NEWPORT BANNING RANCH

PLANNED COMMUNITY DEVELOPMENT PLAN

GREEN AND SUSTAINABLE PROGRAM

Appendix B to the Planned Community Development Plan

Submitted to:
City of Newport Beach
Planning Department
3300 Newport Boulevard
Newport Beach, California 92658

D E C E M B E R 0 9

Submitted by:
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Green and Sustainable Program

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GREEN AND SUSTAINABLE PROGRAM

1 Background

1.1 Sustainable Development

With the enactment of the Global Warming Solutions Act of 2006 (also known as AB 32), California took a significant step in confirming its commitment to address climate change. Although much recent attention has been focused on the reduction of greenhouse gas emissions, there also are a number of important strategies being considered by communities today to reduce the impact of development on the environment more generally. Creating "green" and sustainable communities through environmentally conscious development is one of the strategies being employed in land use planning and development today. At the national, state, and local levels of government, attention is being directed to identifying and employing development practices that achieve long-term environmental sustainability for new communities.

The Green and Sustainable Program provides an overview on the importance of integrating sustainable community principles into the development of Newport Banning Ranch and includes measures and elements of project design that are being proposed to incorporate positive solutions to the need for environmentally conscious development. The Program begins with a brief discussion of recent State of California legislation and regulatory programs designed to address climate change and reduce greenhouse gas emissions, outlines the basic principles of sustainable development, and discusses the strategies employed at NBR to respond to the desire to create sustainable communities, and concludes with an outline of the Project-specific measures to create a green and sustainable community at Newport Banning Ranch.

1.2 California Climate Change Efforts

Beginning in 2005, California has taken steps to pioneer efforts at reducing greenhouse gas emission. On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05 which established greenhouse gas emission reduction targets with a goal of achieving a reduction of greenhouse gas emissions to 80% below 1990 levels by 2050. The Governor's Executive Order was followed by enactment of the Global Warming Solutions Act of 2006 or AB 32 (codified at Health and Safety Code Section 38500 et seq.) which directed the California Air Resources Board to establish a comprehensive program to reduce greenhouse gases by 2020.

In addition to these legislative mandates, the statewide goal of greenhouse gas emissions has also been incorporated into implementation of existing environmental statutes and regulations, including the California Environmental Quality Act (CEQA). SB 97, which was signed by the Governor in 2007, requires the Governor's Office of Planning and Research to prepare, develop and transmit guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as evaluated under CEQA.

On July 17, 2008, the California Building Standards Commission adopted the California Green Building Code (CGBC), the nation's first statewide "green" building code. This is a relatively complex set of proposed regulations that will be imposed in two steps and across a variety of site planning and building components and technologies. The CGBC includes green building measures organized in the following categories:

- Planning and Design;
- Energy Efficiency;
- Water Efficiency and Conservation;
- Material Conservation and Resource Efficiency; and
- Environmental Quality.

The new Code will become effective on a voluntary basis on January 15, 2009, until a mandatory edition of the Code is enacted (expected to be published in July of 2010 and become effective in January of 2011). The CBGC Focus Group (comprised of numerous State agencies, industry, utility companies, and environmental organizations) that drafted the proposed regulations will be reviewing the code over the course of four meetings commencing in December of 2008. Public hearings are expected to be held in the Spring of 2009. Newport Banning Ranch will conform to all applicable California Green Building Code measures in effect at the time of final Project approval. Compliance will most likely be overseen by the City of Newport Beach.

Achieving the State's goals of energy efficiency and greenhouse gas emission reduction will require a variety of efforts among the public and private sector including the development of energy efficient technology, increasing the use of renewable resources, promoting energy conservation and waste reduction, and incorporating measures into the construction and development of land that focus on sustainable or "green" communities.

One of the technical resources identified by the State of California (Office of Planning and Research) is the Sustainable Communities Model (SCM) developed by CTG Energetics, Inc. which "quantifies total CO2e emissions allowing communities the ability to optimize planning decisions that result in the greatest environmental benefit for the least cost."

The Landowner/Master Developer has retained CTG Energetics, Inc. and has incorporated elements of the SCM evaluation methodology into the overall Project's Green Development process.

Newport Banning Ranch will achieve Green Development goals and objectives by a variety of project design features. These goals and commitments, summarized in the following sections, are intended to create a framework to guide future land use and development within the Site. Envisioned is an exemplary community development that, in its layout, design, construction, and lifestyle, reduces greenhouse gas emissions, and conserves water and energy resources. Land use considerations include encouraging the development of compact, mixed-use, transit-oriented development that reduces vehicle miles traveled; encouraging alternative fuel vehicle use; conserving energy and water usage; and promoting carbon sequestration.

2 Strategic Overview

The Landowner/Master Developer and design team for Newport Banning Ranch are committed to a green and sustainable development. A holistic approach has been used to evaluate the Project and to ensure that adequate sustainable features are incorporated into project design, construction, and long-term operation and maintenance.

The Project will take tangible steps to address and contribute to reducing greenhouse gas emissions and the impacts of development on climate change. In that effort, a study was prepared by the Landowner/Master Developer's consultant team that:

1. Discusses the implications of the Project with respect to greenhouse gas emissions;

2. Quantifies and discloses the Project's estimated greenhouse gas emissions; and

3. Discusses verifiable strategies to reduce the greenhouse gas emissions associated with the Project.

This approach will be consistent with the Statewide goals and objectives described in Section 1, will be confirmed through independent third party evaluation and certification described in Section 3, , and achieved through implementation of a program of local project-initiated components (Section 4).

3 Independent Third-Party Green Certification

Separate from State-related requirements and the Landowner/Master Developer's Project-specific green program, the Project will consider committing some form of independent third-party green building certification provided that the fees for said certification are reasonable. The entire Newport Banning Ranch community will be certified either as a "GreenPoint-Rated" development through Build It Green or otherwise be certified by another comparable recognized program (such as, but not necessarily limited to, the USGBC LEED-ND™, or the NAHB National Green Building Standard™, that may exist at the time of Project approval and implementation.

If at the time of Project approvals, required local or State programs are more restrictive than the selected third-party program, the Project will adhere to local or State program requirements in lieu of obtaining a third-party certification.

Build It Green is a non-profit organization recognized by the State of California – and increasingly by environmentally-sensitive cities and counties – whose mission is to promote healthy, energy- and resource-efficient communities and buildings. Built It Green has been identified by the California Attorney General's office as follows: *"Build It Green" is a non-profit, membership organization that promotes green building practices in California. The organization offers a point-based green building rating system for various types of projects."*[1]

Build It Green's green-building guidelines, policies, and programs are intentionally crafted to be consistent and complementary with California's energy and water utility programs, building and energy codes, and with reputable national green building programs such as ENERGY STAR® and LEED™.

[1] The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level, Office of the California Attorney General, Edmund G. Brown Jr., Global Warming Measures, updated 2/14/8, p. 13 of 20.

4 NBR Resource Management Program

4.1 Resource Systems Included

The green program for Newport Banning Ranch is viewed broadly and focuses on sustainability in terms of the 13 resource areas identified below:

1. Habitat;
2. Watershed;
3. Energy, Air, and Water;
4. Carbon Sequestration;
5. Traffic and Transportation;
6. Public Views and Access;
7. Wildland Fire Safety;
8. Open Space;
9. Archaeology and Paleontology;
10. Oil and Gas;
11. Brownfield Conversion;
12. Governance; and
13. Social.

4.2 Resource Management Matrix

Exhibit 1, Resource Management Performance Matrix, provides the organizational foundation for the green and sustainable implementation process.

Each resource system has associated goals and objectives which focus on significantly reducing the Project's carbon footprint, protecting and restoring on-site habitat areas, and contributing to the reduction of greenhouse gas emissions.

To meet the Project's green and sustainable goals and objectives, implementation strategies were then developed and analyzed, and then integrated into the Newport Banning Ranch PC Development Plan and its various implementation plans and programs.

Project commitments were then generated to provide a dimension to the implementation strategies. The Project EIR will evaluate these commitments as Project Design Features embodied in the PC Development Plan and the various technical appendices.

During the environmental review process, the Landowner/Master Developer and Project team intend to compare these Newport Banning Ranch commitments against a baseline that reflects current California policies, regulations, and practices for comparably-sized projects, e.g., compliance with current Title 24 of the Code of Regulations. This will allow the Project to be compared to the environmental consequence of a conventional "business as usual" development.

The Project's intent is to improve upon and surpass this baseline and reduce impacts so as to meet the goals and objectives established for each resource system.

The process will, to the extent practicable, seek measurable results in each resource system so that this process will produce a comparison of the Project as proposed and the "business-as-usual" development model.

Green and sustainable opportunities related to these systems are summarized in the following resource-by-resource discussion, with appropriate references to the PC Development Plan and the various plans and programs contained in the Technical Appendices included as part of the overall City submittal.

4.3 Habitat

The Landowner/Master Developer has adopted five (5) goals and objectives addressing the Site's Habitat Resource System:

1. Habitat Restoration;
2. Habitat Mitigation;
3. Protection of Jurisdictional Wetlands;
4. Maintenance of Ecological/Wildlife Corridors; and
5. Conservancy.

These goals and objectives are met through the specific strategies and commitments described in Exhibit 1, which include:

- Surveying, mapping, and evaluating habitat areas, jurisdictional waters and wetlands, and ecological corridors;
- Buffering, restoring, and enhancing areas slated for preservation;
- Removing invasive vegetation and restoring with native plants;
- Enhancing on-site linkages for resident avifauna and enhancing functions for regional connectivity ("archipelago effect");
- Providing the opportunity for habitat restoration beyond the economic capability of the Project by remediating and reserving a portion of the Lowland as a mitigation bank; and
- Making one or more Irrevocable Offer(s) of Dedication to either public agencies or non-profit organizations, including but not limited to the City of Newport Beach, County of Orange, a State or federal agency, and/or a qualified non-profit organization, to oversee the maintenance and management of open space areas. Said non-profit organization may be an existing organization or be established and subsidized by the Landowner/Master Developer.

A comprehensive Habitat Restoration Plan (HRP) will function as the Project's primary component for implementing the commitments described above, and will be submitted in conjunction wit the Master Site Plan for the Project.

4.4 Watershed

The Landowner/Master Developer has adopted two (2) goals and objectives addressing the Site's Watershed Resources:

1. Runoff Management; and
2. Water Quality Treatment.

The goals and objectives are met through the specific strategies and commitments described in Exhibit 1, which include:

- Constructing a water quality basin as part of a wetlands restoration area to reduce peak storm flows generated off-site;
- Redirecting peak flows to the Lowland area;
- Constructing basins as part of wetlands restoration areas to cleanse/polish on-site runoff; and
- Implementing bio-cells on proposed streets for additional water quality treatment.

A comprehensive Watershed Assessment Report will function as the Project's primary component for implementing the commitments described above, and will be submitted in conjunction wit the Master Site Plan for the Project.

4.5 Energy, Air, and Water

The Landowner/Master Developer has adopted ten (10) goals addressing the Site's Energy, Air, and Water Resource System:

1. Energy Efficiency;
2. On-Site Renewable Energy Generation;
3. Reduced Potable Water Use;
4. Reduced Irrigation Water Use;
5. Storm Water Conservation;
6. Reduced Transportation Emissions;
7. Reduced Solid Waste;
8. Lower Impact Construction Operations;
9. Construction Waste Recycling; and
10. Using Environmentally Preferable Materials.

The above-stated goals are met through the specific strategies and commitments described in Exhibit 1, which include:

- Exceeding current Title 24 energy requirements by a minimum of 20%;
- Providing multimetering "dashboards" in each dwelling unit to visualize real-time energy use;
- Implementing a "Dark Sky" lighting concept adjacent to sensitive habitat areas;
- Reducing light and energy use in streets and common areas;

- Designing single-family residential roofs to be compatible with future photovoltaic panel installations;
- Utilizing low-water use indoor appliances, including washing machines, showers, and dual-flush toilets;
- Requiring 100% of plant materials in Upland and Lowland Open Space Areas (excluding public park and recreation areas), Oil Facilities Areas, and common Fuel Management Areas maintained by the HOA to be California natives;
- Requiring 50% plant materials to be California native or drought-tolerant through a community landscape program;
- Implementing Smart Controller irrigation systems in public and common areas;
- Designing landscape areas on a hydrozone basis;
- Implementing "green" streets which include bio-filters and impoundment areas;
- Providing access to transit and pedestrian and bicyclist connectivity;
- Reducing vehicle idling with roundabout street designs and other traffic-calming design details;
- Providing educational information on recycling to residents;
- Reducing construction emissions by 25% from standard 2008 practices;
- Increasing construction waste diversion by 50 to 75% from standard 2008 practices;
- Committing to 25% Forest Stewardship Council (FSC) certified wood for finish wood used during Project construction; and
- Requiring all building materials and finishes be Low Volatile Organic Compounds (VOC) , and prohibiting Freon in all air conditioning units, and acid-washed concrete in all paving.

The NBR PC Development Plan and subsequent Master Site Plan will function as the Project's primary components for implementing the commitments described above.

4.6 Carbon Sequestration

The Landowner/Master Developer addresses the Site's Carbon Sequestration System through the protection, restoration and creation of on-site native habitats and the planting of community landscape and an extensive public park and open space system.

This is met through the specific strategies and commitments described in Exhibit 1, which include:

- Increasing carbon sequestration through enhanced habitat creation and restoration;
- Enhancing the biomass of the Site through Oil Facility/Surface Remediation;
- Enhancing the biomass of the Site through community landscaping improvements; and
- Reusing clean topsoil in community landscape.

The PC Development Plan and the subsequent Master Site Plan and Habitat Restoration Plan (HRP) will function as the Project's primary components for implementing the commitments described above.

4.7 Traffic and Transportation

The Landowner/Master Developer has adopted two (2) goals and objectives addressing the Site's Traffic and Transportation System:

1. Reduced Vehicle Miles Traveled (VMT); and
2. Reduced Impacts to Adjacent Areas.

The above-stated goals and objectives are met through the specific strategies and commitments described in Exhibit 1, which include:

- Designing streets and intersections to encourage walking and bicycling with a pedestrian-oriented street design;
- Providing local goods and services within walking distance of future residents to reduce VMT by minimizing the need to go off-site;
- Proposing a bridge connection over West Coast Highway for pedestrians and bicyclists;
- Providing Wi-Fi capability in public and common areas and buildings for telecommuting and other advanced communications technology;
- Designing streets, including 15th, 16th and 17th Streets, with multiple dispersion routes to reduce congestion; and
- Implementing traffic calming devices such as median islands and intersection bulb-outs to reduce vehicle speeds, increase traffic volumes, and create safer streets.

The NBR PC Development Plan and subsequent Master Site Plan function as the Project's primary components for implementing the commitments described above.

4.8 Public Views and Access

The Landowner/Master Developer has adopted two (2) goals addressing the Site's Public Views and Public Access System:

1. Creating New Public Accessways and Places; and
2. Viewshed Protection.

The above-stated goals and objectives are met through the specific strategies and commitments described in Exhibit 1, which include:

- Providing a linear public Bluff Park with numerous vista points with seating;
- Providing an extensive eight-mile-long trail system with linkages to the beach and the Santa Ana River Trail;
- Proposing a bridge connection over West Coast Highway for pedestrians and bicyclists; and
- Using visual studies and simulations to refine Project design and minimize impacts on public and private views.

The NBR PC Development Plan and subsequent Master Site Plan will function as the Project's primary components for implementing the commitments described above.

4.9 Fire and Life Safety

The Landowner/Master Developer has adopted the goal of "Comprehensive and Environmentally-Sensitive Fire Protection" to address the Site's Fire and Life Safety Systems.

This goal is met through the specific strategies and commitments described in Exhibit 1, which include:

- Establishing fuel management zones that protect development while respecting special-status habitat areas proposed by the HRP;
- Establishing an enhanced construction zone that requires fire-resistant building materials and other construction measures;
- Requiring all structures to meet or exceed fire-resistant standards for materials and methods; and
- Providing emergency equipment access to all occupied structures in consultation with City and County public safety officials.

The NBR PC Development Plan and the Fire and Life Safety Program to be submitted in conjunction with the Master Site Plan will function as the Project's primary components for implementing the commitments described above.

4.10 Open Space

The Landowner/Master Developer has adopted two (2) goals addressing the Site's Open Space System:

1. Open Space Preservation; and
2. Regional and Community Parklands Creation.

The above-stated goals are met through the specific strategies and commitments described in Exhibit 1, which include:

- Preserving almost all of the potential special-status habitat on the Lowland as permanent open space;
- Preserving almost all of the potential special-status habitat on the Upland as permanent open space;
- Enhancing the bio-mass of the Site's open space through supplemental plantings to increase carbon sequestration;
- Preserving more than 50% of the Site as permanent open space;
- Providing an extensive eight-mile-long public trail system with linkages to the beach and the Santa Ana River Trail System;
- Providing over 40 acres of eligible land for public parks; and
- Providing neighborhood allées, HOA greens, community focal points, and "third place" elements.

The NBR PC Development Plan, and subsequent Master Site Plan, as well as an Open Space Dedication Program that will be submitted as part of or in conjunction with the future Pre-Annexation Development Agreement (PADA) will function as the Project's primary components for implementing the commitments described above.

4.11 Archaeology and Paleontology

The Landowner/Master Developer has adopted the goal of "Comprehensive Cultural Resource Mitigation" to address the Site's archaeological and paleontological resources.

This goal/objective is met through the specific strategies and commitments described in Exhibit 1, which include:

- Surveying, mapping, and evaluating existing on-site archaeological and paleontological resources; and
- Preparing and submitting a Cultural Resource Assessment Survey for Agency review in conjunction with preparation of the EIR.

The Project EIR, including a comprehensive cultural resource assessment survey will function as the Project's primary component for implementing the commitments described above.

4.12 Oil and Gas

The Landowner/Master Developer has adopted compatible ongoing oil operations to address the Site's Oil and Gas Resources.

This goal/objective is met through the specific strategies and commitments described in Exhibit 1, which include:

- Consolidating existing oil and gas operations into two oil facilities consolidation sites, two native plant buffers around the oil sites, and a non-exclusive, joint-use easement for access totaling approximately 19 acres; and

- Providing plantings, barriers, signage, and information to ensure continued operations are reasonably compatible with the proposed development.

The NBR PC Development Plan will function as the Project's primary component for implementing the commitments described above.

4.13 Brownfield Conversion

The Landowner/Master Developer has adopted the goal of a "Safe and Sustainable Infill Community" to address the Site's Brownfield Conversion.

This goal is met through the specific strategies and commitments described in Exhibit 1, which include:

- Mapping oil and gas wells and ensuring no habitable structures are proposed within ten feet of abandoned wells through site planning;

- Decommissioning and abandoning oil wells in accordance with State DOGGR standards;

- Implementing recommended mitigation measures to protect occupied structures from potential exposure to methane;

- Recycling and reusing salvageable material;

- Remediating soils when feasible through natural processes to reuse on-site; and

- Minimizing off-site hauling and disposal of materials and associated off-site traffic.

The NBR PC Development Plan will function as the Project's primary component for implementing the commitments described above.

4.14 Governance

The Landowner/Master Developer has adopted the goal of "Dedicated Open Space Management" to address the Site's Governance.

To meet this goal, the Landowner/Master Developer will make one or more Irrevocable Offer(s) of Dedication to either public agencies or non-profit organizations, including but not limited to the City of Newport Beach, County of Orange, a State or federal agency, and/or a qualified non-profit organization, to oversee the maintenance and management of open space areas. Said non-profit organization may be an existing organization or be established and subsidized by the Landowner/Master Developer.

The Landowner/Master Developer has also included, within the Project, the reservation of approximately 76 acres exclusive of public interpretive trials within the Lowland that could be owned by a public agency or qualified non-profit organization and either restored with Local, State, and/or Federal Funds, and/or operated as a third-party mitigation bank.

The NBR PC Development Plan and the future Pre-Annexation Development Agreement (PADA) will function as the Project's primary components for implementing the commitments described above.

4.15 Social

The Landowner/Master Developer has adopted two goals addressing the Site's Social System:

1. Create a Mixed Income Community; and
2. Provide Community Education.

The above-stated goals are met through the specific strategies and commitments described in Exhibit 1, which include:

- Preparing and obtaining City approval of an Affordable Housing Implementation Plan (AHIP); and

- Funding a portion of the proposed Interpretive Nature Center and constructing interpretive improvements within the Vernal Pool Interpretive Area.

The future Pre-Annexation Development Agreement (PADA) and future Affordable Housing Implementation Plan (AHIP) will function as the Project's primary components for implementing the commitments described above.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
	HABITAT	***1.1***	***Habitat Restoration:*** *Incorporate the protection, preservation, and restoration of habitat areas in the Project's planning and design to the maximum extent practicable.*	1.1.1	Survey and map all habitat areas pursuant to accepted survey protocols.	1.1.1-a	Habitat areas have been surveyed, mapped, and evaluated. The results, conclusions, and recommendations have been reported in the Biological Technical Report, reflected in the NBR Planned Community Development Plan, and incorporated into the Habitat Restoration Plan (HRP) in accordance with Resource Agency protocols. The HRP will be submitted for Agency reviews prior to Coastal Commission approval of the (first) Master Coastal Development Permit.
				1.1.2	Restore, enhance, or buffer marginal and degraded habitat types in targeted areas.	1.1.2-a	The HRP includes implementation measures for the buffering, restoration, and enhancement of degraded habitat areas slated for preservation. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.
				1.1.3	Remove invasive plants and restore native vegetation in targeted areas.	1.1.3-a	The HRP includes implementation measures for the removal of invasive vegetation and restoration with suitable native species where appropriate. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.
		1.2	***Habitat Mitigation:*** *Incorporate on-site mitigation efforts for loss of habitat area.*	1.2.1	Survey and map all habitat areas pursuant to accepted survey protocols.	1.2.1-a	Habitat areas have been surveyed, mapped, and evaluated. The results, conclusions and recommendations have been reported in the HRP in accordance with Resource Agency protocols. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.
				1.2.2	Mitigate the temporary and/or permanent disturbance and/or loss of habitat type pursuant to Resource Agencies accepted practices.	1.2.2-a	The HRP includes implementation measures for the mitigation of all temporary and/or permanent disturbance and/or loss of habitat areas. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.
				1.2.3	Provide the opportunity for habitat restoration beyond the environmental impact obligations of this project.	1.2.2-b	Remediate and reserve a portion of the Lowland as a mitigation bank.
		1.3	***Jurisdictional Wetlands:*** *Minimize impacts to Federal/State jurisdictional wetlands to the maximum extent practicable.*	1.3.1	Survey, map, and plan to avoid to maximum extent possible, jurisdictional wetlands for development purposes.	1.3.1-a	ACOE, CDFG, and CCC jurisdictional waters and wetlands have been surveyed, mapped, and evaluated. The results, conclusions and recommendations have been reported in the Jurisdictional Delineation Report, reflected in the NBR Planned Community Development Plan, and incorporated into the HRP in accordance with Resource Agency protocols. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
1	HABITAT	*1.4*	***Ecological/Wildlife Corridors:*** *Preserve, protect and buffer existing on-site ecological corridors in the project's planning and design.*	1.4.1	Preserve and buffer existing on-site ecological corridors where appropriate.	1.4.1-a	Enhancing on-site linkages for resident avifauna and enhancing functions for regional connectivity ("archipelago effect") in the NBR Planned Community Development Plan and the HRP. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of Resource Agency approvals of the HRP.
				1.4.2	Improve quality of existing corridors.	1.4.2-a	The HRP includes implementation measures for the enhancement of habitat linkages, removal of invasives, and improvement of the quality of existing corridors. Prior to issuance of a grading permit for land use development, the Landowner/Master Developer will furnish evidence of all Resource Agency approvals of the HRP.
		1.5	***Conservancy:*** *Incorporate the designation or formation of a Newport Banning Ranch Conservancy in the Project's planning and design.*	1.5.1	Establish and/or contract with an existing non-profit organization for oversight and management of habitat areas.	1.5.1-a	The Landowner/Master Developer will make irrevocable offers of dedication to the City, County, State and/or Federal Agencies, or alternatively establish and subsidize a new non-profit organization, or contract with an existing organization, to oversee and manage the maintenance of sensitive habitats, ecological corridors, and mitigation areas for a period of five (5) years from the issuance of the first Certificate of Occupancy.
		1.6	***Newport Beach LCP Land Use Plan:*** *Provide a project that is consistent with the Biological Policies within City's certified LCP Land Use Plan*	1.6.1	Implement through the Planned Community Development Plan, HRP, and other plans and programs, the General Plan Land Uses in the coastal zone to be consistent with the Coastal Land Use Plan Map and applicable LCP policies.	1.6.1-a	The NBR Project will be consistent with the City's certified LCP Land Use Plan to the extent applicable. The Site is designated as a Deferred Certification Area and, therefore, does not have a certified LCP Land Use Plan designation. The Project, as evaluated in the LCP Consistency Analysis (see PCDP Appendix C), is consistent with LCP policies and will be submitted to the California Coastal Commission for review and approval through a Master Coastal Development Permit.
2	WATERSHED	*2.1*	***Runoff Management:*** *Meet or exceed local flood control standards*	2.1.1	Implement development practices that maintain the existing hydrologic character of the site while reducing erosion and sedimentation.	2.1.1-a	A detention/water cleansing basin will be constructed at or near the off-site entrance to the Large Arroyo to reduce peak storm flow generated in off-site tributary areas of Costa Mesa and Newport Beach.
						2.1.1-b	Peak flows will be redirected to the Lowland area to reduce Oxbow Loop impacts.
						2.1.1-c	Maintain existing flow rates to the West Coast Highway and the Large Arroyo drainage systems by implementing bio-cells and adjusting the proposed tributary areas.
		2.2	***Water Quality Treatment:*** *Meet or exceed State Water Resource Water Quality Control Board requirements*	2.2.1	Implement source control and water quality treatment to treat runoff and improve the water quality outletting to the Oxbow Loop and Lowland areas.	2.2.1-a	A detention/water cleansing basin will be constructed at the entrance to the Large Arroyo to cleanse off-site tributary runoff from the commercial area east of the Project Site.
						2.2.1-b	Include, in site design, allowances for Best Management Practices such as bio-cells along proposed streets, bio-swales in park areas, and subterranean parking in some multi-family products.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
3	ENERGY, AIR, AND WATER	*3.1*	***Energy Efficiency:*** *Meet and exceed energy code requirements and convey information about their performance to stakeholders both pre-and post-entitlement.*	3.1.1	Reduce emissions through design and building features.	3.1.1-a	All residential buildings will exceed current Title 24 requirements by at least 20% through improved design, materials, construction, inspection, and equipment/appliance specifications.
				3.1.2	Provide each Dwelling Unit with the capability to visualize real time energy use and track consumption over time.	3.1.2-a	Install Residential Building Multimetering "Dashboards" in all homes.
		3.2	***Energy Generation:*** *Consider a wide-range of energy generation technology.*	3.2.1	Implement a "Dark Sky" lighting concept in residential areas to minimize impacts to neighbors and habitat areas, while improving energy efficiency.	3.2.1-a	Lights and energy use in streets and common areas will be reduced by using a variety of the following or similar actions: 1. Use of Dark Sky fixtures; 2. Fewer fixtures; 3. LED or low-energy fixtures; and 4. Solar assist attachments.
				3.2.2	Evaluate opportunities for on-site energy generation.	3.2.2-a	Detached residential roof designs will be designed in a manner compatible with installation of photovoltaic panels.
		3.3	***Potable Water Use:*** *Meet or exceed local agency recommendations for water conservation.*	3.3.1	Use a variety of water-saving devices to reduce indoor water use.	3.3.1-a	All indoor appliances will be low-water use, including washing machines, showers, and dual-flush toilets. All public and/or common area restrooms will feature waterless urinals in men's rooms.
		3.4	***Irrigation Water Use:*** *Save energy and emissions embodied in water through landscape design.*	3.4.1	Use a mixture of native water-saving plantings and high-efficiency irrigation systems .	3.4.1-a	100% of the plant materials in Upland and Lowland Open Space Areas (exclusing public park and recreation areas), Oil Facilities Areas, and common Fuel Management Areas maintained by the HOA will be California Natives.
						3.4.1-b	50% of the plant materials used in the master community landscape program will be California natives or drought-tolerant species.
						3.4.1-c	All public and common area landscaping will be irrigated by a "Smart Controller" system featuring satellite weather data, rain sensors, and/or moisture sensors.
						3.4.1-d	All landscaped areas will be designed on a hydrozone basis to group plants according to their water requirements and sun exposure.
				3.4.2	Evaluate the feasibility of reclaimed water for landscape irrigation purposes.	3.4.2-a	A reclaimed water distribution system will be designed and installed in backbone streets to allow for the use of reclaimed water for common landscape irrigation purposes should the delivery of reclaimed water to the site become a reality.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
3	ENERGY, AIR, AND WATER	***3.5***	***Storm Water Conservation:*** *Incorporate storm water conservation and groundwater protection strategies where feasible.*	3.5.1	Implement rainfall infiltration and impounding through planning and design of streets and rights-of-way.	3.5.1-a	Many streets will be designed and constructed as "green" streets with bio-filters. Impoundment areas will be designed and constructed to capture, treat, and retain runoff.
		3.6	***Transportation Emissions:*** *Strive for below-average levels of transportation-related greenhouse gas emissions.*	3.6.1	Consider access to transit, proximity to diverse land uses, and connectivity for pedestrians and bicycles in project's design features.	3.6.1-a	The community's design provides access to transit, proximity to diverse land uses, and connectivity for pedestrians and bicycles.
				3.6.2	Utilize devices such as roundabouts to reduce air quality impacts.	3.6.2-a	The community's design provides roundabouts and other traffic-calming design details that will reduce the volume of vehicles stopped and idling at conventional signalized and/or STOP-signed intersections.
		3.7	***Solid Waste:*** *Meet and exceed regional waste diversion goals.*	3.7.1	Include project features and educational measures to reduce waste generation rates and promote recycling.	3.7.1-a	Recycling, reuse, and reduced-use information and educational materials will be provided to all residents and users in print form and on a community intranet.
						3.7.1-b	Recycling bins will be provided in public parks, interpretive centers, and retail and commercial areas.
		3.8	***Construction Operations:*** *Evaluate opportunities to follow industry best practices.*	3.8.1	Quantify construction emissions and look for creative opportunities to reduce emissions.	3.8.1-a	Construction emissions will be reduced by 25% from standard 2008 practices through the use of clean-burning diesel fuel, bio-diesel fuel, and/or other alternative fuels.
						3.8.1-b	Energy conservation and emission reduction education and training sessions will be conducted for all contractors.
		3.9	***Construction Waste Recycling:*** *Increase construction waste recycling.*	3.9.1	Reduce associated life cycle greenhouse gas emissions.	3.9.1-a	Construction waste diversion rate will be increased from 50% to 75% from standard 2008 practices.
		3.10	***Materials:*** *Use materials with relatively low environmental impacts.*	3.10.1	Evaluate and implement materials with relatively low environmental impacts.	3.10.1-a	25% of finish wood will be FSC certified.
						3.10.1-b	Building materials and finishes will be Low Volatile Organic Compounds (VOC).
						3.10.1-c	A/C units will be non-Freon.
						3.10.1-d	Acid-washed concrete paving will be prohibited.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
4	CARBON SEQUESTRATION	*4.1*	***Carbon Sequestration:*** Use on-site restoration of natural habitats as well as planting of public parks and open space areas for carbon sequestration.	4.1.1	Evaluate the potential for carbon sequestration and, where feasible, design restoration programs to enhance natural sequestration.	4.1.1-a	Planting to implement HRP has been enhanced in terms of habitat creation, restoration, and overall enhancement resulting in increased carbon sequestration.
						4.1.1-b	Community landscaping improvements for streets, parks, common areas, open space areas, and habitat areas will be enhanced, restored, and improved with major supplemental plantings that will dramatically increase the biomass of Newport Banning Ranch, providing for significant onsite carbon sequestration.
				4.1.2	Evaluate potential for topsoil mining to maximize carbon banking through tree/planting programs.	4.1.2-a	Non-contaminated topsoil will be stripped, stockpiled, and reused in the community landscape.
5	TRAFFIC AND TRANSPORTATION	*5.1*	***Reduced Vehicle Miles Traveled:*** *Create opportunities for and improve alternative modes of transportation.*	5.1.1	Provide a pedestrian-friendly design through site planning.	5.1.1-a	Streets and intersections will be designed to create a safe, pleasant pedestrian experience that encourages walking and bicycling in place of the auto.
				5.1.2	Evaluate the opportunity for a pedestrian bridge connection over West Coast Highway.	5.1.2-a	The community's design will propose for a bridge connection to the beach over West Coast Highway for pedestrians and bicycles.
				5.1.3	Provide opportunities for advanced communications technology (telecommuting).	5.1.3-a	Fiber-optic lines will be installed to all homes.
						5.1.3-b	The community will feature Wi-Fi capability in all public and common areas and buildings.
						5.1.3-c	Subscriber technical support will be available through the HOA or a commercial operation.
		5.2	***Reduced Impacts to Adjacent Areas:*** *Improve traffic flow in and around project site.*	5.2.1	Include multiple dispersion routes for vehicular traffic flow in and around site.	5.2.1-a	Streets – including 15th, 16th, and 17th Streets – will be designed and improved to offer multiple route choices to reduce congestion both internally and externally.
				5.2.2	Design a new intersection along West Coast Highway.	5.2.2-a	The main community entry at West Coast Highway will feature a state-of-the-art design that includes free right-turn lanes, a wide landscaped median and, along Bluff Road, an access to Sunset Ridge Park.
				5.2.3	Use landscape design features to create green and calm streets.	5.2.3-a	Median islands and landscaped roundabouts will provide additional landscape areas.
				5.2.4	Use traffic-calming devices, where feasible, to better manage vehicular traffic.	5.2.4-a	Intersection bulb-outs will provide for reduced vehicle speeds, higher traffic volumes, and safer, calmed traffic flow.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
6	PUBLIC VIEWS AND ACCESS	*6.1*	***New Accessways and Places:*** *Create public views and trails throughout project design.*	6.1.1	Design a variety of view parks accessible by the public.	6.1.1-a	Nearly the entire western and southern perimeter of the community is designed as a linear public Bluff Park offering numerous vista points with seating.
				6.1.2	Design public trails in all directions with connections to surrounding open space areas and facilitate public access to nearby neighborhoods.	6.1.2-a	An extensive network of public Lowland Trails, Upland Trails, Arroyo Trails, Bluff Toe Trails, and Bluff Park Trails (totaling approximately 8 miles) will link all areas of the community with connections to the beach and the Santa Ana River Trail System.
				6.1.3	Provide the opportunity for a pedestrian bridge connection over West Coast Highway.	6.1.3-a	The community's will provide for a bridge connection to the beach over West Coast Highway for pedestrians and bicycles.
		6.2	***Viewshed Protections:*** *Address visual impacts on public and private viewsheds.*	6.2.1	Use visual studies and simulations to refine project design, grading, landscape, and architecture.	6.2.1-a	Visual studies and simulations have been used to refine project design – grading, landscape, architecture – affecting public/private views (e.g., roads, parks, open space, and nearby residents). These visual studies and simulations will be submitted to the City for review prior to public distribution of the Draft EIR.
7	WILDLAND FIRE AND LIFE SAFETY	*7.1*	***Fire Protection:*** *Protect life and property from wildland fire hazards.*	7.1.1	Provide appropriate fuel management zones between occupied structures and fire hazard areas.	7.1.1-a	A fire model analysis as to the exposure of structures to wildland fire hazards has been conducted by experts. Their recommendations have been reflected in the site planning for the community and in the design of fuel management zones and an enhanced construction zones. These studies and recommendations will be provided in conjunction with the Planned Community Development Plan and Master Site Plan/Tentative Tract Map.
				7.1.2	Establish fuel management zones and programs to maintain the integrity of designated habitat areas.	7.1.2-a	The site planning for the community and the design of fuel management zones and programs have been completed with considerable consultation with the project biologist to respect and maintain the integrity of existing potential Special-Status Habitat areas proposed by the HRP. These studies and recommendations will be provided in conjunction with the Planned Community Development Plan and Master Site Plan/Tentative Tract Map.
				7.1.3	Incorporate fire-resistant design, materials, and methods for occupied structures where required.	7.1.3-a	All occupied structures will be designed and constructed to meet or exceed fire-resistant standards and codes for materials and methods.
				7.1.4	Provide adequate emergency equipment access routes to all occupied structures.	7.1.4-a	Emergency equipment access to all occupied structures will be designed in consultation with City and County public safety officials to meet or exceed all codes and standards.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
8	OPEN SPACE	*8.1*	***Open Space Preservation:*** *Set aside a majority of the project site in permanent open space.*	8.1.1	Preserve majority of Lowlands open space habitat.	8.1.1-a	Almost all of the potential Special-Status Habitat on the Lowland will be preserved and/or enhanced/restored as permanent open space.
				8.1.2	Preserve majority of Upland open space habitat.	8.1.2-a	Almost all of the potential Special-Status Habitat on the Upland will be preserved and/or enhanced/restored as permanent open space.
				8.1.3	Utilize suitable open space areas as core component of natural carbon sequestration strategy.	8.1.3-a	Open space areas will be enhanced, restored, protected, and/or improved with major supplemental plantings that will increase the bio-mass of Newport Banning Ranch, providing for significant on-site carbon sequestration.
		8.2	***Regional and Community Parklands:*** *Provide passive and active parks to serve this project and adjacent areas.*	8.2.1	Passive and active parks shall be connected to the trail system.	8.2.1-a	Significantly more than 50% of the Site will remain in permanent open space. Eligible land for public park uses exceeds 40 acres, nearly three times the City's minimum requirement. An extensive public trail network – composed of the Lowland Trails, Upland Trails, Arroyo Trails, Bluff Toe Trails, and Bluff Park Trails – over 8 miles in total length – will link areas of the community with connections to the beach and the Santa Ana River Trail System.
				8.2.2	Evaluate and designate private recreational areas and facilities to augment public parks	8.2.2-a	Neighborhood allées, HOA Greens, and Community Focal Points will provide linear parks and "third place" elements for the residential areas to increase social interaction and create a sense of place. These will be designated on the Master Site Plan.
9	ARCHAEOLOGY AND PALEONTOLOGY	*9.1*	***Cultural Resource Preservation:*** *Comply with accepted practices for the preservation of cultural resource artifacts or recovery of these artifacts in a manner that preserves the scientific and historical value of the resource consistent with local, State, and Federal laws, guidelines, and protocols.*	9.1.1	Research literature and survey the project site using standard protocols.	9.1.1-a	Existing on-site archaeological and paleontological resources have been surveyed, mapped, and evaluated. The results, conclusions and recommendations have been reported in the Draft Cultural Resource Assessment Survey in accordance with local, State, and Federal laws, guidelines, and protocols. The Draft Cultural Resource Assessment Survey is contained in Volume IV of the Technical Appendices.
				9.1.2	Implement recommended mitigation measures during the planning, design, implementation, and construction of the project as appropriate.	9.1.2-a	
10	OIL AND GAS	*10.1*	***Compatible Oil Operations:*** *Provide for continued oil and gas operations during project construction and occupancy.*	10.1.1	Consolidate oil and gas operations, equipment, pipelines, and storage facilities.	10.1.1-a	All oil and gas operations, equipment, pipelines, and storage facilities now spread out over the entire 402-acre property will be consolidated to two sites connected by an access road/easement, totaling approximately 19 acres.
				10.1.2	Provide barriers to ensure compatibility of continued oil and gas recovery operations with the proposed development, use, open space, and occupancy of Newport Banning Ranch.	10.1.2-a	Barriers, signage, and informational literature for residents and visitors will be provided to ensure compatibility of continued oil and gas recovery operations with the proposed development, public use, and residential occupancy of Newport Banning Ranch. These materials will be provided in conjunction with disclosure documents in the purchase and sales agreements.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
11	**BROWNFIELD CONVERSION**	***11.1***	***Safe and Sustainable Infill Community:*** *Provide for the safe and efficient transformation of most of the project site area from an active oil and gas resource recovery operation to a mixed-use community.*	11.1.1	Map all oil and gas wells.	11.1.1-a	All oil and gas wells have been mapped and their locations have been considered in the site planning of the community as summarized in Chapter 2 of the PC Development Plan, and in the Draft Oil Facility Consolidation, Abandonment, and Remediation Program (OFCARP) contained in Volume I of the Technical Appendices.
				11.1.2	Decommission and abandon oil and gas wells in or near the development in accordance with DOGGR standards.	11.1.2-a	All oil and gas wells in or near the development will be decommissioned and abandoned in accordance with State DOGGR standards.
				11.1.3	Plan and design all proposed occupied structures to maintain minimum setbacks from abandoned wells.	11.1.3-a	As provided for in the Draft OFCARP, Construction-level Site Plans will be designed to ensure that no habitable structures is located above or within 10 feet of any abandoned well. Other safety/venting provisions are set forth in the OFCARP.
				11.1.4	Implement recommended mitigation measures to protect all occupied structures and inhabitants from potential exposure to methane and natural gas and other toxic elements.	11.1.4-a	As set forth in the Draft OFCARP, the following mitigation measures will be incorporated into oil facility abandonment and remediation: 1. A Hazardous Gas Analysis of the property will be conducted as outlined by the OCFA to determine appropriate mitigation measures as necessary. 2. An Environmental Monitor will be used during site grading to immediately handle any small impacts encountered. 3. Oil well casing tops will be adjusted and tested to respect land use development grading (e.g., keeping the tops of the oil wells close enough to the new surface to be monitored) 4. Methane vents will be installed on all abandoned oil wells within and near land use development. 5. Habitable structures will be prohibited above or within 10 feet of any abandoned oil well. 6. Methane barriers and passive venting will be required for habitable structures near wells.
				11.1.5	Use "smart design" to locate new buildings and community facilities to be least affected by prior oil/ energy uses.	11.1.5-a	All oil and gas wells have been mapped and their locations have been considered in the site planning of the NBR community.
				11.1.6	Recycle soil, concrete, and other oil-related equipment/materials, to the maximum extent feasible.	11.1.6-a	1. Recycle or reuse salvageable materials from the oil operations. 2. Remediate soils on-site, whenever feasible, using natural processes. 3. Reuse remediated soils and restored materials in development fills whenever possible. 4. Minimize off-site traffic, hauling and disposal 5. Minimize disturbances to potential Special-Status Habitat, consistent with State and Federal Resource Agency directives.

Exhibit 1

RESOURCE MANAGEMENT PERFORMANCE MATRIX (continued)
Newport Banning Ranch

RESOURCE #	RESOURCE SYSTEM		GOALS AND OBJECTIVES		STRATEGIES		COMMITMENTS
12	GOVERNANCE	*12.1*	***Dedicated Open Space Management and Maintenance:*** *Provide the structure and process to oversee the long-term operations, management and maintenance of the site's open space areas and resources, as well as the community's common areas.*	12.1.1	Establish the Newport Banning Ranch Conservancy or contract with an existing organization, charged with the authority and responsibility to direct the management and maintenance of NBR's various open space preservation areas and programs.	12.1.1-a	The Landowner/Master Developer will make an offer to the City, County, State or Federal Agency, or establish and subsidize a non-profit organization, or contract with an existing organization, to oversee and manage the maintenance of sensitive open space areas, ecological corridors and mitigation areas for a period of five (5) years from the issuance of the first Certificate of Occupancy.
				12.1.2	Include, within the Project, the reservation of approximately 76 acres exclusive of public interpretive trials within the Lowland that could be owned by a public agency or qualified non-profit organization and either restored with Local, State, and/or Federal Funds, and/or operated as a third-party mitigation bank.	12.1.2-a	The Landowner/Master Developer will make an offer to the City, County, State or Federal Agency, or establish and subsidize a non-profit organization, or contract with an existing organization, to oversee and manage the maintenance of sensitive open space areas, ecological corridors and mitigation areas for a period of five (5) years from the issuance of the first Certificate of Occupancy.
13	SOCIAL	*13.1*	***Mixed Income Community:*** *Provide affordable housing on site.*	13.1.1	Construct on-site affordable housing units.	13.1.1-a	The Landowner/Master Developer will prepare and obtain City approval of an Affordable Housing Implementation Plan (AHIP). A Draft of this AHIP is contained in Volume I of the Technical Appendices.
			Community Education: *Provide education/ awareness*	13.2.1	Develop signage and other informational programs to promote learning	13.2.1-a	Fund a portion of the Interpretive Nature Center that will be located adjacent to the Public Bluff Park. Construct interpretive signage in Vernal Pool Interpretive Area.