

9/24/2020

# Resolution to Affirm City Commitment to Seawall Funding

City Council  
October 6, 2020

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Public Works Director



## RECOMMENDATION

That the City Council adopt a resolution affirming the City of Oxnard's commitment to share the repair/replacement costs associated with the Mandalay Bay seawalls in the amount of 50% of the total repair/replacement costs with the funding mechanism to be determined at a later date.

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## BACKGROUND

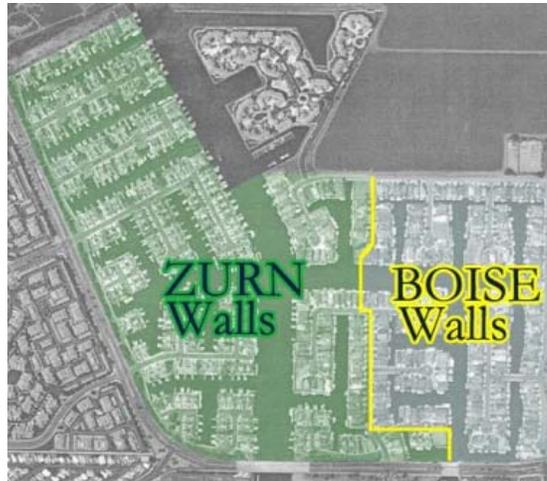
- Between 1968 and 1973, the City of Oxnard approved the development of 743 attached and detached single family homes and 37 greenbelts to create the Mandalay Bay community
- The developer installed reinforced concrete Boise and Zurn style seawalls to create lots for residential development



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## BACKGROUND

- Boise and Zurn seawalls were constructed according to the Building Codes in place at that time
- Degradation in both types of walls began during the first 20 years, due to the concrete's adverse reaction to the marine environment



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## BACKGROUND

- Mandalay Bay waterways assessment district was formed June 16, 1970 by Resolution No. 5,144 to fund maintenance of the waterways and landscaping
- Mandalay Bay residents are paying the maximum assessment based on the formation documents which did not include a CPI escalator
- Due to the adoption of Proposition 218 in 1996, the City is precluded from increasing assessments within the district without majority vote and protest procedures

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## BACKGROUND

Over the past 30+ years, hundreds of repairs have been made to the seawalls including removal of degraded concrete, weep hole repairs and concrete jacketing of pilasters



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## DISCUSSION

- In December 2017, TranSystems completed the *Mandalay Bay Seawalls Capital Improvement Program: Phase C* which included a recommendation of repair to weep holes, pilasters and walls
- In early 2018, Public Works reviewed the accumulation of TranSystems documents and determined a value engineering process was prudent in order to analyze the cost/benefit options for seawall replacement
- In October 2018 the City released a Request for Proposal (RFP) for Mandalay Bay Repair Feasibility Study and Phase 2 Construction documents for 3900-3966 West Hemlock Street

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## DISCUSSION

- In March 2019, TetraTech was awarded the contract and began work on the study which included a cost analysis for each of the various wall replacement designs
- TetraTech recommended two options: installation of panels and tiebacks, or cantilever sheet pile
  - Tieback option would consist of installing a new panel in front of the existing wall, and installing tiebacks that extend down into the competent, non-liquefiable soils.
  - Cantilever sheet pile would consist of installing new sheet pile in front of the existing wall using a press-in method (which causes less vibration and noise) and filling the gap between the two walls.

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DISCUSSION

- Tieback

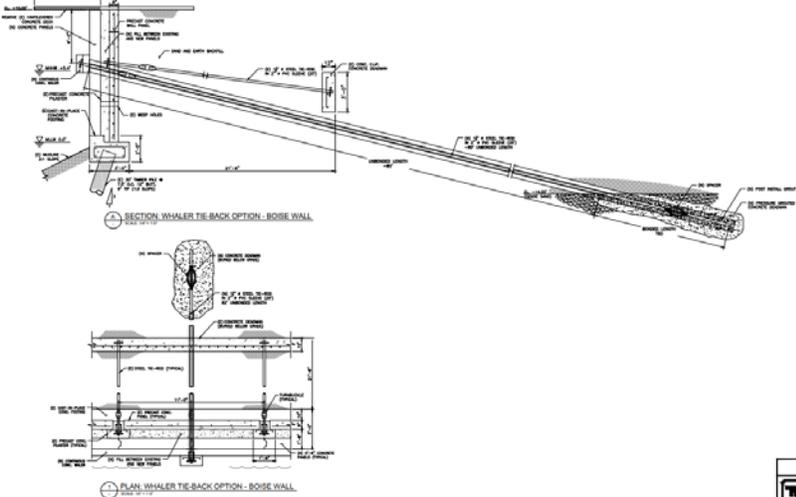


Figure 12  
TETRA TECH

DISCUSSION

- Cantilever Sheet Pile

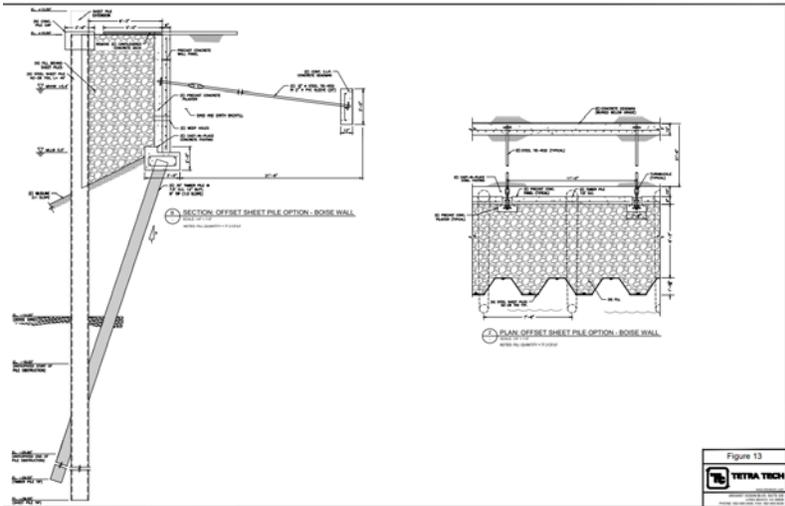


Figure 13  
TETRA TECH

## DISCUSSION

- Cost estimates range between \$4,155 - \$4,277 per linear foot for installation of the panel and tieback walls
- The new seawalls would be constructed to withstand seismic activity and adhere to current California Building Code standards
- The duration of the replacement project is estimated to be within 25 years; with maintenance and minor repair activities beyond 25 years
- The effective life of the new seawalls would be 75 years

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## DISCUSSION

Another option is a repair method similar to that proposed by TranSystems

- It would include removal of 1" to 1 ½" of existing concrete and the addition of 4" of marine resistant concrete, doweled for improved adhesion
- It would be a non-structural repair to slow the deterioration
- Effective life of repairs would be approximately 20 years
- Seawalls would be monitored for any signs of movement

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## DISCUSSION

- Stakeholders including City Staff, residents and consultants have been meeting over the last three years to discuss replacement and funding options
- Residents are working to engage their neighbors to form a bonded Community Facilities District (CFD) to fund 50% of the obligation, with the City funding the other 50%
- The City will continue to pay 50% of ongoing repair costs as funds are available through the Mandalay Bay Waterways assessment district
- Through annual meetings, person-to-person coordination and engagement, consultants will work to survey registered voters on approval of the CFD

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## FINANCIAL IMPACT

- Approval of this resolution affirms the City Council's commitment to fund 50% of the seawall replacement costs
- Overall estimates for the project are approximately \$200 million adjusted for inflation; \$100 million of which would be borne by the City
- Funds will be allocated when a funding method is determined

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# Questions

