

Implementing Order

Implementing Order No.: 8-8

Title: Sustainable Buildings Program

Ordered: 09/01/2022

Effective: 09/11/2022

I. AUTHORITY:

Section 5.02 of the Miami-Dade County Home Rule Amendment and Charter, and Chapter 9, Article III, Sections 9-71 thru 9-75 of the County Code.

II. SUPERSEDES:

Except for Ongoing Projects (as such term is defined herein), this Implementing Order (IO) supersedes previous IO 8-8, ordered December 04, 2007, and effective December 14, 2007. Ongoing Projects shall be required to comply with the provisions of the previous IO 8-8 ordered December 4, 2007, and effective December 14, 2007, until such time as they are completed. Any future renovations, additions and upgrades to Ongoing Projects shall, provided it would not result in a breach of valid contractual agreements existing as of the date of this IO, be required to comply with the provision of this IO.

III. POLICY:

Sections 9-71 through 9-75 of the Code of Miami-Dade County (Code) established a County policy to incorporate, wherever practical, Green Building Practices into the planning, design, construction, management, renovation, maintenance and decommissioning of Public Projects (as defined herein). Sections 9-71 through 9-75 of the Code, together with this IO, are referred to herein as the "Sustainable Buildings Program."

IV. PURPOSE AND SCOPE:

This IO is intended to provide consistent direction to County agencies and departments to ensure adherence to principles and processes that comply with the Sustainable Buildings Program, thereby promoting long term capital asset value, economic vitality, environmental quality, and social benefit through the integration of materials and methods in the design, construction, and operation of the County's built environment. The Sustainability Manager is responsible for oversight of and adherence to the Sustainable Buildings Program and is authorized to interpret and enforce the provisions of this IO.

This IO generally requires compliance with certain sustainability/resilience standards as outlined more specifically herein, including LEED or Envision or an acceptable substitute standard. Projects are only required to pursue one standard.

This IO applies countywide, applies to Public Projects (as further defined herein), and shall govern all phases of capital construction projects regardless how they are classified (new construction, repair, and maintenance) including, but not limited to, planning, budgeting, design, construction, replacement, and Operations and Maintenance (O&M). This IO applies to projects implemented through contracts or solicitations such as Professional Services Agreements and solicitations for architecture or engineering services, design-criteria packages developed for design-build or P3 projects, design-build contracts and solicitations, construction contracts and solicitations including through the County's

Miscellaneous Construction Contracts program, Equitable Distribution Pool contracts, P3 projects, redesign contracts and solicitations, lease agreements that allow construction on County-owned land or Buildings, lease agreements wherein the County is constructing on non-County owned land or Buildings, grant agreements for County-funded Buildings or Infrastructure, Infrastructure projects, and certain replacement and repair projects.

Exemptions:

Projects that do not fall within the definition of Public Projects, as provided in this IO.

Public Projects covered by section 2-8.2.10 of the Code.

Affordable housing projects receiving federal or state tax credits or other federal or state funding that are required, as a condition of such funding or tax credit, to achieve certification through one of the following Green Building Certification programs: i) Leadership in Energy and Environmental Design (LEED); ii) Florida Green Building Coalition (FGBC); iii) Enterprise Green Communities (ECG); or iv) ICC 700 National Green Building Standard (NGBS).

County projects that are funded by federal grants, only to the extent that the requirements of the federal grant would conflict with or preclude compliance with a requirement or requirements of this IO.

Any Dwelling that is a one family or single family, or one-family residence as defined by chapter 33 of the Code.

Any Dwelling that is a duplex or two family, or two-family residence as defined by chapter 33 of the Code.

V. GENERAL TERMS, AS USED IN THIS ORDER, SHALL MEAN:

- **Benchmark:** to input and submit the total energy and water consumed and other descriptive information for a property for the previous calendar year as required by the Benchmarking tool.
- **Benchmarking Tool:** the U.S. Environmental Protection Agency's ENERGY STAR Portfolio Manager (ESPM), or any additional or alternative tool approved by the Sustainability Manager, used to track and assess the energy and water use of certain properties relative to similar properties.
- **Building:** Any structure governed by LEED, as opposed to Envision. In general, Buildings are intended to house or support a use or occupancy. Structures governed by Envision would fall under the definition herein for Infrastructure, and structures must fall under either the definition for Building or the definition for Infrastructure. All residential developments are considered Buildings.
- **Cool Roof:** a roof made of highly reflective and emissive materials that remain significantly cooler than traditional materials during peak summer weather, and which uses roofing material that has solar reflectance and thermal emittance properties that are verifiably rated by the Cool Roof Rating Council (CRRC).

- **ECAP** (Energy Cost Avoidance Program): a comprehensive utility bill accounting and energy management software used by the County to process and analyze electricity and water bills.
- **Envision**: a third-party verifiable sustainability rating system and planning guide for introducing sustainability considerations into Infrastructure projects, managed by the Institute for Sustainable Infrastructure.
- **Florida Green Building Coalition (FGBC)**: a Florida nonprofit that developed and now administers a statewide green building program with third-party verifiable individual standards and certification for homes, commercial buildings, and land developments.
- **Green Business Certification Inc. (GBCI)**: administers professional accreditations and project certifications for the Leadership in Energy and Environmental Design (LEED), EDGE, GRESB, Parksmart, Performance Excellence in Energy Renewal (PEER), Sustainable Sites Initiative (SITES), TRUE, and WELL green rating systems.
- **Green Building Practices**: as defined in section 9-73 of the Code.
- **Infrastructure**: a capital improvement governed by Envision, as opposed to LEED, including, but not limited to: roads and expressways; bridges and dams; water, sewer, wastewater, stormwater, canal, or other surface water management systems; railways and subways including mass transit lines; boat or ferry docks; vehicle parking surface lots; equipment yards; fuel dispensing facilities and pipelines; outdoor recreational facilities; and telecommunications systems.
- **LEED**: Leadership in Energy and Environmental Design (LEED) is an internationally utilized green building rating system for the design, construction, and operation of high-performance green Buildings. LEED was developed and is maintained by the U.S. Green Building Council (USGBC). Third party verification services for LEED certification and credentialing are provided online through Green Business Certification Inc. (GBCI).
- **Maximum Measures**: are best practices that can be incorporated into all project phases to provide the maximum long-term life-cycle sustainability and resiliency benefits for a project that cannot meet the LEED, Envision, or other third-party verified sustainability standard certification pre-requisites for a Building or Infrastructure project. Maximum Measures are determined through an effort led by the Office of Resilience with departmental staff during project planning and design phases.
- **New Construction**: the design and construction of any new Building, or an addition to an existing Building.
- **Ongoing Projects**: those Public Projects which, on the Effective Date of this IO, were already:
 1. the subject of a publicly-issued and advertised solicitation for architectural and design services, construction services, design-criteria package services, P3 contract services, or O&M services; or

2. the subject of a Board-approved lease agreement, development agreement, management agreement, operating agreement, or license/concession/use agreement where a private party is to develop on County-owned land or a County-owned Building or Infrastructure; or
 3. the subject of a Board-approved lease agreement, development agreement, management agreement, operating agreement or license/concession/use agreement where the County is to develop on non-County owned land, or a non-County-owned Building or Infrastructure and the applicability of this updated IO would conflict with the provisions contained therein.
- **Operations and Maintenance (O&M):** any work done to a Building or Infrastructure that assures it will perform the functions for which it was designed and constructed.
 - **Public Projects:** Infrastructure or Building projects where: (1) the County provides funding, financing or any financial support for a value equal or more than one million dollars (\$1,000,000) for the development thereof, either directly through a contract with the architect, construction contractor, engineer, developer or any similarly situated entity, or through a grant agreement; or (2) the County enters into any agreement where a private party is to develop on County-owned land or a County-owned Building and the cost of construction is equal or greater than two million dollars (\$2,000,000), even if the County is not providing any financial support for the development thereof or where the County is receiving only nominal consideration for said contractual rights; or (3) the County is the user, tenant, operator or otherwise has the contractual rights to develop on non-County owned land or a non-County owned Building pursuant to any agreement, the total construction costs are equal or greater than five million dollars (\$5,000,000); or (4) the County owns or will own the Infrastructure or Building project, regardless of cost; or (5) a P3 project, regardless of cost.
 - **Public-Private Partnership (P3):** as defined in section 2-8.2.6 of the Code.
 - **Sustainable Buildings Program:** Sections 9-71 through 9-75 of the Code, together with this IO.
 - **Sustainability Manager:** as defined in section 9-74 of the Code.

VI. STANDARDS

The primary mechanisms for determining compliance with the Sustainable Buildings Program shall be the current LEED rating system (for Buildings) and the Envision rating system (for Infrastructure), except as noted elsewhere in this IO. If an alternative rating system is requested to demonstrate compliance, substitutions of standard, compliance interpretations, and exemptions may be sought, as detailed herein.

Building-related project compliance shall require the completion of a formal third-party verified certification process with the appropriate standard rating system. However, if an alternative project compliance pathway is preferred, then compliance interpretations, substitutions of standard, and exemptions may be sought, as detailed herein.

A. Standards Detail by Project Type:

1. Standard for a Building that is a Public Project

- a. For all New Construction Public Projects, the minimum rating shall be LEED Silver in the version most recently adopted by USGBC for all project phases, and the Section VII Prescriptive Path elements shall be required. Except as provided below in Section VI(A)(3).
- b. For Public Projects that are not New Construction but meet LEED prerequisites, the minimum rating shall be LEED Silver in the version most recently adopted by USGBC for all project phases, and the Section VII Prescriptive Path elements shall be required. Except as provided below in Section VI(A)(3).
- c. For Public Projects that are not New Construction and do not meet LEED prerequisites as determined by the Sustainability Manager, the Public Project shall adhere to Maximum Measures, and the Section VII Prescriptive Path elements shall be required. Except as provided below in Section VI(A)(3).

2. Standard for Infrastructure that is a Public Project

- a. For Infrastructure Public Projects that are subject to this IO with project costs greater than two million dollars (\$2,000,000), the minimum rating shall be Envision Silver, per the version most recently adopted by the Institute for Sustainable Infrastructure, and the required Section VII Prescriptive Path elements.

Formal independent third-party Envision verification (certification) is only required as follows:

- i. County departments shall select certain Infrastructure Public Projects for formal Envision third party verification and awards. The total budgeted costs of the projects selected by each department (during each 5-year cycle) must be at least 20% of the dollar value reflected in the Department's five-year financial outlook in the County's Adopted Budget and Multi-Year Capital Plan.
 - ii. The first 5-year cycle shall begin FY 2022/2023 and every 5 years thereafter (e.g., second cycle will start FY 2027/2028 and so on).
 - iii. If a department has only one Infrastructure project with total project costs greater than or equal to two million dollars (\$2,000,000) in the 5-year cycle, a formal third-party Envision verification and award shall be required for this project.
 - iv. If departments do not choose which projects are to pursue third-party Envision verification and awards, the Sustainability Manager shall randomly select the departmental Infrastructure projects for formal Envision verification and awards.
- b. For Infrastructure Public Projects with project costs less than two million dollars (\$2,000,000), the following requirements shall be met:
 - i. Maximum Measures
 - ii. Section VII Prescriptive Path elements.

3. Standards for Agreements, such as leases, involving Buildings and Infrastructure

This category is for Public Projects where Miami-Dade County is the lessor (owner) or lessee (tenant) of a Building, land, or Infrastructure. For Public Projects involving agreements, including but not limited to where the County is leasing the property to a third party or where the County is the lessee, the following requirements shall be included in any lease or other applicable agreement with the County: the minimum rating shall be LEED Silver (for Buildings) or Envision Silver (for Infrastructure), and the Section VII Prescriptive Path shall be required, except as noted elsewhere in this IO.

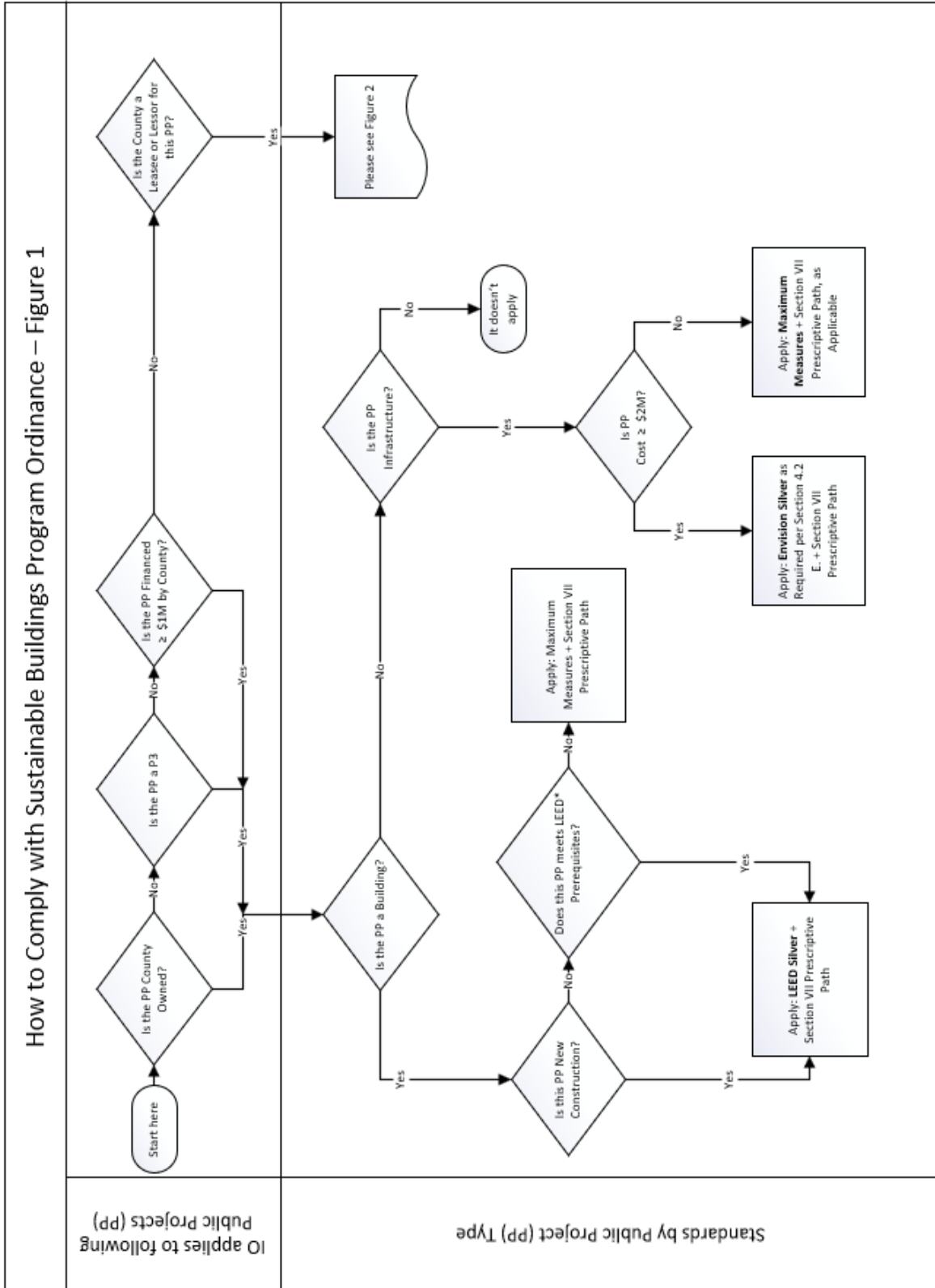
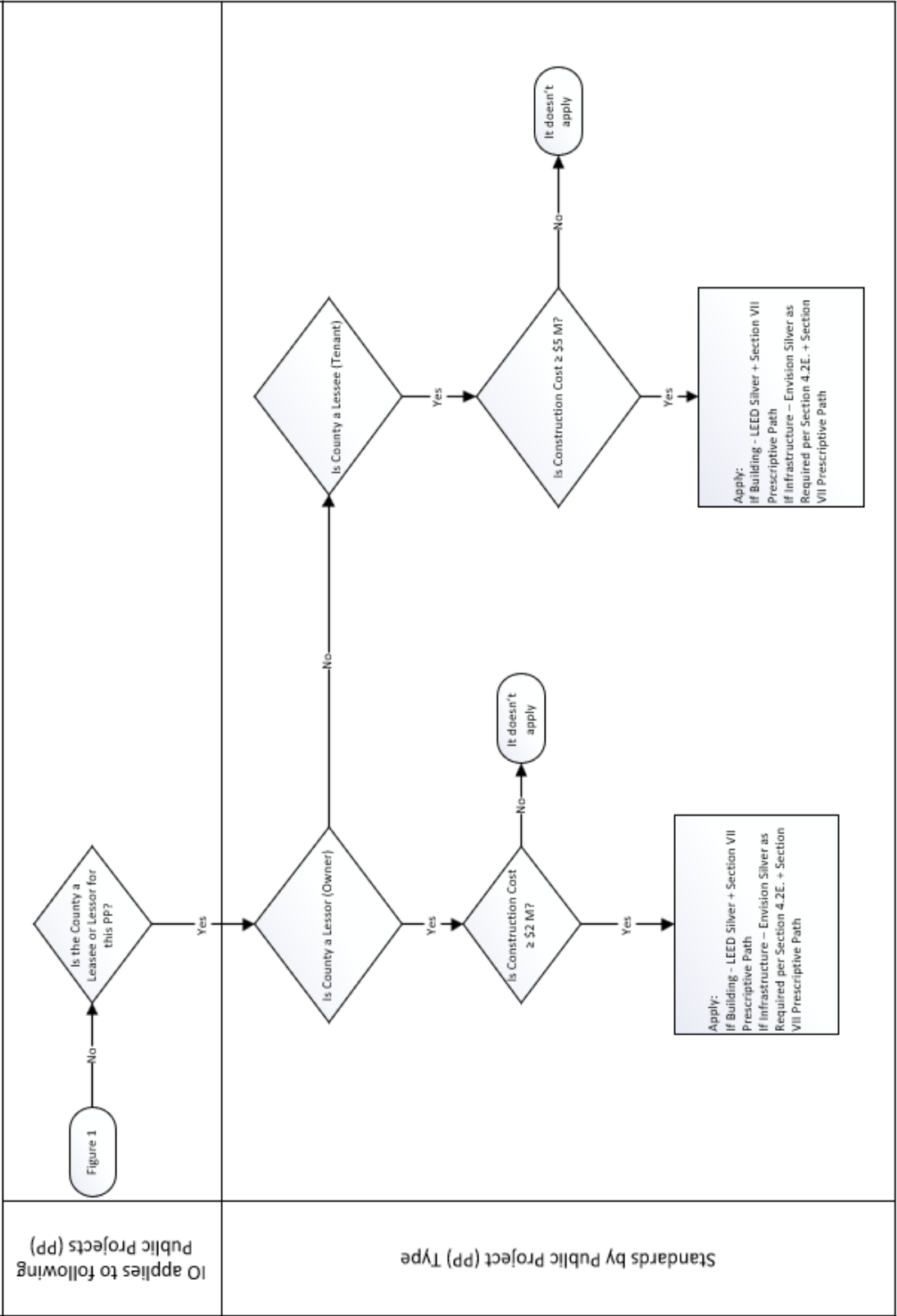


Figure 1. Standard Details for Sustainable Buildings Program Ordinance

How to Comply with Sustainable Buildings Program Ordinance – Figure 2



*If Public Project (PP) is using another third-party verifiable standard, determine if PP meets pre-requisites for the approved substitute standard

Figure 2. Standard Details for Sustainable Buildings Program Ordinance – Lease Agreements

B. Substitution of Standard

For a particular Public Project, the Sustainability Manager may, upon request, approve a substitution of the required standard with another third-party verifiable standard. To request a substitution of standard, departments shall complete and submit the “Initial Project Questionnaire” and a “Substitution of Standard Request Form” to the Sustainability Manager, along with all additional requested information and all necessary facts, allowing a minimum of four weeks for review and determination.

If a substitution of standard is approved, the Public Project shall be deemed to be exempt from following the usual required standard provided that the Public Project instead obtains certification following the agreed upon substitute standard. Some examples of acceptable third party verified standards are Florida Green Building Coalition, Green Globes, and the Living Building Challenge, but there may be other acceptable third-party verifiable standards. If a substitution of standard is approved, the Public Project shall obtain the equivalent certification level as would be required in LEED or Envision for the specified project category.

Any approval of a substitution of standard shall be for the express purpose of ensuring the use of the most appropriate or relevant rating standard, and shall not, in any way, be used to avoid obtaining certification or implementing Green Building Practices to the maximum extent possible. The substitution of standard process may also require the determination of Maximum Measures and compliance therewith. Please note that a substitution of standard is made on a case-by-case basis. Even if a substitution of standard is approved, all other requirements of the Sustainable Buildings Program, including submittal of checklists and project status updates, shall continue to apply.

C. Waiver:

Exemptions from the requirements of this IO may be granted by the Miami-Dade Board of County Commissioners by a two-thirds vote of members present.

VII. PRESCRIPTIVE PATH: REQUIRED ELEMENTS

The Prescriptive Path elements described below are required for all Public Projects that fall under this IO, unless specifically provided otherwise in this Section. By complying with these Prescriptive Path elements, Public Projects will earn certain LEED or Envision credits that would otherwise be optional ways to earn LEED or Envision certification. This Section is referred to as the Prescriptive Path because the elements listed below and the associated LEED or Envision credits, if applicable, are required as part of the Sustainable Buildings Program. For convenience, this Section gives examples of LEED credits that may be earned through each Prescriptive Path element. If a Public Project has been approved for a substitution of standards, it must still include substantially similar requirements to satisfy the Prescriptive Path elements and their respective purposes.

A. Cool Roof

A Cool Roof is required for all Public Projects covered by this IO, to the extent that the Public Project includes any work related to a roof of a Building or roof of Infrastructure. With respect to commercial low slope roofs, verified Cool Roof Rating Council ratings of (1) a minimum three-year aged solar reflectance of 0.63 and a minimum 3-year aged thermal emittance of 0.75 or (2) a minimum three-year aged solar reflective index of 75 shall be required. For Projects that do not involve commercial low slope roofs, an equivalent standard shall be required, and the Office of Resilience should be

contacted for guidance regarding equivalent ratings. Examples of specific LEED credits that may be earned include the “Heat Island Reduction” credit under both LEED for New Construction and Major Renovations (v4.1) as well as LEED for Existing Buildings: Operations and Maintenance (v4.1).

B. Benchmarking Energy and Water Use

Public Projects must continuously track energy and water consumption using the County’s existing ECAP software platform and a Benchmarking Tool. These systems help the County strategically manage electricity and water usage and bills, obtain energy and water use intensity values and ENERGY STAR ratings for certain County facilities, and other functions. For Public Projects that fall under this IO but are not owned or operated by Miami-Dade County, aggregated monthly energy and water usage for each Building shall be recorded and entered, on at least an annual basis, into the Benchmarking tool, and this data shall be shared with the Sustainability Manager on an annual basis. The required monthly energy and water usage data is limited to whole-building data, and energy and water usage for individual units is not required.

Examples of specific LEED credits that may be earned include the prerequisite credits of “Building-Level Energy Metering” and “Building-Level Water Metering” under LEED New Construction and Major Renovations (v4.1).

C. Electric Vehicle (EV) Charging Stations

Public Projects that involve parking or parking facilities must install electric vehicle supply equipment in at least 2% of all parking spaces used by the project. Examples of specific LEED credits that may be earned include the “Electric Vehicles” credit for LEED New Construction and Major Renovations (v4.1) and the “Alternative Fuel Vehicles” credit under LEED for Communities: Plan & Design (v.4.1).

D. Life Cycle Cost Analysis

Life Cycle Cost Analysis of the Public Project’s structure, enclosure and equipment is required. Life Cycle Cost Analysis is an analysis that determines the most cost-effective option among different competing alternatives by including all direct and externalized costs associated with processes, materials, and goods (more than initial costs are considered) when estimating the actual total cost of an investment. An examples of a specific LEED credit that may be earned is the “Building Life-Cycle Impact Reduction” credit under LEED for New Construction and Major Renovations (v4.1).

E. Solar Feasibility Checklist and Solar Water Heating Systems

For a Public Project that includes either (i) New Construction that includes a roof or (ii) any work related to a roof (including but not limited to roof replacement, re-roofing, roof repairs, or roof O&M) where the cost is equal to or exceeds 50% of the roof’s replacement cost, the following requirements apply:

1. A solar feasibility checklist is required to be submitted to the Sustainability Manager prior to 30% design completion as an initial screening for possible solar photovoltaic or solar thermal installation, and

2. If a Building or Infrastructure uses or will use more than 1,000 gallons of hot water per day, a solar water heating system that provides at least 65 percent of hot water needs shall be required.

An example of a specific LEED credit that may be earned is the “Renewable Energy” credit under both LEED for New Construction and Major Renovations (v4.1) and LEED for Commercial Interiors (v.4.1)

VIII. ADDITIONAL COUNTY REQUIREMENTS AND BEST PRACTICES

For each Public Project, departments shall complete the “Additional County Policy Requirements and Best Practice Recommendations” checklist and submit it to the Sustainability Manger. This checklist is available from the Sustainability Manager. The completed checklist is due upon completion of a Public Project’s planning stage or before the 30% design phase is completed, at the latest.

IX. ADDITIONAL DEPARTMENT RESPONSIBILITIES:

A. All County Departments shall:

1. Incorporate a reference to the Sustainable Buildings Program, and the required compliance therewith, into all relevant planning, budgeting, design, construction, renovation, management, and maintenance contracts and agreements for Public Projects covered by this IO. Such references shall also be included in all relevant procurement documents.
2. Include sufficient associated costs of compliance with the Sustainable Buildings Program as part of budgetary requests and projections.
3. Complete the “Office of Resilience – Initial Project Questionnaire for Buildings and Infrastructure” and submit it to the Sustainability Manager. Departments shall also register all Public Projects covered by this IO with LEED or Envision, or as directed by the Sustainability Manager.
4. Obtain and use Facility Identification number from the Internal Services Department (ISD), assigned to all County facilities per the Miami-Dade County’s Procedures Manual. This Facility Identification number shall be used, in addition to the national unique building identifier (UBID) numbers generated with U. S. Department of Energy online tools, once available.
5. Identify and review utility and governmental efficiency programs, rebates, and incentives that a Public Project is eligible for and those that it will apply for.
6. Submit a final report for each Public Project covered by this IO after project completion to the Sustainability Manger, including the final LEED or Envision checklist (or comparable tool), that details the Green Building Practices and/or, as applicable, Maximum Measures applied to the project.
7. Departments shall send list of Public Projects selected for formal third-party Envision verification to Sustainability Manager by January 1st of the applicable 5-year cycle, as detailed in section VI-2-a of this IO.
8. Undertake proactive measures to ensure that all relevant staff are knowledgeable about Green Building Practices and the benefits of green building through training and accreditation, as appropriate, and inclusion of green building goals in departmental business plans and capital and operating budgets.
9. To demonstrate compliance and track performance, all departments shall submit biannual status reports to the Sustainability Manger, in the form required by the Sustainability Manager, regarding the status and/or accomplishments for each of

its Public Projects covered by this IO, including status updates for performance contracting projects. Reports for Building-related projects shall also include a completed ENERGY STAR Portfolio Manager Data Collection Worksheet, specifying the Building's primary use type and other information that is required to determine the Building's Water and Energy Use Intensity values and ENERGY STAR Score, as applicable.

The biannual reports should include existing Buildings' ECAP energy and water use reports comparing year-to-year energy and water usage. If energy (kWh) or water (gallons) usage for a County facility increases more than 10 percent over the same period compared to the previous year, an explanation should also be included with the biannual report. The biannual reporting periods with due dates are as follows:

- Reporting Period 1 - October 1st through March 30th with report due date of May 1st.
- Reporting Period 2 - April 1st through September 30th with report due date of November 1st. The Period 2 report shall also include a copy of the Period 1 report.

If no changes have occurred, a report is due stating no changes have occurred since the last report.

10. Work with the Sustainability Manager and departmental staff to update or craft new budgeting procedures as needed (such as ensuring that departments have completed their Miami-Dade Initial Sustainable Buildings Program Project Questionnaire and Checklist), to facilitate implementation of this IO.
11. Collect and disseminate relevant information to identify sustainable or resilient capital projects in the County's budget process to assist OOR and other relevant departments.
12. Work with Sustainability Manager to help determine whether a Public Project has been improperly segmented to avoid application of this IO and to help prevent such occurrences.

B. Office of Resilience and the Sustainability Manager shall

1. Organize periodic informational sessions for departments to facilitate compliance with the Sustainable Buildings Program and provide annual training related to sustainable Buildings and Infrastructure for County staff and other relevant stakeholders.
2. Provide compliance interpretations as needed.
3. Track projects related to this IO and prepare an enterprise-wide annual report documenting the County's performance under the County's Sustainable Building Program. This report shall be prepared with information received from all departments and shall be sent to the Mayor and Board of County Commissioners and entered into the County's Scorecard, as appropriate.

XI. COMPLIANCE REQUIREMENTS

Lack of compliance will be noted in reports to the Board of County Commissioners and Mayor's office.

Please note that lack of funding, lack of knowledge about following this IO, tight deadlines, being unaware of Sustainable Buildings Program requirements, forgetting to put the requirements in bid documents, being unable to go back and change bid documents without incurring significant change order costs, contractors being unaware of the

requirements, belief that the policies do not apply due to the wording of the policies, or any other similar justifications are not accepted in lieu of compliance with Sustainable Buildings Program. Departments shall not break up a Public Project to avoid application of this IO. The unique characteristics of a project shall not, in any way, exempt it from applying sustainable Green Building Practices to the maximum extent possible.

This Implementing Order is hereby submitted to the Board of County Commissioners of Miami-Dade County, Florida.

Approved by County Attorney as
To form and legal sufficiency