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25 March 2021

Andrew Jackson  
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Western Sydney Planning Partnership  
4 Parramatta Square  
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Dear Andrew

### **Western Sydney Draft Precinct Planning Package Comments**

Thank you for the opportunity to comment on the Draft Precinct Plans for the Initial Precincts of the Western Sydney Aerotropolis (Precinct Plans or Draft Plans). Council is involved in the Western Sydney Planning Partnership (Partnership) and continues to commend its collaborative approach. This collaboration has produced a new level of involvement across all levels of government, creating documents which support the critical role the Aerotropolis plays in the growth of Western Sydney.

Please find attached our comments on the Draft Precinct Plans. Council's comments have been outlined and grouped to align with the structure of the Precinct Plans. These views have been endorsed by Council at the Ordinary Meeting of 22 March 2021.

The economic opportunities afforded by the Aerotropolis continue to be welcomed by Council, although the cumulative impact of the various plans and studies must be reviewed holistically to ensure that development remains achievable, particularly regarding funding.

Council is collaborating with the Partnership to complete a comparative analysis of infrastructure and funding; this work is not yet complete. The Precinct Plans should not be made until there is a clear pathway for funding infrastructure delivery, including community and smart cities infrastructure, affordable housing and regenerative sustainability measures.

When the Aerotropolis SEPP was released, Council's submission identified that the lack of detail on the Environment and Recreation Zone creates uncertainty for landowners. This remains an issue for funding fair land acquisition, future ownership and maintenance.

As precinct planning is finalised, working with landowners will assist in the early and high-quality delivery of the desired outcomes for all parties, particularly the provision of open space, key access corridors and centres.

A further summary of the key matters for your consideration is provided below:

- Infrastructure costing and relationship to contributions – Ensuring that the infrastructure indicated on the Precinct Plans is identified in relation



to specific funding sources, particularly in relation to non-business as usual components. The deliverability of infrastructure also needs to be ensured. In a non-business as usual environment such as the Western Sydney Aerotropolis, there is a clear incentive to “do things differently” and to ensure that development represents best practice in the planning industry. Council encourages innovation where it leads to superior environmental outcome especially in unique situations like this where there is a new city being developed around a new international airport.

- Cooling the City - Council encourages outcomes which are consistent with the desired outcomes of Council’s Cooling the City Strategy.
- Development feasibility – Providing that development related provisions are tested against potential applications, to ensure that development remains feasible and deliverable on sites under the Precinct Plans.
- Wianamatta-South Creek – Providing clarity in relation to the future form and function of land within Wianamatta-South Creek zoned Environment and Recreation under the Aerotropolis SEPP. This should include details of future ownership, acquisition, maintenance responsibilities and funding arrangements.
- Economic impacts – Supporting the continued focus on employment opportunities provided within the Precinct Plans and ensuring that residential is not permitted in certain locations to preserve employment land.
- Consistency between technical studies and the Urban Design Reports – Providing clarifications between several the technical study findings, particularly where findings are inconsistent between reports.
- Future desired character of Luddenham Village – Ensuring that Luddenham Village becomes an integrated part of the Aerotropolis and can take advantage of the opportunities provided in the precinct. Given that this represents a unique opportunity, the sustainability of the village needs to be ensured while it’s character is retained. More work needs to be undertaken by the Western Sydney Planning Partnership (WSPP) in this regard. At the Ordinary Meeting of 22 March 2021, Councillors resolved to update our submission to include a preferred zoning for the Luddenham Village Precinct of B3 (Business) zone.
- Strategic consistency – Alignment with strategic principles in the Penrith Local Government Area (e.g. Penrith Economic Triangle), and other neighbouring strategic precincts (e.g. Western Sydney Employment Area, Greater Penrith to Eastern Creek Priority Area).
- Location and quantum of open space – Providing detail on future ownership, funding, acquisition and maintenance responsibilities for different types of open space in the Aerotropolis, as well as how this open space will relate to land within Wianamatta-South Creek. The impact on Development Contributions while considering development feasibility is an important consideration that needs to be taken in account.
- Development Application processes – Requesting further clarity regarding how future Development Applications would be assessed against the Precinct Plans, particularly with the Phase 2 Development



Control Plan still in drafting and with the Precinct Plans only providing high level guidance. Further clarity is sought on the process of future amendments to the Plans and Development Control Plan.

- Location and quantum of various road typologies – Providing detail on future costings, ownership, acquisition and maintenance responsibilities for different types of road typologies in the Aerotropolis. A particular focus on some of the larger typologies, many of which include large landscaped verges, cycle paths and other pieces of infrastructure which need to be funded.
- Sydney Science Park – Providing clarity on the future direction of planning in relation to the Sydney Science Park, which currently benefits from a number of development consents as well as a transitional provision under the Aerotropolis SEPP which allows applications to continue to be submitted under the Penrith LEP until the completion of precinct planning. It is recommended that a review of the existing Development Applications and Precinct Plans be undertaken to provide a pathway which enables these existing development consents to be recognised, and enable applications to continue to be lodged on the site, should the landowner wish to act on them. Furthermore, there is a need to reconcile current land use permissibility to make sure that the site is not disadvantaged from its current potential.
- Land ownership – Relationship to existing land ownership arrangements throughout the initial precincts and ensuring that the precinct plans consider existing land ownership impacts. Intentions for future land acquisitions must also be clarified.
- Car parking – Provision of appropriate car parking rates which reflect the nature of greenfield development in this precinct, given that initial precincts will likely be away from public transport for a period.
- Staging – Details on staging of development, infrastructure and community facilities.
- Infrastructure corridors – The relationship of the Northern Gateway site to the infrastructure corridors, including the M12 Motorway and the future Outer Sydney Orbital need to be considered to determine the best future outcome for this site.
- Farm dams – Further assessment should be completed to clarify information determining whether farm dams should be retained or removed. The Impact of dams on the operation of the airport needs to be considered carefully such as attraction of wildlife and birds that increase the chances of adverse impacts such as bird strike. This assessment should also:
  - o Assess further economic considerations, including the relationship to development footprints and cost of retaining and potentially rebuilding dams to make them safe. This includes feasibility of retention and relationship to existing funding options. This will enable achievable outcomes for dam retention.
  - o Identify how dams can be made safe, including maintenance access.



- o Provide further information on the implications of different retention classifications.
  - o Address the management strategy Sydney Water is currently preparing on the impacts of development in the area, including the importation of fill into the floodplain. This strategy should be addressed before the Plans come into effect.
- Sensitive interfaces – Ensuring appropriate and amenable interfaces are provided to areas including Twin Creeks and rural communities to the west.

At this stage, the detail in the Urban Design studies and Precinct Plans is insufficient to enable a full assessment of Development Applications to be undertaken. Further detail needed would generally be included in the Phase 2 Development Control Plan, and therefore it is requested that Development Applications not be determined in the initial precincts until the Phase 2 Development Control Plan has been exhibited and finalised.

Council welcomes the opportunity to work through the recommendations with you before the Precinct Plans are finalised. Council also looks forward to seeing how the Western Sydney Aerotropolis Phase 2 Development Control Plan aligns with the Precinct Plans and studies.

Thank you again for the opportunity to comment on these critical draft precinct plans. Please contact Abdul Cheema on 4732 8120 or [abdul.cheema@penrith.city](mailto:abdul.cheema@penrith.city) if you have any questions or wish to discuss the matters raised in this letter further.

Yours sincerely,

Natasha Borgia  
**City Planning Manager**



## Attachment A: Submission Comments

Please find council's comments below, divided into the following structure:

- General comments, applicable to the entire package.
- Comments divided into specific precincts.
- Comments relevant to specific environmental studies or matters.

If comments relate to multiple areas, these have been stated multiple times, in order to ensure that the comments get captured in accordance with the relevant documents.

### 1. General Comments

#### 1.1 Economic Impact of the Aerotropolis

Initially, Council commends the Western Sydney Planning Partnership in achieving this level of planning assessment and direction, in what has been an extremely challenging environment. The need for high quality jobs in Western Sydney is greater than ever and the release of the Draft Precinct Plans for the initial precincts is a vital step to realising this outcome. Council supports the continued focus on employment opportunities provided by the Precinct Plans, by ensuring that residential is not permitted in certain locations to preserve employment land.

#### 1.2 Economic Feasibility

In a non-business as usual environment such as the Western Sydney Aerotropolis, there is a clear incentive to "do things differently" and to ensure that development represents best practice in the planning industry. This is a clear priority; however, each innovation comes with an associated additional cost to landowners or developers, either in cost of works, cost of planning / development, land dedication or another similar matter.

The local infrastructure required by the precinct plans needs to be funded and delivered. Council has proposed a draft s7.12 contribution plan for this purpose. If the fixed levy rate sought is not approved by the Minister, there may be a funding shortfall.

#### **Recommendations:**

- Council encourages innovation where it leads to superior environmental outcomes. However, it must be ensured that economic feasibility is not compromised through many small incremental new requirements. This is particularly the case in the critical early years of the Western Sydney Aerotropolis.

#### ***Cumulative Feasibility Impact of Environmental Matters***

- Page 9 of the *Draft Market Analysis and Economic Feasibility Report* appears to state that environmental and urban design factors have not been included in the feasibility analysis, noting that "*development schemes tested are notional only; they have not been capacity, urban design or engineering tested*". This assessment should be completed and include such matters as:
  - Farm dam retention / reconstruction cost
  - Design excellence competitions, referrals and the like



- Provision of wide streets to limit urban heat impacts
- Requirement for solar panels on roof spaces
- Requirements for higher than standard environmental targets (i.e., BASIX, NABERS); and
- Circular economy requirements.
- Furthermore, some of the above environmental requirements are in environmental studies and / or it is difficult to ascertain their intended impact. There needs to be a clear rationalisation of these various environmental requirements such that they can be legible and ascertainable to relevant stakeholders. Without this, it is difficult to make a call on whether the requirements are reasonable and necessary in the circumstances.
- Ensure that the above requirements are feasible in areas such as around Luddenham Station and in the core and that these requirements can be typology tested for areas with lower employment densities.

#### ***Ensuring delivery of job targets***

- Specify whether desired jobs per hectare are to be adopted as a development standard, and what form they will be provided in if they are to be a DCP control.

#### ***Funding***

- Will existing VPA's in the Aerotropolis continue to operate, for example, the VPA for the Sydney Science Park? How will these fit in with the new, broader scope of precinct planning?
- If existing VPA's do not continue to operate, what mechanisms will be instated to ensure the outcomes the VPA's support will continue to be feasible?
- Certain infrastructure will need to be supplied through developer contributions. However, all the planned infrastructure and services may not be feasibly delivered this way.
- The mechanisms for funding each element of infrastructure in each stage of development are fundamental to the initial and ongoing success of the broader vision for the aerotropolis.
- Smart City infrastructure will enable data to be collected about the Precincts and assist with future planning, for example regarding the use of public and open space, travel in and around the precincts, as well as addressing issues such as urban heat islands. Smart City infrastructure is critical to delivery of certain aspects of the Aerotropolis, and there is currently no clear process to achieve funding and resources for enabling this vision.
- Good internet connectivity will provide a competitive edge for businesses that locate in the Aerotropolis. This element of infrastructure should be delivered as early as possible.

#### ***Cumulative feasibility impacts***

- That all considerations in the various environmental and urban design studies be assessed for consistency with one another.
- All controls should be ground-truthed.



- Stage 2 of the DCP should be drafted and the role of each piece of legislation clarified with respect to planning processes, including master planning.
- That the various study considerations which are likely to result in impacts on development profitability (i.e., margins) be assessed as a single piece of work in a capacity to pay analysis for all sites in the Precinct Plans. This includes direct financial matters such as contributions, but also indirect matters such as environmental requirements.
- Assessment will need to include consideration of which controls or considerations are flexible and may be adapted, and which are not. It is possible that this report could provide recommendations for whether certain elements of the relevant Plans should be more flexible, to enable development to flexibly adapt to the various development scenarios the Aerotropolis provides.
- That capacity analysis be divided into the specific outcomes of different urban typologies in the Aerotropolis (i.e., mixed use, commercial high density, commercial low density, etc).
- It should be ensured that the infrastructure indicated on the Precinct Plans is identified in relation to specific funding sources, particularly in relation to non-business as usual components. It is noted that the Special Infrastructure Contributions Plan currently responds to some of these needs, but not all of them. Critical elements which require funding but are not addressed by the SIC include affordable housing and smart cities infrastructure.

### 1.3 Cooling the City

#### Recommendations:

- The precinct plans should provide measurable short, medium and long-term actions to achieve targets for Cooling the City and all other emerging sustainability objectives. The plans should and identify in detail the impact that these measures will have, and monitoring methods.
- The Draft Sustainability and Heat Report needs to be followed by effective DCP controls.

### 1.4 Relationship to Development Applications

#### **Role of Precinct Planning**

Clause 41 of the Aerotropolis SEPP states the following:

*“Development consent must not be granted to development on land to which a precinct plan applies unless the consent authority is satisfied that the development is consistent with the precinct plan”*

Noting that Master Planning remains optional, this generally means that Development Applications could be determined following finalisation of the Draft Precinct Plans. The detail in the Urban Design studies combined with the Precinct Plans is insufficient to enable a full assessment of Development Applications to be undertaken.

**Recommendation:**

- Further detail which would be needed would generally be included in the Phase 2 Development Control Plan, and therefore it is requested that a position be taken that Development Applications not be determined in the initial precincts until the Phase 2 Development Control Plan has been exhibited and finalised.
- That a review of the existing Development Applications and Precinct Plans be undertaken to provide a pathway which enables existing development consents to be recognised. This is particularly recommended for land where the Sydney Science Park transitional provisions apply.
- That a review of the practical application of the controls should consider application in various scenarios within the subject area. This review should practically apply and assess all of the relevant planning controls.

***Sydney Science Park Transitional Provisions***

Additionally, the existing transitional provisions in relation to the Science Park are to have effect until the finalisation of Precinct Planning, as prescribed by Clause 52 of the Aerotropolis SEPP. Given the above issues regarding existing development consents within the Science Park, further consultation with relevant stakeholders, including the landowner, Council and other sites in the Northern Gateway would assist in enabling an appropriate and seamless transition of the Science Park.

**Recommendations:**

- That guidance be provided by the Western Sydney Planning Partnership to the effect that Development Applications should not be finalised until the finalisation of the Phase 2 Development Control Plan.

**1.5 Open space****Recommendations:*****Acquisition and Costing of Open Space***

- There is significant risk that the amount of open space identified cannot be funded using the sources of funding currently available. Council does not have the resources and must not be required to draw on general revenue to provide for the acquisition, operation and maintenance of open space in the Western Sydney Aerotropolis.
- Open space must be identified along with ownership arrangements and funding sources if it is expected to be delivered.
- There is a significant risk that landowners will be disadvantaged by open space arrangements, as there is a lack of clarity regarding the future nature of land use and operation.
- There must be a pathway to either review the rates of open space provided or provide a clear mechanism for the provision of funding for appropriate and high-quality open spaces in the new precinct. Council is currently collaborating with the Western Sydney Planning Partnership to deliver a comparative analysis; however, the precinct plans should not be made until it can be ascertained that all the intended outcomes are resourced.





### ***Nature of Open Space***

- Detailed demographic projections should inform design of targeted open space provision and uses to ensure all future potential users are catered for, and that an appropriate budget can be determined.
- Intended future land uses should be clear and distinct. Some sites have been zoned urban and then placed in the context of environmental land uses.
- Open space is supported but must demonstrate that it is required and feasible.
- That a full reconciliation of the significant open space quantum and typologies be provided to Council, such that Council and the Partnership can continue to workshop funding.
- That a schedule of obligations regarding ownership, acquisition and maintenance be developed for open space identified in the Draft Precinct Plans.
- That the priorities in Council's Open Space and Recreation Strategy be compared to the Precinct Plans to ensure that Council's minimum open space strategic objectives are being achieved.
- An overarching open space strategy is essential to deliver appropriate consideration of the above appropriate quality, location, sizing, connectivity and performance.

## **1.6 Transport**

### **Recommendation:**

- There must be a clear line of sight from the commencement of initial development under the plans to the finished product of public and active transport, given that many areas will be road-reliant at first. Piecemeal delivery, road networks taking priority, lack of funding and individual sites not sufficiently equipped or prepared to accommodate active transport will all serve to prevent the objectives of the Plans from being achieved. As such, active and public transport networks must be secured and enshrined in the controls as early as possible.

## **1.7 Road network – cost and format**

### **Recommendations:**

- Road network delivery priorities, timing, ownership, acquisition, maintenance and costings should be calculated and provided for different types of roads in the Aerotropolis. A focus should be placed on some of the larger typologies, many of which include large, landscaped verges, cycle paths and other pieces of infrastructure which need to be funded.
- Under the Western Sydney Aerotropolis, Luddenham Road will be a Major thoroughfare and will be carrying very significant amount heavy vehicles (B-Double and B-triple). The existing pavement will need to be reconstructed to the arterial standard to accommodate these traffic loadings and we recommend that it be re-classified as a state road.
- The impact of future subdivision on the Twin Creeks needs to be addressed, particularly the bridge on the Twin Creeks Drive.



- The intersection design of Mamre Road at Luddenham Road needs to be reviewed to accommodate proposed 40 – 60 metre road reserve width of Luddenham Road.
- A more detailed hierarchy of roads should be identified, which directly corresponds to delivery timing and priorities for the entire network.
- The Transport Planning and Modelling Stage 2 Report makes limited reference to the use of the Western Sydney Street Design Guidelines. Planning for the precincts should clearly identify what the guidelines inform and how, to demonstrate consistency.

### 1.8 Car Parking and Street Widths

The precinct guidelines aim to encourage use of public and active transport to encourage modal shift. To this end, car parking is minimised.

The Western Sydney Aerotropolis Transport Planning and Modelling Stage 2 Report identifies that the number of jobs and residents planned in the five initial Aerotropolis precincts is anticipated to be relatively low at first, meaning:

*“walking and cycling are likely to be less attractive mode choices for shorter trips in the five initial Aerotropolis precincts. However, the development of an integrated multimodal transport network is expected to embed travel patterns early and achieve mode share targets beyond business as usual.”*

#### **Recommendations:**

- Acknowledgement be included in the Precinct Planning Report that car parking is required in the early phases of the Aerotropolis to support first movers and freight vehicles.
- That the approach be moved from “limiting private vehicle use from Day 1” to “responding to existing movement patterns in Western Sydney, whilst not prohibiting future public and active transport options”.
- Design elements such as carpark roof heights to allow for conversion to other uses once mode share targets are feasible. This will be far more effective than limiting car parking numbers.

### 1.9 Land Ownership

The relationship to existing land ownership arrangements throughout the initial precincts should be carefully considered to ensure that the precinct plans consider how the existing land ownership contributes to the ability for precinct plans to be achieved.

#### **Recommendations:**

- Careful and collaborative consultation with all landowners throughout preparation and implementation of the Plans, which involves landowners and State and Council stakeholders, to ensure follow-through of agreements and that objectives are achieved in the long term.
- A review of the Precinct Plans, particularly the Northern Gateway Precinct Plan, should be undertaken to identify opportunities for changes to the boundaries to reflect land ownership boundaries.

- Ensure that development can be delivered in a manner which generally aligns with what the development industry can achieve by consulting in detail with landowners.
- The detailed comments in Part 2 should be adopted.

### 1.10 Staging

#### Recommendations:

- Council officers generally support the broad staging plans. The significant number of Stage 1 areas in the Northern Gateway, as well as the identified Stage 1 areas in Luddenham Village and the northern part of Badgerys Creek are welcome.
- There should be a review of specific connections or facilities, which may not be only in 'Stage 1' nominated areas, which can provide significant benefits to the region. Examples of this include:
  - Connections across infrastructure corridors
  - Connections across environmental corridors
  - Connections between key roads, and
  - Open space and community facilities which will be required for initial populations.
- There should be avenues for specific sites to be accelerated in this phasing if landowners come forward with Master Plans, or other forms of high-level solutions to aligning growth with infrastructure.
- Stage 1 areas are fully assessed to confirm appropriateness of development in initial stages. 'Substages' be provided which reflect an economic and orderly rollout of initial precincts. This will make it clear which roads, open space areas, key sites or the like should be prioritised.
- Criteria are provided to enable key pieces of infrastructure to be delivered which may not be included in Stage 1 areas but have potential to provide significant regional benefits to the Aerotropolis.

### 1.11 Strategic integration

#### Recommendations:

##### ***Penrith Economic Triangle***

- Council requests that a review be undertaken, particularly against the Northern Gateway, of the key strategic areas of the Penrith Local Government Area identified in the *Penrith Local Strategic Planning Statement* (Figure 1) and the future *North South Corridor Strategy* before finalisation of Aerotropolis Precinct Planning. Delivery of these plans should be parallel to delivery of strategic work for the North-South Rail corridor and East-West Corridor strategies.

##### ***Mulgoa Valley***

- In-depth local character and economic context analysis should inform all planning decisions which may affect Mulgoa. Council is in the process of preparing strategic works which may assist with this.

##### ***Relationship to Western Sydney Employment Area***

- The controls for the Mamre Road Precinct and Broader Western Sydney Employment Area should work together with controls for the Aerotropolis Precincts to reduce fractured planning outcomes. They should create clear connections and support the delivery of

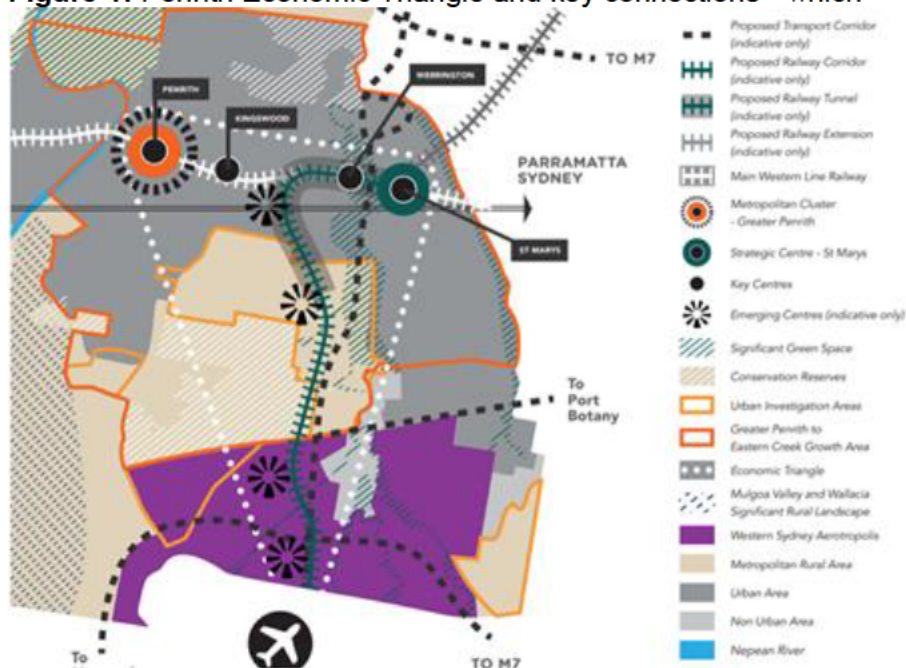


infrastructure networks. Outcomes for transitional spaces such as the South Creek Corridor should be seamless.

#### Other Plans

- The relationship of the Plan with broader strategic planning instruments, such as the Western Sydney Employment Area, Greater Penrith to Eastern Creek Priority Area (GPEC) and Penrith Local Strategic Planning Statement should also be considered in great detail, to ensure strategic consistency and streamlined delivery of key objectives.

**Figure 1: Penrith Economic Triangle and key connections - which**



#### 1.12 Precinct Plans align with the SEPP

All planning controls for the Aerotropolis must be clear and consistent.

##### **Recommendation:**

- Adoption of the Precinct Plans should be aligned with the SEPP outcomes for delivery of Stage 2 of the DCP, the relationship of the controls to the Sydney Science Park and the delivery of a contribution framework, to ensure delivery of key objectives.
- The Aerotropolis SEPP must be amended to support the Precinct Plan outcomes, otherwise inconsistencies in areas such as acquisition and location of open space will create confusion in the application of planning considerations for assessment.

#### 1.13 Precinct Plans to DCP Provisions

Including such a substantial quantum of assessment information in the Precinct Plans means that future assessment against the plans may become selective out of necessity. The idea of the Precinct Planning Report being retained as an independent measure requiring comparison will unnecessarily complicate the planning system.



**Recommendation:**

- The relationship between the DCP and the Precinct Plans is not currently clear. The Precinct Planning Report should be integrated into the Phase 2 DCP. The Precinct Planning Report may be given a lifespan, such that it will cease to have effect once the Phase 2 Development Control Plan has been finalised. This will enable a 'single source of truth' in relation to documentation for the community and other stakeholders and will help to ensure that planning for the Aerotropolis is clearly communicated.
- Council must have an ability to amend the DCP in a timely manner. Council should have ownership of the DCP so the planning system can continue to respond to the local communities evolving needs.

**1.14 Fill**

Given the hilly nature of the sites, cut and fill will need to be strictly controlled to ensure that development does not affect permeability or result in adjoining development at drastically different ground levels.

**Recommendation:**

- Development should address the site topography. Sites with steep slopes should be carefully planned to avoid high retaining walls.
  - Stepped retaining walls should be considered on steep sites.
  - There should be strong limitations on earthworks to prevent any fill retaining walls over certain height.
  - Higher retaining walls should be screened by trees and vegetated as much as possible.
  - This is a significant consideration for industrial sites, given that building foundations are less adaptable than residential development, as they have less ability to operate from stepped buildings.

**1.15 Corridors and Infrastructure Needs**

Corridors and infrastructure delivery should be provided adaptively, on an as-needs basis to suit the evolving nature of the site, as identified in the Draft Western Sydney Aerotropolis Transport Planning and Modelling Stage 2 Report and Draft Western Sydney Aerotropolis Market Analysis and Economic Feasibility Report.

**Recommendations:**

- Support broader precinct delivery through integrated delivery of sites such as the Sydney Science Park which are acknowledged in Precinct staging plans.
- Identify how local roads will be delivered, as individual development or in response to development of arterial roads?
- Define the nature of the land uses for land designated for corridors.
- There should be a clear framework in the DCP for supporting the evolution of the site over time. This may include a plan of future amendments. For example, Stage 2 may be focused on supporting interim uses while future reviews have the objective of encouraging the continuing evolution of the sites.



### 1.16 Farm Dams

The Draft Stormwater and Water Cycle Management Study Interim Report at Figure 4-1 appears to show farm dams across the initial precincts as being either:

- Suitable for retention,
- Not suitable for retention but with HEV area, or
- Not suitable for retention.

Alongside this is the statement on Page 47 that “following field assessment, results will be mapped by Precinct and recommendations for retention or removal based on ecological data made”. The report also identifies that there are relevant safety considerations in relation to the retention of dams which is welcome.

While Council supports the concept of onsite stormwater detention for ecological and flood mitigation purposes, there are some further considerations which should be addressed.

#### **Recommendations:**

- That farm dam retention be costed and demonstrated as feasible in accordance with the existing collections mechanisms.
- That economic impact be considered in the final decisions regarding farm dam retention.
- That clarity be provided in relation to dams identified as ‘Not suitable but with HEV area’, including indication as to whether these would be retained or not. Many of these dams are in locations which are outside of ecological creek corridors. This should be reviewed in the finalisation of the documentation.
- That dams in non-initial precincts (Figure 4-1) be identified as not needing to be reconstructed until a future stage. These are not within areas subject to the Precinct Planning package, so it is unclear how this would be enforced, or what would happen if a Development Application were to be submitted which sought to remove a dam in a non-initial precinct (i.e., when the Precinct Plans are released for the relevant precincts).
- That further assessment incorporates economic considerations, including relationship to development footprints and cost of rebuilding
- Identify further measures by which farm dams can be made safe, including maintenance access.
- Provide further information on the implications of different retention classifications.
- Address the management strategy Sydney Water is currently preparing on the impacts of development in the area, including the importation of fill into the floodplain. This strategy should be addressed before the Plans come into effect.

### 1.17 Affordable Housing

Council supports the State government target to achieve affordable housing delivery. However, the feasibility report identifies that affordable housing will not be feasible without government funding.



The Feasibility Analysis provided as part of the Precinct Planning package states that

*“Given the level of contributions proposed for the Aerotropolis, including Section 7.12 contributions and a Special Infrastructure Contribution, market feasibility testing indicates it is unlikely there will be capacity for development to contribute to affordable housing”.*

Council also does not have the capacity to contribute financially to achieving these targets.

**Recommendations:**

- General Government funding should be made available such that affordable housing can occur. Another option could be to seek a lower percentage of affordable housing delivery, in the realm of 1-4% in a staged approach.
- The cost of delivery be reviewed to confirm whether a lower percentage could be delivered with and without other funding sources.
- If affordable housing cannot be undertaken, any requirement for future feasibility testing be undertaken from government (i.e., by periodic review or similar) or a similar independent third party such as a panel.

## **2. Precinct Specific Comments – Northern Gateway**

### **2.1 Science Park Integration**

Sydney Science Park currently benefits from a number of development consents as well as a transitional provision under the Aerotropolis SEPP which allows applications to continue to be submitted under the Penrith LEP 2010 until the completion of precinct planning.

**Recommendations:**

- Development Applications should not be finalised until the Phase 2 Development Control Plan is Made.
- There should be a review of the existing Development Applications and Precinct Plans be undertaken to provide a pathway which enables these existing development consents to be recognised, should the landowner wish to act on them.
- The future growth targets of the Science Park after Metro Station development should be reassessed, and key to informing any future control revisions to ensure consistency with desired outcomes for the precinct.
- Mapped control boundaries for the Sydney Science Park provided in Figure 2 below should be kept consistent with the indicated future lot and street boundaries to reduce any confusion regarding the application of controls. This should be updated immediately and regularly until these boundaries are finalised to prevent confusion in the application of site-specific controls.

**Recognition of previously approved Development Applications**

- Existing Development Consents should be recognised in the Plans. Many consents have been substantially commenced, meaning that



the landowner has the right to develop. Ignoring these consents could contribute to inconsistent development outcomes.

**Figure 2 - Lot and plan boundary inconsistencies, Overview of the Northern Gateway Precinct Plan, P. 10, 11,12**



## 2.2 Connectivity to North and West

### Recommendations:

- The proposed M12 motorway and Outer Sydney Orbital has the potential to divide the Northern Gateway from the rest of the Aerotropolis. Undergrounding parts of the M12 near the Northern Gateway and Wianamatta-South Creek to ensure aboveground connectivity and reduce visual impact on the high-quality environment necessary for tourism and other high-end uses.
- Investigate delivery of the Castlereagh Connection between the M7 motorway and just west of the Nepean River, as this may unlock economic opportunities and enable faster flood evacuation in the region.

## 2.3 Future stages of the Science Park

Education and research are a key element of innovation precincts, as planned for the Sydney Science Park. Surrounding uses should be well planned and integrated to support growth in the education and research sectors.

### Recommendation:

- Given the growth in business tourism in recent years, whilst acknowledging the impact of COVID-19, there is potential to locate conference and meeting facilities within the Northern Gateway Precinct. These uses should be facilitated early, with incentives to support early activation.

### ***Landowner interface***

- Important linkages, such as that identified in Figure 4 below should be designed to intersect the smallest number of properties wherever possible. This is particularly critical for sub-arterial level linkages, which will do some of the heavy lifting in establishing early links throughout the Aerotropolis.

For example, the below link in Figure 4 is shown providing a connection between Elizabeth Drive and Luddenham Road, and



currently runs across three properties. In this instance, the impacts on the middle property owner could be reduced by having the road move slightly to the right. This would increase the potential for the connection to be delivered sooner, rather than leaving the middle section in a position where the property owner has no obligation or benefit to developing it.

**Figure 4:** Connection between Elizabeth Drive and Luddenham Road



#### 2.4 Interface – Twin Creeks

Council raised in our submission to the Western Sydney Aerotropolis Plan that a sensitive interface should be provided to existing communities, including those at the existing community of Twin Creeks. The Northern Gateway Precinct Plan appears to show a hard employment use border right up to the boundary, which is not consistent with this request. This is demonstrated at Figure 5.

Without any kind of sensitive interface, this approach is not considered to be appropriate. Existing dwellings will be subject to a directly abutting commercial use interface, which would result in acceptable amenity impacts for residents.

#### **Recommendation:**

- Although we would expect that detailed interface controls would be built into the future Phase 2 DCP, there should be assessment of this interface at this stage. Without this, there is going to be a significant issue of land use compatibility in this location.

**Figure 5:** Interface demonstrated to Twin Creeks



### 3. Precinct Specific Comments – Agribusiness

#### **Recommendation:**

- Agribusiness should be clearly defined in terms of what this precinct intends to deliver:
  - What specific land uses will deliver the envisioned food production outcomes, and where?
  - What is the relationship between these specific land uses and considerations like lot size, infrastructure and proximity to services?
  - What ancillary uses will be essential nearby for delivery of agribusiness land uses?

#### **3.1 Luddenham Village**

Future controls and development considerations for this area must be able to support the existing and emerging uses, whilst maintaining the village's character.

#### **Recommendations:**

- Support opportunity for delivery of a specialised retail precinct based on local food and produce, like the Hunter Valley Gardens Shopping Village, Pokolbin.
- Council supports the proposal for a fresh food market in the Agribusiness Precinct, like Sydney Markets, Flemington.
- Sustainability should remain a key focus of future development, alongside heritage features.
- Further planning should be supported by a clear local character assessment of Luddenham Village and detailed DCP controls which support retention of the character-forming elements.
- Methods for enabling integration into the Aerotropolis while retaining Luddenham Village's character, must be identified and clearly set out in the Plans. This work should be undertaken in collaboration with Council.
- It must be ensured that the existing land uses within Luddenham Village can be sustained into the future. This includes local shops, schools and other community and social infrastructure.



- At the Ordinary Meeting of 22 March 2021, Councillors resolved that “The submission include a preferred zoning of the Luddenham Village Precinct to B3 (Business) zoning”.

### 3.2 Rural-Urban Interface

#### Recommendation:

- That an impact assessment (including visual impact, odour, acoustic, etc) be undertaken of the rural interface at the western boundary of the Aerotropolis, to ensure that there are no adverse impacts on rural amenity from development in the Aerotropolis.

### 3.3 Connectivity to / from the M12

#### Recommendation:

- That road and shared path interchanges be provided at Luddenham Road to increase permeability and reduce reliance on local roads.

### 3.4 Staging of Agribusiness

Council is currently investigating opportunities to align our own strategic direction with the opportunities afforded by the Western Sydney Aerotropolis.

#### Recommendation:

- That detailed consultation with Council be undertaken regarding staging of Agribusiness precinct delivery, or
- That the identification of much of the Agribusiness Precinct in the Penrith LGA as being in the third stage of operations be reconsidered to enable effective integration.

## 4. Precinct Specific Comments – Aerotropolis Core / Badgerys Creek

### 4.1 Suez Facility

#### Recommendation:

- The relationship of the Suez facility to other development needs to be carefully considered in future planning works, given the nature of the site's use.

## 5. Precinct Specific Comments – Wianamatta-South Creek

### 5.1 Wianamatta-South Creek

A key part of Council's submission on the Western Sydney Aerotropolis Plan was that details, including future ownership, acquisition and maintenance responsibilities of the Environment and Recreation zoned areas in the Aerotropolis would be key to Council's future response.

Ownership of Wianamatta-South Creek is a critical piece of the Aerotropolis, and without direction on ownership it will be very difficult for Council and the community to decide whether the open space approach in the Aerotropolis is appropriate and feasible.



#### **Recommendations:**

- That clarity be provided in relation to the future form and function of land within Wianamatta-South Creek zoned "Environment and Recreation" under the Aerotropolis SEPP. This should include details of future ownership, acquisition, maintenance responsibilities and funding arrangements.
- That detail be provided to Council of the future intended ownership arrangement of the Environment and Recreation zone under the Aerotropolis SEPP prior to finalisation of the Draft Precinct Plans, such that Council can provide informed advice on the matter.
- That landowners and community members be provided with clarity regarding the future ownership of Wianamatta-South Creek as early as possible.
- A delivery strategy for land acquisition should be provided. This strategy must include timeframes and mechanisms for acquisition, and a clear statement of criteria. This is essential, as it currently appears that some sites are to be acquired, while others aren't. The reasoning behind this approach has not yet been provided.

## **6. Precinct Planning Report Comments**

### **6.1 Traffic Engineering Comments**

Council's Traffic Engineers have reviewed the Precinct Planning Report, and have recommended changes to reflect the relevant Australian Standards, Austroads Guidelines, etc.

#### **Comments:**

- page 106 shows a 3.3m lane to back of kerb, this does not meet Austroads design guide as it should be face of kerb to allow clearance. Furthermore the 2.2m parking lanes should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 110 shows a 3.3m lane to back of kerb, this does not meet Austroads design guide as it should be face of kerb to allow clearance. Furthermore the 2.2m parking lanes should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 112 shows 2.4m parking lanes that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane. The introduction of numerous planting bays will have a negative effect on parking in the precinct and remove parking supply for patrons. Footpaths are to be minimum 1.5m not 1.2m.
- Page 114 Shows a 2.8m travel lane where no bus route exists, this should be minimum 3.0m and 3.5m for buses where it's on a route in accordance with Bus Guidelines and best practice. Furthermore the 2.2m parking lanes should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 116 shows a 5m one-way shared laneway, 'No Parking' signage is likely to be in place on one-side allowing drop off and pick up within the laneway (note only)
- Page 186 shows 2.3m parking lanes that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.





- Page 187 shows 2.3m parking lanes that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 188 shows 2.3m parking lanes that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 189 shows 2.3m parking lanes that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 197 (Fig. 61) shows 2.4m parking lanes for the street typologies that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 198-199 (Fig. 62 and 63) shows 2.4m parking lanes for the street typologies that should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane. Footpaths are to be minimum 1.5m not 1.2m and 1m as shown.
- Page 200 (Fig 64.) shows a shared path of 2.0m which should be 2.5m. Further a 2.8m travel lane is proposed where no bus route exists, this should be minimum 3.0m and 3.5m for buses where it's on a route in accordance with Bus Guidelines and best practice. Furthermore the 2.2m parking lanes should have a 0.3 clearance for door opening therefore making it a 2.5m parking lane.
- Page 201 (Fig 65.) shows a 2.8m travel lane is proposed where no bus route exists, this should be minimum 3.0m and 3.5m for buses where it's on a route in accordance with Bus Guidelines and best practice. Furthermore the 90-degree parking bays should have sufficient offset to an adjacent lane to allow manoeuvring into this area. It must comply with Fig 2.5 of AS 2890.5

## 6.2 Flood Risk Management Comments

Council's Engineering officers have reviewed the Precinct Planning Report and have recommended changes to reflect the relevant flooding considerations.

### Comments:

- Section 3.2.2 provides 1 objective for 'Flood management'. Flooding is an important matter for this development as is recognised in other studies and reports. As such, the Precinct Plan should be expanded in its flood management objectives to reflect the importance.
- Section 3.2.4 Riparian Land should reference the flood controls and the importance of these areas in flood conveyance
- Section 3.2.5 Water Management proposes a significant maintenance burden upon councils with the provision of infrastructure such as basins, on street rain gardens and dams in the public domain with significant water quality targets. The maintenance costs have an impact upon Councils which have not been fully addressed or agreed.
- Road cross-sections that minimise on street parking by providing indented bays is not supported. Parking is required on both sides for the full length of the road. In addition, the parking lanes are too narrow and must be widened to a minimum 3.0m
- Figure 26 is not supported as it minimises on street parking by providing parking on one side of the road only. Parking is required on both sides for the full length of the road. In addition, the parking lanes are too narrow and must be widened to a minimum 3.0m



- Figure 28 is not supported as it does not provide a verge for pedestrians or service allocations.
- Figure 56 - split level roads can be challenging, and the median will have to be wider than 2.6m as described in the figure. It should be noted that this is an indicative median width only.

### 6.3 Drainage Asset Comments

Council officers have reviewed the Precinct Planning Report and have a number of recommended changes to reflect the relevant considerations for construction and maintenance of drainage assets.

#### **Comments:**

- Detention basins, wetlands or any ornamental water features need to be provided with an access for maintenance by machinery (with appropriate weight/dimensions). Maintenance methods involving WHS risks i.e., maintenance by boats, manual cleaning etc. should be avoided.
- When introducing large/expensive water features/WSUD devices, a lifecycle management plan (including a strategic maintenance schedule and a cost estimate) needs to be developed and agreed with the council. Any changes incorporated at a later implementation stage should not adversely affect the original life cycle intent and ideally be discussed with the Council.
- There are many transverse drainage crossings along Luddenham Road that need to be upgraded to cater for increased impervious area. An additional allowance for unknown flow increases due to climate change affects is recommended.
- Impermeable clay soils mentioned in the Appendix-E of “Aerotropolis Initial Precincts Stormwater and Water Cycle Management Study Interim Report (September 2020)” for flood modelling purposes appears to be of lower standard than that prescribed in the “Penrith City Council Design Guidelines for Engineering Works for Subdivisions and Developments” (Ref Table3) e.g., Medium Density Residential 85% (PCC) vs 65% (Report); Recreational areas 50% (PCC) vs 15%(Report). It is better to use higher factors in flood estimations and sizing detention basins whereas lower factors can be targeted in building such areas to absorb more moisture to support flow peak reduction.
- The precincts are in flat terrain and draining stormwater from such areas and conveying them long distances (to natural water courses) through open canals/swale drains with insufficient gradients is a challenging task. PCC experience in dealing with such open drains indicates that they are susceptible to frequent siltation, difficult to mow and create stagnant water puddles – creating breeding grounds for mosquitoes.
- The following measures are recommended in remedying the above situation.
  - Open earth canals in the area should be concrete lined to a certain depth for reducing roughness/ increase flow velocity, and for easy maintenance.



<ul style="list-style-type: none"> <li>○ Grassed earth canals to be avoided on constantly wet clay areas</li> <li>○ Use gravity pressure heads systems i.e., High Early Discharge (HED) and innovative pump out to push water away as required from residential commercial areas to natural water courses.</li> </ul>
<ul style="list-style-type: none"> <li>● Porous footpaths and stormwater harvesting systems are recommended to retain water/attenuate flood peaks.</li> <li>● It is noted that Flood Risk Management assessment is not provided. It is essential that this is provided and exhibited alongside the plans.</li> </ul>

## 7. Environmental Studies

In line with the series of environmental studies submitted in relation to the draft Precinct Plans, the table below provides specific technical comments in relation to each study. If the comment has impacts beyond the study itself, the comment may have been identified in the above sections.

Environmental Study	Comments
Draft Western Sydney Aerotropolis Transport Planning and Modelling Stage 2 Report	The Transport Staging and Modelling stage 2 report The Transport Planning and Modelling Stage 2 Report makes limited reference to the use of the Western Sydney Street Design Guidelines. These guidelines should be key to informing future designs, and this importance should be clearly demonstrated through the Plan.
Draft Western Sydney Aerotropolis Market Analysis and Economic Feasibility Report	<p>There are challenges associated with industry locating in the precincts, linked to issues of population growth and critical mass, which should be recognised in the Precinct Plan. The findings of this report should be more strongly represented in the Precinct Plan.</p> <p>The employment targets in the Precinct Plan are ambitious, but achievable, if the intensification and densification approach to development advocated in the Market Analysis and Feasibility technical report is followed. This should be more strongly represented in the Precinct Plans.</p>
Draft Western Sydney Aerotropolis Wildlife Management Report	There is an inherent conflict in wildlife management and delivery of open space which should be acknowledged. The report should make recommendations for open space and recreation options which minimise these conflicts.
Draft Stormwater and Water Cycle Management Study Interim Report	<p>Comments relating to the Draft Stormwater and Water Cycle Management Study Interim Report :</p> <ul style="list-style-type: none"> <li>● This study provides a different approach to the Engineering Design Manual prepared by the Planning Partnership for water quality. We consider that these documents should align.</li> </ul>





Environmental Study	Comments
	<ul style="list-style-type: none"><li>• The study proposes a significant maintenance burden upon councils with the provision of infrastructure such as basins, on street rain gardens and dams in the public domain with significant water quality targets. The maintenance costs have an impact upon Councils which have not been fully addressed or agreed.</li><li>• It is noted that Flood Risk Management assessment is not provided. It is essential that this is addressed.</li><li>• Council supports the integration of stormwater water quality and quantity devices and basins on land adjacent to passive and active recreation spaces. Basins are not supported where they are isolated away from other open spaces that have an active or passive use.</li><li>• Basin numbers shall be minimised to reduce the future maintenance burden upon Council. A lifecycle management plan must be produced and agreed to by Council to ensure Council has sufficient budgets and resources to cater for basin dedication and management. Figure 7-10 proposed a significant number of OSD basins adjacent to each other within the northern gateway. This is not an acceptable outcome for Penrith Council. Basins shall be consolidated into regional basins along creek lines.</li><li>• The stormwater strategy shall be designed to comply with the requirements of the Engineering Design Manual (EDM) commissioned by the Planning Partnership Office (PPO). We have been advised that the EDM has not been used as the primary resource in preparing the Aerotropolis Stormwater and Water Cycle Management Study. The study should comply with the EDM.</li><li>• Stormwater basins shall not be located within Riparian Corridors and all basins shall be located above the 1% AEP.</li><li>• Regional basins are not supported for commercial and industrial areas. Water quality and quantity is required on lot and maintained in private ownership.</li><li>• The retention of 'Farm Dams' creates a potential for water drownings.</li><li>• Typically, open water bodies need to be engineered to provide shallow zones.</li><li>• Playgrounds and infrastructure embellishment shall be above the 1% AEP.</li><li>• The concept designs within the document do not appear to cater for shallow zones around the</li></ul>



Environmental Study	Comments
	<p>OSD and open water body structures. It is essential that shallow zones are provided to reduce the risk of drowning. Fencing is not an acceptable solution.</p> <ul style="list-style-type: none"> <li>• Vehicle Access (Concrete) shall be provided in each basin for simple management.</li> </ul>
<p>Draft Social Infrastructure Audit / Needs Reports Draft Social Return on Investment Framework</p>	<p>Comments in relation to the Draft Social Infrastructure Needs Assessment:</p> <ul style="list-style-type: none"> <li>• Social and cultural infrastructure, such as educational institutions and childcare, are important in developing local skills and attracting workers to the area. Their importance must be reflected by detailed planning actions.</li> <li>• p.v Health: It might be useful to note in the paragraph around health, that health infrastructure includes any infrastructure or part of the built environment that supports communities to be healthy and well, including supporting social connection, active lifestyles, and access to fresh healthy food, but that this needs study addresses the need specifically for health services and the infrastructure to deliver those.</li> <li>• p.62: "Facilities should contribute to green infrastructure by incorporating green infrastructure elements into its design and construction to create a health and activity. - the first sentence of this dot point doesn't make sense. "In addition, they should be located near open space, to allow for related outdoor activities and community events, such as festivals and markets" – "Should" should be changed to "could be ... if appropriate" as connection to open space depends on the facility typology. For example, a multipurpose community hub would not necessarily need to have outdoor activities, but may be best located near a public space, such as a town square.</li> <li>• In addition to the design considerations listed for community facilities, in Penrith we have learnt that community facilities should be designed to support a range of management models, so that there is best chance of facility activation E.g., provision of an office for an organisation to manage a neighbourhood centre or multipurpose hub. How a facility is managed is crucial to the success and activation of the facility, and the building design should be mindful of the needs of the facility management.</li> </ul>



Environmental Study	Comments
Aboriginal Engagement Report	<p>Council strongly supports the recognition of Country through all processes related to planning for the future.</p> <p>Council notes that the engagement report recommends definition of a cultural design framework, rather than a cultural design process, which is what was implemented in the Precinct Plan.</p> <p>Future revisions of the precinct plans or Stage 2 of the DCP should set this framework to provide a mechanism for incorporating Country and Aboriginal culture in the built form.</p>
Draft Aboriginal and Non-Aboriginal Cultural Heritage Assessment	<p>Council supports the preservation and enhancement of Aboriginal and non-Aboriginal cultural heritage and blue-green infrastructure, which will contribute to the local distinctiveness of the Aerotropolis, attract workers and maximise the economic benefits of tourism.</p>
Draft Sustainability and Heat Report	<p>This report acknowledges Council's Cooling the City Strategy as a resource and foundation for recommendations around urban heat, alongside recent WSROC work and other key strategies applying to the area. Council acknowledges the importance and role of the Sustainable Regenerative approach outlined, and notes that the regional impact of this approach would be significant.</p> <p>It should be noted that Council and WSROC's work in this space continues to change and develop to form a locally specific response to urban heat matters, particularly with respect to planning innovations. Council encourages further engagement regarding urban heat management responses in Western Sydney, so that Aerotropolis Precinct Plans can remain at the cutting edge of innovation.</p> <p>It is a concern that the measurable actions in the plan only extend to 2023, which presents short-term targets but no long-term recommendations for future action or engagement, beyond identifying further Principles to be incorporated in the Plans. The further recommendation to enable a flexible planning approach has vague implications and requires more specific planning focused responses to the urban heat issue to be effective.</p>