BRISBANE CITY COUNCIL

TEMPORARY LOCAL PLANNING INSTRUMENT - 01/12

BRISBANE INTERIM FLOOD RESPONSE

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1. Short title

This temporary local planning instrument (TLPI) may be cited as Temporary Local Planning Instrument 01/12 –Brisbane Interim Flood Response.

2. Purpose

The purpose of this TLPI is to adopt the Interim Residential Flood Level (IRFL) and facilitate the following:

1. Application of the Interim Residential Flood Level.
2. Where on standard lots, allow Self Assessment of Houses up to 9.5m above ground level where affected by creek/waterway and/or Brisbane River Flooding (as described in Table A below).
3. Change the Level of Assessment for a House on a Small Lot to Code Notifiable where building a new House or raising an existing House, and not meeting the building height requirements of Table 1 Building Envelope Requirements of the Residential Design Small Lot Code and affected by creek/waterway and/or Brisbane River Flooding.
4. Allow Houses to be raised or extended with habitable floor levels below the Interim Residential Flood Level with requirements for resilient building design and materials.
5. Introduce additional requirements for filling and excavation for Houses.
6. Allow for creek/waterway and/or Brisbane River Flooding to be taken into account when assessing maximum building height for a House, Multi-unit dwelling and Single unit dwelling.
7. Identify additional technical standards and requirements to complement those in the Subdivision and Development Guidelines for properties affected by creek/waterway and /or Brisbane River Flooding, including building basements and essential services for commercial and residential buildings.

3. Application

The land to which this TLPI applies is those lots any part of which are affected by the Interim Residential Flood Level and/or Creek/Waterway Flooding. The terms “Interim Residential Flood Level” and “Creek/Waterway Flooding” are defined in Section 5 of the TLPI.

Relationship with planning scheme

1. To the extent of any inconsistency between the Brisbane City Plan 2000 (City Plan) and this TLPI, the TLPI prevails.
2. Exempt development as listed in Chapter 3 of the City Plan is unaffected by this TLPI.
3. Building work listed under Section 1 of the Residential Design Small Lot Code, Residential Design Character Code and Residential Design Single Unit Dwelling Code is unaffected by the TLPI.
4. This TLPI overrides the provisions in the City Plan to the extent of matters that this instrument relates to as outlined in Section 6.
5. Where raising a House to comply with the IRFL and where located within a Demolition Control Precinct, Performance Criterion 2 and Acceptable Solution A2.1 of the Residential Design Character Code do not apply.

4. Duration

This TLPI has effect for a period of 1 year from the date of commencement.

5. Definitions

5.1 Terms used in this TLPI have the same meaning as in the *Sustainable Planning Act 2009*, unless otherwise defined in this TLPI or the Brisbane City Plan 2000..

5.2 The Interim Residential Flood Level (IRFL) is the surface of floodwater in one or both of the following flood events, whichever is the higher at any point:

1. Brisbane River - January 2011 event, as described in Table A
2. The Defined Flood Level (DFL) based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the Brisbane City Gauge, as described in Table A.

5.3 Creek/Waterway Flooding is all land affected by a 100 year (Average Recurrence Interval) flood event, as described in Table A

5.4 Table A below refers to the source of the mapping and data relied on for the purpose of this instrument.

Table A	
TLPI extent:	**Described in:**
The January 2011 estimated Brisbane River flood extent	Temporary Local Planning Instrument -Brisbane Interim Flood Response Map Number LGA 1000-0025-1 Sheet 1 to Sheet 22 dated 19/4/2011.
Creek/waterway flood inundation extent for a 100 year ARI creek/waterway flood event; and Defined Flood Level based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the Brisbane City Gauge	"TLPI Flood Maps" and *FloodWise* Property Report, copyright Brisbane City Council as at the date of gazettal.
Flood level:	**Described in:**
The estimated January 2011 Brisbane River flood levels; and Defined Flood Level based on a Brisbane River Defined Flood Event of 3.7m AHD at the Brisbane City Gauge; and creek/waterway 100 year ARI flood level	The *Brisbane Interim Flood Response* database, and referenced in the *FloodWise* Property Report copyright Brisbane City Council as at the date of gazettal.

* The TLPI does not relate to land affected solely by overland flow or tidal flooding (storm tide)

6. Effect of this Temporary Local Planning Instrument

Development specified in Table 1, Column 1 of this TLPI on lots, any part of which are affected by the Interim Residential Flood Level and/or creek/waterway flooding as described in Table A, have the level of assessment specified in Table 1, Column 2 and must comply with the applicable City Plan Codes specified in Column 3 and the Additional Purpose, Additional Performance Criteria and Additional Acceptable Solutions specified in Table 1, Columns 4, 5 and 6.

In the event of any inconsistency between the purpose, performance criteria and acceptable solutions of the applicable City Plan codes specified in Table 1 Column 3 of this TLPI and the Additional Purpose, Additional Performance Criteria and Additional Acceptable Solutions specified in columns 4,5 and 6 of table 1 of this TLPI, the Additional Purpose, the Additional Performance Criteria and the Additional Acceptable Solutions shall prevail.

Development specified in Table 3, Column 1 of this TLPI on lots, any part of which are affected by the Interim Residential Flood Level and/or creek/waterway flooding as described in Table A, must comply with the requirements specified in Table 3, Column 2.

Development specified in Table 4, Column 1 of this TLPI on lots, any part of which are affected by the Interim Residential Flood Level and/or creek/waterway flooding as described in Table A, must comply with the requirements specified in Table 4, Column 2.

Development for demolition where the work is raising a House, except where on a small lot, where the resultant height does not exceed 9.5 metres above ground level, is exempt development. (Note: this does not include any building work to enclose under the house).

Table 1: Assessment table for specific development where affected by creek/waterway and/or Brisbane River Flooding

Column 1 Type of Development	Column 2 Level of Assessment	Column 3 Applicable Codes	Column 4 Additional Purpose	Column 5 Additional Performance Criteria	Column 6 Additional Acceptable Solution
House where not on a small lot and not in a Demolition Control Precinct	Self Assessment where complying with the Acceptable Solutions in the House Code as varied by the additional Acceptable Solutions in Column 6	House Code	Ensure new houses, where raising a house and extensions to existing houses achieve acceptable flood immunity. Ensure houses are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood level and creek/waterway flooding. Building components and flood resilient design: • preserve structural performance during and after a flood event • prevent further post flood deterioration • minimise repair costs following a flood • ensure ease of cleaning New building work improves flood immunity and ensures safety for all persons. Filling or excavation must not impact adversely on visual amenity or local drainage. *Note: Retaining wall construction and embankment gradients will also need to comply with the Building Regulations*	Where an existing house is raised, extended or a new house is erected, the building height above ground level must not be greater than 9.5 metres. The minimum level for habitable and non–habitable areas (including utility areas, garage, laundry and storage room) are not less than those set out in Table 2. Where development involves raising an existing house and the modified building does not meet the requirements of Table 2, the following requirement is met: • the new habitable floor levels are above the existing habitable floor levels and any building work below the IRFL utilises water resistant materials* Where development involves enclosing under or extending an existing house and the modified building does not meet the requirements of Table 2, the following requirements are met: • the new habitable floor levels are above the existing habitable floor levels; and • any enclosure below the IRFL must have openings that are at least 1% of the enclosed area for automatic exit of flood water for the flood events up to and including those set out in Table 2. Any openings are a minimum of 75mm. • all new floor levels are elevated above ground level, such as on stumps or fill; and • the new building work below the IRFL uses water resistant materials*; and • essential services are located above IRFL and any electrical services, including photovoltaic panels, are easily disconnected; and • the new building work below the IRFL uses corrosion free building components such as galvanised steel or

					aluminium. **Editor's Note: For a list of water resistant materials please refer to table 1- Higher water resistance - Growth Management Queensland Factsheet January 2011 – Repairing your House After a Flood* A retaining wall is set back at least half the height of the wall from any boundary of the site. Retaining walls over 1.5m high are stepped 0.75m for every 1.5m in height, terraced and landscaped; No filling, excavation or retaining works shall be carried out that cause stormwater to be concentrated or redirected from pre-development conditions, unless the stormwater is directed to a lawful point of discharge such as kerb and channel. Where in the Brisbane River Corridor an existing house is raised, extended or a new house is erected, the building height above ground level, must not be greater than 9.5 metres.:
House where not on a small lot but in a Demolition Control Precinct	Self Assessment where complying with the Acceptable Solutions in the House Code as varied by the additional Acceptable Solutions in Column 6 and where	House Code Residential Design Character Code	Ensure new houses, where raising a house and extensions to existing houses achieve acceptable flood immunity Ensure houses are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding. Building components and flood resilient design: • preserve structural performance during and after a flood event • prevent further post flood deterioration • minimise repair costs following a	Where an existing house is raised, extended or a new house is erected, the building height above ground level must not be greater than 9.5 metres. The minimum level for habitable and non–habitable areas (including utility areas, garage, laundry and storage room) are not less than those set out in Table 2. Where development involves raising an existing house and the modified building does not meet the requirements of Table 2, the following requirements is met: • the new habitable floor levels are above the existing habitable floor levels and any building work below the

	complying with the Residential Design Character Code			flood • ensure ease of cleaning New building work improves flood immunity and ensures safety for all persons. Filling or excavation must not impact adversely on visual amenity, the stability of land or local drainage. *Note: Retaining wall construction and embankment gradients will also need to comply with the Building Regulations*	IRFL utilises water resistant materials* Where development involves enclosing under or extending an existing house and the modified building does not meet the requirements of Table 2, the following requirements are met: • the new habitable floor levels are above the existing habitable floor levels; and • any enclosure below the IRFL must have openings that are at least 1% of the enclosed area for automatic exit of flood water for the flood events up to and including those set out in Table 2.. Any openings are a minimum of 75mm. • all new floor levels are elevated above ground level, such as on stumps or fill; and • the new building work below the IRFL uses water resistant materials*; and • essential services are located above IRFL and any electrical services, including photovoltaic panels, are easily disconnected; and • the new building work below the IRFL uses corrosion free building components such as galvanised steel or aluminium. **Editor's Note: For a list of water resistant materials please refer to table 1- Higher water resistance - Growth Management Queensland Factsheet January 2011 – Repairing your House After a Flood* A retaining wall is set back at least half the height of the wall from any boundary of the site. Retaining walls over 1.5m are stepped 0.75m for every 1.5m in height, terraced and landscaped.

					No filling, excavation or retaining works shall be carried out that cause stormwater to be concentrated or redirected from predevelopment conditions, unless the stormwater is directed to a lawful point of discharge. Where in the Brisbane River Corridor an existing house is raised, extended or a new house is erected, the building height above ground level, must not be greater than 9.5 metres.
House where on a small lot and not in a Demolition Control Precint	Self Assessment where complying with the Acceptable Solutions in the House Code as varied by the additional Acceptable Solutions in Column 6, and where complying with the Acceptable Solutions in Part 1 of the Residential Design Small Lot Code Code Notifiable where complying with the Acceptable Solutions in	House Code Residential Design Small Lot Code	Ensure new houses, where raising a house and extensions to existing houses achieve acceptable flood immunity Ensure houses are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding. Building components and flood resilient design: • preserve structural performance during and after a flood event • prevent further post flood deterioration • minimise repair costs following a flood • ensure ease of cleaning New building work improves flood immunity and ensures safety for all persons. Filling or excavation must not impact adversely on visual amenity, the stability of land or local drainage. *Note: Retaining wall construction and embankment gradients will also need to comply with the Building Regulations*	The minimum level for habitable and non–habitable areas (including utility areas, garage, laundry and storage rooms) are not less than those set out in Table 2 Where development involves raising an existing house and the modified building does not meet the requirements of Table 2, the following requirement is met: • the new habitable floor levels are above the existing habitable floor levels and any building work below the IRFL utilises water resistant materials* Where development involves enclosing under or extending an existing house and the modified building does not meet the requirements of Table 2, the following requirements are met: • the new habitable floor levels are above the existing habitable floor levels; • any enclosure below the IRFL must have openings that are at least 1% of the enclosed area for automatic exit of flood water for the flood events up to and including those set out in Table 2.. Any openings are a minimum of 75mm. • all new floor levels are elevated above ground level, such as on stumps or fill; • the new building work below the IRFL uses water resistant materials*; • essential services are located above IRFL and any electrical services, including photovoltaic panels, are

	Part 1 of the Residential Design Small Lot Code as varied by the deletion of Acceptable Solution A2 relating to building heights. Impact Assessment (Generally Inappropriate) where not complying with the Acceptable Solutions in Part 1 of the Residential Design Small Lot Code as varied by the deletion of Acceptable solution A2 relating to building heights				easily disconnected; • the new building work below the IRFL uses corrosion free building components such as galvanised steel or aluminium. **Editor's Note: For a list of water resistant materials please refer to table 1- Higher water resistance - Growth Management Queensland Factsheet January 2011 – Repairing your House After a Flood* A retaining wall is set back at least half the height of the wall from any boundary of the site; and Retaining walls over 1.5m are stepped 0.75m for every 1.5m in height, terraced and landscaped; No filling, excavation or retaining works shall be carried out that cause stormwater to be concentrated or redirected from predevelopment conditions, unless the stormwater is directed to a lawful point of discharge.
House where on a small lot and in a Demolition Control Precinct	Self Assessment where complying with the Acceptable Solutions in	House Code Residential Design Small Lot	Ensure new houses, where raising a house and extensions to existing houses achieve acceptable flood immunity	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	The minimum level for habitable and non–habitable areas (including utility areas, garage, laundry and storage room) are not less than those set out in Table 2 Where development involves raising an existing house and the modified building does not meet the requirements of

	the House Code as varied by the additional Acceptable Solutions in Column 6 and where complying with the Acceptable Solutions in Part 1 of the Residential Design Small Lot Code and where complying with the Residential Design Character Code Code Notifiable where complying with the Acceptable Solutions in Part 1 in the Residential Design Small Lot Code as varied by the deletion of Acceptable	Code Residential Design Character Code	Ensure houses are not subject to unreasonable hazard due to flooding.	Building components and flood resilient design: • preserve structural performance during and after a flood event • prevent further post flood deterioration • minimise repair costs following a flood • ensure ease of cleaning New building work improves flood immunity and ensures safety for all persons. Filling or excavation must not impact adversely on visual amenity, the stability of land or local drainage. *Note: Retaining wall construction and embankment gradients will also need to comply with the Building Regulations*	Table 2, the following requirement is met: • the new habitable floor levels are above the existing habitable floor levels and any building work below the IRFL utilises water resistant materials* Where development involves enclosing under or extending an existing house and the modified building does not meet the requirements of Table 2, the following requirements are met: • the new habitable floor levels are above the existing habitable floor levels; • any enclosure below the IRFL must have openings that are at least 1% of the enclosed area for automatic exit of flood water for the flood events up to and including those set out in Table 2.. Any openings are a minimum of 75mm. • all new floor levels are elevated above ground level, such as on stumps or fill; • the new building work below the IRFL uses water resistant materials*; • essential services are located above IRFL and any electrical services, including photovoltaic panels, are easily disconnected; • the new building work below the IRFL uses corrosion free building components such as galvanised steel or aluminium. **Editor's Note: For a list of water resistant materials please refer to table 1- Higher water resistance - Growth Management Queensland Factsheet January 2011 – Repairing your House After a Flood* A retaining wall is set back at least half the height of the wall from any boundary of the site; and

	Solution A2 relating to building heights Impact Assessment (Generally Innappropriate) where not complying with the Acceptable Solutions in Part 1 of the Small Lot Code as varied by the deletion of Acceptable Solution A2 relating to building heights				Retaining walls over 1.5m are stepped 0.75m for every 1.5m in height, terraced and landscaped; No filling, excavation or retaining works shall be carried out that cause stormwater to be concentrated or redirected from predevelopment conditions, unless the stormwater is directed to a lawful point of discharge.
Single Unit Dwelling in the Low Density, Character and Low Medium Density Residential Area	No change to Level of Assessment	Residential Design Single Unit Dwelling Code	Ensure all new single unit dwellings achieve acceptable flood immunity. Ensure all new single unit dwellings are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	
Single Unit Dwelling in the Medium	No change to Level of Assessment	Residential Design Single Unit	Ensure all new single unit dwellings achieve acceptable flood	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim	

Density and High Density Residential Area and Centres Area		Dwelling Code	immunity. Ensure all new single unit dwellings are not subject to unreasonable hazard due to flooding.	Residential Flood Level and creek/waterway flooding.	
Multi Unit in the Low Density, Character and Low Medium Density Residential Area	No change to Level of Assessment	Residential Design – Low Density, Character and Low Medium Density Code	Ensure all new multi-unit-dwellings achieve acceptable flood immunity. Ensure all new multi-unit dwellings are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	
Multi Unit in the Medium Density Area	No change to Level of Assessment	Residential Design – Medium Density Code	Ensure all new multi-unit dwellings achieve acceptable flood immunity Ensure all new multi-unit dwellings are not subject to unreasonable hazard due to flooding.	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	
Multi Unit in the High Density Area	No change to Level of Assessment	Residential Design – High Density Code	Ensure all new multi-unit dwellings achieve acceptable flood immunity Ensure all new multi-unit dwellings are not subject to	Buildings may be higher than adjoining properties to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	

			unreasonable hazard due to flooding.		
Mixed Use in the Centres Area	No change to Level of Assessment	Centre Design Code	Ensure all new residential or mixed use development including residential development achieves acceptable flood immunity. Ensure all new multi-unit dwellings are not subject to unreasonable hazard due to flooding.	All new residential development or the residential component of Mixed Use development may be higher than adjoining development to the extent required to achieve flood immunity for Interim Residential Flood Level and creek/waterway flooding.	
For infill development for lots smaller than 1000m2 in the Residential Area	No change to Level of Assessment	Subdivision Code			All lots below 1000m2 in size are located above the minimum design levels for flood immunity in accordance with Council's Subdivision and Development Guidelines and this instrument. For infill development for lots smaller than 1000m2 affected by Brisbane River flooding only (Interim Residential Flood Level),filling may not be required where a house could otherwise reasonably be constructed to comply with the Subdivision and Development Guidelines and the flood immunity requirements within this instrument *Editor's note: It is expected that flood immunity will be achieved by a combination of limited filling, buildings on stumps or other building techniques. Over reliance on filling can lead to adverse impacts on the amenity of adjoining lands and local drainage.*

Table 2: House Flood Immunity Levels

Type of Flooding	Minimum Ground Level for House Pad after filling (where permitted)	Habitable Floor Level	Non–habitable Areas (i.e. utility areas, garage, laundry and storage room)
Brisbane River	IRFL + 300mm	IRFL + 500mm	50 year ARI + 300mm
Creek or Waterway	100 year ARI + 300mm	100 year ARI + 500mm	100 year ARI + 300mm

Table 3: Local Plan or Neighborhood Plan and Brisbane River Corridor Planning Scheme Policy

Column 1	**Column 2**
Residential development and the basements of commercial development included in any Local Plan or Neighbourhood Plan Area as described in Chapter 4 of the City Plan.	Where residential development, commercial development (including filling and reconfiguration for the same purpose) or mixed use development including a residential component is regulated in respect of : • Building height of houses, single unit dwellings or Multi-unit dwellings; and or • Flood immunity requirements for Interim Residential Flood Level and creek/waterway flooding the applicable Local or Neighbourhood Plan shall be read as having the following additional intent: 1. Buildings may be higher than 8.5 metres to the extent required to achieve acceptable flood immunity. These buildings must be designed to minimize the height of the side and rear walls in relation to adjoining properties and the overall height of the building. 2. Ensure all new residential development achieves acceptable flood immunity, by complying with tables 4 and 5; or The DFL whichever is the greater level of immunity
Structures in Precinct 1 and 2 – Residential Parkland of the Brisbane River	Building height may vary to the extent required to achieve flood immunity

Table 4: Subdivision and Development Guidelines

Column 1	Column 2
Any development requiring compliance with Table A1.1 of the Subdivision and Development Guidelines	The minimum lot level for residential subdivision is IRFL + 300mm Filling of lots affected by Brisbane River flooding (Interim Residential Flood Level) for flood immunity may produce undesirable outcomes with respect to the streetscape and boundaries to existing lots. Filling may not be required for infill subdivision affected by Brisbane River flooding only (Interim Residential Flood Level) where a house otherwise could be reasonably constructed to comply with this requirement. Notes; The Interim Residential Flood Level (IRFL) is the surface of floodwater in one or both of the following flood events, whichever is the higher at any point: 1. Brisbane River - January 2011 event, as mapped in Table A 2. The Defined Flood Level (DFL) based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the Brisbane City Gauge, as mapped in Table A. Creek/waterway flooding is all land affected by a 100 year average recurrence interval (ARI) flood, as mapped in Table A. The January 2011 Brisbane River flood event is described in the Queensland Reconstruction Authority “Interactive Reconstruction Map” 2010-2011 Interim Flood Lines. The creek/waterway flood inundation extent and level for a 100 year ARI creek/waterway flood event and the Defined Flood Level based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the City Gauge is described in the database and mapping described as “TLPI Flood Maps” and “FloodWise Property Report, Brisbane City Council”.

Any development requiring compliance with Table A1.2 of the Subdivision and Development Guidelines	The Minimum design floor or pavement levels for Category A are IRFL + 500mm. The Minimum design floor or pavement levels for Category B are IRFL + 300mm. Refer to Table 5 for assignment of these categories Notes; The Interim Residential Flood Level (IRFL) is the surface of floodwater in one or both of the following flood events, whichever is the higher at any point: 1. Brisbane River - January 2011 event, as mapped in Table A 2. The Defined Flood Level (DFL) based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the Brisbane City Gauge, as mapped in Table A. Creek/waterway flooding is all land affected by a 100 year average recurrence interval (ARI) flood event, as mapped in Table A. The January 2011 Brisbane River flood event is described in the Queensland Reconstruction Authority "Interactive Reconstruction Map" 2010-2011 Interim Flood Lines. The creek/waterway flood inundation extent and level for a 100 year ARI water/creek flood event and the Defined Flood Level based on a Brisbane River Flood Event using a flood height profile of 3.7m AHD at the City Gauge is described in the database and mapping described as "TLPI Flood Maps" and "FloodWise Property Report, Brisbane City Council".
Development requiring compliance with table A 1.3 of the Subdivision and Development Guidelines	Refer to Table 5

Table 5: Building Categories

BCA Building Classification*	Development Type & Design Levels	Category (3) (Refer Table 4 for applicable immunity)
Class 1 - 4	Habitable room*	Category A
	Non-habitable room - including garage, patio, private open space and courtyard	Category B
		except for Class 1a building where the 50year ARI + 0.3m applies to Brisbane River.
	Non-habitable part of a Class 2 or Class 3 building - excluding the essential services(@)	Category B
		Risk management approach to Brisbane River flooding is permitted. (refer Subdivision and Development Guidelines - Section 4)
	Parking located in the building undercroft of a multi unit dwelling	Category C
	Carport(1), unroofed carpark, Vehicular manoeuvring areas	Category D
	Essential electrical services(@) of a Class 2 or Class 3 building only	Category A (4)
	Basement parking entry(#)	Category C +300mm
Class 5, Class 6, Class 8	Building floor level	Category C
		Risk Management approach to Brisbane River flooding is permitted.
	Garage or carpark(#) located in the building undercroft	Category C
	Carport1 or unroofed carpark	Category D
	Vehicular access and manoeuvring areas	Category D
	Essential electrical services(@)	Class 8 - Category C Class 5 & 6 – Category A (4)
		Risk management approach to Brisbane River flooding is permitted (4)

	Basement parking entry(#)	Category C
Class 7a	Refer to the relevant building class specified in this table	
Class 7b	Building floor level	Category C
		Risk Management approach to Brisbane River flooding is permitted.
	Vehicular access and manoeuvring areas	Category D
	Essential electrical services(@)	Category C
Class 9	Building floor level - including essential services(@)	Category A
	Garage or carpark# located in the building undercroft	Category C
	Carport (1) or unroofed carpark	Category D
	Vehicular access and manoeuvring areas	Category D
Class 10a	Carparking facility	Refer to the relevant building class specified in this table.
	Shed (2) or the like	Category D
Class 10b	Swimming pool	Category E
	Associated mechanical and electrical pool equipment	Category C
	Other structures	Flood immunity standard does not apply.

* Refer Section 2.3.3 of the Subdivision and Development Guidelines for definitions.
@ Essential services include any room used for fire control panel, telephone PABX, sensitive substation equipment including transformers, low voltage switch gear, high voltage switch gear, battery chargers, protection control and communication equipment, low voltage cables, high voltage cables, and lift controls etc.
# Basement carparks must be suitably waterproofed and all air vents, air conditioning ducts, pedestrian access and entry/exit ramps at the carpark entrance have flood immunity in accordance with this table.
1. A shelter for a motor vehicle, which has a roof and one or more open sides, and which can be built against the side of a building.
2. A slight or rough structure built for shelter and storage; or a large strongly built structure, often open at the sides or end.
3. Where a building includes a combination of uses that includes a component of classes 2, 3 or 9, the essential services for that building shall comply with the requirements of the building class with the greatest flood immunity requirement.
4. Where essential services are proposed in a basement below the specified flood immunity level in Table 5 as part of a risk management approach to Brisbane River Flooding or Creek/waterway flooding, the flood immunity of all air vents, air conditioning ducts, pedestrian access, lift shafts and entry/exit ramps at the basement entrance and any other openings into that basement must conform to Category A for Residential development, and the relevant basement entry level of all other uses. This will require a fully watertight basement design to prevent floodwaters entering the basement to ensure flood immunity.