DEMOLITION - STATEMENT OF ENVIRONMENTAL EFFECTS

REPORT PREPARED FOR:

LOT 27, NO. 2 MARETIMO STREET, BALGOWLAH, NSW 2093

PROPOSAL DESCRIPTION:
Demolition of existing structures, and construction of a new two-level duplex dwelling over basement parking, including associated swimming pools

REPORT PREPARED
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Application Details

TYPE OF APPLICATION:	Development Application
PROPERTY ADDRESS:	LOT 27, NO. 2 MARETIMO STREET, BALGOWLAH, NSW 2093
OWNERS:	BKEA Investment
APPLICANT:	MarkQ Pty Ltd
PROPOSAL:	Demolition of existing structures, and construction of a new two-level duplex dwelling over basement parking, including associated swimming pools
AUTHOR:	MarkQ Pty Ltd – John Carl Francisco **Registered and Licensed Architect, Bachelor of Science in Architecture**
DATE:	12/12/2024
COUNCIL:	Northern Beaches Council

Key Issues

A comprehensive assessment of the existing structure at Lot 27, No. 2 Maretimo Street, Balgowlah, has been conducted. Based on this assessment, no key issues have been identified that would hinder the proposed demolition.

The proposed demolition is fully compliant with the requirements of the Building Code of Australia (BCA) 2022, Volume 2, ensuring adherence to structural provisions and site safety guidelines. Additionally, the project will comply with the Northern Beaches Development Control Plan (DCP) regarding landscaping and tree removal policies. Environmental protection will be prioritized, with strict adherence to NSW Environmental Protection Authority (EPA) and local council regulations.

Therefore, the proposed demolition is deemed suitable and in harmony with both local and national regulations, ensuring minimal impact on the environment and the local community.

Background

History

The site is currently developed with an existing two-storey brick building comprising two units, featuring a tiled roof and a detached garage.

Introduction

This report outlines the environmental considerations and proposed measures to manage potential impacts associated with the demolition of the existing structures at Lot 27, No. 2 Maretimo Street, Balgowlah, NSW 2093. The project involves the removal of a two-storey brick residential building with a tile roof and a detached double garage. The works will comply with all relevant legislation, including the Environmental Planning and Assessment Act 1979 and the Protection of the Environment Operations Act 1997.

Site location and context

The project lot at Lot 27, No. 2 Maretimo Street, Balgowlah, NSW 2093, is a 619.7m² property that includes a solid double-brick, duplex-style house. This structure offers potential for dual living, with near-identical layouts across its two levels. The property is situated in a quiet area offering views of the Sydney CBD skyline and is surrounded by convenient amenities like Seaforth and Balgowlah villages, as well as proximity to harbor beaches and reserves. The surrounding developments consist of two single storey level brick dwelling.

The site in question is approximately 84.489m above sea level according to a recent survey done for the site. The site falls towards Maretimo Street.

The subject site is suitable to accommodate the proposed development, which has been designed well in-line with the desired future character of Northern Beaches and will generally comply with the DCP and LEP requirements of the Northern Beaches Council

Past and present use, as far as investigation has shown, the site has not been used for anything apart from it being a residential dwelling.

Relevant Planning Instruments:

- BCA 2022 (Volume 2): Demolition activities to comply with the structural provisions and site safety guidelines.
- Northern Beaches DCP: Adherence to landscaping and tree removal policies.
- Environmental Protection: Compliance with NSW EPA and local council regulations

Site zoning

The site in question **(LOT 27, NO. 2 MARETIMO STREET, BALGOWLAH, NSW 2093)** is located within an R2 - Low Density Residential zone under the provisions of the Northern Beaches Local Environmental Plan. The site zoning is suitable for the proposal and permissible with consent according to the Northern Beaches LEP.

The objectives of demolition:

The objectives of this demolition are multifaceted, encompassing both practical and environmental considerations. Primarily, demolition aims to safely remove structures that need to be replaced to make way for new developments. This process typically involves deconstructing or dismantling buildings in a manner that minimizes hazards and environmental impact.

Key objectives of demolition include:

1. Safety and Structural Integrity: Ensuring the safe removal of hazardous materials, such as asbestos or lead, and the safe dismantling of structures to protect workers and the surrounding community.

2. Environmental Sustainability: Reducing waste and promoting recycling by salvaging reusable materials such as bricks, metal, and wood, which can be repurposed in future projects.

3. Compliance with Regulations: Adhering to local, state, or federal guidelines regarding noise, dust control, and the safe disposal of materials to minimize environmental and health risks.

4. Facilitating New Development: Making space for new construction projects, improving site accessibility, or complying with updated zoning laws and urban development requirements.

5. Restoration of the Site: Preparing the site for subsequent land use by leveling or clearing the ground to accommodate new foundations, utilities, or landscaping.

By addressing these objectives effectively, demolition can contribute to urban renewal and environmental sustainability while ensuring public health and safety.

Demolition

The proposed demolition involves the removal of a two-story duplex-style residential building and associated structures, including detached garages and external landscaping. The property is located on a 619.7m² lot, zoned residential, and includes mature vegetation. This demolition will prepare the site for redevelopment while adhering to environmental and regulatory standards.

Demolition Scope

Primary Building:

- Demolition of the duplex, including roof tiles, brick walls, internal partitions, and fixtures.
- Removal of plasterboard, floor coverings, kitchen fittings, and windows.

Secondary Structures:

- Demolition of detached garages, carport, and retaining walls.

Vegetation Clearance:

- Removal or relocation of trees as detailed

Tree Removal and Relocation

The following trees are proposed for removal or relocation due to their location and interference with demolition:

- Front trees:
    - S4 T0.2 H6 & S6 T0.2 H4

- LHS trees:
    - S4 T0.2 H6, S4 T0.1 H3, S6 T0.2 H4, S6 T0.3 H7, S4 T0.2 H3, S4 T0.2 H3 & S2 T0.1 H4
- Rear trees:
    - S4 T0.2 H4, S6 T0.3 H6, S12 T0.5 H7, S10 T0.3 H7, S4 T0.2 H4, S4 T0.2 H4, S4 T0.4 H5

For more information, please refer to the submitted Demolition Plan.

Environmental Considerations:

Waste Management:

- Sorting and recycling of demolition materials, including concrete, bricks, metals, and timber.
- Safe disposal of asbestos-containing materials, if identified.

Noise and Dust Control:

- Use of sound-dampening equipment and water sprays for dust suppression.
- Restricted demolition hours to minimize neighborhood disturbance.

Tree Preservation:

- Retention of healthy, non-conflicting trees where feasible.
- Arborist assessment for removal/relocation and council approvals under Northern Beaches DCP.

Soil and Erosion Control:

- Sediment control measures to protect remaining soil and vegetation.

Asbestos Management:

Licensed contractors will handle asbestos removal in compliance with Work Health and Safety Act 2011 and EPA regulations.

Mitigation Measures:

To minimize the environmental and social impacts of the demolition, several mitigation strategies will be implemented. Noise barriers and sound-dampening equipment will be utilized to limit disturbances to neighboring properties, particularly during restricted demolition hours. Dust suppression measures, such as water sprays, will be in place to maintain air quality and reduce particulate emissions. Sediment control systems will be deployed to prevent soil erosion and protect the remaining vegetation. Furthermore, compensatory planting of native species will be integrated into the site's redevelopment plan to offset the ecological loss caused by tree removal. Licensed contractors will ensure safe handling and disposal of hazardous materials, including asbestos, under stringent safety protocols.

Compliance Standards:

The demolition process will comply with all relevant regulations and standards. This includes adherence to the BCA 2022 (Volume 2) provisions for structural safety during demolition and the requirements outlined in the Northern Beaches Development Control Plan (DCP) for vegetation management and site redevelopment. Noise and dust control measures will align with the Protection of the Environment Operations Act 1997 to minimize environmental pollution. Additionally, asbestos handling and removal will be conducted in accordance with the Work Health and Safety Act 2011 and EPA regulations, ensuring a safe and environmentally responsible process.

Estimated Timeline

The entire demolition process is expected to span approximately six to nine weeks. Initial site setup will take one to two weeks, focusing on the installation of erosion controls, tree protection, and hazardous material assessment. The demolition of the structures, including the house, garage, and carport, will occur over a period of three to five weeks, depending on weather conditions and complexity. Waste disposal, site clearing, and final inspections are anticipated to take an additional one to two weeks, ensuring the site is cleared and prepared for redevelopment.

Setbacks

The existing house adheres to standard residential setbacks typical for the area. The front setback is aligned with the local council's guidelines, which ensure proper spacing between the structure and the street. Side and rear setbacks follow applicable zoning regulations, maintaining privacy and access to neighboring properties.

Category	As-built Setbacks	Comply
Building Setback	7.362m	Yes
Garage Setback	24.660m	Yes
Side Setback (ground)	1.309m & 4.283	Yes
Side Setback (first)	1.309m & 4.283	Yes
Rear setback	GF Rear: 20.099m FF Rear: 20.945m	Yes

Parking

The existing house adheres to standard residential setbacks typical for the area. The front setback is aligned with the local council's guidelines, which ensure proper spacing between the structure and the street. Side and rear setbacks follow applicable zoning regulations, maintaining privacy and access to neighboring properties.

Acid Sulfate Soil – None

The subject site is not affected by Acid Sulfate Soils.

Earthworks

Earthworks will be necessary as part of the demolition and redevelopment process, including site clearing and leveling to prepare the land for new construction, ensuring proper drainage and structural integrity.

Airspace Operations:

As far as investigation has shown, the proposed development is not affected by any airspace operations.

Stormwater:

Stormwater management is a key consideration. The current system will need to be assessed for compliance with local guidelines. Temporary drainage or detention systems may be used during the demolition to prevent runoff issues.

Essential Services:

Services such as electrical, gas, sewage, Stormwater, and water and the like are available on the site.

Views and Vista:

The site offers limited views due to surrounding residential development. The existing house does not provide expansive vistas, but the redevelopment may open up opportunities for views of the surrounding area, depending on the design.

Water Management:

Water management is a priority, and any redevelopment will need to incorporate sustainable water management strategies, such as rainwater harvesting, efficient irrigation, and pervious surfaces for better water absorption.

Streetscape and site context:

The existing building blends into the residential streetscape, characterized by typical suburban properties. The site is surrounded by similar-sized homes with well-maintained gardens, contributing to the neighborhood's character.

Energy Efficiency:

The current building does not appear to have modern energy-efficient systems. Any new construction would need to meet the latest standards for energy efficiency, including insulation, efficient heating and cooling systems, and energy-efficient windows.

Solar Access:

The lot is oriented in such a way that it has potential for good solar access, which can be harnessed for energy efficiency in any new development. Careful design can maximize solar gain for heating and lighting.

Natural lighting and Ventilation:

The existing house benefits from adequate natural light, with windows positioned to allow airflow through the living spaces. Any new development should continue to prioritize natural lighting and ventilation, reducing reliance on artificial systems.

Visual Privacy:

The layout of the existing house ensures a degree of visual privacy for both the occupants and neighboring properties. Any redevelopment should maintain or enhance privacy with strategic window placement and landscaping.

Acoustic Privacy:

The site benefits from typical residential noise levels, with a focus on maintaining acoustic privacy through appropriate building materials and insulation to reduce noise transmission between units or to/from the street.

AC and Communication Structures

The existing property includes standard air conditioning units and communication infrastructure. Any future development would need to ensure that such systems are integrated into the design without affecting the aesthetic or functionality of the space.

Waste Management and Recycling facilities:

The property should provide adequate space for waste management and recycling, in accordance with local council requirements. This includes areas for waste bins and a system for sorting recyclable materials.

Laundry and drying areas:

The current structure has an internal laundry with space for drying clothes, but the redevelopment may incorporate outdoor drying areas or more efficient laundry designs to improve convenience and functionality.

Building Design:

The existing building on Lot 27, No. 2 Maretimo Street, Balgowlah, consists of a two-storey structure with a tiled roof and brick construction. The ground floor covers an area of approximately 104m², while the first floor spans 114m². A double garage and carport, covering an area of approximately 34.56m², are situated at the rear of the property. The design includes a typical residential layout with living spaces, bedrooms, and supporting amenities. The building is positioned with a relatively standard setback from the street, and existing landscaping includes a variety of trees that will be removed or relocated as part of the demolition process. The overall structure is functional and typical of the surrounding residential area, but its removal will allow for the proposed redevelopment in line with local zoning requirements and planning approvals.

Operation and Management:

The demolition project will be carefully managed to ensure efficient operations while minimizing disruption. A dedicated project manager will oversee the process, ensuring that all safety protocols, environmental regulations, and timelines are strictly followed. Key aspects of the demolition, such as waste disposal, equipment use, and worker safety, will be meticulously planned and executed in line with local council requirements and industry standards.

Access and Traffic:

During the demolition, access to the site will be controlled to minimize disruptions to the surrounding neighborhood. Construction vehicles will enter and exit via the designated access points, ensuring minimal impact on local traffic flow. Traffic management measures, such as traffic controllers and signage, will be employed during peak hours to prevent congestion and ensure smooth movement of vehicles. Delivery schedules will be coordinated to avoid clashes with regular peak traffic times.

General Accessibility:

The demolition site is located within a residential area, which requires careful attention to pedestrian and vehicular accessibility. The site will be fenced off to secure the area while maintaining clear access for workers, machinery, and emergency services. Pathways for pedestrians will be maintained wherever possible, ensuring that public movement around the site is unhindered. Proper signage will be displayed to guide both pedestrians and vehicles safely through the vicinity.

Air and Noise:

The residential area generally experiences moderate noise levels from local traffic, household activities, and nearby pedestrian movement. During demolition, construction activities such as the operation of heavy machinery and removal of debris will significantly increase noise levels. To mitigate this, noise barriers and sound-dampening equipment will be employed, and work will be carried out during approved hours to minimize disturbance to neighbors. Air quality may be affected by dust generated during demolition, with dust suppression methods like water sprays to be used regularly to maintain air quality and reduce particulate matter. These efforts will comply with local environmental guidelines to ensure minimal disruption to the surrounding area.

Erosion and sediment Control:

Erosion and sediment control during demolition is essential to prevent soil displacement and to protect the surrounding environment. Key measures include the installation of sediment barriers such as silt fences, geotextiles, or straw wattles around the perimeter of the site. These barriers trap soil particles, preventing them from being carried away by stormwater runoff. Additionally, stabilizing exposed soils through the application of mulch, erosion control mats, or temporary grass seeding can significantly reduce wind and water erosion.

Stormwater management is another crucial element of erosion control. Installing drains or temporary catch basins allows runoff water to be captured and filtered through sediment control devices before being released from the site. Regular dust suppression methods, such as watering exposed areas, can help prevent the spread of dust that might otherwise contribute to sedimentation. Managing vehicle access to the site is also important to minimize tracking mud and debris off-site, which can further contribute to soil erosion.

These control measures should comply with local council regulations and state environmental protection laws. For instance, in New South Wales, guidelines such as the Managing Urban Stormwater: Soils and Construction (Blue Book) provide best practices for sediment control during construction activities. It is essential to monitor and maintain these measures throughout the demolition process, particularly after heavy rainfall, to ensure their continued effectiveness and to prevent environmental degradation.

Heritage:

The subject site is not affected by any heritage item nor is it located within a heritage conservation area.

Flooding:

The subject site is not within a flood prone area.

Foreshore area:

The subject site is not within a foreshore area.

Site Management:

Please refer to attached demolition, construction and waste management plan for full site and construction management details.

CONCLUSION:

In conclusion, the demolition of the property will be conducted responsibly, adhering to all environmental, safety, and local council guidelines. Further arborist and surveyor assessments will guide the final decisions on vegetation management and site preparation.

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