

APPENDIX H

Financial Feasibility Documentation for Vegetated Roofs and Rainwater Harvesting

City of Seattle | Stormwater Manual



Vegetated roofs and rainwater harvesting may not be financially feasible in all project situations. If the applicant determines that including a vegetated roof or rainwater harvesting to meet the on-site stormwater management requirement is not economically feasible using reasonable consideration of financial costs, even when engineering design limitations and physical limitations of the site would allow greater use of these best management practices (BMPs), then the applicant shall provide the following additional submittal documentation:

1. A narrative description and rationale with substantial evidence sufficient to explain and justify the applicant's conclusion that installation of a vegetated roof or rainwater harvesting is economically infeasible.
2. A detailed cost estimate of constructing the project as proposed (i.e., including the level of on-site stormwater management that is considered cost feasible for the project). The detailed cost estimate must include the following:
 - Breakdown of project costs into subtotals for demolition, site preparation, building construction, site paving, landscaping, and utilities, as applicable.
 - Itemization of the proposed stormwater control measures.
 - If a vegetated roof or rainwater harvesting would be feasible but for cost considerations, documentation of the difference in unit and total cost between the conventional surface and rainwater harvesting and/or alternative surface approach (e.g., the difference in cost between a standard roof and associated stormwater control BMPs compared to a vegetated roof and associated stormwater control BMPs).
3. A detailed cost estimate of constructing the project with additional stormwater control BMPs beyond what the applicant considers a feasible cost (i.e., beyond the proposed design itemized in item 2 above). That is, provide the additional cost the project would incur if the project were to use a vegetated roof or rainwater harvesting to meet the on-site stormwater management requirements.
4. Building/project valuation construction cost as determined by the Seattle Department of Construction and Inspection (SDCI).
5. If applicable, Street Improvement Plan or Utility Plan construction cost as determined by the Seattle Department of Transportation (SDOT) or capital improvement project cost as determined by applicable City department.
6. If the project does not achieve the on-site stormwater management requirements and the project application is not signed and stamped by a professional engineer, a signed statement by the applicant certifying that the project design implements the on-site stormwater management requirements is required.

Alternatively, the applicant may establish financial infeasibility of rainwater harvesting based on one of the following simplified criteria:

- The non-pollution-generating roof area is less than 20,000 square feet.
- The ratio of roof area to average daily rainwater demand is less than 10,000 square feet/gallons per minute (gpm) (refer to *Volume 3, Section 5.5.1.6* for rainwater demand calculations).