## Lompoc City Council Agenda Item



City Council Meeting Date: November 4, 2008

TO: Gary P. Keefe, City Administrator

FROM: Craig Dierling, P.E., Civil Engineering Associate III

c\_dierling@ci.lompoc.ca.us

SUBJECT: PROJECT UPDATE ON CITY PROJECT NO. CS-08-S-2 -

FEASIBILITY STUDY FOR SANTA YNEZ RIVER BANK STABILIZATION AT RIVERBEND PARK BIKEWAY

## **BACKGROUND:**

Per Council Member Holmdahl's request made at the October 7, 2008, City Council Meeting, staff has prepared the following response addressing the issue of riverbank stabilization adjacent to the Riverbend Park Bikeway. A brief description of the current City project related to this issue is included as well.

The Lompoc City Council received a letter from Carl Walton on September 23, 2008, which presented concerns of bank erosion at the Santa Ynez River near the newly constructed Riverbend Park Bikeway. The letter included aerial photographs of the Santa Ynez River adjacent to the Schuyler property taken in 1994 and in 2006, and noted erosion of the west river bank in this area during the last 14 years.

## PROJECT UPDATE:

City staff is aware of erosion issues along the riverbanks and of the potential for damage to the Riverbend Park Bikeway caused by such erosion. However, addressing such issues through measures such as realigning river flow or providing bank protection is costly, often involves lengthy environmental approval processes, and can be unsuccessful as a long-term solution if funding is not available for a conservatively designed holistic approach.

Although the issue of bank erosion of the Santa Ynez River adjacent to the City's Riverbend Park Bikeway is large scale, and solutions are anticipated to be costly, the City has developed a project to study this issue. Through City Project No. CS-08-S-2, the City plans to solicit a request for proposals and to hire an experienced consulting firm to prepare a Feasibility Study to evaluate and propose solutions to this bank erosion issue. The study will be limited to the portions of riverbank threatening the bike path. The City Council approved the necessary Measure D funding for this study at the April 1, 2008, City Council Meeting, as part of the two-

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year Measure D Program of Projects. No funding has been identified for construction of this project. Questions related to this project may be directed to Craig Dierling at (805) 875-8224, or at the email address listed above.

Craig Dierling, P.E.
Civil Engineering Associate III

Attachments: City Project CS-08-S-2 Location Map

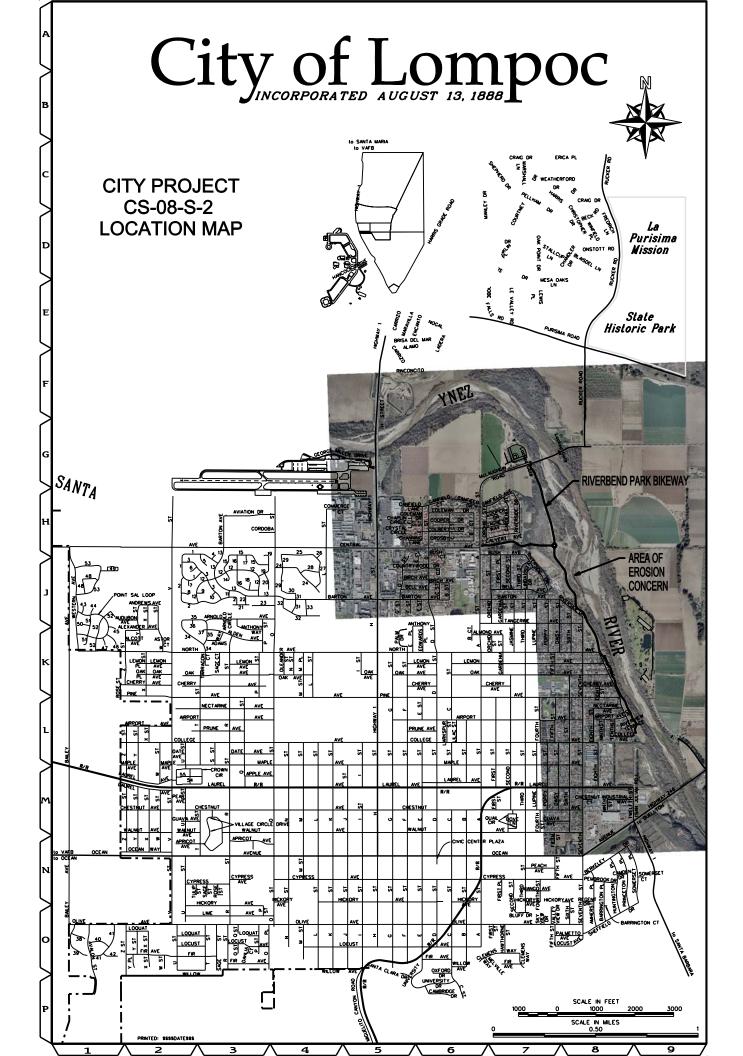
Letter to City Council dated September 23, 2008

APPROVED FOR SUBMITTAL TO THE CITY ADMINISTRATOR:

Larry A. Bean, P.E.
Public Works Director

APPROVED FOR SUBMITTAL TO THE CITY COUNCIL:

Gary P. Keefe City Administrator



Lompoc City Council 100 Civic Center Plaza Lompoc, California 93438

Subject: Save Riverbend Park Bikeway

Dear Council Members,

Government needs to take prompt action to prevent destruction of the Riverbend Park Bikeway. During the last 14 years, the Santa Ynez River has eroded land, encroaching on where the Riverbend Park Bikeway was recently built. If no action is taken, the next significant flow in the Santa Ynez River may destroy portions of the bikeway.

As shown in the aerial images below, the Santa Ynez River expanded its banks about 300 feet to the West between 1994 and 2006.



1994 Aerial View of Santa Ynez River Adjacent to Schuyler Property



2006 Aerial View of Santa Ynez River Adjacent to Schuyler Property

During last year's rainy season, which was relatively mild, another 40 feet of property was eroded. Much of the trail adjacent to the riverbed in the 2006 image above was eroded away.

The area where the Northern most section of the bikeway was built has been underwater during recent periods of significant flows and will be underwater again if nothing is done to channel the river's flow.

Only in wet years, when the river experiences substantial flow, does the river significantly erode its banks. When the river does erode its banks, it occurs rapidly over short periods of time. Most of the erosion since 1994 has occurred in a few weeks during a few wet years.

Annual releases from Cachuma Lake appear to have been a strong factor in causing the erosion that is threatening the bikeway. Natural flows during wet years cleanse the riverbed, removing vegetation that clogs and redirects the river. The annual releases, designed to recharge underground basins, do not contain sufficient volume to cleanse the riverbed. Instead they promote vegetation growth which encourages the river to seek alternate paths.

The Riverbend Park Bikeway is not the only property threatened. A significant flow in the Santa Ynez River, such as happened in 1969, could damage Riverbend Park and possibly threaten

structures.



2006 Aerial View Showing Potentially Threatened Areas

I encourage the Lompoc City Council to take prompt action to prevent future damage to the Riverbend Park Bikeway, Riverbend Park, or other structures. Once the river starts flowing, the erosion problem will be much harder to address.

Best Regards,

Carl Walton