

# **APPENDIX O**

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## **Draft Baylands Public Space Master Plan**

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# THE BAYLANDS



## PUBLIC SPACE MASTER PLAN

Prepared for



## THE CITY OF BRISBANE

MAY, 2009

Prepared by



The Dangermond Group  
Creative Project Planning & Design

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# CONTENTS

|                                                                                                                     |    |
|---------------------------------------------------------------------------------------------------------------------|----|
| I. Executive Summary                                                                                                | 1  |
| II. Introduction                                                                                                    | 4  |
| A. Project Overview                                                                                                 | 4  |
| B. Baylands Project Description                                                                                     | 4  |
| C. Public Space Plan Report Overview                                                                                | 4  |
| III. Public Space Analysis                                                                                          | 5  |
| A. Review and Summary of Initial Concepts and Vision                                                                | 5  |
| B. Workshop and Meeting Summaries                                                                                   | 6  |
| 1. City Council Workshop, Public Space and Recreation Uses at the Baylands, January 26, 2009                        | 6  |
| 2. Parks, Beaches, and Recreation Commission Meeting, Baylands Public Space Planning Workshop, February 4, 2009     | 8  |
| 3. Planning Commission, Baylands Public Space Planning Workshop, February 5, 2009                                   | 8  |
| 4. Open Space and Ecology Committee, Baylands Public Space Planning Workshop, February 11, 2009                     | 9  |
| 5. Parks, Beaches, and Recreation Commission Meeting, Baylands Public Space Planning Workshop 2, February 18, 2009  | 9  |
| 6. Stakeholder meeting with members of the Brisbane arts community, March 2, 2009                                   | 10 |
| 7. Staff meeting with Association of Bay Area Governments regarding the Bay Trail, March 3, 2009                    | 10 |
| 8. Presentation to City Council of Observations and Recommendations regarding Baylands Public Space, April 13, 2009 | 11 |
| C. Opportunities and Constraints Analysis                                                                           | 12 |
| D. Review of Community-based Alternatives                                                                           | 14 |
| IV. Public Space Plan                                                                                               | 15 |
| A. Plan Outline                                                                                                     | 15 |
| B. Unifying Features                                                                                                | 15 |
| C. Detailed Elements                                                                                                | 18 |
| 1. Habitat Enhancement / Open Space                                                                                 | 18 |
| a. Visitacion Creek/Wetlands                                                                                        | 19 |
| b. Lagoon and shoreline                                                                                             | 19 |
| c. Ice House Hill                                                                                                   | 19 |
| d. Other Upland Habitats                                                                                            | 20 |
| 2. Recreational / Public Space Use Areas                                                                            | 20 |
| a. Charter High School / Community Use Area                                                                         | 20 |

|                               |    |
|-------------------------------|----|
| b. Group Use Area             | 21 |
| c. Interpretive Center        | 21 |
| d. Commercial Land Use Area   | 22 |
| e. Regional Use Area          | 22 |
| 3. Public / Private Use Areas | 23 |
| a. Green Development Center   | 23 |
| b. Civic-Cultural Envelope    | 24 |
| c. Park Concession            | 24 |
| 4. Trails                     | 25 |
| a. Bay Trail                  | 26 |
| b. Recreational Trails        | 26 |
| 5. Lagoon                     | 28 |
| D. Economics                  | 28 |
| E. Governance                 | 30 |
| F. Conclusions                | 31 |

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CONTENTS

## I. Executive Summary

The Dangermond Group (TDG) was retained by the City to develop a Public Space Plan for the Brisbane Baylands. This report provides an overall summary of the Public Space planning process. That process included:

- Review and summary of concepts and ideas developed by the community during the alternatives process;
- An understanding of the Vision for the Baylands as developed by the City and Dyett and Bhatia;
- An examination of the three community-based alternatives with respect to public space;
- A series of eight meetings with the City's Commissions, Committee, and interested parties where opinions could be gathered from the public and group members;
- An on-site analysis of the opportunities and constraints presented by the Baylands;
- Discussions with the City's consultant biologist as to the needs and potentials for the habitat elements of a potential plan;
- Development and review of guiding principles, plan configurations and use allocations;
- Analysis of economic and governance considerations and their influence on the plan; and
- Finally, the preparation of the Public Space Plan.

It is recommended that the Public Space Plan be based upon four primary principles:

1. Creating a distinctive setting
2. Serving Brisbane, the Baylands, and the region
3. Creating a connected place
4. Complementing future development

Based on the proposed concept, a total of 365 acres would be dedicated for public space uses, including approximately 113 acres in the Lagoon and 252 upland acres. An additional 123 acres would be Public/Private Use Areas. Five (5) specific types of public space uses are recommended for inclusion within the Baylands. These uses (and approximate acreages) are:

- Habitat Enhancement/Open Space (203 acres)
- Recreational/Public Space Use Areas (49 acres)
- Public/Private Use Areas (123 acres)
- Lagoon (113 acres)
- Trails (8 miles)

It is envisioned that the Baylands be viewed as a place of connections, with connected habitat areas, trail connections, and opportunities for people to connect with nature, with nature through art, and with history. The most noticeable unifying element recommended is the enveloping natural landscape portion of the site. A second unifying feature will be the trail system. The primary element in the Baylands will be Visitacion Creek. It is planned to border the development for its entire length and will join all

of the more significant public use features. Environmental art is also proposed as a unifying feature. Additional unifying elements would be the use of “Green Architecture” in all structures and other sustainability features, such as native plantings and solar roofs and other alternative energy development, including appropriately sited wind turbines. A final unifying element is the interface between the Baylands development and the public space area.

The creation or enhancement of approximately 203 acres of open space/habitat is recommended. These lands have been planned to create a unifying natural landscape within which the recreational and public space use areas are located. Primary Habitat areas would include Visitacion Creek wetlands, the Lagoon and shoreline, Ice House Hill and Upland Habitats.

The Plan advocates siting three recreational and public space use areas based on their ability to serve specifically identified groups and in response to the site’s physical characteristics. Three distinct groups have been identified which will make use of the public space provided at the Baylands: Brisbane residents and employees of existing Brisbane businesses, future Baylands workers, and regional users. The areas west of the rail lines, closest to Bayshore Blvd. should be targeted towards Brisbane residents and workers. These use areas are identified on the Public Space Plan Map as the Charter High School / Community Use Area, the Group Use Area and the Interpretive Center. The Regional Use Area east of the rail lines, closest to the Bay, is targeted towards Baylands workers and regional users, with use by Brisbane residents also anticipated.

The Public / Private use areas are envisioned to focus on specific user groups. In addition, two of the three Public / Private Use Areas will also actively promote the Brisbane community’s vision of the Baylands. The Civic-Cultural Envelope will represent and preserve cultural histories and structures identified with the Baylands, Brisbane, and the region while the Green Development Center will capture the vision of the Baylands as a forward-looking center for sustainability and green development.

The Plan recommends siting approximately 6.5 miles of Class I and 1.5 miles of Class II trails throughout the Baylands area. In addition to providing regional and local connectivity, the recommended trail system would, where practical, consist of separated trails that accommodate both fast and slow traffic.

The Lagoon itself is recognized as an integral element in the Public Space Plan and is considered to be primarily a visual and wildlife resource. The objective for this area is to maintain and preserve existing conditions and habitat while improving viewing and trail access.

The proposed Public Space Plan has been designed so as to minimize operating cost support. This is proposed to be done by emphasizing natural landscapes, choosing revenue generating recreation facilities, creating settings to encourage private enterprise leases and forming non-profit entity support.

It is recommended that the City and UPC seek to reach consensus on how the public space areas should be governed and operated. From prior project experience, it is believed that the process will likely result in a private non-profit entity, with both the City and UPC having representation on the Board of Directors. This non-profit should have the power to contract with agencies, other non-profit organizations, and private concessionaires.

The Public Space Plan will be integrated into the City's ongoing process of developing a community-based alternative plan for study in the forthcoming draft EIR. It is anticipated that the EIR process will more specifically outline and define existing habitat, recommended roadways and transit locations, biological and toxics issues, and mitigation requirements that may impact recommendations made in this Public Space Plan. After the EIR is completed, this Plan may have to be reevaluated to take into account those conclusions.



**Figure 1. Historical Baylands**

## II. Introduction

### A. Project Overview

At the beginning of 2006 the current Baylands landowner, Universal Paragon Corporation (UPC), submitted for the City's consideration and approval the Brisbane Baylands Phase I Specific Plan. The plan application was deemed complete by the City in February of 2006, and scoping for the Environmental Impact Report (EIR) phase began. By the end of 2006 the City had completed its initial scoping sessions and had selected a consultant to prepare the EIR. During the scoping process the public repeatedly identified the need for an additional project alternative, derived from the community's vision for the Baylands, to be analyzed along side the developer's proposal. While developing community-based alternatives to the Baylands Specific Plan, it became clear to the City that the Open Space/Public Space component was vital to any successful plan that might be developed. In recognition of this consideration, the City chose to further refine the public space component of the plan before selecting a community preferred alternative. The Dangermond Group (TDG) was retained by the City to develop a Public Space Plan for the Brisbane Baylands. Upon approval by the City Council, the Plan will be integrated into the City's ongoing process of developing a community-based alternative plan for study in the forthcoming draft EIR.

### B. Baylands Project Description

The Brisbane Baylands sits on 660 acres of land northeast of Brisbane's city center. The site's northern edge is located at Brisbane's border with the City and County of San Francisco. From there the site runs south to the edge of the Brisbane Lagoon. The east side is bounded by the US 101 causeway which links the city of San Francisco with South San Francisco and San Francisco International airport. Bayshore Boulevard runs along the west edge of the site and separates the Baylands from both Daly City and the rest of Brisbane. Views of both the San Bruno Mountains and the East Bay are readily available from the Baylands. The Baylands is a brownfield site which the developer is proposing to reclaim by reusing land created by the filling of the Bay. The site previously contained a large rail yard, and several industrial uses are still in operation. As currently proposed, the Baylands development will provide a large increase in office and commercial space in Brisbane.

### C. Public Space Plan Report Overview

This report provides an overall summary of the Public Space planning process. The section Public Space Analysis provides a review and summary of the initial concepts and vision, followed by a summary of meetings in which TDG was engaged. The section concludes with an overview of the Opportunities and Constraints analysis that was conducted, followed by a review of previously completed Community-based alternatives. The next section outlines the Public Space Plan, with a description of the Plan Outline and overall Unifying Features. This is followed by a description of Detailed Elements, including Habitat/Open Space, Recreational/Public Space Use Areas, Public/Private Use Areas, Trails, and the Lagoon. The final sections provide a summary of recommendations for Economics, Governance and Conclusions.

### III. Public Space Analysis

#### A. Review and Summary of Initial Concepts and Vision

The following section outlines the analysis process that was used in the preparation of the Public Space Plan. That process included:

- Review and summary of concepts and ideas developed by the community during the alternatives process;
- An understanding of the Vision for the Baylands as developed by the City and Dyett and Bhatia;
- An examination of the three community-based alternatives with respect to public space;
- A summary of information gathered at a series of meetings with the City's Commissions, Committees, and interested parties where opinions could be gathered from the public and group members;
- An on-site analysis of the opportunities and constraints presented by the Baylands;
- Discussions with the City's consultant biologist as to the needs and potentials for the habitat elements of a potential plan;
- Development and review of guiding principles, plan configurations and use allocations;
- Analysis of economic and governance considerations and their influence on the plan; and
- Finally, the preparation of the Public Space Plan.

The process of developing a community-based alternative generated a large amount of public input, planning analysis and technical information documents. The Public Space Plan process began with a review and synthesis of these documents and an evaluation of where potential gaps in the information might exist. Some of the most relevant documents examined include the City General plan, the Open Space and Ecology Committee's Open Space Plan dated August 2001, and reports detailing the City's development of alternative plans for the EIR process prepared by Dyett and Bhatia. A full list of the numerous additional staff reports and stakeholder documents are provided as an appendix.

Many differing visions for the Baylands were found during a review of the community inputs made during the alternatives development process. Some were concerned specifically with remediation and habitat issues, others felt on-site alternative energy uses should be a main focus, and still others focused on potential recreation uses. Overall, several concepts were identified relating to public space which generated nearly unanimous agreement.

- The idea consistently put forth by all groups was a desire to keep as much area as possible south of Visitacion Creek, the central drainage channel, as public space. This area was generally seen as the best location for both recreational and natural uses.
- Using the concept of sustainability as a foundation for open space was also a popular comment. The community wanted open spaces to promote the concept of

sustainable land uses as well as have them provide self-supporting mechanisms that would address the operation and maintenance requirements of open spaces.

- Maintaining and improving wetland conditions on site, especially along Visitacion Creek and near the lagoon, was emphasized by many in the community as a critical requirement for the Public Space Plan.
- Designing the Baylands as a connected whole that provided pedestrian, bicycling, and other transportation linkages was a recommendation that had broad support. Providing trail connections for both commuting and recreational bicycling throughout the entire Baylands area was acknowledged as a top priority.
- The community also expressed a strong desire to see amenities and attractions for Brisbane as well as a willingness to provide amenities for the surrounding region.
- Finally, preserving and enhancing existing views of the Bay, both from and across the Baylands, was considered an essential requirement for both public space and future development.

These concepts were utilized by the City and Dyett and Bhatia to develop the overall vision for the Baylands, encompassing both the public space and project development areas. This overall vision stated the Baylands would be, “**a hallmark for sustainability and green development with a mix of active uses and extensive open space**” as referenced in the July, 2008 Community Input on Alternatives Report.

These concepts have been used, along with the overall vision stated above, to guide the development of the Public Space Plan which will, in turn, support and help to implement the community’s vision for the Baylands.

#### B. Workshop and Meeting Summaries

In addition to guidance provided by the vision and principals, The Dangermond Group engaged in a series of workshops and stakeholder meetings with the City’s commissions and committees in order to identify more detailed public space concerns. Public participation and input was also well represented during these meetings. A list of the eight (8) meetings and workshops attended by TDG is provided below along with summaries of the ideas, concepts and concerns discussed.

##### 1. City Council Workshop, Public Space and Recreation Uses at the Baylands, January 26, 2009

A panel of four park and planning professionals presented projects and topics directly related to public space planning. These panelists and their presentation topics were:

- Michael Tymoff, Project Manager for the San Francisco’s Mayor’s Office of Economic and Workforce Development, presented on parks and open space for the proposed Treasure Island Development.
- Dave Gould, Diablo Vista District Superintendent for California State Parks, presented on his experience with the development, operations and management of parks.

- Michael Boland, Chief Planning, Projects and Programs Officer for the Presidio Trust, presented on the Presidio redevelopment.
- Pete Dangermond, President of The Dangermond Group, presented on the development of a public space plan for the Baylands.

After the presentations, a question and answer session was facilitated between the panelists, the City Council, and the public.

The session began with questions from the Council. Topics included how the amount of public space was determined for the Treasure Island and Presidio projects, how much open space was provided in relation to the overall size of the projects, and what is the expected relationship between phasing of the Treasure Island development and the creation of public space.

Questions of security in public spaces were also raised. These questions explored the ideas of how to get people to use proposed open space, how many people would be needed to consider the space useful and safe, and who would provide security services for the open space.

How the projects intended to provide self-sufficiency for parks and open space was also asked. This led to a discussion of commercial uses and residential housing as funding sources for parks along with the Presidio's mandate to be financially self-supporting within a specified time period.

The final Council questions were concerned with how habitat preservation and reconstruction decisions were made. The majority of the Treasure Island site had little to no existing habitat value while the Presidio was rich in both natural and historic resources and the project had planning documents and mandates in place to guide its decisions.

After questions from the Council, the public was invited to speak and ask questions. The majority of the public speakers used the opportunity to voice their preferences and recommendations for the Baylands. These recommendations included:

- Think regionally when developing public space for the Baylands and look to make connections to surrounding regional open space areas.
- Do something significant with the public space and focus on determining the highest and best use for open space.
- Currently the Baylands is an open space 'embarrassment of riches' and should remain that way.
- An organic process for the remediation of hydrocarbons was presented and its use recommended.
- Passive recreation areas should be provided alongside active recreation areas.
- Support was expressed for the creation of bike trails for both recreation and as a way to encourage biking as a commuter option.

Questions from the public to the panelists were concerned with the reason for the small development footprints of the Treasure Island project, balancing preservation and development at the Presidio (Lucas Film project), and the building height requirements on Treasure Island.

## 2. Parks, Beaches, and Recreation Commission Meeting, Baylands Public Space Planning Workshop, February 4, 2009

An overview of Public Space and Recreation Uses at the Baylands was presented, which included discussions of the following topics:

- Review of Vision and Guiding Principles
- Explanation of approach
- Summary of previous inputs generated by the Committee & City Council
- Site evaluations and potential uses
- Discussion of major areas of concern
- Questions and comments

Commission members spoke first, followed by public comments. There was generally good support for the presented initial planning framework, in particular the use of mounding of soil for screening, sound remediation, and to separate use areas. Comments supported a balanced use of the open space, including unprogrammed areas, active use areas, natural areas, and locations for green technology and public art.

Getting children outdoors was a concern, with suggestions for trail and walking connections, a BMX skills development area, a community soccer field with an adjacent kids play area and picnic areas.

To ensure a meaningful incorporation of art into the site, it was suggested that artists be invited to participate in the planning process early on. The importance of environmental art was emphasized, and several residents cited examples of successful sculpture gardens. The possibility of an art museum-education center and a performance center was raised.

A discussion of the suitability of the area near Visitacion Creek for development of wetlands ensued, including concerns about the availability of adequate water from drainage. Other comments included a request to landscape using native vegetation, and the use of green technology. Showcasing the Ice House Hill butterfly habitat and developing an environmental or global climate center were suggested. Creating and preserving bird habitat was also a concern. Maintenance and liability issues were briefly addressed, as were parking locations.

## 3. Planning Commission, Baylands Public Space Planning Workshop, February 5, 2009

An overview of Public Space and Recreation Uses at the Baylands was presented with the same topics as at the February 4<sup>th</sup> PBR Commission meeting, as listed above.

Comments began with a discussion of the Baylands project timeline and the need to define open space prior to the beginning of the draft EIR process.

Safety issues were a large concern, including water cleanup and availability, with suggestions for possible wetlands, detention ponds, and underground cisterns. Concerns about the effects of liquefaction and earthquakes on hazardous waste and the efficacy of sealing the site were expressed. The use of vertical wind turbines was suggested. The availability of water for wetlands was discussed. Concern about how to contain leakage from the tank farm was also expressed.

A suggestion was made to use the entire site for open space, and keep everything south of Visitacion Creek as green space, enhancing habitats to support existing indigenous butterflies and migratory freshwater birds that overwinter.

A discussion of recreational uses included suggestions for unplanned spaces, a restaurant, ball fields, a driving range or chipping course, soccer fields with adjacent small berms for spectators, a BMX skills course, and a farmers market and farming history center.

Environmental art was suggested along with incorporating art into trails, sculpture gardens, using the Roundhouse as a cultural hub, and art at the east entry to the City.

#### 4. Open Space and Ecology Committee, Baylands Public Space Planning Workshop, February 11, 2009

An overview of Public Space and Recreation Uses at the Baylands was again presented with the same topics as at the February 4<sup>th</sup> PBR Commission meeting, as listed above. Once the presentation was completed, comments were taken by the public. Two members of the public provided input and their comments included concerns about fragmentation of existing habitat, protecting existing wetlands, increasing wind and solar energy potentials, and increasing sustainable uses.

Each committee member then provided their comments and observations. In general, committee members were concerned about protecting and enhancing existing habitat, especially wetland habitat, with a primary focus on habitat connections both within and adjacent to the site, to ensure that natural areas function as intended. Committee members would also like to see wetlands used as bioremediation sites. In addition, Committee members expressed support for extensive trail connections within the site and with connections to the community to encourage both bike and pedestrian access and use. There was also support for integrating environmental art into the design, increasing wind and solar opportunities, and protecting Ice House Hill, with its adjacent existing equestrian and farm uses.

#### 5. Parks, Beaches, and Recreation Commission Meeting, Baylands Public Space Planning Workshop 2, February 18, 2009

This second workshop for the Parks, Beaches, and Recreation commission was structured to focus on the recreation facility needs of the City and to review in greater detail a list of use and activity groupings presented to the Commission at the previous workshop.

The Chairman led the Commission through a review of a list of suggested recreation uses developed through a Brisbane public opinion poll and inputs by the commission. Overall, the Commission approved of the majority of the uses listed. Specific comments or concerns were:

- A full sized golf course was seen as unrealistic due to size requirements and associated operations and maintenance (O&M) costs.
- Locating a gymnasium on the Baylands was seen as a priority although there were concerns about O&M costs.
- The grouping of passive uses, such as hills for unstructured play and natural landscapes, alongside active uses like sports fields was strongly supported.
- Public comments were mentioned by the Commission about locating walkways or boardwalks out over the Lagoon to provide more bird viewing opportunities.
- It was noted that no support was expressed for boat uses on the Lagoon.

Following the review of the use and activity list the public was invited to comment. Two members of the community spoke. Both emphasized the desire of the public for a full-sized community soccer field. A Commission member also spoke of having heard various public comments in favor of a soccer field.

After the public comments the concept of locating an interpretive center near Icehouse Hill to illustrate the relationship between the San Bruno Mountains, butterflies and the Baylands was introduced. The Commission was receptive to this concept.

#### 6. Stakeholder meeting with members of the Brisbane arts community, March 2, 2009

A meeting was held with members of the Brisbane Arts Group to provide an overview of the Public Space planning process for the Baylands. The Brisbane Arts Group members provided information about their concepts for an approach for public art in the Baylands. Discussion then focused on examples of interesting ways environmental art was incorporated in various public spaces throughout the world and how environmental art could be incorporated into the Baylands site. Environmental art is usually focused on calling attention to an environmental issue. If the issues at the Baylands are resolved, the focus could be to highlight the executed solutions.

#### 7. Staff meeting with Association of Bay Area Governments regarding the Bay Trail, March 3, 2009

A meeting was held with City of Brisbane staff and Laura Thompson, ABAG Bay Trail

Project Manager, to discuss options for the Bay Trail segments through the Baylands, including the use of City streets (Class II and Class III Bikeways) versus a completely separated trail (Class I Bikeway). Specifically Bayshore Boulevard or Sierra Point Parkway, presently in use, were stated to be suitable if no separated bike route could be found, but preference was expressed for Class I where possible. A discussion about the potential for using a deck pathway along the lagoon shore line occurred. Questions about the surface for use by bicycles were expressed, but examples of existing surfaces suitable for bicycles were described.

The potential negative impacts of freeway air pollution on bicyclists were discussed, with agreement that further study of these impacts is worthwhile.

Meeting attendees acknowledged that the connection to Candlestick Point State Recreation Area via the Bayshore Freeway overpass would be complicated, even if a bicycle lane were added, because of the on and off ramps that would be difficult for bicycles to cross. An alternate route on Alanna Rd. that might entail sharing with transit was discussed as an alternative. Connections to transit were encouraged.

#### 8. Presentation to City Council of Observations and Recommendations regarding Baylands Public Space, April 13, 2009

A presentation was made to the City Council outlining Observations and Recommendations from the Public Space planning process. Topics in the presentation included:

- Process Background
- A Place of Connections
  - a. Habitat Connections
  - b. Connecting to a Vision
  - c. Connecting People with Nature, Art, and History
  - d. Trail Connections
- Draft Public Space Plan Overview
- Governance and Funding of Public Space

The Mayor then solicited input from the Council through seven input categories of the plan:

1. Habitat Enhancement/Open Space
2. Recreational/Public Space Use Areas
3. Public/Private Space Use Areas
4. Trails
5. Lagoon
6. Additional Elements
7. Governance, Economics, Operations & Maintenance

Generally the Council supported the plan, but had concerns about liability and development and operations and maintenance costs. Regarding Habitat Enhancement and Open Space, the Council commented that they would like to see wetland

remediation, and had concerns about the Lagoon shoreline. The most comments were made about the Recreational/Public Space Use Areas and the Public/Private Space Use Areas, with recommendations made to eliminate the community park on industrial way and allow for more development within that area. In addition, the Council wanted to see the park concession on the north of the Lagoon moved into the Regional Use area. There was interest in the soccer fields, high school, and art complex. Recommendations were made to increase the amount of activities in the regional use area to include such activities as rock climbing and skate boarding. The Trails plan was generally supported, with comments to increase the number of Class I trails and to ensure connections to transit. One councilmember had an initial negative reaction to the proposed boardwalk/floating trail along the Lagoon, while another councilmember liked the idea. The Council was supportive of ideas for environmental art, sustainability, and green development. Finally, on the topic of Governance and Economics, the Council reiterated that the public space development would need income streams to support it over the long term.

After the Council had completed their comments, the public was invited to speak. Several citizens offered support for bike trails and for a full-sized soccer field and a gymnasium sited close to the city. There was support for a bicycle training area in the regional park area, as well as for skateboarding facilities. Additional support was mentioned for an arts complex and environmental art throughout the complex, as well as natural open space integrated throughout the development. Finally, there were comments that addressed concerns about toxics and safety.

### C. Opportunities and Constraints Analysis

The new inputs and key findings were combined with a professional assessment of the site from a park and open space planning perspective. An opportunities and constraints analysis was conducted to identify potential public space alternatives and location recommendations. The analysis considered community preferences for public space in the Baylands in concert with physical site characteristics, governance and funding issues. All of the above inputs were used to guide development of the draft Public Space Plan.

The analysis process of the opportunities and constraints involves three steps. The first is to look for ways to build upon and heighten the site's inherent special features and opportunities. Second is to explore potentials for reducing or mitigating constraints, and finally, an evaluation of how the positive and negative factors influence the overall plan.

The opportunities and constraints analysis initially focused on the physical features of the Baylands. They were identified for their historic, environmental, and situational qualities along with their potential for enhancement, improvement or restoration. These features are:

- Visitacion Creek
- Ice House Hill
- The Lagoon

- **Historic buildings:**
  - The Roundhouse
  - The Packing house (currently used for charcoal storage)
  - The Shlage offices
  - The Ice House (currently an industrial use)
- The Bay Trail

In addition to its physical features, the unique size, location and history of the Baylands development also helped to identify opportunities and constraints.

It was found that the enhancement of Visitacion Creek presented the best opportunity for a high value feature for the Public Space Plan. In addition, the historic structures, Ice House Hill, and the Lagoon presented potentials for site focal points. These features were also analyzed for their ability to contribute to the creation of a connected, unifying public space theme throughout the Baylands.

Constraint issues include contamination and settling due to previous use as a landfill, on-site wind moving from the San Bruno Mountains to the Bay, freeway noise from the nearby U.S. 101 causeway, the disturbed nature of the lagoon shoreline, the separation of the site from central Brisbane, and the Kinder-Morgan storage tanks. They were analyzed as to their impacts, plan influences, and possible remediation measures.

Potentials present themselves for utilizing mounding of surplus earth found on the site to screen out some of the freeway noise and views of the storage tanks. Such mounding could also have some value in site use area definitions and localized wind reduction. Improving the Lagoon edges appears to be highly improbable due to the bordering railroad, roadway and pipeline, although natural siltation processes are creating shallows and wetlands within the Lagoon.

The major plan influences from the opportunities and constraints analysis are:

- The ultimate utilization of the rail line for high speed trains, with their companion fencing, will result in separating the public space into two distinct areas.
- The relatively small, separated area around the historic Ice House is the closest area to the community, is relatively protected from the wind, and has increased security due to its proximity to the City fire station.
- An area immediately north of Ice House Hill along Visitacion Creek has the opportunity to create the widest diversity of land and water related habitats on the entire site.
- The area between Bayshore Boulevard and Visitacion Creek north of Ice House Hill has three key attributes: the most wind protection on the site, the least freeway noise, and an absence of uneven settlement.
- Utilization of and conformance with Bay Trail alignment policies prepared by Association of Bay Area Governments (ABAG).

These factors strongly influenced the location of certain uses within the recommended

## Public Use Plan.

### D. Review of Community-based Alternatives

The need for the Public Space Plan was born out of the efforts to develop community-based alternatives for evaluation in the EIR. With this in mind, the opportunities and constraints analysis, new inputs, key findings, and professional assessment were compared to the previously developed alternatives to be sure that the Public Space Plan tracked with community concerns. An analysis was made of the three community alternatives with particular attention to the public space portions of the plans. Alternative 1 had the largest public space footprint and Alternative 3 the least. All three reflected certain common elements including:

- An identified civic / cultural land use in conjunction with the historic railroad roundhouse.
- Wetlands designation along Visitacion Creek and the Lagoon's northern edge. In addition, Alternatives 1 and 3 also designated the area around the historic Ice House parcel as wetlands. No distinction was made as to whether these wetlands would be freshwater or tidal.
- All three contained public space areas within the proposed Baylands development with Alternative 2 having the most and Alternative 1 the least.
- The Bay Trail was recognized and placed adjacent to the freeway in all instances.
- The three alternatives suggested a land use pattern wherein roadways frequently separated the development and public space areas, severing possible positive relationships.

Key findings from the analysis result in a Public Spaces Plan which closely follows the footprint of Alternative 1, incorporates many features from all alternatives, and makes some suggested modifications where deemed appropriate.

## IV. Public Space Plan

### A. Plan Outline

It is recommended that the Public Space Plan be based upon four primary principles:

1. Creating a distinctive setting
2. Serving Brisbane, the Baylands, and the region
3. Creating a connected place
4. Complementing future development

In developing the plan, the following were taken into account:

#### Site considerations

- Recognizing key natural and historic features
- Evaluating existing and potential habitat areas
- Studying the inter-relationships between the community and Baylands development
- Recognizing the ability to shape earth to afford screening and noise abatement
- Evaluating potential use areas
- Acknowledging the separation of the site into two distinct areas by the rail lines

#### Use Considerations

- Studying local, Baylands and regional needs and desires
- Evaluating trail needs and opportunities

#### Economic considerations

- Focus on revenue generating/self supporting recreational use areas

Based on the proposed concept, a total of 365 acres would be dedicated for public space uses, including approximately 113 acres in the Lagoon and 252 upland acres. An additional 123 acres would be Public/Private Use Areas. Five (5) specific types of public space uses are recommended for inclusion within the Baylands. These uses (and approximate acreages) are:

- Habitat Enhancement/Open Space (203 acres)
- Recreational/Public Space Use Areas (49 acres)
- Public/Private Use Areas (123 acres)
- Lagoon (113 acres)
- Trails (8 miles)

A map identifying recommended public space areas, associated uses and trail locations has been prepared to provide a graphic summary of the draft Public Space Plan (see Page 16).

### B. Unifying Features

An early class project by Berkeley landscape architecture students saw the public space portions of the Baylands development as a “park of parks”, i.e. a number of separate opportunities to provide recreation and public space areas. Although the recommended

# BAYLANDS PUBLIC SPACE MASTER PLAN



## City of Brisbane Baylands Public Space Plan

Draft - April 27, 2009 - The Dangermond Group

### PUBLIC SPACE PLAN

Plan also visualizes a number of use areas, it sees them connected within one larger unified whole. There are a variety of elements that will create this wholeness.

It is envisioned that the Baylands will become a place of connections, with connections between the developed areas and the public spaces, connected habitat areas, trail connections, and opportunities for people to connect with nature through art, and with history.

The most noticeable unifying element recommended is the enveloping natural landscape portion of the site. As with Golden Gate Park's trees and sheltering landscapes, this site's native plantings will surround and flow through its use areas and borders, its trails, and the edges of the Baylands development. The overall feeling should be one of use areas carved out of one larger natural landscape.

A special opportunity is presented by this created natural landscape. Due to its size, location and constructed nature, (Ice House Hill excepted), it will primarily be inhabited by more common vegetation, birds and animals rather than rare and endangered species. This will allow its focus to be on connecting people with nature through an interpretive center, other features and programming, and vital informal youth play and exploration experiences.

A third unifying feature will be the trail system. It is designed to accommodate the Bay Trail, commuters to and from Brisbane as well as recreationists from the community, the Baylands development and the region. It will interconnect the various use areas with looping opportunities of various lengths and mark the area as a biking and trail oriented place.

The primary element in the Baylands will be Visitacion Creek. It is planned to border the development for its entire length and will join all of the more significant public use features. The creek zone is recommended to include water elements throughout its length, beginning with fresh water features and wetlands descending to brackish and salt water marsh and then finally out to the Bay. The trail element through the length of Visitacion Creek is proposed to receive special treatment with trail stops, interpretive features, environmental art, and a connecting bridge over the railroad tracks.

Environmental art is also proposed as a unifying feature. It can help to tell the story of the Baylands from an environmental standpoint as well as help to create a sense of place. Utilization of such features in multiple locations, such as the Visitacion Creek parkway, the Interpretive Center, Ice House Hill trails, the Lagoon, open spaces, recreational use areas, and bridges and trails, is proposed.

Additional unifying elements would be the use of "Green Architecture" in all structures and other sustainability features, such as native plantings and solar roofs and other alternative energy development, including appropriately sited wind turbines.

A final unifying element is the interface between the Baylands development and the public space area. It is recommended that no roadway separate the two, but instead that the edge be developed and landscaped so as to integrate and complement the development. Bordering trails could invite workers to utilize the public space areas, helping to create a unified whole out of the total project area. Another interface between the development and the open space is through the integration of the historic site resources, including the Roundhouse, the Schlage building, Ice House Hill, remnants of the original Bayshore highway, and other historical features. Finally, it is recommended that enhanced entryways to the City and streetscape designs provide a distinctive Brisbane feel to the entire Baylands development and public space.

### C. Detailed Elements

#### 1. Habitat Enhancement / Open Space

The Baylands site currently has several different types of mostly disturbed habitats within its boundaries, including the open water lagoon with tidal influences at its north, west, and southerly corners, a saltwater/brackish creek, some perched and other freshwater wetlands, and upland habitats. The terrestrial habitats currently support a range of species, including coyote, black-tailed jackrabbit, striped skunk, raccoon, snakes, and lizards, and potentially grey fox and brush rabbit. Aquatic species include pacific treefrog and three-spine stickleback. In addition, the Lagoon and upland areas support a diversity of birds, including some migratory waterfowl. Most of the terrestrial species on site are generalists. Icehouse Hill may also be home to several different types of butterflies, potentially including the callippe silverspot butterfly (*M. Lowe, personal communication*).

The creation or enhancement of approximately 203 acres of open space/habitat is recommended. These lands have been planned to create a unifying natural landscape within which the recreational and public space use areas are located. Other objectives for the enhanced habitat and open space recommendations include:

- Evaluate existing and potential aspect, soils, etc. in order to promote diversity of habitats and resulting wildlife and to maximize habitat and open space areas.
- The habitat areas are envisioned to provide connections between Visitation Creek, Ice House Hill, and the Lagoon within the site and regional natural areas surrounding the site.
- Habitat types include freshwater, salt water, and brackish marshes and wetland habitats, upland habitats, and restoring the original habitat on Ice House Hill.

Note that all of these recommendations for creating or enhancing habitats should be thoroughly studied and evaluated by biologists in the EIR process for specific habitat and species recommendations. However, it is recommended that within the overall area a diversity of habitats should be created so as to provide an enriched environment. Specific descriptions and recommendations for each area within the proposed open space area follow.

a. Visitacion Creek/Wetlands

Currently, Visitacion Creek drains run-off from most of the site to the bay. The creek has an existing salinity gradient, from salty to brackish, up to the railroad, which is dependent on the tides.

It is proposed that the existing salinity along the creek east of the railroad be maintained and that a study be conducted to determine the feasibility of a small saltwater pond area immediately west of the railroad. It is further recommended that the existing first flow culvert be studied for retention west of the railroad. Within the overflow channel, it is proposed that freshwater wetlands and ponds be created, utilizing reclaimed water as necessary. These upstream wetlands and ponds could be used to assist with the drainage and should be studied for the potential for bioremediation of wastewater from the site. In addition, wetlands could be created that would help remediate some of the site run-off and allow for overflow from the current drain culvert.



Figure 2. Visitacion Creek

b. Lagoon and shoreline

The existing Lagoon currently has open water that supports a diversity of waterfowl. There are wetlands along the edges, predominantly in the north and south, with discontinuous bands along the foot of the riprap on the northern, eastern and western edges. These wetlands support a variety of species, including frogs. However, the Lagoon has contaminated soils, and so modification of the shoreline or human body contact uses are not recommended.

We propose protecting the existing Lagoon habitat for waterbirds, as well as enhancing existing wetlands along the southerly and northeastern corner of the shore. Due to the old landfill, the shoreline on the north portion of the Lagoon can not be modified to create additional tidal wetlands. Thus, we propose an area of enhanced upland habitat north of the Lagoon, to buffer the Lagoon from active recreational areas, as well as the roadway. This upland habitat should be created in such a way to maintain views of the Lagoon from the roadway.

c. Ice House Hill

Ice House Hill is the last remnant of the original natural habitat/topography remaining easterly of Bayshore Blvd. It currently has a small stable at its northerly base, with trails (for both pedestrian and equestrian) going up to the top. In addition, the southerly

slope was previously used as a police shooting range, and it has lead remaining from the leftover shells. There are several different butterfly populations that are present on Ice House Hill, with potential for the endangered callippe silverspot butterfly (its host plant has been reported there).

It is recommended that Ice House Hill remain natural open space, that non-native, invasive plants be removed and that the habitat be enhanced throughout the Hill for diverse butterfly populations through the planting of different species of host plants. In addition, a trail should be maintained up Ice House Hill to the top, for both pedestrians and equestrians. This trail should be tastefully fenced to minimize impacts to actual or potential butterfly populations.



Figure 3. Ice House Hill

#### d. Other Upland Habitats

The remainders of the open space/habitat areas are recommended to be natural upland habitats, such as native coastal prairie, coastal scrub vegetation, and/or grass oak woodlands. Trails can be designed through these areas to be an educational demonstration of the types of habitats that once occurred along the Bay shore, as well as a place for people to interact with nature.

### 2. Recreational / Public Space Use Areas

The Plan advocates siting three recreational and public space use areas based on their ability to serve specifically identified groups and in response to the site's physical characteristics. Three distinct groups have been identified which will make use of the public space provided at the Baylands: Brisbane residents and employees of existing Brisbane businesses, future Baylands workers, and regional users. The physical characteristics of the site, as acknowledged in the opportunities and constraints analysis, dictate that the areas west of the rail lines, closest to Bayshore Blvd. be targeted towards Brisbane residents and workers. These use areas are identified on the Public Space Plan Map as the Charter High School / Community Use Area, the Group Use Area with the adjacent Interpretive Center, and the Regional Use Area. The area east of the rail lines, closest to the Bay, is targeted towards Baylands workers and regional users, with use by Brisbane residents also anticipated.

#### a. Charter High School / Community Use Area

The Charter High School / Community Use Area is located close to central Brisbane just south of Ice House Hill and north of the existing fire station. This location, estimated to be 5.7 acres, will encourage pedestrian and bicycle commuting from the Brisbane

community and will provide additional safety with the fire station's presence. Recreation uses associated with the high school would include a gymnasium and a full-sized soccer field. It is proposed that these features would be available to the Brisbane community when not being utilized for high school activities under a joint use agreement. The focus of the high school could possibly be on exploring green technology, environmental sustainability, and environmental art.

In the event the Charter High School concept does not gain traction with the community, the area could function as an independent Community Use Area. The same recreational features, the gymnasium and soccer field, would be provided along with a community building focusing on adult education and art.

#### b. Group Use Area

The Group Use Area is located immediately north of Ice House Hill. This area would also be oriented towards public usage by the Baylands community but it would also include a commercial recreational component that would provide services and activities for organized group events.

The recreational component of this area will be primarily oriented toward organized groups. A concessionaire agreement for operation of this area is recommended in order to provide a source of revenue generation that would help support the public space. Picnic and recreational activity services would be oriented to accommodate sizeable corporate picnics and business retreats, as well as large family celebrations and events. The site should be designed to accommodate multiple smaller groups up to a single large group. This type of operation would provide food services and recreational opportunities such as: softball, volleyball, horseshoes, tetherball, croquet, and other group and family-oriented outdoor activities. It is also recommended that a significant amount of open space should be included in the design of this area to provide unstructured activity opportunities and promote pedestrian uses.

#### c. Interpretive Center

The area at the northeast corner of Ice House Hill is at the intersection of several significant features of the Baylands. It is anticipated that at this location the transition between freshwater and tidal wetlands, created as part of the Visitacion Creek habitat, will occur. In addition, butterfly habitat is located on and around this section of Ice House Hill. Also located here is the last remaining section of the highway that ran along the Bay prior to landfilling. Finally, this area currently hosts equestrian and farming activities that could potentially be improved and incorporated into a potential interpretive program. With all of these important features of the Baylands located in one area, an opportunity exists to develop an interpretive center that promotes these features and also unites them with the sustainable vision of the Baylands development.

The interpretive center is proposed to feature four subjects:

- The history of the Baylands, from open water, to the 1906 earthquake fill, the railroad, the landfill and freeway, and the eventual remediation and

- redevelopment in a sustainable manner.
- An expanded 'farm' area, including the existing horses and farm animals and a demonstration kitchen and fruit and vegetable garden.
- The surrounding habitats including fresh and saltwater ponds and wetlands, uplands, and the natural habitat of Ice House Hill. It is suggested that consideration also be given to interpreting the unique species of butterflies found on Ice House Hill and nearby San Bruno Mountain.
- The green architecture with which it is recommended the center and Baylands development be built.

The center should also be the primary trailhead for accessing Ice House Hill. Management could be achieved through either a non-profit entity, or a joint powers agreement with the County.

#### d. Commercial Land Use Area

It is proposed that a commercial development area be located immediately north of this recreational use area and that businesses and services which complement the group recreation and interpretive center themes of the area be located there. This commercial development area can also serve the Civic / Cultural Envelope that will be located around the site of the existing Roundhouse and will provide an opportunity to establish a linkage between that area and the Interpretive Center. One possible linkage would be a small children's train connecting the interpretive center, roundhouse and picnic areas which could provide self-supporting revenue generation as well as unifying themes with the Roundhouse. The design of the commercial area should pay specific attention to circulation issues. The location of access roads and parking for the development should be oriented away from the wetland areas and designed to promote pedestrian linkages between the Interpretive Center and the Civic / Cultural Envelope.

#### e. Regional Use Area

The Regional Use Area will be located on the far east side of the Baylands and just south of the point where the Visitacion Creek channel connects to the Bay. This area is intended to serve the future Baylands development and the Bay region. This is the largest of the planned recreational areas at 26.8 acres, and will provide opportunities for activities requiring significant space. Any use in this area should take advantage of the trail network that will be located through the area, interact in harmony with the adjacent habitat area to the west, and be able to adapt to the subsidence issues associated with the underlying landfill conditions. Some recommended uses, either separately or as a cluster, for this area include:

- A bicycle skills center, including a mountain-biking skills course, bicycle motocross (BMX) track, and/or bicycle road track training course. All of these uses provide revenue-generating opportunities and would be promoted to attract biking-communities and activities on a regional scale. These uses could also be incorporated with the proposed Baylands trails network for bicycle races and other events.
- A 'Field of Dreams' sports complex that would attract local, regional, and national baseball and softball tournaments and events.



the same values should be approached for potential location within the complex. The idea is to create a design that inspires and programs which build upon the excitement and enthusiasm of the theme, with the goal of creating a self-sustaining, regionally significant destination. The development should seamlessly integrate with the Visitacion Creek habitat to the south, utilize and integrate native plantings, and promote the use of trail connections to both the development and the recreational opportunities on the Baylands.

**b. Civic-Cultural Envelope**

The Civic-Cultural Envelope, as identified in the Recreational / Public Space Use Area section, will be located near and around the historic railroad Roundhouse and Packing House buildings. Restoration and reuse of these buildings will provide the opportunity to locate potential revenue-generating uses in and around them. These potential uses include a railroad history exhibit, possibly including actual railroad cars or engine, an outdoor performing art stage or center, indoor meeting spaces or artist studios, or a farmer's market, in addition to retail or other commercial uses. The location of artist studios and a performing art stage would tie-in with art programs at the Charter High School / Community Use Area and environmental art installations recommended through out the Baylands development.



**Figure 5. Environmental Art**

The Civic-Cultural Envelope will also be designed to echo the proposed parks and plazas being developed as part of the Visitacion Valley /Schlage Lock development to the north in San Francisco. The restoration and conversion to public use of the historic Schlage office building will be balanced by similar actions at the Roundhouse and Packing House. A green mall or parkway connection between these areas should be coordinated and, the linkages from the Schlage building to the Interpretive Center, as well as the rest of the Baylands development, be promoted.

Parking should be sensitive to the pedestrian themes of the area and be located away from the space between the Roundhouse, Packing House and the area to the south adjacent to the detention pond. Off-site storm water flow will be daylighted in this area and parking lot runoff impacts should be minimized.

**c. Park Concession**

The Park Concession area will be situated at the south end of the Regional Use Area located in the southeastern section of the Baylands and described in the Recreational / Public Space Use Areas section. The main focus of this area will be on services and amenities associated with and supportive of the activities selected for the recreational

area. The opportunity for food service businesses will also be present. Any food service or restaurant operation should take advantage of and utilize views of the Bay, Lagoon and central Brisbane. The potential for additional restaurant uses due to demand from City residents and regional access from US 101 should be evaluated periodically. In addition to serving the needs of regional users of the recreation area, the needs of users of the Bay Trail should also be considered. The area should be planned as a trailhead for the Bay Trail, the Lagoon Boardwalk and the overall Baylands trail network. An analysis to determine the other possibilities for generating operation and maintenance revenue for the Regional Use Area, along with the most advantageous type of concessionaire agreement(private, non-profit, etc.), should be part of future planning efforts.

#### 4. Trails

The Plan recommends siting approximately 6.5 miles of Class I and 1.5 miles of Class II trails throughout the Baylands area. In determining the goals for the project trails, information was developed from public input, ABAG Bay Trail alignment policies, Caltrans Bikeway Planning Design Guidelines, and Bikeway/trail design best practices from a variety of federal, state and local sources. Key considerations for the trails planning include safety, local and regional connections, technical feasibility, and aesthetic qualities. The objectives of the trail network planning were:

- To plan a network of trails for bicyclists and pedestrians to provide regional and local connections.
- To develop a network of trails that would allow for different intensities of use and include accommodations for a variety of users with special needs such as families with small children, disabled users, and people walking dogs.
- To develop a trail network that connects the City of Brisbane with the Baylands.
- To plan a trail network that links elements of the open space and recreation plan.
- To identify a route (or routes) for the Brisbane segment of the San Francisco Bay Trail (described as “. . . a continuous 500-mile network of bicycling and hiking trails”).
- To develop non-automotive connections to public transportation.
- To develop accommodations for equestrians on trails leading east into the hills.
- To site Class I Bikeways, where possible.

The Trail planning process evaluated all viable routes and then selected the most highly rated routes. However, since some of the trails are connected to the roadways and the transit plans, the trail routes should be reevaluated as part of the overall Baylands planning process.



Figure 6. The Bay Trail

a. Bay Trail

The proposed Bay Trail is a regional trail that is intended to provide a 500 mile network of bicycling and hiking trails encircling San Francisco Bay. The trail is about sixty percent complete, including the portion from the San Francisco International Airport in San Bruno north to Sierra Point. The Association of Bay Area Governments' (ABAG) website describes the Bay Trail as follows:

“The Bay Trail provides easily accessible recreational opportunities for outdoor enthusiasts, including hikers, joggers, bicyclists, and skaters. It also offers a setting for wildlife viewing and environmental education, and it increases public respect and appreciation for the Bay. It also has important transportation benefits, providing a commute alternative for cyclists, and connecting to numerous public transportation facilities (including ferry terminals, light-rail lines, bus stops and Caltrain, Amtrak, and BART stations); also, the Bay Trail will eventually cross all the major toll bridges in the Bay Area.” (<http://baytrail.abag.ca.gov/overview.html>)

As part of the Brisbane Open Space and Recreation study, a local Bay Trail route, consistent with ABAG's Bay Trail policies and best trails planning practices, has been identified. The selected route:

- Connects to the existing Bay Trail to the south and the proposed Bay Trail route to the north,
- Is physically separated from streets and roadways where possible,
- Utilizes a floating trail as an alternative to the Class II trail on Sierra Point Parkway,
- Provides opportunities for interpretation and art,
- Provides views of the Bay, San Bruno Mountain, Ice House Hill and the City of Brisbane,
- Connects to the proposed relocated Caltrain station and existing and proposed local trails and bikeways,
- Is visible from adjacent buildings and open space, helping to assure safety along the proposed Trail route, and
- Would connect to local destinations.

In addition to providing regional and local connectivity, the recommended trail system should, where practical, consist of separated trails that accommodate both fast and slow traffic.

b. Recreational Trails

The Vision of the Baylands is to provide connections to a wide variety of spaces and uses. The recreational trail system will encourage walking and biking to become the preferred method of transportation to access these areas. The system design shall include connections that create loops of varying length to accommodate users from the recreational biking enthusiast to the family-oriented weekend users. The recreational trail system will provide series of different trail experiences as it moves from the grid-oriented network of the development out to the flowing, naturally-landscaped trails

along side Visitacion Creek and on to the regionally connected Bay Trail. For future access to the Lagoon, a floating trail adjacent to the lagoon would add value to the trail. A similar facility is located in Brisbane, Australia.



**Figure 7. Floating Boardwalk Trail - Brisbane, Australia**

Overall the recreational trail system shall be designed to include thoughtfully located areas to stop along the trail and take in views of the Bay, Lagoon, and Mountains or experience environmental art installations, Interpretive Center activities, or a quiet refreshment. Access points and trailheads should be developed in a way that creates a sense of identify for the recreational trail system.

Opportunities to create unique, identifying spaces include the rail tunnel underpass connecting the Baylands to Crocker Industrial Park, the proposed trailhead located in the Park Concession area, and at connections to the Bay Trail. In addition, the proposed pedestrian/bicycle bridge over the rail corridor provides a special opportunity to create a one of a kind asset to enhance the City of Brisbane.

Overall, a network of Class I and Class II bikeways are proposed that would provide connections to public spaces and natural areas. As defined by Caltrans, the proposed Class I Bikeways will “provide a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow minimized.” The nearly bare slate of the Baylands project presents many opportunities to construct Class I trails with the highest level of safety by building where there are no cross streets or providing grade separation at all street crossings. Class II Bikeways will “provide a striped lane for one-way bike travel on a street or highway.” On roadways with 2-way traffic, a lane on each side of the street is used. To provide maximum bicycle access to the Baylands, Class II Bikeways can be incorporated into streets throughout the complex, connecting to regional Class I and Class II Bikeways and transit. In



**Figure 8. Snake Bridge - Arizona**

addition, proposed Greenways provide an opportunity to incorporate Class I Bikeways into landscaped settings. The proposed network of trails provides many connections with regional trails and transit.

### 5. Lagoon

As indicated in the Habitat Enhancement / Open Space section, the Lagoon itself is recognized as an integral element in the Public Space Plan and is considered to be primarily a wildlife resource and visual amenity. The Brisbane community strongly identifies with the wildlife habitat provided and supports both the annual bird counts and local fishing area activities that occur on the Lagoon.

The objective for this area is to maintain and preserve existing conditions and habitat while improving viewing and trail access. The existing views should be utilized by the Park Concession area located south of the Regional Use Area. Due to contamination underneath the first layer of Bay silts as well as in the adjacent landfill, modification of the Lagoon shoreline to accommodate trail installation is not recommended. There is, however, the potential for a boardwalk-type bike and pedestrian trail to be located along the eastern edge, which would allow for closer viewing of wildlife.



Figure 9. Brisbane Lagoon

### D. Economics

The proposed Public Space Plan has been designed so as to minimize operating cost support. This is proposed to be done by emphasizing natural landscapes, choosing revenue generating recreation facilities, and creating settings to encourage private enterprise leases and non-profit entity support. Approximately 30% of the site is proposed for development with native/natural landscapes. On average, such areas cost up to 1/10<sup>th</sup> the amount to maintain per acre as opposed to park irrigated turf, trees and shrubs.

We are recommending that approximately 49 acres of land be developed into recreational and public space use areas. At an approximate cost of \$425,000 per acre to develop, the total cost is estimated to be \$20 million. Based on prior history and local information, it currently costs approximately \$10,000 per acre to operate and maintain developed recreation areas, for a total cost of \$490,000 per year. However, it is likely be that the approximately 27 acre Regional Use area may be fully maintained by an outside private entity. Additionally, the 17 acre Group Area is recommended to be maintained by the concessionaire. Finally, if the High School is constructed, the primary development and maintenance costs of those facilities would be born by the school district, with some participation from the managing entity. Based on these

assumptions, the management costs would be between \$100,000 - \$200,000 per year. These estimates do not include streetscapes or plazas, as those would likely be incorporated into the development and handled through common area changes.

We estimate that the 203 acres of upland habitat will cost approximately \$40,000 per acre to develop, with operations costs of \$1,000 per acre. This will result in a total development cost of approximately \$8 million and an annual operations cost of \$203,000. Trails of this class, with related amenities, have an average development cost of \$750,000 per mile, and a maintenance cost of \$15,000 per mile. With 8 miles of trails, this will result in an upfront cost of approximately \$6 million and maintenance costs of \$120,000 per year.

**Table 1: Estimated Development Costs for Baylands Public Space**

| Facility     | Acreage or Miles | Development Cost    | Net Annual Maintenance Costs |
|--------------|------------------|---------------------|------------------------------|
| Use Areas    | 49 acres         | \$20,000,000        | \$200,000                    |
| Habitat      | 203 acres        | \$8,000,000         | \$203,000                    |
| Trails       | 8 miles          | \$6,000,000         | \$120,000                    |
| <b>Total</b> |                  | <b>\$34,000,000</b> | <b>\$523,000</b>             |

There may be additional maintenance costs due to the siting on top of the closed landfill due to subsidence or other issues. However, the Plan recommends that most of the built public facilities be constructed west of the landfill area. Most of the land over the closed landfill is recommended to be kept as upland habitat, with the exception of the Regional Use area. If ball fields (such as a “Field of Dreams” facility) or golf greens are constructed here, maintenance will likely be higher. However, if a BMX and/or mountain biking skills course is constructed in this area, any subsidence issues may be able to be incorporated into the facility.

The proposed plan use areas will feature facilities that are revenue generating and can pay for their operating support. Important aspects to such self support are creating an appropriate setting, constructing the basic infrastructure and facilities, and building appropriately sized economic units. The plan elements (described in greater detail in the Recreational/Public Space Use Areas above) that are of this nature are:

- Group picnic areas
- Regional recreation area (bicycle trails, a mountain bike training and competition area, a golf training facility, Field of Dreams sports complex, skateboard area, climbing wall and/or a gymnasium companioned with a coffee/food service complex.)



**Figure 10. Group Picnic Area**

At the appropriate time, these potential facilities should have an economic feasibility analysis performed. Existing Group Picnic areas elsewhere in the Bay Area have grossed between \$500,000 to over \$1 million per year in the last three years, with attendance of 18,000 – 25,000 per year. The measure of success would be whether they could at least maintain their individual areas.

It is suggested that the interpretive center receive a base tax support from the development but that its enrichment be through non-profit operation, support, and sponsorships, presumably from local and Baylands businesses. Using a similar model, regional and Baylands businesses may also be approached for sponsorship or adoption of local trails or other recreation areas to assist with their maintenance. Other revenue could come from user fees (low to no cost for residents / higher fees for non-residents). The High School/Community Recreation Area could be supported largely by the school district through property tax revenues resulting from the Baylands development.

A key overall strategy is to contract out maintenance services, utilizing adopted guidelines and schedules. Outside contracting has proven to be a very successful cost saving mechanism for many agencies.

It is estimated that these strategies will significantly reduce the operations and maintenance costs of the public space area. Remaining support could come from a combination of a Baylands assessment district and from an earmark of a portion of the anticipated transient occupancy tax.

Construction of the natural landscape installations and activity use areas should be phased with the development. If possible, site grading and establishment of the upland natural areas should be accomplished early to have the largest impact at minimum cost. Natural area establishment could be followed by installation, one at a time, of use area infrastructure and initial improvements.

Sufficient “critical mass” is required for the initial improvements for each use area, but then it is recommended that build out occur over time, utilizing a Baylands development income stream. This phasing will allow room for adaptation to growth of demand, changing needs, and new trends.

Environmental artists should be engaged at the beginning of the process in order to help shape the overall project design. Likewise, those use areas envisioned for operation by private concessionaires should either utilize a specialty consultant or pre-selected operators to assist in the development planning.

#### E. Governance

It is recommended that the City and UPC seek to reach consensus on how the public space areas should be governed and operated. Some of the issues to consider are decision making power, liability, funding for operations and maintenance, financial management capabilities and incentives, and capability to lease to concessionaires,

other agencies, and non-profit organizations. There are numerous potential alternatives for governing bodies, including public agency (the City or the County), a joint powers authority, private (developer or operator), public/private partnership, non-profit land trust, other local non-profit organization, and others. From prior project experience, it is believed that the process will likely result in a private non-profit entity, with both the City and UPC having representation on the Board of Director sand with the power to contract with agencies, other non-profit organizations, and private concessionaires.

#### F. Conclusions

The Public Space Plan will be integrated into the City's ongoing process of developing a community-based alternative plan for study in the forthcoming draft EIR. It is anticipated that the EIR process will more specifically outline and define existing habitat, recommended roadways and transit locations, biological and toxics issues, and mitigation requirements that may impact recommendations made in this Public Space Plan. After the EIR is completed, this Plan may have to be reevaluated to take into account those conclusions. In addition, a more detailed, site-specific design process should be conducted which includes:

- Specific preliminary designs for elements within each identified use area;
- Specific trail plans;
- Biological and technical studies identified in the Plan as necessary in selected areas and for specific uses; and
- Feasibility studies for revenue generating public space uses recommended in the Plan. These studies should begin with identified uses and activities and then be expanded to include others identified by the city or developer during future stages of the process.



Figure 11. The Baylands