

## MEMORANDUM

DATE:	June 5, 2023
TO:	Steve Bennett, AICP, Planning Director
FROM:	Brian Way, PLA, ASLA, Landscape Architect
SUBJECT:	Review of planting requirements in LFP Retaining Wall Design Guidelines

The professional opinions and recommendations noted below are being provided as a response to your request for PACE to review the vine coverage requirement in the Draft Lake Forest Park Retaining Wall Design Guidelines, dated May 11, 2023.

The coverage requirement is stated in provision 2. of the Retaining Wall Design Guidelines is that vine plantings on a wall reach a coverage of 30% of the wall front surface within 36 months, while also being drought tolerant, and not requiring permanent irrigation.

It is my opinion that without meeting certain considerations, achieving the 30% coverage within 36 months requirement would be extremely difficult. I would instead recommend a more flexible approach, considering the constraints of each retaining wall location and design.

Items for consideration:

1. <u>Wall Height:</u> Wall coverage represented as a percentage as a general requirement to be used on a variety of projects with varying wall heights will be a difficult metric to achieve. Planting in greater density or frequency along the base of the wall will not guarantee greater overall wall coverage in the 36-month timeframe, especially for taller walls.

## Recommendation:

Require that the design specify spacing of the vines for (1) eventual full coverage of a wall or (2) partial coverage in coordination with the approved architectural finish. An on-center plant spacing based on the species selected should be specified and then reviewed to verify the design intent. As an example, the species noted in the next paragraph could be installed at 6 feet on-center if no permanent irrigation is installed or spaced further apart at 10 feet on-center with an irrigation system for similar results. In addition to planting at the base of the retaining wall, encouraging installation of draping plant material above the wall can help mitigate the limited planting area.

<u>Growth Rate and Plant Selection</u>: There are only a few possible self-supporting vine selections for this region, typically Boston Ivy, Virginia Creeper, or Silvervein Creeper. With the expectation of the vigorous growth rate (36 months) while also being drought tolerant and not requiring a

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> permanent irrigation system, only the hardiest of these plants, likely Boston Ivy, will be used for all projects. Another consideration is that all three of these self-supporting vines are deciduous, leaving only the bare branching vines visible through the winter months.

Recommendation:

Remove the specific timeframe of 36 months so as to not limit the plant selection. Consider allowing or encouraging a trellis/plant support to be attached to the retaining wall allowing for a greater variety of climbing plants.

<u>No Permanent Irrigation system:</u> The ability for the plants to survive without irrigation will need to be determined by their drought resistance <u>and</u> the available soil volume for each plant. Retaining walls that provide isolated confined planting pockets may not retain enough moisture to permit the plants to survive through the dry summer months of the Pacific Northwest without supplemental watering. Watering and maintenance is expected for all plant material during a typical plant establishment period of 2-3 years.

## Recommendation:

Add additional language to the guidelines that allows for low flow irrigation (drip) in certain situations or requires supplemental hand watering during prolonged periods of drought or prohibits the use of retaining walls that would only provide small, confined planting pockets requiring supplemental watering.

Please contact me with any questions or concerns regarding this review.

Sincerely,

Brian Way, PLA, ASLA Landscape Architect

