Larry@WGTrestle.org
(sent via email)
May 30, 2013

Mayor Reed and Members of the San José City Council,
200 E. Santa Clara St.
San José, CA 95110

re: PRNS and Public Works "Three Creeks Bridge Issues" meeting 5/10 and memo 5/17/13

Dear Mayor Reed and Councilmembers,

I want to thank Julie Edmonds-Mares and the Staff at the Department of Parks, Recreation and Neighborhood Services (PRNS) and the Department of Public Works (DPW), as well as the Principal Engineer from CH2M-Hill, for taking time on May 10th to meet with Helen Chapman, Scott Lane and me to discuss the "Three Creeks Trail Bridge" (also called the Willow Glen Trestle). After our meeting, PRNS and DPW wrote a memo to Council dated May 17th that I'd like to address here.

The basis of our discussion was the Engineering Report by CH2M-Hill that the City commissioned last fall. The Report is, as I've always said, a very professional and thorough engineering evaluation of the trestle. It contains detailed analyses of structural, hydraulic, seismic, and other loads, detailed repair plans, 15 pages diagramming each and every board or bolt that needs attention, and dozens of pages of detailed cost estimates. The resulting conclusion is that the trestle can readily be restored and adapted to trail use for a price of under a million dollars – and that includes smoke alarms, fire-retardant treatments and the installation of a fire-sprinkler system.

The Report also includes data from various steel bridge manufacturers, a vendor price quote, and a one-page budget that results in a $1.6 million estimate for replacing the trestle with a new steel bridge. I fear that that total may be severely underestimated, as it includes only $58,800 for the complete removal of the existing trestle. This low estimate is explained in an appendix by asserting that each piling or timber in the trestle can be unbolted or pulled up and removed by a four-person crew in fifteen minutes or less. (Based on conversation with several experts in the field, a more cost realistic estimate for removing the trestle might be a million dollars or more, given the sensitive habitat in the vicinity of the structure.) The cost of environmental mitigation (installation and maintenance) does not appear to be included for either alternative.

The Engineering Report includes a one-page trade matrix that, utilizing a somewhat arbitrary scoring method, concludes that the steel bridge scores marginally better than the restored trestle. The Executive Summary refers to this trade matrix and then recommends replacing the trestle.

Given this background, let me address some specific details in the PRNS/DPW memo of May 17th:

Annual Cost to Inspect and Maintain

"Estimated costs for retaining the wooden trestle are significantly higher than for a replacement bridge, …". But Table 16 on page 5-7 gives the total cost of restoring the trestle as $959k while the Replacement Alternative costs over 70% more: $1.637 million.

The Engineering Report does give a higher cost for maintenance and inspection, mainly because it assumes that a new bridge would need absolutely no maintenance for over forty years, and because it states that every other year it will take two inspectors with a ladder to inspect the trestle whereas a single inspector can inspect the steel bridge. Several comments to this:

- This higher cost amounts to only about $6k a year (from the Report: $4k every other year for inspection plus $20k every fifth year for maintenance and repairs). The San Jose Parks Foundation has already set up an account to help the City with this modest expense (and I have already "put my money where my mouth is").
- As a taxpayer, I'm concerned that the City appears willing to spend many hundreds of thousands of dollars (and most likely up in the millions) of public money just to avoid spending six thousand dollars a year from the maintenance budget.
- Volunteers can help remove flood debris from the creek and do various annual cleanups through an "adopt a creek" program. Note that creek maintenance is required even if the trestle were to be replaced: weeds and exotic invasives (e.g., eucalyptus and bamboo) need to be controlled, because a brush fire in them would damage a steel trestle as well. (The steel doesn't burn, but it can lose strength and buckle when heated.)

Project Life Cycle Costs:

"…however, when factoring in the life cycle costs of each alternative over a forty-year period, the present worth cost of each alternative is nearly identical."

Financial terms such as "present value" can be confusing − even to an aerospace engineer. It appears that cost of the Alternatives are nearly equal because it is assumed that the $600k difference in up-front costs is invested somewhere earning 3% per year, and that, in forty years, the resulting $2 million will be used to buy a new steel bridge. This leads to a couple interesting questions: (1) since inflation was not taken into account, will a steel bridge still cost $2M in the year 2053?, and (2) if the costs really are equal, wouldn't it be better to restore the trestle now and then buy a new bridge in 2053, rather than replacing the trestle now and having a forty-year-old bridge then?

Environmental Permitting

As discussed in the Report's Appendix F, either alternative is substantially different from the top-of-trestle project that was originally planned in a 2004 Study, and so, either way, there will have to be new environmental evaluations.

- As noted in the memo, both the Restoration and Replacement Alternatives involve disposal of the treated timbers, but the Restoration Alternative involves significantly less material: 47 timbers vs. 172 timbers and pilings.
- Equipment of some kind will be needed for restoration as well as for removal and replacement, but the size of the equipment and the duration of its use will be different. A small forklift would be useful for the Restoration Alternative in replacing the sashes and

braces, but it will require some heavy equipment to pull those vertical pilings out of the ground: some of the vertical timbers are over 20' tall (and who knows how far they are driven into the ground) and are going to be heavy.

- Disturbing the creosote-treated timbers endangers the aquatic environment with toxic chips and scraped debris. The 5/17 memo states that the concerns about removing the timbers are different here than they were in 2007 for BART at the Santa Clara Street bridge, but it doesn't say why or how.
- What are the initial and annual estimated costs to install and maintain the mitigation habitat that will be required for either Alternative?

Degraded Structure?

The 5/17 memo states that the structure of the trestle is degraded and would require major rehabilitation. While it's true that a number of the sash and brace beams should be replaced, they are just large boards that are bolted to the side of the vertical timbers and are readily removed and replaced. The vertical timbers themselves are generally in fine shape, with only five of them requiring any repairs. And, as detailed in the Engineering Report, they can be patched by a process involving little more than using bondo-patch to fill some of the flaws.

This trestle was designed and built to handle freight trains – it is so over-built for a bike/pedestrian bridge that half the vertical timbers could probably be removed and the bridge would still be more than adequate. It thus seems excessive to say there'd be major expenses and closures should another timber require repair.

Regarding the need to increase the construction contingency from 10% to 20%: this seems to be a minor consideration. If the contingency is applied to the entire budget, it is less than an extra $100k to be held in reserve, which is minimal compared to the $600k (or probably more) extra cost of the Replacement Alternative.

Historic Significance

We've never claimed that the trestle is prehistoric, nor that anyone famous has ever hung out there. We have said that the 90-year-old trestle served the canneries that once were a significant part of the local economy, and that the character of Willow Glen – and its very existence as a once-independent city – was significantly shaped by its interaction with the railroads during its formative years. Our vision, as we have presented to the various funding agencies over the years, is that the Three Creeks Trail will honor its place in history as it wends from the History Museum at Kelley Park, past numerous cannery sites, and then crosses the trestle and proceeds along the Los Gatos Creek Trail to the old Del Monte cannery water tower.

Eventual Loss of the Trestle Structure

Nothing lasts forever, but that's not a reason to tear it down before its time. After the repair or replacement of structural elements (already accounted for in the "maintenance and repair" portion of the budget), the Report estimates that the trestle could last another fifty years.

Regarding fire: the trestle has already survived fires for over ninety years. According to retired San Jose Deputy Fire Chief Jim Carter, the large timbers are especially resistant to fire: their creosote coating makes them particularly difficult to ignite. Measures can be taken to further

reduce fire danger: remove the weeds and bushes growing near the trestle, and remove the damaged rail ties. (This should be done as soon as possible, regardless of which bridge Alternative is eventually selected.) If/when there is a fire, the trestle is easily reached with fire-fighting equipment from either end of the trestle; there are three fire stations within two miles of the site; fire engines routinely carry the needed suppressant foam; and the trestle's open structure makes it easy to reach every piece. The planned safety measures in the Engineering Report's budget include smoke detectors and fire alarms, fire-retardant treatments, and the installation of a sprinkler system. Videos of some spectacular recent trestle fires have been circulated, but in those cases the fire-fighters left the trestles to burn in a controlled manner because they were inaccessible to their fire-fighting equipment. (And there have been some spectacular forest fires over the years as well, yet we continue to grow trees.) It would be a loss to the community if our trestle were to burn, just as it would be a loss to the community if it were to be torn down with forklift and excavator.

Grant Funding

We in the community helped the City get a one-year extension on its Prop. 40 grant last year, but it was too late in the legislative cycle to request a second extension this year. But the City should not act rashly just because the grant may expire: it is not too late to request a change of designation, so that the grant money could be applied to some other worthy projects (e.g., to buy parklands across the city) just so long as the final 2015 deadline is met.

Regarding the use of the $450k grant from the SCVWD: this was given by the water district for the purpose of restoring the trestle, not for demolishing it. While the wording of the grant may not preclude its repurposing, I can't help but imagine that the City may be jeopardizing its chances of ever getting future grants. (At the very least, you're jeopardizing your chances of having us in the community work in support of future grant applications.)

Engineering Study

I think we all agree with this finding: "The engineering study determined that both replacement and preservation of the trestle are possible." Once again, I thank the City for arranging for some of us from Friends of the WG Trestle to meet with representatives from PRNS, Public Works, and CH2M-Hill.

Regarding the trade matrix (Table 16 on p. 5-7): I can't help but feel that there may be some mis-scored entries here. As stated in the footnotes, the table is to be scored using points "on a scale of 1 to 3, with 1 being the worst overall value and 3 being the best overall value." Yet, for 'construction/design cost', Alternative 2 (the "trestle with concrete decking" alternative) is the least expensive and yet only got 2 rather than 3 points; for 'expected life', Alt. 2 lasts 5-10 years longer than Alt. 1 and still was given only 1 point; and, under 'neighborhood aesthetics', the trestle gets its proper 3 points, but the replacement steel bridge is given 2 points because "it could be made pleasing". Taken together, these would change the overall score from "19:17 in favor of replacement" to "19:18 in favor of restoring the trestle". The 5/17 memo goes on to say that Staff did not depend solely on this matrix, yet it doesn't explain what the other deciding factors were.

Public Outreach

This has not been up to Departmental standards:

- "Staff engaged key community stakeholders." But Staff did not engage the San Jose Parks Commission; did not engage the San Jose Historic Landmarks Commission; did not engage the citizens who served on the City's "Willow Glen Spur Trail Focus Group"; and did not engage the community with timely information about the pending decision.
- Staff made a presentation at the Feb. 5 Save Our Trails (SOT) board meeting, but the membership had not been informed that the board was preparing to make an endorsement: the "Presentation by Guest" agenda item entitled "Alternatives for the trestle" describes something like a discussion on decking materials and types of railing, not a decision to endorse an alternative *to* the trestle. It's unclear how the SOT board has reached out to its membership on this topic, other than by the posting of the agenda and minutes on a website.
- The WGNA president endorsed the Replacement Alternative, but it is unclear whether the board was involved in the decision, or whether the general membership has been informed of the position.
- At the March 19th Public Meeting, the presentation given was that the decision on bridge replacement was already "a done deal", glossed over and said so quickly that few in the audience even noticed that it was mentioned.
- Two representatives did speak at the March 26th Council meeting: I was unable to attend, but I did submit a letter to the Mayor and Council (with copies sent to PRNS and others).
- There was a second opportunity to publicly address the Council (the April 5th Council meeting) and I did speak in support of the trestle, but I was then told by a Councilmember that I was too late and that the decision had already been made.

Meanwhile, there has been Public Outreach by the community itself in support of the trestle, with information and discussions (nearly all positive) on the 2,100-member Willow Glen Backfence "eList" (with spillover on to adjacent websites and list-serves). There is a "Friends of the WG Trestle" Facebook group with 189 followers. There've been two editorials in the San Jose Mercury News, and an ongoing dialog through Letters to the Editor. Over sixty community members have given up part of a Saturday morning to take a guided tour of the trestle; over 120 folks have written to City Council in support of the trestle; and over 700 people have taken a "virtual tour" of the trestle via a YouTube video. Approximately a hundred residents showed up last night for the second public meeting on the Three Creeks Trail, with many coming specifically for the trestle. This shows the high level of community interest, and is an example of the type of "Public Outreach" that should have taken place prior to the City deciding on the fate of the trestle.

In summary,

- The Willow Glen Trestle is sturdy, safe, and readily adapted for use as a pedestrian/bike bridge.
- It can be restored for considerably less money than would be needed for replacing it.
- The state grant money can be utilized elsewhere in the city, and the community is willing to help with on-going maintenance.
- We are concerned about potential cost overruns and environmental impacts of replacing the trestle.

- We in the community are just now discovering this gem that has been hiding here in our midst these past 90 years, and we hope the City will not rush forward with plans for its demolition before we have even had an opportunity to discuss it.

We request that the Council vote to suspend the current trestle demolition plans and to engage the community on details on the restoration (and funding) of the trestle.

I want to thank the City representatives for meeting with us on May 10th, and also thank the PRNS, DPW, and CH2M-Hill Staff for finding additional time to talk with us at the Three Creeks Trail public meeting yesterday.

Thank you,

Dr. Lawrence Ames,
Friends of the WG Trestle.

cc: PRNS: Director Julie Edmonds-Mares, Matt Cano, Yves Zsutty
DPW: Director David Sykes, Harry Freitas
SJ City Manager: Manager Debra Figone, Kip Harkness
CH2M-Hill: Program Manager David Von Rueden
SCVWD: Boardmember Barbara Keegan
SCCo. BoS: David Cortese, Joe Simitian, Mike Wasserman, Ken Yeager
SJPF: Exec. Director Jim Reber, Helen Chapman
SOT: Chair Taisia McMahon, Bill Rankin
WGNA: Pres. Richard Zappelli