

REFERRAL RESPONSE – DEVELOPMENT ENGINEERING

FILE NO: Development Applications/ 477/2019/1
ADDRESS: 30 Alma Street PADDINGTON 2021
PROPOSAL: First stage of the development of White City for a multi-purpose sports centre and registered club facilities including site remediation
FROM: Mr R Lam
TO: Mr M Moratelli

1. ISSUES

- None
- Refer to comments/conditions from Council's Traffic Engineers separately.
- Approval from Sydney Water for the proposed stormwater connection to its stormwater channel should be sought.

2. DOCUMENTATION

I refer to the following documents received for this report:

- Statement of Environment Effects, unreferenced, prepared by Sutherland & Associates Planning, dated December 2019.
- Architectural Plans, referenced 0818-Rev J, prepared by MASQ Architecture, dated 10/12/2019.
- Architectural Plans, referenced 5669-Issue 01, prepared by Cottee Parker Architects P/L, dated 03/12/2019.
- Survey, referenced 15685, prepared by Dunlop Thorpe & Co P/L, dated 20/11/2014.
- Stormwater Management Report, referenced 4576-Rev 1, prepared by M+G Consulting, dated 5 December 2019.
- Stormwater Management Plan, referenced 4576-Issue 02, prepared by M+G Consulting Engineers P/L, dated 5 December 2019.
- Flood Risk Assessment Report, referenced S18403, prepared by BG&E, dated 21 November 2019.
- Geotechnical Report, referenced 45079.06-Rev 1, prepared by Douglas Partners, dated 2 October 2019.
- Traffic Report, referenced 0410r02v4, prepared by asongroup, dated 5/12/2019.
- Road Safety Review, referenced 19363-v02, prepared by TTPP, dated 5 December 2019.

3. ASSESSMENT

Comments have been prepared on the following. **Where Approval is recommended, Conditions of Consent follow at the end of the comments.**

a. Site Drainage comments

The submitted concept stormwater plans are considered satisfactory in principle subject to refinements at the CC stage. Stormwater runoff from the site will be discharged to the existing Sydney Water's stormwater channel located immediately adjacent to the subject site via the installation of stormwater treatment system. Hence, approval shall be obtained from Sydney Water for such proposed stormwater connection. It is noted that the subject site is situated in the OSD exemption area where the installation of OSD system is not required. Besides, it is noted from the submitted stormwater management report that stormwater treatment system has been provided to comply with Chapter E2.2.3 of Council's DCP.

In light of the above, Council's Technical Services Division is satisfied that adequate provision could be made for the disposal of stormwater from the land it is proposed to develop and complies with Chapter E2 "Stormwater and Flood Risk Management" DCP.

b. Flooding & Overland Flow comments

Council's Drainage Engineer has determined that the development proposal is generally satisfactory, subject to the following conditions:

Flood Protection

The Construction Certificate plans and specifications, required by clause 139 of the Regulation, must include a Flood Risk Management Plan on the basis of the Flood Planning Level (FPL) detailing:

- a. Permanent flood warning signage shall be installed in all flood prone areas, as directed by an engineer experienced in flood mitigation. The signage is to include flood depth indicators placed at minimum 20m intervals in all parking areas below 4.5m AHD;*
- b. A permanent flood risk management plan shall be installed in a prominent area of the gymnasium;*
- c. Permanent flood risk management plans shall be installed in the office areas frequented by the facility staff;*
- d. Permanent signage shall be installed in the gymnasium indicating both the 1% flood level 4m AHD and the PMF level 6.5m AHD;*
- e. All mechanical lifts shall be protected by mechanical flood barriers with the threshold set to the flood planning level of 4.5m AHD;*
- f. The pool plant room entry shall be protected by a mechanical flood door with the threshold set to the flood planning level of 4.5m AHD;*
- g. Permanent signage shall be fixed in prominent locations in the outdoor area, indicating the 1% AEP flood level 4m AHD and the PMF level 6.5m AHD;*
- h. A flood warning system shall be installed to monitor water levels in the adjacent stormwater channel. The system is to be designed to warn occupants when water in the*

channel is rising quickly so flood affected areas can be evacuated. The warning system is to be developed in consultation with Council, BOM, Sydney water and the SES;

- i. A flood evacuation plan shall be developed in consultation with Council and the SES;*
- j. The driveway entry to the covered section of the car parking area shall be protected by a mechanical flood barrier with the threshold set to the flood planning level of 4.5m AHD;*
- k. Permanent brass plaques shall be mounted adjacent to all mechanical flood barriers explaining their purpose and operation;*
- l. All fences traversing the over land flow path shall be designed to be flow through.*
- m. All fences and walls shall be designed to be structurally stable during all flood events up to the probable maximum flood (PMF);*
- n. The car park boundary fence adjacent to the Sydney water channel shall be designed to prevent floating vehicles being washed into the channel to a design level of 4.5m AHD;*
- o. All below ground construction shall be fully tanked;*
- p. Flood compatible materials shall be used for all flood exposed construction below the flood planning level of 4.5m AHD;*
- q. All electrical wiring and fixed electrical equipment shall be located above or waterproofed to the flood planning level of 4.5 m AHD;*
- r. Permanent brass plaques shall be mounted adjacent to all mechanical flood barriers explaining their purpose and operation;*
- s. All flood protection measures are to be inspected and certified as fit for purpose after construction is complete by an engineer experienced in flood mitigation;*
- t. The buildings shall be designed by a suitable qualified structural engineer to withstand the forces generated by floodwaters.*

c. Impacts on Council Infrastructure comments

The impact of the development upon Council's infrastructure are considered in every stage and assessment. Conditions will be imposed for the following infrastructure works as part of this application:

Alma Street

- The reconstruction of the existing vehicular crossing including replacement of layback and gutter.*

Glenmore Road

- 1 pedestrian access and 1 vehicular crossing are proposed off Glenmore Road. The vehicular crossing is to be constructed at a width of 3.5m each and any proposed gates are to open inward to prevent blockage to public footpath and creation of safety issues. The existing footpath within the frontage of the site in Glenmore Street is to be reconstructed. Further, it is noted that the proposed crossing will be constructed over the existing kerb inlet pit. Hence, the applicant must construct a new KIP located upstream of the proposed crossing which will be conditioned accordingly.*

d. Traffic comments

Please refer to comments/conditions from Council's Traffic Engineers separately.

e. Vehicle Access & Accommodation comments

A perusal of the submitted architectural plans revealed that applicant has not provided any dimensions to all proposed parking spaces and aisle widths. Hence, it is difficult to ascertain whether these spaces comply with AS2890.1. In light of the above, conditions will be imposed to ensure that all vehicular access and car parking layout comply with AS2890.1.

f. Geotechnical, Hydrogeological and/or Structural comments

A Geotechnical Report by Douglas Partners, Ref: 45079.06, dated 2 October 2019, has been submitted in support of the application. It is understood that the proposed development will include the following:

- a) A three to four storey gym on the southern part of the site with ground floor parking. The ground floor level within this building varies from RL 2.8 m to RL 3.6 m and will generally require excavation up to 1 m depth below the current ground level. Along the southern and western boundary the building extends into an existing batter slope and excavation in this area will increase up to 10 m below the adjacent site levels;*
- b) A four-storey club house on the western part of the site. The ground floor level is generally close to or above existing surface levels;*
- c) Additional outdoor parking along the eastern boundary of the site which is understood to be close to the existing surface level; and*
- d) A football field on the northern part of the site and additional tennis courts on the eastern part of the site, all close to existing surface levels.*

The results of a previous field work and investigation by Poplar Holdings (Project 45079, dated October 2007) have been used for this report. Details of the field and laboratory work are provided in the new report together with comments relating to design and construction issues.

The report made comments and recommendations on the following:

- Shoring and support,*
- Vibration Monitoring,*
- Excavation method,*
- Further Geotechnical input.*

Council's Technical Services has no objections to the proposed excavation on technical grounds. Notwithstanding this, conditions will be imposed to emphasize that the DA consent does not give approval for any underpinning works to any structures on adjoining properties including the boundary walls. Council's Planning Officer is also to undertake an assessment of the proposed excavation against the relevant excavation objectives and controls prescribed under the LEP and DCP.

g. Other matters

A perusal of the submitted architectural plans revealed that an awning louvre will be constructed over Council's property in Glenmore Road. Hence, a condition for the creation of a Positive Covenant will be imposed as part of this application.

4. RECOMMENDATION

Council's Development Engineer has determined that the proposal is satisfactory, subject to the following conditions:

A. General Conditions

A.5 Approved Plans & Supporting documents

Reference	Description	Author/Drawn	Date(s)
45079.06-Rev 1	Geotechnical Report	Douglas Partners	21 November 2019
4576-Issue 1	Stormwater Report	M+G Consulting Engineers P/L	05 December 2019
4576	Stormwater Plan	M+G Consulting Engineers P/L	
C01-Issue 2			05/12/2019
C04-Issue 2			05/12/2019
C05-Issue 2			05/12/2019
C06-Issue 2			05/12/2019
C07-Issue 2			05/12/2019
C08-Issue 2			05/12/2019
S18403	Flood Risk Assessment	BG&E	21 November 2019
0410r02v4	Traffic Report	ASONGROUP	05/12/2019
19363-v02	Road Safety Review	TTPP	05 December 2019

A.8 Ancillary Aspect of the Development (S80A(2) of the Act)

A.30 No Underpinning works (Special Condition)

This development consent does NOT give approval to any works outside the boundaries of the subject property including any underpinning works to any structures on adjoining properties.

B. Conditions which must be satisfied prior to the demolition of any building or construction

B.7 Public Road Assets prior to any work/demolition

C. Conditions which must be satisfied prior to the issue of any construction certificate

C.5 Security Deposits

Property Damage Security Deposit (S138)	\$1,128,845	No	T115
Infrastructure Works bond (S138)	\$57,250	No	T113
Public Road and Footpath Infrastructure Inspection Fee (S138 Fee)	\$942	No	T45

C.13 Road and Public Domain Works

A separate application under Section 138 of the *Roads Act* 1993 is to be made to, and be approved by Council as the road authority, for the following infrastructure works prior to the issuing of any Construction Certificate. Detailed engineering drawings prepared by a suitably qualified and experienced civil engineer for the following infrastructure works which must be carried out at the applicant's expense:

1. Road & Footpath Works

- a) The removal of the existing vehicular crossing including layback and gutter and the construction of a new 3.5 metres wide vehicular crossing in Alma Street in accordance with Council's standard driveway drawing RF2_D and Council's specification. The new crossing shall be constructed at right angle to the street kerb in plain concrete and the centreline of the new crossing shall be aligned with the centreline of the internal driveway at the property boundary. Design longitudinal surface profiles along each edge of each proposed vehicular crossing must be submitted for assessment.
- b) The removal of the existing kerb and gutter and the construction of a new 3.5 metres wide vehicular crossing in Glenmore Road in accordance with Council's standard driveway drawing RF2_D and Council's specification. The new crossing shall be constructed at right angle to the street kerb in plain concrete and be located at a minimum distance of one (1) metre from any existing street tree and/or traffic signs. Design longitudinal surface profiles along each edge of each proposed vehicular crossing must be submitted for assessment.
- c) The reconstruction of the existing 1.8m wide concrete footpath for the full frontage of the site in Glenmore Road in accordance with Council's Specification for Roadworks, Drainage and Miscellaneous Works. Detailed long section and cross section at every 5m interval shall be prepared by a suitably qualified and experienced civil engineer.
- d) Where a grass verge exists, the balance of the area between the footpath and the kerb over the full frontage of the proposed development must be turfed. The grass verge must be constructed to contain a uniform minimum 75mm of friable growing medium and have a total cover of Couch turf.

2. Drainage Works

- a) Due to location of proposed vehicular crossing in Glenmore Road which will be constructed over the existing kerb inlet pit, the applicant must construct a new kerb inlet pit with 1.8m precast lintel located upstream of the proposed crossing. The new lintel must be at a minimum distance of 0.5m from the new layback wings to comply with Council's Crossing Specification. All grates are to be Class D bicycle friendly type grates. The existing kerb inlet pit is to be modified with Class D bicycle friendly butterfly grates to Council's Specification. All works must be carried out in accordance with Council's Specification for Roadworks, Drainage and Miscellaneous Works.
- b) The developer shall be responsible for carrying out all service investigations to allow a gravity connection.

3. Private Works over Council's Property

- a) The construction of new awning louvre over Council's property in Glenmore Road as per architectural drawing "Detailed Floor Plan – Roof Plan (Gym)" dwg no. 5669-A2059-Issue 01, dated 03 December 2019.
- b) Structural design details and certification for the proposed awning louvre.
- c) Observe condition for the creation of positive covenant requirements.

4. Bonds

- a) A bond of \$57,250 will be used as security to ensure the satisfactory completion of the infrastructure works. The security or bank guarantee must be the original unconditional bank guarantee with no expiry date.
- b) Council may use all or part of the Infrastructure Bond as well as the Property Damage Security Deposit to meet the cost of removing or completing the works if they do not meet Council's requirements.
- c) The Deposit/Bond will not be released until Council has inspected the site and is satisfied that the Works have been completed in accordance with Council approved drawings and to Council requirements

Note: To ensure that this work is completed to Council's satisfaction, this consent by separate condition, may impose one or more Infrastructure Works Bonds.

Note: *Road* has the same meaning as in the *Roads Act* 1993.

Note: The intent of this condition is that the design of the road, footpaths, driveway crossings and public stormwater drainage works must be detailed and approved prior to the issue of any *Construction Certificate*. Changes in levels may arise from the detailed design of buildings, road, footpath, driveway crossing grades and stormwater. Changes required under *Roads Act* 1993 approvals may necessitate design and levels changes under this consent. This may in turn require the applicant to seek to amend this consent.

Note: See condition K24 in *Section K. Advising* of this Consent titled *Roads Act Application*.
Standard Condition: C13 (Autotext CC13)

C.21 Provision for Energy Supplies

C.25 Soil and Water Management Plan – Submissions & Approval

C.36 Professional Engineering Details

C.37 Engineer Certification (Special Condition)

This development consent does NOT give approval to any works outside the boundaries of the subject property including any underpinning works to any structures on adjoining properties.

Any structural design is not to incorporate any underpinning works which encroaches outside the boundaries of the subject property. Engineer certification to this effect shall be submitted to the Certifying Authority prior to issue of any Construction Certificate.

C.40 Geotechnical and Hydrogeological Design, Certification & Monitoring

C.41 Ground Anchors

C.45 Parking Facilities

The Construction Certificate plans and specifications required by clause 139 of the *Regulation*, must include detailed plans and specifications for all bicycle, car and commercial vehicle parking in compliance with AS2890.3:1993 *Parking Facilities - Bicycle Parking Facilities*, AS/NZS 2890.1:2004 : *Parking Facilities - Off-Street Car Parking* and AS 2890.2:2002 – *Off-Street Parking: Commercial Vehicle Facilities* respectively showing the following:

The plans must satisfy the following requirements:

- a) A 2m x2.5m sight triangle, clear of any obstructions to visibility, must be provided on both sides of the driveway exit to comply with Clause 3.2.4 and Figure 3.3 of AS2890.1.
- b) All parking spaces are to be designed in accordance with a User Class 2 and are to be provided with a minimum space length of 5.4m, width of 2.5m and a minimum aisle width of 5.8m.
- c) The first 6m of the driveway into the property must be designed with a maximum grade of 5% to comply Clause 3.3 of AS2890.1. Finished levels of the proposed driveway must be clearly depicted on the architectural plans.

Access levels and grades must comply with access levels and grade required by Council under the *Roads Act* 1993.

The *Certifying Authority* has no discretion to reduce or increase the number or area of car parking or commercial parking spaces required to be provided and maintained by this consent.

Standard Condition: C45 (Autotext: CC45)

C.46 Engineer Certification (Special Condition)

Prior to issue of any Construction Certificate, the applicant shall submit, for approval by the Certifying Authority, a certificate from a *professional engineer* (Civil/Traffic Engineer), certifying the following:

- 1) That all aspects of the carpark comply with AS2890.1. In particular, the proposed driveway for the first 6m from the property boundary is at a maximum grade of 5%;
- 2) That all aspects of the bicycle parking and storage facilities comply with AS2890.3 and Chapter E1 of Woollahra Council's DCP;
- 3) The driveway to the site must be designed such that there are minimum sight lines for pedestrian safety as per Figure 3.3 of AS 2890.1.

C.51 Stormwater Management Plan

The *Construction Certificate* plans and specifications, required by Clause 139 of the *Regulation*, must include a *Stormwater Management Plan* for the site. The *Stormwater Management Plan* must detail:

- a) General design in accordance with stormwater management plans, referenced 4576-Issue 02, prepared by M+G Consulting Engineers P/L, dated 05/12/2019 other than amended by this and other conditions;
- b) The discharge of stormwater, by direct connection, to Sydney Water Stormwater Channel. Approval from Sydney Water must be obtained prior to any stormwater connection works;
- c) The installation of stormwater quality treatment system to satisfy the water quality targets that are stipulated in Chapter E2.2.3 of Council's DCP. This includes but not limited to the installation of Ecosol GPT4450 units (2 of) together with Ecosol Litter Baskets in stormwater pits;
- d) Compliance the objectives and performance requirements of the BCA; and
- e) General compliance with the Council's Woollahra DCP 2015 Chapter E2 – Stormwater and Flood Risk Management.

The *Stormwater Management Plan* must also include the following specific requirements:

Layout plan

A detailed drainage plan at a scale of 1:100 based on drainage calculations prepared in accordance with the Institute of Engineers Australia publication, *Australian Rainfall and Run-off*, 1987 edition or most current version thereof. It must include:

- a) All pipe layouts, dimensions, grades, lengths and material specification,
- b) Location of On-Site Detention,
- c) All invert levels reduced to Australian Height Datum (AHD),
- d) Location and dimensions of all drainage pits,
- e) Point and method of connection to Councils drainage infrastructure, and
- f) Overland flow paths over impervious areas.

Note: This Condition is imposed to ensure that site stormwater is disposed of in a controlled and sustainable manner.

Note: The collection, storage and use of rainwater is to be in accordance with *Standards Australia HB230-2008 "Rainwater Tank Design and Installation Handbook"*.
Standard Condition: C.51 (Autotext CC51)

C.52 Non-Gravity Drainage Systems

C.54 Flood Protection

The Construction Certificate plans and specifications, required by clause 139 of the *Regulation*, must include a Flood Risk Management Plan detailing:

- a. Permanent flood warning signage shall be installed in all flood prone areas, as directed by an engineer experienced in flood mitigation. The signage is to include flood depth indicators placed at minimum 20m intervals in all parking areas below 4.5m AHD;
- b. A permanent flood risk management plan shall be installed in a prominent area of the gymnasium;
- c. Permanent flood risk management plans shall be installed in the office areas frequented by the facility staff;
- d. Permanent signage shall be installed in the gymnasium indicating both the 1% flood level 4m AHD and the PMF level 6.5m AHD;
- e. All mechanical lifts shall be protected by mechanical flood barriers with the threshold set to the flood planning level of 4.5m AHD;
- f. The pool plant room entry shall be protected by a mechanical flood door with the threshold set to the flood planning level of 4.5m AHD;
- g. Permanent signage shall be fixed in prominent locations in the outdoor area, indicating the 1% AEP flood level 4m AHD and the PMF level 6.5m AHD;
- h. A flood warning system shall be installed to monitor water levels in the adjacent stormwater channel. The system is to be designed to warn occupants when water in the channel is rising quickly so flood affected areas can be evacuated. The warning system is to be developed in consultation with Council, BOM, Sydney water and the SES;
- i. A flood evacuation plan shall be developed in consultation with Council and the SES;
- j. The driveway entry to the covered section of the car parking area shall be protected by a mechanical flood barrier with the threshold set to the flood planning level of 4.5m AHD;
- k. Permanent brass plaques shall be mounted adjacent to all mechanical flood barriers explaining their purpose and operation;
- l. All fences traversing the over land flow path shall be designed to be flow through.
- m. All fences and walls shall be designed to be structurally stable during all flood events up to the probable maximum flood (PMF);
- n. The car park boundary fence adjacent to the Sydney water channel shall be designed to prevent floating vehicles being washed into the channel to a design level of 4.5m AHD;
- o. All below ground construction shall be fully tanked;
- p. Flood compatible materials shall be used for all flood exposed construction below the flood planning level of 4.5m AHD;
- q. All electrical wiring and fixed electrical equipment shall be located above or waterproofed to the flood planning level of 4.5 m AHD;
- r. Permanent brass plaques shall be mounted adjacent to all mechanical flood barriers explaining their purpose and operation;
- s. All flood protection measures are to be inspected and certified as fit for purpose after construction is complete by an engineer experienced in flood mitigation;

- t. The buildings shall be designed by a suitable qualified structural engineer to withstand the forces generated by floodwaters.

Flood protection is to comply with Woollahra DCP 2015, Part E General Controls for All Development, Chapter E2 –Stormwater and Flood Risk Management.

Note: The revised driveway profile, gradients and transitions must be in accordance with Australian Standard 2890.1 – 2004, Part 1: *Off-street car parking*. The driveway profile submitted to Council must contain all relevant details: reduced levels, proposed grades and distances. Council will not allow alteration to existing reduced levels within the road or any other public place to achieve flood protection.
Standard Condition C.54 (autotext CC54)

D. Conditions which must be satisfied prior to the commencement of any development work

D.4 Dilapidation Reports for existing buildings

Dilapidation surveys and dilapidation reports shall be conducted and prepared by a *professional engineer* (structural) for all buildings and/or structures that are located within the likely “zone of influence” of any excavation, dewatering and/or construction induced vibration as determined applicable by a Structural Engineer.

These properties to be assessed by the Structural Engineer must include (but is not limited to):

No. 400 Glenmore Road
No. 1-7 Alma Street

All required dilapidation reports must be completed and submitted to the *Certifying Authority* with a copy submitted to Council with the *Notice of Commencement* prior to the commencement of any *development work*.

Where excavation of the site will extend below the level of any immediately adjoining building the *principal contractor* or *owner builder* must give the adjoining building owner(s) a copy of the dilapidation report for their building(s) and a copy of the *notice of commencement* required by S81A(2) of the *Act* not less than two (2) days prior to the commencement of any work.

Note: The reasons for this condition are:

- To provide a record of the condition of buildings prior to development being carried out
- To encourage developers and its contractors to use construction techniques that will minimise the risk of damage to buildings on neighbouring land

Also refer to the Dilapidation Report Advising for more information regarding this condition

Standard Condition: D4 (Autotext DD4)

D.6 Adjoining buildings founded on loose foundation materials

D.7 Piezometers for the Monitoring of Ground Water Levels

The Principal Contractor must provide 2 piezometers within the excavation area and a further 2 piezometers around the perimeter of the wall. The piezometers are to be installed to monitor ground water levels (GWL) before and during all dewatering works for the construction phase.

The GWL monitoring wells and monitoring program must be maintained until the issue of the *Final Occupation Certificate*.

The GWL are to be regularly monitored during the course of the works as required by the work method statement for the control of GWL. Any damaged piezometers are to be replaced to allow uninterrupted monitoring.

Where there are any movements in the GWL outside a safe range set by the work method statement for the control of GWL, corrective action must be undertaken under the direction of the professional engineer (hydrological/geotechnical engineer).

Standard Condition: D7 (Autotext DD7)

D.9 Construction Management Plan

D.10 Works (Construction) Zone – Approval & Implementation

D.14 Erosion and Sediment Controls – Installation

E. Conditions which must be satisfied during any development work

E.3 Compliance with Construction Management Plan

E.7 Maintenance of Vehicular and Pedestrian Safety and Access

E.11 Maintenance of Environmental Controls

E.12 Compliance with Geotechnical/Hydrogeological Monitoring Program

E.13 Support of Adjoining Land Owners

E.14 Vibration Monitoring

E.15 Erosion and Sediment Controls – Maintenance

E.17 Disposal of Site Water during Construction

E.19 Site Cranes

E.20 Check Surveys – boundary location, building location, building height, stormwater drainage system and flood protection measures relative to AHD

E.24 Compliance with Council's Specification for Roadworks, Drainage and Miscellaneous Works, Road Works and, Work within the Road and Footway

F. Conditions which must be satisfied prior to any occupation or use of the building (Part 4A of the Act and Part 8 Division 3 of the Regulation)

F.7 Commissioning and Certification of Systems and Works

Prior to issue of any occupation Certificate, the Principal Contractor or Owner-builder must submit, for approval by the Principal Certifying Authority, works-as-executed (WAE) plans, Compliance Certificates and evidence of suitability in accordance with

Part A2.2 of the BCA confirming that the works, as executed and as detailed, comply with the requirement of this consent, the *Act*, the *Regulations*, any relevant construction certificate, the BCA and relevant Australian Standards.

Works-as-executed plans, Compliance Certificates and evidence of suitability in accordance with Part A2.2 of the BCA must include but may not be limited to:

- a) Certification from the supervising professional engineer that the requirement of the Geotechnical/Hydrogeological conditions and report recommendations were implemented and satisfied during development work;
- b) All flood protection measures;
- c) All basement car park, driveways and access ramps comply with Australian Standard AS 2890.1: *Off-Street car parking*. In particular, the following requirement must be certified by a traffic engineer:
 - 1) The internal driveway for the first 6m from the property boundary has been constructed at a maximum grade of 5% to comply with AS2890.1;
 - 2) Minimum headroom of 2.2m has been provided for the proposed basement to comply with AS2890.1.
 - 3) 2m x 2.5m sight triangles, clear of obstructions to visibility, have been provided on both sides of the driveway exit to comply with AS2890.1.
 - 4) All parking spaces have minimum dimensions of 2.5m x 5.4m, clear of any obstructions, to comply with AS2890.1.
 - 5) Minimum aisle width of 5.8m have been provided for all parking spaces to comply with AS2890.1.
- d) All stormwater drainage and storage systems;
- e) All mechanical ventilation systems;
- f) All hydraulic systems;
- g) All structural work;
- h) All acoustic attenuation work;
- i) All waterproofing;
- j) Such further matters as the Principal Certifier may require.

Note: This condition has been imposed to ensure that systems and works as completed meet development standards as defined by the *Act*, comply with the BCA, comply with this consent and so that a public record of works as execute is maintained.

Note: The PC may require any number of WAE plans, certificates, or other evidence of suitability as necessary to confirm compliance with the *Act*, *Regulation*, development standards, BCA, and relevant Australia Standards. As a minimum WAE plans and certification is required for stormwater drainage and detention, mechanical ventilation work, hydraulic services (including but not limited to fire services).

Note: The PC must submit to Council, with any Occupation Certificate, copies of WAE plans, Compliance Certificates and evidence of suitability in accordance with Part A2.2 of the BCA upon which the PC has relied in issuing any Occupation Certificate.

Standard Condition: F7 (Autotext FF7)

F.9 Commissioning and Certification of Public Infrastructure Works

F.20 Covenant for Private Works on Council Property (Special Condition)

Prior to issue of any Occupation Certificate, to ensure the encroaching structures on Council public road reserve accord with Council's "Policy for Managing Encroachments on Council Road Reserves", the person with the benefit of this consent, being the owner(s) of No 30 Alma Street, Paddington, must do the following:

- a) lodge an "Application to Formalise an Existing Encroachment on Council land" with the Council in consultation with Council's Property & Projects Department **AND;**
- b) enter into a legal agreement with the Council for the as-built Awning Louvre, over Council's property in Glenmore Road as per architectural drawing "Detailed Floor Plan – Roof Plan (Gym)" dwg no. 5669-A2059-Issue 01, dated 03 December 2019.

The owner must enter into a legal agreement as follows:

- The registration on the title to the subject property to which this consent relates of a Public Positive Covenant pursuant to S88E of the Conveyancing Act 1919 burdening the subject property and benefiting the Council providing for the indemnification of Council from any claims or actions, and the ongoing maintenance of any private structures encroaching on the public road reserve for which consent has been given, such as steps, retaining walls, access ways, overhang, balconies, awnings, signs and the like. This process has an estimated timeframe of 2 months.
- The wording of the Public Positive Covenant must be in accordance with Council's standard format and the Instrument must be registered at the Land Property Information Office prior to issue of any Occupation Certificate.
- The property owner must pay Council monetary compensation for the Public Positive Covenant, as determined by the Council, and must also pay all of Council's associated costs.

Note: The required wording of the Instrument can be downloaded from Council's web site www.woollahra.nsw.gov.au. The PCA must supply a copy of the WAE Plans to Council together with the *Occupation Certificate*.

Note: No *Occupation Certificate* must be issued until this condition has been satisfied.
Standard Condition: H19 (Autotext HH19)

G. Conditions which must be satisfied prior to the issue of any Subdivision Certificate

G.4 Electricity Substations – Dedication as Road and/or Easements for Access

H. Conditions which must be satisfied prior to the issue of a Final Occupation Certificate (S109C (1)(c))

H.13 Road Works (including footpaths)

H.20 Positive Covenant and Works-As-Executed Certification of Stormwater Systems

On completion of construction work, stormwater drainage works are to be certified by a professional engineer with works-as-executed drawings supplied to the Principal Certifying Authority detailing:

- a) compliance with conditions of development consent relating to stormwater,
- b) the structural adequacy of the stormwater system,
- c) that the works have been constructed in accordance with the approved design in accordance with the approved construction drawings,
- d) pipe invert levels and surface levels to Australian Height Datum, and
- e) contours indicating the direction in which water will flow over land should the capacity of the pit be exceeded in a storm event exceeding design limits.

A positive covenant pursuant to section 88E of the *Conveyancing Act 1919* must be created on the title of the subject property, providing for the indemnification of Council from any claims or actions and for the on-going maintenance of the on-site-retention and reuse system, including any first flush device(s), pumps and sumps incorporated in the development. The wording of the Instrument must be in accordance with Council's standard format and the Instrument must be registered with the NSW Land Registry Services.

Note: The required wording of the Instrument can be downloaded from Council's website www.woollahra.nsw.gov.au. The PC must supply a copy of the WAE plans to Council together with the Final Occupation Certificate.

Note: The Final Occupation Certificate must not be issued until this condition has been satisfied.
Standard Condition: H20 (Autotext HH20)

I. Conditions which must be satisfied during the ongoing use of the development

I.29 Ongoing Maintenance of the Pump-out System and Stormwater Treatment System

The owner(s) must in accordance with this condition and any positive covenant:

- a) Permit stormwater to be temporarily detained by the system;
- b) Keep the system clean and free of silt rubbish and debris;
- c) If the car park is used as a detention basin, a weather resistant sign must be maintained in a prominent position in the car park warning residents that periodic inundation of the car park may occur during heavy rain;
- d) Maintain renew and repair as reasonably required from time to time the whole or part of the system so that it functions in a safe and efficient manner and in doing so complete the same within the time and in the manner reasonably specified in written notice issued by the Council;

- e) Carry out the matters referred to in paragraphs (b) and (d) at the Owners expense;
- f) Not make any alterations to the system or elements thereof without prior consent in writing of the Council and not interfere with the system or by its act or omission cause it to be interfered with so that it does not function or operate properly;
- g) Permit the Council or its authorised agents from time to time upon giving reasonable notice (but at any time and without notice in the case of an emergency) to enter and inspect the land with regard to compliance with the requirements of this covenant;
- h) Comply with the terms of any written notice issued by Council in respect to the requirements of this clause within the time reasonably stated in the notice;
- i) Where the owner fails to comply with the owner's obligations under this covenant, permit Council or its agents at all times and on reasonable notice at the owner's cost to enter the land with equipment, machinery or otherwise to carry out the works required by those obligations.
- j) Indemnify the Council against all claims or actions and costs arising from those claims or actions which Council may suffer or incur in respect of the system and caused by an act or omission by the owners in respect of the owner's obligations under this condition.

Note: This condition has been imposed to ensure that owners are aware of require maintenance requirements for their stormwater systems.

Note: This condition is supplementary to the owner(s) obligations and Council's rights under any positive covenant.
Standard Condition: I29

J. Miscellaneous Conditions

Nil

K. Advisings

K.23 Dilapidation report

K.24 Roads Act Application