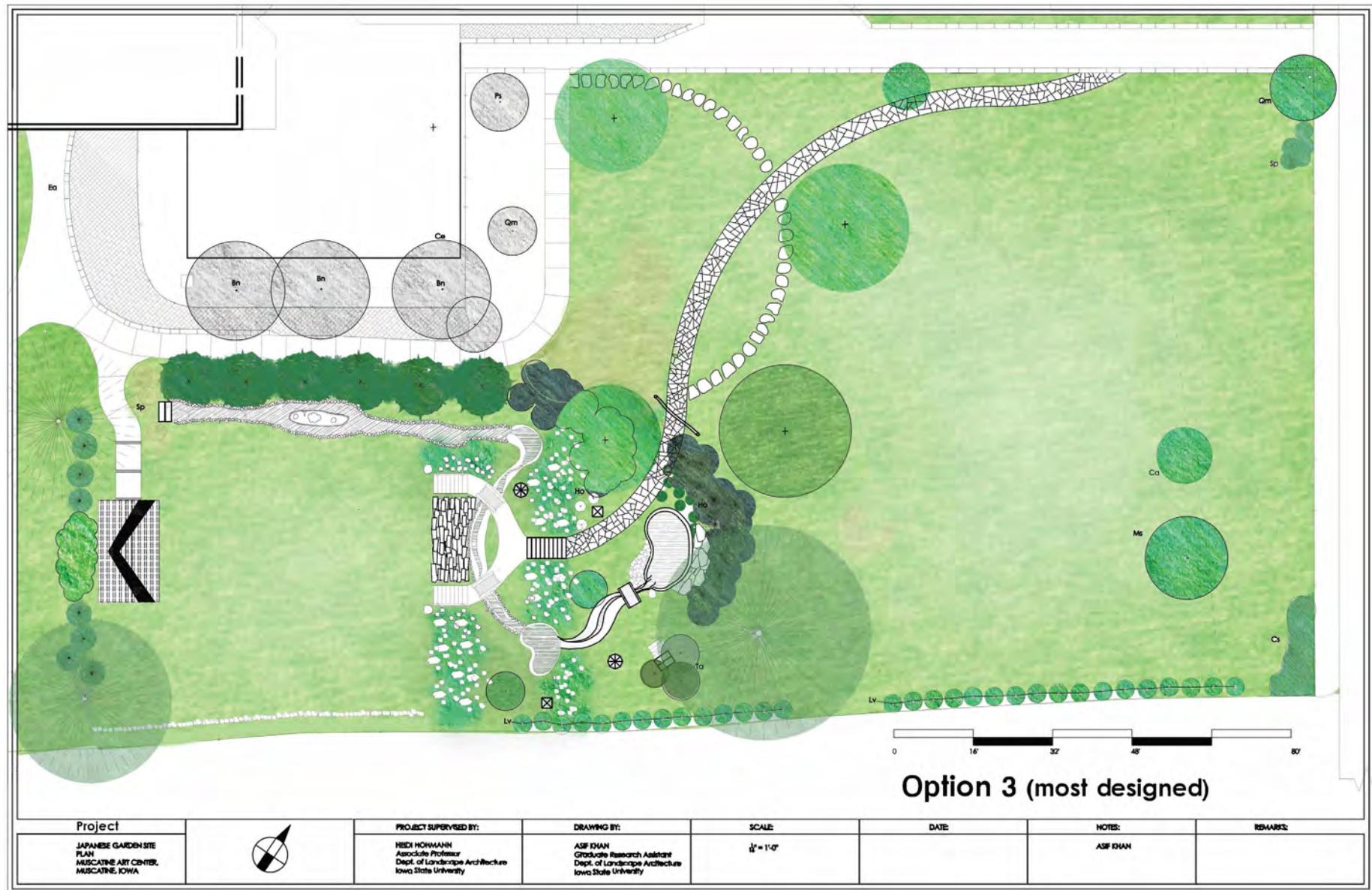


Figure 6. Option 3: Treatment Plan (most designed)

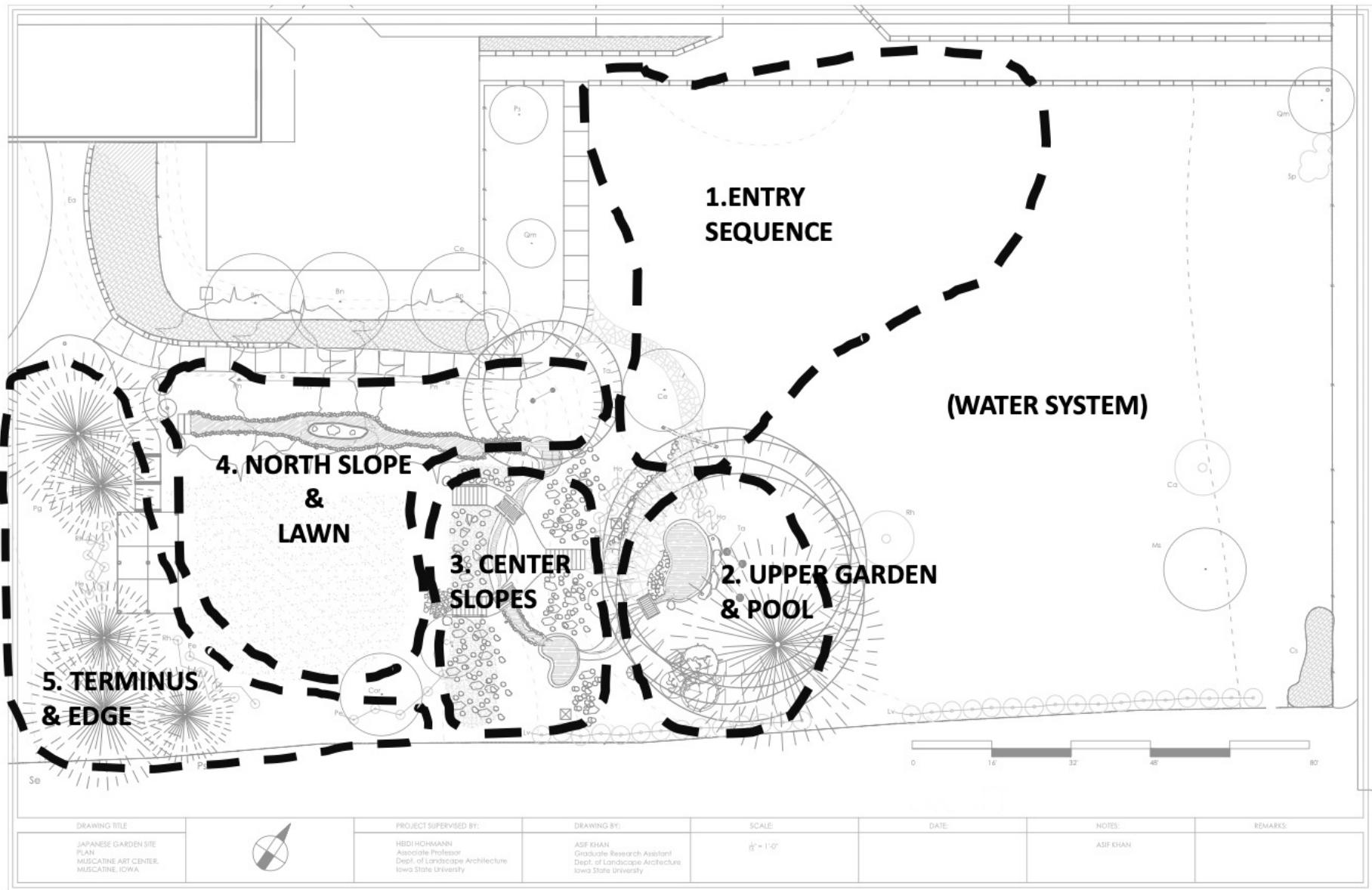


Figure 7.Treatment Zones

Treatment Zones and Actions

Outside of the entry sequence, the actions for the rest of the garden remains the same in all three options. As seen in Figure 7, we have divided the garden into zones to describe the proposed rehabilitation and preservation work.

Water System and Concrete Pools and Streams

Returning the sight and sound of water to the garden would do much to bring back its historic character. But repairing the pools and water system to be fully functional is an ambitious and likely expensive goal. If this is deemed desirable, we recommend that future designers or contractors consult with a company that specializes in landscape water features and fountains. This is a specialty area of practice and working with an experienced company will ensure the work is done correctly. It might be worth consulting with other historic sites that have repaired similar historic pools and fountains. For example, Oldfields, an Olmsted-designed garden (now the Indianapolis Museum of Art) repaired a similar water channel in the 1990s and may be able to describe some pitfalls or successes. Considerations for water system work will involve at least the following actions:

- Fully investigate and document existing water system..
- The water system runs through the garden; if excavation is required to replace water lines, this work should be done first, prior to repairing slopes and adding new plantings.
- Consider replacing piping in (new) areas that are easily excavated to make future repair easier. Consider simply abandoning existing underground system and providing new one.
- Investigate extant concrete streams and pools and their underlayment to ensure they are stable enough to retain water over the long term.
- If, after investigation, channels and pools need to be re-

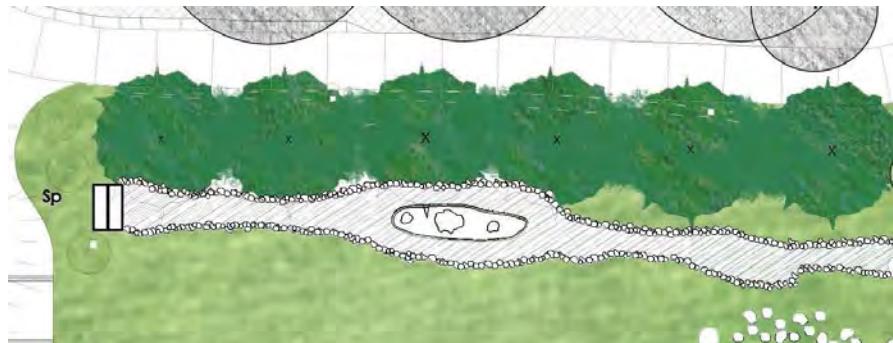


Figure 8. North Slope and Lawn Detail.

constructed, they should match original, based on photos and careful documentation of existing channels and pools.

- Replace stone edging on pools to match historic conditions, knowing pool edging varied over time.
- Plant species around pools to limit needle drop into the pools to prevent drains from clogging.

Entry Sequence/Circulation

- Depending on option choice, replace and/or revise circulation system, matching existing materials as required.
- Balance ADA access and historic character in choosing and refining the entry option.
- Repair lawns following walk replacement.
- Reconstruct the Torii gate and move (slightly) to re-orient toward front of house, per historic photographs and option .
- Replace missing canopy trees in the lawn area around the entry area and porte cochere.

North Slope and Central Lawn (Figure 8)

- Remove the white pines and yews on north garden slope, above the lower stream and pool. Protect small scale features, stream during removal.
- Carefully grind stumps so that limestone retaining wall

in slope is retained (if possible; if not, regrading slope or repairing/replacing the retaining wall may be an additional cost to repair).

- Replace evergreens with a planting that duplicates the historic planting composed of a sumac overstory and herbaceous understory.
- On east side of north slope, create a new shrub bed.
- Between the slope and entry sequence, plant new overstory tree(s).
- Erosion control on planting beds during planting and establishment may be required.
- Establish new lawn in the formerly shady areas south of stream.

Upper Garden and Pool Area (Figure 9)

- Remove existing yews around upper pool and shrine, protecting small scale features and pool during removal. Carefully grind stumps if necessary.
- Regrade area, removing excess mulch and soil around pool, buried lantern base, and steps at the shrine. Establish positive drainage.
- Rebuild stone hill behind crane pool, selecting large, oblong stones to match original composition as closely as possible.
- Create and implement planting bed of mixed evergreen and deciduous shrubs behind stone hill. Choose slow-growing, smaller scaled varieties to retain scale more easily.
- Create and implement new planting around shrine.
- As possible, establish ground cover between new plantings and under existing Norway spruce.
- When new plantings established or when tree declines, remove existing Norway spruce (alternatively, removing this tree, which is mature, could be considered as part of this project. This would allow all new plantings to develop together, but would reduce the sense of separation between public front lawn and private garden..



Figure 9: Upper Garden and Pool Area (Detail)

Center Slopes (Figure 10)



Figure 10: Center Slopes (Detail)

- Investigate depth of existing rockwork. Determine if large stones are extant under mulch and soil. Retain existing steps; do not destabilize during investigation or later excavation. If for some reason steps need to be replaced, replace with historic cheekwalls.
- If rockwork extant, remove excess soil and reveal. Rearrange to make pockets for planting. If large stones not extant, bring in new large stones to add to slopes and rearrange to create pockets for planting. Stone work should conform to appearance in historic photos as much as possible; work should be done with photos in hand.
- Remove redbuds and other trees on slope. Retain extant privet hedge on fence line and lilac; prune to reinvigorate. Develop new planting plan based on new sun and shade regime. Choose mounding species of herbaceous perennials and woody shrubs, both deciduous and evergreen. Large, vertical plantings (grasses, tall oriental lilies, etc.) should be avoided. Some vertical evergreens might be added as per historic photos.
- Replace extant wooden step handrailings with simple, thin, and elegant black cast iron or powder-coated steel railings that recede visually and do not dominate scale of steps.
- Replace bridges with bridges more closely matching historic bridges in scale, arch, and materials. Red color is probably not historic. A neutral or dark brown or weathered cedar might be more appropriate. Tall vertical railings should be eliminated; if ADA railings are required, use thin metal railings similar to those used on steps.

South Edge and Terminus (Figure 11)

- Replace stone edge and planting bed on south side of lawn. Develop planting plan using herbaceous perennials and low growing shrubs.
- Arborvitae here are extant from historic period and mature; pergola has recently been replaced. Undertake this work last or when needed
- Replace extant arborvitae with new arborvitae to return edge to original scale.
- Replace non-historic pergola when it deteriorates. The pergola's current neo-classical style conflicts with garden's Japanese theme and may convey anachronistic character. A new pergola could take on a more Japanese character to reinforce the garden's historic theme. Consider matching material of pergola to bridges to reduce visual clutter.

Implementation

The zones described above are primarily used as a means of explicating the proposed project, specific tasks and to provide an idea of the amount of work required. However, the project can be implemented in many ways. It might indeed be undertaken sequentially, by the zones listed above (though not necessarily in the order presented). Or, the project might be sequenced and undertaken by type of work that crosses zones (e.g., first water system, then tree removals, then slope repair, etc). A third approach might be to undertake the whole project at once, as a capital improvement project.

Each of these approaches has different advantages and disadvantages when considered from different perspectives of time, finances, organizational stress, etc. The approaches might also have imply the use of different kinds of landscape and design professionals. For example, a landscape architecture firm might be hired to complete a full set of design plans for the garden and then

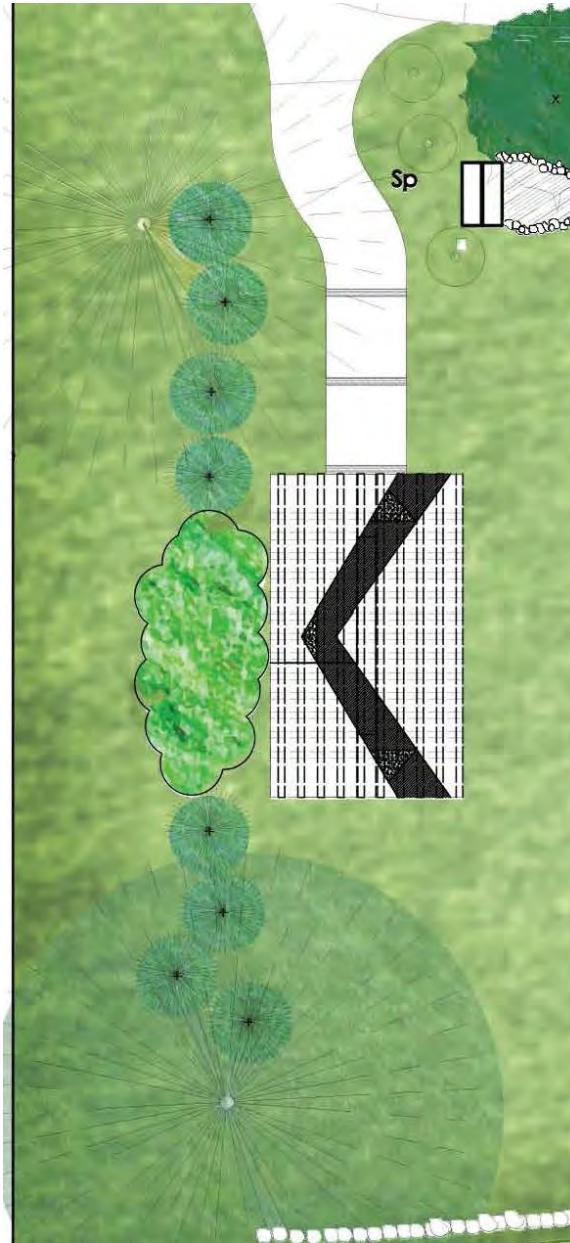


Figure 11. South Edge and Terminus (Detail)

a landscape or engineering contractor employed to implement the whole garden. Alternatively, the museum might work with a local design-build contractor to implement the project in phases. If a design-build firm is used, one that specializes in high end residential landscape design is highly recommended; although the museum is a public agency, the detailed character and construction is very similar to an expensive, extensive, and bespoke residential design. It is important to note that the project is likely beyond the skill set of the average “landscaper.” In addition, it is critical to ensure that historic integrity and veracity is considered throughout the entire project. Both the creation of design plans and the actual construction process will need oversight and monitoring to ensure that historic character is not compromised by modern materials, technologies, shortcuts, and approaches.

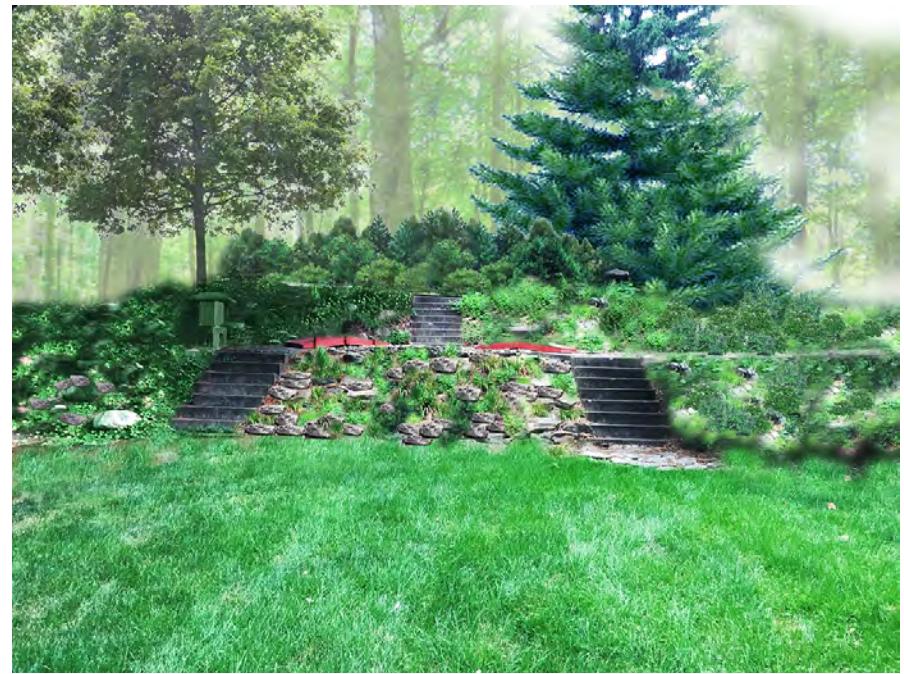
Regardless, a few things will be consistent across all approaches. First, the local community must be brought along in the project, and both informed and consulted. This garden, in its current condition, is important to local residents who may not visit the garden regularly but pass by it every day. If changes are a surprise, they may not be viewed as improvements, however well-intentioned. This is particularly true of the removal of the large pines and yews, which are a major component of the current garden and are a backdrop to the neighborhood. The community needs to know why they are being removed and assured that an improved and more historically accurate garden will replace them. A perceived loss must be counteracted by a perceived gain for people to feel positive about the project.

Education—providing images and information about the historic and future gardens—via signs in the garden and museum and in the local press—will thus be an important part of this process. This will require a publicity campaign that informs and advises the community about the project and project schedule well in advance of removals and construction. And, if the project is phased, it will be important to celebrate and publicize portions when completed, so

that the community can see and acknowledge the progress being made.

Second, additional detailed plans will be needed. This project and this resulting document is just a “road map” that we hope will coalesce a preservation vision. However, all parts, and especially the redesign of the upper pool and its setting, the replanting of the central slopes, and the reconstruction of the bridges and other small-scale features will all require closer examination and planning so that implementation is historically accurate, economical, and efficient.

Third, an ongoing maintenance strategy for the garden should be considered **prior** to construction, preferably as part of future design and planning. All gardens—but especially Japanese gardens—are maintenance intensive, and are not “set it and forget it.” Replacement evergreens, after reaching their desired height, should be pruned regularly to maintain their form and dimensions, and to prevent the overgrowth that has compromised the existing garden. While a maintenance strategy will of course involve the City of Muscatine, it might also be coordinated with a garden club or a Friends’ group might be established (though care and feeding of volunteers can be intensive and add more work to the jobs of museum or city staff). Creation of a garden maintenance monthly checklist, calendar, or handbook after construction can be a way of maintaining consistency and continuity in garden maintenance and ensuring tasks are not forgotten. And ongoing education for new volunteers and new city parks and recreation staff about the garden’s history and the importance of its historic character is also essential. Staff and volunteers who understand and take pride in the garden’s historic character are better prepared to support and protect that character and less likely to promote contemporary garden trends and ideas.



Figures 12 and 13. Image edits depicting future upper pool and central slopes.



Figure 14. Image edit depicting future northern slope..

