

# Paekākāriki Seawall Replacement PROJECT UPDATE

3.00pm – 5.00pm, Sunday 12 February 2017



# PROJECT BACKGROUND

- This project is to replace the failing timber seawall at Paekākāriki.
- The seawall is necessary for the protection of Council's infrastructure along Marine Parade.
- The existing wall is in poor condition and requires significant on-going maintenance.



- The design of the new seawall will try to incorporate both community values as well as providing a 50 year design life.
- Council has approved a budget \$10.6M for the project

# COUNCILS PROJECT TEAM

## ..Working alongside the community



# WHAT HAVE WE ACHIEVED TO DATE?

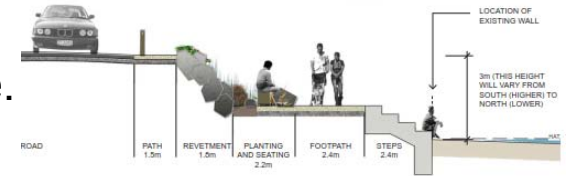
Since the project commenced in 2013 we have:

- Short listed potential concept options for the seawall replacement.
- Consulted with the local and wider Community and agreed on the replacement concept.
- Gained Council support for the continuation with the project and secured funding (\$10.6M).
- Granted a 35 year Resource consent from the Greater Wellington Regional Council based on replacement concept (non-notified).
- Tendered and awarded a professional services contract to Consultants Tonkin and Taylor for specialised assistance with preliminary and detailed design, procurement and construction supervision services.
- Completed preliminary design (Sep – Dec 16)

# PRELIMINARY DESIGN PROCESS TO DATE

## Sept. 2016

- Tonkin & Taylor Ltd engaged.
- Further geotechnical Investigations completed on site.
- 1<sup>st</sup> Design Workshop with CB & CDG.



## Oct. 2016

- 2<sup>nd</sup> Design Workshop with CB & CDG.

## Nov. 2016

- Preliminary Design Options Report completed.
- Preferred preliminary option identified (PVC sheet pile).
- Liaison with GWRC to ensure Resource Consent compliance.



## Dec. 2016

- Supplementary design options explored and presented.
- Design review & Value Engineering workshop with CB & CDG.
- Independent Quantity Surveyors review of construction estimates.
- Preferred option agreed.

## Jan. 2017

- Further Condition and Risk Assessment of the existing seawall.

# POTENTIAL PROJECT RISKS TO BE MANAGED

- Construction estimates as part of the preliminary design process have identified that the costs for a complete wall replacement could exceed our available budget.
- Detailed design and tendering will now include the preferred design option, plus a second design option for remedial repair.
- The final seawall replacement solution is likely to be a combination of full replacement in most areas, and some remedial repair in other areas to align the overall scope of work with the available budget.
- The level of disruption along the Parade and on the beach during construction is likely to be significant.
- Construction methodologies will need to be developed to minimize construction time and disruption, whilst maintaining an appropriate level of coastal defense during construction.

# CONDITION AND RISK ASSESSMENT



Sand Track




Ocean Road

Campbell Park

Paneta Street

Tangahoe Street

Risk Assessment Key (Structural, Serviceability and Hydraulic Performance)

	Low (340m Total)
	Moderate (480m Total)
	High (140m Total)

# PRELIMINARY DESIGN STAGE (COMPLETE)

## Aligning with Community Values

### Maximises Beach Access

- 10 access ways connecting the road to the beach
- Lower level platform to maintain beach connection

### Preserves the Amenity Value of the Beach

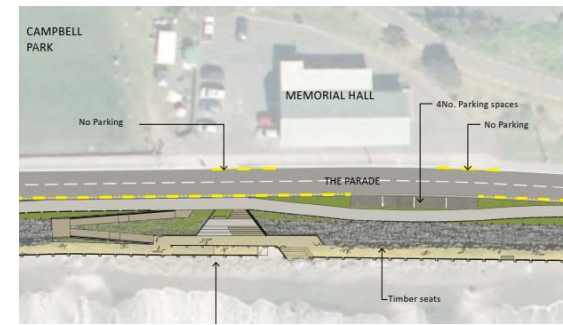
- Minimises beach encroachment

### Resilience: Protection of the Road

- 50 year design life and 100 year design storm
- Safety improved realignment of The Parade

### Walkways at a range of tides & for a range of users

- High level Shared Use pathway along length
- Low level 'raised beach' platform

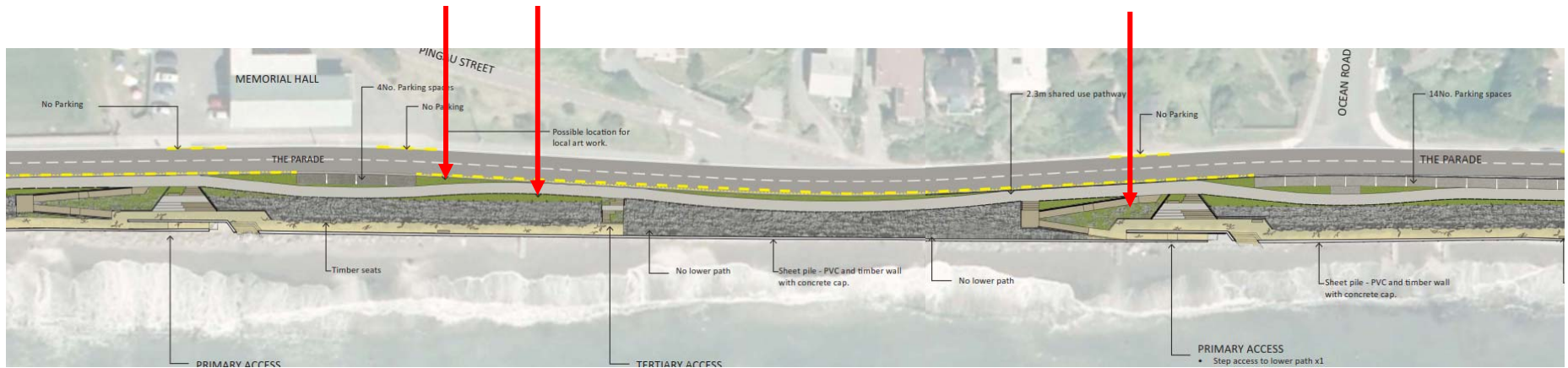




# KEY DESIGN FEATURES

## The Parade and Shared Walkway

Several discrete pocket parks on seaward side for art work/urban design features



- Road width reduced to NZ Standards
- No Parking along full length seaward side of The Parade
- Off-road car parks provided on seaward side of The Parade
- Regular No Parking lengths on landward side for passing places

# KEY DESIGN FEATURES

## Urban Design and Landscaping

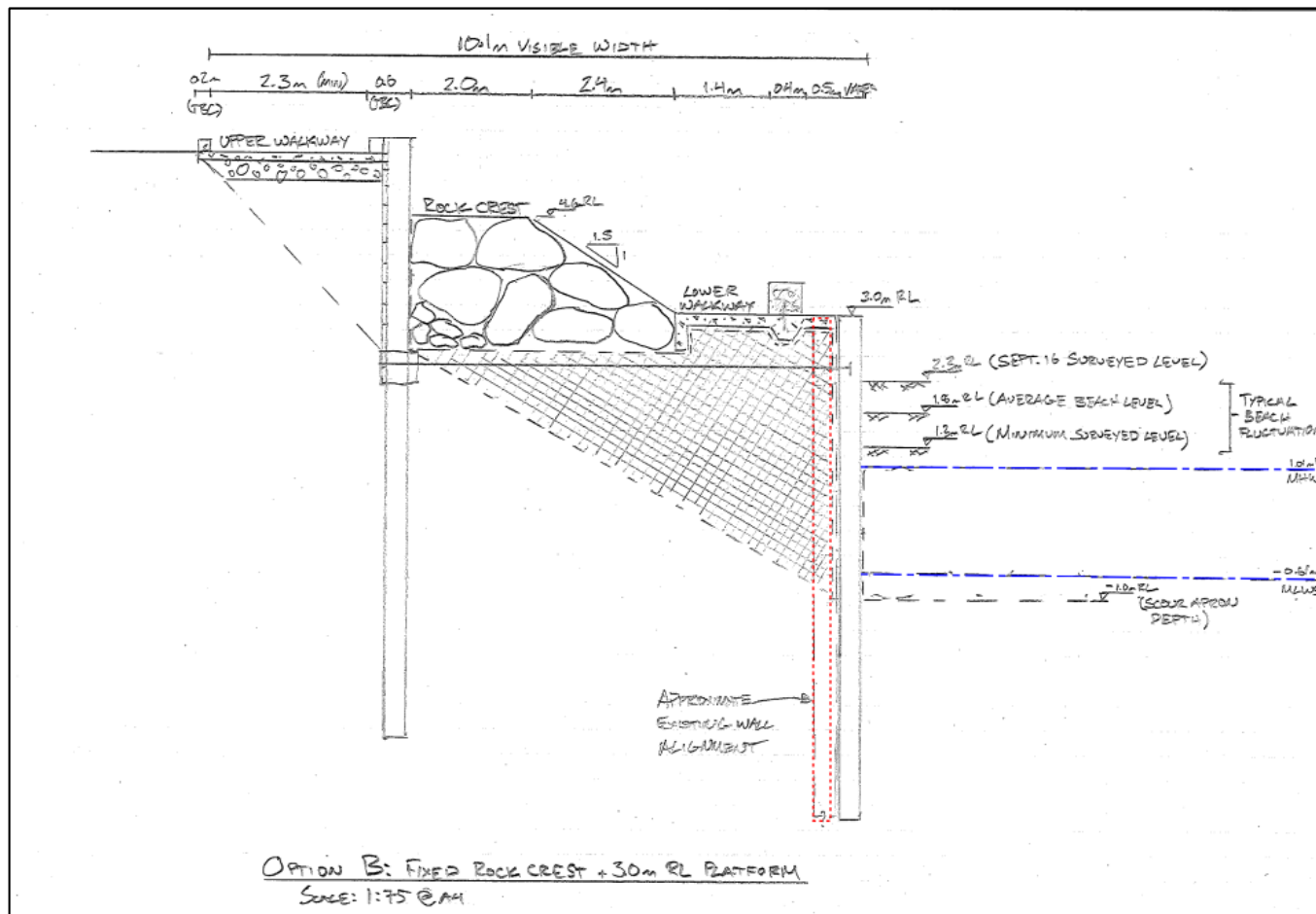


Space for planting and possible location for local art work

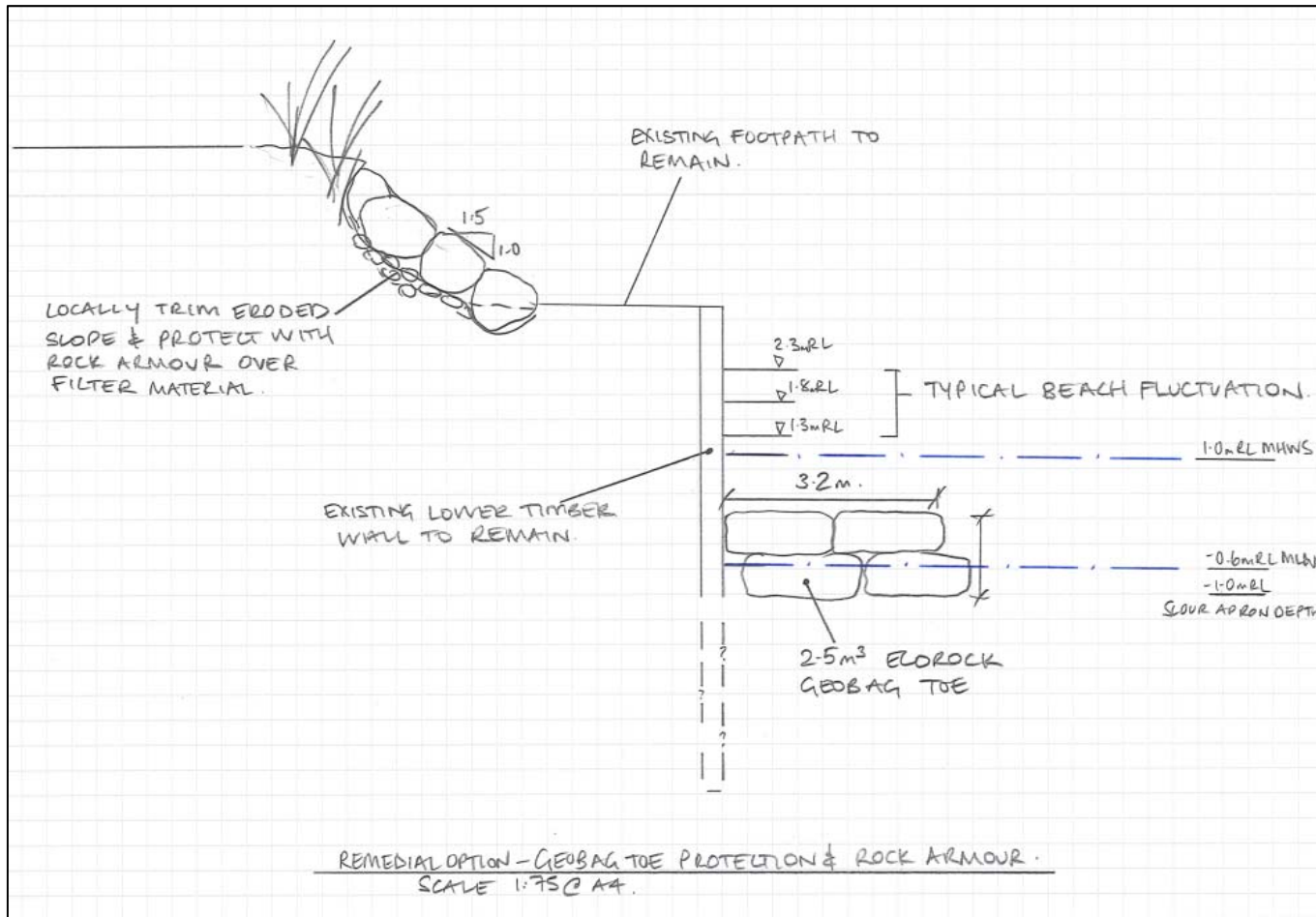
Potential for planting in the rock revetment upper wall



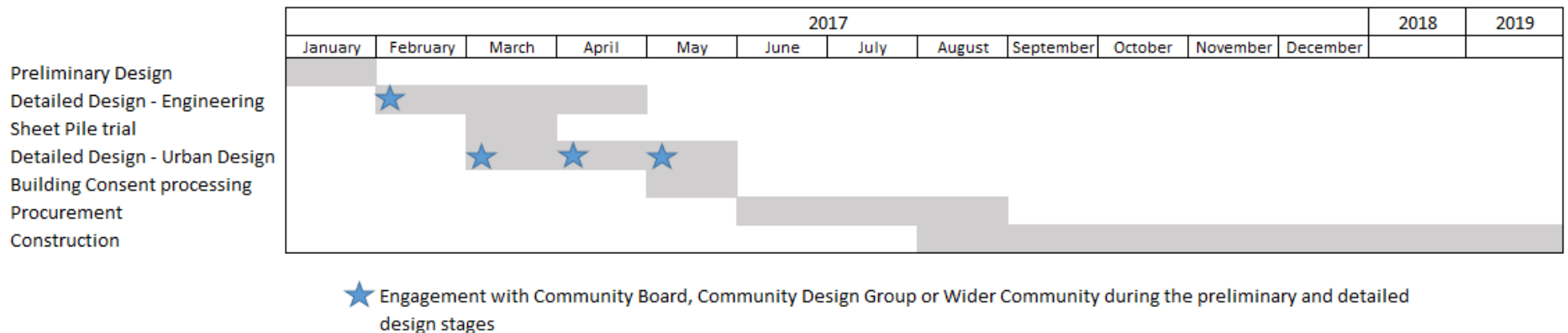
# REPLACEMENT OF SEAWALL PVC Sheet Pile & Timber with Rock Armour



# REMEDIAL SOLUTION FOR SEAWALL Geobags & Upper Rock Armour



# PROJECT PROGRAMME & NEXT STEPS



## Tuesday 14<sup>th</sup> February

- Paekākāriki Community Board approval of Preliminary and Detailed Design arrangements

## Late February

- Design team workshop with Community Board and Community Design Group to integrate Urban Design
- Commencement of Detailed Design

## March

- On-site Sheet Pile Trial

## May

- Building Consent submission and Urban Design refinement

**QUESTIONS?**