



David Sander
Mayor

Linda Budge
Vice Mayor

Ken Cooley
Council Member

Robert McGarvey
Council Member

Dan Skoglund
Council Member

December 3, 2007

José Luis Cáceres, Associate Planner
Sacramento Area Council of Governments
1415 L Street, Suite 300
Sacramento, CA 95814

RE: Submittal of Application for SACOG Bicycle and Pedestrian Funds

Dear Mr. Cáceres:

Please find attached the City of Rancho Cordova's request for Bicycle and Pedestrian Funds for the bicycle and pedestrian component of the extension of International Drive, including a bridge over the Folsom South Canal. I have also attached a copy of the City Council resolution that gives me the authority to apply for funds and enter into contracts.

If you have any questions, please contact me or Troy Holt at (916) 851-8847.

Sincerely,

Cyrus Abhar
Public Works Director

CITY OF RANCHO CORDOVA

RESOLUTION NO. 14-2007

**A RESOLUTION OF THE CITY COUNCIL
AUTHORIZING THE PUBLIC WORKS DIRECTOR/CITY ENGINEER TO EXECUTE VARIOUS
AGREEMENTS WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION RELATED
TO TRANSPORTATION GRANTS**

WHEREAS, the City of Rancho Cordova is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation and;

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements and/or Fund Transfer Agreements need to be executed with the California Department of Transportation before such funds could be claimed and;

WHEREAS, the City of Rancho Cordova wished to delegate authorization to execute these agreements and any amendments thereto that the Public Works Director/City Engineer be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements and/or any amendments thereto with the California Department of Transportation.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF RANCHO CORDOVA that the Council authorizes the Public Works Director/City Engineer to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements and/or any amendments thereto with the California Department of Transportation.

PASSED AND ADOPTED by the City Council of on the 5th day of February, 2007 by the following vote:

AYES: Cooley, McGarvey, Skoglund and Budge

NOES: None

ABSENT: Sander

ABSTAIN: None



David M. Sander, Mayor

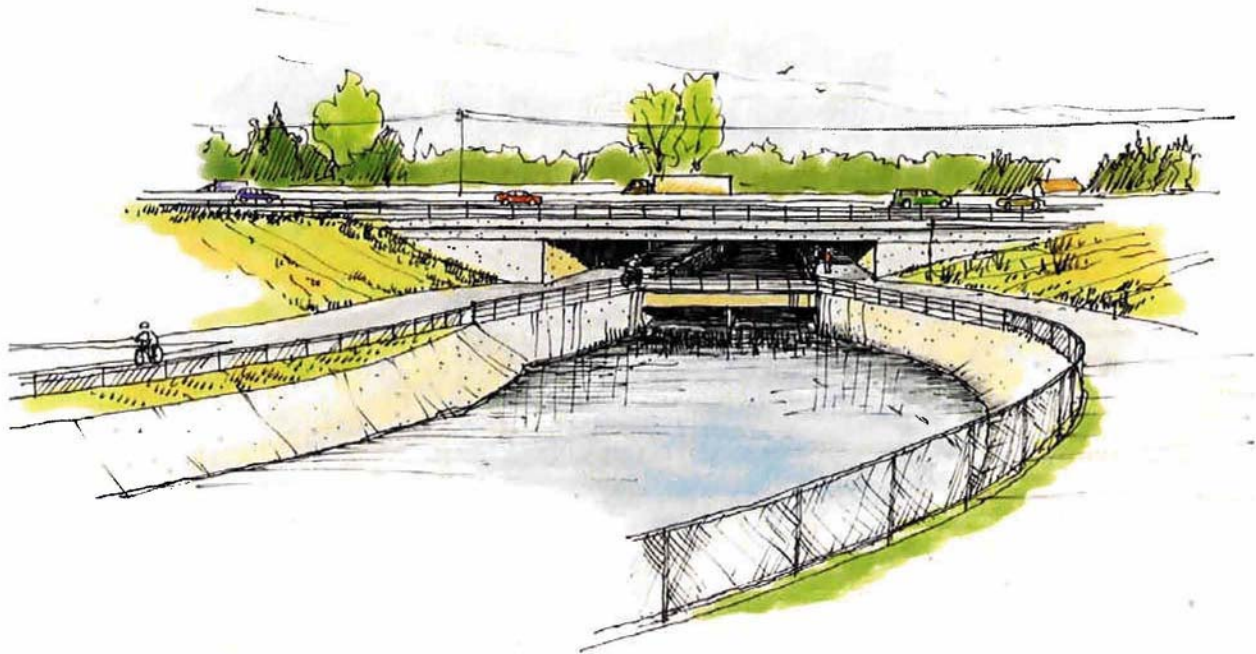
ATTEST:


Anna Olea-Moger, CMC, City Clerk

Sacramento Area Council of Governments

REVISED 10/18/07


**2008 BICYCLE & PEDESTRIAN FUNDING PROGRAM
APPLICATION**



City of Rancho Cordova

**Bicycle Component to the
International Extension and Folsom
South Canal Bridge**

PROJECT SUMMARY

| | |
|---|---|
| <p>Project Title</p> | <p>Bicycle component to the International Extension and Folsom South Canal Bridge.</p> |
| <p>Local agency contact information</p>  | <p>Cyrus Abhar, Director of Public Works City of Rancho Cordova 2729 Prospect Park Drive Rancho Cordova, CA 95670 (916) 851-8700</p> |
| <p>Partners</p> | <p>The City of Rancho Cordova will be the sole partner during the construction of the project.</p> |
| <p>Project Number in SACOG Master Plan</p> | <p>The project is not listed in the SACOG Regional Bicycle, Pedestrian and Trails Master Plan; however, it is listed in the draft MTP for 2035 (page 16 of Appendix A2), and SACTrack #SAC22990.</p> |
| <p>Scope of project & location (not to exceed 150 words) Include aspects of project/program that contribute to Blueprint implementation and other goals of the Funding Program</p> | <p>The International Drive and Folsom South Canal Bridge project will construct a new six-lane extension of International Drive from Kilgore Road to Sunrise Boulevard. The project will include improvements at the intersection with Kilgore Road and Sunrise Boulevard, and a bridge over the Folsom South Canal.</p> <p>The proposed project would allow for a safer bicycle/pedestrian path under the International Drive Bridge. The bicycle and pedestrian component of the project will fund the incremental cost of converting the existing design and cost into a bicycle and pedestrian friendly project. The existing design includes a standard maintenance tunnel that runs parallel to the canal and connects the north/south bike path under the east/west bridge. The standard tunnel can be dark and intimidating for bicyclists and pedestrians. The proposed project will open up the tunnel to allow for natural light and open sight lines to encourage bicycle and pedestrian use.</p> |
| | |

| | |
|---|--|
| <p>Project Schedule & Milestones:</p> <ul style="list-style-type: none"> • Start work • Final Ed approved • R/W Acquired • Final plans approved • Environmental permits secured • Award construction contract • Work completed | <ul style="list-style-type: none"> • Start work -- 3/28/08 • Final Ed approved -- N/A • R/W Acquired -- 5/30/08 • Final plans approved – 5/30/08 • Environmental permits secured – 4/25/08 • Award construction contract -- 4/30/09 • Work completed -- 8/28/2009 |
| <p>Overall Total Cost Estimate</p> | <p>\$887,500 (Bike/Ped Component Only) Total cost of bridge = \$17,687,500</p> |
| <p>Total funding sought and funding committed from other sources</p> | <p>\$887,500 Sought from SACOG Bike & Ped Funding \$5,000,000 Sought from RSTP funds. \$11,800,000 Committed in Local Transportation Funds</p> |
| <p>Local funding commitment from each partner Local match must be at least 11.47% of requested amount</p> | <p>\$11,800,000 Committed in City of Rancho Cordova’s Local Transportation Funds.</p> |
| <p>Risks to Schedule or Cost</p> | <p>No foreseen risks. The project is completely within City limits. The environmental process is nearly complete.</p> |
| <p>Phases/divisibility</p> | <p>The project will be completed in a single phase.</p> |
| <p>Environmental Justice</p> | <p>This project will connect existing, older neighborhoods with newer areas of the City, including job centers, education, shopping, and public transit. This will allow all members of the community, including low income and minority members the opportunity to cross the Folsom South Canal barrier at International Drive and gain access to opportunities on both sides of the canal.</p> |

PROJECT LOCATION

Extension of International Drive from Kilgore Road to Sunrise Boulevard



COST ESTIMATE

| Funding Categories | Task | Cost Estimate |
|---------------------------|---|----------------------|
| Environmental | Environmental Studies | |
| Engineering | Engineering & Design | |
| Right-of-Way* | Right-of-Way acquisition | |
| | Utility relocation & lighting | |
| Construction* | Environmental mitigation | |
| | Grading | |
| | Foundation & Pavement | |
| | Bridges &/or tunnels | \$687,500 |
| | Drainage, curb/gutter, street furniture, planting & irrigation | |
| | Signage, signals, & striping | |
| | Bicycle storage/parking | |
| | Buildings/structures | |
| | Non-capital staff activities | |
| | Non-capital materials (maps, brochures, manuals, printing, etc) | |
| Misc.* | Other project components Bridge Design Modifications | \$200,000 |

*If project applicant is Caltrans, please provide cost estimate for the following additional two components:

- Right-Of-Way Support: _____
- Construction Support: _____

PROJECT BENEFIT ESTIMATE (International Connection)

Bicycle Facilities

The proposed project will extend International Drive with a class 2 bike path from the current terminus of International Drive at Kilgore Road to Sunrise Boulevard. The new road will include a bridge over the Folsom South Canal as well as the class 1 bike trail that runs parallel to the canal. The extension will connect residential, commercial, recreational and industrial locations.

Quantifiable Benefits Methodology

$$\begin{aligned} \text{Estimate of Existing Usage} &= x = 0 \\ \text{Estimate of Increase in Usage} &= y = 12 \\ \text{Length of Project (miles)} &= 0.27 \\ \text{Quantifiable Benefits} &= (x (a/10 \text{ mph}) (\$5/\text{hr})) + (y(a/10 \text{ mph}) (\$10/\text{hr})) \\ &= 0 + (12(0.27/10 \text{ mph}) (\$10/\text{hr})) \\ &= \$3.24 \text{ benefits} \end{aligned}$$

Qualitative Benefits Methodology

The bridge over the Folsom South Canal will be extended to accommodate a 45 degree side slope in place of a vertical wall on the west side. The support wall between the canal and the bike trail will be designed to have portal type openings. These features will increase natural light, visibility, and safety.

Inputs to Calculate Cost-Effectiveness:

| | |
|-----------------------------------|--------------------------------------|
| Funding Dollars (Funding): | \$887,500 |
| Effectiveness Period (Life): | 20 years |
| Days (D): | 200 |
| Average Length of bike trips (L): | 1.8 |
| Annual Ave. Daily Traffic (ADT): | 30,000 (39,000 from 2004 City count) |
| Adjustment (A): | 0.014 |
| Credit (C): | 0.001 |

Emissions Factors (From Table 3, for a 15-year Life):

| | Auto Trip End Factor (grams/trip) | Auto VMT Factor (grams/mile) |
|-------------|--------------------------------------|---------------------------------|
| ROG Factor | 1.020 | 0.266 |
| NOx Factor | 0.458 | 0.319 |
| PM10 Factor | 0.016 | 0.219 |

Calculations:

$$\begin{aligned} \text{Annual Auto Trip Reduction (AATR)} &= D * ADT * (A+C) \\ &= 200 * 30,000 * (0.014+0.001) = 90,000 \end{aligned}$$

$$\text{Annual Auto VMT Reduced} = \text{AATR} * L = 162,000$$

Annual Emission Reductions(ROG, NOx and PM10) in lbs/year

$$= [(\text{AATR}) * (\text{Auto Trips End Factor}) + (\text{Annual Auto VMT Reduced}) * (\text{Auto VMT Factor})] / 454$$

$$\text{ROG: } (91,800 + 43,092) / 454 = 297$$

$$\text{NOx: } (41,220 + 51,678) / 454 = 205$$

$$\text{PM10: } (1,440 + 35,478) / 454 = 81$$

| | | |
|--|----------------------------------|---|
| Capital Recovery Factor (CRF): (From Table 8) | $\frac{(1+i)^n(i)}{(1+i)^n - 1}$ | Where n = project life (20 years) and i = discount rate (3%) |
| | = 0.03 | |

$$\begin{aligned} \text{Cost-Effectiveness of Funding Dollars: } & (\text{CRF} * \text{Funding}) / (\text{ROG} + \text{NOx} + \text{PM10}) \\ &= [.03 * 887,500] / [583] \\ &= \$46.67 \text{ per lb.} \end{aligned}$$

FOR CMAQ PROJECTS ONLY:

Once emissions reductions have been calculated, for each pollutant convert lbs. of emissions reductions per year to kg/day:

$$\frac{\text{lbs. reduced per year}}{2.2 \text{ lbs./kg} * 365 \text{ days/year}} = \frac{297}{2.2 * 365} = 0.37 \text{ kg/day ROG}$$

$$\frac{\text{lbs. reduced per year}}{2.2 \text{ lbs./kg} * 365 \text{ days/year}} = \frac{205}{2.2 * 365} = 0.26 \text{ kg/day NOx}$$

$$\frac{\text{lbs. reduced per year}}{2.2 \text{ lbs./kg} * 365 \text{ days/year}} = \frac{81}{2.2 * 365} = 0.10 \text{ kg/day PM10}$$

Supplemental Information

The proposed project, the bicycle component to the International Extension and Folsom South Canal Bridge, is not currently listed in SACOG's Bicycle, Pedestrian and Trails Master Plan. This is because the City of Rancho Cordova is the newest City (incorporated in 2003) in the Sacramento Region and recently adopted a five-year Capital Improvement Plan (CIP). The 2007-2012 Rancho Cordova CIP includes the International Extension and Folsom South Canal Bridge.

The initial plan for the bridge included the standard bicycle path/maintenance road tunnel (under the bridge, parallel to the canal) as required by the U.S. Bureau of Reclamation. Comments received by bicyclists and pedestrians have been the impetus for the City to reconsider the design to allow for a more open under-crossing, with natural light and clear sight lines.

The City is submitting this application to fund the increased cost of construction to build a safer, open, and well-lighted under-crossing. The City encourages bicycle use and pedestrian activity as alternative modes of transportation, and wants to take reasonable steps to ensure both the actual and perceived safety for bicyclist and pedestrians. Funding of this project will allow the City to create an open design that makes bicycle and pedestrian use more inviting. Additionally, this project will connect existing, older neighborhoods with newer areas of the City, including job centers, education, shopping, and public transit. This will allow all members of the community the opportunity to cross the Folsom South Canal barrier at International Drive and gain access to residential, commercial, recreational and industrial locations on both sides of the canal.

The illustrations on the next page are strictly for demonstration purposes to convey the difference in the design types for the bridge. These illustrations show a project currently listed in the Folsom South Canal Corridor Plan. Illustration 1 shows the standard bicycle/maintenance road tunnel. Illustration 2 shows a more open design comparable to that which the City of Rancho Cordova is seeking for the International Bridge over the Folsom South Canal. The primary difference between Illustration 2 and the proposed project is that the illustration shows a bicycle path on both sides of the canal, and the proposed project area has a bicycle path on only one side of the canal.



Illustration 1 (Standard Maintenance Road Tunnel)

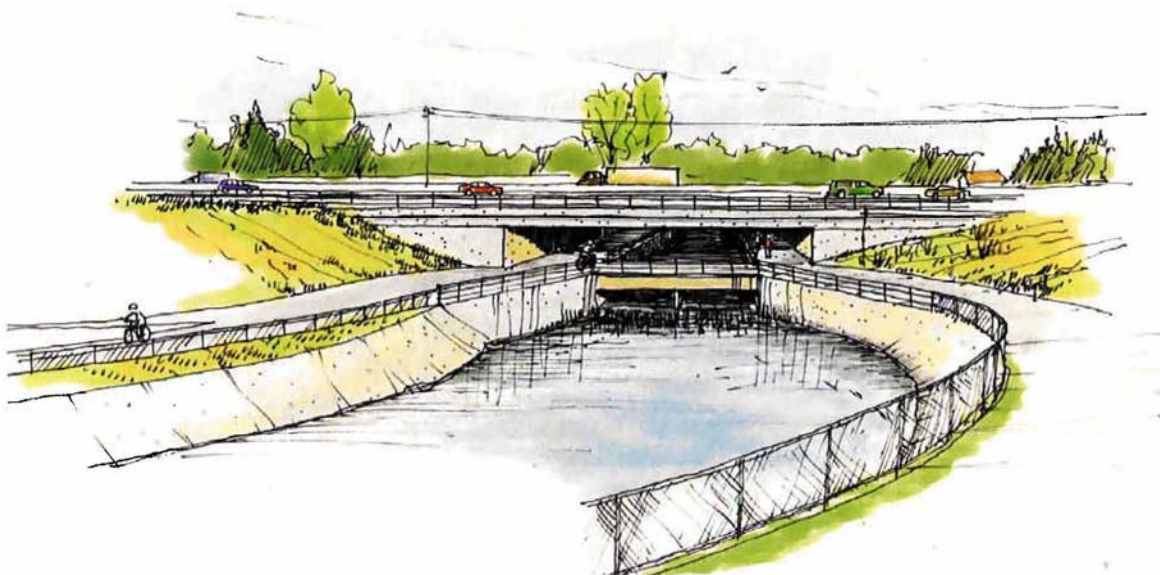


Illustration 2 (Open under-crossing that is more inviting to bicyclists and pedestrians)