APPENDIX A – BOTANY BAY LOCAL ENVIRONMENTAL PLAN 2013

Principal Provisions of BBLEP 2013	Compliance Yes/No	Comment
Landuse Zone Is the proposed use/works permitted with development consent?	Yes	The site is zoned part B4 – Mixed Use, part R3 – Medium Density Housing and part R2 – Low Density Housing under BBLEP 2013. The proposed residential flat buildings and terrace houses/townhouses is permitted with Council's consent under BBLEP 2013. The proposed recreation area in the R2 zone (one lot) is permissible.
Does the proposed use/works meet the objectives of the zone?	Yes within R2 and R3 zone. No within B4 zone. Refer to item 1 under BB LEP 2013 assessment.	The following objectives are relevant to the proposed Master Plan: R2 Zone Objectives • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To encourage development that promotes walking and cycling. R3 Zone Objectives • To provide for the housing needs of the community within a medium density residential environment. • To provide a variety of housing types within a medium density residential environment. • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To encourage development that promotes walking and cycling. B4 Zone Objectives: • To provide a mixture of compatible land uses. • To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling. The proposal includes two commercial tenancies on the ground floor of the proposed

Principal Provisions of BBLEP 2013	Compliance Yes/No	Comment
		building within the B4 zone. This is discussed further at Note 1.
Does Clause 2.6 apply to the site?	Yes	Clause 2.6 states that land to which this Plan applies may be subdivided, but only with development consent. The proposed development is for a Master Plan and involves several individual land parcels. While the proposal does not propose consolidation, in the event of approval it would be recommended that the site be consolidated as part of the consent. Alternatively, it would form part of the application for stage 2.
What is the height of the building? Is the height of the building below the maximum building height?	No Refer to item 2 under BB LEP 2013 assessment	The permitted height of buildings is 10m for the B4 zone, 22m for the R3 zone and 10m for the R2 zone. The proposed Master Plan exceeds these heights as outlined in this report, as follows: B4 zone Building A – 15.52 metres Building B (west) – 15.79 metres R3 Zone Building B (south wing) – 24.09 metres Building B (east wing) – 27.99 metres Building D (south/west wing) – 24.43 metres Building B (north east wing) – 21.04 metres Building D (east wing) – 11.38 metres Building E – 11.34 metres Consideration has been given to the Applicant's Clause 4.6 variation to the height. An assessment in relation to Clause 4.3 and Clause 4.6 is provided at Note 2
What is the proposed FSR? Does the FSR of the building exceed the maximum FSR?	No Refer to item 3 under BB LEP 2013 assessment	The site has an area of 31,079.5 m^2. The permitted FSR and GFA is as follows: R2 zone: 0.55 and up to 1:1 x 456m^2 (depending upon land use) = max. 456 m^2 R3 Zone: 1.65:1 x 22,565m^2 = 37,232.25 m^2 B4 Zone: 1:1 x 8,058.5m^2 = 8,058.5m^2

Principal Provisions of BBLEP 2013	**Compliance Yes/No**	**Comment**
		Total permitted FSR = **45,746.75** If an aggregate FSR over the site were calculated, the FSR would be = 45,746.75m^2/ 31,079.5m^2 = **1.47:1** The proposed FSR/GFA is as follows: R2 zone: 1:1 x 0m^2 = 0m^2 R3 Zone: 1.57:1 x 22,565m^2 = 35,625m^2 B4 Zone: 1.27:1 x 8,058.5m^2 = 10,097m^2 Total proposed GFA = **45,722 m^2** The non-compliance occurs in the B4 zone. The extent of non-compliance is 2,038.5 m^2. This is discussed at item 3
Clause 4.4 (2A) Is the proposed development in a R3/R4 zone? If so does it comply with site of 2000m^2 min and maximum height of 22 metres and maximum FSR of 1.5:1?	No	Part of the subject site is located in the R3 zone, and the proposed FSR within this portion is 1.57:1. Note, that Clause 4.4B is applicable, which increases the permissible FSR to 1.65:1. Therefore, Clause 4.4B prevails over Clause 4.4(2A).
Clause 4.4B Does this clause apply to the site.	Yes Refer to item 4under BB LEP 2013 assessment	The site benefits from the 1.65:1 FSR 'bonus' control.
Is the site within land marked "Area 3" on the FSR Map	N/A	The subject site is not identified as being within "Area 3" on the FSR map.
Is the land affected by road widening?	Yes	The subject site is affected by road widening on the Land Acquisition Map.
Is the site identified on the Key Sites Map?	N/A	No, however is identified as a key site within the Development Control Plan.
Is the site listed in Schedule 5 as a heritage item or within a Heritage Conservation Area?	N/A	The subject site is not identified as a Heritage Item or within a Heritage Conservation Area.
Development near zone boundaries	N/A	The proposed development is permissible within the relevant zone and does not rely upon the provisions of Clause 5.3.
The following provisions in Part 6 of the LEP apply to the	Yes	Clause 6.1 – Acid Sulfate Soils. The subject site is affected by Class 4 Acid Sulfate Soils.

Principal Provisions of BBLEP 2013	Compliance Yes/No	Comment
development: 6.1 – Acid sulfate soils		The Acid Sulfate Soils (ASS) assessment submitted with the application indicates that actual and potential ASS are unlikely to occur at the site. A detailed ASS assessment however would be required for submission during Stage 2.
6.2 – Earthworks	Yes	Clause 6.2 – Earthworks. The proposed development seeks to demolish the existing buildings and excavate the subject site for basement car parking. The development application is Integrated Development and as such, the NSW Office of Water has provided its General Terms of Approval for the proposed development. These condition is required for future Stage 2 applications. The development is considered to be consistent with Clause 6.2 of BBLEP 2013.
6.3 – Stormwater management	Yes Refer to Note 5.	Clause 6.3 – Stormwater. Council's Engineer advises that the application is generally satisfactory for the master plan stage, however further information will be required as part of future stage 2 applications. This is included as a condition of consent. In addition, the application is to be amended to adopt the minimum Flood Planning Levels (FPL) recommended in the applicants report. This has been included as a deferred commencement condition.
6.8 - Airspace operations	Yes	Clause 6.8 – Airspace Operations. The subject site lies within an area defined in the schedules of the Civil Aviation (Buildings Control) Regulations that limit the height of structures to 50 feet (15.24 metres) above existing ground height without prior approval of the Civil Aviation Safety Authority. The application proposed buildings which exceed the maximum height and was therefore referred to Sydney Airports Corporation Limited (SACL) for consideration. SACL raised no objections to the proposed maximum height of 34 metres AHD, subject to conditions to be imposed on any consent. The development is considered to be consistent with Clause 6.8 of BBLEP 2013.

Principal Provisions of BBLEP 2013	Compliance Yes/No	Comment
6.9 – Development in areas subject to aircraft noise	Yes	Clause 6.9 – Aircraft Noise. Only the B4 zoned section of the subject site is affected by the 20-25 ANEF contour. An acoustic report would be required at Stage 2. The development is considered to be consistent with Clause 6.9 of BBLEP 2013.

APPENDIX B – BOTANY BAY DEVELOPMENT CONTROL PLAN 2013

Part	Control	Proposed	Complies
3A.2 Parking Provisions	A dwelling mix has not been provided, however based upon the indicative breakdown submitted by the applicant, the proposal would require a minimum 786 parking.	749 spaces	**No – the proposal results in a shortfall of 37 spaces.** **Any future application will be required to comply with the car parking requirements.**
3J.2 Aircraft Noise Exposure Forecast	**C3** In certain circumstances, and subject to Council discretion, Council may grant consent to development where the building site has been classified as "unacceptable" under Table 2.1 of AS2021-2000. For Council to be able to consider such applications for development, the following factors must be complied with: (i) Submission of specialist acoustic advice by an accredited acoustical consultant certifying full compliance with the requirements of Table 3.3 of AS2021-2000; (ii) Submission of plans and documentation indicating the subject premises will be fully air-conditioned or mechanically ventilated in accordance with Council guidelines; and (iii) Any additional information considered necessary by Council to enable it to make a decision.	The portion of the site zoned B4 is located within the 20-25 ANEF. It is anticipated that an acoustic report would be submitted with the Stage 2 development application indicating that the building can comply with the requirements of AS2021-2000.	**Yes**
4C.6.1 Adaptable Housing	**C3** - Disabled access to all common areas shall be provided even if the development has less than five (5) dwellings and does not contain an adaptable dwelling. **C 4** - Where a development includes five (5) or more dwellings at least one (1) dwelling must be constructed to meet either Class A or B adaptable housing standards under AS 4299-1995 Adaptable	The application does not seek consent for specific apartment layouts and design. However any future Stage 2 application will need to provide adaptable apartments as per the requirements of the DCP.	This can be addressed by way of condition in the event of approval.

Part	Control	Proposed	Complies
	Housing.		
3A.3.1 Car Park Design	**C1 – C41** Comply with AS2890.1 and AS2890.6; entry/exit forwards; residential parking separated in mixed-uses; Stormwater to comply with Council's Guidelines; Pedestrian routes delineated; Location; Access; Landscaping; Basement Parking; Residential; Non-Residential; Pavement; Lighting; Accessible Parking; Waste Collection Points	Compliance with Australian Standards to be demonstrated in Stage 2.	**N/A**
3A.3.2 Bicycle Parking	**C1-C5** To comply with AS2890.3 & AUSTROADS.	Compliance with Australian Standards to be demonstrated in Stage 2.	**N/A**
3A.3.4 On-site Loading & Unloading	**C1-C11** 1 courier van for 999m^2 offices + 1 service bay/50dwgs	No commercial/retail component proposed. However, the BB LEP 2013 and BB DCP 2013 require ground floor non-residential uses. Therefore, loading facilities are necessary. This will need to be addressed as part of a future Stage 2 application.	**No**
3B Heritage	Development in vicinity of heritage item or HCA	N/A	**N/A**
3C Access, Mobility & Adaptability	**C1-C4** Compliance with DDA, AS4299.	Compliance with Australian Standards to be demonstrated in Stage 2.	**N/A**
3G.2 Stormwater Management	**C1-C6** Comply with Stormwater Management Technical Guidelines; Part 3G.5 Stormwater Quality.	The stormwater report has been reviewed by Council's Development Engineer. Council engineers advise that the application is generally satisfactory, subject to the provision of further information as part of Stage 2 applications. In addition, the development is to be amended to adopt the minimum Flood Planning Levels (FPL) recommended in the report. This has been addressed under Note 5 of the BB LEP 2013.	**No** **Refer to item 5 under BB LEP 2013.**
3H Sustainable Design	**C1-C6** BASIX; Solar hot water encouraged.	BASIX Certificate to be provided at Stage 2.	**N/A**

Part	Control	Proposed	Complies
3I Crime Prevention Safety & Security	Site layout, design & uses; Building design; Landscaping & lighting; Public domain, open space & pathways; Car parking areas; Public Facilities.	Comments received from NSW Police & may be included as conditions of consent.	**Yes**
3J OLS	Aircraft height limits in prescribed zones.	SACL comments received – no objection.	**Yes**
3K Contamination	Consider SEPP 55 & Contaminated Land Management Act 1997.	The site requires the preparation of a Remediation Action Plan (RAP) which would be conditioned to form part of any Stage 2 Application.	**Yes**
3L Landscaping	General Requirements; Planting design & species; Landscaping in car parks; Green roofs.	The application includes a deep soil park along the Wilson Street frontage, and deep soil areas along the perimeter of the site. Discussed at Note 1.	**Yes** **Refer to item 1 under BB DCP 2013.**
3N Waste Minimisation & Management	General Requirements; Residential Development; Mixed Use Development.	A Waste Management Plan would be required as part of the Stage 2 submission and could be conditioned as part of this consent.	**Yes**
4C Residential Flat Buildings	Only applicable to development in R3 & R4 zones. However Part 9C of DCP requires compliance.	See below	
4C.2.1 Site Analysis	Site Analysis Plan required.	Site Analysis Plan submitted & SEPP 65 assessment undertaken.	**Yes**
4C.2.2 Local Character – Botany	Desired Future Character Statement; Part 8-Character Precincts	8.4.2 The proposed built form results in a non-compliance with the FSR within the B4 zone and a non-compliance with the height within the B4 and R3 zone. This has been addressed in the assessment under the BB LEP 2013. The application, subject to the design amendments recommended by Council, is generally consistent with the local character. This is discussed at Note 2.	**No – refer to item 2 under BB DCP 2013.**
4C.2.3 Streetscape Presentation	Compatible with bulk & scale of adjoining residential developments; Max building length 24m; Walls	Building lengths range from 22m to 95m.	**No – refer to item 4 under BB DCP 2013.**

Part	Control	Proposed	Complies
	>12m must be articulated; Street presentation.	This is discussed further at Note 4.	
4C.2.4 Height	Comply with cl.4.3 of BBLEP 2013; Buildings to respond to character of neighbourhood; Height & bulk must be distributed to ensure no significant loss of amenity to adjacent sites.	Proposed building heights are non-compliant. It is noted that some building heights are compliant.	**No** **Discussion provided within BBLEP 2012.**
4C.2.5 Floor Space Ratio	Compliance with cl.4.4, 4.4A & 4.4B of BBLEP 2013. 0.55:1 for R2 zone 1:1 for B4 zone 1.65:1 for R3 zone	The proposal results in a non-compliant FSR within the B4 zone. The FSR within the R2 and R3 zone are compliant.	**No** **Discussion provided within BBLEP 2012.**
4C.2.6 Site Coverage	Max site cover 45%	Applicant submits that site coverage is 55.4%, due to basement car park.	**No**
4C.2.7 Landscaped Area and Deep Soil Planting	Landscaped area = 35% (min) Unbuilt upon area = 20% (max) Deep soil = 25% (50% at rear; 30% within front setback; 2m wide landscaping along one side boundary). Basement car parks, where permitted, must not extend to the full width of a site and excavation for any associated garages, car parking, plant rooms or ancillary storage must not exceed 65% of the site area (which equates to maximum site cover + unbuilt upon area).	Landscaped Area = 37.9% Unbuilt = not confirmed, as there is no detailed design at this stage Deep soil = 15% or 4,700 sqm Basement appears to occupy 70% of site area.	**Yes** **N/A** **No – Refer to item 1 under BB DCP 2013.** **No – Refer to item 1 under BB DCP 2013.**
4C.2.8 Private & Communal Open Space	Studio & 1bed = $12m^2$ 2 bed = $15m^2$ 3 bed = $19m^2$ 4 bed = $24m^2$ Min depth of balconies = 3m (or adequate useable space). Min. communal open space = 30% >3hrs sunlight on 21 June	Detail to be provided as part of the Stage 2 DA. The proposal incorporates 8,300m2 of communal open space (27% site area)	**N/A** **No**

Part	Control	Proposed	Complies
4C.2.9 Setbacks	Comply with SEPP 65; Front & side setbacks to provide deep soil; Minimise bulk & scale; Provide adequate exposure to sunlight; Front setback consistent with existing; 3m side setback (min); Basement car parking min 1.5m from side boundaries.	**Front building setbacks to match setback of adjoining properties** **Wilson Street** - 4 metres **Pemberton Street** – 9 metres (southern end), 3metres (northern end) **Warrana Street** – 3 metres **New Street 1** – 5 metres Side setback – min 3m for buildings greater than 7m; basement parking to also observe 3m setback Rear setback to match adjoining properties but must be a minimum of 6m.	**Yes – setbacks considered acceptable as proposed in the Master Plan. Further assessment to be undertaken at Stage 2.** **Refer to item 3 under BB DCP 2013.**
4C.2.10 Through Site Links & View Corridors	Existing view retained; View corridors integrated.	Taller buildings have been positioned toward the centre of the site with separations provided by site links to mitigate view impacts.	**Generally compliant – as discussed in the body of this report.**
4C.3.1 Design Excellence	Excellence in urban design; Design principles; Daylight & ventilation to dwellings.	Buildings articulation to be provided as part of future Stage 2 applications.	**Can comply as part of future applications.**
4C.3.2 Corner Buildings	To align & reflect corner conditions; Reflect architecture & street characteristics.	Corner Buildings appropriately address streetscape.	**Yes**
4C.3.3 Building Entries	Compliance with SEPP 65 for entry & pedestrian access; shelter & well-lit; pedestrian access separated from car parks.	RFDC assessment provided. Building entry easily identifiable. Further details to be provided as part of Stage 2 application.	**Yes**
4C.3.6 Materials & Finishes	Schedule of finishes; Consistent with Part 8; long-wearing materials.	Sample board to be provided in Stage 2 submission.	**N/A**
4C.5.1 Dwelling Mix, room size & layout	Studio – 60m^2 1 bed – 75m^2 2 bed – 100m^2 3 bed – 130m^2 4 bed – 160m^2 25% max no. of 1bed units.	Internal unit layouts not provided with this application, however further details are to be provided in Stage 2 submission. There is an error in the DCP, and this is being rectified by Amendment No1 to the DCP, which requires a maximum of 25% of studios and 1 bedroom apartments.	**N/A**
4C.5.2 Internal Circulation	2m min. corridors; Articulate long corridors.	Details to be provided in Stage 2 submission.	**N/A**

Part	Control	Proposed	Complies
4C.5.3 Building Depth	Max depth = 18m Max habitable room = 10m Single aspect units = 8m Min apartment width = 4m	The following maximum building depths are proposed: Building A = 25m Building B = 25m Building D = 13.9m- 25m Building E = 13.9m-21.6m Other details to be provided in Stage 2 submission.	**No – Refer to item 4 under BB DCP 2013**
4C.5.4 Balconies in RFBs	Differing styles; Min. $12m^2$; Provides for privacy & visual surveillance; Not continuous across facade.	Details to be provided in Stage 2 submission.	**N/A**
4C.5.5 Ground Floor Apartment in Residential Flat Developments	Active street edge; Individual entries; Privacy to be increased by providing gardens & terraces as a transition zone.	The Master Plan would enable individual entries at ground level. Details to be provided in Stage 2 submission.	**N/A**
4C.5.6 Natural Ventilation	Comply with SEPP 65 & RFDC.	Details to be provided in Stage 2 submission.	**N/A**
4C.5.7 Ceiling heights	3m for shops; 2.7m for habitable units.	Details to be provided in Stage 2 submission.	**N/A**
4C.5.8 Solar Access	SEPP 65 & RFDC compliance; 70% of units receive 3 hrs direct sunlight on June 21; Minimal impact upon adjoining properties.	Details to be provided in Stage 2 submission. Impacts of overshadowing on the development to the south at 42-44 Pemberton Street is addressed at Note 5.	**Yes** **Refer to item 5 under BB DCP 2013.**
4C.5.9 Visual Privacy	SEPP 65 & RFDC; No direct views into windows of other dwellings; Attic windows shall not overlook.	Details to be provided in Stage 2 submission.	**N/A**
4C.5.10 Building Separation	SEPP 65 & RFDC; and Table 5 of DCP.	Separation distances between the proposed buildings are consistent with the requirements under SEPP 65. The location of windows/balconies/openings and habitable rooms will be provided as part of future Stage 2 applications and further assessment will be undertaken at that stage.	**Yes** **Future Stage 2 applications to comply**
4C.5.12 Acoustic Privacy	Table 6 of DCP; Multiple dwellings to be designed & constructed to	Details to be provided in Stage 2 submission.	**N/A**

Part	Control	Proposed	Complies
	comply with BCA.		
4C.5.14 Storage	Studio – $6m^2$ 1 bed – $8m^2$ 2 bed – $10m^2$ 3+ bed – $12m^2$	Details to be provided in Stage 2 submission.	**N/A**
4C5.15 Site Facilities	1 lift per 40 units; Garbage storage; Sunlight available to clothes drying area; Undergrounding of major infrastructure.	Details to be provided in Stage 2 submission.	**N/A**
4C.5.16 Safety & Security	Comply with Part 3I Crime Prevention, Safety & Security; SEPP 65 & RFDC in terms of site amenity & safety.	DA considered by NSW Police in terms of CPTED design principles & appropriately conditioned.	**Yes**
4C.5.17 Car Parking & Vehicle Access	Pat 3A compliance; Basement car parking <1.2m out of ground.	Details to be provided in Stage 2 submission.	**N/A**
4C.6.1 Adaptable Housing	Part 3C; Provide all access to common areas in accordance with DDA & BCA; Compliance with adaptable housing standards AS4299-1995.	Compliance with Australian Standards to be demonstrated in Stage 2.	**N/A**
8.4 Botany Character Precinct	Existing Local Character; Desired Future Character.	The proposal, subject to the recommended amendments, is generally consistent with the character objectives relating to form, massing, scale & streetscape; solar access and views.	**Yes – discussed at item 2 under BB DCP 2013**
9.C Wilson/ Pemberton Street Precinct **9C.5 B4 Mixed Use zone along Pemberton St**	Ground & first floor complementary non-residential uses; Height & FSR to comply with BBLEP 2013; Residential not to be adversely impacted by non-residential uses; Setbacks to comply with Table 2; Flooding. Mixed Use Development – active street frontage; Plan of Management; Traffic movements to be managed; Site lighting for building security; Adjoining dwellings access to sunlight; Commercial parking to be conveniently located.	No Ground floor commercial or retail uses proposed. Council officers have recommended that the Building B along Pemberton Street within the B4 zone must include ground floor commercial uses.	**No – discussed at item 2 under BB DCP 2013.**
9.C Wilson/ Pemberton Street Precinct	Table 1 – New Street 1 (Public Street) 20m wide road reservation traversing the precinct from east to west for cars only and closed at	Building E fronts onto New Street 1, which would allow for two-way traffic.	**Yes**

Part	Control	Proposed	Complies
	Wilson Street.		
	Table 2 – New Street 2 & Table 6 Pedestrian Link	Pedestrian through link provided measuring 24m in width.	**Yes**
	Table 3 – Rancom Street	N/A	**N/A**
	Table 4 – Pemberton Street Widening Pemberton Street will be widened by a 4m strip of land along the eastern side of the street to achieve a 20m wide road reserve.	4m strip of land to be dedicated to Council as shown on plans.	**Yes**
	Table 9 – Public Open Space north of New Street 1 The size of the public open space will be a minimum of 3,000m^2 and is to be dedicated to Council.	Proposal includes a 3,000m^2 open space area. Applicant indicates that park shall be dedicated to Council. As outlined in this report, a formal offer of dedication should be submitted to provide certainty to Council of future dedication.	**Yes**
9C.4 R3 Medium Density Residential Zone	Council at its Meeting held 11 December 2013 resolved to prepare a Planning Proposal in accordance with the Environmental Planning & Assessment Act 1979 and its Regulation to amend the Botany Bay Local Environmental Plan 2013 as follows: - Delete Sub-clause (2A) in Clause 4.3 – Height of Buildings relating to a 22 metre height for sites zoned R3 and R4 (which have a site area of 2000m2 and over); and - Delete Clause 4.4B – Exceptions to FSR in Zone R3 and Zone R4 (which permits a FSR of 1.65:1 for sites with an area of 2000m2 subject to a list of criteria). As a result of the Council's resolution the provisions of the DCP relating to 2000m2 sites which are zoned R3 and R4 are subject to change.	Noted – the proposal is generally compliant with the current controls that are in force under the BB LEP 2013. See section under BBLEP 2013 compliance table.	**Noted**

Part	Control	Proposed	Complies
9C.5 B4 Mixed Use Zone along Pemberton Street	The ground and first floors of development must contain complementary non-residential uses permissible in the B4 zone. Residential uses are only permitted at the 2nd floor and above.	The ground floor spaces of the buildings along Pemberton Street contain only two non-residential uses. Council officers recommend that at a minimum the ground floor of Building B that fronts onto Pemberton Street shall contain non-residential uses. Further, this report recommends that the buildings within the B4 zone be reduced in height to 3 storeys.	**No – discussed at item 2 under BB DCP 2013.**
	Height and FSR are to comply with the provisions of the Botany Bay LEP 2013.	<u>B4 zone</u> Permitted FSR: 1:1 Permitted Height: 10m Proposed FSR: 1.25:1 Proposed Height: 15.79m	**No** **No** **Discussed under BB LEP 2013.**
	The following setbacks apply to the site: <u>Building Setback</u> Front - 7m Side – adjoining a residential zone – 3m	<u>Building Setback</u> Front - 7m (Pemberton St north – note 4m of front setback will be excised for road widening). Front - 3m to Warrana St Front - 4m to Wilson St Front – 9m to New Street 1 (note 4m of front setback will be excised for road widening). Front – 13m to Pemberton St south (note 4m of front setback will be excised for road widening). Side – Ranges from 7m to 17.5m adjoining residential zones. Note - all setbacks appear to be landscaped in accordance with the DCP requirements.	**Yes** **No** **No** **Yes** **Yes** **Yes** **Discussed at item 3 under BB DCP 2013**



52-54 Pemberton Street Botany

Masterplan Stormwater Management Report

November 2014

Australand Residential Botany Pty Ltd

Mott MacDonald

52-54 Pemberton Street Botany

Masterplan Stormwater Management Report

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Issue and revision record

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Contents

Executive Summary

Australand Residential Botany Pty Ltd proposes to redevelop the existing site bounded by Pemberton, Wilson, Warrana and adjacent future development into a multi-unit residential development. Mott MacDonald has been commissioned to undertake an assessment of the water management issues as part of a Masterplan Stage 1 DA submission.

Hughes Trueman/Mott MacDonald has previously undertaken 2D flood modelling in the site catchment and it is understood that Council has not completed any major catchment modelling investigations since this time. This existing flood modelling has been used to assist in the stormwater management assessment. A copy of the previous 2D flood modelling is attached to this report.

The key issues associated with the proposed development with respect to stormwater management are summarised below.

Flooding

Pemberton and Wilson Streets, downstream of the site, are significantly prone to flooding due to a constriction (building over) in the trunk stormwater channel/overland flowpath easement over 21 Pemberton Street. The level of ponding in Pemberton Street is controlled by the level and width of the downstream overland flowpath running through 21 Pemberton Street. The resulting ponding level in Pemberton Street is below the level of the subject site.

Pemberton and Wilson Streets operate as overland flowpaths. The previous flood studies for the precinct indicate flood inundation into the site from Pemberton Street, however, this is as a result of the existing building in this location not being included in the flood modelling. There is a constant line of buildings within the site along Pemberton Street, therefore there is no flood inundation into the site along this frontage. A small area of flood storage exists off Wilson Street at the south of the site. An equivalent volume of flood storage will be provided within the proposed development. The previous flood modelling indicates that in the 1 in in 100 year recurrence interval the overland flow depth in Pemberton Street adjacent to the site shall be up to 600mm and the flow depth in Wilson Street adjacent to the site shall be up to 200 mm.

A 500mm freeboard will be provided above the flood level in Pemberton Street to the proposed development floor levels in accordance with Botany Council's requirements.

A freeboard of 300mm shall be provided at all basement entry ramps.

Minimum Flood Planning Levels have been determined based on the 1 in 100 recurrence interval flood levels determined from the previous 2D flood modelling for the area undertaken by Hughes Trueman/ Mott MacDonald. The post development flows from the site shall be less than the current flows from the site and shall not impact on the regional flows/depth of flow in Wilson and Pemberton Street. These proposed minimum flood planning levels are shown on Figure 3.5 in this report.

Water Quantity Management

Detention for the development shall be provided within the proposed development to constrain outflows to 'state of nature' volumes. Detention shall be considered on a catchment by catchment basis to maintain the existing flow regime and to ensure that no adverse impacts are introduced to third parties.

Botany Council's stormwater guidelines require absorption to be considered as part of the stormwater design. It is considered that, due to the groundwater levels at the site, absorption is not appropriate in this instance.

There is a stormwater drainage line crossing the site. This pipe currently drains a small upstream catchment in Kurnell Street (approximately 3000sqm) and also collects stormwater from within the site. This pipeline discharges into the main stormwater main that runs between Wilson Street and Permberton Street. The pipe size ranges from 375mm increasing to 525mm at its discharge point into the main channel. This stormwater line is old and will conflict with the proposed development basements. It is proposed to remove this existing stormwater pipe and replace it with a new pipe running around the basement envelope and connect into the trunk stormwater channel. The proposed pipe shall have a reduced contributing catchment area as all site flows shall be directed through separate connections via detention systems. The pipe shall provide for the upstream Kurnell Street flow only. Overland flow from this minor upstream catchment shall be accommodated in a proposed overland flowpath across the site.

Easements

There are a number of existing drainage easements on the existing site. A drainage easement running north-south through the site caters for the upstream Kurnell Street catchment. This easement will be removed and the drainage (piped and overland) will be diverted around the proposed development as discussed above.

A second easement covering a significant portion of the site is understood to remain from the early land uses (market gardens) on site to permit surface drainage from areas within the site. This easement was subsequently built over and its function (to provide surface drainage to the market gardens) was no longer required. This easement is not required as part of the proposed development and can be removed.

Development Impacts

The total impervious area of the site will be reduced post-development. This will result in reduced levels of discharge. With the addition of detention, discharge volumes will be significantly reduced.

The proposed development floor levels and carpark entry crest levels will be located above the flood levels with appropriate freeboard provision to protect the development from flooding.

The proposed development will not result in any adverse impacts to any third party.

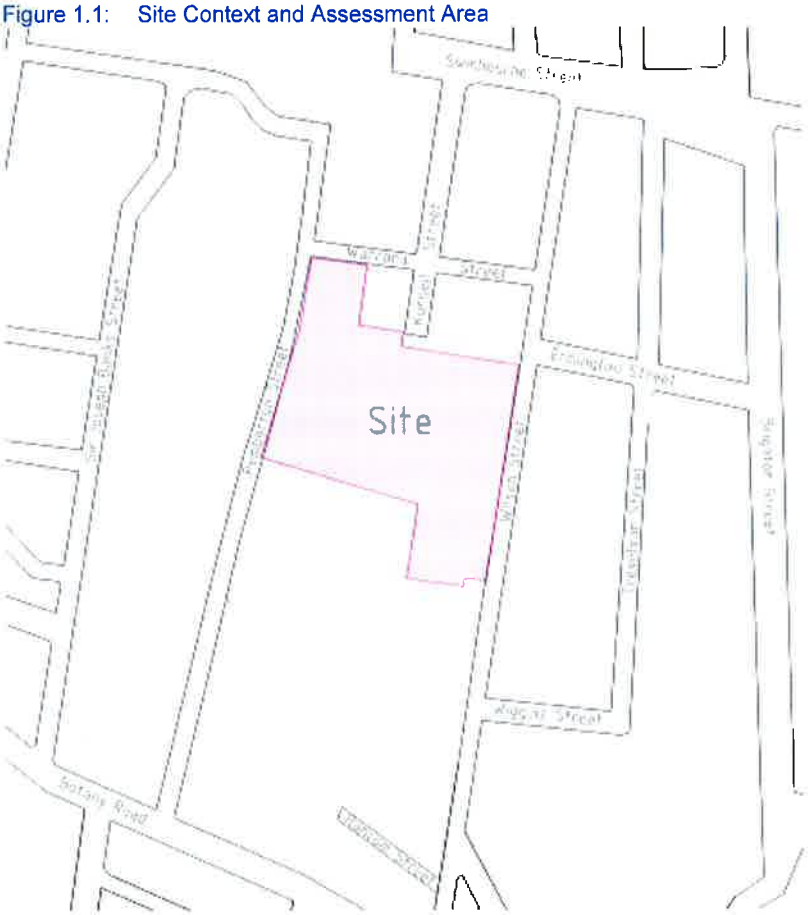
1. Introduction

1.1 Background

Mott MacDonald has been commissioned by Australand Residential Botany Pty Ltd to prepare a masterplan stormwater management report for the proposed redevelopment of 52-54 Pemberton Street, Botany as part of the Stage 1 Masterplan DA for the development.

The site is indicated in Figure 1.1 below.

Figure 1.1: Site Context and Assessment Area



1.2 Purpose of Assessment

The main aims of this masterplan stormwater management report are:

- To consider the flooding issues (local and regional) relevant to the site planning
- To assess and recommend appropriate floor levels controls for the proposed development
- To identify requirements with respect to maintaining existing flood storage within the site
- To consider and incorporate detention requirements
- To address water quality management issues

1.3 Scope of Assessment

This study investigates the following:

- The infrastructure site constraints,
- Topographical constraints – slope, drainage corridors;
- Appreciation of hydrological issues by desktop review of previous studies;
- Identification of Stormwater Quantity Management issues - detention requirements;
- Identification of likely Stormwater Quality Management obligations; and
- Integration issues with adjacent properties and proposed development

The study addresses all the items raised by Botany Bay Council at the meeting of 25/11/14 including:

- Proposed floor levels and basement ramp crest levels for the proposed development;
- Incorporation of on-site detention;
- Maintenance of existing flood storage on site;
- Existing easements;
- External site catchment from Kurnell Street.

1.4 Base Data

The base data used as a part of this assessment includes:

- Survey by Crux Surveying (30/01/2013)
- Survey by Dunlop Thorpe & Co. (15/10/2014)
- Architectural Drawings by Group GSA. Note: Proposed building footprints and other landuses shown in this report and drawings are indicative only. Refer to the architectural drawings for further details.
- Previous regional flood modelling undertaken in the area by Mott MacDonald – Parkgrove, Botany Flood and Stormwater Management Report, Mott MacDonald. (2011)

The report prepared by KFW and provided by Botany Bay Council for the adjacent 42-44 Pemberton site has also been reviewed as a part of this assessment.

1.5 Regional Context

The subject site comprises a parcel of land bounded by Pemberton Street to the west, Warrana Street to the north, Wilson Street to the east and future residential development to the south (currently industrial lots). The southern boundary of the site is approximately 260m to the north of Botany Road. More broadly, the site is located within the Botany Bay Local Government Area (LGA).

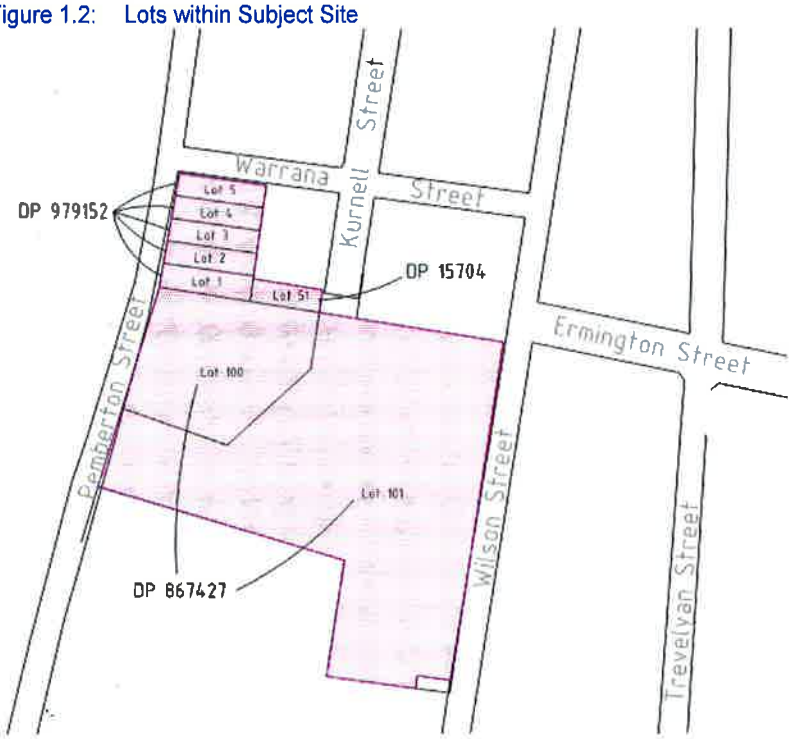
1.6 Lots and Site Areas

The site encompasses a number of lots, as indicated in Figure 1.2 below. Approximate areas of the respective lots are included in Table 1.1.

Table 1.1: Lot Areas

DP	Lot	Approximate Area (sqm)
979152	1	645
979152	2	589
979152	3	583
979152	4	578
979152	5	572
15704	51	456
867427	100	5,894
867427	101	21,760
	Total	***31,077***

Figure 1.2: Lots within Subject Site



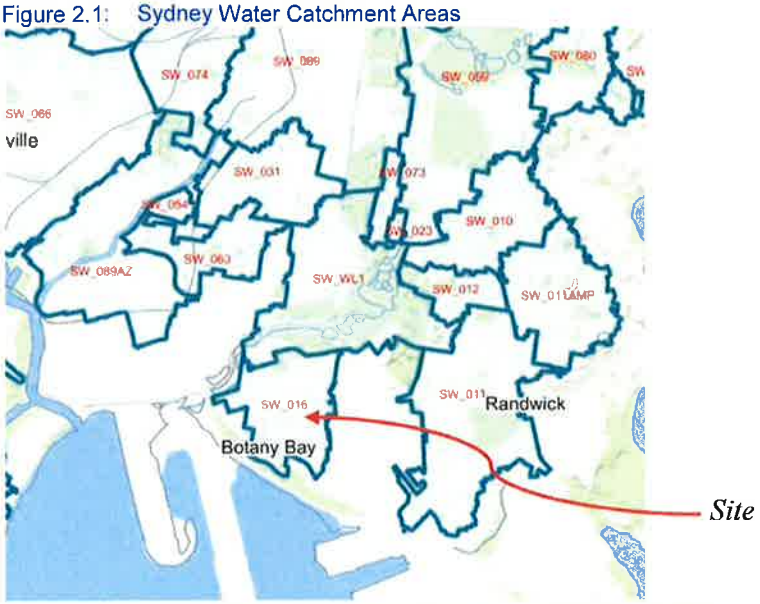
2. Existing Site Conditions & Constraints

2.1 Catchments & Hydrology

2.1.1 Regional

The site sits wholly within the Foreshore Beach subcatchment draining to Botany Bay and is within Sydney Water catchment SW_016 (refer to Figure 2.1 below). Sydney Water maintains the trunk drainage system within the catchment.

Figure 2.1: Sydney Water Catchment Areas



Source: Sydney Water Stormwater Drainage Areas, Sydney Water Asset Data Information, 2012

All site areas ultimately drain to the west to Pemberton Street. A catchment boundary divides the site into eastern and western sub-catchments. The western subcatchment drains directly to Pemberton Street, while the eastern subcatchment drains to the southeast to Wilson Street and the new street to the south of the site. The flows in Wilson Street drain along a drainage easement to the south of the site to Pemberton Street.

A 900mm diameter pipe runs along an easement beyond the site's southern boundary. The pipe continues across Pemberton Street and through the property on its western side (continuing through an easement). Midway between Pemberton Street and Sir Joseph Banks Street, the 900mm pipe joins an open channel which subsequently joins a Box culvert in Sir Joseph Banks Street. The trunk stormwater system runs southerly along Sir Joseph Banks Street and Livingstone Avenue

prior to crossing Sir Joseph Banks Park and discharging into the bay via 3 No. 1650mm dia pipes. The existing stormwater from Sir Joseph Banks Street to the ultimate discharge point varies in cross section between multiple piped systems and multiple box culverts.

The existing regional stormwater is shown schematically on Figure 2.2 below. The local stormwater infrastructure and constraints are shown in more detail on Figure 2.3.

Figure 2.2: Regional Stormwater

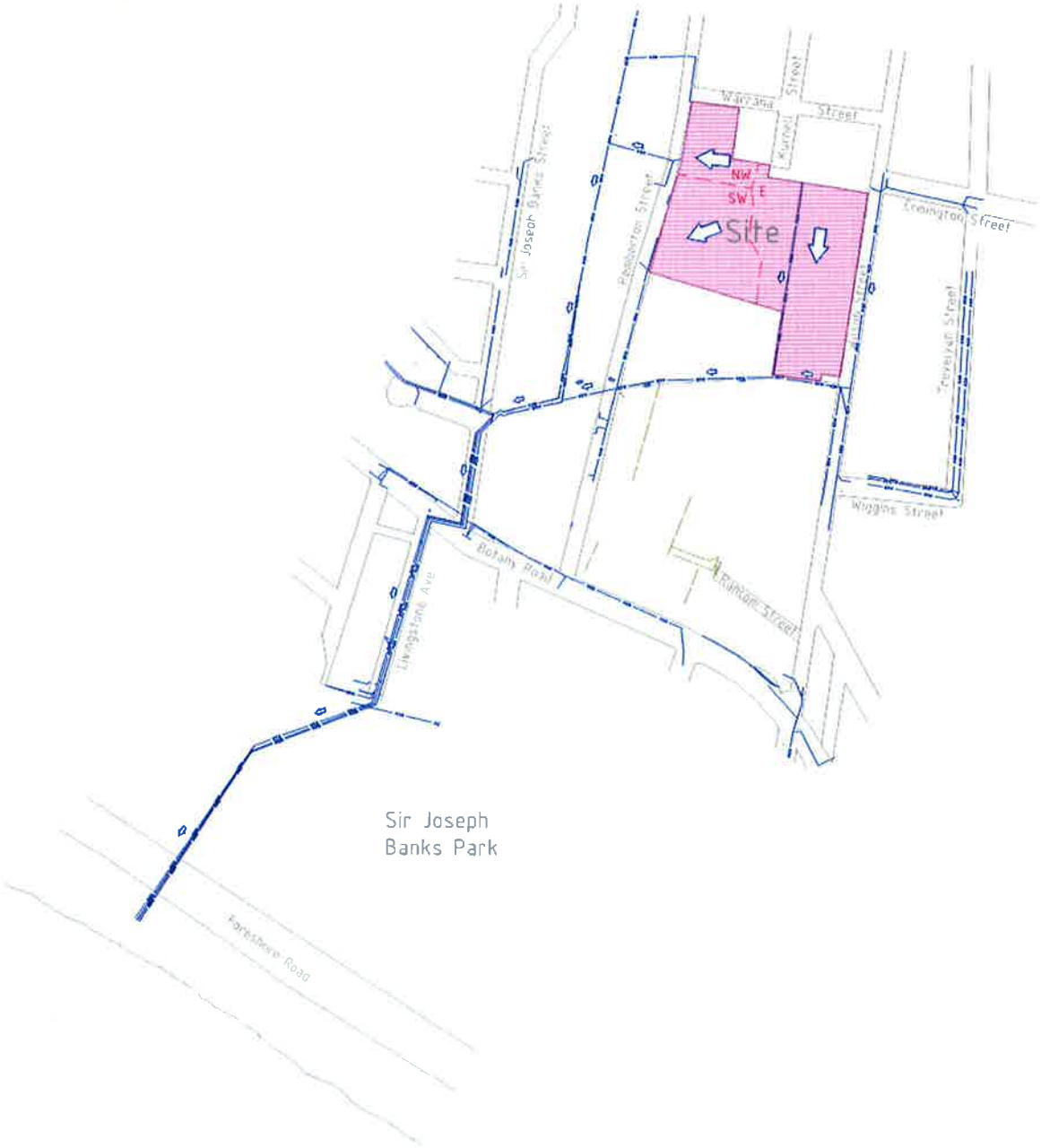


Figure 2.3: Local Stormwater

2.1.2 Site Drainage

The existing site drains principally to the existing piped systems in Pemberton and Wilson Streets based on the catchment boundary indicated in Figure 2.3 above. Portion of the site drains into the cross site pipeline running from Kurnell Street

2.1.2.1 Stormwater Easement through Site

A stormwater line runs along an easement through the site in a southerly direction. The pipe increases in size from 375mm at the site's northern boundary to 525mm at its connection to the 900mm main running westerly adjacent to the site's southern boundary, as described in Section 2.1.1 above. This stormwater line currently conveys flows from the southern end of Kurnell Street bounded to the north by Warrana Street.

2.1.3 External Catchments

The only external catchment draining through the site is that comprising the southern end of Kurnell Street and adjacent properties, which drains along the existing stormwater easement described in Section 2.1.2 above.

The broader sub-catchment within which the site is situated, extends approximately 1.2km upstream (north) of the northern boundary of the site. This catchment drains generally in a south-westerly direction along Pemberton and Sir Joseph Banks Streets and does not flow through the subject site.

2.1.4 Existing Flooding and Flood Controls

The area bounded by Botany Road, Wilson Street, Pemberton Street and the south of the subject site is potentially prone to flooding due to downstream topographic constraints. Minor flows from this area drain through the existing 900mm diameter pipe described in Section 2.1.1 above while major flows, up to the 100 year rainfall event drain overland between Pemberton Street and Sir Joseph Banks Street. The drainage easement along this route is currently obstructed by a building over the top, meaning that the overland flow in major storm events flows through private land to the north of the easement, through an open carport area between existing buildings. The level over and width through which the floodwaters must flow to pass from Pemberton Street to Sir Joseph Banks Street is the downstream flood control. The weir level along this path is approximately RL4.10. In extreme storm events water ponds in Pemberton Street and into adjacent sites, to a level of approximately RL4.55[1] as it discharges over this weir. The southern boundary of the subject site is above this level. Were the flood path between Pemberton Street and Sir Joseph Banks Street to become completely blocked, water would pond further until overtopping into Botany Road at a level of approximately RL5.15. This would have significant implications for many properties in Pemberton Street, particularly those downstream of the subject site.

Flooding also currently occurs in Wilson Street. At present, flood waters pond to a depth of approximately 300mm prior to flowing overland across downstream sites (Ref 2D flood modelling output attached). It is understood that council proposes to manage this flow along the

[1] Parkgrove, Botany Flood and Stormwater Management Report, Mott MacDonald (2011)

proposed new street to the south of the subject site, which will connect Wilson Street to Pemberton Street. An existing drainage easement containing the 900mm diameter pipe runs within this corridor.

The existing ponding in Wilson Street extends partially onto the south-east corner of the subject site. Post development flood modelling for the adjacent sites indicates that the ponding will be between 0 and 0.2m over a small area of the site. The resultant volume of flood storage will be included within detention storage within the site.

2.2 Existing Site Characteristics

2.2.1 Land Use & Topography

The entire western site catchment houses large buildings and otherwise impervious hard surfaces. The catchment is characterised by flat grades, generally less than 1%, sloping in a south-westerly direction. The north-western corner of the site, adjacent to Warrana Street, grades more steeply (approximately 4-5%) in a westerly direction.

The eastern catchment has a grassed area at its south; the remainder is characterised similarly to the western catchment – of buildings and hard surfaces. The catchment drains generally to the south-east at very flat grades (less than 1% on average).

The existing site has an impervious area of 82.5%.

2.2.2 Stormwater Quality

Stormwater quality management facilities within the existing site are not apparent.

2.2.3 Flooding

It is understood that council is currently preparing (or has commissioned the preparation of) a regional flood study for this catchment. Council has not previously identified the site as being flood affected. There are, however, a number of factors that need to be considered carefully in the future design of the site, with respect to flood management.

2.2.3.1 Flow along Wilson and Pemberton Streets

Wilson and Pemberton Streets both act as floodways during major storm events, transferring flood waters from the upstream catchment to

the downstream drainage system. A freeboard will need to be applied to proposed buildings and car park accesses off these streets and the proposed new street to the south of the development.

2.2.3.2 Drainage Easement through 17-19 Pemberton Street

As discussed in Section 2.1.4, it is imperative that the existing overland flow corridor through 17-19 Pemberton Street is maintained. Ultimately, any future development of the site should ensure that there is no building over the drainage easement.

The ponding effects in Pemberton and Wilson Streets associated with this flood control impose a regional flooding issue on this and adjacent developments. A freeboard will need to be provided above this flood level to building floor levels and carpark entries in the proposed development.

2.2.3.3 Local Flooding

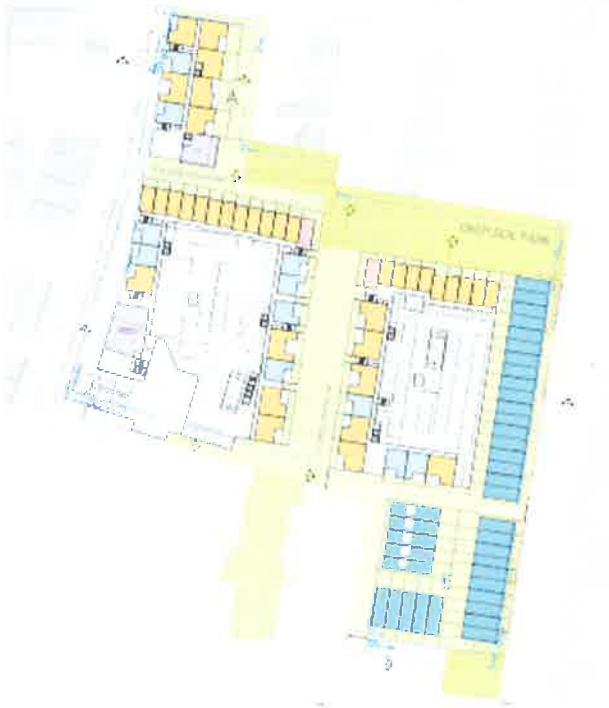
The site may be subject to local flooding, however, strategies such as the provision of clear overland flowpaths and the application of freeboard to proposed floor levels will be implemented to mitigate this risk.

3. Development & Future Infrastructure Requirements

3.1 Proposed Development

It is proposed to redevelop the site as a multi-unit residential development interspersed with open space. A basement is proposed under the majority of the site. Refer to the architectural drawings and masterplan report for further details of the development proposal.

Figure 3.1: Proposed Development



3.1.1 Relevant Policies & Guidelines

A number of policies and guidelines are relevant to the water management and preliminary services assessment for this development. These include:

- Stormwater Management Technical Guidelines, City of Botany Bay. (2013)
- Development Control Plan Part 9C Pemberton-Wilson Street Precinct, City of Botany Bay. (2013)

The requirements of these policies will be incorporated in the proposed development planning and future design and have been discussed in the relevant sections of this report.

3.2 Site Grading

The site will be graded based on a number of factors, including:

- Integration with the surrounding, existing and proposed development;
- Integration with the adjacent roads;
- Provision of appropriate freeboard controls to buildings; and
- Provision of overland flowpaths where required and of sufficient grade.

3.3 Stormwater Management

3.3.1 Water Quantity Management Objectives

3.3.1.1 Detention

Botany Council's stormwater drainage guidelines outline the water quantity management requirements for the proposed development.

The guideline states that Onsite Detention System (OSD) shall be designed to detain the stormwater runoff generated by the development for all storm durations up to and including the 1 in 100 year on site. The permissible site discharge from the site shall be designed to restrict the discharge to 1 in 5 year event peak flow under the "state of nature" condition of the site.

An assessment of the detention requirements for the proposed development has been undertaken.

Table 3.1: Detention Requirements

Catchment	5yr ARI (State of Nature)	100yr ARI (with Detention)	Detention Volume Required
Western	0.23 cu.m/s	0.23 cu.m/s	546 cu.m
Eastern	0.321 cu.m/s	0.321 cu.m/s	673 cu.m

It is necessary that the proposed detention facilities are located above the 100 year flood level at their point of discharge such that they are not inundated during flood events and can discharge freely.

In addition to the above detention requirements for the development, we have undertaken an assessment of the existing and proposed conditions and summarise these below:

Table 3.2: Existing and Proposed Conditions

Catchment	100yr ARI (existing conditions)	100yr ARI (proposed Conditions)	100yr ARI (proposed conditions) – with detention
Western	1.00 cu.m/s	0.98 cu.m/s	0.23 cu.m/s
Eastern	1.36 cu.m/s	1.35 cu.m/s	0.321 cu.m/s

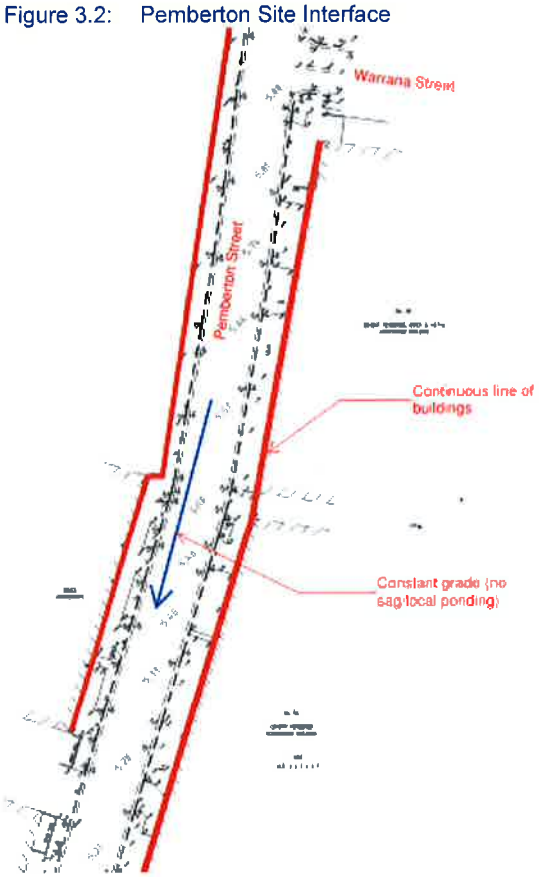
As indicated in the above table, the proposed development, largely resulting from the existing building coverage across the site and impervious area, will not adversely impact any third parties. The inclusion of on-site detention will significantly reduce site discharge.

3.3.1.2 Compensatory Flood Storage

There is a limited amount of flood storage at the south-eastern corner of the site (approximately 300 cu.m). An equivalent volume will be stored in the proposed detention tanks on site, offsetting the potential removal of this storage as part of the proposed development. There is no other significant existing flood storage within the site.

We have reviewed the existing flood study for the adjacent 42-44 Pemberton Street development, provided by council which indicates inundation into the 52-54 Pemberton Street site towards the north of the site. This is an aberration in the flood modelling as the existing building in this location was not included in the flood modelling. Therefore, there is no existing flood storage in this location. Equally, we have reviewed the survey information for Pemberton Street and confirm that there is no low point or change in cross section at this location. It can therefore be considered that the flow depth along the site frontage remains relatively constant without localised areas of ponding. This is illustrated in Figure 3.2 below showing the existing site survey, the constant line of buildings and constant road grade.

Figure 3.2: Pemberton Site Interface



3.3.1.3 Site Stormwater Drainage

Botany Bay Council requires all stormwater to be designed for the 20 year ARI rainfall event.

3.3.1.4 Absorption

Botany Council's stormwater drainage guidelines require the on-site absorption system to detain and absorb all storm events up to and including the 1 in 100 year for all durations from 6 minutes to 72 hour storm inclusive on site. The guideline states that absorption will not be permitted if groundwater levels are within 2.5m of the existing surface levels. Investigations have been undertaken in this regard and it is understood that ground water levels may be in the order of 2-3m below

existing surface levels in areas of the site. As such, it is not considered that the use of absorption for stormwater discharge is appropriate for this site. As a result, the Onsite Detention System (OSD) shall be designed to detain the stormwater runoff generated by the development for all storm durations up to and including the 1 in 100 year for all durations from 6 minutes to 72 hour storm inclusive on site. The permissible site discharge from the site shall be designed to restrict the discharge to 1 in 5 year event peak flow under the "state of nature" condition of the site. Maximum discharge permitted to Council's kerb and gutter is 10L/s. Higher rates of discharge are only permitted by directly connecting to Council's Pit and Pipe System.

3.3.1.5 Diversion of Stormwater from Kurnell Street

The existing stormwater main and easement described in Section 2.1.2 will require relocation as there will be insufficient clearance above the proposed basement to retain the stormwater in this location. The pipe will be diverted to the east and along Wilson Street as shown in Figure 3.3 below. The existing pipe connects flows from the external Kurnell Street catchment in addition to a significant portion of the site.

The proposed diversion pipe will convey the upstream Kurnell Street catchment (bounded by Warrana Street to the north); the site catchment flows shall be managed through a new pipe and detention system.

An overland flowpath to convey flows in excess of the piped capacity will be provided from Kurnell Street to Wilson Street.

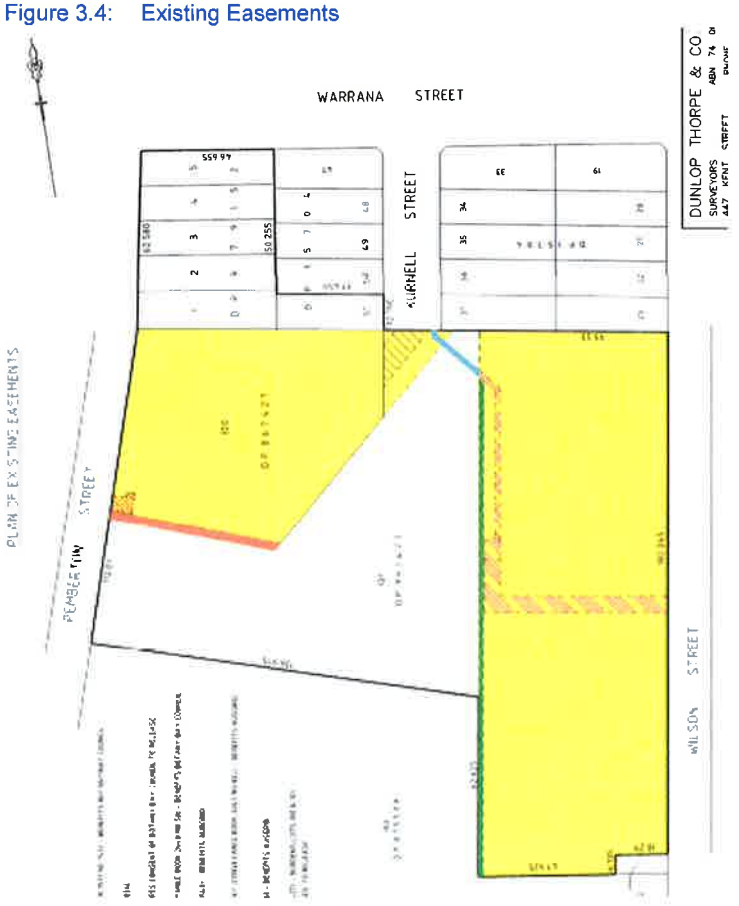
Figure 3.3: Proposed Stormwater Diversion

3.3.2 Existing Easements

There are a number of existing drainage easements in favour of council on the existing site. These are shown in Figure 3.4 below. The easement shown in green on the figure running north-south through the site is the drainage easement catering for the upstream Kurnell Street catchment. Details of this easement and the proposed stormwater diversion have been addressed above in sections 2.1.2.1 and 3.3.1.5.

The large easements shown in yellow on the figure covering large areas of the site are understood to be extant easements from previous land uses (market gardens) on site to permit surface drainage from areas within the site and do not and were not intended to serve any function with respect to flooding or detention. Subsequently (from the 1950s onwards), buildings were placed on site over the top of the drainage easements. It appears that the drainage easements were not extinguished at this time despite serving no ongoing purpose. The easements continue to serve no purpose as part of the proposed development and can be removed.

Figure 3.4: Existing Easements



Note: drainage easements shown in yellow and green

3.3.3 Freeboard

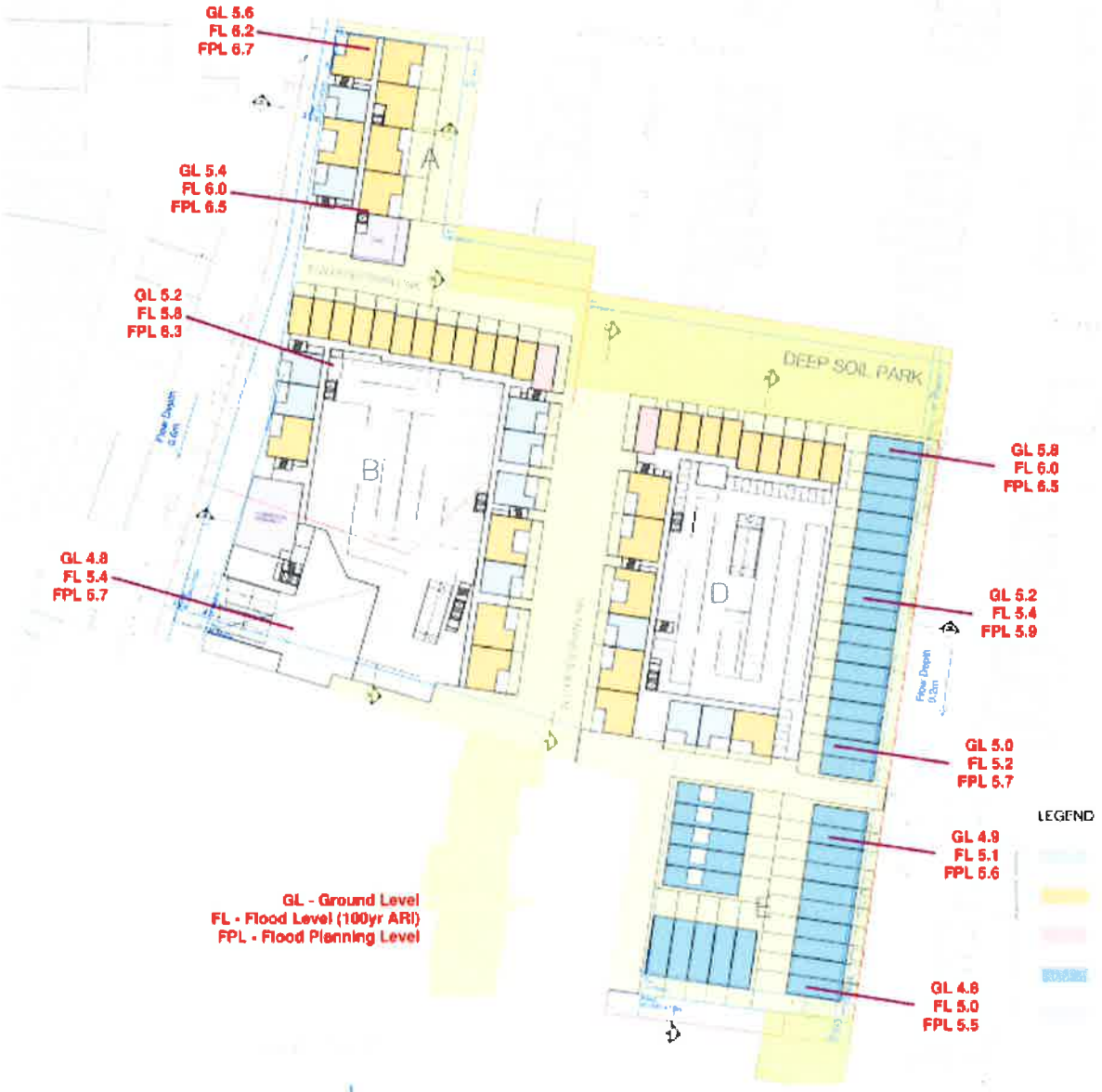
Freeboard is a factor of safety above a given flood level (usually 100 year Average Recurrence Interval (ARI)) above which building floor levels and basement entries must be situated.

Minimum Food Planning Floorlevels have been based on the provision of a freeboard above the 100yr ARI flood level. The freeboard to be applied to this development adjacent to the roadway (overland flowpath), in accordance with Botany Council DCP shall be 500mm for

habitable areas and 300mm for non-habitable areas, including basement carpark entries.

These flood planning level requirements will be incorporated in the proposed design. The relevant minimum flood planning levels are shown on Figure 3.5 below:

Figure 3.5: Proposed Minimum Flood planning Levels



4. References

- Stormwater Management Technical Guidelines, City of Botany Bay. (2013)
- Development Control Plan Part 9C Pemberton-Wilson Street Precinct, City of Botany Bay. (2013)
- Parkgrove, Botany Flood and Stormwater Management Report, Mott MacDonald. (2011)

Appendices

Appendix A. 2011 Flood Report

Mott MacDonald
Hughes Trueman

AUSTCORP

PARKGROVE, BOTANY

FLOOD AND

STORMWATER

MANAGEMENT REPORT

NOVEMBER 2011

PREPARED BY:	SIGNED:	REVIEWED BY:	SIGNED:
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COMMERCIAL IN CONFIDENCE

1.0 INTRODUCTION

The Parkgrove Trust plans to develop a parcel of land bounded by Pemberton, Wilson and Rancom Streets at Botany. A Flood and Stormwater Management Report was completed and submitted to Council in December 2007. The purpose of the study was to assist with the site masterplanning, provide an estimate of flood levels for the site, identify flood risk and to provide recommended floor levels for future development. To address an extended review process of the December 2007 report the following HT documents have been completed and should be read in conjunction with this current study.

- Parkgrove, Botany, Flood and Stormwater Management Report (December 2007)
- Parkgrove, Botany, Flood and Stormwater Management Report Addendum 1 (April 2008)
- Parkgrove, Botany, Flood and Stormwater Management Report Addendum 2 (January 2010)
- Parkgrove, Botany, Flood and Stormwater Management Report Addendum 2 (March 2010)
- Parkgrove, Botany, Flood and Stormwater Management Report Addendum 3 (June 2010)

1.1 BACKGROUND

The June 2010 report was a response to further comments from Botany Bay Council (email correspondence 23rd April 2010 and meeting on 29th April 2010). Botany Bay Council provided comment to the June 2010 report in correspondence dated 19th August 2010 (copy attached at the appendix). This report comprises part of a detailed response to the latest round of Council comments.

This report revisits the assessment of the existing and proposed flood envelope across the site and in the vicinity of the proposed development using two-dimensional modelling. The purpose of this current study is to confirm the observations and recommendations discussed in the previous stormwater management study and subsequent addendum documents.

2.0 FLOOD STUDY REVIEW

The key aims, objectives and outcomes of each report indicated at section 1.0 is provided at the Appendix

2.1 PRE DEVELOPMENT FLOODING MECHANISMS

The Parkgrove site is bound east by Wilson Street, west by Pemberton Street and south by Rancom Street. It is located between sag points on Wilson Street and Pemberton Street respectively.

Overland flow from the upstream catchment flows from west to east across the site while minor flow is conveyed via a 900mm diameter pipe which discharges to an open channel to the west of Pemberton Street.

Overland flow from Pemberton Street is impeded by existing development over the stormwater channel easement. The December 2007 report indicated that surface flow building up at the Pemberton Street sag can only flow downstream via a 'gap' through a driveway corridor at 21 Pemberton Street. Once the flood level in Pemberton Street reaches a critical level of approximately RL4.1mAHD, flow continues downstream. The building facade line at Pemberton Street generally forms a continuous barrier to overland flow. Therefore the overriding control impacting the flood level at Pemberton Street is the 'gap' at 21 Pemberton Street. Therefore, if the gap through 21 Pemberton Street is blocked, surface flow may pond in Pemberton Street and back up to a level of 5.15mAHD before overtopping occurs at Botany Road.

Flooding at Wilson Street is determined by a 14ha upstream catchment. Runoff exceeding pipe capacity ponds in Wilson Street to a depth of 0.3m before overland flow occurs across the site towards Pemberton Street

The pre development flood mechanisms described above are shown at Figure 3-1.

2.2 POST DEVELOPMENT FLOODING MECHANISMS

The proposed development footprint is indicated at HT Dwg 06s221C 08. The site shall be raised to elevate buildings to above 1 in 100 Year ARI flood level. The proposal of a park is central to the development (Central Basin) providing compensatory flood storage and detention for areas of the site draining to the central basin. The park will also serve as a bio-retention facility to manage the quality of stormwater discharging from the site.

The overland flow path from Wilson Street to Pemberton Street is maintained by allowing through flow within New Street 1. This is critical to managing flood related issues at the site.

A summary of peak 1 in 100 Year ARI flood levels from the June 2010 addendum is included in Table 2-1 below. A summary of results from all previous assessments is provided at the Appendix.

Table 2-1 Summary of Flood Levels from June 2010 assessment

Location	Peak 100 Year ARI Flood Level (mAHD)	
	Pre Development	Post Development
Pemberton Street Sag	4.47	4.50
Wilson Street Sag	5.10	5.07

3.0 RE-ASSESSMENT OF FLOOD MECHANISMS

3.1 TWO-DIMENSIONAL FLOOD MODELLING

A two-dimensional flood modelling exercise is required to support this current flood study report as a requirement by the Botany Council. TUFLOW was chosen as the appropriate computer software for two-dimensional flood modelling for the following reasons:

- TUFLOW simulates flooding through two-dimensional overland flows and one-dimensional piped urban flows
- Storage areas and flood attenuation are considered given that topography within floodplain are correctly represented
- TUFLOW generates GIS-based graphical results which are great for presentation and easy to understand

The initial TUFLOW study has been undertaken by an independent consultant, BMT WBM. A review of this model is provided in the paragraphs below.

3.1.1 Review of BMT WBM TUFLOW Model

A report which describes in details the TUFLOW model developed by BMT WBM for the purpose of supporting this current report is attached in Appendix A. The TUFLOW model setup and input parameters have been reviewed and summarised below.

3.1.1.1 Model Topography

A 2m model grid was selected for the study. It was considered as appropriate for representing local flow paths that are of interest in the study.

A Digital Elevation Model (DEM) representing the existing topography provided by MMHT was used for the model (12 outputs are provided at Appendix A). The DEM was developed base on data which consists of photogrammetry spot levels on 15m grid, breaklines representing kerbs and embankments as well as detailed ground survey of the site and adjacent road reserves.

A DEM representing the post development topography was also provided by MMHT for TUFLOW modelling. The post-development DEM is based MMHT's design and includes key ground level changes such as raising much of the site above the 1 in 100 year flood level, the construction of a detention basin (Central Basin) and the construction of a new road (New Road No.1) between Wilson and Pemberton streets.

The detailed ground survey used for developing the DEM gives a good representation of topography within and in the immediate surroundings of the site. Although the use of photogrammetrical information alone (with 15m resolution) to the north of the site reduces model results accuracy, it is still considered as adequate because any potential flood impact from the proposed development is unlikely to extend to areas which is remote from the site.

Buildings were modelled as raised land. It is considered as an appropriate approach because it underestimates additional flood storage within buildings and gives conservative estimate of flood levels. It is also consistent with the approach adopted in the previous flood study undertaken for the site (MMHT December 2007).

3.1.1.2 Model Drainage Network

A summary of the pipe network included in the TUFLOW model is shown below in Table 3-1. The pipe network details were provided by MMHT to BMT WBM.

Table 3-1 Pipe Network Details

Name	From	To	Length (m)	U/S Invert (mAHD)	D/S Invert (mAHD)	Pipe Diameter (mm)
P B12	B12	B11	9.35	13	12.28	300
P B11	B11	B10	36.39	11.08	8.19	375
P B11	B10	B9	22.79	7.55	6.22	375
P B9	B9	B8	18.30	5.68	5.53	375
P B8	B8	B7	5.62	5.45	5.35	375
P B7	B7	B5	193.0	4.85	3.56	525
P B5	B5	B4	65.1	3.46	3.162	900
P B4	B4	B3	118.3	3.162	2.62	900
P B3	B3	B2	39.3	2.62	2.44	900
P B2	Pit1	B1	53.1	2.44	2.2	900
P BA3	BA3	BA2	16.5	12.96	12.41	225
P BA2	BA2	BA1	8.49	12.15	11.94	375
P BA1	BA1	B11	1.5	11.78	11.7	375
P BE	BE	BA1	14.02	13.45	12.41	0.51W x 0.15H
P BB	BB	B8	10.14	5.95	5.77	375
P BD	BD	B7	10.06	5.64	5.51	300
P BC	BC	B7	18.65	5.26	4.86	300
P Z	Z	N115	27	4.8	4.65	300
P BZ	BZ	B3	24.6	2.8	2.65	600
P AA	AA	B5	127.7	6.1	3.75	525
P C3	C3	B5	5	4.18	4.15	375
Pipe Park	Park	B2	100	3.7	2.5	525
RaftsToN115	Rafts	N115	176	4.8	4.65	1.4W x 0.8H
N115toB1	N115	B1	250	4.6	2.4	1.4W x 0.8H
DS Drain	Drain	DS	300	1.5	0.5	1.5W x 1.2H

3.1.1.3 Model Hydrology

Hydrology was provided by MMHT. Methodology and approach adopted was discussed in details in MMHT Flood Report December 2007. Hydrology for the Wilson and Pemberton Street catchments was based on DRAINS result outputs and hydrology for the northern catchment was based on RAFTS result outputs.

The 1-hour duration storm generates the peak flood level on Pemberton Street in a 1 in 100-Year ARI event for both existing and post-development scenario.

3.1.1.4 Model Roughness and Other Assumptions

The site mainly consists of industrialised areas and road reserves. A Mannings n value of 0.015 was selected for road reserves. All remaining area was modelled to have Mannings n value of 0.05, which is typical for highly industrialised areas. Pipe roughness was defined with a Mannings n value of 0.015.

Other key assumptions mainly relate to downstream boundary conditions. It was assumed that surface overland flows drain freely towards Hannon and Margate Streets. A 'normal depth' downstream boundary condition was selected. A fixed tailwater level of 2.1mAHD was applied to the pipe DS Drain as downstream boundary. It was considered as a conservative assumption and appropriate because it is unlikely to have impact on flood levels on Pemberton Street.

3.1.2 Development of MMHT TUFLOW Model

3.1.2.1 Model Topography

The approach and assumptions adopted by BMT WBM is considered to be appropriate. However, a review of the ground model was undertaken at critical locations. The ground model was adjusted based on site observations (north of the site on Pemberton Street) and detailed ground survey.

Detailed ground survey indicates that flood water in 19-21 Wilson Street can escape through an approximately 2m gap between buildings to the site. However, from aerial photographs and also site observations, the flow path is likely be blocked by stacked containers and is not available for active flow. The ground model has been adjusted to block the minor flow path at 19-21 Wilson Street.

3.1.2.2 Model Drainage Network

The pipe network details included in BMT WBM TUFLOW model are consistent with the information provided by MMHT. However, some minor adjustments to model set-up are as follows:

- The capacity of pipe DS Drain has been doubled based on detailed ground survey which indicates that it is a twin box culvert (Table 3.2). The invert levels of the pipe have been raised as shown below in Table 3-2 according to the detailed ground survey.
- A blockage factor of 20% has been applied to the pipe DS Drain. This is considered as reasonable because the drainage culvert is located downstream of the open drainage

ditch west of Pemberton Street and is more prone to blockage during major storm events. The assumption is likely produce a conservative estimate of flood levels at Pemberton Street. However, a number of sensitivity analyses have been carried out and confirmed that the assumptions made to this drainage culvert do not impact on the peak flood level at Pemberton Street. The sensitivity analyses carried out are discussed in details in Section 3.5.1 this flood report.

Table 3-2 Modified Pipe Details

Name	From	To	Length (m)	U/S Invert (mAHD)	D/S Invert (mAHD)	Pipe Diameter (mm)
DS Drain	Drain	DS	300	1.95	0.95	Twin 1.5W x 1.2H

3.1.2.3 Model Hydrology

The model hydrology inputs have been reviewed and found to be consistent with the previous flood report (MMHT December 2007). It has also been confirmed that the 1-hour duration storm generates peak flood level in a 1 in 100-Year ARI event for both existing and post-development scenario.

3.1.2.4 Model Roughness and Other Assumptions

The model roughness parameters adopted by BMT WBM are considered as appropriate. Although most of the industrial properties in the vicinity of the proposed development are concrete or asphalt lined and are less resistant to flows, a Mannings n value of 0.05 is reasonable as it represents the fences and other obstructions to flow within the industrialised area.

The 'normal depth' downstream boundary condition is considered as reasonable. The boundary condition is located some distance downstream of the area of interest.. The fixed tailwater level of 2.1mAHD as downstream boundary to pipe DS Drain is also considered appropriate. A number of sensitivity analyses have been carried out to confirm a varying downstream boundary does not impact on the peak flood level at Pemberton Street and these are discussed in Section 3.5.1 of this report.

4.0 RESULTS

A discussion of MMHT Tuflow modelling results are provided in the following sections.

4.1 Pre Development Flood Mechanisms

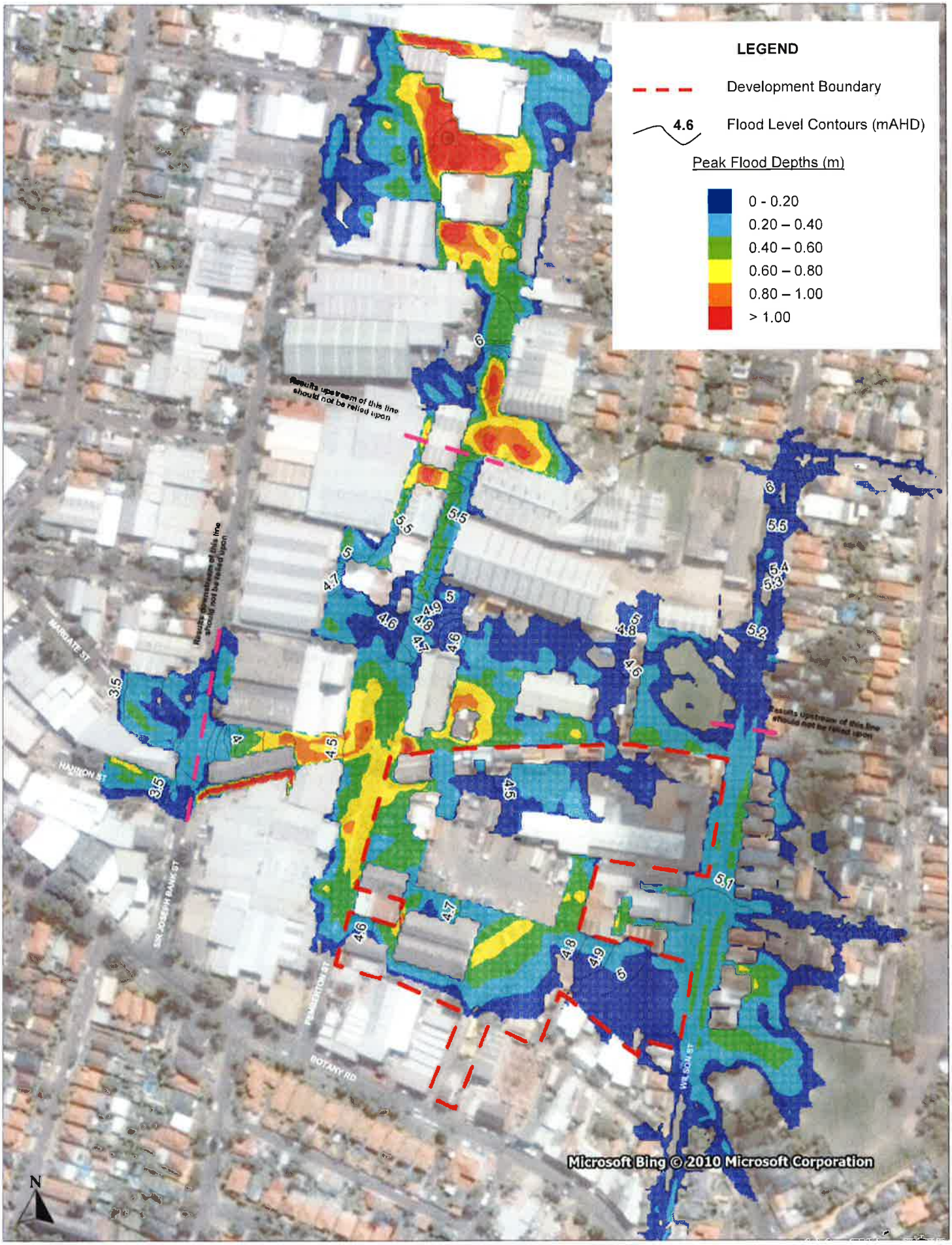
TUFLOW result for the 1 in 100 Year ARI 1 hour storm under existing conditions is shown in Figure 3-1. Result indicates that runoff from Wilson Street catchment ponds at Wilson Street sag and then flows westward to Pemberton Street through the site. The peak 1 in a 100 Year ARI flood level at Wilson Street sag is approximately 5.10mAHD.

Runoff from the northern catchment flows southward to the sag located adjacent to 21 Pemberton Street mainly along the road reserve and partly through buildings. This runoff joins Pemberton Street local catchment runoff with flow from Wilson Street and ponds up to a level of about 4.05mAHD before it can escape through the gap between buildings at 21 Pemberton Street. The peak 1 in a 100 Year ARI flood level at Pemberton Street sag is approximately 4.55mAHD.

A summary of TUFLOW model results is shown in Table 3-3 below. Although estimated peak 1 in 100 Year ARI flood level at Pemberton Street sag is slightly higher than the previous assessment, TUFLOW modelling results generally agree with DRAINS model results as documented in MMHT's flood report of June 2010. TUFLOW estimated flood level at Pemberton Street is slightly higher as a higher Mannings n value of 0.05 has been adopted for the overland flow path through gap between buildings at 21 Pemberton Street. The DRAINS model had utilised a Mannings n value of 0.014 for the flow path and therefore is more effective in conveying flows. Mannings n value of 0.05 is considered as adequate for reason discussed in Section 3.1.2.4. The flood level difference is minimal.

Table 3-3 Summary of Results (Pre Development Conditions)

Location	Peak 100-Year ARI Flood Level (mAHD)	Maximum Flood Depth (m)
Wilson Street Sag	5.10	0.5
Pemberton Street Sag	4.55	0.8



Scale: 1:3,000

50 0 50 100 150

Meters

Figure 3-1 Peak 1 in 100 Year ARI Flood Level Contours and Flood Depths Existing Conditions

4.3 Post-Development Flood Mechanisms

TUFLOW results for the 1 in 100 Year ARI 1 hour storm under post-development conditions are shown in Figure 3-2. Flooding characteristics are generally similar to those under existing conditions. Overland flow from the Wilson Street catchment ponds at Wilson Street sag and escapes westward to Pemberton Street through the proposed New Road No.1 located north of the site. The peak 1 in a 100 Year ARI flood level at Wilson Street sag is approximately 5.07mAHD.

Compensatory storage is provided by the Central Basin within the proposed development. During a 100 year ARI storm event TUFLOW model results indicate that peak 1 in 100 Year ARI flood level in the basin is approximately 4.68mAHD. This is less than the peak level at the Wilson Street Sag.

Flooding characteristics along Pemberton Street are very similar to those under existing conditions on the basis that current flow path through 21 Pemberton Street remains unchanged. The peak 1 in a 100 Year ARI flood level at Pemberton Street sag has increased slightly to approximately 4.59mAHD representing an overall increase of 0.04m. This is consistent with the results indicated by the MMHT June 2010 Addendum. The proposed New Road No.1 maintains connection between the sags on Wilson and Pemberton streets and may facilitate the reduction of the flood level at Wilson Street.

A summary of TUFLOW model results is shown in Table 3-4 below.

Table 3-4 Summary of Results (Post-Development Conditions)

Location	Peak 100-Year ARI Flood Level (mAHD)	Maximum Flood Depth (m)
Central Basin	4.68	1.2
Wilson Street Sag	5.07	0.5
Pemberton Street Sag	4.59	0.9

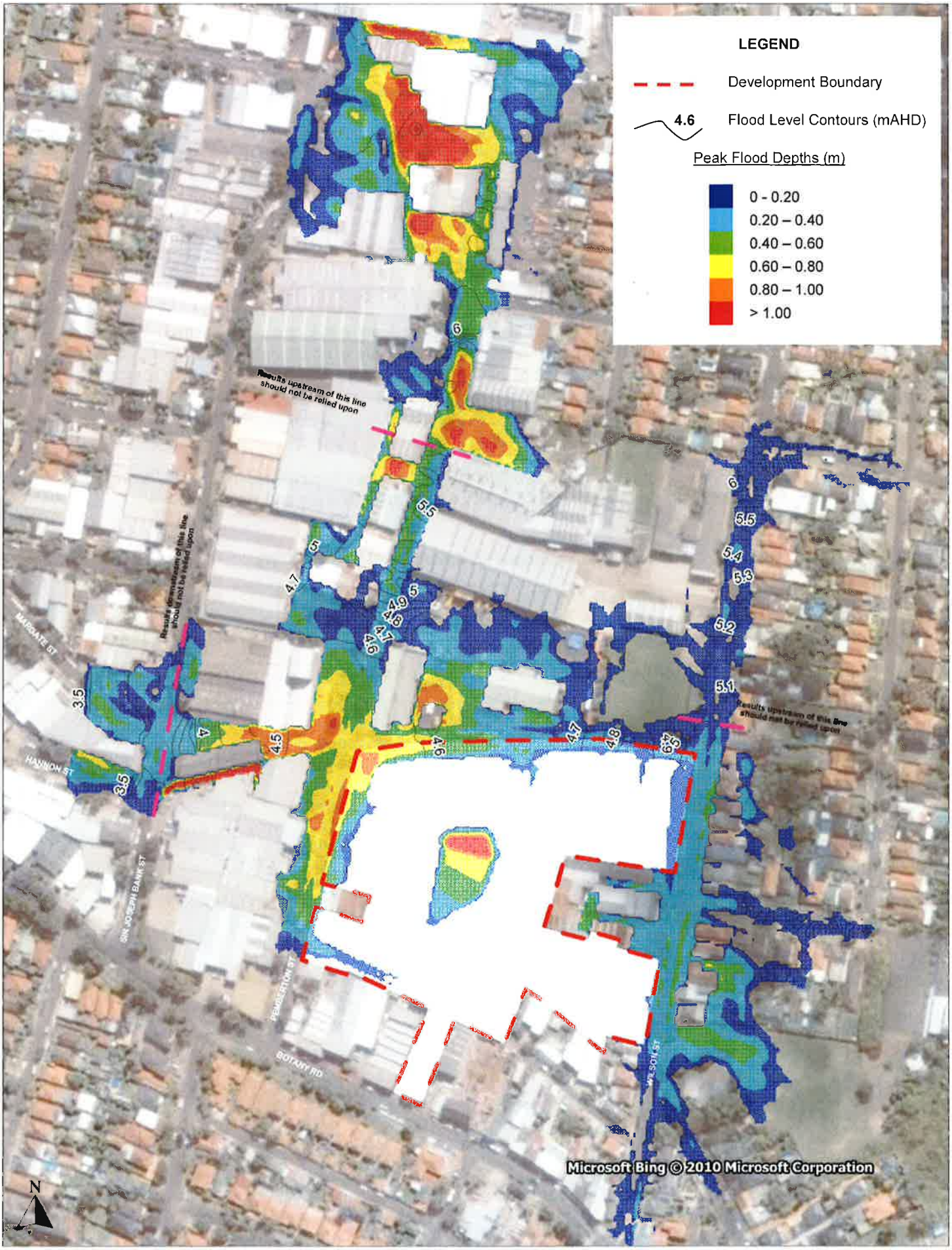
4.4 Peak Flood Level Comparison (MMHT TUFLOW study)

Figure 3-3 indicates differences in peak 1 in 100 Year ARI flood level in the vicinity of the proposed development. TUFLOW model result shows that there is no change (within 10mm difference) in peak flood level as a result of the proposed development to the north of the site (green hatch). The peak flood level has decreased in the order of 50mm in the Wilson Street area (light blue hatch). There is a marginal increase in peak flood level (less than 50mm) in the proximity of Pemberton Street sag (yellow hatch)..

The above findings also agree with the DRAINS model results as documented in MMHT's flood report December 2007. Comparisons of TUFLOW results and afflux are shown in Table 3-5 below.

Table 3-5 Comparisons of Results (MMHT TUFLOW)

Location	Peak 100 Year ARI Flood Level (mAHD)		Afflux (m)
	Existing	Post	(Post – Existing)
Pemberton Street Sag	4.55	4.59	0.04
Wilson Street Sag	5.10	5.07	-0.03



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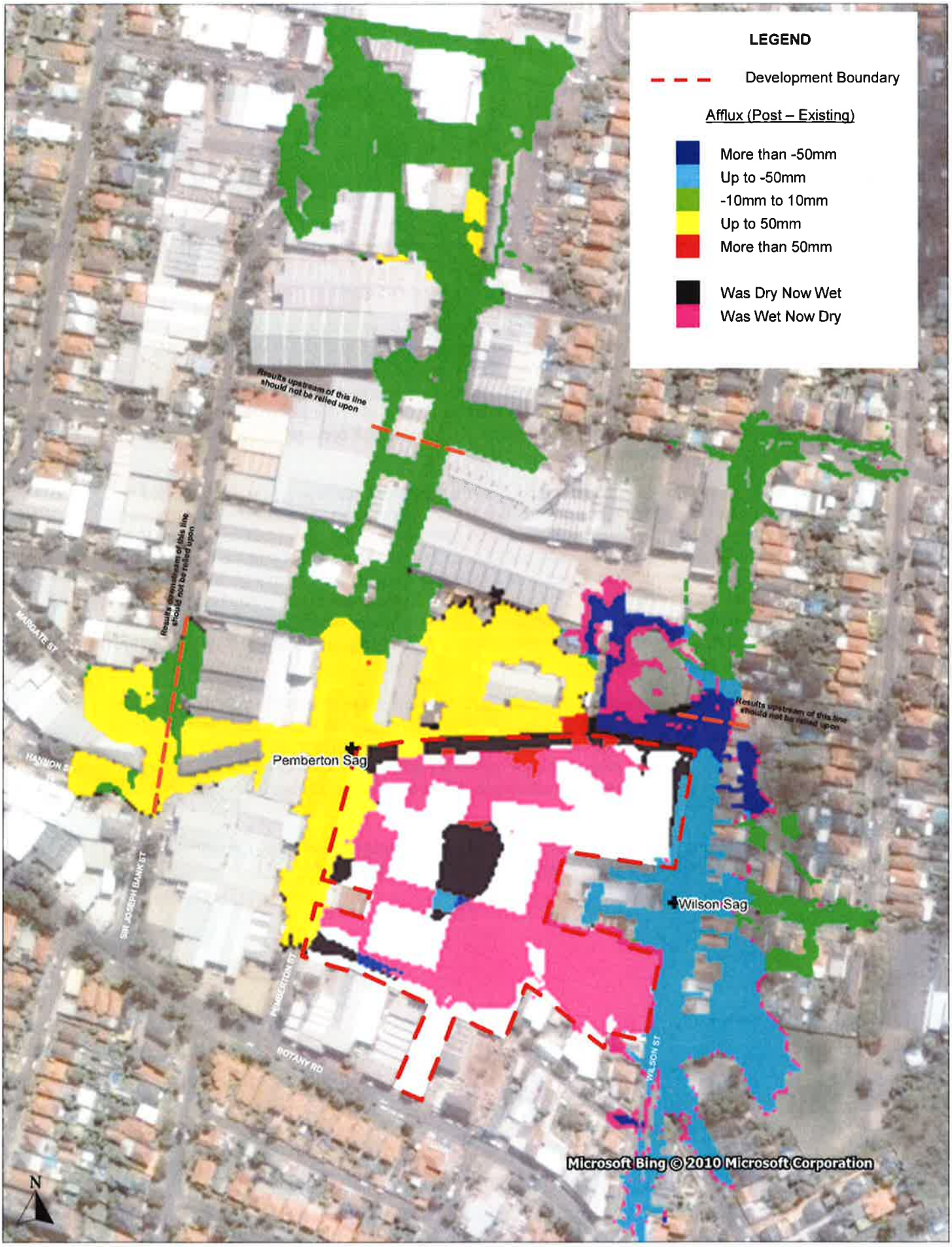
Meters

Figure 3-2 Peak 1 in 100 Year ARI Flood Level Contours and Flood Depths Post-Development Conditions



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Meters

Figure 3-3 Difference in Peak 1 in 100 Year ARI Flood Level Post-Development Conditions – Existing Conditions

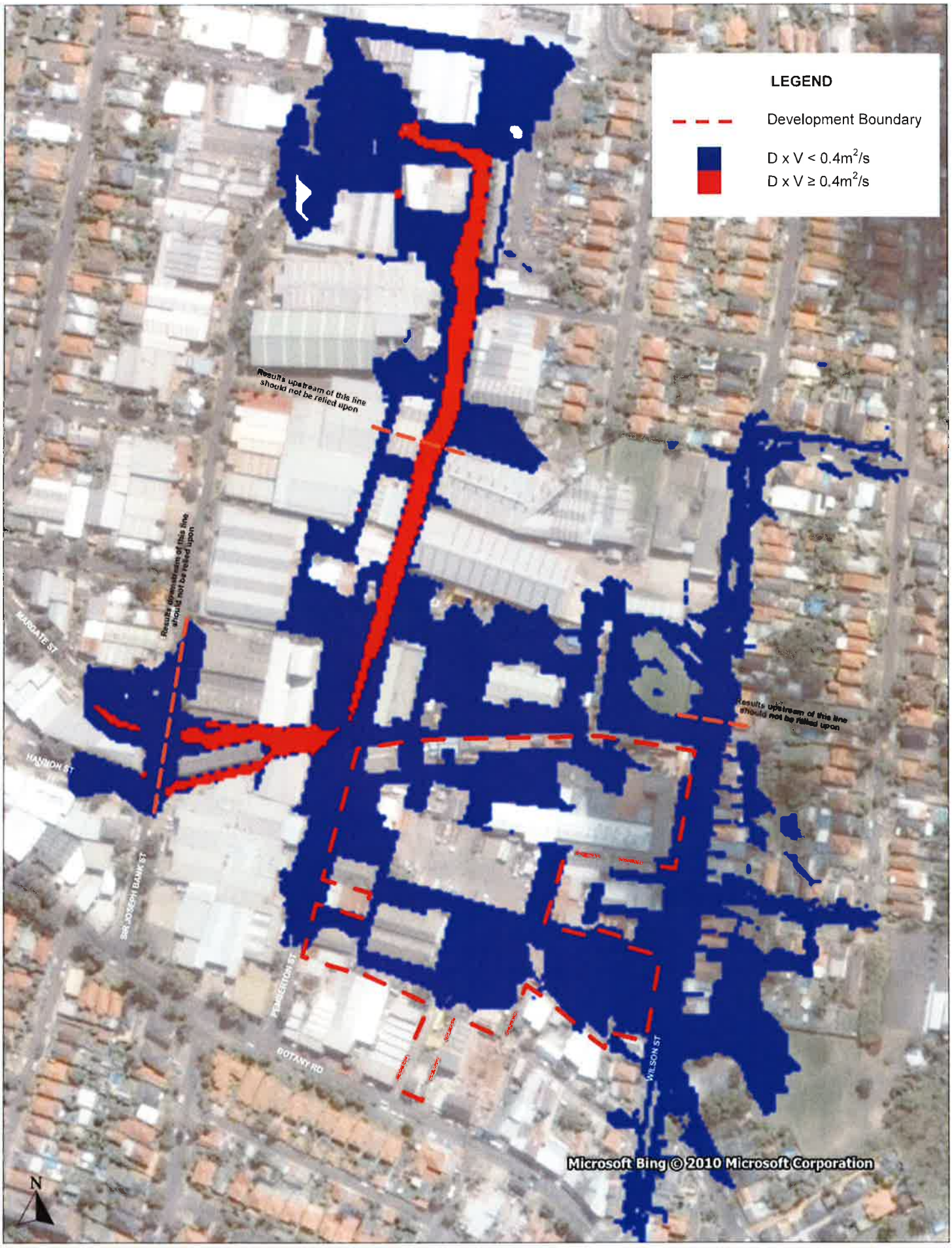
4.4 Flood Hazard

Figure 3-4 and Figure 3-5 indicate the DxV relationship in the vicinity of the proposed development under existing conditions and post-development conditions respectively. The products of depths and velocities can be used as a measure of degree of hydraulic hazard. It is recommended in Australian Rainfall & Runoff (1986) that the value should not exceed 0.4m^2/s for pedestrian safety. The limit is based on experimental studies of stability of children in flowing water by Foster and Cox (1973). A higher value of 0.6-0.7m^2/s is appropriate for indication of hazardous conditions to vehicles.

Figure 3-4 indicates that road corridor along Pemberton Street upstream of the sag adjacent to 17-19 Pemberton has a DxV value greater than 0.4m^2/s for the existing predevelopment scenario. This area shown in red would become hazardous particularly to pedestrians during major storm events. The overland flow path between buildings at 21 Pemberton Street and the open drain ditch located west of Pemberton Street is also indicated as hazardous mainly because the high velocities of flood water. Section 4.3 notes existing predevelopment ponding depths at Wilson Street and Pemberton Street reach a maximum of 0.5m and 0.8m respectively in a 1 in 100 Year ARI event. The NSW floodplain development manual notes that flood depths greater than 0.3m may give rise to some instability.

Figure 3-5 shows that flood hazard conditions in the vicinity of the proposed development under post-development conditions are very similar to those under existing conditions. This finding again supports that the proposed development does not impose a negative impact on the adjacent properties. Further, motor vehicles can safely access the site from Botany Road via Rancom Street under severe weather conditions. Flood depths are 0.5 and 0.9m for Wilson Street and Pemberton Street respectively

Depth of water in the proposed Central Basin can reach a maximum of 1.2m in major storm events and safety measures such as signage should be considered.



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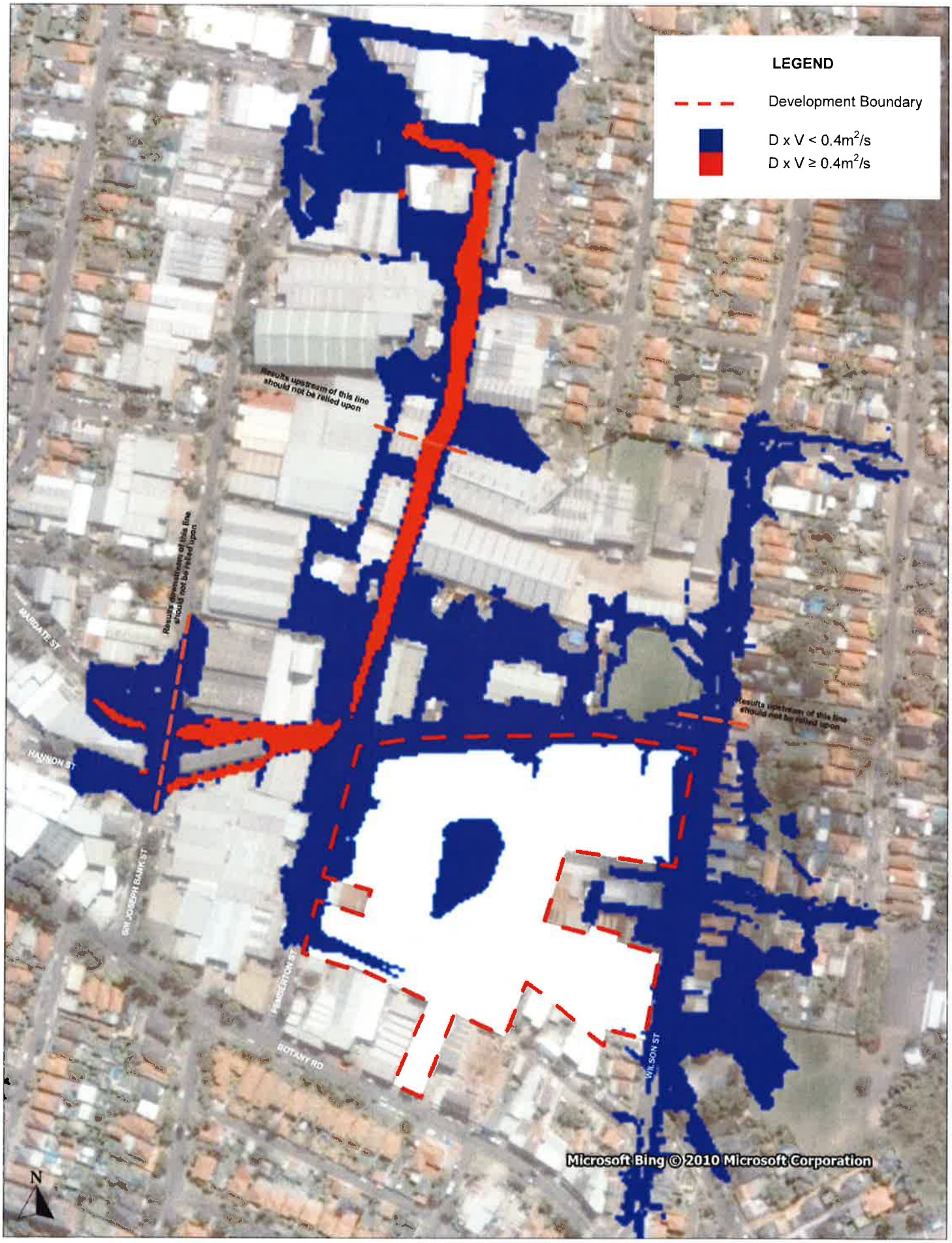
Meters

Figure 3-4 Pedestrian Hazard Zone
Existing Conditions



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Meters

Figure 3-5 Pedestrian Hazard Zone Post-Development Conditions

4.5 Sensitivity Analysis

4.5.1 Downstream Boundary Conditions

A number of sensitivity analyses have been carried out to confirm assumed downstream boundary conditions are appropriate and any changes to the assumed downstream boundary conditions do not impact on estimated flood levels at Pemberton Street. Table 3-6 shows comparison of peak 1 in 100 Year ARI flood level at key locations for the adopted assumptions and three different downstream boundary conditions as sensitivity analyses.

The comparison shows that varying downstream conditions do not have an impact on the estimated flood levels on Pemberton Street during a 1 in 100 Year ARI event. The finding confirms that flood behaviours on Pemberton Street are dependent on the characteristics of the overland flow path between buildings at 21 Pemberton Street. The downstream boundary conditions are located some distance downstream of this hydraulic control.

Table 3-6 Comparison of Results (Downstream Boundary Conditions)

Downstream Boundary Conditions	Peak 100 Year ARI Flood Level (mAHD)					
	Open Drains Downstream		Open Drains Upstream		Pemberton Street Sag	
	Existing	Post	Existing	Post	Existing	Post
2.1mAHD Fixed Tailwater Level and 20% blockage on DS_Drain	3.65	3.67	3.98	4.01	4.55	4.59
2.1mAHD Fixed Tailwater Level and 0% blockage on DS_Drain	3.19	3.22	3.95	3.98	4.55	4.59
0.95mAHD Fixed Tailwater Level and 20% blockage on DS_Drain	3.65	3.67	3.98	4.01	4.55	4.59
2.5mAHD Fixed Tailwater Level and 20% blockage on DS_Drain	3.69	3.70	3.99	4.02	4.55	4.59

4.5.2 Blockage

The Pemberton Street sag is drained by the 900mm diameter trunk drainage (P B2). However, this trunk drainage has very limited capacity. It is found to have less than 5 Year ARI capacity in MMHT December 2007 flood report. It is expected that it conveys only a small portion of flows during a major storm event while a major portion of flows is conveyed through the overland flow path between buildings at 21 Pemberton Street. The sensitivity analysis carried out investigates the impact on peak flood levels if the trunk drainage is 100% blocked. Table 3-7 below summarises the differences in peak flood level under unblocked and 100% blocked scenario.

Sensitivity analysis result indicates that blockage on the 900mm diameter pipe only has minor impact on peak flood level on Pemberton Street. Peak 1 in 100 Year ARI flood level is expected to increase by approximately 40mm if the 900mm diameter pipe become 100% blocked. The result confirms the observation that the trunk drainage has only very limited capacity. It conveys only a small portion of flows even under unblocked scenario and makes little difference to flood level on Pemberton Street if the pipe capacity is further reduced. Peak flood level in the proposed Central Basin is expected to increase marginally by approximately 70mm under blocked scenario.

Table 3-7 Comparison of Results (Blockage Sensitivity Analysis)

Location	Peak 100 Year ARI Flood Level (mAHD)			
	Unblocked		100% Blocked	
	Existing	Proposed	Existing	Proposed
Central Basin	-	4.68	-	4.75
Pemberton Street Sag	4.55	4.59	4.59	4.63
Wilson Street Sag	5.13	5.07	5.13	5.07

The previous assessment (June 2010) of blockage on the 900mm diameter trunk drainage was conservative. The sensitivity analysis the drainage has limited capacity and indicates blockage has minimal impact on flood level.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The current flood study report and two-dimensional flood modelling exercise addresses comment raised by Botany Bay Council. TUFLOW model results generally agree with those from the previous assessments. In conclusion, the current study confirms that:

- The proposed Central Basin offsets loss of flood storage due to raising of site levels and provides compensatory flood storage.
- Flow path through 'gap' between buildings at 21 Pemberton Street exists under present day conditions. Maintaining the flow path is critical in preserving current flood behaviour in post development conditions.
- The proposed development does not cause adverse flood impact on the adjacent properties.
- Flood depths and velocities in the vicinity of the proposed development are not hazardous to pedestrian and motor vehicles.
- Blockage or reduction in capacity of the 900mm diameter trunk drainage has minimal impact on flood level on Pemberton Street.

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Clause 4.6 Request to Vary a Development Standard Height of Buildings

52-54 Pemberton Street, Botany

Submitted to Botany City Council

Prepared by Australand Property Group acting on behalf of Newtown Dyers & Bleachers Pty Ltd

8 October 2014

Tables

1.0 Introduction

Clause 4.6 of the Botany Local Environmental Plan 2013 (Botany LEP 2013) allows Council to grant consent for development even though the development contravenes a development standard imposed by the LEP. The clause aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

This request under clause 4.6 relates to the height of buildings (building height) development standard (clause 4.3) within the Botany LEP 2013.

This request relates to a revised design scheme for the site prepared following detailed analysis of the constraints and opportunities of the site, neighbouring development (existing and proposed), the objectives of the height of buildings standard and the public submissions and Council concerns with the original master plan scheme submitted in relation to this development application. Accordingly the design has been revised to achieve a better outcome by pushing some parts of the site above the controls and leaving other parts of the site below the height and floor space ratio controls. This Clause 4.6 variation will demonstrate how a scheme that strictly complied across the site would result in a poorer design outcome having regard to the specific objectives of the B4 Mixed Uses zone and R3 Medium Density Residential zone, and the height of buildings standard.

This Clause 4.6 variation considers the site conditions as a whole but has been prepared specifically for the B4 Mixed Uses zone and R3 Medium Density Residential zone of the site which are the specific areas of non-compliance.

This submission should be read with the Clause 4.6 variation for floor space ratio as the flexibility in the application of both controls go hand in hand in achieving an optimum built form outcome for the subject site.

1.1 Request to Vary the Height of Buildings Development Standard

Clause 4.6 of the Botany LEP 2013 allows for the variation of certain development standards within the LEP, when granting consent to a development application, subject to a request for a variation from the applicant and provided certain tests are satisfied. This document constitutes such a request to vary the Height of Buildings standard in the Botany LEP 2013, as it applies to that portion of the site zoned B4 Mixed Uses and R3 Medium Density Residential, and sets out the justification for doing so.

Clause 4.6 is specifically designed to provide an appropriate degree of flexibility in applying those standards to order to achieve better development outcomes. The variation sought with respect to building height on those parts of the site zoned B4 Mixed Uses and R3 Medium Density Residential stem from shifting some of the allowable GFA (and consequently height) on other parts of the site to achieve a better design outcome for redevelopment of the site as a whole, and in particular, deliver an open space area that exceeds Council's minimum requirements for the site.

The relevant provisions of Clause 4.6 state:

(1) The objectives of this clause are as follows:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

(a) that ***compliance with the development standard is unreasonable or unnecessary in the circumstances of the case****, and*

(b) that there are ***sufficient environmental planning grounds to justify contravening the development standard****.*

(4) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

(ii) the proposed development will be in the public interest because it is ***consistent with the objectives of the particular standard and the objectives for development within the zone*** *in which the development is proposed to be carried out, and*

(b) the concurrence of the Director-General has been obtained.

(5) In deciding whether to grant concurrence, the Director-General must consider:

(a) whether contravention of the development standard raises any ***matter of significance for State or regional environmental planning****, and*

(b) the ***public benefit of maintaining the development stan****dard, and*

(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.

The principal tests are found in subclauses (3) and (4), namely:

- the '*unreasonable or unnecessary test*' which is similar to that found in State Environmental Planning Policy No.1 – Development Standards (SEPP 1);
- the '*sufficient environmental planning grounds*' test;
- consistency of the proposed development with the objectives of the standard; and
- consistency of the proposed development with the objectives of the zone.

It is understood that the Director- General's concurrence under Clause 4.6(5) has been delegated to Council. Nevertheless, this request to contravene the FSR standard also addresses those matters referred to in subclause (5).

1.2 Development Standard to be Varied

The development standard that is sought to be varied as part of this application is clause 4.3 of the Botany LEP 2013, relating to Building Height.

Clause 4.3 of the Botany LEP 2013 is reproduced below in its entirety, and an extract of the Height of Buildings Map to which that clause applies, is reproduced in **Figure 1**. It should be noted that **Figure 1** shows the extent of the entire site, including that portion of the site zoned R2 Low Density Residential, which is not subject to this clause 4.6 variation.

4.3 Height of buildings

(1) The objectives of this clause are as follows:

(a) to ensure that the built form of Botany Bay develops in a coordinated and cohesive manner,

(b) to ensure that taller buildings are appropriately located,

(c) to ensure that building height is consistent with the desired future character of an area,

(d) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,

(e) to ensure that buildings do not adversely affect the streetscape, skyline or landscape when viewed from adjoining roads and other public places such as parks, and community facilities.

(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.

(2A) Despite subclause (2), if an area of land in Zone R3 Medium Density Residential or Zone R4 High Density Residential exceeds 2,000 square metres, the height of a building on that land may exceed the maximum height shown for the land on the Height of Buildings Map but must not exceed 22 metres.

(2B) Subclause (2A) does not apply to land identified as "Area 1" on the Height of Buildings Map.

(2C) Despite subclause (2), if an area of land identified as "Area 2" on the Height of Buildings Map has a site area exceeding 1,900 square metres, the maximum height for a building on that land may exceed the maximum height shown for the land on the Height of Buildings Map by no more than 2 metres.

Figure 1 – Extract of Botany LEP 2013 Height of Buildings Map as it applies to 52-54 Pemberton Street, Botany
Source: Botany LEP 2013 Height of Buildings Map Sheet 005

An extract of the zoning map is provided at **Figure 2.**

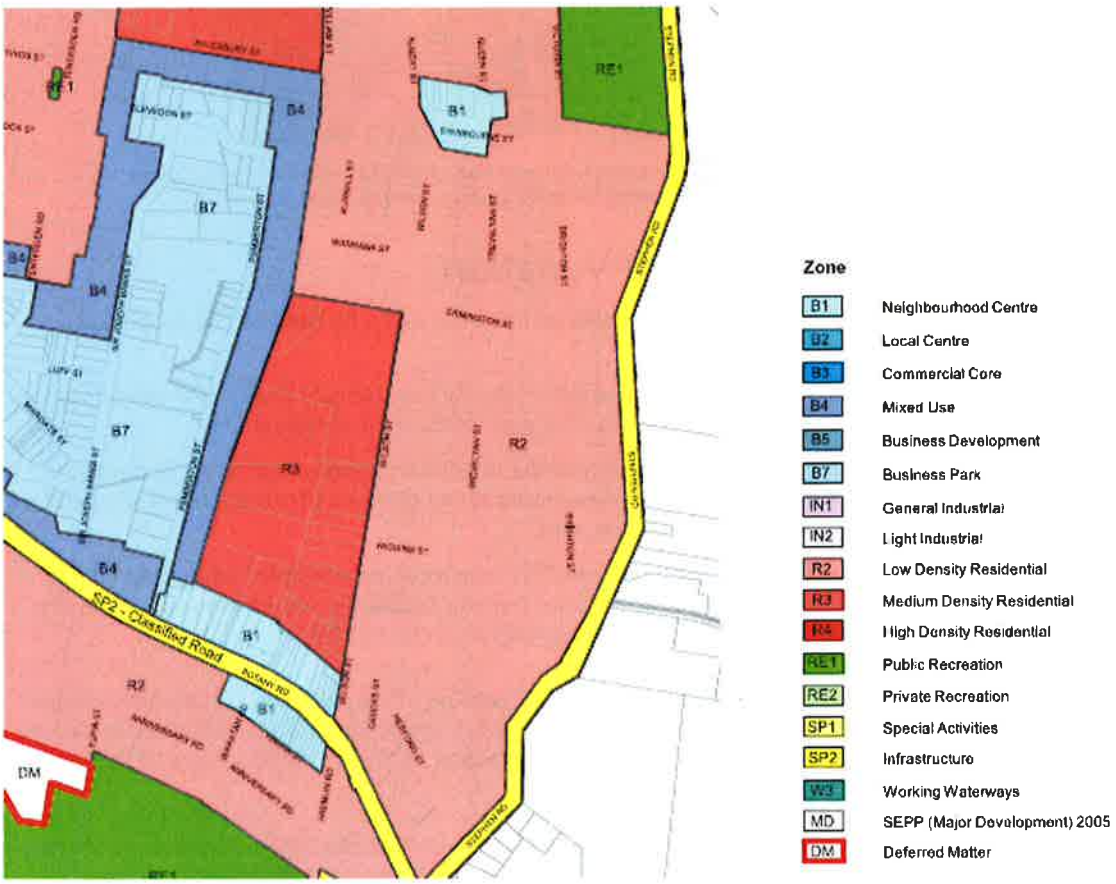

Figure 2 – Extract of Botany Bay Zoning Map
Source: Botany Bay LEP 2013 Zoning Map Sheet 005

Based on the above, the developed area is subject to two building height controls. A maximum building height of 10m applies to the western proportion of the site (which is zoned B4 Mixed Uses). A 22m height control applies to the remainder of the subject site, pursuant to clause 4.3(2A) of the Botany LEP 2013, which applies to land zoned R3 Medium Density Residential and has a site area greater than 2,000m^2 in area. **Figure 3** illustrates the extents of the site subject to the 10m height control and the 22m height control. A 8.5m height control applies to the R2 Low Density Residential zoned portion of the site[1].

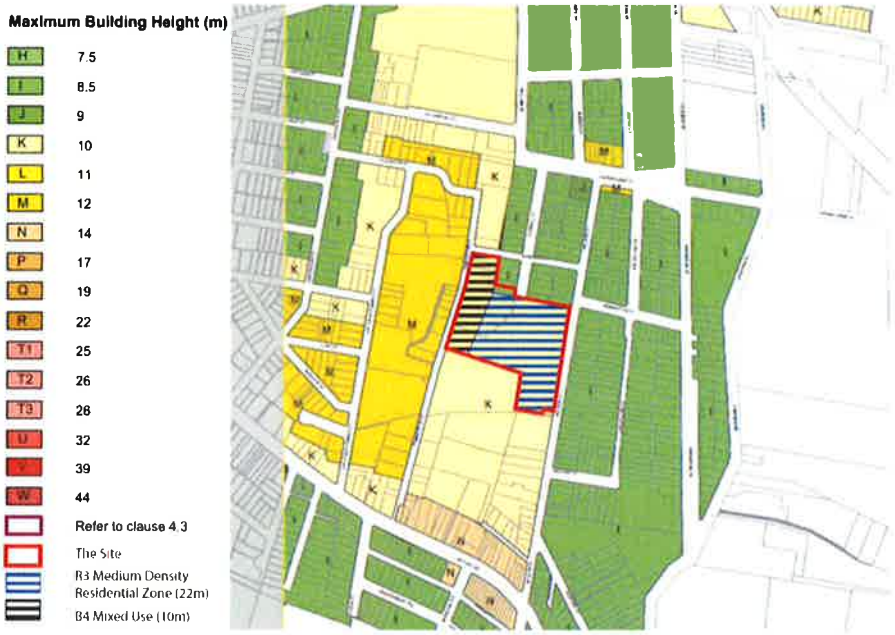

Figure 3 – Summary of building height controls on 52-54 Pemberton Street, Botany
Source: Botany LEP 2013 Height of Buildings Map Sheet 005 and Australand

1.3 Extent of Variation

Whilst a holistic design response has been taken for the site, the proposed development results in:

- No building being proposed on the R2 Low Density Residential zoned portion of the site and therefore no breach of the 8.5m height control;
- building heights that exceed the maximum permissible height of buildings control within the B4 Mixed Uses zoned portions of the site that are subject to a building height of 10m, and
- building heights that exceed the maximum permissible height of buildings control within the R3 Medium Density Residential zoned portions of the site that are subject to a building height control of 22m.

It should be noted that a significant portion of the site zoned R3 accommodates development well below the permissible height limits which while not subject to a Clause 4.6 variation underlies the reason for the extent of variations outlined above.

DA 21 which forms part of **Appendix 1** to the revised SEE and is reproduced in **Figure 3 below**, provides an overlay of the B4 Mixed Uses and R3 Medium

[1] *As with Figure 1, Figure 2 shows the extent of the entire site, including that portion of the site zoned R2 Low Density Residential, which is not subject to this clause 4.6 variation*

Density Residential zones, and consequently the 10m and 22m maximum building heights, over the proposed scheme.

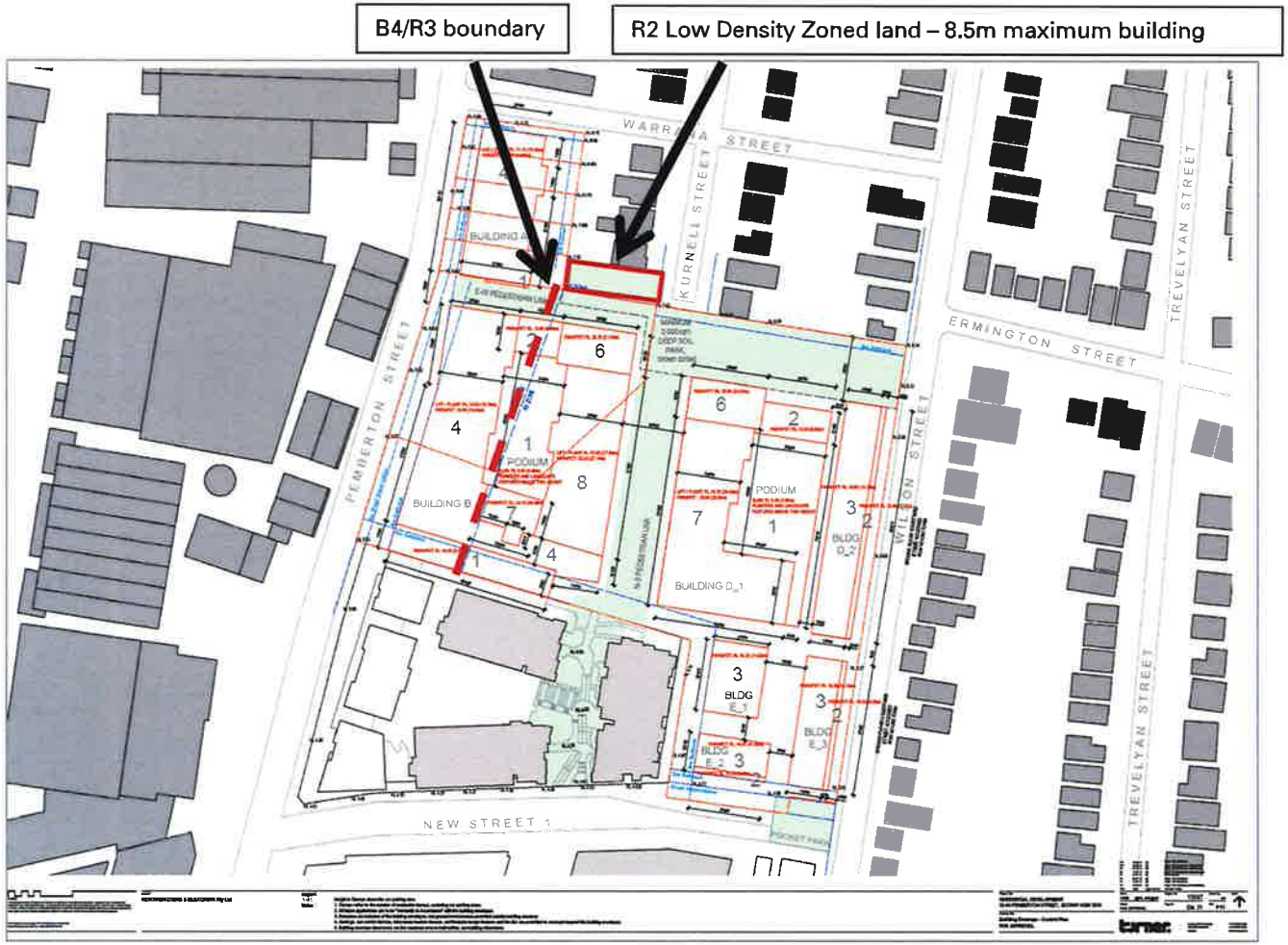

Figure 4 – Summary of proposed heights within the B4 Mixed Uses and R3 Medium Density Residential zones on 52-54 Pemberton Street, Botany
Source: Turner Architects

The maximum building height expressed in metres to top of lift/plant for each individual building within the B4 Mixed Use, R2 Low Density Residential and R3 Medium Density Residential zones is summarised in **Table 1**.

More specifically, **Table 1** identifies the flexible approach to the building heights which has been adopted across the site in order to achieve a better outcome for and from the development site that:

- the proposed maximum extent of variation in the B4 Mixed Uses zone is 5.79m;
- the proposed maximum extent of variation in the R3 Medium Residential Density zone is 5.99m;
- Building B which straddles the B4 Mixed Uses/R3 Medium Density Residential boundary will exceed both the building height control within those portions of the site zoned B4 Mixed Uses that are subject to a 10m height control, and the building height control within those portions of the site zoned R3 Medium Density Residential that are subject to a 22m height control;
- the proposed development:
  - will exceed the maximum building height on the western portion of the site, which is zoned B4 Mixed Uses, by up to 5.79m; and
  - will exceed the maximum building height on the central portion of the site, which is zoned R3 Medium Density Residential, by up to 5.99m; and
  - will be below the maximum permissible height on the eastern portion of the site fronting Wilson Street, in the south-eastern corner fronting New Street 1 and the 6 storey form in the north central area fronting the park and open space.

Table 1 – Summary of proposed building heights by building within the B4 Mixed Uses and R3 Medium Density Residential zones on 52-54 Pemberton Street, Botany

	Botany LEP 2013 Maximum Height Control	Proposed Maximum Height (m)	Variation
B4 Mixed Uses Zone			
Building A	10m	15.52m	5.52m
Building B (west wing)	10m	15.79m	5.79m
R3 Medium Density Zone			
Building B (south wing)	22m	24.09m	2.09m
Building B (east wing)	22m	27.99m	5.99m
Building D (south/west wing)	22m	24.43m	2.43m
Building B (north east wing)	22m	21.04m	Complies
Building D (east wing)	22m	11.38m	Complies
Building E	22m	11.34m	Complies

2.0 Justification for Deviation from the Height of Buildings Standard

2.1 The Standard is Unnecessary and Unreasonable

In the decision of *Wehbe v Pittwater Council* [2007] NSW LEC 827, which relevantly provides case law relating to SEPP 1 objections, Chief Justice Preston outlined the rationale for development standards, and the ways by which a standard might be considered unnecessary and/or unreasonable. At paragraph 43 of his decision in that case Preston CJ noted:

> *"The rationale is that development standards are not ends in themselves but means of achieving ends. The ends are environmental or planning objectives. Compliance with a development standard is fixed as the usual means by which the relevant environmental or planning objective is able to be achieved. However if the proposed development proffers an alternative means of achieving the objective, strict compliance with the standard would be unnecessary (it is achieved anyway) and unreasonable (no purpose would be served)."*

In Wehbe v Pittwater Council Preston CJ noted that this approach of satisfying the objectives of the development standard is one of five possible ways of establishing that compliance with a development standard is "unreasonable or unnecessary". Other ways cited are to establish that:

- the underlying objective or purpose in not relevant to the development with the consequence that compliance is unnecessary;
- the underlying objective or purpose would be defeated or thwarted if compliance is required with the consequence that compliance is unreasonable;
- the development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable; or
- the zoning of particular land was unreasonable or inappropriate so that "a development standard appropriate for that zoning was also unreasonable or unnecessary as it applied to that land" and that compliance with the standard in that case would also be unreasonable or unnecessary.

2.1.1 Satisfying the Objectives of the Development Standard

The objectives of the building height development standard (under clause 4.3 of the Botany LEP 2013) are:

(a) to ensure that the built form of Botany Bay develops in a coordinated and cohesive manner,

(b) to ensure that taller buildings are appropriately located,

(c) to ensure that building height is consistent with the desired future character of an area,

(d) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,

(e) to ensure that buildings do not adversely affect the streetscape, skyline or landscape when viewed from adjoining roads and other public places such as parks, and community facilities.

The proposed development satisfies the objectives of the height of buildings development standard, as set out below.

Objective (a) – Coordinated and cohesive built form

The distribution of height across the site is the outcome of a detailed site analysis which recognises the existing attributes of the site and its surrounds, but importantly recognises the site is located in a precinct undergoing significant transition. Accordingly some parts of the site are proposed to accommodate building heights that exceed the LEP controls whereas other parts of the site will accommodate building heights significantly lower than what the LEP allows.

The proposed development satisfies Objective (a) and demonstrates that it is a coordinated and cohesive built form as the compatibility of the proposed development with the character of the surrounding development has been considered, as has the potential impact of the built form on the existing and future character of the area. This is demonstrated in the B4 Mixed Uses Zone through:

- providing an additional storey within the B4 Mixed Uses zone, which has enabled an englobo approach to be taken to the distribution of building heights across the entire site, and particularly provide the opportunity to provide town house form with less height on the eastern portion of the site fronting Wilson Street and the opportunity to provide significant publicly accessible open space areas including a new park;
- Building B (West wing) is a 4 storey form which adjoins a building envelope for residential flat development proposed on the site to the south fronting Pemberton Street (42-46 Pemberton Street) which the JRPP has recommended should be a maximum three storeys. A 9m setback is provided from the site's southern boundary to the future Building B within which a 1 storey height is proposed which satisfies the subject site's half of the building separation distance between proposed Building B and neighbouring development to the south. The shadowing diagrams show that Building B's height above the numerical standard is not the cause of additional or unacceptable shadowing to future buildings to the south;
- the building heights proposed in the B4 portion of the site are less than those in the R3 Medium Density zone and more comparable with the scale of existing industrial development to the west opposite the site therefore providing an appropriate transition westwards from the R3 Medium Density Residential zone, across the B4 Mixed Use zone and to the B7 Business Park zone immediately opposite the site which is subject to a 12m building height control;
- recognising that the existing industrial buildings immediately north of the site already exceed the 10m height control and distributing the proposed development to provide stepping of heights along Pemberton Street, from the adjoining development site in the south to the north; and
- the proposed building heights to Pemberton Street will be stepped back as a result of a 4m wide road widening setback provided by the development, and proposed landscaping and street trees which also assist in shielding the additional building height.

The proposed development also exhibits a coordinated and cohesive development outcome in the R3 Medium Density Residential zone through the placement of terrace house form along the eastern portion of the site fronting

Wilson Street, which is significantly 10.62m lower than the 22m height control permitted on that portion of the site. The terraces have been specifically positioned in that location in response to the two storey dwellings on the eastern side of Wilson Street, which are subject to a maximum building height control of 8.5m under the Botany LEP 2013 and at the request of Council. ALZ's proposed 11.38m maximum height on the eastern portion of the site translates into a 2-3 storey built outcome, which is compatible with the surrounding development. It should be noted that the LEP permits a 6 storey residential flat building form in this part of the site, however Australand has agreed to provide a lower dwelling form at this street frontage and relocation of the additional permissible height and consequently GFA to other portions of the site, which has resulted in some of the variations sought to building height outlined throughout this submission request.

The location of the building bulk removed from more sensitive lower density residential areas to the east ensures that there is a co-ordinated and cohesive approach to the distribution of building height across the subject site taking into account the context of building height within the locality. Accordingly, it is considered that the distribution of height across the site has been planned to achieve a coordinated and cohesive built form.

Objective (b) – Appropriate location of taller buildings

This objective links the location of height across a site to its context.

The proposed development places the tallest buildings (7 and 8 storeys of a maximum 24.43m and 27.99m, respectively) in the central area of the site, where they will be less visible from adjoining properties, or the perimeter of the site. The location of the tallest buildings has also been sited having regard to the adjoining medium density project to the south. The proposed distribution of building height in this manner does not result in any adverse impacts regarding the intensity of development with respect to the proposed streetscape or visual impact, as demonstrated at Sections 4.10, 5.8, and 5.10 of the Statement of Environment Effects and allows the more sensitive parts of the site to accommodate lower heights, again an appropriate and thoughtful response to the site's context.

From the central portions of the site, building heights step down to the west towards Pemberton Street (where proposed building heights are a maximum 4 storeys or 15.79m) and the east towards Wilson Street (where the proposed building heights are a maximum 3 storeys or 11.38m which is materially lower than the maximum allowed by the LEP. The building heights also step down towards the north, transitioning from 7 and 8 storeys to a maximum 6 storeys (21.04m which complies with the 22m height limit applicable to this part of the site as shown in figure 4)) and no height is proposed on the R2 Low Density Residential land, and similarly to the south where a maximum 3 (11.63m) storeys which complies with the LEP and 4 (15.79m) storeys complying within the R3 zone are achieved along the site's southern boundary.

The proposed distribution of building heights results in a height cone to provide a good transition between the different development types. Importantly, the built form immediately fronting Wilson Street is proposed to be limited to 3 storeys – recognising the 2 storey dwellings located across the street. In addition, the new public park replaces the formerly proposed Building C which provides a building separation greater than 25m and accordingly good transition between the proposed taller elements on Building B and Building D and dwellings along Kurnell Streets. The opportunity for significant landscaping between the buildings is also a meritorious component of the proposed development.

Furthermore, land immediately west of the site across Pemberton Street is also subject to a FSR of 1:1, and benefits from height controls (12m) that are more

generous than those that apply to the B4 Mixed Uses portion of the subject site (10m). The proposed development arguably provides a better transition between taller buildings proposed in the middle of the site, and the maximum permissible building height control on adjoining properties, and therefore complements the adjoining lands.

On the basis of the above, it is considered that the stepping of the built form has appropriately located the taller building elements across the site and balanced the development with appropriately located smaller buildings, therefore satisfying Objective (b).

Objective (c) – Ensuring building height is consistent with desired future character

The desired future character of the area is detailed within Part 9C of the BBDCP2013 and provides:

The Precinct will be a predominately residential neighbourhood that integrates with the suburb of Botany and Banksmeadow. It will be a place where people can live, work and play in a safe and comfortable environment. To achieve this vision the area will offer a diversity of housing types of a high design standard, and good quality communal open spaces and local public open spaces to meet the needs of the Botany Bay local community.

It is understood that the intent of the 10m building height control in the B4 Mixed Use zone is to provide an appropriate transition to adjoining development and preserve the character along Pemberton Street. The proposed design achieves this by providing a development with a height and built form consistent with other new residential development in the surrounding area which is compatible with the scale of industrial development along Pemberton Street.

The proposed development includes significant landscaping, public domain and other design innovations to provide an improved visual relationship between the new development and the existing, arguably undesirable, character which dominates the Pemberton Street interface.

Further, the application of the 22m height limit on that part of the site zoned R3 Medium Density Residential reflects a desired future character for the site which is distinctively different from existing single dwellings along Wilson and Kurnell streets in the vicinity of the site.

Objective (d) – Minimise visual impact, disruption of views, loss of privacy and loss of solar access

Redevelopment of the site will no doubt change the visual appearance of the site when viewed from surrounding development. However, it is considered that the change is not a view loss or negative visual impact, as the proposed development will replace the arguably unsightly views of redundant and outdated industrial buildings which do not, in our opinion, currently provide high levels of visual amenity.

There are no established sightlines across or into the site that will be compromised or removed with the proposed development. Rather, the proposed development provides the opportunity to provide visual breaks and establish new view corridors between Buildings A and B, as well as Building D and existing residential development north of the site fronting Wilson Street.

Despite the proposed development exceeding the maximum building height controls applicable to the B4 Mixed Uses and R3 Medium Density Residential portions of the site, the proposed development is appropriately setback from its

boundaries and adjoining development to ensure satisfactory levels of privacy and solar access will be maintained.

The proposed heights of the development will cause no significant overshadowing onto properties to the west, north or south of the development, and no impact in terms of view impact or amenity impact on the enjoyment and use of the rest of the buildings within the subject site. Building separations comply with the recommended distances identified within SEPP 65.

In fact, putting lower buildings in sensitive locations means less impact than the controls anticipate. The visual presentation to existing development on the opposite side of Wilson Street is acceptable in that the 3 storey component steps back ensuring the bulk and scale of the townhouses is not overbearing when viewed from the existing dwellings on that side of the street.

Objective (e) – No adverse impacts to streetscape, skyline or landscape when viewed from road and public places

The proposed building envelopes across the site represent an appropriate and sensitive distribution of height which has sound urban design and external amenity outcomes. It therefore clearly results in a satisfactory streetscape outcome along both Pemberton Street and Wilson Street and as viewed from Kurnell Street and a better outcome than would be achieve if strict compliance was adhered to.

As outlined above, setbacks proposed along Pemberton Street provide an opportunity to provide pedestrian pathways, a generous landscaped setting, and a landscaped area that could potentially accommodate the planting of larger trees. This will result in sufficient separations between the B4 Mixed Use and B7 Business Development zones to protect and improve the streetscape.

The buildings within both the B4 Mixed Uses zone and the R3 Medium Residential Development zone are in context with the scale of existing and proposed buildings as outlined above. The stepping of building heights, and the siting of taller elements within the central portions of the site and smaller buildings in sensitive locations ensure that view angles from existing residential properties along Kurnell Street and Wilson Street towards the skyline will be improved compared to a strictly complying scheme. Adverse impacts to the skyline are therefore not anticipated.

The proposed development will deliver:

- A new deep soil park of 3,000m^2 and additional central publicly accessible open space in the form of NS and EW through site linkages of approximately 3,000m^2; and
- Generous setbacks between Buildings A and B and Pemberton Street and Buildings D and E and Wilson Street.

The proposed building heights have been tested to ensure that good solar access is achieved to these areas during mid-winter. The shadowing plans appended to the Statement of Environment Effects demonstrate that the open space areas will benefit from good amenity. Views of the proposed development from public places, including the surrounding street network, the green corridor on the adjoining property to the south, and from within the internal publicly open space will be framed by the buildings, and provide good surveillance and activation irrespective of the numerical non compliances with the building height controls.

2.1.2 Satisfying the Objectives of the Zone

The proposed development exceeds the height controls in both the B4 Mixed Uses zone and the R3 Medium Density Residential zone. As such, the objectives

of both zones are required to be considered in determining whether the variation to exceed the applicable height controls is supportable.

The objectives of the B4 Mixed Uses Zone are as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*

The proposal in its entirety satisfies the B4 Mixed Uses Zone objectives as it:

- predominantly proposes stand-alone residential flat buildings which are permissible with consent in the zone, within an environmentally responsible framework, which will be compatible with other land uses located within this zone;
- proposes to provide one commercial tenancy on the ground floor of Building B with frontage to Pemberton Street in addition to a cafe tenancy at the southern end of Building A fronting the site through link near the entry from Pemberton Street – three discrete land uses are therefore provided within the B4 Mixed Uses zone;
- the proposed development represents an appropriate design response to the opportunities and constraints inherent in the site and its setting and is consistent with the design quality principles outlined in SEPP 65;
- the proposed development locates significant publicly accessible open space on site, thereby providing a localised recreation opportunity within walking and cycling distance, which reduces the need for offsite travel by private vehicles; and
- does not compromise the ability of adjoining properties in the B4 Mixed Uses zone to provide other uses typically found in the zone to provide a precinct wide integrated land use framework that is economically, environmentally and socially sustainable.

The objectives of the R3 Medium Density Residential zone are as follows:

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of the residents.*

The proposal in its entirety satisfies the R3 Medium Density Residential Zone objectives as it:

- provides for the housing needs of the community by being designed in such a manner that the social and affordable housing objectives of the Botany LEP 2013 and Botany DCP 2013;
- contributes to housing diversity and will increase the housing choice within the Botany Bay LGA by providing additional housing in an established urban area with good access to major employment centres;
- provides a range of landscaped open spaces areas that are appropriately designed to ensure compatibility within the site, the desired future character of the area, and the broader Botany locality; and
- provides residential development and through-site links in close proximity to existing employment lands thereby encouraging walking and cycling through

the local precinct between proposed residential and existing non-residential land uses.

2.2 Sufficient Environmental Planning Grounds

There are sufficient environmental planning grounds to justify flexible application of the building height control as it applies to both the B4 Mixed Uses and R3 Medium Density Residential Zone to allow for some buildings exceeding the maximum height controls and others being significantly below the maximum control.

The non-compliance with the building height control across both the B4 Mixed Uses zone and R3 Medium Density Residential zone is predominantly caused by the proponent's intention to distribute built form across the site in a manner that recognises the site's contextual relationship, future desired character and the opportunity to provide significant publicly accessible open space that significantly exceeds Council's minimum open space requirements. The case is an appropriate one for the flexible application of the height control in order to facilitate an overall improvement in environmental outcome on this large site.

In addition:

- the height, form and density of the proposed development is considered to be more appropriate in this context than would a strictly complying scheme;
- the proposal satisfies the objectives of the height development standard as it will not adversely affect views, solar access or privacy and is compatible with the bulk, scale and character of the area;
- the proposal satisfies the objectives of the B4 Mixed Uses and R3 Medium Density Residential Zones on the basis that it provides for the housing needs of the community and provides a suitable apartment mix;
- the proposed development does not raise any matters of significance for State or regional environmental planning significance set at Section 2.3 below and summarised as follows:
  - the proposed development is suitable for the site and exhibits demonstrable public interest despite the numerical non-compliances with the applicable height controls; and
  - the proposal is not inconsistent with the objectives of the Botany LEP 2013, Botany DCP 2013, Draft Metropolitan Strategy and the Draft South Subregional Strategy;
- there is no tangible public benefit in maintaining numerical compliance with the applicable height controls as demonstrated throughout this report and the Statement of Environmental Effects.

In light of the above it is considered that there are no environmental planning grounds that warrant maintaining and/or enforcing the numerical building height standard in this instance. Rather, there are clear and justifiable environmental planning merits which justify the application of flexibility allowed for in Clause 4.6.

2.3 Director General's Concurrence

It is understood that the Director-General's concurrence under clause 4.6(5) has been delegated to Council. The following section provides a response to those matters sets out in clause 4.6(5) which must be considered by Council under its delegated authority.

Whether contravention of the development standard raises any matter of significance for State or regional environmental planning

The proposed contravention to the building height development standard is well balanced by areas significantly below the standard and does not raise any matter of significance for the state or regional environmental planning. The additional height proposed within the portion of the site zoned B4 Mixed Uses and the portion of the site zoned R3 Medium Density Residential does not result in any adverse impact on the surrounding area, and enables a more appropriate distribution of height across the entire site, including the specific location of taller buildings in the centre of the site and adjoining other taller buildings on the adjoining site to the south and smaller buildings along the site's Wilson Street frontage.

The proposal is consistent with the most recent Draft Metropolitan Strategy for Sydney to 2031 (dated March 2013) (the draft Metro Strategy) and the preceding Metropolitan Plan for Sydney 2036 (dated December 2010), as demonstrated by the Statement of Environment Effects submitted with the DA. In summary:

- The proposed development satisfies the "Balanced Growth" objectives of the draft Metro Strategy in that:
  - The site is effectively part of an urban renewal area.
  - The proposed development is within the Metropolitan Urban Area in a location experiencing strong market demand.
  - The proposed development reduces pressure on greenfield land which may contain agriculture and resource lands.
  - The proposed development reduces pressure on greenfield land which may contain high value environmental land.
  - The proposed development provides growth in an inner ring suburb of Sydney.
  - The proposed development encourages the growth of employment in those areas by co-locating housing and employment and encouraging small businesses servicing the resident population.
- The proposed development satisfies the "Liveable City" objectives of the draft Metro Strategy in that:
  - The proposed development provides much needed additional homes in the subregion.
  - The proposed development provides new housing close to existing infrastructure.
  - The proposed development provides a range of housing types (courtyard units and apartments) and sizes that are in demand in this location.
  - Whilst the proposed development will not provide housing for very low or low income earners it will provide "opportunities to invest in mid- and moderately-priced housing in accessible places to boost supply and improve overall housing affordability." It also satisfies BASIX requirements and enables savings to household bills.
  - The proposed development provides for the growth and change in the Pemberton – Wilson Precinct as anticipated by the current local plans (including the relevant character statement).
  - The proposed development does not affect any heritage assets.
  - The proposed development follows good principles of urban design, including those in SEPP 65.

The public benefit of maintaining the development standard

There is no public benefit in maintaining the numerical building height development standard in this instance. Specifically, as demonstrated above,

there will be no adverse impacts as a result of the variation to the development standard. Maintaining and enforcing the development standard in this case would unreasonably prevent the orderly and economic development of this underutilised site, and would unnecessarily preclude the various community benefits this development brings, including:

- revitalisation of an underutilised and derelict site;
- a new development that is consistent with the desired future character of the locality and recognises that Botany is an area undergoing significant and dynamic transformation;
- a new development offering high quality design and improvements to the streetscape;
- a new development including a publicly accessible deep soil 3,000m^2 park in addition to landscaped site through linkages;
- provision of construction jobs; and
- a capacity to achieve a better outcome by materially reducing heights in more sensitive locations on the site.

It is therefore considered to be in the public interest that the variation to the development standard be supported in this case.

Any other matters required to be taken into consideration by the Director-General before granting concurrence

In addition to the matters already mentioned, it is worth pointing out that the non-compliance will not set an undesirable precedent in the area. The applicant is not seeking an unreasonable amount of additional height; merely a variation from the height development standard to permit some parts of some buildings to be erected above the height control to allow for lower heights to be achieved on more sensitive parts of this large site in order to achieve a better overall environmental outcome. Furthermore, the variation provides for the provision of a new public park in addition to publically accessible site through link and for town/row home built form along the Wilson Street frontage with a height and FSR considerably less than what is allowed for this portion of the site. The variation to the height development standard as it applies to the site would facilitate a development scale more closely comparable to the scale of each of the various building components surrounding the site and achieving an overall improvement in the outcome both on and off the site.

2.4 Summary

In putting together or assessing the complex variables of any given development it is important to consider the inter-relationship of the many and often competing planning controls and objectives. Ultimately the development needs to achieve a balanced and efficient response that 'best fits' the site in its physical and statutory context. Clause 4.6 of the Botany LEP 2013 recognises this by permitting flexibility in the application of development standards and has an important objective of achieving better outcomes from development by allowing flexibility in appropriate circumstances. The proposal for this Stage 1 DA applies clause 4.6 in order to achieve that objective by proposing a development that has better outcomes both for the development itself and future occupants, and from the development in terms of its external environmental impacts and relationships with the public domain and neighbouring sites.

The proposed development application seeks consent for a Stage 1 Development Application (DA), including:

- building envelopes containing a maximum GFA of 45,722m^2;

- maximum building heights ranging from 11.38m (3 storeys) to 27.99m (8 storeys);
- minimum 3000m^2 new deep soil park;
- additional publicly accessible open space, including pedestrian through-site links; and
- New vehicular access from Pemberton Street.

It is entirely consistent with the objectives of the Botany LEP 2013 Height of Buildings control, the zone objectives for the B4 Mixed Uses and R3 Medium Density Residential zones, and is in the public interest.

Due to the application of building height bands based on the zoning of the site which appears to follow the underlying subdivision pattern, the 10m height control in the B4 Mixed Use zone does not lead to the best outcome in addressing contextual issues associated with existing and desired future character or opportunities to provide appropriately located open space areas which will have a broader community benefit. It is necessary to vary the building height control in the B4 Mixed Use zone in order to facilitate a development that provides regularised and SEPP 65 compliant building envelopes, of comparable scale to surrounding buildings and which achieves a better overall outcome across the development site by implementing the flexibility in clause 4.6 of the LEP.

The proponent's commitment to construct an appropriately scaled built form fronting Wilson Street and the opportunity to provide extensive open space, which is significantly more than required by Council's local controls, supports the proposed development's variation to the building height control within the R3 Medium Density Residential zone and the B4 Mixed Uses Zone.

On balance, the proposed variation is justified for the following reasons:

- The proposed non-compliance provides the opportunity to appropriately locate building heights across the site which best respond to their immediate context including existing, proposed and future development potential of neighbouring sites in accordance with planning controls, and allow for gross floor area to be concentrated in four (4) buildings in order to provide for a new deep soil park on the site in addition to publically accessible open space.
- The proposal is compatible with surrounding development, recognising that the site is located in a precinct undergoing transition with heights and built form that will differ in scale between single dwellings, residential apartment buildings and industrial development.
- The additional building height within certain portions of the site zoned B4 Mixed Uses and R3 Medium Density Residential is offset by the proposal proposing less than the maximum permitted height on the other parts of the site, including along the Wilson Street frontage, and on land immediately south of adjoining residential development on Kurnell and Wilson Streets where no buildings are proposed to be located to allow for development of a new public park and a landscaped area on land zoned R2 Low Density Residential.
- The proposed development seeks to redevelop an existing under-utilised site to provide for the housing needs of the community.

Taking this into consideration this statement demonstrates that Council can be satisfied that:

- compliance with the development standard is both unreasonable and unnecessary in the circumstances of the case, because the objectives of the

standard and the B4 Mixed Uses Zone and the R3 Medium Density Residential zones are satisfied notwithstanding non-compliance with the standard; and

- there are sufficient environmental planning grounds to justify the contravention, and the variation does not result in any adverse environmental impacts.

The proposal also results in the opportunity to establish a high quality development that positively contributes to the precinct and provides public benefits. For the reasons set out throughout this report, an analysis of the development has demonstrated that on balance compliance with the objectives of the standard is achieved notwithstanding non-compliance with the standard itself. Accordingly, the Clause 4.6 Variation has demonstrated that one of the ways in which an objection to a development standard might be shown to be unreasonable or unnecessary has been met, and therefore the Objection is well founded.

2.5 Conclusion

This Clause 4.6 submission demonstrates the consent authority can be satisfied that the proposed variation to the building height development standard that applies to land zoned B4 Mixed Uses and land zoned R3 Medium Density Residential is justified and satisfies the tests established by the Land and Environment Court for SEPP 1/Clause 4.6 Objections, in that:

- The clause 4.6 variation is 'well founded' because the proposal is compatible with the scale and character of the area and will not have adverse amenity impacts on surrounding land;
- The strict application of the standard would be both unreasonable and unnecessary in the circumstances of the case;
- The strict application of the standard would hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the EP&A Act;
- The non-compliance with the development standard does not raise any matters of State and regional planning significance and will assist with the attainment of policies;
- There is no public benefit in maintaining the building height development standard adopted by the environmental planning instrument for this site; and
- The proposed flexible application of controls achieves better planning outcomes than would be achievable by strict adherence to the controls across the development site.

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Clause 4.6 Request to Vary a Development Standard Floor Space Ratio

52-54 Pemberton Street, Botany

Submitted to Botany City Council

Prepared by Australand Property Group on behalf of Newtown Dyers & Bleachers Pty Ltd

8 October 2014 ■ 14318

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People driven people.

Figures

Tables

1.0 Introduction

Clause 4.6 of the Botany Local Environmental Plan 2013 (Botany LEP 2013) allows Council to grant consent for development even though the development contravenes a development standard imposed by the LEP. The clause aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

This request under clause 4.6 relates to the floor space ratio (FSR) development standard (clause 4.4) within the Botany LEP 2013.

This request relates to a revised design scheme for the site prepared following detailed analysis of the constraints and opportunities of the site, neighbouring development (existing and proposed), the objectives of the floor space ratio standard and the public submissions and Council concerns with the original master plan scheme submitted in relation to this development application. Accordingly the design has been revised to achieve a better outcome by pushing some parts of the site above the controls and leaving other parts of the site below the height and floor space ratio controls. Overall, the total gross floor area sought across the site as a whole does not exceed the maximum GFA (or FSR) that would otherwise be achievable within the individually zoned portions of the site. This Clause 4.6 variation will demonstrate how a scheme that strictly complied across the site would result in a poorer design outcome having regard to the specific objectives of the B4 Mixed Uses zone and the floor space ratio standard.

This Clause 4.6 variation considers the site conditions as a whole but has been prepared specifically for the B4 Mixed Uses zoned portion of the site which is the specific area of non-compliance.

This submission should be read with the Clause 4.6 variation for building height as the flexibility in the application of both controls go hand in hand in achieving an optimum built form outcome for the subject site.

1.1 Request to Vary the Floor Space Ratio Development Standard

Clause 4.6 of the Botany LEP 2013 allows for the variation of certain development standards within the LEP, when granting consent to a development application, subject to a request for a variation from the applicant and provided certain tests are satisfied. This document constitutes such a request to vary the FSR standard in the Botany LEP 2013, as it applies to that portion of the site zoned B4 Mixed Uses, and sets out the justification for doing so.

Clause 4.6 is specifically designed to provide an appropriate degree of flexibility in applying those standards to order to achieve better development outcomes. The variation sought with respect to FSR on that part of the site zoned B4 Mixed Uses seeks to shift some of the allowable GFA on other parts of the site to the Pemberton Street frontage to achieve a better design outcome for redevelopment of the site as a whole. It should be noted that the reallocation of GFA from the R2 Low Density Residential and R3 Medium Density Residential zoned parts of the site to the B4 Mixed Uses zoned land does not exceed the amalgamated permissible GFA for the site as a whole.

The relevant provisions of Clause 4.6 state:

(1) The objectives of this clause are as follows:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

(a) that ***compliance with the development standard is unreasonable or unnecessary in the circumstances of the case****, and*

(b) that there are ***sufficient environmental planning grounds to justify contravening the development standard****.*

(4) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

(ii) the proposed development will be in the public interest because it is ***consistent with the objectives of the particular standard and the objectives for development within the zone*** *in which the development is proposed to be carried out, and*

(b) the concurrence of the Director-General has been obtained.

(5) In deciding whether to grant concurrence, the Director-General must consider:

(a) whether contravention of the development standard raises any ***matter of significance for State or regional environmental planning****, and*

(b) the ***public benefit of maintaining the development standard****, and*

(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.

The principal tests are found in subclauses (3) and (4), namely:

- the '*unreasonable or unnecessary test*' which is similar to that found in State Environmental Planning Policy No.1 – Development Standards (SEPP 1);
- the '*sufficient environmental planning grounds*' test;
- consistency of the proposed development with the objectives of the standard; and
- consistency of the proposed development with the objectives of the zone.

It is understood that the Director- General's concurrence under Clause 4.6(5) has been delegated to Council. Nevertheless, this request to contravene the FSR standard also addresses those matters referred to in subclause (5).

1.2 Development Standard to be Varied

The development standard that is sought to be varied as part of this application is clause 4.4 of the Botany LEP 2013, relating to FSR.

Under Clause 4.4(2) of the Botany LEP 2013 ' *The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map* '. The maximum FSR shown on the Floor Space Ratio for the subject site is shown below in **Figure 1**. It should be noted that **Figure 1** shows the extent of the actual development site, including those portions of the site zoned R2 Low Density Residential and R3 Medium Density Residential which are not subject to this clause 4.6 variation.

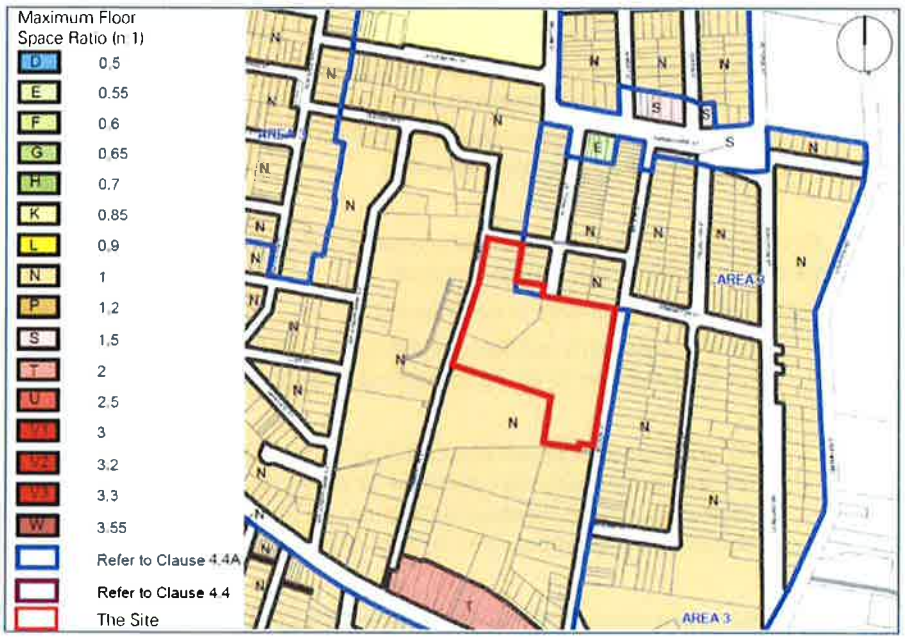

Figure 1 – Extract of Botany LEP 2013 FSR Map
Source: Botany LEP 2013 Floor Space Ratio Map Sheet 005

An extract of the zoning map is provided at **Figure 2**.

Figure 2 – Extract of Botany LEP 2013 Zoning Map
Source: Botany LEP 2013 Zoning Map Sheet 005

The Botany LEP 2013 FSR Map (**Figure 1**) sets a maximum FSR development standard of 1:1 across the site.

However, pursuant to clause 4.4B of the Botany LEP 2013, a FSR bonus is available on land zoned R3 Medium Density Residential subject to certain conditions being satisfied. Further, the land is identified as Area 3 on the FSR map and accordingly Clause 4.4A applies to that part of the site zoned R2 Low Density Residential. The maximum FSR of 1:1 specified on the FSR map would apply to any non-residential land uses developed on the R2 Low Density Residential land, however, a maximum FSR of 0.55:1 would be applicable for the development of a dwelling house on this lot. As there are a range of non-residential uses that could be developed on this land in accordance with the land use table, the maximum applicable FSR of 1:1 has been adopted in this instance.

Accordingly, the site is subject to a FSR development standard of 1:1 on the eastern portion (Pemberton Street frontage) zoned B4 Mixed Uses and the R2 Low Density zoned lot of land and a FSR development standard up to 1.65:1 across the remainder of the site (including the FSR bonus) zoned R3 Medium Density Residential, as shown in **Figure 3**[1]. This Clause 4.6 variation only relates to that part of the site zoned B4 Mixed Uses as the development within the R3 Medium Density Residential zoned portion complies with the FSR control applicable on that part of the site and no buildings are proposed on the R2 Low Density Residential part of the site to accommodate a proposed new 'recreation area' for the broader public.

[1] *As per Figure 1, it should be noted that Figure 2 shows the extent of the actual development site, including those portions of the site zoned R2 Low Density Residential and R3 Medium Density Residential which are not subject to this clause 4.6 variation.*

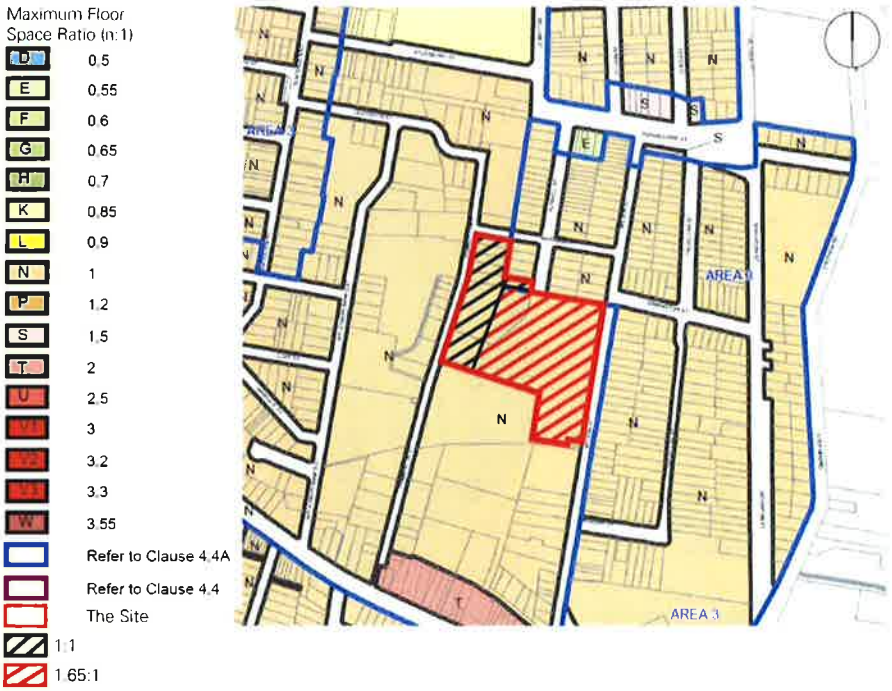

Figure 3 – Summary of FSR controls on 52-54 Pemberton Street, Botany
Source: Botany LEP 2013 Floor Space Ration Map Sheet 005 and JBA

1.3 Extent of Variation

Whilst the proposed development has been designed to respond to the site holistically, when calculating the FSR for the purposes of technical compliance with the Botany LEP 2013, the FSR must be determined for each area of the site.

The proposed development has a maximum FSR of 1.252:1 on that part of the site zoned B4. This exceeds the maximum permissible FSR of 1:1 on the western portion of the site, by 2,038.5m^2 or an equivalent FSR of 0.252:1.

By contrast development within the R3 Medium Density Residential zoned portion of the site has a proposed FSR of 1.578:1 which complies with the maximum 1.65:1 provision applicable to that land and is therefore not subject to this Clause 4.6 variation. Further, no FSR is proposed on that part of the site zoned R2 Low Density Residential Development which could otherwise accommodate up to 456m^2 gross floor area within a complying scheme.

It is noted that when the full development potential across the applicable FSR bands is calculated, the overall site GFA as proposed by the DA, would be slightly below the total maximum permissible GFA permitted on the site.

A summary of the gross floor allocations across the site is summarised in **Table 1**. As per previous comments, this clause 4.6 variation only applies to that part of the site zoned B4 Mixed Uses however the gross floor area and FSR proposed on the remaining parts of the site are provided for information purposes to understand the context of FSR allocation across the whole site.

The table shows that if the maximum allowable FSR was achieved across the three zoned portions of the site a total GFA of 45,746.75m^2 would apply. The proposed development provides a total GFA across the site of 45,722m^2 which is less than this amount. Accordingly no additional GFA is sought for the development above that would otherwise be allowed if the FSR was maximised on the individual portions of the site.

Table 1 – Summary of non-compliance with FSR controls and GFA

	Site Area (m^2)	Botany LEP 2013 FSR Control	Maximum Permissible GFA (m^2)	Proposed GFA (m^2)	Proposed FSR	Extent of Compliance/ Variation (m^2) (GFA)	Extent of Compliance/ Variation (m^2) (FSR)
B4 Mixed Uses Zone	**8,058.5**	**1:1**	**8,058.5**	**10,097**	**1.252:1**	**2,038.5 (0.252:1)**	**+0.252:1**
R2 Low Density Zone	456	0.55:1 to 1:1 dependant on proposed land use	456	0	0	456m^2 less than maximum GFA	-1:1
R3 Medium Density Zone	22,565	1.65:1	37,232.25	35,625	1.578:1	1607.25m^2 less than maximum GFA	-0.072:1
TOTAL SITE GFA	31,079.5		45,746.75	45,722		24.75	

2.0 Justification for Deviation from the FSR Standard

2.1 The Standard is Unnecessary and Unreasonable

In the decision of *Wehbe v Pittwater Council* [2007] NSW LEC 827, which relevantly provides case law relating to SEPP 1 objections, Chief Justice Preston outlined the rationale for development standards, and the ways by which a standard might be considered unnecessary and/or unreasonable. At paragraph 43 of his decision in that case Preston CJ noted:

> *"The rationale is that development standards are not ends in themselves but means of achieving ends. The ends are environmental or planning objectives. Compliance with a development standard is fixed as the usual means by which the relevant environmental or planning objective is able to be achieved. However if the proposed development proffers an alternative means of achieving the objective, strict compliance with the standard would be unnecessary (it is achieved anyway) and unreasonable (no purpose would be served)."*

In Wehbe v Pittwater Council Preston CJ noted that this approach of satisfying the objectives of the development standard is one of five possible ways of establishing that compliance with a development standard is "unreasonable or unnecessary". Other ways cited are to establish that:

- the underlying objective or purpose in not relevant to the development with the consequence that compliance is unnecessary;
- the underlying objective or purpose would be defeated or thwarted if compliance is required with the consequence that compliance is unreasonable;
- the development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable; or
- the zoning of particular land was unreasonable or inappropriate so that "a development standard appropriate for that zoning was also unreasonable or unnecessary as it applied to that land" and that compliance with the standard in that case would also be unreasonable or unnecessary.

2.1.1 Satisfying the Objectives of the Development Standard

The objectives of the FSR development standard (under clause 4.4 of the Botany LEP 2013) are:

> *(a) to establish standards for the maximum development density and intensity of land use,*
>
> *(b) to ensure that buildings are compatible with the bulk and scale of the existing and desired future character of the locality,*
>
> *(c) to maintain an appropriate visual relationship between new development and the existing character of areas or locations that are not undergoing, and are not likely to undergo, a substantial transformation,*
>
> *(d) to ensure that buildings do not adversely affect the streetscape, skyline or landscape when viewed from adjoining roads and other public places such as parks, and community facilities,*

(e) to minimise adverse environmental effects on the use or enjoyment of adjoining properties and the public domain,

(f) to provide an appropriate correlation between the size of a site and the extent of any development on that site,

(g) to facilitate development that contributes to the economic growth of Botany Bay.

The proposed development satisfies all of the objectives of the FSR development standard, as set out below.

Objective (a) – Maximum density and intensity of land use

The distribution of GFA across the site results in some parts of the site accommodating less than the applicable FSR control, and other parts accommodating more than the FSR control. As outlined in Section 1.3 of this submission, the 456m^2 portion of the site zoned R2 Low Density Residential is proposed to accommodate part of a new recreation area that will be available to the broader community and will not utilise its FSR. Consequently the development potential from that part of the site has been transferred to the B4 Mixed Use zoned land. The distribution of GFA is the outcome of a detailed site analysis which identified where the built form would have minimum impact on the character of the area, whilst ensuring the high quality future development that provides significant public amenity in terms of generous publicly accessible open space areas, road widening, through-site links and building envelopes that are capable of achieving compliance with SEPP 65 and the Rules of Thumb set out within the Residential Flat Design Code.

The variation also provides flexibility by allowing an alternative massing arrangement for the subject site and enables improved solar access to be provided to internal open space areas and future residential buildings both within and adjoining the site, comparative to complying building envelopes designed to the underlying FSR bands.

The redistribution of FSR as currently proposed is further considered appropriate in the context of the site as the density and intensity of use is focused on the western portion where it is in closer proximity to the B7 Business Zone which is a less sensitive land use in terms of amenity and more consistent with the scale of commercial buildings. This design principle also allows for the presentation of a lower density terrace house built form at the eastern edge of the site which allows for a better relationship with the existing low scale residential development on the opposite side of Wilson Street.

Finally, Objective (a) links the density of the development to the intensity of use. In this regard, the DA has demonstrated that the site is able to accommodate the proposed development in a manner that does not raise significant traffic, car parking or access issues. There is sufficient capacity within the surrounding road network to support the additional vehicle generation both in vehicular and pedestrian terms. The proposed envelopes have also been tested to ensure that no unacceptable adverse impacts would result such as overshadowing or loss of privacy. As discussed in later sections of this submission, the proposed development does not result in any adverse impacts regarding the intensity of development with respect to the proposed streetscape or visual impact as suggested in Council's Assessment Report to the JRPP.

Objective (b) – Compatibility with bulk and scale of the locality's existing and desired future character

The development site is located at the northern end of the Pemberton-Wilson Street Precinct, which has been identified by Council for urban renewal. The Botany LEP 2013's FSR controls recognise that the site will undergo

transformation, and actively encourage the site by providing FSR 'bonuses' on larger sites to facilitate better built form and urban design.

Part 9C of the Botany Development Control Plan (DCP) 2013 applies specifically to the Wilson Pemberton Street Precinct. Section 9C.2 of the DCP provides a Vision Statement for the Precinct which has been reproduced below:

*The Wilson-Pemberton Street Precinct will be a **predominately residential neighbourhood** that integrates with the suburb of Botany and Banksmeadow. It will be a place where people can live, work and play in a safe and comfortable environment.*
The area will offer a diversity of housing types of a high design standard, and good quality communal open spaces and local public open spaces to meet the needs of the Botany Bay local community. The public open spaces will be places where residents can meet and interact with one another.
Residents will have access to public transport along Botany Road, as well, as having good walking access through the Precinct to the historic Sir Joseph Banks Park and the Banksmeadow shopping village along Botany Road. The Precinct will encourage people to cycle and walk through the area by providing safe and well-presented streets and public open spaces.
The Precinct will help to support and improve the Banksmeadow village shops along Botany Road by increasing the population who can use these services. Employment in the precinct will be maintained by providing the opportunity for new and emerging businesses along Pemberton Street. The businesses will be compatible with residential and provide residents with a buffer to the industry to the west. In addition, this strip of businesses will provide an opportunity for a live and work environment.
The road and pedestrian system through the Precinct is intended to act as a structuring element that will integrate the development with the surrounding areas and the existing street network. New streets through the Precinct, the extension of Rancom Street to Pemberton Street and the widening of Pemberton Street will improve the overall transport management of the area ensuring residents and businesses better access to Botany Road and surrounds, as well as, servicing the businesses along Botany Road. A north-south off street cycle path from Kurnell Street through the Precinct is proposed which will provide safer cycle access for the community and will link into the wider regional cycle route in Botany.

The proposed development is consistent with the DCP's vision statement and future desired character of the Pemberton-Wilson Street Precinct in that it will:

- Offer a diversity of housing types and good quality communal open spaces and local public open spaces to meet the needs of the Botany local community;
- Encourage people to cycle and walk through the Precinct by providing safe and well presented public open spaces, through site links and streetscape improvements;
- Help support and improve the Banksmeadow village shops along Botany Road by increasing the residential and employee population who can use those services; and
- Provide new employment opportunities which will be compatible with a residential population and will buffer the proposed and existing residential to the east from the industry to the west.

The proposed FSR distribution enhances the project's ability to deliver the desired future character by creating a stronger presentation to the Pemberton streetscape, re-enforcing it as ` a structural element' (as desired in the DCP) and a primary transport route through the precinct. Providing higher density along major arteries through a precinct is a sound and highly utilised design principle and is considered entirely suitable in this instance.

The massing also allows for the creation of a central publicly accessible through site link which will have a high level of amenity due to the proposed landscaping of the space and solar access. It is noted in this instance that the proposal will provide publicly accessible through site links including an east-west link not originally contemplated in the DCP. This is a public benefit over and above that required by the controls. The proposed FSR therefore is not considered to adversely affect existing neighbours in regard to visual and acoustic privacy, overshadowing or loss of views.

Furthermore, the additional FSR does not compromise the amenity impacts that could be associated with any future development on surrounding sites to the west which are zoned B7 Business Park. The objectives of the B7 Business Park Zone are:

- *To provide a range of **office and light industrial uses**.*
- *To **encourage employment opportunities**.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To encourage uses in the arts, technology, production and design sectors*

Permissible uses within the B7 Business Park Zone include, but are not limited to, child care centres; dwelling houses; light industries; office premises; passenger transport facilities; vehicle sales or hire premises; and warehouse or distribution centres. Properties to the west, whilst highly fragmented in terms of subdivision, are held in large land holdings and would likely need significant amalgamation effort before viable redevelopment for a land use(s) that is consistent with the zone objectives and is permissible within the B7 Business Park Zone could proceed. Nonetheless, future amenity of these properties has been considered, and as can be seen on the shadowing plans submitted with the DA, by 11.00am in mid-winter, shadows cast by the proposed development will not affect the western side of Pemberton Street. Appropriate setbacks, landscaped buffers and visual separation as discussed below in response to Objective (c) will also ensure that the amenity of existing and future properties within the B7 Business Park Zone is not adversely compromised. On this basis, the proposed FSR on the subject site will not be to the detriment of any existing or future development on surrounding properties.

Furthermore, land immediately west of the site's western boundary is also subject to a FSR of 1:1, and benefits from height controls (12m) that are more generous than those that apply to the B4 Mixed Uses portion of the subject site (10m). Objective (b) aims to ensure ***compatibility***, rather than an identical outcome, with the existing and future bulk and scale. It is evident through this submission that the proposed development is compatible with the existing and future character given the lack of adverse impacts on adjoining properties at the site's boundaries and interfaces. To the contrary, the proposed development provides a better transition between taller buildings proposed in the middle of the site, and the maximum permissible building height control on adjoining properties, and therefore complements the adjoining lands.

Furthermore, the proposal provides appropriate building transitions between the residential apartment buildings fronting Pemberton Street and adjoining dwellings to the east fronting Kurnell Street through generous landscaped setback area with a minimum distance of 11m between the proposed building envelope and the common boundary with adjoining dwelling houses, which significantly exceeds the building separation requirement under the RFDC. The generous setbacks have been provided to the Kurnell Street properties in recognition of the R2 Low Density Residential zoning and lesser FSR (0.55:1-0.85:1 depending on the lot size) that

applies to these properties unless they were developed for a non-residential use as per the R2 Low Density Residential zoned parcel of land within the subject site.

It is also noted that existing structures on the site would appear to exceed the height and FSR controls that are intended to control bulk and scale.

It is therefore considered that Objective (b) is of great significance to the proposed development as the site is in a location that is intended to provide a transition in character between proposed lower density areas located east of the site (i.e.: east of Wilson Street) and commercial, industrial and business park areas located west of the site (i.e.: west of Pemberton Street) as illustrated in **Figure 2**. Overall the proposed FSR will continue to deliver a density and scale consistent with the existing and future desired character of the area.

Objective (c) - Maintaining an appropriate visual relationship between new development and existing character of areas or locations that are not undergoing, and are not likely to undergo, a substantial transformation

The areas that are unlikely to undergo substantial transformation are the residential properties to the north and east of the site fronting Kurnell Street and Wilson Street.

An appropriate visual relationship is maintained between by the proposed development and residential properties fronting Kurnell Street and Wilson Street by locating building envelopes that are well below the applicable FSR control along the Wilson Street frontage and providing a new deep soil park with a frontage of 25m to Wilson Street. Kurnell Street residential properties have been considered in the design by setting back future building envelopes by 11m from the site boundary.

The properties to the west of Pemberton Street zoned B7 Business Park are also expected to undergo substantial transformation in the medium – long term. Accordingly, it is considered reasonable that these properties be excluded from being caught by objective (c). Notwithstanding this, the proposed design also maintains an appropriate visual relationship to Pemberton Street by providing a development with a density and built form consistent with the surrounding area and the planning controls that apply westward of the subject site. The additional density is distributed across a 45-50m wide and 35-40m long portion of land which is indiscernible when viewed from properties on the western side of Pemberton Street. It is noted that the majority of properties along Pemberton Street facing the site do not have windows with direct lines of sight that are at risk of being compromised. As discussed earlier, these properties are highly fragmented, and have a very limited, if non-existent, visual relationship to the site. As such, the proposed development will not have negative impact on views towards the site from the west.

As outlined above, the proposed distribution of massing on the site takes into account both the existing character of surrounding development and also the future desired character of the area. In this regard the development seeks to focus the massing of the development to the west in closer proximity to the less sensitive industrial and commercial land uses allowing for a lower scale interface with the existing residential development on the opposite side of Wilson Street.

The proposed development also includes significant landscaping, public domain and other design innovations to provide an improved visual relationship between the new development and the existing, arguably undesirable, character which dominates the Pemberton Street interface. The Indicative Design Scheme submitted with the DA indicates the perimeter streets will generally include tree planting, verges and landscaped setbacks. A 4 metre wide road reserve has been

incorporated along the Pemberton Street frontage to accommodate future road widening. A 1.5 metre wide pedestrian footpath and 2.1 metre wide verge will be provided with street tree planting providing visual amenity and residential pedestrian connection to Botany Road. In addition, boundary planting will be designed to minimise maintenance requirements whilst optimising amenity. A 3 metre setback at the northern end of the site, gradually increasing to 9 metres further to the south along Pemberton Street for deep soil at the perimeter of the site has been proposed to allow for screen planting. Ultimately, the landscape design to all public and street frontages will be developed to enable privacy for residents whilst encouraging visual surveillance of the public realm.

Residential dwellings immediately north of the site fronting Pemberton Street are subject to a B4 Mixed Use zone and therefore are expected to undergo future redevelopment. Objective (c) is therefore not a matter for consideration in relation to those properties.

Objective (d) – Ensure buildings do not adversely affect the streetscape, skyline or landscape when viewed from adjoining roads and other public places such as parks, and community facilities

The proposed building envelopes on the portion of the site zoned B4 Mixed Uses represents an appropriate and sensitive distribution of FSR which has sound urban design and external amenity outcomes, and therefore clearly results in a satisfactory, and arguably superior, streetscape outcome when viewed from all relevant public vantage points.

The proposed exceedance of the FSR control in no way compromises the Pemberton Street streetscape. To the contrary, the DA proposes a 4 metre wide road reserve along the Pemberton Street frontage to accommodate future road widening. The proposed planting to the street frontage positively contributes to the streetscape, integration of the development, and visual amenity privacy and safety / security for the residents, whilst clearly demarcating pedestrian entry points and clear way finding cues.

The development also proposes one new retail/commercial tenancy along Pemberton Street frontage and a café space fronting the new east west through site link which will provide new activation to Pemberton Street and pedestrian link, something which is highly desired by Council.

The skyline is unaffected by the 2,038.5m^2 of additional GFA proposed within the B4 Mixed Uses zone which results in the 0.252:1 non-compliance. As outlined in the clause 4.6 variation submitted in relation to building height, a maximum variation of 5.52m is sought for Building A and a maximum 5.79m is sought for the west wing of Building B which is located within the B4 Mixed Use zone. It is therefore reasonable to conclude that the additional GFA is between that part of the building envelope that exceeds the maximum building height of 10m and the top of the buildings. Skyline views from properties on the western side of Pemberton are unlikely to be adversely impinged by the additional GFA on Buildings A and B as the angles to sky from those properties should not be interrupted. Adverse impacts to the skyline are therefore not anticipated.

The proposed building envelopes have been tested to ensure that good solar access is achieved to these areas during mid-winter. The shadowing plans appended to the Statement of Environment Effects demonstrate that the open space areas will benefit from good amenity. Views of the proposed development from public places, including the surrounding street network, and from within the internal publicly open space will be framed by the buildings, and provide good surveillance and activation irrespective of the numerical non compliances with the FSR controls.

Objective (e) - Minimise adverse environmental effects on the use or enjoyment of adjoining properties and the public domain

Despite the proposed development exceeding the maximum FSR controls applicable to the B4 Mixed Uses portion of the site, the proposed development will not cause adverse environmental impact on the use or enjoyment of adjoining properties or the public domain.

An FSR of 1.252:1, being 0.252:1 above the numerical Botany LEP 2013 standard has insignificant impacts on the use or enjoyment of the adjoining properties or the public domain. The FSR of the development will cause no unacceptable adverse overshadowing onto properties to the west, north or south of the development, and no impact in terms of view impact or amenity impact on the enjoyment and use of the rest of the buildings within the subject site. This is demonstrated by the shadow diagrams submitted with the application.

The shadowing diagrams also demonstrate that Buildings A and B within the B4 Mixed Use zone do not overshadow the open space/public domain either along Pemberton Street nor to the future open space and landscaped areas within the site for more than 2 hours on June 21.

Objective (f) – Correlate site size with development

The site has an area in excess of 8,000m^2. Council's controls actively seek the redevelopment of larger sites recognising that a better built form outcome that can be achieved due to a more comprehensive design response and the greater flexibility for the layout of development on the site. The proposed development does not utilise the full FSR potential available on the land zoned R2 Low Density Residential or the land zoned R3 Medium Density Residential. The proposed non-compliance with the FSR control that applies to the B4 Mixed Uses zone by 0.252:1 or 2,038.5m^2 GFA over an area of a site area in excess of 8,000m^2 is considered negligible and acceptable in this instance given that the site can accommodate the additional floorspace without any adverse environmental impacts.

Objective (g) – Economic growth

The economic benefits of the proposed development are well documented at Section 5.12 of the Statement of Environment Effects submitted with the DA. In addition, the proposed development in its current configuration is consistent with the objects of the Environmental Planning and Assessment Act 1979, specifically because it will facilitate the ***economic and orderly development*** of the site within a precinct earmarked for urban renewal and in this part of the Botany Bay LGA.

It is noted that Council's Assessment Report to the JRPP has not indicated that the proposed development is inconsistent with Objective (g).

2.1.2 Satisfying the Objectives of the Zone

The objectives of the B4 Mixed Uses Zone are as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*

There are no zone objectives specifically related to built form that can be considered. However, the proposal in its entirety satisfies the B4 Mixed Uses Zone objectives as it:

- provides a mix of residential, commercial and retail uses that are appropriately designed to ensure compatibility within the site, the desired future character of the area, and the broader Botany locality;
- provides flexible spaces within the ground floor along the Pemberton Street frontage of the site to accommodate low-scale non-residential land uses, thereby encouraging walking and cycling through the co-location and integration of residential and commercial land uses.

2.2 Sufficient Environmental Planning Grounds

There are sufficient environmental planning grounds to justify non-compliance with the FSR control as it applies to the B4 Mixed Uses Zone. In particular:

- The non-compliance with the FSR control is predominantly caused by the proponent's intention to distribute built form across the site in a manner that recognises the site's contextual relationship, future desired character and the opportunity to provide significant publicly accessible open space that significantly exceeds Council's minimum open space requirements. This is a considered design response taking into account the submissions by Council and the community.
- The overall gross floor area to be provided across the whole development site does not exceed the total maximum gross floor area that could otherwise be accommodated if the maximum FSR was achieved within each of the three zoned portions of the site.
- The redistribution of gross floor area and consequently FSR from the R2 and R3 zoned portions of the site allow for a better planning outcome to be achieved which respects the context and character of the surrounding locality in addition to providing significant public benefits through a new 3,000m2 deep soil park fronting Wilson street and connecting to Pemberton Street and Kurnell street through publicly accessible landscaped spaces.
- The proposal satisfies the objectives of the FSR development standard. It will not adversely affect views, solar access or privacy and is generally compatible with the bulk, scale and desired character of the area.
- The proposal satisfies the objectives of the B4 Mixed Uses Zone. It provides for the housing needs of the community and provides a suitable apartment mix.
- The proposal is consistent with the Draft South Subregional Strategy.

In light of the above it is considered that there are no environmental planning grounds that warrant maintaining and/or enforcing the numerical FSR standard in this instance. Rather, there are clear and justifiable environmental planning merits which justify the application of flexibility allowed for in Clause 4.6 in the circumstances of this case.

2.3 Director General's Concurrence

It is understood that the Director-General's concurrence under clause 4.6(5) has been delegated to Council. The following section provides a response to those matters sets out in clause 4.6(5) which must be considered by Council under its delegated authority.

Whether contravention of the development standard raises any matter of significance for State or regional environmental planning

The proposed contravention to the FSR development standard does not raise any matter of significance for the state or regional environmental planning. The additional GFA proposed within the portion of the site zoned B4 Mixed Uses does not result in any adverse impact on the surrounding area, and enables a more

appropriate distribution of GFA across the entire site. The proposed development represents a site specific 'fine tuning' of the FSR controls englobo for this particular site.

The proposal is consistent with the most recent Draft Metropolitan Strategy for Sydney to 3031 (dated March 2013) (the draft Metro Strategy) and the preceding Metropolitan Plan for Sydney 2036 (dated December 2010), as demonstrated by the Statement of Environment Effects submitted with the DA. In summary:

- The proposed development satisfies the "Balanced Growth" objectives of the draft Metro Strategy in that:
  - The site is effectively part of an urban renewal area.
  - The proposed development is within the Metropolitan Urban Area in a location experiencing strong market demand.
  - The proposed development reduces pressure on greenfield land which may contain agriculture and resource lands.
  - The proposed development reduces pressure on greenfield land which may contain high value environmental land.
  - The proposed development provides growth in an inner ring suburb of Sydney.
  - The proposed development encourages the growth of employment in those areas by co-locating housing and employment and encouraging small businesses servicing the resident population.
- The proposed development satisfies the "Liveable City" objectives of the draft Metro Strategy in that:
  - The proposed development provides much needed additional homes in the subregion.
  - The proposed development provides new housing close to existing infrastructure.
  - The proposed development provides a range of housing types (courtyard units and apartments) and sizes that are in demand in this location.
  - Whilst the proposed development will not provide housing for very low or low income earners it will provide "opportunities to invest in mid- and moderately-priced housing in accessible places to boost supply and improve overall housing affordability." It also satisfies BASIX requirements and enables savings to household bills.
  - The proposed development provides for the growth and change in the Pemberton – Wilson Precinct as anticipated by the current local plans (including the relevant character statement).
  - The proposed development does not affect any heritage assets.
  - The proposed development follows good principles of urban design, including those in SEPP 65.

The public benefit of maintaining the development standard

Whilst there is generally public benefit in maintaining development standards, in this particular circumstance, greater overall public benefit can be provided if the site is treated as a whole and flexibility applied to the FSR controls. Specifically, as demonstrated above, there will be no adverse impacts as a result of the variation to the development standard. Maintaining and enforcing the development standard in this case would unreasonably prevent the orderly and economic development of this underutilised site, and would unnecessarily preclude the various community benefits this development brings, including:

- revitalisation of an underutilised and derelict site;

- a new development that is consistent with the desired future character of the locality and recognises that Botany is an area undergoing significant and dynamic transformation;
- a new development offering high quality design and improvements to the streetscape; and
- provision of construction jobs.

It is therefore considered to be in the public interest that the variation to the development standard be supported in this case.

Any other matters required to be taken into consideration by the Director-General before granting concurrence

In addition to the matters already mentioned, it is worth pointing out that the non-compliance will not set an undesirable precedent in the area. The site is unique in terms of the opportunity available to redistribute GFA across the site 'englobo', provide significant publicly accessible land including a new deep soil park and achieve an overall site wide GFA that is less than that permitted, if the FSR controls on a zone by zone basis were strictly applied. The applicant is not seeking an unreasonable amount of additional GFA; merely the flexibility across the site to achieve the optimum environmental outcomes. The variation to the FSR development standard as it applies to the B4 Mixed Uses zoned portion of the site would facilitate a development of comparable scale to surrounding buildings.

2.4 Summary

In putting together or assessing the complex variables of any given development it is important to consider the inter-relationship of the many and often competing planning controls and objectives. Ultimately the development needs to achieve a balanced and efficient response that 'best fits' the site in its physical and statutory context. Clause 4.6 of the Botany LEP 2013 has an important objective of achieving better outcomes for and from development by allowing flexibility in particular circumstances. The proposal for this Stage 1 DA applies clause 4.6 in order to achieve that objective by proposing a development which has better outcomes both for the development itself and future occupants, and from the development in terms of its external environmental impacts and relationships with the public domain and neighbouring sites.

The proposed development application seeks consent for a Stage 1 Development Application (DA), including:

- building envelopes containing a maximum GFA of 45,722m^2;
- maximum building heights ranging from 11.38m (3 storeys) to 27.99m (8 storeys);
- minimum 3000m^2 new deep soil park;
- additional publicly accessible open space, including pedestrian through-site links; and
- New vehicular access from Pemberton Street.

It is entirely consistent with the objectives of the Botany LEP 2013 FSR control and the zone objectives, and is in the public interest.

Importantly, if the maximum allowable FSR was achieved across the three zoned portions of the site a total GFA of 45,746.75m^2 would apply. The proposed development provides a total GFA across the site of 45,722m^2 which is less than this amount. Accordingly no additional GFA is sought for the development above that would otherwise be allowed if the FSR was maximised on the individual portions of the site.

Due to the application of FSR bands based on the zoning of the site which appears to follow the underlying subdivision pattern on adjoining land, the 1:1 FSR control unfairly penalises any prospective developer of this site where a better overall outcome is achievable across the whole site by implementing the flexibility in Clause 4.6. It is necessary to vary the FSR control in order to facilitate a development outcome that provides regularised and SEPP 65 compliant building envelopes, provide 3 storey terrace house form instead of the permitted 6 storey residential apartment buildings along the Wilson Street frontage and to accommodate a new 3,000m2 deep soil park with a 25m frontage to Wilson Street in addition to significant publicly accessible landscaped open space links throughout the site.

It is submitted that the proposed variation is justified for the following reasons:

- The proposed non-compliance provides the opportunity to more appropriately distribute GFA across the entire site, and provide significant public benefits through the provision of a new park in addition to landscaped publicly accessible open space linkages which go beyond the requirements in the DCP.
- The proposal is compatible with the bulk and scale of surrounding development which is dominated by a built form that is equivalent to 3-4 storeys, and is consistent with the future desired character of the area.
- The additional GFA within the portion of the site zoned B4 Mixed Uses is offset by the proposal proposing less than the maximum permitted GFA on the R2 Low Density Residential and R3 Medium Density Residential parts of the site.
- The proposed development seeks to redevelop an existing under-utilised to provide for the housing needs of the community.

Taking this into consideration this statement demonstrates that Council can be satisfied that:

- compliance with the development standard is both unreasonable and unnecessary in the circumstances of the case, because the objectives of the standard and the B4 Mixed Uses Zone are satisfied notwithstanding non-compliance with the standard; and
- there are sufficient environmental planning grounds to justify the contravention, and the variation does not result in any adverse environmental impacts.

The proposal also results in the opportunity to establish a high quality development that positively contributes to the Pemberton Street streetscape. For the reasons set out throughout this report, an analysis of the development has demonstrated that on balance compliance with the objectives of the standard is achieved notwithstanding non-compliance with the standard itself. Accordingly, the Clause 4.6 Variation has demonstrated that one of the ways in which an objection to a development standard might be shown to be unreasonable or unnecessary has been met, and therefore the Objection is well founded.

2.5 Conclusion

This Clause 4.6 Submission demonstrates the consent authority can be satisfied that the proposed variation to the FSR development standard that applies to land zoned B4 Mixed Uses is justified and satisfies the tests established by the Land and Environment Court for SEPP 1/Clause 4.6 Objections, in that:

- The clause 4.6 variation is 'well founded' because the proposal is compatible with the scale and character of the area and will not have adverse amenity impacts on surrounding land;
- The strict application of the standard would be both unreasonable and unnecessary in the circumstances of the case;

- The strict application of the standard would hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the EP&A Act;
- The non-compliance with the development standard does not raise any matters of State and regional planning significance and will assist with the attainment of policies;
- There is no public benefit in maintaining the FSR development standard adopted by the environmental planning instrument for this site; and
- The proposed flexible application of controls achieves better planning outcomes than would be achievable by strict adherence to the controls across the development site.