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THE PANEL'S ADVICE

NATIONAL CAPITAL DESIGN REVIEW PANEL

Molonglo Valley – First Session

Molonglo Group Centre and Surrounds Planning Framework



Australian Government
National Capital Authority



ACT
Government

NATIONAL CAPITAL DESIGN REVIEW PANEL

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Date issued: Friday 11 June 2021

Project: Molonglo Group Centre and Surrounds Planning Framework

Review date: Wednesday 26 May 2021

Meeting location: Session held remotely via Microsoft Teams

Site visit: Site visit held Monday 10 May 2021, attended by Chair and [REDACTED]

Panel members: Catherine Townsend, Chair and ACT Government Architect [REDACTED]

Proponent: Environment Planning and Sustainable Development Directorate, ACT Government

Observers: Representatives from the:
Environment Planning and Sustainable Development Directorate (EPSDD)
Transport Canberra and City Services (TCCS)
Suburban Land Agency (SLA)

Conflicts of interest: None

Confidentiality of the Panel's Advice: Design review considers concept proposals at various stages throughout the design process that are frequently subject to change and improvement in relation to feedback from the NCDRP. Throughout this time a commercial in confidence status is maintained for proposals that engage with the NCDRP.

In accordance with Section 139 of the Planning and Development Act (2007) (the Act), prescribed development proposals are required to provide a copy of the 'Panels Advice' and the proponent's 'Response to the Panels Advice' in writing when the Development Application is submitted. Section 30 of the Act identifies the design advice and the proponent's written response to that advice as associated documents, therefore the most recent Panel's Advice and the proponent's response become publicly available once a Development Application is publicly notified for community comment.

MEETING SUMMARY AND RECOMMENDATION

Property address: Molonglo Valley, Canberra, Australian Capital Territory

Proposal: The Molonglo Group Centre and Surrounds proposal comprises a planning framework of land use zones for the Molonglo Group Centre (MGC) and surrounds that is intended to guide the design and assessment of estate development plans (subdivision proposals) and development applications.

The Molonglo Group Centre and Surrounds development will provide for a large group centre that includes commercial and retail, residential development with a mix of dwelling types and sizes, a services area, community facilities and associated public domain, open space and recreational opportunities. The proposal is situated on the remaining land to be developed in the area known as Molonglo and Denman Prospect. The site is bound by the Molonglo River Reserve to the east and divided into 'quadrants' by the current and future alignment of John Gorton Drive oriented north-south and the future East West Arterial. The south-west quadrant of the site features a completed local centre and mix of low to high density residential development (i.e. RZ1 to RZ5) in various phases of construction. The remaining three quadrants to be developed are the subject of the current proposal.

The proposed group centre will provide a hub for community, retail and service industries for the Molonglo Valley with a total estimated population up to 55,000. The proponent, Land Development Projects, EPSDD seeks to provide an estate development model that will provide for retail space, different residential demands, and the provision of integrated community facilities and services within a group centre and activity hub. The proposal also seeks to promote sustainable development, active travel, pedestrian focussed streets, with high permeability to encourage movement and use of the public spaces with strong links to the Molonglo River Corridor.

An updated Territory Plan is required to reflect the alignment of John Gorton Drive, East West Arterial and development principles and policies articulated within the planning framework. Following submission of a draft statutory concept plan to Territory Plan, EPSDD, a transfer of information and responsibility to the Suburban Land Agency (SLA) will occur to continue with planning and design of the proposal.

Proponents' representative address to the panel:

The proponent team, represented by Dave Richardson of Development and Implementation (Greenfields), EPSDD commenced by providing an overview of the scope of comments sought by the team from the Panel, broadly requesting that the Panel provide input on whether the presented concept plan can deliver a high quality built form and landscape outcome for the Molonglo Valley.

The site boundary and significant contextual elements were presented, with the proponent noting the presence of two major arterial roads (John Gorton Drive and the future east-west arterial) and the Molonglo River Corridor Nature Reserve. The proponent describing the vision for the proposal as

being a diverse, fresh, healthy and enriching place to live, work and engage in recreation.

Key figures were then presented, describing the estimated total population for the Molonglo Valley of about 40,000 to 50,000 people and 20,000 dwellings. The proponent noted that the current proposal is based in part on the unpublished draft 'Molonglo Commercial Centre and Environs Draft Concept Plan 2014' prepared by EPSDD and has also sought to incorporate contemporary ACT Government policies and strategies, including; the ACT Planning Strategy 2018; Moving Canberra 2019-2045, Integrated Transport Strategy; 2016 ACT Climate Change and Adaptation Strategy and Implementation; Public, Community and Affordable Housing Target; and Canberra's Living Infrastructure Plan: Cooling the City. Further recent studies relating to residential supply, infrastructure and staging were described as also supporting the development of the statutory concept plan (i.e. the proposal) and associated Territory Plan Variation that is required to address the revised alignment of John Gorton Drive, residential density and integration of core uses.

The proponent presented the key aspects of the site, noting in particular the Molonglo River Corridor boundary marking the Molonglo River Corridor Reserve with extensive Pink Tailed Worm Lizard habitat and Box Gum Woodlands, existing vegetation with a range of exception and high quality regulated trees, the highly varied topography across the site, and the presence and influence of both John Gorton Drive and the planned East West Arterial.

The future extension of John Gorton Drive and the East West Arterial were noted for their anticipated impacts on the area, including extensive cut and fill to facilitate adequate grades for a future extension of the Light Rail network along John Gorton Drive.

The evolution of site planning was detailed, with an early plan from the Annand Alcock Urban Design (May 2006), followed by the Molonglo Valley Stage 2 Urban Design Framework (2012) and the Draft Concept Plan (2014) presented to highlight the positioning of the future commercial centre and John Gorton Drive bridge that have been reconfigured in response to environmental and infrastructure considerations.

The proponent then presented a range of precedent images accompanying principles for the proposal, under the headings of public realm links, open space and environment, residential, transport and movement. The indicative land use zoning and anticipated building heights were presented, accompanied by a table indicating residential densities with approximately 4300 dwellings across the total site. The proponent also briefly described the infrastructure requirements and staging, with staging driven by access to existing infrastructure. The presentation concluded with an overview of the forward planning for approvals and handover of the proposal to the SLA for further development.

Recommendation: Based on the documentation provided prior to the design review panel session; a site visit by the Secretariat and Chair and panellist [REDACTED] on Monday 10 May 2021; and the proponents presentation, the following comments and recommendations are provided:

The Panel is pleased that the development proposal has been presented to NCDRP at this early design concept stage. Engaging early with the Panel has provided the opportunity for a meaningful discussion about the key elements of the proposal and to identify how the design concepts could be further enhanced for the benefit of the future residents, the broader community and the natural environment.

The Panel considers that the current proposal is an exciting proposition that will serve as an important keystone for the Molonglo Valley area. As such this significant opportunity comes with an accompanying responsibility to ensure that best practice planning is achieved that responds to the ACT Government's agenda for sustainable, resilient and high amenity development.

To achieve a truly exemplary development, the Panel considers that the proposal requires further consideration of contemporary best practice planning and urban design. The Panel recommends thorough analysis of precedents and incorporation of insights gained in a robust vision that incorporates understanding of place and clearly articulated, specific principles and objectives that will be enduring as the proposal progresses through to subsequent development stages.

Given the significant opportunities afforded by the Molonglo Valley's unique landscape setting, the Panel recommends that the proponent investigates a first principles approach to planning premised on a landscape-led design response. The Panel considers that there is an opportunity for the planning to engage positively with the existing landscape, ecology and adjacent suburbs and recreational facilities, 'weaving in' to the broader urban fabric of the Molonglo Valley through robust interpretive, cultural and physical links. The Panel also highlights the critical importance of a well-considered placemaking strategy to provide a foundation for community identity and to inform subsequent design development.

In relation to the future built form, the Panel encourages the proponent to employ contemporary digital planning and design tools to test alternative design options, including higher densities with minimal overall footprints to allow for a greater green and recreation-supporting landscape setting for the development. The Panel also encourages the proponent to explore a greater integration of the proposal with the adjacent Molonglo River corridor, considering there is opportunity for a beneficial 'knitting together' of the urban and ecological areas of the site.

While the Panel acknowledges the early phase of design for the Molonglo Group Centre and Surrounds, the Panel considers that early consideration of the issues identified in this advice is essential to ensuring positive outcomes in later stages. Spatial planning for elements such as public open space, green and blue infrastructure, movement networks and consideration of interfaces with the Molonglo River corridor and surrounding suburbs is essential to 'get right' in the current phase, as retrofitting of these elements will likely prove difficult or unfeasible once development of the area has commenced. Future proposals should be based a clear strategic plan for structuring the site around blue green infrastructure, movement and connections, and a response to topography.

The Panel thanks the proponent for their positive engagement with design review to-date and recommends further design review for this proposal.

Key Issues and Recommendations

The *Key Issues and Recommendations* provide detail advice to the proponent, consistent with the above recommendation.

To achieve the best possible design outcome for the proposal, the proponent is encouraged to consider the following issues through the next stages of the design development:

1.0 Context and character

- 1.1 The Panel acknowledges the significant body of legacy planning work conducted to-date that has informed the development of this proposal, however considers that there is an opportunity for a contemporary best practice approach with an accompanying ambition for this significant site to achieve an international exemplar development. The proponent is encouraged to investigate a first principles approach informed by the 'Molonglo Commercial Centre and Environs Draft Concept Plan 2014' to reframe the site planning as a landscape-led proposal that harnesses the opportunities presented by the undulating site topology, drainage patterns and remnant flora within the development area and the adjacent Molonglo River corridor. The proponent is also encouraged by the Panel to elevate the current vision and principles to clearly articulate the intent and to define the desired outcomes for this important proposal. The Panel therefore recommends the establishment of a robust vision and principles that articulates specific and embedded commitments to desired outcomes (e.g. affordable housing quotas, EV charging infrastructure, battery storage, gas-free suburb, tree canopy target and species selections) to ensure that these are retained as the proposal progresses through further development phases and custodians (i.e. from Development and Implementation (Greenfields) to the SLA and ultimately to the developers of individual sites). A further study of relevant precedent developments such as Nordhavn, Copenhagen (refer also to Attachment 1) is also recommended by the Panel to assist in the articulation of robust principles that builds on the particular landscape characteristics of the site and informs a built form that includes diverse urban spaces and ecological corridors.
 - 1.2 The Panel considers that the proposal has not yet demonstrated adequate consideration of and integration of indigenous site history and cultural narratives in interpretative elements or placemaking for the area. The proponent is encouraged by the Panel to engage with local indigenous representatives to ensure relevant elements within the proposal area are identified and appropriately managed. The Panel notes the significant opportunity presented by indigenous cultural heritage/history to contribute to an understanding of place and the formulation of a unique place identity that would serve to anchor the proposal to its important landscape setting. The proponent is therefore strongly encouraged by the Panel to develop an understanding of the historical and current cultural and physical use of
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the land and to incorporate this as part of a robust place-making vision and strategy for the site.

- 1.3 The Panel observes that the varied topography of the site presents a significant opportunity to celebrate the landscape in the proposal, however the current proposition will likely necessitate substantial cut and fill that will compromise the character of the landscape. The proponent is encouraged by the Panel to conduct thorough site analysis including the existing topography and significant landscape features and adopt an approach that allows future development to 'rise and fall' with the land (for precedent refer to Castlecrag by Walter and Marion Burley Griffin) and that allows neighbourhoods to orient to the existing hills and river. The Panel notes that, in concert with adjusted land use planning, this approach may require innovative subdivision (i.e. consideration of size, orientation, distribution) to ensure sites are viable for the intended development without requiring significant earthworks. It may also require planning controls to stipulate maximum allowable cut and fill requirements (e.g. cut and fill of more than 1m should not be permitted) and limits to built form following the topography of the land (e.g. max 2 storey height that's steps to follow the land form control). The Panel encourages the proponent to refer to the Griffin Conservation Area in Willoughby Council (see Attachment 1) as a useful reference for an approach to built form on characterful topography. The proponent is therefore encouraged by the Panel to use digital planning tools to aid in the exploration of alternative approaches to site planning and subdivision, noting a variety of powerful analytical tools exist that could aid in developing a compelling alternative model that increases the response to the undulating topology of the area.

2.0 Landscape

- 2.1 The Panel observes that the site currently features numerous existing mature trees, however these do not appear to be accommodated within the current site planning (with the exception of the knoll located in the core area). As part of a future green infrastructure strategy for the proposition, the proponent is strongly encouraged by the Panel to accommodate the remnant trees within planted landscape patches throughout the proposal, with these trees supported to assist in regenerating an ecology for the area and to provide residential amenity. The proponent is also encouraged to incorporate greater infiltration of public open space 'green fingers' to ensure future dwellings have nearby access to green space and to provide an improved network of landscaped area to support suburb-scale cooling, amenity for residents and additional urban-adjacent habitat. To inform further development of this aspect of the proposal, the proponent is encouraged by the Panel to refer to NSW's 'Sydney Green Grid' strategic planning and urban design policy that is considered by the Panel to offer valuable insights for delivering green infrastructure.
 - 2.2 The Panel considers that there is an opportunity for the proposal to articulate a robust approach, principles or strategy for how the proposed built area will interface with the high value ecological corridor of the existing Molonglo River. The Panel notes significant
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latent opportunity to provide a vibrant, enriching interface that contributes to both residential amenity and to the protection of the ecological assets within the corridor. In concert with the consideration of the overall development footprint, the Panel encourages the proponent to explore opportunities to provide a transitional landscaped zone. For the next design review session, the proponent is requested by the Panel to provide sectional analysis demonstrating the proposed interface between the built areas and the Molonglo River corridor.

3.0 Sustainability

3.1 The proponent's intent to achieve a sustainable development is supported by the Panel, however the Panel considers that the proposal is yet to adequately articulate how this will be achieved. Noting the ecological sensitivities of the area, the substantial size of the proposal and the ACT Government's sustainable development agenda, there is an opportunity for the proposal to aim for an innovative and best practice sustainable urban design. In undertaking further design development of the proposal, the proponent is encouraged by the Panel to;

- 3.1.1 Employ a recognised sustainability framework to guide and provide benchmarks for development, such as the United Nations Sustainable Development Goals, Greenstar Communities or similar.
- 3.1.2 Implement sustainable design guidelines to ensure appropriate siting, design and materials for individual developments. Such guidelines should carefully consider how mandatory and/or incentivised controls could be applied to ensure the desired sustainability outcomes are realised (e.g. promotion of lighter roof colours/less heat absorptive roofing materials to mitigate urban heat gain).
- 3.1.3 Consider how the proposal could allow capacity for development of microgrids for power (i.e. generation and storage) and water.
- 3.1.4 Consider long term macro environmental trends (i.e. impacts of climate change, intensifying/more frequent drought) and how the proposal will actively seek to mitigate the impacts of these through site planning and built form outcomes.

3.2 The Panel observes that the site has a number of existing retention ponds however these have not been demonstrably considered within a water management strategy for the proposal as presented. The Panel notes that without further development as part of an overall water management strategy, these ponds will be of limited effectiveness for water management as they currently serve to remove water from the urban landscape that should be retained to support healthy soil and canopy trees. The proponent is therefore encouraged by the Panel to develop a whole-of-site Water Sensitive Urban Design strategy to promote water retention within the urban landscape to support healthy

soil and trees (i.e. reducing the need for irrigation) and to manage potential adverse impacts of runoff on the ecological health of Molonglo River corridor. The Panel encourages the proponent to consider how water management can be integrated with landscape open space (e.g. in the manner of the Sydney Park wetlands), rather than act as separate off line systems that offer minimal benefit.

4.0 Density and connectivity

- 4.1 The Panel acknowledges that the existing Territory Plan has provided the basis for the current proposal, however considers that there is an opportunity for the proponent to better demonstrate sufficient analysis to justify the proposal's current distribution of uses and associated densities across the site. The Panel therefore recommends that the proponent considers the exploration of alternative distributions that provides higher densities in a more compact footprint, to allow for a significantly larger recreational and ecological hinterland for the proposal.
 - 4.2 The Panel notes the critical importance of an effective, well integrated movement network to support vibrant community life and considers that there is an opportunity for the proposal to demonstrate how this will be achieved. Further, the Panel notes that transport infrastructure must be operational from day one to ensure desired patterns of use are established (i.e. if sufficient public and active transport networks not provided during the establishment of the suburb, then residents are likely to become habituated /entrenched in car-reliant patterns of movement). In developing the proposal further, the proponent is encouraged by the Panel to;
 - 4.2.1 Consider how the various movement networks will integrate with each other (i.e. vehicle, cyclist, pedestrian) and with a future network of urban green spaces to form a complementary system (e.g. colocation of active travel links along sheltered green spines) that supports safe and sustainable travel and the health and wellbeing of residents. The proponent is also encouraged to engage in further analysis to develop an understanding of how the proposal should connect at its edges with surrounding suburbs and recreational opportunities (e.g. Stromlo Park), with an aim to ensure the proposal features robust connections that support the broader movement network of Canberra.
 - 4.2.2 Ensure that the proposal retains the capacity for future integration of light rail. The Panel acknowledges the extension of the light rail network may be a long-term proposition for the Molonglo Valley, however notes that integration must be considered at this stage to ensure future retrofitting feasibility (i.e. both financial and physical feasibility).
 - 4.2.3 Ensure that a functional public transport network (i.e. buses) exists and is in regular operation from the initial phase of development in the subject area, noting the
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- critical importance of public transport availability and reliability in establishing desired patterns of use.
- 4.2.4 Ensure that a functional cycle and pedestrian path network is established in the initial phase of development with clear, safe connections to significant community facilities and key public spaces (e.g. schools, parks and other recreational areas). Similarly to 4.2.3, the Panel notes the critical importance of early establishment of a pedestrian and cycle network to support residents to form healthy active travel habits (i.e. children being able to safely cycle or walk to school will support their long-term health and wellbeing). The Panel also notes that a strategic approach should be adopted to network planning to provide acceptable gradients for walkability of the network.
- 4.2.5 Consider how land use planning and space allocation serves to reinforce or subvert the dominance of individual passenger vehicles. The Panel considers that there is an opportunity for the proposal to reflect the desired modal split (i.e. a greater emphasis on active travel and public transport) and therefore encourages the proponent to increase and more equitably allocate space for pedestrian, cyclist and public transport uses. 'Mobility hubs' where combined parking with green walls, active play roof spaces that allow for places for people before cars should also be investigated (see reference to Nordhavn and Jernbanebyen in Attachment 1).
- 4.2.6 Consider whether the John Gorton Drive and future East West Arterial can be revised to promote a fine grain, permeable, pedestrian-friendly and human-scaled environment, noting at present these are likely to constitute 'hard edges' that will divide the area and have considerable adverse impacts on the public domain (e.g. pedestrians, particularly the vulnerable such as prams and disabled users are unlikely to feel safe crossing the significant road verges currently proposed).
- 4.3 The proposed building heights (i.e. 6 storeys) surrounding the 'knoll' within the proposed group centre are considered by the Panel to require further review, with the Panel observing that the current building heights and minimal setbacks are likely to result in an enclosing of this space. To ensure this significant landscape feature is maintained and can contribute positively to the amenity of the Molonglo Group Centre, the proponent is encouraged by the Panel to explore further setbacks from the designated public open space to ensure legibility of the knoll, avoid overshadowing and to ensure that distance views in and out from the centre are retained.
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5.0 Legibility and safety

- 5.1 The Panel notes positively the proponent's intention to deliver a safe development, however considers that the means by which this will be achieved has not been adequately articulated. In this regard the Panel encourages the proponent to incorporate Crime Prevention Through Environmental Design (CPTED) principles to develop a more rigorous approach to planning for safety within the public domain.

6.0 Built form and scale

- 6.1 The proposal to stage development from the south – extending the northern Coombs low density residential development was queried by the Panel. Investigations into establishing a more community focussed core earlier / first in the development staging should be considered to provide the essentials for daily life (e.g. supermarket) or other high needs community facilities for the already existing and fast-growing communities in the region. The proponent is encouraged to consider how to best serve the existing and future community through appropriate phasing of development, noting that a people-focused rather than engineering-led approach is considered appropriate.

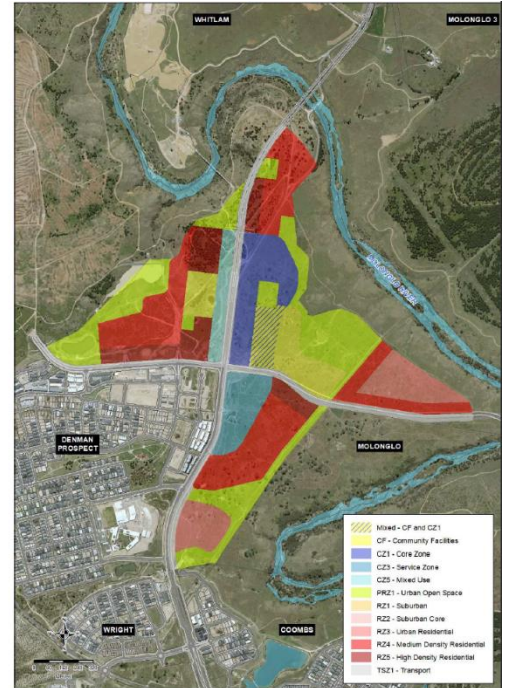
Sample images from presentation

The following images have been extracted by the NCDRP Secretariat from the proponent's presentation to the Panel during the session. The images have been selected as an indicative sample of the proposal at the time of design review. It is noted that the provided images may not be representative of the proposal as lodged for development assessment.

Proposed Territory Plan Variation

Community/commercial/retail hub with allied facilities and services that includes

- Education – Primary school, high school and college
- Health facility (walk in or community)
- flexible community spaces (includes Libraries)
- full line and discount supermarkets
- retail
- non-retail (eg bank and office)
- food outlets, cafes
- urban open space that includes a town square and gathering spaces
- residential
- other community uses
- core tower – consideration will be given for a taller element than the mandatory 6 storeys
- pedestrian-centric thoroughfare and links
- significant features at key entry points and junctions

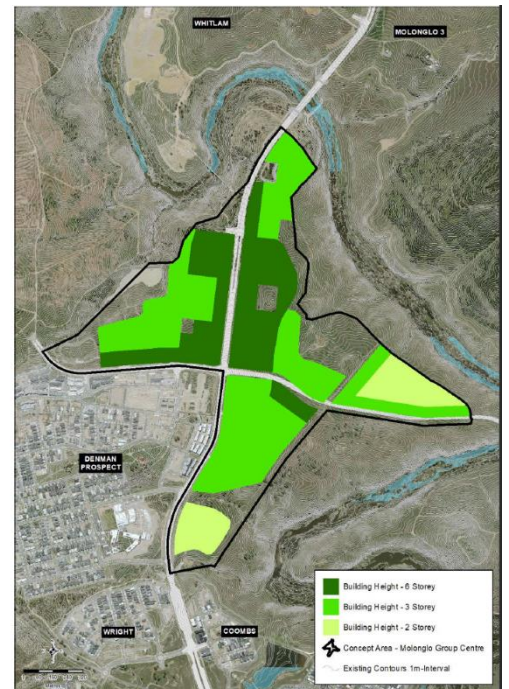


Plan - Proposed Territory Plan Variation

Building heights

Provide a variety of housing choices with a focus on residential density towards the heart of the district

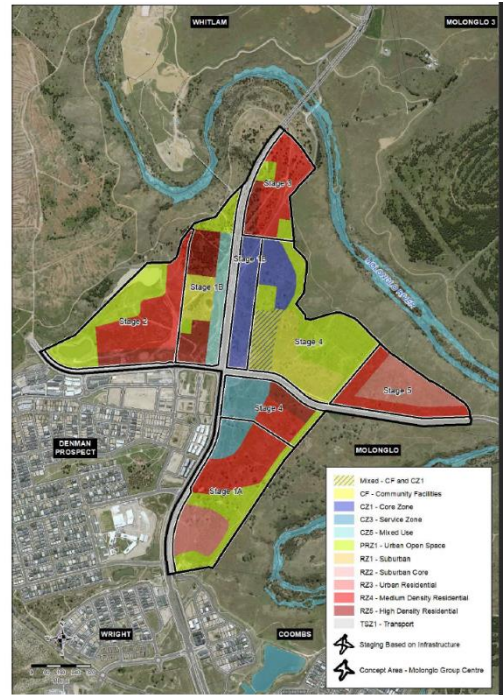
- RZ 3 (Urban Residential) – Maximum 2 storeys
- RZ 4 (Medium Density Residential) – Maximum 3 storeys
- RZ 5 (High Density Residential) – Maximum 6 storeys
- CZ1 (Commercial Core) – Maximum 6 storeys with 1 tower



Plan - Proposed Building Heights

Infrastructure requirements and staging

Stage	"Offsite works"	Timing
1A	Master planning for Extra Low Zone water supply Stage 3 and 4. Master planning for future road connections to Stage 4 and East-West Arterial. Temporary Extra Low Pressure Zone PRV. Imported fill material.	1A design 1A design 1A design Link to Stage 1B
1B	Master planning for sewer, water supply, stormwater, traffic for Stage 2. Construction of sewer and stormwater through Stage 2. Master planning for future road connections to Stages 2 and 4. Interim WSUD/OSD requirements for section draining to Pond A in Stage 4. Significant excess spoil material.	1B design 1B construction 1B design 1B design Link to Stage 1A and Stage 4
2	Extension of John Gorton Drive.	Link to capital works design
3	Extension of John Gorton Drive. Connection of sewer to the west of John Gorton Drive. Extension of Extra Low Pressure Zone water main from Western Low Pressure Zone. Significant excess spoil material.	Link to capital works construction Link to Stage 4
4	Extension of East/West Arterial Road Significant imported fill material.	Link to capital works construction Link to Stage 1B and Stage 3
5	Extension of East/West Arterial Road Construction of sewage pump station and rising main to Stage 4. Imported fill material.	Link to capital works construction Link to Stage 3



Infrastructure and Staging

Precedents

The Panel recommends investigation of precedents to inform further development of the proposal for the Molonglo Group Centre and Surrounds. The following selection of precedent developments is considered by the Panel to represent a broad range of scales and contexts, which all exemplify strong community principles, and convincing approaches to sustainability, energy conservation as well as landscape and ecological values.

The Panel notes that some of the provided precedents vary in their site conditions (e.g. some are located by water bodies) however the proponent is encouraged to consider how principles, strategies and initiatives demonstrated in the precedents could be adapted/adopted/translated to the current proposal. In many of the precedents, the Panel encourages the proponent to consider how overarching sustainability principles have translated into place experience and sense of community.

Nordhavn, Copenhagen

Masterplan for new city district in former industrial harbour area, including development plan, district plans, design of public spaces, streetscapes and promenades, landscaping, bicycle infrastructure and metro stations

<https://www.cobe.dk/place/nordhavn>

Jernbanebyen, Copenhagen

Masterplan for new green city district

<https://cobe.dk/news/cobe-wins-competition-to-design-copenhagens-new-green-city-district-jernbanebyen-at-the-citys-former-railroad-yard>

Hammarby Sjostadt – Stockholm, Sweden

An important and now substantially built out project in Stockholm, landscape, energy and sense of community all strongly present:

[Hammarby sjostad - Urban Design Analysis by Deena A. Kharouf - issuu](#)

[HAMMARBY SJOSTAD Stockholm, Sweden: A Case Study](#)

Stockholm Royal Seaport, Sweden

A notable project located in Stockholm with strong sustainability credentials

<http://www.stockholmroyalseaport.com/>

Vauban - Freiburg, Germany

Notable as a substantially car-free community; very informal in character

[Case study - Vauban](#)

Eddington, Cambridge

[Home - Eddington Cambridge \(eddington-cambridge.co.uk\)](#)

[Eddington Masterplan \(architecture.com\)](#)

Accordia, Cambridge

Regarded as one of the best housing projects in the UK over last 15 years; very influential example of mid-density housing with innovative housing typologies:

[Accordia – Feilden Clegg Bradley Studios](#)

Marmalade Lane, Cambridge

A more contemporary small scale example situated in Cambridge, featuring co-housing

[Marmalade Lane - Cambridge's first cohousing community](#)

Borneo – Sporenburg, Amsterdam

An Urban waterfront rehabilitation project incorporating self-build and wide range of typologies

[Borneo- Sporenburg - West 8](#)

Portland, Oregon

Notable for its goal to increase the use of public and active transport to 80% of the population by 2030

<https://www.greencitytimes.com/portland/>

San Francisco/ Bay Area

Notable for its focus on fostering resilience to environmental risks such as sea level rise, severe storms and flooding

<http://www.resilientbayarea.org/>

Vancouver, BC

Notable for its integrated and extensive suite of policies relating to sustainable development

<https://vancouver.ca/green-vancouver.aspx>

Selandra Rise, Melbourne

Notable for its integrated health planning to support health and wellbeing of residents

https://www.vichealth.vic.gov.au/-/media/ResourceCentre/PublicationsandResources/General/Selandra_Rise_Final_Summary_Report.pdf?la=en&hash=A58AAB5A27486863DBEA8B18D3B5188A407F50BE

Green Square, Sydney

Notable for its implementation of embedded energy networks and water treatment

<https://altogethergroup.com.au/about/communities/green-square/>

Griffin Conservation Area, Willoughby Council, NSW

Notable for its recognition and management of the area's cultural and historical significance.

<https://www.willoughby.nsw.gov.au/Development/Planning-Rules/WDCP>

Low density development: Impacts on physical activity and associated health outcomes

A review of evidence analysing links between low density suburban forms and cardiovascular health

https://resources.heartfoundation.org.au/images/uploads/publications/Heart_Foundation_Low_density_Report_FINAL2014.pdf

