

Urban Planning Committee

Agenda: *Urban Planning Committee*

Date: *Monday 28 November 2011*

Time: *6.00pm*

Outline of Meeting Protocol & Procedure:

- The Chairperson will call the Meeting to order and ask the Committee/Staff to present apologies or late correspondence.
- The Chairperson will commence the Order of Business as shown in the Index to the Agenda.
- At the beginning of each item the Chairperson will ask whether a member(s) of the public wish to address the Committee.
- If person(s) wish to address the Committee, they are allowed four (4) minutes in which to do so. Please direct comments to the issues at hand.
- If there are persons representing both sides of a matter (eg applicant/objector), the person(s) against the recommendation speak first.
- At the conclusion of the allotted four (4) minutes, the speaker resumes his/her seat and takes no further part in the debate unless specifically called to do so by the Chairperson.
- If there is more than one (1) person wishing to address the Committee from the same side of the debate, the Chairperson will request that where possible a spokesperson be nominated to represent the parties.
- The Chairperson has the discretion whether to continue to accept speakers from the floor.
- After considering any submissions the Committee will debate the matter (if necessary), and arrive at a recommendation (R items which proceed to Full Council) or a resolution (D items for which the Committee has delegated authority).

Recommendation only to the Full Council (“R” Items)

- Such matters as are specified in Section 377 of the Local Government Act and within the ambit of the Committee considerations.
- Broad strategic matters, such as:-
 - Town Planning Objectives; and
 - major planning initiatives.
- Matters not within the specified functions of the Committee.
- Matters requiring supplementary votes to Budget.
- Urban Design Plans and Guidelines.
- Local Environment Plans.
- Residential and Commercial Development Control Plans.
- Rezoning applications.
- Heritage Conservation Controls.
- Traffic Management and Planning (Policy) and Approvals.
- Commercial Centres Beautification Plans of Management.
- Matters requiring the expenditure of moneys and in respect of which no Council vote has been made.
- Matters reserved by individual Councillors in accordance with any Council policy on "safeguards" and substantive changes.

Delegated Authority (“D” Items)

- To require such investigations, reports or actions as considered necessary in respect of matters contained within the Business Agendas (and as may be limited by specific Council resolutions).
- Confirmation of the Minutes of its Meetings.
- Any other matter falling within the responsibility of the Urban Planning Committee and not restricted by the Local Government Act or required to be a Recommendation to Full Council as listed above.
- Statutory reviews of Council's Delivery Program and Operational Plan.

Committee Membership:

7 Councillors

Quorum:

The quorum for a committee meeting is 4 Councillors.

WOOLLAHRA MUNICIPAL COUNCIL

Notice of Meeting

24 November 2011

To: Her Worship The Mayor, Councillor Susan Wynne ex-officio
Councillors Malcolm Young (Chair)
Chris Howe (Deputy Chair)
Sean Carmichael
Lucienne Edelman
Nicola Grieve
Ian Plater
David Shoebridge

Dear Councillors

Urban Planning Committee Meeting – 28 November 2011

In accordance with the provisions of the Local Government Act 1993, I request your attendance at a Meeting of the Council's **Urban Planning Committee** to be held in the **Thornton Room (Committee Room), 536 New South Head Road, Double Bay, on Monday 28 November 2011 at 6.00pm.**

Gary James
General Manager

Additional Information Relating to Committee Matters

Site Inspection

Other Matters

Meeting Agenda

Item	Subject	Pages
1	Leave of Absence and Apologies	
2	Late Correspondence Note Council resolution of 27 June 2011 to read late correspondence in conjunction with the relevant Agenda Item	
3	Declarations of Interest	

Items to be Decided by this Committee using its Delegated Authority

D1	Confirmation of Minutes of Meeting held on 14 November 2011	1
D2	Delivery Program 2009 to 2013 & Operational Plan 2011/12 Quarterly Progress Report September 2011 – Goal (4) – Well Planned Neighbourhoods – 1229.G	2

Items to be Submitted to the Council for Decision with Recommendations from this Committee

R1	Notice of Motion 1/11/10 – Excavation – 900.G	7
----	---	---

Item No: D1 Delegated to Committee
Subject: **Confirmation of Minutes of Meeting held on 14 November 2011**
Author: Les Windle, Manager – Governance
File No: See Council Minutes
Reason for Report: The Minutes of the Meeting of Monday 14 November 2011 were previously circulated. In accordance with the guidelines for Committees' operations it is now necessary that those Minutes be formally taken as read and confirmed.

Recommendation:

That the Minutes of the Urban Planning Committee Meeting of 14 November 2011 be taken as read and confirmed.

Les Windle
Manager - Governance

Item No: D2 Delegated to Committee

Subject: **Delivery Program 2009 to 2013 and Operational Plan 2011/12 Quarterly Progress Report September 2011 – Goal (4) – Well Planned Neighbourhoods**

Author: Allan Coker - Director Planning and Development
Chris Bluett – Manager Strategic Planning
Patrick Robinson – Manager Development Control

File No: 1229.G

Reason for Report: To review the status of the priorities and actions in Council's Delivery Program 2009 to 2013 and Operational Plan 2011/12 for the three months ending 30 September 2011.

Recommendation

THAT the September 2011 quarterly progress report on Goal 4 (Well planned neighbourhoods) of Council's Delivery Program 2009 to 2013 and Operational Plan 2011/12 be received and noted and that revised target dates be adopted.

Background

In May 2011 Council adopted its revised Delivery Program 2009 to 2013 and Operational Plan 2011/12 (DPOP) in line with the new Integrated Planning and Reporting Legislation for NSW Local Government.

As a consequence of the Integrated Planning and Reporting Legislation, the *Local Government Act 1993* was amended to require Council to report on the progress of its Delivery Program at least every six months. In response to the amendments, and in order to ensure that Council's reporting to the community remains transparent, timely and manageable under the legislation, progress reports on the DPOP will continue to be presented quarterly for the end of September, December, March and June each year.

The framework for quarterly progress reports is consistent with the structure of the Delivery Program and Operational Plan developed around the following interrelated themes and supporting goals:

Theme: Community well-being
Goal 1: A connected and harmonious community.
Goal 2: A supported community.
Goal 3: A creative and vibrant community.

Theme: Quality places and spaces
Goal 4: Well planned neighbourhoods.
Goal 5: Liveable places.
Goal 6: Getting around.

Theme: A healthy environment
Goal 7: Protecting our environment.
Goal 8: Sustainable use of resources.

Theme: Local prosperity

Goal 9: Community focused economic development.

Theme: Community leadership and participation

Goal 10: Working together.

Goal 11: A well managed Council.

Annexure 1 to this report is Council's Quarterly Progress Report for the period 1 July to 30 September 2011 for Goal 4, being most relevant to the Urban Planning Committee.

Progress comments for all DPOP actions are provided in the tables of **Annexure 1**. Council staff have provided updates on these comments on an ongoing basis for internal management purposes with the comments then collated at the end of the quarter for reporting to Council and the community. Generally, actions included in the Operational Plan relate to the current financial year. However, there are a number of actions that extend beyond June 2012, as indicated in the Target Date column.

As this is the first quarterly report for 2011/12, the final column in the tables headed "Updated Comments" is blank. In future quarterly reports a tick will appear in this column to indicate that the comments relating to that action have been updated since the previous quarterly report to Council. This will enable Councillors and other readers of the report to easily identify where an action status has been updated.

Adopted notices of motion and other decisions of the Council

To further improve the efficiency and transparency of Council's Integrated Planning and Reporting procedures, notices of motion and other decisions of the Council which are strategic and/or project based are now included as additional actions in the DPOP and reported on through the Quarterly Progress Report.

Adopted notices of motion which are non-strategic in nature, such as placement of an additional agenda item on a meeting or writing a letter to an organisation, will be monitored administratively.

During the period 1 July to 30 September 2011, no new notices of motion have been identified as strategic and/or project based in nature. One decision of the Council relevant to Goal 4 of the DPOP was made during the quarter and is included as a new action. Details of this new action are provided below.

ACTION ARISING FROM A DECISION OF COUNCIL	
Action number in 2011/2012 Quarterly Progress Report	Action description
4.1.1.34	Prepare a planning proposal for 9A Cooper Park Road, Bellevue Hill [Refer decision of Council 25 July 2011].

Development activity

Annexure 2 provides graphical presentations of development activity turnaround times for the September quarter supporting the Progress Comments relevant to Priority 4.1.2 – Deliver high quality and timely development assessment.

Conclusion

It is recommended that the September 2011 Quarterly Progress Report on Goal 4 (Well planned neighbourhoods) of Council's Delivery Program 2009 to 2013 and Operational Plan 2011/12, be received and noted.

Chris Bluett
Manager Strategic Planning

Patrick Robinson
Manager Development Control

Allan Coker
Director Planning and Development

Annexure

- 1 DPOP Quarterly Progress Report September 2011 for Goal 4 (Well planned neighbourhoods)
– *distributed separately*
- 2 Graphical presentation of development activity turnaround time for the September quarter.

Item No: R1 Recommendation to Council
Subject: Notice of Motion 1/11/10 - Excavation
Co-authors: P Kauter, Executive Planner
T Jones, Urban Design Planner
File No: 900.G
Reason for Report: Response to Notice of Motion

Recommendation:

- A. That the Council resolve to prepare a planning proposal under section 55 of the *Environmental Planning and Assessment Act 1979* for the purpose of amending Woollahra Local Environmental Plan 1995 in the manner shown in annexure A of the report to the Urban Planning Committee dated 28/11/11. The purpose of the amendment is to limit the excavation of land associated with the development of single dwellings, dual occupancies and residential flat buildings.
- B. That when the planning proposal referred to in part A has been prepared it be forwarded to the Minister for Planning under the Gateway determination process contained in section 56 of the *Environmental Planning and Assessment Act 1979*.
- C. That the Council resolve to prepare a draft development control plan to amend Woollahra Residential Development Control Plan 2003, in the manner shown in annexure A of the report to the Urban Planning Committee dated 28/11/11. The purpose of the amendment is to limit the excavation of land associated with the development of single dwellings, dual occupancies and residential flat buildings.

1. Background

On 1/11/10 Council adopted the following Notice of Motion:

- A. *That a report be brought before the Urban Planning Committee regarding the effectiveness of current controls within the WREP (sic) 1995, and WRDCP2003 limiting excessive site excavation, together with recommendations on amendments to the WRDCP2003 and other planning instruments to prevent excessive site excavation.*
The report to include consideration of:
 1. *Effectiveness of Clause 5.2.4 of WRDCP2003 (quote)..... To limit site excavation and minimise cut and fill to ensure building form relates to the topography and to protect the amenity of adjoining properties.....in respect to appeals before the Land & Environment Court where excessive excavation has been a reason for refusal.*
 2. *Environmental, economic and amenity impacts of large excavations on the community at large, including amenity impact caused by additional traffic in residential streets, additional energy consumption from excavation and removal, together with alteration of underground water flows due to alteration of topography.*
 3. *Use of below ground envelope controls to limit excessive excavation.*
- B. *That a recommended program and resources required be included in the pending report by the Director of Planning to be submitted to the Urban Planning Committee on current Strategic Planning Tasks, Resources and Priorities.*

This report relates to part A of the Notice of Motion.

On 10/8/11 there was a presentation to the Strategic Planning Working Party (SPWP). This presentation covered various Land & Environment Court decisions where excavation was an issue, the impacts of excavation, our current controls, proposed long term controls (related to the introduction of the Comprehensive DCP) and proposed interim controls based on volumetric limitations.

On 23/8/11 the Urban Planning Committee, in considering the June 2011 Quarterly Report on the Delivery Program and Operational Plan, amended the target date on this Notice of Motion to 31/12/11. It was intended to make another progress presentation to the SPWP however in order to meet the target date it was considered necessary to bring forward this report to the Urban Planning Committee.

The impacts of excavation are an issue in our area due mainly to the topography of the land. A considerable proportion of the land in our area is on hillsides making excavation a factor in its development. Excavation is a means by which useable floor area can be made available for habitable and non-habitable purposes. Also, excavation is being used to provide accommodation for an increasing range of uses suited to subterranean conditions such as home studios, cellars, water craft storage, home gymnasiums, etc.

Excavation can have short term and long term impacts. In a built-up urban area such as ours short term impacts mainly relate to the amenity of properties in the immediate vicinity of the excavation from noise, vibration, dust, property damage and traffic associated with the movement of trucks and equipment. Longer term impacts can include land destabilisation, interruption with the flow of ground water and changes to the natural land form. Excavation can also raise issues relating to ecologically sustainable development (ESD), loss of vegetation and heritage.

Longer term impacts of excavation tend to be cumulative in nature, i.e. whereas excavation associated with the development of one individual allotment may be justifiable if considered in isolation, the similar excavation of a number of lots in the vicinity may have unacceptable consequences in terms of ground water flows, etc.

Our planning controls contain a number of provisions relating to the short and long term impacts of excavation. The appropriateness of these provisions and their application by ourselves and by the Land & Environment Court (the Court) is discussed in this report.

2. Current controls

Our planning controls for excavation are contained in the *Woollahra Local Environmental Plan 2005* (WLEP) and *Woollahra Residential Development Control Plan 2003* (WRDCP). Various other development control plans also contain provisions relating to excavation.

2.1 WLEP¹

The objectives of WLEP include objectives in relation to the excavation of land in cl.2(2)(1) as follows:

(i) to minimise any impact on the amenity of the neighbourhood,

¹ Cl.8(5) provides that the Council shall not grant consent to the carrying out of development unless it is satisfied that the development is consistent with the objectives of the WLEP as apply to that development.

- (ii) to protect the natural foreshore areas including the visually and ecologically significant beaches, inter-tidal rock formations, vegetation, rock faces, shelves and outcrops,*
- (iii) to protect trees and significant vegetation and the native flora and fauna, and*
- (iv) to avoid potential damage to neighbouring public and private land and buildings which may result from the proposed excavation works,*

Objective (ii) includes a reference to the ecology. This reference is to the ecology in terms of the natural foreshore providing a habitat for animal and plant organisms. This is a useful objective for supporting the additional provisions in the WLEP dealing with excavation and development controls under the DCPs. The impact of excavation on the ecology is broader than endangering habitats. While there are objectives in the WLEP relating to global warming, which is related to ESD (see cl.2(2)(j)), a more general excavation objective supporting the principles of ecologically sustainable development (ESD) should be considered. This is discussed later in the report.

Clause 18 includes additional provisions for the excavation of land relating to the consideration of DAs as follows:

18. Excavation of land

- (1) When considering an application for consent for development involving the excavation of any land, the Council shall have regard to how that excavation may temporarily or permanently affect:
 - (a) the amenity of the neighbourhood by way of noise, vibration, dust or other similar circumstances related to the excavation process, and*
 - (b) public safety, and*
 - (c) vehicle and pedestrian movements, and*
 - (d) the heritage significance of any heritage item that may be affected by the proposed excavation and its setting; and*
 - (e) natural landforms and vegetation, and*
 - (f) natural water runoff patterns.**
- (2) The Council may decline to grant such a consent unless it has considered specialist reports, including geotechnical reports, structural engineering reports, hydrology reports and dilapidation reports of properties which may be affected by the proposed excavation.*
- (3) Consent for an excavation may be granted when consent is granted for any other development proposal for the carrying out of which the excavation is necessary.*

These provisions of the WLEP are not in the form of development standards and do not include in the consideration of a DA any specific limitations on the extent of excavation in terms of area, depth and/or volume.

2.2 WRDCP²

The WRDCP contains the planning controls which are applied the most frequently in the assessment of DAs in our area. It has Precinct Controls (see Part 4) and General Controls (see Part 5).

² 'Case law' on the application of DCP provisions require that a relevant and applicable standard must be taken into consideration as a *focal point* for, or a *fundamental element* in, the Council's consideration (*Zhang v Canterbury Council*). In applying DCP provisions if Council considers that a standard has not been met it is still required to consider the other relevant considerations including the likely impacts of the development under s.79C(1)(b), i.e. the impacts of development. The contravention of a standard in a DCP does not result in automatic refusal.

The Precinct Controls relevantly include provisions for property frontages and garaging. They relate to excavation insofar as they provide for 40% of the front setback to be deep soil landscaped area, i.e. no subterranean structures. However, these provisions do not specifically state that the front setback area can not be excavated. Also, in some precincts excavated garages on the high side of the street are allowable, i.e. outside of the building footprint.

Part 5.2, Building Size and Location, contains objectives and specific performance criteria relating to excavation. The Explanation for part 5.2 includes the following which are of relevance to excavation:

The potential location of development on the site will be guided by the application of the RDCP's building footprint control. The purpose of the building footprint control is to:

- *maximise deep soil landscape areas;*
- *maintain natural landform;*
- *maintain subterranean water flows;*
- *protect significant vegetation; and*
- *minimise the likelihood of land instability due to excavation.*

Applicants may choose where to locate the building footprint, provided that it occurs within the outer limits of the front, side and rear setbacks and subject to the RDCP's other controls.

Objective O5.2.4 provides:

O 5.2.4 To limit site excavation and minimise cut and fill to ensure that building form relates to the topography and to protect the amenity of adjoining properties both during and after construction.

Site Excavation performance criteria are in C5.2.15 – C5.2.17 as follows:

C 5.2.15 The building footprint is designed to minimise cut and fill.

C 5.2.16 The outer edge of excavation, piling and all sub-surface walls shall not be less than 1.5m from a front, side or rear boundary.

C 5.2.17 To minimise cut and fill on sloping sites and to encourage good quality internal environments, any habitable room of a dwelling must have at least one external wall fully above existing ground level (see diagram 5.2.11).

C5.2.15 is specifically about minimising cut and fill rather than excavation generally. Cut and fill is a process that is used to level a sloping site by cutting into the higher ground and using the material from the 'cut' to fill a lower portion of the ground. *Building footprint* is a defined term under the WRDCP. It means:

the area of land measured at finished ground level, which contains all external walls and balconies of a dwelling house, dual occupancy or residential flat building including all above ground levels.

The likely impact of designing a building's footprint to minimise cut and fill would be to limit the area of a building's footprint. Performance criteria C5.2.7 and C5.2.8 limit building footprints for residential flat buildings, dwelling houses and dual occupancies based on a percentage of the site area. These criteria provide a practical guide for the design of building footprints. In practice the purpose of C5.2.15 is more as a complement for C5.2.7 and C5.2.8.

C5.2.16 applies a minimum setback of 1.5m for excavation and construction associated with excavation from boundaries. The 1.5m setback avoids the practical construction difficulties that can arise with excavating in close proximity to property boundaries, allows room for sub-surface drainage and increases the potential for deep soil landscaping.

It also limits excavation that is not part of a dwelling, dual occupancy, residential flat building or an ancillary building, e.g. excavation for landscape works. This performance criteria assists in achieving the objectives and provisions of the WLEP which relate to excavation and the objectives of part 5.2 of the WRDCP.

Provisions relating to the setback of buildings generally, as opposed to the setback of excavation, are contained in performance criteria C5.2.1 – C5.2.5 under Development Setbacks. These provisions are also relevant to the setback of the excavated portions of buildings from site boundaries as the definition of setbacks is as follows:

means the horizontal distance between a building and a site boundary, measured along a line perpendicular to the site boundary. The building includes all parts of the building from the lowest point (including where it extends below ground level) to its highest point. (emphasis added)

C5.2.16 allows a substantial amount of excavation within setback areas particularly in relation to the front and rear setbacks which, under C5.2.2 (front setbacks are to be consistent with buildings on adjoining land) and C5.2.3 (rear setbacks are to be 25% of the length of the site), would generally be greater than 1.5m. However, the setback of the excavated portion of a building is still subject to C5.2.1 – C5.2.5 by virtue of the definition of *setback*.

C5.2.16 deals with the setback of excavation from site boundaries. It does not limit either the volume or depth of excavation.

C5.2.17 again relates specifically to cut and fill and not to excavation in general. It also refers to encouraging good quality internal amenity. This is primarily directed to light, ventilation and the general amenity of habitable rooms. This is a useful performance criteria for controlling excavation associated with habitable floor levels of residential buildings as it encourages habitable floor levels to be stepped rather than cut deep into sloping sites. However, it does not place limits on the area, volume or depth of excavation.

A similar performance criteria in the *Woollahra Residential Development Control Plan 1999* was an important factor in the Land and Environment Court dismissing an appeal against our refusal of a development application (s.96 application) for a seniors living development at 577 New South Head Road, Rose Bay, *577 New South Head Road Pty Ltd v Woollahra Municipal Council* [2004] NSWLEC 526.

Part 5.9, Car Parking and Driveways, also includes provisions relating to excavation. The Explanation to part 5.9 includes:

Council's on-site car parking requirements aim to satisfy the parking demand likely to be generated by housing developments while discouraging unnecessary car use and site excavation resulting from the provision of excessive amounts of on-site parking.

The design of parking and driveway areas should also acknowledge the need to limit the amount of impervious surfaces over a site and the amount of site excavation.

Excessive excavation can lead to site instability and interrupt ground water flows relied upon by surrounding vegetation.

The objectives of part 5.9 include:

O 5.9.1 To limit the amount of site excavation for the purpose of car parking.

Part 5.9 includes the following Site Excavation performance criteria:

C 5.9.1 The area of site excavated for the purposes of underground car parking is limited to the building footprint of the development (see Figure 5.9.1) and the site excavation requirements contained in Section 5.2 - Building Size and Location.

C 5.9.2 In order to avoid the need for mechanical car lifts and associated excavation, car parking for developments on the lower side of the street is to be provided on the upper levels of the building.

C5.9.1 limits the excavation to the building footprint in relation to excavation for underground parking and in this respect is similar to C5.2.1 – C5.2.5. It therefore limits the area of a site which can be excavated but it does not limit the volume or depth of excavation for underground car parking.

Our *Parking Development Control Plan* (Parking DCP) in part 2.2 Residential Parking includes the following under 2.2.1 Residential Parking Generation Rates:

Where an application proposes to provide more or less than the number of spaces specified in Table 2.2, justification must be provided as part of the statement of environmental effects. Where additional parking is proposed (i.e. additional to the rates contained in the Parking DCP) justification must cover matters such as, but not limited to:

.....

- *The amount of additional excavation and its impact on:*
 - *Land form*
 - *Structural integrity of structures and buildings on adjoining land*
 - *The stability of land on the site and on adjoining sites*

This control requires an applicant to provide justification for additional parking in relation to its need for additional excavation. It does not include limits on the setback, depth and/or volume of excavation.

The provisions of C5.9 and of the Parking DCP are important to limiting excavation as most excavation is associated with the accommodating car parking. However, these performance criteria do not place limitations on excavation that is not related to car parking.

2.3 Double Bay Centre DCP

The Double Bay Centre DCP includes in part 6.6.9 development controls for geotechnology and hydrogeology. These provisions relate to the particular geology of Double Bay which consists of alluvial water charged sediments with a high water table. The principles and controls in part 6.6.9 concern the impact on adjoining structures that may be associated with the impacts of below ground development on the water table. Due to the particular geology of Double Bay the specialist reports required to accompany DAs are more stringent than in other DCPs.

Control C8 provides that permanent support and retention measures are preferred to be setback a minimum of 900mm from adjacent property boundaries. Consideration may be given to construction on the boundary on a merit based assessment.

Part 6.7 includes principles and controls for on-site parking. On narrow sites they encourage a co-operative approach to parking and a preference to satisfy parking requirements by monetary contribution under our Section 96 Contributions Plan, which applies in the Double Bay centre.

The Double Bay Centre DCP does not include controls which limit the area, volume or depth of excavations.

2.4 Neighbourhood Centres DCP (NCDCP)

The NCDCP includes the following provisions under Site Excavation in relation to, Car Parking Vehicular Access and Servicing:

C 5.9.15 The area of site excavated for the purposes of underground carparking is limited to the building footprint of the development.

C 5.9.16 Permanent sub-surface support and retention structures are set back a minimum of 900mm from adjacent property boundaries.

Note: Council may consider construction of new development to the boundary on a merit based assessment.

The provisions of the NCDCP place limitations on the area of land that can be excavated and for the setback of excavations. There are no limits on the volume or depth of excavations.

2.5 Paddington Heritage Conservation Area DCP (PDCP)

The PDCP includes in part 4.1.6 objectives and controls for excavation. These provisions deal with the specific geology encountered in the Paddington area, the type of construction methods used for existing buildings and the preservation of heritage fabric and structural integrity.

C1 sets out circumstances where excavation will not be permitted primarily based on the proximity of excavation to existing walls and/or the type of foundation material on which those existing wall are supported.

C6 sets out the circumstances where boundary to boundary excavation for garage structures may be permitted. These circumstances relate to compliance with clause 4.2.6 *On-site vehicle parking, garages, carports, driveway access and servicing facilities*, the structure not adjoining buildings on adjoining sites and original footings on adjoining sites not being disturbed.

C7 sets out the circumstances where excavation may be permitted for structures such as pools, spas or other permissible development (beyond the principal building form or secondary wing). These circumstances relate to the setback of excavation from side boundaries based on property width (property width < 6m a minimum setback required is 900mm; property width = or > 6m a minimum setback of 1.5m is required); habitable rooms having a wall above existing ground level; original footings on adjoining properties not being disturbed; and, a geotechnical report ensuring that there will be no adverse effect on neighbouring structures.

The Paddington Heritage Conservation Area DCP does not permit excavation in certain circumstances and requires excavation to be setback from property boundaries, as discussed above. However there are no provisions which otherwise limit volume, depth and area of excavations.

2.6 Rose Bay Centre DCP

The Rose Bay Centre DCP contains no specific requirements for excavation. There are some provisions which may, incidentally, have a bearing on excavations, e.g. cl. 6.3.2 setbacks and cl. 6.4.1 soft landscaping. There are otherwise no limitations on excavation in terms of volume, depth or area.

2.7 Watsons Bay Heritage Conservation Area DCP (WBDCP)

The WBDCP contains Precinct Controls in Part 3 and General Development Controls in Part 4.

The **precinct controls** require buildings to have setbacks. As the definition of setbacks in the WBDCP is the same as the WRDCP the setback controls apply to the below ground parts of buildings, i.e the excavated parts of buildings. The setback in some cases differ from precinct to precinct but generally front and rear setbacks need to follow established patterns in the precinct. In some precincts setbacks from side boundaries are required, e.g. the Camp Cove Village Precinct (precinct K) requires new buildings to have 1.2m setback from side boundaries (see C19).

In the Pacific Street Waterfront Precinct (precinct J) excavation of the rock platform is not permitted for any purpose (see C2).

The **general development controls** include numerous objectives and controls that relate directly and indirectly to excavation. Under cl.4.2, Topography and Vegetation, objectives O1 and O2 and control C4 *New development is to step down sloping sites* are relevant. Under cl.4.3 control C12 provides that:

C12 Extensive cut and fill or retaining walls that would detract from the appearance of the natural landform or streetscape character are not permitted.

Clause 4.6, Built Form, includes under 4.6.1, General Controls C7, C8 and C9 under Siting and Alignment which are similar to the WRDCP's performance criteria C5.2.15 – C5.2.17 discussed earlier. However, there are no objectives to support these controls.

Clause 4.7, Landscaping and Private Open Space, under 4.7.2, Soft Landscaping and Stormwater Infiltration, there are minimum requirements for soft landscaping (75% of the required private open space) and deep soil landscaped area (40% of the soft landscaped area). Control C2 provides:

C2 Soft landscaping is to be designed and is to be at existing ground levels.

Clause 4.9, Carparking and Access, includes the following control:

C13 Extensive areas of excavation to facilitate carparking/access are not permitted.

The provisions of the WBDCP require the excavated portions of buildings and other excavations to be setback from property boundaries. Therefore they limit the area of a site which may be excavated. They do not impose any numeric limit on the volume or depth of excavation.

2.8 Woollahra Heritage Conservation Area DCP (WHCADCP)

The WHCADCP imposes minimum requirements for deep soil landscaping under the precinct controls (part 3.1). The amount of deep soil landscaping required varies from precinct to precinct.

Part 3.2, Significant Items and Group Significant Buildings, includes the following control, 3.2.3 Alterations and Additions to Significant Items, Location of Additions:

C6 Excavation for basement levels will not be permitted below significant items or in their gardens unless the site slopes to the rear and a basement level can be achieved by excavating no deeper than 1.5 metres. The outer edge of excavation piling and all sub-surface walls must be not less than 1.5m metres from any boundary. No excavation is permitted where underpinning of significant fabric would be required.

Part 3.4, General Controls for Development, includes the following controls, 3.4.3, Building Location and Built Form, Building Location:

C8 The building footprint is designed to minimise cut and fill on sloping sites and to encourage good quality internal environments, any habitable room of a dwelling must have at least one external wall fully above existing ground level (figure 3.21).

C9 The outer edge of excavation, piling and all sub-surface walls shall not be less than 1.5 meters from a front, side or rear boundary.

Clause 3.4.9, Parking and Garages, includes a control which provides that on-site parking may not be permitted where *extensive excavation is required*.

The provisions of the WHCADCP include a limitation on the excavation depth for significant items. There are also boundary setback requirements for excavation generally. Otherwise there are no limitations on the depth of excavation or on the volume of excavation.

The WRDCP is the main DCP which is used to assess the impacts of excavation. The provisions in the area specific DCPs respond to the circumstances and the particular issues associated with excavating in the area where they apply. The approach to limiting excavation in the DCPs is primarily through provisions which require:

- Buildings, including the below ground portion of buildings, to be setback from site boundaries
- Excavations to be setback from site boundaries
- Habitable rooms to have an external wall above existing ground level
- Car parking to be within building footprints

The main effect of this approach is to limit the area of the site which can be excavated. This is a two dimensional approach whereas excavation is a three dimensional process, i.e. it includes depth as well as area. The current DCP controls do not allow excavation in close proximity to property boundaries, i.e. within 1.5m in the case of the WRDCP. The controls do not limit any other area of a site from being excavated and do not limit the depth of excavations (apart from the provision in the WHCADCP referred to earlier and which would have limited application). Therefore they also do not limit the volume of material which may be excavated.

3. Land & Environment Court cases

The following are summaries of Land and Environment Court cases involving DAs that we have dealt with and in which excavation was an issue. They are grouped under Appeals Upheld and Appeals Dismissed:

3.1 Appeals upheld

- *Burley Katon Halliday v Woollahra Municipal Council* [2008] NSWLEC 37

Decision: Appeal upheld
Site: 42-42A Wolseley Road, Point Piper
Summary of reasons: The proposed extent of excavation was comparable to other recent developments on neighbouring sites

- *Tifad Developments Pty Ltd v Woollahra Municipal Council* [2009] NSWLEC 1140

Decision: Appeal upheld
Site: 95 Wentworth Avenue, Vaucluse
Summary of reason: The unauthorised excavations the subject of the s.96 application were supported on engineering grounds; the proposed modified development would be substantially the same as the original consent; and, the landscaped character would be the same or slightly better

- *Webster v Woollahra Municipal Council* [2008] NSWLEC 1448

Decision: Appeal upheld
Site: 47 Russell Street, Vaucluse
Summary of reason: Conditions to overcome risks to an adjacent cliff were feasible

- *Wang v Woollahra Municipal Council* [2008] NSWLEC 3

Decision: Appeal upheld
Site: 9 Dunera Gardens, Point Piper
Summary of reason: Proposed excavations would be within the building footprint; engineering evidence was that there were solutions to safeguarding adjoining properties

- *Ergo Architecture and Interior v Woollahra Municipal Council* [2007] NSWLEC 525

Decision: Appeal upheld
Site: 9 Bayview Street, Rose Bay
Summary of reason: Proposed excavations would be within the building footprint

- *Wheatley v Woollahra Municipal Council* [2007] NSWLEC 192

Decision: Appeal upheld
Site: 14 Gurner Street, Paddington
Summary of reason: The evidence of the court appointed expert (a geotechnical engineer) was that, subject to stringent conditions, the risk of damage to neighbouring properties in the heritage conservation area was 1%. The court found this risk to be acceptable. The proposed excavation provisions of the Draft Paddington DCP were not considered to be relevant

- *Galea and Falcone v Woollahra Municipal Council* [2006] NSWLEC 760

Decision: Appeal upheld
Site: 12A Trelawney Street, Woollahra
Summary of reason: The excavated area contributed to a FSR non compliance however this did not make the proposal unacceptable as the excavated area was to be satisfactorily landscaped

- *Edgar Allan Planning Pty Limited v Woollahra Municipal Council* [2006] NSWLEC 790

Decision: Appeal upheld
Site: 2 Rawson Road, Rose Bay
Summary of reason: The proposed excavation would be within the building footprint. FSR associated with the proposed excavation would not contribute to the bulk of the building.

- *Bega v Woollahra Municipal Council* [2006] NSWLEC 170

Decision: Appeal upheld
Site: 54 Kings Road, Vaucluse
Summary of reason: The excavations were not considered to be unreasonable subject to conditions being imposed. FSR exceedences associated to excavations was considered to be not significant.

3.2 Appeals dismissed

- *Chris Kokkinis trading as Ergo Architecture and Interiors v Woollahra Municipal Council* [2006] NSWLEC 586

Decision: Appeal dismissed
Site: 54 Fletcher Street, Woollahra
Summary of reason: Numerous non compliances with provisions of the Woollahra Heritage Conservation Area DCP including streetscape impacts of a basement/excavated garage

- *Stromer v Woollahra Municipal Council* [2006] NSWLEC 121

Decision: Appeal dismissed
Site: 15-17 Fairfax Road, Bellevue Hill
Summary of reason: Non compliance with excavation provisions of the Residential DCP 2003. Proposed excavation outside the building footprint. Changes to the landform notwithstanding previous changes to the natural landform. The excavation contributed to the excessive bulk of the building (landscaping should not be used to hide non complying bulk)

- *577 New South Head Road Pty Ltd v Woollahra Municipal Council* [2004] NSWLEC 526

Decision: Appeal dismissed
Site: 577 New South Head Road, Rose Bay
Summary of reason: The development proposed by the s.96 application was not considered to be substantially the same as the approved development. This was primarily due to the proposed increase in excavation. There was uncertainty regarding the structural impact the proposed excavation would have on an adjoining heritage item. Non compliance with the provisions of the Residential DCP 1999 regarding the windows of habitable rooms being below the existing ground level and the consequent increase in excavation this necessitated.

3.3 The Court's approach

- most appeals were upheld
- excavation within the building footprint was generally considered to be satisfactory, i.e. if it did not reduce soft landscaping
- in most cases the court accepted that there were engineering solutions to concerns about the safety of neighbouring properties
- the court expressed greater concern about the safety of neighbouring properties with excavation in heritage conservation areas and where heritage items were at risk
- FSR exceedences associated with excavated basements was not an issue in terms of building bulk
- the court gave greater weight to the issue of excavation where the planning controls included specific objectives and criteria relating to excavation
- the court supported DCP controls which required that each habitable room have an external wall located above the existing ground level
- increases in approved excavation can result in a proposed modified development not being substantially the same as an approved development. Quantitative and qualitative assessments are necessary in these circumstances

4. Ecologically sustainable development (ESD)

Excavation raises a number of issues relating to ESD principles including:

- excavation associated with excessive car parking increases reliance on the private motor vehicle for transportation
- truck movements and the operation of excavation machinery, including the impacts of heavy trucks on local roads
- disposal of excavated material
- reduced opportunities for landscaping, including deep soil landscaping
- increased area of impervious surfaces and reduced area for water infiltration
- construction costs, in particular the use of cement
- the need to rely on artificial light and ventilation of excavated areas
- energy required to carry out excavation and transport excavated material

The relationship between excavation, ESD and our controls was raised in a DA for **129 Hopetoun Avenue, Vacluse, DA1/2007**. The DA was for a new RFB to replace an existing RFB. The proposed development included excavation of a basement level to accommodate 5 car parking spaces, being the number of spaces required by our WRDCP. The proposed excavation involved an area of 286m², varying in depth to around 6m-8m, a volume of 1,753.6m³ and with nominal boundary setbacks. The nature of the excavation would not have been 'cut and fill', rather 'cut and cover', with the excavated material requiring disposal off site. We refused the DA for a number of reasons including:

The excessive amount of excavation for the basement level car park will have an adverse impact on the amenity and stability of adjoining properties due to the minimal setback of excavation from the boundaries and adjoining properties.

The applicant appealed to the Land and Environment Court. During the proceedings the proposal was amended, including by setting back excavation 1.5m from the side boundaries and by reducing the volume of excavated material to 1,172.9m³, i.e. by about 33%.

In this circumstance the applicability of our planning controls was influenced by existing use rights provisions. Prospects of success advice was obtained from Lindsay Taylor Lawyers by letter dated 5/8/08. That advice included the following comments in relation to excavation and car parking:

- 14 *..... It was intended to argue that the proposal was generally inappropriate on grounds of environmental sustainability I note that Commissioner Murrell appeared to agree with the tenor of (that) argument when it was raised at the 34 conference.*
- 15 *The applicant therefore offered to make further, though relatively obvious, amendments to reduce the scope of excavation while maintaining car parking capacity.*
- 17 *There has been some detailed discussion with staff concerning whether Council could or should amend its contentions to argue that the proposed access from Hopetoun Avenue should be refused in its entirety on grounds of environmental sustainability given the availability of alternative access to the site from Village High Road. Use of that access for a stacked car parking arrangement might potentially have obviated the need for any, or any substantial excavation on the site.*
- 22 *The Residential Development Control Plan 2003 requires a minimum of four (4) resident and 0.5 visitor spaces The proposal for four (4) resident and one (1) visitor space could not, therefore, be further reduced in compliance with the DCP. Any proposal for parking to be solely accessed from Village High Road would appear to have required a mechanical solution to achieve the requisite capacity.*
- 25 *I note that the Council's planning controls are generally inapplicable to the subject application to the extent they derogate from existing use rights. Curiously, they remain a fairly powerful consideration in favour of the proposal if the amended plans generally comply with them.*
- 26 *..... The relevance of environmentally sustainable development is a factor that the Court must arguably consider, but it is only one of a number of relevant matters. I think that the Court would give determinative weight to the fact that the Council's DCP controls are generally consistent with basement excavation for car parking providing the relevant limiting objectives are achieved.*

- 27 *If Council does wish to be able to require the minimisation of excavation on ESD grounds, I recommend that it amend its planning controls.*

After considering this advice we agreed to enter into consent orders subject to conditions. The Court upheld the appeal on the basis of the amended plans and subject to conditions.

The assessment of **DA777/2008** for a new dwelling at **23 Victoria Street, Watsons Bay** made a connection between the amount of excavation proposed and the carbon footprint of the proposed development. The excavation involved an area of the site of 1,385m² (approx.), a maximum depth

of 3.8m and 2,686m³ (approx.) volume of material. The nature of the excavation would not have been 'cut and fill', rather 'cut and cover', with the excavated material requiring disposal off site. We imposed the following consent condition:

- C.1 a) In order to reduce the carbon footprint of the development and achieve a greater level of compliance with Council's floor space control, the basement floor level is to be redesigned to facilitate only the watercraft storage area, pool plant room, pool undercroft area, rainwater storage area, stair access and 60m² of general storage area including hot water storage to a total area not exceeding 230m².*

This condition was changed following an application to modify the consent under s.96(2) to read as follows:

- C.1 a) In order to reduce the carbon footprint of the development, Boral 3 star "green cement" is to be utilised in the construction of the development rather than traditional cement. Further, the basement floor level is to be naturally ventilated rather than mechanically ventilated.*

The condition was again changed following a further application to modify the consent under s.96(1A) to read as follows:

- C.1 a) In order to offset the 209.9 tons of carbon emissions associated with the use of conventional concrete, 209.9 tons of carbon credit is to be purchased from Global Carbon Exchange. Evidence of this purchase is to be provided to Council prior to the pouring of the conventional concrete. Further, the basement floor level is to be naturally ventilated rather than mechanically ventilated in order to minimise ongoing carbon emissions.*

It has been established that there is a nexus between excavation and ESD. We have an obligation to consider ESD principles in the assessment of DAs under s.79C, as a public interest matter, see *BGP Properties Pty Limited v Lake Macquarie City Council [2004] NSWLEC 399 (12 August 2004)*. The matters under s.79C are to be taken into consideration if they are of relevance to the development proposed by a DA. Therefore, for the purpose of limiting excessive excavation, it would be appropriate for specific reference to ESD to be included in our planning documents in relation to excavation. This would draw attention to the relevance of ESD in the assessment of DAs involving excavation.

Clause 18(2) of the WLEP provides that we can decline to grant consent for excavation unless we have considered specialist reports. The clause refers to geotechnical, structural engineering, hydrology and dilapidation reports. It is considered that ecology reports should also be included. Whilst this would not make the submission of such a report mandatory with all DAs that involve excavation it would give us the option of asking for one if the specific circumstances justify it.

These circumstances would include excavations which do not comply with other excavation controls. Information about the required contents of an ecology report could be included in our DA Guide.

The specific changes required to the provisions of the WLEP and the WRDCP in respect to ESD and excavation are shown in Annexure 1.

[Note: It is considered that *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004* provisions relating to competing provisions of LEPs & DCPs would not apply to ESD provisions for excavations. This is because they would be aimed at different activities than those targeted by BASIX.]

5. Limiting excavation

As discussed earlier, the focus of our current planning controls is on limiting the area of a site which may be excavated. This approach does not limit the depth of excavations and/or the volume of material that may be excavated.

A review has been made of the planning controls used by a number of other council's for excavation. The following are examples of numeric controls used by other councils:

- Manly Council's DCP for Residential Zone 2007 – Amendment 1, includes a provision that generally limits excavation to 1m below natural ground level with the exception of basement parking areas and swimming pools
- Mosman Council's Residential DCP, includes a provision for basement excavation to be setback a minimum of 2m from side boundaries
- Pittwater Council's 21 Development Control Plan does not include numeric controls
- Waverley Council's DCP 2006 (Amendment 4), includes a provision for single dwellings that excavation does not exceed 3.0 metres in depth and 50% of the building footprint, including a garage

The excavation controls for these councils are generally in the form of performance based controls rather than prescriptive type controls. None of these councils have volumetric controls for excavation.

The most common reasons for excavating on a sloping site are to provide a level platform from which a building can be constructed or providing near level vehicle access. Imposing controls on the depth of excavation and in particular introducing *below ground envelope controls*, as referred to in part 3 of the Council's Notice of Motion, can be problematic. This is because of difficulties which can arise in establishing a standard reference point from which measurements can be taken and which can be equitably applied to all sites.

Our Strategic Planning and Urban Design staff are developing a new set of planning controls as part of the Standard Instrument LEP/DCP process. A cornerstone of these new controls is the concept of a horizontal plane. The horizontal plane will establish a definable building envelope including a level for a building footplate which will allow, amongst other things, a level from which excavation depth can be measured in a uniform manner on all sites. The horizontal plane is a different approach to controlling development and integrates with a number of controls other than those which relate to excavation. It would not be practical to introduce the Horizontal Plane in isolation.

At this stage it is considered that a volumetric approach to preventing excessive excavation should be adopted pending the finalisation of new planning controls as part of the Standard Instrument LEP/DCP process. It would be appropriate to defer consideration of below ground envelope controls until the package of new controls have been finalised.

6. Volumetric controls

To establish an appropriate means of limiting the volume of material which may be excavated from a site the following investigations have been carried out:

- studies of developments involving excavation, some of which have been referred to earlier (see the following case studies)
- testing the practical implications of our current controls and in particular our requirements for on site parking and private open space
- reviewing controls used by various other councils
- consultation with our Strategic Planning and Development Control
- review of various Land & Environment Court decisions

It should also be recognised that in many circumstances the ability to excavate is beneficial. Excavation can reduce the perceived scale and bulk of buildings which can have benefits in terms of the amenity of neighbouring properties. Car parking accommodation, which could otherwise compromise building design, can be concealed with benefits for streetscapes and building design. These benefits need to be weighted against those impacts caused by excavation.

We are of the view that different approaches should apply to the volume of material that may be excavated for developments involving single dwellings/dual occupancies and for developments for multi-unit buildings. This is primarily because of the practicalities of satisfying the on-site car parking requirements for multi-unit buildings. These requirements invariably dictate a garaging arrangement with parking spaces either side of a central driveway. This is also consistent with WLEP, cl.10B, Frontage Standards which requires a minimum allotment width at the front boundary of 21m for buildings containing 4 or more dwellings.

Single dwelling

Under the WRDCP a site containing a 3 bedroom dwelling is expected to accommodate 2 on site car parking spaces. The garaging of 2 cars can reasonably be achieved in a 6m x 6m space with 2.8m depth. This equates to 100m³. There is generally no requirement for vehicles to be able to turn around so as to enter and exit in a forward direction.

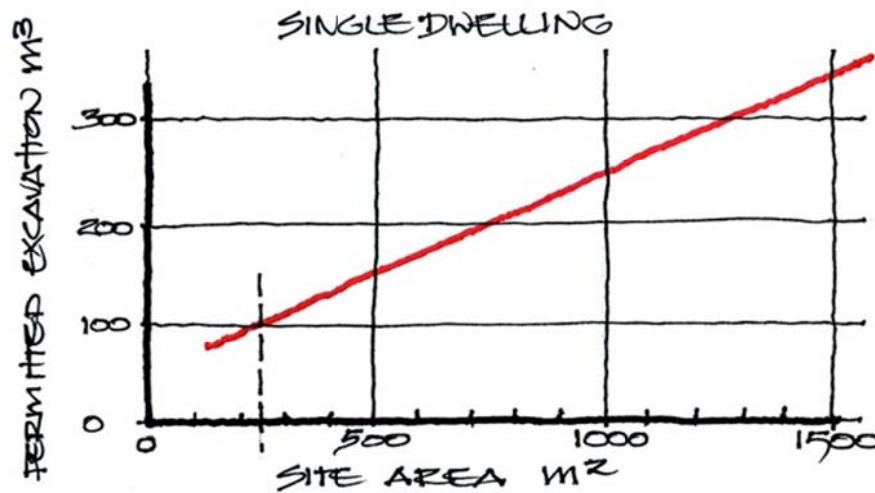
A 230m² site (minimum lot size allowed in the WLEP) attracts an FSR of 0.88:1 which would facilitate a house with a floor area of 202m². The DCP expects such a dwelling to accommodate 2 car spaces off street, equating to 100m³ of excavation in certain circumstances.

If a 230m² site accommodating a dwelling with a floor area 202m² is allowed 100m³ of excavation to accommodate 2 cars, then a larger house of e.g. 550m² on a 1,000m² site might reasonably be allowed 200m³ or the equivalent of 4 car parking spaces.

The case studies referred to in this report show that subterranean areas are being increasingly developed to provide accommodation for purposes other than parking. This accommodation includes general storage, studios, gymnasiums, home theatres, cellars and water craft storage, etc. It is considered that an allowance should be made that would facilitate reasonable expectations for this type of accommodation in subterranean areas. Based on the case studies and investigation of what area might reasonably be needed to permit such accommodation it is considered that an additional component would equate to 5% of the site area. Therefore, using the above examples, on a 230m² site 111.5m³ of excavation would be permissible. On a 1,000m² site 250m³ of excavation would be permissible.

The volume of excavation that would be permissible on a site based the area of a site and the above criteria is shown on the following graph, table A.

TABLE A



The following case studies of DAs involving single dwellings provides an indication of what the impact/comparison of applying the excavation volume rates from the above graph would be:

- 9a Bayview Hill Road, Bellevue Hill:

Site area	436m ²
Excavation proposed	231m ³
Applying proposed rates	139m ³
‘Exceedance’	92m ³
	(66%)

[2 storey, 4 bedroom (+ study) dwelling with basement parking for 2 cars]

- 54 Kings Road, Vaucluse:

Site area	632.5m ²
Excavation proposed	357.3m ³
Applying proposed rates	176m ³
‘Exceedance’	181.3m ³
	(97%)

[2/3 storey, 4 bedroom (+ guest bedroom) dwelling with 4 car parking spaces]

- 23 Victoria Street, Watson's Bay:

Site area	1,955m ²
Excavation approved	1,690m ³
Applying proposed rates	428m ³
'Exceedance'	1,262m ³
	(295%)

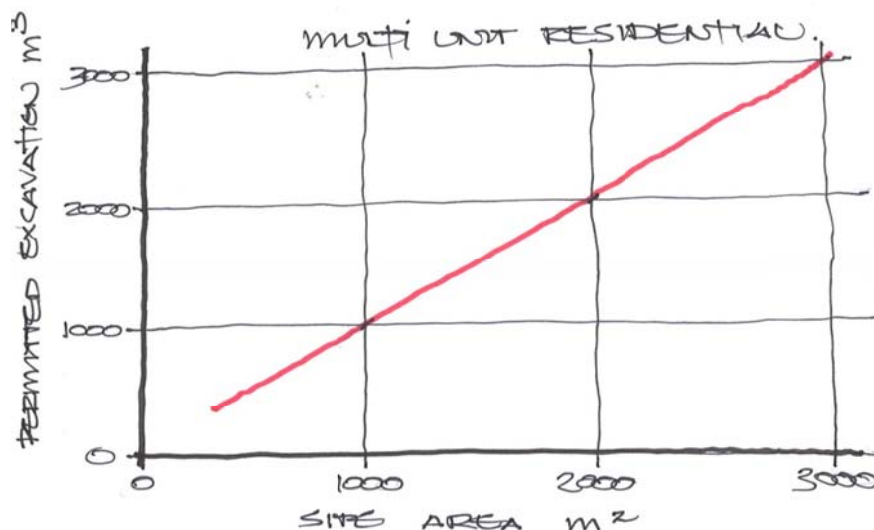
[2 storey 4 bedroom (+ guest room) dwelling on a large, level site; basement accommodating 4 car parking spaces, turning area, hot water & storage, communication room, gym, media, pool equipment & water craft storage (DA777/08)]

Multi unit

Lots zoned to facilitate multi unit development have different demands on excavation to single residences. This is because the fixed FSR will produce the same density throughout the zone irrespective of the area of individual sites. With a fixed FSR the demand for excavation to accommodate car parking is directly linked to lot size. With parking associated with multiple unit developments the expectation is that cars enter and exit the public road in a forward direction, i.e. there is a need for vehicle turning area on site. A 1000m² site zoned medium density, with an FSR of 0.75:1 would allow 750m² of floor area which would accommodate 6 residences with an average size of 125m². If an appropriate range of apartment types are provided, approximately 1.75 cars will be required per unit, meaning 10.5 cars. If 6m x 3m x 2.8m is allowed for each car space and a further 5 x 3 x 2.8m for circulation, plant, storage, slope of land, etc. then 92.4m³ of excavation would be required per car³. For 10.5 cars 966m³ of excavation might be required. This rounds-up to 1000m³/1000m² of site.

This relationship is shown in table B below.

TABLE B



³ 100m³ of excavation/car space is consistent with proposals for large multi-space underground car parks proposed at the Scottish Hospital (106m³/car space) and the CYCA (99m³/car space)

The following case studies of DAs involving multi-unit developments provides an indication of what the impact/comparison of applying the excavation volume rates from the above graph would be:

- 88-96 Newcastle Street, Rose Bay
Site area 3,470.7m²
Excavation proposed 3,920.0m³
Applying proposed rates 3,470.7m³
'Exceedance' 450.0m³
(13%)

[21 x 2 & 2 x 1 bedroom units with basement parking for 41 cars]

- 3-5 Loftus Road, Darling Point
Site area 961.0m²
Excavation proposed 2,298.35m³
Applying proposed rates 961.0m³
'Exceedance' 1,337.35m³
(139%)

[4 x 3 bedroom units on a steeply sloping site with car lift and parking for 8 cars]

- 45-47 Spencer Street, Rose Bay
Site area 1,235.7m²
Excavation proposed 1,162.0m³
Applying proposed rates 1,235.7m³
'Exceedance' -73.7m³

[4 x 4 bedroom units with basement parking for 9 cars and a swimming pool]

- 223-227 O'Sullivan Road, Bellevue Hill (6 units) Site area 1,212.0m²
Excavation proposed 2,700.0m³
Applying proposed rates 1,212.0m³
'Exceedance' 1,488.0m³
(123%)

[6 x 3 bedroom units with basement parking for 16 cars and 2 swimming pools]

These are random case studies. The calculations are provided primarily for comparative purposes. They give an indication of how the volume of excavated material allowed under the recommended sliding scales compares with actual development proposals.

In all but one of these cases the volume of excavated material proposed/approved exceeds that which would be allowed under the recommended sliding scales. However, the degree of exceedance varies considerably, from 13% to 139%.

With development of sloping sites excavation is virtually unavoidable. The complexity of establishing what is a reasonable amount of excavation on sloping sites will increase with the slope of the land, i.e. the steeper the slope of the land the more complex it will be to comply with the excavation rates in the tables referred to earlier. Although the excavation volumes contained in the tables take the influence of slope into account, the topography of our area is such that strict adherence with the tables will not always be possible or practicable. In order to protect the integrity of the recommended volume controls it is considered necessary to include an allowance for sloping sites.

This raises the question of what should be regarded as a sloping site for the purpose of making an allowance. Because the prime purpose of excavation is to provide garaging the gradients which apply to driveway access can be used as a guide. Maximum driveway gradients are 16% (about 1:6) with transition grades of 12% (about 1:8). Therefore, it is considered that the allowance should apply to sites where the difference in levels between the street and the highest point of the land represents a gradient greater than 1:8. The allowance should only apply where the development satisfies other controls which relate to excavation.

The specific changes required to our planning controls to limit the volume of material that may be excavated on a site are shown on annexure A.

7. Conclusion

Our current planning controls in relation to excavation are directed to the area of land over which excavation may occur. This is mainly through controls which require buildings and excavation to be setback from property boundaries.

This report concludes that a more effective approach to limit excavation is to place controls on the volume of material which may be excavated on an individual site. The controls would be based on the category of residential development, site area and land slope.

Another approach is to impose a numeric depth limit or subterranean building envelope on excavation. However, for the reasons discussed earlier in this report, the introduction of this approach should be deferred pending the major review of our planning controls as part of the Standard Instrument and the consolidated DCP process.

As the excavation of land can give rise to ESD related issues our excavation related planning controls should include specific objectives which refer to ESD. It is also considered appropriate to amend our controls so it is explicit that they cover all forms of excavation.

The specific changes to our planning controls for achieving a more effective approach to limiting excavation are set out in Annexure A. The changes to the WLEP would apply to the whole of the Woollahra local government area. The RDCP contains the controls which apply to the assessment of the majority of development proposals which we deal with where excavation is proposed. The precinct specific DCPs have controls which deal with the specific excavation associated issues within those precincts. No changes are considered necessary to the precinct specific DCPs.

Peter Kauter, Executive Planner
Tom Jones, Urban Design Planner

Allan Coker, Director – Planning & Development

Annexure

Recommended changes to planning controls

ANNEXURE A

RECOMMENDED CHANGES TO PLANNING CONTROLS

WOOLLAHRA LOCAL ENVIRONMENTAL PLAN 1995

- Include an additional objective in cl.2(2)(1) as follows:

(v) to ensure the principles of ecologically sustainable development (ESD) are considered to avoid excessive excavation

- Include an additional item which we must have regard to in relation to the permanent or temporary effects of excavation in the consideration of DAs in cl.18(1) as follows:

(g) the ecology, particularly in relation to the principles of ecologically sustainable development (ESD)

- Amend cl.18(1)(2) to read as follows (change shown underlined):

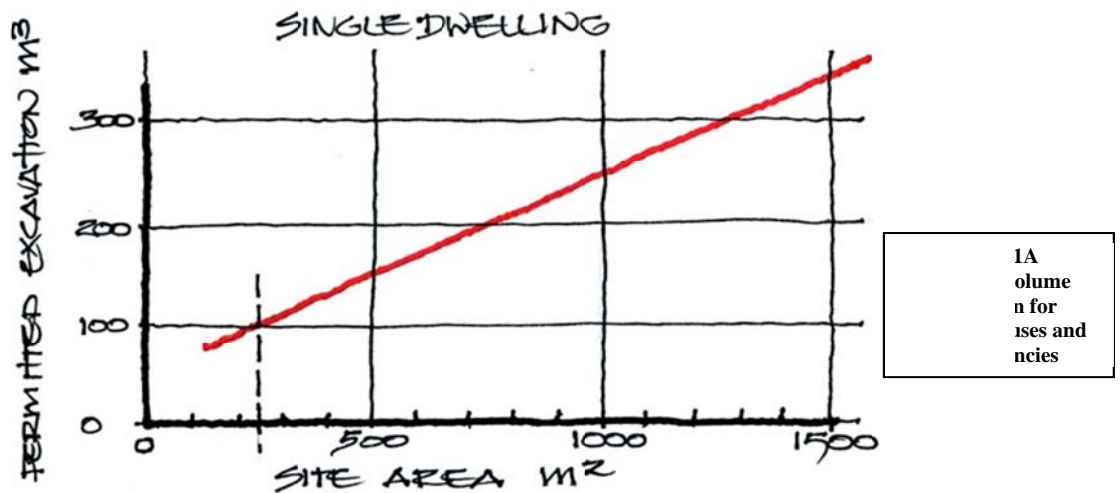
The Council may decline to grant such a consent unless it has considered specialist reports, including geotechnical reports, structural engineering reports, hydrology reports, ecological reports and dilapidation reports of properties which may be affected by the proposed excavation.

WOOLLAHRA RESIDENTIAL DEVELOPMENT CONTROL PLAN

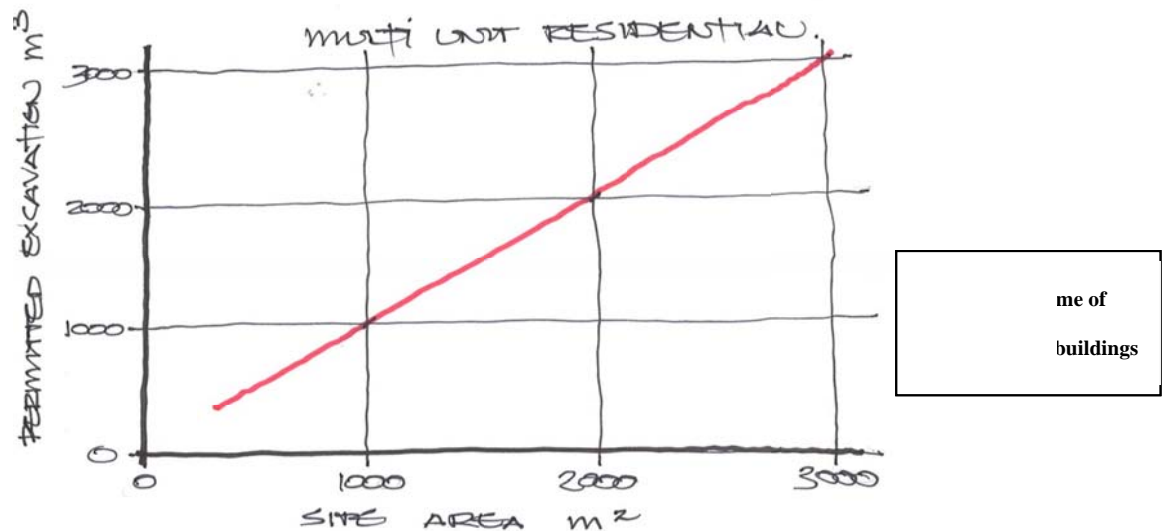
(The changes are shown with additional wording underlined and deleted text ~~striketrough~~)

- O5.2.4** To limit site excavation and minimise cut and fill to ensure that building form relates to the topography, to satisfy the principles of ecologically sustainable development and to protect the amenity of adjoining properties both during and after construction.
- C 5.2.15** The building footprint is designed to minimise excavation, including cut and fill.
- C 5.2.16** The outer edge of excavation, piling and all sub-surface walls shall not be less than 1.5m from a front, side or rear boundary.
[NOTE: The front, rear and side building setbacks referred to in C5.2.1, C5.2.2, C5.2.3 and C5.2.5 also apply to all parts of the building, including where it extends below ground level]
- C 5.2.17** To minimise excavation, including cut and fill, on sloping sites and to encourage good quality internal environments, any habitable room of a dwelling must have at least one external wall fully above existing ground level (*see diagram 5.2.11*).
- C 5.2.17A** The volume of material to be excavated in connection with a site used as a single dwelling or dual occupancy is not to exceed the volume shown on the sliding scale in figure 5.2.11A.

C 5.2.17B The volume of material to be excavated in connection with a site used as residential flat building is not to exceed the volume shown on the sliding scale in figure 5.2.11B.



MAXIMUM VOLUME OF EXCAVATION FOR DWELLING HOUSES AND DUAL OCCUPANCIES



MAXIMUM VOLUME OF EXCAVATION FOR RESIDENTIAL FLAT BUILDINGS

C.5.2.17C An allowance may be made in respect to the volumes shown in figures 5.2.11A and 5.2.11B for sloping sites (i.e. where the difference in levels between the point of vehicular entry to the site and any part of the land represents a gradient of greater than 1:8), where the development satisfies all other excavation controls.

**POLITICAL DONATIONS DECISION MAKING FLOWCHART
FOR THE INFORMATION OF COUNCILLORS**

