

20 July 2022

Our Ref: H-22027

The General Manager

Northern Beaches Council

725 Pittwater Road

DEE WHY NSW 2099

council@northernbeaches.nsw.gov.au

Dear Sir/Madam,

**RE: NARRABEEN EDUCATION PRECINCT, NAMONA STREET, NORTH NARRABEEN -
ASSESSMENT OF POTENTIAL HERITAGE IMPACTS (TREE REMOVAL)**

The following brief heritage impact statement (HIS) has been commissioned by the NSW Department of Education, Northern Sydney Asset Management Unit (NSAMU), to accompany a Development Application to the Northern Beaches Council.

The proposed Narrabeen Education Precinct development includes redevelopment of Narrabeen North Public School (NNPS) and Narrabeen Sports High School (NSHS). The Public School and High School have been identified by the NSW Department of Education (DoE) as requiring upgrade works.

The works at NNPS upgrade the school including demolition of existing buildings (Blocks H and J), construction of three (3) new buildings with refurbishment of three (3) existing buildings (Blocks B, K and V).

The works at NSHS upgrade the school including addition of new two (2) storey extension to Building A, construction of new single storey amenities building and refurbishment of four (4) existing buildings (Buildings A, B, C and K).

This Development Application (DA) will seek consent for tree removal to facilitate works proposed under other planning pathways including Part 4 development application (DA), development without consent (REF) and exempt development.

The proposed development does not seek to increase staff or student numbers.

This brief assessment will address the likely impact of the proposed Tree Removal in the upgrade and redevelopment of North Narrabeen Public School (NNPS) and Narrabeen Sports High School (NSHS) on their existing sites to significantly improve educational outcomes and support the delivery of modern pedagogical learning. It further includes consideration of likely heritage impacts from the Tree Removal on the heritage-listed concrete geodesic domes, which are located within the Narrabeen North Public School site. The assessment of the proposed upgrade and redevelopment works within the Narrabeen Education Precinct, including Narrabeen North Public School and Narrabeen Sports High School, co-located with the Narrabeen Indoor Sports Centre, against the policies and controls of the Pittwater Local Environmental Plan (LEP) 2014 and Pittwater 21 Development Control Plan (DCP) will be subject to a separate Development Application to be lodged to Northern Beaches Council.

Heritage Listing

The subject three Bini Shells (Bini Shell A and Bini Shell B) within the North Narrabeen Public School site are listed as a heritage item under Part 1 of Schedule 5 of the Pittwater LEP 2014 as 'Concrete Geodesic Domes (North Narrabeen Public School)', (item no. 2270341). In addition, Bini Shell B is listed as a State significant structure on the State Heritage Register under the *NSW Heritage Act, 1977* as part of the 'The Binishell Collection (Department of Education)' (SHR no. 02037) listing. The SHR listing curtilage excludes Bini Shell A, which remains as a local heritage item.

The subject site is also located in proximity to the following heritage items:

Environmental Planning and Assessment Act, 1979

Pittwater LEP 2014, Part 1 Heritage items

- "Alma's Tree", Moreton Bay Fig Tree', 1468 Pittwater Road, Warriewood (item no. 2270331)
- 'Warriewood Wetland', 14 Jacksons Road, Warriewood (item no. 2270516)

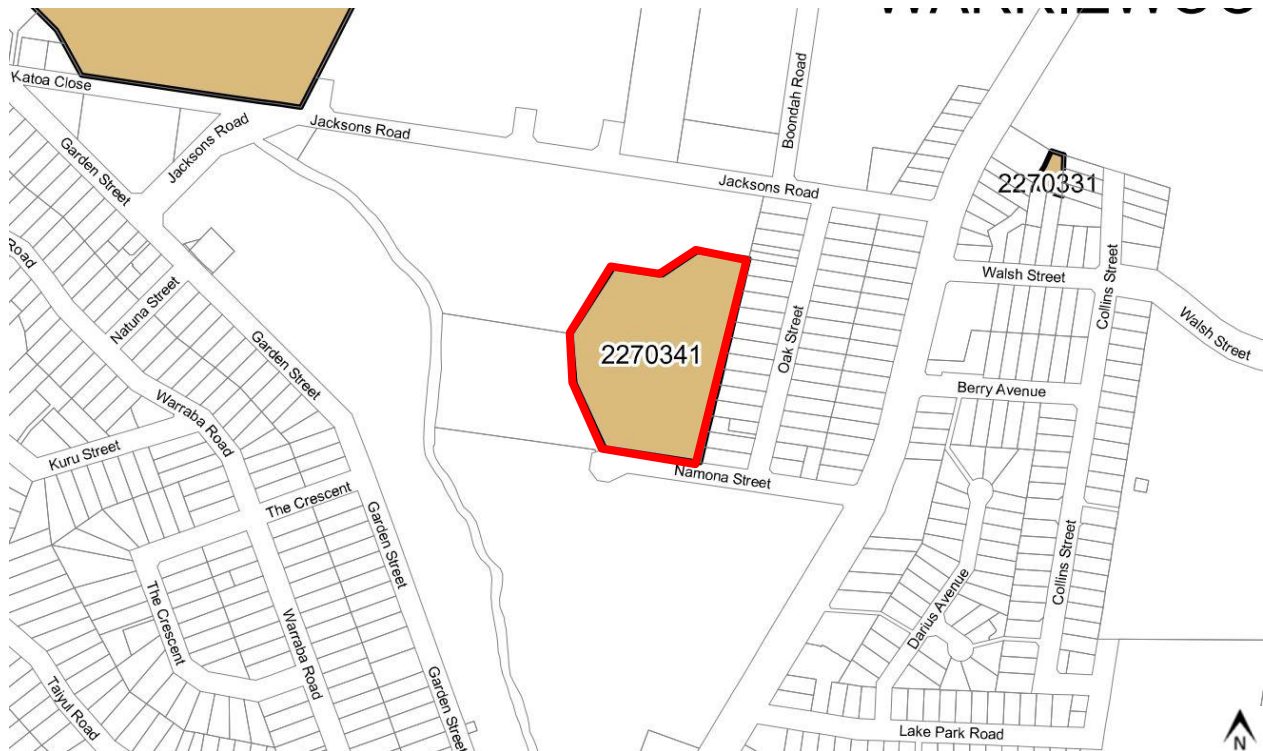


Figure 1: Heritage Map showing the location of North Narrabeen Public School (indicated in red) within its current heritage context (Source: Pittwater LEP 2014, Heritage Map - Sheet HER_019).

As a result, the heritage provisions of the Pittwater LEP 2014 and Pittwater 21 DCP, will apply. The following assessment and consideration of likely heritage impacts will be limited to the potential impacts of the Tree Removal on the heritage significance of the school site. The redevelopment and upgrade work to the Narrabeen Education Precinct, including Narrabeen North Public School and Narrabeen Sports High

School, co-located with the Narrabeen Indoor Sports Centre will be subject to a separate application and assessment accordingly.

1. SITE CONTEXT AND DESCRIPTION

The subject sites are located at 6 and 10 Namona Street, North Narrabeen (referred to as the Narrabeen Education Precinct) and falls within the local government area of Northern Beaches Council. The Narrabeen Education Precinct has a total area of 9.84 hectares.

Narrabeen North Primary School (NNPS) is located on the northern side of Namona Street, North Narrabeen and is legally described as Lot 3 Deposited Plan (DP) 1018621. NNPS is surrounded by residential dwellings to the east, grassed sporting fields (Warriewood Valley Sportsground) to the north and Northern Beaches Indoor Sports Centre to the west. NNPS contains two (2) Binishell domes (Block A and Block B) which are identified as a local heritage item under the Pittwater Local Environmental Plan 2014. The two (2) Binishell Domes are listed as State significant on DoE's Section 170 Heritage and Conservation Register. The Double Binishell Dome (Block B) is listed on the State Heritage Register (SHR). Both Bini Shells are located north of Namona Street, centrally located within the Narrabeen North Public School site. Bini Shell A was one of the first 18-meter diameter dome constructed in New South Wales (NSW), while Bini Shell B, located adjacent to Bini Shell A, is one of the few dome structures formed of two interconnected domes, each 18 meters in diameter, constructed in steel and concrete with glass windows. Both Bini Shells are surrounded by rectangular face brick and weatherboard school buildings with hipped roofs.

Narrabeen Sports High School (NSHS) is located on the southern side of Namona Street and is legally described as Lot 12 DP 1119562. NSHS is surrounded by Pittwater Road to the east, Pittwater Sports Centre to the south and Mullet Creek to the west.



Figure 2: Aerial view of the subject site (indicated in blue) within its surrounding context (Source: Nearmap)

2. ESTABLISHED STATEMENTS OF SIGNIFICANCE

2.1. State Heritage Register

The following Statement of Significance has been extracted from the State Heritage Inventory (SHI) form for State heritage item 'The Binishell Collection (Department of Education)' (SHR no. 02037):¹

The Binishell Collection (Department of Education) is of state heritage significance for its historic values as part of the innovative NSW Public Works Binishell Program which successfully and quickly responded to the sudden growth in public schools in NSW at the end of the 1960s and through the 1970s.

The Binishell Collection (Department of Education) is of state heritage significance for its association with the NSW government's innovative response need to fast track an economical, labour effective and speedy program of building in NSW Schools in the early 1970s. It is also of significance for its association with the Italian architect, Dr Dante Bini who developed and patented the system of constructing reinforced concrete domes.

The Binishells in the collection are of state heritage significance as each demonstrate the distinctive, landmark aesthetic qualities and variations of the concrete futuristic bubble design popular in the late 1960s and 1970s.

The Binishell Collection (Department of Education) is of state heritage significance for its ability to demonstrate the innovative design and construction techniques used in their construction.

The Binishell Collection (Department of Education) is of state heritage significance an intact rare example of the Binishell as multipurpose school buildings in NSW schools.

2.2. Pittwater Local Environmental Plan 2014

The following Statement of Significance has been extracted from the State Heritage Inventory (SHI) form for heritage item 'Concrete geodesic domes (North Narrabeen Public School)' (item no. 2270341):²

The concrete geodesic domes are one of a very limited number of Binishells in Australia and one of the few remaining constructed as part of the NSW Department of Public Works building program for schools in the 1970s. This program sought to construct 10 binishells across the state to provide large open floor spaces for schools, using the new construction method invented by Italian architect, Dr Dante Bini. This method of construction has been used around the world, mainly to build houses. These buildings are aesthetically and technically significant as they represent a new method of public building construction in the 1970s. The North Narrabeen Binishells were the first 18 metre domes built in NSW and were one of the first such buildings in NSW public schools.

¹ 'The Binishell Collection (Department of Education)', State Heritage Inventory (SHI) form, available at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5066940>

² 'Concrete geodesic domes (North Narrabeen Public School)', State Heritage Inventory (SHI) form, available at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2270341>

2.3. Binishells NSW - A Heritage Assessment

The following Statement of Significance has been extracted from the Heritage Assessment of Binishells NSW for School Infrastructure NSW Department of Education by Anne Warr Heritage Consulting in May 2019:³

The construction of Binishells as school facilities to house libraries, multi-purpose centres and gymnasia in NSW schools between 1974 and 1979, demonstrated a period of creativity and experimentation by the NSW Government, including the Government Architects Branch and NSW Department of Education, to provide much needed accommodation for a booming school population. The program ceased in 1979 after fifteen Binishells were constructed across fourteen schools, making it the largest collection of Binishells in the world devoted to a public enterprise.

Binishells are significant for their association with Dr. Dante Bini, a highly creative Italian architect who patented the system of building reinforced concrete domes by using compressed air to inflate a large membrane covered with wet concrete, and developed the product in many forms and for many applications around the world. The Binishell project was able to come to fruition in NSW because of the atmosphere of creativity, experimentation and problem solving which flourished in the Government Architects Branch of the NSW Public Works Department in the 1970s. The willingness of NSW Government to import foreign ideas and expertise reflected the spirit of Internationalism of the time, embracing innovative ideas in a spirit of international⁴ cooperation.

Binishells embody a high degree of aesthetic significance as examples of Modernism which departed from traditional rectilinear forms in NSW school architecture, and for a high level of intactness including custom designed interiors of timber joinery, colour schemes, furniture and spatial arrangements. It was an imaginative and cutting-edge initiative which brought 'space age' design and technical innovation to the forefront of public architecture.

The uniqueness of the construction and design enables the Binishell structures to reveal information over time about an innovative construction technique, modern architectural design, the use of space in learning environments, and lessons regarding durability of materials, maintenance and sustainability. The structural failure of two of the domes in 1975 and 1986 have provided opportunities for research into the reasons for the failures and the development of structural understanding and alternatives.

Of the fifteen Binishells originally constructed, eight² remain, six have been demolished and one collapsed. The eight remaining Binishells are a precious collection demonstrating a period of modern architecture which expressed optimism in the future, a willingness to experiment with new building techniques and a desire to create innovative learning spaces. It was an investment by the NSW government that has provided memorable experiences for generations of school children over the past 40 years. Although examples of Binishells can be found around the world, the comprehensive development of the system for school education by the NSW Department of Public Works remains unique in the world.

³ Warr, A. (May 2019), 'Binishells NSW - A Heritage Assessment', pp. 2-3.

⁴ Interestingly, the construction method was brought to the attention of the NSW Minister for Public Works by Sir William Davis Hughes, himself a former NSW Public Works Minister, then Agent General in London. David Hughes was the initial intermediary between the architects at NSW Public Works and Dante Bini. (Source: Betteridge/Musecape 2018).

3. TREE REMOVAL

This HIS is concerned with the removal of trees at North Narrabeen Public School along the south, west and southwest of the school site. The proposal includes the removal of a number of young and mature trees to accommodate the new development on site, including development of a new hall, a new covered outdoor learning area (COLA), and an administration and staff hub in the west, and a new access ramp along the southern entrance.

The proposed works also allows for assessment and retention of the existing trees including pruning (where required) and plantation of new trees along the south and west of the proposed new development.

Comparison of Historical Imagery

The 1951 Historical Aerial Imagery for North Narrabeen Public School provides evidence of a larger landscaped area at the school site in that period; however, around 1961, a significant area of the school site was cleared to accommodate more structures within the school site. It is evident from the 1961 Imagery that the school site has two landscaped areas remaining from the 1951 period along the south and southwest of the school site. Later, in between 1961 to 1978, a large area of the open space around the school buildings and Binidomes was enhanced with natural landscape that contributed to the aesthetic characteristics of the school. The following aerial images show the landscaping and structures within the school site between 1951 and 1978.



Figure 3: 1951 Historical Aerial Imagery for North Narrabeen Public School (indicated in red) (Source: NSW Historical Imagery, 1951, Image Name CCC470_26_062, accessed [online], https://portal.spatial.nsw.gov.au/download/historic/CCC470/CCC470_26_062.jp2.jpeg).



Figure 4: 1961 Historical Aerial Imagery for North Narrabeen Public School (both indicated in red) (Source: NSW Historical Imagery, 1961, Image Name 1052_22_159, accessed [online], https://portal.spatial.nsw.gov.au/download/historic/1052/1052_22_159.jp2.jpeg).



Figure 5: 1978 Historical Aerial Imagery for North Narrabeen Public School (both indicated in red) (Source: NSW Historical Imagery, 1961, Image Name 2710_08_355, accessed [online], https://portal.spatial.nsw.gov.au/download/historic/2710/2710_08_355.jp2.jpeg).

4. ASSESSMENT OF POTENTIAL HERITAGE IMPACTS

The impact of the proposed tree removal on the heritage significance of the site and surrounding heritage items has been assessed in this section. As noted above, the proposed tree removal is primarily around the southwest boundary of the school site. The upgrade and redevelopment of the school site include the development of a new hall, a new covered outdoor learning area (COLA), as well as an administration and staff hub at the west of the North Narrabeen Public School. Hence, in order to accommodate the new development, it is imperative to remove a few trees along the southwest for the new building to sit within the early brick and weatherboard structures as well as the 1970s Binidomes. As evident from the historical imagery, the trees proposed for removal are later trees introduced in the 1970s and do not impact the identified heritage significance of the site, which is essentially relate to the Binidomes rather than the landscaping within the site. Notwithstanding, based on the Arborist report, a few of the southwestern trees are of medium or high significance and in good condition contributing to the overall landscape character of the school site.

The tree located south of Binidome A (proposed for removal) is also one of the later trees planted following construction of the Binidomes and is not culturally significant landscape element. It is also not a contributing element in the natural landscape setting of the Binidomes and is located outside the SHR Curtilage of the North Narrabeen Public School Library (Binidome B). Most of the early planting is being retained, and to upgrade the school amenities, it is necessary to remove a few trees that will be balanced through proposed new landscaping around the new development.

The removal of trees from the south of Binidome A and southwest of the site will have no impact on the heritage significance of the site and the Binidomes. The location of the new development, on the other hand, will contribute to enhancing the setting of the significant Binidomes by creating a direct view corridor from the main entrance of the site that is not currently available.

The southern trees, located at the entrance of North Narrabeen Public School, are also proposed for removal. One of the trees located at the main entrance along Namona Street goes back to 1951 and is a mature tree contributing to the landscape setting of the school site. However, in order to accommodate the new ramped entrance that makes the site accessible for all, the subject southern tree requires removal. Currently, the entrance corridor at the school from Namona Street leads to a single-storey building that blocks the view of the main school courtyard area and the Binidomes. With the new ramped entrance slightly deviated to the west from the current entrance location, as noted above, the entrance to the school will be enhanced as it will provide a clear and better visual connectivity with the Binidomes and open up views to the main courtyard area. The overlay image of the proposed tree removal plan on the 1978 aerial image indicating the locations of the trees that will be removed, which are relatively minor in relation to the existing landscape dating from the 1950s and earlier, has been provided as an Appendix to this letter.

5. CONCLUSION AND RECOMMENDATIONS

In conclusion, the proposed tree removal at North Narrabeen Public School along the south, west, and southwest will not adversely impact the heritage significance of both Binidomes and the landscape setting of the North Narrabeen Public School site. In fact, it will provide direct access and a new view curtilage to the significant Binidomes while also upgrade the amenities and facilities of the school. Most of the original screening is being retained and protected through measures as a part of the proposal and will continue to stay significantly in the setting of the Binidomes.

The development of the new building on the existing school site will significantly improve educational outcomes and support the delivery of modern pedagogical learning. In addition, the location of the proposed

new building adjacent to the Binidomes, which will necessitate removal of the demountable school buildings to the front, will contribute to enhancing the setting of the significant Binidomes as well as direct views from the new proposed entrance. The removal of trees along the south, which are largely dating from the 1970s, will further improve the view corridors from Namona Street (The primary entrance to the site). Although a mature tree is required to be removed to accommodate a new ramped entrance to make the site accessible for all, this relocation will connect the main entrance directly to the school's open corridor instead of terminating at a school building as it is currently. It further provides a clear and defined school entrance, and better visual connectivity with the Binidomes.

In our opinion, the works are acceptable from a heritage perspective as the proposed limited tree removal incorporating one tree dating from the pre-1950s is considered crucial to accommodate the new development and will have no adverse impact on the significance of the Binidomes and their setting.

We trust this brief HIS will satisfy the heritage requirements of Northern Beaches Council in the assessment of the proposed Tree Removal. Should you have any questions or wish to discuss the matter further, please do not hesitate to contact the undersigned on 8270 3500 or at kerimed@cityplan.com.au.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Kerime Danis'.

Kerime Danis
Director - Heritage

Appendices:

- *Overlay of the proposed Tree Management Plan (Sheet 1 & Sheet 2) on the 1978 aerial image*
- *Tree management plan by the Independent Arboricultural Services (July 2022)*

APPENDIX A: OVERLAY OF THE PROPOSED TREE MANAGEMENT PLAN (SHEET 1 & SHEET 2) ON THE 1978 AERIAL IMAGE



Figure 6: Overlay of the Tree Management Plan demarcating tree removals (indicated in red) and existing trees to be assessed for retention (indicated in black) along the southwest at North Narrabeen Public School on the 1978 aerial image (Source: Independent Arboreal Services, Tree Management Plan, Sheet 1 and Sheet 2, July 2022 & Historical Imagery NSW respectively).

APPENDIX B: TREE MANAGEMENT PLAN BY INDEPENDENT ARBORICULTURAL SERVICES (JULY 2022)

