The Green Gateway Business Community - Basics for a 21st Century plan

Transportation is key to air quality.

Fully 38% of the greenhouse gases in our Bay Area air comes from automobiles. It is simply no longer an acceptable alternative to develop new retail and industrial land usages that fail to take this into account.

A 21st Century development must be planned in such a way as to keep trip generation at a minimum. We need to enable and encourage many if not most of those fewer trips to be made on foot and by bicycle, and on clean-tech public transit. In this way, a primary goal of the Green Gateway Business Community is to provide alternatives to cars.

We propose:

1. A much smaller development, (fewer lots on less acreage, less grading, fewer square feet of building space) with accordingly fewer trips to and from the Business Community (see also the Comparison Table A1 on page 10). In summary, the acreage of the Green Gateway Business Community would comprise:
    - 100 acres of Research & Development and other office and limited industrial use
    - 15 acres of mixed commercial use: hotel, retail (no big box) and office (no residential)
    - 12 acres roads
    - 2 million square yards of grading
    - 400 acres open space
    - 1.5 million square feet of Research and Development, office and other limited industrial building space
    - 300,000 square feet of mixed use (office and retail, but no residential) business space
    - 1.8 million square feet total buildings
2. Plentiful pedestrian and bicycle paths within the Community, and whenever possible, interconnected streets (as opposed to cul-de-sacs). This design would encourage foot and bicycle traffic.
3. Focus most business and industrial uses on cleantech R&D and related commerce, so that Green Gateway becomes known and recognized as a central cleantech hub in the emerging East Bay/Sacramento Green Corridor. By focusing on cleantech R&D and University collaboration, the Park would create a good job match for Benicia's employment demographics, thereby reducing commute traffic. A clean tech green-collar training center would generate a skilled green-collar workforce for the many businesses on site and elsewhere.
4. A distribution of commerce and retail throughout the acreage rather than concentrated near Interstate 680. This retail and commerce would primarily serve the Community itself, and would result in much less traffic off Interstate 680, although high-quality restaurants and other commercial ventures would appeal to hotel and retreat center guests, Benicians and others from nearby cities.
5. An Intermodal Transportation hub and shuttle service – paid for through assessment district financing – (note for example, Emeryville, CA), to cut down on trips from other cities.
6. Minimal parking which would encourage use of connector buses.
7. A citywide local transit system of electric -- or hybrid -- short buses (vans or cutaways) and a system of elegantly designed bus stops to serve all of Benicia. Buses would run frequently enough to make car trips to and from the Green Gateway Business Community (and elsewhere in Benicia) unnecessary in most cases.

Protection of Habitat, Streams

Benicians love the hills and open space that surround our beautiful city. For aesthetic reasons, then, as well as the increasingly urgent environmental imperatives, the Green Gateway Business Community will preserve and enhance the natural and pastoral beauty of the original hills, valleys and streams. Those who do business in the community will enjoy a park-like setting.

We propose:

- No grading resulting in slopes over 20%
- 200 foot wide buffers on each side of all creeks, drainages, swales and other wetlands.
- 75% open space
- No extension of Industrial Road to Lake Herman

A profitable development that serves the City of Benicia

Our research shows that the Green Gateway Business Community, while substantially smaller than ventures proposed for this location in the past, meets and exceeds industry standards for profitability. In developers' terms, the project "pencils." Development of 127 acres will enrich the owners, developers, contractors and builders, bring significant new jobs, and serve the City of Benicia and its citizens throughout a 21st Century that promises to unfold like no previous era in human history.

Cleantech R&D is projected to be the most vigorous and growth oriented business sector in the coming decades. Additionally, the activities of cleantech R&D provide a good match for our employment demographics, offering a wide spectrum of jobs for Benicians from skilled labor to scientific and professional. The project will put Benicia on the map as a leader in clean technology, will strengthen the overall economy in Benicia and in the San Francisco Bay Area, and will draw new research and development that is key to combating climate change and growing a more sustainable world.

(For more, refer to "Clean Technology Green Innovation for 21st Century Challenges" pp. 16-20 *below)*

Guidelines / Goals / Types of Companies and Businesses
GGG Brainstorm

Guidelines

Leeds Certifications (Gold if possible)
Form based Code
Meets the requirements of Benicia's General Plan
Sustainable under California law (AB32)
Visionary
21st century
0 Carbon footprint
Clean tech / Green tech R&D
Net positive energy outflow
This is a venue for Benicia, not for tourists

Goals

Intermodal transport site
Connect to electric trolley service that connects BIP, downtown, Yuba, Arsenal, Rose Drive business, Southampton, Community Park etc
Walking/biking trails
Connecting streets
Pay attention to the creek/bridges over the creeks
Lots of trees
Keep hills, no more than 20% grading
Anchor companies placed like a spider web
Campus style
Mixed use means retail below, office above (not residential)
Parks, small areas of rest
Pool, lake
Playground
Vista points
View corridors
Use wind, solar
Community garden

Types of companies / buildings

At a minimum, the Green Gateway Business Community would be **built** green, and every business/occupant would commit to a green operation. An even better option would be for the Community to foster only businesses/occupants that are generating clean-tech research, development and manufacture. Our group favors the latter option. We envision a hotel, conference center and restaurants to serve the Green Gateway, and mixed use distribution of additional retail to serve the business community, along with R&D and light industry.

Potential Companies, Buildings, Occupants

(Additional material from the Addendum of 9/1/08)

At a minimum ...
At a minimum, the Green Gateway Business Community would be built green, and every business/occupant would commit to a green operation.

An even better option would be ...
An even better option would be for the Community to foster only businesses/occupants that are focused on clean-technology research, development, manufacture, commerce, education, and related support activities. Our group favors this latter option.

We envision ...
We envision a hotel, conference center and restaurants to serve the Green Gateway Business Community, an education commons, an expo/demonstration center, cleantech testing facilities, and mixed use distribution of additional commerce and retail to serve the business community, along with cleantech R&D and light industry.

Some potential occupants might include ...

Some potential occupants might include satellite education centers from UC Berkeley, UC Davis, and other universities and Jr. colleges; green-collar skills training centers; an Expo Center showcasing state of the art demonstration projects from private industry; large areas devoted to testing of large scale solar projects and wind technology; a cleantech business incubator; and many start-up and established companies focusing on cleantech R&D, manufacture, and sales and services relating to a wide range of categories such as energy, transportation, water, air, materials, agriculture, and recycling..

COMPARISON: SEENO AND THE GREEN GATEWAY VISION

The Green Gateway model would result in an estimated 78% reduction in traffic over Seeno's 2007 proposal based on trip generation alone. With an intermodal transit station, on-campus shuttle service and an electric or hybrid transit system serving all of Benicia, there would be even greater reductions.

The Green Gateway Business Community model is a 21st Century design that will be profitable for the developer within industry standards. The time necessary for all parties to agree on a revised project along these lines, (about a year), will be much less than a protracted lawsuit over the suitability of the currently proposed project.

Seeno 2007	Seeno 2008	Green Gateway Vision
80 lots	80 lots	lots as needed
280 acres light industrial	150 acres light industrial (54% of 2007)	100 acres of primarily Research and Development / clean-tech / light industrial (67% of 2008)
35 acres highway commercial	35 acres highway commercial (no change)	15 acres hotel, mixed use retail and office, no big box, spread throughout the project (43% of 2007/2008)
32 acres roads	30 acres roads (94% of 2007)	12 acres roads (40% of 2008)
180 acres open space	313.2 acres open space (174% of 2007)	400 acres open space (128% of 2008)
527.8 acres total	527.8 acres total	527.8 acres total
9 million square yards grading	4 million square yards grading (44% of 2007)	2 million square yards grading (50% of 2008)
4.44 million sq. ft. light industrial building space	2.4 million sq. ft. light industrial building space (54% of 2007)	1.5 million sq. ft. of primarily Research & Development / clean-tech business space (62% of 2008)
857,000 sq. ft. of commercial building space	857,000 sq. ft. of commercial building space (no change)	300,000 sq. ft. of mixed use retail & office building space (35% of 2007/2008)
5.3 million sq. ft. total building space	3.3 million sq. ft. total building space (62.3% of 2007)	1.8 million sq. ft. total building space (55% of 2008)

Sample: Monterey Sustainability Checklist

A possible source for a report card comparing Seeno and the Green Gateway Vision

Source: http://www.monterey.org/building/greenbuilding/docs/Monterey_GBP_NonResInstructions.doc

NON-RESIDENTIAL NEW CONSTRUCTION TOTAL POINT REQUIREMENTS

Total Points Possible	69
Action	*Points required to receive action*
Receipt of Building Permit - New construction project over 500 sq.ft.	15
Green Building Award and Incentive Level	33

GREENPOINTS CHECKLIST FOR NON-RESIDENTIAL PROJECTS

(Based on USGBC's LEED v2.2 Guidelines, directions can be found on the Monterey Green Building Program web site, http://www.monterey.org/building/greenbuilding/)

A. Sustainable Sites		**Total**	**Green Gateway Vision**	**Seeno**
Prereq 1	**Construction Activity Pollution Prevention**	Required		
Credit 1	**Site Selection**	1		
Credit 2	**Development Density & Community Connectivity**	1		
Credit 3	**Brownfield Redevelopment**	1		
Credit 4.1	**Alternative Transportation**, Public Transportation Access	1		
Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1		
Credit 4.3	**Alternative Transportation**, Low-Emitting & Fuel-Efficient	1		
Credit 4.4	**Alternative Transportation**, Parking Capacity	1		
Credit 5.1	**Site Development,** Protect or Restore Habitat	1		
Credit 5.2	**Site Development,** Maximize Open Space	1		
Credit 6.1	**Stormwater Design,** Quantity Control	1		
Credit 6.2	**Stormwater Design,** Quality Control	1		
Credit 7.1	**Heat Island Effect,** Non-Roof	1		
Credit 7.2	**Heat Island Effect,** Roof	1		
Credit 8	**Light Pollution Reduction**	1		

		Sustainable Sites Total Available Points	**14**		
B. Water Efficiency			**Total**		
Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%		1		
Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation		1		
Credit 2	**Innovative Wastewater Technologies**		1		
Credit 3.1	**Water Use Reduction**, 20% Reduction		1		
Credit 3.2	**Water Use Reduction**, 30% Reduction		1		
		Water Efficiency Total Available Points	**5**		
C. Energy & Atmosphere			**Total**		
Prereq 1	**Fundamental Commissioning of the Building Energy Systems**		Required		
Prereq 2	**Minimum Energy Performance**		Required		
Prereq 3	**Fundamental Refrigerant Management**		Required		
Credit 1	**Optimize Energy Performance**		1-10 points		
	10.5% New Buildings or 3.5% Existing Building Renovations		1		
	14% New Buildings or 7% Existing Building Renovations		2		
	17.5% New Buildings or 10.5% Existing Building Renovations		3		
	21% New Buildings or 14% Existing Building Renovations		4		
	24.5% New Buildings or 17.5% Existing Building Renovations		5		
	28% New Buildings or 21% Existing Building Renovations		6		
	31.5% New Buildings or 24.5% Existing Building Renovations		7		
	35% New Buildings or 28% Existing Building Renovations		8		
	38.5% New Buildings or 31.5% Existing Building Renovations		9		
	42% New Buildings or 35% Existing Building Renovations		10		
Credit 2	**On-Site Renewable Energy**		1-3 points		
	2.5% Renewable Energy		1		
	7.5% Renewable Energy		2		
	12.5% Renewable Energy		3		

Credit 3	**Enhanced Commissioning**		1		
Credit 4	**Enhanced Refrigerant Management**		1		
Credit 5	**Measurement & Verification**		1		
Credit 6	**Green Power**		1		
		Energy & Atmosphere Total Available Points	**17**		
D. Materials & Resources			**Total**		
Prereq 1	**Storage & Collection of Recyclables**		Required		
Credit 1.1	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof		1		
Credit 1.2	**Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof		1		
Credit 1.3	**Building Reuse**, Maintain 50% of Interior Non-Structural Elements		1		
Prereq 2	**Construction Waste Management**, 100% non-hazardous construction material taken to a bonafide facility		Required		
Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal		1		
Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal		1		
Credit 3.1	**Materials Reuse**, 5%		1		
Credit 3.2	**Materials Reuse**,10%		1		
Credit 4.1	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)		1		
Credit 4.2	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)		1		
Credit 5.1	**Regional Materials**, 10% Extracted, Proc. & Man. Regionally		1		
Credit 5.2	**Regional Materials**, 20% Extracted, Proc & Man. Regionally		1		
Credit 6	**Rapidly Renewable Materials**		1		
Credit 7	**Certified Wood**		1		
		Materials & Resources Total Available Points	**13**		
E. Indoor Environmental Quality			**Total**		
Prereq 1	**Minimum IAQ Performance**		Required		
Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**		Required		
Credit 1	**Outdoor Air Delivery Monitoring**		1		
Credit 2	**Increased Ventilation**		1		
Credit 3.1	**Construction IAQ Management Plan**, During Construction		1		

Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy		1		
Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants		1		
Credit 4.2	**Low-Emitting Materials**, Paints & Coatings		1		
Credit 4.3	**Low-Emitting Materials**, Carpet Systems		1		
Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products		1		
Credit 5	**Indoor Chemical & Pollutant Source Control**		1		
Credit 6.1	**Controllability of Systems**, Lighting		1		
Credit 6.2	**Controllability of Systems**, Thermal Comfort		1		
Credit 7.1	**Thermal Comfort**, Design		1		
Credit 7.2	**Thermal Comfort**, Verification		1		
Credit 8.1	**Daylight & Views**, Daylight 75% of Spaces		1		
Credit 8.2	**Daylight & Views**, Views for 90% of Spaces		1		
		Indoor Environmental Quality Total Available Points	**15**		
F. Innovation & Design Process			**Total**		
Credit 1.1	**Innovation in Design**: Provide Specific Title		1		
Credit 1.2	**Innovation in Design**: Provide Specific Title		1		
Credit 1.3	**Innovation in Design**: Provide Specific Title		1		
Credit 1.4	**Innovation in Design**: Provide Specific Title		1		
Credit 2	**LEED® Accredited Professional**		1		
		Innovation & Design Process Total Available Points	**5**		
		Total Available Non-Residential Points	69		