

Objection – SSD-100912708 Pathways Rose Bay

1 October 2026

Submission objecting to SSD-100912708: Pathways Rose Bay Seniors Housing

Location: 20–30 Wilberforce Avenue and 33–39 Dover Road, Rose Bay NSW 2029

To: Department of Planning, Housing and Infrastructure (via NSW Planning Portal)

From: Cr Merrill Witt, Councillor for Vaucluse Ward, Woollahra Municipal Council

Date: 1 October 2026

Executive summary

I object to SSD-100912708, 20–30 Wilberforce Avenue and 33–39 Dover Road, Rose Bay NSW 2029.

This submission is made in my capacity as a Woollahra Councillor for the Vaucluse Ward, but does not purport to represent a resolution of Woollahra Municipal Council. It relies on the applicant's own EIS and technical appendices, Council's published requirements for geotechnical and hydrogeological reports, Council's commissioned groundwater research, and a comparison of the reports lodged for the adjoining SSD at 23–31 Dover Road (SSD-86017721).

The proposal requires a bulk excavation of up to 14–15 m through a shallow sand aquifer in the mapped Rose Bay Settlement Area. On the applicant's own documents:

- **the suitability of the land for that excavation has not been established**, and the analysis of impacts on neighbouring buildings is deferred until after consent;
- **Council's 0.3 m groundwater drawdown limit has been replaced with a self-selected 0.4 m trigger**, and the base-case prediction already sits at 0.3 m on model inputs that understate measured sand permeability;
- **the dewatering plan concedes that no cumulative drawdown assessment has been undertaken**, and its predictions are irreconcilable with those of the adjoining site's consultant for the same aquifer;
- **the EIS concedes that the consent authority cannot yet be satisfied the land is suitable in respect of contamination**;
- **the proposal exceeds the height standard even after two stacked height uplifts**, and its stated deep soil and communal open space figures do not reconcile with its stated site area; and
- **every tree on the site is to be removed, including a stand of lemon-scented gums up to 18 m tall**, and the applicant's own arborist concedes the development will cut off the groundwater seepage that sustains them.

The Department cannot be satisfied with these matters on deferred modelling and post-consent conditions.

Section 1: Height, building separation and deep soil

1.1 Height exceeds the standard after two stacked uplifts. The Woollahra LEP height control is 10.5 m. The LMR “Inner Area” provisions raise this to 22 m, and s 87 of the Housing SEPP adds a further 3.8 m for seniors housing, giving 25.8 m (EIS pp. 45–46, 56). The building reaches 28.1 m (RL 41.500) (EIS pp. 20, 49, 67) — 2.3 m above the uplifted standard and 17.6 m above the LEP control. The variation is attributed to rooftop plant, lift overruns, balustrades and flood planning levels (EIS p. 52; Appendix D). A proposal that already relies on two stacked height concessions should accommodate its plant within them; the Department should not accept the further variation as “minor”.

1.2 Building separation depends on blank walls. The EIS provides a minimum 6 m to side boundaries, increasing to 9 m on the northern boundary (EIS p. 73), and relies on treating facing façades as non-habitable to justify reduced separation (EIS pp. 80, 85). Under ADG Objective 3F-1, buildings up to 25 m require 9 m from habitable rooms to side and rear boundaries, and buildings above 25 m require 12 m. At 28.1 m, ADG compliance rests almost entirely on façade treatment, which the Department should test against the architectural plans.

1.3 Deep soil does not reconcile with the stated site area. The EIS states 744 m² of deep soil as 15.4% of the site (EIS p. 20). But the site area is stated as 5,652 m² (EIS p. 20), and 744 m² is 13.2% of that — below the 15% deep soil standard the EIS itself cites for seniors housing (EIS p. 51). Communal open space shows the same discrepancy (1,222 m² stated as 25.3%, and elsewhere as 25.15% (EIS p. 85); it is 21.6% of 5,652 m²) — below the ADG minimum of 25% of site area (Objective 3D-1). The Department should require the applicant to identify the area used as the denominator. The proposal also removes 94 trees (EIS p. 20); the EIS should state how much of the claimed 2,000 m² (35%) canopy (EIS pp. 20, 23) will grow in natural deep soil rather than over the basement slab, which spans substantially the whole site (EIS p. 35).

1.4 Every tree on the site is removed, mostly to make way for the basement. Of 115 trees assessed, only 22 are retained, and every one of them stands in the street or on a neighbouring property (Appendix L, pp. 6, 29). No tree within the site survives. Three of the ten trees rated high retention value are removed — trees 18, 81 and 82 — along with 11 of the 15 rated moderate (Appendix L, pp. 5, 26–27). Almost every removal is attributed to the basement or driveway (Appendix L, Table 3, pp. 14–23).



(i) **Tree 18** is a lemon-scented gum about 18 m tall, with a 670 mm trunk, in excellent health and rated high in both landscape significance and retention value (Appendix L, p. 15). It shares a single canopy with trees 19 and 20, two further lemon-scented gums of 18 m and 9 m, which the arborist says must be considered together (Appendix L, pp. 15, 25). All three are removed for the basement (Appendix L, p. 15). The reasons given are largely design choices: the existing soil level is about 1.5 m above the proposed design level, and retaining the trees “would significantly alter the design outcomes of the landscape proposal and the architectural requirements” (Appendix L, p. 26).

(ii) **Trees 81 and 82** — a 710 mm cheese tree and a 520 mm coastal banksia, both rated very high in landscape significance — are removed because they sit where the basement is to be excavated (Appendix L, pp. 20–21, 26). The claim that replanting “will more than compensate” for their loss (Appendix L, p. 26) is not supported by any comparison of canopy lost and gained.

(iii) **The arborist confirms the development will change groundwater conditions.** Explaining why trees 18–20 could not survive, the report says they are likely receiving underground water through seepage from properties upslope, and that “this additional water will cease to exist when development of the property occurs” (Appendix L, p. 26). The same change will affect the retained street and neighbouring trees, yet the assessment considers only physical root encroachment, finds “no envisaged negative impact” on any retained tree (Appendix L, p. 29), and relies on existing retaining walls acting as root barriers without any below-ground inspection (Appendix L, pp. 11, 24, 53). It does not consider a year of construction dewatering (EIS p. 100) or permanent groundwater mounding (Section 4.3) in free-draining, low-fertility sands (Appendix L, p. 10).

(iv) **SEAR 14 is not met.** SEAR 14 requires the arboricultural assessment to address "any existing canopy coverage to be retained on-site", and requires evidence that opportunities to retain significant trees have been explored (EIS p. 105). The report gives no figure for canopy retained on site — there is none, since every on-site tree is removed — and the only reasons it offers for removing trees 18–20 are that keeping them would alter the design (Appendix L, p. 26). The report also says it includes "any cumulative impact from any surrounding developments" (Appendix L, p. 7), but considers none; with similar basements proposed across the block (Section 4.4), cumulative canopy loss should be quantified. It also describes the R3 zone as low density (Appendix L, p. 10) and lists tree 61 as unaffected by the works yet proposed for removal (Appendix L, p. 19).

1.5 Solar access has not been assessed as the SEARs require.

(i) SEAR 7 requires overshadowing to be compared across the proposed development, the existing situation and, where applicable, "a development with no bonuses applied" (EIS p. 77). The EIS instead measures the proposal against a "compliant building envelope" that already includes the LMR and seniors housing height bonuses, and reports as additional only the shadow cast by elements above that envelope: about 37 m² at 9 am, and about 1 m² each to two properties at noon (EIS pp. 77–78). Shadow cast by the bonus height itself is treated as "anticipated by the applicable planning controls" (EIS p. 77) rather than assessed. The no-bonus comparison the SEARs call for is not reported.

(ii) The EIS does not state how many hours of mid-winter sun neighbouring living rooms and private open spaces would retain. It concedes that 9 am is "the most constrained period", with additional shadow falling on properties to the south along Wilberforce Avenue (EIS p. 77), and that at 3 pm shadow extends across Dover Road towards properties opposite (EIS p. 79), but quantifies neither.

(iii) The "future context" used in the shadow diagrams includes only 23–31 Dover Road and 12–18 Wilberforce Avenue (EIS p. 77). It omits the 8–12 storey proposals at 32–42 Wilberforce Avenue/41–55 Dover Road and 36–56 Dover Road/27–31 Hamilton Street that the EIS itself lists (EIS p. 7), so the combined overshadowing of the dwellings that remain on and around the block is unknown.

(iv) Within the development, compliance is marginal: 52 of 74 apartments (70.2%) meet the ADG minimum of 70%, so a single apartment would tip it into non-compliance, and 50.4% of the communal open space receives two hours of sun against a 50% minimum (EIS p. 82). These figures should be independently verified against the architectural plans.

Section 2: Geotechnical and hydrogeological risk

The EIS asserts that site suitability "is established through the LMR Housing framework" (EIS p. 146). Permissibility is not physical suitability, which the consent authority must separately consider under s 4.15(1)(c) of the EP&A Act.

2.1 The excavation and the ground. Bulk excavation reaches about 14–15 m, with a basement set back only about 1 m from the neighbouring properties to the north-west (EIS p. 99). The final excavation level of RL 1.5 m AHD is well below measured groundwater of 3.8–6.4 m AHD (EIS p. 99).

The site is underlain by dune sands that are “weakly coherent when moist and non-cohesive when dry or saturated” (EIS pp. 11, 98)

Investigation of site conditions included four cored boreholes and three cone penetration tests, all three of which were done outside the site on Wilberforce Avenue and Dover Road. No standard penetration tests were done, so soil density was not assessed in the boreholes (Appendix Z, pp. 6–8).

2.2 Shoring integrity is rated “very high” risk, then described as modest. The geotechnical report rates the risk of seepage and sand loss through deep secant pile walls as “very high” (Appendix Z, p. 21), and warns of abrupt changes in rock level and detached sandstone blocks that could undermine the cut-off (Appendix Z, p. 13). The dewatering plan calls the same risk “correspondingly modest” (Appendix AA, pp. 21–22), yet concedes that gaps could cause “significantly higher inflow rates and drawdowns” and that leaks below excavation level may be difficult to isolate (Appendix AA, p. 37). Every drawdown prediction depends on this wall performing as designed.

Rock levels make a continuous cut-off doubtful. The applicant’s low drawdown prediction depends on a wall socketed into sandstone around the whole basement (EIS p. 100). Its own investigation found the top of sandstone ranging from RL 4.6 m to RL -11.3 m AHD in the boreholes, with cone refusal as deep as RL -12.6 m (Appendix Z, pp. 8, 15) — a variation of around 16 m across the site. With bulk excavation to about RL 1 m (Appendix Z, p. 12), rock sits above excavation level in the north-east but some 12 m below it at BH01. The geotechnical report concedes it is “difficult to reliably predict the variation of rock levels across the whole footprint”, that “abrupt changes of rock level (i.e. near vertical drops)” and detached sandstone blocks should be assumed, and that these could “reduce the effectiveness of the socket/cut off in rock” (Appendix Z, p. 13). It warns that a CSM wall “may not achieve an effective seal at the rock interface”, and that drilling deep secant piles into rock can decompress the surrounding sand and damage adjacent buildings (Appendix Z, p. 21). It recommends a minimum socket of only 1 m, against the 2 m relied on in the EIS (Appendix Z, pp. 18, 20; EIS p. 100), and defers confirmation of rock levels to “gap-targeted investigations” after demolition (Appendix Z, pp. 27–28). Where the toe misses competent rock, the cut-off becomes partial and drawdown will approach the levels predicted for the adjoining site.

Before determination, the applicant should confirm the rock level along the full wall alignment and show how a seal will be achieved where rock drops away.

2.3 Council’s drawdown limit has been replaced with the applicant’s own.

(i) Within the mapped Rose Bay settlement area, Council's DCP limits temporary drawdown to 0.3 m from the average monitored pre-construction groundwater level (Woollahra DCP 2015, E2.2.10 C11, E2 pg. 25). That standard derives from Council's commissioned GHD study, which identified 0.3 m as a relatively safe drawdown limit for Settlement Zones A and B (GHD 2024, pp. ii, 24), and the applicant adopts it as its benchmark (EIS p. 99).

(ii) The geotechnical report concedes this is "difficult to achieve unless a cut-off shoring wall socketed into sandstone bedrock is adopted" (Appendix Z, p. 17) — a cut-off that, as 2.2 shows, cannot yet be shown to be achievable. The dewatering plan instead adopts a "site-specific drawdown trigger of 0.4m" (Appendix AA, pp. 26, 36; EIS pp. 99–100) — a 33% relaxation.

(iii) The justification is natural fluctuation at a single well, BH03, over about four months of logging (Appendix AA, pp. 12–13). Council requires at least six months (DA Guide Att. 6, p. 4), as did the applicant's own geotechnical report, whose data loggers were installed on 24 March 2026 for a minimum of six months, with results to be reported separately (Appendix Z, p. 9). That record was not complete when the EIS was lodged. Council's requirements permit reference to natural fluctuation only **outside** the settlement areas (DA Guide Att. 6, p. 5).

(iv) The trigger is defined inconsistently — a drop "at any monitoring well on site" on one page and in "average groundwater levels in sand" on another (Appendix AA, pp. 26, 32). Neither measures drawdown at neighbouring properties, where the DCP limit is directed.

2.4 The model understates the risk.

(i) Predicted drawdown outside the shoring wall is 0.3 m (Appendix AA, p. 22; EIS p. 99) — at Council's limit with no margin.

(ii) The inflow trigger is set at 53 ML, the worst-case sensitivity volume, nearly three times the 18 ML base case (Appendix AA, pp. 20–21, 26). Inflows could far exceed predictions before any hold point is reached.

(iii) The applicant predicts drawdown extending less than 40 m (EIS p. 99). Council's GHD study found construction dewatering impacts in sandy alluvium can extend up to about 800 m, and identified 0.3 m in Rose Bay as a relatively safe drawdown limit against a 15 mm settlement threshold (GHD 2020, pp. i–ii).

2.5 The impact on neighbouring buildings is deferred until after consent. Council requires reports to predict ground settlement in adjacent areas and demonstrate no adverse impact (DA Guide Att. 6, p. 4). The application contains no settlement calculation for any neighbouring structure: the geotechnical report relies on GHD's regional estimate (Appendix Z, pp. 28–29), and the dewatering plan asserts only that compressible layers are unlikely within 200 m, on unpublished previous work (Appendix AA, p. 36). Numerical analysis of the shoring's impact on neighbouring buildings, footing investigations and further investigation after demolition are all proposed as post-consent conditions (EIS p. 101; Appendix Z, pp. 27–28, 30). Base stability is addressed only qualitatively: the geotechnical report recommends a minimum 1 m socket into

sandstone to reduce the risk of piping failure, to be “reviewed during the groundwater inflow analysis” (Appendix Z, pp. 18–19), although sandstone groundwater head of up to 6.4 m AHD sits nearly 5 m above the excavation base (EIS p. 99).

2.6 Contamination is a precondition, not a condition. The EIS concedes that “the consent authority is not yet able to be satisfied, for the purposes of section 4.6” of the Resilience and Hazards SEPP that the land is suitable (EIS p. 103). That cannot be cured by condition; the Detailed Site Investigation must be completed and made public before determination.

2.7 Local experience.

(i) **14 Forest Road, Double Bay.** In August 2019, GHD and Council officers observed substantial, worsening cracking at 14 Forest Road, coinciding with basement dewatering downslope at 4–8 Patterson Street (GHD 2020, s 5.2.2, p. 19). GHD calibrated its seepage model against the groundwater drawdown observed at 14 Forest Road from that dewatering (GHD 2020, pp. 62–63, Fig. 32).

(ii) **6–8 Richmond Road, Rose Bay (DA92/2019).** Excavation damaged the neighbouring inter-war apartment buildings at 4 and 10 Richmond Road. The NSW Building Commissioner first issued a Stop Work Order on 7 July 2023, later modified to extend to those properties. On 26 March 2026, Building Commission NSW issued its fifth Stop Work Order in three years, after adjoining owners reported on 2 February 2026 that additional cracking had appeared as a result of recent sheet piling work ([Building Commission NSW register](#)).

(iii) **“Hillcrest”, 780–786 New South Head Road, Rose Bay (DA30/2021).** On 12 February 2026, part of the two upper levels and the roof of this heritage-listed building collapsed into the basement excavation ([City Hub, 4 April 2026](#)). The builder’s director described it as a “freak accident” and attributed it to suspected flawed geotechnical advice, and on 13 March 2026 SafeWork NSW issued an improvement notice requiring stabilisation works under the supervision of independent geotechnical and structural engineers (‘Freak accident’: Rose Bay villa partially collapses during luxury rebuild by David Barwell, [Sydney Morning Herald](#) 26 March 2026.).

When this development was approved on appeal, the neighbours’ geotechnical expert gave evidence that there was insufficient information to inform the engineering design and that the excavation posed a risk to the adjoining building, and sought a deferred commencement condition (*Hillcrest Rose Bay Pty Ltd v Woollahra Municipal Council* [2021] NSWLEC 1662 at [44]). The Commissioner instead accepted that stability would be maintained subject to the final design responding to further investigation “as the work commences”, secured by conditions of consent (at [96]–[97]). That is the same deferral approach proposed here.

(iv) **19–27 Bay Street, Double Bay.** In September 2024, the neighbouring building at 17 Bay Street experienced cracking and movement during the drilling and installation of three soft piles close to its northern external wall. A site inspection report by structural engineers TTW,

prepared after significant works beneath 17 Bay Street to arrest settlement, indicated that poor soil conditions combined with the piling procedure were responsible (TTW, Site Inspection Report, 24 November 2024). The applicant’s consultant for that site had conceded that drawdown could only be kept below 1 m with a substantially watertight cut-off wall — five times the 0.2 m Double Bay limit (EI Australia, Additional Geotechnical Investigation, 14 June 2023).

(v) **Council lacks expertise to properly verify geotechnical reports.** At Council’s Environmental Planning Committee on 2 March 2026, Council’s Manager of Development Assessment explained that Council’s engineers review geotechnical reports for consistency with Council’s guidelines, but when asked whether they have the skill to scrutinise them further, said: “The answer is no, because they’re not geotechnical engineers.” On 23 March 2026, Council resolved to request the General Manager consider engaging independent experts to peer-review hydrogeological and geotechnical reports (Council Minutes, 23 March 2026).

Section 3: Contradictions with the adjoining aquifer model

The site directly adjoins the SSD at 23–31 Dover Road (SSD-86017721), the only project the EIS assesses cumulatively (EIS pp. 6–7, 142). Both basements penetrate the same dune sand aquifer, yet the two sets of consultants’ reports cannot be reconciled:

Matter	Pathways (Douglas Partners)	23–31 Dover Road (Morrow Geotechnics / EI Australia)
Drawdown	0.3 m beyond the shoring wall, extending less than 40 m (EIS p. 99; Appendix AA, p. 22)	0.92–1.33 m within 20 m of the excavation face, falling below 0.2 m only at about 78–79 m (Morrow DMP, Table 2, p. 7)
Construction inflow	About 18 ML in total over one year, for a basement across most of a 5,652 m ² site (EIS pp. 20, 99–100)	148.82 ML per year for a basement of about 1,947 m ² (Morrow DMP pp. 1, 6)
Drawdown trigger	0.4 m (Appendix AA, pp. 26, 36)	1,500 mm (Morrow DMP p. 13)
Monitoring basis for natural fluctuation	About four months of logging at a single well, BH03 (Appendix AA, pp. 12–13)	About three months of continuous monitoring at three wells, 6 May to 8 August 2025, recording 0.37–0.42 m of variation (Site Hydrogeology Report, as

Matter	Pathways (Douglas Partners)	23–31 Dover Road (Morrow Geotechnics / EI Australia)
		summarised in PSM 2026, p. 21); the DMP also cites “up to approximately 790 mm” attributed to modelling (Morrow DMP p. 13); pre-works baseline of “at least one round of monitoring” (p. 13)
Groundwater flow	South to north towards Rose Bay Beach (EIS p. 99) — but the geotechnical report infers flow “mostly in south-westerly direction” (Appendix Z, p. 15)	Westerly towards Rose Bay (EI ASSMP p. 5)
Registered wells nearby	Eight, about 100 m away at 18 Dover Road (EIS p. 11)	None within 100 m (Morrow DMP p. 8)

Neither trigger complies with Council’s 0.3 m limit. Differences in wall design explain some of the gap. The Pathways cut-off wall is socketed 2 m into sandstone (EIS p. 100), while the wall for 23-31 Dover Road stops in sand (Morrow DMP p. 4; Morrow GIR p. 5).

The Pathways dewatering plan states that its drawdown assessment “assumed no concurrent dewatering” by adjacent proposals and that “no cumulative drawdown impact assessment has been undertaken” (Appendix AA, p. 22).

Its only cumulative scenario treats neighbouring basements as completed, fully tanked blocks (EIS p. 101; Appendix AA, pp. 4, 23–24), and even places them differently from the EIS — north and south (EIS p. 101) versus west and east (Appendix AA, p. 4), using footprints “provided by the client” (Appendix AA, p. 4). Yet the EIS tells the Department the strategy “is expected to minimise cumulative impacts” (EIS p. 143). If construction on the two sites overlaps, the combined drawdown next to a basement 1 m from its neighbours has simply not been assessed.

For SSD-86122958 at 2–16 Spencer Street, the Department obtained an independent peer review (PSM6131-002R Rev1, 24 June 2026), which found the applicant’s material insufficient against 10 of 13 criteria. The Department has relayed that feedback to this proponent (EIS p. 59). An independent review of both adjoining sites together is the only way to test whether it has been addressed.

DPHI's used PSM to do an independent geotechnical for the 23-31 Dover Road site.

Its report recommended controls materially weaker than Council's):

(i) **Drawdown.** PSM described GHD's 0.3 m limit as "a conservative general screening tool" (pp. 39–42), suggested site-specific studies could raise it "to at least 1.0 m" (p. 14), and agreed that the DCP's 0.3 m requirement "may not be necessary for the protection of the neighbours" (p. 28). Its recommended dewatering condition sets no numerical drawdown limit at all (CC4, p. 36), leaving Morrow's 1.5 m trigger (p. 22) to be justified after consent (p. 23).

(ii) **Vibration.** Council's DCP limits vibration, measured at the site boundary, to 0.28 mm/s for continuous and 2.5 mm/s for intermittent and impulsive vibration (DCP E2.2.10 C8; PSM p. 7). PSM considered these "more consistent with human comfort levels than damage to structures" and suggested limits of 5 mm/s "and potentially as high as 10 mm/s" (p. 16). Its recommended condition allows 5 mm/s peak particle velocity measured at adjoining structures (CC2, p. 34) — double the DCP's intermittent limit, nearly 18 times its continuous limit, and measured at the building rather than the boundary.

(iii) **Monitoring.** PSM found the applicant had "not undertaken sufficiently long-term groundwater monitoring" (Table 3, item 1.2, p. 30), yet its condition only "preferably" requires six months, and allows a shorter record supplemented by regional data (CC4, p. 36).

(iv) **Deferral.** PSM rated six of 13 criteria insufficient, including excavation-induced ground movement, setbacks and dilapidation surveys (Table 3, pp. 30–33). The applicant declined PSM's recommended 3 m offset and provided no further settlement calculations (Table 4, p. 38), but PSM concluded these could be "resolved by imposing appropriate consent conditions" (p. 39), noting that such work "is typically undertaken after approval" (p. 29).

Its dismissal of cumulative impacts from basement excavation and dewatering should not carry over to Pathways.

(i) PSM concluded that drawdown effects "are not cumulative, provided the basements are tanked in perpetuity" (p. 16). **Permanent tanking addresses the completed buildings; it says nothing about two excavations dewatering at the same time.**

(ii) PSM accepted Morrow's view that concurrent dewatering with 6–8 Richmond Road would have no tangible cumulative effect because that site is more than 150 m away and down-gradient (p. 28). Pathways is neither. 33 Dover Road, part of the Pathways site, adjoins the approved basement, whose excavation is about 800 mm from that boundary (p. 28) — well inside Morrow's predicted drawdown of more than 0.2 m out to about 80 m (p. 22).

The Pathways basement is set back only about 1 m from its northern neighbours (Appendix Z, p. 13), so the two basements could sit about 2 m apart. Council's requirements do not allow groundwater flow to be assumed through corridors narrower than about 3 m between basements (DA Guide Att. 6, p. 6), so the two would act as a single barrier.

(iii) PSM judged damming “likely to be minor” under partial cut-off conditions (p. 16), and said the “proposed offsets and the topography would make damming water behind the basement difficult” (pp. 32–33), although the approved basement has no setback to its eastern and southern boundaries (p. 20). Pathways is a full cut-off socketed into sandstone (EIS p. 100) and predicts cumulative mounding of 0.5 m (EIS p. 99) — above GHD’s estimate of less than 0.3 m for full cut-off basements (GHD 2024, pp. ii, 24), on which PSM relied (p. 15).

(iv) PSM undertook no groundwater analysis of its own (pp. 12, 16), and its cumulative conditions extend only to “existing basements and basements not constructed but already approved” (CC3, CC4 and CC6, pp. 35–37). Neither assessment addresses two deep excavations being built side by side.

The Pathways dewatering assessment relies on treating the adjoining 23–31 Dover Road development as a permanently tanked, completed structure rather than modelling the concurrent drawdown and dewatering impacts that would occur if both basements are excavated at the same time. This creates a significant blind spot regarding cumulative hydrogeological risks in the Rose Bay sand aquifer.

Recommendation – Reconciliation of conflicting models and standards. Having approved one major excavation on a hydrogeological model that contradicts this one, and on the basis of the PSM review that relaxed Council’s established controls, DPHI must reconcile the contradictions before approving the Pathways SSDA. Any independent review of the Pathways proposal must explicitly model and test concurrent construction dewatering with the approved 23–31 Dover Road basement, and apply Council’s mandatory drawdown and vibration standards rather than relaxed equivalents.

Section 4: Cumulative impacts and the development pipeline

4.1 Only one of seven proposals was assessed. The EIS lists eight applications on and around the block (EIS Table 3, p. 7) but assesses only 23–31 Dover Road, “strictly applying” the relevant future project framework (EIS p. 142). Council raised cumulative groundwater drawdown in its pre-lodgement feedback (EIS p. 59), and residents raised groundwater and damage concerns at consultation (EIS p. 61).

4.2 The updated assessment would escape exhibition. The EIS proposes to update its cumulative assessment at the Response to Submissions stage (EIS pp. 6, 142), after the community’s opportunity to comment has closed. Its groundwater consultant accepts the model should be updated as information on neighbouring developments emerges (EIS pp. 101–102). The updated assessment must be publicly exhibited.

Section 4.3 Summary:

Subsurface Damming Effect: A fully tanked basement socketed into sandstone will act as an impermeable subsurface barrier across the Rose Bay sand aquifer, obstructing natural groundwater flow.

Exceeding Natural Variability: Predicted cumulative mounding of 0.5 m exceeds the applicant's own adopted natural variability (0.4 m) and GHD's established threshold for full cut-off basements (0.3 m).

Conflict with Council Controls: Woollahra Council requires uninhibited groundwater drainage paths to maintain the natural range of fluctuation, yet no such drainage is proposed despite recommendations from both the applicant's geotechnical engineer and the adjoining site's consultant.

Unassessed Risks & Permanent Damage: The applicant's cumulative modeling relies on simplified, completed block assumptions rather than evaluating active concurrent developments, ignoring GHD's warning that resulting ground settlement and barrier effects will cause permanent, irreversible damage.

4.4 The pipeline. This block and its surrounds face an unprecedented concentration of deep-basement proposals (Attachment A):

Proposal	Scale	Basement	Status
SSDA 2–16 Spencer Street (SSD-86122958)	9 storeys, 54 units	3 levels	Approved
SSDA 23–31 Dover Road (SSD-86017721)	8 storeys, 70 units	2 levels	Approved
SSDA 2A Conway Avenue / 15–15A Fernleigh	8 storeys, 70 units	3 levels	Response to Submissions
SSDA 32–42 Wilberforce Avenue / 41–55 Dover Road (SSD-123064740)	8–9 storeys, 105 units	2 levels	EIS stage
SSDA 36–56 Dover Road / 27–31 Hamilton Street (SSD-108773958)	8–12 storeys, 433 units	3 levels	EIS stage

Proposal	Scale	Basement	Status
DA/449/2025, 12–18 Wilberforce Avenue	8 storeys, 32 units	2 levels	LEC appeal
DA446/2025, 10 Wilberforce Avenue	8 storeys, 8 units	3 levels	Under assessment
DA2026/187, 35–37 Wilberforce Avenue	8 storeys, 31 units	2 levels	Under assessment

These are among approximately 22 applications proposing deep basements in the Rose Bay basin following the LMR reforms. No single application can properly be assessed in isolation, and a precinct-wide cumulative hydrogeological study should precede determination of further deep-basement proposals in the Rose Bay Settlement Area.

4.5 The scale is not needed to meet housing targets. The EIS relies on Woollahra’s target of 1,900 additional dwellings (EIS p. 18). The LMR reforms have created zoned capacity far exceeding that target, and the local market’s capacity to absorb new apartments is a small fraction of that capacity. The binding constraints on supply are market and financing conditions, not planning controls.

Section 5: Flood risk and vulnerable residents

The applicant’s Flood Impact Assessment (Appendix X) shows Wilberforce Avenue at hazard category H5 in the 1% AEP event, with depths of about 0.5 m to more than 1 m. In the PMF it reaches H6 — the highest category — with depths over 1.5 m and velocities over 5 m/s (EIS p. 112), across the full site frontage (EIS p. 113).

The site stays “flood free” only through flood walls and mechanical flood gates on both frontages (EIS pp. 112–113). Aged care and independent living residents, expected to average 80 to 85 years of age (EIS p. 143), would depend on those gates working, with shelter-in-place as the preferred response and no formal flood forecasting system for the area (EIS p. 113). The only vehicle access, including to the basement ambulance bay, is from Wilberforce Avenue (EIS pp. 34–35) — the H5/H6 frontage. The EIS also describes H6 conditions “at the proposed driveway” on Dover Road (EIS p. 112), which is inconsistent and must be clarified.

The conclusion of “no cumulative impacts from a flood perspective” (EIS pp. 113, 144) rests solely on this site staying dry. It does not consider several adjoining developments each confining overland flow to the same road corridors behind flood walls.

Requested outcomes

I ask the Department to refuse the application. In the alternative, no determination should be made until the following have been completed and publicly exhibited:

- (a) **Independent peer review** of SSD-100912708 and SSD-86017721 together, reconciling their conflicting flow directions, inflows and drawdowns, and assessing concurrent construction dewatering.
- (b) **Pre-consent settlement modelling**: quantitative settlement and ground movement analysis for all adjacent structures, including peat occurrence and base stability, rather than a post-consent condition.
- (c) **Remodelling with measured permeability**: the groundwater model re-run using the measured sand hydraulic conductivities (1.2×10^{-4} to 6.6×10^{-4} m/s), with sensitivity testing of the sand unit.
- (d) **Council's drawdown limit**: compliance with the 0.3 m DCP limit measured at the site boundary, based on at least 12 months of baseline monitoring, in place of the 0.4 m trigger.
- (e) **Drainage-through design**: a sub-slab or equivalent system that maintains groundwater flow within its natural range.
- (f) **Contamination**: the Detailed Site Investigation (and any Remediation Action Plan) completed, so s 4.6 of the Resilience and Hazards SEPP can be satisfied.
- (g) **Complete cumulative assessment**: all proposals in EIS Table 3 modelled and the result re-exhibited.
- (h) **Deep soil and height**: the deep soil and communal open space calculations reconciled with the 5,652 m² site area; the height variation reconsidered; and a solar access assessment that includes the no-bonus comparison required by SEAR 7, the hours of mid-winter sun retained by neighbouring properties, and all proposals on the block.
- (i) **Vibration**: Council's DCP vibration limits (0.28 mm/s continuous; 2.5 mm/s intermittent and impulsive), measured at the site boundary, rather than the 5 mm/s at adjoining structures recommended for the adjoining site, or the 8 mm/s provisionally suggested by the applicant's engineer, who accepts that 2.5 mm/s should apply to neighbouring buildings founded at high level in loose sand (Appendix Z, pp. 19–20).
- (j) **Coordination with the approved adjoining basement**: assessment of concurrent construction with SSD-86017721, a joint monitoring network across the shared boundary, and construction sequencing that prevents the two sites dewatering at the same time.
- (k) **Site characterisation**: identification of which parts of the site, and of the neighbouring properties within the zone of influence, lie in GHD Rose Bay Settlement Zone B; and cone penetration testing to bedrock along the full cut-off wall alignment, with site-specific settlement calculations, rather than reliance on a regional zone boundary drawn from sparse data points. The geotechnical report relies on a September 2023 version of GHD's Rose Bay study (Appendix Z, p. 28), not the final report of 31 July 2024 (GHD 2024).

I also ask the Department to support a precinct-wide hydrogeological study of the Rose Bay Settlement Area before determining further deep-basement proposals within it.

Cr Merrill Witt Councillor for Vaocluse Ward, Woollahra Municipal Council

Documents relied on

Short form	Document
EIS	Gyde Consulting, Environmental Impact Statement, SSD-100912708, 27 August 2026 (printed page numbers)
Appendix L	Bradshaw Consulting Arborists, Arboricultural Impact Assessment (EIS Appendix L), Version 2, 24 July 2026
Appendix Z	Douglas Partners, Report on Geotechnical Investigation (EIS Appendix Z), 236899.01.R.001.Rev2, 30 July 2026
Appendix AA	Douglas Partners, Dewatering Management Plan (EIS Appendix AA), Rev1, 20 August 2026
DA Guide Att. 6	Woollahra Municipal Council, DA Guide – Attachment 6: Geotechnical and Hydrogeological Reports
Woollahra DCP 2015	Woollahra Development Control Plan 2015, Chapter E2 Stormwater, Flood and Geotechnical Risk Management (as amended 2 December 2024)
GHD 2020	GHD for Woollahra Municipal Council, Double Bay – Hydrogeological Geotechnical Impacts, June 2020
GHD 2024	GHD for Woollahra Municipal Council, Rose Bay – Hydrogeological and Geotechnical Impacts, 24_135498, Final, 31 July 2024
PSM 2026	PSM for the Department of Planning, Housing and Infrastructure, 23–31 Dover Road, Rose Bay – Geotechnical Peer Review, PSM6131.02-003R, 24 August 2026

Short form	Document
Morrow DMP	Morrow Geotechnics, Dewatering Management Plan, 23–31 Dover Road, P3496_04 Rev4, 23 February 2026
Morrow GIR	Morrow Geotechnics, Geotechnical Investigation Report, 23–31 Dover Road, P3496_02 Rev3, 23 February 2026
EI ASSMP	EI Australia, Acid Sulfate Soil Management Plan, 23–31 Dover Road, E26745.E14_Rev3, 23 February 2026
Attachment A	Register of concurrent deep-basement applications, Rose Bay basin