

TO: Board of Supervisors, Contra Costa County
FROM: Brian Coyle, Canyon Elementary School Board Vice President
SUBJECT: Establish County Authority for Canyon Rd. Bridge Safety Determination and Response
DATE: 4/25/2017

EXECUTIVE SUMMARY: The town of Moraga precipitously closed Canyon Rd. bridge, endangering the well-being of neighboring Canyon, especially students at Canyon school. Contra Costa county should assert authority over safety assessment and the response to it, because Moraga's action violates the California constitution, rises to the level of regional concern, and demonstrates engineering incapacity. Contra Costa's Public Works department, if it determines bridge traffic should be reduced and repairs made, should purchase a low-cost, high-performance Bailey bridge, as most neighboring county Public Works agencies have. It can be installed temporarily.

REQUEST: The Canyon School Board, the Canyon School Superintendent, and the Canyon School Principal request that Contra Costa county assume responsibility for the safe use of Canyon Rd. bridge. The town of Moraga, though well-meaning, lacks the capacity, both legal and functional, to manage it. The County should assert a legitimate interest in the bridge, including safety assessment and determining any response.

When a city or town acts to close a transportation route, its legal validity is determined by whether (1) it has the exclusive authority to do so, and (2) whether the closure is a matter of regional concern such that county authority preempts city actions.

Exclusive authority: California Vehicle Code 35750 states that any determination that reduces the weight "which a bridge structure" will safely sustain, can only be made by a city council or the board of supervisors of a city or county with a population of 1,100,000 or more. Moraga had a population of 17,016 in 2014, 1.5% of the necessary number.

35754 states that if an appropriate governing body determines "a bridge under its jurisdiction is in a dangerous or weak condition, it may temporarily erect suitable signs at all entrances to such bridge specifying the maximum weight which it believes the bridge with safety to itself will sustain. The maximum weight limit so fixed and posted shall remain in effect for not more than 90 days."

The Vehicle Code can not be preempted by local government. Therefore Moraga's sudden decision to close the bridge is outside its exclusive authority.

Regional Concern: The Canyon Rd. bridge closure concerns Moraga townspeople who use it as a commuting short cut. It concerns the neighboring Canyon community because it's the route for emergency services such as ambulance, fire, and police. It's Canyon school's route of egress in emergencies, and the way some students reach it. It's Canyon community's primary egress for groceries, water supplies, and high school. The alternate route is twice as slow and leads to Alameda county, which creates numerous jurisdictional issues.

Therefore Canyon community's serious concerns rise to a level that clearly demonstrates this is not a one town issue. The bridge closure impacts Canyon life and property, and inconveniences Moraga. Thus the bridge is a regional concern, and its operation should be a determination made by the county.

Moraga Capacity: Discussions with Moraga's Public Works team, and other Moraga officials, reveals what should not surprise anyone: they don't know a lot about bridges. A Public Works administrator said one of the bridge's bracing members had moved, which “twisted and deformed the bridge structure.” The braces under the bridge provide secondary support. The steel beams, or stringers, which run lengthwise between abutments at either end of the bridge, are its primary supports. The braces are not fixed to the superstructure, but press against it, so slide under the bridge, and certainly lack the force to torque it.

PROPOSED ACTION: Contra Costa Public Works Department shall immediately assess the Canyon Rd. bridge. If properly reduced vehicle weight is needed, the county shall erect necessary signs. In the event the bridge must be closed, there will be a period prior to closure during which vehicle weight is reduced, followed by the placement of a Bailey bridge, a temporary bridge that goes over a small bridge. These cost under \$70,000, and are assets held by many California county Public Works agencies. Contra Costa does not have one, but Sonoma, Napa, Lake, Mendocino, and others do. Because they are reusable, they are not an appropriate purchase for a small town, which has limited options for reuse or storage.

SUPPORTING DOCUMENTS:

Newspaper articles from Mendocino and Napa counties, reporting on Bailey bridge use.
Board Agenda Letter from Napa Public Works Department requesting Bailey bridge funding.



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 10/7/2014

Agenda Placement: 6J

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors

FROM: Steven Lederer - Director of Public Works
Roads Department

REPORT BY: Jeff Brooner, Purchasing Manager - 707-259-8188

SUBJECT: Approval of Establishment of a Sole Sourced Fixed Asset (Bailey Bridge) for Roads Department

RECOMMENDATION

Director of Public Works and the County Roads Commissioner request retroactive approval of establishment of a sole sourced fixed asset in the amount of \$63,732 for the 40' Bailey Bridge purchased on September 11, 2014 for use as a temporary fix to the bridge on Partrick Road due to the damage caused by the recent South Napa Earthquake (4/5 vote required).

EXECUTIVE SUMMARY

On September 11, 2014 a 40' Bailey Bridge was purchased from Bailey Bridge, INC, dba Pioneer Bridge, of Fort Payne, AL, without competitive solicitation in order to preserve the integrity and ability to keep open the Partrick Road Bridge as a result of damaged caused by the recent South Napa Earthquake. This action will provide retroactive approval of establishment of a sole sourced fixed asset in the amount of \$63,732 for the Bailey Bridge. It is intended that the Bailey Bridge will stay in place until a permanent fix can be made to the bridge.

FISCAL IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	No
What is the revenue source?	These items were not included in the budget because the need is a result of the South Napa Earthquake that occurred on Sunday, August 24, 2014; however appropriations were made available through the 2014 South Napa Earthquake Emergency subdivision.

Is it Mandatory or Discretionary? Discretionary
Discretionary Justification: This purchase was expedited for the preservation of life and property.
Is the general fund affected? Yes
Future fiscal impact: None
Consequences if not approved: Cancellation of the bridge order, forfeiting the \$20,000 deposit, and not being able to preserve the integrity of the Partrick Road bridge by utilization of a Bailey Bridge.

Additional Information:

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

On September 11, 2014, a 40' Bailey Bridge was purchased from Bailey Bridge, INC, dba Pioneer Bridge, of Fort Payne, AL, without competitive solicitation in order to preserve the integrity and ability to keep open the Partrick Road Bridge as a result of damaged caused by the recent South Napa Earthquake. This action, in accordance with Napa County Code Sections 2.36.080 and 2.36.100, will provide retroactive approval of establishment of a sole sourced fixed asset in the amount of \$63,732 for the Bailey Bridge. A four-fifths vote is required by the Board of Supervisors.

The bridge was purchased without competitive solicitation due to neighboring Lake and Sonoma Counties both owning Bailey Bridges and, if needed, the three counties can provide mutual aid and/or combine resources when necessary. Additionally, Sonoma County has expertise in installation of Bailey Bridges and can provide consultation and installation services.

There are no vendors in Napa County who sell Bailey Bridges.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve

Reviewed By: Molly Rattigan

Oct 7, 2014

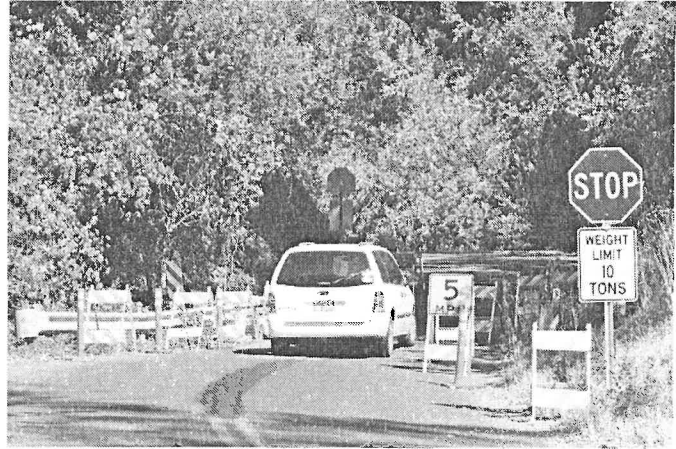
Napa buys temporary bridge for Partrick Road



BARRY EBERLING

Help is on the way for an earthquake-damaged, one-lane bridge on rural Partrick Road.

Napa County has ordered a portable, prefabricated steel bridge for \$63,732 that will sit on top of the damaged span. The new bridge will give the damaged bridge the strength it needs to bear heavier loads than the current 10-ton limit.



"Think of a steel carpet," Napa Public Works Director Steven Lederer said.

The county ordered the 40-foot-long Bailey bridge as an emergency measure from Alabama-based Pioneer Bridge on Sept. 11 without going out to bid. It expedited the purchase for the preservation of life and property after the Aug. 24 south Napa earthquake, a county report said.

Lederer said the county took this move because of the four-week lead time to receive the order. County officials think it important to receive the bridge as soon as possible.

Bailey bridges are a prefabricated bridge used by the military during World War II. Public works departments today often use them as temporary spans.

On Tuesday, the Napa County Board of Supervisors without discussion approved the purchase retroactively. Canceling the bridge order would have meant forfeiting the \$20,000 deposit.

Partrick Road begins in the city of Napa's Browns Valley area and runs for more than five miles through the rural county up the south end of the Mayacamas Mountains. The bridge crosses a creek about a mile from city limits and must be used to reach two wineries and about 28 residences.

In northern Mendocino County, Bailey bridges provide an option in emergencies

By Linda Williams/TWN Staff Writer 12/28/12

When Highway 162 collapsed due to a washout in the early hours of December 21, CalTrans considered borrowing a Bailey bridge from the Mendocino County Department of Transportation as one possible fix.

The MDOT had successfully deployed one of its three bridge panels on December 1 to replace the collapsed bridge on Hearst Willits Road in Little Lake Valley.

Even though CalTrans decided to put in a new culvert to restore access to Covelo via Highway 162, Bailey bridges remain a workable option for future washouts and bridge failures. CalTrans actually borrowed three of MDOT's eight-foot diameter culverts for the Highway 162 temporary fix.

After the Hearst Road bridge collapsed at a creek crossing, it left a substantial detour for many stuck on either side. MDOT crews hauled the Bailey bridge panel to the site and put it together like a large erector set, transforming the site from a "hole in the ground" to functioning bridge within nine hours. While the MDOT crew leaned on the expertise of its bridge foremen, the crew itself had no hands-on experience building a Bailey bridge.

The panels are all designed to be lifted by a work crew, with the heaviest section weighing 540 pounds. When finished, it left the county with a temporary bridge on this vital secondary road rated for a vehicle weight of 80,000 pounds.

Donald Bailey was a British civil servant during World War II who enjoyed building model buildings as a hobby and came up with an idea for a temporary bridge design that helped win the war. The bridges were designed in a modular fashion, requiring little aid from heavy equipment or cranes. Each part could be carried by a squad of men and assembled using minimal tools. The modular nature allowed it to be as long and as wide as needed.

During World War II, many Bailey bridges were constructed by combat engineers during battles and under enemy fire.

Bailey bridges remain in service to this day in many parts of the world.

Transportation departments in many states store bridge panels for emergency use.

In Washington state, floods in December 2007 on the Chehalis River washed out several bridges stranding a number of homes. The Washington State Department of Transportation installed a Bailey bridge with a 180-foot span capable of carrying semi-trucks and trailers within two weeks. Washington state maintains a supply of Bailey bridge sections and can deploy and reuse them as needed during emergencies.

In Mendocino County there are two more Bailey bridge sections available for emergency use. When the Hearst Road bridge is replaced with a permanent structure, the old Bailey bridge will be removed and stored for use in the next emergency.

The county has had these temporary bridges available for emergency deployment for at least 20 years.

Bailey bridges have been used since the 1950s for temporary replacement bridges throughout Mendocino County. CalTrans deployed one on Highway 20 for a slipout following damage from a major storm in 1998. The county used one in 1978 on Schow Road after the prior bridge collapsed under the weight of a propane truck, and in 1985 when the Tomki Creek bridge collapsed under the weight of a bulldozer.

REQUEST TO SPEAK FORM (2 minute limit)

I wish to speak on Agenda Item # _____

Complete this form and place it in the upright box near the speaker's podium, and wait to be called by the Chair.

Date: 4/25/14

Personal information is optional. This speaker's card will be incorporated into the public record of this meeting.

My comments will be: General
 For
 Against

NAME (Print) Sophia McKee
To ensure your name is announced correctly, you may include phonetic spelling.

I wish to speak on the subject of:

White bridge between
Moraga and canyon

Address: _____

City: Martinez

Phone: _____

I am speaking for: Myself
 Organization: _____

I do not want to speak but would like to leave comments for the Board to consider.
(Use the back of this form.)

Information for Speakers:

In lieu of speaking, I wish to submit these comments:

Deposit this form in the upright box next to the speaker's podium before the Board's consideration of your item.

I am a student of canyon
school, the bridge being out is
a serious safety concern for
the community of canyon and
all of the children of canyon
school, The alternate route is
almost impassable for emergency
services. We need a bridge.

Wait to be called by the Chair. Please speak into the microphone at the podium.

Begin by stating your name and your city or area of residence, and whether you are speaking for yourself or on behalf of an organization.

If you have handout materials, please give them to the Clerk.

Avoid repeating comments made by previous speakers.

REQUEST TO SPEAK FORM (2 minute limit)

I wish to speak on Agenda Item # D.2

Complete this form and place it in the upright box near the speaker's podium, and wait to be called by the Chair.

Date: 4/25/17

Personal information is optional. This speaker's card will be incorporated into the public record of this meeting.

My comments will be: General
 For
 Against

NAME (Print) Marieke Tarter
To ensure your name is announced correctly, you may include phonetic spelling

I wish to speak on the subject of:

Address: 111 Flame Drive

City: Pacheco CA 94553

Phone: 925 239 - 5292

I am speaking for: Myself
 Organization: _____

I do not want to speak but would like to leave comments for the Board to consider.
(Use the back of this form.)

Information for Speakers:

In lieu of speaking, I wish to submit these comments:

Deposit this form in the upright box next to the speaker's podium before the Board's consideration of your item.

Wait to be called by the Chair. Please speak into the microphone at the podium.

Begin by stating your name and your city or area of residence, and whether you are speaking for yourself or on behalf of an organization.

If you have handout materials, please give them to the Clerk.

Avoid repeating comments made by previous speakers.

My family lives in Pacheco and commutes to Canyon Elementary school so that my 9 year old and 7 year old can attend school there. I am very concerned about their safety now that the fastest emergency route has been closed. Please fix this bridge as soon as possible

Thank you,
Marieke Tarter