Transport
for NSW

Central Precinct Renewal Program

State Significant Precinct Study—Aeronautical Report (RTS Addendum)

July 2022

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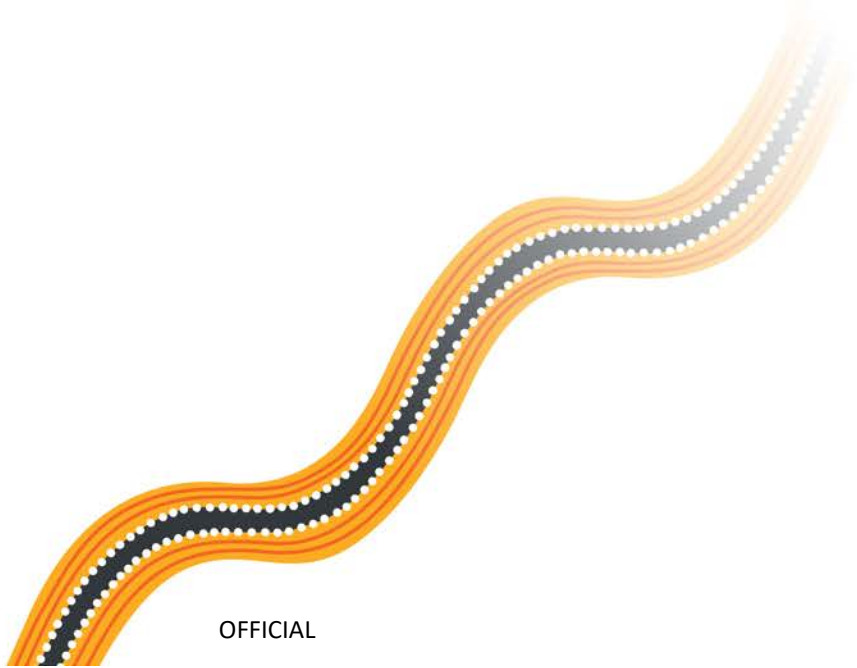
NSW GOVERNMENT

Acknowledgement of Country

We respectfully acknowledge the Traditional Custodians of the Central Precinct, the Gadigal and recognise the importance of place to Aboriginal people and their continuing connection to Country and culture. We pay our respect to Elders past, present and emerging.



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Document control

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Branch	IP Development
Division	Infrastructure and Place (IP)

Versions

Version	Amendment notes
1.0	Final for CPRP Public Exhibition 2022
2.0	Final for DPE Submission
3.0	Issued to TfNSW for Review – Standard text updated
4.0	Final

1. Introduction

The purpose of this report is to:

- Summarise the feedback received from the Public Exhibition of the SSP Study related to building heights specifically as they relate to Aeronautical Impact.
- Respond to key technical matters raised during the public exhibition to inform the Response to Submissions Report for Central Precinct.
- Assess the proposed changes to the revised scheme for Central Precinct.
- Provide additional recommendations for the proposed planning framework for Central Precinct.

This document is an addendum to the exhibited SSP Study Aeronautical Report and is intended to be read in conjunction with the exhibited report.

2. The exhibited SSP Study

The Central SSP Study and supporting documents were made available for public comment from 22 August to 4 October 2022. During the exhibition period, community members and stakeholders were invited to provide their comments and feedback on the rezoning proposal.

2.1 The exhibited proposal

The exhibited rezoning proposal included a Place Strategy, Urban Design Framework, Public Domain Strategy, draft Design Guide, Explanation of Intended Effect and supporting technical studies, which seek to enable the delivery of:

- approximately 269,500 square metres of commercial gross floor area (GFA).
- approximately 22,850 square metres of retail GFA.
- approximately 47,250 square metres of education/ tech GFA.
- approximately 14,300 square metres of community/ cultural GFA.
- approximately 84,900 square metres of residential GFA.
- approximately 53,600 square metres of hotel GFA.
- approximately 22,500 square metres of student accommodation GFA.
- 15% of new dwellings to be provided as affordable housing.
- over two hectares of new and improved publicly accessible spaces, including:
  - Central Square, a new approximately 7,000 square metre publicly accessible square located at the George Street and Pitt Street junction.
  - Central Green, a new approximately 6,000 square metre publicly accessible park located immediately south of the Sydney Terminal building.
  - Mortuary Station Plaza, an approximately 4,470 square metre publicly accessible plaza (excluding the Mortuary Station building) located at Mortuary Station.
  - Sydney Terminal building western rooftop, a 970 square metre publicly accessible space above the Terminal building roof.
  - upgrades to Eddy Avenue Plaza and Ibero-American Plaza.
- an integrated network of streets, laneways and other movement corridors, including:
  - Central Avenue, as Central Precinct's new main street
  - Devonshire Link, as Central Precinct's main east-west linking street
  - a north-south link as an intimately scaled, active laneway
  - a supporting network of other open-to-the-sky laneways generally running east-west through the Precinct.
  - a number of through-block links to provide further permeability for pedestrians.
  - an eastern colonnade having a generous, double-storey height.
  - three new active transport over-rail bridges.
  - a revitalised Goods Line.

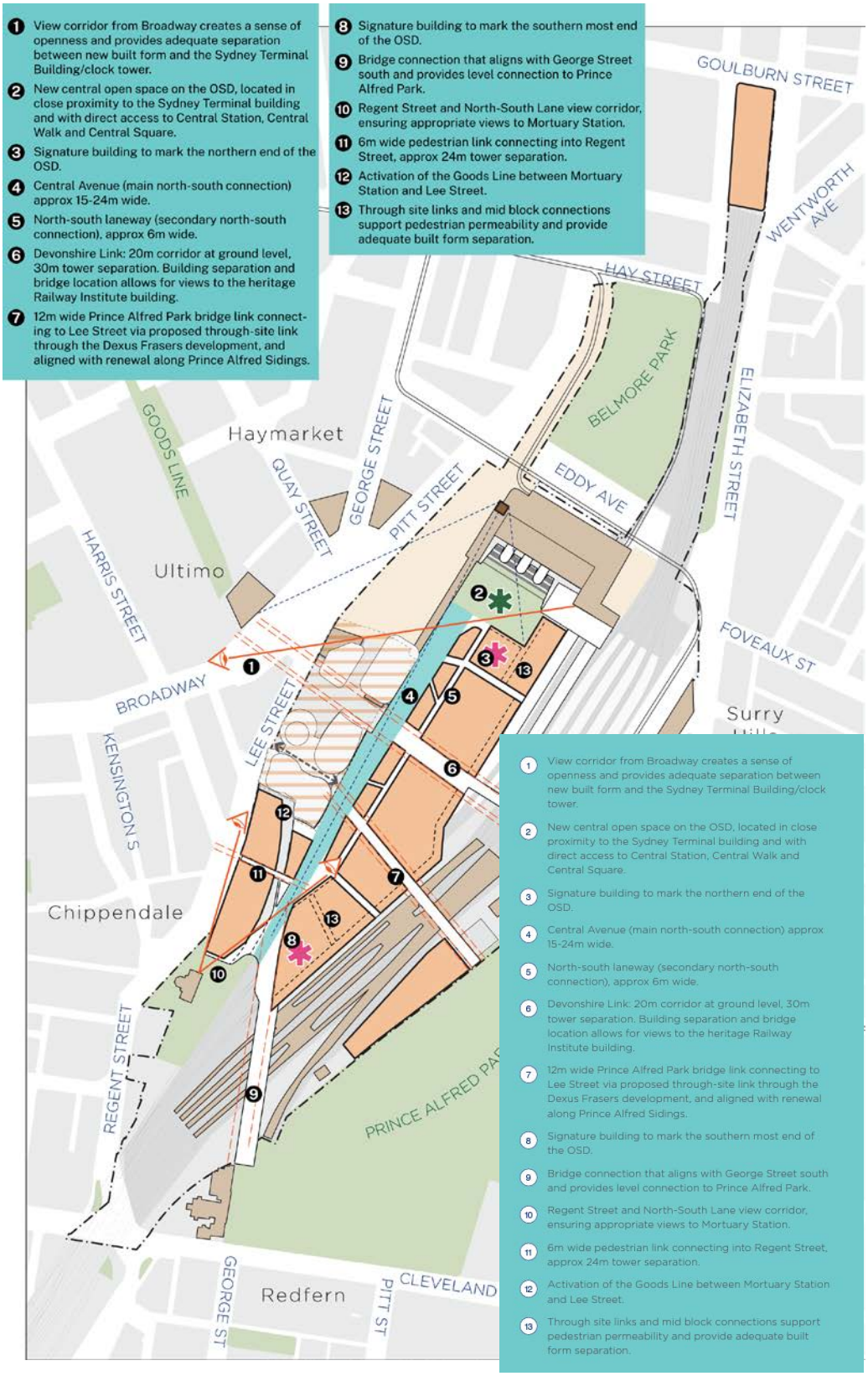


Figure 2-1 — Exhibited Urban Design Framework

Source: Architectus, 2022

3. Feedback relating to the Aeronautical Impact Assessment (AIA) received during exhibition

A total of 368 submissions were received from individuals, local council, government agencies, industry bodies, non-government organisations and interest groups. Table 3-1 below provides an overview of the feedback relating to the Aeronautical Impact Assessment based on our review of the submissions.

Table 3-1 — Summary of feedback from public exhibition relating to Aeronautical Impact

Theme	Summary of feedback
Built form and density — Exceedance of prescribed airspace	Concerns and notes about breaching the prescribed airspace of Sydney Airport. Sydney Airport noted that the height of some of the buildings proposed for certain development blocks in the Central Precinct will, if approved, penetrate Sydney Airport's prescribed airspace, including the obstacle limitation surface (OLS) and radar terrain clearance chart (RTCC) surfaces. Future development applications for any such buildings and construction cranes should be referred to Sydney Airport to enable assessment under the Airports Act 1996 (the Act) and Airports (Protection of Airspace) Regulations 1996 (the Regulations). Airservices Australia expressed the view that they would not be supportive of developments or crane operations that would exceed the current PANS-OPS and RTCC prescribed airspace levels around Sydney. They also noted that temporary exceedance (of cranes) for a period not greater than 3 months would be considered by the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA, the approving authority for applications under the Regulations) on a case-by-case basis, based on advice from Airservices, CASA and the Airport/ operators there.

4. Responses to key issues raised

The most significant issue raised by airport and aviation stakeholders was the potential infringement (penetration) of the upper limiting airspace over the site, the Radar Terrain Clearance Chart (RTCC) surfaces. In this location, these surfaces define:

- the absolute maximum height to which buildings are technically approvable as under the *Airports (Protection of Airspace) Regulations 1998* (APAR), and also
- the maximum height that, in practice, would most likely be applied as the height constraint for cranes required for construction.

Whilst there have been changes of building massing and heights as part of the Revised Scheme, the RTCC surfaces have also changed since the study report was published — the result being that the RTCC-related issues raised would in effect be negated.

Table 4-1 — Responses to Aeronautical Issues Raised

Respondent	Issue Summary	Response
Sydney Airport	Building Heights The height of some of the buildings proposed for certain development blocks in the Central Precinct will, if approved, penetrate Sydney Airport's prescribed airspace, including the obstacle limitation surface (OLS) and radar terrain clearance chart (RTCC) surfaces.	Building Heights Under the APAR buildings are permitted to infringe the relevant OLS surface, and there are many existing buildings in the Sydney CBD (and in fact between Sydney Airport and the CBD) which already penetrate the OLS. Therefore, infringement of the OLS by some buildings in Central Precinct is not considered a barrier to planning approval. None of the buildings in the Revised Scheme would penetrate the RTCC surfaces, and so this issue is negated.
	Future Building & Crane Heights Future development applications for any such buildings and construction cranes should be referred to Sydney Airport to enable assessment under the Airports Act 1996 (the Act) and Airports (Protection of Airspace) Regulations 1996 (the Regulations).	Building & Crane Height Approvability The exhibited report noted that buildings and cranes would need prior airspace height approvals, and the assessment study focused on what would and wouldn't be considered approvable under the APAR. This addendum also makes comment on the potential for approval based on assessment of the revised scheme in relation to current and future airspace constraints.

Respondent	Issue Summary	Response
Airservices Australia	Buildings & Cranes Airservices Australia expressed the view that they would not be supportive of developments or crane operations that would exceed the current PANS-OPS and RTCC prescribed airspace levels around Sydney.	Buildings & Cranes One of the key constraints for the master plan was that buildings would not exceed the PANS-OPS and RTCC prescribed airspace, and this has been observed in the revised scheme, so this aspect is not a concern. This addendum also makes comment on the potential for approval based on assessment of the revised scheme in relation to current and future airspace constraints
	Temporary Exceedance of Prescribed Airspace: 'Short-Term' Cranes They also noted that temporary exceedance (of cranes) for a period not greater than 3 months would be considered by the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA, the approving authority for applications under the Regulations) on a case-by-case basis, based on advice from Airservices, CASA and the Airport/ operators there.	Temporary Exceedance of Prescribed Airspace: 'Short-Term' Cranes The cases where this could potentially be required, for given buildings, was canvassed in the exhibited report (even though it is not required for planning approval). This addendum also makes comment on the potential need, or probable lack thereof, based on the assessment of the revised scheme in relation to current and future airspace constraints.

As long as the proposed buildings in the revised scheme would satisfy the conditions and criteria for airspace height approvability, the need to obtain prior airspace approvals for the buildings at their final design heights and for the associated construction facilities (eg, cranes) is not an issue for planning approval in itself.

Airspace height approvals under the APAR for buildings must be obtained prior to construction, as a prerequisite to or as a condition of DA consent. The feasibility of construction, taking into account likely airspace constraints of cranes required for construction of a given building, will be taken into consideration by the Commonwealth DITRDCA when assessing an application for a building height approval.

Separate applications for airspace height approval of cranes will be required prior to their respective deployments, or potentially earlier if required under DA conditions.

Note that since the original report was exhibited, there have been changes to the prescribed airspace — specifically, the RTCC surfaces over the Central Precinct —which has resulted in increased maximum airspace limits over parts of the of the Precinct that were previously constrained by a lower RTCC surface height. The consequence of this change is that there is more available airspace for cranes required for construction of three of the tallest towers. The changed impact on crane heights is discussed in this addendum in section 6.3 (p30).

5. The revised proposal

Based on the feedback received during the public exhibition of the Central Precinct rezoning proposal, a revised proposal has been prepared for DPIE's consideration as part of its assessment. The revised proposal includes an updated Urban Design Framework and Public Domain Strategy, which establishes the updated Reference Masterplan and has informed updates to the proposed planning framework for Central Precinct. The updated Reference Masterplan comprises:

- approximately 263,000 square metres of commercial gross floor area (GFA).
- approximately 24,450 square metres of retail GFA
- approximately 46,000 square metres of education/ tech GFA
- approximately 14,800square metres of community/ cultural GFA
- approximately 82,350 square metres of residential GFA
- approximately 53,000 square metres of hotel GFA.
- approximately 20,700 square metres of student accommodation GFA.
- 30% of new dwellings to be provided as affordable housing
- over two hectares of new and improved publicly accessible spaces, including:
  - Central Square, a new approximately 7,000 square metre publicly accessible open space located at the junction of George Street and Pitt Streets at street level.
  - Central Green, a new approximately 6,200 square metre publicly accessible open space located immediately south of the Sydney Terminal building at deck level, including the Sydney Terminal building western rooftop.
  - Devonshire Square, an approximately 3,700 square metre publicly accessible plaza at the junction of Central Avenue and the Devonshire link.
  - Southern Plaza, an approximately 4700 square metre publicly accessible plaza at the junction of Central Avenue and the George Street Bridge.
  - Mortuary Station Plaza, an approximately 6,500 square metre (excluding the Mortuary Station building) publicly accessible plaza located at street level at the junction of the Mortuary Station and the Goods Line.
  - upgrades to Eddy Avenue Plaza and Ibero-American Plaza.
- an integrated network of streets, laneways and other movement corridors, including:
  - Central Avenue, as Central Precinct's new main street.
  - Devonshire Link, as Central Precinct's main east-west sequence.
  - a north-south link as an intimately scaled, active laneway.
  - a supporting network of other open-to-the-sky laneways generally running east-west through the Precinct.
  - through-block links to provide further permeability for pedestrians.
  - three active transport over-rail bridges.
  - a revitalised Goods Line as an active transport corridor.

The key features of the updated Reference Masterplan, include:

- A network of new and enhanced public spaces linked together by green connections. This will include:
  - A new Central Square that will deliver on the vision for a new public square at Central Station, as one of three major public spaces within the Sydney CBD connected by a people-friendly spine along George Street.

- A Central Green (Dune Gardens) at the north of Central Precinct will create a new civic park extension of the Sydney Terminal building and a new vantage point for Central Sydney.
- A new civic space (Devonshire Square) at the proposed entry/exit point to Central Walk from the OSD, giving access to all platforms within Central Station.
- Mortuary Station Plaza at Mortuary Station will be a key public domain interface between Chippendale and the over-station development and a public link to the Goods Line.
- A reconfigured Southern Square at the southern end of the OSD deck will provide a new arrival and meeting space when coming from Redfern and a key connection to Redfern when coming from the city.
- Henry Deane Plaza which will prioritise the pedestrian experience, improving connectivity and pedestrian legibility within the Western Gateway sub-precinct and provide clear, direct links to and from Central Station and its surrounds.
- Eddy Avenue Plaza will transform into a more civic environment with improved amenity and an enhanced interface with the Sydney Terminal building.

- A new network of circulation spaces that are legible and provide for public access and use of the place. This will include:
  - Central Avenue, with a consistent minimum width of 18 metres located to provide long views of the Sydney Terminal Building clocktower. Central Avenue will be a place for people to dwell and move through while linking together a sequence of publicly accessible spaces on the OSD deck, including the Central Green, Devonshire Square and the Southern Plaza.
  - A minimum 6-metre wide north-south laneway providing an additional intimate and active link between the sequence of publicly accessible spaces on the OSD deck, and opportunities for smaller courtyard experiences.
  - Three new over-rail connections to enhance pedestrian and bicycle access to and from Surry Hills, Prince Alfred Park, Redfern and Chippendale and circulation to and through the Central Precinct.
  - The extension of public access along the Goods Line offering a new connection to Darling Harbour from Mortuary Station Plaza.
  - New vertical transportation locations throughout the precinct provide accessible vertical connections to the OSD.

The revised proposed land allocation for Central Precinct is described in Table 5-1 below.

Table 5-1 — Breakdown of allocation of land within Central Precinct

Land allocation	Proposed
Open-air rail corridor (Infrastructure)	89,781 sqm
Western Gateway	16,638 sqm
Developable area (Total)	131,593 sqm
Public Space (Including open space, squares, plazas, movement zones, streets and links)	71,603 sqm /54.4 % of Developable area
Building area	59,990 sqm / 45.6 % of Developable area
Central SSP total area	**238,012 sqm (23.8 ha)**

The revised Indicative Reference Master Plan for Central Precinct is illustrated in Figure 5-1 below.

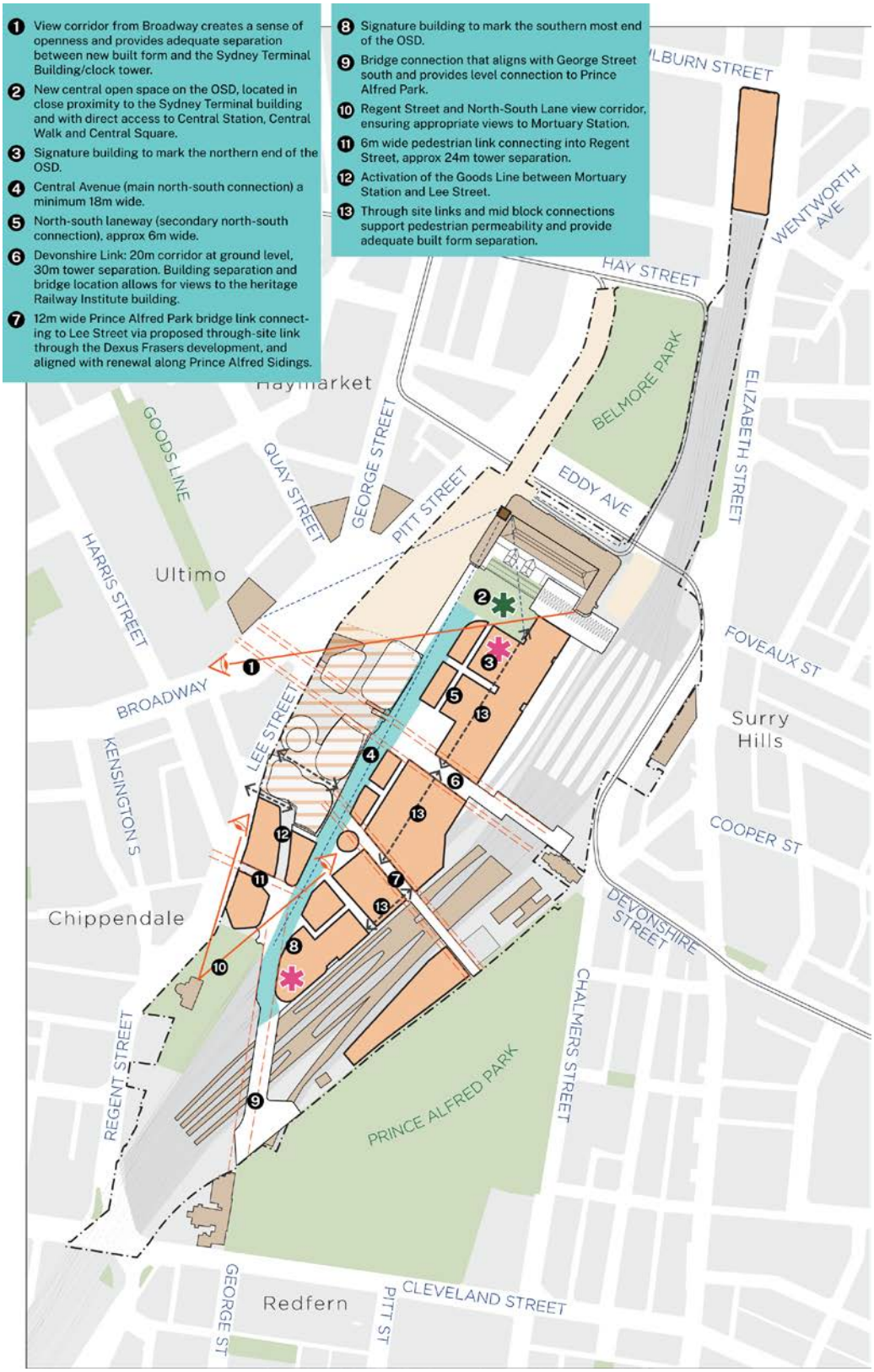


Figure 5-1 — Revised Urban Design Framework

Source: Architectus, 2022

5.1 Key changes from the exhibited proposal

The feedback on the exhibited rezoning proposal has informed subsequent amendments to the Reference Masterplan. A summary of the key changes adopted as part of the revised Reference Masterplan are described below:

- **Improved interface between Terminal and OSD**: The interface relationship between the OSD deck and the Terminal Building has been further rationalised to improve the function of the station as a major interchange and better respect the heritage of Central Railway Station. The following changes have been made:
  - a reduced spatial extent of the stairs between the OSD deck and the Terminal to now be a consolidated vertical connection (stairs, lift and escalators) to the north-eastern edge of Central Green
  - an expanded concourse level with greater access to daylight and new opportunities for landscaping that will improve the passenger experience on the platforms and in the concourse, compared to the exhibited proposal
  - incorporating an interpretation of the platform canopies to deliver a heritage-responsive and weather-protected connection.
- **Consistent 18-metre wide Central Avenue**: A consistent width of 18 metres has been provided for Central Avenue. The future role and function of this link has been revised from an avenue between the north and south of the OSD deck to now becoming a connector of a sequence of public spaces on the OSD deck.
- **Additional mid-block through-site links**: The introduction of additional mid-block connections to reinforce breaking up the podiums on the OSD deck level into interconnected smaller building forms.
- **Removal of the Eastern Colonnade**: The eastern colonnade has been removed from the revised Reference Masterplan.
- **Reconfiguration of Central Green**: The layout of Central Green has been adjusted to be a squarer geometry compared to the exhibited proposal. The primary movement path through Central Green is now focused toward the southern and eastern edges of this open space. The indicative design of Central Green has also been adjusted to improve its relationship with the Terminal Building through the incorporation of seating and greater landscaping at the northern edge of the park.
- **An enlarged Mortuary Station Plaza**: The reduction of the podium building envelope of the Regent Street Sidings building brought about through changes to the bus layover and basement entry /exit pathways provide for an enlarged public space at Mortuary Station Plaza by 2,030 square metres to a total area of 6,500 square metres. The increase in the size of this public space also presents the opportunity to retain the existing fig tree at Mortuary Station and provide a new playground that is accessible to the broader community.
- **Devonshire Square**: A new square of approximately 2,700 square metres has been included into the revised Reference masterplan at the junction of Central Avenue and the Devonshire link, which will provide a new civic space at the entry point to the proposed extended Central Walk. (Central Walk will provide access to all of the rail platforms in Central).
- **Southern Plaza**: A new reconfigured civic space of approximately 4,700 square metres at the southern end of Central Avenue, providing a new arrival and meeting space when coming from the south. Within the Southern Plaza, there is the potential for a marker building that is designed with a Connecting with Country focus.
- **Regent Street Sidings**: The podium envelope at Regent Street Sidings has been further rationalised to improve the integration between the OSD deck level and Regent Street

Sidings, the Goods Line and Mortuary Station Plaza. This has been through the following changes:

- undergrounding the bus layover into the basement to enable the reduction of the podium footprint.
- consolidating basement entry/exit into a single location for loading, residential parking and bus layover.
- locating basement entry/exit at a signalised intersection.
- increase the opportunity to activate the Goods Line and Mortuary Station Plaza.
- extending the OSD deck level to integrate with the podium rooftop of Regent Street Sidings.

- **Increased green cover**: An increase to the overall green cover in the precinct has been adopted as part of the revised Reference Masterplan.
- **Enhanced east-west view lines**: The indicative building envelopes on the OSD deck have been refined in location and shape to increase the separation of tower forms and enhance east-west view lines.
- **Reduction in overall GFA**: Based on refinements to the Reference Masterplan, the overall proposed GFA of Central Precinct has reduced by approximately 10,600 square metres.

6. Assessment

Because of the change of massing and building heights in the revised scheme, and because of a change to (increase in) the RTCC surface height limits over part of the Central Precinct, many details of the aeronautical impact assessment have changed — including minor changes to reference coordinates used, the extent of building height impact on various aspects of the prescribed airspace, and consequently some conclusions about airspace height approvability for some of the taller buildings (taking into account implications of likely future crane heights).

Because of the extent of the change in results, it is impractical to reference every change. Instead, except where explicitly stated otherwise herein, this section should be assumed to supersede the following sections in the exhibited report:

7. Aeronautical Impact Context
8. Analysis
9. Crane Considerations

6.1 Aeronautical Impact Context

6.1.1 Scope & Extent of Updated Aeronautical Assessment

This addendum refers to the Revised Scheme, as described in section 5 (p11).

6.1.2 Site Location relative to Sydney Airport

Unchanged — refer to this part of section 7 in the exhibited report.

6.1.3 Methodology

Unchanged on the whole — refer to this part of section 7 in the exhibited report.

The only exception is that the planned Sunsetting of the Airports (Protection of Airspace) Regulations 1996 has been deferred from 1st April 2024 to 1st April 2025[1].

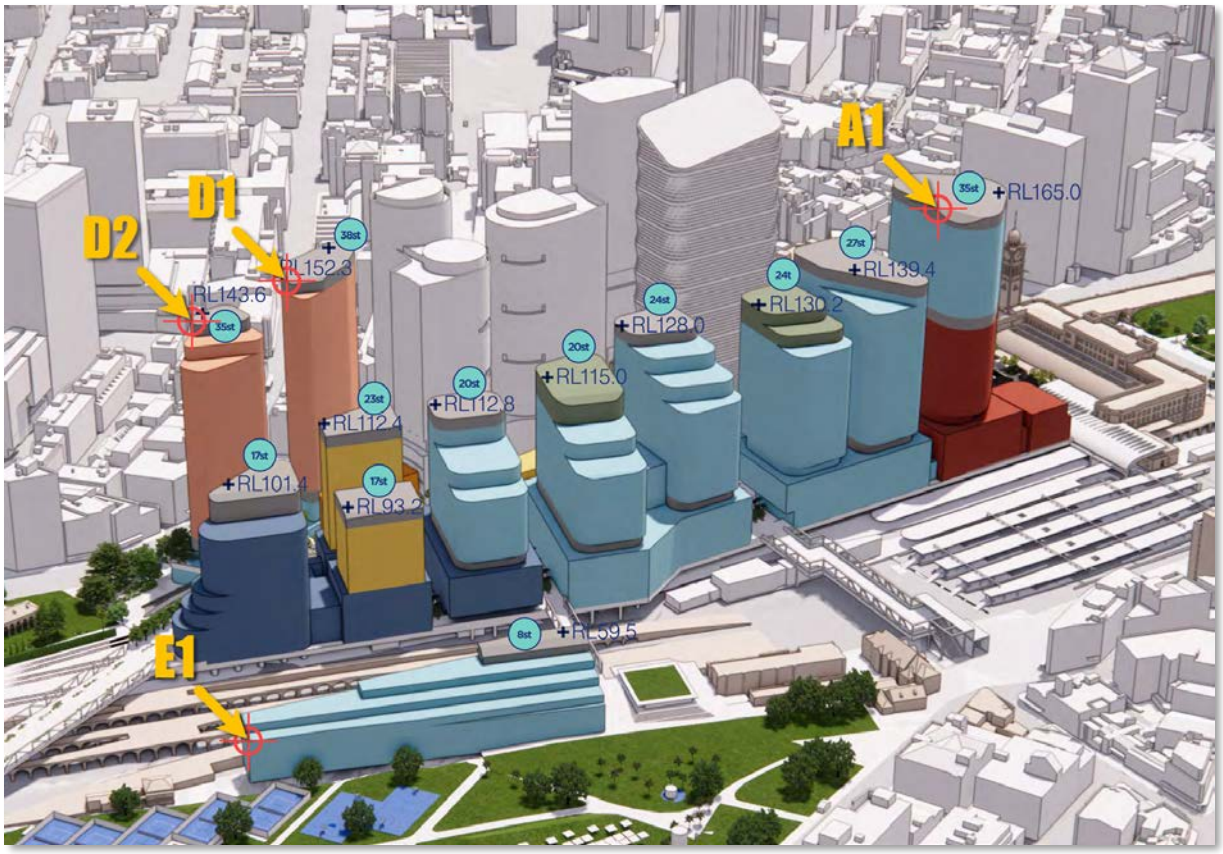
6.1.4 Key Reference Points used for Analysis

The key reference points for the site in relation to Sydney Airport remains unchanged. However, because of the change of massing (shape and height) of some the proposed buildings, the Key Reference Points for various buildings have been updated — as depicted below in Figure 6-1 and detailed in Table 6-1.

1 https://www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-legislation-regulation-policy/sunsetting-aviation-legislation

Figure 6-1 — Key Reference Points Used for Assessment of the Master Plan

Source: Architectus and Strategic Airspace



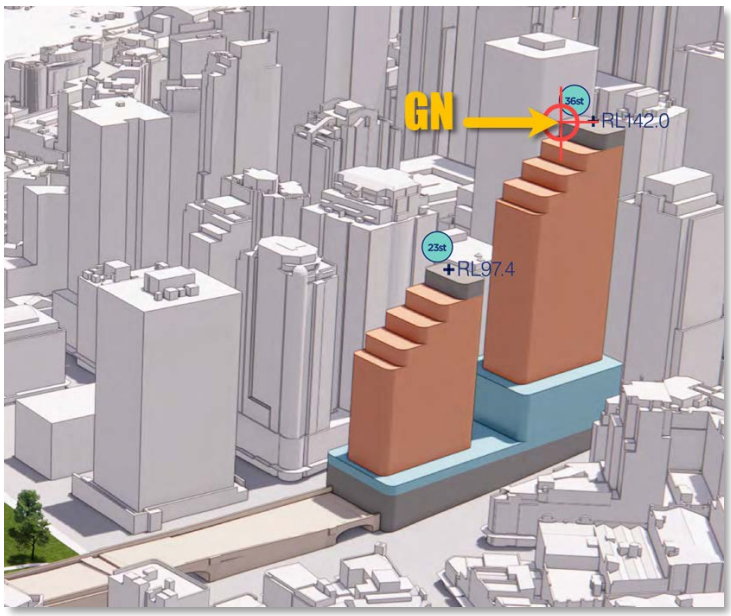


Table 6-1 — Revised Assessment Reference Points, Coordinates & Heights (Tower Buildings)

Key Reference Points	Point	Assessment Heights (m AHD)*	WGS84 Geographic Coordinates	GDA94 Coordinates (Zone 56)
SW corner of tower envelope, max height of tallest building overall	**A1**	**165.0**	**33° 53' 02.20" S 151° 12' 21.55" E**	**334091.285 E 6249263.475 S**
SW corner of plant room, max height of tallest building in Regent Street Sidings precinct	**D1**	152.3	33° 53' 07.96" S 151° 12' 11.71" E	333841.704 E 6249081.764 S
SW corner of plant room, max height of high rise building nearest to YSSY	**D2**	143.6	33° 53' 09.33" S 151° 12' 10.70" E	333816.342 E 6249039.068 S
SW corner of roof, & Site Reference Point	**E1**	45.9	33° 53' 14.72" S 151° 12' 15.17" E	333934.224 S 6248875.005 E
SW corner of plant room, max height of tallest building in Goulburn Car Park precinct	**GN**	142.0	33° 52' 42.98" S 151° 12' 31.62" E	334339.876 S 6249860.013 E

* *Assessment Heights — Indicative Max RLs of the Proposed Tower Envelopes*

- *It is assumed that the top heights of the masterplan proposal are top of building envelope heights, inclusive of all lift and plant overruns, rooftop furniture and vegetation, signage and antennae.*
- *Heights expressed in Metres Australian Height Datum (AHD)*

6.2 Analysis

6.2.1 Sydney Airport's Prescribed Airspace & the Master Plan 2039

Unchanged — refer to this part of section 8.1 in the exhibited report.

6.2.2 OLS Analysis

As a result of the revised proposal, there are only minor changes in the OLS height impact.

As in the exhibited report, all but the three tallest tower buildings in the Revised Scheme remain below the OLS — only the A1, D1 and D2 towers penetrate the OLS. Table 6-2 below provides an indication of the extent of OLS infringement.

The low and mid-rise buildings will not infringe the OLS and therefore would not require approval under the APAR.

Table 6-2 — OLS Height Impact & APAR Application Implications

		OLS Height		
Location	*Assessment Height (m AHD)*	*Surface Height (m AHD)*	*Clearance / Infringement*	*Approvability Comment*
Central Precinct SSP (Revised Scheme)		Range 127.1 – 156.0	- 18.02 or lesser infringe-ment	Buildings which infringe the OLS require prior approval under APAR.

Location	Assessment Height (m AHD)	OLS Height: Surface Height (m AHD)	OLS Height: Clearance / Infringement	Approvability Comment
The 4 Tallest Towers				
GN	142.0	156.00	14.00	No prior approval required
A1	165.0	148.06	**- 16.94**	
D1	152.3	134.28	**- 18.02**	Largest infringement of OLS
D2	143.6	131.80	**- 11.80**	

Figure 6-2 — The Revised Scheme in relation to the OLS for Sydney Airport with surface heights indicated for Key Points

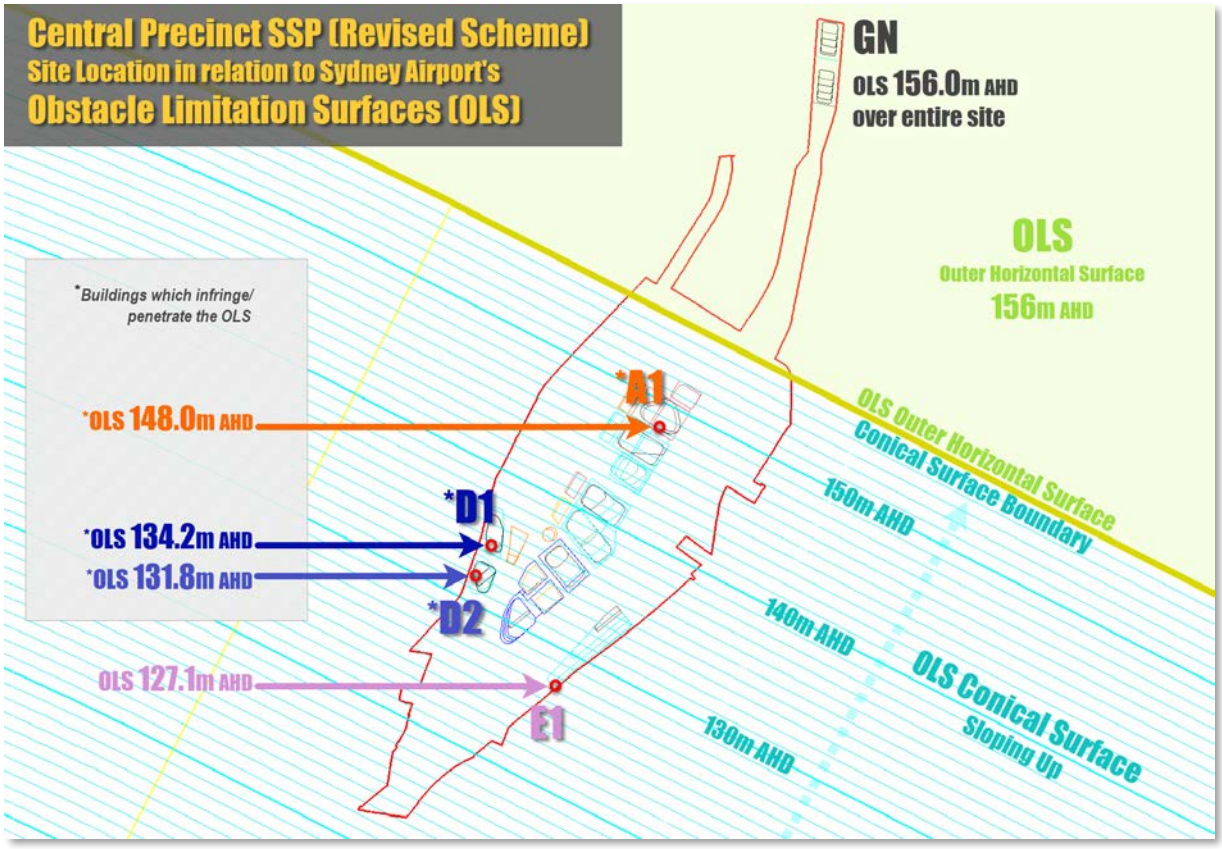
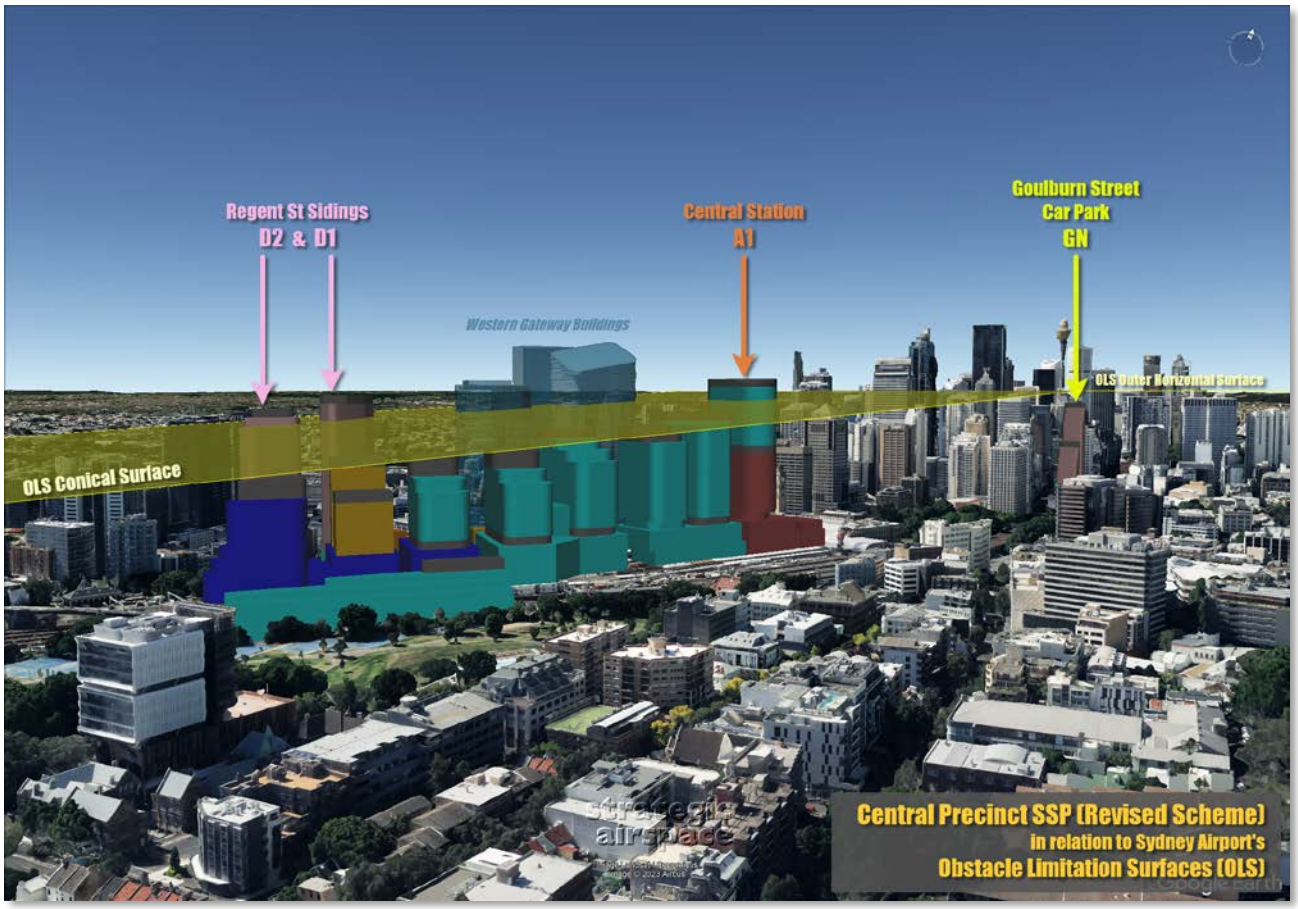


Figure 6-3 — Revised Scheme in 3D and the OLS Overlay (Viewed from the South-East)



6.2.3 PANS-OPS Analysis

As a result of the revised proposal, there are only minor changes in the impact on PANS-OPS surfaces.

As in the exhibited report, all the tower remain well below the PANS-OPS surfaces. Table 6-3 below provides an indication of the clearances from the PANS-OPS surfaces.

There have been no significant changes to the published procedures since the exhibited report, as such all the clearances have only changed slightly due to minor shifts in tower locations and heights.

Table 6-3 — Sydney (YSSY) PANS-OPS Height Limit Summary

Procedure	Height Limit (m AHD) at E1	Description
Approaches and Missed Approaches to all Runways	≥ 259.1	**The height clearance shown here is based on the Revised Scheme** As for the exhibited report based on the master plan before it was revised, most limiting procedure is the RWY34R ILS CAT I SA missed approach, which is a sloping surface with its lowest point over the site at assessment point E1.
Departures	≥ 261.5	Clearance based on the Revised Scheme.
Circling Area	N/A	Unchanged — refer to the exhibited report
Minimum Sector Altitude (MSA)	340	Unchanged — refer to the exhibited report
STARs	> 340	Unchanged — refer to the exhibited report

6.2.3.1 ”Area” Procedures

Unchanged — refer to Section 8.3.1 of the exhibited report.

6.2.3.2 Instrument Approaches & Missed Approaches

As the surfaces slope over the site, the minor change in the footprint of the revised scheme results in minor changes to the heights of the surfaces over the revised reference points. The changes are considered insignificant at up to 0.4m.

The limiting heights and the impact in relation to the key tall buildings are summarised in Table 6-4 below. Clearance information for all buildings can be found in the Appendices, Section 18.4 (p35).

Table 6-4 — Summary of Limiting PANS-OPS APPROACH Surface Heights & Height Clearances

		PANS-OPS Approach Surfaces		
Reference Point	*Assessment Height (m AHD)*	*Procedure*	*Surface Height*	*Clearance / Infringement*
GN	142.0	RWY 34R ILS MA	292.1	150.1
A1	**165.0**	**RWY 34R ILS MA**	**272.0**	**107.0**
D1	152.3	RWY 34R ILS MA	266.4	114.1
D2	143.6	RWY 34R ILS MA	265.0	121.4
E1	45.9	RWY 34R ILS MA	259.1	213.2

6.2.3.3 Departures

As the surfaces slope over the site, the minor change in the footprint of the revised scheme results in minor changes to the heights of the surfaces over the revised reference points. The changes are considered insignificant at up to 1.4m.

The limiting departure surface heights and the impact in relation to the revised scheme are depicted in Table 6-5 below.

Table 6-5 — Summary of Limiting PANS-OPS DEPARTURE Surface Heights & Height Clearances

		PANS-OPS Departure Surfaces		
Location	*Assessment Height (m AHD)*	*Procedure*	*Surface Height*	*Clearance / Infringement*
GN	142.0	Radar Dep RWY07	310.9	168.9
A1	**165.0**	**Radar Dep RWY34R**	**281.5**	**116.5**
D1	152.3	Radar Dep RWY34R	270.2	117.9
D2	143.6	Radar Dep RWY34R	267.9	124.3
E1	45.9	Radar Dep RWY34R	261.5	215.6

6.2.4 Other Assessment Considerations

The following table provides a brief assessment of other considerations.

Table 6-6 — Other Assessable Height Limitations — including the RTCC MVA Limit

Procedure	Height Limit (m AHD)	Description
Radar Terrain Clearance Chart (RTCC)	**North (Majority): 243.8** **Southern Portion: 152.4**	**The area of coverage of the RTCC surfaces over the site has changed, effectively increasing the max height limits over Tower Buildings A1, D1 & D2 by 91.4m. This is of benefit to the planning proposal.** Refer Section 6.2.4.1 and Figure 6-4 (p25), and additionally Figure 6-729).
Communications & Navigation Infrastructure Surfaces	N/A	Unchanged — refer exhibited report
Approach Lighting & VGSI Surfaces	N/A	Unchanged — refer exhibited report
Airline One-Engine Inoperative Procedures	N/A	Unchanged — refer exhibited report
External Lighting & Façade Reflectivity	N/A	Unchanged — refer exhibited report
Wind Shear & Turbulence	N/A	Unchanged — refer exhibited report
Helicopter Procedures related to the Nearest Strategic Helicopter Landing Site (SHLS)	N/A	Unchanged — refer exhibited report Refer to Figure 6-8 below (p26) for a 3D image showing the Revised Scheme in relation to the helicopter route.

There are no other considerations that might limit the building height at the project site.

6.2.4.1 Radar Terrain Clearance Chart (RTCC) Surfaces

The coverage area of the two RTCC surfaces over the Central Precinct have been changed since the time of the exhibited report (the amended became effective February 2023).

This change resulted in the area of the higher RTCC surface (243.8m AHD) being extended further to the south, with the new coverage area extending over all of the taller towers. Previously Buildings D1 and D2 in the Regent Street Sidings sub-precinct were subject to the lower RTCC surface (152.4m AHD), which meant that whilst the buildings were technically permissible for a height approval under the APAR, the fact that there was little clearance between the top of those tower buildings and the RTCC meant that construction may have been difficult due to potential crane height constraints.

The 91.4m increase in the RTCC surface over those two buildings in particular removes that potential concern about crane height restrictions.

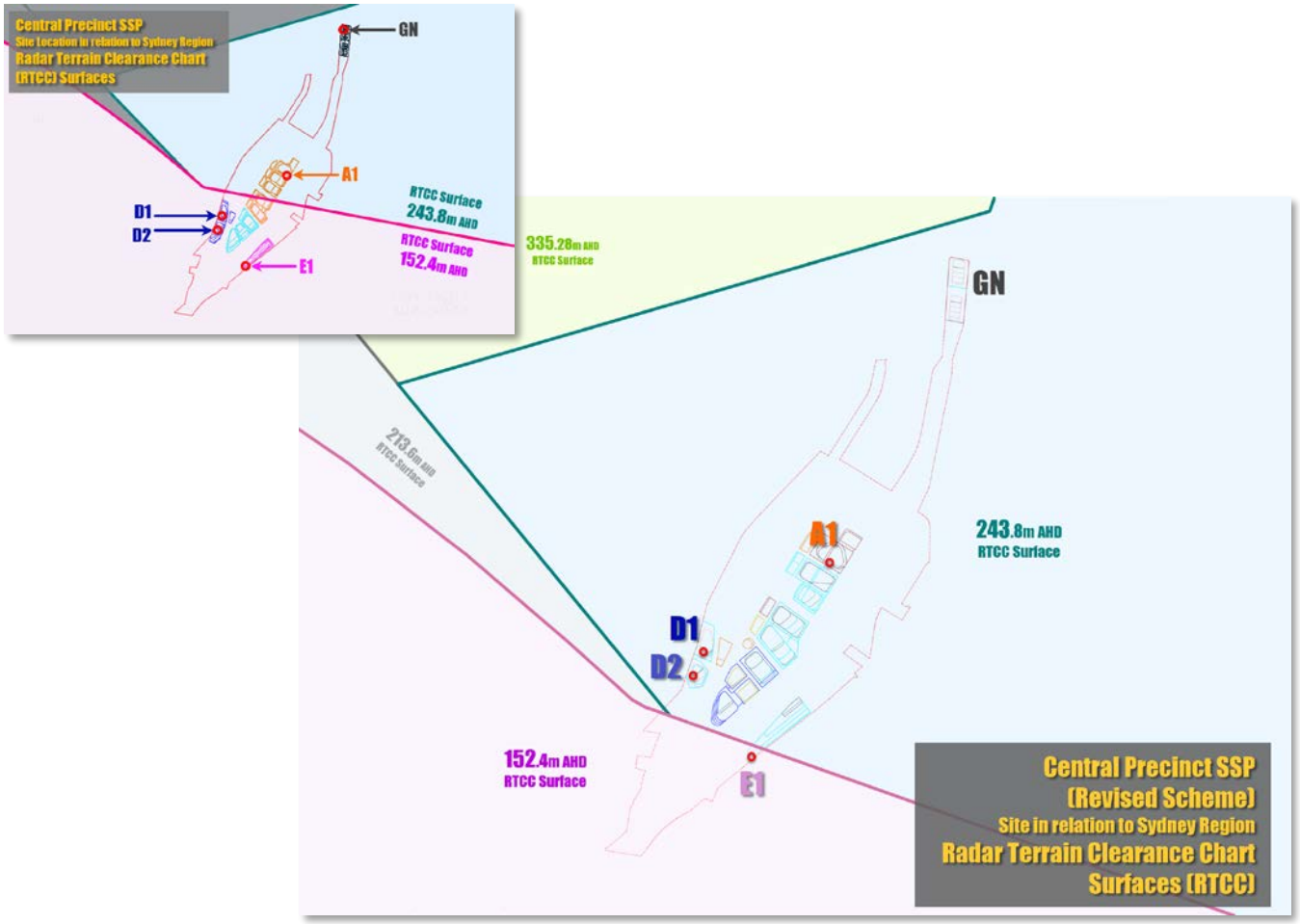
The buildings in the Southern OSD sub-precinct remain unaffected. This is further discussed in section 6.3 Crane Considerations (p30).

The RTCC before and after changes are documented in Table 6-8 below and most clearly depicted in Figure 6-4 below. Additionally, 3D rendered images of the RTCC over the Central Precinct are also provided to illustrate the change and the consequential favourable impact. Figure 6-6 (p28) is the situation before the change (as per the exhibited report), and Figure 6-7 (p29) shows the Revised Scheme and the current RTCC.

Table 6-7 — RTCC Surface Heights & Tower Building Height Clearances

		2022 RTCC		2023 RTCC Surface	
Location	*Assessment Height (m AHD)*	*Surface Height (m AHD)*		*Surface Height (m AHD)*	*Clearance / Infringement*
GN	142.0	243.8		243.8	101.8
A1	**165.0**	**243.8**		**243.8**	**78.8**
D1	152.3	152.4	⇨	243.8	91.5
D2	143.6	152.4	⇨	243.8	100.2
E1	45.9	152.4		152.4	106.5

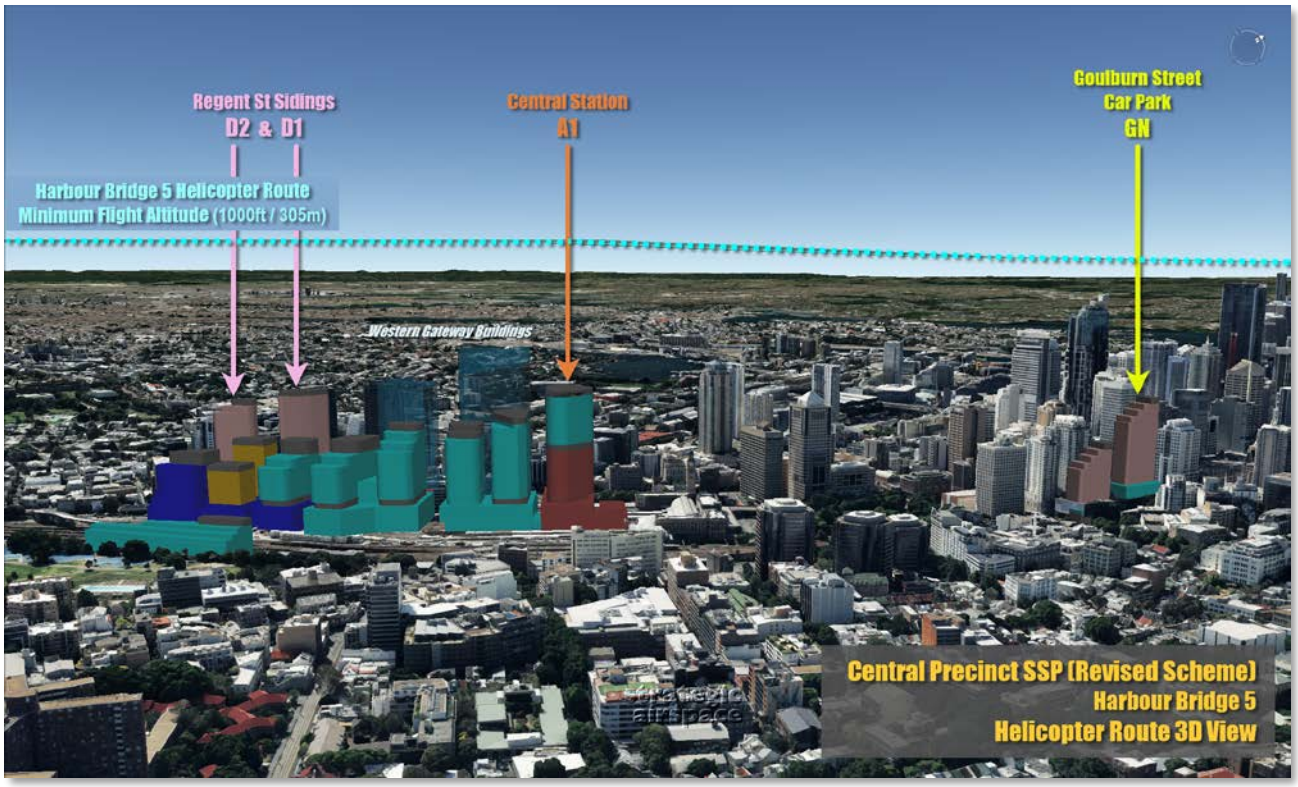
Figure 6-4 — The Precinct in relation to 2020 Sydney Radar Terrain Clearance Chart & and the current RTCC Surfaces (effective 2023)



6.2.4.2 Helicopter Flight Paths

The Harbour Bridge Five helicopter route which goes overhead the site remains unchanged — it imposes no effective height constraints on the planning proposal, nor does the Revised Scheme have any adverse impact on the flight route. Figure 6-5 below depicts the revised scheme in relation to the route in 3D for information.

Figure 6-5 — 3D View of the Harbour Bridge Five Helicopter Route over the Central Precinct (Revised Scheme)



6.2.5 Airspace Heights Summary

The key airspace heights over the Central Precinct, from lowest to highest, and their relevance to building height approvability under the APAR are summarised in the following table.

Table 6-8 — Analysis Summary — Airspace Height Constraints over the Site

Height Limits (m AHD)	Height Limit Detail*	Comment
127.1 - 156.0	**Obstacle Limitation Surface (OLS) — Conical and Outer Horizontal Surfaces**	**Overall impact unchanged** **APAR THRESHOLD HEIGHT** **The 3 tallest proposed tower buildings proposed would infringe the OLS**, and thus would **require height approval under the APAR by DITRDC**. Infringement of the OLS in this case is not considered a barrier to approval of an application under the APAR.
North (Majority): 243.8 **Southern Portion: 152.4**	**Radar Terrain Clearance Chart (RTCC) / Minimum Vector Altitude (MVA) 1500 and 1800 Sector**	**The 2023 amendment to the RTCC resulted in the northern section at the higher height extending south to cover all of the tall towers.** MAXIMUM EFFECTIVE HEIGHT CONSTRAINTS: • for BUILDINGS – all of which are below these heights • for CRANES to operate without a 3-month operating time limit.

Height Limits (m AHD)	Height Limit Detail*	Comment
≥ 259.1	PANS-OPS Approach Surface — ILS RW34R Missed Approach	**Overall impact unchanged** MAXIMUM EFFECTIVE CRANE HEIGHT CONSTRAINT
≥ 261.5	PANS-OPS Departure Surface — Radar Departure RWY 34R	Overall impact unchanged
N/A or Higher	Other Surfaces	Overall impact unchanged — higher or Not Applicable.

* *PANS-OPS Approach & Departure Surface Heights are shown at the Site Assessment Reference Point, at Building E1*

All buildings proposed in the Revised Scheme are below the maximum limiting surface heights. As noted above, only the three buildings which would infringe the OLS — buildings A1, D1 and D2 — would require prior airspace height approvals under the APAR.

For detailed information on the heights of all buildings in relation to the Prescribed Airspace, refer to Section 14.4 Revised Scheme Building Heights & Airspace Impact (p35) and Table 19-3 (p36) in the Appendices.

Figure 6-6 — 3D View of the Masterplan Proposal (Exhibited Report) & the RTCC Surfaces prior to Feb-2023 (Large Format)

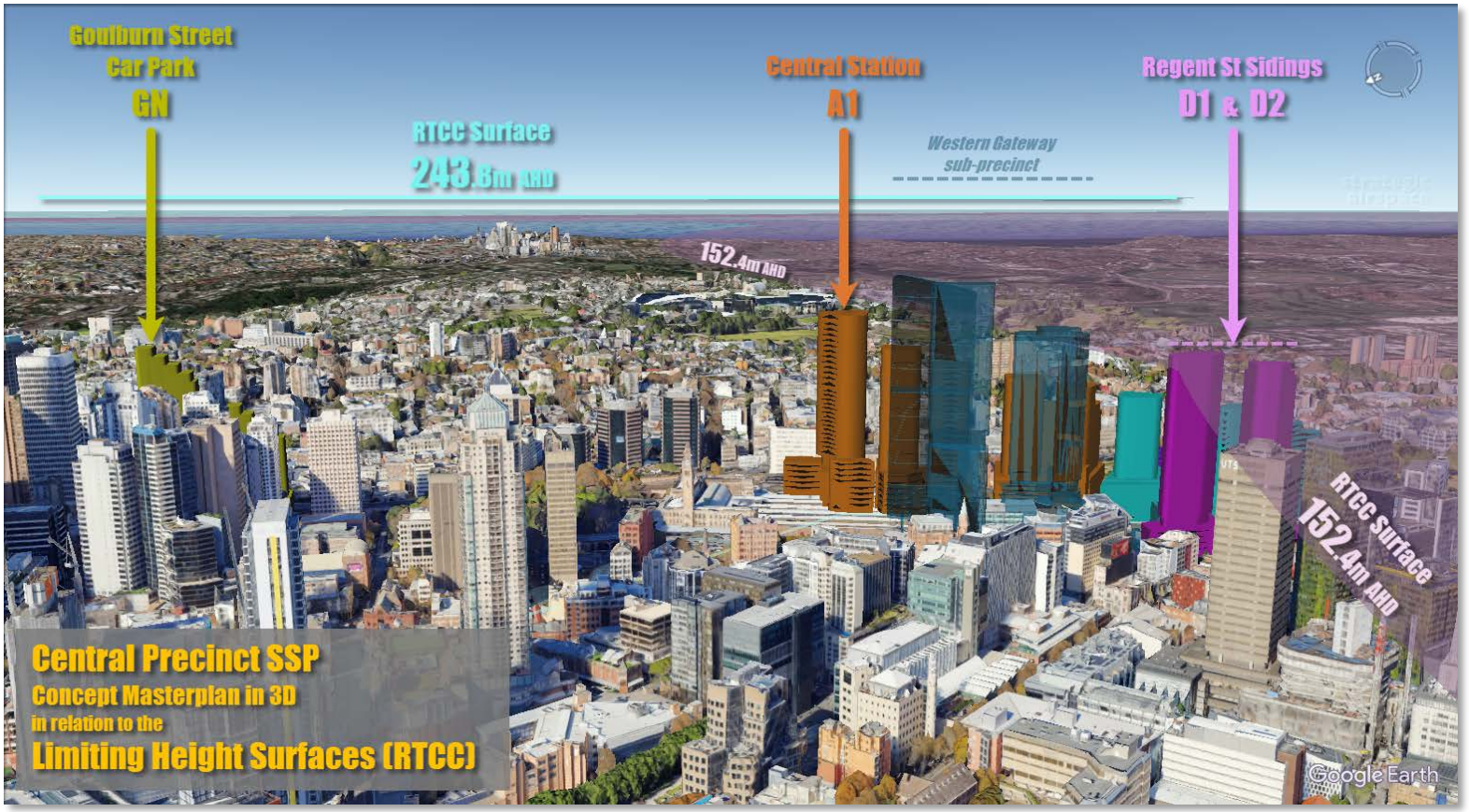
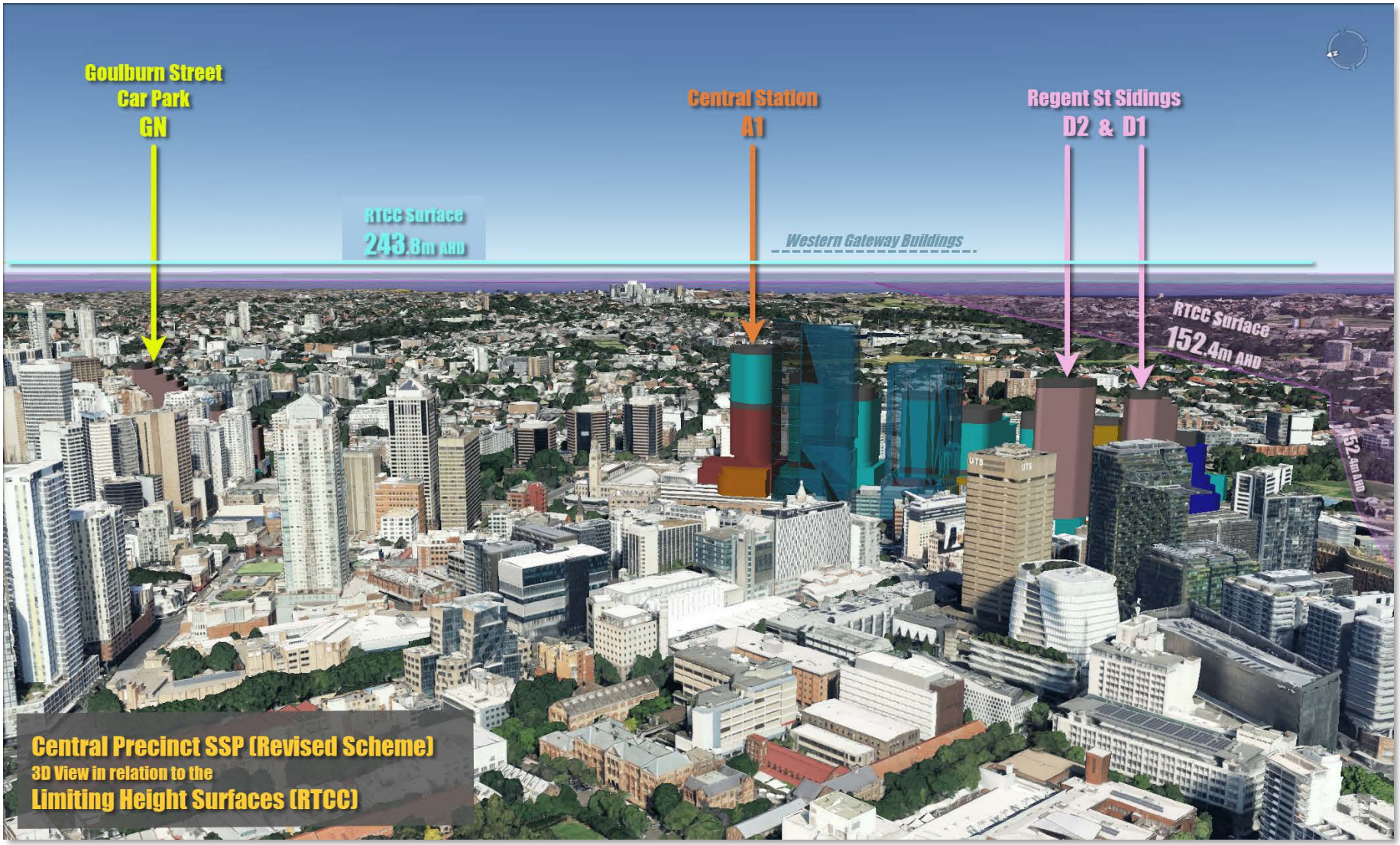


Figure 6-7 — 3D View of the Revised Scheme & Amended (2023) RTCC Surfaces (Large Format)



6.3 Crane Considerations

6.3.1 Potential Impact on Crane Heights

Significant changes in the heights available for cranes are due to the boundary changes of the two RTCC surfaces which sit over the Central Precinct (refer section 6.2.4.1, p24). The changes resulted in the maximum limiting (RTCC) surface height over the middle portion of the main Central Precinct being increased by 91.4m.

Before this airspace amendment, the lower surface height then applicable for Buildings D1 and D2 would have been a significant constraint on cranes required for completing construction of the top of those buildings.

With the height clearances between the top of buildings and the limiting RTCC airspace constraint now 78.8m (for building A1) and greater (for all other buildings), there is ample clearance for deployment of cranes to be used for construction of all of the tallest buildings in the Revised Scheme. Table 6-8 (p24) summarises the clearances above the tallest buildings.

Table 19-4 (p37) in the Appendices, Section 14.4 (p35), summarises the height clearances of all buildings in relation to the RTCC surface heights.

6.3.2 Background on Crane Approval Conditions

Unchanged — refer to Section 9.2 of the exhibited report.

7. Recommendations

In addition to the Recommendations provided in the exhibited report, it is proposed to amend the Guiding Principles for Design and Construction that were contained in the Appendices of the exhibited report.

The proposed change does not arise from the Revised Scheme, but is prompted by the changing focus and more demanding assessment (by the approving authority, the Commonwealth DITRDCA) of the feasibility of constructing buildings when considering the future airspace implications arising during construction (eg, cranes).

The section below is intended to supersede the section of the same name in the exhibited report.

7.1 Guiding Principles for Design & Construction (Amended)

Key issues to observe and consider during the design process and construction planning are:

- The maximum airspace heights considered approvable for the building(s).
- The fact that planning-related height approvals may not be consistent with maximum airspace heights.
  - Planning-related Height of Buildings maps and DA height approvals are usually to top of roof height only.
  - However, airspace height applications and approvals are based on the maximum height of the building as an RL in Metres (metres AHD) inclusive of all lift and plant overruns and rooftop things such as services, antennae, signage, Building Maintenance Units (BMUs) when deployed, and even vegetation.
- Crane heights in relation to various airspace limits and the consequential impact on crane plans and the overall construction program and costs.

It is recommended that the preliminary Construction Management Programs (CMPs) be developed earlier, and that it include more detail on cranes and crane plans, than may have been necessary in the past.

This information will be required (and should be included in an Aeronautical Impact Assessment (AIA)) to support an airspace height application under the APAR for any tower building which would infringe the OLS. The approving authority, the Commonwealth DITRDCA, will assess the feasibility of construction by considering the potential future airspace impact of cranes as part of a building airspace height application before issuing a determination for the building.

Further, because the APAR approval will most likely be a precondition of DA consent, the airspace height application should be lodged by the proponent (or on its behalf by its aeronautical consultant) no later than the date of lodgement of the DA, but ideally just prior.

Separate airspace height applications for the cranes themselves will need to be submitted separately, after DA consent but well before the time that cranes will need erection onsite.

As noted in Section 6.3 Crane Considerations (p30), knowing the airspace height constraints can be used to advantage during construction planning and costing — especially when cranes will be required to exceed the RTCC surface height for completion

of upper levels of tall tower buildings and therefore result in a 3-month duration limit and other operational conditions as part of a crane approval. Crane type selection, staging cranes, use of self-climbing tower cranes, and even use of roof-top mini mobile cranes should all be considered to facilitate the length of time cranes can be used whilst also minimising impact on airspace.

The following diagrams provide a quick visual reference as to the relationship between airspace heights and approvability implications for buildings and cranes.

Figure 7-1 — Visual Reference Guide: Airspace Surfaces & Building Approvability

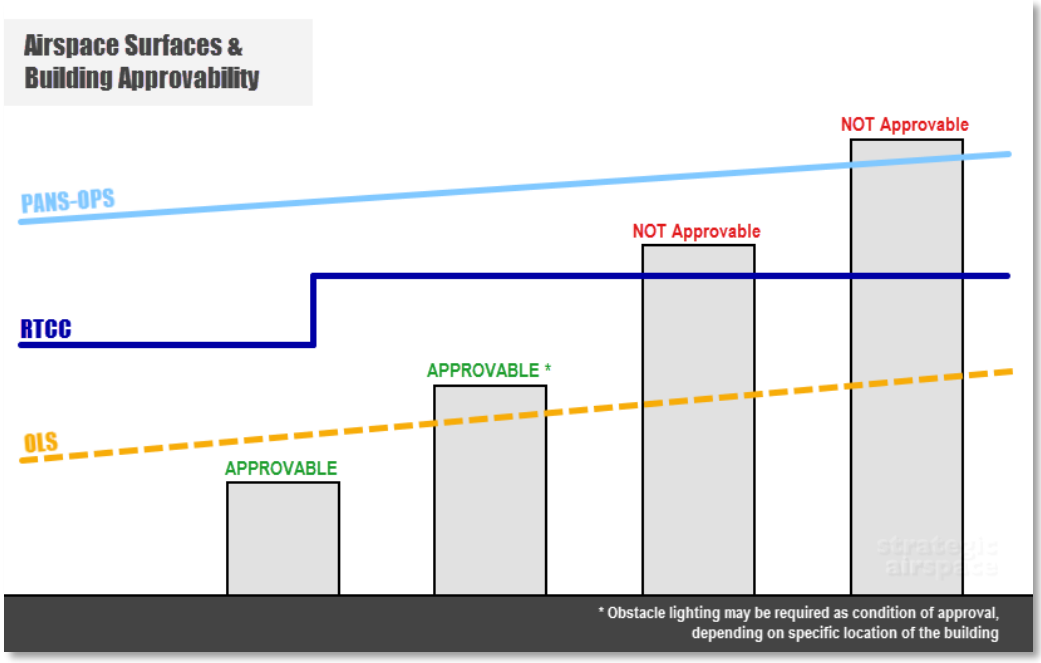
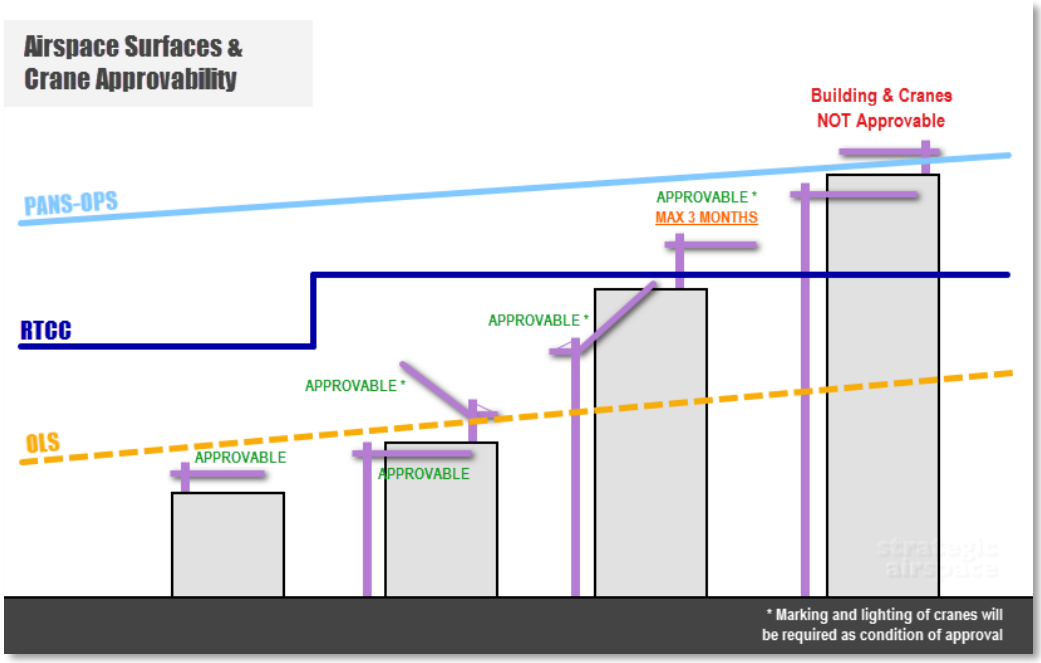


Figure 7-2 — Visual Reference Guide: Airspace Surfaces & Crane Approvability



8. Conclusion

The Revised Scheme itself resulted in little to no change of consequence in terms of aeronautical impact. However, since the time the original study report was published for public exhibition and comment, there has been a significant change in the airspace over the Central Precinct — that being amendment of the boundaries of the RTCC surface areas.

The resultant effect is higher maximum airspace height limits over three of the tallest tower buildings — Buildings A1, D1 and D2, the only buildings in the proposal that would require prior airspace height approvals. Those buildings were previously and are still at heights below the prescribed airspace, and therefore technically approvable under the APAR. However, the consequential effect of the greater airspace clearance above the buildings for cranes required for construction reduces the likelihood of future airspace impact during construction and therefore significantly increases the acceptability of those tallest buildings to the aviation authorities who would ultimately be assessing applications for airspace height approval. The same applies to future crane requirements for the other buildings which are low enough that they would not require airspace height approvals for the buildings themselves.

Given that the feasibility of construction when considering future airspace impacts during construction is now given greater scrutiny by the airspace stakeholders and the approving authority, the Commonwealth DITRDCA, the higher airspace allowances over the majority of Central Precinct have negated the concerns submitted by the airport and aviation agencies.

In conclusion, in the opinion of the authors, the Revised Scheme will have no adverse impact on the safety, regularity of efficiency of current and future air transport operations at Sydney Airport.

9. Appendices

9.1 Updated PANS-OPS Procedures Referenced

The Instrument Flight Procedures for Sydney Airport referenced during the original study were from the AIP Amendment 169, effective from 02-Dec-021 to 21-Mar-2022. Since that time there have been multiple amendments to various charts and IFPs.

When conducting the assessment of the Revised Scheme, the versions of the IFPs consulted were from the latest available AIP Amendment 176, effective from 07-Sep-2023 to 29-Nov-2023, as indicated in Table 19-1 below.

Table 14-1 — Appendix: PANS-OPS Instrument Flight Procedure Charts for Sydney Airport (AIP Amendment 176 – Effective 07-Sep-2023 to 29-Nov-2023)

SYDNEY (YSSY)

Chart	Effective Date	(Amdt No)
AERODROME CHART PAGE 1	15-Jun-2023	(Am 175)
AERODROME CHART PAGE 2	1-Dec-2022	(Am 173)
AERODROME GROUND MOVEMENT CHART	15-Jun-2023	(Am 175)
APRON CHART - INTERNATIONAL PAGE 1	7-Sep-2023	(Am 176)
APRON CHART - INTERNATIONAL PAGE 2	7-Sep-2023	(Am 176)
APRON CHART - DOMESTIC PAGE 1	7-Sep-2023	(Am 176)
APRON CHART - DOMESTIC PAGE 2	7-Sep-2023	(Am 176)
APRON CHART - DOMESTIC PAGE 3	7-Sep-2023	(Am 176)
STANDARD DOMESTIC TAXI ROUTES - ARRIVALS	16-Jun-2022	(Am 171)
STANDARD DOMESTIC TAXI ROUTES - DEPARTURES	16-Jun-2022	(Am 171)
NOISE ABATEMENT PROCEDURE PAGE 1	7-Nov-2019	(Am 161)
NOISE ABATEMENT PROCEDURE PAGE 2	1-Dec-2022	(Am 173)
NOISE ABATEMENT PROCEDURE PAGE 3	1-Dec-2022	(Am 173)
NOISE ABATEMENT PROCEDURE PAGE 4	23-Mar-2023	(Am 174)
NOISE ABATEMENT PROCEDURE PAGE 5	23-Mar-2023	(Am 174)
NOISE ABATEMENT PROCEDURE PAGE 6	1-Dec-2022	(Am 173)
NOISE ABATEMENT PROCEDURE PAGE 7	7-Nov-2019	(Am 161)
NOISE ABATEMENT PROCEDURE PAGE 8	1-Dec-2022	(Am 173)
NOISE ABATEMENT PROCEDURE PAGE 9	7-Nov-2019	(Am 161)
NOISE ABATEMENT PROCEDURE PAGE 10	7-Nov-2019	(Am 161)
AIRPORT EFFICIENCY PROCEDURES	7-Nov-2019	(Am 161)
IVA USER GUIDE PAGE 1	7-Nov-2019	(Am 161)
IVA USER GUIDE PAGE 2	7-Nov-2019	(Am 161)
PRM USER INSTRUCTIONS	17-Jun-2021	(Am 167)
SID SYDNEY TWO DEPARTURE (RADAR)	24-Mar-2022	(Am 170)
SID RWY 34L SOUTH WEST DEP (JET)	24-Mar-2022	(Am 170)
SID RWY 16R DEENA SEVEN (JET) (RNAV)	24-Mar-2022	(Am 170)
SID RWY 34R ENTRA FIVE (JET) (RNAV)	24-Mar-2022	(Am 170)
SID RWY 07 FISHA EIGHT (JET) (RNAV)	24-Mar-2022	(Am 170)
SID RWY 16R KAMPI FIVE (RNAV)	24-Mar-2022	(Am 170)
SID RWY 16L KEVIN SIX (RNAV)	24-Mar-2022	(Am 170)
SID RWY 16L ABBEY THREE (JET) (RNAV)	16-Jun-2022	(Am 171)
SID RWY 34R MARUB SIX (JET) (RNAV)	24-Mar-2022	(Am 170)
SID RWY 34L RICHMOND FIVE DEP (JET)	24-Mar-2022	(Am 170)
STAR BOREE THREE A ARRIVAL (RNAV)	24-Mar-2022	(Am 170)

Chart	Effective Date	(Amdt No)
STAR BOREE THREE P ARRIVAL (RNAV)	24-Mar-2022	(Am 170)
STAR MEPIL THREE ARRIVAL (RNAV)	24-Mar-2022	(Am 170)
STAR MARLN FIVE ARRIVAL (RNAV)	24-Mar-2022	(Am 170)
STAR ODALE SEVEN ARRIVAL (RNAV)	24-Mar-2022	(Am 170)
STAR RIVET THREE ARRIVAL (RNAV)	24-Mar-2022	(Am 170)
ILS OR LOC RWY 07	7-Nov-2019	(Am 161)
ILS OR LOC RWY 16L PAGE 1	9-Sep-2021	(Am 168)
ILS RWY 16L PAGE 2	9-Sep-2021	(Am 168)
ILS OR LOC RWY 16R PAGE 1	23-Mar-2023	(Am 174)
ILS RWY 16R PAGE 2	23-Mar-2023	(Am 174)
ILS OR LOC RWY 25	17-Jun-2021	(Am 167)
ILS OR LOC RWY 34L PAGE 1	9-Sep-2021	(Am 168)
ILS RWY 34L PAGE 2	9-Sep-2021	(Am 168)
ILS OR LOC RWY 34R PAGE 1	8-Sep-2022	(Am 172)
ILS RWY 34R PAGE 2	8-Sep-2022	(Am 172)
RNP RWY 07	9-Sep-2021	(Am 168)
RNP RWY 16L	1-Dec-2022	(Am 173)
RNP RWY 16R	8-Sep-2022	(Am 172)
RNP RWY 25	9-Sep-2021	(Am 168)
RNP RWY 34L	8-Sep-2022	(Am 172)
RNP RWY 34R	8-Sep-2022	(Am 172)
GLS RWY 07	7-Nov-2019	(Am 161)
GLS RWY 16L	23-Mar-2023	(Am 174)
GLS RWY 16R	9-Sep-2021	(Am 168)
GLS RWY 25	17-Jun-2021	(Am 167)
GLS RWY 34L	7-Sep-2023	(Am 176)
GLS RWY 34R	23-Mar-2023	(Am 174)

Last Modified: 2023-06-20
Source: AIP Book (07-Sep-2023 to 29-Nov-2023) via http://www.airservicesaustralia.com/aip/aip.asp

9.2 Helicopter Routes

No effective change.

9.3 Revised Scheme Building Heights & Airspace Impact

The tables below detail the heights of identified buildings in the masterplan and the amount by which they infringe or are clear of (below) the OLS threshold, the lowest PANS-OPS surface and the upper limiting RTCC surfaces.

Table 19-2 — Critical Height Impacts: Key Buildings

Building ID & Assessment Location		No Floors	Height m AHD	MIN HGT & Clearance (APCHs & DEPs) Surface	MIN SFC HGT	Hgt Clearance	OLS Surface Hgt OLS SFC	Hgt Clearance	RTCC Surface Hgt RTCC Surface	Hgt Clearance
GN: GoulburnCarPark N High	**GNp**	36	142.00	ILS 34R MA SA CAT I	292.11	150.11	156.00	14.00	243.84	101.84
A1: SW corner of Tower	**A1r**	35	**165.00**	ILS 34R MA SA CAT I	272.05	**107.05**	148.06	-16.94	243.84	**78.84**
D1: SW corner of Plant Room	**D1p**	38	152.30	ILS 34R MA SA CAT I	266.42	114.12	134.28	**-18.02**	243.84	91.54
D2: SW corner of Plant Room	**D2p**	35	143.60	ILS 34R MA SA CAT I	265.05	121.45	131.80	-11.80	243.84	100.24
E1: SW corner of Podium	**E1r**	5	45.90	ILS 34R MA SA CAT I	259.17	213.27	127.19	81.29	243.84	197.94

Table 19-3 — Critical Height Impacts: All Buildings

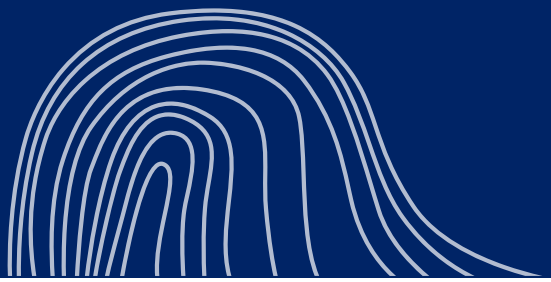
Building ID & Assessment Location		No Floors	Height m AHD	MIN HGT & Clearance (APCHs & DEPs) Surface	MIN SFC HGT	Hgt Clearance	OLS Surface Hgt OLS SFC	Hgt Clearance	RTCC Surface Hgt RTCC Surface	Hgt Clearance
A1: SW corner of Tower	**A1r**	35	165.00	ILS 34R MA SA CAT I	272.05	**107.05**	148.06	-16.94	243.84	**78.84**
A2: SW corner of Tower	**A2r**	25	129.60							
A2: SW corner of Plant Room	**A2p**	27	139.40	ILS 34R MA SA CAT I	270.94	131.54	145.53	6.13	243.84	104.44
A3: SW corner of Tower	**A3r**	24	118.20							
A3: SW corner of Plant Room*	**A3p**	26	130.20	ILS 34R MA SA CAT I	269.57	139.37	143.40	13.20	243.84	113.64
B1: SW corner of Tower	**B1r**	19	106.80							
B1: SW corner of Plant Room	**B1p**	24	128.00	ILS 34R MA SA CAT I	268.20	140.20	140.33	12.33	243.84	115.84
B2: SW corner of Tower	**B2r**	18	95.40							
B2: SW corner of Plant Room	**B2p**	22	115.00	ILS 34R MA SA CAT I	266.45	151.45	137.69	22.69	243.84	128.84
C1: SW corner of Tower	**C1r**	15	91.60							
C1: SW corner of Plant Room	**C1p**	20	112.80	ILS 34R MA SA CAT I	265.37	152.57	135.16	22.36	243.84	131.04
C3: SW corner of Tower	**C3p**	17	93.20							
C2: SW corner of Plant Room	**C2p**	23	112.40	ILS 34R MA SA CAT I	264.14	151.74	132.68	20.28	243.84	131.44
C4: SW corner of Tower	**C4r**	15	89.40							
C4: SW corner of Plant Room	**C4p**	17	101.40	ILS 34R MA SA CAT I	262.43	161.03	129.67	28.27	243.84	142.44
D1: SW corner of Tower	**D1r**	37	146.30							
D1: SW corner of Plant Room	**D1p**	38	152.30	ILS 34R MA SA CAT I	266.42	114.12	134.28	**-18.02**	243.84	91.54
D2: SW corner of Tower	**D2r**	32	131.20							
D2: SW corner of Plant Room	**D2p**	35	143.60	ILS 34R MA SA CAT I	265.05	121.45	131.80	-11.80	243.84	100.24
E1: SW corner of Podium	**E1r**	5	45.90	ILS 34R MA SA CAT I	259.17	213.27	127.19	81.29	243.84	197.94
E1: SW corner of Plant Room	**E1p**	8	59.50	ILS 34R MA SA CAT I	261.96	202.46	132.48	72.98	243.84	184.34
GS: GoulburnCarPark S Low	**GSr**	16	72.20							
GS: GoulburnCarPark S High	**GSp**	23	97.40	ILS 34R MA SA CAT I	289.74	192.34	156.00	58.60	243.84	146.44
GN: GoulburnCarPark N Low	**GNr**	29	116.80							
GN: GoulburnCarPark N High	**GNp**	36	142.00	ILS 34R MA SA CAT I	292.11	150.11	156.00	14.00	243.84	101.84

The following table documents the potential feasibility of cranes to operate without infringing the RTCC surface, based on the height differences between the top of the building envelope (roof top and plant overrun). 'No Impact' is assumed where there is a clearance of more than 60m.

Table 19-4 — Assessment of Potential Crane Height Impact: All Buildings

Building ID & Assessment Location		No Floors	Height m AHD	RTCC Surface		Crane Impact
				RTCC Surface Hgt	Hgt Clearance	Potential Crane Impact*
A1: SW corner of Tower	**A1r**	35	165.00	243.84	**78.84**	No
A2: SW corner of Tower	**A2r**	25	129.60	243.84	114.24	No
A2: SW corner of Plant Room	**A2p**	27	139.40	243.84	104.44	No
A3: SW corner of Tower	**A3r**	24	118.20	243.84	125.64	No
A3: SW corner of Plant Room*	**A3p**	26	130.20	243.84	113.64	No
B1: SW corner of Tower	**B1r**	19	106.80	243.84	137.04	No
B1: SW corner of Plant Room	**B1p**	24	128.00	243.84	115.84	No
B2: SW corner of Tower	**B2r**	18	95.40	243.84	148.44	No
B2: SW corner of Plant Room	**B2p**	22	115.00	243.84	128.84	No
C1: SW corner of Tower	**C1r**	15	91.60	243.84	152.24	No
C1: SW corner of Plant Room	**C1p**	20	112.80	243.84	131.04	No
C3: SW corner of Tower	**C3p**	17	93.20	243.84	150.64	No
C2: SW corner of Plant Room	**C2p**	23	112.40	243.84	131.44	No
C4: SW corner of Tower	**C4r**	15	89.40	243.84	154.44	No
C4: SW corner of Plant Room	**C4p**	17	101.40	243.84	142.44	No
D1: SW corner of Tower	**D1r**	37	146.30	243.84	97.54	No
D1: SW corner of Plant Room	**D1p**	38	152.30	243.84	91.54	No
D2: SW corner of Tower	**D2r**	32	131.20	243.84	112.64	No
D2: SW corner of Plant Room	**D2p**	35	143.60	243.84	100.24	No
E1: SW corner of Podium	**E1r**	5	45.90	243.84	197.94	No
E1: SW corner of Plant Room	**E1p**	8	59.50	243.84	184.34	No
GS: GoulburnCarPark S Low	**GSr**	16	72.20	243.84	171.64	No
GS: GoulburnCarPark S High	**GSp**	23	97.40	243.84	146.44	No
GN: GoulburnCarPark N Low	**GNr**	29	116.80	243.84	127.04	No
GN: GoulburnCarPark N High	**GNp**	36	142.00	243.84	101.84	No

* *Cranes which exceed the RTCC would be subject to a 3-month time limit & other operating conditions*



NSW GOVERNMENT