

Antelope Valley Project

Abstract

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Similar to many communities, an 85 year old 2 mile long culvert carried Antelope Creek under the eastern fringe of the downtown area of the City of Lincoln. The undersized culvert placed 200 businesses and 800 dwellings in the five to seven block wide floodplain. Further, due in part to the extensive floodplain, this portion of the community had become blighted and under utilized. What initially started as a flood reduction study quickly expanded to include community redevelopment along with transportation and drainage improvements to help revitalize the core area of Lincoln, Nebraska.

Through a detailed public involvement process combined with visionary leadership by the public officials, it quickly became apparent that Antelope Creek should not only be daylighted but further developed into an urban community park and festival space. Daylighting the stream would require extensive right of way purchase, building demolition and would sever numerous infrastructure elements such as streets, sanitary sewers, storm sewers, water mains, steam lines and a host of other utilities common to a developed historic urban core. In addition to the channel enhancements, the City had planned major transportation improvements for this area that would relocate major arterial roadways out of the University of Nebraska's campus. To minimize impacts to surrounding properties as well as to maximize construction efficiencies, the design and location of the roadways and channel were developed together.

The Joint Antelope Valley Authority (JAVA) was formed with the major sponsors being the University of Nebraska, City of Lincoln and the Lower Platte South Natural Resources District. Forming JAVA allowed the project to move across numerous properties and expedited the decision making process. The team of Olsson Associates and Parsons Brinckerhoff was selected to prepare the initial feasibility studies and guide the public involvement process. JAVA applied to the U.S. Army Corps of Engineers- Omaha District (COE) for financial assistance through the 205 program. The COE focused on the final design elements of the drainage improvements while the Olsson/ PB team designed the other improvements such as the transportation and utility improvements. The transportation improvements result in vehicle hour savings present worth of \$147 million. The Clark Enersen Partners and Olsson are currently working on the final design of the park amenities. .

The resulting \$250 million dollar project has decreased the floodplain to fall within the banks of the new daylighted stream, improved the pedestrian and vehicular traffic flow, and revitalized a portion of the urban core. The cost benefit study that was completed as part of the Environmental Impact Study found a total present value benefit of \$745 million which far exceeds the public investment. The project is still under construction and is approximately 65% complete. Final completion of the new stream is anticipated in January of 2010 with the new roadways and bridges completed by fall of 2011.