--/--/--Proposed C384melb

# SCHEDULE 3 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as **LSIO3**.

## MOONEE PONDS CREEK AND LOWER YARRA RIVER WATERWAYS

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# Land subject to inundation objectives to be achieved

To identify land in areas that may be inundated by the combined effects of the 1% Annual Exceedance Probability (AEP) flood event incorporating an 18.5% increase in rainfall intensity due to climate change by the year 2100.

To protect life, property, public health, assets and the environment from flood hazard.

To minimise the impact of development on flood extent, depth and the flow velocity.

To ensure that the development prioritises the protection of human life, including emergency services personnel.

To ensure development can be permitted where the risk to life and property from flooding can be reduced to an acceptable level.

<u>To ensure development does not increase flood levels and/or velocities to the detriment of surrounding properties.</u>

To ensure that any new development is suitably designed to be compatible with the identified flood hazard and local drainage characteristics.

and identified flood hazard.

To ensure development simultaneously achieves safe access and egress, good urban design and equitable access.

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# Statement of risk

The City of Melbourne includes the lower reaches of the Yarra River and Moonee Ponds Creek. Riverine flooding is caused when runoff from major storms exceeds the channel capacity of a river or creek and overflows onto the surrounding floodplain. While riverine flooding is generally associated with a longer rate of rise and in some instances warning times, flood events may have a longer duration and therefore a longer period of exposure to flood hazard. Flooding may have the potential to result in significant risk to:

- · Human life and safety
- Property
- · Public infrastructure and assets
- · Public health through contaminated floodwaters
- The environment
- Economic and social cohesion of communities

To minimise the impact of such events, it is important buildings are sensitively and appropriately designed to minimise flood damage and protect life, property, assets and the environment.

The mapping which forms the basis of the Land Subject to Inundation Overlay identifies areas that would be subject to inundation by the combined effects of the 1% Annual Exceedance Probability (AEP) flood event incorporating an 18.5% increase in rainfall intensity due to climate change by the year 2100.

For Moonee Ponds Creek and the Lower Yarra River a boundary condition inclusive of a

starting water surface level of a 10% Annual Exceedance Probability (AEP) tidal level plus a 0.8 metre sea level rise in 2100 has been included in the modelling.

This information is contained in the background documents listed in the Schedule to Clause 72.08 which is the source of mapping for this overlay.

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## Permit requirement

A permit is not required to construct a building or carry out works for:

- An elevated boardwalk provided that the boardwalk is constructed above the applicable levels set by the relevant floodplain management authority.
- Earthworks that do not change the rate of flow or the discharge point of water across a property boundary.
- A sign on a single support pole, or structure that is at least 50 per cent permeable up to the applicable flood level.
- Bollards, bus and tram shelters.

See 44.04-2 for relevant provisions.

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# **Application requirements**

The following application requirements apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- An Eexisting conditions survey plans taken by or under the direction and supervision of a licensed land surveyor showing boundaries and dimensions of the site, showing the layout and location of existing building and works with all relevant natural ground level, the current Flood Level, and the ground and finished floor levels to Australian Height Datum (AHD).
- A development plan which includes:
  - layout and location of proposed building and works including all relevant dimensions of the site;
  - proposed finished natural surface levels, building floor levels, building entry points and basement ramps to Australian Height Datum (AHD); and
  - proposed overland flow paths to ensure overland flow paths are maintained.
  - Proposed, plans, Cross section elevations and section drawings (1:50 or 1:20) to Australian Height Datum (AHD). The cross section elevations and section drawings are to include survey levels of the site including building floors, building entry points, basement ramps and ground levels along access and egress routes within the property boundary and flow paths for the passage of overland flows to Australian Height Datum (AHD). The elevations and section drawings must clearly show the Annual Exceedance Probability (AEP) Flood showing the proposed ground and finished floor Level and the Nominal Nominated Flood Protection Level (NFPL) of all new structures on the land. as determined by the Floodplain Management Authority.
- A written Flood Risk and Design Statement which that must include but not be limited to the following:
  - A flood assessment of the site which includes reference to the Design Flood Event (1% AEP) and other flood characteristics, including velocities and depths of flooding on the site and access routes, overland flood paths and the duration of flooding. A comprehensive description of the proposed plans, elevations and drawings stating the design of the lower levels of the building including entries, shop front design, the current Flood Level, the proposed Finished Floor Level(s) and Nominated Flood Protection Level (NFPL) as nominated by the relevant floodplain management authority, flood proofing and use of flood-

- resistant materials, flood storage, stairs, ramps and access/egress points and possible refuge spaces within the development (if applicable).
- A <u>written</u> description of proposed actions, flood mitigation strategies or measures required, if any, to the siting and design of the buildings or works, or in association with the use and occupation of all aspects of the proposal in order to reduce the risk to individuals, property, infrastructure and the environment. These actions may include the consideration of adaptation options such as planned retreat, setbacks, accommodation of changes through floor heights, site and land forming and proposed drainage works. the design response which demonstrates how the proposed development responds to the flood characteristics which affect the site and surrounds, including an assessment against the four objectives as defined in the *Guidelines for Development in Flood Affected Areas* (the Department of Environment, Land, Water and Planning, 2019).

See 44.04.4 for relevant provisions.

# 5.0 Decision guidelines

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The following decision guidelines apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Guidelines for Development in Flood Affected Areas (the Department of Environment, Land, Water and Planning, 2019).
- Good Design Guide for Buildings in Flood Affected Areas in Fishermans Bend, Arden and Macaulay (City of Melbourne, Melbourne Water and City of Port Phillip, 2021)
- The practicality and reliability, over the likely lifetime of a development, of any proposed strategies to minimise or mitigate risks of flood damage or safety hazards.
- <u>Whether the development will likely result in persons and property being exposed to unsafe flood depths and velocities.</u>
- Whether the proposed development maintains existing flood storage capacity and flow paths.
- The likely or modelled extent of any likely or modelled impact development on floodwaters, including the specific and cumulative nature and extent of impact on surrounding properties.
- The individual and cumulative cost to the community of the likely tangible and intangible flood damages, over time.
- Whether the proposal appropriately responds to the identified site specific flood risk to the satisfaction of the relevant floodplain management authority.
- \* Whether development achieves good urban design and equitable access.
- Whether the ground floor design of the building maintains good physical and visual connection between the street and internal ground floor.
- Whether development activates the street edge and frontage.
- Whether the development and design response manage the flood risk appropriately. Whether the materials and finishes are resilient to damage in flood events.

See 44.04-8 for relevant provisions.

## 6 Background document

Good Design Guide for Buildings in Flood Affected Areas in Fishermans Bend, Arden and Macaulay (City of Melbourne, Melbourne Water and City of Port Phillip, 2021).