PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

Why is PMH being demolished?

- PMH was the State's specialist children's hospital for 108 years until its closure in June 2018.
- Demolition works are required to revitalize this large parcel of land right on the doorstep of both Subiaco and the Perth CBD.

What is planned for the PMH site?

- PMH is proposed to be a high-quality residential development.
- As an inner-city village, on of the project objectives is to provide great places for the community to meet and socialise, prioritising pedestrian movement and connectivity to surrounding areas.
- At the centre of the PMH area will be a green heart - open areas for residents and the community to enjoy.
- The underpass will continue to be a key connection. Careful consideration is being given to improve this link to increase pedestrian connectivity between West Perth and Subiaco.

Figure 1. Subiaco East Master Plan area.

How is the history and heritage of PMH being reflected and celebrated?

- Godfrey House in the north-eastern corner of the Site, and the former 'Outpatients' building in the south-east of the site, have undergone restoration and will be retained as part of the future development.
- The PMH boiler house and chimney will also be retained and repurposed for future generations to enjoy.
- Many artefacts have been retained from the former PMH buildings and these will be used in selected spaces during the redevelopment of the site.
- The Master Plan also includes a dedicated reflection space for those who would like to spend time at the site in years to come.
- The Whadjuk Elders and our Community Reference Group (CRG) have indicated that the space should also include areas for play and education.
- DevelopmentWA has been working with the Children's Hospital Alumni of Western Australia to capture the history of Princess Margaret Hospital and tell its story through artwork.
- Former patients, staff and anyone with a deep connection to the site were offered the opportunity to submit their stories/reflections into a time capsule, to be buried in a memorial garden within the former PMH grounds. For more information visit www.developmentWA.com.au/subieast

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Will there be a memorial as part of the project?

- Yes, the former Outpatients building will be retained and protected on site and a memorial garden to provide a quiet reflective space for those whose children were treated at PMH.
- The space will also provide opportunity to highlight key people and events in the hospital's history through a memorial walk to the north of the former Outpatients building, together with a time capsule that will be buried in the memorial garden.
- Please refer to the Landscape Master Plan for more information. www.developmentWA.com.au/subieast

What is the PMH Time Capsule activity and how can I participate?

- Western Australians at home and all around the globe were offered an opportunity to farewell Princess Margaret Hospital by submitting their memories and experiences into a unique digital time capsule before demolition is completed in 2022.
- The time capsule will be buried in a memorial garden area at the Subi East PMH neighbourhood and opened in 109 years, the length of time PMH was in service.
- To submit your story, visit www.developmentwa.com.au/Subieast and follow the prompts.

How has the community been consulted?

- The PMH demolition is the third phase of the project. The first 2 phases included demolition of Subiaco Oval and the master planning for Subiaco East. All phases have included extensive consultation with the local community and stakeholders.
- In 2019 the community was asked for feedback on the Vision Concept for Subi-East.
- Three Community Reference Groups (CRG) have been established to date covering the various stages of the project.
- The PMH Demolition CRG had its first meeting in October 2020 and a recent meeting in March 2021.
- The CRG will provide feedback to DevelopmentWA, the demolition contractor RJ Vincent and will disseminate information to the local community.
- Regular project updates will be published and distributed to the community.
- Further information will be available on the 'Subi East Have Your Say' website. PMH Demolition | Have Your Say DevelopmentWA

How many jobs will this project create?

- The PMH demolition will create approximately 130 jobs including traineeships and apprenticeships for Aboriginal and Torres Strait Islanders candidates.
- The project provides daily direct employment opportunities for up to 50 local contractors and has injected more than five million dollars to the local economy since its inception.
- The overall Subi East project will provide approximately 2,700 jobs during construction and an estimated additional 660 jobs once it is fully developed and occupied.

How can stay up to date with the demolition?

- Project updates will be posted regularly to: PMH Demolition | Have Your Say DevelopmentWA
- Register your details via the "Stay informed" button on the website.
- If you are unable to access information online please email subieast@developmentwa.com.au or call our 24/7 project information line on 1800 430 844 to make alternative arrangements.

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DEMOLITION SPECIFIC

The following information is applicable to the general scope of work and is not intended to detail all technical aspects of the project. The community may contact DevelopmentWA via the 24-hr project information line (1800 430 844) or email (subieast@developmentwa.com.au) for additional information if required.

Who is doing the demolition?

- The contract to demolish PMH has been awarded to the experienced Western Australian based civil contractor, RJ Vincent.
- RJ Vincent were appointed following their successful and award-winning demolition of the former Subiaco Oval grandstands and reinstatement of the oval.

When will demolition commence and how long will it take?

- Preliminary site works commenced in late 2020 with structural deconstruction and demolition of the buildings commencing in mid-March 2021.
- The demolition of the site is expected to be completed by mid-2022.

What is the extent of the demolition?

- The deconstruction and demolition will be fully contained within the current PMH site, which is surrounded by Hay, Thomas and Hamilton Streets and Roberts Road – refer to image below. Hoarding and fencing has been erected around the site perimeter.

Figure 2. PMH Demolition Area

How will the buildings be demolished?

- The PMH buildings will be deconstructed using specialised mechanical equipment and tools.
- This includes hydraulic excavators equipped with special attachments (including a pulveriser) that can “chew through” steel and concrete using methods that minimise dust and noise whilst preserving valuable elements for recycling.
- Materials will be deconstructed into manageable sizes that will be loaded into trucks for cartage to recycling facilities in Bullsbrook, Neerabup and Rockingham.
- For further information on the demolition methodology, download the Demolition Methodology Information Sheet PMH Demolition | Have Your Say DevelopmentWA

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

Have dilapidation (property) surveys been carried out for nearby properties?

- Yes, dilapidation surveys of properties in proximity to the works have been completed by RJ Vincent.
- The dilapidation surveys took place prior to works commencing.

What is the transport route for the trucks carrying the demolition material?

- To minimise the impact on the surrounding community, there will be limited processing of materials on site.
- Materials will instead be transported to facilities in Bullsbrook, Neerabup and Rockingham for sorting and recycling. All truck loads will be dampened down with water during loading and prior to leaving site.
- Construction traffic will use the existing intersection on Hay and Hamilton Streets to enter and will exit the site using the Hamilton street and Roberts Road intersection.
- Entry and exit points will be controlled by dedicated traffic spotters to manage construction traffic and minimise disruptions to road users.

How will the demolition affect pedestrian movement, traffic and parking in the area?

- There will be an increase in trucks moving through the immediate area as materials are removed from site.
- During the demolition works, the contractors will park all vehicles on site and there should be no additional parking congestion in local streets.
- Pedestrians will have access to footpaths and to the Thomas Street underpass.
- The traffic signals at the Roberts Road / Hay Street intersections with Thomas Road will not be impacted.
- For further information on traffic impacts download the Traffic Management and Access Information Sheet.
- The construction traffic will use the existing intersections on Hamilton Street, entering the site via Hay Street and existing via Roberts Road. Entry and exit points will be manned with traffic spotters to manage demolition traffic and minimise disruptions to road users.

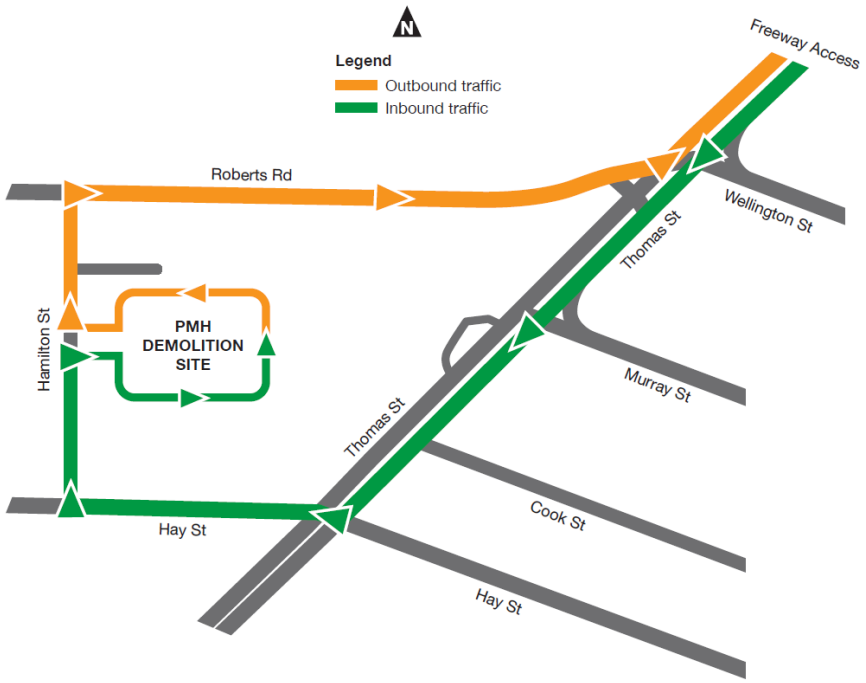

Figure 3. Haulage Routes

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

What will happen to the demolition material?

- The project is required to achieve at least a 97% waste re-use for recyclable materials.
- The demolition material will be removed from site, repurposed or processed (sorted, screened, crushed) and reused.
- Other developments and construction work around Perth will have access to use the recycled materials.

What will be done to protect trees on the site?

- A Tree Protection Strategy has been prepared for DevelopmentWA by a qualified arborist, to assist in guiding RJ Vincent on how to protect trees and other flora to be retained.
- Tree protection zones in accordance with Australian Standards will be established around all retained trees to ensure that vehicle access or demolition activities do not cause damage to the roots.
- For further information on environmental stewardship, download the Environmental Stewardship and Heritage Information Sheet. PMH Demolition | Have Your Say DevelopmentWA

Will demolition work impact surrounding residents?

- RJ Vincent is required to adhere to strict guidelines for dust control, vibration, traffic management and noise.
- Some impacts will be experienced by residents and businesses in proximity to the works, however we hope these can be kept to a minimum.
- We will continue to work with RJ Vincent throughout the process to identify opportunities to reduce the impact of the works.
- For further information on vibration and noise management download the Vibration and Noise Information Sheet PMH Demolition | Have Your Say DevelopmentWA

Will the demolition process leave debris and mess on the road?

- Dust / debris from the truck wheels may be deposited onto local roads.
- Regular road sweeping will be undertaken by RJ Vincent to remove this dust.
- If you notice road debris from the site, contact the Project Information Line on 1800 430 844 or email subieast@developmentwa.com.au.
- It is important to note that there are several construction related projects in Subiaco that are also using Roberts Road. The project will do its best to maintain a clean area, but we cannot control the activities of neighboring projects.

Is there asbestos in the PMH buildings?

- Yes there is or has been in most buildings on site as is expected in any building constructed before the 1980's and potentially later.
- The majority of the asbestos is internal to the buildings and in the underground service tunnels although some is external such as fibre cement eaves.
- Approximately 90% of the asbestos identified within the site is non-friable asbestos. It takes the form of bonded fibre cement such as wall cladding / sheeting and composite materials such as vinyl floor tiles. These types of materials are commonly found in buildings constructed in the 1950-1980 period.
- Approximately 10% is friable asbestos internal to the buildings or enclosed. Friable asbestos is usually in the form of thermal insulation. Friable material poses the greatest risk to the workforce during removal and as such the process of removal is more complex with very strict controls.

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

How will you prevent children and the community from being exposed to asbestos?

- Asbestos primarily represents an occupational risk to workers undertaking the removal work. All asbestos is therefore being removed from the buildings/structures:

    - by a DMIRS licenced and experienced contractor;
    - in accordance with legislation including relevant codes of practice; and
    - in strict accordance with site specific Asbestos Removal Control Plans.

- Key management measures include carefully planned and controlled removal of asbestos; secure negative pressure enclosures to contain the materials within buildings where required (friable asbestos); and water to manage dust.
- Controlled removal work is subject to independent inspections and air quality monitoring by a team of qualified and experienced hazardous materials consultants that specialise in asbestos identification and risk assessment.
- Following the removal of asbestos and independent inspection, a clearance certificate will be issued by the inspector for each building, prior to commencement of demolition.
- On the basis that exposure risks to onsite personnel are being strictly managed, the potential risk to the wider community outside of the site are therefore also managed.
- Asbestos waste materials will be managed separately from all other building materials and disposed of at a licenced disposal facility.
- In summary the management of all hazardous materials, including asbestos, during demolition projects is very similar and can be summarised as:

    - identify and quantify hazardous materials before and during internal strip out of buildings;
    - assess the risk of disturbance and exposure;
    - remove the hazardous material under appropriate controls to prevent exposure;
    - monitor where appropriate during removal works;
    - validate the area post hazardous material removal;
    - safely transport and dispose of the hazardous materials off-site at a licenced waste facility.

- A significant proportion of the asbestos containing materials were removed from the buildings during the school holidays (December-February 2021). Asbestos removal works will however continue in the first half of 2021.

Will you be monitoring for asbestos?

- Asbestos safety is a great concern for our workforce. The control measures, including air quality monitoring (fibres and general dust) that are in place throughout the asbestos removal work are intended to protect all of the workers within the site as well as the wider community.
- A comprehensive Asbestos Fibre Monitoring program, which includes internal and external monitoring locations, with a control limit set in accordance with codes of practice at 10 times below the national occupational exposure standard, will be adhered to for the duration of the works. This control limit is used to verify adequacy of controls implemented by the asbestos removal contractors.
- All analysis is conducted at NATA accredited laboratories, independent of the asbestos removal contractor.
- The site has and will continue to be regularly inspected by Worksafe and third-party safety auditors. To date the works have achieved very good compliance results.

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

How are you dealing with Radioactive materials?

- The PMH Radiation Safety Officer confirmed that no radiative substances were stored at PMH at the time of closure in June 2018.
- A radiation specialist consultant was also commissioned as part of the hazardous materials survey in 2019. No radiation above background levels was identified during the survey.
- A very limited number of smoke alarms with sealed radioactive sources have been identified within the site. They were consistent with typical household alarms and were removed intact, prior to deconstruction of the buildings and disposed of consistent with the Radiation Safety (General) Regulations 1983 under Regulation 7B (3a) as 'normal' household / commercial waste or as otherwise directed by the Radiological Council.

How are you dealing with materials containing lead?

- Lead has been identified primarily in paint and large sheets in walls used to protect workers operating x-ray machines.
  - Large sheets of lead were removed as single pieces for reprocessing offsite.
  - There will no cutting or grinding of lead sheets or lead paint containing materials on site.

- The threshold for considering paint as lead containing in public buildings was reduced in the Australian Standard from 1% to 0.1% in 2017. Prior to this, the majority of the paints analysed at PMH would not have been considered lead-containing due to the very low concentrations of lead present.
- Lead represents the greatest risk in occupational or workplace scenarios. Lead is most hazardous when raised as a fine respirable dust or fume during such actions as cutting, grinding, smelting and other hot work. Lead paints at PMH will not be subjected to such processes.
- Demolition practices do not pose a risk from lead due to the low concentrations present and the processes do not generate the fine particles in dust required for this to occur, in addition to water being used extensively to limit dust generation from all deconstruction activities.
- Fine particulate dust levels will be continuously monitored (24/7) in 'real time' at locations around the perimeter of the site with alarms set to alert at thresholds well below the adopted national standards for PM_{10} and $PM_{2.5.}$

How are you dealing with silica?

- Silica is a naturally occurring substance. It is impossible to remove silica from the environment because it is significant proportion of the earth's surface including sand.
- Exposure to silica is a workplace occupational issue. Today, workers in the stone bench top manufacturing industry appear to be at the greatest risk of silica exposure where high concentrations of fine dust are produced in an enclosed environment. Silica, as a constituent of general dust, is not considered a risk to the broader community during the demolition project and will be managed as a part of our overall dust management strategy.
- Modern demolition techniques include the deconstruction of buildings in a controlled manner and water is used extensively via misters and water carts to suppress dust.
- Any multi-storey structures in proximity to the perimeter of the site will also be enclosed in scaffolding and shade cloth which further limits the risk of particulate emissions.
- Fine particulate dust levels will be continuously monitored (24/7) in 'real time' at locations around the perimeter of the site with alarms set to alert at thresholds well below the adopted national standards for PM_{10} and $PM2_{.5}$.

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

What is your dust management methodology?

- Whilst dust is a common and unavoidable characteristic of demolition activities, the contractors Air Quality Dust Management Plan has been approved by the Local Council as part of the demolition application process and is required to be implemented for the duration of the project.
- The contractor will proactively ensure air quality is maintained by using dust suppression techniques. This includes the selective use of innovative mesh on scaffolding and fencing and spraying water directly onto buildings during demolition. Water will also be used to supress dust from debris stockpiles using misters and water carts. For more information on dust managed please see the Air Quality and Asbestos Removal Information Sheet.
- Fine particulate dust levels (PM_{10} and $PM_{2.5}$) will be continuously monitored (24/7) in 'real time' at locations around the perimeter of the site. The monitors will be set to alarm and notify RJ Vincent's site management team and environmental advisor (via SMS), at levels well below the national standards so that management controls can be increased (e.g., additional water) to prevent any exceedance.
- The monitoring is intended to inform the project team that the management controls are effective and that dust migrating beyond the Site boundary (where the monitors are located) is being minimised to the extent practicable.

How are you planning to deal with hazardous materials that you have not identified?

- Hazardous materials identified prior to site possession by the contractor have been well documented.
- Once the contractor took possession of site, soft strip work throughout all buildings was able to access all areas which were previously difficult to inspect.
- The contractor has procedures to manage any unexpected finds.
- Key steps in the unexpected finds procedures are:
    - 1. Stop work
    - 2. Initiate an investigation with the project team (including engineers and specialists in hazards materials and environmental management). The investigation may include sampling.
    - 3. Implement management controls as required.
- The procedures and control measures in place are intended to protect all of the workers within the site as well as the community.

How are you dealing with noise from the demolition site?

- Noise level criteria due to construction activities has been established to maintain acoustic amenity of the receivers in proximity to the project site.
- Noise from the demolition site is being actively managed by continuous monitoring around the site. Data is automated where alert messages are sent to the project team when the levels reach the nominated criteria level. This allows the project team to actively manage noise impacts.

How are you dealing with vibration from the demolition works?

- Vibration criteria to manage vibration impacts due to the demolition activities has been established.
- Similar to noise, vibration levels are being monitored around the site and when the levels reach the nominated criteria level alert messages are sent to the project team to actively manage the activities on site. Monitoring assists in dealing with the impacts effectively as the exceedance is investigated immediately rather than being dealt with later on after the event or impact has occurred.

PRINCESS MARGARET HOSPITAL - DEMOLITION FREQUENTLY ASKED QUESTIONS

How are you adhering to guidelines and regulations?

- A series of management plans have been prepared and are required to be implemented by the demolition contractor. The management plans have been prepared in accordance with state and national Acts and Regulations, industry codes of practice, standards and guidelines and audited by independent third-party reviews and an auditor.
- Site activities are also required to adhere to Worksafe notifications, permits and approvals issued by the regulators.
- The Site will be regularly inspected by engineers, occupational hygienists, environmental advisors and third-party safety auditors to ensure strict adherence with the management plans, permits and approvals.
- The project will be observed by the following independent regulators:

    - Department of Water and Environmental Regulation
    - Department of Health
    - Worksafe
    - City of Subiaco (including Environmental Health Officer)
    - City of Perth (including Environmental Health Officer)
    - Contaminated Sites Auditor (accredited by the Department of Water and Environmental Regulation)

    These regulators have been provided with detailed information regarding the scope of the project, key demolition / deconstruction activities and management plans and have the opportunity to undertake site inspections.

What experience does DevelopmentWA have in these types of projects?

- DevelopmentWA, as project manager for the delivery of the Subi East project, has extensive experience and has successfully managed remediation works at contaminated sites throughout the Perth metropolitan area and across the State for decades. As with all previous remediation projects, best practice and strict health and safety measures are always enforced.
- Most recently, DevelopmentWA has demolished the Subiaco Oval Stadium, Shenton Park Hospital and Port Hedland Hospital.
- The contractor used on the award-winning Subiaco Oval Stadium demolition is the same contractor being used on the PMH Demolition. They have extensive experience in demolition and are also very familiar with Subiaco stakeholders, the local community and traffic flows.

How are you handling the traffic, noise, dust and vibration with the school specifically?

- Safe access to the worksite is limited to one option (the construction traffic will use the existing intersections on Hamilton Street, entering the site via Hay Street and existing via Roberts Road) whereas parents have several options to access the school.
- Noise, dust and vibration will be managed and monitored in accordance with local government, State and Commonwealth Acts, regulations and guidelines.
- DevelopmentWA is using innovative methodologies that go well beyond industry standards to limit the impact on the school. These include:
    - Sheeting around the buildings along Roberts Road that will assist with dust and noise suppression.
    - Off-site monitoring of dust, noise and vibration.
    - A 65m Hammerhead Tower Crane is being installed to remove larger materials and panels for transport and processing offsite. This will reduce the amount of noise and dust generating activities.

- The project is in constant communication with the School's administration to understand the School's needs and we will work collaboratively with the School to find solutions should issues arise.

How will you protect the site after demolition is complete?

- An interim landscaping plan and activation to parts of site as appropriate will be developed along with fencing to protect the community from any dust from vacant lots. This has been done in the past at other DevelopmentWA lots that are awaiting development.

How will the Tower Crane be installed and secured?

- A Hammerhead Tower Crane will be constructed in mid-March
- The crane has a base of steel reinforced concrete pilings that are 8 meters deep. This anchors the crane to the ground.
- The crane is 65m high and can lift a maximum of 18 tonne.
- It is operated by a single licensed operator, with a ground-based rigger providing instructions via radio communications.
- The crane has a 360 swing and a boom length of 74 metres.
- The crane is constructed using reinforced steel.