## **REFERRAL RESPONSE – TECH. SERVICES**

FILE NO:	DA 531/2011/1
ADDRESS:	1 Kiaora Road DOUBLE BAY 2028
PROPOSAL:	Kiaora Lands Redevelopment comprising demolition of existing buildings and structures, a new 4 storey commercial/retail building fronting New South Head Road and including a new public library, a new 3 level commercial/retail building fronting Kiaora Lane, including a supermarket and public parking (465 spaces) and public domain improvements.
FROM:	N Tomkins
TO:	Mr P Kauter

I refer to the following documents received for this report:

- Site Analysis Plan No 3109\_DA\_001-D, Drawn by Nettle tribe dated November 2011
- Architectural Plan No's 3109\_DA\_003-D-3109\_DA\_0012-D & 3109\_D\_013-C, drawn by Nettle tribe dated November 2011.
- Streetscape Elevations No's 3109\_DA\_021-C &024-C, drawn by Nettle tribe dated November 2011.
- Statement of Environmental Effects, written by Tpg, dated November 2011.
- Survey Plan No.100207 by Denny Linker & Co, dated 1<sup>st</sup> of February 2010.
- Landscape Concept Documentation No's LSK 09582-001-003&011E, designed by Context, dated November 2011.

Documents referenced by TS

- 1. Double Bay Flood Risk Management Study and Plan
- 2. Flooding, Stormwater Report by Worley Parson dated 27 Oct 2011
- 3. Stormwater Drainage Concept Design by Warren Smith & Partners Dwg No H-01 to 07 Issue 03 dated 18.10.11
- 4. Kiaora Lane Concept Plan (Civil) by BG&E Dwg No SKC01 to 06 Rev B dated 24.10.11
- 5. Traffic Report prepared by Halcrow dated 19 October 2011
- 6. Letter to the RTA prepared by Halcrow dated 23 December 2011
- 7. Construction Management Plan prepared by Caverstock Group dated 15 November 2011
- 8. Hydrogeological Report prepared by Coffee Geosciences P/L Ref E12616/1-BY dated 16 October 2003

- 9. Referral Response (Drainage) from Council's Drainage Engineer, dated 22 December 2011 (attached)
- 10. Referral Response (Traffic) from Engineering Services Manager, dated 03/01/2012

(DRAFT REPORT PROVIDED, FINAL REPORT TO COME)

Additional Documentation

- 1. Letter from Sydney Water dated 10 February 2012
- Response to Council's email of 30 November 2011 from The Planning Group Ref: 209.058.47 L6 dated 15 February 2012
- 3. Letter on drainage issues from BG&E PL Ref: S100016-LTR-GS001.DOCX dated 25 January 2012

Council Reports

- 1. TS Referral dated 6January 2012
- 2. Traffic Engineer's Comments dated 29 April 2008

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

## Site Drainage/Flooding general comments

There is an apparent conflict between the Flooding, Stormwater Report by Worley Parson, the Stormwater Drainage Concept Design by Warren Smith & Partners and the Kiaora Lane Concept Plan (Civil) by BG&E. These are:

- The Flooding, Stormwater Report by Worley Parson dated 27 Oct 2011 Figure 1 shows two new drainage systems, one down Kiaora Lane (2 x 600x 300) and 2 ,3, 4, & 5 x 600 x 300 culvert and overland flow through the proposed development with connection to Sydney Water stormwater channel
- The Stormwater Concept Design by Warren Smith & Partners Dwg No H-07 Issue 03 dated 18.10.11 shows only property connections to the existing pipeline in Kiaora Lane with a new 25m long extension up the lane. Outlets to Kiaora Road to be rationalised and connected directly to pipe system.
- Civil Plans by BG&E Dwg No SKC03 Rev B dated 16.11.11 show a new pipe network in the road in Patterson St dog leg through the development along the western and southern boundaries then along Anderson St connecting to the existing system in Court Road –no long sections provided
   A plan and long section of culvert 2 x 600 x 300 is shown down Kiaora Lane from ch 00 to connect to existing channel – no inlet structures are shown

These issues are to be resolved and revised plans submitted to Council with the S138 Roads Act application for assessment and approval. Amended plans are to be certified by the authors of the flood report that they satisfy their requirements

## Site Drainage comments

*The Stormwater Drainage Concept Design by Warren Smith & Partners Dwg No H-01 to 07 Issue 03 dated 18.10.11 are to be amended to include:* 

- *New pipe extension is to be located under the proposed dish gutter with grates over*
- Drainage long section of pipe extension in Kiaora Lane
- All drainage outlets are to be rationalised and the number reduced in Kiaora Rd and Kiaora Lane with direct connection to the new and existing pipe systems

Kiaora Lane Concept Plan (Civil) by BG&E Dwg No SKC01 to 06 Rev B dated 24.10.11 is to be amended to include:

- The 300mm dia pipeline as shown on plan SK03 RevC dated 16.11.11 is to be increased to a minimum of 375mm RCP
- The new drainage system is to connect to Council's existing drainage system in Court Road. The impact of the additional water on Council's drainage system is to be assessed and the system upgraded if necessary.
- Details of inlets structures to be provided.

The design concept plans by Warren Smith & Ptrs and BG&E are to be consistent with each other and the flood study.

#### Further, advice from Council Drainage Engineer is as follows:

"Reference is made to the submission by BG&E PL Ref: S100016-LTR-GS001.DOCX dated 25 January 2012 and the following comments are made:

#### **Rain gardens**

The development is to make use of the proposed landscape garden areas as bio retention areas or "rain gardens" The rain gardens are to be designed by an engineering practitioner experienced in water sensitive urban design (WSUD). The design is to be based on the Sydney Metropolitan Catchment Management Authorities WSUD interim reference guidelines.

The rain gardens are to be designed to treat the first flush of stormwater runoff from the rooftop parking area. The rain gardens are to be integrated into the proposed storm water treatment system to achieve maximum benefit to the stormwater treatment process.

#### **Pervious Paving/ inlet traps**

Council will not permit the use of pit inlet traps in Council Public road. The use of "healguard" grates as the alternative to prevent larger litter entering the drainage system is preferred. But notes (Paragraph 2) the use of "heelguard" grates which have less inlet capacity will be required to larger surface areas to match the inlet capacity of the originally proposed grates, full details of calculations are to be submitted.

Council further suggests that the use of permapave pit grates be further investigated as they may be better suited to this location.

#### Flooding and overland flow

The submitted details of the Barrier Fence configuration as shown on Dwg No. CSK001 Rev A by BG&E dated 25.01.12 designed to protect the channel from becoming blocked with debris is satisfactory.

#### The requirements above are condition accordingly.

The concept plan is subject to the submission and approval of Stormwater Management Plan for the site prior to release of the Construction Certificate. Details are to be in accordance with Council's Draft Stormwater Development Control Plan and Local Approvals Policy. This is to ensure that site stormwater is disposed in a controlled and sustainable manner -Conditions applied. Council's Technical Services Division is satisfied that adequate provision has been made for the disposal of stormwater from the land it is proposed to develop and complies with the provisions of Clause 25 (2) of WLEP 1995

## Flooding & Overland Flow comments

A Flood Impact Assessment Report by Worley Parsons dated 27/10/2011 has been submitted to Council in order to address flooding issues. The Report determined that the flood levels in a 1 in 100 year storm event to be 2.9m AHD and recommends a retail floor level of 3.2m AHD. Council's Drainage Engineer has made the following comments:

"The flood impact assessment prepared by Worley Parsons has been prepared using methods that are acceptable to Council".

As such, Council's Technical Services is satisfied with the retail flood protection measures.

However, the architectural plans identify that the car-park floor level has a varying floor level ranging between 2.3m AHD and 2.8m AHD which corresponds to flood water depths of up to a maximum of 600mm.

The Report has identified that the flood hazard in the area is generally low with exception of the intersection of the Kiaora Lane and Kiaora Road.

It is noted that blockage in the open stormwater channel (SWC) has been factored into the flood level assessment. However, any additional blockage above the factored levels will increase the flood levels and subsequent hazards.

The nature and size of the development will intensify the use of the area. Vehicles and debris from the car-park and surrounding area will flow to the SWC causing additional blockage. As such, the applicant is required to take all reasonable steps to ensure public safety.

Council's Drainage Engineer has made the following comments:

"Water depths of over 300mm can cause vehicles to float which will cause the area to become hazardous. This needs to be addressed when the detailed emergency management plan is produced".

A recommendation of the Double Bay Flood Risk Management Study and Plan is to construct a strong flow-through fence at the high risk location. The fence is needed to reduce the potential of the open Sydney Water Channel blocking. In response to this BG&E have provided details of the Barrier Fence configuration as shown on Dwg No. CSK001 Rev A by BG&E dated 25.01.12 and is satisfactory. The fence is to be 75m long and constructed along the edge of the Kiaora Road SWC. The applicant is to liaise with Sydney Water for these works

The submission of a detailed emergency response and evacuation management plan is to be produced prior to occupation, including flood signage and flood proof materials – conditions applied.

## **Construction Management comments**

A Construction Management Plan prepared by Caverstock Group dated 15 November 2011 has been submitted and assessed by Council's Manager Engineering Services (Copy attached). There are generally no objections to the CMP subject to conditions.

Due to the lack of on-street parking availability a Work Zones will be required from Council during construction. Appropriate conditions have been applied.

## **Traffic comments**

See attached Traffic Engineer's comments dated

#### **Impacts on Council Infrastructure comments**

New road, drainage and public domain works are proposed for the street network in Kiaora Lane, Kiaora Road, Patterson Street and Anderson Street including all associated level adjustment and service adjustments

<u>Kiaora Lane</u>

- Roadworks Full width road reconstruction, K& G, dish footpath and level adjustment for the length of the development from about the eastern boundary of No 11 Patterson Street to Kiaora Road. Replacement K&G and footpath on the north side from the development to Manning Road
- *Plaza construction of all public domain assets*
- Drainage- Construction of drainage and pits and connections to the existing drainage line. Box culvert construction for the full length

<u>Kiaora Street</u>

- Roadworks road shoulder reconstruction, Replacement of K& G and footpath for the length of the development, long section for driveways.
- Drainage new pipe connections and pipeline upgrades across Kiaora Road <u>Patterson Street</u>
  - Roadworks road pavement, K& G, driveways and new footpath on south side.
  - Drainage new 375mm Dia RCP pipeline and pits

Anderson Street

- Roadworks K& G and driveways.
- Drainage new 375mm Dia RCP pipeline and pits.

<u>General</u>

- There is conflict between the Flooding, Stormwater Report by Worley Parson, the Stormwater Drainage Concept Design by Warren Smith & Partners and the Kiaora Lane Concept Plan (Civil) by BG&E. These drainage conflicts are to be resolved and revised plans are to be prepared and submitted to Council.
- Pavement design details
- Dilapidation reports will be required on the adjoining road network that will be affected by construction equipment.
- All the above works will be subject to the submission and approval by Council of a S138 Roads Act application.

## Vehicle Access & Accommodation comments

See Traffic Engineer's comments dated 03 January 2012

#### Geotechnical, Hydrogeological and/or Structural comments

A Hydrogeological Report prepared by Coffee Geosciences P/L Ref E12616/1-BY dated 16 October 2003 has been submitted in support of the application. The proposal involves minimal excavation for lift overrun, drainage and service trenches. No dewatering of the site is proposed or approved

Council's Technical Services has no objection to the limited excavation on technical grounds.

#### **Other comments**

Due to the likelihood of additional power usage as a result of the new development, Energy Australia has requested that the applicant contact them with regards to the possible provision of a new Electricity Substation on site.

*The requirement as set out in the letter from Sydney Water dated 10 February 2012 are to be complied with – conditions applied* 

#### RECOMMENDATION

Council's Development Engineer has determined that the proposal satisfies Technical Services concerns, subject to the following conditions. Accordingly, the following conditions are recommended.

**Conditions of Consent** 

## Standard conditions of consent are may be modified by the Technical Services Division to suit a particular development application and should not be altered.

#### A. General Conditions

#### A5 Approved Plans & Supporting documents

Reference	Description	Author/Drawn	Date(s)
	Letter	Sydney Water	10 February 2012
	<ul> <li>Double Bay Flood Risk Management Study and Plan</li> <li>Flooding, Stormwater Report by Worley Parson dated 27 Oct 2011</li> <li>Stormwater Drainage Concept Design by Warren Smith &amp; Partners Dwg No H-01 to 07 Issue 03 dated 18.10.11</li> <li>Kiaora Lane Concept Plan (Civil) by BG&amp;E Dwg No SKC01 to 06 Rev B dated</li> </ul>		

<ul> <li>24.10.11</li> <li>Traffic Report prepared by Halcrow dated 19 October 2011</li> <li>Hydrogeological Report prepared by Coffee Geosciences P/L Ref E12616/1- BY dated 16 October 2003</li> </ul>	

## A8 Ancillary Aspect of the Development (Repair Damaged Infrastructure)

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

Nil

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

## C.5 Security Deposits/Fees

a) Property Damage Security Deposit (S138)	\$1,310,530	No	T113
g) Public Road and Footpath Infrastructure Inspection Fee (S138 Fee)	\$420	No	T45
h) Security Administration Fee	\$180	No	T16

## 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 for the following infrastructure works prior to the issuing of any Construction Certificate. The infrastructure works must be carried out at the applicant's expense:

a) Road and Drainage Works

Kiaora Lane

- Roadworks Full width road reconstruction, kerb & gutter, dish footpath and level adjustment for the length of the development from about the eastern boundary of No 11 Patterson Street to Kiaora Road. Replacement Kerb & Gutter and footpath on the north side from the development to Manning Road
- Plaza construction of all public domain assets
- Drainage- Construction of drainage and pits and connections to the existing drainage line. Box culvert construction for the full length of the development Visora Street

Kiaora Street

- Roadworks road shoulder reconstruction, Replacement of kerb & gutter and footpath for the length of the development, long section for driveways.
- Drainage new pipe connections and pipeline upgrades across Kiaora Road Patterson Street
- Roadworks road pavement, kerb & gutter, driveways and new footpath on south side.

- Drainage new 375mm diameter Reinforced Concrete Pipe and pits Anderson Street
- Roadworks -Kerb & gutter and driveways.
- Drainage new 375mm diameter Reinforced Concrete Pipe and pits. Drainage impacts on the existing system in Court Road to be detailed

## Other

- There is conflict between the Flooding, Stormwater Report by Worley Parson, the Stormwater Drainage Concept Design by Warren Smith & Partners and the Kiaora Lane Concept Plan (Civil) by BG&E. These drainage conflicts are to be resolved and revised plans are to be prepared and submitted to Council.
- The amended plans are to be certified by the authors of the flood report that they satisfy their requirements for flood management.
- Dilapidation reports will be required on the adjoining road network that will be affected by construction equipment.
- All the above works will be subject to the submission and approval by Council of a S138 Roads Act application.
- b) General

Detailed engineering plans (plan, sections and elevation views) and specifications of all works for the footpath, driveways, kerb & gutter, drainage long sections new gully pit showing clearly the connection point of site outlet pipe(s) of the works required by this Condition must accompany the S138 Application form. The plans must also clearly show the following:

- Full width vehicular crossings to be constructed in accordance with Council's standard driveway drawing RF2C
- A design longitudinal surface profile for the proposed driveway must be submitted for assessment.
- Removal and replacement of the existing footpath for the full width of the property in accordance with Council's standard drawing RF3.
- Removal of all driveway crossings and kerb laybacks which will be no longer required.
- Reinstatement of footpath, kerb and gutter to match existing.
- Full new pavement details.
- 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.
- Engineering drawings of the new drainage line to be constructed joining the new and existing drainage pits including services.

**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. Advisings* of this Consent titled *Roads Act Application*. Standard Condition: C13 (Autotext CC13)

#### C20 Utility Services Generally

#### C.21 Provision for Energy Supplies

#### C.45 Parking Facilities

The *Construction Certificate* plans and specifications required by clause 139 of the Regulation, must include detailed plans and specifications for any bicycle, car and commercial vehicle parking demonstrating 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.

### (INSERT ANY REQUIREMENTS AS REQUIRED BY COUNCIL'S TRAFFIC REPORT)

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

#### C.48 Relocation or reconstruction of Council's stormwater drainage system

The developer must meet all costs of relocation or reconstruction of any part of Council's drainage system (including design drawings and easements) required to carry out the approved development. All engineering drawings (plan, sections and elevation views) and specifications of the new stormwater drainage system to be constructed are to be prepared by the applicant. The design plans must be lodged and approved by Council <u>prior</u> to the issue of a Construction Certificate.

The design and construction of the works must be in accordance with Council's Draft Stormwater Drainage Management DCP (Draft Version 1.1, Public Exhibition Copy dated 14/12/2006) and "Specification for Road Works, Drainage and Miscellaneous Works" which include Council's Standard Drawings. Both documents are available from Council's website <u>http://www.woollahra.nsw.gov.au</u>.

Note: Four weeks should be allowed for assessment

**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. Standard Condition: C.48 (Autotext CC48)

## C.50 Stormwater Discharge to Sydney Water Channel (Clause 25(2) WLEP 1995)

The developer must obtain written approval from Sydney Water to discharge stormwater from the subject property directly into Sydney Water Channel and comply with all requirements. Standard Condition: C50

Standard Condition: CS0

### C51 Stormwater management plan Clause 25(2) WLEP 1995)

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 disposal concept plan prepared by
  - Stormwater Drainage Concept Design by Warren Smith & Partners and
  - Kiaora Lane Concept Plan (Civil) by BG&E other than amended by this and other conditions;
- b. the discharge of stormwater, by a single direct connection to the nearest Council drainage pit/system and to open channel as required by Sydney Water
- c. compliance the objectives and performance requirements of the BCA;
- d. any rainwater tank required by BASIX commitments including their overflow connection to the *Stormwater Drainage System*, and
- e. general compliance with the Council's draft Development Control Plan Stormwater Drainage Management (draft version 1.1, public exhibition copy dated 14/12/2006

The Stormwater Management Plan must 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:

- All pipe layouts, dimensions, grades, lengths and material specification,
- All invert levels reduced to Australian Height Datum (AHD),
- Location and dimensions of all drainage pits,
- Point and method of connection to Councils drainage infrastructure,
- Overland flow paths over impervious areas.
- Subsoil Drainage Subsoil drainage details, clean out points, discharge point.
- **Note:** This Condition is imposed to ensure that site stormwater is disposed of in a controlled and sustainable manner. Standard Condition: C51

## C.54 Flood protection

The *Construction Certificate* plans and specifications, required by Clause 139 of the *Regulation*, must include flood mitigation measures to provide protection for the development up to the Flood Planning Levels (FPL's) as determined by Flooding, Stormwater Report by Worley Parson dated 27 Oct 2011

The Flood Planning Levels (FPL's) are as follows for:

- Habitable buildings RL 3.2mm AHD
- Non-Habitable buildings RL 3.05mm AHD

The Flood Planning Levels (FPLs) are a combination of the 1:100 year flood level plus the selected freeboard. For Habitable floor levels not less than 300mm above the flood level and Non- Habitable floor levels not less than 150mm.

A detailed Emergency Response and Evacuation Management Plan is to be prepared and produced prior to occupation. See detailed conditions further in this consent.

Standard Condition: C54

# D. Conditions which <u>must be satisfied prior to the commencement</u> of any development work

## D.4 Dilapidation Reports for existing buildings

Dilapidation surveys must be conducted and dilapidation reports prepared by a *professional engineer* (structural) of all buildings on land whose title boundary abuts the site and of such further buildings located within the likely "zone of influence" of any excavation, dewatering and/or construction induced vibration.

These properties must include (but is not limited to)

• 11 Patterson Street.

The dilapidation reports must be completed and 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 Dilaridation Penert Advising for more information regarding this condition

Also refer to the Dilapidation Report Advising for more information regarding this condition Standard Condition: D4

## **D5** Dilapidation Reports for Public Infrastructure

To clarify the existing state of public infrastructure prior to the commencement of any development (including prior to any demolition), the *Principal Contractor* must submit a dilapidation report, prepared by a *professional engineer*, on Council's infrastructure within and near the development site as described below:

- Manning Road full width New South Head Road to Court Road
- Kiaora Lane full width Manning Road to new construction zone
- Kiaora Road full width New South Head Road to Court Road
- Patterson Street full width Manning Road to new construction zone
- Anderson Street full width Court Road to new construction zone
- New South Head Road half road south side from Kiaora Road to opposite Knox Street

The dilapidation report must be submitted to Council prior to the commencement of any work and include:

- a. Photographs showing any existing damage to the road pavement fronting the site,
- b. Photographs showing any existing damage to the kerb and gutter fronting the site,
- c. Photographs showing any existing damage to the footway including footpath pavement fronting the site,
- d. Photographs showing any existing damage to retaining walls within the footway or road, and
- e. Closed circuit television/video inspection (in DVD format) of public stormwater drainage systems fronting, adjoining or within the site and
- f. The full name and signature of the professional engineer.

The reports are to be supplied in both paper copy and electronic format in Word. Photographs are to be in colour, digital and date stamped.

The dilapidation report must specify (with supporting photographic/DVD evidence) the exact location and extent of any damaged or defective public infrastructure prior to the commencement of any work. If the required report is not submitted then Council will assume there was no damage to any infrastructure in the immediate vicinity of the site prior to the commencement of any work under this consent.

**Note:** If the Principal Contractor fails to submit the dilapidation report required by this condition and damage is occasioned to public assets adjoining the site Council will deduct from security any costs associated with remedying, repairing or replacing damaged public infrastructure. Nothing in this condition prevents Council making any claim against security held for this purpose. Standard Condition: D5

## D6 Adjoining buildings founded on loose foundation materials

#### **D9** Construction Management Plan

As a result of the site constraints, limited space and access a Construction Management Plan (CMP) is to be submitted to Council. Also, due to the lack of on-street parking a Work Zone will be required during construction.

A Construction Management Plan prepared by Caverstock Group dated 15 November 2011 has been submitted in support of the application. An amended CMP is to be submitted to Council and approved by Council's Traffic Engineer to address the following.

- During construction, heavy vehicle access via Court Road and Anderson Street is to be minimised.
- During construction, no heavy vehicles associated with the site are to utilise Manning Road, Epping Road, Forest Road or Bellevue Road.
- The temporary closure of Kiaora Lane is to be referred to the Woollahra Traffic Committee for consideration and approval, prior to the issue of the Construction Certificate.
- Should the existing Woolworths remain open during construction, the applicant is to develop a trolley management system during works which may include the operation of a customer courtesy trolley system, to assist customers to their parked vehicles. It may also include a trolley collection system in the Cross Street car park and within 400m of the existing Woolworths site. The trolley management system is to be documented and submitted to Council for approval by Council's Manager Engineering Services, prior to the issue of the Construction Certificate.

The plan must also:

- a) Describe the anticipated impact of the demolition, excavation and construction works on:
  - Local traffic routes
  - Pedestrian circulation adjacent to the building site
  - On-street parking in the local area
- b) Describe the means proposed to:
  - Manage construction works to minimise such impacts,
  - Provide for the standing of vehicles during construction,
  - Provide for the movement of trucks to and from the site, and deliveries to the site
- c) Show the location of:
  - Any site sheds and any anticipated use of cranes and concrete pumps,
  - Any areas of Council property on which it is proposed to install a Works Zone (Construction Zone)
  - Structures to be erected such as hoardings, scaffolding or shoring
  - Any excavation
- d) Describe the excavation impact on the area including
  - Number and types of trucks to be used
  - Time frame
  - Streets to be used
  - Routes to be taken
  - Directions of travel
  - Truck storage areas
  - It is recommended that vehicle routes be shared
  - Excavation is to only be carried out outside peak and school hours between 9.30am to 2.30pm week days

- e) Protect Trees, Bushland and Public Open Space:
  - Show the location of all Tree Protection (Exclusion) Zones as required within the conditions of this development consent.

The Plan must make provision for all materials, plant, etc. to be stored within the development site at all times during construction. Structures or works on Council property such as hoardings, scaffolding, shoring or excavation need separate approval from Council. Standing of cranes and concrete pumps on Council property will need approval on each occasion.

**Note:** A minimum of eight weeks will be required for assessment. Work must not commence until the Construction Management Plan is approved. Failure to comply with this condition may result in fines and proceedings to stop work. Standard Condition: D9 (Autotext: DD9)

## D10 Work (Construction) Zone – Approval & Implementation

- **D11 SECURITY FENCING**
- **D.14 Erosion and Sediment Controls Installation**

#### E. Conditions which must be satisfied during any development work

- E3 Compliance with Construction Management Plan
- E.7 Public Footpaths Safety, Access and Maintenance
- E11 Maintenance of Environmental Controls
- E13 Support of Adjoining Land Owners
- E15 Erosion and Sediment Controls Maintenance
- E17 Disposal of Site Water during Construction

**E20** Check Surveys - boundary location, building location, building height and stormwater drainage system relative to Australian Height Datum

## E24 Compliance with Council's Specification for Roadworks, Drainage and Miscellaneous Road Works

#### **E.30** Protection of Street Name Inlays

The existing street name inlay/s in the footpath/kerb/gutter in the public road adjoining the development site are not to be removed or damaged as a consequence of the development. Appropriate measures are to be undertaken to ensure the protection of the street name inlay/s at all times during the course of construction. This condition is imposed to preserve the cultural heritage of the Woollahra Municipality. Standard Condition E30

## F. Conditions which must be satisfied prior to any occupation or use of the building

#### F7 Commissioning and Certification of Systems and Works

#### F.8 Emergency Response and Evacuation Plan

An emergency response and evacuation plan and procedure complying with AS 3745-2002 - *Emergency control organisation and procedures for buildings, structures and workplaces* must be implemented. The emergency response and evacuation plan and procedure must form part of listed essential fire safety measures subject to the *interim* or *final fire safety certificate* and thence subject to *Annual Fire Safety Certificates*. The emergency response and evacuation plan and procedure must:

- (a) Address, in addition to ordinary risks (fire etc.), the specific risks associated with flooding;
- (b) provide clearly visible flood warning signs in unobstructed areas of all basements and all areas potentially subject to inundations up to the Probable Maximum Flood level and
- (c) ensure that wardens are in the car park when any flood level reaches RL
   2.0m AHD, to effect the orderly evacuation of people from the carpark.

The emergency response and evacuation plan and procedure must be submitted to the Director General, New South Wales State Emergency Service and the Commissioner of the NSW Fire Brigades. Any changes requested by these emergency services that are consistent with AS 3745-2002 – *Emergency control organisation and procedures for buildings, structures and workplaces* is to be adopted by the emergency response and evacuation plan and procedure prior to any occupation of the building or the issue of any occupation certificate.

**Note:** AS 3745 sets out the requirements for the development of procedures for the controlled evacuation of buildings, structures and workplaces during emergencies. The AS also establishes guidelines for — (a) the appointment of the emergency planning committee (EPC); (b) the setting up of an emergency control organisation (ECO); (c) the preparation of emergency plans and procedures; (d) the role and authority of ECO personnel while executing their duties; and (e) the requirements of an education and training program. The standard covers emergency situations until the appropriate emergency service arrives to take control, at which time, the ECO will work in conjunction with that service.

## **F9** Commissioning and Certification of Public Infrastructure Works

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

G4 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

H13 Road Works (including footpaths

## H14 Dilapidation Report for public infrastructure works

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

#### I.19 Emergency response and evacuation plan – compliance & review

Occupation and use of the development must be in accordance with the emergency response and evacuation plan and procedure.

The emergency response and evacuation plan and procedure must be reviewed and, if necessary, updated at each annual meeting of the *emergency planning committee* constituted under AS 3745-2002 - *Emergency control organisation and procedures for buildings, structures and workplaces.* The emergency response and evacuation plan and procedure must form part of the listed *essential fire safety measures* subject to *Annual Fire Safety Certificates.* 

Any amended emergency response and evacuation plan and procedure must be submitted to the Director General, New South Wales State Emergency Service and the Commissioner of the NSW Fire Brigades. Any changes requested by these emergency services that are consistent with AS 3745-2002 – *Emergency control organization and procedures for buildings, structures and workplaces* must be adopted by the emergency response and evacuation plan and procedure prior to implementation of the amended emergency response and evacuation plan and procedure.

**Note:** The emergency response and evacuation plan and is the primary mechanism for the protection of life and safety.

#### **Miscellaneous Conditions**

Nil

K. Advisings

## K.23 Dilapidation Report Condition

K24 Roads Act Application

<u>Memorandum</u>		
Date	9 January 2012	
File No.	DA 531/2011/1	
То	Nick Tomkins	
СС		
From	Cathy Edwards-Davis	
Subject	KIAORA LANDS REDEVELOPMENT, DOUBLE BAY - CONSTRUCTION MANAGEMENT PLAN	



ABN 32 218 483 245

Redleaf Council Chambers 536 New South Head Road Double Bay NSW 2028 Correspondence to General Manager PO Box 61 Double Bay NSW 1360 DX 3607 Double Bay records@woollahra.nsw.gov www.woollahra.nsw.gov.au Telephone (02) 9391 7000

Facsimile (02) 9391 7044

I refer to the following document:

• Construction Management Plan prepared by Caverstock Group dated 15 November 2011

#### Staging

Stage 1 is the supermarket site which is generally bounded by Kiaora Lane, Kiaora Road, the rear boundary of 6 residences which front Court Road, Anderson Street and Patterson Street.

Stage 2 is the library site, which is the existing Woolworths store located between New South Head Road and Kiaora Lane. There will also be associated road works.

#### Access & Egress

The applicant has proposed the following access during demolition:

- For houses from the streets where the houses are located
- For retail from Kiaora Lane

The applicant has proposed the following access during construction:

- Deliveries are to be made via Kiaora Lane, Anderson Street, Court Road and the Work Zone in Kiaora Street.
- Concrete pumping for Stage 1 will be from the site across and south of Kiaora Lane.
- Concrete pumping for Stage 2 will be from Kiaora Lane

The applicant (Appendix B) has indicated that deliveries will occur via New South Head Road, Kiaora Lane, Kiaora Road and Patterson Street.

The applicant has also indicated that deliveries will occur via Manning Road, Epping Road, Forest Road, Bellevue Road, Court Road and Anderson Street. Due to the nature of the development, it is accepted that some deliveries may need to be via Anderson Street and Court Road. However, given the residential nature of these roads, it is important to minimise the impact of construction on these properties. No deliveries should occur via the residential streets of Manning Road, Epping Road, Forest Road and Bellevue Road.

### **Construction Staff Parking**

It is anticipated that the maximum number of construction workers will be 200 during the peak period.

During the initial demolition phase and the finishing period for Stage 1, parking will be available for workers on-site. However, during the majority of construction for Stage 1 and all of Stage 2, parking will not be available on-site for workers.

The applicant has stated that all construction workers will be encouraged to catch public transport and to share vehicles. Trades will require a drop-off for tools, materials and equipment before finding parking in the neighbourhood.

#### Work Zones

Work Zones are proposed in Kiaora Road and Kiaora Lane.

Construction activity on New South Head Road has been avoided. Construction activity for the New South Head Road site will be undertaken from the Kiaora Lane side of the property.

#### Hoardings

Gantry, overhead protection and hoardings may be placed along the property boundary and over the footpath on New South Head Road; along the property boundary and over the footpath facing Kiaora Road; and along the property boundary facing Kiaora Lane. This will be subject to further discussion between the appointed builder and Council.

#### **Temporary Road Closure**

The applicant has proposed that Kiaora Lane will be temporarily closed once the Stage 1 demolition is completed. Access for the existing retail trucks will be managed by traffic controllers.

#### Cranes

A site crane will be located near the Kiaora Road boundary.

Some minor deliveries using mobile cranes will occur from Kiaora Road, Kiaora Lane and Anderson Street.

#### Access to Supermarket During Works

It is of serious concern that it is proposed to keep the existing Woolworths open during the construction of the new Woolworths. During this time, the existing 145 public parking spaces will be unavailable. There will therefore be severe restrictions on the availability of parking for the Woolworths during this time. This demand for alternative parking will be exacerbated by up to 200 people working on the construction site. It is noted that the Cross Street car park can provide some parking relief during this time. However, this requires Woolworths customers to cross at two signalised pedestrian crossings, and an unsignalised road. This may be acceptable for customers who only purchase a bag or two of shopping. However, this is not readily practicable for people with shopping trolleys.

## Conclusion

From a construction management point of view, particularly with regards to pedestrian and vehicle safety and access, it would be highly preferable that the existing supermarket were closed during construction of the proposed development.

### Notwithstanding the above, I have reviewed the submitted Development Application and I have no objection to the proposed development in terms of the proposed construction methodology.

I note that a builder has not been appointed for this development as yet. There are therefore some details missing from this preliminary Construction Management Plan. It is recommended that a Detailed Construction Management Plan be submitted once a builder has been appointed.

*Should* this development be recommended for approval, it is recommended that the following conditions be imposed:

- During construction, heavy vehicle access via Court Road and Anderson Street is to be minimised.
- During construction, no heavy vehicles associated with the site are to utilise Manning Road, Epping Road, Forest Road or Bellevue Road.
- The temporary closure of Kiaora Lane is be referred to the Woollahra Traffic Committee for consideration and approval, prior to the issue of the Construction Certificate.
- Should the existing Woolworths remain open during construction, the applicant is to develop a trolley management system during works which may include the operation of a customer courtesy trolley system, to assist customers to their parked vehicles. It may also include a trolley collection system in the Cross Street car park and within 400m of the existing Woolworths site. The trolley management system is to be documented and submitted to Council for approval by Council's Manager Engineering Services, prior to the issue of the Construction Certificate.

#### **D.9** Construction Management Plan

As a result of the site constraints, limited space and access a Construction Management Plan is to be submitted to Council. Also, due to the lack of on-street parking a Work Zone may be required during construction. A construction management plan must be submitted and approved by Council's Development Engineer. The plan must:-

- f) Describe the anticipated impact of the demolition, excavation and construction works on:
  - Local traffic routes
  - Pedestrian circulation adjacent to the building site
  - On-street parking in the local area
- g) Describe the means proposed to:
  - Manage construction works to minimise such impacts,
  - Provide for the standing of vehicles during construction,
  - Provide for the movement of trucks to and from the site, and deliveries to the site
- h) Show the location of:
  - Any site sheds and any anticipated use of cranes and concrete pumps,
  - Any areas of Council property on which it is proposed to install a Works Zone (Construction Zone)
  - Structures to be erected such as hoardings, scaffolding or shoring
  - Any excavation
- i) Describe the excavation impact on the area including
  - Number and types of trucks to be used
  - Time frame
  - Streets to be used
  - Routes to be taken
  - Directions of travel
  - Truck storage areas
  - It is recommended that vehicle routes be shared
  - Excavation is to only be carried out outside peak and school hours between 9.30am to 2.30pm week days
- j) Protect Trees, Bushland and Public Open Space:
  - Show the location of all Tree Protection (Exclusion) Zones as required within the conditions of this development consent.

The Plan must make provision for all materials, plant, etc. to be stored within the development site at all times during construction. Structures or works on Council property such as hoardings, scaffolding, shoring or excavation need separate approval from Council. Standing of cranes and concrete pumps on Council property will need approval on each occasion.

**Note:** A minimum of eight weeks will be required for assessment. Work must not commence until the Construction Management Plan is approved. Failure to comply with this condition may result in fines and proceedings to stop work. Standard Condition: D9 (Autotext: DD9)

#### E.3 Compliance with Construction Management Plan

All development activities and traffic movements must be carried out in accordance with the approved construction management plan. All controls in the Plan must be maintained at all times. A copy of the Plan must be kept on-site at all times and made available to the *PCA* or *Council* on request.

Note: Irrespective of the provisions of the Construction Management Plan the provisions of traffic and parking legislation prevails. Standard Condition: E3 (Autotext EE3)

Cathy Edwards-Davis Manager Engineering Services