J:\Jobs\28041-04\ArcviewMaps\Report\Figure8_DrainageNetworkPeakFlow_005y.mxd


Note: only peak flows in pipe network shown
FIGURE B9
DRAINAGE NETWORK
PEAK FLOWS
5% AEP EVENT
Moore Park
Supacentre
Moore Park
Golf Course
Todman Ave
Cooper Pl
Raleigh Park
Winkurra St
Baker St
Balfour Rd
Kensington Rd
Duke St
South Dowling St
Myrtle St
Virginia St
McDougall St
Milroy Ave
Ingram St
Lenthal St
The Australian
Golf Course
N
Flow (m3/s)
< 0.5
0.5 - 1
1 - 2
> 2
NOTE:
Base Photos dated 2004
0 50 100
m
J:\Jobs\28041-04\ArcviewMaps\Report\Figure9_DrainageNetworkPeakFlow_020y.mxd

FIGURE B10
DRAINAGE NETWORK
PEAK FLOWS
2% AEP EVENT

J:\Jobs\28041-04\Arcview\Maps\Report\Figure10_DrainageNetworkPeakFlow_050y.mxd


Note: only peak flows in pipe network shown
FIGURE B11
DRAINAGE NETWORK
PEAK FLOWS
1% AEP EVENT
Moore Park
Supacentre
Moore Park
Golf Course
Raleigh Park
Todman Ave
Cooper Pl
Winkurra St
Baker St
South Dowling St
Balfour Rd
Kensington Rd
Duke St
Milroy Ave
Myrtle St
Virginia St
McDougall St
Ingram St
Lenthal St
The Australian
Golf Course
N
Flow (m3/s)
< 0.5
0.5 - 1
1 - 2
> 2
NOTE:
Base Photos dated 2004
0 50 100
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure11_DrainageNetworkPeakFlow_100y.mxd


FIGURE B12
DRAINAGE NETWORK
PEAK FLOWS
0.2% AEP EVENT
Note: only peak flows in pipe network shown
Moore Park Supacentre
Moore Park Golf Course
Todman Ave
Cooper Pl
Raleigh Park
Winkurra St
Baker St
Balfour Rd
Kensington Rd
Duke St
South Dowling St
Myrtle St
Virginia St
McDougall St
Milroy Ave
Ingram St
Lenthal St
The Australian Golf Course
N
Flow (m3/s)
< 0.5
0.5 - 1
1 - 2
> 2
NOTE:
Base Photos dated 2004
0 50 100
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure12_DrainageNetworkPeakFlow_500y.mxd

FIGURE B13
DRAINAGE NETWORK
PEAK FLOWS
PMF EVENT

J:\Jobs\28041-04\Arcview\Maps\Report\Figure13_DrainageNetworkPeakFlow_PMF.mxd

J:\Jobs\28041-04\Arcview\Maps\Report\Figure14_PeakFloodLevelsandDepths_002y.mxd

J:\Jobs\28041-04\Arcview\Maps\Report\Figure15_PeakFloodLevelsandDepths_005y.mxd


FIGURE B16
PEAK FLOOD LEVELS
AND DEPTHS
5% AEP EVENT
Moore Park
Supacentre
26.9
Moore Park
Golf Course
Todman Ave
Cooper Pl
26.5
Raleigh Park
Winkurra St
22.5
Baker St
Balfour Rd
Kensington Rd
South Dowling St
25
Duke St
24.3
Milroy Ave
Myrtle St
Virginia St
McDougall St
25.1
Ingram St
24.1
22.1
Links Rd
Lenthal St
22.1
23.2
The Australian
Golf Course
N
Peak Flood Level (m AHD)
Mapping Extent
Peak Depth (m)
< 0.2
0.2 - 0.5
0.5 - 1
> 1
NOTE:
Base Photos dated 2004
0 50 100 200
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure16_PeakFloodLevelsandDepths_020y.mxd


FIGURE B17
PEAK FLOOD LEVELS
AND DEPTHS
2% AEP EVENT
Moore Park
Supacentre
26.9
Moore Park
Golf Course
Todman Ave
Cooper Pl
26.7
Raleigh Park
Winkurra St
22.6
Baker St
Balfour Rd
Kensington Rd
South Dowling St
25
Duke St
24.5
Milroy Ave
Myrtle St
Virginia St
McDougall St
25.3
Ingram St
24.1
Links Rd
22.1
Lenthal St
22.1
23.4
The Australian
Golf Course
N
Peak Flood Level (m AHD)
Mapping Extent
Peak Depth (m)
< 0.2
0.2 - 0.5
0.5 - 1
> 1
NOTE:
Base Photos dated 2004
0 50 100 200
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure17_PeakFloodLevelsandDepths_050y.mxd


FIGURE B18
PEAK FLOOD LEVELS
AND DEPTHS
1% AEP EVENT
Moore Park
Supacentre
27
Moore Park
Golf Course
Todman Ave
Cooper Pl
26.9
Raleigh Park
Winkurra St
22.6
Baker St
Balfour Rd
Kensington Rd
South Dowling St
25.1
Duke St
24.6
Milroy Ave
Myrtle St
Virginia St
McDougall St
25.5
Ingram St
24.1
Links Rd
22.2
Lenthal St
22.1
23.6
The Australian
Golf Course
N
Peak Flood Level (m AHD)
Mapping Extent
Peak Depth (m)
< 0.2
0.2 - 0.5
0.5 - 1
> 1
NOTE:
Base Photos dated 2004
0 50 100 200
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure18_PeakFloodLevelsandDepths_100y.mxd


FIGURE B19
PEAK FLOOD LEVELS
AND DEPTHS
0.2% AEP EVENT
Moore Park
Supacentre
Moore Park
Golf Course
Raleigh Park
Todman Ave
Cooper Pl
Winkurra St
Baker St
South Dowling St
Balfour Rd
Kensington Rd
Duke St
Milroy Ave
McDougall St
Myrtle St
Virginia St
Ingram St
Lenthal St
Links Rd
The Australian
Golf Course
27.2
27.4
22.8
25.1
24.6
25.8
24.2
22.3
22.2
23.8
N
Peak Flood Level (m AHD)
Mapping Extent
Peak Depth (m)
< 0.2
0.2 - 0.5
0.5 - 1
> 1
NOTE:
Base Photos dated 2004
0 50 100 200
m
J:\Jobs\28041-04\Arcview\Maps\Report\Figure19_PeakFloodLevelsandDepths_500y.mxd

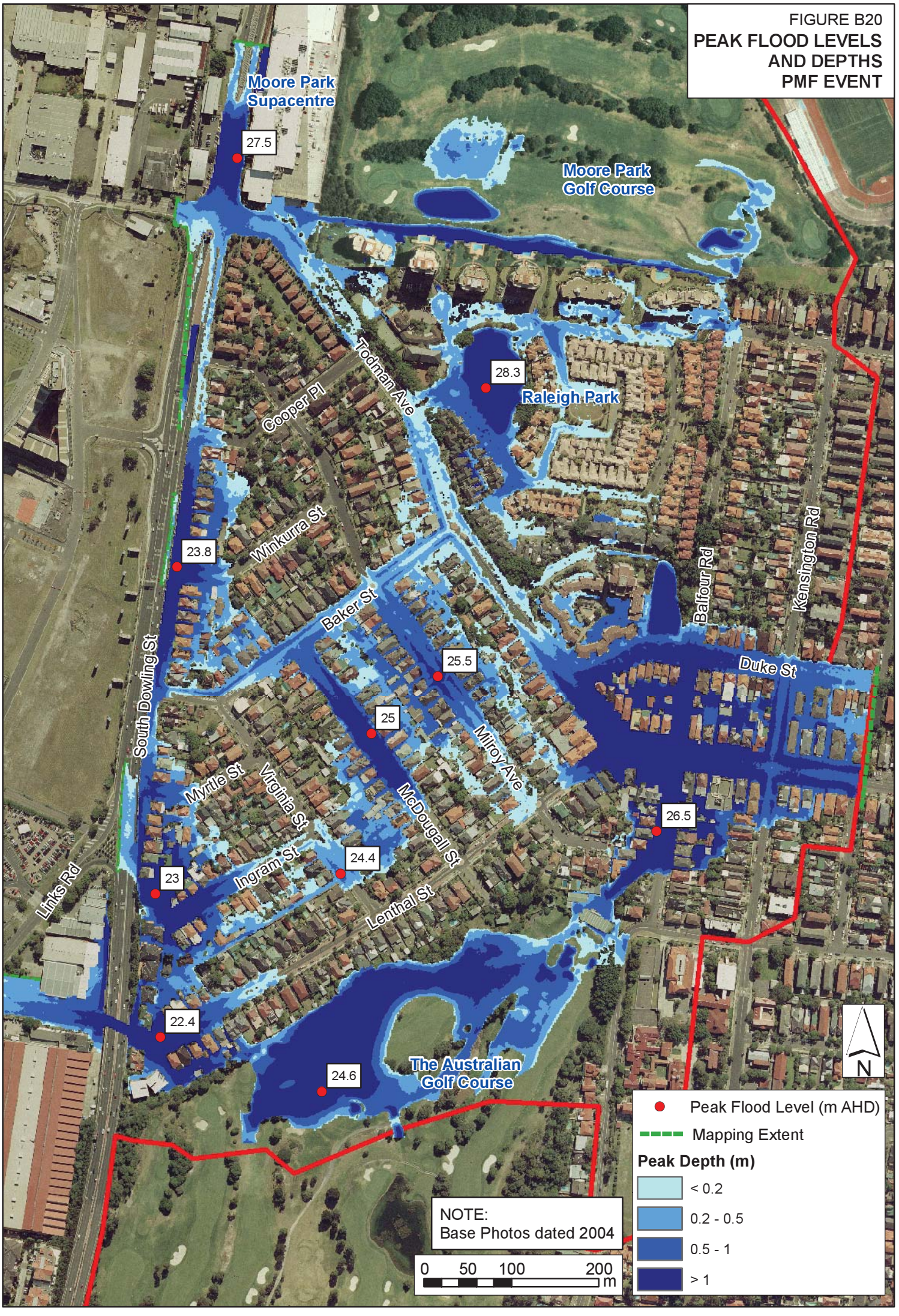
FIGURE B20
PEAK FLOOD LEVELS AND DEPTHS PMF EVENT
Moore Park Supacentre
27.5
Moore Park Golf Course
Todman Ave
28.3
Raleigh Park
Cooper Pl
Winkurra St
23.8
Baker St
Balfour Rd
Kensington Rd
South Dowling St
25.5
Duke St
25
Milroy Ave
Myrtle St
Virginia St
McDougall St
26.5
Ingram St
24.4
23
Links Rd
Lenthal St
22.4
24.6
The Australian Golf Course
N
Peak Flood Level (m AHD)
Mapping Extent
Peak Depth (m)
< 0.2
0.2 - 0.5
0.5 - 1
> 1
NOTE:
Base Photos dated 2004
0 50 100 200
m
J:\Jobs\28041-04\ArcviewMaps\Report\Figure20_PeakFloodLevelsandDepths_PMF.mxd


FIGURE B21
PROVISIONAL HYDRAULIC HAZARD CATEGORIES
1% AEP EVENT
Moore Park Supacentre
Moore Park Golf Course
Raleigh Park
Todman Ave
Cooper Pl
Winkurra St
Baker St
South Dowling St
Myrtle St
Virginia St
Ingram St
Links Rd
McDougall St
Milroy Ave
Lenthal St
Balfour Rd
Kensington Rd
Duke St
The Australian Golf Course
N
NOTE:
Hazard calculated in accordance with Figure L2 of the Floodplain Development Manual 2005
0 50 100 200 m
Provisional Hydraulic Hazard Categories
Low Hazard
High Hazard
Mapping Extent
Catchment Boundary
J:\Jobs\28041-04\ArcviewMaps\Report\Figure21_ProvisionalHydraulicHazardCategories_100y.mxd


FIGURE B22
PROVISIONAL HYDRAULIC HAZARD CATEGORIES
PMF EVENT
Moore Park Supacentre
Moore Park Golf Course
Raleigh Park
Todman Ave
Cooper Pl
Winkurra St
Baker St
South Dowling St
Myrtle St
Virginia St
Ingram St
Lenthal St
McDougall St
Milroy Ave
Balfour Rd
Kensington Rd
Duke St
Inks Rd
The Australian Golf Course
N
NOTE:
1: Hazard calculated in ac cordance with Figure L2 of the Floodplain Development Manual 2005.
2: Base Photos dated 2004.
3:Indicated PMF Flood Level and Depths Estimates based on Peak Envelope from a range of storm durations.
0 50 100 m
Provisional Hydraulic Hazard Categories
Low Hazard
High Hazard
Mapping Extent
Catchment Boundary
J:\Jobs\28041-04\Arcview\Maps\Report\Figure22_ProvisionalHydraulicHazardCategories_PMF.mxd

Appendix C

APPENDIX C:

CITY OF SYDNEY FLOOD PLANNING LEVELS

Flood Planning Levels – Green Square Area DCP

Item	Flood Planning Level
Residential Properties	
Habitable Room Floor Level:	
• inundated by mainstream flooding,	1% AEP + 0.5 m
• inundated by local drainage flooding,	1% AEP + 0.5 m or if the depth of flow in the 1% AEP is <0.25 m then 2 x the depth of flow with a minimum of 0.3 m above the surrounding surface.
• all other properties.	0.3 m above surrounding ground
Non-Habitable Floor Level such as a garage (excluding underground garages) or laundry for which development approval is required):	
• inundated by mainstream or local drainage flooding.	1% AEP
Underground Garage or Car Park	
For this purpose an underground garage or car park is where the floor of the car park is more than 1 m below the surrounding natural ground.	
Single property owner with not more than 2 car spaces:	
• inundated by mainstream or local overland flooding,	1% AEP + 0.5 m
• car park outside floodplain.	0.3 m above the surrounding surface
All others:	
• inundated by mainstream or local overland flooding,	1% AEP + 0.5 m (as a minimum) or a level that is determined based on a review of the PMF, whichever is the higher.
• car park outside floodplain.	0.3 m above the surrounding surface
Industrial/Commercial Properties	
It is assumed that all properties will be advised of the flood risk, either from existing studies or investigations by the proponent.	
• floor level of a small business,	1% AEP
• floor level of a large business,	merits approach presented by the applicant
• floor level of schools and child care facilities,	merits approach presented by the applicant
• residential floors within tourist establishments,	1% AEP + 0.5 m
• housing for older people or people with disabilities,	1% AEP + 0.5 m (as a minimum) or a level that is determined based on a review of the PMF, whichever is the higher.
• above ground car park.	1% AEP
Critical Facilities	
These include: hospitals and ancillary service; communication centres; police, fire and SES stations; major transport facilities, sewerage and electricity plants; any installations containing infrastructure control equipment, any operational centres for use in a flood.	
• floor level,	1% AEP + 0.5 m (as a minimum) or a level that is determined based on a review of the PMF, whichever is the higher.
• access to and from.	1% AEP + 0.5 m (as a minimum) or a level that is determined based on a review of the PMF, whichever is the higher.
Note: The Flood Planning Level (FPL) refers to the minimum building floor levels. For underground parking or other forms of underground development, the FPL refers to the minimum level at each access point. The higher of any FPL shall prevail.	

Source: South Sydney Development Control Plan 1997: Urban Design - Part G: Special Precinct No.9 Green Square

RANDWICK CITY COUNCIL: PROPOSED FLOOD PLANNING LEVELS

Item	Flood Planning Level
Residential Properties	
Habitable Floor Level	
• Inundated by mainstream flooding	1% AEP + 0.5m freeboard
• Inundated by local drainage flooding	1% AEP + 0.5m freeboard or if the depth of flow in the 1% AEP is less than or equal to 0.25m then 2 x the depth of flow with a minimum of 0.3m above the surrounding surface
• All other properties	0.3m above surrounding ground
Non habitable floor levels, such as laundry or shed but excluding garages, with a total floor area less than $10m^2$.	
• Inundated by main stream or local drainage flooding	1% AEP but not less than 0.15m above surrounding ground level
Open car parking, car ports and garages, excluding underground garage or car park	
• Open car parking spaces and car ports	5% AEP flood
• Enclosed residential parking for up to two spaces	1% AEP but not less than 0.15m above surrounding ground level
• Enclosed residential parking with more than two spaces	Applicable residential habitable floor level requirement
• Enclosed Industrial/Commercial parking spaces	Applicable industrial/commercial floor level requirement
Underground garage or car park	
For this purpose an underground garage or car park is where the floor of the car park is more than 0.8m below the surrounding natural ground	
• Inundated by main stream or local drainage flooding	All openings to be sealed up to 1% AEP + 0.5m freeboard with a minimum of 0.3m above the surrounding surface
• All others areas	All openings to be sealed up to 0.3m above the surrounding surface
• All emergency exits	All underground garages and car parks to have emergency exits protected from inundation up to the 1% AEP flood plus 0.7m freeboard with a minimum of 0.2m freeboard from vehicle entry point.
Industrial/commercial properties	
Habitable floor level	
This includes floor levels such as; office space, show rooms, child care facilities, residential floor levels for hotels and tourist establishments	
• Inundated by mainstream flooding	1% AEP + 0.5m freeboard
• Inundated by local drainage	1% AEP + 0.5m freeboard or if the depth

flooding	of flow in the 1% AEP is less than or equal to 0.25m then 2 x the depth of flow with a minimum of 0.3m above the surrounding surface
• All other properties	0.3m above surrounding ground
Non habitable floor level	
• Inundated by main stream or local drainage flooding	1% AEP but not less than 0.15m above surrounding ground level
• All other properties	0.15m above surrounding ground
Critical facilities	
These include; hospitals, police, fire, ambulance, SES stations, major transport facilities, major sewage or water supply or electricity or telecommunication plants, schools, nursing homes and retirement villages.	
• Floor level mainstream flooding	PMF + 0.5m freeboard
• Floor level local drainage flooding	PMF + 0.5m freeboard or if the depth of flow in the PMF is less than or equal to 0.25m then 2 x the depth of flow with a minimum of 0.3m above the surrounding surface
• Floor level all other locations	0.3m above surrounding surface
• Site access	1% AEP + 0.5m freeboard or PMF, whichever is higher
Material storage location	
• Materials sensitive to flood damage	1% AEP + 0.5m freeboard
• Materials which may cause pollution or be potentially hazardous during flooding	% AEP + 0.5m freeboard
Note: The flood planning level refers to the minimum required building floor levels. For underground car parking or other forms of underground development, the flood planning level refers to minimum level at each access point.	