

Special Charge Scheme

Surf Beach Sunderland Bay

Community Reference Group - Concept Options Summary

Project Description

The Surf Beach and Sunderland Bay estates are the highest priority within Council's Urban Road and Drainage Improvement Policy priority list. Council has been undertaking community consultation and various planning investigations since October 2021 in order to confirm a preferred design, associated costs, cost proportioning and risks with the project.

Concept Options Development

In September 2022, property owners were asked if they would like to volunteer their time to assist with providing feedback on the concept options for the potential road and drainage upgrade project as part of a Community Reference Group (CRG). The purpose of the CRG was to engage with local property owners by providing more detailed information for them to consider and assist Council in developing concept plan options for the broader community's consideration. All community members that volunteered to be part of the group were accepted and in total there are 135 property owners in this group. This group represented a good cross section of interest areas and residential status.

Method of Engagement

In October, details of the engagement method, scope and feedback requirements was sent to CRG members. Given the sample size, the CRG didn't meet in person and communication was via email, letters and telephone to enable each CRG representative the opportunity to provide detailed feedback and ask specific questions in a one-on-one environment. As part of the feedback

required from the CRG, 4 example concept options were presented to the property owners and various design elements that could be incorporated into the design were listed in a matrix table. The matrix table (see Figure 3) had 4 options that consisted of a base cost, low landscaping, medium landscaping and a maximum landscaping options. The matrix table was used so property owners could tick the box that aligned different design elements with different concept options. A feedback form was also attached so property owners could provide additional feedback if they desired. To assist selection of design elements, indicative cost ranges for different design elements were provided to CRG members.

Required Design Inclusions

The design matrix provided to CRG had some design elements ticked already as these would be required as a minimum as part of a road and drainage improvement project due to standards. These required design elements include sealing roads, installing an underground drainage network and improvements to access and safety for pedestrians.

Sealing Roads

The only and best method to treat the dust problems in urban areas in Bass Coast at this point in time is to seal the roads. To seal the roads and achieve a reasonable life out of the seal, underlying pavement and subgrade improvements are required prior to sealing. If this is not undertaken, seals will quickly deteriorate and potholes will form. Therefore, sealing the roads and upgrading the underlying pavement is a required inclusion for this project.

Drainage Infrastructure

To treat flooding issues in urban areas, the best and standard process is to install a network of underground concrete pipes that will take smaller rainfall events and design the road carriageway to take larger rainfall events. The road reserve formation acts as a channel and takes large quantities of rainfall away from the built up urban areas downstream to reduce the risk of flooding private residential property. Indicative underground pipe sizes range from 300-1500mm in diameter. Swale drains alone would not be safe and have capacity to take these types of flows. Therefore, an underground network of drainage pipes and concrete kerbs are a required inclusion for this project. An example of the road cross sectional elements and drainage channelisation for drainage design is shown below in Figure 1.

Pedestrian Access and Safety

To improve pedestrian access, typically concrete paths are installed, which are much safer for parents with prams, children, elderly and people with disabilities. Additionally, to slow motor vehicles speeds the standard practice is to either install traffic calming devices such as speed humps, one way narrowings or a combination of these with landscaped features. The slowing of motor vehicles provides improved safety for both pedestrian and also motorists which may be passing through intersections or manoeuvring in/out of access driveways. Providing traffic calming treatments at selected locations and at least one concrete footpath on all streets in the estate is a required inclusion for this project.

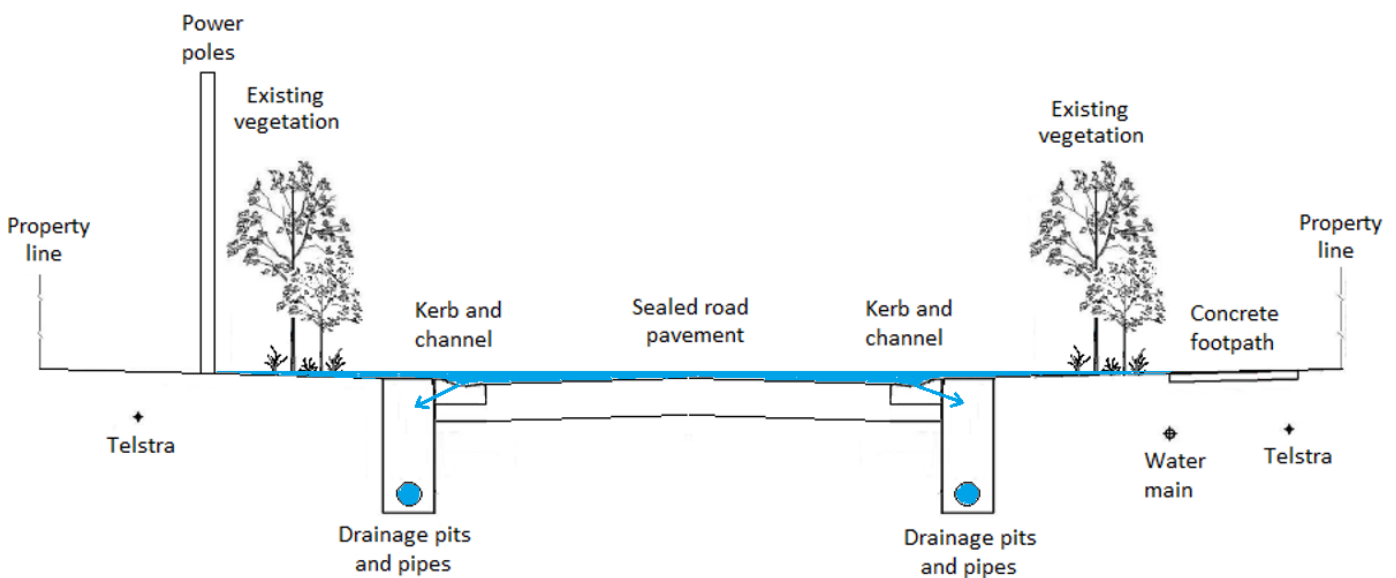


Figure 1: Road Cross Sectional Elements

Extra features

Often, urban areas contain extra features to enhance the characteristics such as landscaping, different styles of traffic calming treatments, wider or coloured footpaths, nature strip enhancements such as feature swale drains or street plantings, additional street carparking and lighting improvements. Different levels of these extra features will be included in the various concept options being developed. This will be where most the feedback from this CRG will be required.

Optional extras

Concrete driveways could be installed by the road contractor during the special charge scheme for bulk efficiency, which was the case at Pioneer Bay, where property owners got a quote from the contractor and paid the contractor directly. Vegetated swales in nature strips could be considered in a similar style to driveways, that the swales would be an optional extra cost for property owners on top of the special charge scheme cost. The vegetated swales can be shaped and have subsoil drainage installed and linked into the road underground drainage pipes, see Figure 2 below for an example. Drainage and plantings could be installed by a contractor engaged by Council for bulk efficiency. Plantings could be designed by a landscape architect with a few standard layout options available. Vegetated swales would have to be considered on a case by case basis and will depend on the location / depth of underground services. Property owners may also decide to have no swale drain and just have a flat grassed nature strip. Property owners would be responsible for the ongoing maintenance of driveways and nature strips, which is normal practice. A guideline on plantings in the nature strip was supplied to CRG members

Results

The results from the feedback will assist to later present various concept options to the wider community so that a preferred option can be selected. In total there was feedback provided from 73 of the 135 CRG members. Feedback was in the form of either the matrix table being filled in, comments provided over the phone or written submission via email.

There was 42 property owners that either filled in the table partially or fully. The results from the feedback received is presented in Tables 1 to 4.

There was feedback from 31 property owners that none of the options presented were suitable. The scope of this stage of community engagement was developing options, therefore this feedback was noted, however not included Tables 1 to 4. In addition, several of CRG members did provide alternative suggestions which are listed in Table 5.

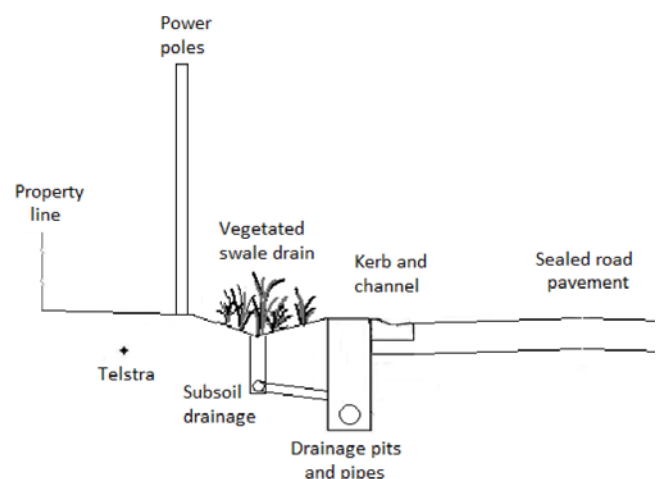


Figure 2: Example swale drain

Surf Beach / Sunderland Bay Estate

Potential Road and Drainage Improvements

The purpose of this design matrix table is to arrange design elements into various concept design options in order for the wider community to later select a preferred option. Please tick the box in the matrix table where you would like to see each design element. The shaded / ticked boxes are required at a minimum to treat flooding, dust and traffic safety issues.

	Concept Option 1 (base case)	Concept Option 2 (low landscaping)	Concept Option 3 (medium landscaping)	Concept Option 4 (maximum landscaping)	Indicative cost range
Sealing roads to different widths	✓	✓	✓	✓	\$6.5-7.9M
Installing kerb and channel on all roads	✓	✓	✓	✓	\$3.7-4.5M
Installing underground drainage in the road reserve and back of lots as required	✓	✓	✓	✓	\$12.6-\$15.4M
Installing one footpath 1.5m wide on all streets	✓	✓	✓	✓	\$2.4-2.9M
Install Watts Style speed humps at approximately 100m	✓				\$0.4-0.5M
Installing coloured raised platform intersection treatments					\$0.6-0.7M
Installing coloured landscaped traffic calming treatments at approximately 100m spacing					\$0.4-0.5M
Installing a feature swale drain along Sunderland Bay Rd					\$0.2-0.3M
Installing a coloured and wider (2.5m) wide shared footpath along The Esplanade					\$0.5-0.6M (additional cost to grey concrete)
Installing two 1.5m wide concrete paths along all roads (except The Esplanade)					\$1.8-2.2M (additional cost to one path)
Sealing beach carparks					\$0.5-0.6M
Installing less bright lighting					\$1.0-2.2M

Figure 3: Design Matrix Table

Concept Option 1 (Base Case)

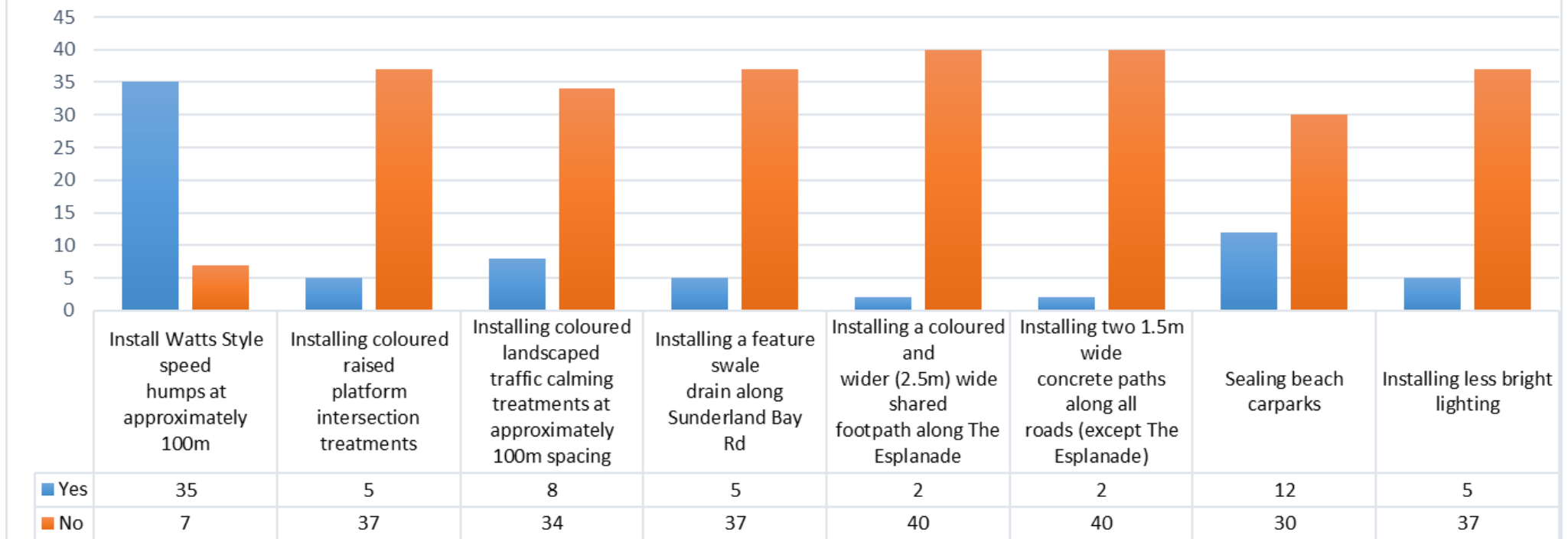


Table I: Concept Option Feedback from the CRG (Base Case)

Concept Option 2 (Low Landscaping)

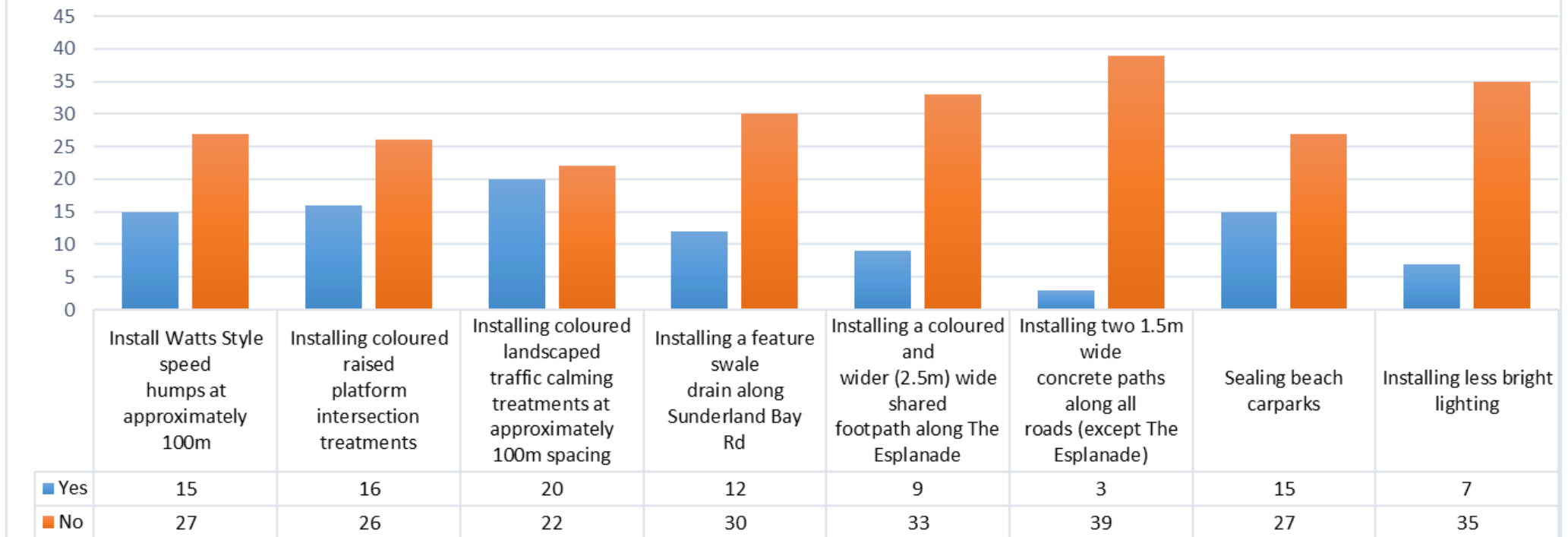


Table 2: Concept Option Feedback from the CRG (Low Landscaping)

Concept Option 3 (Medium Landscaping)

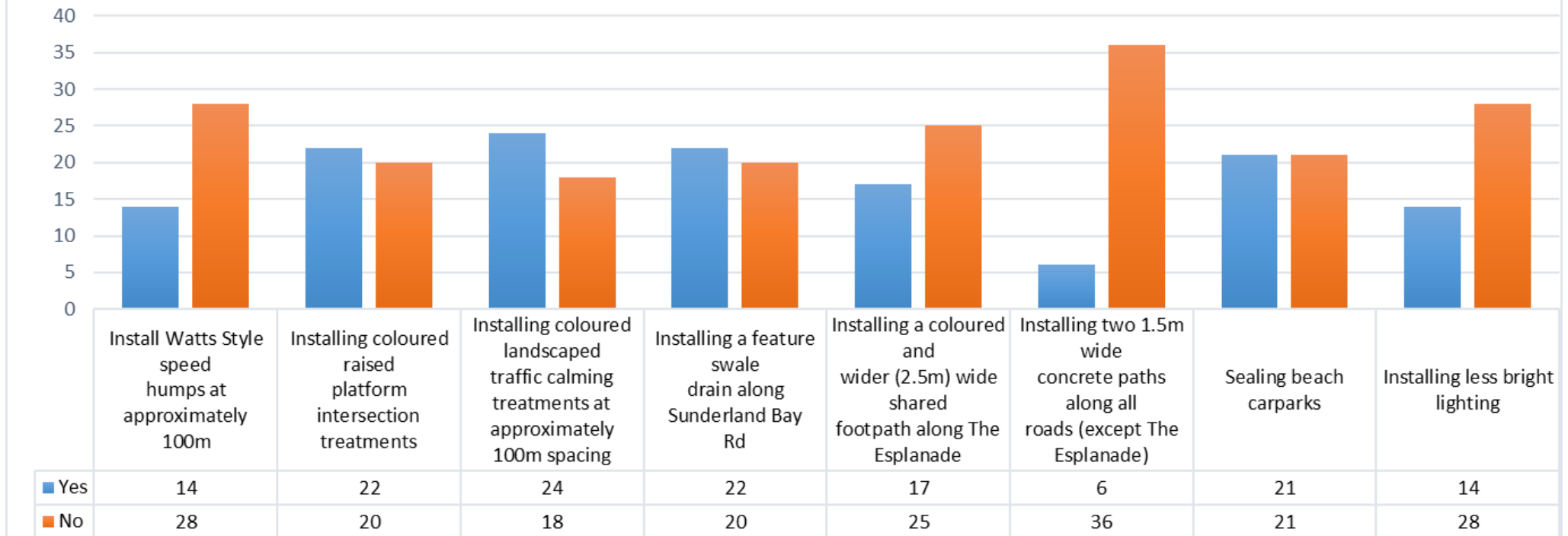


Table 3: Concept Option Feedback from the CRG (Medium Landscaping)

Concept Option 4 (Maximum Landscaping)

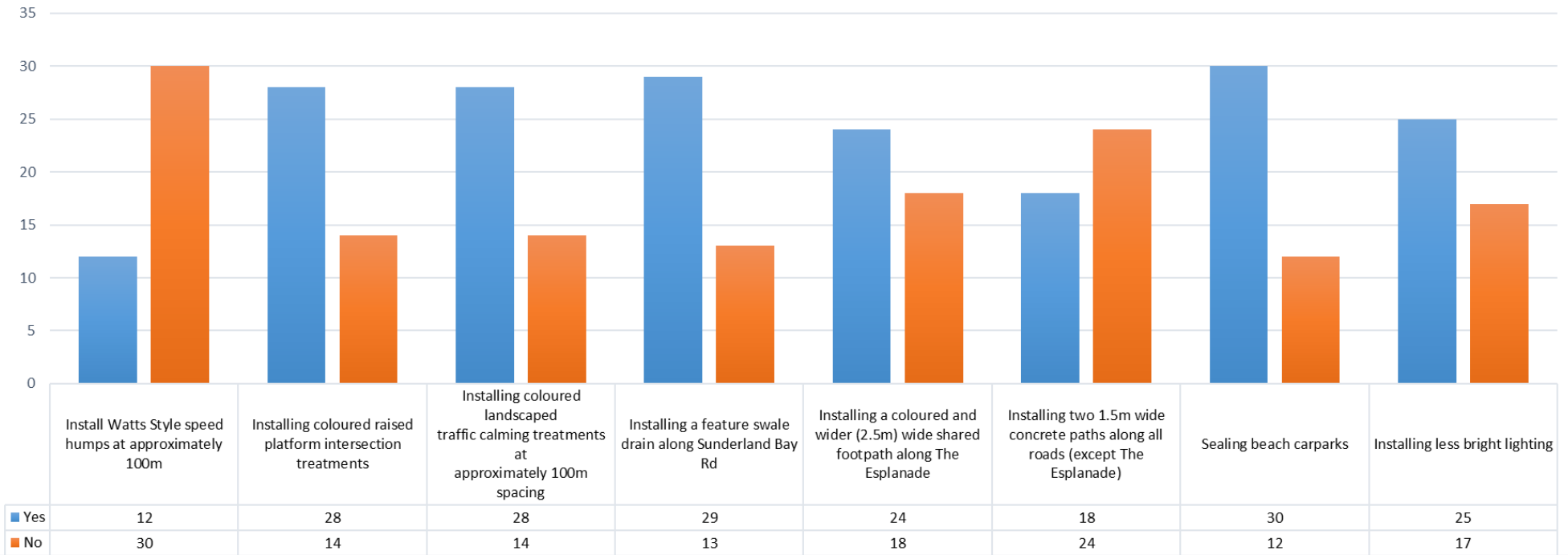


Table 4: Concept Option Feedback from the CRG (Maximum Landscaping)

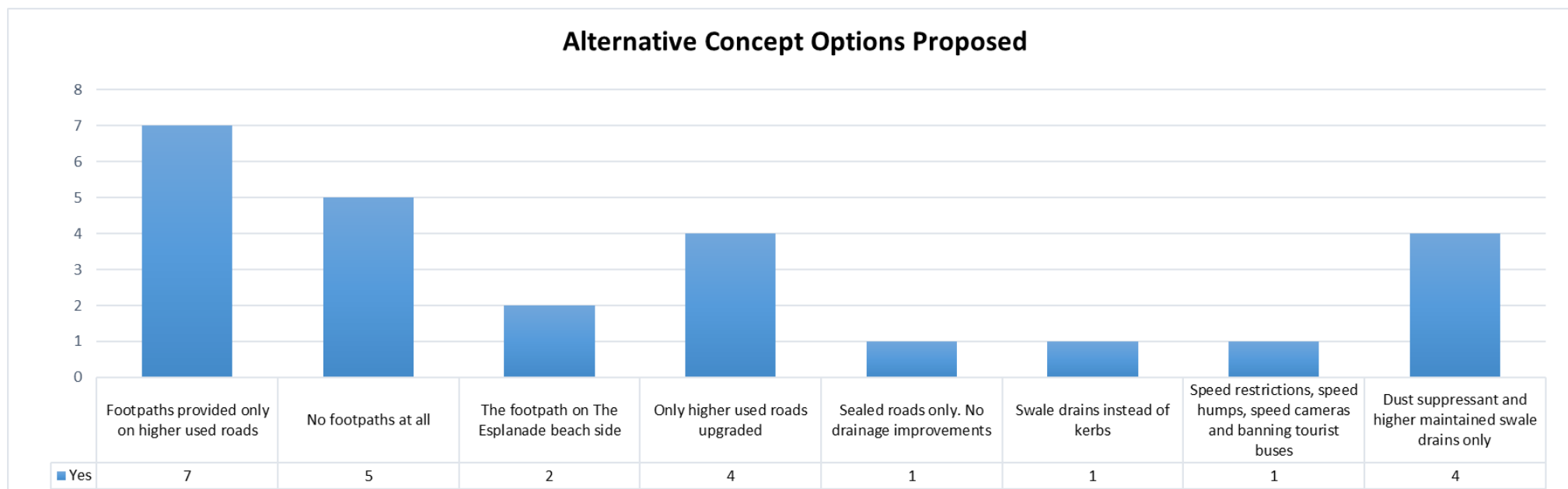


Table 5: Alternative Concept Option Feedback from the CRG

Next steps

The next step in the process is to finalise the several options of concept plans that align with the questionnaire results and feedback from the CRG and present these to the wider community so that a preferred option can be selected. There is likely to be a minimal cost option, then several other options with additional features included with indicative cost ranges.

Upgrades with Phillip Island Road such as Sunderland Bay Road and Dunvegan Crescent intersections and the service lane will not be included in this special charge scheme, but the concept options will allow for potential upgrades of these in the future by others such as the Department of Transport.

The next round of community consultation with options developed for the wider community to vote on and indicative cost ranges is planned for November-December 2022.

More Information

For more information call the Customer Service Team on 1300 BCOAST (226 278) or (03) 5671 2211 or email sunderlandbayandsurfbeachupgrade@basscoast.vic.gov.au