Hines has developed several prominent buildings that have achieved LEED Gold certification or higher, demonstrating both their commitment to sustainable development and demonstrates that a Platinum LEED standards should be required for both the stadium and that all new development within the Gas Plant should be held to a standard similar to the existing <u>Sustainability & Resiliency of City Facilities Ordinance No. 359-H</u>, which holds the City to the highest sustainability and building efficiency standards.

Here are some notable examples of sustainably designed stadiums and/or arenas that have achieved at least a LEED Gold certification and incorporate on-site solar energy systems:

- Mercedes-Benz Stadium, Atlanta, Georgia: Designed by <u>HOK, a firm known</u> for its affiliation with Populous, this stadium achieved LEED Platinum certification. It includes an extensive solar panel system with over 4,000 panels that help generate up to 1.6 MW of power. This is enough to power over 10 Atlanta Falcons home games, and any excess power is fed back into the grid. The solar energy generated at Mercedes-Benz Stadium significantly reduces its carbon footprint and supports its sustainability goals (<u>askHRgreen.org</u>).
- Golden 1 Center, Sacramento, California: Home to the Sacramento Kings, Golden 1 Center is the first 100% solar-powered stadium/ and the first LEED Platinum certified indoor stadium/arena. The facility features solar panels both on-site and off-site, which contribute to its net zero energy status. Additionally, the stadium boasts various sustainable design features such as smart lighting, ultra-low flow plumbing, and the use of locally sourced materials (see here for further reading)
- 3. Levi's Stadium, Santa Clara, California: Home to the San Francisco 49ers, Levi's Stadium is the first professional football stadium in the United States to achieve LEED Gold certification for both new construction and operations and maintenance. The stadium features the NRG Solar Terrace, a green roof that includes 1,186 solar panels generating 375 kW of power. This energy, combined with the output from solar bridges connecting the parking area to the stadium, provides enough renewable energy to offset the power used during 49ers home games (Levi's Stadium) (Levi's Stadium) (Greenroofs.com).
- 4. Chase Center, San Francisco, California: This arena, home to the Golden State Warriors, achieved LEED Gold certification and features a variety of sustainable elements. The design includes a significant solar panel installation that contributes to the arena's energy needs—enough to power around 600 homes for an hour. The stadium also has several other sustainable features, such as a green roof that helps regulate the stadium's temperature and reduces the need for air conditioning. The Chase Center's commitment to sustainability is

reflected in its use of renewable energy sources and its environmentally conscious design (Lumiflon USA).

The following stadiums were designed by Populous and help to showcase the architectural firm's potential to ensure high-performing sustainability standards that are brought from concept to completion. That said, please note that only one of their stadium, the Climate Pledge Arena, has been LEED certified at a Silver level the other venues are international:

- Climate Pledge Arena, Seattle, Washington: Populous was the project architect. This arena, home to the Seattle Kraken, achieved LEED Silver certification but is notable for its ambitious sustainability goals, including being the first arena to receive the International Living Future Institute's Zero Carbon Certification. The facility is powered entirely by renewable energy, with on-site solar panels generating 440 MWh annually. It also features extensive water conservation measures and public transportation incentives (see here for further reading).
- 2. London Stadium, London, UK (2012): Originally designed for the 2012 Olympic Games, London Stadium exemplifies sustainable architecture through its flexible and environmentally conscious design. Key sustainability features include the use of recycled materials such as an unused gas pipe from a North Sea oil project and 40% recycled aggregate in the concrete. The stadium also utilized energy-efficient construction methods, achieving the lowest carbon footprint for an Olympic Stadium. Post-Games, the stadium was transformed to accommodate various sports and events, reducing its seating capacity from 80,000 to 25,000 to better serve community and elite athletic events (ArchDaily) (Populous) (Paris 2024 Olympics).
 - a. While the London Stadium is highly regarded for its sustainable design and use of recycled materials, it has not received LEED certification (<u>ArchDaily</u>) (<u>Populous</u>) (<u>Paris 2024 Olympics</u>).
- 3. Accor Stadium (formerly Stadium Australia), Sydney, Australia (2000): Designed by Populous for the 2000 Summer Olympics, Accor Stadium has set a benchmark in sustainable sports venue design. The stadium incorporates passive design features such as natural cooling for the concourses and rainwater harvesting from the roof for pitch irrigation. These sustainable elements have contributed to its recognition as one of the most environmentally friendly stadiums globally. The design of Accor Stadium continues to influence sustainable architecture in sports venues (Populous).
 - Although the Accor Stadium is noted for its sustainable features such as natural cooling and rainwater harvesting, it has not been awarded LEED certification (<u>Populous</u>).
- 4. **Stade de la Meinau, Strasbourg, France (ongoing–expected completion date of 2025)**: The renovation of Stade de la Meinau, led by Populous, emphasizes sustainability through innovative design features. The project includes the reuse of decommissioned Airbus A340 fuselages as sunshades and the installation of nearly 1,000 square meters of photovoltaic panels on the South Stand roof. Additionally, the stadium will implement rainwater recycling facilities and use biomass for renewable

energy. These efforts aim to significantly reduce the stadium's carbon footprint and protect local ecology (<u>Stadia Magazine</u>) (<u>The Stadium Business</u>).

a. The renovation of Stade de la Meinau includes various sustainable design features such as the reuse of decommissioned aircraft fuselages and the installation of photovoltaic panels. However, it has not achieved LEED certification (<u>Stadia Magazine</u>) (<u>The Stadium Business</u>).

Overall, these stadiums exemplify the integration of sustainable practices and renewable energy solutions in modern sports facilities, highlighting the efforts by Hines and Populous to design environmentally responsible and energy-efficient stadiums, standards that should be required in the finalized terms of the stadium deal to align with existing City sustainability priorities.

Select examples of Hines commercial developments that are of LEED Gold certification or higher:

- Williams Tower, Houston, Texas (2009): This iconic 1.5 million-square-foot, 64-story office and Hines corporate headquarter building, originally developed in 1982, achieved LEED Gold certification under the LEED for Existing Buildings Rating System. The building features energy-efficient retrofits, low-flow fixtures, and a comprehensive recycling program, making it 34% more energy-efficient than the average office building (<u>Hines</u>).
- CityCenterDC, Washington, D.C. (2014): This expansive 2.5 million-square-foot mixed-use development occupies a 10-acre site and includes office, retail, residential, and hotel spaces. The first phase of the project, completed in early 2014, earned LEED Gold certification for its office buildings and LEED Silver for other components. The development emphasizes sustainable design, energy efficiency, and green spaces (<u>Hines</u>).
- 3. Eighth Avenue Place, Calgary, Alberta (2009): This 49-story, 1.1 million-square-foot office tower received LEED Platinum pre-certification, making it one of Canada's most sustainably designed high-rises. The building integrates advanced energy management systems and sustainable materials to reduce its environmental footprint significantly (<u>Hines</u>).
- 4. Chandler Viridian, Chandler, Arizona (2019): This six-story, 252,418-square-foot office building, the tallest multi-tenant office structure in Chandler, received LEED Gold certification under the LEED Core and Shell rating system. The building incorporates numerous sustainable features such as low-flow water fixtures, LED lighting, and native, drought-tolerant landscaping. It is part of a larger 25-acre mixed-use project that includes a hotel, luxury apartments, retail spaces, and a public plaza with high-speed internet and Wi-Fi (<u>Hines</u>).

5. 321 North Clark, Chicago, Illinois (2011): This 896,502-square-foot, 35-story office building located along the Chicago River earned LEED Gold certification under the LEED for Existing Buildings rating system. Sustainable enhancements at this property include low-flow water fixtures, energy-efficient LED lighting, green cleaning practices, and a comprehensive recycling program. The building is 32% more energy-efficient than the average U.S. office building, contributing to significant greenhouse gas reductions (<u>Hines</u>).

These examples highlight Hines' leadership in integrating sustainable practices into large-scale, high-profile developments. Rather than relying on the "good faith" of the developer, Hines should be required to build to these standards both for the Rays stadium as well as commercial and residential developments within the Historic Gas Plant redevelopment.

Both Hines and Populous have done it before and there is <u>no reason</u> that they shouldn't be required to do it as part of the new Rays Stadium deal and Historic Gas Plant Redevelopment.

Within the development agreements, please refer to following sections for where this policy is relevant:

Stadium Development and Funding Agreement

Article 7 Scope of Development of Project Agreements Section 3 Design Documents and Design Standards Subsection c Project Improvements Specifications and Design Standards Part v

Item B – New language for consideration - *StadCo will use good faith, commercially reasonable efforts to achieve LEED Platinum certification for the Stadium as the Target Development Plan and LEED Gold as the Minimum Development Requirement.* The Rays/Hines team is working with world class designers and developers who have designed and built to these standards previously. Additionally, while upfront development costs may be higher, long term operating expenses will be lower resulting in cost savings to the Rays over the lifetime of the agreement/stadium.

Item D – New language for consideration - *StadCo will develop plans and install sufficient photovoltaic installations to generate a minimum of 100% of the expected annual energy usage of the Stadium and related facilities.* The Stadium and related facilities will be operating in the Sunshine City in the Sunshine State 100% of the time. The Stadium will only be operated a percentage of that time. Generating enough power on site to exceed the power used to operate the Stadium is a low threshold and will result in lower operating costs to the Rays while also assisting the City in achieving its energy goals as outlined in the ISAP.

HGP Redevelopment Agreement

Article 6 Community Benefits Agreement Section 1 Community Benefit Obligations Subsection 6 Sustainability

Item 5 – New language for consideration –

- 1. All new construction will be LEED Gold as the Target Development Plan and LEED Silver as the Minimum Required Development.
- 2. All new construction will be "solar-ready" and have Level 2 EV charger capability.
- 3. Multi-unit housing should meet the EV charging expectations laid out by the St. Petersburg City Council in their proposed ordinance developed in 2023.
- 4. All construction will comply with the <u>Sustainability & Resiliency of City Facilities</u> <u>Ordinance No. 359-H</u>.
- 5. All rental housing leases will include a Total Cost of Rental agreement encompassing all rental and utility costs.