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Planning and Assessment  
Department of Planning, Environment and Industry  
Level 17, 4 Parramatta Square, Parramatta NSW 2124

Via Planning Portal

Dear Annie,

**Response to RtS – Waterloo OSD Southern Precinct – SSD 10437**

Thank you for your correspondence dated 4 November 2020 seeking comment on the Response to Submissions (RtS) for the Waterloo OSD Southern Precinct. City staff have reviewed the information accompanying the RtS and provide our response at Attachment A.

While the City does not wish to 'object' to the proposal, we raise significant issues beginning with the planning process to date and matters unresolved from the original EIS. We request that the City be provided the opportunity to review and respond to any recommended conditions of consent prior to determination.

You can contact Senior Planner David Zabell on 9288 5842 or at [dzabell1@cityofsydney.nsw.gov.au](mailto:dzabell1@cityofsydney.nsw.gov.au) if you wish to discuss any matters raised in this submission.

Yours sincerely



**Graham Jahn** AM LFRAIA Hon FPIA  
**Director**  
City Planning | Development | Transport

## Attachment A – Response to RtS

### Planning Process

1. The City has previously raised concerns with the uncoordinated approach to the redevelopment of Waterloo OSD, Waterloo social housing and Botany Road precinct. A holistic approach would have allowed for a better understanding and management of traffic impacts, storm and wastewater runoff and treatment, and established a desired future character regarding bulk, scale, architecture, materiality, signage and landscaping.
2. The Waterloo Metro Quarter Design and Amenity Guidelines should have been finalised prior to the lodgement of these applications. However, the planning process for Waterloo OSD appears to endorse placing 'the cart before the horse' with the detailed design applications dictating the final form of the planning controls. This does not provide any certainty to the community, is poor planning practice and erodes community confidence in the planning process. Further, this process raises the perception that DCP level planning controls are being driven by the developer's commercial objectives at the expense of appropriate building design, the amenity of future occupants, and the quality of the public domain.
3. DPIE should therefore treat any proposed changes to the Waterloo Metro Quarter Design and Amenity Guidelines and note further within our response where City staff discourage this to occur.

### Misapplication of ADG design criteria and guidance

4. City staff have met with the applicant on several occasions during the assessment of this application and have raised clear concerns with the responses provided to the Apartment Design Guide (ADG). City staff have drawn the applicant's attention to the "How to use this guide" section, which states that:
5. *The key to working with Parts 3 and 4 is that a development needs to demonstrate how it meets the objective and design criteria. The design criteria set a clear measurable benchmark for how the objective can be practically achieved. If it is not possible to satisfy the design criteria, applications must demonstrate what other design responses are used to achieve the objective and the design guidance can be used to assist in this.*
6. Unfortunately, the applicant up until this point, has failed to follow this approach in the design and assessment of their application with particular regard to measuring solar access, natural cross ventilation, natural ventilation and visual privacy. City staff have addressed each under relevant headings below.
7. City staff appreciate that not all developments will be able to achieve the design criteria under each objective. This is why design guidance is provided, which provides alternative pathways to ensuring a reasonable standard of amenity for residents. The applicant, however, has consistently adopted design responses or

methods of assessment which are either not reflected in the ADG or are in contravention of the design criteria and guidance. Examples include widening the assessment period for solar access and asserting that plenums provide natural cross ventilation contrary to the definition within the ADG.

8. City staff remain concerned that the social housing development exhibits a number of inconsistencies with the ADG, and that the constraints raised by the applicant are related primarily to the built form and layout of the development, rather than any external impacts or constraints.
9. If DPIE does approve the development, even though it does not meet relevant design criteria, inappropriate or novel responses should not be relied upon as they undermine State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development and the ADG.

#### Makerspace and Place Manager

10. The layout of the Makerspace is compromised by the addition of the B99 service vehicle space. City staff recommend that any additional space required for servicing to be reallocated from the gym area.
11. The application remains unclear as to how the Makerspace and Place Manager will be designed, operated and secured for the life of the development. These are key community facilities and management is necessary to support the proposed development and integrate it into the community. It is recommended that this space and the Place Manager be included in the Planning Agreement required under condition A12 of SSD 9393 or secured through another enforceable mechanism, subject to consultation with the City of Sydney.

#### Wind

12. The wind report notes significant improvements to pedestrian amenity and that the development can generally comply with the comfort and safety criteria of the Waterloo Metro Quarter Design and Amenity Guidelines. However, this relies on the success of extensive tree canopy coverage throughout the site and as such it is imperative that sufficient/ample soil volumes and depths are provided for each tree type.
13. It is recommended that any conditions for tree planting reference the City's Landscape Code Volume 2, and that replacement tree planting occur within the first 10 years of the development where trees fail. The recommendations of the wind report must form part of the conditions of consent, including any coordination with architectural plans.

#### Awnings

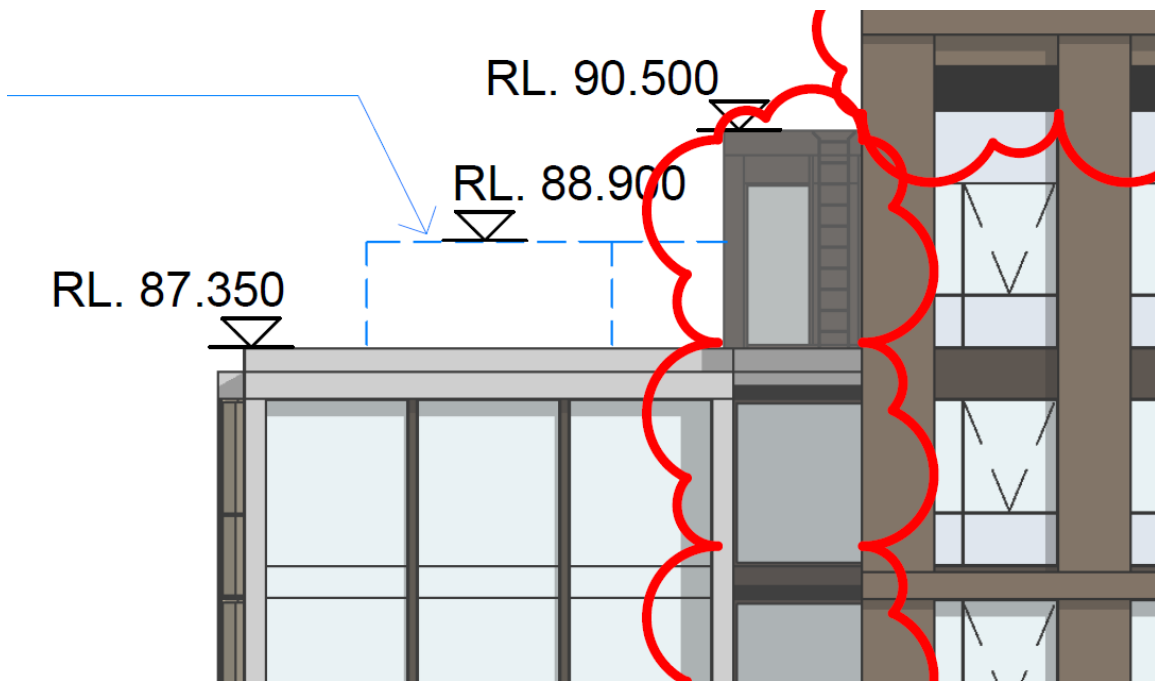
14. Awnings located over the footpath and adjacent at grade spaces should by way of condition comply with the Section 3.2.3 of the Sydney Development Control Plan 2012 to provide weather protection and amenity to pedestrians.

### Blank side walls

15. The additional glazing is acceptable, however, there is no variation in the colour of the grid and infill panels of the north or east walls. This monotony could be better treated with some variety in colour. A condition to this effect is recommended.

### Parapet

16. The height of the parapet on Building 3 identified in the image below should be extended from RL 87.35 to RL 88.9 to conceal views of the solar panels from the surrounding area whilst allowing for unobstructed solar access. All other parapets should be raised to a minimum 1.5 metres above the corresponding finished roof level, subject to mitigating any overshadowing impacts on Alexandria Park.



17. The height of the parapet on Building 4 should be similarly increased by a minimum of 1 metre to obscure any services, exhausts, plant and the like, subject to mitigating any overshadowing impacts. This would result in an exceedance to the stage 1 building envelope but comply with the maximum RL96.9 permitted for the site.

### Materials

18. Any condition of consent regarding materials selection must require specifics including colour, material and where relevant manufacturer. Words such as “or similar” **should not be permitted on the drawings**. No substitutes should be permitted without the approval of an independent Design Review Panel.
19. The glazing selection does not appear to be clear and untinted. High performance and heavily tinted glazing is not good urban design and should not be supported.

20. Awning windows provide substandard amenity for occupants by minimising airflow. It is recommended that sashes or casement windows be provided instead.

#### Solar access and external sun shading

##### *Building 3*

21. Cundall at Appendix P of the RtS have assessed the impacts of summer sun on the western facade of Building 3 using three treatment options. The results of the test are spurious at best, failing to consider the superior option of externally mounted, operable screens. Similar screens have been provided at Central Park, Barangaroo and 188 Day Street, Haymarket and are frequently used to successfully mitigate afternoon summer sun. The development instead is relying on only partial sun shading and tinted high performance glazing.
22. More generous horizontal shading above the lintels and vertical fins provided to the sides of windows should be provided to the northern elevation.
23. Views from the sun diagrams should be provided at the summer solstice from 8am to 5pm to demonstrate the efficacy or otherwise of the design to mitigate the heat gain from the summer sun.

##### *Building 4*

24. The City notes and supports the Design Integrity Panel's comments which endorse the above recommendations for Building 3 and to replicate this to the west elevation of Building 4 (see p20, Appendix F of the RtS).
25. The narrow frontage of the east facing studio apartments would benefit from any additional sunlight access. If DPIE do not wish to condition the use of operable external screens, it is recommended that the louvres could be fixed at an angle which allows some winter morning sunlight penetration rather than none.
26. DPIE should note that the view from the sun diagrams exclude the balustrades to the balconies, which will self-shadow the apartments and reduce their compliance accordingly. Refer to the City's previous submission for an accurate calculation of solar access.
27. In summary, the development fails to adequately prepare for increasing and intensifying hot summer days. Furthermore, DPIE should not support the applicant's attempt to revise the design criteria and guidance of Objective 4A-1 of the Apartment Design Guide by extending the assessment timeframe beyond 9am and 3pm midwinter - See *So v Council of the City of Sydney* [2017] NSWLEC 128 para 14. The performance should be measured consistently against the ADG measure.

#### Visual privacy

28. City staff have consistently raised concerns with the applicant regarding the insufficient building separation and visual privacy provided between the student

housing and social housing residents. The applicant has incorrectly applied the design criteria of Objective 3F-1 which requires increased setbacks between buildings based on the overall height of the building **in metres**, not based on the number of storeys of residential uses.

**Objective 3F-1**  
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

**Design criteria**

1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

Building height	Habitable rooms and balconies	Non-habitable rooms
up to 12m (4 storeys)	6m	3m
up to 25m (5-8 storeys)	9m	4.5m
over 25m (9+ storeys)	12m	6m

Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties

The applicant states:

29. *As discussed in the EIS, the proposed social housing development is constructed directly above the metro services box. SEPP 65 does not apply to the metro services box. Therefore, the building separation requirements are not considered applicable to the proposed development below a height of 19m. Accordingly, the first habitable 'floor level' of the development is technically at RL 35.76.*
30. If this were the case, retail and other commercial uses also not subject to SEPP 65 objectives but commonly located on the lower levels of mixed-use towers could influence separation distances for levels above, which is not the case.
31. The applicant also asserts that internal blinds and locating communal facilities for students on the southwest side of the building provide sufficient mitigation to protect the amenity of social housing residents. The minimal separation distance creates a real and perceived sense of overlooking that unduly burdens social housing residents, who in this location will also not benefit from natural cross ventilation or good solar access during winter.
32. The City has encouraged the applicant to instead provide bay windows to the student housing units with angled glazing directed to the north. This will maintain solar access to these boarding rooms, remove any sense of overlooking and

improve the amenity and dignity of the affected social housing apartments and work with the existing general layout and dimensions.

#### Natural cross ventilation

33. The applicant is proposing to augment the amenity of social housing apartments with plenums, small windows and communal corridors to improve air flow. While DPIE may find that this is acceptable with regard to the constraints of the site (traffic noise, building envelope, LAHC stipulations etc) these measures should not be misconstrued as providing 'natural cross ventilation'. The definition under the ADG is as follows:
34. *Natural ventilation which allows air to flow between positive pressure on the windward side of the building to the negative pressure on the leeward side of the building providing a greater degree of comfort and amenity for occupants. The connection between these windows must provide a clear, unobstructed air flow path. For an apartment to be considered cross ventilated, the majority of the primary living space and n-1 bedrooms (where n is the number of bedrooms) should be on a ventilation path.*
35. Plenums and small windows only allow for effective airflow in one direction, where they are located on the leeward side of a building. They do not provide for effective air flow when located on the windward side (the openings are too small, usually obstructed with insect screens and in the case of plenums can get dirty and difficult to clean) and therefore fail to provide natural cross ventilation. A condition of consent should be imposed requiring cleaning and maintenance plans for the plenums.
36. Furthermore, all north facing apartments are noise affected and must have their windows and external doors closed to achieve acoustic amenity in accordance with Objective 4J-1. While it is beneficial that these apartments can open up their doors and windows to flush the air within the apartments, DPIE cannot claim that these apartments benefit from 'natural cross ventilation' in accordance with the ADG.
37. As such, only 8 out of 70 social housing units achieve natural cross ventilation.

#### Natural ventilation

38. The City encourages DPIE to refer to the [Alternative Natural Ventilation of Apartments in Noisy Environments Performance Pathway Guideline](#) to ensure that the plenums are designed sufficiently to provide both acoustic privacy and natural ventilation to noise affected apartments.

#### Transport

##### *Traffic modelling*

39. The applicant asserts that insufficient information has been provided regarding the redevelopment of the social housing sites to the east to properly model traffic

impacts from the development. This is a symptom of the ad-hoc approach taken to redevelopment of the site and its relationship with other significant redevelopments in the surrounding area.

40. The applicant asserts that 'zero trip generation' for the student housing development is reflective of the lack of on-site parking. However, this does not account for any private vehicles that residents may park on the street and any taxis or rideshare movements which may occur.

#### *Cycle parking*

41. The City does not support the proposed change to Section 3N of the Waterloo Metro Design Quality Guidelines, which reduces the amount of bike parking required for Building 3 by 80%. The applicant has elected to adopt the minimum bike parking requirement from the State Environmental Planning Policy (Affordable Rental Housing) 2009, which is over 10 years old and does not reflect the significant and still growing uptake in cycling.
42. The City and State Government are investing heavily in cycle infrastructure, with new cycle ways throughout Waterloo connecting to the City, Airport and Green Square. The applicant's assertion that facilities in existing student housing developments are under-utilised potentially reflects a lack of commitment to encouraging active transport alternatives. It is noted that limited context for the survey is provided, and if the survey was undertaken during the past 12 months, it should be ignored given the significant fall in student housing tenancy during the Covid pandemic.
43. It is recommended that DPIE reject this revision to the Guidelines and require a greater provision of bicycle parking to encourage more active transport alternatives for residents. If necessary, the gym should be reduced in size to accommodate the additional bike parking.

#### Public art

44. Given the scale, importance and history of the site, along with the aspiration to connect with community and tell First Nations' stories on the site through the public art process, some of the public art opportunities should be advertised as open EOIs for all First Nations' artists to respond. While the City acknowledges the expertise in the Curatorial Team and the proposed selection criteria, an open EOI would allow for a truly democratic public art process. The results could provide the opportunity for unknown artists, or artists with extensive experience who are untested in the public domain, to surprise the selection panel with ideas or stories unique to this location and feels this as a missed opportunity.
45. The City requests that any condition for public art require consultation with the City's Public Art Team regarding the long list of artists prior to final selection. A draft of the Detailed Public Art Plan must be presented to the City's Public Art Advisory Panel for feedback prior to its submission for approval.

#### Waste



46. The Waste Management Plan, provision of bin rooms and numbers of bins are to be amended to be consistent with the Guidelines for Waste Minimisation in New Developments as follows:
- (a) The application has been amended to reduce the size of the bin rooms and incorporate garbage chutes. A chute room is required on each habitable floor of a development that has a chute system. The chute room must be accessible, not adjacent to a habitable area and be able to accommodate at least 2 x 240L bins for waste and recycling in case of chute failure.
  - (b) The City is the waste contractor for Building 4. The City does not support more than weekly collection, and as such sufficient bins and storage areas are to be provided.

Note: The City recommends that a minimum 50mm be provided between each bin to allow for access/manoeuvrability between bins and provisions for disability access should be considered (i.e. 1500mm aisle width between bin rows and avoid bin stacking). Doorway widths into and out of WSA should be designed with appropriate space to accommodate the movement of the largest bin proposed for development. The Waste Management Plan should identify the path of access for residents, retail staff, cleaners and collection vehicles demonstrating the functionality of the bin stores and loading dock.

- (c) 5x weekly collections are proposed for Building 3, resulting in excessive truck movements. This is inconsistent with Sustainable Sydney 2030 and the TOD model which seek to reduce vehicle movements. Sufficient bin storage should be provided to allow for no more than 3x weekly collection.
- (d) Food waste generation cannot be merged with general waste. Separate space must be allocated for food waste recycling. Food waste must be stored in bins 240L or smaller.
- (e) Details the ongoing management, storage and collection of waste, including responsibility for cleaning, transfer of bins between storage areas and collection points, implementation and maintenance of signage, and security of storage areas.
- (f) Waste management plans for demolition and construction including material storage areas for reusable materials and recyclables during demolition and construction; vehicle access to material storage areas; estimation of quantities and types of materials to be reused, recycled or left over for removal from the site are required. A template is available at appendix A and B of the City of Sydney *Guidelines for Waste Management in New Developments 2018*.

### Landscape

47. As previously stated, the development relies heavily on the success of tree planting to mitigate wind impacts caused by the buildings. It is therefore imperative

that all the recommendations of the wind report are incorporated into the conditions of consent.

48. A green roof is proposed to level 3 of Building 3. The section on drawing WMQ-BLD3-ASP-LS-DA303 illustrates substrate that mounds up but also tapers out to almost nothing. This is not supported, and the edge should be increased to a minimum depth of 200mm or 400mm, depending on the intended species.
49. In addition to improved biodiversity, stormwater management, reduced albedo and urban heat island effects, green roofs can significantly reduce the temperature of PV equipment thereby increasing their efficiency. It is recommended that DPIE compel the applicant by condition to engage with this research and provide green roofs not just where PV cells are provided but replace any bare roof spaces.

### Flooding

50. The amended application does not alter the original recommendations and comments made in the public domain assessment of November 2020 in terms of storm water management and flooding. It is noted that the original assessment highlighted the proposed non-compliance of a retail building identified as retail area 11 where the proposed floor level is below the required flood planning level. The original comments are repeated below:
51. *Each application has its own site-specific flood assessment which is based on the proposed building layout to produce flood planning levels for the individual precincts. The flood planning levels specified in the assessment are in accordance with Councils Interim flood plain management policy with the exception of a retail strip fronting Botany Road identified as retail area 11 in the Central precinct. In this case the proposed floor levels of 15.2m AHD are below the flood planning level of 15.7m AHD. The flood planning level being the 1% AEP flood level for retail floor space.*
52. *The reason given for the non-compliance is the relatively small areas of retail floor space available does not allow for adequate DDA compliant ramping form the surrounding Botany road public domain level. This reasoning is not supported and given this is a new development with no site constraints, compliance with the required flood planning levels should be achieved. The depth of flooding in the proposed retail space can be up to 500mm during the 1% AEP storm which is considered not acceptable."*
53. This issue is still outstanding and needs to be resolved. It is also noted that comments from two separate State Government bodies the Environment, Energy and Science Group (EES) and DPIE have also raised concerns about the impact of flooding from the proposed road works along Cope St associated with the Station development. It should be noted that these flooding issues are still outstanding and need to be resolved prior to works commencing on site for access to the station development which will have a flow on effect for the over station developments.

## Signs

54. The application proposes two top of building signs, which are conspicuously absent from the surrounding area and not supported under Council's signage controls within this zone. There are no signage controls within the Waterloo Metro Design Quality Guidelines and as such it is appropriate to refer to the Assessment Criteria of State Environmental Planning Policy No 64—Advertising and Signage for guidance.

55. The applicant asserts that the signs are supportable for the following reasons:

(a) *The proposal is consistent with the theme for top of building signage in the surrounding area. The site is located within 500m of the Australian Technology Park which comprises several top of building signs.*

(b) *Similar top of building signage is installed on buildings elsewhere in the City of Sydney for Iglu tenants including, Iglu Central, Iglu Broadway and Iglu Redfern.*

**Response** The Australian Technology Park is an entirely incomparable context, excluded from the Sydney Local Environmental Plan 2012 and not within the visual catchment of the site. The Redfern and Central examples are similarly excluded from the Sydney Local Environmental Plan 2012, with all three examples again in a similarly incomparable context being on the edge of the CBD. There is no theme for top of building signage in the surrounding area. The signs are therefore inconsistent with the first and fourth assessment criteria under Schedule 1 of the State Environmental Planning Policy No 64—Advertising and Signage.

(c) *The proposed signs will be placed on a simple architectural design and will not result in additional visual clutter.*

**Response** The signs by their nature will result in visual clutter and set an unacceptable precedent in the area inconsistent with the fourth assessment criteria under Schedule 1 of the State Environmental Planning Policy No 64—Advertising and Signage.

(d) *The proposed size of the signs responds to the proportions of the building and will not result in any impacts on the architectural integrity of the building and the surrounding streetscape.*

(e) *The signs are located on adjacent elevations and therefore will not be visible from separate streets.*

**Response** Notwithstanding the signs are unacceptable.

(f) *The signage seeks to fulfil the purpose of identifying the building and improve wayfinding to the student accommodation building for residents and visitors, without compromising the design integrity of the building.*

- (g) *The proposed signage is compatible with the character of the area and existing signage. It effectively communicates the building tenant (Iglu) when approaching from the north and east.*

**Response** This is a unconvincing argument. By the applicant's own admission, there will be a zero-trip generation by the development with the majority of people accessing the site via the Sydney Metro, which is an underground service. Top of building signs serve no wayfinding purpose given the use of mobile map technology. The sole purpose of a top of building sign is advertising.

- (h) *The proposed signs are well integrated with, and subservient to Building 3 so as not to detract from the heritage of Waterloo Congregational Church and nearby items.*
- (i) *The proposed signs are affixed to the façade of Building 3 and therefore not visible above the roof line.*
- (j) *The proposed signage is scaled appropriately for the building and broader WMQ site.*

**Response** Notwithstanding the signs are unacceptable.

- (k) *The proposed signage has been confined to the ground plane and top of building and integrated into the architectural design. The proposed signage is simple and well positioned to identify the building tenant.*

**Response** The top of building signage is unnecessary, sets an adverse precedent for the area, is contrary to Schedule 1 of the State Environmental Planning Policy No 64—Advertising and Signage and presupposes any strategic planning investigations for Botany Road. Signage should be confined to the ground plane only to truly assist pedestrian wayfinding.

Furthermore, as there may be at least three tenants on the site (the Makerspace, which could accommodate more than one tenant), the student housing and the gym, a signage strategy should be prepared by the architects prior to determination.

### Remediation

56. The remedial action plan (RAP) for the Waterloo Station development by Douglas Partners recommends excavation and removal of contaminants from the site, which will form the underground station 28 meters below ground level.
57. The RAP is endorsed by NSW Accredited Site Auditor, Tom Onus within a Section B Site Audit Statement dated 2 June 2020, which states that the land can be made suitable for the proposed use.
58. The recommended remediation strategy includes tanking of the basement to prevent ingress of groundwater and any off-site contaminants, including the slightly elevated levels of chloroform and Trichloroethane referred to within the RAP.

59. The Statements of Environmental Effects for all the above statements refer to the remedial strategy for the metro station as being suitable.
60. However, the endorsed remedial strategy is referred to as HIL (D)- Industrial/ Commercial, which will not meet the HIL (B) for the proposed residential use with minimal opportunity for access to soils or the HIL (C) for the proposed areas of open space.
61. The RAP and Section B Site Audit Statement appears to relate to the eastern section of the site only (Signal Box Area) and further investigations should be carried out for all other land within the site, especially with the potential plume of chlorinated hydrocarbons from the former dry cleaners at 87 Botany Road.
62. Any land to be dedicated to the City of Sydney, for example setbacks, roads and pavements will be subject to remediation to a minimum depth of 1.5m below ground level with no Long Term Environmental Management Plan (LTEMP) attached.