

Statement of Environmental Effects

September 2020

Proposed retaining wall and associated works

at

No.21 Kirra Road, Allambie Heights NSW 2100

INTRODUCTION

This report has been prepared to accompany a development application to Northern Beaches Council for proposed works to an existing residential dwelling at No.21 Kirra Road, Allambie Heights. This report should be read in conjunction with the following documentation:

- 2010/DA-01 Site Analysis Plan
- 2010/DA-02 Proposed Site Plan & Sections
- 14627-20 DET Detail Survey prepared by 'C&A Surveyors NSW'

SITE DESCRIPTION AND SURROUNDS

The subject site is described as Lot 9 in DP 114000 and is known as No.21 Kirra Road, Allambie Heights. Pursuant to the Northern Beaches Council Local Planning Controls, the subject site has the following characteristics:

- Zoned R2 Low Density Residential
- Landslip Risk Area B

The subject site is an irregular shaped lot, with the front boundary facing south fronting Kirra Road. The subject site has a boundary width of 20.725m at the front and 22.860m at the rear. The subject site has a boundary length of 35.050m along the eastern boundary and 34.135m along the western boundary. The subject site is a sloping site with a slope running diagonally across the site from the western corner of the front boundary (RL 106.180) to the eastern corner of the rear boundary (RL 102.250). The subject site has a total site area of 733.50m².

The existing dwelling is a mixed single and 2 storey brick dwelling with tiled roof. This dwelling is to remain as existing, with no proposed works associated with the dwelling.

To the east of the subject site is a 2 storey brick and weatherboard house with tiled roof, known as No.19 Kirra Road. To the west of the subject site is a 2 storey weatherboard house with metal roof, known as No.23 Kirra Road. To the north of the subject site is a 2 storey weatherboard house with metal roof, known as No.8 Libya Crescent.

The streetscape of Kirra Road is made up of a mix of single and 2 storey dwellings in varying architectural styles. The proposed works will have no impact on the immediate streetscape.

THE PROPOSAL

The proposed works consist of:

- New Retaining Wall and Associated Earthworks.

New Retaining Wall and Associated Earthworks:

The subject site currently has no retaining walls along any of its boundaries. Considering the slope of the subject site and surrounding area, a retaining wall system is proposed in order to create a safer outdoor amenity for the occupants of the subject site, as well as the neighbouring sites.

Currently, the subject site has a slope running diagonally across the site from west to east. The highest point on the site is located at the western front corner of the site with RL 106.180. The lowest point on the site is located at the eastern rear corner of the site with RL 102.250. There is also a large drop along the eastern and northern boundaries, which is especially apparent at the rear corner of the site, where these boundaries meet. The drop along the northern boundary between the subject site and No.8 Libya Crescent is approximately 1.110m, while the drop along the eastern boundary varies from 0m at the front and approximately 1.040m at the rear.

With these significant level changes between the subject site and neighbouring sites, a retaining wall is proposed to run along the eastern boundary and partially along the northern boundary in order to preserve and enhance the existing amenity and safety of the subject site and neighbouring sites.

The north east corner of the subject site will also be levelled to RL 102.750 (refer to 2010/DA-02) to reduce the existing slope of the site, so that the rear yard can be utilised to its maximum potential in terms of usable private open space.

No.19 Kirra Road, has an already approved Development Application (DA) and Construction Certificate (CC) on the site for a new dwelling and associated retaining walls. This approved DA is known as DA2016/1345 and the CC is known as CC2017/0205. The approved dwelling has been completed, however the approved retaining walls are yet to be constructed.

Discussions have taken place between the owners of No.19 Kirra Road and the subject site in relation to the retaining walls and an agreement has been made to combine the approved retaining wall of No.19 with the proposed retaining wall of the subject site, so that the end result is 1 continuous retaining wall, rather than 2 separate retaining walls. An owner's consent letter from No.19 Kirra Road forms part of this submission as evidence that an agreement has been met.

GENERAL PLANNING AUTHORITY REQUIREMENTS

The proposed development is subject to the provisions of two statutory planning instruments:

- Warringah Local Environmental Plan 2012 (WLEP 2011)
- Warringah Development Control Plan (WDCP)

Clauses from these documents are shown in italic

WLEP 2012

2.1 Land use zones

The subject site is zoned R2 Low Density Residential.

In Response:

The proposed works are permissible within this zone.

6.2 Earthworks

1. *The objectives of this clause are as follows:*
 - a. *to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,*
 - b. *to allow earthworks of a minor nature without requiring separate development consent.*
2. *Development consent is required for earthworks unless:*
 - a. *the work is exempt development under this Plan or another applicable environmental planning instrument, or*
 - b. *the work is ancillary to other development for which development consent has been given.*
3. *Before granting development consent for earthworks, the consent authority must consider the following matters:*
 - a. *the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
 - b. *the effect of the proposed development on the likely future use or redevelopment of the land,*
 - c. *the quality of the fill or the soil to be excavated, or both,*
 - d. *the effect of the proposed development on the existing and likely amenity of adjoining properties,*
 - e. *the source of any fill material and the destination of any excavated material,*
 - f. *the likelihood of disturbing relics,*
 - g. *the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

In Response:

The proposed works comply with the above controls. The proposed retaining wall and associated earthworks will have no detrimental effect on the surrounding area. The existing drainage patterns will not be impacted and will remain. The majority of soil used to raise the rear corner of the subject site will be existing soil from the proposed earthworks that will be redistributed over the subject site.

6.4 Development on sloping land

1. *The objectives of this clause are as follows:*
 - a. *to avoid significant adverse impacts on development and on properties in the vicinity of development sites resulting from landslides originating either on or near sloping land,*
 - b. *to ensure the impacts of storm water runoff from development on or near sloping land are minimised so as to not adversely affect the stability of the subject and surrounding land,*
 - c. *to ensure subsurface flows are not adversely affected by development so as to not impact on the stability of existing or adjoining land.*
2. *This clause applies to land shown as Area A, Area B, Area C, Area D and Area E on the Landslip Risk Map.*
3. *Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:*
 - a. *the application for development has been assessed for the risk associated with landslides in relation to both property and life, and*
 - b. *the development will not cause significant detrimental impacts because of stormwater discharge from the development site, and*
 - c. *the development will not impact on or affect the existing subsurface flow conditions.*

In Response:

The proposed works comply with the above controls. The subject site is classed as 'Area B' on the Landslip Risk Map. In accordance with Council requirements, a Preliminary Assessment from a qualified Geotechnical Engineer has been provided as part of this submission.

WDCP 2016

It will be readily appreciated that because the proposed works are a retaining wall and associated earthworks, that parts of the planning controls specified by the WDCP may not be relevant. Those planning controls contained within the WDCP which are directly or indirectly relevant are:

PART B – BUILT FORM CONTROLS

- B5 Side Boundary Setbacks
- B9 Rear Boundary Setbacks

PART C – SITING FACTORS

- C4 Stormwater
- C5 Erosion and Sedimentation
- C7 Excavation and Landfill
- C9 Waste Management

PART D – DESIGN

- D1 Landscaped Open Space and Bushland Setting

PART E – THE NATURAL ENVIRONMENT

- E10 Landslip Risk

PART B – BUILT FORM CONTROLS

B5 Side Boundary Setbacks

Objectives:

- To provide opportunities for deep soil landscape areas.
- To ensure that development does not become visually dominant.
- To ensure that the scale and bulk of buildings is minimised.
- To provide adequate separation between buildings to ensure a reasonable level of privacy, amenity and solar access is maintained.
- To provide reasonable sharing of views to and from public and private properties.

Requirements:

1. Development on land shown coloured on the DCP Map Side Boundary Setbacks is to maintain a minimum setback from side boundaries as shown on the map.
2. Side boundary setback areas are to be landscaped and free of any above or below ground structures, car parking or site facilities other than driveways and fences.
3. On land within the R3 Medium Density Residential zone, above and below ground structures and private open space, basement car parking, vehicle access ramps, balconies, terraces, and the like shall not encroach the side setback except as provided for under Exceptions below.

Land Zoned R2:

All development:

- Screens or sunblinds, light fittings, electricity or gas meters, or other services infrastructure and structures not more than 1 metre above ground level (existing) such as unroofed terraces, balconies, landings, steps or ramps may encroach beyond the minimum side setback.

Ancillary to a dwelling house:

- Consent may be granted to allow a single storey outbuilding, carport, pergola or the like that to a minor extent does not comply with the requirements of this clause.

In Response:

The proposed works comply with the above controls. The proposed retaining wall along the eastern and northern boundaries will form part of the property fence line.

B9 Rear Boundary Setbacks

Objectives:

- To ensure opportunities for deep soil landscape areas are maintained.
- To create a sense of openness in rear yards.
- To preserve the amenity of adjacent land, particularly relating to privacy between buildings.
- To maintain the existing visual continuity and pattern of buildings, rear gardens and landscape elements.
- To provide opportunities to maintain privacy between dwellings.

Requirements:

1. *Development is to maintain a minimum setback to rear boundaries.*
2. *The rear setback area is to be landscaped and free of any above or below ground structures.*
3. *On land zoned R3 Medium Density where there is a 6m rear boundary setback, above and below ground structures and private open space, including basement carparking, vehicle access ramps, balconies, terraces, and the like shall not encroach the rear building setback.*
4. *The rear building setback for land zoned IN2 Light Industrial at Tepko Road that adjoins land zoned R2 Low Density Residential is not to be used for industrial purposes or vehicle access.*
5. *The rear building setback for land zoned IN2 Light Industrial in the vicinity of Campbell Parade, Manly Vale is not to be used for industrial purposes or vehicle access*

Exceptions:

On land zoned R2 Low Density Residential, and land zoned RU4 Rural Small Holdings that has frontage to "The Greenway", Duffy's Forest, where the minimum rear building setback is 6 metres, exempt development, swimming pools and outbuildings that, in total, do not exceed 50% of the rear setback area, provided that the objectives of this provision are met.

In Response:

The proposed works comply with the above controls.

PART C – SITING FACTORS

C4 Stormwater

Objectives:

- *To protect and improve the ecological condition of Warringah's beaches, lagoons, waterways, wetlands and surrounding bushland;*
- *To minimise the risk to public health and safety;*
- *To reduce the risk to life and property from flooding;*
- *Integrate Water Sensitive Urban Design measures into the landscape and built form to maximise amenity.*
- *To manage and minimise stormwater overland flow, nuisance flooding and groundwater related damage to properties.*
- *To protect Council's stormwater drainage assets during development works and to ensure Council's drainage rights are not compromised.*
- *To minimise the quantity of stormwater runoff from new development on Council's drainage system.*

Requirements:

1. *Stormwater runoff must not cause downstream flooding and must have minimal environmental impact on any receiving stormwater infrastructure, watercourse, stream, lagoon, lake and waterway or the like.*
2. *The stormwater drainage systems for all developments are to be designed, installed and maintained in accordance with Council's Water Management Policy.*

In Response:

The proposed works comply with the above controls. The proposed works will have no impact on existing stormwater runoff.

C5 Erosion and Sedimentation

Objectives:

- To reduce the potential for soil erosion and adverse sedimentation impacts upon the environment.
- To prevent the migration of sediment off the site onto any waterway, drainage systems, public reserves, road reserve, bushland or adjoining private lands.
- To prevent any reduction in water quality downstream of the development site.

Requirements:

1. All developments which involve the disturbance of land must install and maintain erosion and sediment controls until the site is fully stabilised.
2. Any erosion and sedimentation is to be managed at the source.
3. Erosion, sediment and pollution controls including water discharge from the site must comply with Council's Water Management Policy.
4. An Erosion and Sediment Control Plan must be prepared in accordance with Landcom's Managing Urban Stormwater: Soil and Construction Manual (2004) for all development which involves the disturbance of up to 2500m² of land.
5. Soil and Water Management Plan must be prepared in accordance with Landcom's Managing Urban Stormwater: Soil and Construction Manual (2004) for all development which involves the disturbance of more than 2500m² of land.

In Response:

The proposed works comply with the above controls. Appropriate erosion and sediment control fences and meshes will be installed during the works to manage any erosion and sedimentation at the source. The proposed retaining walls will assist in stabilising the subject site.

C7 Excavation and Landfill

Objectives:

- To ensure any land excavation or fill work will not have an adverse effect upon the visual and natural environment or adjoining and adjacent properties.
- To require that excavation and landfill does not create airborne pollution.
- To preserve the integrity of the physical environment.
- To maintain and enhance visual and scenic quality.

Requirements:

1. All landfill must be clean and not contain any materials that are contaminated and must comply with the relevant legislation.
2. Excavation and landfill works must not result in any adverse impact on adjoining land.
3. Excavated and landfill areas shall be constructed to ensure the geological stability of the work.
4. Excavation and landfill shall not create siltation or pollution of waterways and drainage lines, or degrade or destroy the natural environment.
5. Rehabilitation and revegetation techniques shall be applied to the fill.
6. Where landfill is necessary, it is to be minimal and shall have no adverse effect on the visual and natural environment or adjoining and surrounding properties.

In Response:

The proposed works will comply with the above controls. Existing soil that is excavated will be redistributed across the subject site as required. Any new soil that is introduced to the subject site will be in accordance with Council requirements.

C9 Waste Management

Objectives:

- To facilitate sustainable waste management in a manner consistent with the principles of Ecologically Sustainable Development (ESD).
- To achieve waste avoidance, source separation and recycling of household and industrial/commercial waste.
- To design and locate waste storage and collection facilities which are convenient and easily accessible; safe; hygienic; of an adequate size, and with minimal adverse impacts on residents, surrounding neighbours, and pedestrian and vehicle movements.
- To ensure waste storage and collection facilities complement waste collection and management services, offered by Council and the private service providers and support on-going control for such standards and services.
- To minimise risks to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
- To minimise any adverse environmental impacts associated with the storage and collection of waste.
- To discourage illegal dumping.

Requirements:

All development that is, or includes, demolition and/or construction, must comply with the appropriate sections of the Waste Management Guidelines and all relevant Development Applications must be accompanied by a Waste Management Plan.

In Response:

The proposed works comply with the above controls. A Waste Management Plan has been prepared and forms part of this submission.

PART D – DESIGN

D1 Landscaped Open Space and Bushland Setting

Objectives:

- To enable planting to maintain and enhance the streetscape.
- To conserve and enhance indigenous vegetation, topographical features and habitat for wildlife.
- To provide for landscaped open space with dimensions that are sufficient to enable the establishment of low lying shrubs, medium high shrubs and canopy trees of a size and density to mitigate the height, bulk and scale of the building.
- To enhance privacy between buildings.
- To accommodate appropriate outdoor recreational opportunities that meet the needs of the occupants.
- To provide space for service functions, including clothes drying.
- To facilitate water management, including on-site detention and infiltration of stormwater.

Requirements:

1. The required minimum area of landscaped open space is shown on DCP Map Landscaped Open Space and Bushland Setting. To measure the area of landscaped open space:
 - a. Driveways, paved areas, roofed areas, tennis courts, car parking and stormwater structures, decks, etc, and any open space areas with a dimension of less than 2 metres are excluded from the calculation;
 - b. The water surface of swimming pools and impervious surfaces which occur naturally such as rock outcrops are included in the calculation;
 - c. Landscaped open space must be at ground level (finished); and
 - d. The minimum soil depth of land that can be included as landscaped open space is 1 metre.

2. *Where land is shown on DCP Map Landscaped Open Space and Bushland Setting as "Bushland Setting", a minimum of 50% of the site area must remain undisturbed by development and is to be kept as natural bushland or landscaped with locally indigenous species.*
3. *In Cottage Point the relationship of the locality with the surrounding National Park and Cowan Creek waterway will be given top priority by enhancing the spread of indigenous tree canopy and protecting the natural landscape including rock outcrops and remnant bushland.*

In Response:

The proposed works comply with the above controls. The proposed works will have no impact on the existing landscape area or existing soil depths.

PART E – THE NATURAL ENVIRONMENT

E10 Landslip Risk

Objectives:

- *To ensure development is geotechnically stable.*
- *To ensure good engineering practice.*
- *To ensure there is no adverse impact on existing subsurface flow conditions.*
- *To ensure there is no adverse impact resulting from stormwater discharge.*

Requirements:

1. *The applicant must demonstrate that:*
 - *The proposed development is justified in terms of geotechnical stability; and*
 - *The proposed development will be carried out in accordance with good engineering practice.*
2. *Development must not cause detrimental impacts because of stormwater discharge from the land.*
3. *Development must not cause detrimental impact on the existing subsurface flow conditions including those of other properties.*
4. *For land identified as being in Area B or Area D:*

A preliminary assessment of site conditions prepared in accordance with the Checklist for Council's assessment of site conditions must be carried out for development. The preliminary assessment must be prepared by a suitably qualified geotechnical engineer/ engineering geologist and must be submitted with the development application.

If the preliminary assessment determines that a geotechnical report is required a report must be prepared by a suitably qualified geotechnical engineer / engineering geologist and must be submitted with the development application.

Also, if the preliminary assessment determines that a geotechnical report is required a hydrological assessment of stormwater discharge and subsurface flow conditions, prepared by a suitably qualified geotechnical/ hydrological engineer, must be submitted with the development application.

In Response:

The proposed works comply with the above controls. The subject site is identified as being in Area B on the Landslip Risk Map. In accordance with Council requirements, a preliminary assessment from a qualified Geotechnical Engineer forms part of this submission.

GROSS FLOOR AREA (GFA) AND LANDSCAPE AREA CALCULATIONS

- Total Site Area - 733.50m²
- Existing GFA - unchanged by proposed works
- Existing Landscape Area - unchanged by proposed works

SITE WASTE MANAGEMENT

The items impacted by the proposed works will consist of:

- Timber fence paling
- Soil

Any existing material which has been removed and cannot be reused in the proposed works will be sorted as materials for recycling.

Waste storage containers, skip bins and the like will be stored on site where possible, as needed. If required, activity approval will be sort from council for alternative location.

Dust mitigation will be implemented during the proposed works and will include:

- Dust screens where required.
- All stockpiles and loose materials will be covered when not in use.
- All equipment, where capable, will be fitted with dust catchers.

All skip bins will be kept covered when not being filled or emptied.

BUILDING CODE OF AUSTRALIA

All aspects of the proposed works will be executed in compliance with the current edition of The Building Code of Australia (as amended), current editions of relevant Australian Standards (as amended) and current requirements of other authorities relevant to the proposed works.

CONCLUSION

The proposed retaining wall and associated earthworks at No.21 Kirra Road, Allambie Heights will have no impact on the surrounding properties and streetscape. The proposed works create a more useable private open space and overall safer amenity for the subject site and surrounds.

The proposed works seek to comply with the requirements and objectives of the relevant sections of WLEP and WDCP. Therefore it is considered that these proposed works at No.21 Kirra Road, Allambie Heights should be supported.