

3.4 STORMWATER AND WSUD

Stormwater Drainage and WSUD - Site Wide

Site wide, the total catchment area for the entire SICEEP development is approx. 190 ha. Of this, approx. 120 ha is to the south of the precinct and will drain through The Haymarket either from the south east at the junction of Hay and Harbour Streets or south west at the corner of Hay Street and Darling Drive. Ultimately this enters the Harbour at Cockle Bay.

In order to facilitate the modelled 1 in 100 year flows, the Boulevard will accommodate a continuous overland flow path that can direct high velocity stormwater away from The Haymarket and toward Cockle Bay. Stormwater will be directed toward the Boulevard from the east and west along Hay Street, with some flow diverted to flow along Darling Drive.

WSUD principles within the Public Domain - Site Wide

The expected velocity of the stormwater in high rainfall events means that infiltration into porous surfaces will not occur during these events. Low flow events, however will be mostly absorbed through porous surfaces or soft landscape areas. As such, the Public Domain will be designed to facilitate bio filtration within the Boulevard and Darling Drive absorbing runoff from low flow rain events and capture stormwater through permeable paving and suitable filter soil media. Refer to Hyder Stormwater Report.

SSDA 3

Within the SSDA 3 Western Plot site, opportunities lie in utilising the lawn and kerbside soft landscape areas for intercepting and treating stormwater as bio filtration beds.



Figure 3.4.1 Water Management in the West Plot

3.5 DARLING DRIVE

Site Wide

Darling Drive provides vehicular access to all proposed new Exhibition, Convention and Entertainment buildings within the SICEEP precinct, allowing the inner core of Public Domain to remain pedestrian focussed. Similarly within The Haymarket precinct, Darling Drive is the primary vehicular route, facilitating access to the above ground car parking of the NW and SW plots (via Exhibition Place and Hay Street) and drop off to the Student Accommodation building. A shared pedestrian/cycle path runs the length of Darling Drive, providing the main circulatory connection between the north SICEEP precinct and the Darling Drive signalised crossing at the south eastern corner of the site.

SSDA 3

The shared path and all pavement area of the western side of Darling Drive will be paved in insitu exposed aggregate concrete with decorative saw cuts. Insitu Concrete paving is proposed in contrast to the stone within the public domain in SSDA4 and SSDA 5 to help integrate with the palette and language of The Goods Line and to help define this space as distinct from the The Haymarket, and more connected to Ultimo and Pyrmont. This surface will extend into Macarthur Place to create a fully integrated Public Domain. Street trees along the southern end of Darling Drive will be *Flindersia australis* to create an evergreen avenue, tying in with the existing Darling Drive character in scale and to ensure a consistency in landscape along the length of Darling Drive. Trees have been spaced to allow sun into Macarthur Place and to allow sight lines to the entry lobby of the student accommodation building.

A second signalised crossing will allow pedestrians to take the Dickson's Lane route into The Haymarket.

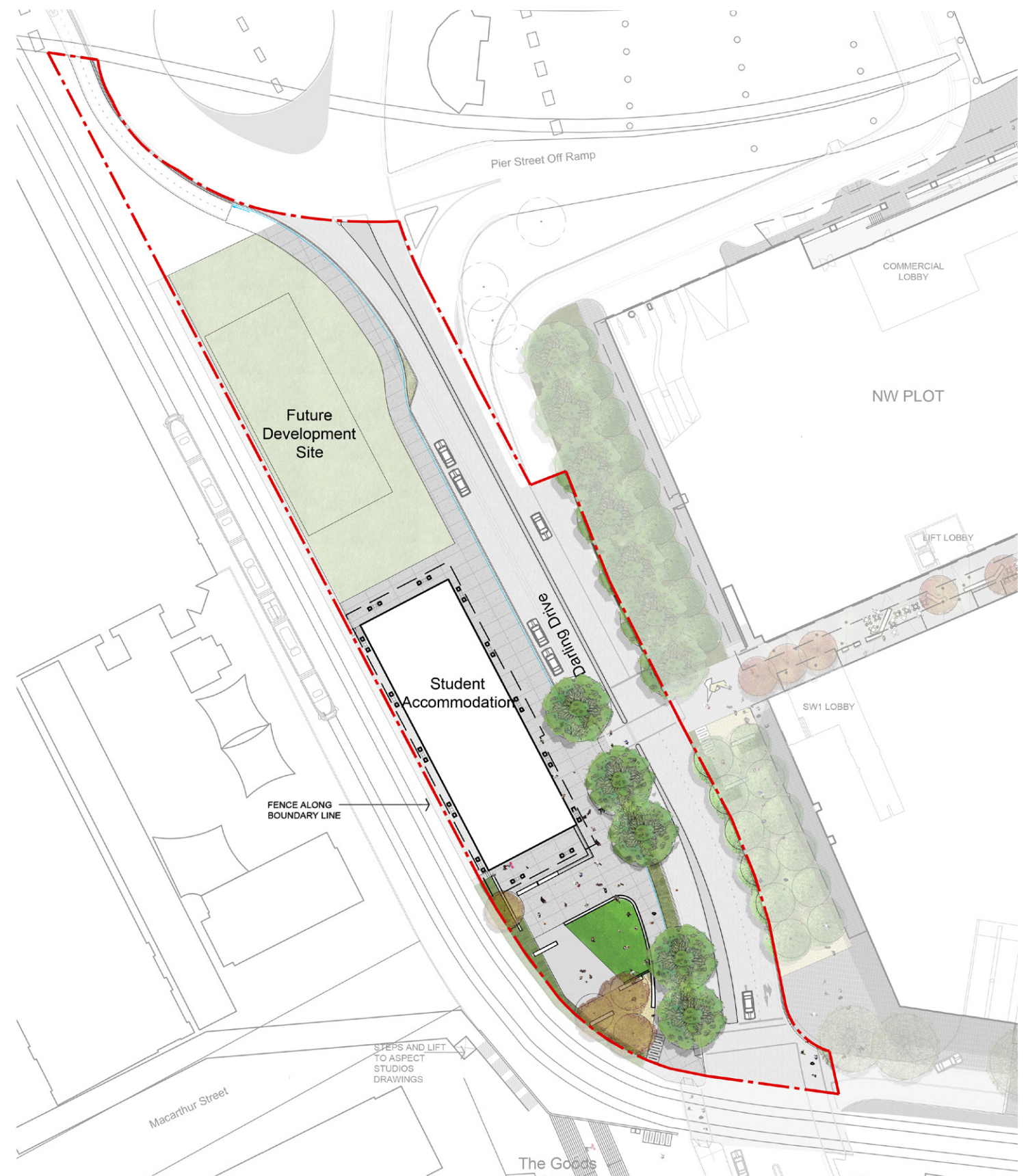


Figure 3.5.1 Darling Drive

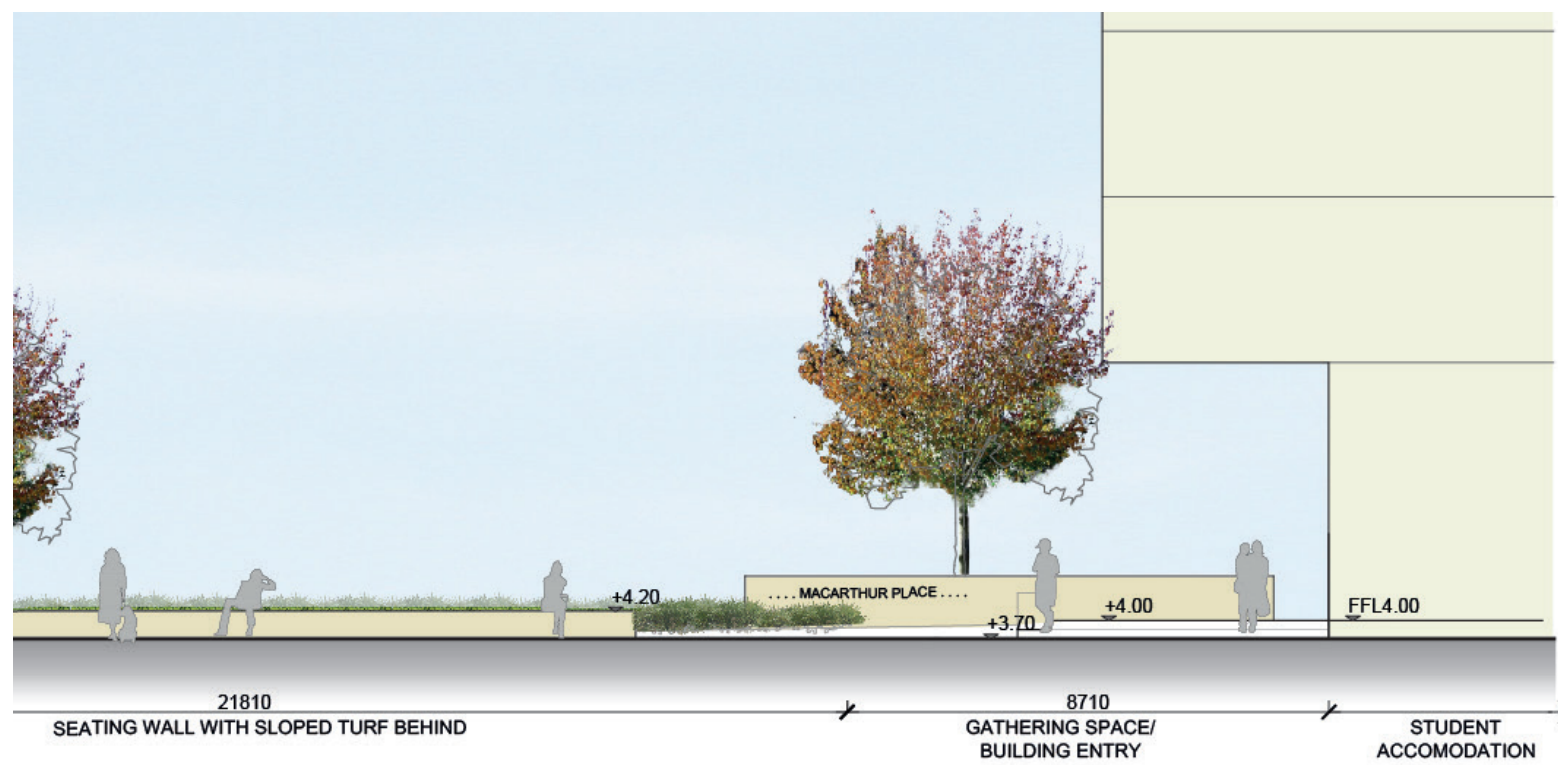


Figure 3.5.2 Section 1: Macarthur Square/ Darling Drive west

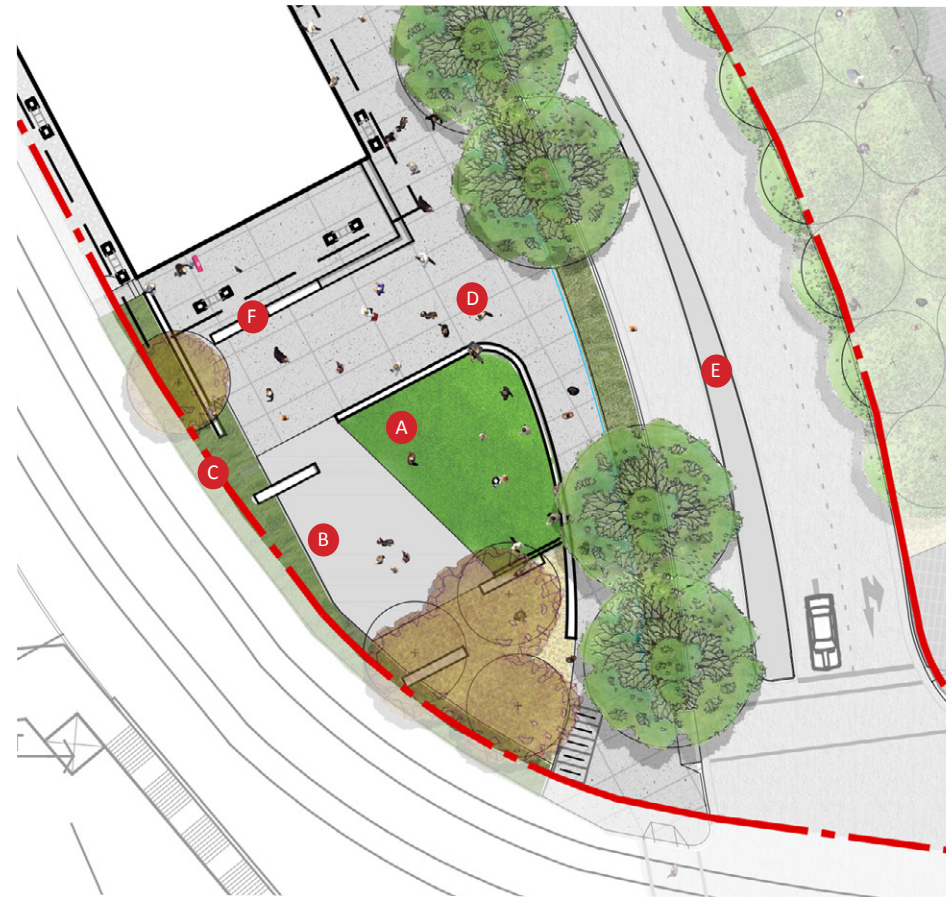
3.6 MACARTHUR PLACE

Located to the south of the proposed student accommodation building Macarthur Place serves as both building entry forecourt and recreation/amenity space for the students.

This space provides a visual termination point to The Goods Line which will form the main pedestrian entry to The Haymarket precinct from the west and south, where access from Harris Street and the Powerhouse Museum will be improved through an upgrade of the existing overhead walkway from Harris Street (subject to SSDA 5).

Macarthur Place will provide amenity for students, the composition of the 'square' providing a paved courtyard, lawn, seating and space for small scale group sport and recreational activity. A low seat wall edge to an inclined lawn provides enclosure and separation from the main circulation space of the shared pedestrian and cycle path. A grove of deciduous trees in decomposed granite surface with seating beneath forms the transition zone at the edge of a flexible recreation area with sports surfacing. The sloping lawn provides informal gathering opportunities.

Evergreen shrub planting of predominantly native species will be used as a buffer and barrier to the Light Rail at the western edge of Macarthur Place, screening a fence which will run along the boundary as required.



- A** Sloping turf
- B** Multi use recreation area
- C** Planting to Light Rail fence line
- D** Shared pedestrian/ cycle path
- E** Darling Drive
- F** Paved entry forecourt

Figure 3.6.1 Macarthur Place

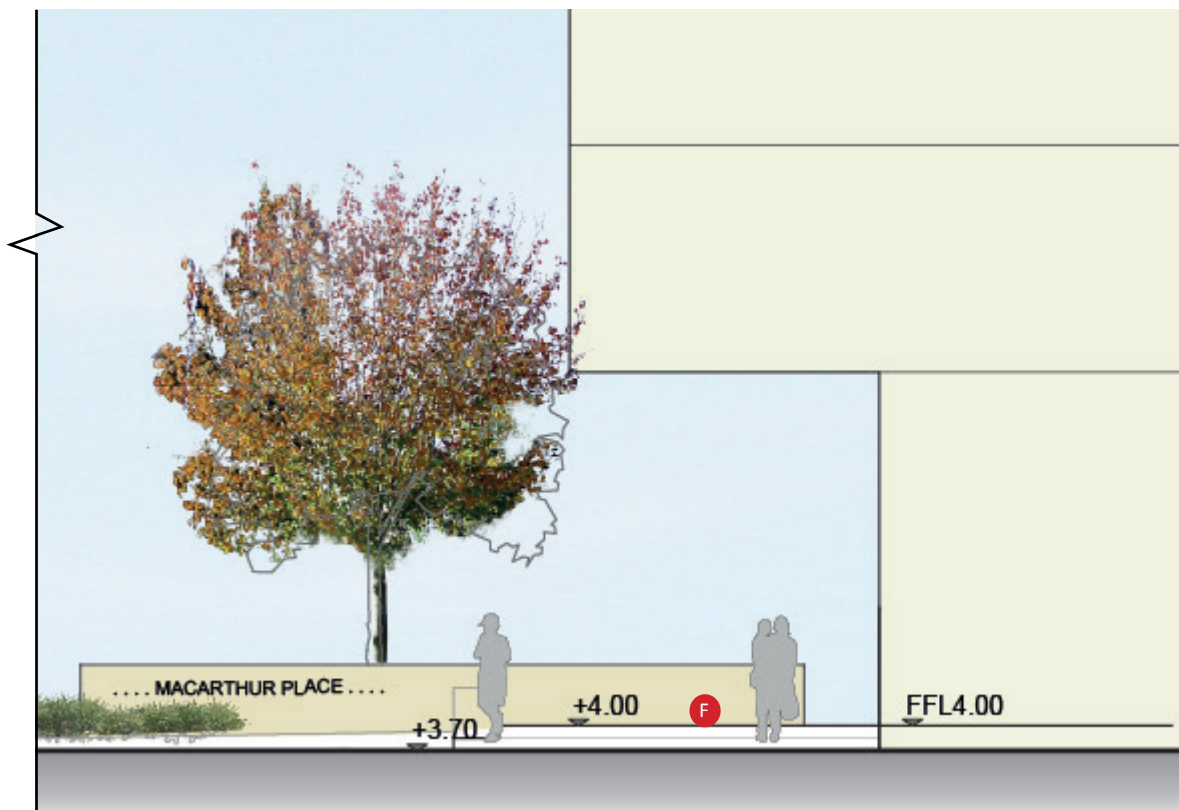
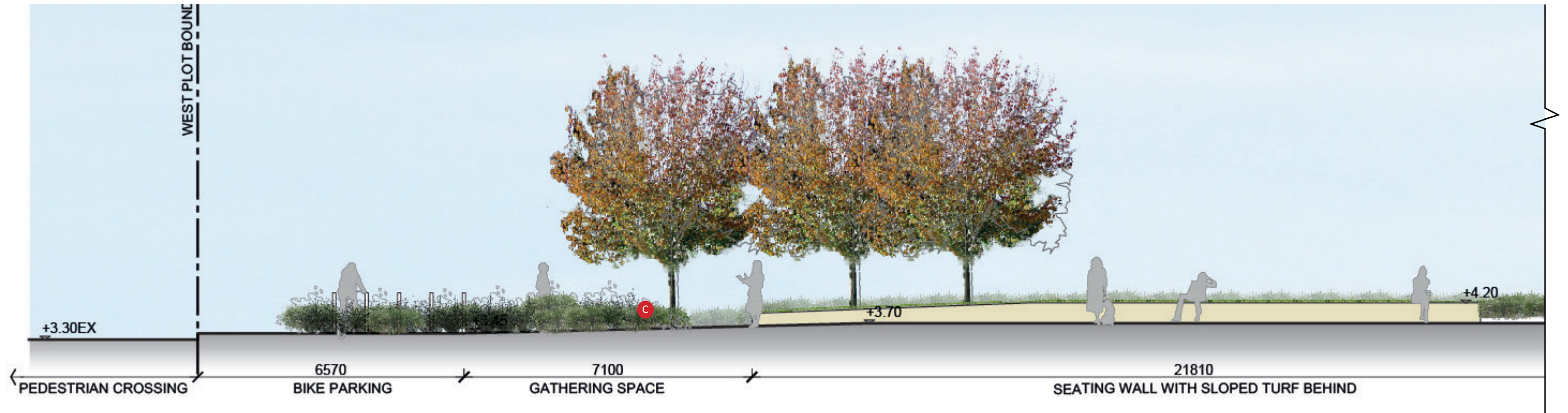


Figure 3.6.3 Section 3 - Macarthur Place



Figure 3.6.4 Macarthur Place Detail Plan



Figure 3.6.5 Macarthur Place Montage - Source AJC Architects

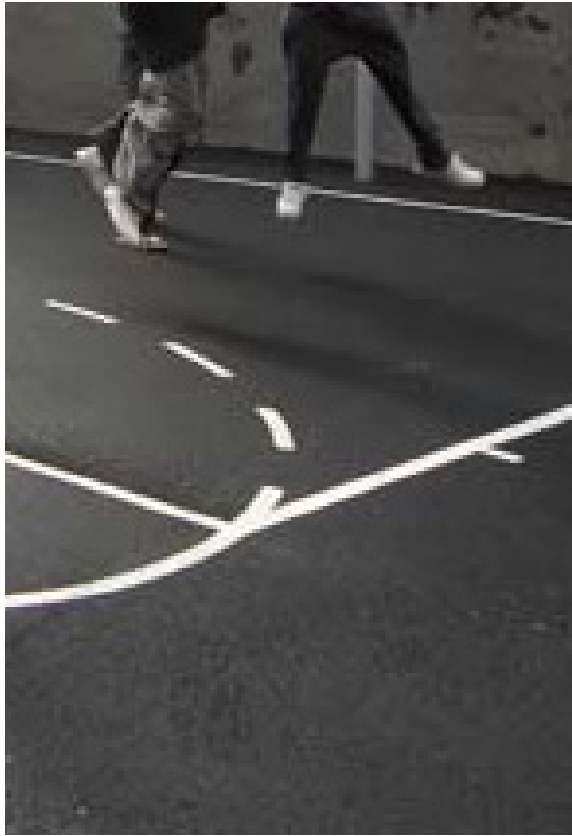
- A Turf
- B Flexible use area
- C Planting to Light Rail fence line
- D Shared pedestrian/ cycle zone
- E Darling Drive (Refer Hyder drawing PD-CI 4301)
- F Paved entry forecourt



1.



2.



3.



4.



5.



6.



7.

Figure 3.6.6 Macarthur Place Character Images: 1- Insitu concrete paving, 2. Cast concrete benches, 3.- Multi use asphalt surface, 4. - Decomposed granite and seating , 5 -Decomposed granite, 6,7 - Seat wall and turf