

Memo

To: Jesse Jacometti (MPDC), Oliver Smith (MPDC)

From: Tristan McWilliam (WSP, Principal Geotechnical Engineer)

Technical Review: Ross Harvey (WSP Director, Structures)

Subject: **Order Requirements - Goods Shed and Red Shed Deconstruction**

Our ref: PS225332-WSP-HOB-GEO-MEM-015 Rev1 Goods Shed

Date: 3 July 2026

Jesse

The proposed Macquarie Point development requires the movement of some existing onsite infrastructure to facilitate the construction of the Multipurpose Stadium. The existing Goods Shed on the site is required to be dismantled, stored, reconstructed and repurposed as part of the development. We understand the Red Shed will be deconstructed but not relocated as part of the development. This memorandum provides some measures to be implemented to meet the requirements of the Tasmania State Policies and Projects (Macquarie Point Precinct) Order 2025, Statutory Rules 2025, No 49 (The Order). In particular, the focus of this memo is on item B13 – the structural and geotechnical measures to be implemented. Figure 1 shows the location of the Goods Shed and Red Shed on the site. Extracts from The Order related to the Goods Shed and Red Shed are provided in Attachment A.

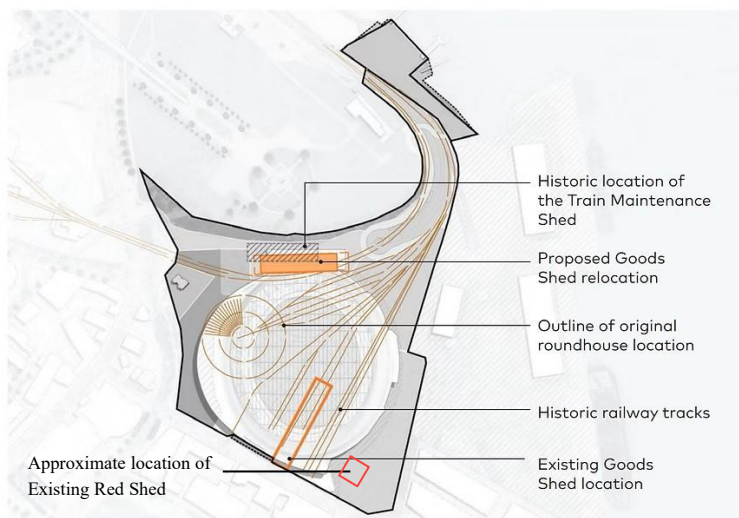


Figure 1 Location of Goods Shed relative to the development (source: www.macpoint.com)

Figure 2 and Figure 3 provided historical sections for the Goods Shed and Red Shed.

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WSP acknowledges that every project we work on takes place on First Peoples lands. We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

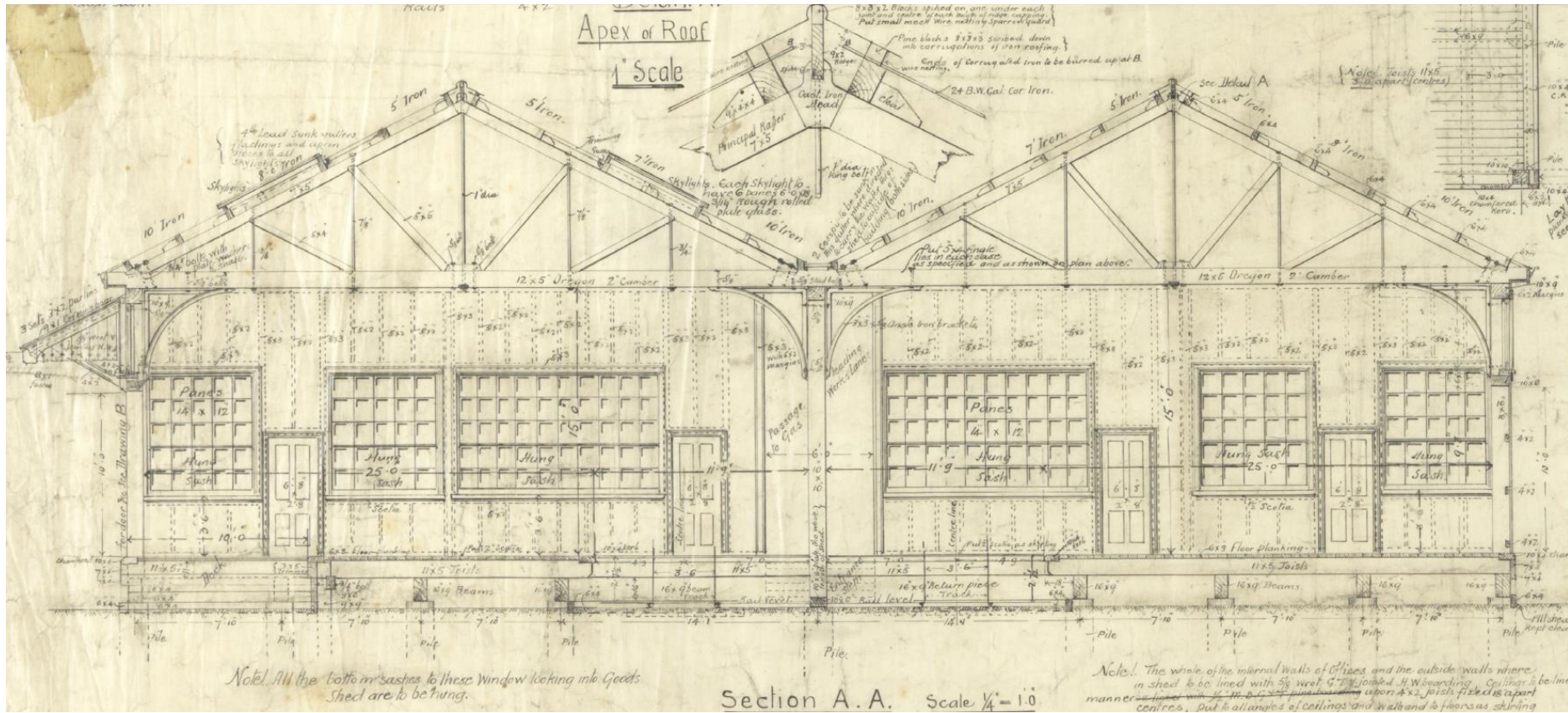


Figure 2 Goods Shed Historical Section

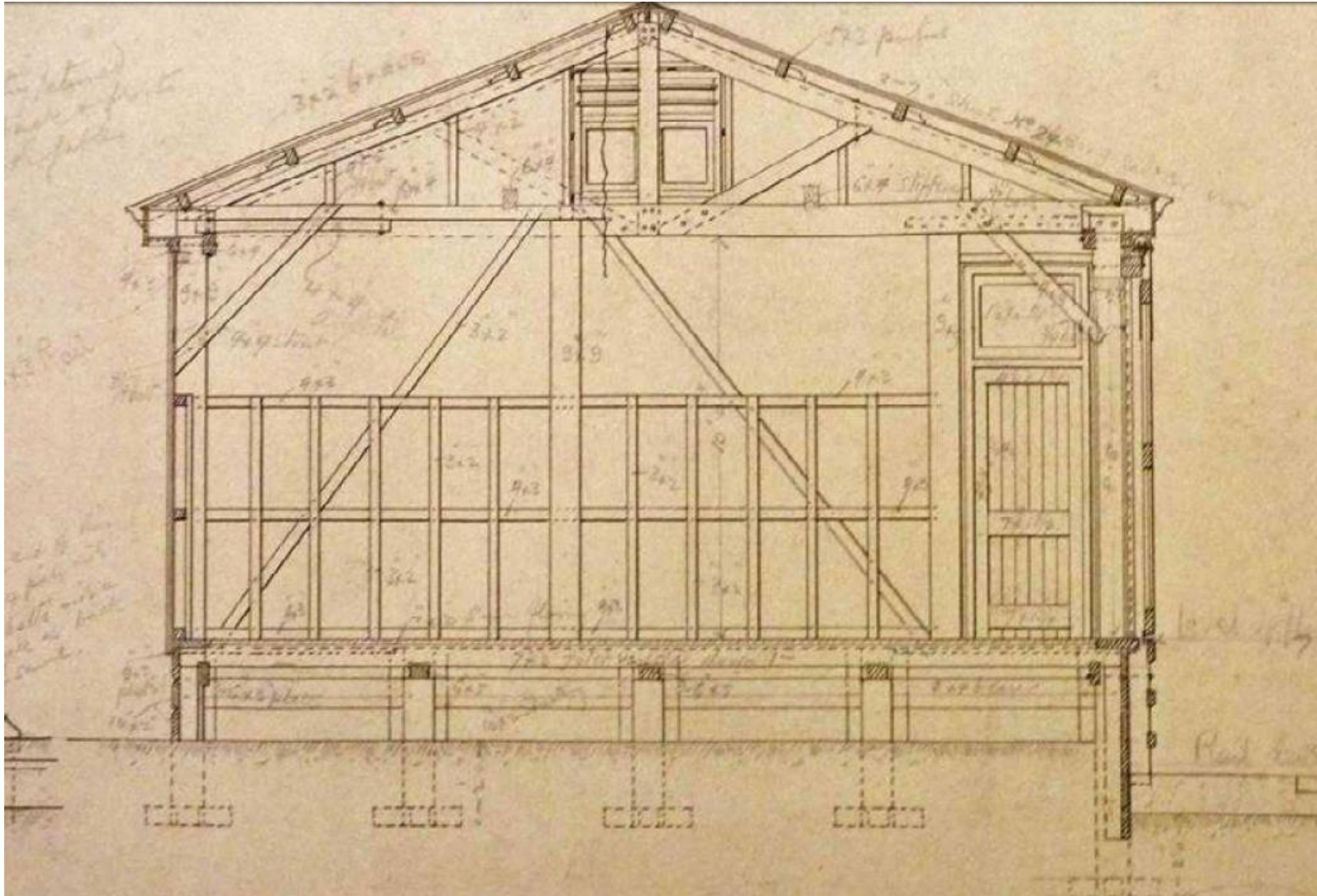


Figure 3 Red Shed Historical Section

The drawings indicate the footings for the Goods Shed are likely to comprise piles, assumed to be concrete, with timber beams and joists spanning the footings. The Red Shed footings appear to comprise embedded shallow spread footings.

B13 Requirements

A summary of the requirements of B13, that is the focus of this advice, is as follows:

- Assess whether the works have, or do not have, an impact on the structural integrity of the road reservation during construction or operation;
- Assess whether the works comply with AS 4678-2002, the Australian Standard for earth retaining structures. This item is not considered relevant for the Goods Shed relocation.
- Consider the additional surcharge loadings in accordance with relevant standards and their effect on the structures;
- Provide reference to any relevant geotechnical investigations or findings;
- Recommend any necessary mitigation measures to protect road infrastructure;
- Provide details on the location and structural design of footings adjacent to the highway [road] reservation; and
- Confirm that all works must be performed in accordance with this order.

These items are discussed individually, following the anticipated high level methodology for the deconstruction of the Good Shed.

Deconstruction Methodology

We anticipate that the general methodology for the deconstruction of the Goods Shed is as follows:

1. A structural engineer should develop a deconstruction staging plan, to ensure that there are no adverse effects on the structure during the works and that the appropriate temporary support is in place, to facilitate the works. Deconstruction in an unplanned manner could lead to additional load transferring to a structural member that does not have the capacity for the additional load. In addition, should there be section loss through corrosion, the structural capacity of the load bearing columns and beams may be less than the capacity at time of installation.
2. The appropriate heritage conservation management measures should be implemented, to meet the Heritage items of The Order, outlined in Appendix A.
3. Scaffolding is to be erected where required, to facilitate deconstruction. The temporary works designers will need to confirm scaffolding post loads and footing requirements to ensure the stability of the scaffolding system. Depending on the magnitude of the loading, the bearing capacity of the fill supporting the scaffolding may need verification (e.g. DCP's, proof roll) to ensure the stability of the system.
4. Where scaffolding is to be erected adjacent to publicly accessible areas, for example adjacent to the road reserve of Evans Street, containment sheeting should be erected to provide fall protection to prevent items from falling and impacting the ground.
5. A crane or franna may be used to assist with the deconstruction of heavy items. A lift study and foundation assessment should be undertaken to ensure safe operation of cranes, for the deconstruction works.
6. Depending on the operating radius of the crane, an over-sail agreement may need to be sought with the Hobart City Council. It may be preferable to undertake all lifting operations within the site boundary to eliminate the need for over-sail arrangements.
7. Where required, deconstruction plant may need to be registered with Worksafe Tasmania (e.g. mobile cranes rated to loads greater than 10t).
8. Appropriate traffic management should be implemented to ensure that both pedestrian and vehicle traffic can continue to operate along Evans Street in a safe manner.
9. Any excavation below ground level as part of the deconstruction works is expected to be a maximum of 0.5 m below current ground level.

Where relevant, the above methodology should be considered for the Red Shed deconstruction.

B13 Assessment

The following items discuss the B13 clause items relative to the deconstruction methodology.

Impact on the road reserve

Provided the scaffolding, temporary support and crane loading are implemented for the deconstruction works in accordance with the staging plan, there is a low risk that the structural integrity of the road reserve would be impacted. Where demolition of footings adjacent to the road reserve is required to be undertaken, appropriate measures such as saw cutting should be adopted to structurally isolate the Goods Shed footings from the adjacent footpath concrete. Vibrations from demolition activities, such as jack hammering, should be considered and the potential for structures nearby to be affected. Low impact methods should be used to remove footings near the road reserve if required.

Any excavation for the deconstruction of the Goods Shed that is adjacent to and below the footpath founding level should be reviewed by a geotechnical engineer to ensure there are no risk of undermining the footpath. Some consideration of excavation adjacent to structures has already been considered in the Bulk Excavation Stage 1 works and this advice is only applicable to works outside of what has been addressed as part of Stage 1. We do not anticipate there to be significant excavation required as the deconstruction contract is understood to require a maximum of 0.5 m of excavation below existing levels. Where excavation is required below the ground level as part of the deconstruction works, it is recommended that no excavation occur below a 45 degree surface projected downwards from the existing road/footpath reservation.

Consideration should also be given to existing services within close proximity of the works, such that movement and vibration induced within the ground is within the tolerable limits specified by the asset owners.

Compliance with AS4678

The proposed deconstruction works are generally above ground level and no retaining structures are anticipated to be required as part of the deconstruction works. We note that earth retention may be required as part of the reconstruction and repurposing of the Goods Shed and the designers must comply with the project requirements and Australian Standards for such structures.

Loading

It is unlikely that significant additional loading will be imparted on the structures during deconstruction, and the structural designers assessing the deconstruction staging should identify and assess loading to be applied, and the current capacity of load bearing items, to ensure members are not adversely impacted. Temporary works loading for cranes and scaffolding should be considered by the temporary works designers.

Geotechnical Conditions

Refer to the Macquarie Point Geotechnical Interpretive Report (reference PS225332-WSP_HOB-GEO-REP-006 Rev0 dated 30 January 2026 for location specific ground information. The main ground feature that dominates the southern portion of the site is a paleochannel that aligns in a general west to east direction, that passes below the southern half of the Goods Shed and the Red Shed. A general summary of the ground conditions at the Goods Shed and Red Shed is provided in the table below.

Table 1 *Ground Condition Summary near Goods Shed and Red Shed*

	Goods Shed		Red Shed	
	Approx. Layer Thickness	Approx. Surface RL	Approx. Layer Thickness	Approx. Surface RL
Uncontrolled Fill	3 m to 7 m	3 m to 4 m AHD	7 m to 9 m	3 m to 4 m AHD
Estuarine Deposits	2 m to 7 m	0 m to -3 m AHD	6 m to 8 m	-4 m to -6 m AHD
Alluvium	2 m to 7 m	-3 m to -8 m AHD	1 m to 6 m	-12 m to -13 m AHD
Weathered Dolerite	Not proven	-3 m to -15 m AHD	Not Proven	-12 m to -17 m AHD



The temporary works required for the deconstruction will largely interact with the layer of uncontrolled fill across the site. The near surface uncontrolled fill is variable in nature and composition, generally described as gravelly sand, clayey gravelly sand to silty sandy gravel. There are some layers of silty clay, sandy clay and gravelly clay within the Uncontrolled Fill. The Fill has a variable density generally loose and medium dense. The underlying Estuarine deposits are predominantly granular and are very loose to loose.

The Alluvium is typically sandy and gravelly and medium dense to dense. Moderately weathered to fresh Dolerite underlies the Alluvium in the areas of the Goods Shed and Red Shed.

Recommended mitigation measures to protect road reserve

Recommended mitigation measures to be implemented to protect the road reserve have been mentioned in the deconstruction methodology and include:

- Preparation of a detailed deconstruction plan to stage the works such that no adverse movements or structure collapse occurs.
- Careful excavation adjacent to road reserve infrastructure to not undermine the existing structures.
- Consideration of vibration from any deconstruction or demolition tasks. Use of low vibration techniques, isolating footings by saw cutting and perhaps undertaking vibration monitoring where sensitive structures are nearby.
- Install barriers such as scaffolding and fall protection sheeting to remove the potential for items to fall from the Sheds to the road reserve.
- Undertake lift studies and foundation bearing capacity assessment for crane loading to ensure the foundation has sufficient strength. Ground improvement measures such as the construction of a working platform may be required if loads are sufficiently large.
- Undertake an onsite inspection to verify the location of existing footings, prior to commencement of the deconstruction, to identify any structures or footings that could have a higher risk of impacting the road reserve. This inspection should form part of the development of the deconstruction staging plan.
- Review and consideration of existing underground services in the development of the deconstruction staging plan.

Closure

We trust this memorandum provides sufficient information to inform the measures to be implemented to prevent damage to the road reserve during deconstruction works of the Goods Shed and Red Shed. Should you require clarification of any items, please contact the undersigned.



Limitations

Please refer to the limitations statement in Appendix B for the uses of this technical memorandum.

A handwritten signature in black ink, appearing to read 'Tristan McWilliam'.

Tristan McWilliam

Principal Geotechnical Engineer

BEng(Hons), MEngSc, MIEAust, CPEng, NER

Appendices

Appendix A	Order Extract
Appendix B	Limitations Statement

Appendix A

Table A.1 Extract from Tasmania State Policies and Projects (Macquarie Point Precinct) Order 2025, Statutory Rules 2025, No 49 for items related to the Goods Shed

Ref.	Item	Discussion
B13	Design Drawings, Structural Certificates and Geotechnical Assessments	Before a stage of works for the Project, commences, detailed design drawings, structural certificates and associated geotechnical assessments for that stage must be prepared that: a are prepared by a suitability qualified and experienced engineer and include – i confirming whether the works have, or do not have, an impact on the structural integrity of the road reservation during construction or operation; and ii whether the works comply with AS 4678-2002 and specify a design life, consistent with Table 3.1 of that Standard, for major public infrastructure relating to the works; and iii information that accounts for any additional surcharge loadings in accordance with relevant standards prepared by Standards Australia; and iv a reference, and response, to any relevant geotechnical investigations or findings; and v any necessary mitigation measures to protect road infrastructure; and vi details on the location and structural design of footings adjacent to the highway reservation; and vii a requirement that all works must be performed in accordance with this order; and b are approved by the Secretary before works on that stage commence.
H1	Management Plan	Before the relocation of the Goods Shed, a management plan must be prepared by the Proponent, to the satisfaction of Heritage Tasmania, for the purpose of management of historical cultural heritage matters relating to the Project.
H2	Heritage Conservation Management Plan	The Heritage Conservation Management Plan must: a be prepared before works commence to dismantle the Goods Shed; and b include the methodology proposed to be used to dismantle, store and re-erect the Goods Shed including, but not limited to, alteration, adaptation and interpretation of the Goods Shed; and c be prepared while having regard to The Goods Shed Initial Conservation Management Plan prepared by Purcell Architecture (ABN 43 636 400 327) on 16 May 2025; and d be prepared by a suitably qualified and experienced person in heritage matters.
H3	Heritage Conservation Management Plan	The Heritage Conservation Management Plan must be prepared on the basis of a structural assessment, and extant recording, of the Goods Shed undertaken by a suitably qualified and experienced structural engineer to ensure that the building: a is relocated with minimal loss of heritage fabric; and b is conserved with a high degree of integrity and authenticity.
H4	Heritage Conservation Management Plan	The relocation of the Goods Shed must be carried out in accordance with the methodology specified in the Heritage Conservation Management Plan.

Ref.	Item	Discussion
H7		A revised Heritage Conservation Management Plan must be prepared by a person who is suitably qualified and experienced in heritage, and made publicly available, by the Proponent: a after the Goods Shed has been relocated on Project land; and b before the Goods Shed is occupied for use.
H15		a Before any demolition occurs on Project land as part of heritage works, an archival record of the buildings referred to in subclause (2) must be prepared by the Proponent that: i is in accordance with Practice Note No. 3, approved by the Heritage Council on 19 November 2014, and entitled Procedure for Recording a Heritage Place; and ii once so prepared, is made publicly available. b An archival record is required under this condition of the following buildings: i the Goods Shed; ii the building known as the Red Shed; iii the Hydro Electric Commission Building.
H17		The Public Domain and Landscaping Plan required under condition B3 must – a include landscaping surrounding the <i>Goods Shed</i> in its new location on Project land that is informed by the revised Heritage Conservation Management Plan required under condition H7;



Appendix B Limitations Statement



LIMITATION STATEMENT GEOTECHNICAL SITE INVESTIGATION AND GEOTECHNICAL INTERPRETATION

SCOPE OF SERVICES

This geotechnical report (the report) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the MPDC and WSP (scope of services). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, site access and/or site disturbance constraints.

RELIANCE ON DATA

In preparing the report, WSP has relied upon data, surveys, analyses, designs, plans and other information provided by the client and other individuals and organisations, most of which are referred to in the report (the data). Except as otherwise stated in the report, WSP has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. WSP will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.

GEOTECHNICAL INVESTIGATION

Geotechnical engineering is based extensively on judgment and opinion. It is far less exact than other engineering disciplines. Geotechnical engineering reports are prepared to meet the specific needs of individuals. A report prepared for a consulting civil engineer may not be adequate for a construction contractor or even some other consulting civil engineer. This report was prepared expressly for MPDC and expressly for purposes indicated by MPDC or their representative. Use by any other persons for any purpose, or by the client for a different purpose, might result in problems. MPDC should not use this report for other than its intended purpose without seeking additional geotechnical advice.

The WSP geotechnical and geophysics investigation services were conducted in a manner consistent with the level of care and skill ordinarily exercised by other members of the geotechnical and geophysical community currently practicing under similar conditions and subject to the time limits, financial and physical constraints applicable to the services.

THIS GEOTECHNICAL REPORT IS BASED ON PROJECT-SPECIFIC FACTORS

This geotechnical engineering report is based on a subsurface investigation which was designed for project-specification factors, including the nature of any development, its size and configuration, the location of any development on the site and its orientation, and the location of access roads and parking areas. Unless further geotechnical advice is obtained, this geotechnical engineering report cannot be used:

- when the nature of any proposed development is changed; and
- when the size, configuration location or orientation of any proposed development is modified.

This geotechnical engineering report cannot be applied to an adjacent site.

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THE LIMITATIONS OF SITE INVESTIGATION

In making an assessment of a site from a limited number of investigation locations, there is the possibility that variations may occur between test locations. Site exploration identifies specific subsurface conditions only at those points from which samples have been taken. The risk that variations will not be detected can be reduced by increasing the frequency of test locations. The investigation program undertaken is a professional estimate of the scope of investigation required to provide a general profile of the subsurface conditions. The data derived from the site investigation program and subsequent laboratory testing are extrapolated across the site to form an inferred geological model and an engineering opinion is rendered about overall subsurface conditions and their likely behaviour with regard to the proposed development. Despite investigation, the actual conditions at the site might differ from those inferred to exist, since no subsurface exploration program, no matter how comprehensive, can reveal all subsurface details and anomalies.

The investigation logs are the subjective interpretation of subsurface conditions at a particular location, made by trained personnel. The interpretation may be limited by the method of investigation, and cannot always be definitive. For example, CPTu enables continuous profiling of soil properties along the test depth; however, its effectiveness is constrained by refusal in hard clay, dense sand/gravel or rock formations. In site investigation, the actual interface between materials may be more gradual or abrupt than a report indicates.

With reference to the geophysical assessment, Seismic refraction and multi-channel analysis of surface waves methods both have some inherent limitations in effectively representing subsurface conditions in all geological environments. The completed geophysical methods are remote sensing methods that may not detect all subsurface features. Depth of penetration is dependent on the nature of the subsurface. Furthermore, it is possible that interpreted features such as stratigraphic boundaries, top of bedrock, faults, voids, other geologic hazards and utilities may, upon intrusive sampling, prove to have been misinterpreted. Accurate interpretation of remote sensing data relies on the site-specific correlation of information with that obtained from borehole drilling, digging or other direct observation methods.

SUBSURFACE CONDITIONS ARE TIME DEPENDENT

Subsurface conditions may be modified by changing natural forces or man-made influences. A geotechnical engineering report is based on conditions which existed at the time of subsurface exploration.

Construction operations at or adjacent to the site, and natural events such as floods, or groundwater fluctuations, may also affect subsurface conditions, and thus the continuing adequacy of a geotechnical report. The geotechnical engineer should be kept apprised of any such events, and should be consulted to determine if additional tests are necessary.

AVOID MISINTERPRETATION

A suitably qualified geotechnical engineer should be retained to work with other appropriate design professionals explaining relevant geotechnical findings and in reviewing the adequacy of their plans and specifications relative to geotechnical issues.

BORE/PROFILE LOGS SHOULD NOT BE SEPARATED FROM THE ENGINEERING REPORT

Final bore/profile logs are developed by geotechnical engineers based upon their interpretation of field logs and laboratory evaluation of field samples. Customarily, only the final bore/profile logs are included in geotechnical engineering reports. These logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings. To minimise the likelihood of bore/profile log misinterpretation, contractors should be given access to the complete geotechnical engineering report prepared or authorised for their use. Providing the best available information to contractors helps prevent costly construction problems. For further information on this matter, reference should be made to 'Guidelines for the Provision of Geotechnical Information in Construction Contracts' published by the Institution of Engineers Australia, National Headquarters, Canberra 1987.



GEOTECHNICAL INVOLVEMENT DURING CONSTRUCTION

During construction, excavation is frequently undertaken which exposes the actual subsurface conditions. For this reason geotechnical consultants should be retained through the construction stage, to identify variations if they are exposed and to conduct additional tests which may be required and to deal quickly with geotechnical problems if they arise.

REPORT FOR BENEFIT OF CLIENT

The report has been prepared for the benefit of MPDC and no other party. WSP assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of WSP or for any loss or damage suffered by any other party not entitled to rely upon the factual information expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions (unless third-party reliance has been extended) and should make their own enquiries and obtain independent advice in relation to such matters.

OTHER LIMITATIONS

WSP will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.