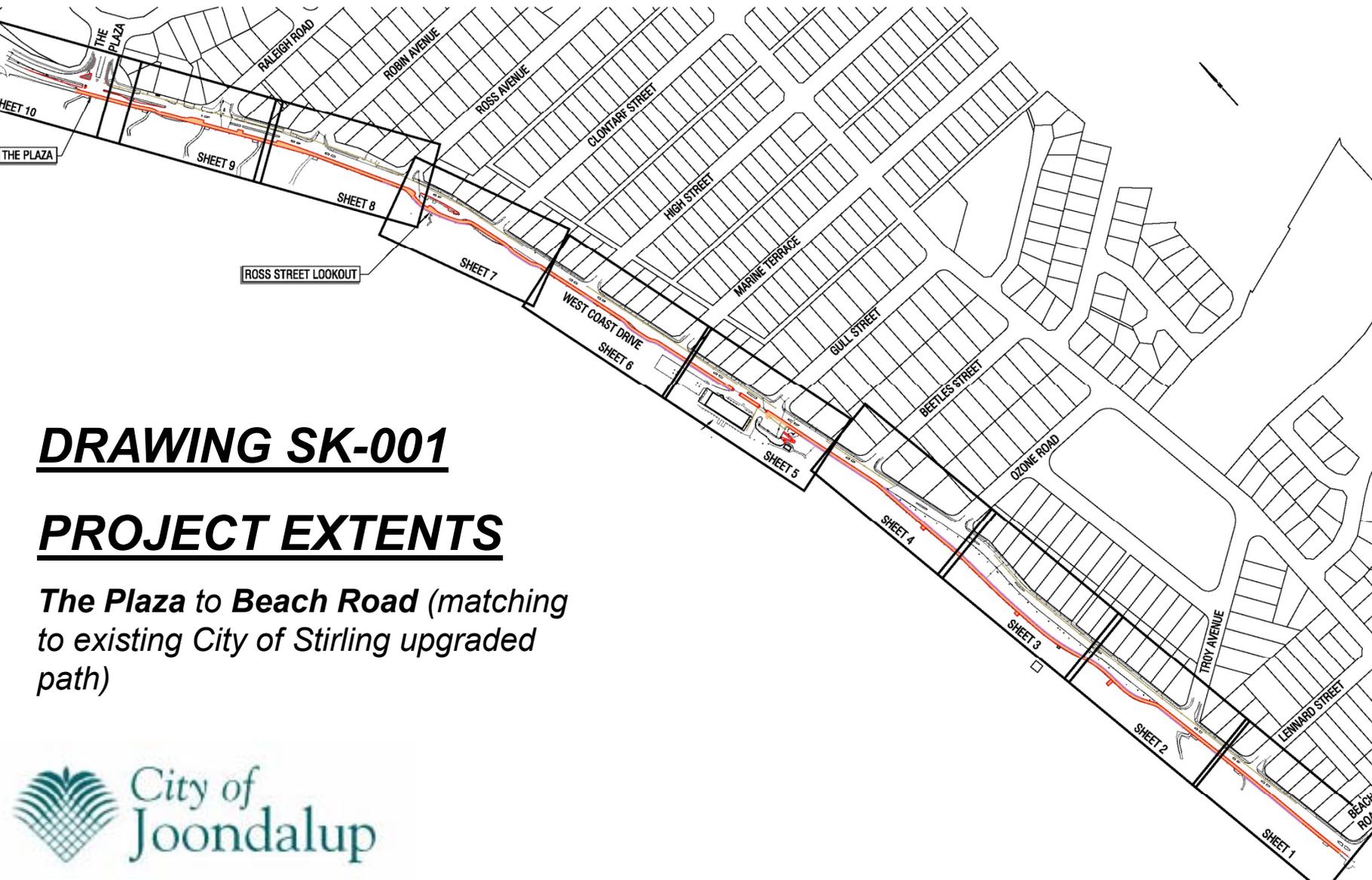


# ***West Coast Drive Dual Use Path Upgrade Preliminary Design***

***June 2008***



## **DRAWING SK-001**

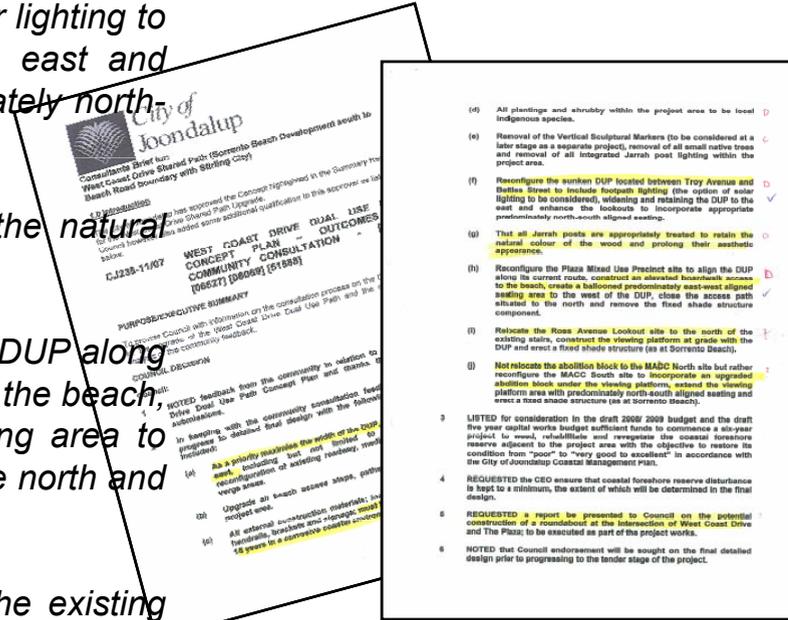
## **PROJECT EXTENTS**

*The Plaza to Beach Road (matching to existing City of Stirling upgraded path)*



# COUNCIL DECISION

- (f) Reconfigure the sunken DUP located between Troy Avenue and Bettles Street to include footpath lighting (the option of solar lighting to be considered), widening and retaining the DUP to the east and enhance the lookouts to incorporate appropriate predominately north-south aligned seating.
- (g) That all Jarrah posts are appropriately treated to retain the natural colour of the wood and prolong their aesthetic appearance.
- (h) Reconfigure the Plaza Mixed Use precinct site to align the DUP along its current route, construct an elevated boardwalk access to the beach, create a ballooned predominately east-west aligned seating area to the west of the DUP, close to the access path situated to the north and remove the fixed shade structure component.
- (i) Relocate the Ross Avenue Lookout site to the north of the existing stairs, construct the viewing platform at grade with the DUP and erect a fixed shade structure (as at Sorrento Beach)
- (j) Not relocate the ablution block to the MAAC North site but rather reconfigure the MAAC South site to incorporate an upgraded ablution block under the viewing platform, extend the viewing platform area with predominately north-south aligned seating and erect a fixed shade structure (as at Sorrento Beach)



**COUNCIL DECISION ITEM (a)**

*As a priority, maximise the width of the DUP, predominately to the east, including but not limited to encroachment and reconfiguration of existing roadway, median strips and eastern verge areas.*

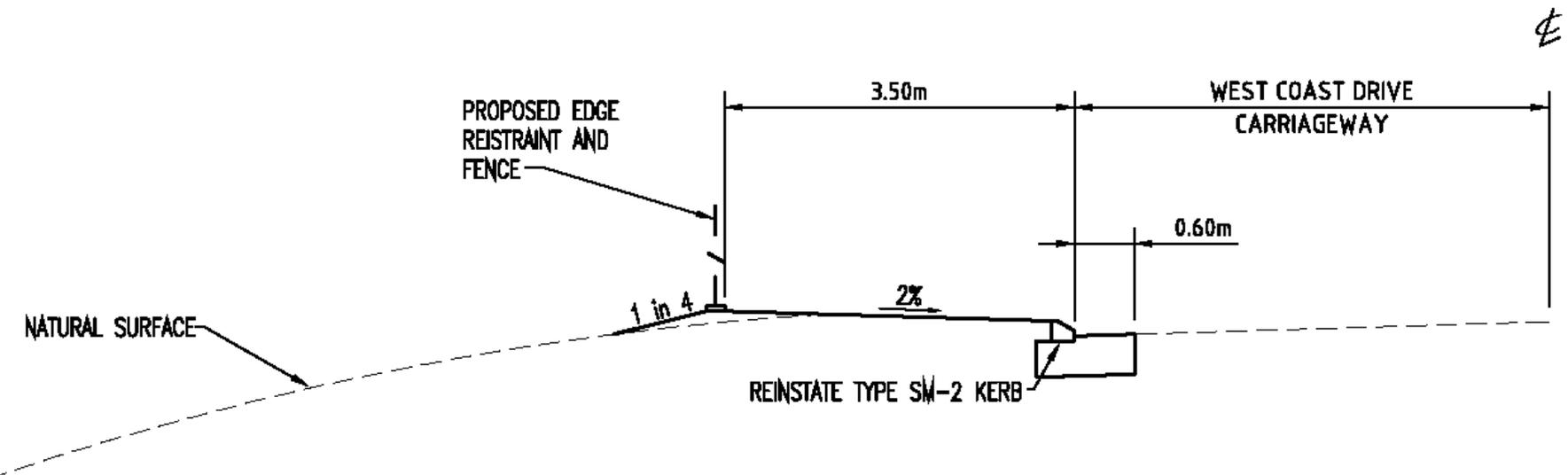
**DESIGN CRITERIA**

- ✓ *Aim to achieve 3.5m minimum width Dual Use Path (DUP)*
- ✓ *Minimise intrusion into dunes by investigating use of existing road reserve space*
- ✓ *Meet current design standard and construction practice guidelines*
- ✓ *Maximise operational safety*



# PRELIMINARY DESIGN – CROSS SECTION 1

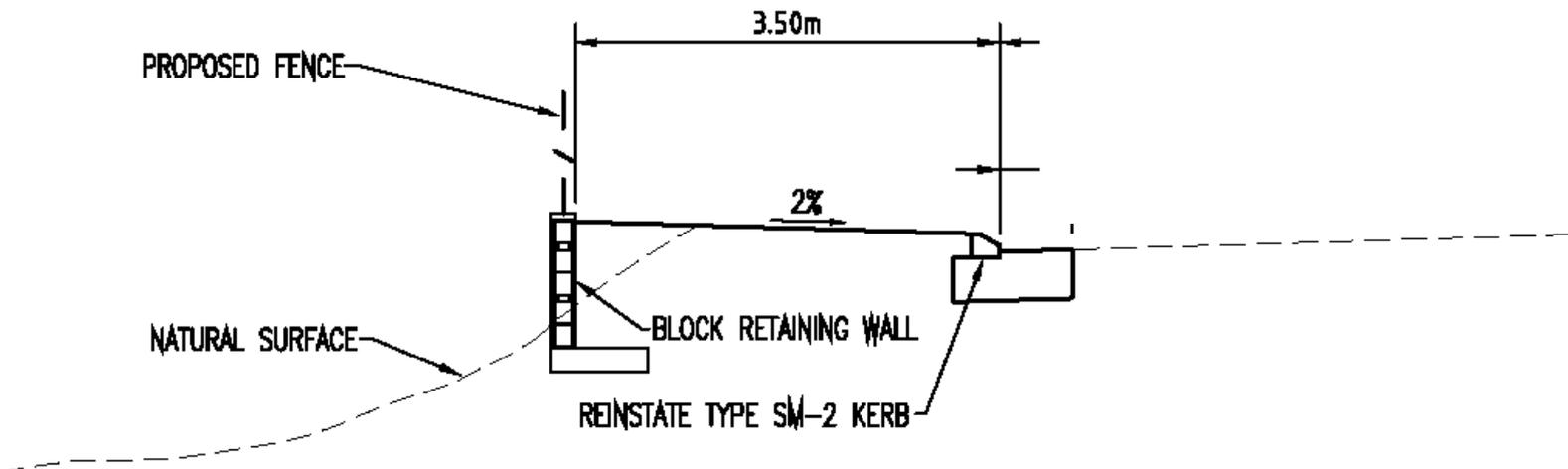
## (No Retaining Wall)



## TYPICAL SECTION PATH AND BATTER

## PRELIMINARY DESIGN – CROSS SECTION 2

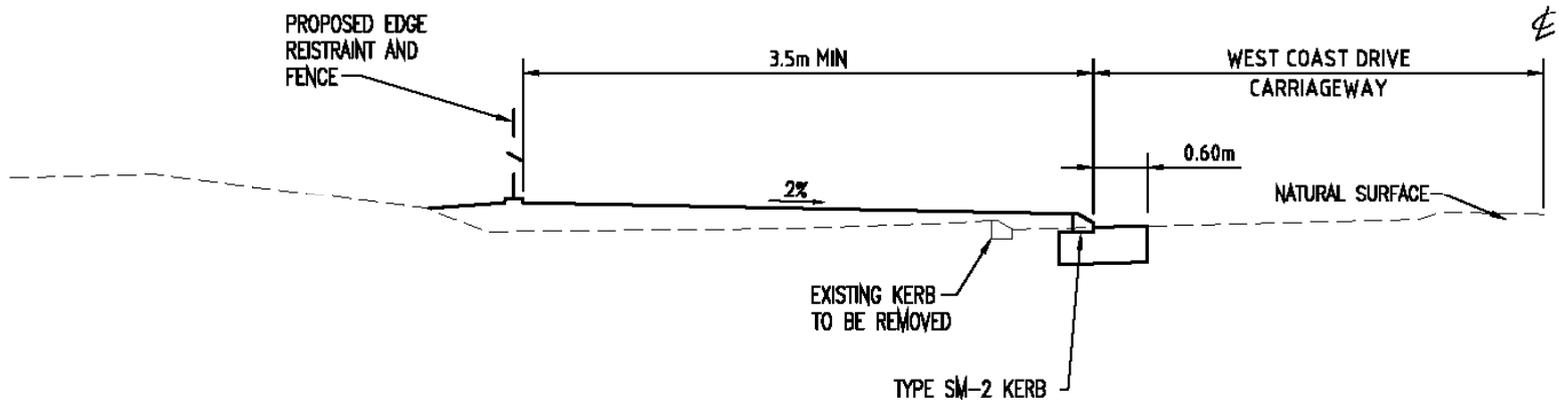
(With Retaining Wall)



TYPICAL SECTION  
PATH AND RETAINING WALL

## PRELIMINARY DESIGN – CROSS SECTION 3

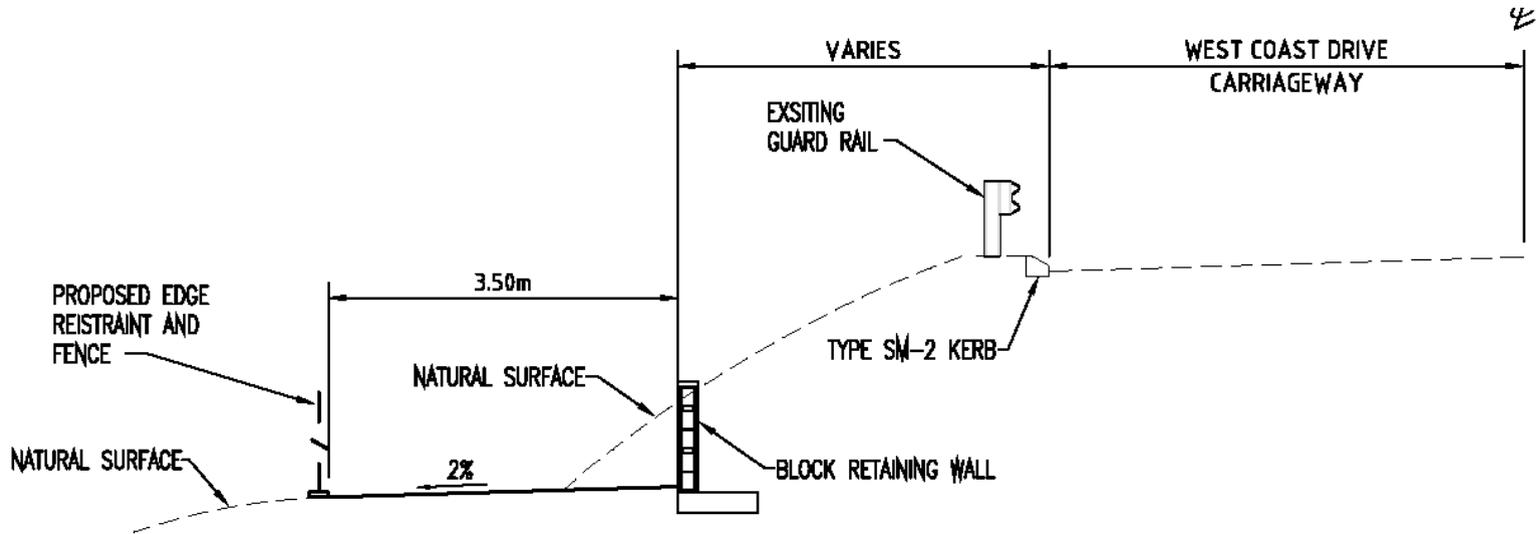
### (Use of Existing Pavement Width)



TYPICAL SECTION A-A

# PRELIMINARY DESIGN – CROSS SECTION 4

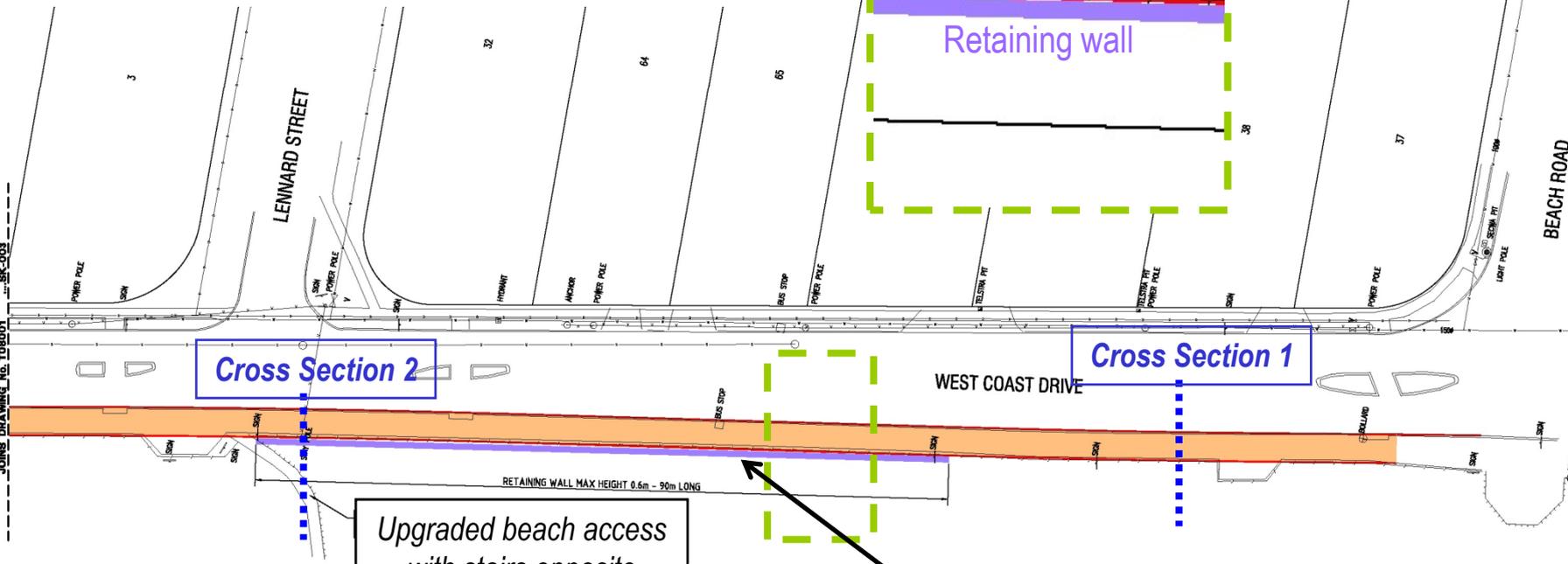
## (Sunken section of DUP)



## TYPICAL SECTION OFFSET PATH AND RETAINING WALL

# DRAWING SK-002

## (Beach Rd – Lennard St)

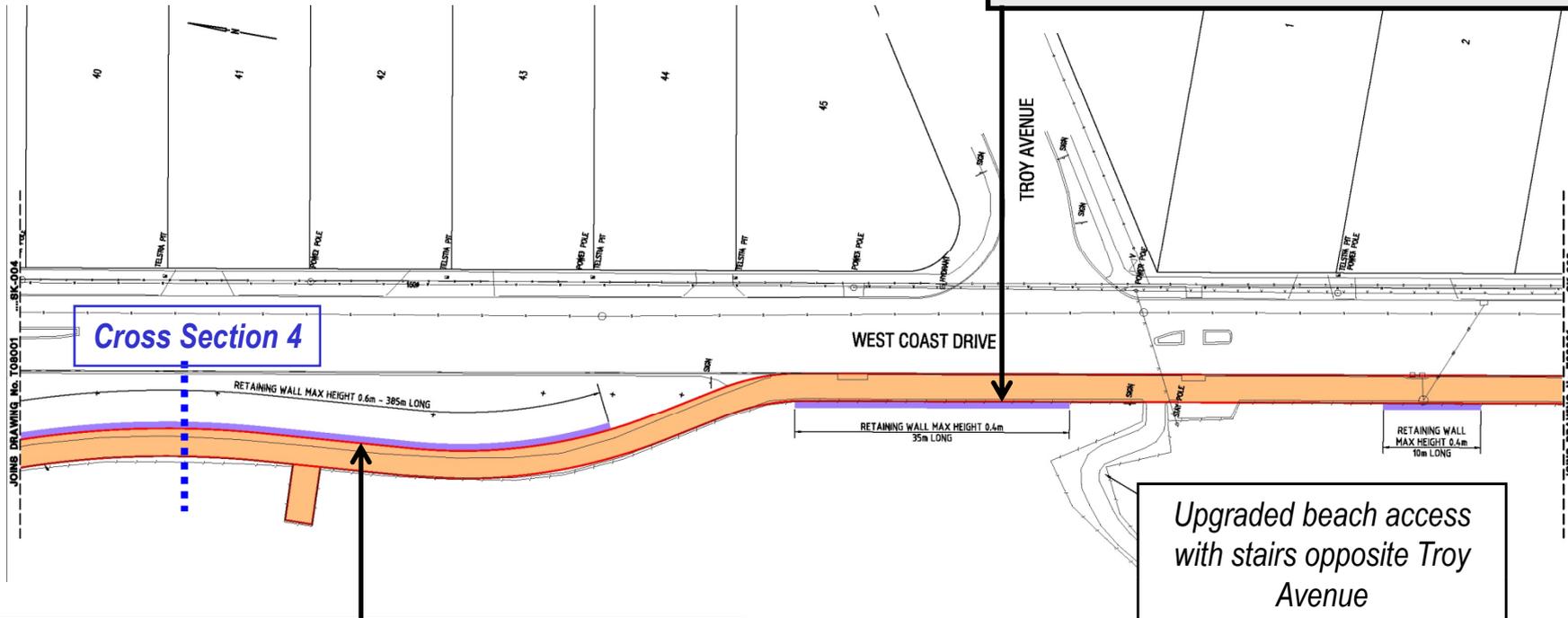


Upgraded beach access  
with stairs opposite  
Lennard Street

Minimal intrusion into dunes - 0.5m  
Retaining wall length - 90m  
Retaining wall max height - 0.6m

# DRAWING SK-003 (Start of sunken section north of Troy Ave)

*Intrusion into dunes - 0.4m*  
*Retaining wall max height - 0.4m*  
*Retaining wall length - 35m*



*Intrusion into dunes towards road - 1m*  
*Retaining wall length - 385m*  
*Retaining wall max height - 0.6m*

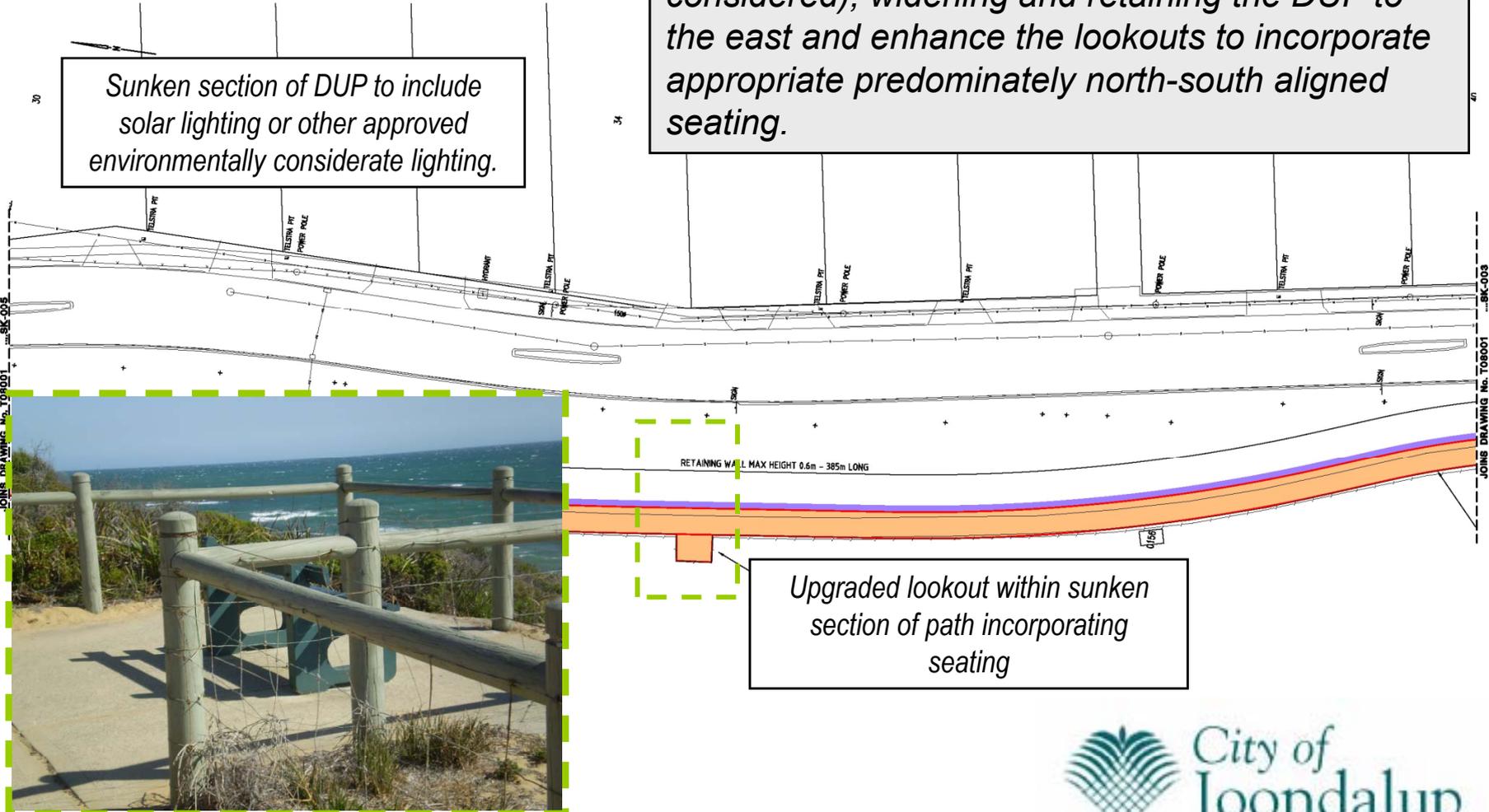
*Minimum width between central island and kerb is 3.5m in accordance with Austroads Guidelines*

**COUNCIL DECISION ITEM (f)**

Reconfigure the sunken DUP located between Troy Avenue and Bettles Street to include footpath lighting (the option of solar lighting to be considered), widening and retaining the DUP to the east and enhance the lookouts to incorporate appropriate predominately north-south aligned seating.

**DRAWING SK-004**

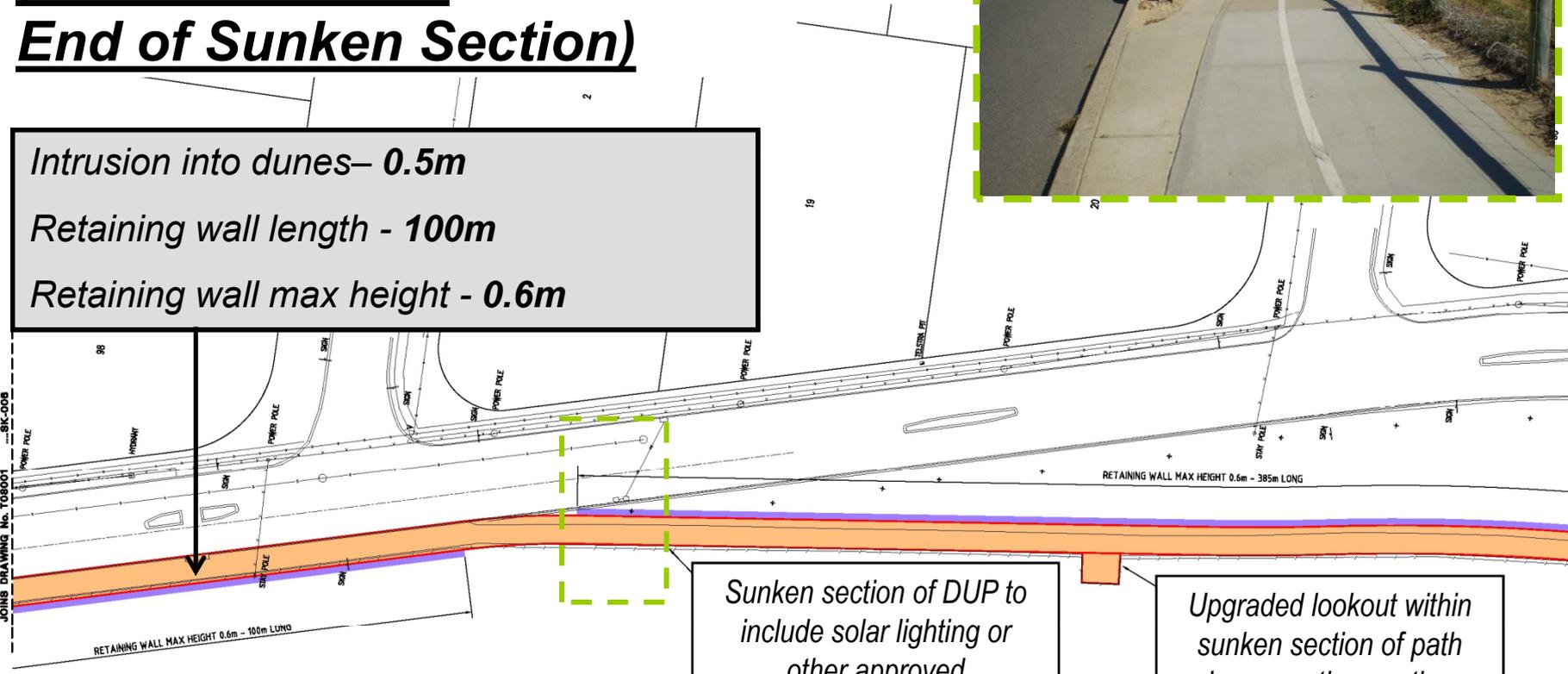
Sunken section of DUP to include solar lighting or other approved environmentally considerate lighting.



# DRAWING SK-005 (Bettles – Ozone End of Sunken Section)



*Intrusion into dunes– 0.5m*  
*Retaining wall length - 100m*  
*Retaining wall max height - 0.6m*



*Sunken section of DUP to include solar lighting or other approved environmentally considerate lighting.*

*Upgraded lookout within sunken section of path incorporating seating*

JOINS DRAWING No. T08001  
SIC-008

# MARMION ANGLING CLUB

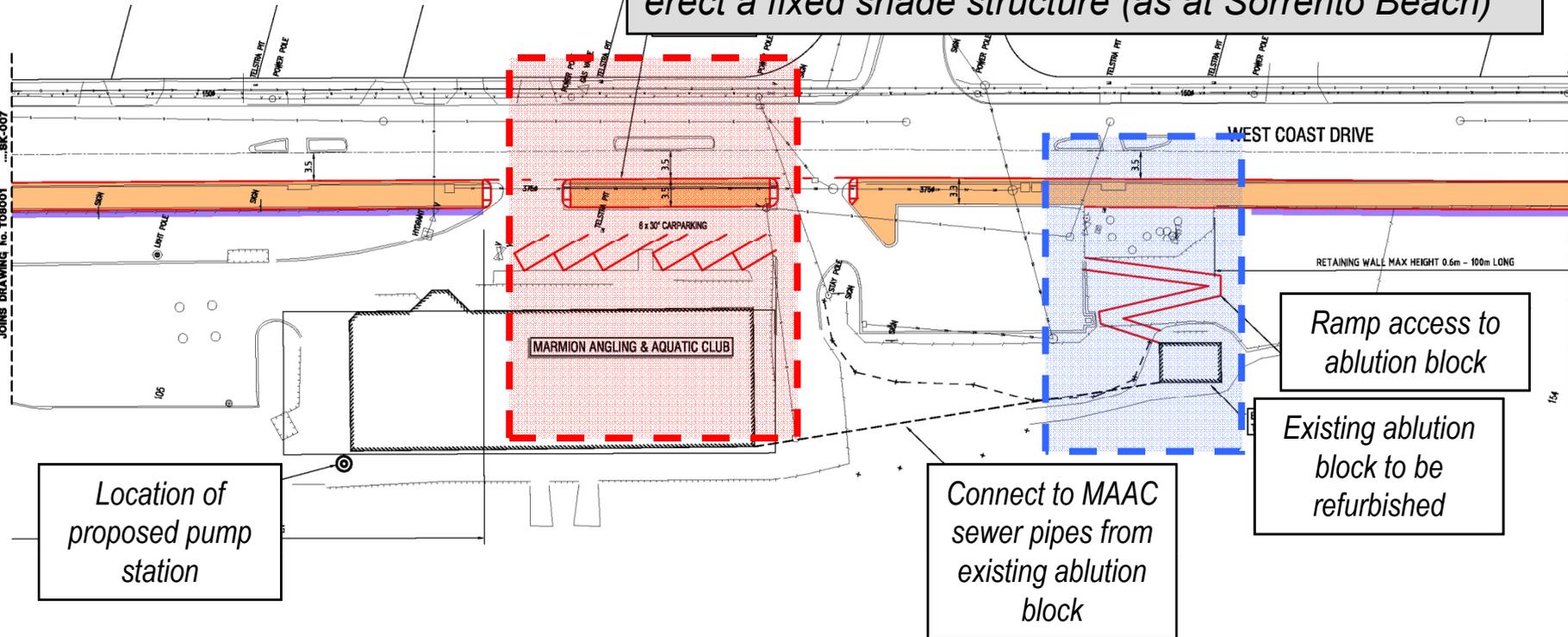


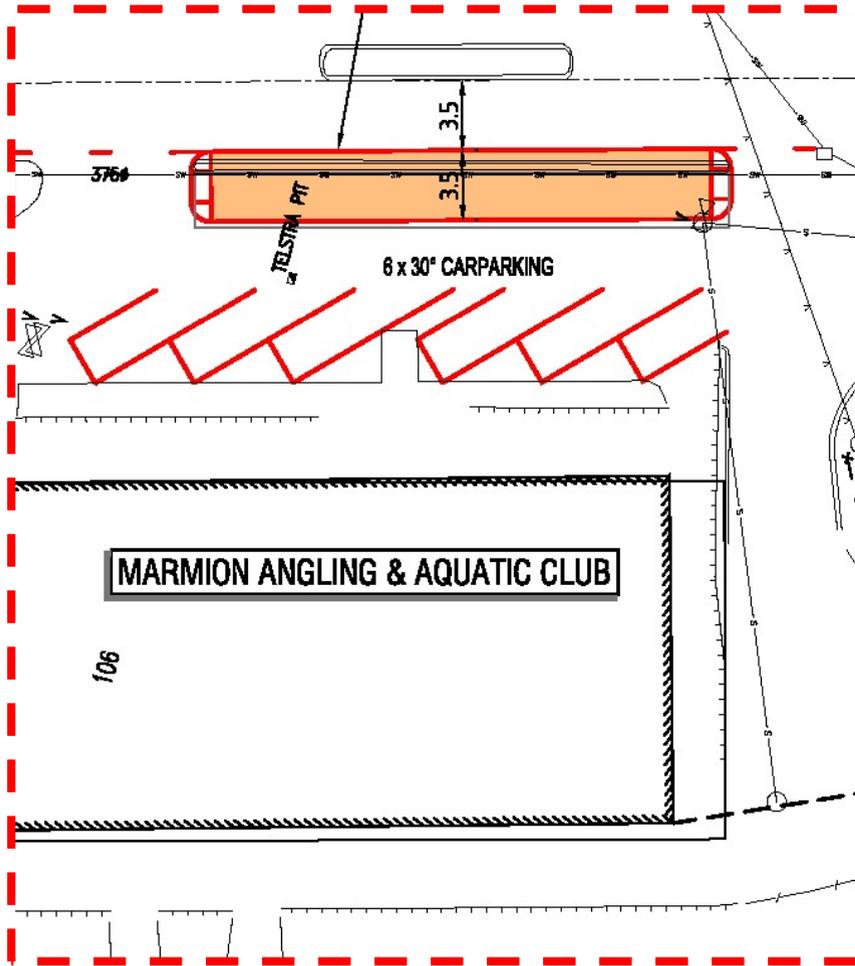
**COUNCIL DECISION ITEM (j)**

*Not to relocate the ablution block to the MAAC North site but rather reconfigure the MAAC South site to incorporate an upgraded ablution block under the viewing platform, extend the viewing platform area with predominately north-south aligned seating and erect a fixed shade structure (as at Sorrento Beach)*

**DRAWING SK-006**

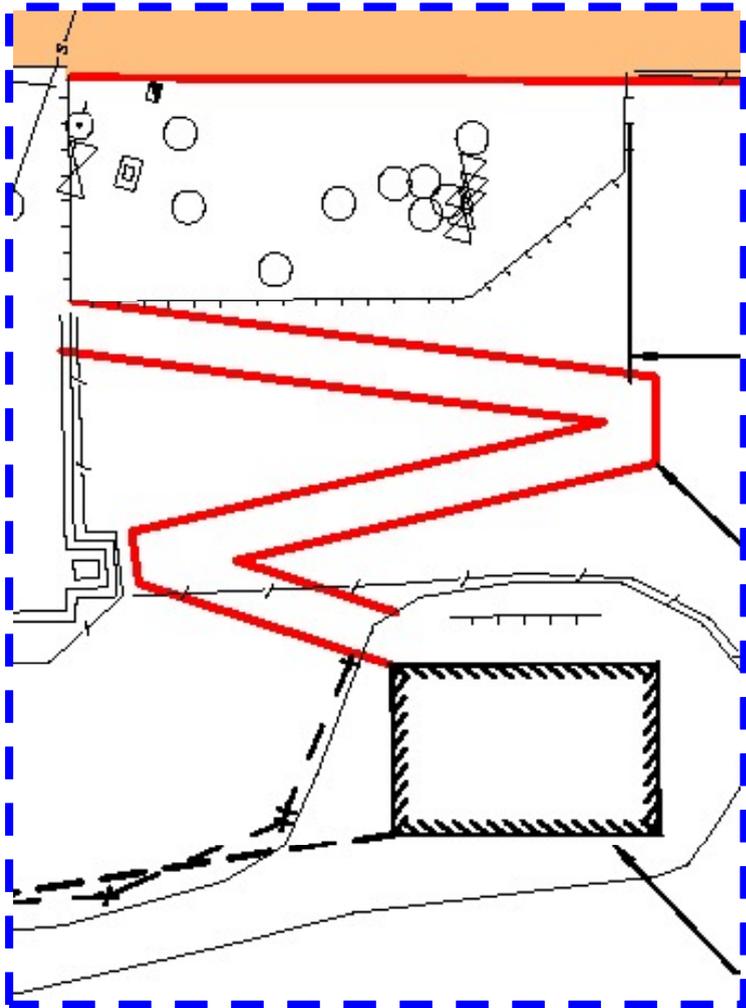
**MAAC PRECINCT**





- *Raised DUP above surrounding carpark surface to improve definition and safety*
- *Reconfigure car parking spaces – 6 spaces at 30 degrees (loss of 1 space)*

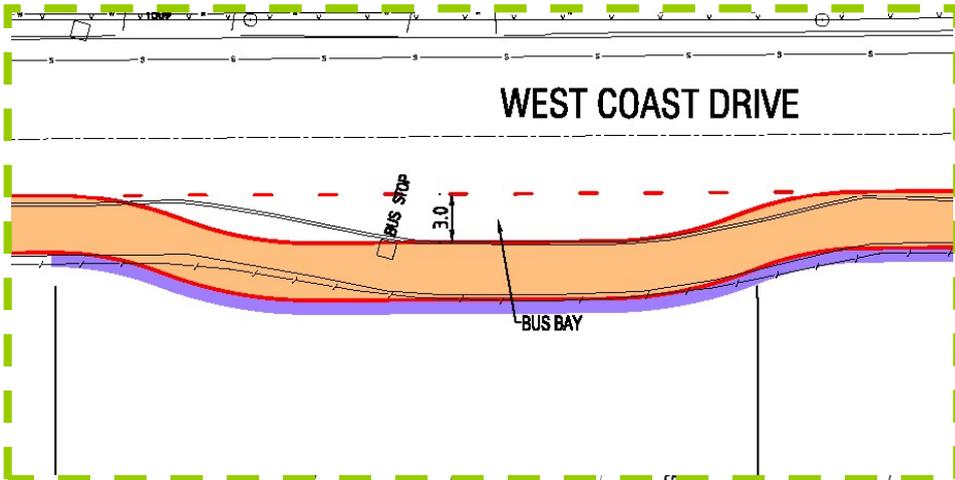




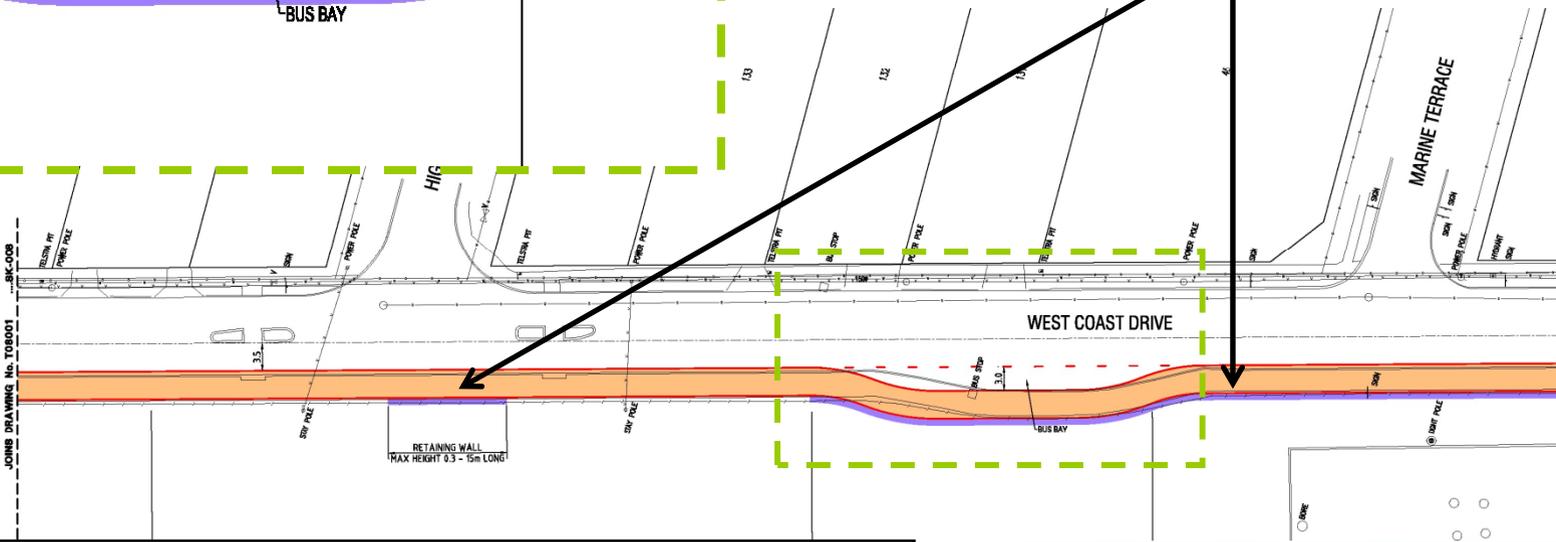
- *Ramp access to ablation block to be constructed*
- *Existing ablation block to be refurbished*
- *Connect to MAAC sewer*



# DRAWING SK-007 (Marine Terrace Bus Stop)

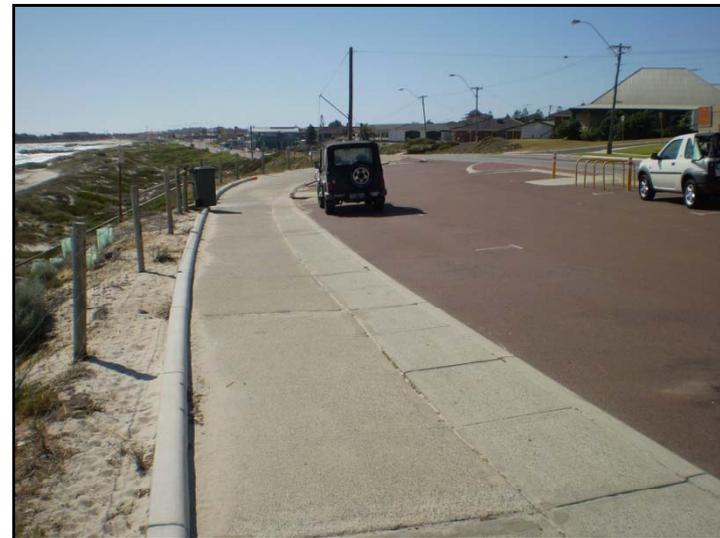


*Intrusion into dunes – 0.5m*  
*Retaining wall length - 15m & 100m*  
*Retaining wall max height - 0.3 and 1.2m*



*Upgraded to meet current bus bay length Standards*  
*Intrusion into dunes - 2m at northern end of bus bay*

# ROSS AVENUE LOOKOUT MODIFICATIONS

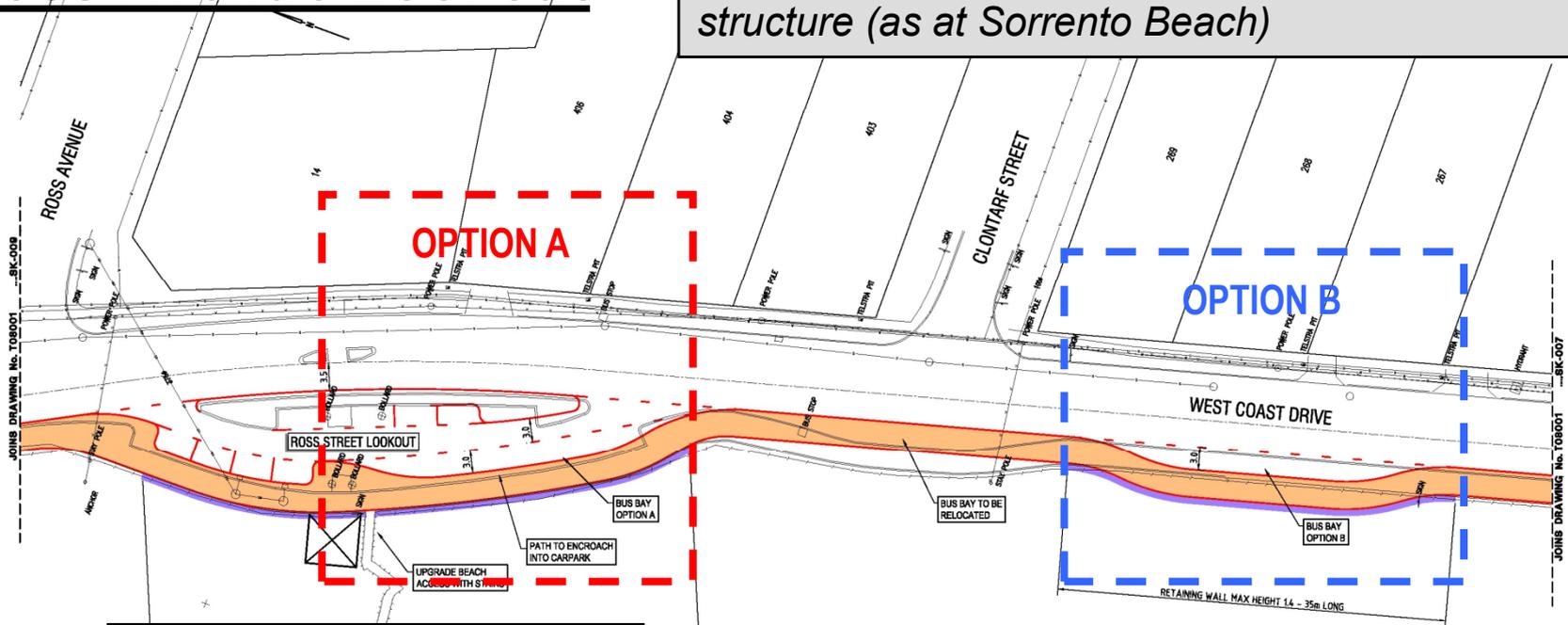


**COUNCIL DECISION ITEM (i)**

Relocate the Ross Avenue Lookout site to the north of the existing stairs, construct the viewing platform at grade with the DUP and erect a fixed shade structure (as at Sorrento Beach)

**DRAWING SK-008**

**Ross Avenue Lookout**



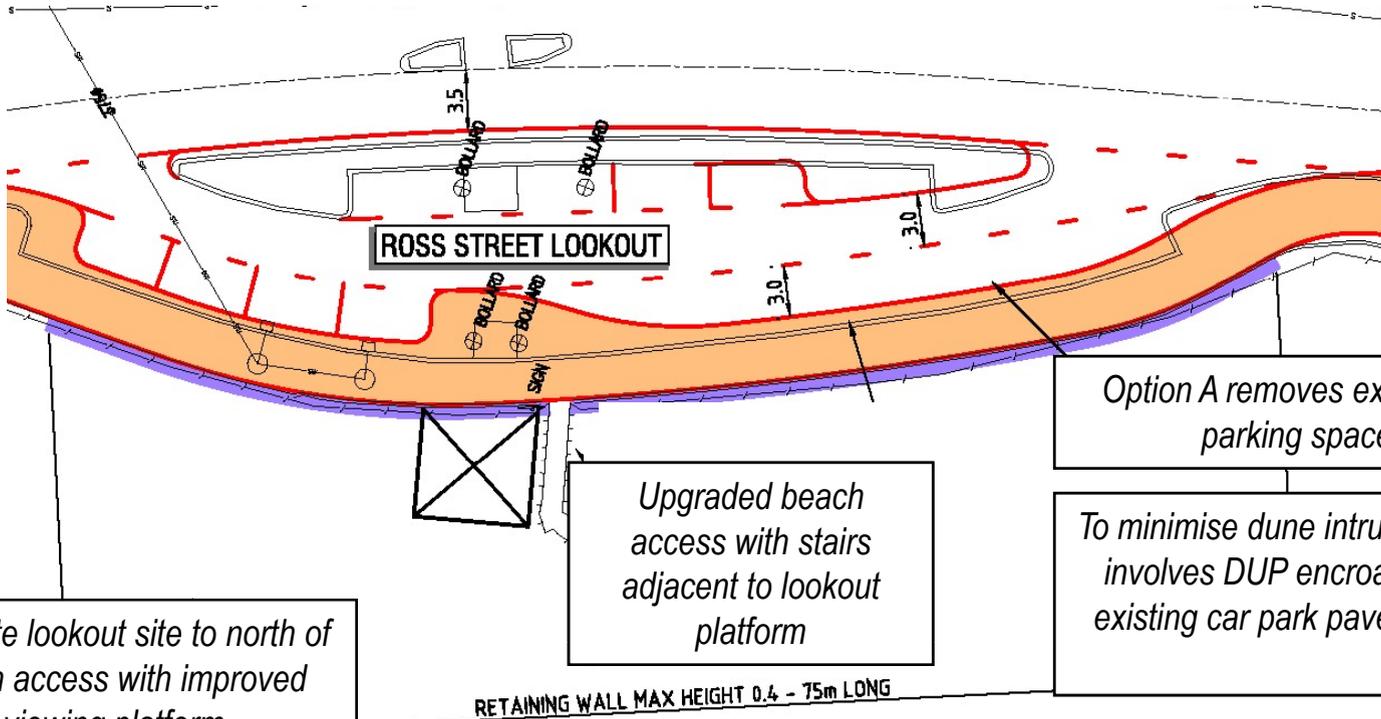
Relocated and upgraded lookout platform

Need to improve existing bus stop to meet current design standards

# DRAWING SK-008

## (Ross Avenue Lookout)

No Intrusion into dunes  
 Retaining wall length - 75m  
 Retaining wall max height - 0.4m



Relocate lookout site to north of beach access with improved viewing platform

Upgraded beach access with stairs adjacent to lookout platform

Option A removes existing car parking spaces

To minimise dune intrusion, design involves DUP encroaching into existing car park pavement area

RETAINING WALL MAX HEIGHT 0.4 - 75m LONG

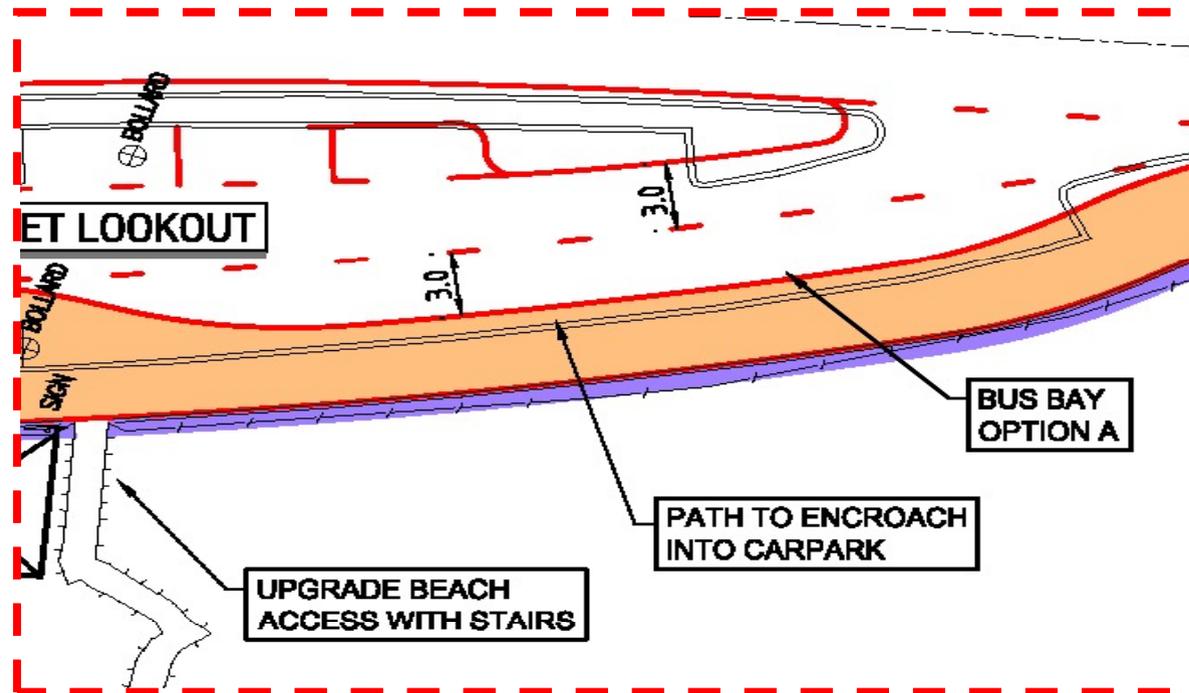
## DRAWING SK-08

### (Ross Avenue Bus Stop Option A)

*Bus bay constructed in place of existing parallel car bays. (loss of 5 bays)*

*DUP utilises existing pavement space and encroaches into carpark.*

*No encroachment into dunes*



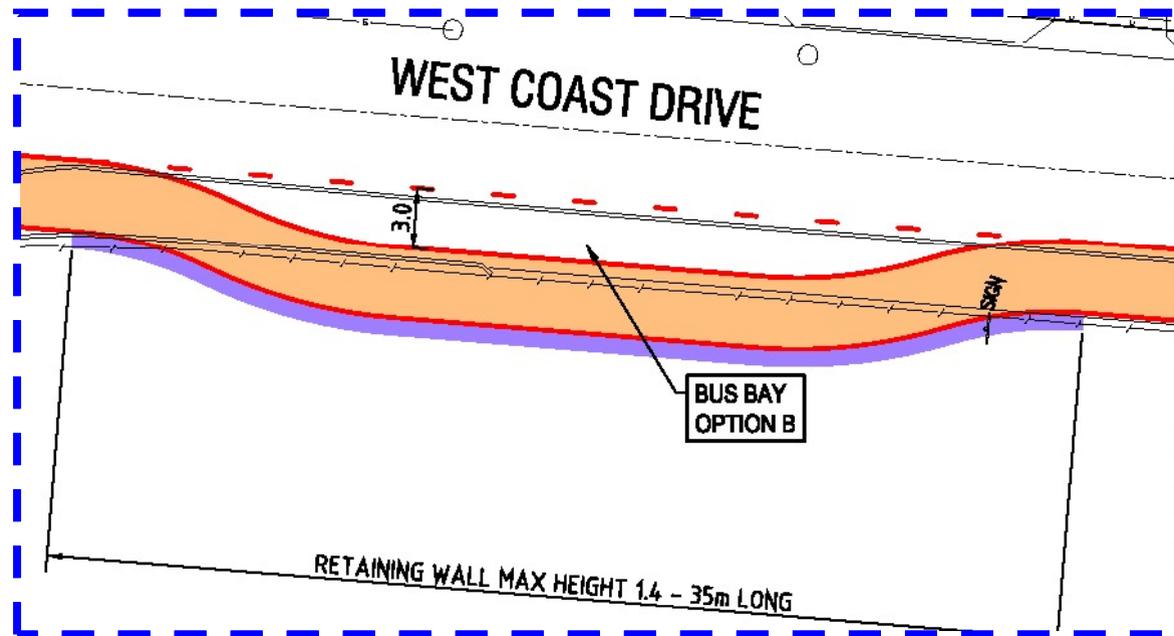
## DRAWING SK-08

### (Ross Avenue Bus Stop Option B)

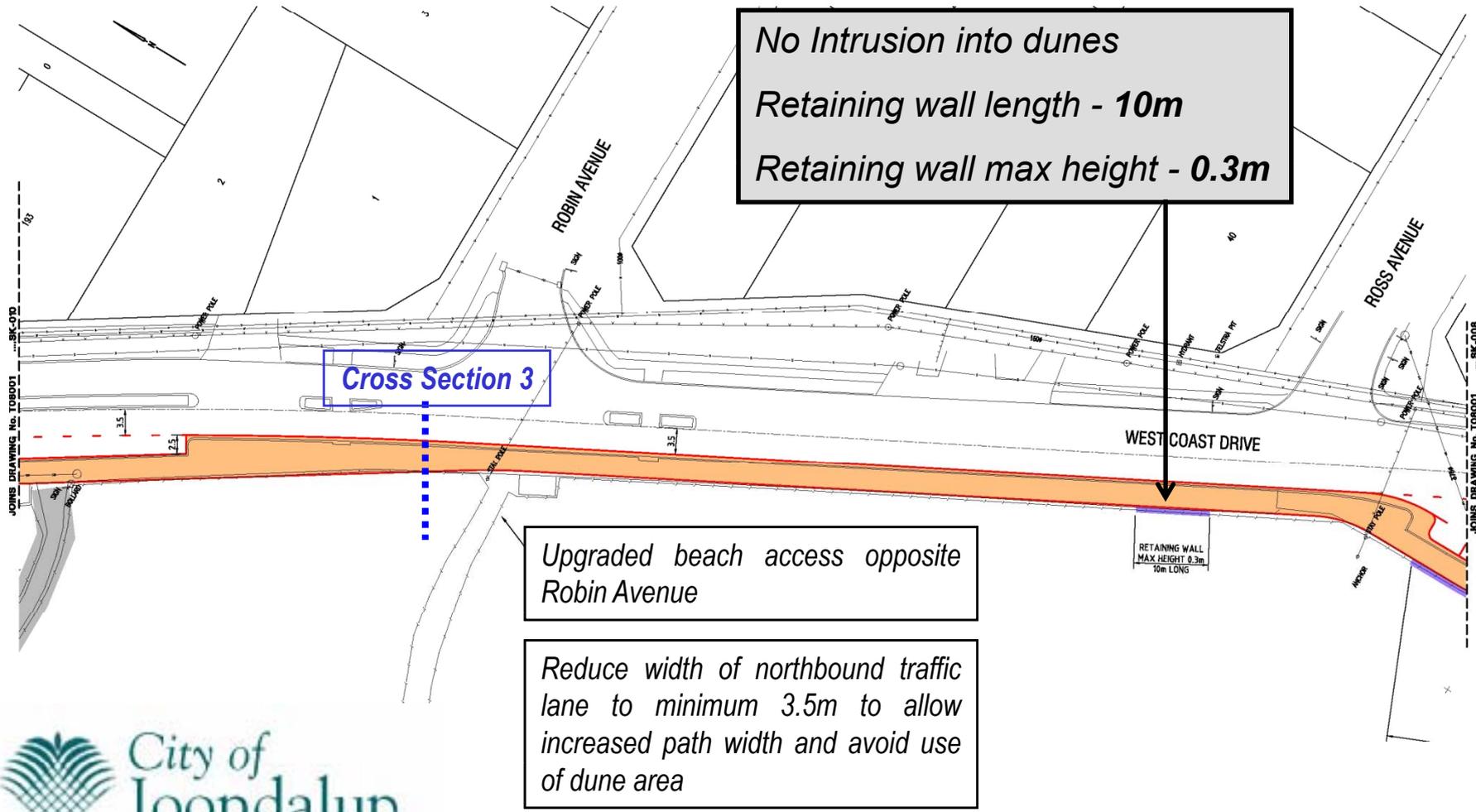
*Bus Bay relocated further south away from intersection.*

*Intrusion into dunes by minimum **2.5m***

*Section of high retaining wall – **1.4m height***



# DRAWING SK-009 (Ross Avenue – Robin Avenue)



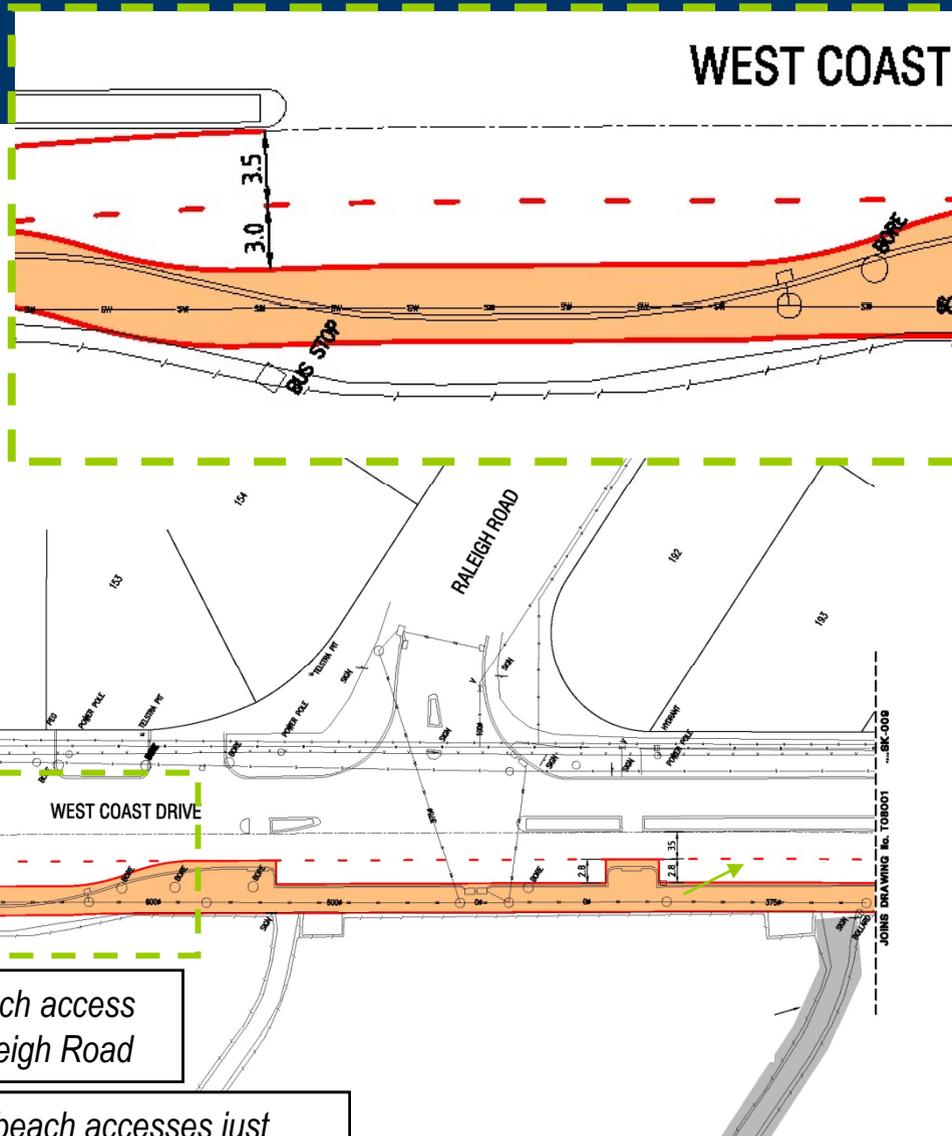
# DRAWING SK-010

## (Raleigh Road – The Plaza)

Improved pedestrian crossing just south of The Plaza

Upgraded bus bay to meet current standards

Use of northbound pavement width to avoid use of dune area



No Intrusion into dunes  
No Retaining Walls

Upgrade beach access opposite Raleigh Road

Close existing beach accesses just south of Raleigh Road and just south of The Plaza





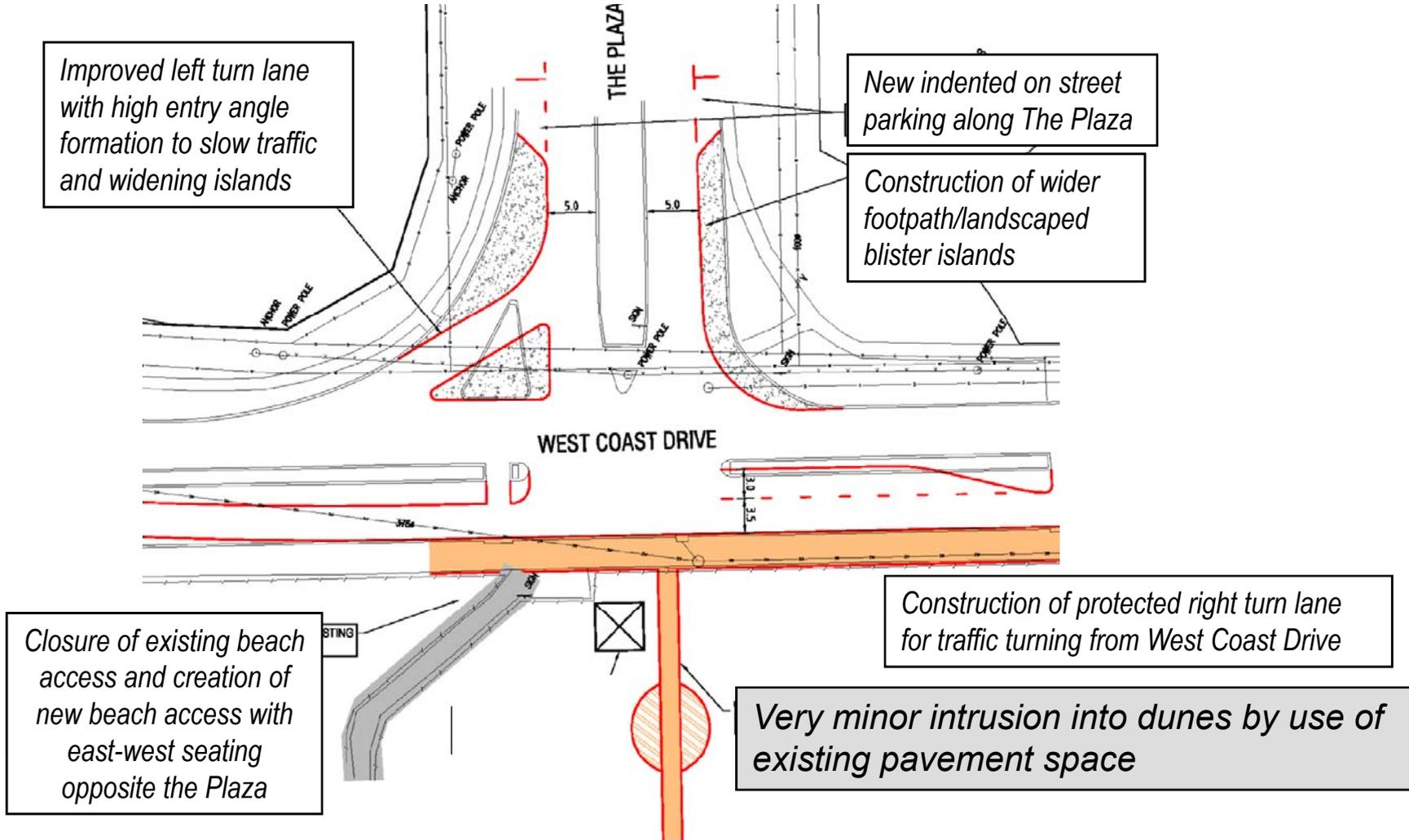
## **THE PLAZA**

### ***COUNCIL DECISION ITEM (h)***

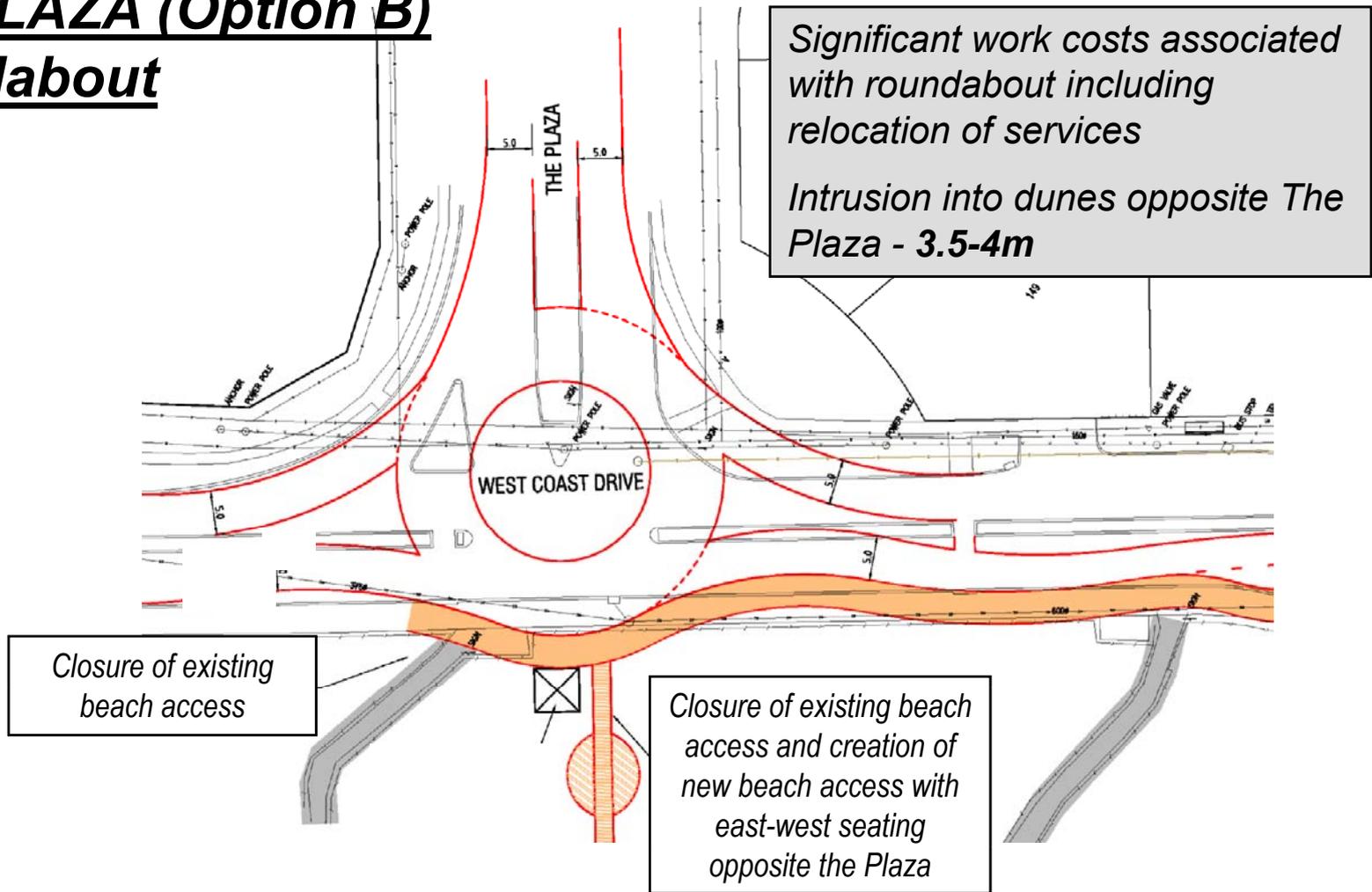
*Reconfigure the Plaza Mixed Use precinct site to align the DUP along its current route, construct an elevated boardwalk access to the beach, create a ballooned predominately east-west aligned seating area to the west of the DUP, close to the access path situated to the north and remove the fixed shade structure component.*

# DRAWING SK-011

## THE PLAZA (Option A) Improved T-Junction



**DRAWING SK-012**  
**THE PLAZA (Option B)**  
**Roundabout**



## **PROJECT ACTIONS/PROGRAM**

<i>Milestone</i>	<i>Forecast Commencement</i>	<i>Forecast Completion</i>	<i>Actual Completion</i>
Detailed Design	1 Jan 2008	30 Sep 2008	-
Council Endorsement (Workshop or Strategy Session) at 20% detailed design stage.	1 May 2008	1 May 2008	<b>1 Jun 2008</b>
Prepare Tender Documentation	1 Jul 2008	30 Sep 2008	-
Tender Phase	3 Oct 2008	30 Jan 2009	-
Assess/Award Tender	2 Feb 2009	31 Mar 2009	-
Construction	1 Apr 2009	30 Oct 2009	-
Defects Liability	30 Oct 2009	30 Oct 2010	-