# **OFFICE OF SUSTAINABILITY**

# AMENDMENTS TO REGULATION ON ENERGY EFFICIENCY AND ENVIRONMENTAL DESIGN IN CONSTRUCTION OF BUILDINGS

# 1. Scope

Pursuant to § 17-111 of The Philadelphia Code, the Office of Sustainability (OOS) hereby adopts the following regulations to implement the requirement that every City contract for the design or construction of a Large City Public Works Project includes requirements intended to ensure that the finished product will achieve a Leadership in Energy and Environmental Design (LEED) v4 or v4.1 Gold Certification rating if the project:

- .1 Is capable of meeting the minimum program requirements for the LEED rating system intended for New Construction and Major Renovations; and
- .2 Involves the Expenditure of Primarily City Capital Dollars.

#### 2. Definitions

Unless otherwise provided herein, capitalized terms shall have the meanings set forth in § 17-111 of The Philadelphia Code, as amended.

Department. The department with which the contractor has contracted.

Director. Director of the Office of Sustainability.

Expenditure of Primarily City Capital Dollars. The spending of funds for the design and construction of a project when more than fifty percent (50%) of such funding is based on authorization set forth in the City's annual capital budget appropriations ordinance for expenditure by any City department and the imposition of LEED requirements is not prohibited by federal or state law.

#### 3. Administration

Any party that responds to a Request for Proposals, (RFP) or enters a contract for design services, construction services, or other services as necessary for a project described in Section 1 shall agree to all LEED requirements contained therein. A City contractor shall monitor and

document the ability of the project to achieve a LEED Gold certification through project milestones such as Budget Call, all stages of design development, construction, and building and systems commissioning.

# 4. Compliance Standard

- 4.1 City contractors shall take all necessary and appropriate steps to meet the LEED prerequisites and achieve the following v4 credit points, or equivalent v4.1 credit points, to contribute to a project's minimum 60 points required to earn the LEED Gold certification.
  - .1 IPc1 Integrative Process: 1 point
- .2 LTc8 Green Vehicles: 1 point (if dedicated site parking is within the project scope)
  - .3 SSc1 Site Assessment: 1 point
  - .4 SSc5 Heat Island Reduction: 2 points
  - .5 WEc1 Outdoor Water Use Reduction: 1+ points
  - .6 WEc2 Indoor Water Use Reduction: 2+ points
  - .7 EAc1 Enhanced Commissioning: 2+ points
  - .8 EAc2 Optimize Energy Performance: 6+ points
- .9 EAc3 Enhanced Advanced Energy Metering: 1 point (if project includes 50,000 or more gross square feet of enclosed and conditioned building space)
  - .10 EQc1 Enhanced Indoor Air Quality Strategies: 1+ points
  - .11 EQc4 Indoor Air Quality Assessment: 1 point
- 4.2 City contractors shall use the guidance set forth in the High-Performance Building Guidelines document, as may be amended and made available on the City's public website, to develop measures to meet LEED credit requirements, when designing a project.
- 4.3 Pursuant to § 16-307 of The Philadelphia Code, LED lighting must be installed for all lighting purposes in Large City Public Works Projects.
- 4.4 Pursuant to § B-1504.9 of the Philadelphia Building Code (Title 4, Subcode B of The Philadelphia Code), low-slope roofs on buildings shall be constructed with cool roofs using materials with an initial solar reflectance of greater than or equal to 0.65, with a few exceptions

for green roofs, high-rise buildings, and other limited scenarios. Roofs shall be designed to have three-year aged solar reflectance values (SRI) equal to or greater than 64 for existing buildings, new buildings, and roof rebuilds. If the three-year aged SRI is not available, the initial SRI of roofs shall be equal to or greater than 82. Conformance to the aforementioned roofing standard contributes to achievement of the SSc5 Heat Island Reduction credit points reflected in Section 4.1.

# 5. Alternative Standards or Exceptions

- 5.1 A City contractor, on behalf of and with the permission of the Department, may submit a request for an alternative standard or exception when there is reason to believe that achievement of LEED Gold certification by a particular City public works project would be inconsistent with LEED minimum program requirements and/or in conflict with other City priorities.
- 5.2 Alternative standards, if approved, may include one of the following:
- .1 Registration and Gold-level certification under a more appropriate LEED rating system;
  - .2 Passive House Institute US (PHIUS) Passive Building Certification;
  - .3 Institute for Sustainable Infrastructure Envision rating system;
  - .4 Another standard, as approved by the Director.
- 5.3 Options to comply under an exception, if approved, may include one of the following:
- .1 Compliance with LEED prerequisites and credits highlighted in Section 4.1, as applicable;
- .2 Compliance in certain categories with high levels of performance above Philadelphia Building Code minimums under another third-party rating program, such as those listed in 5.2, as approved by the Director.
- Alternative standards and exceptions for a project shall be considered among an advisory group which shall include, but not be limited to, representatives of the Department, OOS, Finance, Law, the Department of Public Property, and City Planning. The advisory group will assemble on a project-by-project basis.
- 5.5 Upon receipt of a complete submission request for an alternative standard or exception, as defined in Section 6.4, the submission will be evaluated by the Director and the advisory group within 60 days. The City contractor and the Department shall receive a notice stating whether the Director endorses or rejects alternative standards or exceptions within that time. If

no notice is given by the Director within the 60-day period, alternative standards or exceptions proposed by a contractor and the Department shall be deemed endorsed.

#### 6. Submission Requirements

6.1 A submission by the City contractor and the Department to OOS for formal consideration of alternative standards or exceptions shall state the specific minimum program requirements, prerequisites, and credits under the LEED Rating System for New Construction and Major Renovations or other City priorities with which the Department's project is inconsistent or in conflict.

Each submission shall directly reference LEED v4.1 requirements under which the project would comply to seek certification, if determined to be eligible and required under § 17-111.

- 6.2 An electronic copy of a submission shall be sent to the Director, and shall include:
  - .1 A cover letter addressed to the Director;
- .2 A brief narrative of the project, including project ownership, project purpose, gross floor area affected by the project, project costs, project funding amounts and sources, and project timing or phasing;
  - .3 A copy of the initial RFP, if applicable;
- .4 Site or floor plans sufficient in detail to describe the location and scope of work involved in the New Construction or Major Renovation;
- .5 Documentation and justification for potential exceptions or alternate standards proposed by the City contractor and the Department;
- .6 If alternative standards and exceptions were not requested in the initial stages of the project, documentation of the project milestones or stages when it became evident that the requirements for LEED Gold-level certification could not be met, and the reasons why alternative standards and exceptions were subsequently proposed; and
- .7 Any other information which the City contractor and the Department consider relevant.
- 6.3 After initial review of the submission, OOS may request additional information.
- 6.4. A submission shall be deemed complete when OOS has received all information set forth in this Section, including such additional information as requested pursuant to Section 6.3. OOS shall provide notice to the City contractor and the Department confirming when the submission is deemed complete.