

Saro G. Rizzo

Attorney At Law
1457 Marsh Street, Suite 100
San Luis Obispo, Ca. 93401

3-10-22

VIA E-Mail

Lee Ann Eager
CTC Chair
California Transportation Commission
1120 N St.
Sacramento, CA 95814
ctc@catc.ca.gov

Casey Kempenaar
Planning Manager
City of Citrus Heights
6360 Fountain Square Drive
Citrus Heights, CA 95621

**RE: Proposed Funding for Arcade-Cripple Creek Trail
 Lead Agency - City of Citrus Heights**

My office represents Peg Pinard who has serious concerns regarding the proposed funding of the Arcade-Cripple Creek Trail.

Before you is a project that does not meet the requirements or intent of the U.S. Department of Transportation Act's Section 4(f) through which the City of Citrus Heights' (CH) Arcade-Cripple Creek Trail (formerly Electric Greenway) is funded. Section 4(f) of the U.S. Department of Transportation Act "seeks to protect publicly-owned parklands...wildlife refuges...from impacts...caused by transportation projects."

Apparently, there has been a reliance on "assurances" from Citrus Heights staff rather than on the actual data. These "assurances" were also presented to other agencies and the public when they questioned the proposed plan. However, these 'assurances' do not match the resulting plan and many members of the public are calling for an accountability. Besides the legal requirements of Section 4(f), the public's trust is at stake here. Very qualified members of the public who have expertise in this area have voiced their concerns from the beginning of this project but were constantly told by CH staff to wait until the "final draft" was ready for review. Their input included how to make the trail less environmentally destructive and how to make street crossings safer and more in-line with Caltrans standards.

All along, the public made many suggestions and had questions about the data presented. The public was told to wait for the final draft. After having laid out a process, the plan was only made available on Dec. 6, 2021, and with a deadline for input on Jan. 4, 2022. After having waited years to be able to view the actual plan, the timing was very suspect as CH, the lead agency, knew that this was going to be the least available time for the public to review it. Unfortunately, this is a well-known bureaucratic trick when an agency wants to

minimize public input.

According to Section 4(f), the “use” of these resources - caused by transportation projects - "requires an assessment of the effects, and either avoidance, minimization, mitigation, or enhancement measures established to lessen those effects". Based on the information below, the current “assessment” is not consistent with the intent of Section 4(f).

Regarding its self-declared “de minimus” status, Citrus Heights posted the following: "CEQA Initial Study/Proposed Mitigated Negative Declaration"—in fact, CEQA guidelines were not followed. The “mitigated negative declaration (MND) was claimed even though endangered species were unnecessarily being affected as well and tons of carbon pollution would be released into the atmosphere every year. CH determined that, in spite of all the major impacts, everything was “not significant” and it ignored the impacts and no real mitigations were provided for them. The list of CEQA concerns are listed below.

1) CEQA Requires Compatibility with Zoning

A significant part of this proposed multi-use trail goes through the Sundance Natural Area. This 14-acre nature reserve is one of the few remaining urban woodlands. The allowable “use” in this zone is listed as a “Walking Trail”. While residents are not objecting to a respectful improvement to the existing trail, they do object to designing a project such that it substantially impacts the very purpose of the woodland as a wildlife refuge and habitat. If this project is built as currently proposed, it will substantially impact the woodland. In every instance, the most destructive options were chosen when there were other, less impactful options available. This proposed project design is not consistent with the land use.

2) Goal should be to Minimize Environmental Impacts

This is a CEQA and Section 4(f) goal, yet CH has consistently refused to add the language of minimizing impacts and have that language be the policy and guiding principle for this trail.

3) Massive Negative Impacts to Global Warming and Carbon Pollution

Despite all the Federal and State commitments to reduce our carbon footprint, this project is being designed to maximize a carbon footprint. Scientists have been clear about the benefits of trees in carbon sequestration. The larger the tree, the more carbon it sequesters. In addition to the above ground benefits, there is the whole mycorrhizal underground network that sequesters massive amounts of carbon. That means that the more trees we can preserve and the less ground that we disturb, the less will be our carbon footprint. However, this 2.9-mile trail project was designed with the most destructive footprint. It was described at cutting down hundreds of trees. The final draft plan is only counting trees that are 19” or more in diameter. (Initially, over 300 mature, established trees were ‘in the way’.) This being an oak woodland, there were trees of all sizes, especially many oak trees that were the next generation. There were hundreds more that were not even being counted since they are only “counting” the trees that are greater than 19” in diameter and oak trees greater than 6” in diameter. Mysteriously, 210 trees that lined the path were cut down just months ago. In the final draft plan, CH has not accounted for the carbon impact of the many ‘smaller’ trees. A 6” diameter oak tree could be 20+ years old already especially having survived our multiple drought years.

According to Davey Research Group (DRG), the firm hired by such cities as Sacramento and Roseville for their expertise in analyzing urban forestry programs, below is an accounting of some of the carbon sequestration impacts.

ANNUAL CARBON SEQUESTRATION BENEFITS

Trees absorb atmospheric carbon, which reduces GHGs. The carbon-related function of trees is measure in two (2) ways: storage (total stored in tree biomass) and sequestration (the absorption rate per year). Urban trees act as a sink of CO₂ by storing excess carbon as biomass during photosynthesis and the amount of CO₂ stored is proportional to the biomass of the trees (Gomez-Baggethun and Barton, 2013).” (DRG)

Name	DBH (inches)	Reduced Atmospheric Carbon pounds
Purple Leaf Plum	6”	110 lbs. per year
Red Maple	12”	267 lbs. per year
Big Leaf Maple	24”	731 lbs. per year

4) Safety

The project description calls this trail link as being particularly for use as a connection to schools and parks - in other words, primarily for neighborhood children. Yet, as designed the plan ignores the following major safety issues that could be avoided:

a) The crossing at Fair Oaks Blvd. does not follow the Caltrans guideline of following "line of sight" and keeping the number of decisions drivers need to make simple. People go from the parking lot for the existing path and walk right across the street to the trail's entrance. Instead of improving the crossing where people actually walk, the plan calls for moving the crosswalk further down Fair Oaks, about a hundred feet beyond the parking lot. Driver's exiting the parking lot will have to make a quick second decision to have to stop if someone is in the crosswalk. Making it a T-intersection directly from the parking lot would minimize the number of decisions a driver would have to make and be safer for all trail users. The 'plan' cites Caltrans standards, but it is clearly a misinterpretation of the site.

b) The new proposed alignment will bring children directly next to a wooded, under-a-bridge, homeless encampment. The current configuration allows for children to be visible, out in the open, and as far away from the homeless camp as possible. Children, and anyone else using the trail, will not know that people are lurking just feet away and out of sight.

c) The proposed plan calls for constructing a new 5' high elevated bridge in the middle of the wooded area. Such an elevation will require a 150 ft. ramp to the new elevated 5' bridge over an existing creek. This is a huge hazard as it will become another homeless camp where children will be brought right over to it. The plan seeks to quote FEMA as being a regulation, but that's not a true picture. FEMA's regulations are applicable for when such a bridge would result in a community being cut-off in the event of a flood. In this instance, no sector of our community would be "cut off. Access to all homes is by paved streets. FEMA allows for such small issues to not have to be the same as the Golden Gate Bridge, but the project planner chose the most expensive and most intrusive option. There is easily a case to be made that the existing structure could just be brought up to ADA code with no gaps in the boards since it poses no danger downstream. Even if the current bridge became dislodged, which it didn't in the last 100-year flood, it would not be

able to go anywhere or create any dangers. The many trees downstream would prevent it from going beyond a few feet.

The point is that none of these less intrusive and safer options were evaluated.

5) Trees - Lack of Mitigation

While hundreds of trees are going to be cut down for this oversized project, there is no plan to effectively mitigate the loss in the woodland. Proposed 'mitigations' will be for incredibly young saplings to be planted outside of the wooded areas. For the Sundance Natural Area, these seedlings are to be planted only adjacent to the road so that people will not notice what has been cut down behind the street-screen. The wildlife habitats and vibrant ecological systems will be permanently lost. Saplings will not replace the carbon sequestration capabilities of the existing trees. There is to be extensive excavations that will destroy the land's ability to sequester as well since the main root networks are within the top 18" of soil.

The net effects on the environment are substantial unmitigated impacts. As shown in the diagrams, a sapling would not even make up for the deficit for at least as long as the original tree was in existence....most of them are generations old. That makes our current climate situation even more of a crisis with adding tons of carbon into the atmosphere — every year! That is no improvement, it is pure destruction in the name of what could have been a good and responsible project. Our children deserve better.

Sincerely yours,

A handwritten signature in black ink, consisting of a stylized 'S' and 'R' followed by a long horizontal line.

Saro G. Rizzo

Newman-Burckhard, Beverley@CATC

From: Neil Anderson
Sent: Wednesday, March 9, 2022 8:01 PM
To: Blomquist, Leslie
Cc: California Transportation Commission@CATC;

Subject: Re: Arcade-Cripple Creek Trail Project--Sundance Park Bridge

EXTERNAL EMAIL. Links/attachments may not be safe.

Ms. Blomquist:

Thank you so much for the rapid response and the supposed as-built drawings, including one showing the Sundance Park bridge (sheet 3). Barry Ross sent me these same details of the existing bridge last week. The bridge shown on sheet 3 does not depict the bridge as it was constructed. On March 3, I sent to Mr. Ross a list of at six significant differences between dimensions shown on the drawings and measurements I personally made on the bridge in place. He will return to his office Monday, March 14, and will try to find the correct drawings for me.

I will go over your letter tomorrow and respond. Thank you.

Neil Anderson

On Wednesday, March 9, 2022, 11:16:23 AM PST, Blomquist, Leslie <lblomquist@citrusheights.net> wrote:

Mr. Anderson,

We appreciate the suggestions and comments provided in the below email as well as the March 8, 2022 letter sent via USPS to Casey Kempenaar. Attached, please see a responding letter with additional information regarding this bridge in Sundance Natural Area. A hard copy of this letter will be placed in today's mail to your attention.

In addition, per your request, attached please find a PDF copy of the as-built drawings for the existing bridge in Sundance Natural Area. Also, please see the Arcade Cripple Creek Trail Plans response to comments available here: <https://www.citrusheights.net/DocumentCenter/View/17480/Arcade-Cripple-Creek-Trail-Public-Comments-Response> for additional information.

Sincerely,

Leslie Blomquist, PE, TE

City Engineer I

6360 Fountain Square Dr. | Citrus Heights, CA

(916) 727-4770 | www.citrusheights.net



----- Original message -----

From: Neil Anderson <[_____](#)>

Date: 3/8/22 7:52 PM (GMT-08:00)

To: ctc@catc.ca.gov,
[_____](#)

Subject: Arcade-Cripple Creek Trail Project--Sundance Park Bridge
[_____](#)
[_____](#)
[_____](#)

March 8, 2022

I am a resident of Orangevale who wishes to express his concerns about the proposed replacement of the bridge over Arcade Creek in Sundance Park as part of the "Arcade-Cripple Creek Trail Project".

In the Arcade-Cripple Creek Trail Project website (as of February 20, 2022), there is a list of "Frequently Asked Questions (FAQ)". The response to FAQ No. 35 states that the existing bridge must be replaced because it is not ADA accessible and does not meet updated FEMA floodway mapping and design standards. I have expressed in writing (letter dated February 22, 2022) my concerns to the City of Citrus Heights Planning Manager regarding the City's plan to eliminate the existing bridge and build a new bridge five feet higher with corresponding approach ramps at each end. Please note that this is a significant change to the original plan to "resurface existing creek crossing, repair as necessary", shown on

the plan and profile drawings for the project (as of February 22, 2022). Here are my comments on the FEMA and ADA issues that prompted the planned removal of the existing bridge:

1. FEMA Design Standards: I have requested of City Planning Manager the specific FEMA requirement that an existing pedestrian must be replaced by a new pedestrian bridge. As of March 8, 2022, I have not received a response indicating where I can review this requirement. Considering the scope of FEMA regulations, there doesn't appear to be any requirement that small pedestrian bridges fall under the same FEMA requirements as those concerning major structures. Upon checking with FEMA directly this morning, March 8, about their regulations regarding bridges in general and pedestrian bridges in particular, I was told that they deal primarily with disaster relief. They said that bridges "would only become important in providing access to an area that suffered flood damage". The Sundance Natural Area is a relatively small parcel of land that is a flood plain and a recharge area for our aquifer. In the event of a 100 yr. flood access to all structures are accessible by paved roads from multiple directions. The City's response to FAQ #35 on the its webpage referring to the existing bridge not meeting FEMA requirements is misleading.

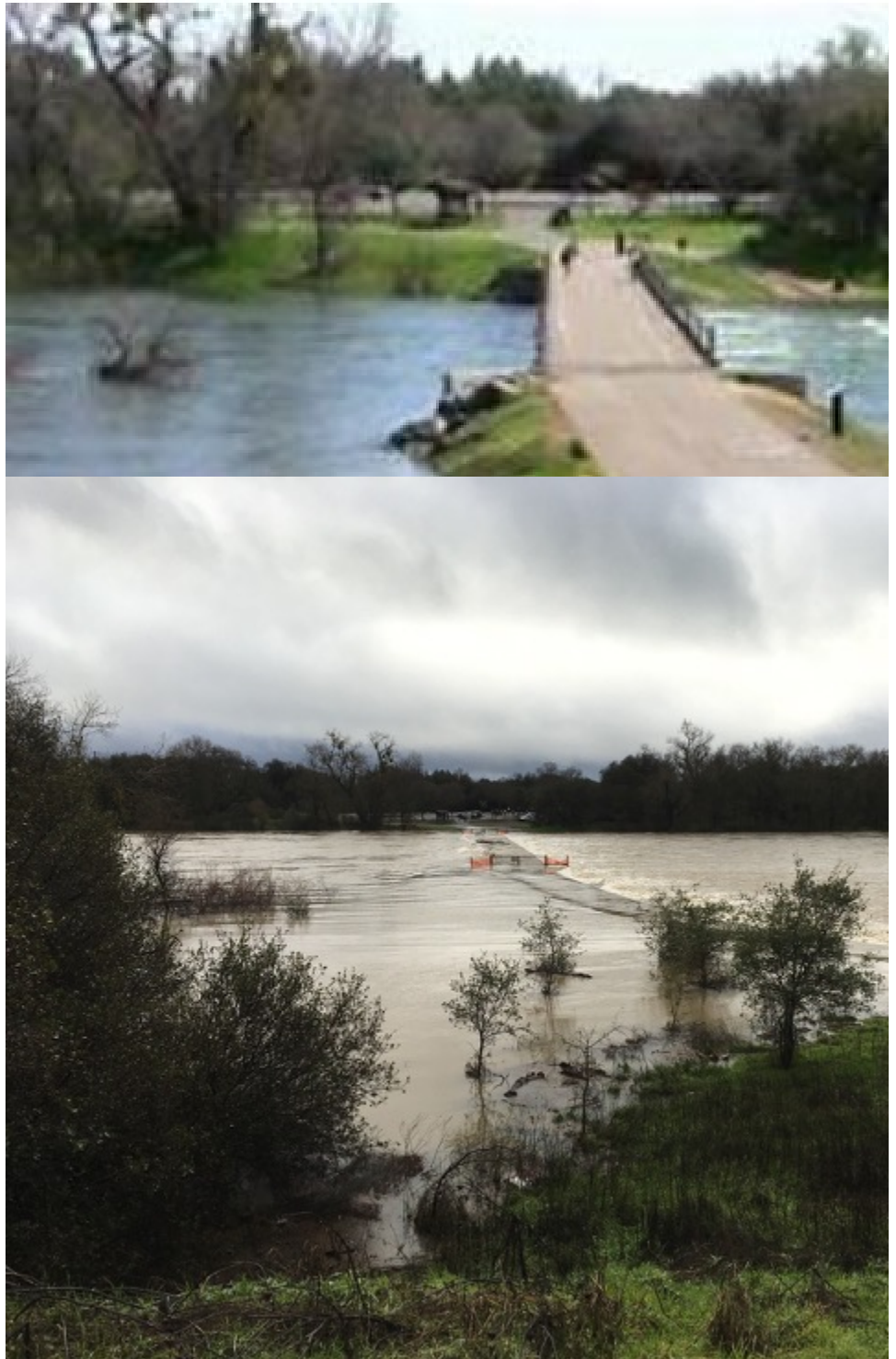
2. ADA Accessibility: According to the City of Citrus Heights, the existing bridge has been categorized as not meeting the latest ADA standards because the floor board spacing is too great and that the bridge does not have guardrails. The bridge can be brought into ADA compliance without raising it. The existing timber bridge deck can be replaced with a surface compatible with wheelchairs and guardrails can be added to each side of the existing bridge. The guardrails can be designed to be readily removable. This bridge does not have to be removed in its entirety and replaced by

a new bridge in order to comply with
ADA.

The data available to the public does not support the idea that the existing pedestrian bridge *is* in danger of being washed away or being damaged by foundation undercutting. Ten yards upstream of the bridge, the creek makes a 90-degree left turn. The stream will not be able to build up the momentum required to erode the channel banks after making this right-angle turn. Debris buildup against the structure is highly unlikely due to low velocity flow and the nature of the watershed upstream of the bridge.

The fact that the 100-year storm may result in the bridge being overtopped by a few inches does not necessarily imperil the bridge. This bridge is very sturdy. I have personally inspected it myself. If its abutments are provided nominal additional protection, it surely will not be damaged by 3-4 inch overtopping of the deck which may occur purportedly in the 100-year storm event. Pedestrian bridges can survive overtopping. A prime example is the Jim Jones Trail bridge over the American River which has survived overtopping at least twice in the past 40 years without being damaged. The Sundance Park pedestrian bridge will not be subjected to stream velocities similar to those impinging on the Jim Jones Trail bridge in the American River when releases from Folsom Dam exceeded 100,000 cubic feet per second. When the Jim Jones Trail bridge is expected to be overtopped, the bridge is closed to the public and the guardrails are removed. The same can be done at Sundance when the 100-year storm is anticipated to be near at hand.

Jim Jones Trail Bridge
over American River
showing high flow(top)
and overtopping(bottom)



This is not a highway bridge whose temporary unserviceability would cause significant disruption to the surrounding community. This is a pedestrian bridge. Its being closed for repairs would not be a disaster. Due to the grade of the

stream and its sinuous nature, I do not anticipate the 100-year storm, as defined in the hydraulic study report, damaging this bridge. I am awaiting an analysis from the City Planner that will support the need to abandon the existing bridge to build a new one.

Existing Pedestrian Bridge in Sundance Natural Area



Neil K. Anderson, PE

Civil Engineer

Orangevale, CA

From: Tom Digiacomio
Sent: Monday, March 7, 2022 10:16 AM
To: California Transportation Commission@CATC;
Cc:
Subject: Funding for The Arcade-Cripple Creek Trail (formerly the Electric Greenway Trail)

EXTERNAL EMAIL. Links/attachments may not be safe.

Please Do Not Fund At This Time

As President of the Woodmore Oaks Neighborhood Watch Program that consists of approximately 100 + streets in the City of Citrus Heights and the Unincorporated Areas of Sacramento County, I represent many neighbors who have expressed their concerns about the Arcade-Cripple Creek Trail Project since its community involvement starting in 2019. As many neighbors were opposed the project from its conception, I had to try to change the mindsets of many neighbors and tell them that this project was going to move forward sometime in the future, but we will have the opportunity to make it a better project and get what is best for our community. Unfortunately, timing became a bad taste **for** many neighbors when the City of Citrus Heights only **made** the final Draft Plans of the Project public the first week in December 2021 and closed community input on January 4, 2022. The City took advantage of a time when many neighbors were on holidays whether out of town or having loved ones visiting them. We had discussed with the City that we needed ample amount of time for the community to view and talk about these plans in a time frame for us to get the word out through various means of social sites as well as the monthly Woodmore Oaks Neighborhood Watch Newsletter that goes out to 3,000 viewers. Since the Newsletter is published by the first week of each month, the draft plans were conveniently made public in the 2nd. Week of December, right after the Newsletter was distributed and then community response ended just after we went to print on the January Newsletter issue, so no time was given for us to get the word out.

Since that time, we have had a series of community meetings to share some key points that still puzzle the community and therefore we are asking for a Delay in funding this project on March 16, 2022. This project is so important to the community. I would like to share some key points that neighbors are most concerned with:

1. The Project Planners, Casey Kempenaar and Leslie Blomquist, have stated that the whole trail project will be lighted. This one point was a major concern since the inception of this project at the community meetings in 2019. When I personally had a meeting with the two of them in December 2019 at the Citrus Heights Planning Department after reviewing the draft plans, I noticed the when you came out of Sundance Park on to Highwood Way and went up around a dangerous “S” turn to Woodmore Oaks Dr. and then left to the 7 Eleven corridor, there were no plans for lighting of those two streets that are dark at night. The response I was given by Casey and Leslie was that these streets are connecting streets to the trail and not technically part of the trail .This is wrong because anyone can see that they need to use these streets to get from one point to another. Then Casey and Leslie mentioned that there was no funding for streetlights and solar blinking stop signs needed at the dangerous corners and this would be a County expense and not part of the project expense. We had County Supervisor Sue Frost and Matt Hedges at our last “Special Meeting” held where we had over 50 people attend, and they heard that which we did **to** raise their awareness. We have various photos showing traffic jams at that “S” turn on Highwood Way as well as a School Bus that drives that street daily, so this is a big safety concern.
1. **SOLUTION:** 3 streetlights are needed – 2 at the “S” Turn on Highwood Way and 1 at Corner of Woodmore Oaks Dr. & Highwood Way. Also 4 Solar Blinking Stop Signs Needed at Corner of Woodmore Oaks Dr. & Highwood Way and 3 More Solar Blinking Stop Signs at Drywood Way and Woodmore Oaks Dr.
2. Rebuilding of a pedestrian bridge in Sundance Park. At the last Special Meeting we walked to the existing bridge inside Sundance Park and the community does agree that it needs a **new surface and** guard rails but the bridge does not have to be **demolished** and replaced with another pedestrian bridge with a long elevated ramp to **raise the bridge crossing an** additional 5 feet. **The walking surface of the existing bridge is only about 4 inches below the water surface of the 100-year flood, (Note: Overtopping of the bridge deck is temporary and no cause to raise the walking surface to be above the water surface in case of the 100-year flood event).** I want to stress that this is a pedestrian bridge as stated in the draft plans. The term pedestrian means people, bicycles, people walking with strollers and given the benefit of the doubt, maybe small light trucks. At the last Special Meeting, Casey mentioned that firetrucks would need to go over the bridge for whatever reason they want to come up with. At first this made some sense and at that point some council members that were present agreed with that. Well after now understanding this more, this was just a scare/fear tactic because a pedestrian bridge is not designed nor engineered

for a fire truck, so this was just a scare tactic that was not fair to say.

2. **SOLUTION:** *Replacing the timber superstructure, painting the steel stringers (longitudinal beams that support the walking surface), and adding guard rails is all this bridge needs. This would free up monies for streetlights and solar stop signs.*

2. Building of ramps to meet with the 5-foot higher extended bridge for ADA requirements was another scare tactic that was told to the community. Any given wheelchair can easily make it over the existing bridge as it stands today. If you add ramps that must have an incline to accommodate the bridge height, you are now creating dams for water to back up. It is my understanding that you cannot bring in earth to create a dam in a 100-year flood plain. This would be another reason why this project should be delayed so that more thought can be given to this. _

2. **SOLUTION:** Grading the existing trail is all it needs – no need to make ramps that would be dams ***if the creek were to overflow its banks.***

3. Creating Homeless Encampments would happen if the bridge was to be raised. There is already an existing homeless encampment at Fair Oaks Blvd. & Entrance to Sundance Park. There are existing photos of previous fires in that location as well as debris(bicycles). The bridge is in the middle of Sundance Park and not visible from either Highwood Way Entrance of Fair Oaks Blvd. Entrance. Being secluded the likelihood of a homeless encampment is inevitable and therefore more safety concerns for neighbors walking over the pedestrian bridge.

3. **SOLUTION-** do not replace the existing bridge with another that will be 5 feet higher- only 2-3 inches is needed for flood plain requirements.

4. Proposed New Walkway going across Fair Oaks Blvd. is not the best location contrary to where they want to put it. There is an existing entrance to the trail on Sundance Park that is in “line of site “ from the exit/entrance of autos from Tempo Park. There is nothing wrong with keeping the same location. The proposed location is near the existing homeless encampment bridge. This is, again, a huge safety

concern to our neighbors. Bringing the trail on that side of tennis courts at Tempo Park makes no sense and is a safety issue is being overlooked.

4. **SOLUTION:** The trail can be brought around the back side of the tennis courts and come around to the existing entrance/exit to Tempo Park. Then the crosswalk can be made right there so autos/bicycles can cross within line of site of that entrance and the existing entrance to Sundance Park is almost directly across Fair Oaks Blvd.

5. Trees already cut along the existing trail in Sundance Park were a mystery to all of us. When we asked who ordered to have the many trees (210) along the trail cut, we got an "I don't know" answer. We can understand trees needing to be cut under powerlines but many of these trees were just large bushes and were no more than 10 feet high. The neighbors loved the shade they provided in the summer and now all that is there is bare land. We had questioned the number of trees being cut for this project and we understand some directly within the width of the trail but it wasn't right to cut as many as they did. They were no where near the power lines as they wanted us to believe.

As I mentioned earlier, I represent many neighbors that have expressed their concerns on this Trail Project and all they are asking is to build it safely and well lighted. These neighbors are familiar with cars running the stop signs on Woodmore Oaks Dr. as well as having to take it very slow around a blind "S" turn on Highwood Way especially when cars are parked on both sides of the street. It's even more dangerous when it is trash pickup day. Highwood Way & Woodmore Oaks Dr. are very dark at night and the added traffic would make things worse, so streetlights are much needed. When you agreed to fund this trail all these connections were there, it was one trail. But now Citrus Heights is claiming that these trail connections are not their concern and are trying to exclude them from the project. These streetlights and solar blinking stop signs should not be left off of the Trail Project. Citrus Heights is trying to withhold that money and saying that Sacramento County should pay for it.

Respectfully,

Tom DiGiacomo

President of Woodmore Oaks Neighborhood Watch

[Website](#)

[TextMe](#)

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Newman-Burckhard, Beverley@CATC

From: Neil Anderson
Sent: Saturday, March 12, 2022 7:01 AM
To: California Transportation Commission@CATC

Cc: Tom DiGiacomo; Peg Pinard
Subject: Fw: Arcade-Cripple Creek Trail Project -- Response to Your Letter dated March 8, 2022

EXTERNAL EMAIL. Links/attachments may not be safe.

This is my response to Leslie Blomquist regarding the letter she sent me dated March 8. I am responding to her copy of the letter e-mailed to me. I have not yet received the mailed letter.

----- Forwarded Message -----

From: Neil Anderson <liennosredna@yahoo.com>
To: Leslie Blomquist <lblomquist@citrusheights.net>
Cc: Peg Pinard <pinardmat@gmail.com>; Tom DiGiacomo <tomagent@tomdigiacomo.com>
Sent: Friday, March 11, 2022, 04:38:48 PM PST
Subject: Arcade-Cripple Creek Trail Project -- Response to Your Letter dated March 8, 2022

Dear Ms. Blomquist:

Thank you for responding to my letter, addressed to Mr. Kempenaar and dated February 22, 2022. I appreciate your taking the time to communicate with me.

Below I have expressed my concerns about the decision to demolish the existing pedestrian bridge and replace it with a new bridge raised approximately five feet above the existing. Comments are in accordance with the enumerated responses in your March 8, 2022, letter.

1. In your response you state: "The addition of the handrails and new deck (within the FEMA floodway) would create new obstructions for flows and cause an increase in the floodway elevation, triggering the need for replacement."

The addition of guardrails will not create new obstructions if removable guardrails are installed. On a 30-long bridge removable guardrails can be removed in short order. Please refer to the photos I sent of the American River bridge being overtopped in 1997. Also, the trail can and should be closed to the public before anticipated flooding. Replacing the existing bridge deck with a new deck (along with addition of guardrails) should not "create new obstructions" if its profile is no greater than that of the existing deck. The new deck can consist of light-weight metal grating designed to support pedestrian loads (no vehicular traffic allowed). Deck replacement and guardrail addition can be accomplished without the bridge being reclassified as new construction.

2. The addition of guardrails to the existing bridge can be accomplished without reducing the width of the crossing. The new walking surface can be made wider than the existing surface with guardrails positioned on the outside edge of the grating, supported by new brackets attached to each of the two outside bridge stringers (the existing bridge deck is supported by four 16-inch-deep wide-flange steel stringers). The bridge is not the "prefab steel bridge" shown on sheet 3 of the Steven Fuhrman & Company drawings of 1997.

3. The replacement of the bridge deck with metal grating and the addition of removable guardrails will not add to the obstruction that already exists. The submerged volumes of these items (grating and guardrail post support brackets) will be very small and raise the floodwater surface elevation an insignificant amount. Ramps for the new elevated bridge will add volume and raise the floodwater surface elevation. The existing abutments being left in place will also obstruct the flow. Other measures can be considered in order to lessen the impediments to the stream flow.

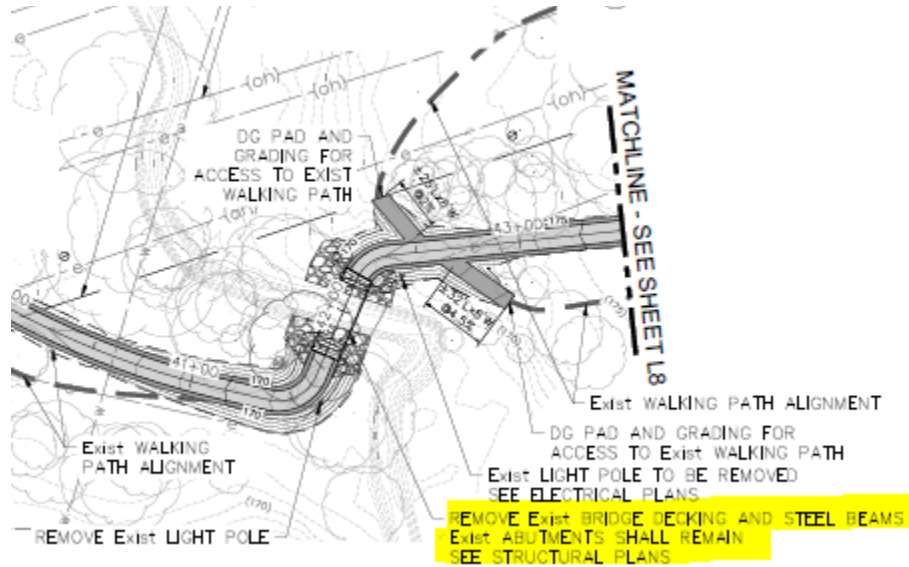
4. It appears that the survivability of the existing structure was not really a concern of yours. The existing bridge superstructure is extremely sturdy, much sturdier than the original bridge as specified. I still have not been able to examine as-built drawings of the foundation. The abutments are massive but their depth I cannot determine from observation.

5. This is a pedestrian bridge. I examined the document you e-mailed to me entitled: "Guidance for Flood Risk Analysis and Mapping", by FEMA, dated November 2021. Paragraph 11.2.2. of this document addresses replacement of an existing bridge but does not mention any requirement to remove an existing bridge that does not comply with 2021 recommendations.
6. Additional dead loads resulting from replacing the wearing surface of the bridge and adding guardrails are insignificant. The bridge in place is much sturdier than the bridge originally designed in 1997.
7. I did not find your 6.9 foot scour figure in the Hydraulic Report. That is a significant number and cause for concern, yet it was not emphasized as a primary reason for eliminating the existing bridge. Scour can be attenuated with the addition of riprap on the creek banks in proximity of the bridge. The creek prism can be reshaped in the vicinity of the bridge to accommodate such protection without raising the expected 100-year floodwater surface elevation, i.e. by replacing embankment material with rock.
8. My position has not changed based on your responses to my issues. The existing bridge can be repaired without raising the water surface level of the 100-year event above what it is now.
9. It does not appear that the cost of the new bridge is an issue.
10. I have already mentioned that the timber floor boards can be replaced with metal grating.
11. I agree with your response, however, guardrails that are designed for easy removal can be added to the existing bridge. The guardrails can be designed to be removed readily by maintenance personnel as needed.

In summary, I know that the decision to replace the bridge will not be changed, at least as a result of my commentary. I regret not knowing about the plan to build an elevated bridge sooner. Even so, I probably would not have been able to convince you to abandon the plan to replace the bridge and repair the existing bridge instead. FEMA's latest guidelines were published in November 2021. I do not see how these requirements were part of the decision to replace the bridge, which must have been made much earlier.

Neil Anderson

PORSCHE MIDDLETON, *Mayor* • TIM SCHAEFER, *Vice Mayor*
JEANNIE BRUINS, *Council Member* • BRET DANIELS, *Council Member* • STEVE MILLER, *Council Member*
ASHLEY J. FEENEY, *City Manager* • RYAN R. JONES, *City Attorney*



Snip from page L7 (18 of 134) of project plan set

2. The existing bridge can be repaired to comply with ADA.

The existing bridge surface is comprised of wood planks and simple resurfacing or replacement of the timber decking is not an option. ADA requires the presence of hand railing and adding these rails would reduce the effective width of the trail, further exacerbating the existing ADA compliance challenges. Both repair/replacement of the surface and the addition of the hand rails would impact the bridge's structural integrity and would require significant modifications to the bridge abutment design, triggering the need to replace the bridge.

Leaving the bridge at the current elevation would mean the bridge type would have to be changed to a significantly more impactful design to the environment including:

- Deeper and larger footings resulting in more ground disturbance, wetland/riparian impacts, longer construction periods, significantly higher cost, and potentially more tree removals in order to construct.
- Changing the material to concrete for the structure to increase the strength resulting in higher carbon footprint, bigger/bulkier structure that will not blend as nicely with the environment, significantly higher cost, longer construction periods.
- The existing structure is likely to be damaged during these large storm events (which this level of flooding is seen at this location regularly) resulting in excessive costs for repairs, maintenance, cleanup, repainting, resurfacing, degradation of the structure and significantly reducing the expected life-span.

Leaving the structure as is would also trigger the need to request FEMA change the flood maps, potentially causing homes bordering the park to no longer be protected or be eligible for flood insurance.

The intent of this project is to improve the safety and accessibility of this public nature area with minimal impact and disturbance to its existing beauty while not jeopardizing the homes of the adjacent residents.

- 3. *In my experience I have learned that here are different requirements for existing bridges and new bridges. If the bridge is replaced rather than repaired, the new bridge must meet all of the latest requirements, but existing structures that do not meet the latest standards do not have to be necessarily demolished and replaced, unless they present a clear safety hazard.***

Your understanding is correct, in many cases repair/maintenance projects do not require upgrading a structure to current standards. However, the additional obstruction to the floodway (handrails and modified soffit) would cause an obstruction and increase the elevation of the floodway. As noted above, the intent of this project is to improve the safety and accessibility of this public nature area with minimal impact and disturbance to its existing beauty while not jeopardizing the homes of the adjacent residents.

- 4. *In the response to FAQ No. 35, item 2 claims that the present structure will be jeopardized by the design 100-year storm. According to the plan and profile depicted in Figure 2 of the "Bridge Design Hydraulic Study Report", the maximum water surface elevation of Arcade Creek at the bridge site during the 100-year storm will be 168.3, slightly above the deck of the existing bridge which appears to be at approximate elevation 168.0. I have heard that the existing bridge cannot survive the 100-year flood undamaged. Surely, this assessment, if true, must be based on engineering analysis. I am very interested in being provided the opportunity to review this engineering analysis.***

It is not necessarily the case that the old or new bridge could not survive a flood event, however the new structure would have to be designed to withstand the loading of the water and debris attempting to pass by. This would also require the foundations being modified and strengthened to withstand these forces, triggering significant environmental impacts. The two major concerns with adding obstructions to the floodway are (1) a change to the 100-year water surface elevation that impacts private properties and structures and (2) the ongoing maintenance and repair costs that would result from debris colliding with the sides of the structure and the silt deposits along the decking would be a significant cost to the Parks District.

- 5. *You intend to replace the existing bridge because it is not in compliance with the latest FEMA standards. Please direct me to the specific FEMA requirements that existing pedestrian bridges must meet.***

The two project bridges (one at Arcade Creek and one at Cripple Creek) are located within the Federal Emergency Management Agency (FEMA) designated floodplains and floodways. Because of this, the bridges were designed per FEMA guidelines as well as Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), and Sacramento County criteria. Negligible increases (such as a 0.2' increase) to water surface elevations are allowed for FEMA designated floodways.

The bridges were designed to pass the 100-year floodplain with 2 feet of freeboard (meaning there is 2 feet of clearance from the high water elevation and the bottom of the bridge) per the combination of guidelines from FHWA, Caltrans, and Sacramento County.

The FEMA guidelines can be found here:

https://www.fema.gov/sites/default/files/documents/fema_floodway-analysis-mapping_112021.pdf

See Section 11.2.2 for “Replace an existing Building, Bridge, or Culvert,” the last paragraph in particular.

6. ***I discovered during my visit that this bridge was constructed very well with the intent of supporting significant loads. The 30-foot long bridge is supported by four 16-inch deep wide-flange steel stringers. The concrete abutments are well constructed. I cannot tell how deep they are buried and whether they have a spread footing or not. The clear width of the bridge is 11 feet, but that can be increased by replacement of the floor boards with longer timbers. The design drawings, specifically the as-built drawings, will prove to be an important part of the determination of the sturdiness of the existing bridge. So far, I have not had an opportunity to review these drawings.***

The project team reviewed available as-built data for the existing bridge. The largest constraint to re-using the foundations and replacing the deck is that the additional dead load and lateral forces experienced by the new structure was not a part of the original footing design.

A copy of the Park As-built Plans are attached for your information.

7. ***The data available to the public (who do not have access to the engineering drawings) do not support the bridge being in danger of being washed away or being damaged by foundation undercutting. Ten yards upstream of the bridge, the creek makes a 90-degree left turn. Also the creek grade is fairly flat. The stream will not be able to build up the momentum required to erode the channel banks after making this right-angle turn. Debris buildup against the structure is highly unlikely due to low velocity flow and the nature of the watershed upstream of the bridge.***

The City’s Project Team has performed a hydraulic analysis based on available data and current design and modeling standards. The Hydraulics Report has documented the potential for up to 6.9 feet of total scour at the southern abutment.

Because the project is located within a regulatory floodway, one of the goals of the project was to avoid increasing the water surface elevations, to allow the water an unimpeded path and to reduce flooding potential of the adjacent property owners. This also helps to maintain the integrity of the creek for years to come.

The project’s intent is to

- not impact the floodway (endangering private property and increasing our impact to this public space)
- design within engineering standards and best practices and comply with project funding requirements
- provide added protection for the structure
- balance the “added protection” of the structure vs. structure’s construction cost and environmental impact

The decision that was made is within standard practice applied across the country. Many other jurisdictions have standards and/or encourage 3 feet of freeboard or more for the same reasons. The bridges to be constructed as part of the Arcade Cripple Creek Trail Project will provide 2 feet of freeboard above the 100 year flood water surface elevation.

8. I believe you should seriously consider refurbishing the existing bridge.

See response to question 2, refurbishing the bridge and upgrading to meet ADA requirements will trigger replacement, which is why it has been identified as such.

9. With a fraction of the expenditure allocated to construction of a new elevated bridge with the necessary approach ramps, the existing bridge can be repaired and improved, including the addition of guardrails.

See response to question 2. Improvements to the bridge to meet current ADA and the installation of handrails will trigger replacement, which is why it has been identified as such.

10. I am convinced that timber components of the bridge should be replaced.

See response to question 2. Both repair/replacement of the bridge decking and surface (as well as the addition of the hand rails) would impact the bridge’s structural integrity and would require significant modifications to the bridge abutment design, triggering the need to replace the bridge.

11. Due to the grade of the stream and its sinuous nature, I do not anticipate the 100-year storm, as defined in the hydraulic study report, damaging this bridge. If you have determined that the bridge will not survive the design 100-year flood, please give me the opportunity to see this for myself by providing to me for my review the engineering analysis that supports your conclusion.

The existing creek alignment has already been taken into consideration. The modeling within the Hydraulic Study takes the bends into consideration and water will not overtop the banks unless it has nowhere else to go (or is blocked or reduced by an impeding bridge with debris under it), which is why raising the bridge is also important.

Some of the 100-year flow does go over the banks; however, the flow that goes over the banks continues flowing in a wide floodplain towards the west (towards the bridge). A bridge with handrails would impact the natural channel/floodplain with new eddies, forces, and flow patterns.

Thank you for your comments and concerns as for being one of the many stakeholders and active participants in this project. Please let us know if you have any additional questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Leslie Blomquist".

Leslie Blomquist, PE, TE
City Engineer

A handwritten signature in blue ink, appearing to read "Casey Kempenaar".

Casey Kempenaar
Community Development Director