

San Francisco Department of the Environment
Policy Sub-Committee Meeting
February 14, 2011

Subject: Informational Presentation on the Draft Sustainability Plan for the Treasure Island / Yerba Buena Island Redevelopment Project (Discussion Item)

Contact: Michael Tymoff, Deputy Director of Redevelopment, Office of Economic and Workforce Development / Treasure Island Development Authority

Executive Summary

The Sustainability Plan, as updated from the 2006 Sustainability Plan as attached to the Development Plan and Term Sheet, is a policy document that would be adopted by TIDA at the time of all final project approvals. Unlike other Project Documents previously presented, the Sustainability Plan will not be attached to the DDA. Rather, a comprehensive list of TICD's obligations pursuant to the Sustainability Plan, including compliance with the City's Green Building Ordinance (GBO), will be attached to the DDA..

The overarching principle guiding TICD's sustainability obligations is a good faith effort to implement the sustainability principles outlined in the Land Use Plan and Development Program while maintaining the ability to achieve the return on investment outlined in the DDA as well as the ability to finance the level of public benefits outlined in the development program. The sustainability obligations are divided into six subsections: Land Use, Transportation, Energy and Water, Building Design and Construction, Solid Waste and Community Benefits, and reference obligations that are made and further detailed in the various Project Documents and exhibits to the DDA between TIDA and TICD. A draft of TICD's Sustainability Obligations is attached to this staff summary for reference.

The Sustainability Plan draws from related project documents that will be attached to the DDA, as well as establishes other program areas where the Project has the opportunity to advance its leadership position in the realm of sustainable development. Those are briefly discussed below, after the short summary of the evolution of the plan from 2006 to today.

In 2006, working closely with the San Francisco Department of the Environment (SFE), TIDA and TICD developed an innovative and comprehensive Sustainability Plan for Treasure Island / Yerba Buena Island, a first of its kind in the City for a large development project. The 2006 Sustainability Plan included principles, goals, targets and strategies for each of the key elements of the project including site design and land use, landscape and biodiversity, transportation, energy, water and wastewater, materials, solid waste, health, safety and security, community and society and economic development. The 2006 Sustainability Plan comprehensively integrated elements reflected in other

components of the 2006 Development Plan and Term Sheet (e.g., the Infrastructure, Transportation and Housing Plans). At the time, the Sustainability Plan included the direct obligations of TICD and third party developers, but also set out high-level, long-term goals for the Project that will require key partnerships with other private parties, federal, state and local governmental agencies and other stakeholders and partners. In addition, the plan recognized the need to establish tools for measuring, monitoring and reporting the project's progress against these goals and proposed a structure for doing so.

Since 2006, staff and TICD have advanced project planning in all areas of the project's commitments to achieving high levels of sustainability. These efforts have included working with the SFPUC on a system wide Water Supply Assessment, conceptual designs for stormwater and wastewater management, updating analysis of LEED-ND compliance, and working with the Clinton Climate Initiative to develop a baseline inventory of greenhouse gas emissions and a roadmap to identify steps to reduce those emissions to less than zero (net neutral) over the long term life of the project. The 2010 Sustainability Plan outlines the latest thinking with respect to triple-bottom line sustainable development, including updates to the 2006 Plan's objectives, strategies and targets across key focus areas, including the following:

- ***Site Design and Land Use.*** Perhaps the single most important means of facilitating the sustainability goals of the project was achieved through the land use plan itself. For example, the street grid has been adjusted to maximize exposure to sun on the streets and into the buildings, while at the same time minimizing the impacts of the often strong winds on the islands. In addition, by creating a dense, compact land use plan located in close walking proximity to a multi-modal transit node, residents, employees and visitors are encouraged to choose walking, bicycling and transit over the automobile. This compact development plan also enables the majority of the Islands to be set aside for parks and open space, including the restoration, preservation and enhancement of natural habitat on both Islands. The density of the land plan provides a critical mass of residents and appropriate mix of land uses to support the retail amenities and services necessary for the community to be reasonably self-sufficient, in terms of providing for residents' daily needs, goods and services.
- ***Transportation.*** The Project's transportation program that has been designed as an innovative and integral element of the overall development program necessary to achieve the overall high levels of environmental performance consistent with SB 375 and AB 32 goals. The program is centered around a compact transit-oriented land plan, and would provide robust, high frequency transit service to both sides of the Bay, as well as on-island suite of transit, bicycle and pedestrian facilities that promote a transit-oriented lifestyle, and minimize the impacts of private automobiles on the bridge. Additional transportation demand management programs include congestion pricing, ramp metering, mandatory transit passes for all residents, among others.

- *Community.* One of the fundamental principles of the Project is to develop a strong sense of community and provide a diversity of opportunities for recreation, arts, education and community engagement. This is achieved through the provision of community facilities, a diversity of housing types to attract a broad spectrum of household types and income levels, and by providing job and economic opportunities to residents, including formerly homeless individuals and families.
- *Climate Change and Resilience.* Consistent with the City's policy to achieve carbon neutrality over the long term, the Project has partnered with the Clinton Climate Foundation and US Green Building Council in their Climate Positive Development Program in order to demonstrate successful models of large scale development achieving carbon neutrality. The project has undertaken a baseline analysis of all GHG emissions and a roadmap to reduce those to below zero over the life of the project. Additionally, the Project will make geotechnical improvements and provide protection against future sea level rise, including project generated funding in order to implement an adaptive management strategy to mitigate against climate change.
- *Energy.* The commitment to have individual buildings meet high performance green building specifications will ensure that energy resources are conserved by the new development. Extensive renewable energy generation is expected to be provided primarily via solar resources, but could also potentially be generated in smaller amounts via harnessing wind resources, through the construction of small scale vertical axis wind turbines, either ground mounted or on buildings. All appropriate building rooftops will be designed to accept photovoltaic panels and advancing technologies will continue to be explored to maximize both renewable energy generation and resource conservation. Ultimately, the goal is for Treasure Island to generate more energy via on-island renewable sources than it consumes during peak periods. Achieving this goal will require partnerships with governmental agencies and private industry.
- *Water.* The development will minimize water consumption and treat waste and stormwater flows in an environmentally sustainable manner. The commitment to green building specifications and utilization of recycled water for landscape irrigation and toilet flushing are key elements of water conservation. An on-site wastewater treatment and recycled water treatment facility will use the most appropriate technology to treat all wastewater on the Islands. This facility will include a recycled water component to serve all appropriate irrigation and building uses with recycled water, thereby reducing the use of potable water.
- *Waste.* The Project will also support the City's goal of 100% diversion of waste from landfills by 2020, including strategies to minimize construction and demolition waste, implement source-separation programs and utilization of organic waste to both produce energy and to produce compost. Additionally, the

Project will explore partnerships and technical and financial feasibility of providing an automated waste collection system.

- ***Information & Communication Technology.*** Leadership in emerging information technologies will be another example of the Project's forward thinking approach to conservation of resources. Such systems would allow both utility providers and end users to monitor use and increase access to information regarding resource decisions. These include smart grid technologies, broad-band connectivity, open-source sharing of data, and public displays of information including travel demand, energy and water consumption, carbon footprint and transportation schedules to enable residents and visitors to make informed decisions in real-time.
- ***Economic Vitality.*** An overarching requirement of the Project is that it maintain financial feasibility while reducing costs and minimizing risks. This includes providing positive contribution's to the City's General Fund over the life of the project, as well as project generated revenues to support on-going operations and maintenance, while providing residents opportunities for affordable housing and new jobs. TIDA would also continue to explore partnerships in order to expand the pool of financial resources in order to bring additional renewable energy and energy efficiency programs to the Project. These mechanisms will continue to evolve throughout the Project, but because of the scale of the Project, there are built-in incentives to attract and capture such investments..
- ***Green Building and Neighborhood Design Standards.*** The Design for Development will require all new buildings to comply with the City's Green Building Ordinance, which stipulates either LEED-NC Gold certification or Green Points Rated certification depending on the size of the project. In addition, the U.S. Green Building Council (USGBC) recently unveiled a new rating and certification tool for master planned developments, referred to as LEED for Neighborhood Development, or LEED-ND. TICD has agreed that the overall master plan for Treasure Island will achieve a LEED-ND Gold rating, and TICD will use good faith efforts to work with TIDA and SFE to achieve a Platinum rating for the overall project, the highest level that may be obtained.

As a policy document, the 2010 Sustainability Plan also outlines potential partnerships, infrastructure systems and technologies and/or financial mechanisms that could be explored at different stages of project implementation and that would allow TIDA to expand its sustainability portfolio and increase environmental performance. These components would require partnerships with either public or private entities and would be delivered at no cost to the project or end users. In some instances, residents and businesses on the Islands would see cost savings and have the ability to modify their behavior based on real-time information. These could include an automated waste collection system, a district heating and cooling plant, a solar farm, green financing vehicles and smart grid technologies that could be adopted over time as financial feasibility and market acceptance grows.

ATTACHMENTS

- Attachment A: TICD Sustainability Obligations

Attachment A

TICD Environmental Sustainability Obligations

Overarching Commitment:

Commit to good faith effort to implement the sustainability principles embedded in the Land Use Plan and Development Program while also: (1) retaining the ability to achieve TICD's targeted return on investment as established in the DDA, and (2) maintaining the project's ability to finance the level of public benefits described in the Development Program.

The following represents TICD's environmental sustainability obligations pertaining to the development of Treasure Island and Yerba Buena Island:

LAND USE

1. Commit to achieving Gold certification under the United States Green Building Council's LEED (Leadership in Energy & Environmental Design) for Neighborhood Development (ND) rating system (July 2010 version), while making a good faith effort to achieve the higher Platinum certification.
2. Implement the DDA-approved land use plan which includes the following fundamental environmentally sustainable elements:
 - Dense, compact, walkable design centered around a robust transit hub;
 - Street and building orientation designed to maximize penetration of sunlight into parks, streets and buildings and to protect streets and open spaces from the prevailing winds, fostering a more comfortable outdoor environment;
 - Establishment of convenient neighborhood-serving retail and services that lessens need for driving;
 - Adaptive reuse of existing historic structures to honor the heritage of the site and contribute to the uniqueness of the islands;
 - Convert previously developed lands so that approximately 2/3 of the available land area is dedicated for parks and open space;

- Dedicate land for an Urban Agricultural Park to promote local organic food production and prepare land for development of agricultural and community garden uses in accordance with the Design for Development and Infrastructure Plan; and
 - Complete additional remediation work beyond that done by the Navy to ensure the safety of future residents and users of Treasure Island, in accordance with the Infrastructure Plan.
3. Implement the Parks and Open Space plan attached to the DDA which includes the following elements:
- Use of native or regionally appropriate species for landscaping where appropriate, with an emphasis on drought tolerant plantings;
 - Protection of sensitive species in accordance and consistent with applicable laws and the California Environmental Quality Act
 - Funding for on-going operations and maintenance, in accordance with the terms of the DDA;
 - Implement certain components of the Yerba Buena Island Habitat Management Plan.
4. Comply with the CEQA Mitigation Monitoring and Reporting Plan.

TRANSPORTATION AND INFRASTRUCTURE

1. Implement the transportation programs and meet operating subsidy obligation set forth in the Transportation Implementation Plan and provide funding for the transportation-related capital improvements as set forth in the Financing Plan, which includes the following elements:
- An on-island transit shuttle connecting the islands' neighborhoods;
 - Transit stops buffered against wind and rain;
 - A Ferry Terminal on Treasure Island for ferry service to San Francisco;
 - New bus infrastructure for service to the East Bay;
 - Development of an extensive and connected islands'-wide bicycle network;
 - Mandatory car sharing service available in larger residential and commercial projects; and
 - Required purchase of transit pass for each household.

2. Develop an infrastructure system set forth in the Infrastructure Plan, which includes the following elements:
 - Storm water treatment wetlands appropriately sized to handle projected storm water treatment flows;
 - Provision of water storage on Yerba Buena Island equal to two days average potable water demand plus four hours of fire flow;
 - Construction of a recycling and composting center for composting food and green waste;
 - Erosion and sedimentation control measures during construction based on an approved Storm Water Pollution Prevention Plan for each phase of construction;
 - Improvements to protect against seismic, flooding and climate change risks; and
 - Improvements to provide adequate emergency support services as outlined in the Infrastructure Plan and the Emergency Support Plan.

ENERGY AND WATER

1. Reduce building energy demand by requiring developers to utilize the Green Building Specifications incorporated into the Design for Development.
2. Incorporate design standards that require building roofs to enable installation of photovoltaic panels or solar thermal applications and to provide appropriate access rights to enable third party energy providers to access rooftops.
3. Construct renewable energy infrastructure that will provide a minimum 5% of peak demand delivered from on-site renewable energy.
4. Achieve at least 15% compliance margin over Title 24 Part 6 2008 California Energy Standards.
5. Provide energy capacity and infrastructure to accommodate potential electric vehicle charging stations in public and private areas.

6. Provide for the use of recycled water for residential, commercial and irrigation applications, and install recycled water infrastructure as well as mandating dual plumbing in new buildings as required by code.
7. Reduce potable water consumption by 30%.
8. Install native or regionally appropriate landscaping and maximize vegetation that does not require permanent irrigation for landscaping in public and private open spaces, rooftops and green walls

BUILDING DESIGN AND CONSTRUCTION

1. Prescribe Treasure Island/Yerba Buena Island Green Building Specifications and incorporate into the Design for Development document.
2. Use of alternatively fueled construction equipment for at least 15% of the construction fleet.

SOLID WASTE

1. Diversion of at least 75% of construction debris from landfills and incinerators back to the manufacturing process or reuse at appropriate sites.
2. Provide for on-site area for separation, storage and loading of trash, recyclables and compostable waste.
3. Commit to good faith efforts to explore feasibility of installing automatic waste management system.

COMMUNITY BENEFITS

1. Provide public and community facilities, in accordance with the Community Facilities Plan in the DDA, to serve the needs of residents and visitors commensurate with the phased development of the project.
2. Comply with the terms and conditions applicable to TICD outlined in the Employment and Contracting Policy referenced in the DDA.
3. Provide developable land and developer subsidy to support the development of affordable housing that equals 30% of the homes built on the islands by implementing TICD's obligations under the Housing Plan attached to the DDA.

