
APPENDIX 4.2-4
THE CALIFORNIA ENVIRONMENTAL QUALITY ACT:
ADDRESSING GLOBAL WARMING IMPACTS AT THE
LOCAL AGENCY LEVEL
AG WEBSITE ENERGY CONCEPTS, 2010

Concept	Applicability	Notes
Energy Efficiency		
Incorporate green building practices and design elements.	Yes	As noted in the project description, the proposed project includes items such as computer monitoring of HVAC, skylights with daytime dimming, occupancy sensors and LED technology. These are all elements outlined in the AIA 50>50 program and considered green elements of the proposed project. Major 1 (Walmart) has a more extensive list of features noted in the project description. Some, but not all of the green building design elements will be applied to the remainder of the proposed project. (See 3.0 Project Description)
Meet recognized green building and energy efficiency benchmarks.	Yes	In addition to the proposed project features, Mitigation Measure 4.2.4a requires the project to exceed Title 24.
Install energy efficient lighting (e.g., light emitting diodes (LEDs)), heating and cooling systems, appliances, equipment, and control systems.	Yes	See Section 3.0 Project Description.
Use passive solar design, e.g., orient buildings and incorporate landscaping to maximize passive solar heating during cool seasons, minimize solar heat gain during hot seasons, and enhance natural ventilation. Design buildings to take advantage of sunlight.	Yes	The proposed project includes a landscape plan that will result in coverage of the parking area by 50 percent in 5 years.
Install light colored "cool" roofs and cool pavements.	Yes	An energy star roof is included in the project description and also required in Mitigation Measure 4.2.4b.
Install efficient lighting, (including LEDs) for traffic, street and other outdoor lighting.	Yes	LED lighting is included in the project description and Mitigation Measure 4.2.4a.
Reduce unnecessary outdoor lighting.	Yes	Lighting is addressed in section 4.1 Aesthetics and Visual, with policies from the Mitchell Road Specific Plan and a Mitigation Measure 4.1.3 which establishes performance standards for outside lighting.
Meet "reach" goals for building energy efficiency and renewable energy use.	Yes	The proposed project is in TID which has obtained over 40 percent of its power source from renewable sources. See Section 4.14 Energy.
Install solar, wind, and geothermal power systems and solar hot water heaters.	No	The proposed project does not include active solar, wind or geothermal components. Major 1 (Walmart) will however capture waste heat from the refrigeration equipment to heat water for the kitchen prep areas of the store
Install solar panels on unused roof and ground space and over carports and parking areas.	No	The proposed project does not include active solar power.
Where solar systems cannot feasibly be incorporated into the project at the outset, build "solar ready" structures.	No	The proposed project does not include solar.
Incorporate wind and solar energy systems into agricultural projects where appropriate.	N/A	The proposed project is retail commercial.

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Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use.	N/A	
Use on-site generated biogas, including methane, in appropriate applications.	N/A	
Incorporate water-reducing features into building and landscape design.	Yes	Irrigation will be by irrigation well and distributed through purple-pipe designed for use of reclaimed water in the future.
Create water-efficient landscapes.	Yes	The City is requiring that the project either use the existing agricultural well, or drill a new well to landscape the site. The City requires water-efficient landscape.
Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and use water-efficient irrigation methods.	Yes	Water-efficient irrigation is a requirement of the City.
Make effective use of graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines. Graywater to be used for landscape irrigation.)	N/A	Irrigation will be by irrigation well and distributed through purple-pipe designed for use of reclaimed water in the future.
Implement low-impact development practices that maintain the existing hydrology of the site to manage storm water and protect the environment.	Yes	The proposed project includes storm drainage retention on site under the parking lot. The retention system is designed to allow percolation of stormwater.
Devise a comprehensive water conservation strategy appropriate for the project and location.	N/A	The City of Ceres provides water and will ensure that the proposed project includes conservation measures.
Design buildings to be water-efficient. Install water-efficient fixtures and appliances.	Yes	The restroom sinks in the store will use sensor-activated low-flow faucets that reduce usage.
Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).	Yes	Construction and demolition materials will be recycled as appropriate.
Integrate reuse and recycling into residential industrial, institutional and commercial projects.	Yes	New Walmart (Major 1) stores are built of nearly 85-90 percent recycled structural steel. All of the plastic baseboards, and much of the plastic shelving, are manufactured from recycled material.
Provide easy and convenient recycling opportunities for residents, the public, and tenant businesses.	Yes	Recycling areas are shown on the site plan.
Provide education and publicity about reducing waste and available recycling services.	N/A	Stanislaus County provides this information.

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Ensure consistency with "smart growth" principles – mixed-use, infill, and higher density projects that provide alternatives to individual vehicle travel and promote the efficient delivery of services and goods.	No	While the proposed project is consistent with the City of Ceres General Plan and Mitchell Road Specific Plan, the project contains only commercial uses. However, the project is within a mixed use neighborhood that contains commercial, multi-family, single family, professional office and religious institutions.
Meet recognized "smart growth" benchmarks.	N/A	
Educate the public about the many benefits of well-designed, higher density development.	N/A	The proposed project is commercial.
Incorporate public transit into the project's design.	Yes	The proposed project includes right of way and locations for a future transit stop.
Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.	Yes	Two existing trees will be retained. The proposed project includes landscaping designed to shade the parking area to xxx percent in five years. Trees are also planned at the periphery of the project site to help shade sidewalks. The project does not affect existing parks, but will develop vacant land.
Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs.	No	The proposed project develops vacant land.
Include pedestrian and bicycle facilities within projects and ensure that existing non-motorized routes are maintained and enhanced.	Yes	The proposed project includes sidewalks and bicycle routes both within the shopping center, and connectivity to existing and planned routes.
Meet an identified transportation-related benchmark.	N/A	The project meets the City's General Plan requirements, and includes provision for motorized and non-motorized transportation.
Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.	N/A	Parking standards for the proposed project are established by the Mitchell Road Specific Plan. The proposed project meets the standards, but does not exceed them by more than 1 percent.
Build or fund a major transit stop within or near the development.	N/A	The proposed project includes right of way and locations for a future transit stop.
Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers.	N/A	The proposed project includes right of way and locations for a future transit stop.
Promote "least polluting" ways to connect people and goods to their destinations.	N/A	The project is a commercial center.
Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments.	Yes	The proposed project includes bicycle parking as well as lanes and connectivity to planned bike lanes.
Require amenities for non-motorized transportation, such as secure and convenient bicycle parking.	Yes	The proposed project includes bicycle parking as well as lanes and connectivity to planned bike lanes.

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Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation.	Yes	The proposed project extends sidewalks on all sides, and provide clear pedestrian connection within the project parking area. The site design provides connectivity to all three roadways that form the boundaries of the project, and allows for the future extension of El Camino Road.
Connect parks and open space through shared pedestrian/bike paths and trails to encourage walking and bicycling. Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	N/A	The proposed project is commercial.
Work with the school districts to improve pedestrian and bike access to schools and to restore or expand school bus service using lower-emitting vehicles.	N/A	The proposed project is a privately owned commercial shopping center.
Institute teleconferencing, telecommute and/or flexible work hour programs to reduce unnecessary employee transportation.	N/A	The proposed project is a privately owned commercial shopping center.
Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions.	N/A	The proposed project is a privately owned commercial shopping center.
Educate consumers, residents, tenants and the public about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; vehicle performance and efficiency (e.g., keeping tires inflated); and low or zero-emission vehicles.	N/A	The proposed project is a privately owned commercial shopping center.
Purchase, or create incentives for purchasing, low or zero-emission vehicles.	N/A	The proposed project is a privately owned commercial shopping center.
Create a ride sharing program. Promote existing ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles, and providing a web site or message board for coordinating rides.	N/A	The proposed project is a privately owned commercial shopping center.

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Create or accommodate car sharing programs, e.g., provide parking spaces for car share vehicles at convenient locations accessible by public transportation.	No	A location for a public transit stop is provided as are bicycle racks.
Provide a vanpool for employees.	No	A location for a public transit stop is provided as are bicycle racks.
Create local "light vehicle" networks, such as neighborhood electric vehicle systems.	N/A	Government oriented policy. The proposed project is a privately owned commercial shopping center.
Enforce and follow limits idling time for commercial vehicles, including delivery and construction vehicles.	Yes	Idling time is limited to 5 minutes per MM 4.2.8.
Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles.	No	Project does not contain zero emission vehicle policies.
Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar.	N/A	The proposed project is commercial.
Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.	No	The proposed project would convert agricultural land to urban uses. The land is surrounded by urban uses making conventional agriculture difficult. The storm drainage system is designed to allow recharge of the groundwater under the project.
Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance.	Yes	Although two trees will be protected on the periphery of the project, the other trees will be removed to accommodate construction. The proposed project does have an extensive landscape plan which will more than compensate for the removal of the existing trees.