

Indicative Yield Calculations for Block 4 Section 23 Moncrieff

1 Introductory Notes

1. This yield analysis is based on 2 scenarios, firstly a review of the indicative yield based on a concept site layout, with 'block & stack' image prepared by Hill Thalys on 16 May 2024 and secondly on a maximum development scenario.
2. Block 4 Section 23 Moncrieff is zoned CFZ Community Facility.
3. It is understood that the site is to be released for development as Community Housing or Supportive Housing, both of which are permissible in the CFZ zone.
4. The Gungahlin District Policy includes 2 mandatory Assessment Requirements relevant to development of the subject site:
 - no access is permitted to Mirrabai Drive and acoustic requirements are to be assessed on an individual basis.
 - where community housing is provided it is not required to be in association with a place of worship, religious associated use or supportive housing.
5. The Territory Plan does not have any mandatory requirements relating to density, building height, or site coverage for development in the Community Facilities zone.
6. Although not part of the Territory Plan and not a mandatory requirement, the Community Facility Technical Specifications seek to limit buildings to 4 storeys (or 2 storeys when closer than 30m to a residential block, however, the site is further than 30m from any residential site, so this part of the Specifications does not apply).
7. The 4-storey provision of the Technical Specification relates directly to an Assessment Outcome in the Territory Plan which seeks to achieve: "*The height, bulk and scale of the development is appropriate, noting the desired zone policy outcomes and the streetscape*".
8. The consideration of potential height of a future building is a key element in determining potential development yield for this site.
9. The absence of height limits in the Territory Plan and the vague application of the Technical Specifications presents a challenge to determine an appropriate, or maximum, height for a future building (and hence indicative yield).

10. A Hindu Temple is under construction on the adjoining site to the south. It is understood this building will be single storey, mostly about 5.7m with some elements, such as the temple tower – or sikhara – rising up to 13m, refer Figure 1. Residential development to the west comprises 3-storey townhouses.

Figure 1: Elevation of Proposed Hindu Temple on Adjoining Block



Source: <https://mygungahlin.com.au/traditional-hindu-temple-planned-for-booming-gungahlin/6174/>

11. It is noted that a Draft Design & Place Framework for the adjacent Moncrieff Group Centre prepared by Hill Thalys (February 2023) indicated 4-6 storey buildings to the north, on the opposite side of O’Keeffe Ave.
12. The absence of any Territory Plan controls on building height requires consideration of what level of bulk and scale (i.e. building height) is appropriate, as per the Territory Plan Assessment Outcome (refer Point 7).
13. It is considered that the focus for consideration of acceptable building height by the Planning Authority of any future DA will be the potential impact on the streetscape.
14. The Assessment Outcome also cross references the Community Facility Policy Outcomes. However, these focus on enabling efficient use of land, encouraging adaptable and affordable housing and facilitating social sustainability (among others). This does not directly assist in determining an appropriate building height.
15. It is considered that calculation of potential yield based on a 4-storey building is the ‘safest’ option (i.e. one that should not cause any concerns at DA stage for a future buyer).
16. This conclusion is based on the bulk and scale being more consistent with surrounding buildings (as per the Assessment Outcome) noting the adjacent existing 3-storey residential buildings, the Hindu temple being the height of a 2-storey building and the likely heights of future buildings in the group centre being 4-6 storeys. This site is about 2m higher than the ground level at the future Group

Centre (based on ACTMAPi contours) and as such, any building of 4-storeys will, in effect, be close to the height of future Group Centre buildings.

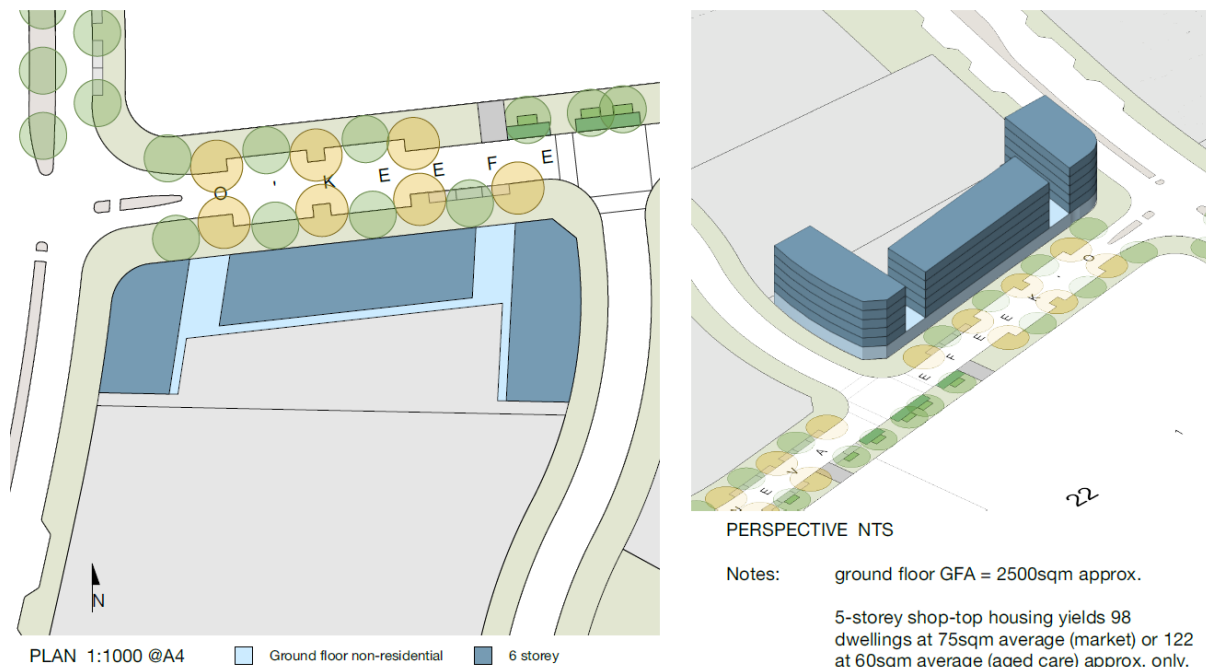
17. Notwithstanding the above points that 4-storeys is the 'safest' option, it is noted that the Common Ground development on CFZ zoned land in Dickson is 6-storeys and it is located in a neighbourhood of single and 2-storey buildings.
18. As such, it is appropriate to consider 4-storeys as the 'compliant' option and 6-storeys as a maximum option for yield calculation purposes.

2 Scenario 1 – Hill Thalys Concept Plan

2.1 Assumptions

19. That future development will be required to be consistent with the Hill Thalys Concept Plan, as part of land release conditions.
20. That development of the subject site consistent with the 6-storey heights and building footprints shown in the Concept Plan, refer Figure 2, will be acceptable to the ACT Planning Authority.

Figure 2: Concept Plan – Building Heights



2.2 Calculations

21. The Concept Plan propose 3 buildings each of 6-storeys with a combined upper-level footprint of approximately 2,150m² * across the 3 buildings. The Concept Plan notes the ground floor for non-residential uses being 2,500m² GFA.

(* Note – areas approximate only, scaled from printed plans)

22. The total residential floor area for the 5 upper levels is 10,750m² (2,150m² per level).
23. Allowing 10% of the GFA for building circulation and services, this leaves 9,675m² floor area allocated to units. At 75m² per unit (as per the notes to the Concept Plan, refer Figure 2) this would yield 129 units.
24. The concept plan notes that the yield would be 98 dwellings based on 75m² average unit floor area.
25. It is not clear as to how the yield calculations of 98 units, as shown in the Hill Thalys Concept Plan (Figure 2), was calculated.
26. The Hill Thalys figure of 98 units becomes reasonable if a significantly larger floor area per unit was used than that provided in the Concept Plan. Rather than an average of 75m² per unit, floor areas similar to the community housing development 'Common Ground' in Dickson could be used. That development shows unit sizes to be larger than typical 'market' developed units with 1-bed units approx. 65m²; 2-bed 110m² and 3-bed 170m² (excluding balconies).
27. Assuming a bedroom mix close to 40% 1-bed; 40% 2-bed and 20% 3-bed units (consistent with Residential Technical Specifications and similar to the ratio of units in Common Ground Dickson). Yield would be:
- 40 x 1-bed units (or 42%) (40 x 65m² = 2,600m²)
 - 38 x 2-bed units (or 40%) (38 x 110m² = 4,180m²)
 - 17 x 3-bed units (or 18%) (17 x 170m² = 2,890m²)
 - Total 95 Units (9,670m² Residential Floor Area)

Although this scenario is similar to the Dickson Common Ground development, it is not considered the optimum outcome for the suite for the purposes of calculating potential development yield.

28. An alternative method of calculation based on the 'block & stack' image shown in the Concept Plan is to consider the specific dimensions of the proposed buildings. The western building is approximately 30m long, the central building is approximately 60m long and the eastern building approximately 41m long. This gives a total building length of 131m. Assuming a design with average unit widths of 10m, and loss of 10% (13m distance) for services, this would allow for 11 units along the remaining 118m, or 22 units per floor, based on a 'double-loaded'

apartment layout. With 5 residential floors, this would achieve a yield of 110 units.

29. In summary, it is considered the potential yield for the site, based on development consistent with the Hill Thalys Concept Plan is in the range of **110-129 units**. (subject to comments on car parking in Section 2.3 below.

'Aged Care' Calculation

30. The Hill Thalys Concept Plan includes an indicative yield of 122 units if the site was developed as an 'Aged Care' development. The Territory Plan does not specifically define Aged Care, it falls under a wider definition for 'Supportive Housing', which includes, public housing and social housing as well as older persons units.
31. It is assumed the higher yield for Aged Care in the Hill Thalys calculations reflects a higher proportion of single bedroom or studio units.
32. If all units were single bed units at an average of 65m², this should yield **148 units** for the 9,670m² residential floor area stated above.

2.3 Car Parking

33. Whether the site is developed as 'Community Housing' or 'Supportive Housing', the Community Facilities Technical Specification provides for the same rate for on-site car parking.
34. Based on the unit mix described in point 27 above, there would be an 'obligation' to provide 133 car parking spaces, just for the residential component of the development. Noting that the Technical Specifications are not a mandatory requirement.
35. 133 car spaces would often occupy about 4,000 – 4,500m² site area. Based on the 2,150m² building footprint shown in the Concept Plan, this would require 2 basement levels. It is understood that, subject to geo-technical investigations, that any basement may not be feasible.
36. As the remaining site area outside of the building footprint is only about 2,000m² there is not sufficient area to accommodate the 133 cars for the residential use (notwithstanding parking required for any non-residential ground level land uses).

37. Due to the likelihood that tenants will either not own a car or not own more than 1 car, there is an argument for future development to provide reduced parking. Potentially 1 space per unit, plus staff parking.
38. A reduced parking provision of say 1 space per unit, provided as podium parking could be achievable. Provision of podium parking immediately above the ground level non-residential uses should accommodate about 70 car parking spaces (within the 2,150m² building footprint). However, the podium parking would remove one level of residential units reducing the yield by about 20 units. The parking shortfall for the remaining units could be accommodated at ground level.
39. The Concept Plan proposes 2,500m² of non-residential land uses at ground level. Dependant on the future land uses at ground level, provision of on-site parking consistent with the Technical Specifications will be a challenge.
40. As stated above (Point 36), there is about 2,000m² of site area. Assuming 30% of this is required for landscaping, site circulation, access etc, then there is only about 1,400m² available for surface car parking. A community centre occupying the whole 2,500m² would require 100 car parking spaces (or about 3,000m²). To accommodate this, a 2-level structured car park would need to be built, external to the main buildings, which may not be feasible.
41. If the ground level non-residential uses were to include a health facility, child care and/or reduced area community centre, then the parking demand would be even greater than that outlined in point 40 above.
42. Depending on the outcome of the geo-technical investigations, undercroft car parking could be considered to enable parking to be under a partially raised ground floor to achieve additional parking without reducing potential residential yield.

3 Scenario 2

3.1 Assumptions

43. The site is released without any site building restrictions (i.e. the building footprint shown in the Hill Thalys Concept Plan is not applied as part of any land release conditions).
44. The site is developed to 4-storeys consistent with the Community Facility Technical Specifications.

3.2 Calculations

45. Site area = 4,154m².
46. Assume 30% site area allocated for deep soil planting, canopy cover and movement through the site, with these areas being communal open space for residents.
47. 70% site cover of 4,154m² allows a building footprint of approximately 2,900m².
48. Based on 4 storeys as per the Community Facility Technical Specification, this results in a GFA of 11,600m².
49. Allowing 10% circulation and building services, this leaves about 10,440m² residential floor area.
50. Allowing 100m² per unit average this would result in a yield of **105 units**.
(However: see notes below).

3.3 Notes to Calculations

51. The above calculation of 105 units is based on 4-storey development, consistent with the Technical Specification guideline.
52. If a 6-storey building was proposed under this scenario then the total upper-level residential floor area would be 17,400m² resulting in an indicative yield of 174 units.
53. The yield of 105 units for a 4-storey building or 174 units for a 6-storey building does not allow for any GFA that would be used for any 'social enterprise' activities, staff areas, resident 'break-out' spaces and community use tenancies which are often included as part of community housing projects. Inclusion of any, or all of the above would require about 800-900m² for communal purposes (based on the Common Ground Dickson Development) and a reduced yield of 9-10 units.
54. The average area allowed per unit, while consistent with current market standards, is smaller than that provided in other community housing developments.
55. The same car parking challenges will arise for development under this scenario as that for the first scenario – refer Section 2.3 above.

4 Conclusions

56. The potential yield for community housing and/or social housing based on a 4-storey building is considered to be between **110 and 129 units** (subject to typical market conditions, unit sizes and bedroom ratios similar to other community housing projects).
57. The development of 6-storey buildings on the subject site is considered optimistic, but potentially acceptable.
58. A 6-storey building on the subject site will be about twice the height of any other existing building in the neighbourhood. The adjacent 3-storey townhouses to the west across Mirrabei Drive, have their top floor set within the roofline giving the appearance of a lower building. The adjoining Hindu temple will effectively be lower in height than a typical 2-storey building.
59. Notwithstanding the contrast of a 6-storey building with other existing buildings, it will be broadly consistent with future buildings in the Group Centra and may be considered consistent with future character and therefore not inconsistent with the Territory Plan Assessment Outcome, which seeks to ensure the *“height, bulk and scale of the development is appropriate”*. In addition, the Common Ground development in Dickson sets a precedent for a 6-storey building in a neighbourhood where existing buildings are low-rise, but where future character of that neighbourhood is likely to include taller buildings.
60. Therefore, the potential yield for community housing and/or social housing based on a 6-storey building is considered to be between **164 and 174 units** (subject to typical market conditions, unit sizes and bedroom ratios similar to other community housing projects).