2011 ASLA Design Awards

Cadence
Merit Award
Land Stewardship Designation
Design Workshop, Denver
Project Name: Cadence

Project Location: Henderson, Nevada (East Henderson)

Project Summary: Cadence, a 2,200-acre mixed-use community in Henderson, Nevada, will be built on one of the country’s largest brownfield sites. At full build out, the remediated land – cleared of the industrial chemicals that had leached into the soil and water over many decades – will be the site for a new sustainable community of approximately 40,000 residents and workers that rejuvenates the area socially, economically and environmentally.

Purpose of Project: Located in the oldest part of the city, Cadence has an industrial history dating back to the 1930’s when the workers came here to build Boulder Dam and later in 1941 when the U.S. government built an industrial town so 14,000 workers could process magnesium for airplane parts and bomb making during WWII. After the war, the industrial complex continued to be used for industrial production at the expense of contaminating the land, air and water. A bold developer believed that this site should be rehabilitated in order to create a new and better place for the town that grew up around the industrial complex. With the help of the state and city government leaders, the remediation of nearly 500 acres of land (2.2 million cubic yards of contaminated soil) has been completed to lay the foundation for a new sustainable community to grow; bringing new people, jobs, housing, shopping, entertainment, schools, civic facilities, BRT transit and needed tax dollars to this older area of the City.

Role of Landscape Architect - The landscape architect was the land planner, urban designer and landscape architect that prepared the community master plan and entitlement/zoning documents including a comprehensive set of development standards. Additionally, the landscape architect has developed the community website and prepared conceptual design for the Phase 1 streetscapes, parks and environmental graphics and signage in the community.

Special Factors: A comprehensive environmental analysis and remediation plan was prepared for the land but it was done with the foresight of how the land should be used after remediation was complete. The community master plan was structured so that the community could be built as areas of the land were environmentally cleaned. This added some complexity to how the community framework of streets, open spaces and development parcels were organized in order to give the developer(s) flexibility to move the development forward as they saw fit.

Significance: As the prime consultant, the consultant worked closely with the developer and engineers to achieve new road and park standards for Cadence. Specifically, Cadence has established new park requirements like smaller neighborhood and pocket park sizes that can be spaced more closely together than other typical residential developments. A majority of all homes are within a ¼-mile walking distance of a park, open space or nature way. Moreover, the community will use reclaimed water for landscape irrigation however the gray water infrastructure will take many years for the City to build. In the near term, there is a plan for a dual water system that will eventually become a single reclaimed system. For that reason the landscape standards and approved plant list for Cadence were coordinated with the City and experts at UNLV to ensure that a water conserving landscape could survive regardless of the type of irrigation water.
**Responding to the Surrounding Context:**

Bordering the site is the Las Vegas Wash - one of the region’s more important open spaces that will convey water to Lake Mead - the region’s primary water supply. Because Cadence is upland of the Wash, it has located a major sports complex and lower density development nearby. Additionally, there are two major nature ways /drainage corridors in the community that provide areas for storm-water collection, water quality treatment, habitat, recreation, and pedestrian/bikeway connections. The nature ways will provide green linkages between the Wash, Cadence and the existing residential and commercial areas.

**Sustainability, Special Features and Design Elements - Design with the End User in Mind**

**COMMUNITY BUILDING AND CONNECTIVITY** – The rehabilitation of the land is only one part of the story. The developer and planner decided that Cadence would be unlike any other new community in Las Vegas because it wouldn’t have cul-de-sac road networks, “walled” neighborhoods and large parks that are spaced too far apart for people to walk to them. Community building starts with people’s ability to move and engage one another on foot on in public setting. To that end, the layout of the streets and neighborhoods was modeled after traditional urban neighborhoods where gridded streets and fenceless neighborhoods allowed for social engagement to occur.

However, to make Cadence truly a pedestrian-oriented community, the plan needed to create a network of streets that make it easier to connect all the community amenities and destinations within it. Streets have been designed in a grid pattern, narrower that most, helping to reduce the amount of asphalt paving from a typical city roadway profile. LED street lights are being considered for major streets which will further reduce the amount of energy consumed by this community. On-street parking and “bulb-out” conditions at intersections are accommodated on streets and they will help create a safer, more convenient path for pedestrians than typical suburban communities. Many homes will face onto important streets as opposed to backyards and screen walls that are customary in most communities in Las Vegas.

Based on a climate study that was prepared by the planner, site and architectural standards have been written that will help to reduce peak water and energy demands of home and business owners in the hot summer months because standards require addressing things like natural wind patterns, solar orientation, shading devices, and sustainable building materials and details. Additionally, the climate study helped the planner determine how to capture the wind and where to provide shading along streets and key public spaces.

**DESIGNED FOR DIVERSITY AND AFFORDABILITY** – Lastly, this community has been designed with diversity and affordability in mind. A range of housing types and price points is required as part of the entitlements for this land. Neighborhoods will be defined by mixture not homogeneity. Each neighborhood will have no fewer than three product types of different price ranges. In all, over 15 different housing options will provide a wealth of choice for people.