Campus Com m ons Village Four Long-Range Landscape Developm ent Project

Phase Two Requirements and Specifications

Final Report

Landscape Condition Assessment

Respectfully submitted,

- /

March 12, 2021

Gary Slavit, PMP Project Manager Date

Long-Range Landscape Development Project Phase Two – Final Report

Introduction

The Long-Range Landscape Development Project (LRLDP) has concluded the process the requirements and specifications to further define the project's goals and objectives as established in Phase One. As part of the assessment included in LRLDP Phase Two, we have obtained expert opinion from five landscape professionals (See Appendix A) to provide an assessment of the overall condition of our common area landscaping. As this phase of the project progressed, the scope of the phase changed.

Village Four Landscape History

Based upon the visual evidence, all participating landscape professionals are in concurrence as to the history of the Village Four landscaping. When Village Four initially installed the current landscaping in that it was created based upon the conditions at the time. The newly planted trees were young and provided no shade due to their immaturity and size. Therefore, the varieties and species of grass, ground covers, plants, and shrubbery were selected because they required and would thrive in full sun. As the trees grew during the course of over 40 years, their canopies developed and began providing more and more shade. The plants, bushes, etc. were no longer receiving the sun they required for good health and viability. In addition, at the time of installation, there were fewer options in terms of available plants and such from which to select and therefore many were not as viable for the purposes needed. For example, many of the bushes planted along fences are varieties that normally grow to a height of 15 to 35 feet but are regularly pruned to a height of four to six feet. Drastic pruning such as this is very unhealthy for the plants.

It is likely that those that installed the original landscaping assumed that the grounds would be replaced over time as the needs changed since most of the plants' normal lifespan is not expected to be in excess of 40 years. Regardless of that assumption, they had to plant according to the conditions at the time.

Summary

All of the independent experts agree that much of our common area landscaping is in poor condition mostly due to its age which is approximately 40 to 50 years old. The lifespan of flora can vary greatly, annuals only live one season whereas many redwood trees can live upwards of 1,500 years. While there is no specific age where the typical landscaping found in areas such as Campus Commons becomes unhealthy and non-viable, the experts agree that 40 years is well beyond its lifespan. The majority of the shrubbery, green belts, and other plants, while still alive, is neither thriving nor healthy and is susceptible to disease and pests, which not only exacerbate the plants' condition, but spread to other plants and can accelerate their decline. Additionally, the Village Four landscaping is far out of compliance with current water conservation regulations and there are no longer "grandfathering" exemptions.

Expert Opinion

Following are some of the specific recommendations and observations based upon the professional review:

- The general design of the landscaping is fundamentally sound.
- Overall, the trees in Village Four are the main source of the common area landscape beauty.
 - o Nearly all of the trees should remain
 - Many require some pruning to remove dead growth
 - o Trees that should be removed are:
 - Competing with nearby trees,
 - Dead,
 - Improperly located, or
 - In generally poor and non-viable condition
- The vast majority of the shrubbery should be removed due to its poor condition.
 - o This is as a result of several factors:
 - Old age. A majority of the bushes are likely part of the original landscaping and is beyond their normal life expectancy.
 - Insufficient sunlight. Many of the bushes require full sun and are receiving mostly shade. When originally planted, the surrounding trees were also young and now that they are grown and provide shade, the bushes are not receiving proper sunlight.
 - Excessive and improper pruning. Much of the shrubbery is designed to grow as high as 15′ 35′ tall but has been pruned to heights of 6′ or less. This causes excess stress and damages the plants. Shrubs have been pruned in ways that inhibit overall plant health.
 - The condition of the bushes cannot be reversed and will only deteriorate, and eventually die (this is already occurring).
- There are many areas where the landscaping creates security issues such as hiding spots and are conducive to homeless camping.
- Much of the ivy should be removed and replaced.
 - High water requirements
 - Highly attractive to rats and mice
 - Much is planted in inappropriate areas
 - It would be preferable to remove all ivy, but it is difficult and costly to remove permanently
 - Large expanses of ivy should be removed
 - Small, narrow, thin ivy strips can remain as borders
- Approximately 40%¹ of the grass areas should remain as lawn, the rest should be removed.

¹ The 40% figure is based on visual approximation by the landscape professionals. No formal measurement or surveys was performed to provide precise metrics.

- All of the existing lawn (grass) areas are in extremely poor condition. The vast majority of the lawn is actually weed, clover, and other invasive plants.
- o Like other plants, grass has a lifespan, shortened by improper maintenance such as infrequent fertilizing, reseeding, or improper watering and weed control.
- The grass varieties found in Village Four thrive in direct sunlight. Many turf areas receive mostly shade because of the many trees. This is a cause of the poor turf condition in those areas. If the lawn is replaced in those areas, it would likely return to the poor condition within months. Green belts should be replanted with grass varieties that do not require the direct sunlight.
- Grass consumes large amounts of water, creates runoff, and requires a high level of maintenance and chemical controls (fertilizers, weed controls, and pesticides)
- o Much of the lawn areas are not appropriate for grass, such as areas that are:
 - Difficult to mow, edge, and otherwise maintain
 - Prone to water runoff
 - Wastes water
 - Harmful to fish and other organisms that inhabit the creeks and rivers
 - Not conducive to walking, play, or recreation
 - Not used, visited, or openly visible
 - Heavily shaded where sunlight is insufficient for healthy grass growth
- o Green belts and other areas where grass is appropriate and desirable should:
 - Have the existing lawn removed
 - Be sterilized to kill the invasive plants (e.g., crabgrass and Bermuda grass)
 - Be equipped with more efficient irrigation
 - Be resodded with grass species better suited for the sunlight conditions.
- The irrigation systems are in poor condition and should be replaced
 - o Past the end of their serviceable life
 - o Inefficient compared to currently available irrigation technology
- The existing landscape requires an extremely high level of maintenance and requires a lot of polluting power equipment and chemical applications to maintain.
- The existing landscaping is greatly out of compliance with current water conservation standards.
 - The current landscaping requires high levels of irrigation.
 - Local jurisdictions can restrict or even ban water use for irrigation if drought conditions dictate. Local jurisdictions may allow water use in drought conditions if the landscape and irrigation systems meet water conservation standards.
 - Local jurisdictions can impose high fines for out-of-compliance landscaping.
 However, if initiatives are under way to bring the landscaping into compliance, and progress is evident, compliance agencies may waive fines.
- There are many varieties of shrubs, plants, ground covers, and such that were not available at the time of the current landscape's installation that would be more

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appropriate and beautiful for this area. These new floras require much less maintenance, water, and provide color and a lush appearance.

Scope Change

The LRLDP Phase Two scope consisted of creating detailed requirements and specifications to further define the goals and objectives established in the LRLDP's first phase. Specific operational definitions would then establish measurable benchmarks to determine the project's success criteria.

During the consultations with landscape experts, it became apparent that the current landscape design within Village Four is suitable and appropriate, however, the execution of the landscape is not. In other words, for the reasons previously described, the flora and infrastructure are no longer viable for the design. Some of the metrics necessary to develop operational definitions is cumbersome to obtain and may not be available, such as accurate water usage statistics since meters have only recently been installed. The exercises to create the metrics may not achieve accurate measurements. Since the data quality ranking would be low, efforts to create viable metrics are not warranted. Additionally, proper execution of a replacement plan would likely yield the maximum benefit.

Discussions with the landscape consultants clarified that replacement of the current landscaping with current technology and appropriate plant species will have a dramatic impact to the higher priority goals and objectives. The committee determined that the Phase Two scope should address developing a strategy for an overall Village Four landscape replacement to take advantage of current landscape materials and opportunities. The Howe Avenue Berm pilot (described below) provided the project team with potential cost information that factored into the scope change.

The Howe Avenue Berm Pilot

The Howe Avenue berm is the area to the east of the Village Four homes along Howe Avenue from Village Two to American River Drive to the Howe Avenue sidewalk, which is approximately 1.2 acres.

During this phase of the project, the LRLDP committee worked in concert with the Village Four Security Committee with regard to the security fence project which will erect a fence that connects with Village Two's chain link fence on the Howe Avenue berm. This fence will run from the Village Two fence connection south along Howe Avenue and terminate with a connection to a residential fence on American River Drive. The fence construction will involve modification to certain areas of the berm.

The LRLDP obtained proposals for a complete re-landscaping of the berm area which would replace the large grass expanse with shrubs, rock borders, and other materials and would include a high-efficiency irrigation system replacement. The proposals were not comparable, but the most complete proposal that included the berm landscape replacement was approximately \$331,000.

This effort served as a pilot for the LRLDP team to better understand the scope of the entire LRLDP. The potential cost indicates that an implementation strategy will be critical to the overall project success.

Condition Survey

During this project phase, the Village Four homeowners were presented with a survey requesting input to landscape problem areas near their homes or anywhere else in Village Four. The intent of this survey was to create an inventory of non-routine maintenance issues. 15 homeowners (28.3%) responded to the survey. General maintenance issues were directed to the landscape maintenance vendor and only major problem areas (e.g., dead bushes, dead lawn areas, drainage issues, etc.) were considered. The primary issues identified were irrigation issues (water runoff and improper coverage) and dead/poor condition plants and bushes.

Committee Analysis

The LRLDP committee and Village Four Homeowner's Association Board of Directors are well aware that some homeowners oppose any changes to the landscaping, they love it the way it is. Unfortunately, leaving the landscaping unchanged is no longer an option. However, there are options whereby we can have beautiful grounds, walkable green belts, and meet our goals and objectives. Landscape designers and contractors have many tools at their disposal to address these issues without sacrificing beauty.

While the grounds from a distance and at a glance still look lush, upon closer inspection it is clear that the green belts are mostly clover and weeds with very little actual grass. Shrubbery shows foliage on the surface, but below the outer leaves is actually mostly bare branches, many plants reside in inappropriate locations or just not situated to be conducive to healthy growth. The landscape committee has recently initiated monthly inspections of the Village Four grounds with Fernandez Landscaping to review the regular landscape maintenance. During these inspections, Fernandez landscaping directs our attention to plants and bushes that are either dead, diseased, or damaged and they recommend their removal. Over the last few months, we have had to remove a number of bushes that were dead or diseased. Replacing these plants now would result in a hodgepodge of plants in various states of maturity and would no longer have the beauty we currently enjoy. Therefore, in most cases, we are removing dead or diseased plants as advised by our landscape maintenance contractor, but not replacing them until we have an overall plan.

Since approximately July 2020, Village Four has received invoices of approximately \$1,000 each month for repairs to the existing irrigation system. The system:

- Is in poor condition due to age
- Is in need of costly, labor-intensive repairs due to broken pipes damaged by tree roots
- Distributes water inefficiently
- Is in need of redesign to establish more efficient zones

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- Uses outdated controllers that are nearing the end of their serviceable life and do not take advantage of new technology that provides more efficient irrigation
- Should be replaced which will require destruction of parts of the existing landscape

Recommended Strategy

The LRLDP team has obtained significantly more knowledge and information about the Village Four landscaping since the project initiation. Assumptions made at that time have been clarified and that has indicated a change may be in order for the remaining phases. Phase Three was to recruit landscape professionals to implement the requirements and specification by creating a plan to satisfy those needs. A rough order of magnitude estimate for such a design is in the range of \$40,000. Upon analysis of the data and knowledge from Phase Two, the following strategy is recommended to modify the original plan for Phase Three.

Since the basic design of the common areal landscaping is fundamentally sound, the need for a redesign is not indicated. However, the following is recommended:

- Replace all irrigation systems with modernized and efficient irrigation technology
- Replace all plant material with new (with the exceptions noted below) plants or other materials that are appropriate in terms of sunlight, water usage, and maintenance needs
 - o Exceptions
 - Trees (tree maintenance and removal/replacement will be addressed separately)
 - Large ivy patches that are not feasible to remove
 - Plants that are healthy, appropriately placed, and still viable for the long term
- Replace all grass areas (except for the north and south green belts²) with non-grass materials (ground covers, etc.) that will provide appropriate coverage for the needs and expectations of the area
 - Green belts should be replanted with grass varieties suited for less sunlight after irrigation system replacement

In order to satisfy homeowners' desires to maintain the look and feel of the current landscape, for the landscape to be aesthetically pleasing, and to have variety with cohesiveness, the committee recommends that we contract with a landscape design consultant to create a catalog of replacement materials that would be appropriate for different scenarios (e.g., shaded areas, full sun, security, etc.). Homeowners would be allowed to choose replacement plants from that catalog for the areas around their home. The LRLDP would be responsible for the replacement of all common areas not associated with specific homes, such as green belts and the areas lining Commons Drive and American River Drive.

² The green belt areas are as follows: the south green belt is the area bordered by the 955-959Commons Drive structure and the 23112315Americ an River Drive structure west to Commons Drive. The north green belt is the area bordered by the 941945 Commons Drive structure and the 921925Commons Drive structure.

Due to the high cost of replacement landscaping, it is recommended that Village Four be divided into zones, prioritized, and replacement projects initiated over the course of time as funding permits.

Recommendation

The LRLDP recommends that the Campus Commons Village Four Homeowners Association Board of Directors (HOA):

- 1. Accepts of the findings of the committee as described within this report, and
- 2. Approve the Phase Three Design charter authorizing the continuation of the LRLDP.

ACCEPTANCE

Landscape Committee Acceptance

The Campus Commons Village Four Landscape Committee hereby accepts this report and its findings and submits the report to the Campus Commons Village Four Homeowners Association Board of Directors for final acceptance and approval.

On behalf of the Campus Commons Village Four Landscape Committee:

Paul Stiffler,

Chair

March 12, 200

Date

Campus Commons Village Four Homeowners Association Board of Directors Acceptance

The Campus Commons Village Four Homeowners Association Board of Directors hereby accepts this report and its findings. Upon acceptance, Phase Two of the Long-Range Landscape Development Project is complete.

On behalf of the Campus Commons Village Four Homeowners Association Board of Directors:

Nancy Comstock

President

Date

Appendix A Landscape Professionals

The following landscape professionals were consulted for their expert opinion on the condition of the Village Four common area landscaping:

Tim Pine, EH&S Specialist, Office of Environmental Health and Safety, University of California, Berkeley

Mr. Pine's telephone consultation provided background information and general information about landscape that fits the profile of Village Four. He offered specific information based on a general description of the landscaping.

Taylor Lewis, Nursery Manager, Arboretum and Public Gardens, University of California, Davis Mr. Lewis provided telephone consultation. He is familiar with Campus Commons and was able to offer opinion on its condition and history.

Russell Vernaza, Owner, NewScapes Landscaping

Mr. Vernaza assessed the general condition of the Village Four landscaping during an informal onsite tour of the village. He provided design guidance and estimates for the Howe Avenue berm.

Michael Glassman, Michael Glassman & Associates Landscape Design and Consultation Mr. Glassman performed an in-depth and formal analysis of the Village Four landscaping and provided design strategies and advice during two formal tours of the property.

Rafael Fernandez (Owner) and Marcos Ramirez (Foreman), Fernandez Landscaping
As the Village Four landscape maintenance contractors, Mr. Fernandez and Mr. Ramirez have been providing information and input on an ongoing basis regarding the overall condition of the landscaping. Fernandez Landscaping also provided limited estimates for renovation of the Howe Avenue berm.

APPENDIX B

Participation Roster

<u>Campus Commons Village Four Landscape Committee</u>
Paul Stiffler – Chair
Gary Slavit, PMP

<u>LRLDP</u>
Gary Slavit, PMP – Project Manager

LRLDP Phase Two Committee
Gary Slavit, PMP – Chair
Kim Dagan
Jennifer Shaw
Marty Stiffler
Paul Stiffler

APPENDIX C

Final Phase Two Project Statistics

Budget Report

Original Phase Budget:

\$1,000.00

Total Spent:

\$ 309.57

Cost Variance:

\$ 690.43

Cost Performance:

3.23 (favorable)

Budget Performance:

69.04% under budget

Date	Vendor	Description	Amount
11/10/20	Michael Glassman and Associates	Initial consultation (10/21/2020)	\$150.00
12/11/20	University Copy	Problem report surveys	\$9.57
02/05/21	Michael Glassman and Associates	Second consultation (12/21/2020)	\$150.00
Total Phase Expenditures			\$309.57

Schedule Report

Planned Completion: March 2021 (Presentation of report at HOA Board meeting)

Actual Completion: 03/11/2021

Schedule Performance: 1.0 (On schedule completion)