



## City Council AGENDA REPORT

**DATE:** 08/23/2023

**AGENDA OF:** 09/12/2023

**DEPARTMENT:** Public Works/City Manager

**SUBJECT:** West Cliff Infrastructure and Transportation Update (PW/CM)

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**RECOMMENDATION:** Motion to:

- 1) Receive updates on West Cliff related capital projects including Bethany Curve culvert, rip-rap, and infill walls; transportation efforts including the study conducted on the one-way pilot; and infrastructure next steps including impacts for West Cliff given construction projects;
  - 2) Direct staff to restore two-way traffic, remove the one-way pilot when the infill walls are complete, and include further traffic options in the 50-year vision project;
  - 3) Adopt a resolution to approve a city traffic calming toolkit; and
  - 4) Adopt a resolution to amend the FY 2024 budget to appropriate \$1.7 million from Gas-Tax, \$1 million from General Fund Capital Investment Program (CIP), and \$1 million from state earmark to the West Cliff Stabilization Project (c401501).
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**BACKGROUND:** West Cliff Drive, between Columbia Road and David Way, was severely damaged by large swells during the January 2023 storms, causing portions of the roadway and path to fail, along with impacts to public access points, utility infrastructure, and the surrounding neighborhood. Initial work was focused on emergency protective measures geared toward safety and access. Additionally, community interest in support of accelerated decision-making regarding management of the West Cliff area was activated.

Post-disaster, the City of Santa Cruz (City) assembled an integrated, citywide team to holistically address the damage, existing in process work, and development of adjusted next steps as West Cliff is a cherished public amenity that should be accessible to all for a variety of uses. The extended team also included consulting and engineering partners, regulatory agencies, funders, the community, and community groups. A broad update of regulatory, visioning, and roadmap processes and next steps will be presented to Council on September 26, 2023.

Project related information, related sites to link to, and community outreach information can be found at: <https://www.cityofsantacruz.com/government/city-departments/city-manager/west-cliff>.

The team has made considerable progress on infrastructure and transportation elements. Due to construction scheduling and funding considerations, this update is being brought to Council in advance of the broader West Cliff update.

Infrastructure and transportation work progress made since the May 23, 2023 Council meeting:

- General: Shared comprehensive update to Council on May 23, 2023
- Infrastructure:
  - o Infill Walls
    - Council Ratified Approval to bid and award and approved design services agreement with MME Engineers for design and construction phase support on June 26, 2023.
    - Subsequently no bids were received. Staff transitioned to negotiated bidding method with interested local contractors. As of August 29, 2023, one bid is “in hand”, and two more are expected.
    - Received funding approval for \$5,000,000 from Federal Highway Administration (FHWA).
    - Received \$1,000,000 in state funding for West Cliff through Senator Laird’s office.
    - Current objective is to complete walls at 1016, 920, and 932 West Cliff Drive by end of December, weather and conditions permitting, and balance of work in spring 2024.
  - o Bethany Curve Culvert
    - Completed initial geotechnical investigations and obtained 30% design package. Current design approach is to reconstruct walls on exterior of existing structure, elevate roadway, replace and increase height of railings, and restore drainage features.
    - Council authorized bidding for bid for Bethany Curve culvert project at August 22, 2023 meeting as well as award of a professional service agreement to MME Engineers for design services. Design refinements continue, and bidding will commence in fall 2023, and upon receipt of funding award from FHWA.
    - Current objective is complete repairs and reopen the Westcliff drive in summer 2024
  - o Shoreline Protection (rip-rap) at Various Sites:
    - Scoping design service agreement
    - Fulfilling ongoing data requests to Federal Emergency Management Agency (FEMA)
    - Estimated completion in summer 2024
- Transportation:
  - o Completed data collections and analysis of pre and post-storm travel patterns in the study area as part of the one-way pilot
  - o Implemented traffic calming on Alta, Delaware, Pelton, and Woodrow in consultation with neighbors
  - o Created a city traffic calming toolkit (Toolkit), with unanimous recommended approval to Council from the Transportation and Public Works Committee (August 21<sup>st</sup> TPWC meeting)

Outreach – “Community Conversations” since May 23, 2023:

- Neighborhood / “garage” meetings:
  - o June 1, 2023 pop-up engagement on West Cliff Drive

- June 13, 2023 pop-up engagement at the Wharf Summer Concert series
- June 15, 2023 pop-up engagement on West Cliff Drive
- July 11, 2023 Pelton and Clark Neighbors meeting
- July 19, 2023 Delaware and Almar Neighbors meeting

**DISCUSSION:** The January 2023 storms caused substantial damage on West Cliff Drive. The integrated citywide team has been working diligently to advance urgent repairs to West Cliff Drive as well as develop a longer term vision.

Due to the urgent need to start repairs on West Cliff Drive in advance of the coming winter, this item for infrastructure and transportation is coming to Council in advance of the broader policy, regulatory, and visioning item for September 26, 2023.

Advancing the infrastructure projects on West Cliff Drive before this winter is critical. At this time, every working day is important to the ability to deliver the planned infill walls before the end of the year. Hand in hand, the construction needs of the project will require an adjustment to the current pilot and temporary traffic controls in the adjacent neighborhood.

#### Infrastructure

The general engineering team has been actively working with the design consultant on refining the construction plans for the planned infill walls at 928, 932, 1016, and 1030 West Cliff Drive. Coastline protection is the primary objective before winter. Full roadway restoration, including paving, is to follow. Original construction plans that were approved by Council and bid in July were roughly at 30% level to try and expedite the construction. Unfortunately, no bids were received from contractors due to the level of design and constrained (urgent) schedule. With approval from the grant funding source, FHWA, staff proceeded with direct negotiations with contractors on the four infill walls.

Granite Construction (Granite) submitted a proposal for \$8.7 million which is higher than the current FHWA approved amount of \$5 million. Staff proceeded to select Granite as the contractor to construct the infill walls based on the high level of engagement on construction details that increased confidence that they will be able to construct the key protection components by the end of this year (weather dependent). In addition, staff has submitted revised Damage Assessment Forms and the Granite proposal to FHWA to request additional funding to cover the gap. Based on ongoing communications with Caltrans staff who administer the FHWA Emergency Opening program, it's likely that FHWA will approve the revised funding amount. Work that occurs on or before September 23, 2023 is eligible for 100% reimbursement. Work that occurs after that date will be reimbursed at 88.53%.

The City team has been actively engaged with California Coastal Commission (CCC) staff throughout the entire design and procurement process. CCC staff have given verbal approval to proceed with the infill walls. City staff will follow up with a consolidated Emergency Coastal Design Permit (ECDP).

Granite Construction is anticipated to mobilize the week of September 11, or sooner, and begin construction shortly thereafter. Based on current risk exposure, wall locations will be prioritized in the following order: 1016, 932, 928, and 1030 West Cliff Drive. In order to construct as much as possible before winter, Granite plans to work 6-days a week with 10-hour shifts. Additional

road closures and temporary traffic controls are anticipated for project staging and construction. The City will work with Granite to expedite restoration of the roadway as infill walls are completed in order to reduce impacts in the neighborhood and restore West Cliff Drive between Columbia Street and Woodrow Avenue to pre-storm conditions. Access to properties adjacent to the work will be provided on a limited basis during work hours and the general public will experience detours off West Cliff Drive. Work that cannot be completed due to weather conditions will be completed in the spring-summer of next year.

Bethany Curve culvert project is at 30% level of design. Staff continues to work with the design consultant to refine the construction plans. Council authorized bidding; however, FHWA has yet to approve funding for this project. Bidding is anticipated to occur in the next 4-6 weeks as staff waits for funding approval. Currently, the project is estimated at \$10 million. Construction is anticipated to start in spring 2024 and be complete by summer 2024. Staff will return to Council with an item to award the project and authorize execution of a construction agreement as well as provide an update of the status of the FHWA funding.

Areas that saw rip-rap displacement that are not covered by the four infill walls and Bethany Curve culvert fall under the Shoreline Protection (Rip-rap) project. This is anticipated to be funded by FEMA and estimated at \$1.5 million. Staff is currently scoping the design services agreement. Construction is anticipated to occur in summer 2024.

#### Transportation

At the February 28, 2023 City Council meeting, staff was directed to pursue a one-way pilot project on West Cliff Drive between Columbia Road and David Way, collect data on the roadway and surrounding neighborhood, and develop a neighborhood traffic calming toolkit. To achieve this, the transportation team completed data collection and analysis from pre- and post-storm travel patterns in the study area. The base year selected for pre-storm data was 2019, reflecting the “normal” travel patterns prior to the global COVID-19 pandemic. These were compared to data collected in 2023.

In general, transportation volumes overall decreased in the study area between 2019 and present. As the result of the roadway failures and the Bethany Curve culvert full closure, specific streets experienced higher volumes. These streets with increased volumes include eastbound Pelton Avenue, northbound Woodrow Avenue, bi-directionally on Oxford Way, bi-directionally Clark Avenue, and northbound Almar Avenue.

Staff focused the neighborhood outreach and traffic calming efforts in these areas. To manage the volumes, cul-de-sacs were installed on Oxford Way and Alta Avenue, and intersection improvements and striping changes were implemented on Woodrow Avenue at Pelton Avenue, Delaware Avenue at Almar Avenue. With input from the neighbors improvements for the Delaware corridor between Seaside and Almar were also developed and are anticipated to be installed in September. While the infill walls and return to two-way traffic will address the changed volumes on Pelton, the remaining impacted streets will continue to experience a higher volume of traffic until the Bethany Curve culvert reopens.

It is often assumed that traffic volumes remain constant during significant changes, like a conversion to one-way traffic, however that was not observed during the pilot. The conversion to

one-way westbound (towards Natural Bridges) resulted in an overall decrease of eastbound (towards the Wharf) traffic along the West Cliff outside the closure area. People's transportation choices depend in-part on the network available to them, so when that changes, their choices will as well. That means people faced with a new network will choose to drive on another road, switch modes of travel (e.g. from driving to walking), change when they take their trip, or not take the trip at all. It's difficult to fully quantify the change with only roadway counts, but we observed approximately 1,020 fewer daily westbound vehicles at the Lighthouse, a 35% reduction with the one-way pilot than what would be expected with a two-way roadway open. The way people choose to travel through the West Cliff neighborhood can have their choices influenced by the transportation network provided.

Overall, the largest impacts from the one-way pilot were felt from the concentrated study area (Columbia Avenue to Woodrow Avenue) and the hard closure of Bethany Curve culvert. A larger study area would likely have diluted the traffic volumes over a larger area, lessening the concentrated impact on any one street. Additionally, the hard closure on Bethany Curve culvert forced all traffic to divert in to surrounding neighborhoods rather than enabling a continuous one-way flow. Until the culvert can be reopened, the impacts in the area surrounding the Bethany Curve culvert will continue to be felt even with a return to two-way traffic.

The shared-use-path within the pilot area saw 1,700 people in a typical weekday and 2,360 people on the weekend. With the pilot in place, people primarily walked on the multiuse path and people primarily biked on the roadway, except where there were pinch points around the cliff failures. People appreciated this separation as noted below in the public engagement.

The experience can also be measured with the "Shared-Use Path Level of Service" calculator developed by FHWA. The existing 10-foot-wide shared used path is a Level-of-Service E or F depending where and when volumes were collected. That score is consistent with the persistent complaints of vehicle-bike conflicts. To reduce those conflicts and improve the path to a level-of-service B, the trail width would have to be increased to at least 18 feet wide. The cheapest and quickest way to achieve that improvement is to convert the existing pathway to a sidewalk and reallocate an auto lane to a separated bikeway as was completed during the pilot.

Staff has completed extensive outreach to inform our work and next steps. This took two tracks: direct neighbor engagement and general public engagement. For direct neighbor engagement, the Public Works Transportation team attended and facilitated numerous backyard and garage meetings with small neighborhood groups to discuss specific impacts and develop solutions that could be implemented quickly. The topics at these meetings generally focused on street specific traffic calming and consensus building.

To supplement the traffic data and direct neighbor meetings, staff also conducted general public outreach on West Cliff Drive and on the Wharf to ask users how they felt about the pilot and what their vision was for the transportation future on West Cliff. People were asked to choose a theoretical cross section, ranging from existing conditions before the storm to a full closure of the roadway and complete dedication to biking and walking. Overwhelmingly the preferred options gave-up either parking or auto lanes to improve the recreational experience. Of the 123 responses, only 11 people preferred the existing conditions (two-way traffic, parking, and a

shared-use path) compared to 88 people that preferred reallocating at least on travel lane to walking or biking. In practice, this is only achievable with a conversion of an auto lane to a cycle lane. In speaking to people walking and biking on West Cliff, the biggest feedback was that people love spending time on West Cliff Drive and would like to have cyclists and pedestrians separate from each other and from cars, and that this was worth the elimination of a lane of traffic. Currently, the focus is to restore the existing conditions above the infill walls however, reducing an auto lane to prioritize biking and walking should be investigated further in the 50-year visioning process.

Staff also utilized a “thumbs up/thumbs down” board to engage with drivers about their experience using the one-way pilot, the group expected to be most impacted by the reduction of a travel lane. Of the 136 vehicles staff engaged with, 36% liked the pilot, 25% disliked it, and 39% did not respond. The outreach in the pilot area showed it was overall favored by those surveyed. To ensure the full community is involved, not just those who use West Cliff when we were surveying, additional outreach and polling should be conducted as part of the 50-year visioning process.

As part of the West Cliff 50-year Vision, the team will continue investigation about how our community values the allocation of space on West Cliff. Future transportation options should continue to evaluate all possible transportation scenarios.

The Traffic Calming Toolkit (Toolkit - attached) establishes a set of tools that can be used to implement a citywide traffic calming program. As part of this, the toolkit includes a rating form to evaluate traffic calming requests. The Transportation and Public Works Commission reviewed the Toolkit at their August 21, 2023 meeting and unanimously recommended Council approval. In accordance with SCMC 10.16.010, this toolkit is recommended to be approved by resolution.

### Funding

The Infill walls project will require additional city funding to complete. Currently, staff is waiting to hear from FHWA on approval of additional funds above the original approved amount. While staff anticipates approval from FHWA for additional funds, a budget adjustment of \$1.7 million Gas-Tax, \$1 million from General Fund CIP, and \$1 million of state-earmark is currently needed to fully fund the infill walls project.

### Conclusion

The Public Works and citywide team has been working diligently to advance the infrastructure projects in order to continue to protect West Cliff Drive in advance of the coming winter. Continuing to move swiftly is imperative.

During the period of construction, Public Works engineering and transportation teams will continue to update the community and respond to emerging needs.

**FISCAL IMPACT:** Temporary traffic controls and contract for data collection, synthesis, and Traffic Calming Toolkit to date related to the one-way pilot were approximately \$200,000 and were covered by the West Cliff Resiliency and Accessibility project which includes \$700,000 General Fund stabilization reserve.

Infill walls project is funded by the West Cliff Drive Stabilization project. While staff anticipates approval from FHWA for additional funds, a budget adjustment of \$1.7 million Gas-Tax, \$1 million from General Fund CIP, and \$1 million of state-earmark is currently needed to fully fund the infill walls project.

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**ATTACHMENTS:**

1. RESOLUTION
2. EXHIBIT A – TRAFFIC CALMING TOOLKIT
3. BUDGET ADJUSTMENT
4. WEST CLIFF TRANSPORTATION ASSESSMENT MEMO