

Outline for Sustainable Building Work Plan for Montage Resort at Deer Valley August 29, 2006

Introduction:

The Montage Resort at Deer Valley team is committed to implementing sustainable building design features into the project. The project plans to develop a work plan and use LEED as a guideline to define and document sustainable targets as well as a resource to generate solutions to meet these targets as the design evolves.

Listed below is an outline for the sustainable features work plan that was developed based on the Green Building Rating System for New Construction.

I Sustainable Development Features:

1. Clustering of development within Empire Pass with existing infrastructure in place to make open space parcels larger and development pods more efficient.
 - a. The Empire Pass development is approximately 89% open space
 - b. The Empire Pass development includes approximately 967 acres of open space.
 - c. As a consideration for the hotel approval, United Park has annexed an additional 2800 acres of open space into Park City to offset the additional density for the Montage Project. The land would be put into a conservation easement which would be the largest conservation easement in Park City History.
2. Implement a Resort Transit System design to reduce vehicle trips for Empire Pass.
3. The Empire Pass development has committed \$2,000,000 to enhance traffic mitigation
4. The Empire Pass development provided significant road improvements for SR 224 as stipulated in the development agreement.
5. The Empire Pass development has provisions for improving the public trail system within Empire Pass.
6. The Empire Pass development includes a preservation and restoration plan for structures with historical significance, including the Daly West Head Frame
7. The Empire Pass development includes an affordable housing program which allows for the construction of employee housing.
8. The Empire Pass development established an open space/ transit management fund for which all transfers of land are assessed a 1% fee on the gross sales price of all real property in Empire Pass, 50% of the fees collected are paid to the city to assist in funding costs and expenses for enhanced transportation, recreation improvements and/ or open space acquisition.

II Sustainable Site Features:

1. Brownfield Redevelopment, the project is located on an environmentally impacted site that is in a disturbed area. Development of this site will reduce pressure on undeveloped land elsewhere in Empire Pass and the Park City area.
2. The project will bring a significant positive economic impact to Park City which will generate a substantial amount of revenue and community benefit to the City and the local school district.
3. The project will complement the local architectural styles to enhance the visual environment.
4. The project will pursue alternate transportation by expanding Park City bus service to the site to reduce traffic.
5. The project will reduce the site parking capacity by 25% of the Park City Land Management Code, effectively requiring greater use of transit for the resort.
6. Substantially all of the parking for the project will be located underground.
7. The project has implemented computer modeling in analyzing the view sheds and it was determined that the project has minimal visual impact based on its location.
8. The project will prepare and implement a stormwater management plan.
9. The project will prepare and implement a site sediment and erosion control plan that conforms to the best management practices established in the environmental work plan.
10. The project will develop a plan to treat groundwater collected by foundation drains via a constructed wetland.
11. The project will establish site lighting criteria to maintain safe light levels while avoiding off-site lighting and night sky pollution.
12. The project will incorporate a native vegetation management plan to improve health and reduce wildfire around the site.
13. The project will limit the use of potable water for landscape irrigation by using high efficiency irrigation systems.

II Sustainable Energy Features:

1. The project will participate in the Utah Blue Sky Partner Program
 - i. Visionary Category = 30% of load or 50 blocks
(bluesky@pacificorp.com)
2. The project will develop a commissioning plan for the HVAC systems
3. The project will complete a commissioning report
4. The design team will design the systems to meet building energy efficiency and performance as required by ASHRAE/ IESN 90.1 and the 2003 IBCC.
5. The project will not use CFC-based refrigerants.
6. To maximize energy efficiency, the design team will consider the following items:

- a. Rejecting the kitchen and computer room heat to the parking garage slab via serpentine tubing and or to the snowmelt system. The snowmelt system can reject heat year round.
 - b. Consider air to air or glycol run-around loop heat recovery systems for make-up air and exhaust systems.
 - c. Provide enthalpy recover systems where practical.
 - d. Consider boiler stack economizers for energy recovery
7. The project will specify refrigeration and fire suppression systems that use no HCFCs or halons.
 8. The project will design and install a building management system to measure and monitor energy usage.
 9. The project will implement dimming and switching controls for public and exterior lighting to maximize energy efficient lighting.
 10. The project will maximize “free cooling” which allows for minimum operation of the chillers during moderate or cold outdoor air temperatures.
 11. The project will plan to reduce heat loss from outdoor pools/ spas by implementing pools covers

III Materials & Resources:

1. The project will provide an easily accessible area that services the entire building to be used for recycling materials
2. The project will consider employing cardboard balers, aluminum can crushers and other waste management technologies to further enhance recycling program.
3. The design team will specify sustainable building materials on the exterior skin that have extended life cycles.
4. The project will designate a specific area on the construction site for recycling and track recycling efforts throughout the construction process.
5. The project will develop a plan to minimize the amount of construction debris for landfill disposal incorporating the following:
 - a. Recycling all trees. They are ground up and used as mulch back in the project.
 - b. Onsite production of aggregate reducing truck trips through Park City and conserving other resources.
 - c. Use of mine material as backfill in the Hotel construction.
 - d. Recycle unused building materials.
6. The project will use/ specify local building materials where practical to reduce environmental impacts resulting from their transportation.
7. The project will have an on-mountain concrete batch plant to reduce truck trips through Park City and conserve vital resources.

IV Indoor Environmental Quality

1. The design team will establish minimum indoor air quality performance to prevent the development of indoor air quality problems in the building to further enhance the health and well being of the occupants.
2. The design team will incorporate a carbon dioxide monitoring system into the project to monitor indoor air quality to ensure occupant health and comfort.
3. The design team will maximize the use of fresh air in the HVAC systems.
4. The project will develop an indoor air quality management plan for the construction phase of the project.
5. The design team will pursue implementing a permanent humidification system to enhance indoor air quality.

V Other

1. The project will include a design team with experience in applying sustainability concepts and principles through an integrated design approach. (Hill Glazier- Architect; Beaudin Ganze- MEP Engineer; Stantec- Civil & Environmental Consultant have extensive experience in designing sustainable buildings)
2. The design team will pursue an alternate to chlorine for disinfecting pools and/ or spas, specifically the team will pursue an ozone system.